

# CHAPTER - 1

## INTRODUCTION AND BACKGROUND

Status of watershed programme and approved plan by Steering committee, Govt. of India and status of previous Detailed Project Reports for Mahoba district, Deptt. of Agriculture, Uttar Pradesh is given in following Tables 1.1 and 1.2.

**Table 1.1: Status of watershed programme**

| <b>Details</b>  | <b>No.</b> | <b>District- Mahoba</b> |
|---|------------|-------------------------|
| <b>Area ( ha.)</b>  |            |                         |
| Total Micro watersheds in the district  |            |                         |
| 445   | 288400     |                         |
| Workable Micro Watersheds   |            |                         |
| 61  | 23535      |                         |
| Micro Watersheds already treated (partially) by Deptt of Agriculture, Dist.- Mahoba Uttar Pradesh |            |                         |
| 384   | 264865     |                         |
| Micro Watersheds (MWS) available for treatment (beginning IWMP in the district)                   |            |                         |
| 87  | 26253      |                         |

**Table 1.2: Approved plan (PPRs) by Steering Committee (SC)/Govt. of India,**

| <b>Year</b>  | <b>Project</b> | <b>MWS</b> | <b>Area<br/>(Treatable)<br/>(ha)</b> | <b>Project<br/>Cost<br/>(Rs. Lakh)</b> | <b>Name of<br/>PIA</b> | <b>District- Mahoba</b> | <b>Date of Sanction by<br/>S.C. Govt. of India</b> |
|--------------|----------------|------------|--------------------------------------|--|------------------------|-------------------------|--|
| 2011-12      | IWMP-XVI       | 12         | 4375.00                              | 525.00                                 | BSA (Agri), Mahoba     |                         | 26.09.2011   |
| 2011-12      | IWMP-XVIII     | 18         | 5483.00                              | 657.96                                 | BSA (Agri), Mahoba     |                         | -do-   |
| 2011-12      | IWMP-XIX       | 23         | 6516.00                              | 781.92                                 | BSA (Agri), Charkhari  |                         | -do-   |
| 2011-12      | IWMP-XX        | 13         | 4589.00                              | 550.68                                 | BSA (Agri), Charkhari  |                         | -do-   |
| 2011-12      | IWMP-XXIII     | 21         | 5440.90                              | 652.90                                 | BSA (Agri), Kulpahar   |                         | -do-   |
| <b>Total</b> |                | <b>87</b>  | <b>26403.9</b>                       | <b>3168.46</b>                         |                        |                         |  |

## 1.1 Project Background

Integrated Watershed Management Programme-XVIII comprises eighteen micro-watershed namely Bhestamaaf (2C1B3f1a), Parsaha (2C1B3f1b), Maheba (2C1B3f1d), Sichaura (2C1B3f1e), Lilwahi-I (2C1B3f2a), Lilwahi-II (2C1B3f2b), Utiyan (2C1B3f2d), Jujhar (2C1B3f2e), Dharaun (2C1B3f2f), Babedi (2C1B3k1b), Surha (2C1B3k1c), Kauhari (2C1B3k1d), Pindari (2C1B3k2a), Singhapur Baghari (2C1B3k2b), Kamalpura (2C1B3k2c), Shihara (2C1B3k2d), Bamhaurikaji (2C1B3k2e) and Gahra (2C1B3k2f). Watershed project is situated in Kabarai block of district Mahoba and spread over in 37 villages of 21 gram panchayat. The total geographical area of the IWMP-XVIII is 12326.34 ha however treatable area limited to 5483.00 ha under Integrated Watershed Management Programme (IWMP-XVIII).

**Table 1.3: Details of IWMP-XVIII for which this DPR is Prepared**

| Watershed project | Micro Watersheds (MWS) detail | Micro watersheds code | Treatable Area (ha) | Treated Area (ha) | Name of Watershed in which MWS is falling (River / Nala name) |
|-------------------|-------------------------------|-----------------------|---------------------|-------------------|---|
| IWMP-XVIII        | Bhestamaaf                    | 2C1B3f1a              | 160.00              | 187.70            | Ken River   |
|                   | Parsaha                       | 2C1B3f1b              | 135.00              | 195.85            | Ken River   |
|                   | Maheba                        | 2C1B3f1d              | 363.00              | 83.60             | Ken River   |
|                   | Sichaura                      | 2C1B3f1e              | 387.00              | 178.73            | Ken River   |
|                   | Lilwahi I                     | 2C1B3f2a              | 419.00              | 296.65            | Ken River   |
|                   | Lilwahi II                    | 2C1B3f2b              | 115.00              | 219.76            | Ken River   |
|                   | Utiyan                        | 2C1B3f2d              | 289.00              | 218.68            | Ken River   |
|                   | Jujhar                        | 2C1B3f2e              | 298.00              | 196.29            | Ken River   |
|                   | Dharaun                       | 2C1B3f2f              | 195.00              | 252.55            | Ken River   |
|                   | Babedi                        | 2C1B3k1b              | 380.00              | 76.78             | Ken River   |
|                   | Surha                         | 2C1B3k1c              | 261.00              | 168.68            | Ken River   |
|                   | Kauhari                       | 2C1B3k1d              | 465.00              | 187.25            | Ken River   |
|                   | Pindari                       | 2C1B3k2a              | 195.00              | 280.09            | Ken River   |
|                   | Singhanpur Baghari            | 2C1B3k2b              | 267.00              | 275.63            | Ken River   |
|                   | Kamalpura                     | 2C1B3k2c              | 608.00              | 263.79            | Ken River   |
|                   | Shihara                       | 2C1B3k2d              | 354.00              | 315.20            | Ken River   |
|                   | Bamhaurikaji                  | 2C1B3k2e              | 345.00              | 212.18            | Ken River   |
|                   | Gahra                         | 2C1B3k2f              | 247.00              | 152.38            | Ken River   |

|  |              |  |                |                |  |
|--|--------------|--|----------------|----------------|--|
|  | <b>Total</b> |  | <b>5483.00</b> | <b>3761.79</b> |  |
|--|--------------|--|----------------|----------------|--|

Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Mahoba, District- Mahoba, U.P.)

### 1.2 Need and Scope for Watershed Development

Bundelkhand region had been in a grip of severe drought continuously from 2004 to 2007. In the region, more than 85 per cent of open wells were dried up due to deficit rainfall during drought. Cattle were abandoned due to shortage of water and fodder. Most part of the region was dependent on drinking water supply through tanker. Therefore, management of natural resources on watershed basis is urgent need of the region. Watershed project was selected with following long term objectives:

- To optimize productivity of the land
- To restore ecological balance in degraded and fragile eco-system
- To narrow down the disparity between rainfed and irrigated areas
- To create sustained employment opportunities

### 1.3 Weightage for Selection of Watershed

Watershed project was selected on the basis of criteria mentioned in Table 1.4 and composite ranking was developed on the basis of these parameters. The seventeen criteria were taken with total of 205 weightage points. The criterion taken are availability of drinking water, irrigation, degree of soil erosion, water holding capacity, area under rainfed agriculture, status of field bund/contour bund / graded bund, presence of hard rock below the land, options for livelihood, percentage of small and marginal farmers, degraded land, ground water status, status of technical knowledge for improved farming systems, weather conditions, poverty index (% of poor population), virginity of land, productivity potential of land and soil organic carbon status. The weightage for project is about 85.37 per cent (Table 1.5).

**Table 1.4: Criteria and weightage for selection of watershed**

| S. No. | Criteria       | Maximum Score | Range & Score  |   |   |  |
|--------|----------------|---------------|--|---|---|--|
| 1      | Drinking water | 15            | <b>Very poor</b><br>Dependence on water supply through tanker (15) | <b>Poor</b><br>Partial availability within the periphery of 3-4 km (10) | <b>Good</b><br>Round the year availability within the periphery of 3-4 km (5) | <b>Very Good</b><br>Round the year availability in watershed (0) |
| 2      | Irrigation     | 10            | No irrigation (10)   | Life saving irrigation (7.5)  | Partial life saving irrigation (5)  | Fully covered (0)  |
| 3      | Degree of soil | 10            | Severe   | Medium  | Low   | No erosion   |

|    |  |    |   |  |  |                              |
|----|--|----|---|--|--|------------------------------|
|    | erosion  |    | (10)  | (7.5)                                    | (5)                                      | (0)                          |
| 4  | Water holding capacity                                     | 10 | Very poor (10)  | Poor (7.5)                               | Good (5)                                 | Very Good (0)                |
| 5  | Area under rainfed agriculture                             | 15 | More than 90% (15)  | 80 to 90 % (10)                          | 70 to 80 % (5)                           | Below 70% (Reject) (0)       |
| 6  | Status of field bund/contour bund / graded bund            | 10 | Below 20 % (10)   | 50 to 20 % (7.5)                         | 80 to 50 (5)                             | Above 80% (2.5)              |
| 7  | Presence of hard rock below the land                       | 15 | Hard rock starts from 5 to 20 feet (15)                               | Hard rock starts from 21 to 50 feet (10) | Hard rock starts from 51 to 100 feet (5) | Deep soil depth (0)          |
| 8  | Options for livelihood                                     | 10 | Very poor (10)  | Poor (7.5)                               | Good (5)                                 | Very Good (0)                |
| 9  | % of small and marginal farmers                            | 10 | More than 80% (10)  | 50 to 80 % (5)                           | Less than 50% (3)                        |                              |
| 10 | Degraded land  | 15 | High above 50% (15)   | Medium 25 to 50% (10)                    | Low less than 10 – 25 % (5)              | Very low Less than 10% (0)   |
| 11 | Ground water status  | 10 | Very poor (10)  | Poor (7.5)                               | Good (5)                                 | Very Good (0)                |
| 12 | Status of Technical Knowledge for improved farming systems | 10 | Very poor (10)  | Poor (7.5)                               | Good (5)                                 | Very Good (0)                |
| 13 | Weather condition  | 15 | Uncertain weather condition / Continuous drought for three years (15) | Drought comes one in five years (10)     | Drought comes one in ten years (5)       | Normal weather condition (0) |
| 14 | Poverty index (% of poor population)                       | 10 | Above 80% (10)  | 80 to 50 (7.5)                           | 50 to 20 % (5)                           | Below 20 % (2.5)             |

|    |   |    |   |  |  |                  |
|----|---|----|---|--|--|------------------|
| 15 | Virginity (No treatment /intervention in last five years) | 10 | Above 80% (10)  | 80 to 50 (7.5)   | 50 to 20 % (5)   | Below 20 % (2.5) |
| 16 | Productivity potential of land                            | 15 | Lands with low production & where productivity can be significantly enhanced with reasonable efforts (15) | Lands with moderate production & where productivity can be enhanced with reasonable efforts (10) | Lands with high production & where productivity can be marginally enhanced with reasonable efforts (5) | -                |
| 17 | Organic carbon status                                     | 15 | Very low (15)   | Low (10)   | Medium (5)   | Normal (0)       |

**Table 1.5: Weightage of the project**

| S. No.                                    | Criteria   | Weightage points |
|---|--|------------------|
| 1   | Drinking water   | 10               |
| 2   | Irrigation   | 10               |
| 3   | Degree of soil erosion                                     | 10               |
| 4   | Water holding capacity                                     | 10               |
| 5   | Area under rainfed agriculture                             | 10               |
| 6   | Status of field bund/contour bund / graded bund            | 10               |
| 7   | Presence of hard rock below the land                       | 10               |
| 8   | Options for livelihood                                     | 10               |
| 9   | % of small and marginal farmers                            | 10               |
| 10  | Degraded land  | 10               |
| 11  | Ground water status  | 10               |
| 12  | Status of Technical Knowledge for improved farming systems | 10               |
| 13  | Weather condition  | 10               |
| 14  | Poverty index (% of poor population)                       | 10               |
| 15  | Virginity  | 10               |
| 16  | Productivity potential of land                             | 10               |
| 17  | Organic carbon status                                      | 15               |
| <b>Total Weightage (Out of total 205)</b> |  | <b>175</b>       |
| <b>Weightage Percentage</b>               |  | <b>85.37</b>     |

Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Mahoba, District- Mahoba, U.P.)

#### **1.4 Details of ongoing watershed programme**

Presently, no watershed development programme is going on in the micro-watershed. There is no ongoing watershed management program/ activities on the micro-watershed.

## CHAPTER - 2

### GENERAL DESCRIPTION OF PROJECT AREA

#### **2.1 Location:**

The micro-watersheds of IWMP-XVIII are located in Kabarai block of Mahoba district. It is about 35 km. from Mahoba to Kabarai road. Villages and its geographical area for each micro-watershed are depicted in Table 2.1. Total area of the project is 12326.34 ha, out of which 5483.00 ha is treatable. The geographical area of micro-watershed varied in the range of 441.13 to 1162.38ha.

**Table 2.1: Micro-watershed wise details of location, Gram Panchayat, villages and geographical area of IWMP-XVIII**

| Sl. No. | Name of micro watershed with Code | Names of villages                    | Longitude                    | Latitude                     | Name of Block | Area of village included in MWS (Geographical) | Details of important /approach road with distance km |
|---------|-----------------------------------|--------------------------------------|------------------------------|------------------------------|---------------|--|--|
| 1       | Bhestamaaf<br>2C1B3f1a            | Bhenstamaf, Parsaha, Surha           | 79° 58' 30.0"- 79° 59' 30.0" | 25° 30' 30.0"- 25° 31' 30.0" | Kabarai       | 463.60   | Mahoba to Kabarai road                               |
| 2       | Parsaha<br>2C1B3f1b               | Parsaha, lilwahi                     | 79° 59' 0.0"- 80° 0' 30.0"   | 25° 28' 30.0"- 25° 30' 0.0"  | Kabarai       | 441.13   | -do-   |
| 3       | Maheba<br>2C1B3f1d                | Sichaura, lilwahi, Mahewa, Chanikala | 79° 58' 0.0"- 80° 0' 30.0"   | 25° 25' 30.0"- 25° 26' 0.0"  | Kabarai       | 595.46   | -do-   |
| 4       | Sichaura<br>2C1B3f1e              | Dharaun, Sichaura                    | 79° 57' 30.0"- 79° 59' 30.0" | 25° 25' 0.0"- 25° 26' 30.0"  | Kabarai       | 754.31   | -do-   |
| 5       | Lilwahi-I<br>2C1B3f2a             | Paswara, Pindari, lilwahi            | 79° 57' 30.0"- 79° 59' 0.0"  | 25° 28' 0.0"- 25° 30' 30.0"  | Kabarai       | 954.20   | -do-   |
| 6       | Lilwahi-II<br>2C1B3f2b            | Lilwahi, Gahra, Singhapur, Baghari   | 79° 56' 30.0"- 79° 58' 0.0"  | 25° 27' 0.0"- 25° 29' 0.0"   | Kabarai       | 446.34   | -do-   |
| 7       | Utiyan<br>2C1B3f2d                | Utiya, Bari, Bamhauri, Gehra         | 79° 55' 0.0"- 79° 56' 0.0"   | 25° 24' 30.0"- 25° 26' 30.0" | Kabarai       | 676.90   | -do-   |
| 8       | Jujhar<br>2C1B3f2e                | Utiya, Gnaj, Dharaun, Jujhar         | 79° 55' 0.0"- 79° 57' 30.0"  | 25° 24' 0.0"- 25° 25' 0.0"   | Kabarai       | 659.05   | -do-   |
| 9       | Dharaun<br>2C1B3f2f               | Utiya, Dharaun                       | 79° 56' 0.0"- 79° 57' 30.0"  | 25° 25' 0.0"- 25° 27' 0.0"   | Kabarai       | 596.73   | -do-   |
| 10      | Babedi                            | Baberi, Surha                        | 79° 55' 30.0" -              | 25° 31' 30.0"-               | Kabarai       | 609.04   | Mahoba to Kabarai                                    |

|              | 2C1B3k1b                          |  | 79°58'0.0"                  | 25°33'30.0"                 |         |                 | road |
|--------------|-----------------------------------|--|-----------------------------|-----------------------------|---------|-----------------|------|
| 11           | Surha<br>2C1B3k1c                 | Baberi, Surha  | 79°55'30.0"-<br>79°58'0.0"  | 25°30'30.0"-<br>25°32'0.0"  | Kabarai | 572.91          | -do- |
| 12           | Kauhari<br>2C1B3k1d               | Surha, Kauhari   | 79°54'0.0"-<br>79°56'30.0"  | 25°29'30.0"-<br>25°31'30.0" | Kabarai | 869.67          | -do- |
| 13           | Pindari<br>2C1B3k2a               | Surha, Pindari   | 79°57'0.0"-<br>79°59'30.0"  | 25°29'0.0"-25°32'0.0"       | Kabarai | 633.45          | -do- |
| 14           | Singhanpur<br>Baghari<br>2C1B3k2b | Surha, Singhanpur,<br>Baghari                              | 79°55'30.0"-<br>79°58'0.0"  | 25°29'0.0"-<br>25°31'30.0"  | Kabarai | 723.50          | -do- |
| 15           | Kamalpura<br>2C1B3k2c             | Singhanpur Baghari,<br>Kanera, Salua,<br>Kamalkhera, Patha | 79°53'30.0"-<br>79°56'30.0" | 25°27'30.0"-<br>25°29'30.0" | Kabarai | 1162.38         | -do- |
| 16           | Shivhara<br>2C1B3k2d              | Kamalkhera, Syohar,<br>Bamhaur Kala                        | 79° 52' 0.0"-<br>79°55'0.0" | 25°27'0.0"-25°29'<br>0.0"   | Kabarai | 892.26          | -do- |
| 17           | Bamhaurikaji<br>2C1B3k2e          | Bamhaur Kaji, Siyor,<br>Kamalkhera, Gehra                  | 79°55'30.0"-<br>79°52'30.0" | 25°25'0.0"-<br>25°27'30.0"  | Kabarai | 742.90          | -do- |
| 18           | Gahra<br>2C1B3k2f                 | Singhanpur Baghari,<br>Bhaghari, Gehra                     | 79°55'30.0"-<br>79°57'30.0" | 25°26'30.0"-<br>25°29'0.0"  | Kabarai | 532.51          | -do- |
| <b>Total</b> |                                   |  |                             |                             |         | <b>12326.34</b> |      |

## LOCATION MAP

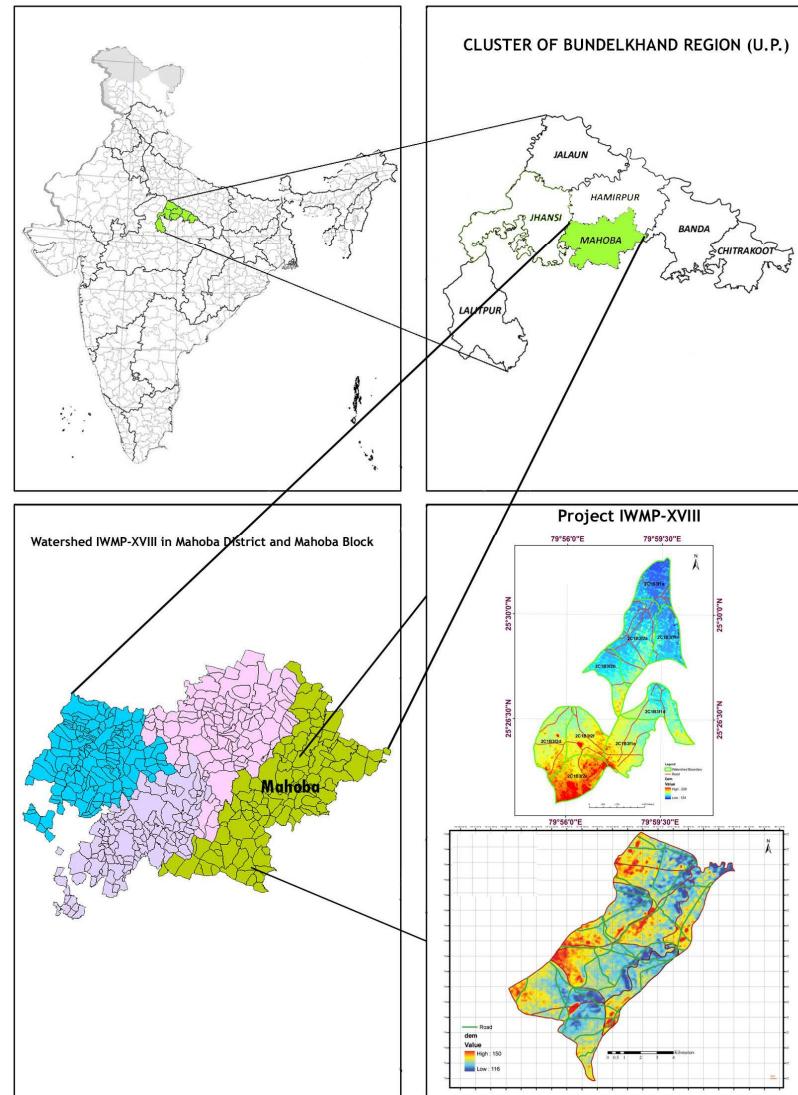


Fig 1 : Location map of the Project

**2.2 Area and Landuse:** Each micro-watershed covers partially or fully lands of many village. Details of various categories of land were estimated on the basis of villages, MWS area, PRA meetings and other source such as village meetings. Village wise detailed information on type of land is depicted in Table 2.2. The total culturable land of the project is 9244.77 ha, out of which 1109.36 (12.00%) ha land is under life saving irrigation mainly by means of open shallow dug wells. The cultivable rainfed, temporary and permanent wastelands are about 80.50, 6.00 and 1.50 per cent, respectively, of culturable land of the project.

**Table 2.2: Details of land resources in IWMP-XVIII of Mahoba district**

| Sl . N o. | Name of MWS with code   | Name of Village                      | Cultiva ted rainfed area | Cultiv ated irrigat ed area | Uncultivated wasteland/ fallow |            | Pvt. Agri. Land |        |        |        | For est Lan d | Commu nity land | Other s | Total area (ha) |
|-----------|-------------------------|--------------------------------------|--------------------------|-----------------------------|--------------------------------|------------|-----------------|--------|--------|--------|---------------|-----------------|---------|-----------------|
|           |                         |                                      |                          |                             | Tem p.                         | Perman ent | Gen             | SC     | OBC    | Total  |               |                 |         |                 |
| 1         | Bhestama af<br>2C1B3f1a | Bhenstamaf, Parsaha, Surha           | 279.90                   | 41.72                       | 20.86                          | 5.22       | 114.74          | 62.59  | 170.37 | 347.70 | 0.00          | 37.09           | 78.81   | 463.60          |
| 2         | Parsaha<br>2C1B3f1b     | Parsaha, lilwahi                     | 266.33                   | 39.70                       | 19.85                          | 4.96       | 109.18          | 59.55  | 162.12 | 330.85 | 0.00          | 35.29           | 74.99   | 441.13          |
| 3         | Maheba<br>2C1B3f1d      | Sichaura, lilwahi, Mahewa, Chanikala | 359.51                   | 53.59                       | 26.80                          | 6.70       | 147.38          | 80.39  | 218.83 | 446.60 | 0.00          | 47.64           | 101.23  | 595.46          |
| 4         | Sichaura<br>2C1B3f1e    | Dharaun, Sichaura                    | 455.41                   | 67.89                       | 33.94                          | 8.49       | 186.69          | 101.83 | 277.21 | 565.73 | 0.00          | 60.34           | 128.23  | 754.31          |
| 5         | Lilwahi-I<br>2C1B3f2a   | Paswara, Pindari, lilwahi            | 576.10                   | 85.88                       | 42.94                          | 10.73      | 236.16          | 128.82 | 350.67 | 715.65 | 0.00          | 76.34           | 162.21  | 954.20          |

|    |                                   |   |        |        |       |       |        |        |        |        |      |        |        |         |
|----|-----------------------------------|---|--------|--------|-------|-------|--------|--------|--------|--------|------|--------|--------|---------|
| 6  | Lilwahi-II<br>2C1B3f2b            | Lilwahi,<br>Gahra,<br>Singhanpura<br>, Baghri                       | 269.48 | 40.17  | 20.09 | 5.02  | 110.47 | 60.26  | 164.03 | 334.76 | 0.00 | 35.71  | 75.88  | 446.34  |
| 7  | Utiyan<br>2C1B3f2d                | Utiya, Bari,<br>Bamhauri,<br>Gehra                                  | 408.68 | 60.92  | 30.46 | 7.62  | 167.53 | 91.38  | 248.76 | 507.68 | 0.00 | 54.15  | 115.07 | 676.90  |
| 8  | Jujhar<br>2C1B3f2e                | Utiya, Gnaj,<br>Dharaun,<br>Jujhar                                  | 397.90 | 59.31  | 29.66 | 7.41  | 163.11 | 88.97  | 242.20 | 494.29 | 0.00 | 52.72  | 112.04 | 659.05  |
| 9  | Dharaun<br>2C1B3f2f               | Utiya,<br>Dharaun   | 360.28 | 53.71  | 26.85 | 6.71  | 147.69 | 80.56  | 219.30 | 447.55 | 0.00 | 47.74  | 101.44 | 596.73  |
| 10 | Babedi<br>2C1B3k1b                | Baberi,<br>Surha  | 365.42 | 54.81  | 27.41 | 9.14  | 95.92  | 105.06 | 255.80 | 456.78 | 0.00 | 60.90  | 91.36  | 609.04  |
| 11 | Surha<br>2C1B3k1c                 | Baberi,<br>Surha  | 343.75 | 51.56  | 25.78 | 8.59  | 90.23  | 98.83  | 240.62 | 429.68 | 0.00 | 57.29  | 85.94  | 572.91  |
| 12 | Kauhari<br>2C1B3k1d               | Surha,<br>Kauhari   | 521.80 | 78.27  | 39.14 | 13.05 | 136.97 | 150.02 | 365.26 | 652.25 | 0.00 | 86.97  | 130.45 | 869.67  |
| 13 | Pindari<br>2C1B3k2a               | Surha,<br>Pindari   | 380.07 | 57.01  | 28.51 | 9.50  | 99.77  | 109.27 | 266.05 | 475.09 | 0.00 | 63.35  | 95.02  | 633.45  |
| 14 | Singhanpu<br>r Baghri<br>2C1B3k2b | Surha,<br>Singhanpur,<br>Baghri                                     | 434.10 | 65.12  | 32.56 | 10.85 | 113.95 | 124.80 | 303.87 | 542.63 | 0.00 | 72.35  | 108.53 | 723.50  |
| 15 | Kamalpur<br>a<br>2C1B3k2c         | Singhanpur<br>Baghri,<br>Kanera,<br>Salua,<br>Kamalkhera<br>, Patha | 697.43 | 104.61 | 52.31 | 17.44 | 183.07 | 200.51 | 488.20 | 871.79 | 0.00 | 116.24 | 174.36 | 1162.38 |

|    |                           |   |                |                |               |               |                |                |                |                |             |                |                |                 |
|----|---------------------------|---|----------------|----------------|---------------|---------------|----------------|----------------|----------------|----------------|-------------|----------------|----------------|-----------------|
| 16 | Shivhara<br>2C1B3k2d      | Kamalkhera , Syohar, Bamhaur Kala       | 535.36         | 80.30          | 40.15         | 13.38         | 140.53         | 153.91         | 374.75         | 669.20         | 0.00        | 89.23          | 133.84         | 892.26          |
| 17 | Bamhauri kaji<br>2C1B3k2e | Bamhaur Kaji, Siyor, Kamalkhera , Gehra | 445.74         | 66.86          | 33.43         | 11.14         | 117.01         | 128.15         | 312.02         | 557.18         | 0.00        | 74.29          | 111.44         | 742.90          |
| 18 | Gahra<br>2C1B3k2f         | Singhanpur Baghari, Bhaghari, Gehra     | 319.51         | 47.93          | 23.96         | 7.99          | 83.87          | 91.86          | 223.65         | 399.38         | 0.00        | 53.25          | 79.88          | 532.51          |
|    | <b>Total</b>              |   | <b>7416.77</b> | <b>1109.36</b> | <b>554.70</b> | <b>163.94</b> | <b>2444.27</b> | <b>1916.76</b> | <b>4883.71</b> | <b>9244.79</b> | <b>0.00</b> | <b>1120.89</b> | <b>1960.72</b> | <b>12326.34</b> |

Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Mahoba, District- Mahoba, U.P.)

### 2.3 Physiography

The micro-watersheds of IWMP-XVIII is situated at an elevation of some 124 to 229 m above mean sea level and has relief from 20 to 80 m. General topography of the watershed is mild to gentle.

| Name of MWS         | Minimum (m) | Maximum (m) | Relief (m) |
|---------------------|-------------|-------------|------------|
| Bhestamaaf 2C1B3f1a | 128         | 148         | 20         |
| Parsaha 2C1B3f1b    | 124         | 151         | 27         |
| Maheba 2C1B3f1d     | 131         | 162         | 31         |
| Sichaura 2C1B3f1e   | 141         | 219         | 78         |
| Lilwahi-I 2C1B3f2a  | 130         | 157         | 27         |
| Lilwahi-II 2C1B3f2b | 134         | 161         | 27         |
| Utiyan 2C1B3f2d     | 143         | 179         | 36         |
| Jujhar 2C1B3f2e     | 149         | 229         | 80         |
| Dharaun 2C1B3f2f    | 142         | 209         | 67         |
| Babedi 2C1B3k1b     | 122         | 147         | 25         |

|                             |     |     |    |
|-----------------------------|-----|-----|----|
| Surha 2C1B3k1c              | 116 | 150 | 34 |
| Kauhari 2C1B3k1d            | 127 | 155 | 28 |
| Pindari 2C1B3k2a            | 116 | 145 | 29 |
| Singhanpur Baghari 2C1B3k2b | 113 | 148 | 35 |
| Kamalpura 2C1B3k2c          | 121 | 155 | 34 |
| Shivhara 2C1B3k2d           | 132 | 203 | 71 |
| Bamhaurikaji 2C1B3k2e       | 131 | 207 | 76 |
| Gahra 2C1B3k2f              | 127 | 158 | 31 |

*Source: Aster 30m DEM*

**Slope:** Spatial distribution of different slope classes was prepared using Arc GIS. Slope was divided into five classes' viz. 0-0.5, 0.5-1.0, 1-3, 3-5, and more than 5 per cent. The dominant slope category in the project were 1-3 per cent (55%) followed by 3-5 per cent (22%).

#### 2.4 Climate

The annual rainfall of the Mahoba district varies from 454 to 1009.10 mm, about 92% of which is received during South-West monsoon starting from June, July and August. The total rainy days/year vary from 35-50 in the district with an average of 38. The distribution of rainfall is very erratic. Low rainfall and drought are common features. Long dry spells during rainy season are also experienced often, which adversely affect the crops. The climate of Mahoba is characterized by a hot dry summer and cold winter and is marked for high variability of rainfall year to year. There are primarily four seasons: – Dry Summer season – from March to May i.e. before advent of monsoon, moist summer season – from June to September (Monsoon) transition period - in October and November, which is the post monsoon period, and winter season – from December to February The coldest months in the year are December and January. Average monthly rainfall and temperature is presented in Table 2.3.

**Table 2.3: Average monthly rainfall and Temperature at IWMP-XVIII, Mahoba, Mahoba, U.P.**

| Month        | Average Annual Rainfall (mm) |               |               |              |              | Average Temperature °c |       |
|--------------|------------------------------|---------------|---------------|--------------|--------------|------------------------|-------|
|              | 2006                         | 2007          | 2008          | 2009         | 2010         | Max.                   | Min.  |
| January      | 0                            | 0             | 0             | 2.8          | 2.2          | 16.8                   | 4.5   |
| February     | 0                            | 57.8          | 0             | 1.8          | 22.1         | 24.2                   | 12.6  |
| March        | 10.7                         | 7.1           | 0             | 2.0          | 0            | 31.8                   | 21.6  |
| April        | 0                            | 0             | 0             | 5.2          | 0            | 37.4                   | 29.7  |
| May          | 13.2                         | 0.7           | 2.2           | 31.2         | 0.5          | 44.4                   | 34.2  |
| June         | 43.3                         | 56.9          | 219.5         | 10.7         | 14.2         | 46.2                   | 35.1  |
| July         | 228.2                        | 115.2         | 431.0         | 179.4        | 148.8        | 47.4                   | 33.6  |
| August       | 87.5                         | 155.8         | 229.3         | 204.4        | 166.9        | 42.3                   | 30.7  |
| September    | 55.7                         | 60.4          | 109.9         | 135.1        | 139.0        | 37.4                   | 20.20 |
| October      | 7.3                          | 1.1           | 5.8           | 86.4         | 25.0         | 34.7                   | 28.5  |
| November     | 8.1                          | 0             | 11.4          | 17.2         | 20.7         | 31.4                   | 18.8  |
| December     | 0                            | 3.3           | 0             | 6.8          | 0.5          | 24.4                   | 10.3  |
| <b>Total</b> | <b>454.00</b>                | <b>458.30</b> | <b>1009.1</b> | <b>683.0</b> | <b>539.9</b> |                        |       |

Source: <http://www.imd.gov.in/section/hydro/distrainfall/webrain/up>

The open pan evaporation varied in the range of 0.5 to 23 mm/day during the year with average of about 5 mm/day. Average relative humidity varied in the range of 25 to 98 per cent, however the range of wind speed is 0.9 to 16 kmph. The details of flood and drought in the project area are showed in Table 2.5.

**Table 2.4: Details of flood and drought in the project area (IWMP-XVIII, Mahoba) Project IWMP- XVIII**

| Name of Micro Watershed | Particulars | Villages   | Periodicity   |                               | Not affected |
|-------------------------|-------------|--|---|-------------------------------|--------------|
|                         |             |  | Annual  | Any other<br>(please specify) |              |
| Bhestamaaf              | Flood       | No. of villages:37   | NA  | NA                            | NA           |
| Parsaha                 |             | Name(s) of villages  | NA  | NA                            | NA           |
| Maheba                  | Drought     | <b>No. of villages- 37</b><br><b>Name of Village:</b><br>Bhenstamaf, Parsaha, Surha, Sichaura, Lilwahi, Mahewa, Chanikala, Paswara, Pindari, Singhapur, Baghari, Bari, Bamhauri, Gehra, Gnaj, Dharaun, Jujhar, Utiya, Baberi, Surha, Kauhari, Pindari, Singhapur, Baghari, Kanera, Salua, Kamalkhera, Patha, Kamalkhera, Syohar, Bamhauri, Kala, Bamhauri, Kaji, Siyor, Kamalkhera, Gehra, Singhapur, Baghari and Bhaghari | <b>twice in 5 years</b> however, the region experienced severe drought during 2004-2007 and 2009 & 2010 were deficit by about 17 to 20 per cent |                               |              |
| Sichaura                |             |  |   |                               |              |
| Lilwahi-I               |             |  |   |                               |              |
| Lilwahi-II              |             |  |   |                               |              |
| Utiyan                  |             |  |   |                               |              |
| Jujhar                  |             |  |   |                               |              |
| Dharaun                 |             |  |   |                               |              |
| Babedi                  |             |  |   |                               |              |
| Surha                   |             |  |   |                               |              |
| Kauhari                 |             |  |   |                               |              |
| Pindari                 |             |  |   |                               |              |
| Singhanpur              |             |  |   |                               |              |
| Baghari                 |             |  |   |                               |              |
| Kamalpura               |             |  |   |                               |              |
| Shivhar                 |             |  |   |                               |              |
| Bamhauri kaji           |             |  |   |                               |              |
| Gehra                   |             |  |   |                               |              |

## CHAPTER – 3

### BASELINE SURVEY AND PARTICIPATORY RURAL APPRAISAL

Participatory rural appraisal (PRA) is a tool to appraise the socio-economic conditions along with all kind of resources available in the watershed through the active participation of the villagers. There are several tools and techniques of PRA. The PRA including house hold survey of Bhestamaaf, Parsaha, Maheba, Sichaura, Lilwahi-I, Lilwahi-II, Utiyan, Jujhar, Dharaun Babedi, Surha, Kauhari, Pindari, Singhapur Baghari, Kamalpura , Shivhar, Bamhauri kaji and Gehra micro-watershed was conducted by PIA and described in the subsequent sections.

#### 3.1. Social-Economic Analysis

About 21 per cent of the population is scheduled caste. Population details of the IWMP-XVIII are given in Table 3.1. In general 7.0 per cent population migrate from the project area due to drought and earn livelihood, however, migration was more than 50 per cent during 2007-08 due to continuous drought from 2004 to 2007 in the region. Majority of population migrate to New Delhi, Haryana and Punjab during drought year. The scenario of migration, infrastructure and common properties resources available in the project was analyzed through house hold survey and is presented in Table 3.2, 3.3 and 3.4, respectively

**Table 3.1: Demographic Features in the project area (IWMP-XVIII, Mahoba)**

| Sr. No. | Name of Micro Watershed | Name of village                      | Total Population |      |        | Population of SC/ST |      |        |
|---------|-------------------------|--------------------------------------|------------------|------|--------|---------------------|------|--------|
|         |                         |                                      | Total            | Male | Female | Total               | Male | Female |
| 1       | Bhestamaaf 2C1B3f1a     | Bhenstamaf, Parsaha, Surha           | 875              | 455  | 420    | 165                 | 86   | 79     |
| 2       | Parsaha 2C1B3f1b        | Parsaha, lilwahi                     | 864              | 449  | 415    | 163                 | 85   | 78     |
| 3       | Maheba 2C1B3f1d         | Sichaura, lilwahi, Mahewa, Chanikala | 1172             | 609  | 563    | 221                 | 115  | 106    |
| 4       | Sichaura 2C1B3f1e       | Dharaun, Sichaura                    | 1350             | 702  | 648    | 256                 | 133  | 123    |
| 5       | Lilwahi-I 2C1B3f2a      | Paswara, Pindari, lilwahi            | 1800             | 936  | 864    | 341                 | 177  | 164    |
| 6       | Lilwahi-II 2C1B3f2b     | Lilwahi, Gahra, Singhapur Baghari    | 850              | 442  | 408    | 160                 | 83   | 77     |
| 7       | Utiyan 2C1B3f2d         | Utiya, Bari, Bamhauri, Gehra         | 1300             | 676  | 624    | 246                 | 128  | 118    |
| 8       | Jujhar 2C1B3f2e         | Utiya, Gnaj,                         | 1225             | 637  | 588    | 232                 | 121  | 111    |

|    |                             |  |              |              |              |             |             |             |
|----|-----------------------------|--|--------------|--------------|--------------|-------------|-------------|-------------|
|    |                             | Dharaun, Jujhar                                      |              |              |              |             |             |             |
| 9  | Dharaun 2C1B3f2f            | Utiya, Dharaun                                       | 1150         | 598          | 552          | 217         | 113         | 104         |
| 10 | Babedi 2C1B3k1b             | Baberi, Surha  | 1150         | 598          | 552          | 263         | 137         | 126         |
| 11 | Surha 2C1B3k1c              | Baberi, Surha  | 1125         | 585          | 540          | 258         | 134         | 124         |
| 12 | Kauhari 2C1B3k1d            | Surha, Kauhari                                       | 1675         | 871          | 804          | 384         | 200         | 184         |
| 13 | Pindari 2C1B3k2a            | Surha, Pindari                                       | 1139         | 592          | 547          | 261         | 136         | 125         |
| 14 | Singhanpur Baghari 2C1B3k2b | Surha, Singhanpur, Baghari                           | 1350         | 702          | 648          | 310         | 161         | 149         |
| 15 | Kamalpura 2C1B3k2c          | Singhanpur Baghari, Kanera, Salua, Kamalkhera, Patha | 2200         | 1144         | 1056         | 505         | 263         | 242         |
| 16 | Shivhara 2C1B3k2d           | Kamalkhera, Syohar, Bamhaur Kala                     | 1700         | 884          | 816          | 390         | 203         | 187         |
| 17 | Bamhaurikaji 2C1B3k2e       | Bamhaur Kaji, Siyor, Kamalkhera, Gehra               | 1350         | 702          | 648          | 310         | 161         | 149         |
| 18 | Gahra 2C1B3k2f              | Singhanpur Baghari, Bhaghari, Gehra                  | 1025         | 533          | 492          | 235         | 122         | 113         |
|    | <b>Total</b>                |  | <b>23300</b> | <b>12115</b> | <b>11185</b> | <b>4917</b> | <b>2558</b> | <b>2359</b> |

Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Mahoba, District- Mahoba, U.P.)

**Table 3.2: Details of land holding pattern in IWMP-XVIII, Mahoba**

| Sr. No.  | Names MWS with code    | Name of Village                            | Type of Farmer         | No. of households | No. of BPL households | Land holding (ha) |               |               |
|----------|------------------------|--|------------------------|-------------------|-----------------------|-------------------|---------------|---------------|
|          |                        |  |                        |                   |                       | Irrigated         | Rainfed       | Total         |
| <b>1</b> | Bhestamaaf<br>2C1B3f1a | Bhenstamaf,<br>Parsaha, Surha              | (i) Big (above 4 ha.)  | 14                | -                     | 26.08             | 52.32         | 78.40         |
|          |                        |  | (ii) Medium (2-4 ha.)  | 51                | -                     | 15.65             | 147.55        | 163.20        |
|          |                        |  | (iii) Small (1-2 ha.)  | 53                | 6                     | 10.43             | 69.07         | 79.50         |
|          |                        |  | (iv) Marginal (0-1ha.) |                   | 42                    | -                 | 26.60         | 26.60         |
|          |                        |  | (v) Landless           | 7                 | 7                     | -                 | -             | -             |
|          |                        |  | <b>Total</b>           | <b>175</b>        | <b>55</b>             | <b>52.16</b>      | <b>295.55</b> | <b>347.70</b> |
| <b>2</b> | Parsaha 2C1B3f1b       | Parsaha, lilwahi                           | (i) Big (above 4 ha.)  | 13                | -                     | 24.81             | 45.39         | 70.20         |
|          |                        |  | (ii) Medium (2-4 ha.)  | 55                | -                     | 14.89             | 144.61        | 159.50        |
|          |                        |  | (iii) Small (1-2 ha.)  | 60                | 7                     | 9.93              | 80.07         | 90.00         |
|          |                        |  | (iv) Marginal (0-1ha.) | 39                | 33                    | -                 | 11.15         | 11.15         |
|          |                        |  | (v) Landless           | 8                 | 8                     | -                 | -             | -             |
|          |                        |  | <b>Total</b>           | <b>175</b>        | <b>48</b>             | <b>49.63</b>      | <b>281.22</b> | <b>330.85</b> |
| <b>3</b> | Maheba<br>2C1B3f1d     | Sichaura, lilwahi,<br>Mahewa,<br>Chanikala | (i) Big (above 4 ha.)  | 17                | -                     | 33.49             | 61.71         | 95.20         |
|          |                        |  | (ii) Medium (2-4 ha.)  | 65                | -                     | 20.10             | 181.40        | 201.50        |
|          |                        |  | (iii) Small (1-2 ha.)  | 79                | 9                     | 13.40             | 109.05        | 122.45        |
|          |                        |  | (iv) Marginal (0-1ha.) | 72                | 61                    | -                 | 27.45         | 27.45         |
|          |                        |  | (v) Landless           | 7                 | 7                     | -                 | -             | -             |
|          |                        |  | <b>Total</b>           | <b>240</b>        | <b>77</b>             | <b>66.99</b>      | <b>379.61</b> | <b>446.60</b> |
| <b>4</b> | Sichaura<br>2C1B3f1e   | Dharaun, Sichaura                          | (i) Big (above 4 ha.)  | 19                | -                     | 42.43             | 63.97         | 106.40        |
|          |                        |  | (ii) Medium (2-4 ha.)  | 85                | -                     | 25.46             | 246.54        | 272.00        |
|          |                        |  | (iii) Small (1-2 ha.)  |                   | 1                     | 16.97             | 141.27        | 158.24        |
|          |                        |  | (iv) Marginal (0-1ha.) | 68                | 57                    | -                 | 29.09         | 29.09         |
|          |                        |  | (v) Landless           | 6                 | 6                     | -                 | -             | -             |

|          |                        |  | <b>Total</b>           | <b>270</b> | <b>64</b> | <b>84.86</b>  | <b>480.87</b> | <b>565.73</b> |
|----------|------------------------|--|------------------------|------------|-----------|---------------|---------------|---------------|
| <b>5</b> | Lilwahi-I<br>2C1B3f2a  | Paswara, Pindari,<br>lilwahi               | (i) Big (above 4 ha.)  | 25         | -         | 53.67         | 83.83         | 137.50        |
|          |                        |  | (ii) Medium (2-4 ha.)  | 115        | -         | 32.20         | 312.80        | 345.00        |
|          |                        |  | (iii) Small (1-2 ha.)  | 124        | 14        | 21.47         | 176.93        | 198.40        |
|          |                        |  | (iv) Marginal (0-1ha.) | 85         | 72        | -             | 34.75         | 34.75         |
|          |                        |  | (v) Landless           | 11         | 11        | -             | -             | -             |
|          |                        |  | <b>Total</b>           | <b>360</b> | <b>97</b> | <b>107.35</b> | <b>608.30</b> | <b>715.65</b> |
| <b>6</b> | Lilwahi-II<br>2C1B3f2b | Lilwahi, Gahra,<br>Singhanpura,<br>Baghari | (i) Big (above 4 ha.)  | 11         | -         | 25.11         | 35.39         | 60.50         |
|          |                        |  | (ii) Medium (2-4 ha.)  | 55         | -         | 15.06         | 149.94        | 165.00        |
|          |                        |  | (iii) Small (1-2 ha.)  | 58         | 6         | 10.04         | 76.96         | 87.00         |
|          |                        |  | (iv) Marginal (0-1ha.) | 40         | 34        | -             | 22.26         | 22.26         |
|          |                        |  | (v) Landless           | 6          | 6         | -             | -             | -             |
|          |                        |  | <b>Total</b>           | <b>170</b> | <b>46</b> | <b>50.21</b>  | <b>284.55</b> | <b>334.76</b> |
| <b>7</b> | Utiyan 2C1B3f2d        | Utiya, Bari,<br>Bamhauri, Gehra            | (i) Big (above 4 ha.)  | 18         | -         | 38.08         | 64.52         | 102.60        |
|          |                        |  | (ii) Medium (2-4 ha.)  | 80         | -         | 22.85         | 217.15        | 240.00        |
|          |                        |  | (iii) Small (1-2 ha.)  | 86         | 10        | 15.23         | 122.37        | 137.60        |
|          |                        |  | (iv) Marginal (0-1ha.) | 67         | 56        | -             | 27.47         | 27.47         |
|          |                        |  | (v) Landless           | 9          | 9         | -             | -             | -             |
|          |                        |  | <b>Total</b>           | <b>260</b> | <b>75</b> | <b>76.15</b>  | <b>431.52</b> | <b>507.67</b> |
| <b>8</b> | Jujhar 2C1B3f2e        | Utiya, Gnaj,<br>Dharaun, Jujhar            | (i) Big (above 4 ha.)  | 17         | -         | 37.07         | 61.53         | 98.60         |
|          |                        |  | (ii) Medium (2-4 ha.)  | 76         | -         | 22.24         | 205.76        | 228.00        |
|          |                        |  | (iii) Small (1-2 ha.)  | 85         | 10        | 14.83         | 129.67        | 144.50        |
|          |                        |  | (iv) Marginal (0-1ha.) | 60         | 51        | -             | 23.19         | 23.19         |
|          |                        |  | (v) Landless           | 7          | 7         | -             | -             | -             |
|          |                        |  | <b>Total</b>           | <b>245</b> | <b>68</b> | <b>74.14</b>  | <b>420.15</b> | <b>494.29</b> |
| <b>9</b> | Dharaun<br>2C1B3f2f    | Utiya, Dharaun                             | (i) Big (above 4 ha.)  | 14         | -         | 33.57         | 46.23         | 79.80         |
|          |                        |  | (ii) Medium (2-4 ha.)  | 71         | -         | 20.14         | 192.86        | 213.00        |
|          |                        |  | (iii) Small (1-2 ha.)  | 78         | 9         | 13.43         | 111.37        | 124.80        |
|          |                        |  | (iv) Marginal (0-1ha.) | 59         | 50        | -             | 29.95         | 29.95         |
|          |                        |  | (v) Landless           | 8          | 8         | -             | -             | -             |

|           |                                   |                                  | <b>Total</b>           | <b>230</b> | <b>67</b> | <b>67.13</b>  | <b>380.42</b> | <b>447.55</b> |
|-----------|-----------------------------------|----------------------------------|------------------------|------------|-----------|---------------|---------------|---------------|
| <b>10</b> | Babedi 2C1B3k1b                   | Baberi, Surha                    | (i) Big (above 4 ha.)  | 15         | -         | 35.40         | 48.60         | 84.00         |
|           |                                   |                                  | (ii) Medium (2-4 ha.)  | 70         | -         | 21.24         | 202.76        | 224.00        |
|           |                                   |                                  | (iii) Small (1-2 ha.)  | 75         | 9         | 14.16         | 98.34         | 112.50        |
|           |                                   |                                  | (iv) Marginal (0-1ha.) | 62         | 52        | -             | 36.28         | 36.28         |
|           |                                   |                                  | (v) Landless           | 8          | 8         | -             | -             | -             |
|           |                                   |                                  | <b>Total</b>           | <b>230</b> | <b>69</b> | <b>70.80</b>  | <b>385.98</b> | <b>456.78</b> |
| <b>11</b> | Surha 2C1B3k1c                    | Baberi, Surha                    | (i) Big (above 4 ha.)  | 16         | -         | 33.30         | 53.10         | 86.40         |
|           |                                   |                                  | (ii) Medium (2-4 ha.)  | 70         | -         | 19.98         | 183.02        | 203.00        |
|           |                                   |                                  | (iii) Small (1-2 ha.)  | 78         | 9         | 13.32         | 103.68        | 117.00        |
|           |                                   |                                  | (iv) Marginal (0-1ha.) | 54         | 45        | -             | 23.28         | 23.28         |
|           |                                   |                                  | (v) Landless           | 7          | 7         | -             | -             | -             |
|           |                                   |                                  | <b>Total</b>           | <b>225</b> | <b>61</b> | <b>66.60</b>  | <b>363.08</b> | <b>429.68</b> |
| <b>12</b> | Kauhari<br>2C1B3k1d               | Surha, Kauhari                   | (i) Big (above 4 ha.)  | 21         | -         | 50.55         | 67.05         | 117.60        |
|           |                                   |                                  | (ii) Medium (2-4 ha.)  | 100        | -         | 30.33         | 279.67        | 310.00        |
|           |                                   |                                  | (iii) Small (1-2 ha.)  | 115        | 13        | 20.22         | 158.03        | 178.25        |
|           |                                   |                                  | (iv) Marginal (0-1ha.) | 90         | 76        | -             | 46.40         | 46.40         |
|           |                                   |                                  | (v) Landless           | 9          | 9         | -             | -             | -             |
|           |                                   |                                  | <b>Total</b>           | <b>335</b> | <b>98</b> | <b>101.10</b> | <b>551.15</b> | <b>652.25</b> |
| <b>13</b> | Pindari 2C1B3k2a                  | Surha, Pindari                   | (i) Big (above 4 ha.)  | 14         | -         | 36.82         | 46.48         | 83.30         |
|           |                                   |                                  | (ii) Medium (2-4 ha.)  | 70         | -         | 22.09         | 213.11        | 235.20        |
|           |                                   |                                  | (iii) Small (1-2 ha.)  | 74         | 8         | 14.73         | 112.55        | 127.28        |
|           |                                   |                                  | (iv) Marginal (0-1ha.) | 64         | 54        | -             | 29.31         | 29.31         |
|           |                                   |                                  | (v) Landless           | 6          | 6         | -             | -             | -             |
|           |                                   |                                  | <b>Total</b>           | <b>228</b> | <b>68</b> | <b>73.64</b>  | <b>401.45</b> | <b>475.09</b> |
| <b>14</b> | Singhanpur<br>Baghari<br>2C1B3k2b | Surha,<br>Singhanpur,<br>Baghari | (i) Big (above 4 ha.)  | 15         | -         | 42.05         | 43.45         | 85.50         |
|           |                                   |                                  | (ii) Medium (2-4 ha.)  | 82         | -         | 25.23         | 253.57        | 278.80        |
|           |                                   |                                  | (iii) Small (1-2 ha.)  | 92         | 11        | 16.82         | 130.38        | 147.20        |
|           |                                   |                                  | (iv) Marginal (0-1ha.) | 73         | 62        | -             | 31.13         | 31.13         |
|           |                                   |                                  | (v) Landless           | 8          | 8         | -             | -             | -             |
|           |                                   |                                  | <b>Total</b>           | <b>270</b> | <b>81</b> | <b>84.11</b>  | <b>458.52</b> | <b>542.63</b> |

|    |                          |   |                        |             |             |                |                |                |
|----|--------------------------|---|------------------------|-------------|-------------|----------------|----------------|----------------|
|    | Kamalpura<br>2C1B3k2c    | Singhanpur<br>Baghari, Kanera,<br>Salua,<br>Kamalkhera, Patha | (i) Big (above 4 ha.)  | 25          | -           | 67.56          | 77.44          | 145.00         |
| 15 |                          |   | (ii) Medium (2-4 ha.)  | 135         | -           | 40.54          | 391.46         | 432.00         |
|    |                          |   | (iii) Small (1-2 ha.)  | 155         | 18          | 27.03          | 213.22         | 240.25         |
|    |                          |   | (iv) Marginal (0-1ha.) | 111         | 94          | -              | 54.54          | 54.54          |
|    |                          |   | (v) Landless           | 14          | 14          | -              | -              | -              |
|    |                          |   | <b>Total</b>           | <b>440</b>  | <b>126</b>  | <b>135.13</b>  | <b>736.66</b>  | <b>871.79</b>  |
| 16 | Shivhara<br>2C1B3k2d     | Kamalkhera,<br>Syohar, Bamhaur<br>Kala                        | (i) Big (above 4 ha.)  | 25          | -           | 51.86          | 93.14          | 145.00         |
|    |                          |   | (ii) Medium (2-4 ha.)  | 105         | -           | 31.12          | 283.88         | 315.00         |
|    |                          |   | (iii) Small (1-2 ha.)  | 115         | 13          | 20.75          | 163.25         | 184.00         |
|    |                          |   | (iv) Marginal (0-1ha.) | 83          | 70          | -              | 25.19          | 25.19          |
|    |                          |   | (v) Landless           | 12          | 12          | -              | -              | -              |
|    |                          |   | <b>Total</b>           | <b>340</b>  | <b>95</b>   | <b>103.73</b>  | <b>565.46</b>  | <b>669.19</b>  |
| 17 | Bamhaurikaji<br>2C1B3k2e | Bamhaur Kaji,<br>Siyor,<br>Kamalkhera,<br>Gehra               | (i) Big (above 4 ha.)  | 18          | -           | 43.18          | 61.22          | 104.40         |
|    |                          |   | (ii) Medium (2-4 ha.)  | 78          | -           | 25.91          | 239.29         | 265.20         |
|    |                          |   | (iii) Small (1-2 ha.)  | 91          | 10          | 17.27          | 137.43         | 154.70         |
|    |                          |   | (iv) Marginal (0-1ha.) | 73          | 62          | -              | 32.88          | 32.88          |
|    |                          |   | (v) Landless           | 10          | 10          | -              | -              | -              |
|    |                          |   | <b>Total</b>           | <b>270</b>  | <b>82</b>   | <b>86.36</b>   | <b>470.82</b>  | <b>557.18</b>  |
| 18 | Gahra 2C1B3k2f           | Singhanpur<br>Baghari, Bhaghari,<br>Gehra                     | (i) Big (above 4 ha.)  | 15          | -           | 30.95          | 54.55          | 85.50          |
|    |                          |   | (ii) Medium (2-4 ha.)  | 61          | -           | 18.57          | 164.43         | 183.00         |
|    |                          |   | (iii) Small (1-2 ha.)  | 69          | 8           | 12.38          | 98.02          | 110.40         |
|    |                          |   | (iv) Marginal (0-1ha.) | 54          | 45          | -              | 20.48          | 20.48          |
|    |                          |   | (v) Landless           | 6           | 6           | -              | -              | -              |
|    |                          |   | <b>Total</b>           | <b>205</b>  | <b>59</b>   | <b>61.90</b>   | <b>337.48</b>  | <b>399.38</b>  |
|    | <b>Total of project</b>  |   |                        | <b>4668</b> | <b>1336</b> | <b>1411.99</b> | <b>7832.79</b> | <b>9244.77</b> |

Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Mahoba, District- Mahoba, U.P.)

**Table 3.3: Details of migration from Project area (IWMP-XVIII, Mahoba): Pre-project status**

| Sl. No. | Names of Watershed          | Name of village                                      | No. of persons migrating | No. of days per year of migration | Major reason(s) for migrating | Distance of destination of migration from the village (km) | Occupation during migration | Income from such occupation (Rs. in lakh) |
|---------|-----------------------------|--|--------------------------|-----------------------------------|-------------------------------|--|-----------------------------|---|
| 1       | Bhestamaaf 2C1B3f1a         | Bhenstamaf, Parsaha, Surha                           | 61                       | 120-180                           | Drought / Earn money          | 500-1100 Km  | Labour                      | 0.25-0.40                                 |
| 2       | Parsaha 2C1B3f1b            | Parsaha, lilwahi                                     | 60                       | 120-180                           | -do-                          | 500-1100 Km  | Labour                      | 0.25-0.40                                 |
| 3       | Maheba 2C1B3f1d             | Sichaura, lilwahi, Mahewa, Chanikala                 | 80                       | 120-180                           | -do-                          | 500-1100 Km  | Labour                      | 0.25-0.40                                 |
| 4       | Sichaura 2C1B3f1e           | Dharaun, Sichaura                                    | 94                       | 120-180                           | -do-                          | 500-1100 Km  | Labour                      | 0.25-0.40                                 |
| 5       | Lilwahi-I 2C1B3f2a          | Paswara, Pindari, lilwahi                            | 126                      |                                   |                               |  |                             |   |
| 6       | Lilwahi-II 2C1B3f2b         | Lilwahi, Gahra, Singhapur, Baghari                   | 59                       | 120-180                           | Drought / Earn money          | 500-1100 Km  | Labour                      | 0.25-0.40                                 |
| 7       | Utiyan 2C1B3f2d             | Utiya, Bari, Bamhauri, Gehra                         | 91                       | 120-180                           | -do-                          | 500-1100 Km  | Labour                      | 0.25-0.40                                 |
| 8       | Jujhar 2C1B3f2e             | Utiya, Gnaj, Dharaun, Jujhar                         | 85                       | 120-180                           | -do-                          | 500-1100 Km  | Labour                      | 0.25-0.40                                 |
| 9       | Dharaun 2C1B3f2f            | Utiya, Dharaun                                       | 80                       | 120-180                           | -do-                          | 500-1100 Km  | Labour                      | 0.25-0.40                                 |
| 10      | Babedi 2C1B3k1b             | Baberi, Surha  | 80                       | 120-180                           | Drought / Earn money          | 500-1100 Km  | Labour                      | 0.25-0.40                                 |
| 11      | Surha 2C1B3k1c              | Baberi, Surha  | 78                       | 120-180                           | -do-                          | 500-1100 Km  | Labour                      | 0.25-0.40                                 |
| 12      | Kauhari 2C1B3k1d            | Surha, Kauhari                                       | 117                      | 120-180                           | -do-                          | 500-1100 Km  | Labour                      | 0.25-0.40                                 |
| 13      | Pindari 2C1B3k2a            | Surha, Pindari                                       | 79                       | 120-180                           | -do-                          | 500-1100 Km  | Labour                      | 0.25-0.40                                 |
| 14      | Singhanpur Baghari 2C1B3k2b | Surha, Singhanpur, Baghari                           | 94                       |                                   |                               |  |                             |   |
| 15      | Kamalpura 2C1B3k2c          | Singhanpur Baghari, Kanera, Salua, Kamalkhera, Patha | 154                      | 120-180                           | Drought / Earn money          | 500-1100 Km  | Labour                      | 0.25-0.40                                 |
| 16      | Shivhara 2C1B3k2d           | Kamalkhera, Syohar, Bamhaur Kala                     | 119                      | 120-180                           | -do-                          | 500-1100 Km  | Labour                      | 0.25-0.40                                 |
| 17      | Bamhaurikaji 2C1B3k2e       | Bamhaur Kaji, Siyor, Kamalkhera, Gehra               | 94                       | 120-180                           | -do-                          | 500-1100 Km  | Labour                      | 0.25-0.40                                 |

|    |                |  |             |         |      |             |        |           |
|----|----------------|--|-------------|---------|------|-------------|--------|-----------|
| 18 | Gahra 2C1B3k2f | Singhanpur Baghari,<br>Bhaghari, Gehra | 71          | 120-180 | -do- | 500-1100 Km | Labour | 0.25-0.40 |
|    | <b>Total</b>   |  | <b>1622</b> |         |      |             |        |           |

Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Mahoba, District- Mahoba, U.P.)

**Table 3.4: Details of infrastructure in IWMP-XVIII, Mahoba**

| Sr.<br>No. | Name of Project | Parameters |   |  |  | Status |   |           |            |
|------------|-----------------|------------|---|--|--|--------|---|-----------|------------|
| 1          | IWMP-XVIII      | (i)        | Name of villages connected to the main road by an all-weather road  |  |  |        | Mahoba to Kabarai road  |           |            |
|            |                 | (ii)       | Villages Name provided with electricity   |  |  |        | All villages  |           |            |
|            |                 | (iii)      | No. of households without access to drinking water  |  |  |        | About 7-10 per cent house holds depends on others' source of drinking water |           |            |
|            |                 | (iv)       | No. of educational institutions :<br>Primary(P)/ Secondary(S)/ Higher Secondary(HS)/ vocational institution(VI) |  |  |        | (P)<br>35   | (S)<br>01 | (HS)<br>01 |
|            |                 | (v)        | Names of villages with access to Primary Health Centre  |  |  |        | NA  |           |            |
|            |                 | (vi)       | Names of villages with access to Veterinary Dispensary  |  |  |        | 02  |           |            |
|            |                 | (vii)      | Names of villages with access to Post Office  |  |  |        | 04  |           |            |
|            |                 | (viii)     | Names of villages with access to Banks  |  |  |        | 01  |           |            |
|            |                 | (ix)       | Names of villages with access to Markets/ mandis  |  |  |        | 01  |           |            |
|            |                 | (x)        | Names of villages with access to Agro-industries  |  |  |        | N.A   |           |            |
|            |                 | (xi)       | Total quantity of surplus milk/ deficit   |  |  |        | -   |           |            |
|            |                 | (xii)      | No. of milk collection centres<br>(e.g. Union(U)/ Society(S)/ Private agency(PA)/ others (O))                   |  |  |        | (U)<br>-  | (S)<br>-  | (PA)<br>-  |
|            |                 | (xiii)     | Name of villages with access to Anganwadi Centre  |  |  |        | At each Gram Panchayat  |           |            |
|            |                 | (xiv)      | Community centre, Panchayat Ghar  |  |  |        | Available   |           |            |

Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Mahoba, District- Mahoba, U.P.)

Note: Micro-watershed wise information is kept in project file

**Table 3.5: Details of common property resources In IWMP-XVIII, Mahoba**

| S. No.            | Names of Project                         | CPR Particulars | Total Area (ha)<br>Area owned/ In possession of |               |               |                         | Area available for treatment (ha) |                       |               |                         |
|-------------------|--|-----------------|---|---------------|---------------|-------------------------|-----------------------------------|-----------------------|---------------|-------------------------|
|                   |  |                 | Pvt. persons                                    | Govt. Revenue | PRI           | Any other (Pl. Specify) | Pvt. persons                      | Govt. (specify dept.) | PRI           | Any other (Pl. Specify) |
| <b>IWMP-XVIII</b> | (i) Wasteland/ degraded land             |                 | 516.15  | -             | 61.28         | -                       | 516.15                            | -                     | 61.28         | -                       |
|                   | (ii) Pastures                            |                 | -   | -             | -             | -                       | -                                 | -                     | -             | -                       |
|                   | (iii) Orchards                           |                 | -   | -             | -             | -                       | -                                 | -                     | -             | -                       |
|                   | (iv) Village Woodlot                     |                 | 77.03   | -             | 54.06         | -                       | 77.03                             | -                     | 54.06         | -                       |
|                   | (v) Forest                               |                 | -   | -             | -             | -                       | -                                 | -                     | -             | -                       |
|                   | (vi) Village Ponds/ Tanks                |                 | -   | -             | 13.78         | -                       | -                                 | -                     | -             | -                       |
|                   | (vii) Community Buildings                |                 | -   | -             | 61.51         | -                       | -                                 | -                     | -             | -                       |
|                   | (viii) Weekly Markets                    |                 | -   | -             | -             | -                       | -                                 | -                     | -             | -                       |
|                   | (ix) Permanent markets                   |                 | -   | -             | -             | -                       | -                                 | -                     | -             | -                       |
|                   | (x) Temples/ Places of worship           |                 | -   | -             | 29.52         | -                       | -                                 | -                     | -             | -                       |
|                   | (xi) Habitat, Chakmarg, Sector, Road etc |                 | -   | 552.21        | -             | -                       | -                                 | -                     | -             | -                       |
|                   | <b>Total</b>                             |                 | <b>593.18</b>                                   | <b>552.21</b> | <b>220.15</b> | -                       | <b>593.18</b>                     | -                     | <b>115.34</b> | -                       |

Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Mahoba, District- Mahoba, U.P.)

### 3.2 Soil and Land Holding Pattern

Major soils of the project are light and medium textured soil (sandy loam, loam and silty loam). Area details of each micro watershed are given in table no. 3.6.

**Table 3.6: Details of Soil texture in IWMP-XVIII, Mahoba**

| Sr. No. | MWS Project                | Area in different Soil Group (ha)      |  |                              | Details          |
|---------|----------------------------|--|--|------------------------------|------------------|
|         |                            | Light textured soil (sand, loamy sand) | Medium textured soil (Sandy loam, loam, silt loam) | Heavy textured soil (Clayey) |                  |
| 1       | Bhestamaaf 2C1B3f1a        | 51.00                                  | 143.72   | 268.89                       | Purwa, Mar+kabar |
| 2       | Parsaha 2C1B3f1b           | 48.52                                  | 136.75   | 255.86                       | Purwa, Mar+kabar |
| 3       | Maheba 2C1B3f1d            | 65.50                                  | 184.59   | 345.37                       | Purwa, Mar+kabar |
| 4       | Sichaura 2C1B3f1e          | 82.97                                  | 233.84   | 437.50                       | Purwa, Mar+kabar |
| 5       | Lilwahi-I 2C1B3f2a         | 104.96                                 | 295.80   | 553.44                       | Purwa, Mar+kabar |
| 6       | Lilwahi-II 2C1B3f2b        | 49.10                                  | 138.37   | 258.88                       | Purwa, Mar+kabar |
| 7       | Utiyan 2C1B3f2d            | 74.46                                  | 209.84   | 392.60                       | Purwa, Mar+kabar |
| 8       | Jujhar 2C1B3f2e            | 72.50                                  | 204.31   | 382.25                       | Purwa, Mar+kabar |
| 9       | Dharaun 2C1B3f2f           | 65.64                                  | 184.99   | 346.10                       | Purwa, Mar+kabar |
| 10      | Babedi 2C1B3k1b            | 30.45                                  | 188.80   | 389.79                       | Purwa, Mar+kabar |
| 11      | Surha 2C1B3k1c             | 28.65                                  | 177.60   | 366.66                       | Purwa, Mar+kabar |
| 12      | Kauhari 2C1B3k1d           | 43.48                                  | 269.60   | 556.59                       | Purwa, Mar+kabar |
| 13      | Pindari 2C1B3k2a           | 31.67                                  | 196.37   | 405.41                       | Purwa, Mar+kabar |
| 14      | Singhanpur Baghri 2C1B3k2b | 36.18                                  | 224.29   | 463.04                       | Purwa, Mar+kabar |
| 15      | Kamalpura 2C1B3k2c         | 58.12                                  | 360.34   | 743.92                       | Purwa, Mar+kabar |
| 16      | Shivhara 2C1B3k2d          | 44.61                                  | 276.60   | 571.05                       | Purwa, Mar+kabar |
| 17      | Bamhaurikaji 2C1B3k2e      | 37.15                                  | 230.30   | 475.46                       | Purwa, Mar+kabar |
| 18      | Gahra 2C1B3k2f             | 26.63                                  | 165.08   | 340.81                       | Purwa, Mar+kabar |
|         | <b>Total</b>               | <b>951.59</b>                          | <b>3821.19</b>                                     | <b>7553.62</b>               |                  |

Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Mahoba, District- Mahoba, U.P.)

### 3.3 Major Crops, its Productivity and Production

Micro-watershed wise grown crops, their productivity and production under irrigated and rainfed condition is given in Table 3.7. As far as productivity of cereals is concerned, it is significantly lower than the state and national average. Micro-watershed wise cropping intensity varied from 103.13 to 109.13 per cent with 106.07 per cent for the project.

**Table 3.7: Micro-watershed wise details of Crops, their Productivity and Production in IWMP-XVIII, Mahoba  
Bhestamaaf 2C1B3f1a**

| S.No | Crop                   | Area (ha.)    |               | Productivity q./ha        |               | Production (q.) |                |               |                |
|------|------------------------|---------------|---------------|---------------------------|---------------|-----------------|----------------|---------------|----------------|
|      |                        | Irrigated     | Rainfed       | Irrigated                 | Rainfed.      | Irrigated       | Rainfed        | Irrigated     | Rainfed        |
| A    | <b>Kharif</b>          |               |               |                           |               |                 |                |               |                |
| 1    | Urd                    | 0.00          | 39.61         | 0.00                      | 2.80          | 0.00            | 110.92         | 0.00          | 221.84         |
| 2    | Moong                  | 0.00          | 32.40         | 0.00                      | 2.60          | 0.00            | 84.24          | 0.00          | 151.63         |
| 3    | Arhar                  | 0.00          | 14.53         | 0.00                      | 4.90          | 0.00            | 71.19          | 0.00          | 12.10          |
| 4    | Sorghum                | 0.00          | 9.46          | 0.00                      | 5.70          | 0.00            | 53.91          | 0.00          | 247.97         |
| 5    | Til                    | 0.00          | 45.89         | 0.00                      | 1.80          | 0.00            | 82.59          | 0.00          | 156.93         |
|      | <b>Total</b>           |               | <b>141.89</b> |                           |               |                 | <b>402.85</b>  | <b>0.00</b>   | <b>790.47</b>  |
| B    | <b>Rabi</b>            |               |               |                           |               |                 |                |               |                |
| 1    | Wheat                  | 41.72         | 13.26         | 20.30                     | 11.50         | 847.00          | 152.49         | 889.35        | 150.97         |
| 2    | Masoor                 | 0.00          | 85.36         | 0.00                      | 11.30         | 0.00            | 964.57         | 0.00          | 954.92         |
| 3    | Gram                   | 0.00          | 46.02         | 0.00                      | 4.50          | 0.00            | 207.07         | 0.00          | 7720.24        |
| 4    | Pea                    | 0.00          | 28.40         | 0.00                      | 5.60          | 0.00            | 159.05         | 0.00          | 152.69         |
| 5    | Mustard                | 0.00          | 17.51         | 0.00                      | 6.90          | 0.00            | 120.81         | 0.00          | 422.82         |
|      | <b>Total</b>           | <b>41.72</b>  | <b>190.55</b> |                           |               | <b>847.00</b>   | <b>1603.99</b> | <b>889.35</b> | <b>9401.64</b> |
| C    | <b>Zaid</b>            |               |               |                           |               |                 |                |               |                |
|      | Nil                    |               |               |                           |               |                 |                |               |                |
|      | <b>Cultivable Area</b> | <b>347.70</b> |               | <b>Cropping Intensity</b> | <b>107.61</b> |                 |                |               |                |

Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Mahoba, District- Mahoba, U.P.)

**Parsaha 2C1B3f1b**

| S.No | Crop                   | Area<br>(ha.) |               | Productivity<br>q./ha     |               | Production (q.) |                |               |                |
|------|------------------------|---------------|---------------|---------------------------|---------------|-----------------|----------------|---------------|----------------|
|      |                        | Irrigated     | Rainfed       | Irrigated                 | Rainfed.      | Irrigated       | Rainfed        | Irrigated     | Rainfed        |
| A    | <b>Kharif</b>          |               |               |                           |               |                 |                |               |                |
| 1    | Urd                    | 0.00          | 43.31         | 0.00                      | 2.80          | 0.00            | 121.27         | 0.00          | 242.55         |
| 2    | Moong                  | 0.00          | 25.54         | 0.00                      | 2.60          | 0.00            | 66.40          | 0.00          | 119.52         |
| 3    | Arhar                  | 0.00          | 13.87         | 0.00                      | 4.90          | 0.00            | 67.98          | 0.00          | 11.56          |
| 4    | Sorghum                | 0.00          | 7.97          | 0.00                      | 5.70          | 0.00            | 45.41          | 0.00          | 208.86         |
| 5    | Til                    | 0.00          | 35.26         | 0.00                      | 1.80          | 0.00            | 63.47          | 0.00          | 120.59         |
|      | <b>Total</b>           |               | <b>125.95</b> |                           |               |                 | <b>364.53</b>  | <b>0.00</b>   | <b>703.08</b>  |
| B    | <b>Rabi</b>            |               |               |                           |               |                 |                |               |                |
| 1    | Wheat                  | 39.70         | 14.36         | 20.30                     | 11.50         | 805.94          | 165.14         | 846.24        | 163.49         |
| 2    | Masoor                 | 0.00          | 69.25         | 0.00                      | 11.30         | 0.00            | 782.53         | 0.00          | 774.70         |
| 3    | Gram                   | 0.00          | 45.26         | 0.00                      | 4.50          | 0.00            | 203.67         | 0.00          | 7720.24        |
| 4    | Pea                    | 0.00          | 36.50         | 0.00                      | 5.60          | 0.00            | 204.40         | 0.00          | 196.22         |
| 5    | Mustard                | 0.00          | 15.82         | 0.00                      | 6.90          | 0.00            | 109.17         | 0.00          | 382.11         |
|      | <b>Total</b>           | <b>39.70</b>  | <b>181.19</b> |                           |               | <b>805.94</b>   | <b>1464.91</b> | <b>846.24</b> | <b>9236.76</b> |
| C    | <b>Zaid</b>            |               |               |                           |               |                 |                |               |                |
|      | Nil                    |               |               |                           |               |                 |                |               |                |
|      | <b>Cultivable Area</b> | <b>330.85</b> |               | <b>Cropping Intensity</b> | <b>104.84</b> |                 |                |               |                |

Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Mahoba, District- Mahoba, U.P.)

**Maheba 2C1B3f1d**

| S.No | Crop                   | Area<br>(ha.) |               | Productivity<br>q./ha     |               | Production (q.) |                |                |                |
|------|------------------------|---------------|---------------|---------------------------|---------------|-----------------|----------------|----------------|----------------|
|      |                        | Irrigated     | Rainfed       | Irrigated                 | Rainfed.      | Irrigated       | Rainfed        | Irrigated      | Rainfed        |
| A    | <b>Kharif</b>          |               |               |                           |               |                 |                |                |                |
| 1    | Urd                    | 0.00          | 59.56         | 0.00                      | 2.80          | 0.00            | 166.77         | 0.00           | 333.54         |
| 2    | Moong                  | 0.00          | 36.24         | 0.00                      | 2.60          | 0.00            | 94.22          | 0.00           | 169.60         |
| 3    | Arhar                  | 0.00          | 8.85          | 0.00                      | 4.90          | 0.00            | 43.38          | 0.00           | 7.37           |
| 4    | Sorghum                | 0.00          | 14.23         | 0.00                      | 5.70          | 0.00            | 81.09          | 0.00           | 373.02         |
| 5    | Til                    | 0.00          | 73.57         | 0.00                      | 1.80          | 0.00            | 132.42         | 0.00           | 251.60         |
|      | <b>Total</b>           |               | <b>192.45</b> |                           |               |                 | <b>517.89</b>  | <b>0.00</b>    | <b>1135.14</b> |
| B    | <b>Rabi</b>            |               |               |                           |               |                 |                |                |                |
| 1    | Wheat                  | 53.59         | 15.26         | 20.30                     | 11.50         | 1087.91         | 175.49         | 1142.30        | 173.74         |
| 2    | Masoor                 | 0.00          | 93.20         | 0.00                      | 11.30         | 0.00            | 1053.16        | 0.00           | 1042.63        |
| 3    | Gram                   | 0.00          | 65.20         | 0.00                      | 4.50          | 0.00            | 293.40         | 0.00           | 7720.24        |
| 4    | Pea                    | 0.00          | 40.35         | 0.00                      | 5.60          | 0.00            | 225.96         | 0.00           | 216.92         |
| 5    | Mustard                | 0.00          | 25.36         | 0.00                      | 6.90          | 0.00            | 174.98         | 0.00           | 612.44         |
|      | <b>Total</b>           | <b>53.59</b>  | <b>239.37</b> |                           |               | <b>1087.91</b>  | <b>1922.99</b> | <b>1142.30</b> | <b>9765.97</b> |
| C    | <b>Zaid</b>            |               |               |                           |               |                 |                |                |                |
|      | Nil                    |               |               |                           |               |                 |                |                |                |
|      | <b>Cultivable Area</b> | <b>446.60</b> |               | <b>Cropping Intensity</b> | <b>108.69</b> |                 |                |                |                |

Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Mahoba, District- Mahoba, U.P.)

