Integrated Watershed Management Programme –Allahabad I

BLOCK - KORAON (ALLAHABAD)

[2009-10]

DETAIL PROJECT REPORT (DPR)

Submitted by:

BSA

DEPARTMENT OF LAND DEVELOPMENT & WATER RESOURCE, SHARDA SAHAYAK PARIYOJNA

DISTRICT ALLAHABAD

UTTAR PRADESH

DETAIL PROJECT REPORT (D.P.R.)

I.W.M.P. 1st 2009-2010

INTEGRATED WATERSHED MANAGEMENT PROGRAMM IN TONS WATERSHED, BLOCK KORAON

DISTRICT - ALLAHABAD (UTTAR PRADESH)

Submitted to: -
Department of Land Development &
Water Resources Lucknow (U.P.)

Prepared By:-
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Land Development & Water Resources Department, Government of Uttar Pradesh

DPR PLAN ABSTRACT

This is to certify that collection of all the relevant data of watershed area and the possible solutions have been described with the help of Village meeting, PRA exercise and focused group discussions. Detailed activity-wise plan for the watershed with year wise phasing have been summarized in DPR plan abstract for 5 year (2009-10 to 2013-14).

The summary of the above document is verified by the following persons:

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EXECUTIVE SUMMARY

The Allahabad District comprises of 408 workable micro-watersheds having an area of 372379.00 hectare. These are available for I.W.M.P. implementation, out of which 9 micro-watersheds namely 2A7D2e2a, 2A7D2e2b, 2A7D2e2c, 2A7D5a1a, 2A7D5a1b, 2A7D2e1b, 2A7D2e3a, 2A7D2e3c, 2A7D2e3b having area of 4962.00 hectare have been selected under I.W.M.P. Ist Allahabad. These micro watersheds are situated in the catchment of Tons river. The watershed is situated in the Northern part of Allahabad district. It lies between 24° 59' N to 25° 03' N latitude and 81° 55' E to 81° 53' E Longitude.

The project area lies in the semi-arid type of climate with average annual rainfall (preceding-five year) is approximately 713 mm. Out of which about 90% rainfall is received during the monsoon season between July to September. Temperature ranges varies from very high 48°c in the May-June to minimum 5°c during December –January. Soil of project area is mainly clay and Domat type. Middle portion of the project area has moderate to sloppy terrain. Agriculture is the main occupation of the people in project area. The main crops are Gram, lentil, Arhar, Bajra. Most of the fields are kept fallow during Kharif season due to this season Green Manuring is the proposed to minimize the runoff and to maintain the soil fertility of the soil.

Natural vegetation of the watershed area is very poor. Babool, Mahua are the main tree of the area. Occasionally Mango, Neem, Sheesham, Ber tree are found in this area. There is no reserve pasture in the watershed area. Due to Ann da Pratha and lack of irrigation water the rate of mortality of planted trees is very high. P.R.A. exercises conducted in the villages of watershed area revealed that inadequate irrigation facilities, low production of field crops. Fodder shortage, lack of inputs and market facility are some of the major constraints being experienced by the farmers. For this area Amla, Guava, Ber, Bel fruit plants are suitable. 18.00 ha Agro-Horticulture is proposed in the selected area to motivate the farmers to adopt the agro horticulture in practice because of inadequate irrigation water.

It is expected that the implementation of different watershed management activities will bring down the run off and soil loss by 70% and 80% of their present level respectively. It is envisaged to increase the water and land utilization index though adoption of bio-engineering measures and improve the eco-development index.

The proposed plan will improve the crop diversification index, productivity of existing crops and thereby will lead to self-suffering in food with nutritional security. The different enterprises of various sectors and the project as a whole have been found to be economically viable with sound rate of internal return and less payback period.

PROJECT AT GLANCE

S. No.	Particulars	Details	
1	Name of Project	IWMP -I	
2	Name of Block (s)	Koraon	
3	Name of district	Allahabad	
4	Name of State	Uttar Pradesh	
5	Name of Watershed	Tons River	
6	Name of Micro watershed/ code with Coordinate latitude Longitude	Latitude	Longitude
a.	Tounga Kalan /2A7D2e2a	25° 2' 10.842" - 25° 3' 59.5008" N	81° 47' 2.0256" - 81° 48' 3.1716" E
b.	Mahuli Khurd /2A7D2e2b	25° 1' 43.1436" - 25° 3' 50.5548" N	81° 45' 34.0704" - 81° 46' 11.226" E
c.	Pathakpur /2A7D2e2c	25° 0' 43.0596" - 25° 2' 54.7332" N	81° 46' 11.226" - 81° 50' 10.1688" E
d.	Unchgoan/ 2A7D5a1a	25° 0' 40.5036" - 25° 2' 20.6412" N	25° 2' 14.676" - 25° 1' 5.2176" E
e.	Nidaura /2A7D5a1b	25° 0' 6.4116"- 25° 1' 5.2176" N	81° 47' 17.0772" - 81° 49' 0.5556" E
f.	Khaptiya / 2A7D2e1b	25° 0' 34.5348" - 25° 3' 0.6984" N	81° 48' 3.1716" - 81° 51' 1.908" E
g.	Bhagol /2A7D2e3a	25° 0' 7.6896" - 25° 2' 49.6176" N	81° 51' 29.6568" - 81° 52' 42.0924" E
h.	Bahraicha – I/2A7D2e3c	24° 59' 47.6628" - 25° 1' 15.87" N	81° 51' 21.1932" - 81° 52' 30.3348" E
i.	Bahraicha –II/2A7D2e3b	24° 59' 18.6828" - 25° 1' 6.9204" N	81° 52' 30.3348" - 81° 53' 41.3592" E
7	No. of Gram Panchayats	13	
8	No. of concerned villages	27	
9	Total Geographical area of Project (ha)	4962.00	
10	Treatable area (ha.)	3573.00	