**Sichaura 2C1B3f1e**

| S.No | Crop                   | Area<br>(ha.) |               | Productivity<br>q./ha     |               | Production (q.) |                |                |                |
|------|------------------------|---------------|---------------|---------------------------|---------------|-----------------|----------------|----------------|----------------|
|      |                        | Irrigated     | Rainfed       | Irrigated                 | Rainfed.      | Irrigated       | Rainfed        | Irrigated      | Rainfed        |
| A    | <b>Kharif</b>          |               |               |                           |               |                 |                |                |                |
| 1    | Urd                    | 0.00          | 60.30         | 0.00                      | 2.80          | 0.00            | 168.84         | 0.00           | 337.68         |
| 2    | Moong                  | 0.00          | 45.36         | 0.00                      | 2.60          | 0.00            | 117.94         | 0.00           | 212.28         |
| 3    | Arhar                  | 0.00          | 22.67         | 0.00                      | 4.90          | 0.00            | 111.08         | 0.00           | 18.88          |
| 4    | Sorghum                | 0.00          | 20.48         | 0.00                      | 5.70          | 0.00            | 116.74         | 0.00           | 536.99         |
| 5    | Til                    | 0.00          | 86.37         | 0.00                      | 1.80          | 0.00            | 155.47         | 0.00           | 295.39         |
|      | <b>Total</b>           |               | <b>235.18</b> |                           |               |                 | <b>670.06</b>  | <b>0.00</b>    | <b>1401.22</b> |
| B    | <b>Rabi</b>            |               |               |                           |               |                 |                |                |                |
| 1    | Wheat                  | 67.89         | 23.25         | 20.30                     | 11.50         | 1378.12         | 267.38         | 1447.03        | 264.70         |
| 2    | Masoor                 | 0.00          | 62.25         | 0.00                      | 11.30         | 0.00            | 703.43         | 0.00           | 696.39         |
| 3    | Gram                   | 0.00          | 110.25        | 0.00                      | 4.50          | 0.00            | 496.13         | 0.00           | 7720.24        |
| 4    | Pea                    | 0.00          | 56.32         | 0.00                      | 5.60          | 0.00            | 315.39         | 0.00           | 302.78         |
| 5    | Mustard                | 0.00          | 30.97         | 0.00                      | 6.90          | 0.00            | 213.69         | 0.00           | 747.93         |
|      | <b>Total</b>           | <b>67.89</b>  | <b>283.04</b> |                           |               | <b>1378.12</b>  | <b>1996.01</b> | <b>1447.03</b> | <b>9732.03</b> |
| C    | <b>Zaid</b>            |               |               |                           |               |                 |                |                |                |
|      | Nil                    |               |               |                           |               |                 |                |                |                |
|      | <b>Cultivable Area</b> | <b>565.73</b> |               | <b>Cropping Intensity</b> | <b>103.60</b> |                 |                |                |                |

Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Mahoba, District- Mahoba, U.P.)

**Lilwahi-I 2C1B3f2a**

| S.No | Crop                   | Area<br>(ha.) |               | Productivity<br>q./ha     |               | Production (q.) |                |                |                 |
|------|------------------------|---------------|---------------|---------------------------|---------------|-----------------|----------------|----------------|-----------------|
|      |                        | Irrigated     | Rainfed       | Irrigated                 | Rainfed.      | Irrigated       | Rainfed        | Irrigated      | Rainfed         |
| A    | <b>Kharif</b>          |               |               |                           |               |                 |                |                |                 |
| 1    | Urd                    | 0.00          | 73.28         | 0.00                      | 2.80          | 0.00            | 205.19         | 0.00           | 410.37          |
| 2    | Moong                  | 0.00          | 61.06         | 0.00                      | 2.60          | 0.00            | 158.76         | 0.00           | 285.77          |
| 3    | Arhar                  | 0.00          | 28.31         | 0.00                      | 4.90          | 0.00            | 138.74         | 0.00           | 23.59           |
| 4    | Sorghum                | 0.00          | 27.92         | 0.00                      | 5.70          | 0.00            | 159.17         | 0.00           | 732.17          |
| 5    | Til                    | 0.00          | 103.01        | 0.00                      | 1.80          | 0.00            | 185.42         | 0.00           | 352.30          |
|      | <b>Total</b>           |               | <b>293.59</b> |                           |               |                 | <b>847.27</b>  | <b>0.00</b>    | <b>1804.19</b>  |
| B    | <b>Rabi</b>            |               |               |                           |               |                 |                |                |                 |
| 1    | Wheat                  | 85.88         | 25.36         | 20.30                     | 11.50         | 1743.32         | 291.64         | 1830.49        | 288.72          |
| 2    | Masoor                 | 0.00          | 95.36         | 0.00                      | 11.30         | 0.00            | 1077.57        | 0.00           | 1066.79         |
| 3    | Gram                   | 0.00          | 178.26        | 0.00                      | 4.50          | 0.00            | 802.17         | 0.00           | 7720.24         |
| 4    | Pea                    | 0.00          | 62.88         | 0.00                      | 5.60          | 0.00            | 352.13         | 0.00           | 338.05          |
| 5    | Mustard                | 0.00          | 39.62         | 0.00                      | 6.90          | 0.00            | 273.41         | 0.00           | 956.92          |
|      | <b>Total</b>           | <b>85.88</b>  | <b>401.49</b> |                           |               | <b>1743.32</b>  | <b>2796.92</b> | <b>1830.49</b> | <b>10370.72</b> |
| C    | <b>Zaid</b>            |               |               |                           |               |                 |                |                |                 |
|      | Nil                    |               |               |                           |               |                 |                |                |                 |
|      | <b>Cultivable Area</b> | <b>715.65</b> |               | <b>Cropping Intensity</b> | <b>109.13</b> |                 |                |                |                 |

Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Mahoba, District- Mahoba, U.P.)

**Lilwahi-II 2C1B3f2b**

| S.No | Crop                   | Area<br>(ha.) |               | Productivity<br>q./ha     |               | Production (q.) |                |               |                |
|------|------------------------|---------------|---------------|---------------------------|---------------|-----------------|----------------|---------------|----------------|
|      |                        | Irrigated     | Rainfed       | Irrigated                 | Rainfed.      | Irrigated       | Rainfed        | Irrigated     | Rainfed        |
| A    | <b>Kharif</b>          |               |               |                           |               |                 |                |               |                |
| 1    | Urd                    | 0.00          | 37.72         | 0.00                      | 2.80          | 0.00            | 105.61         | 0.00          | 211.23         |
| 2    | Moong                  | 0.00          | 31.36         | 0.00                      | 2.60          | 0.00            | 81.54          | 0.00          | 146.77         |
| 3    | Arhar                  | 0.00          | 8.86          | 0.00                      | 4.90          | 0.00            | 43.42          | 0.00          | 7.38           |
| 4    | Sorghum                | 0.00          | 14.63         | 0.00                      | 5.70          | 0.00            | 83.40          | 0.00          | 383.62         |
| 5    | Til                    | 0.00          | 51.55         | 0.00                      | 1.80          | 0.00            | 92.79          | 0.00          | 176.29         |
|      | <b>Total</b>           |               | <b>144.12</b> |                           |               |                 | <b>406.76</b>  | <b>0.00</b>   | <b>925.29</b>  |
| B    | <b>Rabi</b>            |               |               |                           |               |                 |                |               |                |
| 1    | Wheat                  | 40.17         | 12.30         | 20.30                     | 11.50         | 815.46          | 141.45         | 856.24        | 140.04         |
| 2    | Masoor                 | 0.00          | 40.26         | 0.00                      | 11.30         | 0.00            | 454.94         | 0.00          | 450.39         |
| 3    | Gram                   | 0.00          | 78.24         | 0.00                      | 4.50          | 0.00            | 352.08         | 0.00          | 7720.24        |
| 4    | Pea                    | 0.00          | 25.36         | 0.00                      | 5.60          | 0.00            | 142.02         | 0.00          | 136.34         |
| 5    | Mustard                | 0.00          | 12.49         | 0.00                      | 6.90          | 0.00            | 86.18          | 0.00          | 301.64         |
|      | <b>Total</b>           | <b>40.17</b>  | <b>168.65</b> |                           |               | <b>815.46</b>   | <b>1176.67</b> | <b>856.24</b> | <b>8748.64</b> |
| C    | <b>Zaid</b>            |               |               |                           |               |                 |                |               |                |
|      | Nil                    |               |               |                           |               |                 |                |               |                |
|      | <b>Cultivable Area</b> | <b>334.76</b> |               | <b>Cropping Intensity</b> | <b>105.43</b> |                 |                |               |                |

Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Mahoba, District- Mahoba, U.P.)

**Utiyan 2C1B3f2d**

| S.No | Crop                   | Area<br>(ha.) |               | Productivity<br>q./ha     |               | Production (q.) |                |                |                |
|------|------------------------|---------------|---------------|---------------------------|---------------|-----------------|----------------|----------------|----------------|
|      |                        | Irrigated     | Rainfed       | Irrigated                 | Rainfed.      | Irrigated       | Rainfed        | Irrigated      | Rainfed        |
| A    | <b>Kharif</b>          |               |               |                           |               |                 |                |                |                |
| 1    | Urd                    | 0.00          | 64.15         | 0.00                      | 2.80          | 0.00            | 179.62         | 0.00           | 359.24         |
| 2    | Moong                  | 0.00          | 16.35         | 0.00                      | 2.60          | 0.00            | 42.51          | 0.00           | 76.52          |
| 3    | Arhar                  | 0.00          | 42.08         | 0.00                      | 4.90          | 0.00            | 206.17         | 0.00           | 35.05          |
| 4    | Sorghum                | 0.00          | 20.82         | 0.00                      | 5.70          | 0.00            | 118.70         | 0.00           | 546.01         |
| 5    | Til                    | 0.00          | 74.53         | 0.00                      | 1.80          | 0.00            | 134.16         | 0.00           | 254.90         |
|      | <b>Total</b>           |               | <b>217.93</b> |                           |               |                 | <b>681.16</b>  | <b>0.00</b>    | <b>1271.71</b> |
| B    | <b>Rabi</b>            |               |               |                           |               |                 |                |                |                |
| 1    | Wheat                  | 60.92         | 12.34         | 20.30                     | 11.50         | 1236.70         | 141.91         | 1298.53        | 140.49         |
| 2    | Masoor                 | 0.00          | 124.15        | 0.00                      | 11.30         | 0.00            | 1402.90        | 0.00           | 1388.87        |
| 3    | Gram                   | 0.00          | 77.10         | 0.00                      | 4.50          | 0.00            | 346.97         | 0.00           | 7720.24        |
| 4    | Pea                    | 0.00          | 41.10         | 0.00                      | 5.60          | 0.00            | 230.14         | 0.00           | 220.93         |
| 5    | Mustard                | 0.00          | 16.67         | 0.00                      | 6.90          | 0.00            | 115.00         | 0.00           | 402.48         |
|      | <b>Total</b>           | <b>60.92</b>  | <b>271.36</b> |                           |               | <b>1236.70</b>  | <b>2236.91</b> | <b>1298.53</b> | <b>9873.01</b> |
| C    | <b>Zaid</b>            |               |               |                           |               |                 |                |                |                |
|      | Nil                    |               |               |                           |               |                 |                |                |                |
|      | <b>Cultivable Area</b> | <b>507.68</b> |               | <b>Cropping Intensity</b> | <b>108.38</b> |                 |                |                |                |

Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Mahoba, District- Mahoba, U.P.)

**Jujhar 2C1B3f2e**

| S.No | Crop                   | Area<br>(ha.) |               | Productivity<br>q./ha     |               | Production (q.) |                |                |                |
|------|------------------------|---------------|---------------|---------------------------|---------------|-----------------|----------------|----------------|----------------|
|      |                        | Irrigated     | Rainfed       | Irrigated                 | Rainfed.      | Irrigated       | Rainfed        | Irrigated      | Rainfed        |
| A    | <b>Kharif</b>          |               |               |                           |               |                 |                |                |                |
| 1    | Urd                    | 0.00          | 76.98         | 0.00                      | 2.80          | 0.00            | 215.54         | 0.00           | 431.07         |
| 2    | Moong                  | 0.00          | 20.53         | 0.00                      | 2.60          | 0.00            | 53.39          | 0.00           | 96.10          |
| 3    | Arhar                  | 0.00          | 33.13         | 0.00                      | 4.90          | 0.00            | 162.31         | 0.00           | 27.59          |
| 4    | Sorghum                | 0.00          | 13.64         | 0.00                      | 5.70          | 0.00            | 77.74          | 0.00           | 357.59         |
| 5    | Til                    | 0.00          | 40.12         | 0.00                      | 1.80          | 0.00            | 72.22          | 0.00           | 137.22         |
|      | <b>Total</b>           |               | <b>184.40</b> |                           |               |                 | <b>581.20</b>  | <b>0.00</b>    | <b>1049.57</b> |
| B    | <b>Rabi</b>            |               |               |                           |               |                 |                |                |                |
| 1    | Wheat                  | 59.31         | 13.01         | 20.30                     | 11.50         | 1204.08         | 149.59         | 1264.29        | 148.09         |
| 2    | Masoor                 | 0.00          | 67.50         | 0.00                      | 11.30         | 0.00            | 762.75         | 0.00           | 755.12         |
| 3    | Gram                   | 0.00          | 102.36        | 0.00                      | 4.50          | 0.00            | 460.62         | 0.00           | 7720.24        |
| 4    | Pea                    | 0.00          | 56.88         | 0.00                      | 5.60          | 0.00            | 318.56         | 0.00           | 305.81         |
| 5    | Mustard                | 0.00          | 34.48         | 0.00                      | 6.90          | 0.00            | 237.88         | 0.00           | 832.59         |
|      | <b>Total</b>           | <b>59.31</b>  | <b>274.23</b> |                           |               | <b>1204.08</b>  | <b>1929.39</b> | <b>1264.29</b> | <b>9761.86</b> |
| C    | <b>Zaid</b>            |               |               |                           |               |                 |                |                |                |
|      | Nil                    |               |               |                           |               |                 |                |                |                |
|      | <b>Cultivable Area</b> | <b>494.29</b> |               | <b>Cropping Intensity</b> | <b>104.79</b> |                 |                |                |                |

Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Mahoba, District- Mahoba, U.P.)

**Dharaun 2C1B3f2f**

| S.No | Crop                   | Area<br>(ha.) |               | Productivity<br>q./ha     |               | Production (q.) |                |                |                |
|------|------------------------|---------------|---------------|---------------------------|---------------|-----------------|----------------|----------------|----------------|
|      |                        | Irrigated     | Rainfed       | Irrigated                 | Rainfed.      | Irrigated       | Rainfed        | Irrigated      | Rainfed        |
| A    | <b>Kharif</b>          |               |               |                           |               |                 |                |                |                |
| 1    | Urd                    | 0.00          | 48.36         | 0.00                      | 2.80          | 0.00            | 135.41         | 0.00           | 270.82         |
| 2    | Moong                  | 0.00          | 30.25         | 0.00                      | 2.60          | 0.00            | 78.65          | 0.00           | 141.57         |
| 3    | Arhar                  | 0.00          | 18.37         | 0.00                      | 4.90          | 0.00            | 90.01          | 0.00           | 15.30          |
| 4    | Sorghum                | 0.00          | 14.38         | 0.00                      | 5.70          | 0.00            | 81.97          | 0.00           | 377.04         |
| 5    | Til                    | 0.00          | 64.37         | 0.00                      | 1.80          | 0.00            | 115.87         | 0.00           | 220.15         |
|      | <b>Total</b>           |               | <b>175.73</b> |                           |               |                 | <b>501.90</b>  | <b>0.00</b>    | <b>1024.88</b> |
| B    | <b>Rabi</b>            |               |               |                           |               |                 |                |                |                |
| 1    | Wheat                  | 53.71         | 11.25         | 20.30                     | 11.50         | 1090.23         | 129.38         | 1144.74        | 128.08         |
| 2    | Masoor                 | 0.00          | 103.25        | 0.00                      | 11.30         | 0.00            | 1166.73        | 0.00           | 1155.06        |
| 3    | Gram                   | 0.00          | 72.35         | 0.00                      | 4.50          | 0.00            | 204.17         | 0.00           | 7720.24        |
| 4    | Pea                    | 0.00          | 45.37         | 0.00                      | 5.60          | 0.00            | 405.16         | 0.00           | 388.95         |
| 5    | Mustard                | 0.00          | 12.36         | 0.00                      | 6.90          | 0.00            | 85.28          | 0.00           | 298.49         |
|      | <b>Total</b>           | <b>53.71</b>  | <b>244.58</b> |                           |               | <b>1090.23</b>  | <b>1990.71</b> | <b>1144.74</b> | <b>9690.83</b> |
| C    | <b>Zaid</b>            |               |               |                           |               |                 |                |                |                |
|      | Nil                    |               |               |                           |               |                 |                |                |                |
|      | <b>Cultivable Area</b> | <b>447.55</b> |               | <b>Cropping Intensity</b> | <b>105.91</b> |                 |                |                |                |

Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Mahoba, District- Mahoba, U.P.)

Babedi 2C1B3k1b

| S.No | Crop                   | Area in<br>(ha.) |                           | Productivity<br>q./ha |               | Production (q.) |                |                |                 |
|------|------------------------|------------------|---------------------------|-----------------------|---------------|-----------------|----------------|----------------|-----------------|
|      |                        | Irrigated        | Rainfed                   | Irrigated             | Rainfed.      | Irrigated       | Rainfed        | Irrigated      | Rainfed         |
| A    | <b>Kharif</b>          |                  |                           |                       |               |                 |                |                |                 |
| 1    | Urd                    | 0.00             | 55.46                     | 0.00                  | 2.90          | 0.00            | 160.83         | 0.00           | 321.67          |
| 2    | Moong                  | 0.00             | 45.36                     | 0.00                  | 2.80          | 0.00            | 127.01         | 0.00           | 228.61          |
| 3    | Arhar                  | 0.00             | 20.34                     | 0.00                  | 4.90          | 0.00            | 99.67          | 0.00           | 16.94           |
| 4    | Sorghum                | 0.00             | 13.24                     | 0.00                  | 5.90          | 0.00            | 78.12          | 0.00           | 359.33          |
| 5    | Til                    | 0.00             | 64.24                     | 0.00                  | 1.80          | 0.00            | 115.63         | 0.00           | 219.70          |
|      | <b>Total</b>           | <b>0.00</b>      | <b>198.64</b>             |                       |               | <b>0.00</b>     | <b>581.26</b>  | <b>0.00</b>    | <b>1146.26</b>  |
| B    | <b>Rabi</b>            |                  |                           |                       |               |                 |                |                |                 |
| 1    | Wheat                  | 54.81            | 7.24                      | 18.60                 | 10.30         | 1019.53         | 74.57          | 1070.51        | 73.83           |
| 2    | Masoor                 | 0.00             | 125.00                    | 0.00                  | 11.50         | 0.00            | 1437.50        | 0.00           | 1423.13         |
| 3    | Gram                   | 0.00             | 56.14                     | 0.00                  | 4.80          | 0.00            | 166.32         | 0.00           | 7720.24         |
| 4    | Pea                    | 0.00             | 34.65                     | 0.00                  | 5.90          | 0.00            | 331.23         | 0.00           | 317.98          |
| 5    | Mustard                | 0.00             | 21.36                     | 0.00                  | 6.80          | 0.00            | 145.25         | 0.00           | 508.37          |
|      | <b>Total</b>           | <b>54.81</b>     | <b>244.39</b>             |                       |               | <b>1019.53</b>  | <b>2154.87</b> | <b>1070.51</b> | <b>10043.54</b> |
| C    | <b>Zaid</b>            |                  |                           |                       |               |                 |                |                |                 |
|      | Nil                    |                  |                           |                       |               |                 |                |                |                 |
|      | <b>Cultivable Area</b> | <b>456.78</b>    | <b>Cropping Intensity</b> |                       | <b>108.99</b> |                 |                |                |                 |

Surha 2C1B3k1c

| S.No | Crop                   | Area in<br>(ha.) |                           | Productivity<br>q./ha |               | Production (q.) |                |                |                |
|------|------------------------|------------------|---------------------------|-----------------------|---------------|-----------------|----------------|----------------|----------------|
|      |                        | Irrigated        | Rainfed                   | Irrigated             | Rainfed.      | Irrigated       | Rainfed        | Irrigated      | Rainfed        |
| A    | <b>Kharif</b>          |                  |                           |                       |               |                 |                |                |                |
| 1    | Urd                    | 0.00             | 56.31                     | 0.00                  | 2.90          | 0.00            | 163.29         | 0.00           | 326.57         |
| 2    | Moong                  | 0.00             | 25.36                     | 0.00                  | 2.80          | 0.00            | 71.01          | 0.00           | 127.81         |
| 3    | Arhar                  | 0.00             | 18.04                     | 0.00                  | 4.90          | 0.00            | 88.38          | 0.00           | 15.02          |
| 4    | Sorghum                | 0.00             | 10.36                     | 0.00                  | 5.90          | 0.00            | 61.10          | 0.00           | 281.05         |
| 5    | Til                    | 0.00             | 44.36                     | 0.00                  | 1.80          | 0.00            | 79.85          | 0.00           | 151.71         |
|      | <b>Total</b>           | <b>0.00</b>      | <b>154.42</b>             |                       |               | <b>0.00</b>     | <b>463.62</b>  | <b>0.00</b>    | <b>902.17</b>  |
| B    | <b>Rabi</b>            |                  |                           |                       |               |                 |                |                |                |
| 1    | Wheat                  | 51.56            | 11.97                     | 18.60                 | 10.30         | 959.05          | 123.29         | 1007.00        | 122.06         |
| 2    | Masoor                 | 0.00             | 97.46                     | 0.00                  | 11.50         | 0.00            | 1120.79        | 0.00           | 1109.58        |
| 3    | Gram                   | 0.00             | 78.94                     | 0.00                  | 4.80          | 0.00            | 214.32         | 0.00           | 7720.24        |
| 4    | Pea                    | 0.00             | 44.65                     | 0.00                  | 5.90          | 0.00            | 465.75         | 0.00           | 447.12         |
| 5    | Mustard                | 0.00             | 21.36                     | 0.00                  | 6.80          | 0.00            | 145.25         | 0.00           | 508.37         |
|      | <b>Total</b>           | <b>51.56</b>     | <b>254.38</b>             |                       |               | <b>959.05</b>   | <b>2069.40</b> | <b>1007.00</b> | <b>9907.36</b> |
| C    | <b>Zaid</b>            |                  |                           |                       |               |                 |                |                |                |
|      | Nil                    |                  |                           |                       |               |                 |                |                |                |
|      | <b>Cultivable Area</b> | <b>429.68</b>    | <b>Cropping Intensity</b> |                       | <b>107.14</b> |                 |                |                |                |

Kauhari 2C1B3k1d

| S.No | Crop                   | Area in<br>(ha.) |               | Productivity<br>q./ha     |               | Production (q.) |                |                |                 |
|------|------------------------|------------------|---------------|---------------------------|---------------|-----------------|----------------|----------------|-----------------|
|      |                        | Irrigated        | Rainfed       | Irrigated                 | Rainfed.      | Irrigated       | Rainfed        | Irrigated      | Rainfed         |
| A    | <b>Kharif</b>          |                  |               |                           |               |                 |                |                |                 |
| 1    | Urd                    | 0.00             | 71.26         | 0.00                      | 2.90          | 0.00            | 206.65         | 0.00           | 413.31          |
| 2    | Moong                  | 0.00             | 41.36         | 0.00                      | 2.80          | 0.00            | 115.81         | 0.00           | 208.45          |
| 3    | Arhar                  | 0.00             | 13.28         | 0.00                      | 4.90          | 0.00            | 65.07          | 0.00           | 11.06           |
| 4    | Sorghum                | 0.00             | 21.34         | 0.00                      | 5.90          | 0.00            | 125.91         | 0.00           | 579.17          |
| 5    | Til                    | 0.00             | 98.45         | 0.00                      | 1.80          | 0.00            | 177.21         | 0.00           | 336.70          |
|      | <b>Total</b>           | <b>0.00</b>      | <b>245.69</b> |                           |               | <b>0.00</b>     | <b>690.65</b>  | <b>0.00</b>    | <b>1548.69</b>  |
| B    | <b>Rabi</b>            |                  |               |                           |               |                 |                |                |                 |
| 1    | Wheat                  | 78.27            | 13.25         | 18.60                     | 10.30         | 1455.83         | 136.48         | 1528.62        | 135.11          |
| 2    | Masoor                 | 0.00             | 123.65        | 0.00                      | 11.50         | 0.00            | 1421.98        | 0.00           | 1407.76         |
| 3    | Gram                   | 0.00             | 97.18         | 0.00                      | 4.80          | 0.00            | 313.25         | 0.00           | 7720.24         |
| 4    | Pea                    | 0.00             | 65.26         | 0.00                      | 5.90          | 0.00            | 573.36         | 0.00           | 550.43          |
| 5    | Mustard                | 0.00             | 49.38         | 0.00                      | 6.80          | 0.00            | 335.78         | 0.00           | 1175.24         |
|      | <b>Total</b>           | <b>78.27</b>     | <b>348.72</b> |                           |               | <b>1455.83</b>  | <b>2780.84</b> | <b>1528.62</b> | <b>10988.78</b> |
| C    | <b>Zaid</b>            |                  |               |                           |               |                 |                |                |                 |
|      | Nil                    |                  |               |                           |               |                 |                |                |                 |
|      | <b>Cultivable Area</b> | <b>652.25</b>    |               | <b>Cropping Intensity</b> | <b>103.13</b> |                 |                |                |                 |

Pindari 2C1B3k2a

| S.No | Crop                   | Area in<br>(ha.) |               | Productivity<br>q./ha     |               | Production (q.) |                |                |                |
|------|------------------------|------------------|---------------|---------------------------|---------------|-----------------|----------------|----------------|----------------|
|      |                        | Irrigated        | Rainfed       | Irrigated                 | Rainfed.      | Irrigated       | Rainfed        | Irrigated      | Rainfed        |
| A    | <b>Kharif</b>          |                  |               |                           |               |                 |                |                |                |
| 1    | Urd                    | 0.00             | 44.26         | 0.00                      | 2.90          | 0.00            | 128.35         | 0.00           | 256.71         |
| 2    | Moong                  | 0.00             | 25.69         | 0.00                      | 2.80          | 0.00            | 71.93          | 0.00           | 129.48         |
| 3    | Arhar                  | 0.00             | 14.67         | 0.00                      | 4.90          | 0.00            | 71.88          | 0.00           | 12.22          |
| 4    | Sorghum                | 0.00             | 12.48         | 0.00                      | 5.90          | 0.00            | 73.63          | 0.00           | 338.71         |
| 5    | Til                    | 0.00             | 62.18         | 0.00                      | 1.80          | 0.00            | 111.92         | 0.00           | 212.66         |
|      | <b>Total</b>           | <b>0.00</b>      | <b>159.28</b> |                           |               | <b>0.00</b>     | <b>457.73</b>  | <b>0.00</b>    | <b>949.77</b>  |
| B    | <b>Rabi</b>            |                  |               |                           |               |                 |                |                |                |
| 1    | Wheat                  | 57.01            | 8.67          | 18.60                     | 10.30         | 1060.40         | 89.30          | 1113.42        | 88.41          |
| 2    | Masoor                 | 0.00             | 74.39         | 0.00                      | 11.50         | 0.00            | 855.49         | 0.00           | 846.93         |
| 3    | Gram                   | 0.00             | 124.15        | 0.00                      | 4.80          | 0.00            | 299.28         | 0.00           | 7720.24        |
| 4    | Pea                    | 0.00             | 62.35         | 0.00                      | 5.90          | 0.00            | 732.49         | 0.00           | 703.19         |
| 5    | Mustard                | 0.00             | 22.97         | 0.00                      | 6.80          | 0.00            | 156.20         | 0.00           | 546.69         |
|      | <b>Total</b>           | <b>57.01</b>     | <b>292.53</b> |                           |               | <b>1060.40</b>  | <b>2132.75</b> | <b>1113.42</b> | <b>9905.45</b> |
| C    | <b>Zaid</b>            |                  |               |                           |               |                 |                |                |                |
|      | Nil                    |                  |               |                           |               |                 |                |                |                |
|      | <b>Cultivable Area</b> | <b>475.09</b>    |               | <b>Cropping Intensity</b> | <b>107.10</b> |                 |                |                |                |

Singhanpur Baghari 2C1B3k2b

| S.No | Crop                   | Area in (ha.) |               | Productivity q./ha        |               | Production (q.) |                |                |                 |
|------|------------------------|---------------|---------------|---------------------------|---------------|-----------------|----------------|----------------|-----------------|
|      |                        | Irrigated     | Rainfed       | Irrigated                 | Rainfed.      | Irrigated       | Rainfed        | Irrigated      | Rainfed         |
| A    | <b>Kharif</b>          |               |               |                           |               |                 |                |                |                 |
| 1    | Urd                    | 0.00          | 42.87         | 0.00                      | 2.90          | 0.00            | 124.32         | 0.00           | 248.65          |
| 2    | Moong                  | 0.00          | 35.18         | 0.00                      | 2.80          | 0.00            | 98.50          | 0.00           | 177.31          |
| 3    | Arhar                  | 0.00          | 21.78         | 0.00                      | 4.90          | 0.00            | 106.72         | 0.00           | 18.14           |
| 4    | Sorghum                | 0.00          | 15.65         | 0.00                      | 5.90          | 0.00            | 92.34          | 0.00           | 424.74          |
| 5    | Til                    | 0.00          | 59.27         | 0.00                      | 1.80          | 0.00            | 106.69         | 0.00           | 202.70          |
|      | <b>Total</b>           | <b>0.00</b>   | <b>174.75</b> |                           |               | <b>0.00</b>     | <b>528.57</b>  | <b>0.00</b>    | <b>1071.54</b>  |
| B    | <b>Rabi</b>            |               |               |                           |               |                 |                |                |                 |
| 1    | Wheat                  | 65.12         | 8.97          | 18.60                     | 10.30         | 1211.14         | 92.39          | 1271.70        | 91.47           |
| 2    | Masoor                 | 0.00          | 87.39         | 0.00                      | 11.50         | 0.00            | 1004.99        | 0.00           | 994.94          |
| 3    | Gram                   | 0.00          | 153.48        | 0.00                      | 4.80          | 0.00            | 232.18         | 0.00           | 7720.24         |
| 4    | Pea                    | 0.00          | 48.37         | 0.00                      | 5.90          | 0.00            | 905.53         | 0.00           | 869.31          |
| 5    | Mustard                | 0.00          | 30.48         | 0.00                      | 6.80          | 0.00            | 207.26         | 0.00           | 725.42          |
|      | <b>Total</b>           | <b>65.12</b>  | <b>328.69</b> |                           |               | <b>1211.14</b>  | <b>2442.35</b> | <b>1271.70</b> | <b>10401.38</b> |
| C    | <b>Zaid</b>            |               |               |                           |               |                 |                |                |                 |
|      | Nil                    |               |               |                           |               |                 |                |                |                 |
|      | <b>Cultivable Area</b> | <b>542.63</b> |               | <b>Cropping Intensity</b> | <b>104.78</b> |                 |                |                |                 |

Kamalpura 2C1B3k2c

| S.No | Crop                   | Area in (ha.) |               | Productivity q./ha        |               | Production (q.) |                |                |                 |
|------|------------------------|---------------|---------------|---------------------------|---------------|-----------------|----------------|----------------|-----------------|
|      |                        | Irrigated     | Rainfed       | Irrigated                 | Rainfed.      | Irrigated       | Rainfed        | Irrigated      | Rainfed         |
| A    | <b>Kharif</b>          |               |               |                           |               |                 |                |                |                 |
| 1    | Urd                    | 0.00          | 75.68         | 0.00                      | 2.90          | 0.00            | 219.47         | 0.00           | 438.94          |
| 2    | Moong                  | 0.00          | 59.35         | 0.00                      | 2.80          | 0.00            | 166.18         | 0.00           | 299.12          |
| 3    | Arhar                  | 0.00          | 23.04         | 0.00                      | 4.90          | 0.00            | 112.90         | 0.00           | 19.19           |
| 4    | Sorghum                | 0.00          | 38.04         | 0.00                      | 5.90          | 0.00            | 224.44         | 0.00           | 1032.41         |
| 5    | Til                    | 0.00          | 103.48        | 0.00                      | 1.80          | 0.00            | 186.26         | 0.00           | 353.90          |
|      | <b>Total</b>           | <b>0.00</b>   | <b>299.59</b> |                           |               | <b>0.00</b>     | <b>909.25</b>  | <b>0.00</b>    | <b>2143.57</b>  |
| B    | <b>Rabi</b>            |               |               |                           |               |                 |                |                |                 |
| 1    | Wheat                  | 104.61        | 18.51         | 18.60                     | 10.30         | 1945.82         | 190.65         | 2043.12        | 188.75          |
| 2    | Masoor                 | 0.00          | 143.04        | 0.00                      | 11.50         | 0.00            | 1644.96        | 0.00           | 1628.51         |
| 3    | Gram                   | 0.00          | 198.60        | 0.00                      | 4.80          | 0.00            | 564.19         | 0.00           | 7720.24         |
| 4    | Pea                    | 0.00          | 117.54        | 0.00                      | 5.90          | 0.00            | 1171.74        | 0.00           | 1124.87         |
| 5    | Mustard                | 0.00          | 32.48         | 0.00                      | 6.80          | 0.00            | 220.83         | 0.00           | 772.91          |
|      | <b>Total</b>           | <b>104.61</b> | <b>510.17</b> |                           |               | <b>1945.82</b>  | <b>3792.38</b> | <b>2043.12</b> | <b>11435.27</b> |
| C    | <b>Zaid</b>            |               |               |                           |               |                 |                |                |                 |
|      | Nil                    |               |               |                           |               |                 |                |                |                 |
|      | <b>Cultivable Area</b> | <b>871.79</b> |               | <b>Cropping Intensity</b> | <b>104.88</b> |                 |                |                |                 |

Shivhara 2C1B3k2d

| S.No | Crop                   | Area in<br>(ha.) |               | Productivity<br>q./ha     |               | Production (q.) |                |                |                 |
|------|------------------------|------------------|---------------|---------------------------|---------------|-----------------|----------------|----------------|-----------------|
|      |                        | Irrigated        | Rainfed       | Irrigated                 | Rainfed.      | Irrigated       | Rainfed        | Irrigated      | Rainfed         |
| A    | <b>Kharif</b>          |                  |               |                           |               |                 |                |                |                 |
| 1    | Urd                    | 0.00             | 75.36         | 0.00                      | 2.90          | 0.00            | 218.54         | 0.00           | 437.09          |
| 2    | Moong                  | 0.00             | 14.69         | 0.00                      | 2.80          | 0.00            | 41.12          | 0.00           | 74.02           |
| 3    | Arhar                  | 0.00             | 56.34         | 0.00                      | 4.90          | 0.00            | 276.07         | 0.00           | 46.93           |
| 4    | Sorghum                | 0.00             | 40.82         | 0.00                      | 5.90          | 0.00            | 240.86         | 0.00           | 1107.96         |
| 5    | Til                    | 0.00             | 65.36         | 0.00                      | 1.80          | 0.00            | 117.65         | 0.00           | 223.53          |
|      | <b>Total</b>           | <b>0.00</b>      | <b>252.57</b> |                           |               | <b>0.00</b>     | <b>894.24</b>  | <b>0.00</b>    | <b>1889.53</b>  |
| B    | <b>Rabi</b>            |                  |               |                           |               |                 |                |                |                 |
| 1    | Wheat                  | 80.30            | 14.95         | 18.60                     | 10.30         | 1493.64         | 154.01         | 1568.33        | 152.47          |
| 2    | Masoor                 | 0.00             | 170.36        | 0.00                      | 11.50         | 0.00            | 1959.14        | 0.00           | 1939.55         |
| 3    | Gram                   | 0.00             | 97.10         | 0.00                      | 4.80          | 0.00            | 293.26         | 0.00           | 7720.24         |
| 4    | Pea                    | 0.00             | 61.10         | 0.00                      | 5.90          | 0.00            | 572.91         | 0.00           | 550.00          |
| 5    | Mustard                | 0.00             | 36.67         | 0.00                      | 6.80          | 0.00            | 249.33         | 0.00           | 872.65          |
|      | <b>Total</b>           | <b>80.30</b>     | <b>380.18</b> |                           |               | <b>1493.64</b>  | <b>3228.65</b> | <b>1568.33</b> | <b>11234.90</b> |
| C    | <b>Zaid</b>            |                  |               |                           |               |                 |                |                |                 |
|      | Nil                    |                  |               |                           |               |                 |                |                |                 |
|      | <b>Cultivable Area</b> | <b>669.20</b>    |               | <b>Cropping Intensity</b> | <b>106.55</b> |                 |                |                |                 |

Bamhaurikaji 2C1B3k2e

| S.No | Crop                   | Area in<br>(ha.) |               | Productivity<br>q./ha     |               | Production (q.) |                |                |                 |
|------|------------------------|------------------|---------------|---------------------------|---------------|-----------------|----------------|----------------|-----------------|
|      |                        | Irrigated        | Rainfed       | Irrigated                 | Rainfed.      | Irrigated       | Rainfed        | Irrigated      | Rainfed         |
| A    | <b>Kharif</b>          |                  |               |                           |               |                 |                |                |                 |
| 1    | Urd                    | 0.00             | 70.36         | 0.00                      | 2.90          | 0.00            | 204.04         | 0.00           | 408.09          |
| 2    | Moong                  | 0.00             | 30.35         | 0.00                      | 2.80          | 0.00            | 84.98          | 0.00           | 152.96          |
| 3    | Arhar                  | 0.00             | 41.26         | 0.00                      | 4.90          | 0.00            | 202.17         | 0.00           | 34.37           |
| 4    | Sorghum                | 0.00             | 20.36         | 0.00                      | 5.90          | 0.00            | 120.12         | 0.00           | 552.57          |
| 5    | Til                    | 0.00             | 45.12         | 0.00                      | 1.80          | 0.00            | 81.22          | 0.00           | 154.31          |
|      | <b>Total</b>           | <b>0.00</b>      | <b>207.45</b> |                           |               | <b>0.00</b>     | <b>692.54</b>  | <b>0.00</b>    | <b>1302.30</b>  |
| B    | <b>Rabi</b>            |                  |               |                           |               |                 |                |                |                 |
| 1    | Wheat                  | 66.86            | 18.30         | 18.60                     | 10.30         | 1243.61         | 188.49         | 1305.80        | 186.61          |
| 2    | Masoor                 | 0.00             | 74.26         | 0.00                      | 11.50         | 0.00            | 853.99         | 0.00           | 845.45          |
| 3    | Gram                   | 0.00             | 114.54        | 0.00                      | 4.80          | 0.00            | 297.05         | 0.00           | 7720.24         |
| 4    | Pea                    | 0.00             | 61.88         | 0.00                      | 5.90          | 0.00            | 675.79         | 0.00           | 648.76          |
| 5    | Mustard                | 0.00             | 39.48         | 0.00                      | 6.80          | 0.00            | 268.44         | 0.00           | 939.53          |
|      | <b>Total</b>           | <b>66.86</b>     | <b>308.46</b> |                           |               | <b>1243.61</b>  | <b>2283.75</b> | <b>1305.80</b> | <b>10340.58</b> |
| C    | <b>Zaid</b>            |                  |               |                           |               |                 |                |                |                 |
|      | Nil                    |                  |               |                           |               |                 |                |                |                 |
|      | <b>Cultivable Area</b> | <b>557.18</b>    |               | <b>Cropping Intensity</b> | <b>104.59</b> |                 |                |                |                 |

Gahra 2C1B3k2f

| S.No | Crop                   | Area in (ha.) |               | Productivity q./ha        |               | Production (q.) |                |               |                |
|------|------------------------|---------------|---------------|---------------------------|---------------|-----------------|----------------|---------------|----------------|
|      |                        | Irrigated     | Rainfed       | Irrigated                 | Rainfed.      | Irrigated       | Rainfed        | Irrigated     | Rainfed        |
| A    | <b>Kharif</b>          |               |               |                           |               |                 |                |               |                |
| 1    | Urd                    | 0.00          | 35.16         | 0.00                      | 2.90          | 0.00            | 101.96         | 0.00          | 203.93         |
| 2    | Moong                  | 0.00          | 25.36         | 0.00                      | 2.80          | 0.00            | 71.01          | 0.00          | 127.81         |
| 3    | Arhar                  | 0.00          | 16.34         | 0.00                      | 4.90          | 0.00            | 80.07          | 0.00          | 13.61          |
| 4    | Sorghum                | 0.00          | 13.67         | 0.00                      | 5.90          | 0.00            | 80.65          | 0.00          | 371.00         |
| 5    | Til                    | 0.00          | 54.27         | 0.00                      | 1.80          | 0.00            | 97.69          | 0.00          | 449.36         |
|      | <b>Total</b>           | <b>0.00</b>   | <b>144.80</b> |                           |               | <b>0.00</b>     | <b>431.38</b>  | <b>0.00</b>   | <b>1165.71</b> |
| B    | <b>Rabi</b>            |               |               |                           |               |                 |                |               |                |
| 1    | Wheat                  | 47.93         | 10.36         | 18.60                     | 10.30         | 891.42          | 106.71         | 935.99        | 105.64         |
| 2    | Masoor                 | 0.00          | 87.56         | 0.00                      | 11.50         | 0.00            | 1006.94        | 0.00          | 996.87         |
| 3    | Gram                   | 0.00          | 65.24         | 0.00                      | 4.80          | 0.00            | 217.78         | 0.00          | 7720.24        |
| 4    | Pea                    | 0.00          | 45.37         | 0.00                      | 5.90          | 0.00            | 384.92         | 0.00          | 369.52         |
| 5    | Mustard                | 0.00          | 12.36         | 0.00                      | 6.80          | 0.00            | 84.05          | 0.00          | 294.17         |
|      | <b>Total</b>           | <b>47.93</b>  | <b>220.89</b> |                           |               | <b>891.42</b>   | <b>1800.39</b> | <b>935.99</b> | <b>9486.44</b> |
| C    | <b>Zaid</b>            |               |               |                           |               |                 |                |               |                |
|      | Nil                    |               |               |                           |               |                 |                |               |                |
|      | <b>Cultivable Area</b> | <b>399.38</b> |               | <b>Cropping Intensity</b> | <b>103.56</b> |                 |                |               |                |

It was observed that the productivity of wheat, gram, mustard, arhar and linseed was about 66, 37, 33, 49 and 26 per cent, respectively, less than the average (last 10 years- *Source: Directorate of Economics and Statistics, Department of Agriculture and Cooperation*) productivity of the state of Uttar Pradesh.

**Table 3.8: Food, fodder and fuel production in the project area (IWMP-XVIII, District- Mahoba)**

| Summary                            | Unit     | Production During Kharif | Production during Rabi | Total Production | Remarks |
|------------------------------------|----------|--------------------------|------------------------|------------------|---------|
| <b>Food Production (Atlas.)</b>    |          |                          |                        |                  |         |
| Cereals                            | q        | 3952.47                  | 24259.56               | 28212.03         | -       |
| Pulses                             | q        | 4561.84                  | 33804.72               | 38366.56         | -       |
| Oilseed                            | q        | 2108.51                  | 3228.79                | 5337.30          | -       |
| <b>Grand Total</b>                 | <b>q</b> | <b>10622.83</b>          | <b>61293.07</b>        | <b>71915.90</b>  | -       |
| <b>Fodder Production (Atlas.)</b>  |          |                          |                        |                  |         |
| Dry Fodder                         | q        | 213466.84                |                        |                  | -       |
| Green Fodder                       | q        |                          |                        |                  | -       |
| <b>Fuel Production</b>             |          |                          |                        |                  |         |
| Arhar+Mustard+Til Plants           | q        | 11647.10                 |                        |                  | -       |
| <b>Over all Cropping Intensity</b> |          |                          |                        |                  |         |
|                                    |          | <b>106.07</b>            |                        |                  |         |

*Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Mahoba, District- Mahoba, U.P.)*

### 3.4 Agroforestry and Horticulture

There is no systematic agroforestry and orchard in the project area, however, few scattered trees of desi ber, aonla, guava, kathal, etc. was found in the micro-watersheds which is consumed locally (Table 3.9).

**Table 3.9: Horticulture Status**

| S.<br>N. | Name of micro<br>watershed with<br>code | Name of village   | Name of Important horticultural crop |             |                        |                    |                      |                         |                    |
|----------|---|---|--------------------------------------|-------------|------------------------|--------------------|----------------------|-------------------------|--------------------|
|          |   |   | Orchard                              |             |                        |                    | Scattered Fruit Crop |                         |                    |
|          |   |   | Name                                 | Area<br>ha. | Productivity<br>qtl/ha | Production<br>qtls | No.                  | Productivity<br>qtl/No. | Production<br>qtls |
| 1        | Bhestamaaf<br>2C1B3f1a                  | Bhenstamaf, Parsaha, Surha                              | Nil                                  | Nil         | Nil                    | Nil                | 31                   | 0.3                     | 8.06               |
| 2        | Parsaha 2C1B3f1b                        | Parsaha, lilwahi  | Nil                                  | Nil         | Nil                    | Nil                | 35                   | 0.3                     | 8.75               |
| 3        | Maheba 2C1B3f1d                         | Sichaura, lilwahi, Mahewa,<br>Chanikala                 | Nil                                  | Nil         | Nil                    | Nil                | 36                   | 0.2                     | 8.28               |
| 4        | Sichaura 2C1B3f1e                       | Dharaun, Sichaura                                       | Nil                                  | Nil         | Nil                    | Nil                | 34                   | 0.2                     | 7.14               |
| 5        | Lilwahi-I<br>2C1B3f2a                   | Paswara, Pindari, lilwahi                               | Nil                                  | Nil         | Nil                    | Nil                | 29                   | 0.3                     | 7.54               |
| 6        | Lilwahi-II<br>2C1B3f2b                  | Lilwahi, Gahra, Singhapur,<br>Baghari                   | Nil                                  | Nil         | Nil                    | Nil                | 28                   | 0.3                     | 7.84               |
| 7        | Utiyan 2C1B3f2d                         | Utiya, Bari, Bamhauri, Gehra                            | Nil                                  | Nil         | Nil                    | Nil                | 23                   | 0.3                     | 7.13               |
| 8        | Jujhar 2C1B3f2e                         | Utiya, Gnaj, Dharaun, Jujhar                            | Nil                                  | Nil         | Nil                    | Nil                | 34                   | 0.3                     | 9.52               |
| 9        | Dharaun 2C1B3f2f                        | Utiya, Dharaun  | Nil                                  | Nil         | Nil                    | Nil                | 25                   | 0.2                     | 6.00               |
| 10       | Babedi 2C1B3k1b                         | Baberi, Surha   | Nil                                  | Nil         | Nil                    | Nil                | 34                   | 0.2                     | 7.14               |
| 11       | Surha 2C1B3k1c                          | Baberi, Surha   | Nil                                  | Nil         | Nil                    | Nil                | 29                   | 0.3                     | 7.54               |
| 12       | Kauhari 2C1B3k1d                        | Surha, Kauhari  | Nil                                  | Nil         | Nil                    | Nil                | 28                   | 0.3                     | 7.84               |
| 13       | Pindari 2C1B3k2a                        | Surha, Pindari  | Nil                                  | Nil         | Nil                    | Nil                | 23                   | 0.3                     | 7.13               |
| 14       | Singhanpur Baghari<br>2C1B3k2b          | Surha, Singhanpur, Baghari                              | Nil                                  | Nil         | Nil                    | Nil                | 34                   | 0.3                     | 9.52               |
| 15       | Kamalpura<br>2C1B3k2c                   | Singhanpur Baghari, Kanera,<br>Salua, Kamalkhera, Patha | Nil                                  | Nil         | Nil                    | Nil                | 25                   | 0.2                     | 6.00               |

|    |  |   |     |     |     |     |            |             |               |
|----|--|---|-----|-----|-----|-----|------------|-------------|---------------|
| 16 | Shivhara<br>2C1B3k2d   | Kamalkhera, Syohar, Bamhaur<br>Kala       | Nil | Nil | Nil | Nil | 27         | 0.3         | 8.37          |
| 17 | Bamhaurikaji<br>2C1B3k2e   | Bamhaur Kaji, Siyor, Kamalkhera,<br>Gehra | Nil | Nil | Nil | Nil | 26         | 0.3         | 8.32          |
| 18 | Gahra 2C1B3k2f   | Singhanpur Baghari, Bhaghari,<br>Gehra    | Nil | Nil | Nil | Nil | 25         | 0.3         | 7.00          |
|    | <b>Total</b>   |   |     |     |     |     | <b>526</b> | <b>0.27</b> | <b>139.12</b> |
|    | ( Scattered fruit plant of Papaya, Kathal, Ber, Aonla, Guava, etc) |   |     |     |     |     |            |             |               |

Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Mahoba, District- Mahoba, U.P.)

### 3.5 Livestock and Fisheries

In the name of cattle mainly desi cow are found in the project which productivity is significantly lower than the average productivity of the state. The Details of livestock and its productivity are available in Table 3.10 and 3.11, respectively.

**Table 3.10: Livestock Population (No.) in IWMP-XVIII, Mahoba**

| Sr.<br>No<br>. . | Name of<br>Micro<br>watershed<br>with code | Name of<br>Village                            | Cow  |             | Buffalo |        | Ox/Bull | Goat | Sheep | Piggeries | Poultry |            |       | Other<br>specif<br>y |
|------------------|--|---|------|-------------|---------|--------|---------|------|-------|-----------|---------|------------|-------|----------------------|
|                  |  |   | Desi | Crosse<br>d | Desi    | Murrah |         |      |       |           | Broiler | Layer<br>s | Total |                      |
| 1                | Bhestamaaf<br>2C1B3f1a                     | Bhenstama<br>f, Parsaha,<br>Surha             | 73   | 11          | 63      | 7      | 10      | 352  | 16    | 10        | -       | 16         | 558   |                      |
| 2                | Parsaha<br>2C1B3f1b                        | Parsaha,<br>lilwahi                           | 63   | 12          | 57      | 5      | 12      | 316  | 12    | 9         | -       | 15         | 501   |                      |
| 3                | Maheba<br>2C1B3f1d                         | Sichaura,<br>lilwahi,<br>Mahewa,<br>Chanikala | 92   | 13          | 83      | 5      | 13      | 443  | 15    | 7         | -       | 13         | 684   |                      |
| 4                | Sichaura<br>2C1B3f1e                       | Dharaun,<br>Sichaura                          | 99   | 14          | 88      | 6      | 16      | 476  | 14    | 9         | -       | 19         | 741   |                      |
| 5                | Lilwahi-I                                  | Paswara,                                      | 149  | 16          | 122     | 16     | 15      | 695  | 16    | 5         | -       | 10         | 1044  |                      |

|    |                                   |  |     |    |    |    |    |     |    |    |   |           |             |  |
|----|-----------------------------------|--|-----|----|----|----|----|-----|----|----|---|-----------|-------------|--|
|    | 2C1B3f2a                          | Pindari,<br>lilwahi  |     |    |    |    |    |     |    |    |   |           |             |  |
| 6  | Lilwahi-II<br>2C1B3f2b            | Lilwahi,<br>Gahra,<br>Singhanpur<br>a, Baghari                       | 67  | 9  | 56 | 7  | 13 | 321 | 17 | 10 | - | 13        | 513         |  |
| 7  | Utiyan<br>2C1B3f2d                | Utiya, Bari,<br>Bamhauri,<br>Gehra                                   | 100 | 14 | 89 | 6  | 11 | 480 | 15 | 8  | - | 16        | 739         |  |
| 8  | Jujhar<br>2C1B3f2e                | Utiya,<br>Gnaj,<br>Dharaun,<br>Jujhar                                | 102 | 13 | 81 | 14 | 12 | 483 | 11 | 13 | - | 12        | 741         |  |
| 9  | Dharaun<br>2C1B3f2f               | Utiya,<br>Dharaun  | 93  | 12 | 82 | 6  | 10 | 444 | 8  | 7  | - | 11        | 673         |  |
| 10 | Babedi<br>2C1B3k1b                | Baberi,<br>Surha   | 103 | 12 | 52 | 8  | 12 | 471 | 18 | 9  | - | <b>15</b> | <b>700</b>  |  |
| 11 | Surha<br>2C1B3k1c                 | Baberi,<br>Surha   | 81  | 13 | 44 | 6  | 14 | 387 | 14 | 8  | - | <b>14</b> | <b>581</b>  |  |
| 12 | Kauhari<br>2C1B3k1d               | Surha,<br>Kauhari  | 113 | 14 | 63 | 4  | 15 | 521 | 17 | 76 | - | 12        | <b>835</b>  |  |
| 13 | Pindari<br>2C1B3k2a               | Surha,<br>Pindari  | 76  | 12 | 40 | 7  | 18 | 364 | 16 | 8  | - | 18        | <b>559</b>  |  |
| 14 | Singhanpur<br>Baghari<br>2C1B3k2b | Surha,<br>Singhanpur<br>, Baghari                                    | 97  | 11 | 52 | 5  | 17 | 442 | 18 | 4  | - | 9         | <b>655</b>  |  |
| 15 | Kamalpura<br>2C1B3k2c             | Singhanpur<br>Baghari,<br>Kanera,<br>Salua,<br>Kamalkher<br>a, Patha | 170 | 10 | 87 | 8  | 15 | 739 | 19 | 9  | - | <b>12</b> | <b>1069</b> |  |

|    |                          |  |             |            |             |            |            |             |             |            |   |            |              |  |
|----|--------------------------|--|-------------|------------|-------------|------------|------------|-------------|-------------|------------|---|------------|--------------|--|
| 16 | Shivhara<br>2C1B3k2d     | Kamalkher<br>a, Syohar,<br>Bamhaur<br>Kala       | 127         | 15         | 68          | 7          | 13         | 585         | 1917        | 7          | - | 15         | <b>2754</b>  |  |
| 17 | Bamhaurikaji<br>2C1B3k2e | Bamhaur<br>Kaji, Siyor,<br>Kamalkher<br>a, Gehra | 85          | 14         | 48          | 4          | 14         | 409         | 13          | 12         | - | 11         | <b>610</b>   |  |
| 18 | Gahra<br>2C1B3k2f        | Singhanpur<br>Baghari,<br>Bhaghari,<br>Gehra     | 67          | 10         | 35          | 6          | 12         | 319         | 10          | 6          | - | 10         | <b>475</b>   |  |
|    | <b>Total</b>             |  | <b>1757</b> | <b>225</b> | <b>1210</b> | <b>127</b> | <b>242</b> | <b>8247</b> | <b>2166</b> | <b>217</b> | - | <b>241</b> | <b>14432</b> |  |

Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Mahoba, District- Mahoba, U.P.)

**Table 3.11: Productivity of livestock in IWMP-XVIII, Mahoba**

| SN | Name of Micro watershed with code | Name of Village                      | Milk Production (Liter Per day) |         |          |        | Goatry            |                           | Poultry                |   | Piggeries weight Kg/Pig |  |
|----|-----------------------------------|--------------------------------------|---------------------------------|---------|----------|--------|-------------------|---------------------------|------------------------|---|-------------------------|--|
|    |                                   |                                      | Cows                            |         | Buffalos |        | Weight in Kg/goat | Broiler Weight in Kg/ Brl | Layers No. of eggs/day |   |                         |  |
|    |                                   |                                      | Desi                            | Crossed | Desi     | Murrah |                   |                           |                        |   |                         |  |
| 1  | Bhestamaaf 2C1B3f1a               | Bhenstamaf, Parsaha, Surha           | 1.3                             | 4.7     | 2.4      | 5.2    | 22.0              | 0.0                       | 150.0                  | - |                         |  |
| 2  | Parsaha 2C1B3f1b                  | Parsaha, lilwahi                     | 1.1                             | 4.9     | 2.7      | 5.4    | 19.0              | 0.0                       | 169.0                  | - |                         |  |
| 3  | Maheba 2C1B3f1d                   | Sichaura, lilwahi, Mahewa, Chanikala | 1.2                             | 4.8     | 2.9      | 6.1    | 24.0              | 0.0                       | 153.0                  | - |                         |  |
| 4  | Sichaura 2C1B3f1e                 | Dharaun, Sichaura                    | 1.4                             | 5.3     | 2.5      | 5.5    | 23.0              | 0.0                       | 164.0                  | - |                         |  |

|    |                                |  |     |     |     |     |      |     |       |   |
|----|--------------------------------|--|-----|-----|-----|-----|------|-----|-------|---|
| 5  | Lilwahi-I 2C1B3f2a             | Paswara,<br>Pindari,<br>lilwahi                                  | 1.3 | 5.5 | 2.7 | 6.3 | 21.0 | 0.0 | 156.0 | - |
| 6  | Lilwahi-II 2C1B3f2b            | Lilwahi,<br>Gahra,<br>Singhanpura,<br>Baghari                    | 1.2 | 5.5 | 2.8 | 5.4 | 19.0 | 0.0 | 158.0 | - |
| 7  | Utiyan 2C1B3f2d                | Utiya, Bari,<br>Bamhauri,<br>Gehra                               | 1.2 | 5.1 | 3.0 | 5.8 | 21.0 | 0.0 | 167.0 | - |
| 8  | Jujhar 2C1B3f2e                | Utiya, Gnaj,<br>Dharaun,<br>Jujhar                               | 1.4 | 5.5 | 2.3 | 5.1 | 23.0 | 0.0 | 158.0 | - |
| 9  | Dharaun 2C1B3f2f               | Utiya,<br>Dharaun  | 1.3 | 5.4 | 2.8 | 5.5 | 31.0 | 0.0 | 162.0 | - |
| 10 | Babedi 2C1B3k1b                | Baberi, Surha  | 1.0 | 6.0 | 3.1 | 5.9 | 21.0 | 0.0 | 174.0 | - |
| 11 | Surha 2C1B3k1c                 | Baberi, Surha  | 1.3 | 5.6 | 3.3 | 6.4 | 23.0 | 0.0 | 184.0 | - |
| 12 | Kauhari 2C1B3k1d               | Surha,<br>Kauhari  | 1.5 | 6.1 | 2.5 | 5.6 | 25.0 | 0.0 | 174.0 | - |
| 13 | Pindari 2C1B3k2a               | Surha, Pindari   | 1.3 | 5.9 | 2.4 | 5.9 | 26.0 | 0.0 | 178.0 | - |
| 14 | Singhanpur Baghari<br>2C1B3k2b | Surha,<br>Singhanpur,<br>Baghari                                 | 1.2 | 5.2 | 2.6 | 5.7 | 24.0 | 0.0 | 165.0 | - |
| 15 | Kamalpura 2C1B3k2c             | Singhanpur<br>Baghari,<br>Kanera, Salua,<br>Kamalkhera,<br>Patha | 1.4 | 5.4 | 3.0 | 5.9 | 21.0 | 0.0 | 186.0 | - |
| 16 | Shivhara 2C1B3k2d              | Kamalkhera,<br>Syohar,<br>Bamhaur Kala                           | 1.6 | 5.3 | 3.2 | 6.7 | 26.0 | 0.0 | 168.0 | - |

|    |                          |   |            |            |            |            |             |            |              |   |
|----|--------------------------|---|------------|------------|------------|------------|-------------|------------|--------------|---|
| 17 | Bamhaurikaji<br>2C1B3k2e | Bamhaur Kaji,<br>Siyor,<br>Kamalkhera,<br>Gehra | 1.2        | 5.8        | 2.7        | 6.0        | 25.0        | 0.0        | 180.0        | - |
| 18 | Gahra 2C1B3k2f           | Singhanpur<br>Baghari,<br>Bhaghari,<br>Gehra    | 1.1        | 6.1        | 3.0        | 6.9        | 23.0        | 0.0        | 172.0        | - |
|    | <b>Average</b>           |   | <b>1.3</b> | <b>5.5</b> | <b>2.8</b> | <b>5.9</b> | <b>23.2</b> | <b>0.0</b> | <b>167.7</b> | - |

Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Mahoba, District- Mahoba, U.P.)

### 3.6 Forest and Grassland

There is no grassland available in the project area, however, information on naturally generated/grown degraded forest is given in Table 3.12.

**Table 3.12: Forest, vegetative cover/grassland in IWMP-XVIII, Mahoba**

| Sr.<br>No<br>. . | Name & Code of Micro watershed | Name of Village                      | Forest (Area ha) |                               |       | Grassland (Area ha) |         | Other vegetative cover (Area ha) |         |
|------------------|--------------------------------|--------------------------------------|------------------|-------------------------------|-------|---------------------|---------|----------------------------------|---------|
|                  |                                |                                      | Reserv e         | Gram Samaj (Natural /Planted) | Total | Gram Samaj          | Private | Gram Samaj                       | Private |
| 1                | Bhestamaaf 2C1B3f1a            | Bhenstamaf, Parsaha, Surha           | -                | -                             | -     | 5.13                | -       | 2.11                             | 0.88    |
| 2                | Parsaha 2C1B3f1b               | Parsaha, lilwahi                     | -                | -                             | -     | 5.01                | -       | 2.59                             | 1.55    |
| 3                | Maheba 2C1B3f1d                | Sichaura, lilwahi, Mahewa, Chanikala | -                | -                             | -     | 4.77                | -       | 2.66                             | 1.76    |
| 4                | Sichaura 2C1B3f1e              | Dharaun, Sichaura                    | -                | -                             | -     | 4.94                | -       | 2.40                             | 1.55    |
| 5                | Lilwahi-I 2C1B3f2a             | Paswara, Pindari, lilwahi            | -                | -                             | -     | 4.33                | -       | 2.53                             | 1.52    |
| 6                | Lilwahi-II 2C1B3f2b            | Lilwahi, Gahra, Singhanpura, Baghari | -                | -                             | -     | 5.80                | -       | 2.07                             | 1.58    |
| 7                | Utiyan 2C1B3f2d                | Utiya, Bari, Bamhauri, Gehra         | -                | -                             | -     | 3.83                | -       | 2.40                             | 2.37    |
| 8                | Jujhar 2C1B3f2e                | Utiya, Gnaj, Dharaun, Jujhar         | -                | -                             | -     | 5.57                | -       | 2.53                             | 1.58    |

|              |                                |   |   |   |   |              |   |              |              |
|--------------|--------------------------------|---|---|---|---|--------------|---|--------------|--------------|
| 9            | Dharaun 2C1B3f2f               | Utiya, Dharaun  | - | - | - | 5.79         | - | 2.76         | 1.74         |
| 10           | Babedi 2C1B3k1b                | Baberi, Surha   | - | - | - | 5.78         | - | 2.65         | 1.26         |
| 11           | Surha 2C1B3k1c                 | Baberi, Surha   | - | - | - | 4.36         | - | 2.48         | 1.54         |
| 12           | Kauhari 2C1B3k1d               | Surha, Kauhari  | - | - | - | 3.65         | - | 2.58         | 1.63         |
| 13           | Pindari 2C1B3k2a               | Surha, Pindari  | - | - | - | 5.17         | - | 2.64         | 1.42         |
| 14           | Singhanpur Baghari<br>2C1B3k2b | Surha, Singhanpur, Baghari                              | - | - | - | 5.84         | - | 2.42         | 1.36         |
| 15           | Kamalpura 2C1B3k2c             | Singhanpur Baghari, Kanera, Salua,<br>Kamalkhera, Patha | - | - | - | 4.98         | - | 2.69         | 1.54         |
| 16           | Shivhara 2C1B3k2d              | Kamalkhera, Syohar, Bamhaur Kala                        | - | - | - | 4.78         | - | 2.75         | 1.74         |
| 17           | Bamhaurikaji 2C1B3k2e          | Bamhaur Kaji, Siyor, Kamalkhera,<br>Gehra               | - | - | - | 4.96         | - | 2.61         | 1.52         |
| 18           | Gahra 2C1B3k2f                 | Singhanpur Baghari, Bhaghari, Gehra                     | - | - | - | 4.79         | - | 2.84         | 1.48         |
| <b>Total</b> |                                |   | - | - | - | <b>89.48</b> | - | <b>45.71</b> | <b>28.02</b> |

Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Mahoba, District- Mahoba, U.P.)

### 3.7 Livelihood Status

Assestless/landless people earn their livelihood mainly from labour and *batai* (*share cropping*). They about Rs. 3000/per month for share cropping. It is expected that their income will enhance due to watershed management as it will generate share cropping employment opportunity on sustainable basis. Intervention presently on piggeries, fisheries, black smithy and carpentry are not in practice. Livelihood status of landless, farmers and interventions based livelihood status are shown in Table 3.13, 3.14 and 3.15, respectively.

**Table 3.13: Livelihood Status of Landless People**

| Sr. No. | Name & Code of micro watershed | Name of Village                               | Name of Livelihood Activity | No. of house hold engaged |       |       |       | Pre project Average Income/ Year | Desired Activities  | Expected Income from desired activities Rs/Year | Remarks                                    |
|---------|--------------------------------|---|-----------------------------|---------------------------|-------|-------|-------|----------------------------------|---|---|--|
|         |                                |   |                             | Sc                        | Other | Women | Total |                                  |   |   |  |
| 1       | Bhestamaaf<br>2C1B3f1a         | Bhenstamaf,<br>Parsaha, Surha                 | Labour/<br>Batai            | 2                         | 4     | 1     | 7     | 30,000-<br>40,000                | The landless people can increase their income by adopting one or two activities of goatery, poultry, dairy, technical shop, general store, dona making, Rope making, etc. besides Batai/labour work | 50,000-<br>60,000                               | Income may be increased by about two times |
| 2       | Parsaha<br>2C1B3f1b            | Parsaha, lilwahi                              |                             | 2                         | 5     | 1     | 8     |                                  |   |   |  |
| 3       | Maheba<br>2C1B3f1d             | Sichaura,<br>lilwahi,<br>Mahewa,<br>Chanikala |                             | 2                         | 4     | 1     | 7     |                                  |   |   |  |
| 4       | Sichaura<br>2C1B3f1e           | Dharaun,<br>Sichaura                          |                             | 1                         | 4     | 1     | 6     |                                  |   |   |  |
| 5       | Lilwahi-I<br>2C1B3f2a          | Paswara,<br>Pindari, lilwahi                  |                             | 3                         | 6     | 2     | 11    |                                  |   |   |  |
| 6       | Lilwahi-II<br>2C1B3f2b         | Lilwahi, Gahra,<br>Singhanpura,<br>Baghari    |                             | 1                         | 4     | 1     | 6     |                                  |   |   |  |
| 7       | Utiyan<br>2C1B3f2d             | Utiya, Bari,<br>Bamhauri,<br>Gehra            |                             | 2                         | 6     | 1     | 9     |                                  |   |   |  |
| 8       | Jujhar<br>2C1B3f2e             | Utiya, Gnaj,<br>Dharaun, Jujhar               |                             | 2                         | 4     | 1     | 7     |                                  |   |   |  |
| 9       | Dharaun<br>2C1B3f2f            | Utiya, Dharaun                                |                             | 2                         | 5     | 1     | 8     |                                  |   |   |  |
| 10      | Babedi<br>2C1B3k1b             | Baberi, Surha                                 |                             | 1                         | 6     | 1     | 8     |                                  |   |   |  |

|              |                                   |  |  |           |           |           |            |  |  |  |  |
|--------------|-----------------------------------|--|--|-----------|-----------|-----------|------------|--|--|--|--|
| 11           | Surha<br>2C1B3k1c                 | Baberi, Surha  |  | 1         | 5         | 1         | 7          |  |  |  |  |
| 12           | Kauhari<br>2C1B3k1d               | Surha, Kauhari   |  | 2         | 5         | 2         | 9          |  |  |  |  |
| 13           | Pindari<br>2C1B3k2a               | Surha, Pindari   |  | 1         | 4         | 1         | 6          |  |  |  |  |
| 14           | Singhanpur<br>Baghari<br>2C1B3k2b | Surha,<br>Singhanpur,<br>Baghari                                 |  | 2         | 5         | 1         | 8          |  |  |  |  |
| 15           | Kamalpura<br>2C1B3k2c             | Singhanpur<br>Baghari,<br>Kanera, Salua,<br>Kamalkhera,<br>Patha |  | 3         | 9         | 2         | 14         |  |  |  |  |
| 16           | Shivhara<br>2C1B3k2d              | Kamalkhera,<br>Syohar,<br>Bamhaur Kala                           |  | 2         | 8         | 2         | 12         |  |  |  |  |
| 17           | Bamhaurikaji<br>2C1B3k2e          | Bamhaur Kaji,<br>Siyor,<br>Kamalkhera,<br>Gehra                  |  | 2         | 7         | 1         | 10         |  |  |  |  |
| 18           | Gahra<br>2C1B3k2f                 | Singhanpur<br>Baghari,<br>Bhaghari,<br>Gehra                     |  | 1         | 4         | 1         | 6          |  |  |  |  |
| <b>Total</b> |                                   |  |  | <b>32</b> | <b>95</b> | <b>22</b> | <b>149</b> |  |  |  |  |

Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Mahoba, District- Mahoba, U.P.)

**Table 3.14: Details of Livelihood Status of the Farmers**

| Sr. No. | Name & Code of micro watershed | Name of Village                               | Name of Livelihood Activity             | No. of House hold engaged |       |       |       | Pre project Average Income | Desired Activities  | Expected Income from desired activities | Remarks  |
|---------|--------------------------------|---|---|---------------------------|-------|-------|-------|----------------------------|---|---|--|
|         |                                |   |   | Sc                        | Other | Women | Total |                            |   |   |  |
| 1       | Bhestamaaf<br>2C1B3f1a         | Bhenstamaf,<br>Parsaha,<br>Surha              | Agriculture + A.H.,<br>Labour,<br>Batai | 30                        | 127   | 11    | 168   | 45000-<br>55000            | Productivity could be enhance through natural resource conservation, livestock management and micro-enterprises | 65,000-<br>75,000                       | Income may be increased by about 30 to 40 per cent |
| 2       | Parsaha<br>2C1B3f1b            | Parsaha,<br>lilwahi                           |   | 30                        | 127   | 10    | 167   |                            |   |   |  |
| 3       | Maheba<br>2C1B3f1d             | Sichaura,<br>lilwahi,<br>Mahewa,<br>Chankala  |   | 41                        | 184   | 8     | 233   |                            |   |   |  |
| 4       | Sichaura<br>2C1B3f1e           | Dharaun,<br>Sichaura                          |   | 47                        | 208   | 9     | 264   |                            |   |   |  |
| 5       | Lilwahi-I<br>2C1B3f2a          | Paswara,<br>Pindari,<br>lilwahi               |   | 62                        | 276   | 11    | 349   |                            |   |   |  |
| 6       | Lilwahi-II<br>2C1B3f2b         | Lilwahi,<br>Gahra,<br>Singhanpura,<br>Baghari |   | 29                        | 122   | 13    | 164   |                            |   |   |  |
| 7       | Utiyan 2C1B3f2d                | Utiya, Bari,<br>Bamhauri,<br>Gehra            |   | 45                        | 194   | 12    | 251   |                            |   |   |  |
| 8       | Jujhar 2C1B3f2e                | Utiya, Gnaj,<br>Dharaun,<br>Jujhar            |   | 42                        | 182   | 14    | 238   |                            |   |   |  |
| 9       | Dharaun<br>2C1B3f2f            | Utiya,<br>Dharaun                             |   | 39                        | 173   | 10    | 222   |                            |   |   |  |

|    |                                   |  |  |            |             |            |             |  |  |  |  |
|----|-----------------------------------|--|--|------------|-------------|------------|-------------|--|--|--|--|
| 10 | Babedi<br>2C1B3k1b                | Baberi, Surha  |  | 44         | 169         | 9          | 222         |  |  |  |  |
| 11 | Surha 2C1B3k1c                    | Baberi, Surha  |  | 43         | 167         | 8          | 218         |  |  |  |  |
| 12 | Kauhari<br>2C1B3k1d               | Surha,<br>Kauhari  |  | 65         | 255         | 6          | 326         |  |  |  |  |
| 13 | Pindari<br>2C1B3k2a               | Surha, Pindari   |  | 44         | 171         | 7          | 222         |  |  |  |  |
| 14 | Singhanpur<br>Baghari<br>2C1B3k2b | Surha,<br>Singhanpur,<br>Baghari                                 |  | 52         | 201         | 9          | 262         |  |  |  |  |
| 15 | Kamalpura<br>2C1B3k2c             | Singhanpur<br>Baghari,<br>Kanera, Salua,<br>Kamalkhera,<br>Patha |  | 85         | 330         | 11         | 426         |  |  |  |  |
| 16 | Shivhara<br>2C1B3k2d              | Kamalkhera,<br>Syohar,<br>Bamhaur Kala                           |  | 65         | 253         | 10         | 328         |  |  |  |  |
| 17 | Bamhaurikaji<br>2C1B3k2e          | Bamhaur<br>Kaji, Siyor,<br>Kamalkhera,<br>Gehra                  |  | 52         | 196         | 12         | 260         |  |  |  |  |
| 18 | Gahra 2C1B3k2f                    | Singhanpur<br>Baghari,<br>Bhaghari,<br>Gehra                     |  | 39         | 152         | 8          | 199         |  |  |  |  |
|    | <b>Total</b>                      |  |  | <b>854</b> | <b>3487</b> | <b>178</b> | <b>4519</b> |  |  |  |  |

Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Mahoba, District- Mahoba, U.P.)

**Table 3.15: Present Livelihood Status (No. of households/Income per year) in IWMP-XVIII, Mahoba**

'Income in Rs

| Sr.<br>No | Name<br>of<br>MWS<br>with<br>code | Name of<br>village                            | Activities  |                           |         |                           |             |                         |               |                   |               |                   |                 |                   |               |                   |                            |                   |        |                           |                 |                           |
|-----------|-----------------------------------|---|-------------|---------------------------|---------|---------------------------|-------------|-------------------------|---------------|-------------------|---------------|-------------------|-----------------|-------------------|---------------|-------------------|----------------------------|-------------------|--------|---------------------------|-----------------|---------------------------|
|           |                                   |   | Dairy       |                           | Poultry |                           | Goatry      |                         | Piggerie<br>s |                   | Fisherie<br>s |                   | Black<br>Smithy |                   | Carpent<br>ry |                   | Stitchin<br>g/<br>knitting |                   | Wages  |                           | Agricult<br>ure |                           |
|           |                                   |   | N<br>o      | Av.<br>inco<br>me         | N<br>o  | Av.<br>inco<br>me         | N<br>o      | Av.<br>inco<br>me       | N<br>o        | Av.<br>inco<br>me | N<br>o        | Av.<br>inco<br>me | N<br>o          | Av.<br>inco<br>me | N<br>o        | Av.<br>inco<br>me | N<br>o                     | Av.<br>inco<br>me | N<br>o | Av.<br>inco<br>me         | N<br>o          | Av.<br>inco<br>me         |
| 1         | Bhesta<br>maaf<br>2C1B3f<br>1a    | Bhenstamaf,<br>Parsaha,<br>Surha              | 1<br>0<br>5 | 11,5<br>00-<br>13,5<br>00 | 1<br>5  | 13,0<br>00-<br>16,0<br>00 | 2<br>6      | 2000<br>0-<br>2500<br>0 | 1<br>5        | 7500<br>-<br>9000 | -             | -                 | 3               | 2000<br>-<br>4000 | 1             | 2500<br>-<br>4500 | -                          | -                 | 4<br>1 | 11,0<br>00-<br>13,0<br>00 | 2<br>1<br>5     | 25,0<br>00-<br>27,0<br>00 |
| 2         | Parsaha<br>2C1B3f<br>1b           | Parsaha,<br>lilwahi                           | 1<br>3<br>0 |                           | 2<br>4  |                           | 2<br>5<br>8 |                         | 1<br>2        |                   | -             | 4                 |                 | 3                 |               | -                 |                            |                   | 3<br>9 |                           | 1<br>0<br>7     |                           |
| 3         | Maheba<br>2C1B3f<br>1d            | Sichaura,<br>lilwahi,<br>Mahewa,<br>Chanikala | 1<br>2<br>6 |                           | 2<br>3  |                           | 2<br>7<br>5 |                         | 1<br>4        |                   | -             | 2                 |                 | 2                 |               | -                 |                            |                   | 3<br>5 |                           | 1<br>5<br>9     |                           |
| 4         | Sichaur<br>a<br>2C1B3f<br>1e      | Dharaun,<br>Sichaura                          | 1<br>6<br>9 |                           | 1<br>5  |                           | 3<br>7<br>0 |                         | 1<br>0        |                   | -             | 4                 |                 | 2                 |               | -                 |                            |                   | 5<br>1 |                           | 1<br>7<br>3     |                           |
| 5         | Lilwahi<br>-I<br>2C1B3f<br>2a     | Paswara,<br>Pindari,<br>lilwahi               | 1<br>6<br>7 |                           | 2<br>0  |                           | 3<br>6<br>5 |                         | 1<br>8        |                   | -             | 2                 |                 | 1                 |               | -                 |                            |                   | 5<br>3 |                           | 1<br>1<br>3     |                           |
| 6         | Lilwahi<br>-II<br>2C1B3f<br>2b    | Lilwahi,<br>Gahra,<br>Singhanpura,<br>Baghari | 1<br>6<br>5 |                           | 1<br>8  |                           | 3<br>6<br>0 |                         | 1<br>2        |                   | -             | 3                 |                 | 3                 |               | -                 |                            |                   | 5<br>8 |                           | 1<br>5<br>3     |                           |

|    |   |  |             |  |        |  |             |  |        |  |   |   |   |  |   |  |   |  |   |  |                  |  |
|----|---|--|-------------|--|--------|--|-------------|--|--------|--|---|---|---|--|---|--|---|--|---|--|------------------|--|
| 7  | Utiyan<br>2C1B3f<br>2d                    | Utiya, Bari,<br>Bamhauri,<br>Gehra                         | 1<br>6<br>3 |  | 1<br>6 |  | 3<br>5<br>5 |  | 1<br>5 |  | - |   | 4 |  | 2 |  | - |  | 5 |  | 2<br>1<br>4      |  |
| 8  | Jujhar<br>2C1B3f<br>2e                    | Utiya, Gnaj,<br>Dharaun,<br>Jujhar                         | 1<br>5<br>5 |  | 2<br>2 |  | 3<br>4<br>0 |  | 8      |  | - |   | 5 |  | 4 |  | - |  | 5 |  | 4<br>2<br>9<br>8 |  |
| 9  | Dharau<br>n<br>2C1B3f<br>2f               | Utiya,<br>Dharaun  | 1<br>9<br>8 |  | 2<br>5 |  | 4<br>3<br>5 |  | 1<br>2 |  | - |   | 2 |  | 3 |  | - |  | 4 |  | 8<br>2<br>1<br>5 |  |
| 10 | Babedi<br>2C1B3k<br>1b                    | Baberi,<br>Surha   | 1<br>1<br>5 |  | 1<br>0 |  | 2<br>3<br>5 |  | 1<br>2 |  | - | - | 5 |  | 2 |  | - |  | 2 |  | 0<br>2<br>9<br>3 |  |
| 11 | Surha<br>2C1B3k<br>1c                     | Baberi,<br>Surha   | 8<br>0      |  | 1<br>2 |  | 1<br>9<br>3 |  | 1<br>5 |  | - | - | 3 |  | 5 |  | - |  | 5 |  | 4<br>2<br>4<br>1 |  |
| 12 | Kauhari<br>2C1B3k<br>1d                   | Surha,<br>Kauhari  | 1<br>3<br>0 |  | 1<br>4 |  | 2<br>6<br>0 |  | 1<br>4 |  | - | - | 4 |  | 1 |  | - |  | 2 |  | 7<br>3<br>2<br>5 |  |
| 13 | Pindari<br>2C1B3k<br>2a                   | Surha,<br>Pindari  | 9<br>0      |  | 1<br>5 |  | 1<br>8<br>2 |  | 1<br>6 |  | - | - | 2 |  | 3 |  | - |  | 2 |  | 8<br>2<br>2<br>7 |  |
| 14 | Singhan<br>pur<br>Baghari<br>2C1B3k<br>2b | Surha,<br>Singhanpur,<br>Baghari                           | 1<br>2<br>5 |  | 2<br>4 |  | 2<br>2<br>1 |  | 1<br>3 |  | - | - | 0 |  | 0 |  | - |  | 3 |  | 1<br>2<br>7<br>6 |  |
| 15 | Kamalp<br>ura<br>2C1B3k<br>2c             | Singhanpur<br>Baghari,<br>Kanera,<br>Salua,<br>Kamalkhera, | 1<br>6<br>8 |  | 1<br>3 |  | 3<br>6<br>9 |  | 1<br>5 |  |   |   | 8 |  | 4 |  |   |  | 3 |  | 9<br>4<br>6<br>1 |  |

|    |                                   | Patha   |                  |                                     |                |                                     |                |                                    |                      |                            |   |   |                |                            |                |                            |   |        |                      |                                     |                  |                                     |
|----|-----------------------------------|---|------------------|-------------------------------------|----------------|-------------------------------------|----------------|------------------------------------|----------------------|----------------------------|---|---|----------------|----------------------------|----------------|----------------------------|---|--------|----------------------|-------------------------------------|------------------|-------------------------------------|
| 16 | Shivhara<br>2C1B3k<br>2d          | Kamalkhera,<br>Syohar,<br>Bamhaur<br>Kala       | 1<br>5<br>8      |                                     | 1<br>8         |                                     | 2<br>9<br>2    |                                    | 1<br>4               |                            | - | - | 5              |                            | 2              |                            | - |        | 2<br>6               | 3<br>6<br>5                         |                  |                                     |
| 17 | Bamhaur<br>rikaji<br>2C1B3k<br>2e | Bamhaur<br>Kaji, Siyor,<br>Kamalkhera,<br>Gehra | 1<br>0<br>0      |                                     | 1<br>3         |                                     | 2<br>0<br>4    |                                    | 1<br>0               |                            |   |   | 4              |                            | 3              |                            |   | 4<br>1 | 2<br>5<br>5          |                                     |                  |                                     |
| 18 | Gahra<br>2C1B3k<br>2f             | Singhanpur<br>Baghari,<br>Bhaghari,<br>Gehra    | 1<br>2<br>0      |                                     | 1<br>0         |                                     | 1<br>5<br>9    |                                    | 1<br>1               |                            |   |   | 7              |                            | 4              |                            |   | 4<br>5 | 1<br>9<br>8          |                                     |                  |                                     |
|    | <b>Total</b>                      |   | <b>24<br/>64</b> | <b>11,5<br/>00-<br/>13,5<br/>00</b> | <b>3<br/>0</b> | <b>13,0<br/>00-<br/>16,0<br/>00</b> | <b>5<br/>1</b> | <b>2000<br/>0-<br/>2500<br/>80</b> | <b>2<br/>3<br/>6</b> | <b>7500<br/>-<br/>9000</b> | - | - | <b>6<br/>7</b> | <b>2000<br/>-<br/>4000</b> | <b>4<br/>5</b> | <b>2500<br/>-<br/>4500</b> | - | -      | <b>7<br/>4<br/>2</b> | <b>11,0<br/>00-<br/>13,0<br/>00</b> | <b>42<br/>88</b> | <b>25,0<br/>00-<br/>27,0<br/>00</b> |

*Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Mahoba, District- Mahoba, U.P.)*

### **3.8 Hydrology, Water resources and Soil and moisture Conservation**

Shallow dug wells are the only means of irrigation in the area and these wells support only for life saving irrigation. In general, irrigation interval is short due to short water holding capacity of the soils. For soil and water conservation only field bund exist presently. Use of micro-irrigation is almost nil in the area. Groundwater status, irrigation status and source are given in Table 3.16, 3.17 and 3.18, respectively.

**Table 3.16: Ground Water Status in IWMP-XVIII, Mahoba**

| Sr. No.        | Name & Code of Micro watershed | Name of Village                                      | Depth of Ground Water Table (Below Ground level) in Meter |                    | No. of Observation well | Remarks |
|----------------|--------------------------------|--|---|--------------------|-------------------------|---------|
|                |                                |  | Before Monsoon  | After Monsoon      |                         |         |
| 1              | Bhestamaaf 2C1B3f1a            | Bhenstamaf, Parsaha, Surha                           | Avrg.12.05  | Avrg.9.34          | 4                       | -       |
| 2              | Parsaha 2C1B3f1b               | Parsaha, lilwahi                                     | Avrg.14.48  | Avrg.11.14         | 5                       | -       |
| 3              | Maheba 2C1B3f1d                | Sichauna, lilwahi, Mahewa, Chanikala                 | Avrg.14.73  | Avrg.10.94         | 8                       | -       |
| 4              | Sichauna 2C1B3f1e              | Dharaun, Sichauna                                    | Avrg.13.52  | Avrg.11.78         | 7                       | -       |
| 5              | Lilwahi-I 2C1B3f2a             | Paswara, Pindari, lilwahi                            | Avrg.13.61  | Avrg.10.96         | 5                       | -       |
| 6              | Lilwahi-II 2C1B3f2b            | Lilwahi, Gahra, Singhanpura, Baghara                 | Avrg.11.54  | Avrg.8.96          | 7                       | -       |
| 7              | Utiyan 2C1B3f2d                | Utiya, Bari, Bamhauri, Gehra                         | Avrg.14.69  | Avrg.11.97         | 6                       | -       |
| 8              | Jujhar 2C1B3f2e                | Utiya, Gnaj, Dharaun, Jujhar                         | Avrg.12.89  | Avrg.10.77         | 6                       | -       |
| 9              | Dharaun 2C1B3f2f               | Utiya, Dharaun                                       | Avrg.13.31  | Avrg.9.18          | 5                       |         |
| 10             | Babedi 2C1B3k1b                | Baberi, Surha  | Avrg.14.59  | Avrg.10.39         | 6                       |         |
| 11             | Surha 2C1B3k1c                 | Baberi, Surha  | Avrg.13.97  | Avrg.11.03         | 5                       |         |
| 12             | Kauhari 2C1B3k1d               | Surha, Kauhari                                       | Avrg.15.18  | Avrg.12.37         | 8                       |         |
| 13             | Pindari 2C1B3k2a               | Surha, Pindari                                       | Avrg.15.01  | Avrg.12.79         | 7                       |         |
| 14             | Singhanpur Baghara 2C1B3k2b    | Surha, Singhanpur, Baghara                           | Avrg.14.13  | Avrg.10.39         | 5                       |         |
| 15             | Kamalpura 2C1B3k2c             | Singhanpur Baghara, Kanera, Salua, Kamalkhera, Patha | Avrg.13.92  | Avrg.9.37          | 6                       |         |
| 16             | Shivhara 2C1B3k2d              | Kamalkhera, Syohar, Bamhaur Kala                     | Avrg.14.12  | Avrg.11.38         | 7                       |         |
| 17             | Bamhaurikaji 2C1B3k2e          | Bamhaur Kaji, Siyor, Kamalkhera, Gehra               | Avrg.13.15  | Avrg.9.77          | 4                       |         |
| 18             | Gahra 2C1B3k2f                 | Singhanpur Baghara, Bhaghara, Gehra                  | Avrg.12.34  | Avrg.9.18          | 6                       |         |
| <b>Average</b> |                                |  | <b>11.54-15.18</b>  | <b>8.96- 12.79</b> |                         |         |

Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Mahoba, District- Mahoba, U.P.)

Generally stony layer is observed at a depth ranging between 1-5 m in all districts of Bundelkhand in Uttar Pradesh except Jalaun and Hamirpur district. Depth of water table in open shallow dug wells in the project area was about 8.96-12.97 m during pre monsoon, however it was in the range of 11.54-15.18 m during post monsoon season.

**Table 3.17: Irrigation Status in IWMP-XVIII, Mahoba**

| Sr. No . | Name & Micro Watershed with code | Name of Village                               | Gross Cultivated Area |        |      |        | Net Cultivate d Area | Gross Irrigated Area |       |      |       | Rainfe d Area |        |
|----------|----------------------------------|---|-----------------------|--------|------|--------|----------------------|----------------------|-------|------|-------|---------------|--------|
|          |                                  |   | Kharif                | Rabi   | Zaid | Total  |                      | Kharif               | Rabi  | Zaid | Total |               |        |
| 1        | Bhestamaaf<br>2C1B3f1a           | Bhenstamaf,<br>Parsaha, Surha                 | 141.89                | 232.27 | -    | 374.16 | 347.70               | -                    | 41.72 | -    | 41.72 | 41.72         | 305.98 |
| 2        | Parsaha<br>2C1B3f1b              | Parsaha, lilwahi                              | 125.95                | 220.89 | -    | 346.84 | 330.85               | -                    | 39.70 | -    | 39.70 | 39.70         | 291.15 |
| 3        | Maheba<br>2C1B3f1d               | Sichaura,<br>lilwahi,<br>Mahewa,<br>Chanikala | 192.45                | 292.96 | -    | 485.41 | 446.60               | -                    | 53.59 | -    | 53.59 | 53.59         | 393.00 |
| 4        | Sichaura<br>2C1B3f1e             | Dharaun,<br>Sichaura                          | 235.18                | 350.93 | -    | 586.11 | 565.73               | -                    | 67.89 | -    | 67.89 | 67.89         | 497.84 |
| 5        | Lilwahi-I<br>2C1B3f2a            | Paswara,<br>Pindari, lilwahi                  | 293.59                | 487.36 | -    | 780.96 | 715.65               | -                    | 85.88 | -    | 85.88 | 85.88         | 629.77 |
| 6        | Lilwahi-II<br>2C1B3f2b           | Lilwahi, Gahra,<br>Singhanpura,<br>Baghari    | 144.12                | 208.82 | -    | 352.94 | 334.76               | -                    | 40.17 | -    | 40.17 | 40.17         | 294.58 |
| 7        | Utiyan<br>2C1B3f2d               | Utiya, Bari,<br>Bamhauri,<br>Gehra            | 217.93                | 332.28 | -    | 550.21 | 507.68               | -                    | 60.92 | -    | 60.92 | 60.92         | 446.75 |
| 8        | Jujhar<br>2C1B3f2e               | Utiya, Gnaj,<br>Dharaun, Jujhar               | 184.40                | 333.54 | -    | 517.94 | 494.29               | -                    | 59.31 | -    | 59.31 | 59.31         | 434.97 |
| 9        | Dharaun<br>2C1B3f2f              | Utiya, Dharaun                                | 175.73                | 298.29 | -    | 474.02 | 447.55               | -                    | 53.71 | -    | 53.71 | 53.71         | 393.84 |

|              |                                   |  |                |                |             |                |                |          |                |          |                |                |                |
|--------------|-----------------------------------|--|----------------|----------------|-------------|----------------|----------------|----------|----------------|----------|----------------|----------------|----------------|
| 10           | Babedi<br>2C1B3k1b                | Baberi, Surha  | 198.64         | 299.20         | -           | 497.844        | 456.78         | -        | 54.81          | -        | 54.81          | 54.81          | 401.97         |
| 11           | Surha<br>2C1B3k1c                 | Baberi, Surha  | 154.42         | 305.94         | -           | 460.359        | 429.68         | -        | 51.56          | -        | 51.56          | 51.56          | 378.12         |
| 12           | Kauhari<br>2C1B3k1d               | Surha, Kauhari   | 245.69         | 426.99         | -           | 672.68         | 652.25         | -        | 78.27          | -        | 78.27          | 78.27          | 573.98         |
| 13           | Pindari<br>2C1B3k2a               | Surha, Pindari   | 159.28         | 349.54         | -           | 508.821        | 475.09         | -        | 57.01          | -        | 57.01          | 57.01          | 418.08         |
| 14           | Singhanpur<br>Baghari<br>2C1B3k2b | Surha,<br>Singhanpur,<br>Baghari                                 | 174.75         | 393.81         | -           | 568.555        | 542.63         | -        | 65.12          | -        | 65.12          | 65.12          | 477.51         |
| 15           | Kamalpura<br>2C1B3k2c             | Singhanpur<br>Baghari,<br>Kanera, Salua,<br>Kamalkhera,<br>Patha | 299.59         | 614.78         | -           | 914.369        | 871.79         | -        | 104.61         | -        | 104.61         | 104.61         | 767.17         |
| 16           | Shivhara<br>2C1B3k2d              | Kamalkhera,<br>Syohar,<br>Bamhaur Kala                           | 252.57         | 460.48         | -           | 713.051        | 669.20         | -        | 80.30          | -        | 80.30          | 80.30          | 588.89         |
| 17           | Bamhaurikaji<br>2C1B3k2e          | Bamhaur Kaji,<br>Siyor,<br>Kamalkhera,<br>Gehra                  | 207.45         | 375.32         | -           | 582.772        | 557.18         | -        | 66.86          | -        | 66.86          | 66.86          | 490.31         |
| 18           | Gahra<br>2C1B3k2f                 | Singhanpur<br>Baghari,<br>Bhaghari,<br>Gehra                     | 144.80         | 268.82         | -           | 413.616        | 399.38         | -        | 47.93          | -        | 47.93          | 47.93          | 351.46         |
| <b>Total</b> |                                   |  | <b>3548.43</b> | <b>6252.22</b> | <b>0.00</b> | <b>9800.66</b> | <b>9244.79</b> | <b>-</b> | <b>1109.36</b> | <b>-</b> | <b>1109.36</b> | <b>1109.36</b> | <b>8135.37</b> |

Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Mahoba, District- Mahoba, U.P.)

**Table 3.18: Source wise Area Irrigated in IWMP-XVIII, Mahoba (area in ha)**

| Sr. No . | Name &Micro watershed with code | Name of Village                               | Cana l Area | State Tube wells |       | Tanks |       | Open well |       | Bore wells |      | Lift irrigation |       | Others (Specify) |       | Total Irrigate d Area | Re m. |
|----------|---------------------------------|---|-------------|------------------|-------|-------|-------|-----------|-------|------------|------|-----------------|-------|------------------|-------|-----------------------|-------|
|          |                                 |   |             | No .             | Are a | No.   | Area  | No .      | Area  | No .       | Area | No .            | Area  | No .             | Are a |                       |       |
| 1        | Bhestamaaf<br>2C1B3f1a          | Bhenstamaf,<br>Parsaha, Surha                 | -           | -                | -     | 3     | 6.26  | 14        | 22.95 | 1          | 2.92 | -               | 9.60  | -                | -     | 41.72                 | -     |
| 2        | Parsaha<br>2C1B3f1b             | Parsaha, lilwahi                              | -           | -                | -     | 4     | 5.96  | 13        | 21.84 | 1          | 2.78 | -               | 9.13  | -                | -     | 39.70                 | -     |
| 3        | Maheba<br>2C1B3f1d              | Sichaura,<br>lilwahi,<br>Mahewa,<br>Chanikala | -           | -                | -     | 5     | 8.04  | 22        | 29.48 | 2          | 3.75 | -               | 12.33 | -                | -     | 53.59                 | -     |
| 4        | Sichaura<br>2C1B3f1e            | Dharaun,<br>Sichaura                          | -           | -                | -     | 6     | 10.18 | 25        | 37.34 | 2          | 4.75 | -               | 15.61 | -                | -     | 67.89                 | -     |
| 5        | Lilwahi-I<br>2C1B3f2a           | Paswara,<br>Pindari, lilwahi                  | -           | -                | -     | 9     | 12.88 | 28        | 47.23 | 3          | 6.01 | -               | 19.75 | -                | -     | 85.88                 | -     |
| 6        | Lilwahi-II<br>2C1B3f2b          | Lilwahi, Gahra,<br>Singhanpura,<br>Baghari    | -           | -                | -     | 2     | 6.03  | 13        | 22.09 | 2          | 2.81 | -               | 9.24  | -                | -     | 40.17                 | -     |
| 7        | Utiyan<br>2C1B3f2d              | Utiya, Bari,<br>Bamhauri,<br>Gehra            | -           | -                | -     | 4     | 9.14  | 22        | 33.51 | 3          | 4.26 | -               | 14.01 | -                | -     | 60.92                 | -     |
| 8        | Jujhar<br>2C1B3f2e              | Utiya, Gnaj,<br>Dharaun, Jujhar               | -           | -                | -     | 5     | 8.90  | 21        | 32.62 | 3          | 4.15 | -               | 13.64 | -                | -     | 59.31                 | -     |
| 9        | Dharaun<br>2C1B3f2f             | Utiya, Dharaun                                | -           | -                | -     | 3     | 8.06  | 18        | 29.54 | 2          | 3.76 | -               | 12.35 | -                | -     | 53.71                 | -     |
| 10       | Babedi<br>2C1B3k1b              | Baberi, Surha                                 | -           | -                | -     | 2     | 8.22  | 15        | 30.15 | 3          | 3.84 | -               | 12.61 | -                | -     | 54.81                 | -     |
| 11       | Surha<br>2C1B3k1c               | Baberi, Surha                                 | -           | -                | -     | 4     | 7.73  | 14        | 28.36 | 3          | 3.61 | -               | 11.86 | -                | -     | 51.56                 | -     |

|              |                                   |  |   |   |   |    |        |     |        |    |       |   |        |   |   |         |   |
|--------------|-----------------------------------|--|---|---|---|----|--------|-----|--------|----|-------|---|--------|---|---|---------|---|
| 12           | Kauhari<br>2C1B3k1d               | Surha, Kauhari   | - | - | - | 2  | 11.74  | 16  | 43.05  | 3  | 5.48  | - | 18.00  | - | - | 78.27   | - |
| 13           | Pindari<br>2C1B3k2a               | Surha, Pindari   | - | - | - | 6  | 8.55   | 18  | 31.36  | 4  | 3.99  | - | 13.11  | - | - | 57.01   | - |
| 14           | Singhanpur<br>Baghari<br>2C1B3k2b | Surha,<br>Singhanpur,<br>Baghari                                 | - | - | - | 8  | 9.77   | 16  | 35.81  | 3  | 4.56  | - | 14.98  | - | - | 65.12   | - |
| 15           | Kamalpura<br>2C1B3k2c             | Singhanpur<br>Baghari,<br>Kanera, Salua,<br>Kamalkhera,<br>Patha | - | - | - | 4  | 15.69  | 17  | 57.54  | 5  | 7.32  | - | 24.06  | - | - | 104.61  | - |
| 16           | Shivhara<br>2C1B3k2d              | Kamalkhera,<br>Syohar,<br>Bamhaur Kala                           | - | - | - | 3  | 12.05  | 16  | 44.17  | 2  | 5.62  | - | 18.47  | - | - | 80.30   | - |
| 17           | Bamhaurikaji<br>2C1B3k2e          | Bamhaur Kaji,<br>Siyor,<br>Kamalkhera,<br>Gehra                  | - | - | - | 5  | 10.03  | 13  | 36.77  | 3  | 4.68  | - | 15.38  | - | - | 66.86   | - |
| 18           | Gahra<br>2C1B3k2f                 | Singhanpur<br>Baghari,<br>Bhaghari, Gehra                        | - | - | - | 7  | 7.19   | 14  | 26.36  | 2  | 3.35  | - | 11.02  | - | - | 47.93   | - |
| <b>Total</b> |                                   |  | - | - | - | 82 | 166.42 | 315 | 610.17 | 47 | 77.64 | - | 255.15 | - | - | 1109.36 | - |

Source: Participatory rural appraisal by PIA, (Soil Conservation Division, Mahoba, District- Mahoba, U.P.)

## CHAPTER – 4

### INSTITUTIONAL BUILDING AND PROJECT MANAGEMENT

#### 4.1 Project Implementing Agency

The Project Implementing Agency (PIA) is Soil Conservation Officer, Department of Agriculture, IWMP-XVIII, Mahoba, Uttar Pradesh. The PIA was given responsibility to develop the micro-watershed by Watershed Cell and Data Centre (WCDC) and State Level Nodal Agency (SLNA) considering its vast experiences in handling land and water management issues in the region. The PIA has well experienced trained and sufficient staff to handle the watershed management programme efficiently. Most of the staff of PIA has exposure of several watershed projects. In addition the PIA has access for technical backstopping from the ICAR viz. IGFRI and NRCAF at Jhansi and KVK located at Mahoba. Details of PIA are presented in subsequent section.

**Table 4.1: Details of Project Implementing Agency (PIA), IWMP-XVIII, Mahoba**

| Sr. No. | Particulars of PIA                      |   |
|---------|---|---|
| (i)     | Date of selection of PIA                |   |
| (ii)    | Type of organization                    | U.P. Government                                   |
| (iii)   | Name of organization                    | Soil Conservation Division, Deptt. of Agriculture |
| (iv)    | Principal Implementing Agency & Address | Soil Conservation Officer, Mahoba                 |
| (v)     | Telephone                               |   |
| (vi)    | Fax                                     |   |
| (vii)   | E-mail                                  |   |

**Table 4.2: Details of Staff at PIA, IWMP-XVIII, Mahoba**

| Sr. No. | Designation | Name             | M/F | Qualification               |
|---------|-------------|------------------|-----|-----------------------------|
| 1       | B.S.A.      | J.P Singh        | M   | M.Sc (Agriculture )         |
| 2       | J.E.        | R..K Soni        | M   | Diploma in Civil. Engg.     |
| 3       | J.E         | Ajab Singh       | M   | Diploma in Mechanical Engg. |
| 4       | S.C.I.      | Lajja Ram        | M   | Inter, Diploma              |
| 5       | S.C.I.      | S.N Kuril        | M   | Inter, Diploma              |
| 6       | S.C.I.      | Bhim Sankar      | M   | Inter, Diploma              |
| 7       | AS.C.I.     | P.K Tripathi     | M   | High school                 |
| 8       | AS.C.I.     | A.K Khare        | M   | Diploma Agriculture         |
| 9       | AS.C.I.     | Sunder lal       | M   | Graduate (Agri)             |
| 10      | AS.C.I.     | H.G Dayal        | M   | Graduate (Agri)             |
| 11      | AS.C.I.     | G.D Niranjan     | M   | Graduate (Agri)             |
| 12      | AS.C.I.     | S.K Singh        | M   | Inter, Diploma              |
| 13      | AS.C.I.     | PrabhuDayal      | M   | Graduate (Agri)             |
| 14      | AS.C.I.     | D.P Ariaria      | M   | High school, Diploma        |
| 15      | AS.C.I.     | Babu Lal         | M   | Graduate (Agri)             |
| 16      | AS.C.I.     | Satrughan Singh  | M   | Inter, Diploma              |
| 17      | AS.C.I.     | Chhatrapul Singh | M   | Inter, Diploma              |

**Table 4.3: Details of Watershed Development Team (WDT) in the project area****Project- IWMP XVIII****PIA- BSA, Mahoba****District – Mahoba**

| <b>Sr. No.</b> | <b>Name</b>        | <b>M/F</b> | <b>Description of professional training</b>                         | <b>Role/ Function</b>   | <b>Date of appointment of WDT member</b> |
|----------------|--------------------|------------|---|---|--|
| <b>1</b>       | Shri. J.P. Singh   | M          | All the members are having work experience of watershed management. | WDT members will be accountable for the activities mentioned in Common Guidelines for watershed Development Projects 2008 |  |
| <b>2</b>       | Shri.Ajay Singh    | M          |   |   |  |
| <b>3</b>       | Shri.Bheem Shankar | M          |   |   |  |
| <b>4</b>       | Shri. Sundar Lal   | M          |   |   |  |
| <b>5</b>       | Shri.Pramod Kumar  | M          |   |   |  |
| <b>6</b>       | Shri Prabhu Dayal  | M          |   |   |  |
| <b>7</b>       | Shri. Dhan Prasad  | M          |   |   | 25.11.2011                               |

**Table 4.4: Details of Watershed committee (Wc) in the project area**

Jal Sanrakshan Samiti- Surha,

Gram Panchayat: Surha

Name of Project:- IWMP- XVIII

District- Mahoba

| Sl.<br>No<br>. . | Name<br>of<br>Gram<br>Sabha<br>/ GP | Date of<br>Constitutio<br>n/<br>Registratio<br>n as a<br>Society<br>(dd/mm/<br>yyyy) | Designatio<br>n | M/<br>F | S<br>C | S<br>T | OBC | Ge<br>n | S<br>F | M<br>F | L<br>F | Land<br>-less | U<br>G | SH<br>G | G<br>P          | Educa<br>tional<br>qualificatio<br>n  | Function(s)<br>assigned |
|------------------|-------------------------------------|--|-----------------|---------|--------|--------|-----|---------|--------|--------|--------|---------------|--------|---------|-----------------|---|-------------------------|
| 1                | Surha                               | 10.10.11   | President       | M       | -      | -      | Y   | -       | -      | -      | -      | -             | -      | Y       | 5 <sup>TH</sup> | WC will act<br>as per<br>Common<br>Guidelines<br>for<br>watershed<br>Developme<br>nt Projects<br>2008 |                         |
|                  |                                     |  | Secretary       | M       | -      | -      | -   | Y       | -      | -      | -      | -             | -      | -       | -               | 10 <sup>TH</sup>  |                         |
|                  |                                     |  | Team<br>leader  | M       | Y      | -      | -   | -       | -      | Y      | -      | -             | Y      | -       | -               | Diploma Ag  |                         |
|                  |                                     |  | Member          | M       | -      | -      | Y   | -       | Y      | -      | -      | -             | -      | -       | -               | 8 <sup>TH</sup>   |                         |
|                  |                                     |  | Member          | M       | -      | -      | Y   | -       | -      | -      | -      | -             | -      | -       | -               | 8 <sup>TH</sup>   |                         |
|                  |                                     |  | Member          | M       | Y      | -      | -   | -       | -      | -      | Y      | -             | -      | Y       | -               | 5 <sup>TH</sup>   |                         |
|                  |                                     |  | Member          | F       | -      | -      | Y   | -       | Y      | -      | -      | -             | Y      | -       | -               | 5 <sup>TH</sup>   |                         |
|                  |                                     |  | Member          | M       | -      | -      | Y   | -       | -      | -      | -      | -             | Y      | -       | Y               | 5 <sup>TH</sup>   |                         |
|                  |                                     |  | Member          | M       | Y      | -      | -   | -       | -      | -      | -      | Y             | -      | Y       | -               | 8 <sup>TH</sup>   |                         |
|                  |                                     |  | Member          | M       | -      | -      | -   | Y       | -      | -      | -      | -             | Y      | -       | -               | 8 <sup>TH</sup>   |                         |
|                  |                                     |  | Member          | M       | -      | -      | Y   | -       | -      | -      | -      | -             | -      | -       | -               | 8 <sup>TH</sup>   |                         |

Male-M, Female-F, Schedule caste- SC, Schedule tribe- ST, Other backward clan- OBC, General- Gen, Small farmer- SF, Medium farmer-MF, Large farmer- LF, User Group- UG, Self help Group-SHG, Gram Panchayat Member- GP

**Jal Sanrakshan Samiti: Parsaha,  
District- Mahoba**

**Gram Panchayat: Parsaha**

**Name of Project:- IWMP- XVIII**

| <b>Sl.<br/>No<br/>. .</b> | <b>Name<br/>of<br/>Gram<br/>Sabha/<br/>GP</b> | <b>Date of<br/>Constitutio<br/>n/<br/>Registratio<br/>n as a<br/>Society<br/>(dd/mm/<br/>yyyy)</b> | <b>Designati<br/>on</b> | <b>M/<br/>F</b> | <b>S<br/>C</b> | <b>S<br/>T</b> | <b>OBC</b> | <b>Gen</b> | <b>SF</b> | <b>M<br/>F</b> | <b>L<br/>F</b> | <b>Land<br/>-less</b> | <b>U<br/>G</b> | <b>SH<br/>G</b> | <b>G<br/>P</b> | <b>Educa<br/>-<br/>tional<br/>qualificati<br/>on</b> | <b>Function(s)<br/>assigned</b>  |
|---------------------------|---|--|-------------------------|-----------------|----------------|----------------|------------|------------|-----------|----------------|----------------|-----------------------|----------------|-----------------|----------------|--|--|
| 2                         | Parsaha                                       | 13.10.11   | President               | M               | -              | -              | Y          | -          | -         | -              | Y              | -                     | -              | -               | -              | 5 <sup>TH</sup>                                      | WC will act as per Common Guidelines for watershed Development Projects 2008 |
|                           |   |  | Secretary               | M               | -              | -              | -          | Y          | Y         | -              | -              | -                     | -              | -               | -              | B.A  |  |
|                           |   |  | Team Leader             | M               | Y              | -              | -          | -          | Y         | -              | -              | -                     | -              | -               | -              | B.Sc AG  |  |
|                           |   |  | Member                  | M               | -              | -              | Y          | -          | Y         | -              | -              | -                     | Y              | -               | -              | 8 <sup>TH</sup>                                      |  |
|                           |   |  | Member                  | M               | -              | -              | Y          | -          | -         | -              | -              | -                     | -              | -               | -              | 10 <sup>TH</sup>                                     |  |
|                           |   |  | Member                  | M               | -              | -              | -          | -          | -         | -              | Y              | -                     | -              | -               | -              | 8 <sup>TH</sup>                                      |  |
|                           |   |  | Member                  | F               | -              | -              | -          | Y          | Y         | Y              | -              | -                     | -              | Y               | -              | 8 <sup>TH</sup>                                      |  |
|                           |   |  | Member                  | M               | -              | -              | Y          |            | Y         | -              | -              | -                     | Y              | -               | -              | 8 <sup>TH</sup>                                      |  |
|                           |   |  | Member                  | M               | Y              | -              | -          | -          | -         | Y              | -              | Y                     | -              | -               | -              | 5 <sup>TH</sup>                                      |  |
|                           |   |  | Member                  | M               | -              | -              | Y          | -          | Y         | -              | -              | -                     | -              | -               | -              | 5 <sup>TH</sup>                                      |  |
|                           |   |  | Member                  | M               | -              | -              | -          | Y          | -         | -              | -              | -                     | Y              | -               | Y              | 5 <sup>TH</sup>                                      |  |

Jal Sanrakshan Samiti - Lilwahi,  
District- Mahoba

Gram Panchayat: Lilwahi

Name of Project:- IWMP- XVIII

| Sl.<br>No<br>. . | Name<br>of<br>Gram<br>Sabh<br>a/ GP | Date of<br>Constitutio<br>n/<br>Registratio<br>n as a<br>Society<br>(dd/mm/<br>yyyy) | Designatio<br>n | SC | S<br>T | O<br>B<br>C | Gen | SF | MF | LF | L<br>an<br>d-<br>les<br>s | UG | SH<br>G | GP | S<br>C | Educa-<br>tional<br>qualificati<br>on | Function(s)<br>assigned  |
|------------------|-------------------------------------|--|-----------------|----|--------|-------------|-----|----|----|----|---------------------------|----|---------|----|--------|---------------------------------------|--|
| 3                | Lilwa<br>hi                         | 11.10.11   | President       | -  | -      | -           | Y   | -  | Y  | -  | -                         | -  | -       | -  | -      | 5 <sup>TH</sup>                       | WC will<br>act as per<br>Common<br>Guidelines<br>for<br>watershed<br>Developm<br>ent<br>Projects<br>2008 |
|                  |                                     |  | Secretary       | -  | -      | Y           |     | -  | Y  | -  | -                         | Y  | -       | -  | -      | B.A                                   |  |
|                  |                                     |  | Team<br>leader  | -  | -      | -           | Y   | -  | -  | -  | -                         | -  | -       | -  | -      | B.Sc AG                               |  |
|                  |                                     |  | Member          | -  | -      | -           | Y   | -  | Y  | -  | -                         | Y  | -       | -  | -      | 8 <sup>TH</sup>                       |  |
|                  |                                     |  | Member          | -  | -      | Y           | -   | -  | Y  | -  | -                         | -  | -       | -  | -      | 10 <sup>TH</sup>                      |  |
|                  |                                     |  | Member          | Y  | -      | -           | -   | -  | -  | -  | Y                         | -  | Y       | -  | Y      | 8 <sup>TH</sup>                       |  |
|                  |                                     |  | Member          | -  | -      | Y           | -   | -  | Y  | -  | -                         | -  | -       | -  | -      | 8 <sup>TH</sup>                       |  |
|                  |                                     |  | Member          | -  | -      | Y           | -   | -  | -  | -  | Y                         | -  | Y       | -  | -      | 8 <sup>TH</sup>                       |  |
|                  |                                     |  | Member          | Y  | -      | -           | -   | Y  | -  | -  | -                         | Y  | -       | -  | Y      | 5 <sup>TH</sup>                       |  |
|                  |                                     |  | Member          | -  | -      | Y           | -   | -  | Y  | -  | -                         | -  | -       | -  | -      | 5 <sup>TH</sup>                       |  |
|                  |                                     |  | Member          | -  | -      | Y           | -   | Y  | -  | -  | -                         | Y  | -       | -  | -      | 5 <sup>TH</sup>                       |  |

Jal Sanrakshan Samiti - Chhanikala,  
District- Mahoba

Gram Panchayat: Chhanikala

Name of Project:- IWMP- XVIII

| Sl. No . | Name of Gram Sabha/ GP | Date of Constituti on/ Registrati on as a Society (dd/mm/ yyyy) | Designatio n | M/ F | S C | S T | OBC | Gen | SF | M F | L F | Land -less | U G | SH G | G P             | Educa-tional qualificati on  | Function( s) assigned |
|----------|------------------------|---|--------------|------|-----|-----|-----|-----|----|-----|-----|------------|-----|------|-----------------|--|-----------------------|
| 4        | Chhani kala            | 28.10.11  | President    | M    | Y   | -   | -   | -   | Y  | -   | -   | -          | -   | Y    | 8 <sup>TH</sup> | WC will act as per Common Guidelines for watershed Development Projects 2008 |                       |
|          |                        |   | Secretary    | M    | -   | -   | Y   | -   | -  | Y   | -   | -          | Y   | -    | -               | 10 <sup>TH</sup>   |                       |
|          |                        |   | Team leader  | M    | -   | -   | Y   | -   | -  | -   | -   | -          | -   | -    | -               | Diploma Ag   |                       |
|          |                        |   | Member       | M    | -   | -   | Y   | -   | Y  | -   | -   | -          | Y   | -    | -               | 8 <sup>TH</sup>  |                       |
|          |                        |   | Member       | M    | -   | -   | Y   | -   | -  | -   | Y   | -          | Y   | -    | -               | 8 <sup>TH</sup>  |                       |
|          |                        |   | Member       | F    | -   | -   | -   | -   | -  | -   | -   | Y          | -   | Y    | -               | 8 <sup>TH</sup>  |                       |
|          |                        |   | Member       | M    | Y   | -   | -   | -   | Y  | -   | -   | -          | -   | -    | -               | 5 <sup>TH</sup>  |                       |
|          |                        |   | Member       | M    | -   | -   | Y   | -   | -  | Y   | -   | -          | Y   | -    | -               | 5 <sup>TH</sup>  |                       |
|          |                        |   | Member       | F    | Y   | -   | -   | -   | -  | -   | -   | Y          | -   | Y    | -               | 8 <sup>TH</sup>  |                       |
|          |                        |   | Member       | M    | -   | -   | -   | Y   | -  | Y   | -   | -          | -   | -    | -               | 8 <sup>TH</sup>  |                       |
|          |                        |   | Member       | M    | -   | -   | -   | Y   | -  | Y   | -   | -          | -   | -    | -               | 8 <sup>TH</sup>  |                       |

Jal Sanrakshan Samiti – Maheba  
District- Mahoba

Gram Panchayat: Maheba

Name of Project:- IWMP- XVIII

| Sl. No . | Name of Gram Sabha/ GP | Date of Constituti on/ Registrati on as a Society (dd/mm/ yyyy) | Designatio n | M/ F | S C | S T | OBC | Gen | SF | M F | L F | Land -less | U G | SH G | G P | Educa- tional qualificati on | Function( s) assigned  |
|----------|------------------------|---|--------------|------|-----|-----|-----|-----|----|-----|-----|------------|-----|------|-----|------------------------------|--|
| 5        | Maheb a                | 29.10.11  | President    | M    | -   | -   | -   | Y   | -  | Y   | -   | -          | -   | -    | -   | 10 <sup>TH</sup>             | WC will act as per Common Guidelines for watershed Development Projects 2008 |
|          |                        |   | Secretary    | M    | -   | -   | Y   |     | -  | Y   | -   | -          | Y   | -    | -   | 10 <sup>TH</sup>             |  |
|          |                        |   | Team leader  | M    | -   | -   | -   | Y   | -  | -   | -   | -          | -   | -    | -   | Diploma Ag                   |  |
|          |                        |   | Member       | M    | -   | -   | -   | Y   | -  | Y   | -   | -          | Y   | -    | -   | 10 <sup>TH</sup>             |  |
|          |                        |   | Member       | M    | -   | -   | Y   | -   | -  | Y   | -   | -          | -   | -    | -   | 10 <sup>TH</sup>             |  |
|          |                        |   | Member       | M    | Y   | -   | -   | -   | -  | -   | -   | Y          | -   | Y    | -   | B.A                          |  |
|          |                        |   | Member       | M    | -   | -   | Y   | -   | -  | Y   | -   | -          | -   | -    | -   | 5 <sup>TH</sup>              |  |
|          |                        |   | Member       | M    | -   | -   | Y   | -   | -  | -   | -   | Y          | -   | Y    | -   | 5 <sup>TH</sup>              |  |
|          |                        |   | Member       | F    | Y   | -   | -   | -   | Y  | -   | -   | -          | Y   | -    | -   | 8 <sup>TH</sup>              |  |
|          |                        |   | Member       | M    | -   | -   | Y   | -   | -  | Y   | -   | -          | -   | -    | -   | 8 <sup>TH</sup>              |  |
|          |                        |   | Member       | M    | -   | -   | Y   | -   | Y  | -   | -   | -          | Y   | -    | -   | 8 <sup>TH</sup>              |  |

Jal Sanrakshan Samiti - Dharaun,  
District- Mahoba

Gram Panchayat: Dharaun

Name of Project:- IWMP- XVIII

| Sl.<br>No<br>. . | Name<br>of<br>Gram<br>Sabha/<br>GP | Date of<br>Constituti<br>on/<br>Registrati<br>on as a<br>Society<br>(dd/mm/<br>yyyy) | Designatio<br>n | M/<br>F | S<br>C | S<br>T | OBC | Gen | SF | M<br>F | L<br>F | Land<br>-less | U<br>G | SH<br>G | G<br>P | Educa<br>-<br>tional<br>qualificati<br>on | Function(s)<br>assigned  |
|------------------|------------------------------------|--|-----------------|---------|--------|--------|-----|-----|----|--------|--------|---------------|--------|---------|--------|---|--|
| 6                | Dharau<br>n                        | 28.10.11   | President       | M       | -      | -      | -   | Y   | -  | Y      | -      | -             | Y      | -       | Y      | 12 <sup>TH</sup>                          | WC will<br>act as per<br>Common<br>Guidelines<br>for<br>watershed<br>Developm<br>ent<br>Projects<br>2008 |
|                  |                                    |  | Secretary       | M       | -      | -      | Y   | -   | -  | Y      | -      | -             | -      | -       | -      | 10 <sup>TH</sup>                          |  |
|                  |                                    |  | Team<br>leader  | M       | -      | -      | Y   | -   | -  | -      | -      | -             | -      | -       | -      | Diploma<br>Ag                             |  |
|                  |                                    |  | Member          | M       | -      | -      | Y   | -   | -  | Y      | -      | -             | Y      | -       | -      | 8 <sup>TH</sup>                           |  |
|                  |                                    |  | Member          | M       | -      | -      | Y   | -   | -  | Y      | -      | -             | -      | -       | -      | 8 <sup>TH</sup>                           |  |
|                  |                                    |  | Member          | M       | Y      | -      | -   | -   | Y  | -      | -      | -             | Y      | -       | -      | 8 <sup>TH</sup>                           |  |
|                  |                                    |  | Member          | M       | -      | -      | -   | Y   | -  | -      | Y      | -             | -      | -       | -      | 8 <sup>TH</sup>                           |  |
|                  |                                    |  | Member          | M       | -      | -      | -   | Y   | Y  | -      | -      | -             | Y      | -       | -      | 8 <sup>TH</sup>                           |  |
|                  |                                    |  | Member          | F       | -      | -      | Y   | -   | -  | -      | -      | Y             | -      | Y       | -      | 10 <sup>TH</sup>                          |  |
|                  |                                    |  | Member          | M       | Y      | -      | -   | -   | -  | -      | -      | Y             | -      | Y       | -      | 5 <sup>TH</sup>                           |  |
|                  |                                    |  | Member          | M       | -      | -      | Y   | -   | -  | Y      | -      | -             | Y      | -       | -      | 5 <sup>TH</sup>                           |  |

Jal Sanrakshan Samiti – Utiyan,  
District- Mahoba

Gram Panchayat: Utiyan

Name of Project:- IWMP- XVIII

| Sl. No . | Name of Gram Sabha/ GP | Date of Constituti on/ Registrati on as a Society (dd/mm/ yyyy) | Designatio n | M/ F | S C | S T | OBC | Gen | SF | M F | L F | Land -less | U G | SH G | G P | Educa-tional qualificati on | Function( s) assigned  |
|----------|------------------------|---|--------------|------|-----|-----|-----|-----|----|-----|-----|------------|-----|------|-----|-----------------------------|--|
| 7        | Utiyan                 | 29.10.11  | President    | M    | -   | -   | -   | Y   | -  | Y   | -   | -          | -   | -    | -   | 10 <sup>TH</sup>            | WC will act as per Common Guidelines for watershed Development Projects 2008 |
|          |                        |   | Secretary    | M    | -   | -   | Y   |     | -  | Y   | -   | -          | Y   | -    | -   | 10 <sup>TH</sup>            |  |
|          |                        |   | Team leader  | M    | -   | -   | -   | Y   | -  | -   | -   | -          | -   | -    | -   | Diploma Ag                  |  |
|          |                        |   | Member       | M    | -   | -   | -   | Y   | -  | Y   | -   | -          | Y   | -    | -   | 10 <sup>TH</sup>            |  |
|          |                        |   | Member       | M    | -   | -   | Y   | -   | -  | Y   | -   | -          | -   | -    | -   | 10 <sup>TH</sup>            |  |
|          |                        |   | Member       | M    | Y   | -   | -   | -   | -  | -   | -   | Y          | -   | Y    | -   | B.A                         |  |
|          |                        |   | Member       | M    | -   | -   | Y   | -   | -  | Y   | -   | -          | -   | -    | -   | 5 <sup>TH</sup>             |  |
|          |                        |   | Member       | M    | -   | -   | Y   | -   | -  | -   | -   | Y          | -   | Y    | -   | 5 <sup>TH</sup>             |  |
|          |                        |   | Member       | F    | Y   | -   | -   | -   | Y  | -   | -   | -          | Y   | -    | -   | 8 <sup>TH</sup>             |  |
|          |                        |   | Member       | M    | -   | -   | Y   | -   | -  | Y   | -   | -          | -   | -    | -   | 8 <sup>TH</sup>             |  |
|          |                        |   | Member       | M    | -   | -   | Y   | -   | Y  | -   | -   | -          | Y   | -    | -   | 8 <sup>TH</sup>             |  |

Jal Sanrakshan Samiti - Gahra,  
District- Mahoba

Gram Panchayat: Gahra

Name of Project:- IWMP- XVIII

| Sl.<br>No<br>. . | Name<br>of<br>Gram<br>Sabha/<br>GP | Date of<br>Constituti<br>on/<br>Registrati<br>on as a<br>Society<br>(dd/mm/<br>yyyy) | Designatio<br>n | M/<br>F | S<br>C | S<br>T | OBC | Gen | SF | M<br>F | L<br>F | Land<br>-less | U<br>G | SH<br>G | G<br>P | Educa<br>-<br>tional<br>qualificati<br>on | Function(s)<br>assigned  |
|------------------|------------------------------------|--|-----------------|---------|--------|--------|-----|-----|----|--------|--------|---------------|--------|---------|--------|---|--|
| 8                | Gahra                              | 29.10.11   | President       | M       | -      | -      | -   | Y   | -  | Y      | -      | -             | -      | -       | -      | 10 <sup>TH</sup>                          | WC will act as per Common Guidelines for watershed Development Projects 2008 |
|                  |                                    |  | Secretary       | M       | -      | -      | Y   |     | -  | Y      | -      | -             | Y      | -       | -      | 10 <sup>TH</sup>                          |  |
|                  |                                    |  | Team leader     | M       | -      | -      | -   | Y   | -  | -      | -      | -             | -      | -       | -      | Diploma Ag                                |  |
|                  |                                    |  | Member          | M       | -      | -      | -   | Y   | -  | Y      | -      | -             | Y      | -       | -      | 10 <sup>TH</sup>                          |  |
|                  |                                    |  | Member          | M       | -      | -      | Y   | -   | -  | Y      | -      | -             | -      | -       | -      | 10 <sup>TH</sup>                          |  |
|                  |                                    |  | Member          | M       | Y      | -      | -   | -   | -  | -      | -      | Y             | -      | Y       | -      | B.A                                       |  |
|                  |                                    |  | Member          | M       | -      | -      | Y   | -   | -  | Y      | -      | -             | -      | -       | -      | 5 <sup>TH</sup>                           |  |
|                  |                                    |  | Member          | M       | -      | -      | Y   | -   | -  | -      | -      | Y             | -      | Y       | -      | 5 <sup>TH</sup>                           |  |
|                  |                                    |  | Member          | F       | Y      | -      | -   | -   | Y  | -      | -      | -             | Y      | -       | -      | 8 <sup>TH</sup>                           |  |
|                  |                                    |  | Member          | M       | -      | -      | Y   | -   | -  | Y      | -      | -             | -      | -       | -      | 8 <sup>TH</sup>                           |  |
|                  |                                    |  | Member          | M       | -      | -      | Y   | -   | Y  | -      | -      | -             | Y      | -       | -      | 8 <sup>TH</sup>                           |  |

Jal Sanrakshan Samiti - Gudha,  
District- Mahoba

Gram Panchayat: Gudha

Name of Project:- IWMP- XVIII

| Sl.<br>No<br>. . | Name<br>of<br>Gram<br>Sabha/<br>GP | Date of<br>Constituti<br>on/<br>Registrati<br>on as a<br>Society<br>(dd/mm/<br>yyyy) | Designatio<br>n | M/<br>F | S<br>C | S<br>T | OBC | Gen | SF | M<br>F | L<br>F | Land<br>-less | U<br>G | SH<br>G | G<br>P | Educa<br>-<br>tional<br>qualificati<br>on | Function(s)<br>assigned  |
|------------------|------------------------------------|--|-----------------|---------|--------|--------|-----|-----|----|--------|--------|---------------|--------|---------|--------|---|--|
| 9                | Gudha                              | 29.10.11   | President       | M       | -      | -      | -   | Y   | -  | Y      | -      | -             | -      | -       | -      | 10 <sup>TH</sup>                          | WC will act as per Common Guidelines for watershed Development Projects 2008 |
|                  |                                    |  | Secretary       | M       | -      | -      | Y   |     | -  | Y      | -      | -             | Y      | -       | -      | 10 <sup>TH</sup>                          |  |
|                  |                                    |  | Team leader     | M       | -      | -      | -   | Y   | -  | -      | -      | -             | -      | -       | -      | Diploma Ag                                |  |
|                  |                                    |  | Member          | M       | -      | -      | -   | Y   | -  | Y      | -      | -             | Y      | -       | -      | 10 <sup>TH</sup>                          |  |
|                  |                                    |  | Member          | M       | -      | -      | Y   | -   | -  | Y      | -      | -             | -      | -       | -      | 10 <sup>TH</sup>                          |  |
|                  |                                    |  | Member          | M       | Y      | -      | -   | -   | -  | -      | -      | Y             | -      | Y       | -      | B.A                                       |  |
|                  |                                    |  | Member          | M       | -      | -      | Y   | -   | -  | Y      | -      | -             | -      | -       | -      | 5 <sup>TH</sup>                           |  |
|                  |                                    |  | Member          | M       | -      | -      | Y   | -   | -  | -      | -      | Y             | -      | Y       | -      | 5 <sup>TH</sup>                           |  |
|                  |                                    |  | Member          | F       | Y      | -      | -   | -   | Y  | -      | -      | -             | Y      | -       | -      | 8 <sup>TH</sup>                           |  |
|                  |                                    |  | Member          | M       | -      | -      | Y   | -   | -  | Y      | -      | -             | -      | -       | -      | 8 <sup>TH</sup>                           |  |
|                  |                                    |  | Member          | M       | -      | -      | Y   | -   | Y  | -      | -      | -             | Y      | -       | -      | 8 <sup>TH</sup>                           |  |

Jal Sanrakshan Samiti - Jujhar,  
District- Mahoba

Gram Panchayat: Jujhar

Name of Project:- IWMP- XVIII

| Sl.<br>No<br>. . | Name<br>of<br>Gram<br>Sabha/<br>GP | Date of<br>Constituti<br>on/<br>Registrati<br>on as a<br>Society<br>(dd/mm/<br>yyyy) | Designatio<br>n | M/<br>F | S<br>C | S<br>T | OBC | Gen | SF | M<br>F | L<br>F | Land<br>-less | U<br>G | SH<br>G | G<br>P | Educa<br>-<br>tional<br>qualificati<br>on | Function(s)<br>assigned  |
|------------------|------------------------------------|--|-----------------|---------|--------|--------|-----|-----|----|--------|--------|---------------|--------|---------|--------|---|--|
| 10               | Jujhar                             | 29.10.11   | President       | M       | -      | -      | -   | Y   | -  | Y      | -      | -             | -      | -       | -      | 10 <sup>TH</sup>                          | WC will act as per Common Guidelines for watershed Development Projects 2008 |
|                  |                                    |  | Secretary       | M       | -      | -      | Y   |     | -  | Y      | -      | -             | Y      | -       | -      | 10 <sup>TH</sup>                          |  |
|                  |                                    |  | Team leader     | M       | -      | -      | -   | Y   | -  | -      | -      | -             | -      | -       | -      | Diploma Ag                                |  |
|                  |                                    |  | Member          | M       | -      | -      | -   | Y   | -  | Y      | -      | -             | Y      | -       | -      | 10 <sup>TH</sup>                          |  |
|                  |                                    |  | Member          | M       | -      | -      | Y   | -   | -  | Y      | -      | -             | -      | -       | -      | 10 <sup>TH</sup>                          |  |
|                  |                                    |  | Member          | M       | Y      | -      | -   | -   | -  | -      | -      | Y             | -      | Y       | -      | B.A                                       |  |
|                  |                                    |  | Member          | M       | -      | -      | Y   | -   | -  | Y      | -      | -             | -      | -       | -      | 5 <sup>TH</sup>                           |  |
|                  |                                    |  | Member          | M       | -      | -      | Y   | -   | -  | -      | -      | Y             | -      | Y       | -      | 5 <sup>TH</sup>                           |  |
|                  |                                    |  | Member          | F       | Y      | -      | -   | -   | Y  | -      | -      | -             | Y      | -       | -      | 8 <sup>TH</sup>                           |  |
|                  |                                    |  | Member          | M       | -      | -      | Y   | -   | -  | Y      | -      | -             | -      | -       | -      | 8 <sup>TH</sup>                           |  |
|                  |                                    |  | Member          | M       | -      | -      | Y   | -   | Y  | -      | -      | -             | Y      | -       | -      | 8 <sup>TH</sup>                           |  |

Jal Sanrakshan Samiti - Ganj,  
District- Mahoba

Gram Panchayat: Ganj

Name of Project:- IWMP- XVIII

| Sl.<br>No<br>. . | Name<br>of<br>Gram<br>Sabha/<br>GP | Date of<br>Constituti<br>on/<br>Registrati<br>on as a<br>Society<br>(dd/mm/<br>yyyy) | Designatio<br>n | M/<br>F | S<br>C | S<br>T | OBC | Gen | SF | M<br>F | L<br>F | Land<br>-less | U<br>G | SH<br>G | G<br>P | Educa<br>-<br>tional<br>qualificati<br>on | Function(s)<br>assigned  |
|------------------|------------------------------------|--|-----------------|---------|--------|--------|-----|-----|----|--------|--------|---------------|--------|---------|--------|---|--|
| 11               | Ganj                               | 29.10.11   | President       | M       | -      | -      | -   | Y   | -  | Y      | -      | -             | -      | -       | -      | 10 <sup>TH</sup>                          | WC will<br>act as per<br>Common<br>Guidelines<br>for<br>watershed<br>Developm<br>ent<br>Projects<br>2008 |
|                  |                                    |  | Secretary       | M       | -      | -      | Y   |     | -  | Y      | -      | -             | Y      | -       | -      | 10 <sup>TH</sup>                          |  |
|                  |                                    |  | Team<br>leader  | M       | -      | -      | -   | Y   | -  | -      | -      | -             | -      | -       | -      | Diploma<br>Ag                             |  |
|                  |                                    |  | Member          | M       | -      | -      | -   | Y   | -  | Y      | -      | -             | Y      | -       | -      | 10 <sup>TH</sup>                          |  |
|                  |                                    |  | Member          | M       | -      | -      | Y   | -   | -  | Y      | -      | -             | -      | -       | -      | 10 <sup>TH</sup>                          |  |
|                  |                                    |  | Member          | M       | Y      | -      | -   | -   | -  | -      | -      | Y             | -      | Y       | -      | B.A                                       |  |
|                  |                                    |  | Member          | M       | -      | -      | Y   | -   | -  | Y      | -      | -             | -      | -       | -      | 5 <sup>TH</sup>                           |  |
|                  |                                    |  | Member          | M       | -      | -      | Y   | -   | -  | -      | -      | Y             | -      | Y       | -      | 5 <sup>TH</sup>                           |  |
|                  |                                    |  | Member          | F       | Y      | -      | -   | -   | Y  | -      | -      | -             | Y      | -       | -      | 8 <sup>TH</sup>                           |  |
|                  |                                    |  | Member          | M       | -      | -      | Y   | -   | -  | Y      | -      | -             | -      | -       | -      | 8 <sup>TH</sup>                           |  |
|                  |                                    |  | Member          | M       | -      | -      | Y   | -   | Y  | -      | -      | -             | Y      | -       | -      | 8 <sup>TH</sup>                           |  |

Jal Sanrakshan Samiti - Bamhauri Qazi,  
District- Mahoba

Gram Panchayat: Bamhauri Qazi

Name of Project:- IWMP- XVIII

| Sl. No . | Name of Gram Sabha/ GP | Date of Constituti on/ Registrati on as a Society (dd/mm/ yyyy) | Designatio n | M/ F | S C | S T | OBC | Gen | SF | M F | L F | Land -less | U G | SH G | G P | Educa-tional qualificati on | Function( s) assigned  |
|----------|------------------------|---|--------------|------|-----|-----|-----|-----|----|-----|-----|------------|-----|------|-----|-----------------------------|--|
| 12       | Bamha uri Qazi         | 29.10.11  | President    | M    | -   | -   | -   | Y   | -  | Y   | -   | -          | -   | -    | -   | 10 <sup>TH</sup>            | WC will act as per Common Guidelines for watershed Development Projects 2008 |
|          |                        |   | Secretary    | M    | -   | -   | Y   |     | -  | Y   | -   | -          | Y   | -    | -   | 10 <sup>TH</sup>            |  |
|          |                        |   | Team leader  | M    | -   | -   | -   | Y   | -  | -   | -   | -          | -   | -    | -   | Diploma Ag                  |  |
|          |                        |   | Member       | M    | -   | -   | -   | Y   | -  | Y   | -   | -          | Y   | -    | -   | 10 <sup>TH</sup>            |  |
|          |                        |   | Member       | M    | -   | -   | Y   | -   | -  | Y   | -   | -          | -   | -    | -   | 10 <sup>TH</sup>            |  |
|          |                        |   | Member       | M    | Y   | -   | -   | -   | -  | -   | -   | Y          | -   | Y    | -   | B.A                         |  |
|          |                        |   | Member       | M    | -   | -   | Y   | -   | -  | Y   | -   | -          | -   | -    | -   | 5 <sup>TH</sup>             |  |
|          |                        |   | Member       | M    | -   | -   | Y   | -   | -  | -   | -   | Y          | -   | Y    | -   | 5 <sup>TH</sup>             |  |
|          |                        |   | Member       | F    | Y   | -   | -   | -   | Y  | -   | -   | -          | Y   | -    | -   | 8 <sup>TH</sup>             |  |
|          |                        |   | Member       | M    | -   | -   | Y   | -   | -  | Y   | -   | -          | -   | -    | -   | 8 <sup>TH</sup>             |  |
|          |                        |   | Member       | M    | -   | -   | Y   | -   | Y  | -   | -   | -          | Y   | -    | -   | 8 <sup>TH</sup>             |  |

Jal Sanrakshan Samiti- Badedi,  
District- Mahoba

Gram Panchayat: Badedi

Name of Project:- IWMP- XVIII

| Sl. No. | Name of Gram Sabha/ GP | Date of Constitution/ Registration as a Society (dd/mm/yyyy) | Designation | M/F | SC | ST | OBC | Gen | SF | MF | LF | Land-less | UG | SHG | GP | Educa-tional qualification | Function(s) assigned   |
|---------|------------------------|--|-------------|-----|----|----|-----|-----|----|----|----|-----------|----|-----|----|----------------------------|--|
| 13      | Badedi                 | 10.10.11   | President   | M   | -  | -  | Y   | -   | -  | -  | -  | -         | -  | -   | Y  | 5 <sup>TH</sup>            | WC will act as per Common Guidelines for watershed Development Projects 2008 |
|         |                        |  | Secretary   | M   | -  | -  | -   | Y   | -  | -  | -  | -         | -  | -   | -  | 10 <sup>TH</sup>           |  |
|         |                        |  | Team leader | M   | Y  | -  | -   | -   | -  | Y  | -  | -         | Y  | -   | -  | Diploma Ag                 |  |
|         |                        |  | Member      | M   | -  | -  | Y   | -   | Y  | -  | -  | -         | -  | -   | -  | 8 <sup>TH</sup>            |  |
|         |                        |  | Member      | M   | -  | -  | Y   | -   | -  | -  | -  | -         | -  | -   | -  | 8 <sup>TH</sup>            |  |
|         |                        |  | Member      | M   | Y  | -  | -   | -   | -  | -  | Y  | -         | -  | Y   | -  | 5 <sup>TH</sup>            |  |
|         |                        |  | Member      | F   | -  | -  | Y   | -   | Y  | -  | -  | -         | Y  | -   | -  | 5 <sup>TH</sup>            |  |
|         |                        |  | Member      | M   | -  | -  | Y   | -   | -  | -  | -  | -         | Y  | -   | Y  | 5 <sup>TH</sup>            |  |
|         |                        |  | Member      | M   | Y  | -  | -   | -   | -  | -  | -  | Y         | -  | Y   | -  | 8 <sup>TH</sup>            |  |
|         |                        |  | Member      | M   | -  | -  | -   | Y   | -  | -  | -  | -         | Y  | -   | -  | 8 <sup>TH</sup>            |  |
|         |                        |  | Member      | M   | -  | -  | Y   | -   | -  | -  | -  | -         | -  | -   | -  | 8 <sup>TH</sup>            |  |

Jal Sanrakshan Samiti - Singhapur Baghari, Gram Panchayat: Singhapur Baghari  
District- Mahoba

Name of Project:- IWMP- XVIII

| Sl. No . | Name of Gram Sabha/ GP | Date of Constitutio n/ Registratio n as a Society (dd/mm/yyyy) | Designatio n | SC | S T | O B C | Gen | SF | MF | LF | L an d- les s | UG | SH G | GP | S C | Educa- tional qualificati on | Function( s) assigned  |
|----------|------------------------|--|--------------|----|-----|-------|-----|----|----|----|---------------|----|------|----|-----|------------------------------|--|
| 14       | Singh anpur Bagha ri   | 11.10.11   | President    | -  | -   | -     | Y   | -  | Y  | -  | -             | -  | -    | -  | -   | 5 <sup>TH</sup>              | WC will act as per Common Guidelines for watershed Development Projects 2008 |
|          |                        |  | Secretary    | -  | -   | Y     |     | -  | Y  | -  | -             | Y  | -    | -  | -   | -                            | B.A  |
|          |                        |  | Team leader  | -  | -   | -     | Y   | -  | -  | -  | -             | -  | -    | -  | -   | B.Sc AG                      |  |
|          |                        |  | Member       | -  | -   | -     | Y   | -  | Y  | -  | -             | Y  | -    | -  | -   | 8 <sup>TH</sup>              |  |
|          |                        |  | Member       | -  | -   | Y     | -   | -  | Y  | -  | -             | -  | -    | -  | -   | 10 <sup>TH</sup>             |  |
|          |                        |  | Member       | Y  | -   | -     | -   | -  | -  | -  | Y             | -  | Y    | -  | Y   | 8 <sup>TH</sup>              |  |
|          |                        |  | Member       | -  | -   | Y     | -   | -  | Y  | -  | -             | -  | -    | -  | -   | 8 <sup>TH</sup>              |  |
|          |                        |  | Member       | -  | -   | Y     | -   | -  | -  | -  | Y             | -  | Y    | -  | -   | 8 <sup>TH</sup>              |  |
|          |                        |  | Member       | Y  | -   | -     | -   | Y  | -  | -  | -             | Y  | -    | -  | Y   | 5 <sup>TH</sup>              |  |
|          |                        |  | Member       | -  | -   | Y     | -   | -  | Y  | -  | -             | -  | -    | -  | -   | 5 <sup>TH</sup>              |  |
|          |                        |  | Member       | -  | -   | Y     | -   | -  | Y  | -  | -             | Y  | -    | -  | -   | 5 <sup>TH</sup>              |  |

Jal Sanrakshan Samiti - Salua,  
District- Mahoba

Gram Panchayat: Salua

Name of Project:- IWMP- XVIII

| Sl.<br>No<br>. . | Name<br>of<br>Gram<br>Sabha/<br>GP | Date of<br>Constituti<br>on/<br>Registrati<br>on as a<br>Society<br>(dd/mm/<br>yyyy) | Designatio<br>n | M/<br>F | S<br>C | S<br>T | OBC | Gen | SF | M<br>F | L<br>F | Land<br>-less | U<br>G | SH<br>G | G<br>P | Educa<br>-<br>tional<br>qualificati<br>on | Function(s)<br>assigned  |
|------------------|------------------------------------|--|-----------------|---------|--------|--------|-----|-----|----|--------|--------|---------------|--------|---------|--------|---|--|
| 15               | Salua                              | 28.10.11   | President       | M       | Y      | -      | -   | -   | -  | Y      | -      | -             | -      | -       | Y      | 8 <sup>TH</sup>                           | WC will act as per Common Guidelines for watershed Development Projects 2008 |
|                  |                                    |  | Secretary       | M       | -      | -      | Y   | -   | -  | Y      | -      | -             | Y      | -       | -      | 10 <sup>TH</sup>                          |  |
|                  |                                    |  | Team leader     | M       | -      | -      | Y   | -   | -  | -      | -      | -             | -      | -       | -      | Diploma Ag                                |  |
|                  |                                    |  | Member          | M       | -      | -      | Y   | -   | Y  | -      | -      | -             | Y      | -       | -      | 8 <sup>TH</sup>                           |  |
|                  |                                    |  | Member          | M       | -      | -      | Y   | -   | -  | -      | Y      | -             | Y      | -       | -      | 8 <sup>TH</sup>                           |  |
|                  |                                    |  | Member          | F       | -      | -      | -   | -   | -  | -      | -      | Y             | -      | Y       | -      | 8 <sup>TH</sup>                           |  |
|                  |                                    |  | Member          | M       | Y      | -      | -   | -   | Y  | -      | -      | -             | -      | -       | -      | 5 <sup>TH</sup>                           |  |
|                  |                                    |  | Member          | M       | -      | -      | Y   | -   | -  | Y      | -      | -             | Y      | -       | -      | 5 <sup>TH</sup>                           |  |
|                  |                                    |  | Member          | F       | Y      | -      | -   | -   | -  | -      | -      | Y             | -      | Y       | -      | 8 <sup>TH</sup>                           |  |
|                  |                                    |  | Member          | M       | -      | -      | -   | Y   | -  | Y      | -      | -             | -      | -       | -      | 8 <sup>TH</sup>                           |  |
|                  |                                    |  | Member          | M       | -      | -      | -   | Y   | -  | Y      | -      | -             | -      | -       | -      | 8 <sup>TH</sup>                           |  |

**Jal Sanrakshan Samiti – Patha**  
**District- Mahoba**

**Gram Panchayat: Patha**

**Name of Project:- IWMP- XVIII**

| <b>Sl. No .</b> | <b>Name of Gram Sabha/ GP</b> | <b>Date of Constituti on/ Registrati on as a Society (dd/mm/ yyyy)</b> | <b>Designatio n</b> | <b>M/ F</b> | <b>S C</b> | <b>S T</b> | <b>OBC</b> | <b>Gen</b> | <b>SF</b> | <b>M F</b> | <b>L F</b> | <b>Land -less</b> | <b>U G</b> | <b>SH G</b> | <b>G P</b> | <b>Educa-tional qualificati on</b> | <b>Function( s) assigned</b>   |
|-----------------|-------------------------------|--|---------------------|-------------|------------|------------|------------|------------|-----------|------------|------------|-------------------|------------|-------------|------------|------------------------------------|--|
| 16              | Patha                         | 29.10.11   | President           | M           | -          | -          | -          | Y          | -         | Y          | -          | -                 | -          | -           | -          | 10 <sup>TH</sup>                   | WC will act as per Common Guidelines for watershed Development Projects 2008 |
|                 |                               |  | Secretary           | M           | -          | -          | Y          |            | -         | Y          | -          | -                 | Y          | -           | -          | 10 <sup>TH</sup>                   |  |
|                 |                               |  | Team leader         | M           | -          | -          | -          | Y          | -         | -          | -          | -                 | -          | -           | -          | Diploma Ag                         |  |
|                 |                               |  | Member              | M           | -          | -          | -          | Y          | -         | Y          | -          | -                 | Y          | -           | -          | 10 <sup>TH</sup>                   |  |
|                 |                               |  | Member              | M           | -          | -          | Y          | -          | -         | Y          | -          | -                 | -          | -           | -          | 10 <sup>TH</sup>                   |  |
|                 |                               |  | Member              | M           | Y          | -          | -          | -          | -         | -          | -          | Y                 | -          | Y           | -          | B.A                                |  |
|                 |                               |  | Member              | M           | -          | -          | Y          | -          | -         | Y          | -          | -                 | -          | -           | -          | 5 <sup>TH</sup>                    |  |
|                 |                               |  | Member              | M           | -          | -          | Y          | -          | -         | -          | -          | Y                 | -          | Y           | -          | 5 <sup>TH</sup>                    |  |
|                 |                               |  | Member              | F           | Y          | -          | -          | -          | -         | Y          | -          | -                 | Y          | -           | -          | 8 <sup>TH</sup>                    |  |
|                 |                               |  | Member              | M           | -          | -          | Y          | -          | -         | Y          | -          | -                 | -          | -           | -          | 8 <sup>TH</sup>                    |  |
|                 |                               |  | Member              | M           | -          | -          | Y          | -          | Y         | -          | -          | -                 | Y          | -           | -          | 8 <sup>TH</sup>                    |  |

Jal Sanrakshan Samiti - Bahmaurikala,  
District- Mahoba

Gram Panchayat: Bahmaurikala

Name of Project:- IWMP- XVIII

| Sl.<br>No<br>. . | Name<br>of<br>Gram<br>Sabha/<br>GP | Date of<br>Constituti<br>on/<br>Registrati<br>on as a<br>Society<br>(dd/mm/<br>yyyy) | Designatio<br>n | M/<br>F | S<br>C | S<br>T | OBC | Gen | SF | M<br>F | L<br>F | Land<br>-less | U<br>G | SH<br>G | G<br>P | Educa<br>-<br>tional<br>qualificati<br>on | Function(s)<br>assigned  |
|------------------|------------------------------------|--|-----------------|---------|--------|--------|-----|-----|----|--------|--------|---------------|--------|---------|--------|---|--|
| 17               | Bahmau<br>rikala                   | 28.10.11   | President       | M       | -      | -      | -   | Y   | -  | Y      | -      | -             | Y      | -       | Y      | 12 <sup>TH</sup>                          | WC will<br>act as per<br>Common<br>Guidelines<br>for<br>watershed<br>Developm<br>ent<br>Projects<br>2008 |
|                  |                                    |  | Secretary       | M       | -      | -      | Y   | -   | -  | Y      | -      | -             | -      | -       | -      | 10 <sup>TH</sup>                          |  |
|                  |                                    |  | Team<br>leader  | M       | -      | -      | Y   | -   | -  | -      | -      | -             | -      | -       | -      | Diploma<br>Ag                             |  |
|                  |                                    |  | Member          | M       | -      | -      | Y   | -   | -  | Y      | -      | -             | Y      | -       | -      | 8 <sup>TH</sup>                           |  |
|                  |                                    |  | Member          | M       | -      | -      | Y   | -   | -  | Y      | -      | -             | -      | -       | -      | 8 <sup>TH</sup>                           |  |
|                  |                                    |  | Member          | M       | Y      | -      | -   | -   | Y  | -      | -      | -             | Y      | -       | -      | 8 <sup>TH</sup>                           |  |
|                  |                                    |  | Member          | M       | -      | -      | -   | Y   | -  | -      | Y      | -             | -      | -       | -      | 8 <sup>TH</sup>                           |  |
|                  |                                    |  | Member          | M       | -      | -      | -   | Y   | Y  | -      | -      | -             | Y      | -       | -      | 8 <sup>TH</sup>                           |  |
|                  |                                    |  | Member          | F       | -      | -      | Y   | -   | -  | -      | -      | Y             | -      | Y       | -      | 10 <sup>TH</sup>                          |  |
|                  |                                    |  | Member          | M       | Y      | -      | -   | -   | -  | -      | -      | Y             | -      | Y       | -      | 5 <sup>TH</sup>                           |  |
|                  |                                    |  | Member          | M       | -      | -      | Y   | -   | -  | Y      | -      | -             | Y      | -       | -      | 5 <sup>TH</sup>                           |  |

Jal Sanrakshan Samiti - Kamal Kheda,  
District- Mahoba

Gram Panchayat: Kamal Kheda

Name of Project:- IWMP- XVIII

| Sl.<br>No<br>. . | Name<br>of<br>Gram<br>Sabha/<br>GP | Date of<br>Constituti<br>on/<br>Registrati<br>on as a<br>Society<br>(dd/mm/<br>yyyy) | Designatio<br>n | M/<br>F | S<br>C | S<br>T | OBC | Gen | SF | M<br>F | L<br>F | Land<br>-less | U<br>G | SH<br>G | G<br>P | Educa<br>-<br>tional<br>qualificati<br>on | Function(s)<br>assigned  |
|------------------|------------------------------------|--|-----------------|---------|--------|--------|-----|-----|----|--------|--------|---------------|--------|---------|--------|---|--|
| 18               | Kamal<br>Kheda                     | 29.10.11   | President       | M       | -      | -      | -   | Y   | -  | Y      | -      | -             | -      | -       | -      | 10 <sup>TH</sup>                          | WC will<br>act as per<br>Common<br>Guidelines<br>for<br>watershed<br>Developm<br>ent<br>Projects<br>2008 |
|                  |                                    |  | Secretary       | M       | -      | -      | Y   |     | -  | Y      | -      | -             | Y      | -       | -      | 10 <sup>TH</sup>                          |  |
|                  |                                    |  | Team<br>leader  | M       | -      | -      | -   | Y   | -  | -      | -      | -             | -      | -       | -      | Diploma<br>Ag                             |  |
|                  |                                    |  | Member          | M       | -      | -      | -   | Y   | -  | Y      | -      | -             | Y      | -       | -      | 10 <sup>TH</sup>                          |  |
|                  |                                    |  | Member          | M       | -      | -      | Y   | -   | -  | Y      | -      | -             | -      | -       | -      | 10 <sup>TH</sup>                          |  |
|                  |                                    |  | Member          | M       | Y      | -      | -   | -   | -  | -      | -      | Y             | -      | Y       | -      | B.A                                       |  |
|                  |                                    |  | Member          | M       | -      | -      | Y   | -   | -  | Y      | -      | -             | -      | -       | -      | 5 <sup>TH</sup>                           |  |
|                  |                                    |  | Member          | M       | -      | -      | Y   | -   | -  | -      | -      | Y             | -      | Y       | -      | 5 <sup>TH</sup>                           |  |
|                  |                                    |  | Member          | F       | Y      | -      | -   | -   | Y  | -      | -      | -             | Y      | -       | -      | 8 <sup>TH</sup>                           |  |
|                  |                                    |  | Member          | M       | -      | -      | Y   | -   | -  | Y      | -      | -             | -      | -       | -      | 8 <sup>TH</sup>                           |  |
|                  |                                    |  | Member          | M       | -      | -      | Y   | -   | Y  | -      | -      | -             | Y      | -       | -      | 8 <sup>TH</sup>                           |  |

**Table 4.5: Village wise details of Self Help Groups (SHGs) in the project area IWMP- XVIII  
Project- IWMP XVIII**

**District – Mahoba**

| <b>Sr.<br/>No<br/>.</b> | <b>Name of<br/>MWS</b> | <b>Names of<br/>villages</b>                  | <b>Total no. of<br/>Constituted/registered SHGs</b> |                                |                      |              | <b>No. of members</b>  |                |                |              | <b>No. of SC/ST in<br/>each category</b> |          |              | <b>No. of BPL in<br/>each category</b> |                |              | <b>Date of<br/>formatio<br/>n of<br/>SHGs</b>  |
|-------------------------|------------------------|---|---|--------------------------------|----------------------|--------------|------------------------|----------------|----------------|--------------|--|----------|--------------|--|----------------|--------------|--|
|                         |                        |   | <b>With<br/>only<br/>Men</b>                        | <b>With<br/>only<br/>Women</b> | <b>With<br/>both</b> | <b>Total</b> | <b>Categori<br/>es</b> | <b>M</b>       | <b>F</b>       | <b>Total</b> | <b>M</b>                                 | <b>F</b> | <b>Total</b> | <b>M</b>                               | <b>F</b>       | <b>Total</b> |  |
| <b>1</b>                | Bhestamaaf<br>2C1B3f1a | Bhenstamaf,<br>Parsaha, Surha                 | 1   | 0                              | 1                    | 2            | (i)<br>Landless        | 4              | 2              | 6            | -  | -        | -            | <b>4</b>                               | <b>2</b>       | <b>6</b>     | These<br>SHGs<br>were<br>formed<br>during the<br>month of<br>February<br>to April.<br>Bye-laws<br>of the<br>SHGs<br>were<br>prepared<br>and kept<br>in the<br>project<br>file.<br>Process<br>to open<br>the<br>accounts<br>in Gramin<br>bank |
|                         |                        |   |   |                                |                      |              | (ii) SF                | 6              | 3              | 9            | -  | -        | -            | <b>6</b>                               | <b>3</b>       | <b>9</b>     |  |
|                         |                        |   |   |                                |                      |              | (iii) MF               | 4              | 1              | 5            | -  | -        | -            | <b>4</b>                               | <b>1</b>       | <b>5</b>     |  |
|                         |                        |   |   |                                |                      |              | (iv) LF                | -              | -              | -            | -  | -        | -            | -                                      | -              | -            |  |
|                         |                        |   |   |                                |                      |              | <b>Total</b>           | <b>1<br/>4</b> | <b>6</b>       | <b>20</b>    | -  | -        | -            | <b>1<br/>4</b>                         | <b>6</b>       | <b>20</b>    |  |
| <b>2</b>                | Parsaha<br>2C1B3f1b    | Parsaha, lilwahi                              | 0   | 0                              | 1                    | 1            | (i)<br>Landless        | 3              | 0              | 3            | -  | -        | -            | <b>3</b>                               | <b>0</b>       | <b>3</b>     | These<br>SHGs<br>were<br>formed<br>during the<br>month of<br>February<br>to April.<br>Bye-laws<br>of the<br>SHGs<br>were<br>prepared<br>and kept<br>in the<br>project<br>file.<br>Process<br>to open<br>the<br>accounts<br>in Gramin<br>bank |
|                         |                        |   |   |                                |                      |              | (ii) SF                | 4              | 0              | 4            | -  | -        | -            | <b>4</b>                               | <b>0</b>       | <b>4</b>     |  |
|                         |                        |   |   |                                |                      |              | (iii) MF               | 3              | 0              | 3            | -  | -        | -            | <b>3</b>                               | <b>0</b>       | <b>3</b>     |  |
|                         |                        |   |   |                                |                      |              | (iv) LF                | -              | -              | -            | -  | -        | -            | -                                      | -              | -            |  |
|                         |                        |   |   |                                |                      |              | <b>Total</b>           | <b>1<br/>0</b> | <b>0</b>       | <b>10</b>    | <b>0</b>                                 | <b>0</b> | <b>0</b>     | <b>1<br/>0</b>                         | <b>0</b>       | <b>10</b>    |  |
| <b>3</b>                | Maheba<br>2C1B3f1d     | Sichaura,<br>lilwahi,<br>Mahewa,<br>Chanikala | 2   | 1                              | 1                    | 4            | (i)<br>Landless        | 8              | 4              | 12           | 3  | 0        | 3            | <b>8</b>                               | <b>4</b>       | <b>12</b>    | These<br>SHGs<br>were<br>formed<br>during the<br>month of<br>February<br>to April.<br>Bye-laws<br>of the<br>SHGs<br>were<br>prepared<br>and kept<br>in the<br>project<br>file.<br>Process<br>to open<br>the<br>accounts<br>in Gramin<br>bank |
|                         |                        |   |   |                                |                      |              | (ii) SF                | 1<br>3         | 5              | 18           | 4  | 1        | 5            | <b>1<br/>3</b>                         | <b>5</b>       | <b>18</b>    |  |
|                         |                        |   |   |                                |                      |              | (iii) MF               | 7              | 3              | 10           | 2  | 0        | 2            | <b>7</b>                               | <b>3</b>       | <b>10</b>    |  |
|                         |                        |   |   |                                |                      |              | (iv) LF                | -              | -              | -            | -  | -        | -            | -                                      | -              | -            |  |
|                         |                        |   |   |                                |                      |              | <b>Total</b>           | <b>2<br/>8</b> | <b>1<br/>2</b> | <b>40</b>    | <b>9</b>                                 | <b>1</b> | <b>10</b>    | <b>2<br/>8</b>                         | <b>1<br/>2</b> | <b>40</b>    |  |
| <b>4</b>                | Sichaura               | Dharaun,                                      | 3   | 1                              | 2                    | 6            | (i)                    | 1              | 5              | 18           | 5  | 1        | 6            | <b>1</b>                               | <b>5</b>       | <b>18</b>    |  |

|          |                        |  |   |   |   |   |                 |                |                |           |           |          |           |                |                |           |                                   |
|----------|------------------------|--|---|---|---|---|-----------------|----------------|----------------|-----------|-----------|----------|-----------|----------------|----------------|-----------|-----------------------------------|
|          | 2C1B3f1e               | Sichaura                                   |   |   |   |   | Landless        | 3              |                |           |           |          |           | <b>3</b>       |                |           | (service bank) has been initiated |
|          |                        |  |   |   |   |   | (ii) SF         | 1<br>9         | 8              | 27        | 7         | 2        | 9         | <b>1<br/>9</b> | <b>8</b>       | <b>27</b> |                                   |
|          |                        |  |   |   |   |   | (iii) MF        | 1<br>1         | 4              | 15        | 4         | 1        | 5         | <b>1<br/>1</b> | <b>4</b>       | <b>15</b> |                                   |
|          |                        |  |   |   |   |   | (iv) LF         | -              | -              | -         | -         | -        | -         | -              | -              | -         |                                   |
|          |                        |  |   |   |   |   |                 | <b>4<br/>3</b> | <b>1<br/>7</b> | <b>60</b> | <b>16</b> | <b>4</b> | <b>20</b> | <b>4<br/>3</b> | <b>1<br/>7</b> | <b>60</b> |                                   |
| <b>5</b> | Lilwahi-I<br>2C1B3f2a  | Paswara,<br>Pindari, lilwahi               | 3 | 2 | 2 | 7 | (i)<br>Landless | 1<br>5         | 6              | 21        | 5         | 1        | 6         | <b>1<br/>5</b> | <b>6</b>       | <b>21</b> |                                   |
|          |                        |  |   |   |   |   | (ii) SF         | 2<br>2         | 9              | 32        | 6         | 3        | 9         | <b>2<br/>2</b> | <b>9</b>       | <b>32</b> |                                   |
|          |                        |  |   |   |   |   | (iii) MF        | 1<br>2         | 5              | 18        | 4         | 1        | 5         | <b>1<br/>2</b> | <b>5</b>       | <b>18</b> |                                   |
|          |                        |  |   |   |   |   | (iv) LF         | -              | -              | -         | -         | -        | -         | -              | -              | -         |                                   |
|          |                        |  |   |   |   |   | <b>Total</b>    | <b>4<br/>9</b> | <b>2<br/>1</b> | <b>70</b> | <b>15</b> | <b>5</b> | <b>20</b> | <b>4<br/>9</b> | <b>2<br/>1</b> | <b>70</b> |                                   |
| <b>6</b> | Lilwahi-II<br>2C1B3f2b | Lilwahi, Gahra,<br>Singhanpura,<br>Baghari | 0 | 0 | 1 | 1 | (i)<br>Landless | 3              | 0              | 3         | -         | -        | -         | <b>3</b>       | <b>0</b>       | <b>3</b>  |                                   |
|          |                        |  |   |   |   |   | (ii) SF         | 4              | 0              | 4         | -         | -        | -         | <b>4</b>       | <b>0</b>       | <b>4</b>  |                                   |
|          |                        |  |   |   |   |   | (iii) MF        | 3              | 0              | 3         | -         | -        | -         | <b>3</b>       | <b>0</b>       | <b>3</b>  |                                   |
|          |                        |  |   |   |   |   | (iv) LF         | -              | -              | -         | -         | -        | -         | -              | -              | -         |                                   |
|          |                        |  |   |   |   |   | <b>Total</b>    | <b>1<br/>0</b> | <b>0</b>       | <b>10</b> | -         | -        | -         | <b>1<br/>0</b> | <b>0</b>       | <b>10</b> |                                   |
| <b>7</b> | Utiyan<br>2C1B3f2d     | Utiya, Bari,<br>Bamhauri,<br>Gehra         | 2 | 0 | 1 | 3 | (i)<br>Landless | 7              | 2              | 9         | 3         | 0        | 3         | <b>7</b>       | <b>2</b>       | <b>9</b>  |                                   |
|          |                        |  |   |   |   |   | (ii) SF         | 1<br>1         | 3              | 14        | 5         | 0        | 5         | <b>1<br/>1</b> | <b>3</b>       | <b>14</b> |                                   |
|          |                        |  |   |   |   |   | (iii) MF        | 6              | 2              | 8         | 2         | 0        | 2         | <b>6</b>       | <b>2</b>       | <b>8</b>  |                                   |
|          |                        |  |   |   |   |   | (iv) LF         | -              | -              | -         | -         | -        | -         | -              | -              | -         |                                   |

|           |                     |                                 |   |   |   | Total | 2<br>4          | 6              | 30             | 10        | 0         | 10       | 2<br>4    | 6              | 30             |           |  |
|-----------|---------------------|---------------------------------|---|---|---|-------|-----------------|----------------|----------------|-----------|-----------|----------|-----------|----------------|----------------|-----------|--|
| <b>8</b>  | Jujhar<br>2C1B3f2e  | Utiya, Gnaj,<br>Dharaun, Jujhar | 2 | 1 | 1 | 4     | (i)<br>Landless | 9              | 3              | 12        | 3         | 0        | 3         | <b>9</b>       | <b>3</b>       | <b>12</b> |  |
|           |                     |                                 |   |   |   |       | (ii) SF         | 1<br>4         | 4              | 18        | 4         | 1        | 5         | <b>1<br/>4</b> | <b>4</b>       | <b>18</b> |  |
|           |                     |                                 |   |   |   |       | (iii) MF        | 8              | 2              | 10        | 2         | 0        | 2         | <b>8</b>       | <b>2</b>       | <b>10</b> |  |
|           |                     |                                 |   |   |   |       | (iv) LF         | -              | -              | -         | -         | -        | -         | -              | -              | -         |  |
|           |                     |                                 |   |   |   |       | <b>Total</b>    | <b>3<br/>1</b> | <b>9</b>       | <b>40</b> | <b>9</b>  | <b>1</b> | <b>10</b> | <b>3<br/>1</b> | <b>9</b>       | <b>40</b> |  |
| <b>9</b>  | Dharaun<br>2C1B3f2f | Utiya, Dharaun                  | 1 | 0 | 1 | 2     | (i)<br>Landless | 5              | 1              | 6         | -         | -        | -         | <b>5</b>       | <b>1</b>       | <b>6</b>  |  |
|           |                     |                                 |   |   |   |       | (ii) SF         | 7              | 2              | 9         | -         | -        | -         | <b>7</b>       | <b>2</b>       | <b>9</b>  |  |
|           |                     |                                 |   |   |   |       | (iii) MF        | 4              | 1              | 5         | -         | -        | -         | <b>4</b>       | <b>1</b>       | <b>5</b>  |  |
|           |                     |                                 |   |   |   |       | (iv) LF         | -              | -              | -         | -         | -        | -         | -              | -              | -         |  |
|           |                     |                                 |   |   |   |       | <b>Total</b>    | <b>1<br/>6</b> | <b>4</b>       | <b>20</b> | -         | -        | -         | <b>1<br/>6</b> | <b>4</b>       | <b>20</b> |  |
| <b>10</b> | Babedi<br>2C1B3k1b  | Baberi, Surha                   | 3 | 1 | 1 | 5     | (i)<br>Landless | 1<br>1         | 4              | 15        | 4         | 2        | 6         | <b>1<br/>1</b> | <b>4</b>       | <b>15</b> |  |
|           |                     |                                 |   |   |   |       | (ii) SF         | 1<br>8         | 8              | 26        | 7         | 3        | 10        | <b>1<br/>8</b> | <b>8</b>       | <b>26</b> |  |
|           |                     |                                 |   |   |   |       | (iii) MF        | 6              | 3              | 9         | 3         | 1        | 4         | <b>6</b>       | <b>3</b>       | <b>9</b>  |  |
|           |                     |                                 |   |   |   |       | (iv) LF         | -              | -              | -         | -         | -        | -         | -              | -              | -         |  |
|           |                     |                                 |   |   |   |       | <b>Total</b>    | <b>3<br/>5</b> | <b>1<br/>5</b> | <b>50</b> | <b>14</b> | <b>6</b> | <b>20</b> | <b>3<br/>5</b> | <b>1<br/>5</b> | <b>50</b> |  |
| <b>11</b> | Surha<br>2C1B3k1c   | Baberi, Surha                   | 2 | 0 | 1 | 3     | (i)<br>Landless | 6              | 2              | 8         | 3         | 0        | 3         | <b>6</b>       | <b>2</b>       | <b>8</b>  |  |
|           |                     |                                 |   |   |   |       | (ii) SF         | 1<br>3         | 5              | 18        | 4         | 1        | 5         | <b>1<br/>3</b> | <b>5</b>       | <b>18</b> |  |
|           |                     |                                 |   |   |   |       | (iii) MF        | 3              | 1              | 4         | 2         | 0        | 2         | <b>3</b>       | <b>1</b>       | <b>4</b>  |  |
|           |                     |                                 |   |   |   |       | (iv) LF         | -              | -              | -         | -         | -        | -         | -              | -              | -         |  |

|    |                                    |  |   |   |   | Total | 2<br>2          | 8      | 30     | 9  | 1  | 10 | 2<br>2 | 8      | 30     |    |  |
|----|------------------------------------|--|---|---|---|-------|-----------------|--------|--------|----|----|----|--------|--------|--------|----|--|
| 12 | Kauhari<br>2C1B3k1d                | Surha, Kauhari   | 3 | 1 | 2 | 6     | (i)<br>Landless | 1<br>1 | 7      | 18 | 5  | 1  | 6      | 1<br>1 | 7      | 18 |  |
|    |                                    |  |   |   |   |       | (ii) SF         | 2<br>1 | 9      | 30 | 7  | 4  | 11     | 2<br>1 | 9      | 30 |  |
|    |                                    |  |   |   |   |       | (iii) MF        | 8      | 4      | 12 | 3  | 0  | 3      | 8<br>4 | 4      | 12 |  |
|    |                                    |  |   |   |   |       | (iv) LF         | -      | -      | -  | -  | -  | -      | -      | -      | -  |  |
|    |                                    |  |   |   |   |       | Total           | 4<br>0 | 2<br>0 | 60 | 15 | 5  | 20     | 4<br>0 | 2<br>0 | 60 |  |
| 13 | Pindari<br>2C1B3k2a                | Surha, Pindari   | 1 | 0 | 1 | 2     | (i)<br>Landless | 4      | 1      | 5  | -  | -  | -      | 4<br>1 | 1      | 5  |  |
|    |                                    |  |   |   |   |       | (ii) SF         | 9      | 3      | 12 | -  | -  | -      | 9<br>3 | 3      | 12 |  |
|    |                                    |  |   |   |   |       | (iii) MF        | 3      | 0      | 3  | -  | -  | -      | 3<br>0 | 0      | 3  |  |
|    |                                    |  |   |   |   |       | (iv) LF         | -      | -      | -  | -  | -  | -      | -      | -      | -  |  |
|    |                                    |  |   |   |   |       |                 | 1<br>6 | 4      | 20 | -  | -  | -      | 1<br>6 | 4      | 20 |  |
| 14 | Singhanpu<br>r Baghari<br>2C1B3k2b | Surha,<br>Singhanpur,<br>Baghari                                 | 2 | 0 | 1 | 3     | (i)<br>Landless | 6      | 3      | 9  | 2  | 0  | 2      | 6<br>3 | 3      | 9  |  |
|    |                                    |  |   |   |   |       | (ii) SF         | 1<br>3 | 4      | 17 | 5  | 1  | 6      | 1<br>3 | 4      | 17 |  |
|    |                                    |  |   |   |   |       | (iii) MF        | 3      | 1      | 4  | 2  | 0  | 2      | 3<br>1 | 1      | 4  |  |
|    |                                    |  |   |   |   |       | (iv) LF         | -      | -      | -  | -  | -  | -      | -      | -      | -  |  |
|    |                                    |  |   |   |   |       | Total           | 2<br>2 | 8      | 30 | 9  | 1  | 10     | 2<br>2 | 8      | 30 |  |
| 15 | Kamalpura<br>2C1B3k2c              | Singhanpur<br>Baghari, Kanera,<br>Salua,<br>Kamalkhera,<br>Patha | 4 | 1 | 3 | 8     | (i)<br>Landless | 1<br>5 | 7      | 22 | 7  | 3  | 10     | 1<br>5 | 7      | 22 |  |
|    |                                    |  |   |   |   |       | (ii) SF         | 3<br>0 | 1      | 41 | 11 | 5  | 15     | 3<br>0 | 1      | 41 |  |
|    |                                    |  |   |   |   |       | (iii) MF        | 1<br>2 | 5      | 17 | 4  | 1  | 5      | 1<br>2 | 5      | 17 |  |

|    |                              |   |   |    |   |              |                 |          |           |           |           |           |           |          |           |           |     |
|----|------------------------------|---|---|----|---|--------------|-----------------|----------|-----------|-----------|-----------|-----------|-----------|----------|-----------|-----------|-----|
|    |                              |   |   |    |   | (iv) LF      | -               | -        | -         | -         | -         | -         | -         | -        | -         |           |     |
|    |                              |   |   |    |   | <b>Total</b> | <b>5</b>        | <b>2</b> | <b>80</b> | <b>22</b> | <b>9</b>  | <b>30</b> | <b>5</b>  | <b>2</b> | <b>80</b> |           |     |
| 16 | Shivhara<br>2C1B3k2d         | Kamalkhera,<br>Syohar,<br>Bamhaur Kala          | 2 | 0  | 2 | 4            | (i)<br>Landless | 9        | 3         | 12        | 2         | 1         | 3         | 9        | 3         | 12        |     |
|    |                              |   |   |    |   |              | (ii) SF         | 1        | 5         | 19        | 5         | 0         | 5         | 1        | 5         | 19        |     |
|    |                              |   |   |    |   |              | (iii) MF        | 7        | 2         | 9         | 2         | 0         | 2         | 7        | 2         | 9         |     |
|    |                              |   |   |    |   |              | (iv) LF         | -        | -         | -         | -         | -         | -         | -        | -         | -         |     |
|    |                              |   |   |    |   |              | <b>Total</b>    | <b>3</b> | <b>1</b>  | <b>40</b> | <b>9</b>  | <b>1</b>  | <b>10</b> | <b>3</b> | <b>1</b>  | <b>40</b> |     |
| 17 | Bamhaurik<br>aji<br>2C1B3k2e | Bamhaur Kaji,<br>Siyor,<br>Kamalkhera,<br>Gehra | 2 | 1  | 1 | 4            | (i)<br>Landless | 1        | 3         | 13        | 3         | 0         | 3         | 1        | 3         | 13        |     |
|    |                              |   |   |    |   |              | (ii) SF         | 1        | 6         | 20        | 5         | 0         | 5         | 1        | 6         | 20        |     |
|    |                              |   |   |    |   |              | (iii) MF        | 5        | 2         | 7         | 2         | 0         | 2         | 5        | 2         | 7         |     |
|    |                              |   |   |    |   |              | (iv) LF         | -        | -         | -         | -         | -         | -         | -        | -         | -         |     |
|    |                              |   |   |    |   |              | <b>Total</b>    | <b>2</b> | <b>1</b>  | <b>40</b> | <b>10</b> | <b>0</b>  | <b>10</b> | <b>2</b> | <b>1</b>  | <b>40</b> |     |
| 18 | Gahra<br>2C1B3k2f            | Singhanpur<br>Baghari,<br>Bhaghari, Gehra       | 2 | 0  | 1 | 3            | (i)<br>Landless | 7        | 3         | 10        | 2         | 0         | 2         | 7        | 3         | 10        |     |
|    |                              |   |   |    |   |              | (ii) SF         | 1        | 5         | 15        | 5         | 1         | 6         | 1        | 5         | 15        |     |
|    |                              |   |   |    |   |              | (iii) MF        | 4        | 1         | 5         | 2         | 0         | 2         | 4        | 1         | 5         |     |
|    |                              |   |   |    |   |              | (iv) LF         | -        | -         | -         | -         | -         | -         | -        | -         | -         |     |
|    |                              |   |   |    |   |              | <b>Total</b>    | <b>2</b> | <b>9</b>  | <b>30</b> | <b>9</b>  | <b>1</b>  | <b>10</b> | <b>2</b> | <b>9</b>  | <b>30</b> |     |
|    | Total                        |   |   | 35 | 9 | 24           | 68              |          | 49        | 1         | 680       | 156       | 35        | 190      | 49        | 1         | 680 |

(M – Male, F – Female)

There are 18 villages in the project area and village-wise Self Help Groups (SHGs) constituted is given in Table 4.5. A total 68 SHGs were already constituted in the project villages, of them 35, 9 and 24 are men SHGs, women SHGs and mixed SHGs, respectively. Total 236 SHGs have to be constituted to ensure the livelihood of marginalized population in the project. Formation of remaining 168 SHGs is in progress. Livelihood Action Plan is given in Annexure-I.

#### **4.2: Details of Formation of User Groups (UGs)**

User Groups were formed on the basis of beneficiaries of different natural resource conservation activities to be constructed in the watershed. The location of the activities/group mentioned in Table 4.6 can be seen on the proposed plan available in the map section.

| Name of Work                       | Benefited area (ha) | Field No.                                | Name of Adhyaksh | Name of Sachiv/Treasurer | Activity Proposed | Location of the activity | Water storage in cum | Area Proposed for irrigation (ha) | user Charge s (per ha) |
|------------------------------------|---------------------|--|------------------|--------------------------|-------------------|--------------------------|----------------------|-----------------------------------|------------------------|
| <b>Village – Gahra (2c1b3f2f)</b>  |                     |  |                  |                          |                   |                          |                      |                                   |                        |
| CD B 1                             | 19.934              | 183 TO 192 ,194 TO 199                   | Jamuniya         | Ramratan Singh           | Crop Production   | 183                      |                      |                                   |                        |
| <b>Village – Utikan (2c1B3F2d)</b> |                     |  |                  |                          |                   |                          |                      |                                   |                        |
| CD1                                | 19.956              | 77 to 85, 70                             | Jaggu            | Jagdish                  | Crop Production   | 77                       |                      |                                   |                        |
| CD No. C1                          | 9.893               | 121 to 137                               | Bhaiyadeen       | Bhoora                   | Crop Production   | 121                      |                      |                                   |                        |
| CD No. A1                          | 24.283              | 915, 916, 918, 914, 169, 926, 920 TO 925 | Lallu            | Uditnarayan              | Crop Production   | 915                      |                      |                                   |                        |
| <b>Village- Jujhar (2c1B3f2e)</b>  |                     |  |                  |                          |                   |                          |                      |                                   |                        |
| CD1                                | 2.031               | 59/2, 62, 55,                            | Baccha           | Shivram                  | Crop Production   | 62                       |                      |                                   |                        |
| CD2                                | 3.536               | 59, 57, 58                               | Natthu           | Shivram                  | Crop              | 59                       |                      |                                   |                        |

|                                   |        |  |                 |                |                 |      |  |  |  |
|-----------------------------------|--------|--|-----------------|----------------|-----------------|------|--|--|--|
|                                   |        |  |                 |                |                 |      |  |  |  |
| CD3                               | 0.323  | 59                                       | Hardayal Pratap | Ratifal        | Crop Production | 59   |  |  |  |
| CD1                               | 11.905 | 13, 14, 15                               | Bhoora          | Shiv           | Crop Production | 13   |  |  |  |
| CD2                               | 14.137 | 5  | Dev Pratap      | Devideen       | Crop Production | 5    |  |  |  |
| CD1                               | 6.77   | 1010,<br>1009,<br>1004 to<br>1006        | Shivram         | Babu           | Crop Production | 1010 |  |  |  |
| CD2                               | 10.52  | 1079,<br>1080,<br>1081                   | Kuldeep Singh   | Shivram        | Crop Production | 1079 |  |  |  |
| WHB1                              | 10.61  | 1011 to<br>1013,                         | Rmabhavan       | Kunvar Bahadur | Crop Production | 1011 |  |  |  |
| WHB2                              | 20.68  | 1014, 995,<br>996, 1024                  | Prahlad         | Shiv Lal       | Crop Production | 1014 |  |  |  |
| WHB3                              | 28.13  | 1025,<br>1024,<br>1023,<br>1021,<br>1022 | Sukhnandan      | Jagroop        | Crop Production | 1025 |  |  |  |
| WHB4                              | 15.18  | 881, 882,<br>1048,<br>1041,<br>1047      | Dev Pratap      | Devideen       | Crop Production | 881  |  |  |  |
| <b>Village- Jujhar (2c1B3f1e)</b> |        |  |                 |                |                 |      |  |  |  |
| CD1                               | 18.3   | 449, 448                                 | Kuldeep Singh   | Shivram        | Crop Production | 449  |  |  |  |
| CD2                               | 16.85  | 461, 462,<br>459, 460                    | Rmabhavan       | Kunvar Bahadur | Crop Production | 461  |  |  |  |

|     |        |                              |            |              |                 |     |  |  |  |
|-----|--------|------------------------------|------------|--------------|-----------------|-----|--|--|--|
| CD3 | 2.83   | 521, 520                     | Prahlad    | Shiv Lal     | Crop Production | 521 |  |  |  |
| CD4 | 2.82   | 524,<br>522/532              | Sukhnandan | Jagroop      | Crop Production | 524 |  |  |  |
| CD5 | 18.32  | 510, 512                     | Sukhnandan | Jagroop      | Crop Production | 505 |  |  |  |
| CD6 | 11.77  | 505, 511                     | Samarjeet  | Sabhajeet    | Crop Production | 191 |  |  |  |
| CD1 | 14.435 | 191, 190                     | Chunbad    | Savitri      | Crop Production | 186 |  |  |  |
| CD2 | 13.4   | 186, 188                     | Shivram    | Ramnaresh    | Crop Production | 188 |  |  |  |
| CD3 | 19.5   | 762 to<br>767, 771           | Shivram    | Ramvishal    | Crop Production | 762 |  |  |  |
| CD4 | 2.71   | 676, 675,<br>673, 674        | Ratifal    | Chunbaad     | Crop Production | 676 |  |  |  |
| CD5 | 3.38   | 308, 307,<br>309/996,<br>322 | Shiv       | Pratap Singh | Crop Production | 308 |  |  |  |
| CD6 | 14.88  | 303 to<br>305, 308           | Devideen   | Shiv Lal     | Crop Production | 303 |  |  |  |

**Village- Lilyahi (2c1b3f2b)**

|      |        |  |                |           |                 |     |  |  |  |
|------|--------|--|----------------|-----------|-----------------|-----|--|--|--|
| CDA1 | 11     | 59 to 72,<br>176 to 225  | Shivram        | Savitri   | Crop Production | 59  |  |  |  |
| CDC1 | 21.49  | 221 to<br>230, 264,<br>266, 268,<br>169 to<br>272, 277,<br>281 | Kunvar Bahadur | Ramnaresh | Crop Production | 221 |  |  |  |
| CDC2 | 16.263 | 187, 155<br>to 162,  | Shiv Lal       | Ramvishal | Crop Production | 187 |  |  |  |

|                                    |        |   |            |              |                    |      |  |  |  |
|------------------------------------|--------|---|------------|--------------|--------------------|------|--|--|--|
|                                    |        | 195, 194,<br>184                                  |            |              |                    |      |  |  |  |
| CDD1                               | 10.704 | 1162,<br>1163,<br>1173,<br>1172,<br>1171,<br>1170 | Samarjeet  | Sabhajeet    | Crop<br>Production | 1162 |  |  |  |
| CDD2                               | 15.296 | 1147 to<br>1159,<br>1168                          | Chunbad    | Savitri      | Crop<br>Production | 1147 |  |  |  |
| <b>Village- Lilhahi (2c1b3f2a)</b> |        |   |            |              |                    |      |  |  |  |
| CDA1                               | 22.89  | 165 to<br>172, 156<br>to 164,<br>175, 145         | Shivram    | Ramvishal    | Crop<br>Production | 165  |  |  |  |
| CDA2                               | 24     | 178 to<br>198, 138<br>to 151                      | Ratifal    | Chunbaad     | Crop<br>Production | 178  |  |  |  |
| CDA3                               | 22.602 | 198 to 214  | Shiv       | Pratap Singh | Crop<br>Production | 198  |  |  |  |
| CDB1                               | 11.904 | 750, 752,<br>940 to 946                           | Sukhnandan | Jagroop      | Crop<br>Production | 750  |  |  |  |
| CDB2                               | 11.904 | 749, 740,<br>757 to 763                           | Samarjeet  | Sabhajeet    | Crop<br>Production | 749  |  |  |  |
| CDB3                               | 16     | 478, 479,<br>770 to<br>773, 855<br>to 862         | Chunbad    | Savitri      | Crop<br>Production | 770  |  |  |  |
| CDB4                               | 12.41  | 470, 472,<br>485, 479                             | Shivram    | Ramnaresh    | Crop<br>Production | 472  |  |  |  |
| CDB5                               | 8.93   | 420, 421,   | Shivram    | Ramvishal    | Crop               | 420  |  |  |  |

|                                    |        |   |                |               |                 |     |  |  |  |
|------------------------------------|--------|---|----------------|---------------|-----------------|-----|--|--|--|
|                                    |        | 412   |                |               | Production      |     |  |  |  |
| CDB6                               | 2      | 667 to 672                                  | Ratifal        | Chunbaad      | Crop Production | 667 |  |  |  |
| CDB7                               | 28.852 | 674, 682,<br>675 to<br>681, 698<br>to 704   | Shiv           | Pratap Singh  | Crop Production | 674 |  |  |  |
| CDC1                               | 13     | 459 to 461                                  | Devideen       | Shiv Lal      | Crop Production | 459 |  |  |  |
| CDC2                               | 36.1   | 338 to<br>340, 375,<br>365 to<br>370, 371   | Babu           | Krishn Bihari | Crop Production | 338 |  |  |  |
| CDC3                               | 12.5   | 244 to<br>246, 128<br>to 136,<br>156 to 164 | Shivram        | Savitri       | Crop Production | 244 |  |  |  |
| CDC4                               | 15.9   | 389 to<br>392, 388,<br>395                  | Kunvar Bahadur | Ramnaresh     | Crop Production | 389 |  |  |  |
| CDC5                               | 36.55  | 411 to 424                                  | Shiv Lal       | Ramvishal     | Crop Production | 411 |  |  |  |
| CDC6                               | 36.9   | 435 to<br>448, 434                          | Samarjeet      | Sabhajeet     | Crop Production | 435 |  |  |  |
| CDC7                               | 14.9   | 376, 377                                    | Chunbad        | Savitri       | Crop Production | 376 |  |  |  |
| CDC8                               | 14.05  |   | Shivram        | Ramnaresh     | Crop Production |     |  |  |  |
| <b>Village- Lilvahi (2c1b3f2b)</b> |        |   |                |               |                 |     |  |  |  |
| CDA1                               | 11     | 59 to 72,<br>176 to 225                     | Ratifal        | Chunbaad      | Crop Production | 59  |  |  |  |
| CDC1                               | 21.49  | 221 to                                      | Shiv           | Pratap Singh  | Crop            | 221 |  |  |  |

|      |        |  |            |           |                    |      |  |  |  |
|------|--------|--|------------|-----------|--------------------|------|--|--|--|
|      |        | 230, 264,<br>266, 268,<br>169 to<br>272, 277,<br>281 |            |           | Production         |      |  |  |  |
| CDC2 | 16.263 | 187, 155<br>to 162,<br>195, 194,<br>184              | Sukhnandan | Jagroop   | Crop<br>Production | 187  |  |  |  |
| CDD1 | 10.704 | 1162,<br>1163,<br>1173,<br>1172,<br>1171,<br>1170    | Samarjeet  | Sabhajeet | Crop<br>Production | 1162 |  |  |  |
| CDD2 | 15.296 | 1147 to<br>1159,<br>1168                             | Chunbad    | Savitri   | Crop<br>Production | 1147 |  |  |  |

**Village- Lilvahi (2c1b3f2a)**

|      |        |   |          |               |                    |     |  |  |  |
|------|--------|---|----------|---------------|--------------------|-----|--|--|--|
| CDA1 | 22.89  | 165 to<br>172, 156<br>to 164,<br>175, 145 | Shivram  | Ramvishal     | Crop<br>Production | 165 |  |  |  |
| CDA2 | 24     | 178 to<br>198, 138<br>to 151              | Ratifal  | Chunbaad      | Crop<br>Production | 178 |  |  |  |
| CDA3 | 22.602 | 198 to 214                                | Shiv     | Pratap Singh  | Crop<br>Production | 198 |  |  |  |
| CDB1 | 11.904 | 750, 752,<br>940 to 946                   | Devideen | Shiv Lal      | Crop<br>Production | 750 |  |  |  |
| CDB2 | 11.904 | 749, 740,<br>757 to 763                   | Babu     | Krishn Bihari | Crop<br>Production | 749 |  |  |  |

|      |        |   |                |              |                    |     |  |  |  |
|------|--------|---|----------------|--------------|--------------------|-----|--|--|--|
| CDB3 | 16     | 478, 479,<br>770 to<br>773, 855<br>to 862   | Shivram        | Savitri      | Crop<br>Production | 478 |  |  |  |
| CDB4 | 12.41  | 470, 472,<br>485, 479                       | Kunvar Bahadur | Ramnaresh    | Crop<br>Production | 470 |  |  |  |
| CDB5 | 8.93   | 420, 421,<br>412                            | Shiv Lal       | Ramvishal    | Crop<br>Production | 420 |  |  |  |
| CDB6 | 2      | 667 to 672                                  | Samarjeet      | Sabhajeet    | Crop<br>Production | 667 |  |  |  |
| CDB7 | 28.852 | 674, 682,<br>675 to<br>681, 698<br>to 704   | Chunbad        | Savitri      | Crop<br>Production | 675 |  |  |  |
| CDC1 | 13     | 459 to 461                                  | Shivram        | Ramnaresh    | Crop<br>Production | 461 |  |  |  |
| CDC2 | 36.1   | 338 to<br>340, 375,<br>365 to<br>370, 371   | Shivram        | Ramvishal    | Crop<br>Production | 338 |  |  |  |
| CDC3 | 12.5   | 244 to<br>246, 128<br>to 136,<br>156 to 164 | Ratifal        | Chunbaad     | Crop<br>Production | 244 |  |  |  |
| CDC4 | 15.9   | 389 to<br>392, 388,<br>395                  | Shiv           | Pratap Singh | Crop<br>Production | 289 |  |  |  |
| CDC5 | 36.55  | 411 to 424                                  | Sukhnandan     | Jagroop      | Crop<br>Production | 411 |  |  |  |
| CDC6 | 36.9   | 435 to<br>448, 434                          | Samarjeet      | Sabhajeet    | Crop<br>Production | 435 |  |  |  |
| CDC7 | 14.9   | 376, 377                                    | Chunbad        | Savitri      | Crop               | 376 |  |  |  |

|  |        |                               |                |               |                 |     |  |  |  |
|--|--------|-------------------------------|----------------|---------------|-----------------|-----|--|--|--|
|  |        |                               |                |               | Production      |     |  |  |  |
| CDC8                                   | 14.05  |                               | Shivram        | Ramnaresh     | Crop Production |     |  |  |  |
| <b>Village-Chhani Kala (2c1b3f1b)</b>  |        |                               |                |               |                 |     |  |  |  |
| CD1B                                   | 5.496  | 68                            | Ratifal        | Chunbaad      | Crop Production | 68  |  |  |  |
| CD2B                                   | 3.3    | 94                            | Shiv           | Pratap Singh  | Crop Production | 94  |  |  |  |
| CD3B                                   | 4.946  | 98                            | Devideen       | Shiv Lal      | Crop Production | 98  |  |  |  |
| CD1A                                   | 14     | 292, 293,<br>460              | Babu           | Krishn Bihari | Crop Production | 292 |  |  |  |
| CD2A                                   | 17.726 | 461, 462,<br>793, 794         | Shivram        | Savitri       | Crop Production | 461 |  |  |  |
| CD3A                                   | 10.287 | 792, 796<br>to 800            | Kunvar Bahadur | Ramnaresh     | Crop Production | 792 |  |  |  |
| CD1C                                   | 12.956 | 392 to<br>398, 407            | Shiv Lal       | Ramvishal     | Crop Production | 392 |  |  |  |
| <b>Village- Bhaishtamaf (2c1B3f1a)</b> |        |                               |                |               |                 |     |  |  |  |
| CD 1A                                  | 8.908  | 2 To 11<br>,24                | Chunbad        | Savitri       | Crop Production | 2   |  |  |  |
| CD 2A                                  | 5.938  | 20 To 22<br>,51 To 56         | Shivram        | Ramnaresh     | Crop Production | 20  |  |  |  |
| CD 3A                                  | 17.543 | 60To 68<br>,75 To 80          | Shivram        | Ramvishal     | Crop Production | 60  |  |  |  |
| CD 4A                                  | 4.751  | 69 To74<br>,82 ,130<br>To 137 | Ratifal        | Chunbaad      | Crop Production | 69  |  |  |  |
| CD 1B                                  | 4.157  | 193To195                      | Shiv           | Pratap Singh  | Crop Production | 193 |  |  |  |
| CD 2B                                  | 15.167 | 185 To192                     | Sukhnandan     | Jagroop       | Crop Production | 185 |  |  |  |

|       |        |  |           |           |                 |      |  |  |  |
|-------|--------|--|-----------|-----------|-----------------|------|--|--|--|
| CD 3B | 10.417 | 206 To211                                | Samarjeet | Sabhajeet | Crop Production | 206  |  |  |  |
| CD 4B | 10.417 | 101To105                                 | Chunbad   | Savitri   | Crop Production | 101  |  |  |  |
| CD 5B | 7.72   | 400To402                                 | Shivram   | Ramnaresh | Crop Production | 400  |  |  |  |
| CD 1C | 10.758 | 2012,<br>2000,<br>2034,<br>2038          | Shivram   | Ramvishal | Crop Production | 2012 |  |  |  |
| CD 2C | 6.538  | 2000,<br>2048,<br>2052,<br>2055,<br>2056 | Ratifal   | Chunbaad  | Crop Production | 2000 |  |  |  |

#### **4.3 Convergence in IWMP-XVIII, Mahoba**

There is no proposed plan for Convergence

## CHAPTER - 5

### MANAGEMENT/ACTION PLAN

The details of Preparatory Phase, Works Phase and Convergence planning are described in subsequent section

#### **5.1 Entry Point Activities (EPA)**

Entry point activities were executed with the consent of stake holders and it helped in winning the confidence of the villagers for moving ahead the other programmes of watershed. In total 25 EPA activities were executed in the project area which costed Rs. 26.32 Lakh.

| Name of PIA                               | Name of Project | Year    | Name of Block | Name & Code of project/<br>Name of village | E.P.A (Rs. in lakh) | Name of Work                    | Cost in lakh |
|---|-----------------|---------|---------------|--|---------------------|---------------------------------|--------------|
| Soil Conservation Division-Mahoba, Mahoba | IWMP-XVIII      | 2011-12 | Kabarai       | Bhestamaaf 2C1B3f1a                        | 0.77                | Rapta Construct, Well Repaired, | 0.77         |
|   |                 |         |               | Parsaha 2C1B3f1b                           | 0.65                | Kharanja Construct,             | 0.65         |
|   |                 |         |               | Maheba 2C1B3f1d                            | 1.74                | Puliya Construct,               | 1.74         |
|   |                 |         |               | Sichaura 2C1B3f1e                          | 1.86                | Naali Construct                 | 1.86         |
|   |                 |         |               | Lilwahi-I 2C1B3f2a                         | 2.01                |                                 | 2.01         |
|   |                 |         |               | Lilwahi-II 2C1B3f2b                        | 0.55                |                                 | 0.55         |
|   |                 |         |               | Utiyan 2C1B3f2d                            | 1.39                |                                 | 1.39         |
|   |                 |         |               | Jujhar 2C1B3f2e                            | 1.43                |                                 | 1.43         |
|   |                 |         |               | Dharaun 2C1B3f2f                           | 0.94                |                                 | 0.94         |
|   |                 |         |               | Babedi 2C1B3k1b                            | 1.82                |                                 | 1.82         |
|   |                 |         |               | Surha 2C1B3k1c                             | 1.25                |                                 | 1.25         |
|   |                 |         |               | Kauhari 2C1B3k1d                           | 2.23                |                                 | 2.23         |
|   |                 |         |               | Pindari 2C1B3k2a                           | 0.94                |                                 | 0.94         |
|   |                 |         |               | Singhanpur Baghri 2C1B3k2b                 | 1.28                |                                 | 1.28         |
|   |                 |         |               | Kamalpura 2C1B3k2c                         | 2.92                |                                 | 2.92         |
|   |                 |         |               | Shivhara 2C1B3k2d                          | 1.70                |                                 | 1.70         |
|   |                 |         |               | Bamhaurikaji 2C1B3k2e                      | 1.66                |                                 | 1.66         |
|   |                 |         |               | Gahra 2C1B3k2f                             | 1.19                |                                 | 1.19         |
| <b>Total</b>                              |                 |         |               |  | <b>26.32</b>        |                                 | <b>26.32</b> |

## **5.2 Works Phase**

### **Following are the major problems of the watersheds**

- Water scarcity both for drinking as well as irrigation
- Excess runoff and soil loss
- Low water holding capacity of the soil
- Low productivity of crops
- Low fertility of soil
- Low cropping intensity
- Lack of technical knowledge
- *Anna Pratha* (let loose system of cattle)
- Poor vegetative cover
- Poor/low productive breeds of miltch animals
- Lack of feed & fodder availability
- Non availability of wood/fuel
- Lack of proper market facilities
- Low income of the households
- Lack of employment opportunity.

### **Estimation of Runoff from the Watershed**

Runoff from the watershed is estimated by Curve Number method of the Soil Conservation Service of the USDA using 15 years data (1996-2010). It is estimated that runoff potential of the project area is 355 mm, equivalent to 35-40 per cent of average annual rainfall. Expected runoff and soil loss from the project area are depicted Table 5.1.

**Table 5.1: Runoff and soil erosion in the project area (IWMP-XVIII, Mahoba)**

| Sr. No. | Name of Micro Watershed | Cause         | Type of erosion* | Area affected (ha)* | Run off (mm/ year)* | Average Soil Loss (Tonnes/ ha/ year) |
|---------|-------------------------|---------------|------------------|---------------------|---------------------|--------------------------------------|
| 1       | Bhestamaaf<br>2C1B3f1a  | Water erosion |                  |                     |                     |                                      |
|         |                         | a             | Sheet            | 231.80              | 355                 | 8-12                                 |
|         |                         | b             | Rill             | 162.26              |                     |                                      |
|         |                         | c             | Gully            | 69.54               |                     |                                      |
|         |                         | Total         |                  | <b>463.60</b>       |                     |                                      |
| 2       | Parsaha 2C1B3f1b        | Water erosion |                  |                     |                     |                                      |
|         |                         | a             | Sheet            | 220.57              | 355                 | 8-12                                 |
|         |                         | b             | Rill             | 154.40              |                     |                                      |
|         |                         | c             | Gully            | 66.17               |                     |                                      |
|         |                         | Total         |                  | <b>441.13</b>       |                     |                                      |
| 3       | Maheba 2C1B3f1d         | Water erosion |                  |                     |                     |                                      |
|         |                         | a             | Sheet            | 297.73              | 355                 | 8-12                                 |
|         |                         | b             | Rill             | 208.41              |                     |                                      |
|         |                         | c             | Gully            | 89.32               |                     |                                      |
|         |                         | Total         |                  | <b>595.46</b>       |                     |                                      |
| 4       | Sichaura<br>2C1B3f1e    | Water erosion |                  |                     |                     |                                      |
|         |                         | a             | Sheet            | 377.16              | 355                 | 8-12                                 |
|         |                         | b             | Rill             | 264.01              |                     |                                      |
|         |                         | c             | Gully            | 113.15              |                     |                                      |
|         |                         | Total         |                  | <b>754.31</b>       |                     |                                      |
| 5       | Lilwahi-I<br>2C1B3f2a   | Water erosion |                  |                     |                     |                                      |
|         |                         | a             | Sheet            | 477.10              | 355                 | 8-12                                 |
|         |                         | b             | Rill             | 333.97              |                     |                                      |
|         |                         | c             | Gully            | 143.13              |                     |                                      |

|    |                        |               |       |               |     |      |
|----|------------------------|---------------|-------|---------------|-----|------|
|    |                        | Total         |       | <b>954.20</b> |     |      |
| 6  | Lilwahi-II<br>2C1B3f2b | Water erosion |       |               |     |      |
|    |                        | a             | Sheet | 223.17        | 355 | 8-12 |
|    |                        | b             | Rill  | 156.22        |     |      |
|    |                        | c             | Gully | 66.95         |     |      |
|    |                        | Total         |       | <b>446.34</b> |     |      |
| 7  | Utiyan 2C1B3f2d        | Water erosion |       |               |     |      |
|    |                        | a             | Sheet | 338.45        | 355 | 8-12 |
|    |                        | b             | Rill  | 236.92        |     |      |
|    |                        | c             | Gully | 101.54        |     |      |
|    |                        | Total         |       | <b>676.90</b> |     |      |
| 8  | Jujhar 2C1B3f2e        | Water erosion |       |               |     |      |
|    |                        | a             | Sheet | 329.53        | 355 | 8-12 |
|    |                        | b             | Rill  | 230.67        |     |      |
|    |                        | c             | Gully | 98.86         |     |      |
|    |                        | Total         |       | <b>659.05</b> |     |      |
| 9  | Dharaun 2C1B3f2f       | Water erosion |       |               |     |      |
|    |                        | a             | Sheet | 298.37        | 355 | 8-12 |
|    |                        | b             | Rill  | 208.86        |     |      |
|    |                        | c             | Gully | 89.51         |     |      |
|    |                        | Total         |       | <b>596.73</b> |     |      |
| 10 | Babedi 2C1B3k1b        | Water erosion |       |               |     |      |
|    |                        | a             | Sheet | 304.52        | 355 | 8-12 |
|    |                        | b             | Rill  | 213.16        |     |      |
|    |                        | c             | Gully | 91.36         |     |      |
|    |                        | Total         |       | <b>609.04</b> |     |      |

|    |                                |               |       |                |  |  |
|----|--------------------------------|---------------|-------|----------------|--|--|
| 11 | Surha 2C1B3k1c                 | Water erosion |       |                |  |  |
|    |                                | a             | Sheet | 286.46         |  |  |
|    |                                | b             | Rill  | 200.52         |  |  |
|    |                                | c             | Gully | 85.94          |  |  |
|    |                                | Total         |       | <b>572.91</b>  |  |  |
| 12 | Kauhari 2C1B3k1d               | Water erosion |       |                |  |  |
|    |                                | a             | Sheet | 434.84         |  |  |
|    |                                | b             | Rill  | 304.38         |  |  |
|    |                                | c             | Gully | 130.45         |  |  |
|    |                                | Total         |       | <b>869.67</b>  |  |  |
| 13 | Pindari 2C1B3k2a               | Water erosion |       |                |  |  |
|    |                                | a             | Sheet | 316.73         |  |  |
|    |                                | b             | Rill  | 221.71         |  |  |
|    |                                | c             | Gully | 95.02          |  |  |
|    |                                | Total         |       | <b>633.45</b>  |  |  |
| 14 | Singhanpur<br>Baghari 2C1B3k2b | Water erosion |       |                |  |  |
|    |                                | a             | Sheet | 361.75         |  |  |
|    |                                | b             | Rill  | 253.23         |  |  |
|    |                                | c             | Gully | 108.53         |  |  |
|    |                                | Total         |       | <b>723.50</b>  |  |  |
| 15 | Kamalpura<br>2C1B3k2c          | Water erosion |       |                |  |  |
|    |                                | a             | Sheet | 581.19         |  |  |
|    |                                | b             | Rill  | 406.83         |  |  |
|    |                                | c             | Gully | 174.36         |  |  |
|    |                                | Total         |       | <b>1162.38</b> |  |  |

|    |                          |               |       |                 |     |      |
|----|--------------------------|---------------|-------|-----------------|-----|------|
| 16 | Shivhara<br>2C1B3k2d     | Water erosion |       |                 | 355 | 8-12 |
|    |                          | a             | Sheet | 446.13          |     |      |
|    |                          | b             | Rill  | 312.29          |     |      |
|    |                          | c             | Gully | 133.84          |     |      |
|    |                          | Total         |       | <b>892.26</b>   |     |      |
| 17 | Bamhaurikaji<br>2C1B3k2e | Water erosion |       |                 | 355 | 8-12 |
|    |                          | a             | Sheet | 371.45          |     |      |
|    |                          | b             | Rill  | 260.02          |     |      |
|    |                          | c             | Gully | 111.44          |     |      |
|    |                          | Total         |       | <b>742.90</b>   |     |      |
| 18 | Gahra 2C1B3k2f           | Water erosion |       |                 | 355 | 8-12 |
|    |                          | a             | Sheet | 266.26          |     |      |
|    |                          | b             | Rill  | 186.38          |     |      |
|    |                          | c             | Gully | 79.88           |     |      |
|    |                          | Total         |       | <b>532.51</b>   |     |      |
|    | <b>Total</b>             |               |       | <b>12326.34</b> |     |      |

\*Estimated categories of erosion and area affected are based on field visits. Runoff (mm) and soil loss (ton/ha/year) estimates are extrapolated on the basis of hydrological studies in Bundelkhand region of Uttar Pradesh

### **Watershed Development Activities Proposed**

The details of the activities of watershed works (natural resource conservation) are marked on individual field in the micro-watershed wise proposed plan (Map Section). Individual beneficiary wise estimate has been prepared for each micro-watershed and gram panchayat. Information of individual beneficiaries is kept in respective project file available with PIA. (Table 5.2 and 5.3). Similar exercise was also done for participatory crop trials. Location of these trials is marked on proposed plan of participatory crop demonstration (available in map section).

**Table 5.2: Micro-watershed wise details of Watershed Development Activities proposed in IWMP-XVIII, Mahoba**

| Sr. No. | Particular of Measures/Activities                   | Unit | Bhestamaaf<br>2C1B3f1a     |              | Parsaha<br>2C1B3f1b         |             | Maheba<br>2C1B3f1d          |              | Sichaury<br>2C1B3f1e |              |
|---------|---|------|----------------------------|--------------|-----------------------------|-------------|-----------------------------|--------------|----------------------|--------------|
|         |   |      | No., Length/ ha,<br>Volume | Qanty.       | Cost<br>(Rs.<br>In<br>lakh) | Qanty.      | Cost<br>(Rs.<br>In<br>lakh) | Qanty.       | Qanty.               | Qanty.       |
| I       | <b>Soil &amp; Water Conservation Measures</b>       |      |                            |              |                             |             |                             |              |                      |              |
|         | <b>A- Moisture Conservation Measures</b>            |      |                            |              |                             |             |                             |              |                      |              |
|         | 1. Peripheral Bund (with Sodding)                   | cum. |                            |              |                             |             |                             |              |                      |              |
|         | 2. Marginal Bund (with Sodding)                     | cum. | 9401                       | 3.88         | 10816                       | 4.46        | 8112                        | 4.54         | 23936                | 4.99         |
|         | 3. Submergence Bundhi (with Sodding)                | cum. |                            |              |                             |             |                             |              | 12107                | 9.87         |
|         | <b>B- Water Resource Development</b>                |      |                            |              |                             |             |                             |              |                      |              |
|         | 1. Check Dam / Drop Spill Way                       | cum  | 5197                       | 6.88         | 5197                        | 4.61        | 26603.3                     | 19.85        | 9294                 | 11.06        |
|         | 1a- Water storing capacity                          | cum. | 3850                       |              | 2450                        |             | 7200                        |              | 4320                 |              |
|         | 1b. Area proposed for irrigation                    | ha   | 6                          |              | 4                           |             | 12                          |              | 7.2                  |              |
|         | 2. Water Harvesting Bund with surplushing structure | cum. |                            |              |                             |             |                             |              | 188.25               | 0.08         |
|         | 2a-Water storing capacity                           | cum. |                            |              |                             |             |                             |              | 410                  |              |
|         | 2b. Area proposed for irrigation by WHB             | ha   |                            |              |                             |             |                             |              | 0.7                  |              |
|         | <b>Sub Total</b>                                    |      |                            | <b>10.75</b> |                             | <b>9.07</b> |                             | <b>24.39</b> |                      | <b>26.01</b> |
| II      | <b>Livelihood for landless People</b>               |      |                            |              |                             |             |                             |              |                      |              |

|            |   |                                   |       |      |       |      |        |      |        |      |
|------------|---|-----------------------------------|-------|------|-------|------|--------|------|--------|------|
|            | 1. Goatary                                  | No. of SHGs/ No. of beneficiaries | 1/10  | 0.25 | 1/10  | 0.25 | 2/20   | 0.50 | 2/20   | 0.50 |
|            | 2. Back Yard Poultry                        | -do-                              | 1/10  | 0.25 | 1/10  | 0.25 | 2/20   | 0.50 | 2/20   | 0.50 |
|            | 3. Poultry (Broiler)                        | -do-                              | 1/10  | 0.25 | 1/10  | 0.25 | 2/20   | 0.50 | 2/20   | 0.50 |
|            | 4. Black Smithy                             | -do-                              | 0     | 0.00 | 0     | 0.00 | 2/20   | 0.50 | 2/20   | 0.50 |
|            | 5. Rope Making (Linseed)                    | -do-                              | 0     | 0.00 | 0     | 0.00 | 1/10   | 0.25 | 1/10   | 0.25 |
|            | 6. Tailoring                                | -do-                              | 1/10  | 0.25 | 0     | 0.00 | 1/10   | 0.25 | 2/20   | 0.50 |
|            | 7. Vermi composting                         | -do-                              | 1/10  | 0.25 | 1/10  | 0.25 | 2/20   | 0.50 | 2/20   | 0.50 |
|            | 8. Fruit Processing                         | -do-                              | 1/10  | 0.25 | 1/10  | 0.25 | 2/20   | 0.50 | 2/20   | 0.50 |
|            | 9. Seed Bank                                | -do-                              | 1/10  | 0.23 | 1/10  | 0.21 | 2/20   | 0.42 | 2/20   | 0.43 |
|            | <b>Sub Total</b>                            |                                   | 7/70  | 1.73 | 6/60  | 1.46 | 16/160 | 3.92 | 17/170 | 4.18 |
| <b>III</b> | <b><u>Agriculture Production System</u></b> |                                   |       |      |       |      |        |      |        |      |
|            | <b>(1)SMC Area:</b>                         |                                   |       |      |       |      |        |      |        |      |
|            | <b>A- Crop Demonstrations- (Crop Wise)</b>  |                                   |       |      |       |      |        |      |        |      |
|            | 1. Lentil                                   | No. of farmers /Area (ha)         | 3/1.2 | 0.14 | 3/1.2 | 0.14 | 6/2.4  | 0.28 | 6/2.4  | 0.28 |
|            | 2. Chickpea                                 | -do-                              | 3/1.2 | 0.16 | 3/1.2 | 0.16 | 6/2.4  | 0.33 | 6/2.4  | 0.33 |
|            | 3. Field Pea                                | -do-                              | 3/1.2 | 0.17 | 3/1.2 | 0.17 | 6/2.4  | 0.34 | 6/2.4  | 0.34 |
|            | 4. Til                                      | -do-                              | 3/1.2 | 0.05 | 3/1.2 | 0.05 | 6/2.4  | 0.10 | 6/2.4  | 0.10 |
|            | 5. Urd                                      | -do-                              | 3/1.2 | 0.11 | 3/1.2 | 0.11 | 6/2.4  | 0.21 | 6/2.4  | 0.21 |
|            | 6. Moong                                    | -do-                              | 3/1.2 | 0.11 | 2/0.8 | 0.07 | 6/2.4  | 0.22 | 6/2.4  | 0.22 |
|            | 7. Arhar                                    | -do-                              | 3/1.2 | 0.09 | 2/0.8 | 0.06 | 6/2.4  | 0.18 | 6/2.4  | 0.18 |
|            | 8. Wheat                                    | -do-                              | 3/1.2 | 0.17 | 2/0.8 | 0.12 | 5/2.0  | 0.29 | 6/2.4  | 0.35 |
|            | <b>(2) Water Resource Area:</b>             |                                   |       |      |       |      |        |      |        |      |
|            | <b>B- Production of seeds</b>               |                                   |       |      |       |      |        |      |        |      |
|            | 1. Lentil                                   | No. of farmers /Area (ha)         | 3/1.2 | 0.14 | 2/0.8 | 0.09 | 5/2.0  | 0.24 | 6/2.4  | 0.28 |
|            | 2. Chickpea                                 | -do-                              | 3/1.2 | 0.16 | 2/0.8 | 0.11 | 5/2.0  | 0.27 | 5/2.0  | 0.27 |

|  |                |       |             |              |             |              |             |              |             |              |
|--|----------------|-------|-------------|--------------|-------------|--------------|-------------|--------------|-------------|--------------|
| 3. Field Pea                           | -do-           | 3/1.2 | 0.17        | 2/0.8        | 0.11        | 5/2.0        | 0.29        | 5/2.0        | 0.29        |              |
| 4. Til                                 | -do-           | 3/1.2 | 0.05        | 2/0.8        | 0.03        | 5/2.0        | 0.08        | 5/2.0        | 0.08        |              |
| 5. Urd                                 | -do-           | 2/0.8 | 0.07        | 2/0.8        | 0.07        | 5/2.0        | 0.18        | 5/2.0        | 0.18        |              |
| 6. Moong                               | -do-           | 2/0.8 | 0.07        | 2/0.8        | 0.07        | 5/2.0        | 0.18        | 5/2.0        | 0.18        |              |
| 7. Arhar                               | -do-           | 2/0.8 | 0.06        | 2/0.8        | 0.06        | 5/2.0        | 0.15        | 5/2.0        | 0.15        |              |
| 8. Wheat                               | -do-           | 2/0.8 | 0.12        | 2/0.8        | 0.12        | 5/2.0        | 0.29        | 5/2.0        | 0.29        |              |
| <b><u>Agro forestry:-</u></b>          |                |       |             |              |             |              |             |              |             |              |
| 1- Aonla                               | Area in ha     | 0     | 0.00        | 0            | 0.00        | 1            | 0.18        | 2            | 0.36        |              |
| 2. Guava                               | Area in ha     | 0     | 0.00        | 0            | 0.00        | 1            | 0.18        | 1            | 0.18        |              |
| <b><u>Live Stock Management</u></b>    |                |       |             |              |             |              |             |              |             |              |
| A. fodder production                   | No. of Units   | 8     | 0.05        | 8            | 0.05        | 15           | 0.09        | 16           | 0.10        |              |
| B. Vaccination/Medication              | No. of Animals | 15    | 0.01        | 15           | 0.01        | 26           | 0.02        | 26           | 0.02        |              |
| C. Artificial Insemination             | No. of Animals | 15    | 0.01        | 15           | 0.01        | 26           | 0.01        | 26           | 0.01        |              |
| D. Natural Service.                    | He Buffalo     | 0     | 0.00        | 0            | 0.00        | 1            | 0.24        | 1            | 0.24        |              |
| <b>Total for Ag. Production System</b> |                |       | <b>1.92</b> |              | <b>1.62</b> |              | <b>4.36</b> |              | <b>4.64</b> |              |
| <b>Grand Total</b>                     |                |       |             | <b>14.40</b> |             | <b>12.15</b> |             | <b>32.67</b> |             | <b>34.83</b> |

**Micro-watershed wise details of Watershed Development Activities proposed in IWMP-XVIII, Mahoba**

**Cont.....**

| Sr. No. | Particular of Measures/Activities                   | Unit                              | Lilwahi-I<br>2C1B3f2a |                          | Lilwahi-II<br>2C1B3f2b |                          | Utiyan 2C1B3f2d |                          |
|---------|---|-----------------------------------|-----------------------|--------------------------|------------------------|--------------------------|-----------------|--------------------------|
|         |   | No., Length/ ha,<br>Volume        | Qanty.                | Cost<br>(Rs. In<br>lakh) | Qanty.                 | Cost<br>(Rs. In<br>lakh) | Qanty.          | Cost<br>(Rs. In<br>lakh) |
| I       | <b>Soil &amp; Water Conservation Measures</b>       |                                   |                       |                          |                        |                          |                 |                          |
|         | <b>A- Moisture Conservation Measures</b>            |                                   |                       |                          |                        |                          |                 |                          |
|         | 1. Peripheral Bund (with Sodding)                   | cum.                              |                       |                          |                        |                          | 16078           | 7.11                     |
|         | 2. Marginal Bund (with Sodding)                     | cum.                              | 7904                  | 5.21                     | 957                    | 0.67                     | 18614           | 8.67                     |
|         | 3. Submergence Bundhi (with Sodding)                | cum.                              |                       |                          | 2915                   | 2.03                     |                 |                          |
|         | <b>B- Water Resource Development</b>                |                                   |                       |                          |                        |                          |                 |                          |
|         | 1. Check Dam / Drop Spill Way                       | cum                               | 19438.9               | 22.95                    | 6997                   | 5.02                     | 3165            | 3.63                     |
|         | 1a- Water storing capacity                          | cum.                              | 7560                  |                          | 2250                   |                          | 1080            |                          |
|         | 1b. Area proposed for irrigation                    | ha                                | 13                    |                          | 4                      |                          | 1.8             |                          |
|         | 2. Water Harvesting Bund with surplushing structure | cum.                              |                       |                          |                        |                          |                 |                          |
|         | 2a-Water storing capacity                           | cum.                              |                       |                          |                        |                          |                 |                          |
|         | 2b. Area proposed for irrigation by WHB             | ha                                |                       |                          |                        |                          |                 |                          |
|         | <b>Sub Total</b>                                    |                                   |                       | <b>28.16</b>             |                        | <b>7.73</b>              |                 | <b>19.42</b>             |
| II      | <b>Livelihood for landless People</b>               |                                   |                       |                          |                        |                          |                 |                          |
|         | 1. Goatary  | No. of SHGs/ No. of beneficiaries | 2/20                  | 0.50                     | 1/10                   | 0.25                     | 2/20            | 0.50                     |
|         | 2. Back Yard Poultry                                | -do-                              | 2/20                  | 0.50                     | 1/10                   | 0.25                     | 2/20            | 0.50                     |
|         | 3. Poultry (Broiler)                                | -do-                              | 2/20                  | 0.50                     | 1/10                   | 0.25                     | 1/10            | 0.25                     |
|         | 4. Black Smithy                                     | -do-                              | 2/20                  | 0.50                     | 0                      | 0.00                     | 1/10            | 0.25                     |

|     |   |                              |        |      |       |      |        |      |
|-----|---|------------------------------|--------|------|-------|------|--------|------|
|     | 5. Rope Making (Linseed)                    | -do-                         | 2/20   | 0.50 | 0     | 0.00 | 1/10   | 0.25 |
|     | 6. Tailoring                                | -do-                         | 2/20   | 0.50 | 0     | 0.00 | 1/10   | 0.25 |
|     | 7. Vermi composting                         | -do-                         | 2/20   | 0.50 | 0     | 0.00 | 1/10   | 0.25 |
|     | 8. Fruit Processing                         | -do-                         | 2/20   | 0.50 | 1/10  | 0.25 | 1/10   | 0.25 |
|     | 9. Seed Bank                                | -do-                         | 2/20   | 0.53 | 1/10  | 0.24 | 2/20   | 0.62 |
|     | <b>Sub Total</b>                            |                              | 18/180 | 4.53 | 5/50  | 1.24 | 12/120 | 3.12 |
| III | <b><u>Agriculture Production System</u></b> |                              |        |      |       |      |        |      |
|     | <b>(1)SMC Area:</b>                         |                              |        |      |       |      |        |      |
|     | <b>A- Crop Demonstrations- (Crop Wise)</b>  |                              |        |      |       |      |        |      |
|     | 1. Lentil                                   | No. of farmers /Area<br>(ha) | 7/2.8  | 0.33 | 2/0.8 | 0.09 | 5/2.0  | 0.24 |
|     | 2. Chickpea                                 | -do-                         | 6/2.4  | 0.33 | 2/0.8 | 0.11 | 5/2.0  | 0.27 |
|     | 3. Field Pea                                | -do-                         | 6/2.4  | 0.34 | 2/0.8 | 0.11 | 4/1.6  | 0.23 |
|     | 4. Til                                      | -do-                         | 6/2.4  | 0.10 | 2/0.8 | 0.03 | 4/1.6  | 0.07 |
|     | 5. Urd                                      | -do-                         | 6/2.4  | 0.21 | 2/0.8 | 0.07 | 4/1.6  | 0.14 |
|     | 6. Moong                                    | -do-                         | 6/2.4  | 0.22 | 2/0.8 | 0.07 | 4/1.6  | 0.15 |
|     | 7. Arhar                                    | -do-                         | 6/2.4  | 0.18 | 2/0.8 | 0.06 | 4/1.6  | 0.12 |
|     | 8. Wheat                                    | -do-                         | 6/2.4  | 0.35 | 2/0.8 | 0.12 | 4/1.6  | 0.23 |
|     | <b>(2) Water Resource Area:</b>             |                              |        |      |       |      |        |      |
|     | <b>B- Production of seeds</b>               |                              |        |      |       |      |        |      |
|     | 1. Lentil                                   | No. of farmers /Area<br>(ha) | 6/2.4  | 0.28 | 2/0.8 | 0.09 | 4/1.6  | 0.19 |
|     | 2. Chickpea                                 | -do-                         | 6/2.4  | 0.33 | 2/0.8 | 0.11 | 4/1.6  | 0.22 |
|     | 3. Field Pea                                | -do-                         | 6/2.4  | 0.34 | 2/0.8 | 0.11 | 4/1.6  | 0.23 |
|     | 4. Til                                      | -do-                         | 6/2.4  | 0.10 | 2/0.8 | 0.03 | 4/1.6  | 0.07 |

|  |  |                |       |              |       |              |       |              |
|--|--|----------------|-------|--------------|-------|--------------|-------|--------------|
|  | 5. Urd                                 | -do-           | 6/2.4 | 0.21         | 2/0.8 | 0.07         | 4/1.6 | 0.14         |
|  | 6. Moong                               | -do-           | 6/2.4 | 0.22         | 2/0.8 | 0.07         | 4/1.6 | 0.15         |
|  | 7. Arhar                               | -do-           | 6/2.4 | 0.18         | 2/0.8 | 0.06         | 4/1.6 | 0.12         |
|  | 8. Wheat                               | -do-           | 6/2.4 | 0.35         | 2/0.8 | 0.12         | 4/1.6 | 0.23         |
|  | <b><u>Agro forestry:-</u></b>          |                |       |              |       |              |       |              |
|  | 1- Aonla                               | Area in ha     | 2     | 0.36         | 0     | 0.00         | 1     | 0.18         |
|  | 2. Guava                               | Area in ha     | 1     | 0.18         | 0     | 0.00         | 1     | 0.18         |
|  | <b><u>Live Stock Management</u></b>    |                |       |              |       |              |       |              |
|  | A. fodder production                   | No. of Units   | 24    | 0.14         | 4     | 0.02         | 10    | 0.06         |
|  | B. Vaccination/Medication              | No. of Animals | 28    | 0.02         | 15    | 0.01         | 22    | 0.01         |
|  | C. Artificial Insemination             | No. of Animals | 28    | 0.01         | 15    | 0.01         | 22    | 0.01         |
|  | D. Natural Service.                    | He Buffalo     | 1     | 0.24         | 0     | 0.00         | 1     | 0.24         |
|  | <b>Total for Ag. Production System</b> |                |       | <b>5.03</b>  |       | <b>1.38</b>  |       | <b>3.47</b>  |
|  | <b>Grand Total</b>                     |                |       | <b>37.71</b> |       | <b>10.35</b> |       | <b>26.01</b> |

**Micro-watershed wise details of Watershed Development Activities proposed in IWMP-XVIII, Mahoba**

**Cont.....**

| Sr.<br>No. | Particular of Measures/Activities                   | Unit                                 | Jujhar 2C1B3f2e |                       | Dharaun 2C1B3f2f |                       |
|------------|---|--------------------------------------|-----------------|-----------------------|------------------|-----------------------|
|            |   | No., Length/ ha,<br>Volume           | Qanty.          | Cost (Rs.<br>In lakh) | Qanty.           | Cost (Rs.<br>In lakh) |
| I          | <b>Soil &amp; Water Conservation Measures</b>       |                                      |                 |                       |                  |                       |
|            | <b>A- Moisture Conservation Measures</b>            |                                      |                 |                       |                  |                       |
|            | 1. Peripheral Bund (with Sodding)                   | cum.                                 |                 |                       | 25326            | 11.75                 |
|            | 2. Marginal Bund (with Sodding)                     | cum.                                 | 12945           | 5.34                  |                  |                       |
|            | 3. Submergence Bundhi (with Sodding)                | cum.                                 | 4424            | 2.74                  |                  |                       |
|            | <b>B- Water Resource Development</b>                |                                      |                 |                       |                  |                       |
|            | 1. Check Dam / Drop Spill Way                       | cum                                  | 19223           | 3.31                  | 3021             | 1.35                  |
|            | 1a- Water storing capacity                          | cum.                                 | 4140            |                       | 700              |                       |
|            | 1b. Area proposed for irrigation                    | ha                                   | 6.9             |                       | 1                |                       |
|            | 2. Water Harvesting Bund with surplushing structure | cum.                                 |                 |                       |                  |                       |
|            | 2a-Water storing capacity                           | cum.                                 |                 |                       |                  |                       |
|            | 2b. Area proposed for irrigation by WHB             | ha                                   |                 |                       |                  |                       |
|            | <b>Sub Total</b>                                    |                                      | <b>20.03</b>    |                       | <b>13.10</b>     |                       |
| II         | <b>Livelihood for landless People</b>               |                                      |                 |                       |                  |                       |
|            | 1. Goatary  | No. of SHGs/ No. of<br>beneficiaries | 2/20            | 0.50                  | 1/10             | 0.25                  |
|            | 2. Back Yard Poultry                                | -do-                                 | 2/20            | 0.50                  | 1/10             | 0.25                  |
|            | 3. Poultry (Broiler)                                | -do-                                 | 1/10            | 0.25                  | 1/10             | 0.25                  |
|            | 4. Black Smithy                                     | -do-                                 | 1/10            | 0.25                  | 1/10             | 0.25                  |
|            | 5. Rope Making (Linseed)                            | -do-                                 | 1/10            | 0.25                  | 0                | 0.00                  |
|            | 6. Tailoring  | -do-                                 | 1/10            | 0.25                  | 1/10             | 0.25                  |

|            |   |                              |        |      |       |      |
|------------|---|------------------------------|--------|------|-------|------|
|            | 7. Vermi composting                         | -do-                         | 1/10   | 0.25 | 1/10  | 0.25 |
|            | 8. Fruit Processing                         | -do-                         | 2/20   | 0.50 | 1/10  | 0.25 |
|            | 9. Seed Bank                                | -do-                         | 2/20   | 0.47 | 1/10  | 0.36 |
|            | <b>Sub Total</b>                            |                              | 13/130 | 3.22 | 8/80  | 2.11 |
| <b>III</b> | <b><u>Agriculture Production System</u></b> |                              |        |      |       |      |
|            | <b>(1)SMC Area:</b>                         |                              |        |      |       |      |
|            | <b>A- Crop Demonstrations- (Crop Wise)</b>  |                              |        |      |       |      |
|            | 1. Lentil                                   | No. of farmers /Area<br>(ha) | 5/2.0  | 0.24 | 4/1.6 | 0.19 |
|            | 2. Chickpea                                 | -do-                         | 5/2.0  | 0.27 | 3/1.2 | 0.16 |
|            | 3. Field Pea                                | -do-                         | 5/2.0  | 0.29 | 3/1.2 | 0.17 |
|            | 4. Til                                      | -do-                         | 5/2.0  | 0.08 | 3/1.2 | 0.05 |
|            | 5. Urd                                      | -do-                         | 4/1.6  | 0.14 | 3/1.2 | 0.11 |
|            | 6. Moong                                    | -do-                         | 4/1.6  | 0.15 | 3/1.2 | 0.11 |
|            | 7. Arhar                                    | -do-                         | 4/1.6  | 0.12 | 3/1.2 | 0.09 |
|            | 8. Wheat                                    | -do-                         | 4/1.6  | 0.23 | 3/1.2 | 0.17 |
|            | <b>(2) Water Resource Area:</b>             |                              |        |      |       |      |
|            | <b>B- Production of seeds</b>               |                              |        |      |       |      |
|            | 1. Lentil                                   | No. of farmers /Area<br>(ha) | 4/1.6  | 0.19 | 3/1.2 | 0.14 |
|            | 2. Chickpea                                 | -do-                         | 4/1.6  | 0.22 | 3/1.2 | 0.16 |
|            | 3. Field Pea                                | -do-                         | 4/1.6  | 0.23 | 3/1.2 | 0.17 |
|            | 4. Til                                      | -do-                         | 4/1.6  | 0.07 | 3/1.2 | 0.05 |
|            | 5. Urd                                      | -do-                         | 4/1.6  | 0.14 | 3/1.2 | 0.11 |

|  |  |                |       |              |       |              |
|--|--|----------------|-------|--------------|-------|--------------|
|  | 6. Moong                               | -do-           | 4/1.6 | 0.15         | 3/1.2 | 0.11         |
|  | 7. Arhar                               | -do-           | 4/1.6 | 0.12         | 3/1.2 | 0.09         |
|  | 8. Wheat                               | -do-           | 4/1.6 | 0.23         | 3/1.2 | 0.17         |
|  | <b><u>Agro forestry:-</u></b>          |                |       |              |       |              |
|  | 1- Aonla                               | Area in ha     | 1     | 0.18         | 1     | 0.18         |
|  | 2. Guava                               | Area in ha     | 1     | 0.18         | 0     | 0.00         |
|  | <b><u>Live Stock Management</u></b>    |                |       |              |       |              |
|  | A. fodder production                   | No. of Units   | 14    | 0.08         | 14    | 0.08         |
|  | B. Vaccination/Medication              | No. of Animals | 25    | 0.02         | 14    | 0.01         |
|  | C. Artificial Insemination             | No. of Animals | 25    | 0.01         | 14    | 0.01         |
|  | D. Natural Service.                    | He Buffalo     | 1     | 0.24         | 0     | 0.00         |
|  | <b>Total for Ag. Production System</b> |                |       | <b>3.58</b>  |       | <b>2.34</b>  |
|  | <b>Grand Total</b>                     |                |       | <b>26.82</b> |       | <b>17.55</b> |

**Micro-watershed wise details of Watershed Development Activities proposed in IWMP-XVIII, Mahoba**

**Cont.....**

| Sr. No . | Particular of Measures/Activities                   | Unit | Babedi<br>2C1B3k1b         |        | Surha<br>2C1B3k1c        |            | Kauhari<br>2C1B3k1d      |            | Pindari<br>2C1B3k2a      |            | Singhanpur<br>Baghari<br>2C1B3k2b |            |
|----------|---|------|----------------------------|--------|--------------------------|------------|--------------------------|------------|--------------------------|------------|-----------------------------------|------------|
|          |   |      | No., Length/<br>ha, Volume | Qanty. | Cost<br>(Rs. In<br>lakh) | Qant<br>y. | Cost<br>(Rs. In<br>lakh) | Qant<br>y. | Cost<br>(Rs. In<br>lakh) | Qant<br>y. | Cost<br>(Rs. In<br>lakh)          | Qant<br>y. |
| I        | <b>Soil &amp; Water Conservation Measures</b>       |      |                            |        |                          |            |                          |            |                          |            |                                   |            |
|          | <b>A- Moisture Conservation Measures</b>            |      |                            |        |                          |            |                          |            |                          |            |                                   |            |
|          | 1. Peripheral Bund (with Sodding)                   | cum. | 14712                      | 6.07   | 15781                    | 6.50       | 20804                    | 8.58       | -                        | -          | 9070                              | 2.90       |
|          | 2. Marginal Bund (with Sodding)                     | cum. | 15362                      | 6.33   | 2484                     | 1.03       | 8141                     | 3.36       | 11925                    | 4.92       | 450                               | 1.02       |
|          | 3. Submergence Bundhi (with Sodding)                | cum. | 18000                      | 7.42   | 7650                     | 3.15       | 18734                    | 7.72       | 3528                     | 1.45       | 9450                              | 3.90       |
|          | <b>B- Water Resource Development</b>                |      |                            |        |                          |            |                          |            |                          |            |                                   |            |
|          | 1. Check Dam / Drop Spill Way                       | cum  | 7580                       | 5.72   | 10298                    | 6.85       | 18500                    | 11.59      | 12843                    | 6.73       | 15215                             | 8.21       |
|          | 1a- Water storing capacity                          | cum. | 900                        | -      | 3600                     | -          | 5400                     | -          | 4500                     | -          | 4950                              | -          |
|          | 1b. Area proposed for irrigation                    | ha   | 2                          | -      | 6                        | -          | 9                        | -          | 8                        | -          | 8                                 | -          |
|          | 2. Water Harvesting Bund with surplushing structure | cum. | -                          | -      | -                        | -          | -                        | -          | -                        | -          | 2100                              | 1.91       |
|          | 2a-Water storing capacity                           | cum. | -                          | -      | -                        | -          | -                        | -          | -                        | -          | 700                               | -          |
|          | 2b. Area proposed for irrigation by WHB             | ha   | -                          | -      | -                        | -          | -                        | -          | -                        | -          | 1                                 | -          |

|     |  |   |               |              |                    |              |           |              |             |              |                    |              |
|-----|--|---|---------------|--------------|--------------------|--------------|-----------|--------------|-------------|--------------|--------------------|--------------|
|     | <b>Sub Total</b>                             |   |               | <b>25.54</b> |                    | <b>17.54</b> |           | <b>31.25</b> |             | <b>13.10</b> |                    | <b>17.94</b> |
| II  | <b><u>Livelihood for landless People</u></b> |   |               |              |                    |              |           |              |             |              |                    |              |
|     | 1. Goatary                                   | No. of SHGs/<br>No. of<br>beneficiaries | 2/20          | 0.50         | 2/20               | 0.50         | 3/30      | 0.75         | 1/10        | 0.25         | 2/20               | 0.50         |
|     | 2. Back Yard Poultry                         | -do-                                    | 2/20          | 0.50         | 1/10               | 0.25         | 2/20      | 0.50         | 1/10        | 0.25         | 2/20               | 0.50         |
|     | 3. Poultry (Broiler)                         | -do-                                    | 2/20          | 0.50         | 1/10               | 0.25         | 2/20      | 0.50         | 1/10        | 0.25         | 1/10               | 0.25         |
|     | 4. Black Smithy                              | -do-                                    | 1/10          | 0.25         | 1/10               | 0.25         | 2/20      | 0.50         | 1/10        | 0.25         | 1/10               | 0.25         |
|     | 5. Rope Making (Linseed)                     | -do-                                    | 1/10          | 0.25         | 1/10               | 0.25         | 2/20      | 0.50         | 1/10        | 0.25         | 1/10               | 0.25         |
|     | 6. Tailoring                                 | -do-                                    | 2/20          | 0.50         | 1/10               | 0.25         | 2/20      | 0.50         | 0           | 0.00         | 1/10               | 0.25         |
|     | 7. Vermi composting                          | -do-                                    | 2/20          | 0.50         | 1/10               | 0.25         | 2/20      | 0.50         | 1/10        | 0.25         | 1/10               | 0.25         |
|     | 8. Fruit Processing                          | -do-                                    | 2/20          | 0.50         | 1/10               | 0.25         | 2/20      | 0.50         | 1/10        | 0.25         | 1/10               | 0.25         |
|     | 9. Seed Bank                                 | -do-                                    | 2/20          | 0.60         | 2/20               | 0.57         | 3/30      | 0.77         | 1/10        | 0.36         | 1/10               | 0.38         |
|     | <b>Sub Total</b>                             |   | <b>16/160</b> | <b>4.10</b>  | <b>11/11<br/>0</b> | <b>2.82</b>  | <b>20</b> | <b>5.02</b>  | <b>8/80</b> | <b>2.11</b>  | <b>12/12<br/>0</b> | <b>2.88</b>  |
| III | <b><u>Agriculture Production System</u></b>  |   |               |              |                    |              |           |              |             |              |                    |              |
|     | (1)SMC Area:                                 |   |               |              |                    |              |           |              |             |              |                    |              |
|     | <b>A- Crop Demonstrations- (Crop Wise)</b>   |   |               |              |                    |              |           |              |             |              |                    |              |
|     | 1. Lentil                                    | No. of farmers /Area (ha)               | 7/2.8         | 0.33         | 5/2.0              | 0.24         | 7/2.8     | 0.33         | 4/1.6       | 0.19         | 5/2.0              | 0.24         |
|     | 2. Chickpea                                  | -do-                                    | 7/2.8         | 0.38         | 5/2.0              | 0.27         | 7/2.8     | 0.38         | 4/1.6       | 0.22         | 5/2.0              | 0.27         |
|     | 3. Field Pea                                 | -do-                                    | 7/2.8         | 0.40         | 5/2.0              | 0.29         | 7/2.8     | 0.40         | 4/1.6       | 0.23         | 5/2.0              | 0.29         |
|     | 4. Til                                       | -do-                                    | 6/2.4         | 0.10         | 5/2.0              | 0.08         | 7/2.8     | 0.12         | 4/1.6       | 0.07         | 5/2.0              | 0.08         |
|     | 5. Urd                                       | -do-                                    | 6/2.4         | 0.21         | 4/1.6              | 0.14         | 7/2.8     | 0.25         | 4/1.6       | 0.14         | 5/2.0              | 0.18         |

|  |                           |       |              |       |              |       |              |       |              |       |              |
|--|---------------------------|-------|--------------|-------|--------------|-------|--------------|-------|--------------|-------|--------------|
| 6. Moong                               | -do-                      | 6/2.4 | 0.22         | 4/1.6 | 0.15         | 6/2.4 | 0.22         | 4/1.6 | 0.15         | 5/2.0 | 0.18         |
| 7. Arhar                               | -do-                      | 6/2.4 | 0.18         | 4/1.6 | 0.12         | 6/2.4 | 0.18         | 3/1.2 | 0.09         | 4/1.6 | 0.12         |
| 8. Wheat                               | -do-                      | 6/2.4 | 0.35         | 4/1.6 | 0.23         | 6/2.4 | 0.35         | 3/1.2 | 0.17         | 4/1.6 | 0.23         |
| <b>(2) Water Resource Area:</b>        |                           |       |              |       |              |       |              |       |              |       |              |
| <b>B- Production of seeds</b>          |                           |       |              |       |              |       |              |       |              |       |              |
| 1. Lentil                              | No. of farmers /Area (ha) | 5/2.0 | 0.24         | 4/1.6 | 0.19         | 6/2.4 | 0.28         | 3/1.2 | 0.14         | 4/1.6 | 0.19         |
| 2. Chickpea                            | -do-                      | 5/2.0 | 0.27         | 4/1.6 | 0.22         | 6/2.4 | 0.33         | 3/1.2 | 0.16         | 4/1.6 | 0.22         |
| 3. Field Pea                           | -do-                      | 5/2.0 | 0.29         | 4/1.6 | 0.23         | 6/2.4 | 0.34         | 3/1.2 | 0.17         | 4/1.6 | 0.23         |
| 4. Til                                 | -do-                      | 5/2.0 | 0.08         | 4/1.6 | 0.07         | 6/2.4 | 0.10         | 3/1.2 | 0.05         | 4/1.6 | 0.07         |
| 5. Urd                                 | -do-                      | 5/2.0 | 0.18         | 4/1.6 | 0.14         | 6/2.4 | 0.21         | 3/1.2 | 0.11         | 4/1.6 | 0.14         |
| 6. Moong                               | -do-                      | 5/2.0 | 0.18         | 4/1.6 | 0.15         | 6/2.4 | 0.22         | 3/1.2 | 0.11         | 4/1.6 | 0.15         |
| 7. Arhar                               | -do-                      | 5/2.0 | 0.15         | 4/1.6 | 0.12         | 6/2.4 | 0.18         | 3/1.2 | 0.09         | 4/1.6 | 0.12         |
| 8. Wheat                               | -do-                      | 5/2.0 | 0.29         | 4/1.6 | 0.23         | 6/2.4 | 0.35         | 3/1.2 | 0.17         | 4/1.6 | 0.23         |
| <b>Agro forestry:-</b>                 |                           |       |              |       |              |       |              |       |              |       |              |
| 1- Aonla                               | Area in ha                | 1     | 0.18         | 1     | 0.18         | 2     | 0.36         | 0     | 0.00         | 1     | 0.18         |
| 2. Guava                               | Area in ha                | 1     | 0.18         | 0     | 0.00         | 2     | 0.36         | 0     | 0.00         | 0     | 0.00         |
| <b>Live Stock Management</b>           |                           |       |              |       |              |       |              |       |              |       |              |
| A. fodder production                   | No. of Units              | 16    | 0.10         | 13    | 0.08         | 21    | 0.13         | 11    | 0.07         | 13    | 0.08         |
| B. Vaccination/Medication              | No. of Animals            | 16    | 0.01         | 13    | 0.01         | 21    | 0.01         | 11    | 0.01         | 14    | 0.01         |
| C. Artificial Insemination             | No. of Animals            | 16    | 0.01         | 13    | 0.01         | 21    | 0.01         | 11    | 0.00         | 14    | 0.01         |
| D. Natural Service.                    | He Buffalo                | 1     | 0.24         | 0     | 0.00         | 2     | 0.48         | 0     | 0.00         | 0     | 0.00         |
| <b>Total for Ag. Production System</b> |                           |       | <b>4.56</b>  |       | <b>3.13</b>  |       | <b>5.58</b>  |       | <b>2.34</b>  |       | <b>3.20</b>  |
| <b>Total</b>                           |                           |       | <b>34.20</b> |       | <b>23.49</b> |       | <b>41.85</b> |       | <b>17.55</b> |       | <b>24.03</b> |

**Micro-watershed wise details of Watershed Development Activities proposed in IWMP-XVIII, Mahoba**

**Cont...**

| Sr. No . | Particular of Measures/Activities             | Unit | Kamalpura 2C1B3k2c      |         | Shivhara 2C1B3k2d  |        | Bamhaurikaji 2C1B3k2e |        | Gahra 2C1B3k2f     |        | IWMP-VIII          |        |
|----------|---|------|-------------------------|---------|--------------------|--------|-----------------------|--------|--------------------|--------|--------------------|--------|
|          |   |      | No., Length/ ha, Volume | Qanty . | Cost (Rs. In lakh) | Qanty. | Cost (Rs. In lakh)    | Qanty. | Cost (Rs. In lakh) | Qanty. | Cost (Rs. In lakh) | Qanty. |
| I        | <b>Soil &amp; Water Conservation Measures</b> |      |                         |         |                    |        |                       |        |                    |        |                    |        |
|          | <b>A- Moisture Conservation Measures</b>      |      |                         |         |                    |        |                       |        |                    |        |                    |        |
|          | 1. Peripheral Bund (with Sodding)             | cum. | 6818                    | 2.81    | 3970               | 4.61   | 2204                  | 0.91   | 1063               | 0.44   | 115825             | 51.67  |
|          | 2. Marginal Bund (with Sodding)               | cum. | -                       | -       | 6865               | 2.83   | -                     | -      | 5168               | 1.69   | 143078             | 58.95  |
|          | 3. Submergence Bundhi (with Sodding)          | cum. | 23322                   | 9.62    | 2756               | 1.14   | 14123                 | 5.82   | 9460               | 3.90   | 126468             | 58.77  |
|          | <b>B- Water Resource Development</b>          |      |                         |         |                    |        |                       |        |                    |        |                    |        |
|          | 1. Check Dam / Drop Spill Way                 | cum  | 75130                   | 28.43   | 24438              | 15.22  | 27500                 | 16.45  | 16590              | 10.57  | 306230             | 188.44 |
|          | 1a- Water storing capacity                    | cum. | 9900                    | -       | 4500               | -      | 4950                  | -      | 4050               | -      | 76300              | 0.00   |
|          | 1b. Area proposed for irrigation              | ha   | 17                      | -       | 8                  | -      | 8                     | -      | 7                  | -      | 127                | 0.00   |
|          | 2. Water                                      | cum. | -                       | -       | -                  | -      | -                     | -      | -                  | -      | 8311               | 10.63  |

|     |   |   |               |              |               |              |               |              |               |              |                 |               |
|-----|---|---|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|-----------------|---------------|
|     | Harvesting Bund<br>with surplushing<br>structure    |   |               |              |               |              |               |              |               |              |                 |               |
|     | 2a-Water storing<br>capacity                        | cum.                                    | -             | -            | -             | -            | -             | -            | -             | -            | 4310            | 0.00          |
|     | 2b. Area<br>proposed for<br>irrigation by<br>WHB    | ha                                      | -             | -            | -             | -            | -             | -            | -             | -            | 7               | 0.00          |
|     | <b>Sub Total</b>                                    |   |               | <b>40.86</b> |               | <b>23.79</b> |               | <b>23.18</b> |               | <b>16.60</b> |                 | <b>368.46</b> |
| II  | <b><u>Livelihood for<br/>landless People</u></b>    |   |               |              |               |              |               |              |               |              |                 |               |
|     | 1. Goatary  | No. of SHGs/<br>No. of<br>beneficiaries | 3/30          | 0.75         | 2/20          | 0.50         | 2/20          | 0.50         | 2/20          | 0.50         | 33/330          | 8.25          |
|     | 2. Back Yard<br>Poultry                             | -do-                                    | 3/30          | 0.75         | 2/20          | 0.50         | 2/20          | 0.50         | 1/10          | 0.25         | 30/300          | 7.50          |
|     | 3. Poultry<br>(Broiler)                             | -do-                                    | 3/30          | 0.75         | 2/20          | 0.50         | 2/20          | 0.50         | 1/10          | 0.25         | 27/270          | 6.75          |
|     | 4. Black Smithy                                     | -do-                                    | 3/30          | 0.75         | 1/10          | 0.25         | 1/10          | 0.25         | 1/10          | 0.25         | 21/210          | 5.25          |
|     | 5. Rope Making<br>(Linseed)                         | -do-                                    | 2/20          | 0.50         | 1/10          | 0.25         | 1/10          | 0.25         | 1/10          | 0.25         | 17/170          | 4.25          |
|     | 6. Tailoring  | -do-                                    | 3/30          | 0.75         | 1/10          | 0.25         | 1/10          | 0.25         | 1/10          | 0.25         | 21/210          | 5.25          |
|     | 7. Vermi<br>composting                              | -do-                                    | 3/30          | 0.75         | 2/20          | 0.50         | 2/20          | 0.50         | 1/10          | 0.25         | 26/260          | 6.50          |
|     | 8. Fruit<br>Processing                              | -do-                                    | 3/30          | 0.75         | 2/20          | 0.50         | 2/20          | 0.50         | 1/10          | 0.25         | 28/280          | 7.00          |
|     | 9. Seed Bank  | -do-                                    | 3/30          | 0.82         | 2/20          | 0.57         | 2/20          | 0.48         | 2/20          | 0.42         | 33/330          | 8.47          |
|     | <b>Sub Total</b>                                    |   | <b>26/260</b> | <b>6.57</b>  | <b>15/150</b> | <b>3.82</b>  | <b>15/150</b> | <b>3.73</b>  | <b>11/110</b> | <b>2.67</b>  | <b>236/2360</b> | <b>59.22</b>  |
| III | <b><u>Agriculture<br/>Production<br/>System</u></b> |   |               |              |               |              |               |              |               |              |                 |               |

|  |  |                           |       |      |       |      |       |      |       |      |              |
|--|--|---------------------------|-------|------|-------|------|-------|------|-------|------|--------------|
|  | <b>(1)SMC Area:</b>                        |                           |       |      |       |      |       |      |       |      |              |
|  | <b>A- Crop Demonstrations- (Crop Wise)</b> |                           |       |      |       |      |       |      |       |      |              |
|  | 1. Lentil                                  | No. of farmers /Area (ha) | 9/3.6 | 0.43 | 6/2.4 | 0.28 | 9/3.6 | 0.28 | 5/2.0 | 0.24 | 95/38 4.51   |
|  | 2. Chickpea                                | -do-                      | 9/3.6 | 0.49 | 9/3.6 | 0.33 | 9/3.6 | 0.33 | 5/2.0 | 0.27 | 93/37.2 5.06 |
|  | 3. Field Pea                               | -do-                      | 9/3.6 | 0.52 | 9/3.6 | 0.34 | 5/2.0 | 0.29 | 5/2.0 | 0.29 | 91/36.4 5.23 |
|  | 4. Til                                     | -do-                      | 9/3.6 | 0.15 | 9/3.6 | 0.10 | 5/2.0 | 0.08 | 5/2.0 | 0.08 | 90/36 1.52   |
|  | 5. Urd                                     | -do-                      | 9/3.6 | 0.32 | 9/3.6 | 0.21 | 5/2.0 | 0.18 | 5/2.0 | 0.18 | 88/35.2 3.12 |
|  | 6. Moong                                   | -do-                      | 9/3.6 | 0.33 | 5/2.0 | 0.18 | 5/2.0 | 0.18 | 4/1.6 | 0.15 | 84/33.6 3.06 |
|  | 7. Arhar                                   | -do-                      | 9/3.6 | 0.27 | 5/2.0 | 0.15 | 5/2.0 | 0.15 | 4/1.6 | 0.12 | 82/32.8 2.42 |
|  | 8. Wheat                                   | -do-                      | 9/3.6 | 0.52 | 5/2.0 | 0.29 | 5/2.0 | 0.29 | 4/1.6 | 0.23 | 81/32.4 4.68 |
|  | <b>(2) Water Resource Area:</b>            |                           |       |      |       |      |       |      |       |      |              |
|  | <b>B- Production of seeds</b>              |                           |       |      |       |      |       |      |       |      |              |
|  | 1. Lentil                                  | No. of farmers /Area (ha) | 9/3.6 | 0.43 | 5/2.0 | 0.24 | 5/2.0 | 0.24 | 4/1.6 | 0.19 | 80/32 3.79   |
|  | 2. Chickpea                                | -do-                      | 8/3.2 | 0.44 | 5/2.0 | 0.27 | 5/2.0 | 0.27 | 4/1.6 | 0.22 | 78/31.2 4.25 |
|  | 3. Field Pea                               | -do-                      | 8/3.2 | 0.46 | 5/2.0 | 0.29 | 5/2.0 | 0.29 | 4/1.6 | 0.23 | 78/31.2 4.48 |
|  | 4. Til                                     | -do-                      | 8/3.2 | 0.14 | 5/2.0 | 0.08 | 5/2.0 | 0.08 | 4/1.6 | 0.07 | 78/31.2 1.32 |
|  | 5. Urd                                     | -do-                      | 8/3.2 | 0.28 | 5/2.0 | 0.18 | 5/2.0 | 0.18 | 4/1.6 | 0.14 | 77/30.8 2.73 |
|  | 6. Moong                                   | -do-                      | 8/3.2 | 0.29 | 5/2.0 | 0.18 | 5/2.0 | 0.18 | 4/1.6 | 0.15 | 77/30.8 2.81 |
|  | 7. Arhar                                   | -do-                      | 8/3.2 | 0.24 | 5/2.0 | 0.15 | 5/2.0 | 0.15 | 4/1.6 | 0.12 | 77/30.8 2.27 |
|  | 8. Wheat                                   | -do-                      | 8/3.2 | 0.46 | 5/2.0 | 0.29 | 5/2.0 | 0.29 | 4/1.6 | 0.23 | 77/30.8 4.45 |
|  | <b>Agro forestry:-</b>                     |                           |       |      |       |      |       |      |       |      |              |

|  |                                     |                |    |              |    |              |    |              |    |              |     |               |
|--|-------------------------------------|----------------|----|--------------|----|--------------|----|--------------|----|--------------|-----|---------------|
|  | 1- Aonla                            | Area in ha     | 3  | 0.54         | 1  | 0.18         | 1  | 0.18         | 0  | 0.00         | 18  | 3.24          |
|  | 2. Guava                            | Area in ha     | 2  | 0.36         | 1  | 0.18         | 1  | 0.18         | 0  | 0.00         | 12  | 2.16          |
|  | <b><u>Live Stock Management</u></b> |                |    |              |    |              |    |              |    |              |     |               |
|  | A. fodder production                | No. of Units   | 23 | 0.14         | 11 | 0.07         | 12 | 0.07         | 9  | 0.05         | 242 | 1.45          |
|  | B. Vaccination/Medication           | No. of Animals | 29 | 0.02         | 13 | 0.01         | 10 | 0.01         | 14 | 0.01         | 327 | 0.24          |
|  | C. Artificial Insemination          | No. of Animals | 28 | 0.01         | 13 | 0.01         | 13 | 0.01         | 14 | 0.01         | 329 | 0.13          |
|  | D. Natural Service.                 | He Buffalo     | 2  | 0.48         | 1  | 0.24         | 1  | 0.24         | 0  | 0.00         | 12  | 2.88          |
| <b>Total for Ag. Production System</b> |                                     |                |    | <b>7.30</b>  |    | <b>4.25</b>  |    | <b>4.14</b>  |    | <b>2.96</b>  |     | <b>65.80</b>  |
| <b>Total</b>                           |                                     |                |    | <b>54.72</b> |    | <b>31.86</b> |    | <b>31.05</b> |    | <b>22.23</b> |     | <b>493.47</b> |

**Table 5.3: Gram Panchayat wise details of Watershed Development Activities proposed in IWMP-XVIII, Mahoba**

| Sr. No. | Particular of Measures/Activities                   | Unit | Surha                   |        | Parsaha             |              | Lilwahi            |         | Chhanikala         |         | Maheba             |             |
|---------|---|------|-------------------------|--------|---------------------|--------------|--------------------|---------|--------------------|---------|--------------------|-------------|
|         |   |      | No., Length/ ha, Volume | Qanty. | Cost (Rs. In lakh ) | Qanty .      | Cost (Rs. In lakh) | Qanty . | Cost (Rs. In lakh) | Qanty . | Cost (Rs. In lakh) | Qanty .     |
| I       | <b>Soil &amp; Water Conservation Measures</b>       |      |                         |        |                     |              |                    |         |                    |         |                    |             |
|         | <b>A- Moisture Conservation Measures</b>            |      |                         |        |                     |              |                    |         |                    |         |                    |             |
|         | 1. Peripheral Bund (with Sodding)                   | cum. | 24492                   | 10.83  | 9780                | 4.46         | 8773               | 4.00    | 817                | 0.37    | 2598               | 1.18        |
|         | 2. Marginal Bund (with Sodding)                     | cum. | 18292                   | 7.67   | 21892               | 8.92         | 19638              | 8.00    | 1828               | 0.74    | 5816               | 2.37        |
|         | 3. Submergence Bundhi (with Sodding)                | cum. | 33822                   | 14.07  | 4593                | 3.46         | 4120               | 3.10    | 383                | 0.29    | 1220               | 0.92        |
|         | <b>B- Water Resource Development</b>                |      |                         |        |                     |              |                    |         |                    |         |                    |             |
|         | 1. Check Dam / Drop Spill Way                       | cum  | 70174                   | 37.52  | 23180               | 18.58        | 20794              | 16.67   | 1935               | 1.55    | 6158               | 4.94        |
|         | 1a- Water storing capacity                          | cum. | 14668                   | 0.00   | 7924                | 0.00         | 7109               | 0.00    | 662                | 0.00    | 2105               | 0.00        |
|         | 1b. Area proposed for irrigation                    | ha   | 24                      | 0.00   | 13                  | 0.00         | 12                 | 0.00    | 1                  | 0.00    | 4                  | 0.00        |
|         | 2. Water Harvesting Bund with surplushing structure | cum. |                         |        |                     |              | 188                | 0.08    |                    |         |                    |             |
|         | 2a-Water storing capacity                           | cum. |                         |        |                     |              | 410                | 0.00    |                    |         |                    |             |
|         | 2b. Area proposed for irrigation by WHB             | ha   |                         |        |                     |              | 1                  | 0.00    |                    |         |                    |             |
|         | <b>Sub Total</b>                                    |      |                         | 70.09  |                     | <b>35.41</b> |                    |         | <b>31.85</b>       |         | <b>2.96</b>        |             |
|         |   |      |                         |        |                     |              |                    |         |                    |         |                    | <b>9.41</b> |

| II  | <u>Livelihood for landless People</u>      |                                   |        |           |        |      |        |      |       |      |       |      |
|-----|--|-----------------------------------|--------|-----------|--------|------|--------|------|-------|------|-------|------|
|     | 1. Goatary                                 | No. of SHGs/ No. of beneficiaries | 7/70   | 1.75      | 1/10   | 0.25 | 1/10   | 0.25 | 1/10  | 0.25 | 1/10  | 0.25 |
|     | 2. Back Yard Poultry                       | -do-                              | 5/50   | 1.25      | 2/20   | 0.50 | 2/20   | 0.50 | 0     | 0.00 | 1/10  | 0.25 |
|     | 3. Poultry (Broiler)                       | -do-                              | 4/40   | 1.00      | 4/40   | 1.00 | 3/30   | 0.75 | 0     | 0.00 | 1/10  | 0.25 |
|     | 4. Black Smithy                            | -do-                              | 4/40   | 1.00      | 3/30   | 0.75 | 3/30   | 0.75 | 0     | 0.00 | 0     | 0.00 |
|     | 5. Rope Making (Linseed)                   | -do-                              | 3/30   | 0.75      | 2/20   | 0.50 | 2/20   | 0.50 | 0     | 0.00 | 0     | 0.00 |
|     | 6. Tailoring                               | -do-                              | 4/40   | 1.00      | 3/30   | 0.75 | 3/30   | 0.75 | 0     | 0.00 | 0     | 0.00 |
|     | 7. Vermi composting                        | -do-                              | 7/70   | 1.75      | 3/30   | 0.75 | 3/30   | 0.75 | 0     | 0.00 | 1/10  | 0.25 |
|     | 8. Fruit Processing                        | -do-                              | 4/40   | 1.00      | 3/30   | 0.75 | 2/20   | 0.50 | 0     | 0.00 | 1/10  | 0.25 |
|     | 9. Seed Bank                               | -do-                              | 7/70   | 1.76      | 1/10   | 0.19 | 1/10   | 0.37 | 1/10  | 0.23 | 1/10  | 0.26 |
|     | <b>Sub Total</b>                           |                                   | 45/450 | 11.2<br>6 | 23/230 | 5.69 | 20/200 | 5.12 | 2/20  | 0.48 | 6/60  | 1.51 |
| III | <u>Agriculture Production System</u>       |                                   |        |           |        |      |        |      |       |      |       |      |
|     | (1)SMC Area:                               |                                   |        |           |        |      |        |      |       |      |       |      |
|     | <b>A- Crop Demonstrations- (Crop Wise)</b> |                                   |        |           |        |      |        |      |       |      |       |      |
|     | 1. Lentil                                  | No. of farmers /Area (ha)         | 19/7.6 | 0.90      | 8/3.2  | 0.38 | 6/2.4  | 0.28 | 1/0.4 | 0.05 | 3/1.2 | 0.14 |
|     | 2. Chickpea                                | -do-                              | 20/8   | 1.09      | 8/3.2  | 0.44 | 6/2.4  | 0.33 | 1/0.4 | 0.05 | 3/1.2 | 0.16 |
|     | 3. Field Pea                               | -do-                              | 20/8   | 1.15      | 8/3.2  | 0.46 | 6/2.4  | 0.34 | 1/0.4 | 0.06 | 2/0.8 | 0.11 |
|     | 4. Til                                     | -do-                              | 19/7.6 | 0.32      | 8/3.2  | 0.14 | 6/2.4  | 0.10 | 1/0.4 | 0.02 | 2/0.8 | 0.03 |
|     | 5. Urd                                     | -do-                              | 18/7.2 | 0.64      | 8/3.2  | 0.28 | 5/2.0  | 0.18 | 1/0.4 | 0.04 | 2/0.8 | 0.07 |
|     | 6. Moong                                   | -do-                              | 15/6   | 0.55      | 8/3.2  | 0.29 | 6/2.4  | 0.22 | 1/0.4 | 0.04 | 2/0.8 | 0.07 |

|  |                           |        |             |       |              |       |              |       |             |       |              |
|--|---------------------------|--------|-------------|-------|--------------|-------|--------------|-------|-------------|-------|--------------|
| 7. Arhar                               | -do-                      | 14/5.6 | 0.41        | 7/2.8 | 0.21         | 7/2.8 | 0.21         | 1/0.4 | 0.03        | 2/0.8 | 0.06         |
| 8. Wheat                               | -do-                      | 14/5.6 | 0.81        | 7/2.8 | 0.40         | 7/2.8 | 0.40         | 1/0.4 | 0.06        | 2/0.8 | 0.12         |
| <b>(2) Water Resource Area:</b>        |                           |        |             |       | 2.60         |       | 2.06         |       | 0.34        |       | 0.77         |
| <b>B- Production of seeds</b>          |                           |        |             |       |              |       |              |       |             |       |              |
| 1. Lentil                              | No. of farmers /Area (ha) | 14/5.6 | 0.66        | 8/3.2 | 0.38         | 6/2.4 | 0.28         | 1/0.4 | 0.05        | 2/0.8 | 0.09         |
| 2. Chickpea                            | -do-                      | 14/5.6 | 0.76        | 8/3.2 | 0.44         | 5/2.0 | 0.27         | 1/0.4 | 0.05        | 2/0.8 | 0.11         |
| 3. Field Pea                           | -do-                      | 14/5.6 | 0.80        | 8/3.2 | 0.46         | 5/2.0 | 0.29         | 1/0.4 | 0.06        | 2/0.8 | 0.11         |
| 4. Til                                 | -do-                      | 13/5.2 | 0.22        | 8/3.2 | 0.14         | 6/2.4 | 0.10         | 1/0.4 | 0.02        | 2/0.8 | 0.03         |
| 5. Urd                                 | -do-                      | 14/5.6 | 0.50        | 8/3.2 | 0.28         | 6/2.4 | 0.21         | 0     | 0.00        | 2/0.8 | 0.07         |
| 6. Moong                               | -do-                      | 14/5.6 | 0.51        | 8/3.2 | 0.29         | 6/2.4 | 0.22         | 0     | 0.00        | 2/0.8 | 0.07         |
| 7. Arhar                               | -do-                      | 14/5.6 | 0.41        | 8/3.2 | 0.24         | 7/2.8 | 0.21         | 0     | 0.00        | 2/0.8 | 0.06         |
| 8. Wheat                               | -do-                      | 15/6   | 0.87        | 8/3.2 | 0.46         | 7/2.8 | 0.40         | 0     | 0.00        | 2/0.8 | 0.12         |
| <b>Agro forestry:-</b>                 |                           |        |             |       |              |       |              |       |             |       |              |
| 1- Aonla                               | Area in ha                | 0      | 0.00        | 2     | 0.36         | 3     | 0.54         | 0     | 0.00        | 1     | 0.18         |
| 2. Guava                               | Area in ha                | 0      | 0.00        | 2     | 0.36         | 1     | 0.18         | 0     | 0.00        | 0     | 0.00         |
| <b>Live Stock Management</b>           |                           |        |             |       |              |       |              |       |             |       |              |
| A. fodder production                   | No. of Units              | 0      | 0.00        | 12    | 0.07         | 28    | 0.17         | 0     | 0.00        | 7     | 0.04         |
| B. Vaccination/Medication              | No. of Animals            | 15     | 0.01        | 10    | 0.01         | 11    | 0.02         | 15    | 0.01        | 15    | 0.01         |
| C. Artificial Insemination             | No. of Animals            | 0      | 0.00        | 15    | 0.01         | 21    | 0.01         | 15    | 0.01        | 15    | 0.01         |
| D. Natural Service.                    | He Buffalo                | 0      | 0.00        | 1     | 0.24         | 3     | 0.72         | 0     | 0.00        | 0     | 0.00         |
| <b>Total for Ag. Production System</b> |                           |        | <b>0.50</b> |       | <b>6.32</b>  |       | <b>5.69</b>  |       | <b>0.53</b> |       | <b>1.68</b>  |
| <b>Grand Total</b>                     |                           |        | <b>3.78</b> |       | <b>47.43</b> |       | <b>42.66</b> |       | <b>3.96</b> |       | <b>12.60</b> |

**Gram Panchayat wise details of Watershed Development Activities proposed in IWMP-XVIII, Mahoba**

**Cont.....**

| <b>Sr. No .</b> | <b>Particular of Measures/Activities</b>            | <b>Unit</b>                       | <b>Dharaun</b> |                           | <b>Utiyan</b>  |                           | <b>Gahra</b>   |                           | <b>Gudha</b>   |                           |
|-----------------|---|-----------------------------------|----------------|---------------------------|----------------|---------------------------|----------------|---------------------------|----------------|---------------------------|
|                 |   | <b>No., Length/ ha, Volume</b>    | <b>Qanty .</b> | <b>Cost (Rs. In lakh)</b> |
| <b>I</b>        | <b>Soil &amp; Water Conservation Measures</b>       |                                   |                |                           |                |                           |                |                           |                |                           |
|                 | <b>A- Moisture Conservation Measures</b>            |                                   |                |                           |                |                           |                |                           |                |                           |
|                 | 1. Peripheral Bund (with Sodding)                   | cum.                              | 4926           | 2.24                      | 5938           | 2.71                      | 4420           | 1.97                      | 2041           | 0.93                      |
|                 | 2. Marginal Bund (with Sodding)                     | cum.                              | 11026          | 4.49                      | 13293          | 5.42                      | 5515           | 2.27                      | 4569           | 1.86                      |
|                 | 3. Submergence Bundhi (with Sodding)                | cum.                              | 2313           | 1.74                      | 2789           | 2.10                      | 4751           | 2.21                      | 959            | 0.72                      |
|                 | <b>B- Water Resource Development</b>                |                                   |                |                           |                |                           |                |                           |                |                           |
|                 | 1. Check Dam / Drop Spill Way                       | cum                               | 11675          | 9.36                      | 14075          | 11.28                     | 11930          | 7.32                      | 4838           | 3.88                      |
|                 | 1a- Water storing capacity                          | cum.                              | 3991           | 0.00                      | 4812           | 0.00                      | 2961           | 0.00                      | 1654           | 0.00                      |
|                 | 1b. Area proposed for irrigation                    | ha                                | 7              | 0.00                      | 8              | 0.00                      | 5              | 0.00                      | 3              | 0.00                      |
|                 | 2. Water Harvesting Bund with surplushing structure | cum.                              | 6023           | 8.64                      |                |                           |                |                           |                |                           |
|                 | 2a-Water storing capacity                           | cum.                              | 3200           | 0.00                      |                |                           |                |                           |                |                           |
|                 | 2b. Area proposed for irrigation by WHB             | ha                                | 5              | 0.00                      |                |                           |                |                           |                |                           |
|                 | <b>Sub Total</b>                                    |                                   |                | <b>26.48</b>              |                | <b>21.50</b>              |                | 13.78                     |                | <b>7.39</b>               |
| <b>II</b>       | <b>Livelihood for landless People</b>               |                                   |                |                           |                |                           |                |                           |                |                           |
|                 | 1. Goatary  | No. of beneficiaries/ No. of SHGs | 2/20           | 0.50                      | 2/20           | 0.50                      | 2/20           | 0.50                      | 1/10           | 0.25                      |
|                 | 2. Back Yard Poultry                                | -do-                              | 2/20           | 0.50                      | 2/20           | 0.50                      | 2/20           | 0.50                      | 1/10           | 0.25                      |
|                 | 3. Poultry (Broiler)                                | -do-                              | 2/20           | 0.50                      | 1/10           | 0.25                      | 1/10           | 0.25                      | 1/10           | 0.25                      |

|            |   |                           |        |      |        |      |       |      |       |      |
|------------|---|---------------------------|--------|------|--------|------|-------|------|-------|------|
|            | 4. Black Smithy                             | -do-                      | 2/20   | 0.50 | 1/10   | 0.25 | 0     | 0.00 | 0     | 0.00 |
|            | 5. Rope Making (Linseed)                    | -do-                      | 1      | 0.25 | 1/10   | 0.25 | 0     | 0.00 | 0     | 0.00 |
|            | 6. Tailoring                                | -do-                      | 2/20   | 0.50 | 1/10   | 0.25 | 0     | 0.00 | 0     | 0.00 |
|            | 7. Vermi composting                         | -do-                      | 2/20   | 0.50 | 2/20   | 0.50 | 0     | 0.00 | 0     | 0.00 |
|            | 8. Fruit Processing                         | -do-                      | 2/20   | 0.50 | 2/20   | 0.50 | 2/20  | 0.50 | 1/10  | 0.25 |
|            | 9. Seed Bank                                | -do-                      | 2/20   | 0.51 | 2/20   | 0.46 | 2/20  | 0.46 | 1/10  | 0.19 |
|            | <b>Sub Total</b>                            |                           | 17/170 | 4.26 | 14/140 | 3.46 | 9/90  | 2.21 | 5/50  | 1.19 |
| <b>III</b> | <b><u>Agriculture Production System</u></b> |                           |        |      |        |      |       |      |       |      |
|            | <b>(1)SMC Area:</b>                         |                           |        |      |        |      |       |      |       |      |
|            | <b>A- Crop Demonstrations- (Crop Wise)</b>  |                           |        |      |        |      |       |      |       |      |
|            | 1. Lentil                                   | No. of farmers /Area (ha) | 7/2.8  | 0.33 | 5/2.0  | 0.24 | 5/2.0 | 0.24 | 2/0.8 | 0.09 |
|            | 2. Chickpea                                 | -do-                      | 6/2.4  | 0.33 | 5/2.0  | 0.27 | 4/1.6 | 0.22 | 2/0.8 | 0.11 |
|            | 3. Field Pea                                | -do-                      | 6/2.4  | 0.34 | 5/2.0  | 0.29 | 4/1.6 | 0.23 | 2/0.8 | 0.11 |
|            | 4. Til                                      | -do-                      | 6/2.4  | 0.10 | 5/2.0  | 0.08 | 4/1.6 | 0.07 | 2/0.8 | 0.03 |
|            | 5. Urd                                      | -do-                      | 6/2.4  | 0.21 | 5/2.0  | 0.18 | 4/1.6 | 0.14 | 2/0.8 | 0.07 |
|            | 6. Moong                                    | -do-                      | 6/2.4  | 0.22 | 5/2.0  | 0.18 | 4/1.6 | 0.15 | 2/0.8 | 0.07 |
|            | 7. Arhar                                    | -do-                      | 6/2.4  | 0.18 | 5/2.0  | 0.15 | 4/1.6 | 0.12 | 2/0.8 | 0.06 |
|            | 8. Wheat                                    | -do-                      | 6/2.4  | 0.35 | 5/2.0  | 0.29 | 3/1.2 | 0.17 | 2/0.8 | 0.12 |
|            | <b>(2) Water Resource Area:</b>             |                           |        |      |        |      |       |      |       |      |
|            | <b>B- Production of seeds</b>               |                           |        |      |        |      |       |      |       |      |
|            | 1. Lentil                                   | No. of farmers /Area (ha) | 6/2.4  | 0.28 | 5/2.0  | 0.24 | 3/1.2 | 0.14 | 2/0.8 | 0.09 |
|            | 2. Chickpea                                 | -do-                      | 6/2.4  | 0.33 | 5/2.0  | 0.27 | 3/1.2 | 0.16 | 2/0.8 | 0.11 |
|            | 3. Field Pea                                | -do-                      | 6/2.4  | 0.34 | 5/2.0  | 0.29 | 3/1.2 | 0.17 | 2/0.8 | 0.11 |

|  |  |                |       |      |              |      |              |      |              |             |
|--|--|----------------|-------|------|--------------|------|--------------|------|--------------|-------------|
|  | 4. Til                                 | -do-           | 6/2.4 | 0.10 | 5/2.0        | 0.08 | 3/1.2        | 0.05 | 2/0.8        | 0.03        |
|  | 5. Urd                                 | -do-           | 6/2.4 | 0.21 | 5/2.0        | 0.18 | 3/1.2        | 0.11 | 2/0.8        | 0.07        |
|  | 6. Moong                               | -do-           | 6/2.4 | 0.22 | 5/2.0        | 0.18 | 3/1.2        | 0.11 | 2/0.8        | 0.07        |
|  | 7. Arhar                               | -do-           | 6/2.4 | 0.18 | 5/2.0        | 0.15 | 3/1.2        | 0.09 | 1/0.4        | 0.03        |
|  | 8. Wheat                               | -do-           | 6/2.4 | 0.35 | 5/2.0        | 0.29 | 3/1.2        | 0.17 | 1/0.4        | 0.06        |
|  | <b><u>Agro forestry:-</u></b>          |                |       |      |              |      |              |      |              |             |
|  | 1- Aonla                               | Area in ha     | 1     | 0.18 | 1            | 0.18 | 0            | 0.00 | 0            | 0.00        |
|  | 2. Guava                               | Area in ha     | 1     | 0.18 | 1            | 0.18 | 0            | 0.00 | 0            | 0.00        |
|  | <b><u>Live Stock Management</u></b>    |                |       |      |              |      |              |      |              |             |
|  | A. fodder production                   | No. of Units   | 6     | 0.04 | 16           | 0.10 | 15           | 0.09 | 8            | 0.05        |
|  | B. Vaccination/Medication              | No. of Animals | 15    | 0.01 | 30           | 0.02 | 29           | 0.02 | 15           | 0.01        |
|  | C. Artificial Insemination             | No. of Animals | 15    | 0.01 | 30           | 0.01 | 30           | 0.01 | 15           | 0.01        |
|  | D. Natural Service.                    | He Buffalo     | 1     | 0.24 | 0            | 0.00 | 0            | 0.00 | 0            | 0.00        |
|  | <b>Total for Ag. Production System</b> |                |       | 4.73 |              | 3.84 |              | 2.46 |              | <b>1.32</b> |
|  | <b>Grand Total</b>                     |                |       |      | <b>35.46</b> |      | <b>28.80</b> |      | <b>18.45</b> |             |
|  |  |                |       |      |              |      |              |      |              | <b>9.90</b> |

**Gram Panchayat wise details of Watershed Development Activities proposed in IWMP-XVIII, Mahoba**

**Cont.....**

| Sr. No. | Particular of Measures/Activities                   | Unit                                 | Jujhar |                    | Ganj   |                    | Bamhauri Qazi |                    |
|---------|---|--------------------------------------|--------|--------------------|--------|--------------------|---------------|--------------------|
|         |   | No., Length/ ha, Volume              | Qanty. | Cost (Rs. In lakh) | Qanty. | Cost (Rs. In lakh) | Qanty.        | Cost (Rs. In lakh) |
| I       | <b>Soil &amp; Water Conservation Measures</b>       |                                      |        |                    |        |                    |               |                    |
|         | <b>A- Moisture Conservation Measures</b>            |                                      |        |                    |        |                    |               |                    |
|         | 1. Peripheral Bund (with Sodding)                   | cum.                                 | 1206   | 0.55               | 1485   | 0.68               | 3689          | 1.58               |
|         | 2. Marginal Bund (with Sodding)                     | cum.                                 | 2700   | 1.10               | 3323   | 1.35               | 3323          | 1.35               |
|         | 3. Submergence Bundhi (with Sodding)                | cum.                                 | 566    | 0.43               | 697    | 0.52               | 5829          | 2.64               |
|         | <b>B- Water Resource Development</b>                |                                      |        |                    |        |                    |               |                    |
|         | 1. Check Dam / Drop Spill Way                       | cum                                  | 2859   | 2.29               | 3519   | 2.82               | 3519          | 2.82               |
|         | 1a- Water storing capacity                          | cum.                                 | 977    | 0.00               | 1203   | 0.00               | 1203          | 0.00               |
|         | 1b. Area proposed for irrigation                    | ha                                   | 2      | 0.00               | 2      | 0.00               | 2             | 0.00               |
|         | 2. Water Harvesting Bund with surplushing structure | cum.                                 |        |                    |        |                    |               |                    |
|         | 2a-Water storing capacity                           | cum.                                 |        |                    |        |                    |               |                    |
|         | 2b. Area proposed for irrigation by WHB             | ha                                   |        |                    |        |                    |               |                    |
|         | <b>Sub Total</b>                                    |                                      |        | <b>4.37</b>        |        | <b>5.38</b>        |               | <b>8.40</b>        |
| II      | <b>Livelihood for landless People</b>               |                                      |        |                    |        |                    |               |                    |
|         | 1. Goatary  | No. of beneficiaries/<br>No. of SHGs | 1/10   | 0.25               | 1/10   | 0.25               | 2/20          | 0.50               |
|         | 2. Back Yard Poultry                                | -do-                                 | 1/10   | 0.25               | 1/10   | 0.25               | 1/10          | 0.25               |
|         | 3. Poultry (Broiler)                                | -do-                                 | 0      | 0.00               | 0      | 0.00               | 0             | 0.00               |
|         | 4. Black Smithy                                     | -do-                                 | 0      | 0.00               | 0      | 0.00               | 0             | 0.00               |
|         | 5. Rope Making (Linseed)                            | -do-                                 | 0      | 0.00               | 0      | 0.00               | 0             | 0.00               |

|            |   |                              |       |      |       |      |       |      |
|------------|---|------------------------------|-------|------|-------|------|-------|------|
|            | 6. Tailoring                                | -do-                         | 0     | 0.00 | 0     | 0.00 | 0     | 0.00 |
|            | 7. Vermi composting                         | -do-                         | 0     | 0.00 | 0     | 0.00 | 0     | 0.00 |
|            | 8. Fruit Processing                         | -do-                         | 0     | 0.00 | 0     | 0.00 | 0     | 0.00 |
|            | 9. Seed Bank                                | -do-                         | 1/10  | 0.20 | 1/10  | 0.36 | 2/20  | 0.60 |
|            | <b>Sub Total</b>                            |                              | 3/30  | 0.70 | 3/30  | 0.86 | 5/50  | 1.35 |
| <b>III</b> | <b><u>Agriculture Production System</u></b> |                              |       |      |       |      |       |      |
|            | <b>(1)SMC Area:</b>                         |                              |       |      |       |      |       |      |
|            | <b>A- Crop Demonstrations- (Crop Wise)</b>  |                              |       |      |       |      |       |      |
|            | 1. Lentil                                   | No. of farmers /Area<br>(ha) | 2/0.8 | 0.09 | 2/0.8 | 0.09 | 3/1.2 | 0.14 |
|            | 2. Chickpea                                 | -do-                         | 1/0.4 | 0.05 | 2/0.8 | 0.11 | 3/1.2 | 0.16 |
|            | 3. Field Pea                                | -do-                         | 1/0.4 | 0.06 | 2/0.8 | 0.11 | 3/1.2 | 0.17 |
|            | 4. Til                                      | -do-                         | 1/0.4 | 0.02 | 2/0.8 | 0.03 | 3/1.2 | 0.05 |
|            | 5. Urd                                      | -do-                         | 1/0.4 | 0.04 | 2/0.8 | 0.07 | 3/1.2 | 0.11 |
|            | 6. Moong                                    | -do-                         | 1/0.4 | 0.04 | 1/0.4 | 0.04 | 2/0.8 | 0.07 |
|            | 7. Arhar                                    | -do-                         | 1/0.4 | 0.03 | 1/0.4 | 0.03 | 2/0.8 | 0.06 |
|            | 8. Wheat                                    | -do-                         | 1/0.4 | 0.06 | 1/0.4 | 0.06 | 2/0.8 | 0.12 |
|            | <b>(2) Water Resource Area:</b>             |                              |       |      |       |      |       |      |
|            | <b>B- Production of seeds</b>               |                              |       |      |       |      |       |      |
|            | 1. Lentil                                   | No. of farmers /Area<br>(ha) | 1/0.4 | 0.05 | 1/0.4 | 0.05 | 2/0.8 | 0.09 |
|            | 2. Chickpea                                 | -do-                         | 1/0.4 | 0.05 | 1/0.4 | 0.05 | 2/0.8 | 0.11 |
|            | 3. Field Pea                                | -do-                         | 1/0.4 | 0.06 | 1/0.4 | 0.06 | 2/0.8 | 0.11 |
|            | 4. Til                                      | -do-                         | 1/0.4 | 0.02 | 1/0.4 | 0.02 | 2/0.8 | 0.03 |

|  |  |                |       |             |       |             |       |             |
|--|--|----------------|-------|-------------|-------|-------------|-------|-------------|
|  | 5. Urd                                 | -do-           | 1/0.4 | 0.04        | 1/0.4 | 0.04        | 1/0.4 | 0.04        |
|  | 6. Moong                               | -do-           | 1/0.4 | 0.04        | 1/0.4 | 0.04        | 1/0.4 | 0.04        |
|  | 7. Arhar                               | -do-           | 1/0.4 | 0.03        | 1/0.4 | 0.03        | 1/0.4 | 0.03        |
|  | 8. Wheat                               | -do-           | 1/0.4 | 0.06        | 1/0.4 | 0.06        | 1/0.4 | 0.06        |
|  | <b><u>Agro forestry:-</u></b>          |                |       |             |       |             |       |             |
|  | 1- Aonla                               | Area in ha     | 0     | 0.00        | 0     | 0.00        | 0     | 0.00        |
|  | 2. Guava                               | Area in ha     | 0     | 0.00        | 0     | 0.00        | 0     | 0.00        |
|  | <b><u>Live Stock Management</u></b>    |                |       |             |       |             |       |             |
|  | A. fodder production                   | No. of Units   | 7     | 0.04        | 10    | 0.06        | 10    | 0.06        |
|  | B. Vaccination/Medication              | No. of Animals | 15    | 0.01        | 15    | 0.01        | 15    | 0.01        |
|  | C. Artificial Insemination             | No. of Animals | 15    | 0.01        | 15    | 0.01        | 15    | 0.01        |
|  | D. Natural Service.                    | He Buffalo     | 0     | 0.00        | 0     | 0.00        | 0     | 0.00        |
|  | <b>Total for Ag. Production System</b> |                |       | <b>0.78</b> |       | <b>0.96</b> |       | <b>0.96</b> |
|  | <b>Grand Total</b>                     |                |       | <b>5.85</b> |       | <b>7.20</b> |       | <b>7.20</b> |

**Gram Panchayat wise details of Watershed Development Activities proposed in IWMP-XVIII, Mahoba**

**Cont...**

| Sr. No. | Particular of Measures/Activities                   | Unit                                 | Bagedi                  |              | Singhanpur Baghari |              | Salua              |              | Patha              |             |
|---------|---|--------------------------------------|-------------------------|--------------|--------------------|--------------|--------------------|--------------|--------------------|-------------|
|         |   |                                      | No., Length/ ha, Volume | Qanty.       | Cost (Rs. In lakh) | Qanty.       | Cost (Rs. In lakh) | Qanty.       | Cost (Rs. In lakh) | Qanty.      |
| I       | <b>Soil &amp; Water Conservation Measures</b>       |                                      |                         |              |                    |              |                    |              |                    |             |
|         | <b>A- Moisture Conservation Measures</b>            |                                      |                         |              |                    |              |                    |              |                    |             |
|         | 1. Peripheral Bund (with Sodding)                   | cum.                                 | 9878                    | 4.36         | 11299              | 4.99         | 9665               | 4.27         | 2606               | 1.15        |
|         | 2. Marginal Bund (with Sodding)                     | cum.                                 | 6893                    | 2.90         | 7885               | 3.31         | 6744               | 2.84         | 1818               | 0.76        |
|         | 3. Submergence Bundhi (with Sodding)                | cum.                                 | 13937                   | 5.75         | 15943              | 6.57         | 13636              | 5.62         | 3676               | 1.52        |
|         | <b>B- Water Resource Development</b>                |                                      |                         |              |                    |              |                    |              |                    |             |
|         | 1. Check Dam / Drop Spill Way                       | cum                                  | 28464                   | 15.02        | 32559              | 17.18        | 27850              | 14.69        | 7508               | 3.96        |
|         | 1a- Water storing capacity                          | cum.                                 | 5848                    | -            | 6689               | -            | 5721               | -            | 1543               | -           |
|         | 1b. Area proposed for irrigation                    | ha                                   | 10                      | -            | 11                 | -            | 10                 | -            | 3                  | -           |
|         | 2. Water Harvesting Bund with surplushing structure | cum.                                 | -                       | -            | 2100               | 1.91         | -                  | -            | -                  | -           |
|         | 2a-Water storing capacity                           | cum.                                 | -                       | -            | 700                | -            | -                  | -            | -                  | -           |
|         | 2b. Area proposed for irrigation by WHB             | ha                                   | -                       | -            | 1                  | -            | -                  | -            | -                  | -           |
|         | <b>Sub Total</b>                                    |                                      |                         | <b>28.02</b> |                    | <b>33.96</b> |                    | <b>27.42</b> |                    | <b>7.39</b> |
| II      | <b>Livelihood for landless People</b>               |                                      |                         |              |                    |              |                    |              |                    |             |
|         | 1. Goatary  | No. of beneficiaries/<br>No. of SHGs | 2/20                    | 0.50         | 3/30               | 0.75         | 2/20               | 0.50         | 1/10               | 0.25        |
|         | 2. Back Yard Poultry                                | -do-                                 | 2/20                    | 0.50         | 2/20               | 0.50         | 2/20               | 0.50         | 1/10               | 0.25        |
|         | 3. Poultry (Broiler)                                | -do-                                 | 2/20                    | 0.50         | 2/20               | 0.50         | 2/20               | 0.50         | 1/10               | 0.25        |

|            |   |                              |               |             |               |             |               |             |             |             |
|------------|---|------------------------------|---------------|-------------|---------------|-------------|---------------|-------------|-------------|-------------|
|            | 4. Black Smithy                             | -do-                         | 2/20          | 0.50        | 2/20          | 0.50        | 2/20          | 0.50        | 0           | 0.00        |
|            | 5. Rope Making (Linseed)                    | -do-                         | 2/20          | 0.50        | 2/20          | 0.50        | 2/20          | 0.50        | 0           | 0.00        |
|            | 6. Tailoring                                | -do-                         | 2/20          | 0.50        | 2/20          | 0.50        | 2/20          | 0.50        | 0           | 0.00        |
|            | 7. Vermi composting                         | -do-                         | 2/20          | 0.50        | 2/20          | 0.50        | 2/20          | 0.50        | 0           | 0.00        |
|            | 8. Fruit Processing                         | -do-                         | 2/20          | 0.50        | 2/20          | 0.50        | 2/20          | 0.50        | 1/10        | 0.25        |
|            | 9. Seed Bank                                | -do-                         | 2/20          | 0.50        | 3/30          | 0.90        | 2/20          | 0.41        | 1/10        | 0.19        |
|            | <b>Sub Total</b>                            |                              | <b>18/180</b> | <b>4.50</b> | <b>20/200</b> | <b>5.15</b> | <b>18/180</b> | <b>4.41</b> | <b>5/50</b> | <b>1.19</b> |
| <b>III</b> | <b><u>Agriculture Production System</u></b> |                              |               |             |               |             |               |             |             |             |
|            | <b>(1)SMC Area:</b>                         |                              |               |             |               |             |               |             |             |             |
|            | <b>A- Crop Demonstrations- (Crop Wise)</b>  |                              |               |             |               |             |               |             |             |             |
|            | 1. Lentil                                   | No. of farmers<br>/Area (ha) | 7/2.8         | 0.33        | 7/2.8         | 0.33        | 7/2.8         | 0.33        | 2/0.8       | 0.09        |
|            | 2. Chickpea                                 | -do-                         | 7/2.8         | 0.38        | 7/2.8         | 0.38        | 7/2.8         | 0.38        | 2/0.8       | 0.11        |
|            | 3. Field Pea                                | -do-                         | 7/2.8         | 0.40        | 7/2.8         | 0.40        | 6/2.4         | 0.34        | 2/0.8       | 0.11        |
|            | 4. Til                                      | -do-                         | 7/2.8         | 0.12        | 7/2.8         | 0.12        | 6/2.4         | 0.10        | 2/0.8       | 0.03        |
|            | 5. Urd                                      | -do-                         | 7/2.8         | 0.25        | 7/2.8         | 0.25        | 6/2.4         | 0.21        | 2/0.8       | 0.07        |
|            | 6. Moong                                    | -do-                         | 7/2.8         | 0.26        | 7/2.8         | 0.26        | 6/2.4         | 0.22        | 2/0.8       | 0.07        |
|            | 7. Arhar                                    | -do-                         | 6/2.4         | 0.18        | 7/2.8         | 0.21        | 6/2.4         | 0.18        | 2/0.8       | 0.06        |
|            | 8. Wheat                                    | -do-                         | 6/2.4         | 0.35        | 7/2.8         | 0.40        | 6/2.4         | 0.35        | 2/0.8       | 0.12        |
|            | <b>(2) Water Resource Area:</b>             |                              |               |             |               |             |               |             |             |             |
|            | <b>B- Production of seeds</b>               |                              |               |             |               |             |               |             |             |             |
|            | 1. Lentil                                   | No. of farmers<br>/Area (ha) | 6/2.4         | 0.28        | 6             | 0.28        | 6/2.4         | 0.28        | 2/0.8       | 0.09        |
|            | 2. Chickpea                                 | -do-                         | 6/2.4         | 0.33        | 6/2.4         | 0.33        | 6/2.4         | 0.33        | 2/0.8       | 0.11        |
|            | 3. Field Pea                                | -do-                         | 6/2.4         | 0.34        | 6/2.4         | 0.34        | 6/2.4         | 0.34        | 2/0.8       | 0.11        |
|            | 4. Til                                      | -do-                         | 6/2.4         | 0.10        | 6/2.4         | 0.10        | 6/2.4         | 0.10        | 2/0.8       | 0.03        |
|            | 5. Urd                                      | -do-                         | 6/2.4         | 0.21        | 6/2.4         | 0.21        | 6/2.4         | 0.21        | 2/0.8       | 0.07        |

|  |  |                |       |              |       |              |       |              |       |             |
|--|--|----------------|-------|--------------|-------|--------------|-------|--------------|-------|-------------|
|  | 6. Moong                               | -do-           | 6/2.4 | 0.22         | 6/2.4 | 0.22         | 6/2.4 | 0.22         | 2/0.8 | 0.07        |
|  | 7. Arhar                               | -do-           | 6/2.4 | 0.18         | 6/2.4 | 0.18         | 6/2.4 | 0.18         | 2/0.8 | 0.06        |
|  | 8. Wheat                               | -do-           | 6/2.4 | 0.35         | 6/2.4 | 0.35         | 6/2.4 | 0.35         | 1/0.4 | 0.06        |
|  | <b><u>Agro forestry:-</u></b>          |                |       |              |       |              |       |              |       |             |
|  | 1- Aonla                               | Area in ha     | 1     | 0.18         | 2     | 0.36         | 1     | 0.18         | 0     | 0.00        |
|  | 2. Guava                               | Area in ha     | 1     | 0.18         | 2     | 0.36         | 1     | 0.18         | 0     | 0.00        |
|  | <b><u>Live Stock Management</u></b>    |                |       |              |       |              |       |              |       |             |
|  | A. fodder production                   | No. of Units   |       |              |       |              |       |              |       |             |
|  | B. Vaccination/Medication              | No. of Animals | 19    | 0.11         | 23    | 0.14         | 24    | 0.14         | 5     | 0.03        |
|  | C. Artificial Insemination             | No. of Animals | 13    | 0.01         | 15    | 0.01         | 25    | 0.02         | 9     | 0.01        |
|  | D. Natural Service.                    | He Buffalo     | 19    | 0.01         | 35    | 0.01         | 24    | 0.01         | 0     | 0.00        |
|  | D. Natural Service.                    | He Buffalo     | 1     | 0.24         | 2     | 0.48         | 1     | 0.24         | 0     | 0.00        |
|  | <b>Total for Ag. Production System</b> |                |       | <b>5.00</b>  |       | <b>5.72</b>  |       | <b>4.90</b>  |       | <b>1.32</b> |
|  | <b>Total</b>                           |                |       | <b>37.53</b> |       | <b>44.84</b> |       | <b>36.72</b> |       | <b>9.90</b> |

**Gram Panchayat wise details of Watershed Development Activities proposed in IWMP-XVIII, Mahoba**

**Cont...**

| Sr. No. | Particular of Measures/Activities                   | Unit                              | Bahmaurikala            |             | Kamal Kheda        |              | IWMP-VIII          |               |
|---------|---|-----------------------------------|-------------------------|-------------|--------------------|--------------|--------------------|---------------|
|         |   |                                   | No., Length/ ha, Volume | Qanty.      | Cost (Rs. In lakh) | Qanty.       | Cost (Rs. In lakh) | Qanty.        |
| I       | <b>Soil &amp; Water Conservation Measures</b>       |                                   |                         |             |                    |              |                    |               |
|         | <b>A- Moisture Conservation Measures</b>            |                                   |                         |             |                    |              |                    |               |
|         | 1. Peripheral Bund (with Sodding)                   | cum.                              | 2724                    | 1.20        | 10162              | 4.49         | 115825             | 51.67         |
|         | 2. Marginal Bund (with Sodding)                     | cum.                              | 1901                    | 0.80        | 7092               | 2.98         | 143078             | 58.95         |
|         | 3. Submergence Bundhi (with Sodding)                | cum.                              | 3844                    | 1.58        | 14338              | 5.91         | 126468             | 58.77         |
|         | <b>B- Water Resource Development</b>                |                                   |                         |             |                    |              |                    |               |
|         | 1. Check Dam / Drop Spill Way                       | cum                               | 7850                    | 4.14        | 29283              | 15.45        | 306230             | 188.44        |
|         | 1a- Water storing capacity                          | cum.                              | 1613                    | -           | 6016               | -            | 76300              | 0.00          |
|         | 1b. Area proposed for irrigation                    | ha                                | 3                       | -           | 10                 | -            | 127                | 0.00          |
|         | 2. Water Harvesting Bund with surplushing structure | cum.                              | -                       | -           | -                  | -            | 8311               | 10.63         |
|         | 2a-Water storing capacity                           | cum.                              | -                       | -           | -                  | -            | 4310               | 0.00          |
|         | 2b. Area proposed for irrigation by WHB             | ha                                | -                       | -           | -                  | -            | 7                  | 0.00          |
|         | <b>Sub Total</b>                                    |                                   |                         | <b>7.73</b> |                    | <b>28.83</b> |                    | <b>368.46</b> |
| II      | <b>Livelihood for landless People</b>               |                                   |                         |             |                    |              |                    |               |
|         | 1. Goatary  | No. of beneficiaries/ No. of SHGs | 1/10                    | 0.25        | 2/20               | 0.50         | 33/330             | 8.25          |
|         | 2. Back Yard Poultry                                | -do-                              | 1/10                    | 0.25        | 2/20               | 0.50         | 30/300             | 7.50          |
|         | 3. Poultry (Broiler)                                | -do-                              | 1/10                    | 0.25        | 2/20               | 0.50         | 27/270             | 6.75          |

|            |   |                           |             |             |               |             |          |       |
|------------|---|---------------------------|-------------|-------------|---------------|-------------|----------|-------|
|            | 4. Black Smithy                             | -do-                      | 0           | 0.00        | 2/20          | 0.50        | 21/210   | 5.25  |
|            | 5. Rope Making (Linseed)                    | -do-                      | 0           | 0.00        | 2/20          | 0.50        | 17/170   | 4.25  |
|            | 6. Tailoring                                | -do-                      | 0           | 0.00        | 2/20          | 0.50        | 21/210   | 5.25  |
|            | 7. Vermi composting                         | -do-                      | 0           | 0.00        | 2/20          | 0.50        | 26/260   | 6.50  |
|            | 8. Fruit Processing                         | -do-                      | 1/10        | 0.25        | 2/20          | 0.50        | 28/280   | 7.00  |
|            | 9. Seed Bank                                | -do-                      | 1/10        | 0.24        | 2/20          | 0.63        | 33/330   | 8.47  |
|            | <b>Sub Total</b>                            |                           | <b>5/50</b> | <b>1.24</b> | <b>18/180</b> | <b>4.63</b> | 236/2360 | 59.22 |
| <b>III</b> | <b><u>Agriculture Production System</u></b> |                           |             |             |               |             |          |       |
|            | <b>(1)SMC Area:</b>                         |                           |             |             |               |             |          |       |
|            | <b>A- Crop Demonstrations- (Crop Wise)</b>  |                           |             |             |               |             |          |       |
|            | 1. Lentil                                   | No. of farmers /Area (ha) | 2/0.8       | 0.09        | 7/2.8         | 0.33        | 95/38    | 4.51  |
|            | 2. Chickpea                                 | -do-                      | 2/0.8       | 0.11        | 7/2.8         | 0.38        | 93/37.2  | 5.06  |
|            | 3. Field Pea                                | -do-                      | 2/0.8       | 0.11        | 7/2.8         | 0.40        | 91/36.4  | 5.23  |
|            | 4. Til                                      | -do-                      | 2/0.8       | 0.03        | 7/2.8         | 0.12        | 90/36    | 1.52  |
|            | 5. Urd                                      | -do-                      | 2/0.8       | 0.07        | 7/2.8         | 0.25        | 88/35.2  | 3.12  |
|            | 6. Moong                                    | -do-                      | 2/0.8       | 0.07        | 7/2.8         | 0.26        | 84/33.6  | 3.06  |
|            | 7. Arhar                                    | -do-                      | 2/0.8       | 0.06        | 7/2.8         | 0.21        | 82/32.8  | 2.42  |
|            | 8. Wheat                                    | -do-                      | 2/0.8       | 0.12        | 7/2.8         | 0.40        | 81/32.4  | 4.68  |
|            | <b>(2) Water Resource Area:</b>             |                           |             |             |               |             |          |       |
|            | <b>B- Production of seeds</b>               |                           |             |             |               |             |          |       |
|            | 1. Lentil                                   | No. of farmers /Area (ha) | 2/0.8       | 0.09        | 7/2.8         | 0.33        | 80/32    | 3.79  |
|            | 2. Chickpea                                 | -do-                      | 2/0.8       | 0.11        | 6/2.4         | 0.33        | 78/31.2  | 4.25  |
|            | 3. Field Pea                                | -do-                      | 2/0.8       | 0.11        | 6/2.4         | 0.34        | 78/31.2  | 4.48  |
|            | 4. Til                                      | -do-                      | 2/0.8       | 0.03        | 6/2.4         | 0.10        | 78/31.2  | 1.32  |

|  |  |                |       |              |       |              |         |               |
|--|--|----------------|-------|--------------|-------|--------------|---------|---------------|
|  | 5. Urd                                 | -do-           | 2/0.8 | 0.07         | 6/2.4 | 0.21         | 77/30.8 | 2.73          |
|  | 6. Moong                               | -do-           | 2/0.8 | 0.07         | 6/2.4 | 0.22         | 77/30.8 | 2.81          |
|  | 7. Arhar                               | -do-           | 2/0.8 | 0.06         | 6/2.4 | 0.18         | 77/30.8 | 2.27          |
|  | 8. Wheat                               | -do-           | 2/0.8 | 0.12         | 6/2.4 | 0.35         | 77/30.8 | 4.45          |
|  | <b><u>Agro forestry:-</u></b>          |                |       |              |       |              |         |               |
|  | 1- Aonla                               | Area in ha     | 0     | 0.00         | 1     | 0.18         | 18      | 3.24          |
|  | 2. Guava                               | Area in ha     | 0     | 0.00         | 1     | 0.18         | 12      | 2.16          |
|  | <b><u>Live Stock Management</u></b>    |                |       |              |       |              |         |               |
|  | A. fodder production                   | No. of Units   | 5     | 0.03         | 20    | 0.12         | 242     | 1.45          |
|  | B. Vaccination/Medication              | No. of Animals | 14    | 0.01         | 20    | 0.01         | 327     | 0.24          |
|  | C. Artificial Insemination             | No. of Animals | 0     | 0.00         | 20    | 0.01         | 329     | 0.13          |
|  | D. Natural Service.                    | He Buffalo     | 0     | 0.00         | 1     | 0.24         | 12      | 2.88          |
|  | <b>Total for Ag. Production System</b> |                |       | <b>1.38</b>  |       | <b>5.15</b>  |         | <b>65.80</b>  |
|  | <b>Total</b>                           |                |       | <b>10.35</b> |       | <b>38.61</b> |         | <b>493.47</b> |

## DESIGN AND ESTIMATES OF CHECKDAM

| <b>Design of surplusing arrangement No. 1 to be constructed along with WHB</b> |               |               |               |       |                |  |  |
|--|---------------|---------------|---------------|-------|----------------|--|--|
| <b>HYDROLOGIC DESIGN</b>   |               |               |               |       |                |  |  |
| Area (ha)  | 25            |               |               |       |                |  |  |
| slope  | 0.0021        |               |               |       |                |  |  |
| K  | 7.47          |               |               |       |                |  |  |
| a  | 0.17          |               |               |       |                |  |  |
| b  | 0.75          |               |               |       |                |  |  |
| n  | 0.96          |               |               |       |                |  |  |
| <b>Time of Concentration</b>   |               |               |               |       |                |  |  |
|  |               | Le.77         | Se-0.385      |       |                |  |  |
| <b>L (m)</b>   | 700           | <b>155.14</b> |               |       |                |  |  |
| <b>S</b>   | 0.0021        |               | <b>10.655</b> |       |                |  |  |
|  |               | hour          | Tc + b        |       | (tc+b) power n |  |  |
| <b>Tc</b>  | <b>32.185</b> | 0.5364        | 1.2864        |       | 1.274          |  |  |
| <b>Intensity</b>   |               |               |               |       |                |  |  |
|  |               | Tr power a    |               |       |                |  |  |
| Tr   | 10            | 1.4791        |               |       |                |  |  |
| <b>I</b>   |               | 8.6758        |               |       |                |  |  |
| <b>Discharge</b>   |               |               |               |       |                |  |  |
|  |               |               | Taken         |       |                |  |  |
| c  | 0.5           | Coeff         |               |       |                |  |  |
| I  | 86.758        | mm/hr         |               |       |                |  |  |
| A  | 25            | ha            |               |       |                |  |  |
| Q  | 3.0124        |               |               | Cumec |                |  |  |

| <b>HYDRAULIC DESIGN</b>         |  |  |        |       |     |     |  |  |
|---------------------------------|--|--|--------|-------|-----|-----|--|--|
| Length of crest weir (m)        |  |  | 2      |       |     |     |  |  |
| Weir height (m)                 |  |  | h      |       |     |     |  |  |
| $Q = 1.71 * L * h^{1.5}$        |  |  |        |       |     |     |  |  |
| $h^{1.5}$                       |  |  | 0.8808 |       |     |     |  |  |
|                                 |  |  |        | Taken |     |     |  |  |
| h                               |  |  | 0.919  | 0.8   | h1  |     |  |  |
| h + free board                  |  |  | 0.9649 | 0.95  |     |     |  |  |
| <b>Height of WHB</b>            |  |  | 2.35   |       |     |     |  |  |
| <b>Height of water drop (H)</b> |  |  | 1.40   |       | Say | 1.4 |  |  |

| <b>STABILITY ANALYSIS</b>          |  |  |                         |           |                 |           |                    |  |
|------------------------------------|--|--|-------------------------|-----------|-----------------|-----------|--------------------|--|
| Let                                |  |  | <b>Top width (m)</b>    | t         | <b>0.7</b>      |           |                    |  |
|                                    |  |  | <b>Bottom width (m)</b> | T         | <b>1.5</b>      |           |                    |  |
| Weight of dam per unit length (kg) |  |  | W                       | 3388      |                 | W square  | <b>11478544</b>    |  |
| Horizontal water pressure (Kg)     |  |  | P                       | 980       |                 | P square  | <b>960400</b>      |  |
| Uplift pressure (kg)               |  |  | U                       | (T*w*H)/2 | <b>1050</b>     |           |                    |  |
| Net downward force (kg)            |  |  | Wn                      | W-U       | <b>2338</b>     | Wn Square | <b>5466244</b>     |  |
| Resultant (kg)                     |  |  | R                       |           |                 |           | <b>2535.082642</b> |  |
|                                    |  |  | H                       | 1.4       |                 |           |                    |  |
|                                    |  |  | Xbar                    |           | <b>0.574242</b> |           |                    |  |
|                                    |  |  | Z                       |           | <b>0.228951</b> |           |                    |  |
| Point of Resultant (xbar+Z)        |  |  |                         |           | <b>0.803194</b> |           |                    |  |
|                                    |  |  | EA                      |           | 0.925758        |           |                    |  |
|                                    |  |  | P*H/3                   |           | 457.3333        |           |                    |  |
|                                    |  |  | W*EA                    |           | 3136.467        |           |                    |  |

|   |                      |  |                         |  |                                |                |                 |             |                         |  |  |
|---|----------------------|--|-------------------------|--|--------------------------------|----------------|-----------------|-------------|-------------------------|--|--|
|   |                      |  |                         |  | b/6                            |                | 0.25            |             |                         |  |  |
|   |                      |  |                         |  | b/2                            |                | 0.75            |             |                         |  |  |
|   | e = xbar+Z-b/2       |  |                         |  | e (OF)                         |                | 0.053194        |             |                         |  |  |
|   | fmax = Wn/b(1+6*e/b) |  |                         |  | fmax                           |                | 1890.311        |             |                         |  |  |
| <b>A Safety against sliding</b>                 |                      |  |                         |  |                                |                |                 |             |                         |  |  |
|   |                      |  |                         |  | (mu*W)/P                       |                | <b>1.192857</b> |             |                         |  |  |
| <b>B Safety against overturning</b>             |                      |  |                         |  | (W*EA)/(P*H/3)                 |                | <b>2.082255</b> |             |                         |  |  |
| <b>C Safety against Tension</b>                 |                      |  |                         |  | e< b/6 or b/6-e should be +ive |                | <b>0.196806</b> |             |                         |  |  |
| <b>D Safety against Crushing</b>                |                      |  |                         |  | Permiss comp Stress kg/sqm     | say            | <b>10000</b>    |             |                         |  |  |
|   |                      |  |                         |  | PCS-fmax should be +ive        |                | <b>8109.689</b> |             |                         |  |  |
| <b>Depth of Foundation</b>                      |                      |  |                         |  |                                |                |                 |             |                         |  |  |
|   |                      |  | Normal scour depth, dn  |  | 0.473[Q/f]power1/3             |                |                 |             |                         |  |  |
|   |                      |  | Q (cumec)               | 3.012  |                                |                |                 |             |                         |  |  |
|   |                      |  | Q (Cusec)               | 106.3  |                                |                |                 |             |                         |  |  |
|   |                      |  | f is silt factor, take= |  | 1                              |                |                 |             |                         |  |  |
|   |                      |  | [q/f]                   |  | 106.302                        |                |                 |             |                         |  |  |
|   |                      |  | [q/f] power1/3          |  | 4.73711                        |                |                 |             |                         |  |  |
|   |                      |  | dn (ft)                 |  | 2.24065                        |                |                 |             |                         |  |  |
|   |                      |  | dn (m)                  |  | 0.68313                        |                |                 |             |                         |  |  |
|   |                      |  | Maximum scour depth, dm |  | 1.5*dn                         | <b>1.02469</b> |                 |             |                         |  |  |
|   |                      |  |                         |  |                                |                |                 |             | Technical Specification |  |  |
|   |                      |  | Foundation depth, D     |  | 1.33 dm                        | <b>1.36284</b> |                 | <b>1.50</b> |                         |  |  |
| <b>Minimum length of headwall extension (m)</b> |                      |  |                         | E=3h+0.6 or 1.5F whichever is greater              |                                |                |                 |             |                         |  |  |
|   |                      |  |                         | F is net drop from top of transverse sill to crest |                                |                |                 |             |                         |  |  |
|   |                      |  |                         | St= height of transverse sill= h/3                 |                                |                |                 | 0.316667    | <b>0.30</b>             |  |  |
|   |                      |  | F (m)                   | 1.1  |                                |                |                 |             |                         |  |  |

|   |  |  |                          |              |       |               |        |             |  |  |
|---|--|--|--------------------------|--------------|-------|---------------|--------|-------------|--|--|
|   |  |  | E (m)                    | 3.45         | or    | 1.65          | say    | <b>3.00</b> |  |  |
| <b>Length of Basin Lb</b>   |  |  |                          |              |       |               |        |             |  |  |
|   |  |  | Lb (m)= F(2.28*h/F+0.52) |              | 2.738 |               | say    | <b>2.70</b> |  |  |
| <b>Height of the sidewall at end sill is taken to be minimum 1.5h1, but more than H/2</b> |  |  |                          |              |       |               |        |             |  |  |
|   |  |  | J (m)                    | 1.5h1        | 1.2   | more than H/2 | 0.7    | <b>1.20</b> |  |  |
| <b>Height of the sidewall at the weir end</b>   |  |  |                          |              |       |               |        |             |  |  |
|   |  |  | Equal to gully depth     |              | 2.35  |               |        | <b>2.35</b> |  |  |
|   |  |  | M (m)                    | 2(F+1.33h-J) |       |               | 2.327  | <b>2.30</b> |  |  |
|   |  |  | K (m)                    | Lb+.1-M      |       |               | 0.473  | <b>0.90</b> |  |  |
| <b>Length of Wing wall (WL)</b>   |  |  |                          |              |       |               |        |             |  |  |
|   |  |  | WL = 2.25h               |              |       |               | 2.1375 | <b>2.00</b> |  |  |
| <b>Depth of Toe Wall</b>  |  |  |                          |              |       |               |        |             |  |  |
|   |  |  | h1+0.1                   |              |       |               | 0.9    | <b>1.00</b> |  |  |

| WORK ABSTRACT |   |                   |         |              |                   |                                |  |
|---------------|---|-------------------|---------|--------------|-------------------|--------------------------------|--|
| Sl. No.       | Item  | Specification (m) |         |              | Quantity<br>(cum) |                                |  |
|               |   | Length            | Breadth | Depth        |                   |                                |  |
| 1             | <b>Clearing of site (Removal of trees, shrubs and bushes)</b> | 8.00              | 10.00   |              |                   |                                |  |
| 2             | <b>Earth work</b>   |                   |         |              |                   |                                |  |
|               | a) in hard soil Headwall Foundation                           | 2.00              | 2.50    | 1.00         | 5.00              | Effective depth will be 0.7 m  |  |
|               | b) in hard soil RHS of Headwall extension                     | 3.00              | 2.50    | 1.20         | 9.00              | "                              |  |
|               | c) in hard soil LHS of Headwall extension                     | 3.00              | 2.50    | 1.20         | 9.00              | "                              |  |
|               | d) in hard soil cutoff wall                                   | 8.00              | 1.60    | 0.80         | 10.24             |                                |  |
|               | e) in hard soil side wall on both side                        | 6.40              | 2.00    | 2.00         | 25.60             | Effective depth will be 1.25 m |  |
|               | f) in hard soil Toe wall                                      | 2.00              | 1.60    | 1.00         | 3.20              | Effective depth will be 1.00 m |  |
|               | g) in hard soil Wing wall on both side                        | 4.00              | 1.80    | 1.50         | 10.80             | "                              |  |
|               | h) Apron  | 2.70              | 2.30    | 0.50         | 3.11              |                                |  |
|               |   |                   |         | <b>Total</b> | <b>75.95</b>      |                                |  |
| 3             | <b>Cement concrete</b>  |                   |         |              |                   |                                |  |
|               | Cement Concrete (1:2:4)                                       |                   |         |              |                   |                                |  |
|               | a) Head wall coping   | 2.00              | 0.70    | 0.10         | 0.14              |                                |  |

|          |  |      |      |       |             |                           |  |  |
|----------|--|------|------|-------|-------------|---------------------------|--|--|
|          | b) Apron   | 2.70 | 2.30 | 0.10  | 0.62        |                           |  |  |
|          | c) End sill coping   | 2.30 | 0.50 | 0.10  | 0.12        |                           |  |  |
|          |  |      |      | Total | <b>0.88</b> |                           |  |  |
|          | Cement Concrete (1:4:8)  |      |      |       |             |                           |  |  |
|          | d) Toe wall  | 2.30 | 0.70 | 0.10  | 0.16        |                           |  |  |
|          | e) Apron   | 2.70 | 2.30 | 0.10  | 0.62        |                           |  |  |
|          | f) Side wall on both side  | 6.40 | 1.10 | 0.10  | 0.70        |                           |  |  |
|          | g) Wing wall on both side  | 4.00 | 1.00 | 0.10  | 0.40        |                           |  |  |
|          | h) Headwall and Headwall Extension   | 8.00 | 1.60 | 0.10  | 1.28        |                           |  |  |
|          |  |      |      | Total | <b>3.17</b> |                           |  |  |
| <b>4</b> | <b>Requirement of sand to nullify the impact of cracks</b>                   |      |      |       |             |                           |  |  |
|          | a) Below cutoff wall   | 8.00 | 0.70 | 0.05  | 0.28        |                           |  |  |
|          | b) Below Headwall and headwall extension                                     | 8.00 | 1.60 | 0.05  | 0.64        |                           |  |  |
|          | c) Below side wall on both sides   | 6.40 | 1.10 | 0.05  | 0.35        |                           |  |  |
|          | d) Below wing wall on both side  | 4.00 | 1.00 | 0.05  | 0.20        |                           |  |  |
|          | e) Below apron   | 2.70 | 2.30 | 0.05  | 0.31        |                           |  |  |
|          | f) Below Toe wall  | 2.30 | 0.70 | 0.05  | 0.08        |                           |  |  |
|          |  |      |      | Total | <b>1.86</b> |                           |  |  |
| <b>5</b> | <b>Stone Masonry in CM 1:4</b>   |      |      |       |             |                           |  |  |
|          | a) Corewall  | 8.00 | 0.60 | 0.80  | 3.84        |                           |  |  |
|          | b) Headwall and Headwall Extension on both side-Foundation                   | 8.00 | 1.50 | 0.70  | 8.40        |                           |  |  |
|          | c) Headwall+ Headwall Extension on both side above gully bed-super structure | 8.00 | 1.10 | 1.40  | 12.32       | Width=(0.7+1.5)/2= 1.10 m |  |  |
|          | d) Headwall Extension on both the side above crest                           | 6.00 | 0.70 | 0.95  | 3.99        |                           |  |  |
|          | e) Foundation for side wall on both side                                     | 6.00 | 1.10 | 1.25  | 8.25        |                           |  |  |

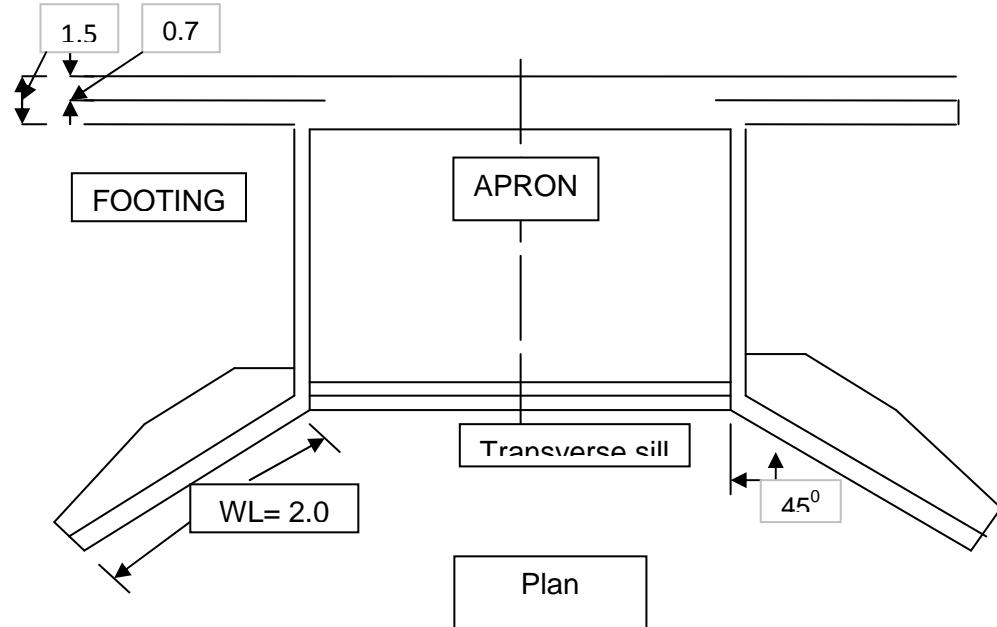
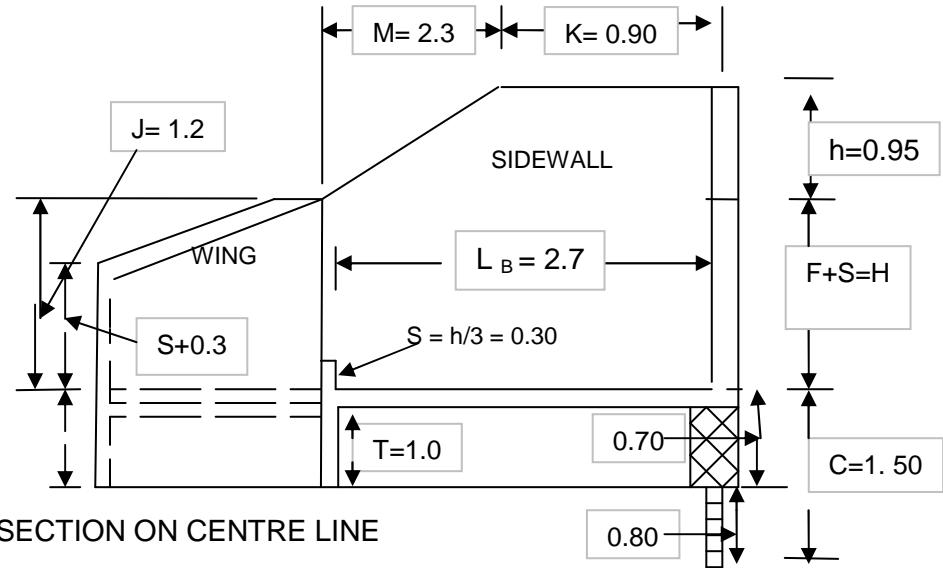
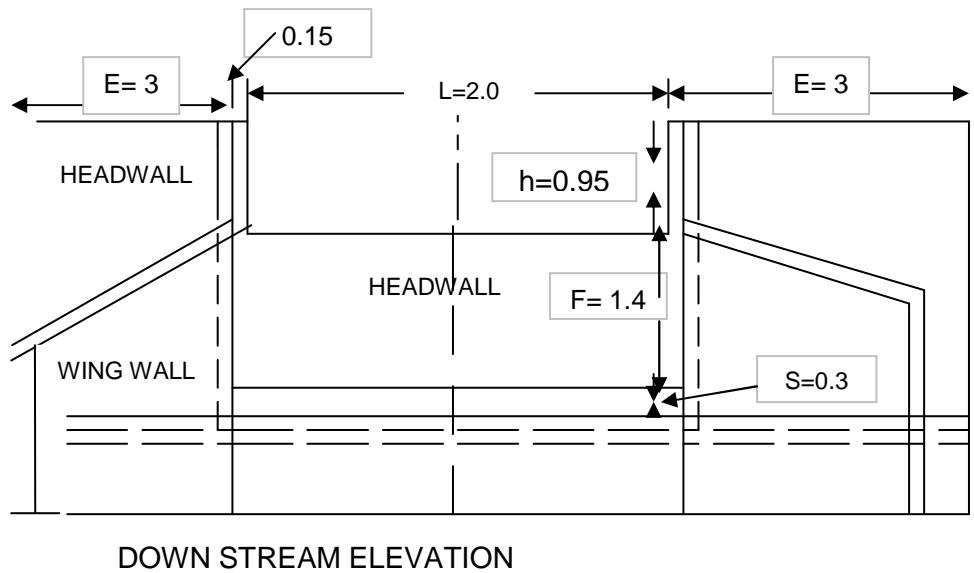
|  |  |      |      |       |              |                               |       |
|--|--|------|------|-------|--------------|-------------------------------|-------|
|  | f) Side wall on both side -super structure (K Part)-I                  | 1.80 | 1.00 | 0.80  | 1.44         |                               |       |
|  | g) Side wall on both side-above part-I mentioned in (e): (K Part)-II   | 1.80 | 0.80 | 0.40  | 0.58         |                               |       |
|  | h) Side wall on both side above part-II mentioned in (f): (K Part)-III | 1.80 | 0.70 | 0.60  | 0.76         |                               |       |
|  | i) Side wall on both side above part-II mentioned in (f): (K Part)-IV  | 1.80 | 0.60 | 0.55  | 0.59         |                               |       |
|  | j) Side wall on both side-Super structure (M Part)-I                   | 4.60 | 1.00 | 0.80  | 3.68         |                               |       |
|  | k) Side wall on both side-Super structure (M Part)-II                  | 4.60 | 0.80 | 0.40  | 1.47         |                               |       |
|  | l) Side wall on both side above Part-II mentioned in (i): (M Part)-III | 4.60 | 0.70 | 0.575 | 1.85         | Avg. ht. of triangle portion= | 0.575 |
|  | m) Foundation for wing wall on both side                               | 4.00 | 0.80 | 1.00  | 3.20         |                               |       |
|  | n) Wing wall on both side-Super structure- Part- I                     | 4.00 | 0.70 | 0.60  | 1.68         |                               |       |
|  | o) Wing wall on both side-Above Part-I mentioned in (l): Part -II      | 4.00 | 0.60 | 0.30  | 0.72         | Avg. ht. of triangle portion= | 0.30  |
|  | p) Toe wall: Part I  | 2.30 | 0.70 | 0.50  | 0.81         |                               |       |
|  | q) Toe wall: Part II   | 2.30 | 0.60 | 0.50  | 0.69         |                               |       |
|  | r) Transverse Sill   | 2.30 | 0.50 | 0.30  | 0.35         |                               |       |
|  | s) Apron   | 2.70 | 2.30 | 0.25  | 1.55         |                               |       |
|  |  |      |      |       | <b>56.16</b> |                               |       |

|          |   |       |      |              |              |                               |       |  |
|----------|---|-------|------|--------------|--------------|-------------------------------|-------|--|
| <b>6</b> | <b>M S Bar (10 mm, q)</b>   |       |      |              | <b>1.50</b>  |                               |       |  |
| <b>7</b> | <b>Providing rough stone pitching in u/s (both side)</b>                          | 35.00 | 2.35 | 0.20         | <b>16.45</b> |                               |       |  |
| <b>8</b> | <b>Cement pointing to stone masonry in CM 1:3 (sqm)</b>                           |       |      |              |              |                               |       |  |
|          | a) Headwall both side + Extension u/s only  | 8.00  |      | 1.40         | 11.20        |                               |       |  |
|          | b) Side wall both side (RHS and LHS)-Part I                                       | 6.40  |      | 1.20         | 7.68         |                               |       |  |
|          | c) Side wall both side (RHS and LHS)-Part II                                      | 1.80  |      | 1.15         | 2.07         |                               |       |  |
|          | d) Side wall both side (RHS and LHS)-Part-III                                     | 4.60  |      | 0.575        | 2.65         | Avg. ht. of triangle portion= | 0.575 |  |
|          | e) Wing wall both side-Part I   | 4.00  |      | 0.60         | 2.40         |                               |       |  |
|          | f) Wing wall both side-Part I   | 4.00  |      | 0.30         | 1.20         | Avg. ht. of triangle portion= | 0.30  |  |
|          |   |       |      | <b>Total</b> | <b>27.20</b> |                               |       |  |
| <b>9</b> | <b>Filling of black clay soil in the up stream (free from any kind of gravel)</b> |       |      |              | <b>5.00</b>  | trolley                       |       |  |

| MATERIAL ABSTRACT |   |  |  |       |        |             |                  |          |           |              |              |            |
|-------------------|---|--|--|-------|--------|-------------|------------------|----------|-----------|--------------|--------------|------------|
|                   |   |  |  |       |        |             | Required Quantiy |          |           |              |              |            |
|                   |   |  |  |       |        | Quantiy,cum | Cement,bags      | Sand,cum | Conc ,cum | Khanda (cum) | Boulder(cum) | MS Bar (q) |
| 1                 | Cement Concrete mix (1:2:4): 12 mm conc.            |  |  | 0.88  | 5.61   | 0.39        | 0.79             |          |           |              |              |            |
| 2                 | Cement Concrete mix (1:4:8); 20 mm conc.            |  |  | 3.17  | 10.76  | 1.49        | 2.98             |          |           |              |              |            |
| 3                 | Stone Maspnary in CM 1:4                            |  |  | 56.16 | 140.41 | 19.10       |                  | 56.16    |           |              |              |            |
| 4                 | MS Bar for reinforcing                              |  |  |       |        |             |                  |          |           |              | 1.50         |            |
| 5                 | Boulder for pitching                                |  |  | 16.45 |        |             |                  |          |           |              | 16.45        |            |
| 6                 | Cement pointing to stone masonry in CM 1:3 (sqm)    |  |  | 27.20 | 1.69   | 0.17        |                  |          |           |              |              |            |
| 7                 | Black clay soil (gravel free)                       |  |  | 5.00  |        |             |                  |          |           |              |              |            |
| 8                 | Requirement of sand to nullify the impact of cracks |  |  |       |        | 1.86        |                  |          |           |              |              |            |
|                   |   |  |  | Total |        | 158.46      | 23.01            |          | 56.16     | 16.45        | 1.50         |            |

| <b>COST ABSTRACT</b> |                |   |                 |                |                        |                     |
|----------------------|----------------|---|-----------------|----------------|------------------------|---------------------|
|                      | <b>Sl. No.</b> | <b>Item</b>   | <b>Quantity</b> | <b>Unit</b>    | <b>Rate (Rs./Unit)</b> | <b>Amount (Rs.)</b> |
| A                    | 1              | Cement  | 158             | Bag            | 300.00                 | 47538.57            |
|                      | 2              | Sand (good quality)   | 23.01           | m <sup>3</sup> | 900.00                 | 20710.47            |
|                      | 3              | Concrete-12 mm  | 0.79            | m <sup>3</sup> | 1300.00                | 1024.92             |
|                      | 4              | Concrete-20 mm  | 2.98            | m <sup>3</sup> | 1200.00                | 3571.25             |
|                      | 5              | Khanda (8"x8"x8")   | 56.16           | m <sup>3</sup> | 1000.00                | 56162.00            |
|                      | 6              | M S Bar (10 mm Saria)   | 1.50            | q              | 4500.00                | 6750.00             |
|                      | 7              | Boulder   | 16.45           | m <sup>3</sup> | 700.00                 | 11515.00            |
| B                    | 8              | Filling of black clay soil in the up stream (free from any kind of gravel)      | 5.00            | Trolley        | 700.00                 | 3500.00             |
|                      |                |   |                 |                | <b>Total</b>           | <b>150772.20</b>    |
| B                    | 9              | Water supply through tanker @ 3 % of material cost                              |                 |                |                        | 4523.17             |
| C                    | 10             | Labour Charges @ 35%  |                 |                |                        | 52770.27            |
|                      |                |   |                 |                | <b>Total (A+B+C)</b>   | <b>208065.64</b>    |
|                      | 11             | Misc. @ 3%  |                 |                |                        | 6241.97             |
|                      |                |   |                 |                | <b>G. Total</b>        | <b>214307.61</b>    |
|                      |                | <b>Rs. 2,14,308/- (Rs. Two lakh fourteen thousand three hundred eight only)</b> |                 |                |                        |                     |

**Note:** The cost of materials is inclusive of all taxes and transportation to the site. It is based on the prevailing market rates. It may vary with respect to time



$L$  = Length of weir  
 $h$  = Depth of weir  
 $F$  = Drop through spillway from crest of weir to top of transverse sill  
 $S$  = Height of transverse sill  
 $L_B$  = Length of Apron  
 $T$  = Depth of toewall below top of apron  
 $C$  = Depth of cutoff wall below top of apron  
 $E$  = Length of headwall extension  
 $J$  = Height of wingwall & sidewall at junction

DESIGNED BY:-  
 DR. R.C. SACHAN  
 EX. SPECIAL SCIENTIST, (LAND & WATER MANAGEMENT)  
 ICRISAT, PATANCHERU, A.P.

Note: Figure not to scale, All dimensions are in Metre

Technical Details of Outlet No. 1 to be constructed along with WHB

| <b>Design of surplusing arrangement No. 2 to be constructed along with WHB</b> |               |               |              |                |       |  |  |
|--|---------------|---------------|--------------|----------------|-------|--|--|
| <b>HYDROLOGIC DESIGN</b>   |               |               |              |                |       |  |  |
| Area (ha)  | 20            |               |              |                |       |  |  |
| slope  | 0.0022        |               |              |                |       |  |  |
| K  | 7.47          |               |              |                |       |  |  |
| a  | 0.17          |               |              |                |       |  |  |
| b  | 0.75          |               |              |                |       |  |  |
| n  | 0.96          |               |              |                |       |  |  |
| <b>Time of Concentration</b>   |               |               |              |                |       |  |  |
|  |               | Le.77         | Se-0.385     |                |       |  |  |
| <b>L (m)</b>   | 600           | <b>137.78</b> |              |                |       |  |  |
| <b>S</b>   | 0.0022        |               | <b>10.61</b> |                |       |  |  |
|  | hour          | Tc + b        |              | (tc+b) power n |       |  |  |
| <b>Tc</b>  | <b>28.462</b> | 0.4744        | 1.2244       |                | 1.214 |  |  |
| <b>Intensity</b>   |               |               |              |                |       |  |  |
|  |               | Tr power a    |              |                |       |  |  |
| Tr   | 10            | 1.4791        |              |                |       |  |  |
| <b>I</b>   |               | 9.0976        |              |                |       |  |  |
| <b>Discharge</b>   |               |               |              |                |       |  |  |
|  |               |               | Taken        |                |       |  |  |
| c  | 0.5           | Coeff         |              |                |       |  |  |
| I  | 90.976        | mm/hr         |              |                |       |  |  |
| A  | 20            | ha            |              |                |       |  |  |
| Q  | 2.5271        |               |              | Cumec          |       |  |  |

| <b>HYDRAULIC DESIGN</b>         |  |             |  |             |             |  |  |  |
|---------------------------------|--|-------------|--|-------------|-------------|--|--|--|
| Length of crest weir (m)        |  | <b>1.75</b> |  |             |             |  |  |  |
| Weir height (m)                 |  | h           |  |             |             |  |  |  |
| Q = 1.71*L*h power (3/2)        |  |             |  |             |             |  |  |  |
| h power 3/2                     |  | 0.8445      |  |             |             |  |  |  |
|                                 |  | Taken       |  |             |             |  |  |  |
| h                               |  | 0.8935      |  | <b>0.9</b>  | h1          |  |  |  |
| h + free board                  |  | 0.9382      |  | <b>0.95</b> |             |  |  |  |
| <b>Height of WHB</b>            |  | 2.20        |  |             |             |  |  |  |
| <b>Height of water drop (H)</b> |  | 1.25        |  | Say         | <b>1.25</b> |  |  |  |

| <b>STABILITY ANALYSIS</b>          |  |  |                         |  |           |                 |           |                    |
|------------------------------------|--|--|-------------------------|--|-----------|-----------------|-----------|--------------------|
| Let                                |  |  | <b>Top width (m)</b>    |  | t         | <b>0.6</b>      |           |                    |
|                                    |  |  | <b>Bottom width (m)</b> |  | T         | <b>1.3</b>      |           |                    |
| Weight of dam per unit length (kg) |  |  | W                       |  | 2612.5    |                 | W square  | <b>6825156.25</b>  |
| Horizontl water pressure (Kg)      |  |  | P                       |  | 781.25    |                 | P square  | <b>610351.5625</b> |
| Uplift pressure (kg)               |  |  | U                       |  | (T*w*H)/2 | <b>812.5</b>    |           |                    |
| Net downward force (kg)            |  |  | Wn                      |  | W-U       | <b>1800</b>     | Wn Square | <b>3240000</b>     |
| Resultant (kg)                     |  |  | R                       |  |           |                 |           | <b>1962.231271</b> |
|                                    |  |  | H                       |  | 1.25      |                 |           |                    |
|                                    |  |  | Xbar                    |  |           | <b>0.496491</b> |           |                    |
|                                    |  |  | Z                       |  |           | <b>0.209354</b> |           |                    |
| Point of Resultant (xbar+Z)        |  |  |                         |  |           | <b>0.705845</b> |           |                    |
|                                    |  |  | EA                      |  |           | 0.803509        |           |                    |
|                                    |  |  | P*H/3                   |  |           | 325.5208        |           |                    |
|                                    |  |  | W*EA                    |  |           | 2099.167        |           |                    |

|   |                      |                         |  |                            |                               |     |                 |                         |  |
|---|----------------------|-------------------------|--|----------------------------|-------------------------------|-----|-----------------|-------------------------|--|
|   |                      |                         |  |                            | b/6                           |     | 0.216667        |                         |  |
|   |                      |                         |  |                            | b/2                           |     | 0.65            |                         |  |
|   | e = xbar+Z-b/2       |                         |  |                            | e (OF)                        |     | 0.055845        |                         |  |
|   | fmax = Wn/b(1+6*e/b) |                         |  |                            | fmax                          |     | 1741.494        |                         |  |
| <b>A Safety against sliding</b>                 |                      |                         |  |                            |                               |     |                 |                         |  |
|   |                      |                         |  |                            | (mu*W)/P                      |     | <b>1.152</b>    |                         |  |
| <b>B Safety against overturning</b>             |                      |                         |  |                            | (W*EA)/(P*H/3)                |     | <b>2.04004</b>  |                         |  |
| <b>C Safety against Tension</b>                 |                      |                         |  |                            | e<b/6 or b/6-e should be +ive |     | <b>0.160822</b> |                         |  |
| <b>D Safety against Crushing</b>                |                      |                         |  | Permiss comp Stress kg/sqm |                               | say | <b>10000</b>    |                         |  |
|   |                      |                         |  | PCS-fmax should be +ive    |                               |     | <b>8258.506</b> |                         |  |
| <b>Depth of Foundation</b>                      |                      |                         |  |                            |                               |     |                 |                         |  |
|   |                      |                         | Normal scour depth, dn                             |                            | 0.473[Q/f]power1/3            |     |                 |                         |  |
|   |                      |                         | Q (cumec)  | 2.527                      |                               |     |                 |                         |  |
|   |                      |                         | Q (Cusec)  | 89.18                      |                               |     |                 |                         |  |
|   |                      |                         | f is silt factor, take=                            | 1                          |                               |     |                 |                         |  |
|   |                      |                         | [q/f]  | 89.1755                    |                               |     |                 |                         |  |
|   |                      |                         | [q/f] power1/3                                     | 4.46768                    |                               |     |                 |                         |  |
|   |                      |                         | dn (ft)  | 2.11321                    |                               |     |                 |                         |  |
|   |                      |                         | dn (m)   | 0.64427                    |                               |     |                 |                         |  |
|   |                      | Maximum scour depth, dm |  | 1.5*dn                     | <b>0.96641</b>                |     |                 |                         |  |
|   |                      |                         |  |                            |                               |     |                 | Technical Specification |  |
|   |                      | Foundation depth, D     |  | 1.33 dm                    | <b>1.28532</b>                |     | <b>1.40</b>     |                         |  |
| <b>Minimum length of headwall extension (m)</b> |                      |                         | E=3h+0.6 or 1.5F whichever is greater              |                            |                               |     |                 |                         |  |
|   |                      |                         | F is net drop from top of transverse sill to crest |                            |                               |     |                 |                         |  |
|   |                      |                         | St= height of transverse sill= h/3                 |                            | 0.316667                      |     | <b>0.30</b>     |                         |  |
|   |                      |                         | F (m)  | 0.95                       |                               |     |                 |                         |  |

|   |  |                          |              |      |               |        |     |             |  |
|---|--|--------------------------|--------------|------|---------------|--------|-----|-------------|--|
|   |  |                          | E (m)        | 3.45 | or            | 1.425  | say | <b>3.00</b> |  |
| <b>Length of Basin Lb</b>   |  |                          |              |      |               |        |     |             |  |
|   |  | Lb (m)= F(2.28*h/F+0.52) |              | 2.66 |               |        | say | <b>2.50</b> |  |
| <b>Height of the sidewall at end sill is taken to be minimum 1.5h1, but more than H/2</b> |  |                          |              |      |               |        |     |             |  |
|   |  | J (m)                    | 1.5h1        | 1.35 | more than H/2 | 0.625  |     | <b>1.20</b> |  |
| <b>Height of the sidewall at the weir end</b>   |  |                          |              |      |               |        |     |             |  |
|   |  | Equal to gully depth     | 2.2          |      |               |        |     | <b>2.20</b> |  |
|   |  | M (m)                    | 2(F+1.33h-J) |      |               | 2.027  |     | <b>2.00</b> |  |
|   |  | K (m)                    | Lb+.1-M      |      |               | 0.573  |     | <b>1.00</b> |  |
| <b>Length of Wing wall (WL)</b>   |  |                          |              |      |               |        |     |             |  |
|   |  | WL = 2.25h               |              |      |               | 2.1375 |     | <b>2.00</b> |  |
| <b>Depth of Toe Wall</b>  |  |                          |              |      |               |        |     |             |  |
|   |  | h1+0.1                   |              |      |               |        | 1   | <b>1.00</b> |  |

| <b>WORK ABSTRACT</b> |   |                   |         |       |                   |                                |  |
|----------------------|---|-------------------|---------|-------|-------------------|--------------------------------|--|
| Sl. No.              | Item  | Specification (m) |         |       | Quantity<br>(cum) |                                |  |
|                      |   | Length            | Breadth | Depth |                   |                                |  |
| 1                    | <b>Clearing of site (Removal of trees, shrubs and bushes)</b> | 8.00              | 10.00   |       |                   |                                |  |
| 2                    | <b>Earth work</b>   |                   |         |       |                   |                                |  |
|                      | a) in hard soil Headwall Foundation                           | 1.75              | 2.50    | 1.00  | 4.38              | Effective depth will be 0.7 m  |  |
|                      | b) in hard soil RHS of Headwall extension                     | 3.00              | 2.50    | 1.20  | 9.00              | "                              |  |
|                      | c) in hard soil LHS of Headwall extension                     | 3.00              | 2.50    | 1.20  | 9.00              | "                              |  |
|                      | d) in hard soil cutoff wall                                   | 7.75              | 1.60    | 0.70  | 8.68              |                                |  |
|                      | e) in hard soil side wall on both side                        | 6.00              | 2.00    | 2.00  | 24.00             | Effective depth will be 1.25 m |  |
|                      | f) in hard soil Toe wall                                      | 1.75              | 1.60    | 1.00  | 2.80              | Effective depth will be 1.00 m |  |
|                      | g) in hard soil Wing wall on both side                        | 4.00              | 1.80    | 1.50  | 10.80             | "                              |  |
|                      | h) Apron  | 2.50              | 2.00    | 0.50  | 2.50              |                                |  |
|                      |   |                   |         |       | <b>Total</b>      | <b>71.16</b>                   |  |
| 3                    | <b>Cement concrete</b>  |                   |         |       |                   |                                |  |
|                      | Cement Concrete (1:2:4)                                       |                   |         |       |                   |                                |  |

|          |  |      |      |       |             |                           |  |  |
|----------|--|------|------|-------|-------------|---------------------------|--|--|
|          | a) Head wall coping  | 1.75 | 0.60 | 0.10  | 0.11        |                           |  |  |
|          | b) Apron   | 2.50 | 2.00 | 0.10  | 0.50        |                           |  |  |
|          | c) End sill coping   | 2.00 | 0.50 | 0.10  | 0.10        |                           |  |  |
|          |  |      |      | Total | <b>0.71</b> |                           |  |  |
|          | Cement Concrete (1:4:8)  |      |      |       |             |                           |  |  |
|          | d) Toe wall  | 2.00 | 0.70 | 0.10  | 0.14        |                           |  |  |
|          | e) Apron   | 2.50 | 2.00 | 0.10  | 0.50        |                           |  |  |
|          | f) Side wall on both side  | 6.00 | 1.10 | 0.10  | 0.66        |                           |  |  |
|          | g) Wing wall on both side  | 4.00 | 1.00 | 0.10  | 0.40        |                           |  |  |
|          | h) Headwall and Headwall Extension   | 7.75 | 1.60 | 0.10  | 1.24        |                           |  |  |
|          |  |      |      | Total | <b>2.94</b> |                           |  |  |
| <b>4</b> | <b>Requirement of sand to nullify the impact of cracks</b>                   |      |      |       |             |                           |  |  |
|          | a) Below cutoff wall   | 7.75 | 0.70 | 0.05  | 0.27        |                           |  |  |
|          | b) Below Headwall and headwall extension                                     | 7.75 | 1.30 | 0.05  | 0.50        |                           |  |  |
|          | c) Below side wall on both sides   | 6.00 | 1.10 | 0.05  | 0.33        |                           |  |  |
|          | d) Below wing wall on both side  | 4.00 | 1.00 | 0.05  | 0.20        |                           |  |  |
|          | e) Below apron   | 2.50 | 2.00 | 0.05  | 0.25        |                           |  |  |
|          | f) Below Toe wall  | 2.00 | 0.70 | 0.05  | 0.07        |                           |  |  |
|          |  |      |      | Total | <b>1.63</b> |                           |  |  |
| <b>5</b> | <b>Stone Masonry in CM 1:4</b>   |      |      |       |             |                           |  |  |
|          | a) Corewall  | 7.75 | 0.60 | 0.70  | 3.26        |                           |  |  |
|          | b) Headwall and Headwall Extension on both side-Foundation                   | 7.75 | 1.30 | 0.70  | 7.05        |                           |  |  |
|          | c) Headwall+ Headwall Extension on both side above gully bed-super structure | 7.75 | 0.95 | 1.25  | 9.20        | Width=(0.6+1.3)/2= 0.95 m |  |  |
|          | d) Headwall Extension on both the side above crest                           | 6.00 | 0.60 | 0.95  | 3.42        |                           |  |  |

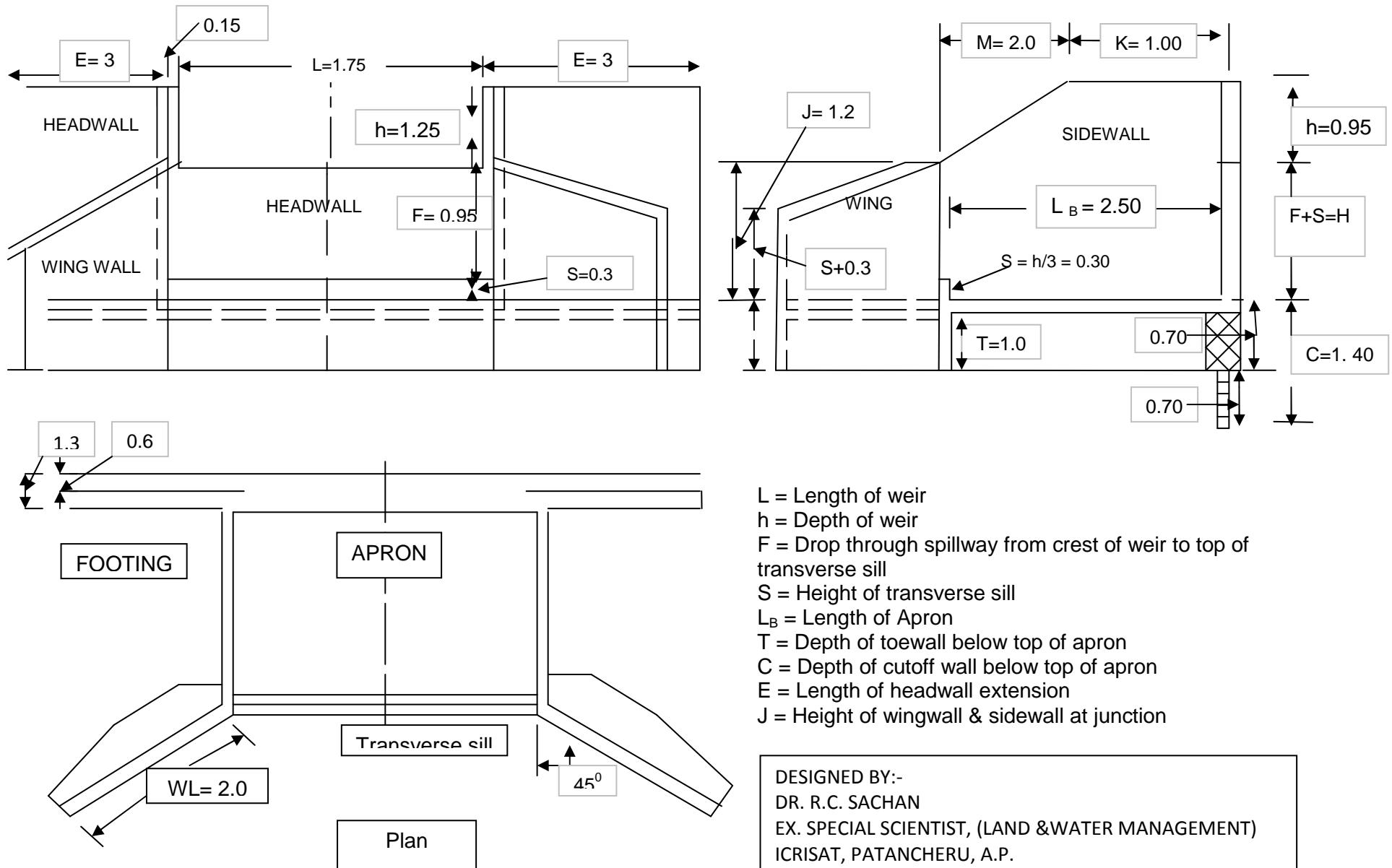
|  |  |      |      |       |      |                               |       |  |
|--|--|------|------|-------|------|-------------------------------|-------|--|
|  | e) Foundation for side wall on both side                               | 6.00 | 1.10 | 1.25  | 8.25 |                               |       |  |
|  | f) Side wall on both side -super structure (K Part)-I                  | 2.00 | 1.00 | 0.80  | 1.60 |                               |       |  |
|  | g) Side wall on both side-above part-I mentioned in (e): (K Part)-II   | 2.00 | 0.80 | 0.40  | 0.64 |                               |       |  |
|  | h) Side wall on both side above part-II mentioned in (f): (K Part)-III | 2.00 | 0.70 | 0.60  | 0.84 |                               |       |  |
|  | i) Side wall on both side above part-II mentioned in (f): (K Part)-IV  | 2.00 | 0.60 | 0.40  | 0.48 |                               |       |  |
|  | j) Side wall on both side-Super structure (M Part)-I                   | 4.00 | 1.00 | 0.80  | 3.20 |                               |       |  |
|  | k) Side wall on both side-Super structure (M Part)-II                  | 4.00 | 0.80 | 0.40  | 1.28 |                               |       |  |
|  | l) Side wall on both side above Part-II mentioned in (i): (M Part)-III | 4.00 | 0.70 | 0.500 | 1.40 | Avg. ht. of triangle portion= | 0.500 |  |
|  | m) Foundation for wing wall on both side                               | 4.00 | 0.80 | 1.00  | 3.20 |                               |       |  |
|  | n) Wing wall on both side-Super structure- Part- I                     | 4.00 | 0.70 | 0.60  | 1.68 |                               |       |  |
|  | o) Wing wall on both side-Above Part-I mentioned in (l): Part -II      | 4.00 | 0.60 | 0.30  | 0.72 | Avg. ht. of triangle portion= | 0.30  |  |
|  | p) Toe wall: Part I  | 2.00 | 0.70 | 0.50  | 0.70 |                               |       |  |
|  | q) Toe wall: Part II   | 2.00 | 0.60 | 0.50  | 0.60 |                               |       |  |
|  | r) Transverse Sill   | 2.00 | 0.50 | 0.30  | 0.30 |                               |       |  |
|  | s) Apron   | 2.50 | 2.00 | 0.25  | 1.25 |                               |       |  |

|          |   |       |      |              |              |                               |              |  |  |  |
|----------|---|-------|------|--------------|--------------|-------------------------------|--------------|--|--|--|
|          |   |       |      |              |              |                               | <b>49.07</b> |  |  |  |
| <b>6</b> | <b>M S Bar (10 mm, q)</b>   |       |      |              |              |                               | <b>1.25</b>  |  |  |  |
| <b>7</b> | <b>Providing rough stone pitching in u/s (both side)</b>                          | 35.00 | 2.20 | 0.20         |              | <b>15.40</b>                  |              |  |  |  |
| <b>8</b> | <b>Cement pointing to stone masonry in CM 1:3 (sqm)</b>                           |       |      |              |              |                               |              |  |  |  |
|          | a) Headwall both side + Extension u/s only  | 7.75  |      | 1.25         | 9.69         |                               |              |  |  |  |
|          | b) Side wall both side (RHS and LHS)-Part I                                       | 6.00  |      | 1.20         | 7.20         |                               |              |  |  |  |
|          | c) Side wall both side (RHS and LHS)-Part II                                      | 2.00  |      | 1.00         | 2.00         |                               |              |  |  |  |
|          | d) Side wall both side (RHS and LHS)-Part-III                                     | 4.00  |      | 0.500        | 2.00         | Avg. ht. of triangle portion= | 0.500        |  |  |  |
|          | e) Wing wall both side-Part I   | 4.00  |      | 0.60         | 2.40         |                               |              |  |  |  |
|          | f) Wing wall both side-Part I   | 4.00  |      | 0.30         | 1.20         | Avg. ht. of triangle portion= | 0.30         |  |  |  |
|          |   |       |      | <b>Total</b> | <b>24.49</b> |                               |              |  |  |  |
| <b>9</b> | <b>Filling of black clay soil in the up stream (free from any kind of gravel)</b> |       |      |              |              | <b>5.00</b>                   | trolley      |  |  |  |

| MATERIAL ABSTRACT |   |  |  |       |             |                  |          |           |              |              |            |
|-------------------|---|--|--|-------|-------------|------------------|----------|-----------|--------------|--------------|------------|
|                   |   |  |  |       |             | Required Quantiy |          |           |              |              |            |
|                   |   |  |  |       | Quantiy,cum | Cement,bags      | Sand,cum | Conc ,cum | Khanda (cum) | Boulder(cum) | MS Bar (q) |
| 1                 | Cement Concrete mix (1:2:4): 12 mm conc.            |  |  |       | 0.71        | 4.51             | 0.32     | 0.63      |              |              |            |
| 2                 | Cement Concrete mix (1:4:8); 20 mm conc.            |  |  |       | 2.94        | 10.00            | 1.38     | 2.76      |              |              |            |
| 3                 | Stone Maspnary in CM 1:4                            |  |  |       | 49.07       | 122.68           | 16.68    |           | 49.07        |              |            |
| 4                 | MS Bar for reinforcing                              |  |  |       |             |                  |          |           |              |              | 1.25       |
| 5                 | Boulder for pitching                                |  |  |       | 15.40       |                  |          |           |              | 15.40        |            |
| 6                 | Cement pointing to stone masonry in CM 1:3 (sqm)    |  |  |       | 24.49       | 1.52             | 0.15     |           |              |              |            |
| 7                 | Black clay soil (gravel free)                       |  |  |       | 5.00        |                  |          |           |              |              |            |
| 8                 | Requirement of sand to nullify the impact of cracks |  |  |       |             |                  | 1.63     |           |              |              |            |
|                   |   |  |  | Total |             | 138.70           | 20.16    |           | 49.07        | 15.40        | 1.25       |

| <b>COST ABSTRACT</b> |                |  |                 |                |                        |                     |
|----------------------|----------------|--|-----------------|----------------|------------------------|---------------------|
|                      | <b>Sl. No.</b> | <b>Item</b>  | <b>Quantity</b> | <b>Unit</b>    | <b>Rate (Rs./Unit)</b> | <b>Amount (Rs.)</b> |
| A                    | 1              | Cement   | 139             | Bag            | 300.00                 | 41610.84            |
|                      | 2              | Sand (good quality)  | 20.16           | m <sup>3</sup> | 900.00                 | 18146.10            |
|                      | 3              | Concrete-12 mm   | 0.63            | m <sup>3</sup> | 1300.00                | 824.85              |
|                      | 4              | Concrete-20 mm   | 2.76            | m <sup>3</sup> | 1200.00                | 3316.32             |
|                      | 5              | Khanda (8"x8"x8")  | 49.07           | m <sup>3</sup> | 1000.00                | 49070.63            |
|                      | 6              | M S Bar (10 mm Saria)  | 1.25            | q              | 4500.00                | 5625.00             |
|                      | 7              | Boulder  | 15.40           | m <sup>3</sup> | 700.00                 | 10780.00            |
|                      | 8              | Filling of black clay soil in the up stream (free from any kind of gravel)               | 5.00            | Trolley        | 700.00                 | 3500.00             |
|                      |                |  |                 |                | <b>Total</b>           | <b>132873.73</b>    |
| B                    | 9              | Water supply through tanker @ 3 % of material cost                                       |                 |                |                        | 3986.21             |
| C                    | 10             | Labour Charges @ 35%   |                 |                |                        | 46505.81            |
|                      |                |  |                 |                | <b>Total (A+B+C)</b>   | <b>183365.75</b>    |
|                      | 11             | Misc. @ 3%   |                 |                |                        | 5500.97             |
|                      |                |  |                 |                | <b>G. Total</b>        | <b>188866.72</b>    |
|                      |                | <b>Rs.1,88,867/- (Rs. One lakh eighty eight thousand eight hundred sixty seven only)</b> |                 |                |                        |                     |

**Note:** The cost of materials is inclusive of all taxes and transportation to the site. It is based on the prevailing market rates. It may vary with respect to time



Note: Figure not to scale, All dimensions are in Metre

**Technical Details of Outlet No. 2 to be constructed along with WHB**

| <b>Design of surplusing arrangement No. 3 to be constructed along with WHB</b> |               |               |               |                |       |  |  |
|--|---------------|---------------|---------------|----------------|-------|--|--|
| <b>HYDROLOGIC DESIGN</b>   |               |               |               |                |       |  |  |
| Area (ha)  | 15            |               |               |                |       |  |  |
| slope  | 0.002         |               |               |                |       |  |  |
| K  | 7.47          |               |               |                |       |  |  |
| a  | 0.17          |               |               |                |       |  |  |
| b  | 0.75          |               |               |                |       |  |  |
| n  | 0.96          |               |               |                |       |  |  |
| <b>Time of Concentration</b>   |               |               |               |                |       |  |  |
|  |               | Le.77         | Se-0.385      |                |       |  |  |
| <b>L (m)</b>   | 500           | <b>119.73</b> |               |                |       |  |  |
| <b>S</b>   | 0.002         |               | <b>10.942</b> |                |       |  |  |
|  | hour          | Tc + b        |               | (tc+b) power n |       |  |  |
| <b>Tc</b>  | <b>25.508</b> | 0.4251        | 1.1751        |                | 1.168 |  |  |
| <b>Intensity</b>   |               |               |               |                |       |  |  |
|  |               | Tr power a    |               |                |       |  |  |
| Tr   | 10            | 1.4791        |               |                |       |  |  |
| <b>I</b>   |               | 9.4632        |               |                |       |  |  |
| <b>Discharge</b>   |               |               |               |                |       |  |  |
|  |               |               | Taken         |                |       |  |  |
| c  | 0.4           | Coeff         |               |                |       |  |  |
| I  | 94.632        | mm/hr         |               |                |       |  |  |
| A  | 15            | ha            |               |                |       |  |  |
| Q  | 1.5772        |               |               | Cumec          |       |  |  |

| HYDRAULIC DESIGN                   |  |  |                         |             |             |                 |           |                    |
|------------------------------------|--|--|-------------------------|-------------|-------------|-----------------|-----------|--------------------|
| Length of crest weir (m)           |  |  | <b>1.25</b>             |             |             |                 |           |                    |
| Weir height (m)                    |  |  | <b>h</b>                |             |             |                 |           |                    |
| $Q = 1.71*L*h$ power (3/2)         |  |  |                         |             |             |                 |           |                    |
| h power 3/2                        |  |  | 0.7379                  |             |             |                 |           |                    |
|                                    |  |  |                         | Taken       |             |                 |           |                    |
| h                                  |  |  | 0.8167                  | <b>0.7</b>  | <b>h1</b>   |                 |           |                    |
| h + free board                     |  |  | 0.8576                  | <b>0.75</b> |             |                 |           |                    |
| <b>Height of WHB</b>               |  |  | 1.75                    |             |             |                 |           |                    |
| <b>Height of water drop (H)</b>    |  |  | 1.00                    |             | Say         | <b>1</b>        |           |                    |
| STABILITY ANALYSIS                 |  |  |                         |             |             |                 |           |                    |
| Let                                |  |  | <b>Top width (m)</b>    | t           | <b>0.5</b>  |                 |           |                    |
|                                    |  |  | <b>Bottom width (m)</b> | T           | <b>1.1</b>  |                 |           |                    |
| Weight of dam per unit length (kg) |  |  |                         | W           | 1760        |                 | W square  | <b>3097600</b>     |
| Horizontzl water pressure (Kg)     |  |  |                         | P           | 500         |                 | P square  | <b>250000</b>      |
| Uplift pressure (kg)               |  |  |                         | U           | $(T*w*H)/2$ | <b>550</b>      |           |                    |
| Net downward force (kg)            |  |  |                         | Wn          | W-U         | <b>1210</b>     | Wn Square | <b>1464100</b>     |
| Resultant (kg)                     |  |  |                         | R           |             |                 |           | <b>1309.236419</b> |
|                                    |  |  |                         | H           | 1           |                 |           |                    |
|                                    |  |  |                         | Xbar        |             | <b>0.41875</b>  |           |                    |
|                                    |  |  |                         | Z           |             | <b>0.161415</b> |           |                    |
| Point of Resultant (xbar+Z)        |  |  |                         |             |             | <b>0.580165</b> |           |                    |
|                                    |  |  |                         | EA          |             | 0.68125         |           |                    |
|                                    |  |  |                         | P*H/3       |             | 166.6667        |           |                    |
|                                    |  |  |                         | W*EA        |             | 1199            |           |                    |
|                                    |  |  |                         | b/6         |             | 0.183333        |           |                    |

|   |                      |                         |                         |  |                |          |                 |                         |             |
|---|----------------------|-------------------------|-------------------------|--|----------------|----------|-----------------|-------------------------|-------------|
|   |                      |                         |                         |  | b/2            |          | 0.55            |                         |             |
|   | e = xbar+Z-b/2       |                         |                         | e (OF)   |                | 0.030165 |                 |                         |             |
|   | fmax = Wn/b(1+6*e/b) |                         |                         | fmax   |                | 1280.992 |                 |                         |             |
| <b>A Safety against sliding</b>                 |                      |                         |                         |  |                |          |                 |                         |             |
|   |                      |                         |                         | (mu*W)/P   |                |          | <b>1.21</b>     |                         |             |
| <b>B Safety against overturning</b>             |                      |                         |                         | (W*EA)/(P*H/3)                                     |                |          | <b>2.104998</b> |                         |             |
| <b>C Safety against Tension</b>                 |                      |                         |                         | e<b/6 or b/6-e should be +ive                      |                |          | <b>0.153168</b> |                         |             |
| <b>D Safety against Crushing</b>                |                      |                         |                         | Permiss comp Stress kg/sqm                         | say            |          | <b>10000</b>    |                         |             |
|   |                      |                         |                         | PCS-fmax should be +ive                            |                |          | <b>8719.008</b> |                         |             |
| <b>Depth of Foundation</b>                      |                      |                         |                         |  |                |          |                 |                         |             |
|   |                      |                         | Normal scour depth, dn  | 0.473[Q/f]power1/3                                 |                |          |                 |                         |             |
|   |                      |                         | Q (cumec)               | 1.577  |                |          |                 |                         |             |
|   |                      |                         | Q (Cusec)               | 55.66  |                |          |                 |                         |             |
|   |                      |                         | f is silt factor, take= | 1  |                |          |                 |                         |             |
|   |                      |                         | [q/f]                   | 55.6554  |                |          |                 |                         |             |
|   |                      |                         | [q/f] power1/3          | 3.818  |                |          |                 |                         |             |
|   |                      |                         | dn (ft)                 | 1.80591  |                |          |                 |                         |             |
|   |                      |                         | dn (m)                  | 0.55058  |                |          |                 |                         |             |
|   |                      | Maximum scour depth, dm |                         | 1.5*dn   | <b>0.82587</b> |          |                 |                         |             |
|   |                      |                         |                         |  |                |          |                 | Technical Specification |             |
|   |                      | Foundation depth, D     |                         | 1.33 dm  | <b>1.09841</b> |          |                 | <b>1.10</b>             |             |
| <b>Minimum length of headwall extension (m)</b> |                      |                         |                         | E=3h+0.6 or 1.5F whichever is greater              |                |          |                 |                         |             |
|   |                      |                         |                         | F is net drop from top of transverse sill to crest |                |          |                 |                         |             |
|   |                      |                         |                         | St= height of transverse sill= h/3                 |                |          |                 | 0.25                    | <b>0.25</b> |
|   |                      |                         |                         | F (m)  | 0.75           |          |                 |                         |             |
|   |                      |                         |                         | E (m)  | 2.85           | or       | 1.125           | say                     | <b>2.50</b> |

|   |  |  |                            |                |      |               |        |             |             |
|---|--|--|----------------------------|----------------|------|---------------|--------|-------------|-------------|
| <b>Length of Basin Lb</b>   |  |  |                            |                |      |               |        |             |             |
|   |  |  | Lb (m)= $F(2.28*h/F+0.52)$ |                |      | 2.1           |        | say         | <b>2.00</b> |
| <b>Height of the sidewall at end sill is taken to be minimum 1.5h1, but more than H/2</b> |  |  |                            |                |      |               |        |             |             |
|   |  |  | J (m)                      | 1.5h1          | 1.05 | more than H/2 | 0.5    | <b>1.00</b> |             |
| <b>Height of the sidewall at the weir end</b>   |  |  |                            |                |      |               |        |             |             |
|   |  |  | Equal to gully depth       | 1.75           |      |               |        | <b>1.75</b> |             |
|   |  |  | M (m)                      | $2(F+1.33h-J)$ |      |               | 1.495  | <b>1.50</b> |             |
|   |  |  | K (m)                      | $Lb+.1-M$      |      |               | 0.605  | <b>1.00</b> |             |
| <b>Length of Wing wall (WL)</b>   |  |  |                            |                |      |               |        |             |             |
|   |  |  | WL = $2.25h$               |                |      |               | 1.6875 | <b>1.75</b> |             |
| <b>Depth of Toe Wall</b>  |  |  |                            |                |      |               |        |             |             |
|   |  |  | h1+0.1                     |                |      |               | 0.8    | <b>0.80</b> |             |

| WORK ABSTRACT |   |                   |         |              |                   |                                |  |
|---------------|---|-------------------|---------|--------------|-------------------|--------------------------------|--|
| Sl. No.       | Item  | Specification (m) |         |              | Quantity<br>(cum) |                                |  |
|               |   | Length            | Breadth | Depth        |                   |                                |  |
| 1             | <b>Clearing of site (Removal of trees, shrubs and bushes)</b> | 8.00              | 10.00   |              |                   |                                |  |
| 2             | <b>Earth work</b>   |                   |         |              |                   |                                |  |
|               | a) in hard soil Headwall Foundation                           | 1.25              | 2.10    | 1.00         | 2.63              | Effective depth will be 0.7 m  |  |
|               | b) in hard soil RHS of Headwall extension                     | 2.50              | 2.10    | 1.20         | 6.30              | "                              |  |
|               | c) in hard soil LHS of Headwall extension                     | 2.50              | 2.10    | 1.20         | 6.30              | "                              |  |
|               | d) in hard soil cutoff wall                                   | 6.25              | 1.60    | 0.40         | 4.00              |                                |  |
|               | e) in hard soil side wall on both side                        | 5.00              | 2.00    | 1.50         | 15.00             | Effective depth will be 1 m    |  |
|               | f) in hard soil Toe wall                                      | 1.50              | 1.60    | 1.00         | 2.40              | Effective depth will be 1.00 m |  |
|               | g) in hard soil Wing wall on both side                        | 3.50              | 1.80    | 1.50         | 9.45              | "                              |  |
|               | h) Apron  | 2.00              | 1.50    | 0.50         | 1.50              |                                |  |
|               |   |                   |         | <b>Total</b> | <b>47.58</b>      |                                |  |
| 3             | <b>Cement concrete</b>  |                   |         |              |                   |                                |  |
|               | Cement Concrete (1:2:4)                                       |                   |         |              |                   |                                |  |

|          |  |      |       |             |      |                         |  |  |
|----------|--|------|-------|-------------|------|-------------------------|--|--|
|          | a) Head wall coping  | 1.25 | 0.50  | 0.10        | 0.06 |                         |  |  |
|          | b) Apron   | 2.00 | 1.50  | 0.10        | 0.30 |                         |  |  |
|          | c) End sill coping   | 1.50 | 0.50  | 0.10        | 0.08 |                         |  |  |
|          |  |      | Total | <b>0.44</b> |      |                         |  |  |
|          | Cement Concrete (1:4:8)  |      |       |             |      |                         |  |  |
|          | d) Toe wall  | 1.50 | 0.70  | 0.10        | 0.11 |                         |  |  |
|          | e) Apron   | 2.00 | 1.50  | 0.10        | 0.30 |                         |  |  |
|          | f) Side wall on both side  | 5.00 | 1.10  | 0.10        | 0.55 |                         |  |  |
|          | g) Wing wall on both side  | 3.50 | 1.00  | 0.10        | 0.35 |                         |  |  |
|          | h) Headwall and Headwall Extension   | 6.25 | 1.60  | 0.10        | 1.00 |                         |  |  |
|          |  |      | Total | <b>2.31</b> |      |                         |  |  |
| <b>4</b> | <b>Requirement of sand to nullify the impact of cracks</b>                   |      |       |             |      |                         |  |  |
|          | a) Below cutoff wall   | 6.25 | 0.70  | 0.05        | 0.22 |                         |  |  |
|          | b) Below Headwall and headwall extension                                     | 6.25 | 1.20  | 0.05        | 0.38 |                         |  |  |
|          | c) Below side wall on both sides   | 5.00 | 1.10  | 0.05        | 0.28 |                         |  |  |
|          | d) Below wing wall on both side  | 3.50 | 1.00  | 0.05        | 0.18 |                         |  |  |
|          | e) Below apron   | 2.00 | 1.50  | 0.05        | 0.15 |                         |  |  |
|          | f) Below Toe wall  | 1.50 | 0.70  | 0.05        | 0.05 |                         |  |  |
|          |  |      | Total | <b>1.25</b> |      |                         |  |  |
| <b>5</b> | <b>Stone Masonry in CM 1:4</b>   |      |       |             |      |                         |  |  |
|          | a) Corewall  | 6.25 | 0.60  | 0.40        | 1.50 |                         |  |  |
|          | b) Headwall and Headwall Extension on both side-Foundation                   | 6.25 | 1.10  | 0.70        | 4.81 |                         |  |  |
|          | c) Headwall+ Headwall Extension on both side above gully bed-super structure | 6.25 | 0.80  | 1.00        | 5.00 | Width=(0.5+1.1)/2=0.8 m |  |  |

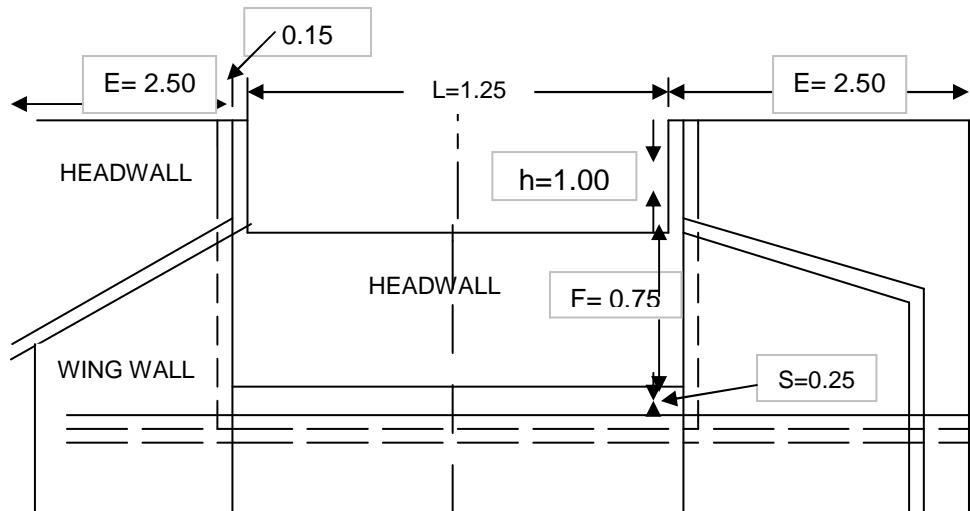
|  |  |      |      |       |      |                               |       |  |
|--|--|------|------|-------|------|-------------------------------|-------|--|
|  | d) Headwall Extension on both the side above crest                     | 5.00 | 0.50 | 0.75  | 1.88 |                               |       |  |
|  | e) Foundation for side wall on both side                               | 5.00 | 0.90 | 1.00  | 4.50 |                               |       |  |
|  | f) Side wall on both side -super structure (K Part)-I                  | 2.00 | 0.80 | 0.50  | 0.80 |                               |       |  |
|  | g) Side wall on both side-above part-I mentioned in (e): (K Part)-II   | 2.00 | 0.70 | 0.50  | 0.70 |                               |       |  |
|  | h) Side wall on both side above part-II mentioned in (f): (K Part)-III | 2.00 | 0.60 | 0.50  | 0.60 |                               |       |  |
|  | i) Side wall on both side above part-II mentioned in (f): (K Part)-IV  | 2.00 | 0.50 | 0.25  | 0.25 |                               |       |  |
|  | j) Side wall on both side-Super structure (M Part)-I                   | 3.00 | 0.90 | 0.50  | 1.35 |                               |       |  |
|  | k) Side wall on both side-Super structure (M Part)-II                  | 3.00 | 0.80 | 0.50  | 1.20 |                               |       |  |
|  | l) Side wall on both side above Part-II mentioned in (i): (M Part)-III | 3.00 | 0.70 | 0.375 | 0.79 | Avg. ht. of triangle portion= | 0.375 |  |
|  | m) Foundation for wing wall on both side                               | 3.50 | 0.70 | 1.00  | 2.45 |                               |       |  |
|  | n) Wing wall on both side-Super structure- Part- I                     | 3.50 | 0.60 | 0.55  | 1.16 |                               |       |  |
|  | o) Wing wall on both side-Above Part-I mentioned in (l): Part -II      | 3.50 | 0.50 | 0.23  | 0.39 | Avg. ht. of triangle portion= | 0.23  |  |
|  | p) Toe wall: Part I  | 1.50 | 0.70 | 0.50  | 0.53 |                               |       |  |
|  | q) Toe wall: Part II   | 1.50 | 0.60 | 0.30  | 0.27 |                               |       |  |

|          |   |       |      |              |              |                               |       |  |
|----------|---|-------|------|--------------|--------------|-------------------------------|-------|--|
|          | r) End Sill   | 1.50  | 0.50 | 0.25         | 0.19         |                               |       |  |
|          | s) Apron  | 2.00  | 1.50 | 0.25         | 0.75         |                               |       |  |
|          |   |       |      |              |              | <b>29.11</b>                  |       |  |
| <b>6</b> | <b>M S Bar (10 mm, q)</b>   |       |      |              |              | <b>1.00</b>                   |       |  |
| <b>7</b> | <b>Providing rough stone pitching in u/s (both side)</b>                          | 35.00 | 1.75 | 0.20         | <b>12.25</b> |                               |       |  |
| <b>8</b> | <b>Cement pointing to stone masonry in CM 1:3 (sqm)</b>                           |       |      |              |              |                               |       |  |
|          | a) Headwall both side + Extension u/s only  | 6.25  |      | 1.00         | 6.25         |                               |       |  |
|          | b) Side wall both side (RHS and LHS)-Part I                                       | 5.00  |      | 1.00         | 5.00         |                               |       |  |
|          | c) Side wall both side (RHS and LHS)-Part II                                      | 2.00  |      | 0.75         | 1.50         |                               |       |  |
|          | d) Side wall both side (RHS and LHS)-Part-III                                     | 3.00  |      | 0.375        | 1.13         | Avg. ht. of triangle portion= | 0.375 |  |
|          | e) Wing wall both side-Part I   | 3.50  |      | 0.55         | 1.93         |                               |       |  |
|          | f) Wing wall both side-Part I   | 4.00  |      | 0.23         | 0.90         | Avg. ht. of triangle portion= | 0.23  |  |
|          |   |       |      | <b>Total</b> | <b>16.70</b> |                               |       |  |
| <b>9</b> | <b>Filling of black clay soil in the up stream (free from any kind of gravel)</b> |       |      |              | <b>4.00</b>  | trolley                       |       |  |

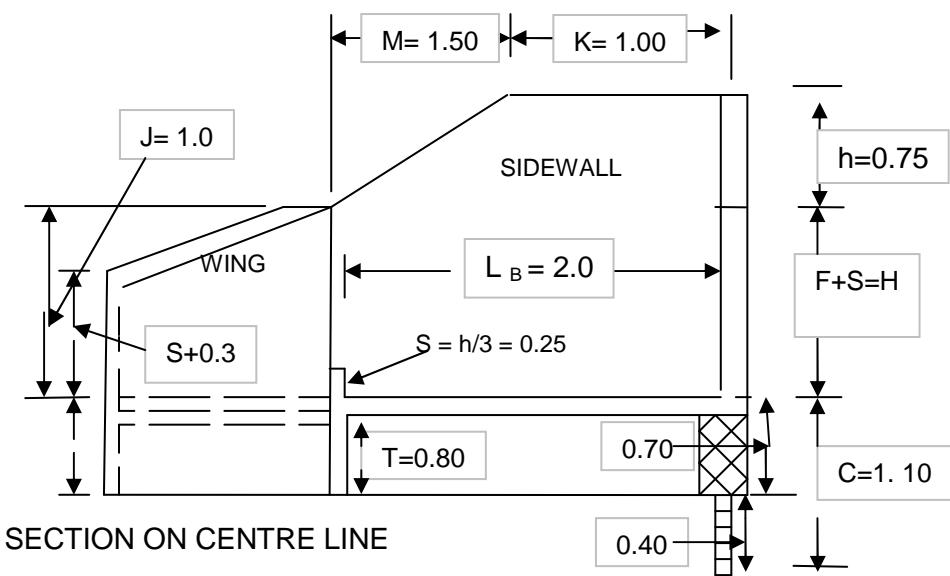
| MATERIAL ABSTRACT |   |  |  |       |             |                  |          |           |              |              |            |
|-------------------|---|--|--|-------|-------------|------------------|----------|-----------|--------------|--------------|------------|
|                   |   |  |  |       |             | Required Quantiy |          |           |              |              |            |
|                   |   |  |  |       | Quantiy,cum | Cement,bags      | Sand,cum | Conc ,cum | Khanda (cum) | Boulder(cum) | MS Bar (q) |
| 1                 | Cement Concrete mix (1:2:4): 12 mm conc.            |  |  |       | 0.44        | 2.80             | 0.20     | 0.39      |              |              |            |
| 2                 | Cement Concrete mix (1:4:8); 20 mm conc.            |  |  |       | 2.31        | 7.84             | 1.08     | 2.17      |              |              |            |
| 3                 | Stone Maspnary in CM 1:4                            |  |  |       | 29.11       | 72.77            | 9.90     |           | 29.11        |              |            |
| 4                 | MS Bar for reinforcing                              |  |  |       |             |                  |          |           |              |              | 1.00       |
| 5                 | Boulder for pitching                                |  |  |       | 12.25       |                  |          |           |              |              | 12.25      |
| 6                 | Cement pointing to stone masonry in CM 1:3 (sqm)    |  |  |       | 16.70       | 1.04             | 0.11     |           |              |              |            |
| 7                 | Black clay soil (gravel free)                       |  |  |       | 4.00        |                  |          |           |              |              |            |
| 8                 | Requirement of sand to nullify the impact of cracks |  |  |       |             |                  | 1.25     |           |              |              |            |
|                   |   |  |  | Total |             | 84.44            | 12.53    |           | 29.11        | 12.25        | 1.00       |

| <b>COST ABSTRACT</b> |                |  |                 |                |                        |                     |
|----------------------|----------------|--|-----------------|----------------|------------------------|---------------------|
|                      | <b>Sl. No.</b> | <b>Item</b>  | <b>Quantity</b> | <b>Unit</b>    | <b>Rate (Rs./Unit)</b> | <b>Amount (Rs.)</b> |
| A                    | 1              | Cement   | 84              | Bag            | 300.00                 | 25331.41            |
|                      | 2              | Sand (good quality)  | 12.53           | m <sup>3</sup> | 900.00                 | 11275.03            |
|                      | 3              | Concrete-12 mm   | 0.39            | m <sup>3</sup> | 1300.00                | 511.88              |
|                      | 4              | Concrete-20 mm   | 2.17            | m <sup>3</sup> | 1200.00                | 2600.04             |
|                      | 5              | Khanda (8"x8"x8")  | 29.11           | m <sup>3</sup> | 1000.00                | 29106.25            |
|                      | 6              | M S Bar (10 mm Saria)  | 1.00            | q              | 4500.00                | 4500.00             |
|                      | 7              | Boulder  | 12.25           | m <sup>3</sup> | 700.00                 | 8575.00             |
|                      | 8              | Filling of black clay soil in the up stream (free from any kind of gravel)         | 4.00            | Trolley        | 700.00                 | 2800.00             |
|                      |                |  |                 |                | <b>Total</b>           | <b>84699.60</b>     |
| B                    | 9              | Water supply through tanker @ 3 % of material cost                                 |                 |                |                        | 2540.99             |
| C                    | 10             | Labour Charges @ 35%   |                 |                |                        | 29644.86            |
|                      |                |  |                 |                | <b>Total (A+B+C)</b>   | <b>116885.45</b>    |
|                      | 11             | Misc. @ 3%   |                 |                |                        | 3506.56             |
|                      |                |  |                 |                | <b>G. Total</b>        | <b>120392.01</b>    |
|                      |                | <b>Rs. 1,20,392/- (Rs. One lakh twenty thousand three hundred ninety two only)</b> |                 |                |                        |                     |

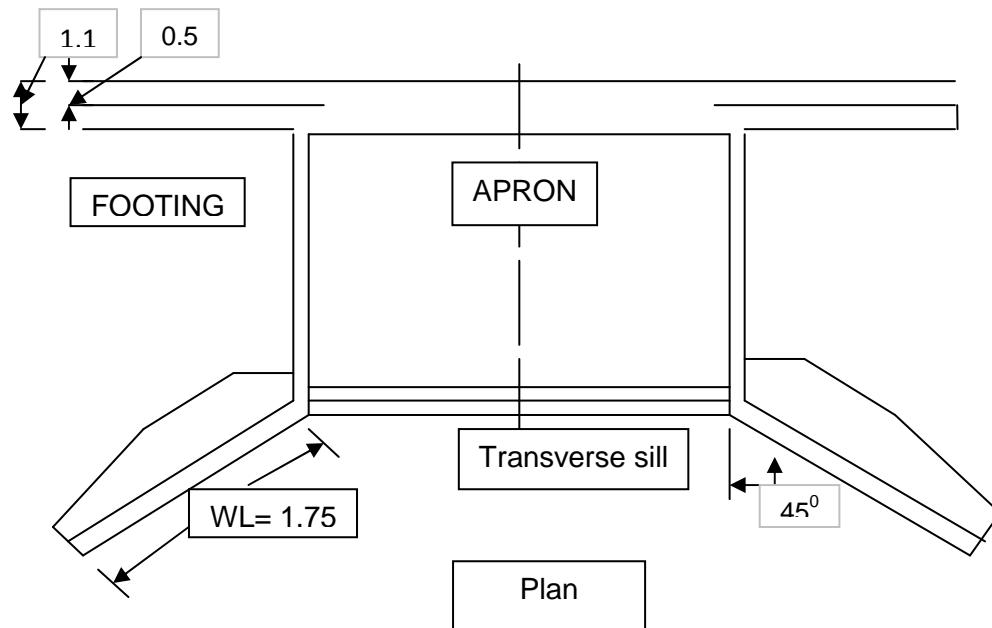
**Note:** The cost of materials is inclusive of all taxes and transportation to the site. It is based on the prevailing market rates. It may vary with respect to time



DOWN STREAM ELEVATION



SECTION ON CENTRE LINE



Note: Figure not to scale, All dimensions are in Metre

$L$  = Length of weir  
 $h$  = Depth of weir  
 $F$  = Drop through spillway from crest of weir to top of transverse sill  
 $S$  = Height of transverse sill  
 $L_B$  = Length of Apron  
 $T$  = Depth of toe wall below top of apron  
 $C$  = Depth of cutoff wall below top of apron  
 $E$  = Length of headwall extension  
 $J$  = Height of wingwall & sidewall at junction

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 ICRISAT, PATANCHERU, A.P.

## CHAPTER - 6

### CAPACITY BUILDING PLAN

The capacity building of various stake holders will be given very high priority as the watershed is to be developed in participatory mode. Capacity building initiative plays very important role in human resource development of model watershed to replicate and train other watershed resource persons. The capacity building initiatives include training to government officials, CBOs, farmers and PIAs through field days, hands-on trainings, exposure visits to successful watersheds, training materials and etc. Need-based specialized training courses will be conducted. The details of the training institutes for capacity building and training to stake holders on participatory watershed management are summarized in Table 6.1 and 6.2, respectively.

**Table 6.1: List of identified training institutes for capacity building\***

| Sr. No. | Name of the Training Institute             | Full Address with contact no, website & e-mail | Designation of the Head of Institute | Type of Institute      | Area(s) of specialization                             | No. of training assigned | No. of persons to be trained | Allocation to be made to the institute |
|---------|--|--|--------------------------------------|------------------------|---|--------------------------|------------------------------|--|
| 1.      | Krishi Vigyan Kendra                       | Jaitpur, Belatal, Mahoba                       | Programme Coordinator                | Agriculture University | Extension<br>Agronomy<br>Home Science<br>Soil Science | 32                       | 1600                         | Proposal with budget will be received  |
| 2.      | National Research Center for Agro-Forestry | Gwalior Road, Jhansi                           | Director                             | GOI, (ICAR)            | Agro-forestry and NRM on watershed basis              | 32                       | 1600                         | -do-                                   |
| 3       | District Gram Vikash Sansthan              | Mahoba   | Coordinator                          | State Govt.            | Small scale   | 8                        | 200                          | -do-                                   |
| 4       | Indian Institute of Grass Land             | Gwalior Road, Jhansi                           | Director, Jhansi                     | GoI (ICAR)             | Grasses and fodder                                    | 8                        | 200                          | -do-                                   |
| 5       | Dept. Of Horticulture                      | Mahoba   | Deputy Director                      | State Govt.            | Fruit and Vegetable Production                        | 4                        | 100                          | -do-                                   |

\*Number of trainings and persons may be changed as per the budget available.

**Table 6.2: Training to stakeholders on participatory watershed management\***

| Sl. No. | Client Group                          | Title of the Programme/Duration/ Time                                   | Objectives  | Coverage/Topics  | Training Methodology                                | Training Institutions  |
|---------|---------------------------------------|---|---|--|---|--|
| 1.      | Watershed Committee & WDT members     | Planning and implementation of IWMP Project (3 day)                     | To Strengthen WC and WDT for planning and executing the Project     | Natural Resource Management Livelihood options for landless and marginal farmers. Improved Agriculture production system       | Lectures, videos and visits to successful watershed | National Research Center for Agro-forestry, Gwalior Road, Jhansi |
| 2.      | User Group, SHGs members              | Agriculture Production system and specialized training for SHGs (3 day) | To increase the Agriculture productivity and livelihood improvement | Integrated crop management in pulses, cereals, oilseeds, vegetables, orchards and small scale projects related to Agriculture. | Lectures, videos and visits                         | Krishi Vigyan Kendra, Bharari, Mahoba                            |
| 3       | Watershed Committee & WDT members     | Management of natural resources on watershed basis and agroforestry     | Awareness and strengthening of knowledge and skills                 | NRM, Production system and livelihood  | Lectures, videos and visits to successful watershed | National Research Center for Agro-forestry, Gwalior Road, Jhansi |
| 4       | Secretaries of WC and WDT/PIA members | Book keeping and record maintenance                                     | Maintenance of record and preparing budget                          | Cash book and ledger registers, preparing budget, maintenance of accounts  | Lectures and practical exercise                     | National Research Center for Agro-forestry, Gwalior Road, Jhansi |
| 5       | PIA/WDT                               | Cultivation of fodder in  | Awareness   | Package of practices   | Lectures, videos                                    | Indian Grassland and Fodder                                      |

|    |                    |                                 |                                     |                       |   |   |
|----|--------------------|---------------------------------|-------------------------------------|-----------------------|---|---|
|    | members            | watershed                       | and knowledge enhancement           | of fodder cultivation | and visits to successful watershed                              | Research Institute, Jhansi                      |
| 6. | PIA/WDT/WC members | Knowledge of market and pricing | Awareness and knowledge enhancement | Market intelligence   | Lectures, videos and visits                                     | Agriculture Technology Management Agency (ATMA) |
| 7  | PIA/WDT members    | Design of SWC structures        | Strengthening of knowledge          | SWC structures        | Lectures, practical exercise and visits to successful watershed | NRCAF, Jhansi / CSWCRTI&RS, Datia, MP           |

\*Training programs, duration and topics may be change on course of project as per need

# CHAPTER - 7

## PHASING OF PROGRAMME AND BUDGETING

### 7.1 Monitoring and Evaluation

Monitoring of the project will be done at each stage and it will be carried out for both, process and outcome. Some community members will be trained and will be involved in participatory monitoring of various parameters and processes and the crop yields. The interventions, expenditure and other information will be displayed in the micro-watershed through wall writings. Besides trained community members, PIA/DWDC will also monitor the physical and financial progress of watershed development programme. Frontier technologies viz. GIS and Remote Sensing techniques will be used by the PIA/District Watershed Committee Development (DWCD) for monitoring and evaluation. The PIA shall submit quarterly progress reports (countersigned by the Watershed Committee (WC) President) to the DWDC for further submission to the SLNA. Sustainable and unbiased monitoring will be ensured by involving an independent agency to monitor impact assessment subsequently. About 1 per cent of the total budget will be used on this activity.

#### Plan for Evaluation

Watershed development activities bring about both tangible and intangible benefits. In order to quantify the benefits, impact analysis has been proposed.

#### Theme

The watershed development activities will bring significant and tangible change in socio-economic status of inhabitants, cropping intensity, ground water recharge, crop diversification, fuel, fodder and small timber availability, livestock composition and milk production, etc. Data on indicators baseline in such parameters with base line data would provide the quantitative information on impact.

#### Observations

The following indicators will be taken into account for quantitative and qualitative assessment. For the purpose, detailed questionnaires will be prepared and field observations will be carried out.

- Duration of availability of drinking water/irrigation and groundwater recharge measure through periodic ground water level in dug well
- Irrigation frequency and area under irrigation
- Changes in cropping pattern and cropping systems in the farmers fields along with productivity and incomes
- Soil health
- Satellite monitoring for vegetation cover and other parameters
- Fuel, fodder and small timber availability
- Livestock composition and productivity

- Periodic pest and disease monitoring will be done in major crops
- Socio-economic aspects including resource inventory
- Following indices will also be worked out as qualitative indicators of the watershed development:
- Land Improvement Index (LII)
- Crop Diversification Index (CDI)
- Cultivated Land Utilization Index (CLUI)
- Crop Fertilization Index (CFI)
- Induced Watershed Eco-Index (IWEI)

The concurrent and post-project monitoring and evaluation would be conducted to assess the status of watershed related interventions. It will be done by an independent agency having similar experiences. About 1 per cent of the total budget will also be used on evaluation.

## 7.2 Annual Action Plan (AAP)

Physical and financial targets and outlays and their year wise break ups are given Table 7.1. Year wise financial phasing for the budget available (Rs. 657.96 lakh) with IWMP-XVIII, district Mahoba is given in Table 7.2.

**Table 7.1: Physical and financial targets and outlays and their year wise break ups of IWMP-XVIII, Mahoba**

| Project - IWMP-XVIII |                                |      | PIA-Soil Conservation Unit., Mahoba |          |             |          |            |          | District-Mahoba |          |               |       |
|----------------------|--------------------------------|------|-------------------------------------|----------|-------------|----------|------------|----------|-----------------|----------|---------------|-------|
| S. No                | Physical and financial targets | Unit | First Year                          |          | Second Year |          | Third Year |          | Fourth Year     |          | Total Project |       |
|                      |                                |      | 2011-12                             | Physical | Financial   | Physical | Financial  | Physical | Financial       | Physical | Financial     |       |
| 1                    | Administration                 |      |                                     | 3.29     |             | 32.90    |            | 19.74    |                 | 9.87     | 0             | 65.80 |
| 2                    | Monitoring                     |      |                                     | 0.00     |             | 3.29     |            | 1.64     |                 | 1.64     | 0             | 6.58  |
| 3                    | Evaluation                     |      |                                     | 0.00     |             | 1.32     |            | 2.96     |                 | 2.30     | 0             | 6.58  |
| 4                    | <b>Entry point activities</b>  | No.  |                                     |          |             |          |            |          |                 | 0        | 0.00          |       |
|                      | (1) Planned                    |      | 10                                  | 26.32    | 0           | 0.00     | 0          | 0.00     | 0               | 0.00     | 10            | 26.32 |

|   |  |         |       |      |      |       |      |       |   |      |       |      |
|---|--|---------|-------|------|------|-------|------|-------|---|------|-------|------|
|   | (a) No. of Activities                        | No.     | 10    | 0.00 | 0    | 0.00  | 0    | 0.00  | 0 | 0.00 | 10    | 0.00 |
|   | (b) No. of beneficiaries                     | No.     | 11900 | 0.00 | 0    | 0.00  | 0    | 0.00  | 0 | 0.00 | 11900 | 0.00 |
|   | (2) Executed                                 |         | 10    | 0.00 | 0    | 0.00  | 0    | 0.00  | 0 | 0.00 | 10    | 0.00 |
|   | (c) No. of Activities                        | No.     | 10    | 0.00 | 0    | 0.00  | 0    | 0.00  | 0 | 0.00 | 10    | 0.00 |
|   | (d) No. of beneficiaries                     | No.     | 11900 | 0.00 | 0    | 0.00  | 0    | 0.00  | 0 | 0.00 | 11900 | 0.00 |
| 5 | <b>Institutional &amp; Capacity Building</b> |         |       |      |      |       |      |       |   | 0    | 0.00  |      |
|   | (1) No. of Persons to be trained             |         | 235   | 1.64 | 2410 | 16.45 | 2150 | 14.80 |   | 4795 | 32.90 |      |
|   | (a) SLNA level                               | No.     | 30    | 0.27 | 300  | 2.70  | 300  | 2.70  |   | 630  | 5.67  |      |
|   | (b) District level                           | ,,      | 45    | 0.36 | 360  | 2.88  | 330  | 2.64  |   | 735  | 5.88  |      |
|   | (c) PIA level<br>(OFFICIAL/WDT/SECA RATORY)  | ,,      | 60    | 0.42 | 420  | 2.94  | 390  | 2.73  |   | 870  | 6.09  |      |
|   | (c) PIA level<br>(FARMERS)                   | ,,      | 100   | 0.59 | 1330 | 7.93  | 1130 | 6.73  |   | 2560 | 15.26 |      |
| 6 | <b>DPR Preparation</b>                       | MWS No. | 18    | 6.58 | 0    | 0.00  | 0    | 0.00  | 0 | 0.00 | 18    | 6.58 |
| 7 | <b>Watershed Development Works</b>           |         | -     |      |      |       |      |       |   | 0    | 0.00  |      |

|   |  |     |          |      |            |       |            |       |       |       |            |             |
|---|--|-----|----------|------|------------|-------|------------|-------|-------|-------|------------|-------------|
|   | (1) SMC                                    | cum | 0        | 0.00 | 19268<br>6 | 84.69 | 11561<br>1 | 50.82 | 77074 | 33.88 | 38537<br>1 | 169.39      |
|   | (2) Water Resource Development             |     |          |      |            |       |            |       |       |       | 0          | 0.00        |
|   | (a) Structures                             | No. | 0        |      | 92         | 99.54 | 55         | 59.72 | 37    | 39.81 | 184        | 199.07      |
|   | (b) Storage capacity                       | cum |          | -    | 40305      | 0.00  | 24183      | 0.00  | 16122 | -     | 80610      | 0.00        |
|   | (c) Life saving irrigation area            | ha. |          |      | 67         | 0.00  | 40         | 0.00  | 27    |       | 134        | 0.00        |
|   | (d) User Groups                            | No. |          |      | 92         |       | 55         |       | 37    |       | 184        | 0.00        |
| 8 | <b>Production system</b>                   |     |          |      |            |       |            |       |       |       | 0          | 0.00        |
|   | <b>(1) Agriculture</b>                     |     |          |      |            |       |            |       |       |       | <b>0</b>   | <b>0.00</b> |
|   | (a) Crop demonstration                     |     |          |      |            |       |            |       |       |       | 0          | 0.00        |
|   | (1) No. of dem.                            | No. | 0        | 0.00 | 0          | 13.32 | 0          | 13.32 | 0     | 2.96  | 0          | 29.60       |
|   | (2) Area                                   | ha. |          |      | 127        |       | 127        |       | 28    |       | 282        | 0.00        |
|   | <b>(b) Seed Production</b>                 |     | <b>0</b> |      |            |       |            |       |       |       | <b>0</b>   | <b>0.00</b> |
|   | (1) No. of dem.                            | No. | 0        | 0.00 | 280        | 11.74 | 280        | 11.74 | 62    | 2.61  | 622        | 26.10       |
|   | (2) Area                                   | ha. | 0        |      | 112        |       | 112        |       | 25    |       | 249        | 0.00        |
|   | <b>(2) Horticulture/ Agri-Horticulture</b> |     | <b>0</b> |      |            |       |            |       |       |       | <b>0</b>   | <b>0.00</b> |
|   | (a) Area                                   | ha. | 0        | 0.00 | 14         | 2.43  | 14         | 2.43  | 3     | 0.54  | 30         | 5.40        |
|   | (b) No. of Plants                          | No. |          | 0.00 |            |       |            |       |       |       | 0          | 0.00        |

|   |  |                        |   |      |     |      |     |      |    |          |             |      |
|---|--|------------------------|---|------|-----|------|-----|------|----|----------|-------------|------|
|   | <b>(3) Animal husbandry</b>                |                        |   |      |     |      |     |      |    | <b>0</b> | <b>0.00</b> |      |
|   | A. fodder production                       | No. of Units / Farmers | 0 | 0.00 | 109 | 0.65 | 109 | 0.65 | 24 | 0.15     | 242         | 1.45 |
|   | B. Vaccination/Medication                  | No. of Animals         |   |      | 147 | 0.11 | 147 | 0.11 | 33 | 0.02     | 327         | 0.24 |
|   | C. Artificial Insemination                 | No. of Animals         |   |      | 148 | 0.06 | 148 | 0.06 | 33 | 0.01     | 329         | 0.13 |
|   | D. Natural Service.                        | He Buffalo             |   |      | 5   | 1.30 | 5   | 1.30 | 1  | 0.29     | 12          | 2.88 |
| 9 | <b>Livelihood activities through SHG's</b> |                        |   |      |     |      |     |      |    | 0        | 0.00        |      |
|   | (1) Activity Goatary                       |                        |   |      |     |      |     |      |    | 0        | 0.00        |      |
|   | (a) No. of SHG's                           | No.                    | 0 | 0.00 | 15  | 3.71 | 15  | 3.71 | 3  | 0.83     | 33          | 8.25 |
|   | (b) No. of members                         | No.                    | 0 | 0.00 | 149 | 0.00 | 149 | 0.00 | 33 | 0.00     | 330         | 0.00 |
|   | (c) Estimated income per year              | Rs.                    | 0 | 0.00 |     |      |     |      |    | 0        | 0.00        |      |
|   | (2) Activity- Back Yard Poultry            |                        | 0 | 0.00 |     |      |     |      |    | 0        | 0.00        |      |
|   | (a) No. of SHG's                           | No.                    | 0 | 0.00 | 14  | 3.38 | 14  | 3.38 | 3  | 0.75     | 30          | 7.50 |
|   | (b) No. of members                         | No.                    | 0 | 0.00 | 135 | 0.00 | 135 | 0.00 | 30 | 0.00     | 300         | 0.00 |
|   | (c) Estimated income per year              | Rs.                    | 0 | 0.00 |     |      |     |      |    | 0        | 0.00        |      |

|  |                                    |     |   |      |     |      |     |      |    |      |      |      |
|--|------------------------------------|-----|---|------|-----|------|-----|------|----|------|------|------|
|  | (3) Activity- Poultry ,<br>Broiler |     | 0 | 0.00 |     |      |     |      |    | 0    | 0.00 |      |
|  | (a) No. of SHG's                   | No. | 0 | 0.00 | 12  | 3.04 | 12  | 3.04 | 3  | 0.68 | 27   | 6.75 |
|  | (b) No. of members                 | No. | 0 | 0.00 | 122 | 0.00 | 122 | 0.00 | 27 | 0.00 | 270  | 0.00 |
|  | (c) Estimated income<br>per year   | Rs. | 0 | 0.00 |     |      |     |      |    | 0    | 0.00 |      |
|  | (4) Black Smithy                   |     |   |      |     |      |     |      |    | 0    | 0.00 |      |
|  | (a) No. of SHG's                   | No. | 0 | 0.00 | 9   | 2.36 | 9   | 2.36 | 2  | 0.53 | 21   | 5.25 |
|  | (b) No. of members                 | No. | 0 | 0.00 | 95  | 0.00 | 95  | 0.00 | 21 | 0.00 | 210  | 0.00 |
|  | (c) Estimated income<br>per year   | Rs. | 0 | 0.00 |     | 0.00 | 0   | 0.00 | 0  | 0.00 | 0    | 0.00 |
|  | (5) Rope making                    |     |   |      |     |      |     |      |    | 0    | 0.00 |      |
|  | (a) No. of SHG's                   | No. | 0 | 0.00 | 8   | 1.91 | 8   | 1.91 | 2  | 0.43 | 17   | 4.25 |
|  | (b) No. of members                 | No. | 0 | 0.00 | 77  | 0.00 | 77  | 0.00 | 17 | 0.00 | 170  | 0.00 |
|  | (c) Estimated income<br>per year   | Rs. | 0 | 0.00 |     |      |     |      |    | 0    | 0.00 |      |
|  | (6) Tailoring                      |     |   |      |     |      |     |      |    | 0    | 0.00 |      |
|  | (a) No. of SHG's                   | No. | 0 | 0.00 | 9   | 2.36 | 9   | 2.36 | 2  | 0.53 | 21   | 5.25 |
|  | (b) No. of members                 | No. | 0 | 0.00 | 95  | 0.00 | 95  | 0.00 | 21 | 0.00 | 210  | 0.00 |

|  |                               |     |   |      |     |      |     |      |    |      |     |      |
|--|-------------------------------|-----|---|------|-----|------|-----|------|----|------|-----|------|
|  | (c) Estimated income per year | Rs. | 0 | 0.00 |     | 0.00 | 0   | 0.00 | 0  | 0.00 | 0   | 0.00 |
|  | (8) Vermi Composting          |     |   |      |     |      |     |      |    |      | 0   | 0.00 |
|  | (a) No. of SHG's              | No. | 0 | 0.00 | 12  | 2.93 | 12  | 2.93 | 3  | 0.65 | 26  | 6.50 |
|  | (b) No. of members            | No. | 0 | 0.00 | 117 | 0.00 | 117 | 0.00 | 26 | 0.00 | 260 | 0.00 |
|  | (c) Estimated income per year | Rs. | 0 | 0.00 |     |      |     |      |    |      | 0   | 0.00 |
|  | (9) Food processing           |     |   |      |     |      |     |      |    |      | 0   | 0.00 |
|  | (a) No. of SHG's              | No. | 0 | 0.00 | 13  | 3.15 | 13  | 3.15 | 3  | 0.70 | 28  | 7.00 |
|  | (b) No. of members            | No. | 0 | 0.00 | 126 | 0.00 | 126 | 0.00 | 28 | 0.00 | 280 | 0.00 |
|  | (c) Estimated income per year | Rs. | 0 | 0.00 |     |      |     |      |    |      | 0   | 0.00 |
|  | (13) Seed Bank                |     |   |      |     |      |     |      |    |      | 0   | 0.00 |
|  | (a) No. of SHG's              | No. | 0 | 0.00 | 15  | 3.81 | 15  | 3.81 | 3  | 0.85 | 33  | 8.47 |
|  | (b) No. of members            | No. | 0 | 0.00 | 149 | 0.00 | 149 | 0.00 | 33 | 0.00 | 330 | 0.00 |
|  | (c) Estimated income per year | Rs. | 0 | 0.00 |     |      |     |      |    |      | 0   | 0.00 |

|                    |   |  |   |      |   |      |   |      |   |       |                    |               |
|--------------------|---|--|---|------|---|------|---|------|---|-------|--------------------|---------------|
| 10                 | <b>Consolidation &amp; Withdrawl Phase activities</b> |  | 0 | 0.00 | 0 | 0.00 | 0 | 0.00 | 0 | 19.74 | 0                  | 19.74         |
| <b>Grand Total</b> |   |  |   |      |   |      |   |      |   |       | <b>62338<br/>2</b> | <b>657.96</b> |

**Table 7.2: Year wise financial phasing (Rs in Lakh) Project IWMP-XVIII, Dept. of Agriculture, Mahoba, U.P.**

| Particulars                               | 1st Year     | 2nd Year      | 3rd Year      | 4th Year      | Total         |
|---|--------------|---------------|---------------|---------------|---------------|
| Administrative Cost-10%                   | 3.29         | 32.90         | 19.74         | 9.87          | 65.80         |
| Monitering-1%                             | 0.00         | 3.29          | 1.64          | 1.64          | 6.58          |
| Evalution-1%                              | 0.00         | 1.32          | 2.96          | 2.30          | 6.58          |
| Entry Point Activity-4%                   | 26.32        | 0.00          | 0.00          | 0.00          | 26.32         |
| Institution & Capacity Building-5%        | 1.64         | 16.45         | 14.80         | 0.00          | 32.90         |
| DPR-1%                                    | 6.58         | 0.00          | 0.00          | 0.00          | 6.58          |
| Watershed Dev. Work-56%                   | 0.00         | 184.23        | 110.54        | 73.69         | 368.46        |
| Livelihood Activity-9%                    | 0.00         | 26.65         | 26.65         | 5.92          | 59.22         |
| Production System & Micro enterprises-10% | 0.00         | 29.61         | 29.61         | 6.58          | 65.80         |
| Consolidation-3%                          | 0.00         | 0.00          | 0.00          | 19.74         | 19.74         |
| <b>Total</b>                              | <b>37.83</b> | <b>294.44</b> | <b>205.94</b> | <b>119.75</b> | <b>657.96</b> |

### 7.3 Details of Convergence

The details of convergence of different developmental schemes are given Chapter 5.

### 7.4 Benefit Cost Analysis

Benefit cost analysis for the project were given in Table 7.3 and 7.4, respectively. The overall B:C ratio for pre and post project is 1.81 and 2.36, respectively,

**Table 7.3: Micro-watershed wise benefit cost analysis of IWMP-XVIII, Mahoba  
Present Outcome (Crops)**

| S.<br>No.                                       | Name of Crop (Season<br>wise) | Area<br>(ha)   | Production<br>(quintal) | Productivity<br>q/ha | Cost/ ha     | Rate<br>Rs/q | Gross<br>Return Rs | Gross<br>Return/ha | Total<br>Cost Rs | Net<br>Return    | Net<br>Return<br>/ha | B:C<br>Ratio |
|---|-------------------------------|----------------|-------------------------|----------------------|--------------|--------------|--------------------|--------------------|------------------|------------------|----------------------|--------------|
| 1   | Urd                           | 1029.99        | 2935.47                 | 2.85                 | 9500         | 5500         | 16145085           | 15675              | 5664942          | 10480143         | 10175                | 1.65         |
| 2   | Moong                         | 601.79         | 1624.84                 | 2.70                 | 9200         | 5800         | 9424061            | 15660              | 3490393          | 5933668          | 9860                 | 1.70         |
| 3   | Arhar                         | 415.76         | 2037.22                 | 4.90                 | 11800        | 6000         | 12223301           | 29400              | 2494551          | 9728750          | 23400                | 2.49         |
| 4   | Sorghum                       | 329.49         | 1911.02                 | 5.80                 | 4500         | 2600         | 4968647            | 15080              | 856663           | 4111983          | 12480                | 3.35         |
| 5   | Til                           | 1171.40        | 2108.51                 | 1.80                 | 4200         | 7000         | 14759600           | 12600              | 8199778          | 6559822          | 5600                 | 3.00         |
| <b>Total</b>                                    |                               | <b>3548.42</b> | <b>10617.06</b>         |                      |              |              | <b>57520694</b>    |                    | <b>20706327</b>  | <b>36814367</b>  |                      |              |
| 1   | Wheat                         | 1361.98        | 20668.05                | 15.18                | 12500        | 1800         | 37202485           | 27315              | 2451564          | 34750921         | 25515                | 2.19         |
| 2   | Barley                        | 1723.69        | 19650.07                | 11.40                | 6500         | 1200         | 23580079           | 13680              | 2068428          | 21511651         | 12480                | 2.10         |
| 3   | Masoor                        | 1733.43        | 8060.47                 | 4.65                 | 9500         | 4200         | 33853981           | 19530              | 7280426          | 26573555         | 15330                | 2.06         |
| 4   | Gram                          | 961.31         | 5527.56                 | 5.75                 | 8560         | 2800         | 15477162           | 16100              | 2691680          | 12785482         | 13300                | 1.88         |
| 5   | Field Pea                     | 471.80         | 3231.85                 | 6.85                 | 8240         | 2400         | 7756452            | 16440              | 1132329          | 6624123          | 14040                | 2.00         |
| <b>Total</b>                                    |                               | <b>6252.22</b> | <b>57138.00</b>         |                      |              |              | <b>117870159</b>   |                    | <b>15624427</b>  | <b>102245732</b> |                      | 1.99         |
| Cropping Intensity                              |                               | 95.06          |                         |                      | Over All B:C | 1.99         |                    |                    |                  |                  |                      |              |
| Cultivable Area (ha)                            |                               | 10310.09       |                         |                      |              |              |                    |                    |                  |                  |                      |              |
| <b>Total Number of Farm<br/>Families in MWS</b> |                               | <b>4668</b>    |                         |                      |              |              |                    |                    |                  |                  |                      |              |
| Net Return per<br>Household                     |                               | 21903.5        |                         |                      |              |              |                    |                    |                  |                  |                      |              |

**Expected Outcome (Crops)**

| S. No. | Name of Crop (Season wise)                  | Area (ha)      | Production (quintal) | Productivity q/ha | Cost/ ha     | Rate Rs/q | Gross Return Rs  | Gross Return/ha | Total Cost Rs   | Net Return       | Net Return /ha | B:C Ratio |
|--------|---|----------------|----------------------|-------------------|--------------|-----------|------------------|-----------------|-----------------|------------------|----------------|-----------|
| 1      | Urd   | 1463.76        | 6257.56              | 4.275             | 9500         | 5500      | 34416590         | 23513           | 8050664         | 26365925         | 18013          | 2.48      |
| 2      | Moong                                       | 854.72         | 3572.75              | 4.18              | 9200         | 5800      | 20721941         | 24244           | 4957402         | 15764539         | 18444          | 2.64      |
| 3      | Arhar                                       | 592.10         | 3833.83              | 6.475             | 11800        | 6000      | 23003000         | 38850           | 3552587         | 19450413         | 32850          | 3.29      |
| 4      | Sorghum                                     | 451.40         | 3213.94              | 7.12              | 4500         | 2600      | 8356236          | 18512           | 1173629         | 7182607          | 15912          | 4.11      |
| 5      | Til   | 1604.81        | 4084.25              | 2.545             | 4200         | 7000      | 28589755         | 17815           | 11233696        | 17356060         | 10815          | 4.24      |
|        | <b>Total</b>                                | <b>4966.79</b> | <b>20962.33</b>      |                   |              |           | <b>115087522</b> | <b>122934</b>   | <b>28967978</b> | <b>86119544</b>  |                |           |
| 1      | Wheat                                       | 1392.44        | 27521.50             | 19.765            | 12500        | 1800      | 49538697         | 35577           | 2506385         | 47032313         | 33777          | 2.85      |
| 2      | Barley                                      | 1800.04        | 26343.64             | 14.635            | 6500         | 1200      | 31612362         | 17562           | 2160052         | 29452310         | 16362          | 2.70      |
| 3      | Masoor                                      | 1810.25        | 10454.21             | 5.775             | 9500         | 4200      | 43907680         | 24255           | 7603062         | 36304619         | 20055          | 2.55      |
| 4      | Gram  | 1008.17        | 6875.72              | 6.82              | 8560         | 2800      | 19252012         | 19096           | 2822876         | 16429136         | 16296          | 2.23      |
| 5      | Field Pea                                   | 494.78         | 3945.88              | 7.975             | 8240         | 2400      | 9470115          | 19140           | 1187475         | 8282639          | 16740          | 2.32      |
|        | <b>Total</b>                                | <b>6505.68</b> | <b>75140.94</b>      |                   |              |           | <b>153780867</b> | <b>115630</b>   | <b>16279849</b> | <b>137501017</b> |                | 2.61      |
|        | Cropping Intensity                          | 111.27         |                      |                   | Over All B:C | 2.61      |                  |                 |                 |                  |                |           |
|        | Cultivable Area (ha)                        | 10310.09       |                      |                   |              |           |                  |                 |                 |                  |                |           |
|        | <b>Total Number of Farm Families in MWS</b> | <b>4668</b>    |                      |                   |              |           |                  |                 |                 |                  |                |           |
|        | Net Return per Household                    | 29456.09       |                      |                   |              |           |                  |                 |                 |                  |                |           |

**Present Outcome (Livestock)**

| <b>Particulars</b>  | <b>Cows</b>    | <b>Buffaloes</b> | <b>Goat</b>     | <b>Bullocks</b> |
|---|----------------|------------------|-----------------|-----------------|
| Total Animals in Micro watershed Area                                       | 1982           | 1337             | 8247            | 242             |
| Milking Animals   | 930            | 555              | 2600            |                 |
| Average Milk Production Lit. / day  | 1469.4         | 2142.3           | 832             |                 |
| Average Milk Production /Animal/ day  | 1.58           | 3.86             | 0.32            |                 |
| Sale of Milk per day (Rs) @ Rs 15/Lit                                       | 22041          | 32134.5          | 12480           |                 |
| <b>Average 150 day milking days &amp; Goat 90 days in a year (Total Rs)</b> | <b>3306150</b> | <b>4820175</b>   | <b>1123200</b>  |                 |
| Meat Animals  |                |                  | 3700            |                 |
| Average rate of one kids Rs   |                |                  | 2500            |                 |
| <b>Total Sale in a year Rs</b>  |                |                  | <b>9250000</b>  |                 |
| Working Animals (Bullocks)  |                |                  |                 | 242             |
| One year work one agriculture fields 180 days @ 200/ day (One pair)         |                |                  |                 | 36000           |
| <b>Total Work value of all Draft animals</b>                                |                |                  |                 | <b>4356000</b>  |
| <b>Total monetary worth (Rs.)</b>   | <b>3306150</b> | <b>4820175</b>   | <b>10373200</b> | <b>4356000</b>  |
|   |                |                  |                 | <b>22855525</b> |
| <b>Total Family</b>   |                |                  |                 | 4668.00         |
| <b>Total Income/Family</b>  |                |                  |                 | 4896.21         |
| Total Expenditure / family  |                |                  |                 | 3000            |
| <b>B:C Ratio</b>  |                |                  |                 | 1.6             |

**Projected Outcome (Livestock)**

| <b>Particulars</b>  | <b>Cows</b>    | <b>Buffaloes</b> | <b>Goat</b>     | <b>Bullocks</b> |
|---|----------------|------------------|-----------------|-----------------|
| Total Animals in Micro watershed Area                                       | 3050           | 2080             | 11500           | 330             |
| Milking Animals   | 1600           | 1110             | 4100            |                 |
| Average Milk Production Lit. / day  | 3520           | 5994             | 2460            |                 |
| Average Milk Production /Animal/ day  | 2.2            | 5.4              | 0.6             |                 |
| Sale of Milk per day (Rs) @ Rs 15/Lit                                       | 52800          | 89910            | 36900           |                 |
| <b>Average 150 day milking days &amp; Goat 90 days in a year (Total Rs)</b> | <b>7920000</b> | <b>13486500</b>  | <b>3321000</b>  |                 |
| Meat Animals  |                |                  | 6100            |                 |
| Average rate of one kids Rs   |                |                  | 2800            |                 |
| <b>Total Sale in a year Rs</b>  |                |                  | <b>17080000</b> |                 |
| Working Animals (Bullocks)  |                |                  |                 | 330             |
| One year work one agriculture fields 200 days @ 220/ day (One pair)         |                |                  |                 | 44000           |
| <b>Total Work value of all Draft animals</b>                                |                |                  |                 | <b>7260000</b>  |
| <b>Total monetary worth (Rs.)</b>   | <b>7920000</b> | <b>13486500</b>  | <b>20401000</b> | <b>7260000</b>  |
|   |                |                  |                 | <b>49067500</b> |
| <b>Total Family</b>   |                |                  |                 | 4668.00         |
| <b>Total Income/Family</b>  |                |                  |                 | 10511.46        |
| Total Expenditure / family  |                |                  |                 | 5000            |
| <b>B:C Ratio</b>  |                |                  |                 | 2.10            |

**Table 7.4 : Outcomes & Benefit cost analysis of IWMP-XVIII, Mahoba**

| <b>Net Income / Family</b> | <b>Present</b>  | <b>Projected</b> |
|----------------------------|-----------------|------------------|
| Agriculture                | 21903.54        | 29456.09         |
| Animal Husbandry           | 4896.21         | 10511.46         |
| <b>Total (Ag+AH)</b>       | <b>26799.76</b> | <b>39967.55</b>  |
| <b>Over All B:C of MWS</b> |                 |                  |
| Agriculture                | 1.99            | 2.61             |
| Animal Husbandry           | 1.63            | 2.10             |
| <b>Over All B: C MWS</b>   | <b>1.81</b>     | <b>2.36</b>      |

## CHAPTER - 8

### CONSOLIDATION AND WITHDRAWAL STRATEGY

#### 8. Consolidation and Withdrawal Strategy

Success of any program depends on sustainability of the various watershed interventions and sustainability can only be achieved through active participation of community. Active participation and cooperation of community can be ensured by building their capacities through exposures and trainings. From the beginning emphasis will be on capacity building and empowerment of stakeholders. The Watershed Committee, SHGs, Area Groups, Users Group and other CBOs will be established, trained, and strengthened to continue development after withdrawal of PIA. By building economic activities through CBOs community participation will be sustained. The PR&D approach along with demand driven interventions will reduce dependency on subsidies. Contributions from the community will be ensured for the entire activities to develop sense of belongingness and these contributions will be deposited to the account of Watershed Development Fund. Watershed Development Fund will also be strengthening through donations from the individual and institutions and the CBOs will be trained to run watershed as business model on sustainable basis. The tangible economic benefits along with empowerment and hand holding by PIA will empower the CBOs to develop and sustain the watershed activities after withdrawal of the PIA. Community organizations will withdraw the money from the WDF to maintain the asset created during the implementation phase. The consolidation phase will also include

- Writing of project completion report
- Documentation of success stories
- Making films, leaflets, bulletins and the lessons learnt.

The expenditure will be done as per the Common Guidelines for Watershed Development Projects 2008.

The completion report will reflect the development on following aspects:

- Productivity enhancement (increase in total productivity, seed replacement, farm mechanization, resources use and operational efficiency.)
- Nutritional security (Production of diverse food commodities)
- Risk minimization (Integrated farming system, water harvesting and protected cultivation, value addition and improved marketing)
- State of environment (Improvement in vegetative cover, hydrology and adoption of IPNM)
- Profitability (Loss preventing and cost reducing measures, value addition and agro-processing.)
- Livelihood security (skill enhancement capacity building, increased employment in agriculture and allied enterprises. Reduction in drudgery of farm women and out migration)

## CHAPTER - 9

### EXPECTED PROJECT OUTCOME

#### 9.1 Employment Generation and Checking Migration

There had been very heavy migration from Bundelkhand region. During drought years, it is as high as 39% against an average migration rate of 11%, in other regions of Uttar Pradesh towards northern part of the country, specially the states of Delhi, Punjab and Haryana, as agriculture labours, factory workers, rickshaw pullers etc. The major reason attributed to high rate of migration is continuous drought in the region and absence of any other alternate livelihood opportunity, in spite of several anti-poverty programmes.

Due to watershed management the cropping intensity will be increased by around 16.20 per cent, in turn acreage in agricultural activities will be increased by about 885 ha. Therefore, an additional employment of about 88,500 human-days will be generated annually. Therefore, no migration in search of livelihoods is expected after implementation of watershed programme.

#### 9.2 Other Expected Outcome\*

The following tangible benefits are expected after implementation of the project:

- Runoff will be reduced by about 30 per cent, however soil and nutrient loss may be reduced up to 40 per cent from the watershed.
- Irrigation intensity may be increased to 40 per cent from present 3 per cent life saving irrigation.
- Surface water in nallah may be available for more than 8 months against 4-5 months at present.
- Average ground water recharge of about 2-4 m may be easily obtained after implementation of the programme
- Productivity of crops may be increased by about 15-25 per cent
- Significant saving of seeds may be obtained through crop demonstration with improved package of practices
- During implementation phase about 2,45,000 human-days will be created through the soil and water conservation measures and crop/agroforestry interventions.
- The overall B C ratio of the project is estimated to be 2.36 as compared to the 1.81 in pre project scenario (detailed analysis is given in Chapter 7)

\*Above mentioned outcomes are based on the meta analysis of 636 watershed projects across India support by various govt. deptt. and development agencis throughout the country done by ICRISAT, Hyderabad and practical experience of watershed management in Bundelkhand region.

### **9.3 Questions to be answered**

This project will answer the following questions:

1. Will the measures taken for water harvesting sufficient enough to recharge the perched water table?
2. Will the soil and water conservation practices be helpful in combating drought?
3. Will alternate land use such as agroforestry land use system result in self reliance/prosperity in drought prone areas?
4. Can the strategies based on watershed basis yield fruitful results?
5. Response of the villagers towards the project and their participation in sustaining developed resources after withdrawal of the project?
6. Will the formation of SHGs will help in savings and generation of self employment?
7. Will the watershed programmes improve the socio-economic conditions of the stake holders?
8. Will the watershed programme helps in capacity building of the stake holders for dissemination of various activities of watershed programme?
9. Will it sustain after project withdrawal?

### **9.4 Problems that could be solved as a results of this project/study**

Following problems can be tackled in the proposed watershed:

1. Solving the problems of shortage of fuel, fodder, fruit and small timber requirement of villagers.
2. Creating water resources for ground water recharge availability of surface water for animal drinking and nistar purposes.
3. Increasing fertilizer consumption and improving NPK consumption ratio.
4. Optimizing crop productivity by putting more area under HYV and irrigation.
5. Increasing cropping intensity.
6. Promoting dairying through increased fodder availability.
7. Improving basic amenities and facilities like health, education, drinking water etc.
8. Increasing per capita income and thereby standard of living of farming community.
9. Increasing co-operative membership.
10. Increasing self employment.
11. Improving living standard of society.

**ANNEXURE-I**  
**BENEFICIARIES WISE DETAILS OF DEVELOPMENTAL ACTIVITIES**

Village – Gahra (2c1b3f2f)

| Name of Work          | Benefited area (ha) | Field No.. / Khasara No.. | Area of work |                    | C.S. (Area) | Work Measurement | Rate         | Total Cost (Rs.) | Manday Rs. 120/Labour |
|-----------------------|---------------------|---------------------------|--------------|--------------------|-------------|------------------|--------------|------------------|-----------------------|
|                       |                     |                           | Length       | Width * Height     |             |                  |              |                  |                       |
| PBA1                  | 20                  | 1172TO1174,918TO920       | 600          | 5.80+0./260*1.30   | 4.16        | 2496             | 41.23        | 102910.1         | 857.584               |
| <b>Village- Utiya</b> |                     |                           |              |                    |             |                  |              |                  |                       |
| PB1 B1                | 15.352              | 247TO259, 292 ,293        | 600          | 5.80+ 0./260*1.30  | 4.16        | 2496             | 41.23        | 102910.1         | 857.584               |
| PB B2                 | 8.942               | 294TO298 , 341, 342       | 350          | 5.80+0. /2 60*1.30 | 4.16        | 1456             | 41.23        | 60030.88         | 500.2573333           |
| PB B3                 | 14                  | 204 ,205,209 TO 214       | 400          | 4.80+0./280*1.50   | 5.7         | 2280             | 41.23        | 94004.4          | 783.37                |
| PB B4                 | 10.246              | 207, 208, 342             | 400          | 5.80+0./2 60*130   | 4.16        | 1664             | 41.23        | 68606.72         | 571.7226667           |
| PB B5                 | 35.526              | 360 TO 371 ,333           | 1100         | 5.80+0./2 60*130   | 4.16        | 4576             | 41.23        | 188668.5         | 1572.237333           |
| PB B6                 | 17654               | 382 , 385TO389            | 400          | 5.80+0./2 60*130   | 4.16        | 1664             | 41.23        | 68606.72         | 571.7226667           |
| PB B7                 | 12.767              | 390TO404                  | 500          | 5.80+0./2 60*130   | 4.16        | 2080             | 41.23        | 85758.4          | 714.6533333           |
| PB B8                 | 8.943               | 414TO422                  | 350          | 5.80+0./2 60*130   | 4.16        | 1456             | 41.23        | 60030.88         | 500.2573333           |
| PB B9                 | 7.659               | 458, 459, 460, 465,       | 300          | 5.80+0./2 60*130   | 4.16        | 1248             | 41.23        | 51455.04         | 428.792               |
| PB B10                | 7.916               | 834 TO 837, 839, 842      | 310          | 5.80+0./2 60*130   | 4.16        | 1289.6           | 41.23        | 53170.21         | 443.0850667           |
|                       | <b>139.023</b>      |                           | <b>4710</b>  |                    |             | <b>20209.6</b>   |              |                  |                       |
| PB B11                | 3.83                | 830 TO 833                | 150          | 5.80+0./260*1.30   | 4.16        | 624              | 41.23        | 25727.52         | 214.396               |
| PB B 12               | 12.213              | 160 TO174                 | 480          | 5.80+0./260*1.30   | 4.16        | 1996.8           | 41.23        | 82328.06         | 686.0672              |
|                       | 155.066             |                           | 5340         |                    |             | 22830.4          | 41.23        | 941297.4         | 7844.144933           |
| CD B 1                | 19.934              | 183 TO 192 ,194 TO 199    | 300          | 9.10+1.50/2*1.90   | 10.07       | 3021             | 41.23        | 124555.8         | 1037.96525            |
|                       | <b>175</b>          |                           | <b>5640</b>  |                    |             | <b>25851.4</b>   | <b>41.23</b> | <b>1065853</b>   | <b>8882.110183</b>    |

**Village – Utiyan (2c1B3F2d)**

| Name of Work         | Benefited area (ha) | Field No.. / Khasara No..   | Area of work |                  | C.S. (Area ) | Work Measurement | Rate  | Total Cost (Rs.) | Manday Rs. 120/Labour |
|----------------------|---------------------|-----------------------------|--------------|------------------|--------------|------------------|-------|------------------|-----------------------|
|                      |                     |                             | Length       | Width * Height   |              |                  |       |                  |                       |
| CD1                  | 19.956              | 77 to 85, 70                | 200          | 8.30+1.50/2*1.70 | 8.33         | 1666             | 41.23 | 68689.18         | 572.4098              |
| MB1                  | 5.105               | 754 to 757, 761             | 200          | 5.80+.60/2*1.30  | 4.16         | 832              | 41.23 | 34303.36         | 285.8613              |
| MB2                  | 7.658               | 950, 949, 952, 955          | 300          | 5.80+.60/2*1.30  | 4.16         | 1248             | 41.23 | 51455.04         | 428.792               |
| MB3                  | 10.201              | 970 to 973, 976 to 980, 982 | 400          | 5.80+.60/2*1.30  | 4.16         | 1664             | 41.23 | 68606.72         | 571.7227              |
| MB4                  | 21.478              | 724 to 728, 730             | 550          | 5.80+.60/2*1.30  | 4.16         | 2288             | 41.23 | 94334.24         | 786.1187              |
| MB5                  | 4.594               | 967, 968, 969, 987          | 180          | 5.80+.60/2*1.30  | 4.16         | 748.8            | 41.23 | 30873.02         | 257.2752              |
| Total                | 49.036              |                             | 1630         |                  |              | 6780.8           |       | 279572.4         |                       |
| <b>Village-Bari</b>  |                     |                             |              |                  |              |                  |       |                  |                       |
| PBNO.C 1             | 24.794              | 168 to 172, 93, 173 to 176  | 690          | 5.80+.60/2*1.30  | 4.16         | 2870.4           | 41.23 | 118346.6         | 986.2216              |
| PBC2                 | 15.313              | 139 to 166                  | 600          | 5.80+.60/2*1.30  | 4.16         | 2496             | 41.23 | 102910.1         | 857.584               |
| Total                | 40.107              |                             | 1290         |                  |              | 5366.4           |       | 221256.7         |                       |
| CDNO.C 1             | 9.893               | 121 to 137                  | 180          | 8.30+1.50/2*1.7  | 8.33         | 1499.4           | 44.34 | 66483.4          |                       |
| <b>Village-Gahra</b> |                     |                             |              |                  |              |                  |       |                  |                       |
| PB.NO.A              | 7.659               | 975, 976, 979               | 300          | 5.80+.60/2*1.3   | 4.16         | 1248             | 41.2  | 51455.0          | 428.792               |

|         |        |  |      |                  |       |        |       |          |          |
|---------|--------|--|------|------------------|-------|--------|-------|----------|----------|
| 1       |        |  |      | 0                |       |        | 3     | 4        |          |
| PB.A2   | 7.648  | 843, 846, 847, 858                       | 300  | 5.80+.60/2*1.30  | 4.16  | 1248   | 41.23 | 51455.04 | 428.792  |
| PB.A3   | 8.933  | 852 to 855                               | 350  | 5.80+.60/2*1.30  | 4.16  | 1456   | 41.23 | 60030.88 | 500.2573 |
| PB.A4   | 12.764 | 506, 508 to 511, 827 to 829, 849 to 851  | 500  | 5.80+.60/2*1.30  | 4.16  | 2080   | 41.23 | 85758.4  | 714.6533 |
| PB.A5   | 6.382  | 929, 930, 928                            | 250  | 5.80+.60/2*1.30  | 4.16  | 1040   | 41.23 | 42879.2  | 357.3267 |
| PB.A6   | 12.76  | 874, 875, 876                            | 500  | 5.80+.60/2*1.30  | 4.16  | 2080   | 41.23 | 85758.4  | 714.6533 |
| PB.A7   | 9.571  | 81, 82, 120, 872, 873, 874               | 375  | 5.80+.60/2*1.30  | 4.16  | 1560   | 41.23 | 64318.8  | 535.99   |
| Total   | 65.717 |  | 2575 |                  |       | 10712  |       | 441655.8 |          |
| CDNO.A1 | 24.283 | 915, 916, 918, 914, 169, 926, 920 TO 925 | 270  | 9.10+1.50/2*1.90 | 10.07 | 2718.9 |       |          |          |
|         |        | Old Work                                 | 200  | 5.80+.60/2*1.30  | 4.16  | 832    |       |          |          |
|         |        |  |      |                  |       | 1886.9 | 44.34 | 83665.15 | 697.2096 |
| Total   | 24.283 |  | 270  |                  |       | 1886.9 |       | 83665.15 |          |

### Village-Bamhori kaji

|         |        |            |     |                 |      |      |       |          |          |
|---------|--------|------------|-----|-----------------|------|------|-------|----------|----------|
| MBNO.B1 | 16.594 | 517 to 522 | 650 | 5.80+.60/2*1.30 | 4.16 | 2704 | 41.23 | 111485.9 | 929.0493 |
| MB.B2   | 10.211 | 513 to 516 | 400 | 5.80+.60/2*1.30 | 4.16 | 1664 | 41.23 | 68606.72 | 571.7227 |
| MB.B3   | 7.66   | 524 to 528 | 300 | 5.80+.60/2*1.30 | 4.16 | 1248 | 41.23 | 51455.04 | 428.792  |
| MB.B4   | 12.762 | 543 to 550 | 500 | 5.80+.60/2*1.3  | 4.16 | 2080 | 41.2  | 85758.4  | 714.6533 |

|       |           |                 |             |                 |      |                |              |                 |                 |
|-------|-----------|-----------------|-------------|-----------------|------|----------------|--------------|-----------------|-----------------|
|       |           |                 |             | 0               |      |                | 3            |                 |                 |
| MB.B5 | 7.646     | 554 to 556      | 360         | 5.80+.60/2*1.30 | 4.16 | 1497.6         | 41.23        | 61746.05        | 514.5504        |
|       |           | Old Work        | 150         | 3.50+.50/2*.70  | 1.4  | 210            |              |                 |                 |
|       |           |                 |             |                 |      | <b>1287.6</b>  | <b>41.23</b> | <b>53087.75</b> | <b>442.3979</b> |
| MB.B6 | 20.195    | 590, 593 to 622 | 500         | 5.80+.60/2*1.30 | 4.16 | 2080           | 41.23        | 85758.4         | 714.6533        |
| MB.B7 | 4.932     | 627, 628, 632   | 195         | 5.80+.60/2*1.30 | 4.16 | 811.2          | 41.23        | 33445.78        | 278.7148        |
|       | <b>80</b> |                 | <b>2905</b> |                 |      | <b>11874.8</b> |              | <b>551344.1</b> |                 |

**Village- Jujhar (2c1B3f2e)**

| Name of Work | Benefit ed area (ha) | Field No. / Khasara No. | Area of work |                   | C.S. (Are a) | Work Measure ment | Rat e | Total Cost (Rs.) | Manday Rs. 120/Lab our | Name of Farmers          |
|--------------|----------------------|-------------------------|--------------|-------------------|--------------|-------------------|-------|------------------|------------------------|--------------------------|
|              |                      |                         | Length       | Width * Height    |              |                   |       |                  |                        |                          |
| MB1          | 4.55                 | 37to 41                 | 200          | 4.80+.70/2*1.35   | 3.71         | 742               | 41.23 | 30592.66         | 254.93883              | Shree.Harinarayn, Ramdas |
| MB2          | 4.56                 | 22 to 28                | 200          | 4.80+.70/2*1.35   | 3.71         | 742               | 41.23 | 30592.66         | 254.93883              | Balaprasad etc.          |
| Total        | 9.11                 |                         | 400          |                   |              | 1484              |       | 61185.32         |                        |                          |
| CD1          | 2.031                | 59/2, 62, 55,           | 30           | 9.40+1.60/2*91.95 | 10.26        | 307.8             | 44.34 | 13647.852        | 113.7321               | Ramesh, Bablu etc.       |
| CD2          | 3.536                | 59, 57, 58              | 50           | 9.40+1.60/2*91.95 | 10.72        | 536               | 44.34 | 23766.24         | 198.052                | Chhiddi, Hardas etc.     |
| CD3          | 0.323                | 59                      | 5            | 9.40+1.60/2*91.95 | 10.72        | 53.6              | 44.34 | 2376.624         | 19.8052                | Nanhi, Kallu etc.        |

|                          |               |                                 |            |                       |           |               |           |                      |                               |                                 |
|--------------------------|---------------|---------------------------------|------------|-----------------------|-----------|---------------|-----------|----------------------|-------------------------------|---------------------------------|
| Total                    | 5.89          |                                 | 85         |                       |           | 897.4         |           | 39790.7<br>16        |                               |                                 |
| <b>Village-<br/>Ganj</b> |               |                                 |            |                       |           |               |           |                      | Jagrup singh,<br>Devideen     |                                 |
| CD1                      | 11.905        | 13, 14, 15                      |            |                       |           |               |           |                      | Mansingh, Gyansingh           |                                 |
| CD2                      | 14.137        | 5                               |            |                       |           |               |           |                      |                               |                                 |
| Total                    | 26.042        |                                 |            |                       |           |               |           |                      |                               |                                 |
| WHB1                     | 26.279        | 4, 5                            |            |                       |           |               |           |                      | Sarashvati devi,<br>Gyansingh |                                 |
| WHB2                     | 27.679        | 1082 to 1084, 1097              |            |                       |           |               |           |                      |                               |                                 |
| <b>Total</b>             | <b>53.958</b> |                                 |            |                       |           |               |           |                      |                               |                                 |
| MB1                      | 4.55          | 850 to 856                      | 200        | 4.80+.70/2*1.<br>35   | 3.71      | 742           | 41.<br>23 | 30592.6<br>6         | 254.9388<br>3                 | Jagat Narayn, Sukhlal<br>etc.   |
| MB2                      | 4.56          | 871, 870, 869                   | 200        | 4.80+.70/2*1.<br>35   | 3.71      | 742           | 41.<br>23 | 30592.6<br>6         | 254.9388<br>3                 | Balkishan, Kalyan<br>singh etc. |
| <b>Total</b>             | <b>9.11</b>   |                                 | <b>400</b> |                       |           | <b>1484</b>   |           | <b>61185.3<br/>2</b> |                               |                                 |
| CD1                      | 6.77          | 1010, 1009, 1004 to<br>1006     | 100        | 9.20+1.60/2*<br>1.90  | 10.2<br>6 | 1026          | 44.<br>34 | 45492.8<br>4         | 379.107                       | Babulal, Ramkrapal<br>etc.      |
| CD2                      | 10.52         | 1079, 1080, 1081                |            |                       |           |               |           |                      |                               | Rupsingh, Bhojraj               |
| <b>Total</b>             | <b>17.29</b>  |                                 | <b>100</b> |                       |           | <b>1026</b>   |           | <b>45492.8<br/>4</b> |                               |                                 |
| WHB1                     | 10.61         | 1011 to 1013,                   | 150        | 9.40+1.60/2*<br>1.95  | 10.7<br>2 | 1608          | 44.<br>34 | 71298.7<br>2         | 594.156                       | Ramswarup, Vihari               |
| WHB2                     | 20.68         | 1014, 995, 996, 1024            | 100        | 11+2.20/2*2.<br>20    | 14.5<br>2 | 1452          | 46.<br>08 | 66908.1<br>6         | 557.568                       | Sundarlal,<br>Bhaiyadeen etc.   |
| WHB3                     | 28.13         | 1025, 1024, 1023,<br>1021, 1022 | 150        | 11.50+2.20/2<br>*2.30 | 15.7<br>5 | 2362.5        | 47.<br>96 | 113305.<br>5         | 944.2125                      | Sukhdeen, Nathhu<br>etc.        |
| WHB4                     | 15.18         | 881, 882, 1048, 1041,<br>1047   | 50         | 10.+2.0/2*2.0         | 12        | 600           | 44.<br>34 | 26604                | 221.7                         | Radharani,<br>Smt.Asharani etc. |
| <b>Total</b>             | <b>74.6</b>   |                                 | <b>450</b> |                       |           | <b>6022.5</b> |           | <b>278116.</b>       | <b>2317.636</b>               |                                 |

|                       |       |                    |      |                     |      |       |           |               |               |                            |
|-----------------------|-------|--------------------|------|---------------------|------|-------|-----------|---------------|---------------|----------------------------|
|                       |       |                    |      |                     |      |       |           | <b>38</b>     | <b>5</b>      |                            |
| <b>Village-Dharon</b> |       |                    |      |                     |      |       |           |               |               |                            |
| SB1                   | 11.76 | 489, 992           | 200  | 5.0+.80/2*1.4<br>0  | 4.06 | 812   | 41.<br>23 | 33478.7<br>6  | 278.9896<br>7 | Shree.Rampal               |
| SB2                   | 13.09 | 530, 529           | 250  | 5.0+.80/2*1.4<br>0  | 4.06 | 1015  | 41.<br>23 | 41848.4<br>5  | 348.7370<br>8 | Ramcharan                  |
| SB3                   | 4.56  | 528, 527           | 200  | 4.80+.70/2*1.<br>35 | 3.71 | 742   | 41.<br>23 | 30592.6<br>6  | 254.9388<br>3 | Kesarbai, Rampal           |
| SB4                   | 9.11  | 507, 509           | 400  | 4.80+.70/2*1.<br>35 | 3.71 | 1484  | 41.<br>23 | 61185.3<br>2  | 509.8776<br>7 | Halke, Ramcharan           |
| SB5                   | 2.27  | 11, 12             | 100  | 4.80+.70/2*1.<br>35 | 3.71 | 371   | 41.<br>23 | 15296.3<br>3  | 127.4694<br>2 | Mulchandra,<br>Foolchandra |
| Total                 | 40.79 |                    | 1150 |                     |      | 4424  |           | 182401.<br>52 |               |                            |
| MB1                   | 3.41  | 473                | 150  | 4.80+.70/2*1.<br>35 | 3.71 | 556.5 | 41.<br>23 | 22944.4<br>95 | 191.2041<br>3 | Brajbhusan                 |
| MB2                   | 4.99  | 475, 474           | 200  | 5.0+0.80/2*1.<br>40 | 4.06 | 812   | 41.<br>23 | 33478.7<br>6  | 278.9896<br>7 | Chandraprakash             |
| MB3                   | 4.98  | 520, 521, 522      | 200  | 5.0+0.80/2*1.<br>40 | 4.06 | 812   | 41.<br>23 | 33478.7<br>6  | 278.9896<br>7 | Hakimsingh                 |
| MB4                   | 4.99  | 519, 517, 515, 516 | 200  | 5.0+0.80/2*1.<br>40 | 4.06 | 812   | 41.<br>23 | 33478.7<br>6  | 278.9896<br>7 | Radhesyam, Banbali         |
| MB5                   | 5.69  | 492, 495, 493, 494 | 250  | 4.80+.70/2*1.<br>35 | 3.71 | 927.5 | 41.<br>23 | 38240.8<br>25 | 318.6735<br>4 | Rasula, Ganeshprasad       |
| MB6                   | 9.1   | 498 to 502         | 400  | 4.80+.70/2*1.<br>35 | 3.71 | 1484  | 41.<br>23 | 61185.3<br>2  | 509.8776<br>7 | Sandeep kumar,<br>Sitaram  |
| MB7                   | 4.98  | 14, 29, 31, 32, 42 | 200  | 5.0+0.80/2*1.<br>40 | 4.06 | 812   | 41.<br>23 | 33478.7<br>6  | 278.9896<br>7 | Mahaveerdas, Dablu         |
| MB8                   | 5.69  | 17, 18             | 250  | 4.80+.70/2*1.<br>35 | 3.71 | 927.5 | 41.<br>23 | 38240.8<br>25 | 318.6735<br>4 | Babulal, Ramprasad         |
| MB9                   | 5.24  | 7, 9, 10           | 230  | 4.80+.70/2*1.       | 3.71 | 853.3 | 41.       | 35181.5       | 293.1796      | Asharam, Chhabilal         |

|              |              |                |             |                     |      |               |           |                        |               |                          |
|--------------|--------------|----------------|-------------|---------------------|------|---------------|-----------|------------------------|---------------|--------------------------|
|              |              |                |             | 35                  |      |               | 23        | 59                     | 6             |                          |
| MB10         | 3.41         | 50, 11         | 150         | 4.80+.70/2*1.<br>35 | 3.71 | 556.5         | 41.<br>23 | 22944.4<br>95          | 191.2041<br>3 | Mulchandra,<br>Permanand |
| MB11         | 3.73         | 64             | 150         | 5.0+0.80/2*1.<br>40 | 4.06 | 609           | 41.<br>23 | 25109.0<br>7           | 209.2422<br>5 | Girdharilal              |
| MB12         | 5            | 59, 60, 62, 61 | 200         | 5.0+0.80/2*1.<br>40 | 4.06 | 812           | 41.<br>23 | 33478.7<br>6           | 278.9896<br>7 | Ganeshprasad             |
| <b>Total</b> | <b>61.21</b> |                | <b>2580</b> |                     |      | <b>9974.3</b> |           | <b>411240.<br/>389</b> |               |                          |

**Village- Jujhar (2c1B3f1e)**

| Name of Work | Benefited area (ha) | Field No. / Khasara No. | Area of work |                       | C.S. (Ara<br>a) | Work Measurem<br>ent | Rat<br>e  | Total Cost (Rs.)     | Manday Rs.<br>120/Labour | Name of Farmers                 |
|--------------|---------------------|-------------------------|--------------|-----------------------|-----------------|----------------------|-----------|----------------------|--------------------------|---------------------------------|
|              |                     |                         | Length       | Width * Height        |                 |                      |           |                      |                          |                                 |
| MB1          | 3.736               | 440, 441                | 150          | 5.0+.80/2*1.4<br>0    | 4.06            | 609                  | 41.2<br>3 | 25109.<br>07         | 209.2423                 | Sevalal, Lallu etc.             |
| MB2          | 3.736               | 446, 447                | 150          | 5.0+.80/2*1.4<br>0    | 4.06            | 609                  | 41.2<br>3 | 25109.<br>07         | 209.2423                 | Rajendra singh,                 |
| MB3          | 4.983               | 453, 451, 452           | 200          | 5.0+.80/2*1.4<br>0    | 4.06            | 812                  | 41.2<br>3 | 33478.<br>76         | 278.9897                 | Vinod kumar singh,              |
| MB4          | 2.989               | 455, 456, 457           | 120          | 5.0+.80/2*1.4<br>0    | 4.06            | 487.2                | 41.2<br>3 | 20087.<br>26         | 167.3938                 | Durgadeen, Sanker, etc.         |
| MB5          | 8.221               | 433, 434, 435, 436      | 330          | 5.0+.80/2*1.4<br>0    | 4.06            | 1339.8               | 41.2<br>3 | 55239.<br>95         | 460.333                  | Radjeet singh, Babbu etc.       |
| <b>Total</b> | <b>23.665</b>       |                         | <b>950</b>   |                       |                 | <b>3857</b>          |           | <b>159024<br/>.1</b> | <b>1325.201</b>          |                                 |
| CD1          | 18.3                | 449, 448                | 100          | 9.40+1.60/2*1.<br>.95 | 10.72           | 1072                 | 44.3<br>4 | 47532.<br>48         | 396.104                  | Mangal singh, Ravindra<br>singh |
| CD2          | 16.85               | 461, 462, 459, 460      | 80           | 10.0+2.0/2*2.<br>0    | 12              | 960                  | 44.3<br>4 | 42566.<br>4          | 354.72                   | Sukhram, Veersingh etc.         |

|              |              |                            |            |                      |       |               |           |                      |                 |                              |
|--------------|--------------|----------------------------|------------|----------------------|-------|---------------|-----------|----------------------|-----------------|------------------------------|
| CD3          | 2.83         | 521, 520                   | 40         | 9.40+1.60/2*1<br>.95 | 10.72 | 428.8         | 44.3<br>4 | 19012.<br>99         | 158.4416        | Rampal, Kandhi               |
| CD4          | 2.82         | 524, 522/532               | 40         | 9.40+1.60/2*1<br>.95 | 10.72 | 428.8         | 44.3<br>4 | 19012.<br>99         | 158.4416        | Gorelal etc.                 |
| CD5          | 18.32        | 510, 512                   | 120        | 9.40+1.60/2*1<br>.95 | 10.72 | 1286.4        | 44.3<br>4 | 57038.<br>98         | 475.3248        | Bhagvat singh, Nandi         |
| CD6          | 11.77        | 505, 511                   | 70         | 9.40+1.60/2*1<br>.95 | 10.72 | 750.4         | 44.3<br>4 | 33272.<br>74         | 277.2728        | Babbu, Nandi                 |
| <b>Total</b> | <b>70.89</b> |                            | <b>450</b> |                      |       | <b>4926.4</b> |           | <b>218436<br/>.6</b> | <b>1820.305</b> |                              |
| SB1          | 9.105        | 445 to 452                 | 400        | 4.80+.70/2*1.<br>35  | 3.71  | 1484          | 41.2<br>3 | 61185.<br>32         | 509.8777        | Bajira, karamat etc.         |
| SB2          | 6.829        | 86, 93, 94                 | 300        | 4.80+.70/2*1.<br>35  | 3.71  | 1113          | 41.2<br>3 | 45888.<br>99         | 382.4083        | Chhedilal, Rameshvar etc.    |
| SB3          | 9.105        | 168, 169, 170, 177         | 400        | 4.80+.70/2*1.<br>35  | 3.71  | 1484          | 41.2<br>3 | 61185.<br>32         | 509.8777        | Dyaram, nathhu etc.          |
| SB4          | 4.981        | 129, 130, 131              | 200        | 5.+.80/2*1.40        | 4.06  | 812           | 41.2<br>3 | 33478.<br>76         | 278.9897        | Halke, Nathhu etc.           |
| SB5          | 5.691        | 212, 215                   | 250        | 4.80+.70/2*1.<br>35  | 3.71  | 927.5         | 41.2<br>3 | 38240.<br>83         | 318.6735        | Devendra kumar, Syamlal etc. |
| SB6          | 6.227        | 311, 312, 313              | 250        | 5.+.80/2*1.40        | 4.06  | 1015          | 41.2<br>3 | 41848.<br>45         | 348.7371        | Mahendrapal singh etc.       |
| SB7          | 7.473        | 350, 351                   | 300        | 5.+.80/2*1.40        | 4.06  | 1218          | 41.2<br>3 | 50218.<br>14         | 418.4845        | Durjana singh, etc.          |
| SB8          | 4.981        | 773, 774                   | 200        | 5.+.80/2*1.40        | 4.06  | 812           | 41.2<br>3 | 33478.<br>76         | 278.9897        | Chunna, Syamaliya            |
| SB9          | 6.227        | 747, 748, 751              | 250        | 5.+.80/2*1.40        | 4.06  | 1015          | 41.2<br>3 | 41848.<br>45         | 348.7371        | Gangaprasad, Ramjeevan       |
| SB10         | 6.829        | 681, 683, 682, 684,<br>685 | 300        | 4.80+.70/2*1.<br>35  | 3.71  | 1113          | 41.2<br>3 | 45888.<br>99         | 382.4083        | Ajuddi, Sandeepkumar         |
| SB11         | 9.105        | 168, 169, 170, 177         | 300        | 4.80+.70/2*1.<br>35  | 3.71  | 1113          | 41.2<br>3 | 45888.<br>99         | 382.4083        | Dyaram, Nathhu etc.          |

|                   |               |                         |             |                     |      |                |            |               |                 |                                   |
|-------------------|---------------|-------------------------|-------------|---------------------|------|----------------|------------|---------------|-----------------|-----------------------------------|
| <b>Tota<br/>l</b> | <b>76.553</b> |                         | <b>3150</b> |                     |      | <b>12106.5</b> |            | <b>499151</b> | <b>4159.592</b> |                                   |
| MB1               | 4.981         | 463, 468                | 200         | 5.+.80/2*1.40       | 4.06 | 812            | 41.2<br>3  | 33478.<br>76  | 278.9897        | Arvindra, Gulhi etc..             |
| MB2               | 7.473         | 400 to 406              | 300         | 5.+.80/2*1.40       | 4.06 | 1218           | 41.2<br>3  | 50218.<br>14  | 418.4845        | Mahesh etc.                       |
| MB3               | 7.472         | 453, 451, 452, 450      | 300         | 5.+.80/2*1.40       | 4.06 | 1218           | 41.2<br>3  | 50218.<br>14  | 418.4845        | Ramswarup, Gopalsaran             |
| MB4               | 6.829         | 449, 448, 450           | 300         | 4.80+.70/2*1.<br>35 | 3.71 | 1113           | 41.2<br>3  | 45888.<br>99  | 382.4083        | Virendra kumar,<br>Adityanarayn   |
| MB5               | 3.414         | 64, 65                  | 150         | 4.80+.70/2*1.<br>35 | 3.71 | 556.5          | 41.2<br>3  | 22944.<br>5   | 191.2041        | Hariprakash, Dasshi               |
| MB6               | 14.945        | 32 to 36, 61            | 600         | 5.+.80/2*1.40       | 4.06 | 2436           | 41.2<br>.3 | 100436        | 836.969         | Rajkisor, Omkar etc.              |
| MB7               | 4.981         | 26, 27                  | 200         | 5.+.80/2*1.40       | 4.06 | 812            | 41.2<br>3  | 33478.<br>76  | 278.9897        |                                   |
| MB8               | 4.981         | 20, 19, 18              | 200         | 5.+.80/2*1.40       | 4.06 | 812            | 41.2<br>3  | 33478.<br>76  | 278.9897        | Ramsingh, Shivprasad              |
| MB9               | 6.829         | 153 to 156, 163,<br>164 | 300         | 4.80+.70/2*1.<br>35 | 3.71 | 1113           | 41.2<br>3  | 45888.<br>99  | 382.4083        | kallu, Santoshkumar etc.          |
| MB10              | 2.276         | 151                     | 100         | 4.80+.70/2*1.<br>35 | 3.71 | 371            | 41.2<br>3  | 15296.<br>33  | 127.4694        | Kaluva                            |
| MB11              | 6.829         | 148 to 152              | 300         | 4.80+.70/2*1.<br>35 | 3.71 | 1113           | 41.2<br>3  | 45888.<br>99  | 382.4083        | Ramswarup                         |
| MB12              | 3.414         | 159, 160                | 150         | 4.80+.70/2*1.<br>35 | 3.71 | 556.5          | 41.2<br>3  | 22944.<br>5   | 191.2041        | Natiram, Ramkishan                |
| MB13              | 4.981         | 137 to 139              | 200         | 5.+.80/2*1.40       | 4.06 | 812            | 41.2<br>3  | 33478.<br>76  | 278.9897        | Rajendra singh, Brajesh<br>singh  |
| MB14              | 13.344        | 123 to 128              | 500         | 5.20+.80/2*1.<br>45 | 4.35 | 2175           | 41.2<br>3  | 89675.<br>25  | 747.2938        | Ishvarchandra , Narendra<br>kumar |
| MB15              | 8.718         | 371 to 386              | 350         | 5.+.80/2*1.40       | 4.06 | 1421           | 41.2<br>3  | 58587.<br>83  | 488.2319        | sandip kumar, Omkar               |

|                   |               |                           |             |                      |       |                |           |                      |          |                           |
|-------------------|---------------|---------------------------|-------------|----------------------|-------|----------------|-----------|----------------------|----------|---------------------------|
| MB1<br>6          | 5.69          | 353 to 359                | 250         | 4.80+.70/2*1.<br>35  | 3.71  | 927.5          | 41.2<br>3 | 38240.<br>83         | 318.6735 | Pushpendra kumar, etc.    |
| MB1<br>7          | 6.672         | 663 to 366                | 250         | 5.20+.80/2*1.<br>45  | 4.35  | 1087.5         | 41.2<br>3 | 44837.<br>63         | 373.6469 | Santosh kumar, Chhidiya   |
| MB1<br>8          | 9.341         | 660/5 to 660/9            | 350         | 5.20+.80/2*1.<br>45  | 4.35  | 1522.5         | 41.2<br>3 | 62772.<br>68         | 523.1056 | Ramnarayn, Akhilesh Kumar |
| <b>Tota<br/>l</b> | <b>123.17</b> |                           | <b>5000</b> |                      |       | <b>20076.5</b> |           | <b>827754<br/>.1</b> |          |                           |
| CD1               | 14.435        | 191, 190                  | 70          | 9.20+1.60/2*1<br>.90 | 10.26 | 718.2          | 44.3<br>4 | 31844.<br>99         | 265.3749 | Prabhudyal, Ramprasad     |
| CD2               | 13.4          | 186, 188                  | 50          | 9.20+1.60/2*1<br>.90 | 10.72 | 536            | 44.3<br>4 | 23766.<br>24         | 198.052  | Swamideen, Ramprasad      |
| CD3               | 19.5          | 762 to 767, 771           | 120         | 10.0+2.0/2*2.<br>0   | 12    | 1440           | 44.3<br>4 | 63849.<br>6          | 532.08   | Gangaprasad, Maiyadeen    |
| CD4               | 2.71          | 676, 675, 673, 674        | 40          | 9.20+1.60/2*1<br>.90 | 10.26 | 410.4          | 44.3<br>4 | 18197.<br>14         | 151.6428 | Deena, kallu etc.         |
| CD5               | 3.38          | 308, 307, 309/996,<br>322 | 50          | 9.20+1.60/2*1<br>.90 | 10.26 | 513            | 44.3<br>4 | 22746.<br>42         | 189.5535 | Baijnath, etc.            |
| CD6               | 14.88         | 303 to 305, 308           | 70          | 9.20+1.60/2*1<br>.90 | 10.72 | 750.4          | 44.3<br>4 | 33272.<br>74         | 277.2728 | Dashsi, Baijnath ec.      |
| <b>Tota<br/>l</b> | <b>68.305</b> |                           | <b>400</b>  |                      |       | <b>4368</b>    |           | <b>193677<br/>.1</b> |          |                           |

**Village- Lilyahi (2c1b3f2b)**

| Name of Work | Benefited area (ha) | Field No. / Khasara No. | Area of work |                      | C.S. (Area) | Work Measurement | Rate      | Total Cost (Rs.) | Manday Rs. 120/Labour |
|--------------|---------------------|-------------------------|--------------|----------------------|-------------|------------------|-----------|------------------|-----------------------|
|              |                     |                         | Length       | Width * Height       |             |                  |           |                  |                       |
| CDA1         | 11                  | 59 to 72, 176 to 225    | 120          | 8.30+1.50/2*1.<br>70 | 8.33        | 999.6            | 44.3<br>4 | 44322.2<br>6     | 369.3522              |
| Total        | 11                  |                         | 120          |                      |             | 999.6            |           | 44322.2<br>6     |                       |

**Village-Sichoura**

|            |       |                          |     |                      |      |       |           |              |          |
|------------|-------|--------------------------|-----|----------------------|------|-------|-----------|--------------|----------|
| MBB1       | 5.107 | 62, 63, 64, 65, 56 to 60 | 200 | 5.80+0.60/2*1.<br>30 | 4.16 | 832   | 41.2<br>3 | 34303.3<br>6 | 285.8613 |
| MBB2       | 0.765 | 16, 17                   | 30  | 5.80+0.60/2*1.<br>30 | 4.16 | 124.8 | 41.2<br>3 | 5145.50<br>4 | 42.8792  |
| MBB3       | 4.128 | 15, 25, 26, 27           |     |                      |      |       |           |              |          |
| pucca work |       |                          |     |                      |      |       |           | 27700        |          |
| Total      | 10    |                          | 230 |                      |      | 956.8 |           | 67148.8<br>6 |          |
|            |       |                          |     |                      |      |       |           |              |          |

**Village-Gahra**

|              |               |                         |            |                      |      |               |           |                |          |
|--------------|---------------|-------------------------|------------|----------------------|------|---------------|-----------|----------------|----------|
|              |               |                         |            |                      |      |               |           |                |          |
| SBC1         | 3.828         | 1333                    | 150        | 5.80+0.60/2*1.<br>30 | 4.16 | 624           | 41.2<br>3 | 25727.5<br>2   | 214.396  |
| SBC2         | 7.656         | 283 to 285, 27 to 31    | 300        | 5.80+0.60/2*1.<br>30 | 4.16 | 1248          | 41.2<br>3 | 51455.0<br>4   | 428.792  |
| SBC3         | 3.58          | 268, 269, 272, 286, 296 | 140        | 5.80+0.60/2*1.<br>30 | 4.16 | 582.4         | 41.2<br>3 | 24012.3<br>5   | 200.1029 |
| SBC4         | 5.615         | 274, 270, 272, 273      | 220        | 5.80+0.60/2*1.<br>30 | 4.16 | 915.2         | 41.2<br>3 | 37733.7        | 314.4475 |
| <b>Total</b> | <b>20.679</b> |                         | <b>810</b> |                      |      | <b>3369.6</b> |           | <b>138928.</b> |          |

|              |               |  |            |                      |      |               |           |                      |          |
|--------------|---------------|--|------------|----------------------|------|---------------|-----------|----------------------|----------|
|              |               |  |            |                      |      |               |           | <b>6</b>             |          |
| CDC1         | 21.49         | 221 to 230, 264, 266, 268, 169 to 272,<br>277, 281 | 250        | 8.30+1.50/2*1.<br>70 | 8.33 | 2082.5        | 44.3<br>4 | 92338.0<br>5         | 769.4838 |
| CDC2         | 16.263        | 187, 155 to 162, 195, 194, 184                     | 200        | 8.30+1.50/2*1.<br>70 | 8.33 | 1666          | 44.3<br>4 | 73870.4<br>4         | 615.587  |
| <b>Total</b> | <b>37.753</b> |  | <b>450</b> |                      |      | <b>3748.5</b> |           | <b>166208.<br/>5</b> |          |

**Village-Sighanpur vadhri**

|              |           |  |            |                      |      |               |           |                      |          |
|--------------|-----------|--|------------|----------------------|------|---------------|-----------|----------------------|----------|
| SBD1         | 9.568     | 1203 to 1205, 1202, 166, 1272/2 to<br>1272/9 | 200        | 5.80+0.60/2*1.<br>30 | 4.16 | 832           | 41.2<br>3 | 34303.3<br>6         | 285.8613 |
| Total        | 9.568     |  | 200        |                      |      | 832           |           | 34303.3<br>6         |          |
|              |           |  |            |                      |      |               |           |                      |          |
| CDD1         | 10.704    | 1162, 1163, 1173, 1172, 1171, 1170           | 100        | 8.30+1.50/2*1.<br>70 | 8.33 | 833           | 44.3<br>4 | 36935.2<br>2         | 307.7935 |
| CDD2         | 15.296    | 1147 to 1159, 1168                           | 170        | 8.30+1.50/2*1.<br>70 | 8.33 | 1416.1        | 44.3<br>4 | 62789.8<br>7         | 523.249  |
| <b>Total</b> | <b>26</b> |  | <b>270</b> |                      |      | <b>2249.1</b> |           | <b>99725.0<br/>9</b> |          |

**Village- Lilhahi (2c1b3f2a)**

| Name of Work | Benefited area (ha) | Field No. / Khasara No.          | Area of work |                  | C.S. (Area) | Work Measurement | Rate  | Total Cost (Rs.)  | Manday Rs. 120/Labour |
|--------------|---------------------|----------------------------------|--------------|------------------|-------------|------------------|-------|-------------------|-----------------------|
|              |                     |                                  | Length       | Width * Height   |             |                  |       |                   |                       |
| MBA1         | 22.754              | 115 to 122                       | 600          | 5.80+0.60/2*1.30 | 4.16        | 2496             | 41.23 | 102910.08         | 857.584               |
| pucca work   |                     |                                  |              |                  |             |                  |       | 50000             |                       |
| MBA2         | 20.202              | 340 to 347                       | 500          | 5.80+0.60/2*1.30 | 4.16        | 2080             | 41.23 | 85758.4           | 714.6533333           |
| pucca work   |                     |                                  |              |                  |             |                  |       | 50000             |                       |
| MBA3         | 2.552               | 156 to 157                       | 100          | 5.80+0.60/2*1.30 | 4.16        | 416              | 41.23 | 17151.68          | 142.9306667           |
| <b>Total</b> | <b>45.508</b>       |                                  | <b>1200</b>  |                  |             | <b>4992</b>      |       | <b>305820.16</b>  |                       |
| CDA1         | 22.89               | 165 to 172, 156 to 164, 175, 145 | 200          | 8.30+1.50/2*1.70 | 8.33        | 1666             | 44.34 | 73870.44          | 615.587               |
| pucca work   |                     |                                  |              |                  |             |                  |       | 80000             |                       |
| CDA2         | 24                  | 178 to 198, 138 to 151           | 220          | 8.30+1.50/2*1.70 | 8.33        | 1832.6           | 44.34 | 81257.484         | 677.1457              |
| pucca work   |                     |                                  |              |                  |             |                  |       | 80000             |                       |
| CDA3         | 22.602              | 198 to 214                       | 200          | 8.30+1.50/2*1.70 | 8.33        | 1666             | 44.34 | 73870.44          | 615.587               |
| pucca work   |                     |                                  |              |                  |             |                  |       | 78000             |                       |
| <b>Total</b> | <b>69.492</b>       |                                  | <b>620</b>   |                  |             | <b>5164.6</b>    |       | <b>466998.364</b> |                       |

**Village-Parsaha**

|              |           |                                  |            |                  |       |               |       |                   |           |
|--------------|-----------|----------------------------------|------------|------------------|-------|---------------|-------|-------------------|-----------|
| CDB1         | 11.904    | 750, 752, 940 to 946             |            |                  |       |               |       |                   |           |
| CDB2         | 11.904    | 749, 740, 757 to 763             |            |                  |       |               |       |                   |           |
| CDB3         | 16        | 478, 479, 770 to 773, 855 to 862 | 100        | 8.30+1.50/2*1.70 | 8.33  | 833           | 44.34 | 36935.22          | 307.7935  |
| CDB4         | 12.41     | 470, 472, 485, 479               | 30         | 9.1+1.50/2*1.90  | 10.07 | 302.1         | 44.34 | 13395.114         | 111.62595 |
| CDB5         | 8.93      | 420, 421, 412                    |            |                  |       |               |       |                   |           |
| CDB6         | 2         | 667 to 672                       | 30         | 9.1+1.50/2*1.90  | 10.07 | 302.1         | 44.34 | 13395.114         | 111.62595 |
| CDB7         | 28.852    | 674, 682, 675 to 681, 698 to 704 | 300        | 8.30+1.50/2*1.70 | 8.33  | 2499          | 44.34 | 110805.66         | 923.3805  |
| pucca work   |           |                                  |            |                  |       |               |       | 440000            |           |
| <b>Total</b> | <b>92</b> |                                  | <b>460</b> |                  |       | <b>3936.2</b> |       | <b>614531.108</b> |           |

**Village-Pindari**

|  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|
|  |  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|--|

|              |              |                                    |             |                    |       |                |       |                   |             |
|--------------|--------------|------------------------------------|-------------|--------------------|-------|----------------|-------|-------------------|-------------|
| MBC1         | 19.5         | 463 to 476                         | 500         | $5.80+0.60/2*1.30$ | 4.16  | 2080           | 41.23 | 85758.4           | 714.6533333 |
| MBC2         | 12.6         | 330 to 325                         | 200         | $5.80+0.60/2*1.30$ | 4.16  | 832            | 41.23 | 34303.36          | 285.8613333 |
| <b>Total</b> | <b>32.1</b>  |                                    | <b>700</b>  |                    |       | <b>2912</b>    |       | <b>120061.76</b>  |             |
| CDC1         | 13           | 459 to 461                         | 100         | $8.30+1.50/2*1.70$ | 8.33  | 833            | 44.34 | 36935.22          | 307.7935    |
| CDC2         | 36.1         | 338 to 340, 375, 365 to 370, 371   | 250         | $8.30+1.50/2*1.70$ | 8.33  | 2082.5         | 44.34 | 92338.05          | 769.48375   |
| CDC3         | 12.5         | 244 to 246, 128 to 136, 156 to 164 | 20          | $9.1+1.50/2*1.90$  | 10.07 | 201.4          | 44.34 | 8930.076          | 74.4173     |
| CDC4         | 15.9         | 389 to 392, 388, 395               | 60          | $9.1+1.50/2*1.90$  | 10.07 | 604.2          | 44.34 | 26790.228         | 223.2519    |
| CDC5         | 36.55        | 411 to 424                         | 500         | $8.30+1.50/2*1.70$ | 8.33  | 4165           |       |                   |             |
| old work     |              |                                    | 400         |                    | 2.2   | 880            |       |                   |             |
| new work     |              |                                    |             |                    |       | 3285           | 44.34 | 145656.9          | 1213.8075   |
| CDC6         | 36.9         | 435 to 448, 434                    | 400         | $8.30+1.50/2*1.70$ | 8.33  | 3332           | 44.34 | 147740.88         | 1231.174    |
| CDC7         | 14.9         | 376, 377                           |             |                    |       |                |       |                   |             |
| CDC8         | 14.05        |                                    |             |                    |       |                |       |                   |             |
| pucca work   |              |                                    |             |                    |       |                |       | 94400             |             |
| <b>Total</b> | <b>179.9</b> |                                    | <b>1730</b> |                    |       | <b>10338.1</b> |       | <b>552791.354</b> |             |

#### Village- Lilvahi (2c1b3f2b)

| Name of Work | Benefited area (ha) | Field No. / Khasara No. | Area of work |                    | C.S. (Area) | Work Measurement | Rate  | Total Cost (Rs.) | Manday Rs. 120/Labour |
|--------------|---------------------|-------------------------|--------------|--------------------|-------------|------------------|-------|------------------|-----------------------|
|              |                     |                         | Length       | Width * Height     |             |                  |       |                  |                       |
| CDA1         | 11                  | 59 to 72, 176 to 225    | 120          | $8.30+1.50/2*1.70$ | 8.33        | 999.6            | 44.34 | 44322.26         | 369.3522              |
|              |                     |                         |              |                    |             |                  |       |                  |                       |
| Total        | 11                  |                         | 120          |                    |             | 999.6            |       | 44322.26         |                       |

#### Village-Sichoura

|      |       |                          |     |                    |      |       |       |          |          |
|------|-------|--------------------------|-----|--------------------|------|-------|-------|----------|----------|
| MBB1 | 5.107 | 62, 63, 64, 65, 56 to 60 | 200 | $5.80+0.60/2*1.30$ | 4.16 | 832   | 41.23 | 34303.36 | 285.8613 |
| MBB2 | 0.765 | 16, 17                   | 30  | $5.80+0.60/2*1.30$ | 4.16 | 124.8 | 41.23 | 5145.504 | 42.8792  |
| MBB3 | 4.128 | 15, 25, 26, 27           |     |                    |      |       |       |          |          |

|              |           |  |            |  |  |              |  |                 |  |
|--------------|-----------|--|------------|--|--|--------------|--|-----------------|--|
| pucca work   |           |  |            |  |  |              |  | 27700           |  |
| <b>Total</b> | <b>10</b> |  | <b>230</b> |  |  | <b>956.8</b> |  | <b>67148.86</b> |  |

**Village-Gahra**

|      |        |   |     |                  |      |        |       |          |          |
|------|--------|---|-----|------------------|------|--------|-------|----------|----------|
| SBC1 | 3.828  | 1333  | 150 | 5.80+0.60/2*1.30 | 4.16 | 624    | 41.23 | 25727.52 | 214.396  |
| SBC2 | 7.656  | 283 to 285, 27 to 31                                  | 300 | 5.80+0.60/2*1.30 | 4.16 | 1248   | 41.23 | 51455.04 | 428.792  |
| SBC3 | 3.58   | 268, 269, 272, 286,<br>296                            | 140 | 5.80+0.60/2*1.30 | 4.16 | 582.4  | 41.23 | 24012.35 | 200.1029 |
| SBC4 | 5.615  | 274, 270, 272, 273                                    | 220 | 5.80+0.60/2*1.30 | 4.16 | 915.2  | 41.23 | 37733.7  | 314.4475 |
|      | 20.679 |   | 810 |                  |      | 3369.6 |       | 138928.6 |          |
| CDC1 | 21.49  | 221 to 230, 264, 266,<br>268, 169 to 272, 277,<br>281 | 250 | 8.30+1.50/2*1.70 | 8.33 | 2082.5 | 44.34 | 92338.05 | 769.4838 |
| CDC2 | 16.263 | 187, 155 to 162, 195,<br>194, 184                     | 200 | 8.30+1.50/2*1.70 | 8.33 | 1666   | 44.34 | 73870.44 | 615.587  |
|      | 37.753 |   | 450 |                  |      | 3748.5 |       | 166208.5 |          |

**Village-Sighanpur vadhri**

|              |           |   |            |                  |      |               |       |                 |          |
|--------------|-----------|---|------------|------------------|------|---------------|-------|-----------------|----------|
| SBD1         | 9.568     | 1203 to 1205, 1202,<br>166, 1272/2 to<br>1272/9 | 200        | 5.80+0.60/2*1.30 | 4.16 | 832           | 41.23 | 34303.36        | 285.8613 |
| Total        | 9.568     |   | 200        |                  |      | 832           |       | 34303.36        |          |
|              |           |   |            |                  |      |               |       |                 |          |
| CDD1         | 10.704    | 1162, 1163, 1173,<br>1172, 1171, 1170           | 100        | 8.30+1.50/2*1.70 | 8.33 | 833           | 44.34 | 36935.22        | 307.7935 |
| CDD2         | 15.296    | 1147 to 1159, 1168                              | 170        | 8.30+1.50/2*1.70 | 8.33 | 1416.1        | 44.34 | 62789.87        | 523.249  |
| <b>Total</b> | <b>26</b> |   | <b>270</b> |                  |      | <b>2249.1</b> |       | <b>99725.09</b> |          |

**Village- Lilvahi (2c1b3f2a)**

| Name of Work | Benefited area (ha) | Field No. / Khasara No.          | Area of work |                  | C.S. (Area ) | Work Measurement | Rate  | Total Cost (Rs.) | Manday Rs. 120/Labour |
|--------------|---------------------|----------------------------------|--------------|------------------|--------------|------------------|-------|------------------|-----------------------|
|              |                     |                                  | Length       | Width * Height   |              |                  |       |                  |                       |
| MBA1         | 22.754              | 115 to 122                       | 600          | 5.80+0.60/2*1.30 | 4.16         | 2496             | 41.23 | 102910.08        | 857.584               |
| pucca work   |                     |                                  |              |                  |              |                  |       | 50000            |                       |
| MBA2         | 20.202              | 340 to 347                       | 500          | 5.80+0.60/2*1.30 | 4.16         | 2080             | 41.23 | 85758.4          | 714.653333            |
| pucca work   |                     |                                  |              |                  |              |                  |       | 50000            |                       |
| MBA3         | 2.552               | 156 to 157                       | 100          | 5.80+0.60/2*1.30 | 4.16         | 416              | 41.23 | 17151.68         | 142.930666            |
| Total        | 45.508              |                                  | 1200         |                  |              | 4992             |       | 305820.16        |                       |
| CDA1         | 22.89               | 165 to 172, 156 to 164, 175, 145 | 200          | 8.30+1.50/2*1.70 | 8.33         | 1666             | 44.34 | 73870.44         | 615.587               |
| pucca work   |                     |                                  |              |                  |              |                  |       | 80000            |                       |
| CDA2         | 24                  | 178 to 198, 138 to 151           | 220          | 8.30+1.50/2*1.70 | 8.33         | 1832.6           | 44.34 | 81257.484        | 677.1457              |
| pucca work   |                     |                                  |              |                  |              |                  |       | 80000            |                       |
| CDA3         | 22.602              | 198 to 214                       | 200          | 8.30+1.50/2*1.70 | 8.33         | 1666             | 44.34 | 73870.44         | 615.587               |
| pucca work   |                     |                                  |              |                  |              |                  |       | 78000            |                       |

|                        |        |                                  |     |                      |       |        |           |                |                 |
|------------------------|--------|----------------------------------|-----|----------------------|-------|--------|-----------|----------------|-----------------|
| Total                  | 69.492 |                                  | 620 |                      |       | 5164.6 |           | 466998.36      |                 |
|                        |        |                                  |     |                      |       |        |           | 4              |                 |
| <b>Village-Parsaha</b> |        |                                  |     |                      |       |        |           |                |                 |
| CDB1                   | 11.904 | 750, 752, 940 to 946             |     |                      |       |        |           |                |                 |
| CDB2                   | 11.904 | 749, 740, 757 to 763             |     |                      |       |        |           |                |                 |
| CDB3                   | 16     | 478, 479, 770 to 773, 855 to 862 | 100 | 8.30+1.50/2*1.7<br>0 | 8.33  | 833    | 44.3<br>4 | 36935.22       | 307.7935        |
| CDB4                   | 12.41  | 470, 472, 485, 479               | 30  | 9.1+1.50/2*1.90      | 10.07 | 302.1  | 44.3<br>4 | 13395.114      | 111.62595       |
| CDB5                   | 8.93   | 420, 421, 412                    |     |                      |       |        |           |                |                 |
| CDB6                   | 2      | 667 to 672                       | 30  | 9.1+1.50/2*1.90      | 10.07 | 302.1  | 44.3<br>4 | 13395.114      | 111.62595       |
| CDB7                   | 28.852 | 674, 682, 675 to 681, 698 to 704 | 300 | 8.30+1.50/2*1.7<br>0 | 8.33  | 2499   | 44.3<br>4 | 110805.66      | 923.3805        |
| pucca work             |        |                                  |     |                      |       |        |           | 440000         |                 |
| Total                  | 92     |                                  | 460 |                      |       | 3936.2 |           | 614531.10<br>8 |                 |
| <b>Village-Pindari</b> |        |                                  |     |                      |       |        |           |                |                 |
| MBC1                   | 19.5   | 463 to 476                       | 500 | 5.80+0.60/2*1.3<br>0 | 4.16  | 2080   | 41.2<br>3 | 85758.4        | 714.653333<br>3 |
| MBC2                   | 12.6   | 330 to 325                       | 200 | 5.80+0.60/2*1.3<br>0 | 4.16  | 832    | 41.2<br>3 | 34303.36       | 285.861333<br>3 |
|                        | 32.1   |                                  | 700 |                      |       | 2912   |           | 120061.76      |                 |
| CDC1                   | 13     | 459 to 461                       | 100 | 8.30+1.50/2*1.7      | 8.33  | 833    | 44.3      | 36935.22       | 307.7935        |

|               |       |                                       |      |                      |       |         |           |                |           |
|---------------|-------|---------------------------------------|------|----------------------|-------|---------|-----------|----------------|-----------|
|               |       |                                       |      | 0                    |       |         | 4         |                |           |
| CDC2          | 36.1  | 338 to 340, 375, 365 to 370,<br>371   | 250  | 8.30+1.50/2*1.7<br>0 | 8.33  | 2082.5  | 44.3<br>4 | 92338.05       | 769.48375 |
| CDC3          | 12.5  | 244 to 246, 128 to 136, 156 to<br>164 | 20   | 9.1+1.50/2*1.90      | 10.07 | 201.4   | 44.3<br>4 | 8930.076       | 74.4173   |
| CDC4          | 15.9  | 389 to 392, 388, 395                  | 60   | 9.1+1.50/2*1.90      | 10.07 | 604.2   | 44.3<br>4 | 26790.228      | 223.2519  |
| CDC5          | 36.55 | 411 to 424                            | 500  | 8.30+1.50/2*1.7<br>0 | 8.33  | 4165    |           |                |           |
| old work      |       |                                       | 400  |                      | 2.2   | 880     |           |                |           |
| new work      |       |                                       |      |                      |       | 3285    | 44.3<br>4 | 145656.9       | 1213.8075 |
|               |       |                                       |      |                      |       |         |           |                |           |
| CDC6          | 36.9  | 435 to 448, 434                       | 400  | 8.30+1.50/2*1.7<br>0 | 8.33  | 3332    | 44.3<br>4 | 147740.88      | 1231.174  |
| CDC7          | 14.9  | 376, 377                              |      |                      |       |         |           |                |           |
| CDC8          | 14.05 |                                       |      |                      |       |         |           |                |           |
| pucca<br>work |       |                                       |      |                      |       |         |           | 94400          |           |
|               |       |                                       |      |                      |       |         |           |                |           |
| Total         | 179.9 |                                       | 1730 |                      |       | 10338.1 |           | 552791.35<br>4 |           |

**Village-Chhani Kala (2c1b3f1b)**

| Name of Work | Benefited area (ha) | Field No. / Khasara No. | Area of work |                  | C.S. (Area) | Work Measurement | Rate  | Total Cost (Rs.) | Manday Rs. 120/Labour |
|--------------|---------------------|-------------------------|--------------|------------------|-------------|------------------|-------|------------------|-----------------------|
|              |                     |                         | Length       | Width * Height   |             |                  |       |                  |                       |
| MB1B         | 6.38                | 57                      | 250          | 5.80+0.60/2*1.30 | 4.16        | 1040             | 41.23 | 42879.2          | 357.3266667           |
| MB2B         | 7.656               | 122                     | 300          | 5.80+0.60/2*1.30 | 4.16        | 1248             | 41.23 | 51455.04         | 428.792               |
| MB3B         | 7.66                | 121                     | 300          | 5.80+0.60/2*1.30 | 4.16        | 1248             | 41.23 | 51455.04         | 428.792               |
| Total        | 21.696              |                         | 850          |                  |             | 3536             |       | 145789.28        |                       |
|              |                     |                         |              |                  |             |                  |       |                  |                       |
| CD1B         | 5.496               | 68                      | 100          | 8.30+1.50/2*1.70 | 8.33        | 833              | 44.34 | 36935.22         | 307.7935              |
| CD2B         | 3.3                 | 94                      | 60           | 8.30+1.50/2*1.70 | 8.33        | 499.8            | 44.34 | 22161.132        | 184.6761              |
| CD3B         | 4.946               | 98                      | 90           | 8.30+1.50/2*1.70 | 8.33        | 749.7            | 44.34 | 33241.698        | 277.01415             |
| Total        | 13.742              |                         | 250          |                  |             | 2082.5           |       | 92338.05         |                       |
|              |                     |                         |              |                  |             |                  |       |                  |                       |

**Village-Parsaha**

|       |        |                    |      |                  |       |        |       |           |             |
|-------|--------|--------------------|------|------------------|-------|--------|-------|-----------|-------------|
|       |        |                    |      |                  |       |        |       |           |             |
| MB1A  | 7.657  | 463, 467, 468, 476 | 300  | 5.80+0.60/2*1.30 | 4.16  | 1248   | 41.23 | 51455.04  | 428.792     |
| MB2A  | 7.665  | 784 to 789         | 300  | 5.80+0.60/2*1.30 | 4.16  | 1248   | 41.23 | 51455.04  | 428.792     |
| MB3A  | 8.935  | 822 to 927         | 350  | 5.80+0.60/2*1.30 | 4.16  | 1456   | 41.23 | 60030.88  | 500.2573333 |
| MB4A  | 7.657  | 872 to 880         | 300  | 5.80+0.60/2*1.30 | 4.16  | 1248   | 41.23 | 51455.04  | 428.792     |
| MB5A  | 6.38   | 923 to 927         | 250  | 5.80+0.60/2*1.30 | 4.16  | 1040   | 41.23 | 42879.2   | 357.3266667 |
| Total | 38.294 |                    | 1500 |                  |       | 6240   |       | 257275.2  | 2143.96     |
|       |        |                    |      |                  |       |        |       |           |             |
| CD1A  | 14     | 292, 293, 460      | 70   | 8.60+1.50/2*1.80 | 9     | 630    | 44.34 | 27934.2   | 232.785     |
| CD2A  | 17.726 | 461, 462, 793, 794 | 110  | 9.20+2.00/2*1.80 | 10.08 | 1108.8 | 44.34 | 49164.192 | 409.7016    |
| CD3A  | 10.287 | 792, 796 to 800    | 60   | 8.60+1.50/2*1.80 | 9     | 540    | 44.34 | 23943.6   | 199.53      |

|                        |        |                    |     |                  |       |        |       |            |             |
|------------------------|--------|--------------------|-----|------------------|-------|--------|-------|------------|-------------|
| Total                  | 42.013 |                    | 240 |                  |       | 2278.8 |       | 101041.992 |             |
| <b>Village-Lilvahi</b> |        |                    |     |                  |       |        |       |            |             |
| MB1C                   | 6.379  | 390, 391, 404, 405 | 250 | 5.80+0.60/2*1.30 | 4.16  | 1040   | 41.23 | 42879.2    | 357.3266667 |
| Total                  | 6.379  |                    | 250 |                  |       | 1040   |       | 42879.2    |             |
| CD1C                   | 12.956 | 392 to 398, 407    | 100 | 9.20+2.00/2*1.80 | 10.08 | 1008   |       |            |             |
| old work               |        |                    | 78  | 5.30+0.50/2*1.20 | 3.48  | 271.44 |       |            |             |
| Pucca work             |        |                    |     |                  |       | 736.56 | 44.34 | 32659.0704 | 272.15892   |
| Total                  | 12.956 |                    | 100 |                  |       | 736.56 |       | 82659.0704 |             |

**Village- Bhaishtamaf (2c1B3f1a)**

| Name of Work | Benefited area (ha) | Field No. / Khasara No. | Area of work |                   | C.S. (Area) | Work Measurement | Rate  | Total Cost (Rs.) | Manday Rs. 120/Labour |
|--------------|---------------------|-------------------------|--------------|-------------------|-------------|------------------|-------|------------------|-----------------------|
|              |                     |                         | Length       | Width * Height    |             |                  |       |                  |                       |
| MB 1A        | 5.105               | 129 ,101 To105          | 200          | 5.80+0.60/2*1.30  | 4.16        | 832              | 41.23 | 34303.36         | 285.8613              |
| MB 2A        | 3.829               | 25 To 30                | 150          | 5.80+0.60 /2*1.30 | 4.16        | 624              | 41.23 | 25727.52         | 214.396               |
| Total        | 8.934               |                         | 350          |                   |             | 1456             |       | 60030.88         |                       |
|              |                     |                         |              |                   |             |                  |       |                  |                       |
| CD 1A        | 8.908               | 2 To 11 ,24             | 150          | 8.60+1.50 /2*1.80 | 9.00        | 1350             | 41.23 | 55660.5          | 463.8375              |
| CD 2A        | 5.938               | 20 To 22 ,51 To 56      | 100          | 8.60+1.50 /2*1.80 | 9.00        | 900              | 41.23 | 37107            | 309.225               |
| CD 3A        | 17.543              | 60To 68 ,75 To 80       | 120          | 8.60+1.50 /2*1.80 | 9.00        | 1080             | 41.23 | 44528.4          | 371.07                |
| CD 4A        | 4.751               | 69 To74 ,82 ,130 To 137 | 80           | 8.60+1.50 /2*1.80 | 9.00        | 720              | 41.23 | 29685.6          | 247.38                |
| Total        | 37.14               |                         | 450          |                   |             | 4050             |       | 166981.5         |                       |
|              |                     |                         |              |                   |             |                  |       |                  |                       |

**Village- Parsaha**

|       |       |            |     |                  |      |       |       |           |          |
|-------|-------|------------|-----|------------------|------|-------|-------|-----------|----------|
| MB 1B | 6.381 | 155 To 160 | 250 | 5.80+0.60/2*1.30 | 4.16 | 1040  | 41.23 | 42879.2   | 357.3267 |
| MB 2B | 6.381 | 212 To214  | 250 | 5.80+0.60/2*1.30 | 4.16 | 1040  | 41.23 | 42879.2   | 357.3267 |
| M B3B | 4.084 | 392 To398  | 160 | 5.80+0.60/2*1.30 | 4.16 | 665.6 | 41.23 | 27442.688 | 228.6891 |
| MB    | 8.933 | 57To59     | 350 | 5.80+0.60/2*1.3  | 4.16 | 1456  | 41.23 | 60030.88  | 500.2573 |

|       |        |           |      |                      |      |      |       |          |         |
|-------|--------|-----------|------|----------------------|------|------|-------|----------|---------|
| 4B    |        |           |      | 0                    |      |      |       |          |         |
| Total | 25.779 |           | 1010 |                      |      |      |       |          |         |
| CD 1B | 4.157  | 193To195  | 70   | 8.60+1.50/2*1.8<br>0 | 9.00 | 630  | 44.34 | 27934.2  | 232.785 |
| CD 2B | 15.167 | 185 To192 | 80   | 8.60+1.50/2*1.8<br>0 | 9.00 | 720  | 44.34 | 31924.8  | 266.04  |
| CD 3B | 10.417 | 206 To211 |      |                      |      |      |       |          |         |
| CD 4B | 10.417 | 101To105  |      |                      |      |      |       |          |         |
| CD 5B | 7.72   | 400To402  | 130  | 8.60+1.50/2*1.8<br>0 | 9.00 | 1170 | 44.34 | 51877.8  | 432.315 |
| Total | 47.878 |           | 280  |                      |      | 2520 |       | 111736.8 |         |
|       |        |           |      |                      |      |      |       |          |         |

### Village-Suraha

|          |        |                                 |     |                      |      |         |       |        |          |
|----------|--------|---------------------------------|-----|----------------------|------|---------|-------|--------|----------|
| MB<br>1C | 8.934  | 2012, 2936,                     | 350 | 5.80+.060/2*1.3<br>0 | 4.16 | 1456    | 41.23 | 60031  | 500.2583 |
| MB<br>2C | 5.105  | 2078, 2079, 2080                | 200 | 5.80+.060/2*1.3<br>0 | 4.16 | 832     | 41.23 | 34303  | 285.8583 |
| MB<br>3C | 8.934  | 2433To 2441                     | 350 | 5.80+.060/2*1.3<br>0 | 4.16 | 1456    | 41.23 | 60031  | 500.2583 |
| Total    | 22.973 |                                 | 900 |                      |      | 3744    |       | 154365 |          |
| CD 1C    | 10.758 | 2012, 2000, 2034,<br>2038       | 60  | 8.30+1.50/2*1.7<br>0 | 8.33 | 499.80  | 44.34 | 22161  | 184.675  |
| CD 2C    | 6.538  | 2000, 2048, 2052,<br>2055, 2056 | 110 | 8.60+1.50/2*1.8<br>0 | 9.00 | 990.00  | 44.34 | 43896  | 365.8    |
| Total    | 17.296 |                                 | 170 |                      |      | 1489.80 |       | 66057  |          |

**ANNEXURE-II**  
**LIVELIHOOD ACTION PLAN**

**Annual Action Plan for Livelihood (Physical & Financial)**

| Project - IWMP-XVIII |  |      | PIA-Soil Conservation Unit., Mahoba |           |             |           |            |           | District-Mahoba |           |               |
|----------------------|--|------|-------------------------------------|-----------|-------------|-----------|------------|-----------|-----------------|-----------|---------------|
| S. No                | Physical and financial targets             | Unit | First Year                          |           | Second Year |           | Third Year |           | Fourth Year     |           |               |
|                      |  |      | Physical                            | Financial | Physical    | Financial | Physical   | Financial | Physical        | Financial | Total Project |
| 1                    | <b>Livelihood activities through SHG's</b> |      |                                     |           |             |           |            |           |                 | 0         | 0.00          |
|                      | (1) Activity Goatary                       |      |                                     |           |             |           |            |           |                 | 0         | 0.00          |
|                      | (a) No. of SHG's                           | No.  | 0                                   | 0.00      | 15          | 3.71      | 15         | 3.71      | 3               | 0.83      | 33 8.25       |
|                      | (b) No. of members                         | No.  | 0                                   | 0.00      | 149         | 0.00      | 149        | 0.00      | 33              | 0.00      | 330 0.00      |
|                      | (c) Estimated income per year              | Rs.  | 0                                   | 0.00      |             |           |            |           |                 | 0         | 0.00          |
|                      | (2) Activity- Back Yard Poultry            |      | 0                                   | 0.00      |             |           |            |           |                 | 0         | 0.00          |
|                      | (a) No. of SHG's                           | No.  | 0                                   | 0.00      | 14          | 3.38      | 14         | 3.38      | 3               | 0.75      | 30 7.50       |
|                      | (b) No. of members                         | No.  | 0                                   | 0.00      | 135         | 0.00      | 135        | 0.00      | 30              | 0.00      | 300 0.00      |
|                      | (c) Estimated income per year              | Rs.  | 0                                   | 0.00      |             |           |            |           |                 | 0         | 0.00          |

|  |                                    |     |   |      |     |      |     |      |    |      |      |      |
|--|------------------------------------|-----|---|------|-----|------|-----|------|----|------|------|------|
|  | (3) Activity- Poultry ,<br>Broiler |     | 0 | 0.00 |     |      |     |      |    | 0    | 0.00 |      |
|  | (a) No. of SHG's                   | No. | 0 | 0.00 | 12  | 3.04 | 12  | 3.04 | 3  | 0.68 | 27   | 6.75 |
|  | (b) No. of members                 | No. | 0 | 0.00 | 122 | 0.00 | 122 | 0.00 | 27 | 0.00 | 270  | 0.00 |
|  | (c) Estimated income<br>per year   | Rs. | 0 | 0.00 |     |      |     |      |    |      | 0    | 0.00 |
|  | (4) Black Smithy                   |     |   |      |     |      |     |      |    |      | 0    | 0.00 |
|  | (a) No. of SHG's                   | No. | 0 | 0.00 | 9   | 2.36 | 9   | 2.36 | 2  | 0.53 | 21   | 5.25 |
|  | (b) No. of members                 | No. | 0 | 0.00 | 95  | 0.00 | 95  | 0.00 | 21 | 0.00 | 210  | 0.00 |
|  | (c) Estimated income<br>per year   | Rs. | 0 | 0.00 |     | 0.00 | 0   | 0.00 | 0  | 0.00 | 0    | 0.00 |
|  | (5) Rope making                    |     |   |      |     |      |     |      |    |      | 0    | 0.00 |
|  | (a) No. of SHG's                   | No. | 0 | 0.00 | 8   | 1.91 | 8   | 1.91 | 2  | 0.43 | 17   | 4.25 |
|  | (b) No. of members                 | No. | 0 | 0.00 | 77  | 0.00 | 77  | 0.00 | 17 | 0.00 | 170  | 0.00 |
|  | (c) Estimated income<br>per year   | Rs. | 0 | 0.00 |     |      |     |      |    |      | 0    | 0.00 |
|  | (6) Tailoring                      |     |   |      |     |      |     |      |    |      | 0    | 0.00 |
|  | (a) No. of SHG's                   | No. | 0 | 0.00 | 9   | 2.36 | 9   | 2.36 | 2  | 0.53 | 21   | 5.25 |
|  | (b) No. of members                 | No. | 0 | 0.00 | 95  | 0.00 | 95  | 0.00 | 21 | 0.00 | 210  | 0.00 |

|  |                               |     |   |      |     |      |     |      |    |      |     |      |
|--|-------------------------------|-----|---|------|-----|------|-----|------|----|------|-----|------|
|  | (c) Estimated income per year | Rs. | 0 | 0.00 |     | 0.00 | 0   | 0.00 | 0  | 0.00 | 0   | 0.00 |
|  | (8) Vermi Composting          |     |   |      |     |      |     |      |    |      | 0   | 0.00 |
|  | (a) No. of SHG's              | No. | 0 | 0.00 | 12  | 2.93 | 12  | 2.93 | 3  | 0.65 | 26  | 6.50 |
|  | (b) No. of members            | No. | 0 | 0.00 | 117 | 0.00 | 117 | 0.00 | 26 | 0.00 | 260 | 0.00 |
|  | (c) Estimated income per year | Rs. | 0 | 0.00 |     |      |     |      |    |      | 0   | 0.00 |
|  | (9) Food processing           |     |   |      |     |      |     |      |    |      | 0   | 0.00 |
|  | (a) No. of SHG's              | No. | 0 | 0.00 | 13  | 3.15 | 13  | 3.15 | 3  | 0.70 | 28  | 7.00 |
|  | (b) No. of members            | No. | 0 | 0.00 | 126 | 0.00 | 126 | 0.00 | 28 | 0.00 | 280 | 0.00 |
|  | (c) Estimated income per year | Rs. | 0 | 0.00 |     |      |     |      |    |      | 0   | 0.00 |
|  | (13) Seed Bank                |     |   |      |     |      |     |      |    |      | 0   | 0.00 |
|  | (a) No. of SHG's              | No. | 0 | 0.00 | 15  | 3.81 | 15  | 3.81 | 3  | 0.85 | 33  | 8.47 |
|  | (b) No. of members            | No. | 0 | 0.00 | 149 | 0.00 | 149 | 0.00 | 33 | 0.00 | 330 | 0.00 |
|  | (c) Estimated income per year | Rs. | 0 | 0.00 |     |      |     |      |    |      | 0   | 0.00 |

**Livelihood Option for Village Groups / Community  
Input supplied to Interested Groups/ SHGs**

| Sr. No. | Name of Activity *       | Name of input                                | Quantity/     | Rate          | No of IG / SHGs | Total Amount (Rs) |
|---------|--------------------------|--|---------------|---------------|-----------------|-------------------|
| 1       | Organic complex          | Red worms ( <i>Eisenia fetida</i> )<br>NADEP | 2 q<br>10 Nos | 25000<br>5000 | 4<br>(40 FF)    | 100000.00         |
| 2       | Goat kids                | Kids   | 40 Nos        | 1200          | 2 (20 FF)       | 48000.00          |
|         |                          | Adult  | 02            | 2500          |                 | 5000.00           |
| 3       | Goat rearing             | Female                                       | 10 Nos        | 3000          | 1 (10 FF)       | 30000.00          |
|         |                          | Adult  | 01            | 3000          |                 | 3000.00           |
| 4       | Motor / Diesel repairing | Tool Kit                                     | All tools     | 25000         | 1               | 25000.00          |
| 5       | Masala Grinding          | Pulvelizer                                   | 02            | 37000         | 2 (20 FF)       | 74000.00          |
| 6       | Oil Expeller             | Oil Expeller                                 | 01            | 84000         | 1 (10 FF)       | 84000.00          |
| 7       | Poultry (Broiler)        | Chicks                                       | 1000          | 25 per chicks | 1 (10 FF)       | 25000.00          |
| 8       | Wooden furniture         | Instruments                                  | 01            | 61000         | 1 (10 FF)       | 61000.00          |
| 9       | Mini Dal Mill            | Machine                                      | 01            | 42000         | 1 (10 FF)       | 42000.00          |
| 10      | Dairy                    | Buffaloes / Cows                             | 10            | 25000         | 1 (10 FF)       | 250000.00         |
| 11      | Back yard Poultry        | Chicks                                       | 2000          | 18            | 2 (20 FF)       | 36000.00          |
| 12      | Linseed rope making      | Rope making machine                          | 01            | 35000         | 1 (10 FF)       | 35000.00          |
| 13      | Organic production       | Registration                                 | 100 ha        | 6000          | 5               | 120000.00         |
| 14      | Tailoring                | Sieving Machine                              | 5 in 01 SHG   | 25000         | 2               | 25000.00          |

Note: Maximum Seed Money will be Rs 25000/- for one SHG / Individual. Repayment limit up to 18 months.

### ANNEXURE-III

#### 1. Annual Action Plan for Agriculture Production System & Micro Enterprises (Physical & Financial)

| Project - IWMP-XVIII |  |      | PIA-Soil Conservation Unit., Mahoba |               |              |               |              |               | District-Mahoba |               |               |               |
|----------------------|--|------|-------------------------------------|---------------|--------------|---------------|--------------|---------------|-----------------|---------------|---------------|---------------|
| S.<br>No             | Physical and financial<br>targets          | Unit | First Year                          |               | Second Year  |               | Third Year   |               | Fourth Year     |               |               |               |
|                      |  |      | 2011-12                             |               | 2012-13      |               | 2013-14      |               | 2014-15         |               | Total Project |               |
|                      |  |      | Physi<br>cal                        | Financ<br>ial | Physi<br>cal | Financ<br>ial | Physi<br>cal | Financ<br>ial | Physi<br>cal    | Financ<br>ial | Physi<br>cal  | Financ<br>ial |
| 1                    | <b>Production system</b>                   |      |                                     |               |              |               |              |               |                 | 0             | 0.00          |               |
|                      | <b>(1) Agriculture</b>                     |      |                                     |               |              |               |              |               |                 | <b>0</b>      | <b>0.00</b>   |               |
|                      | (a) Crop demonstration                     |      |                                     |               |              |               |              |               |                 | 0             | 0.00          |               |
|                      | (1) No. of dem.                            | No.  | 0                                   | 0.00          | 0            | 13.32         | 0            | 13.32         | 0               | 2.96          | 0             | 29.60         |
|                      | (2) Area                                   | ha.  |                                     |               | 127          |               | 127          |               | 28              |               | 282           | 0.00          |
|                      | <b>(b) Seed Production</b>                 |      | <b>0</b>                            |               |              |               |              |               |                 |               | <b>0</b>      | <b>0.00</b>   |
|                      | (1) No. of dem.                            | No.  | 0                                   | 0.00          | 280          | 11.74         | 280          | 11.74         | 62              | 2.61          | 622           | 26.10         |
|                      | (2) Area                                   | ha.  | 0                                   |               | 112          |               | 112          |               | 25              |               | 249           | 0.00          |
|                      | <b>(2) Horticulture/ Agri-Horticulture</b> |      | <b>0</b>                            |               |              |               |              |               |                 |               | <b>0</b>      | <b>0.00</b>   |
|                      | (a) Area                                   | ha.  | 0                                   | 0.00          | 14           | 2.43          | 14           | 2.43          | 3               | 0.54          | 30            | 5.40          |
|                      | (b) No. of Plants                          | No.  |                                     | 0.00          |              |               |              |               |                 |               | 0             | 0.00          |
|                      | <b>(3) Animal husbandry</b>                |      |                                     |               |              |               |              |               |                 | <b>0</b>      | <b>0.00</b>   |               |

|  |                            |                        |   |      |     |      |     |      |    |      |     |      |
|--|----------------------------|------------------------|---|------|-----|------|-----|------|----|------|-----|------|
|  | A. fodder production       | No. of Units / Farmers | 0 | 0.00 | 109 | 0.65 | 109 | 0.65 | 24 | 0.15 | 242 | 1.45 |
|  | B. Vaccination/Medication  | No. of Animals         |   |      | 147 | 0.11 | 147 | 0.11 | 33 | 0.02 | 327 | 0.24 |
|  | C. Artificial Insemination | No. of Animals         |   |      | 148 | 0.06 | 148 | 0.06 | 33 | 0.01 | 329 | 0.13 |
|  | D. Natural Service.        | He Buffalo             |   |      | 5   | 1.30 | 5   | 1.30 | 1  | 0.29 | 12  | 2.88 |

## 2. Estimates of Different Participatory Crop Trials

| Pulses                              | Rabi  |   |                  |                         |
|-------------------------------------|---|---|------------------|-------------------------|
| Integrated Crop Management          | Lentil  |   |                  |                         |
| Area of Demonstration - 0.40 ha     |   |   |                  |                         |
| Detail of Demonstration             | Intervention / Technology Adopted               | Organizations for obtaining Seed  |                  |                         |
| 1. Name of Varieties                | Narendra Masoor-1, DPL-15, L-4076, Pusa Vaibhav | C. S. A. University of Ag. & Technology, Kanpur, Indian Institute of Pulse Research, Kalyanpur Kanpur. IARI, Pusa New Delhi | 5000             | 2000.00                 |
|                                     | Late- IPL-81, K-75                              |   |                  |                         |
| 2. Sowing Time                      | IIInd week of October                           |   |                  |                         |
|                                     |   | Rate(Rs/kg/ Pkt)  | Cost per ha (Rs) | Demonstration Cost (Rs) |
| 3. Required Seed                    | 50 kg / ha (F1,F2, Certified)                   | 80  | 5000             | 2000.00                 |
| 7. Use Weedicide                    | Pendimethalin 3.3 li/ha                         | 465   | 1918             | 767.25                  |
|                                     | (Pre emergence)                                 |   |                  |                         |
| 11. Bio Fertilizers/Bio-agents      |   |   |                  |                         |
| i) Azatobactor + PSB                | -   |   |                  |                         |
| ii) Rhizobium + PSB                 | 5 Pkt + 5 Pkt = 10 Pkt @ Rs                     | 7.5   | 94               | 37.50                   |
| iii) Trichoderma                    | 1.50 kg /ha (Soil treatment)                    | 136   | 255              | 102.00                  |
| 12. Recommended dose of fertilizers |   |   |                  |                         |
| 25:60:30 NPK                        |   |   |                  |                         |
| i) DAP*                             | 130 kg  | 15  | 2438             | 975.00                  |
| ii) SSP*                            | 375 kg  | 8   | 3750             | 1500.00                 |
| iii) Urea                           | In case of SSP 54 kg Urea applied               | 6   | 405              | 162.00                  |
| iv) MOP                             | 50 kg   | 7   | 438              | 175.00                  |
| * Either one                        | 40 kg /ha Sulphur added if SSP used             |   |                  |                         |

|  |  |   |                         |                                |
|--|--|---|-------------------------|--------------------------------|
| <b>13. IPM</b>                         |  |   |                         |                                |
| Spray of Neem Seed Kernal              | 10   | 30  | 375                     | 150.00                         |
| Mataka Khad                            | 15 lit/kg<br>Gobar+Neemleaf+water+Desi cow urine+2 kg Molasis mix & Deco | 2   | 155                     | 62.00                          |
| Insecticides/Fungicides                | If required One Dusting of Methyle Parathion powder                      |   |                         |                                |
|  | 25 kg / ha   | 25  | 781                     | 312.50                         |
|  | <b>Total (Less SSP)</b>  |   |                         | <b>4743.25</b>                 |
| <b>Integrated Crop Management</b>      | <b>Chickpea</b>  |   |                         |                                |
| <b>Area of Demonstration - 0.40 ha</b> |  |   |                         |                                |
| <b>Detail of Demonstration</b>         | <b>Intervention / Technology Adopted</b>                                 | <b>Organizations for obtaining Seed</b>   |                         |                                |
| 1. Name of Varieties                   | KGD-1168, KWR-108, Pusa-256, Pusa-367                                    | C. S. A. University of Ag. & Technology, Kanpur, Indian Institute of Pulse Research, Kalyanpur Kanpur. IARI, Pusa New Delhi |                         |                                |
|  | Late- Udai   |   |                         |                                |
| 2. Sowing Time                         | 1st week of October  | <b>Rate(Rs/kg/ Pkt)</b>   | <b>Cost per ha (Rs)</b> | <b>Demonstration Cost (Rs)</b> |
| 3. Required Seed                       | 80 kg / ha (F1,F2, Certified)  | 65  | 6500                    | 2600.00                        |
| 7. Use Weedicde                        | Pendimethalin 3.3 li/ha<br>(Pre emergence)                               | 465   | 1918                    | 767.25                         |
| 11. Bio Fertilizers/Bio-agents         |  |   |                         |                                |
| i) Azatobactor + PSB                   | -  |   |                         |                                |
| ii) Rhizobium + PSB                    | 5 Pkt + 5 Pkt = 10 Pkt @ Rs  | 7.5   | 94                      | 37.50                          |
| iii) Trichoderma                       | 1.50 kg /ha (Soil treatment)   | 136   | 255                     | 102.00                         |
| 12. Recommended dose of fertilizers    |  |   |                         |                                |
| 25:60:30 NPK                           |  |   |                         |                                |

|  |  |   |                         |                                |
|--|--|---|-------------------------|--------------------------------|
| i) DAP*                                | 130 kg   | 15  | 2438                    | 975.00                         |
| ii) SSP*                               | 375 kg   | 8   | 3750                    | 1500.00                        |
| iii) Urea                              | In case of SSP 54 kg Urea applied  | 6   | 405                     | 162.00                         |
| iv) MOP                                | 50 kg  | 7   | 438                     | 175.00                         |
| * Either one                           | 40 kg /ha Sulphur added if SSP used                                      |   |                         |                                |
| 13. IPM                                |  |   |                         |                                |
| Spray of Neem Seed Kernal              | 10   | 30  | 375                     | 150.00                         |
| Mataka Khad                            | 15 lit/kg<br>Gobar+Neemleaf+water+Desi cow urine+2 kg Molasis mix & Deco | 2   | 155                     | 62.00                          |
| NPV                                    | 250 LE /ha at the time pod formation                                     | 200   | 250                     | 100.00                         |
| Insecticides/Fungicides                | If required One Dusting of Methyle Parathion powder                      |   |                         |                                |
|  | 25 kg / ha   | 25  | 781                     | 312.50                         |
|  | <b>Total (Less SSP)</b>  |   |                         | <b>5443.25</b>                 |
| <b>Integrated Crop Management</b>      | <b>Field Pea</b>   |   |                         |                                |
| <b>Area of Demonstration - 0.40 ha</b> |  |   |                         |                                |
| <b>Detail of Demonstration</b>         | <b>Intervention / Technology Adopted</b>                                 | <b>Organizations for obtaining Seed</b>   |                         |                                |
| 1. Name of Varieties                   | KMPR-400, KPMR-522, Rachna, Shikha                                       | C. S. A. University of Ag. & Technology, Kanpur, Indian Institute of Pulse Research, Kalyanpur Kanpur. IARI, Pusa New Delhi |                         |                                |
| 2. Sowing Time                         | IInd week of October   | <b>Rate(Rs/kg/ Pkt)</b>   | <b>Cost per ha (Rs)</b> | <b>Demonstration Cost (Rs)</b> |
| 3. Required Seed                       | 100 kg / ha (F1,F2, Certified)   | 60  | 7500                    | 3000.00                        |
| 7. Use Weedicide                       | Pendimethalin 3.3 li/ha<br>(Pre emergence)                               | 465   | 1918                    | 767.25                         |

|  |  |   |      |                |
|--|--|---|------|----------------|
| <b>11. Bio Fertilizers/Bio-agents</b>      |  |   |      |                |
| i) Azatobactor + PSB                       | -  |   |      |                |
| ii) Rhizobium + PSB                        | 5 Pkt + 5 Pkt = 10 Pkt @ Rs  | 7.5   | 94   | 37.50          |
| iii) Trichoderma                           | 1.50 kg /ha (Soil treatment)   | 136   | 255  | 102.00         |
| <b>12. Recommended dose of fertilizers</b> |  |   |      |                |
| <b>25:60:30 NPK</b>                        |  |   |      |                |
| i) DAP*                                    | 130 kg   | 15  | 2438 | 975.00         |
| ii) SSP*                                   | 375 kg   | 8   | 3750 | 1500.00        |
| iii) Urea                                  | In case of SSP 54 kg Urea applied  | 6   | 405  | 162.00         |
| iv) MOP                                    | 50 kg  | 7   | 438  | 175.00         |
| * Either one                               | 40 kg /ha Sulphur added if SSP used                                      |   |      |                |
| <b>13. IPM</b>                             |  |   |      |                |
| Spray of Neem Seed Kernal                  | 10   | 30  | 375  | 150.00         |
| Mataka Khad                                | 15 lit/kg<br>Gobar+Neemleaf+water+Desi cow urine+2 kg Molasis mix & Deco | 2   | 155  | 62.00          |
| Insecticides/Fungicides                    | If required One Dusting of Methyle Parathion powder                      |   |      |                |
|  | 25 kg / ha   | 25  | 781  | 312.50         |
|  | <b>Total (Less SSP)</b>  |   |      | <b>5743.25</b> |
| <b>Integrated Crop Management</b>          | <b>Urd</b>   |   |      |                |
| <b>Area of Demonstration - 0.40 ha</b>     |  |   |      |                |
| <b>Detail of Demonstration</b>             | <b>Intervention / Technology Adopted</b>                                 | <b>Organizations for obtaining Seed</b>   |      |                |
| 1. Name of Varieties                       | Shekhar-2, Azad-1, PU-35,<br>Narendra Urd-1                              | C. S. A. University of Ag. & Technology, Kanpur, Indian Institute of Pulse Research, Kalyanpur Kanpur. IARI, Pusa New Delhi |      |                |

|  |  |                         |                         |                                |
|--|--|-------------------------|-------------------------|--------------------------------|
| <b>2. Sowing Time</b>                      | Last week of July  | <b>Rate(Rs/kg/ Pkt)</b> | <b>Cost per ha (Rs)</b> | <b>Demonstration Cost (Rs)</b> |
| <b>3. Required Seed</b>                    | 16 kg / ha (F1,F2, Certified)  | 100                     | 2000                    | 800.00                         |
| <b>7. Use Weedicide</b>                    | Pendimethalin 3.3 li/ha<br>(Pre emergence)                               | 465                     | 1918                    | 767.25                         |
| <b>11. Bio Fertilizers/Bio-agents</b>      |  |                         |                         |                                |
| i) Azatobactor + PSB                       | -  |                         |                         |                                |
| ii) Rhizobium + PSB                        | 5 Pkt + 5 Pkt = 10 Pkt @ Rs  | 7.5                     | 94                      | 37.50                          |
| iii) Trichoderma                           | 1.50 kg /ha (Soil treatment)   | 136                     | 255                     | 102.00                         |
| <b>12. Recommended dose of fertilizers</b> |  |                         |                         |                                |
| <b>25:60:30 NPK</b>                        |  |                         |                         |                                |
| i) DAP*                                    | 130 kg   | 15                      | 2438                    | 975.00                         |
| ii) SSP*                                   | 375 kg   | 8                       | 3750                    | 1500.00                        |
| iii) Urea                                  | In case of SSP 54 kg Urea applied  | 6                       | 405                     | 162.00                         |
| iv) MOP                                    | 50 kg  | 7                       | 438                     | 175.00                         |
| * Either one                               | 40 kg /ha Sulphur added if SSP used                                      |                         |                         |                                |
| <b>13. IPM</b>                             |  |                         |                         |                                |
| Spray of Neem Seed Kernal                  | 10   | 30                      | 375                     | 150.00                         |
| Mataka Khad                                | 15 lit/kg<br>Gobar+Neemleaf+water+Desi cow urine+2 kg Molasis mix & Deco | 2                       | 155                     | 62.00                          |
| Insecticides/Fungicides                    | If required One Dusting of Methyle Parathion powder                      |                         |                         |                                |
|  | 25 kg / ha   | 25                      | 781                     | 312.50                         |
|  | <b>Total (Less SSP)</b>  |                         |                         | <b>3543.25</b>                 |
| <b>Integrated Crop Management</b>          | <b>Moong</b>   |                         |                         |                                |
| <b>Area of Demonstration - 0.40</b>        |  |                         |                         |                                |

| <b>ha</b>                           |  |   |                         |                                |
|-------------------------------------|--|---|-------------------------|--------------------------------|
| <b>Detail of Demonstration</b>      | <b>Intervention / Technology Adopted</b>                                 | <b>Organizations for obtaining Seed</b>   |                         |                                |
| 1. Name of Varieties                | T.M-9937, Meha, Pant Moong-1,2<br>Late- Type-44, Samrat                  | C. S. A. University of Ag. & Technology, Kanpur, Indian Institute of Pulse Research, Kalyanpur Kanpur. IARI, Pusa New Delhi |                         |                                |
| 2. Sowing Time                      | Last week of June  | <b>Rate(Rs/kg/ Pkt)</b>   | <b>Cost per ha (Rs)</b> | <b>Demonstration Cost (Rs)</b> |
| 3. Required Seed                    | 16 kg / ha (F1,F2, Certified)  | 100   | 2000                    | 800.00                         |
| 7. Use Weedicide                    | Pendimethalin 3.3 li/ha<br>(Pre emergence)                               | 465   | 1918                    | 767.25                         |
| 11. Bio Fertilizers/Bio-agents      |  |   |                         |                                |
| i) Azatobactor + PSB                | -  |   |                         |                                |
| ii) Rhizobium + PSB                 | 5 Pkt + 5 Pkt = 10 Pkt @ Rs  | 7.5   | 94                      | 37.50                          |
| iii) Trichoderma                    | 1.50 kg /ha (Soil treatment)   | 136   | 255                     | 102.00                         |
| 12. Recommended dose of fertilizers |  |   |                         |                                |
| 25:60:30 NPK                        |  |   |                         |                                |
| i) DAP*                             | 130 kg   | 15  | 2438                    | 975.00                         |
| ii) SSP*                            | 375 kg   | 8   | 3750                    | 1500.00                        |
| iii) Urea                           | In case of SSP 54 kg Urea applied  | 6   | 405                     | 162.00                         |
| iv) MOP                             | 50 kg  | 7   | 438                     | 175.00                         |
| * Either one                        | 40 kg /ha Sulphur added if SSP used                                      |   |                         |                                |
| 13. IPM                             |  |   |                         |                                |
| Spray of Neem Seed Kernal           | 10   | 30  | 375                     | 150.00                         |
| Mataka Khad                         | 15 lit/kg<br>Gobar+Neemleaf+water+Desi cow urine+2 kg Molasis mix & Deco | 2   | 155                     | 62.00                          |
| NPV                                 | 250 LE /ha at the time pod   | 200   | 250                     | 100.00                         |

|  |  |   |                         |                                |
|--|--|---|-------------------------|--------------------------------|
|  | formation  |   |                         |                                |
| Insecticides/Fungicides                | If required One Dusting of Methyle Paratheon powder                                    |   |                         |                                |
|  | 25 kg / ha   | 25  | 781                     | 312.50                         |
|  | <b>Total (Less SSP)</b>  |   |                         | <b>3643.25</b>                 |
| <b>Integrated Crop Management</b>      | <b>Arhar</b>   |   |                         |                                |
| <b>Area of Demonstration - 0.40 ha</b> |  |   |                         |                                |
| <b>Detail of Demonstration</b>         | <b>Intervention / Technology Adopted</b>   | <b>Organizations for obtaining Seed</b>   |                         |                                |
| 1. Name of Varieties                   | Paras, UPAS-120, Type-21, Pusa-992 (Wilt rest.)<br>Late- Bahar, Narendra Arhar-1, Azad | C. S. A. University of Ag. & Technology, Kanpur, Indian Institute of Pulse Research, Kalyanpur Kanpur. IARI, Pusa New Delhi |                         |                                |
| 2. Sowing Time                         | Late- Month July   | <b>Rate(Rs/kg/ Pkt)</b>   | <b>Cost per ha (Rs)</b> | <b>Demonstration Cost (Rs)</b> |
| 3. Required Seed                       | 20 kg / ha (F1,F2, Certified)  |   |                         |                                |
| 7. Use Weedicde                        | -  | -   | -                       | -                              |
| 11. Bio Fertilizers/Bio-agents         |  |   |                         |                                |
| i) Azatobactor + PSB                   | -  |   |                         |                                |
| ii) Rhizobium + PSB                    | 5 Pkt + 5 Pkt = 10 Pkt @ Rs  | 7.5   | 94                      | 37.50                          |
| iii) Trichoderma                       | 1.50 kg /ha (Soil treatment)   | 136   | 255                     | 102.00                         |
| 12. Recommended dose of fertilizers    |  |   |                         |                                |
| 15:45:20 NPK                           |  |   |                         |                                |
| i) DAP*                                | 100 kg   | 15  | 2438                    | 750.00                         |

|  |  |   |                         |                                |
|--|--|---|-------------------------|--------------------------------|
| ii) SSP*                               | 250 kg   | 8   | 3750                    | 1000.00                        |
| iii) Urea                              | In case of SSP 54 kg Urea applied  | 6   | 405                     | 162.00                         |
| iv) MOP                                | 50 kg  | 7   | 438                     | 175.00                         |
| * Either one                           | 30 kg /ha Sulphur added if SSP used                                      |   |                         |                                |
| 13. IPM                                |  |   |                         |                                |
| Spray of Neem Seed Kernal              | 10   | 30  | 375                     | 150.00                         |
| Mataka Khad                            | 15 lit/kg<br>Gobar+Neemleaf+water+Desi cow urine+2 kg Molasis mix & Deco | 2   | 155                     | 62.00                          |
| Insecticides/Fungicides                | If required One Dusting of Methyle Parathion powder                      |   | 0                       |                                |
|  | 25 kg / ha   | 25  | 781                     | 312.50                         |
|  | <b>Total</b>   |   |                         | <b>2951.00</b>                 |
| <b>Integrated Crop Management</b>      | <b>Linseed</b>   |   |                         |                                |
| <b>Area of Demonstration - 0.40 ha</b> |  |   |                         |                                |
| <b>Detail of Demonstration</b>         | <b>Intervention / Technology Adopted</b>                                 | <b>Organizations for obtaining Seed</b>   |                         |                                |
| 1. Name of Varieties                   | Sweta, Subhra, Garima, Shekhar, Parwati<br>Late- Laxmi-27, Padmini       | C. S. A. University of Ag. & Technology, Kanpur, Indian Institute of Pulse Research, Kalyanpur Kanpur. IARI, Pusa New Delhi |                         |                                |
| 2. Sowing Time                         | Mid October  | <b>Rate(Rs/kg/ Pkt)</b>   | <b>Cost per ha (Rs)</b> | <b>Demonstration Cost (Rs)</b> |
| 3. Required Seed                       | 30 kg / ha (F1,F2, Certified)  | 75  | 2813                    | 1125.00                        |
| 7. Use Weedicide                       | -  | -   | -                       | -                              |
| 11. Bio Fertilizers/Bio-agents         |  |   |                         |                                |
| i) Azatobactor + PSB                   | 5 Pkt + 5 Pkt = 10 Pkt @ Rs  | 7.5   | 94                      | 37.50                          |
| ii) Rhizobium + PSB                    | -  | -   | -                       | -                              |

|  |  |   |                         |                                |
|--|--|---|-------------------------|--------------------------------|
| iii) Trichoderma                       | -  | -   | -                       | -                              |
| 12. Recommended dose of fertilizers    |  |   |                         |                                |
| 50:40:40 NPK                           |  |   |                         |                                |
| i) DAP*                                | 125 kg   | 15  | 2344                    | 937.50                         |
| ii) SSP*                               | 275 kg   | 8   | 2750                    | 1100.00                        |
| iii) Urea                              | 50 kg  | 6   | 375                     | 150.00                         |
| iv) MOP                                | 50 kg  | 7   | 438                     | 175.00                         |
| * Either one                           | 30 kg /ha Sulphur added if SSP used                                      |   |                         |                                |
| 13. IPM                                |  |   |                         |                                |
| Spray of Neem Seed Kernal              | 10   | 30  | 375                     | 150.00                         |
| Mataka Khad                            | 15 lit/kg<br>Gobar+Neemleaf+water+Desi cow urine+2 kg Molasis mix & Deco | 2   | 155                     | 62.00                          |
| Insecticides/Fungicides                | If required One Dusting of Methyle Parathion powder                      |   | 0                       |                                |
|  | 25 kg / ha   | 25  | 781                     | 312.50                         |
|  | <b>Total (Less SSP)</b>  |   |                         | <b>2949.50</b>                 |
| <b>Integrated Crop Management</b>      | <b>Mustard</b>   |   |                         |                                |
| <b>Area of Demonstration - 0.40 ha</b> |  |   |                         |                                |
| <b>Detail of Demonstration</b>         | <b>Intervention / Technology Adopted</b>                                 | <b>Organizations for obtaining Seed</b>   |                         |                                |
| 1. Name of Varieties                   | Varuna, Kranti, Rohini, Vaibhav, Pusa Bold<br>Late-Ashirvad, Vardan      | C. S. A. University of Ag. & Technology, Kanpur, Indian Institute of Pulse Research, Kalyanpur Kanpur. IARI, Pusa New Delhi |                         |                                |
| 2. Sowing Time                         | October first week   | <b>Rate(Rs/kg/ Pkt)</b>   | <b>Cost per ha (Rs)</b> | <b>Demonstration Cost (Rs)</b> |
| 3. Required Seed                       | 6 kg / ha (F1,F2, Certified)   | 150   | 1125                    | 450.00                         |

|  |  |  |      |                |
|--|--|--|------|----------------|
| 7. Use Weedicde                        | -  | -  | -    | -              |
|  |  |  |      |                |
| 11. Bio Fertilizers/Bio-agents         |  |  |      |                |
| i) Azatobactor + PSB                   | 5 Pkt + 5 Pkt = 10 Pkt @ Rs  | 7.5  | 94   | 37.50          |
| ii) Rhizobium + PSB                    | -  | -  | -    | -              |
| iii) Trichoderma                       | -  | -  | -    | -              |
| 12. Recommended dose of fertilizers    |  |  |      |                |
| 60:50:30 NPK                           |  |  |      |                |
| i) DAP*                                | 180 kg   | 15   | 3375 | 1350.00        |
| ii) SSP*                               | 275 kg   | 8  | 2750 | 1100.00        |
| iii) Urea                              | 75 kg  | 6  | 563  | 225.00         |
| iv) MOP                                | 50 kg  | 7  | 438  | 175.00         |
| * Either one                           | 30 kg /ha Sulphur added if SSP used                                      |  |      |                |
| 13. IPM                                |  |  |      |                |
| Spray of Neem Seed Kernal              | 10   | 30   | 375  | 150.00         |
| Mataka Khad                            | 15 lit/kg<br>Gobar+Neemleaf+water+Desi cow urine+2 kg Molasis mix & Deco | 2  | 155  | 62.00          |
| Insecticides/Fungicides                | If required One Dusting of Methyle Parathion powder                      |  |      |                |
|  | 25 kg / ha   | 25   | 781  | 312.50         |
|  | <b>Total (Less SSP)</b>  |  |      | <b>2762.00</b> |
| <b>Integrated Crop Management</b>      | <b>Toriya</b>  |  |      |                |
| <b>Area of Demonstration - 0.40 ha</b> |  |  |      |                |
| <b>Detail of Demonstration</b>         | <b>Intervention / Technology Adopted</b>                                 | <b>Organizations for obtaining Seed</b>                              |      |                |
| 1. Name of Varieties                   | Type-9, PT-303, PT-30  | C. S. A. University of Ag. & Technology, Kanpur, Indian Institute of |      |                |

|                                     |   |  |                             |                                |
|-------------------------------------|---|--|-----------------------------|--------------------------------|
|                                     | Late-Bhawani  | Pulse Research, Kalyanpur Kanpur. IARI, Pusa New Delhi |                             |                                |
| 2. Sowing Time                      |   | <b>Rate(Rs/kg/ Pkt)</b>                                | <b>Cost per ha<br/>(Rs)</b> | <b>Demonstration Cost (Rs)</b> |
|                                     | First Fortnight of September  |  |                             |                                |
| 3. Required Seed                    | 4 kg / ha (F1,F2, Certified)  | 200  | 1000                        | 400.00                         |
| 7. Use Weedicide                    | -   | -  | -                           | -                              |
| 11. Bio Fertilizers/Bio-agents      |   |  |                             |                                |
| i) Azatobactor + PSB                | 5 Pkt + 5 Pkt = 10 Pkt @ Rs   | 7.5  | 94                          | 37.50                          |
| ii) Rhizobium + PSB                 | -   | -  | -                           | -                              |
| iii) Trichoderma                    | -   | -  | -                           | -                              |
| 12. Recommended dose of fertilizers |   |  |                             |                                |
| 50:30:30 NPK                        |   |  |                             |                                |
| i) DAP*                             | 125 kg  | 15   | 2344                        | 937.50                         |
| ii) SSP*                            | 275 kg  | 8  | 2750                        | 1100.00                        |
| iii) Urea                           | 50 kg   | 6  | 375                         | 150.00                         |
| iv) MOP                             | 50 kg   | 7  | 438                         | 175.00                         |
| * Either one                        | 30 kg /ha Sulphur added if SSP used   |  |                             |                                |
| 13. IPM                             |   |  |                             |                                |
| Spray of Neem Seed Kernal           | 10  | 30   | 375                         | 150.00                         |
| Mataka Khad                         | 15 lit/kg<br>Gobar+Neemleaf+water+Desi cow<br>urine+2 kg Molasis mix & Deco | 2  | 155                         | 62.00                          |
| Insecticides/Fungicides             | If required One Dusting of Methyle<br>Parathion powder                      |  | 0                           |                                |
|                                     | 25 kg / ha  | 25   | 781                         | 312.50                         |
|                                     | <b>Total (Less SSP)</b>   |  |                             | <b>2224.50</b>                 |
| <b>Integrated Crop Management</b>   | <b>Til (Sesamum)</b>  |  |                             |                                |
| <b>Area of Demonstration - 0.40</b> |   |  |                             |                                |

| <b>ha</b>                           |  |   |                         |                                |
|-------------------------------------|--|---|-------------------------|--------------------------------|
| <b>Detail of Demonstration</b>      | <b>Intervention / Technology Adopted</b>                                 | <b>Organizations for obtaining Seed</b>   |                         |                                |
| 1. Name of Varieties                | Type-4,12,13,78, Shekhar<br>Late- Pragati, Tarun                         | C. S. A. University of Ag. & Technology, Kanpur, Indian Institute of Pulse Research, Kalyanpur Kanpur. IARI, Pusa New Delhi |                         |                                |
| 2. Sowing Time                      | June last week to July 15  | <b>Rate(Rs/kg/ Pkt)</b>   | <b>Cost per ha (Rs)</b> | <b>Demonstration Cost (Rs)</b> |
| 3. Required Seed                    | 4 kg / ha (F1,F2, Certified)   | 150   | 750                     | 300.00                         |
| 7. Use Weedicide                    | -  | -   | -                       | -                              |
| 11. Bio Fertilizers/Bio-agents      |  |   |                         |                                |
| i) Azatobactor + PSB                | 5 Pkt + 5 Pkt = 10 Pkt @ Rs  | 7.5   | 94                      | 37.50                          |
| ii) Rhizobium + PSB                 | -  | -   | -                       | -                              |
| iii) Trichoderma                    | -  | -   | -                       | -                              |
| 12. Recommended dose of fertilizers |  |   |                         |                                |
| 30:15:25 NPK                        |  |   |                         |                                |
| i) DAP*                             | 80 kg  | 15  | 1500                    | 600.00                         |
| ii) SSP*                            | 225 kg   | 8   | 2250                    | 900.00                         |
| iii) Urea                           | 30 kg  | 6   | 225                     | 90.00                          |
| iv) MOP                             | 40 kg  | 7   | 350                     | 140.00                         |
| * Either one                        | 30 kg /ha Sulphur added if SSP used                                      |   |                         |                                |
| 13. IPM                             |  |   |                         |                                |
| Spray of Neem Seed Kernal           | 10   | 30  | 375                     | 150.00                         |
| Mataka Khad                         | 15 lit/kg<br>Gobar+Neemleaf+water+Desi cow urine+2 kg Molasis mix & Deco | 2   | 155                     | 62.00                          |

|  |   |   |                         |                                |
|--|---|---|-------------------------|--------------------------------|
| Insecticides/Fungicides                | If required One Dusting of Methyle Parathion powder |   |                         |                                |
|  | 25 kg / ha  | 25  | 781                     | 312.50                         |
|  | <b>Total (Less SSP)</b>                             |   |                         | <b>1692.00</b>                 |
| <b>Integrated Crop Management</b>      | <b>Wheat</b>  |   |                         |                                |
| <b>Area of Demonstration - 0.40 ha</b> |   |   |                         |                                |
| <b>Detail of Demonstration</b>         | <b>Intervention / Technology Adopted</b>            | <b>Organizations for obtaining Seed</b>   |                         |                                |
| 1. Name of Varieties                   | UP-2338,WH-542,PBW-343,502,550,K-9006,307           | C. S. A. University of Ag. & Technology, Kanpur, Indian Institute of Pulse Research, Kalyanpur Kanpur. IARI, Pusa New Delhi |                         |                                |
| 2. Sowing Time                         | Mid October to first week of Nov                    | <b>Rate(Rs/kg/ Pkt)</b>   | <b>Cost per ha (Rs)</b> | <b>Demonstration Cost (Rs)</b> |
| 3. Required Seed                       | 100 kg / ha (F1,F2, Certified)                      | 25  | 3125                    | 1250.00                        |
| 7. Use Weedicde                        | Total - at 28 to 32 at after sowing                 | 950   | 1188                    | 475.00                         |
| 11. Bio Fertilizers/Bio-agents         |   |   |                         |                                |
| i) Azatobactor + PSB                   | 5 Pkt + 5 Pkt = 10 Pkt @ Rs                         | 7.5   | 94                      | 37.50                          |
| ii) Rhizobium + PSB                    | -   | -   | -                       | -                              |
| iii) Trichoderma                       | 1.50 kg /ha (Soil treatment)                        | 136   | 255                     | 102.00                         |
| 12. Recommended dose of fertilizers    |   |   |                         |                                |
| 120:60:40 NPK                          |   |   |                         |                                |
| i) DAP*                                | 325 kg  | 15  | 6094                    | 2437.50                        |
| ii) SSP*                               | -   | -   | 0                       | 0.00                           |
| iii) Urea                              | 100 kg  | 6   | 750                     | 300.00                         |
| iv) MOP                                | 80 kg   | 7   | 700                     | 280.00                         |

|  |   |   |                         |                                |
|--|---|---|-------------------------|--------------------------------|
| v) Zinc                                | 30 kg /ha   | 25  | 938                     | 375.00                         |
| 13. IPM                                |   |   |                         |                                |
| Spray of Neem Seed Kernal              | 10  | 30  | 375                     | 150.00                         |
| Mataka Khad                            | 15 lit/kg<br>Gobar+Neemleaf+water+Desi cow urine+2 kg Molasis mix & Deco                | 2   | 155                     | 62.00                          |
| Insecticides/Fungicides                | If required One Dusting of Methyle Parathion powder                                     |   | 0                       |                                |
|  | 25 kg / ha  | 25  | 781                     | 312.50                         |
|  | <b>Total (Less SSP)</b>   |   |                         | <b>5781.50</b>                 |
| <b>Integrated Crop Management</b>      | <b>Maize</b>  |   |                         |                                |
| <b>Area of Demonstration - 0.40 ha</b> |   |   |                         |                                |
| <b>Detail of Demonstration</b>         | <b>Intervention / Technology Adopted</b>  | <b>Organizations for obtaining Seed</b>   |                         |                                |
| 1. Name of Varieties                   | Hyb. Duccan-103, 105, Sankul-Dhawal, Shakti-1, Popcorn- Amber, V.L. Amber, Perl popcorn | C. S. A. University of Ag. & Technology, Kanpur, Indian Institute of Pulse Research, Kalyanpur Kanpur. IARI, Pusa New Delhi |                         |                                |
| 2. Sowing Time                         | 15 Oct. to 15 Nov.  | <b>Rate(Rs/kg/ Pkt)</b>   | <b>Cost per ha (Rs)</b> | <b>Demonstration Cost (Rs)</b> |
| 3. Required Seed                       | 22 kg / ha (F1,F2, Certified)   | 60  | 1650                    | 660.00                         |
| 4. Seed Treatment                      | Thirum & 25 ml Chloropyrophyose   | 60  | 75                      | 30.00                          |
| 11. Bio Fertilizers/Bio-agents         |   |   |                         |                                |
| i) Azatobactor + PSB                   | 5 Pkt + 5 Pkt = 10 Pkt @ Rs   | 7.5   | 94                      | 37.50                          |
| ii) Rhizobium + PSB                    | -   | -   | -                       | -                              |
| iii) Trichoderma                       | 1.50 kg /ha (Soil treatment)  | 136   | 255                     | 102.00                         |
| 12. Recommended dose of                |   |   |                         |                                |

|  |  |   |                         |                                |
|--|--|---|-------------------------|--------------------------------|
| fertilizers                            |  |   |                         |                                |
| 100:60:40 NPK                          |  |   |                         |                                |
| i) DAP*                                | 265 kg   | 15  | 4969                    | 1987.50                        |
| ii) SSP*                               | -  | -   | 0                       | 0.00                           |
| iii) Urea                              | 80 kg  | 6   | 600                     | 240.00                         |
| iv) MOP                                | 50 kg  | 7   | 438                     | 175.00                         |
| v) Zinc                                | -  | -   | 0                       | 0.00                           |
| 13. IPM                                |  |   |                         |                                |
| Spray of Neem Seed Kernal              | 10   | 30  | 375                     | 150.00                         |
| Mataka Khad                            | 15 lit/kg<br>Gobar+Neemleaf+water+Desi cow urine+2 kg Molasis mix & Deco                                     | 2   | 155                     | 62.00                          |
| Insecticides/Fungicides                | If required One Dusting of Methyle Parathion powder  |   | 0                       |                                |
|  | 25 kg / ha   | 25  | 781                     | 312.50                         |
|  | <b>Total (Less SSP)</b>  |   |                         | <b>3756.50</b>                 |
| <b>Integrated Crop Management</b>      | <b>Maize</b>   |   |                         |                                |
| <b>Area of Demonstration - 0.40 ha</b> |  |   |                         |                                |
| <b>Detail of Demonstration</b>         | <b>Intervention / Technology Adopted</b>   | <b>Organizations for obtaining Seed</b>   |                         |                                |
| 1. Name of Varieties                   | Hybrid- Ganga-11, Sartaj, Prakash, Pusa Hybrid Maize5, Composite-Prabhat, Navjyoti, Pusa Composite-2, Naveen | C. S. A. University of Ag. & Technology, Kanpur, Indian Institute of Pulse Research, Kalyanpur Kanpur. IARI, Pusa New Delhi |                         |                                |
| 2. Sowing Time                         | Mid June   | <b>Rate(Rs/kg/ Pkt)</b>   | <b>Cost per ha (Rs)</b> | <b>Demonstration Cost (Rs)</b> |
| 3. Required Seed                       | 20 kg / ha (F1,F2, Certified)  | 40  | 1000                    | 400.00                         |
| 4. Seed Treatment                      | Thirum & 25 ml Chloropiryphose   | 60  | 75                      | 30.00                          |

|  |  |   |      |                |
|--|--|---|------|----------------|
|  |  |   |      |                |
| 11. Bio Fertilizers/Bio-agents         |  |   |      |                |
| i) Azatobactor + PSB                   | 5 Pkt + 5 Pkt = 10 Pkt @ Rs  | 7.5   | 94   | 37.50          |
| ii) Rhizobium + PSB                    | -  | -   | -    | -              |
| iii) Trichoderma                       | 1.50 kg /ha (Soil treatment)   | 136   | 255  | 102.00         |
| 12. Recommended dose of fertilizers    |  |   |      |                |
| 100:60:40 NPK                          |  |   |      |                |
| i) DAP*                                | 265 kg   | 15  | 4969 | 1987.50        |
| ii) SSP*                               | -  | -   | 0    | 0.00           |
| iii) Urea                              | 80 kg  | 6   | 600  | 240.00         |
| iv) MOP                                | 50 kg  | 7   | 438  | 175.00         |
| v) Zinc                                | -  | -   | 0    | 0.00           |
| 13. IPM                                |  |   |      |                |
| Spray of Neem Seed Kernal              | 10   | 30  | 375  | 150.00         |
| Mataka Khad                            | 15 lit/kg<br>Gobar+Neemleaf+water+Desi cow urine+2 kg Molasis mix & Deco | 2   | 155  | 62.00          |
| Insecticides/Fungicides                | If required One Dusting of Methyle Parathion powder                      |   | 0    |                |
|  | 25 kg / ha   | 25  | 781  | 312.50         |
|  | <b>Total (Less SSP)</b>  |   |      | <b>3496.50</b> |
| <b>Integrated Crop Management</b>      | <b>Sorghum</b>   |   |      |                |
| <b>Area of Demonstration - 0.40 ha</b> |  |   |      |                |
| <b>Detail of Demonstration</b>         | <b>Intervention / Technology Adopted</b>                                 | <b>Organizations for obtaining Seed</b>   |      |                |
| 1. Name of Varieties                   | CSV-13, 15, 1616, Bundela. CSH-16  | C. S. A. University of Ag. & Technology, Kanpur, Indian Institute of Pulse Research, Kalyanpur Kanpur. IARI, Pusa New Delhi |      |                |

| 2. Sowing Time                      | June last to July first week   | Rate(Rs/kg/ Pkt) | Cost per ha (Rs) | Demonstration Cost (Rs) |
|-------------------------------------|--|------------------|------------------|-------------------------|
| 3. Required Seed                    | 12 kg / ha (F1,F2, Certified)  | 40               | 600              | 240.00                  |
| 4. Seed Treatment                   | Thirum & 25 ml Chloropyryphose   | 60               | 75               | 30.00                   |
| 11. Bio Fertilizers/Bio-agents      |  |                  |                  |                         |
| i) Azatobactor + PSB                | 5 Pkt + 5 Pkt = 10 Pkt @ Rs  | 7.5              | 94               | 37.50                   |
| ii) Rhizobium + PSB                 | -  | -                | -                | -                       |
| iii) Trichoderma                    | 1.50 kg /ha (Soil treatment)   | 136              | 255              | 102.00                  |
| 12. Recommended dose of fertilizers |  |                  |                  |                         |
| 80:40:20 NPK                        |  |                  |                  |                         |
| i) DAP*                             | 280 kg   | 15               | 5250             | 2100.00                 |
| ii) SSP*                            | -  | -                | 0                | 0.00                    |
| iii) Urea                           | 100 kg   | 6                | 750              | 300.00                  |
| iv) MOP                             | 80 kg  | 7                | 700              | 280.00                  |
| v) Zinc                             | -  | -                | 0                | 0.00                    |
| 13. IPM                             |  |                  |                  |                         |
| Spray of Neem Seed Kernal           | 10   | 30               | 375              | 150.00                  |
| Mataka Khad                         | 15 lit/kg<br>Gobar+Neemleaf+water+Desi cow urine+2 kg Molasis mix & Deco | 2                | 155              | 62.00                   |
| Insecticides/Fungicides             | If required One Dusting of Methyle Parathion powder                      |                  |                  |                         |
|                                     | 25 kg / ha   | 25               | 781              | 312.50                  |
|                                     | <b>Total (Less SSP)</b>  |                  |                  | <b>3614.00</b>          |

**Details of Demonstration under Agriculture Production System**

| Project- IWMP-XVIII |                          |             |                                   |                      |  |  |   |                             |                                   |                                  |                        |              |                          |                              |                        |
|---------------------|--------------------------|-------------|-----------------------------------|----------------------|--|--|---|-----------------------------|-----------------------------------|----------------------------------|------------------------|--------------|--------------------------|------------------------------|------------------------|
| S.<br>N<br>o.       | No.<br>of<br>Far<br>mers | Crop        | Variety                           | Ar<br>ea<br>(ha<br>) | Tota<br>l<br>cost<br>of<br>dem<br>on.<br>(Rs.<br>) | Benefic<br>iary<br>Contrib<br>ution<br>(Rs.) | Sha<br>re<br>of<br>Proj<br>ect<br>fun<br>d<br>(Rs.<br>) | Prop.<br>date of<br>sowing  | Exp.<br>Crop<br>maturi<br>ty date | Prop.<br>Crop<br>cutting<br>Date | Productivity<br>(Q/ha) |              | Total<br>Seed            | Expected<br>Seed<br>Exchange |                        |
|                     |                          |             |                                   |                      |  |  |   |                             |                                   |                                  | Exist<br>ing           | Expe<br>cted | Produ<br>ction<br>(Qtl.) | No of<br>Far<br>mers         | Quan<br>tity<br>(Qtl.) |
| Khar<br>if          |                          |             |                                   |                      |  |  |   |                             |                                   |                                  |                        |              |                          |                              |                        |
| 1                   | 240                      | Urd         | Shekhar-2,<br>Azad-1/<br>PU-35/19 | 48.<br>00            | 1.70<br>1  | 0.060  | 1.64<br>1   | Last<br>June to<br>Mid July | Mid<br>Septe<br>mber              | 25-Sep                           | 3.48                   | 5.6          | 268.8                    | 1792                         | 107.5<br>2             |
|                     |                          |             |                                   |                      |  | 0.221  | 1.48<br>0   |                             |                                   |                                  |                        |              |                          |                              |                        |
| 2                   | 200                      | Sorgh<br>um | Bundela,<br>CSV-15,<br>13         | 40.<br>00            | 1.44<br>6  | 0.051  | 1.39<br>5   | Last<br>June to<br>Mid July | Mid<br>Septe<br>mber              | 25-Sep                           | 4.2                    | 6.2          | 248                      | 2067                         | 206.6<br>7             |
|                     |                          |             |                                   |                      |  | 0.188  | 1.25<br>8   |                             |                                   |                                  |                        |              |                          |                              |                        |
| 3                   | 240                      | Arhar       | Paras,<br>UPAS-120                | 48.<br>00            | 1.41<br>6  | 0.050  | 1.36<br>7   | Last<br>June-<br>July       | Oct<br>(UPA<br>S)                 | 30-Sep                           | 5.34                   | 7.6          | 364.8                    | 1459                         | 291.8<br>4             |
|                     |                          |             |                                   |                      |  | 0.184  | 1.23<br>2   |                             | March<br>(Paras)                  | 25-Mar                           |                        |              |                          |                              |                        |
| 4                   | 200                      | Til         | Pragati,<br>Shekhar               | 40.<br>00            | 0.67<br>7  | 0.024  | 0.65<br>3   | 15-Jul                      | Septe<br>mber                     | 30-Sep                           | 1.8                    | 3.6          | 144                      | 3600                         | 108.0<br>0             |
| <b>Rabi</b>         |                          |             |                                   |                      |  | 0.088  | 0.58<br>9   |                             |                                   |                                  |                        |              |                          |                              |                        |

|   |              |              |                          |           |            |              |                    |                  |                               |                         |           |     |       |      |            |  |
|---|--------------|--------------|--------------------------|-----------|------------|--------------|--------------------|------------------|-------------------------------|-------------------------|-----------|-----|-------|------|------------|--|
| 1 | 400          | Lentil       | DPL-15,<br>K-75          | 80.<br>00 | 3.79<br>5  | 0.133        | 3.66<br>2          | 15-Oct           | Feb                           | 5-Feb                   | 4.9       | 6.5 | 520   | 867  | 433.3<br>3 |  |
|   |              |              |                          |           |            | 0.493        | 3.30<br>1          |                  |                               |                         |           |     |       |      |            |  |
| 2 | 320          | Chick<br>pea | KDG-<br>1168,<br>KWR-108 | 64.<br>00 | 3.48<br>4  | 0.122        | 3.36<br>2          | 15-30<br>October | Las<br>Feb to<br>Mid<br>March | 2-10<br>March           | 5.62      | 8.5 | 544   | 680  | 476.0<br>0 |  |
|   |              |              |                          |           |            | 0.453        | 3.03<br>1          |                  |                               |                         |           |     |       |      |            |  |
| 3 | 320          | Field<br>Pea | KPMR-<br>400, 522        | 64.<br>00 | 3.67<br>6  | 0.129        | 3.54<br>7          | October          | March                         | 5-Mar                   | 6.2       | 9.5 | 608   | 760  | 570.0<br>0 |  |
|   |              |              |                          |           |            | 0.478        | 3.19<br>8          |                  |                               |                         |           |     |       |      |            |  |
| 4 | 240          | Linse<br>ed  | Parwati,<br>Padmini      | 48.<br>00 | 1.41<br>6  | 0.050        | 1.36<br>6          | October          | Feb-<br>March                 | 27 Feb<br>to 5<br>March | Mixe<br>d | 5.6 | 268.8 | 1075 | 215.0<br>4 |  |
|   |              |              |                          |           |            | 0.184        | 1.23<br>2          |                  |                               |                         |           |     |       |      |            |  |
| 5 | 200          | Must<br>ard  | Maya,<br>Kranti          | 40.<br>00 | 1.10<br>48 | 0.039        | 1.06<br>6          | October          | Feb                           | 15-120<br>Feb           | Mixe<br>d | 4.8 | 192   | 3840 | 153.6<br>0 |  |
|   |              |              |                          |           |            | 0.144        | 0.96<br>1          |                  |                               |                         |           |     |       |      |            |  |
|   | <b>Total</b> |              |                          |           |            | <b>3.088</b> | <b>34.3<br/>40</b> |                  |                               |                         |           |     |       |      |            |  |

**NOTE: List of beneficiaries for crop demonstration trials is kept in project file and it is located on the the map of Participatory Crop Demonstration Trials (Crop Action Plan)**