11	Total Project cost (Lacs)	428.76	
12	Cost to be met through convergence	MNREGA	50.61
13	Project period	2009-10 to 2014	5 Years
14	Formation of Watershed committees		
	a. No. of WCs	12	
	b. No. of members	147	
15	Formation of SHGs		
	a. Total SHG Nos	132	
	b. Female SHG Nos.	13	
	c. Total No. of members	1418	
16	Formation of UGs		
	a. No. of UGs	223	
	b. No. of members	1229	
17	Important Outcome indicators	Present	Expected
	a. Rainfed area (ha.)	3970.00	3780.00
	b. Area under irrigation (ha.)	213.36	403.36
	c. Area under crops (ha.)	3582.00	3671.00
	d. Kharif	1836.00	2432.00
	e. Rabi	2088.00	2612.00
	f. Total Production (Qtls)/ Ha		
	g. Kharif	12.5	18.6
	h. Rabi	14.0	22.0

	g. Productivity of important crops (Q/ha.)	Present	Expected
	i. Wheat	18.5	26.5
	j. Paddy	16.0	30.5
	k. Bajra	2.0	3.2
	l. Tur	11.5	18
	m. Gram	13.5	19
	n. Pea	16.5	25
	o. Lentil	1.5	2.5
	p. Mustard	12	18
	q. Linseed	7.5	10.5
	r. Ground water status (m)	6.5 m	5.5m
	s. Milk Production (Liters)	2.8	3.5
	t. Average income per family (Rs.)	240000.00	360000.00
	u. Land holding families	845	
	v. Land less/ poor families	76	
18	Employment generation		
	a. During Project Period		56789
	b. After project		48987

SUMMARY OF PROJECT WORK

S. No.	Activity	Need based requirement (Financial) Rs. in Lacs	Funds available from IWMP Rs. in Lacs	Need of Convergence/ Proposal	Scheme from which convergence proposal	Convergence finalized			Remark
						Scheme	Fund Available Rs. in Lacs	Level at which Decision taken	
1	Administration	42.87	42.87	No					
2	Monitoring	4.28	4.28	No					
3	Evaluation	4.28	4.28	No					
4	Entry point activities	17.15	17.15	No					
5	Institutional & Capacity Building	21.43	21.43	No					
6	DPR Preparation	4.28	4.28	No					
7	Watershed Development Works	290.72	240.11	Yes	MNREGA	MNREGA	50.61	DRDA Allahabad	
8	Production System & Micro-enterprises	42.87	42.87	No					
9	Livelihood activities through SHG's	38.58	38.58	No					
10	Consolidation & withdrawal Phase	12.86	12.86	No					
TOTAL		479.37	428.76	50.61					

CONTENTS

Executive Summary		i
Project at a Glance		ii
Summary of Project Work		v
CHAPTER	**PARTICULARS**	**PAGE NO.**
1. INTRODUCTION AND BACKGROUND		**1**
1.1 Project Background		2
1.2 Need and scope for watershed development		4
1.3 Weightage for selection of watershed		5
1.4 Detail of Development Projects		7
2. GENERAL DESCRIPTION OF THE PROJECT AREA		**8**
2.1 Introduction		9
2.2 Physiography		11
2.3 Slope		14
2.4 Climate		15
3. BASELINE SURVEY & PARTICIPATORY RURAL APPRAISAL		**17**
3.1 Introduction		18
3.2 Socio-economic Analysis		19
3.3 Soil		21
3.4 Land Holding		25
3.5 Agriculture		27
3.6 Agroforestary & Horticulture		39
3.7 Livestock		41

3.8 Forest & Vegetative Cover 43
3.9 Livelihood Status 44
3.10 Ground Water Status 50
3.11 Village Infrastructure 51
4. INSTITUTIONAL BUILDING AND PROJECT MANAGEMENT 67
4.1 Introduction 68
4.2 About the LDWR Department 68
4.3 Project Implementing Agency 68
4.4 WDT 72
4.5 SWOT Analysis 89
5. MANAGEMENT / ACTION PLAN 92
5.1 Entry Point Activities (EPA) 93
5.2 Works Phase 114
5.3 Livelihood 173
5.4 Production System and Microenterprises 176
6. CAPACITY BUILDING PLAN 177
7. PHASING OF PROGRAMME AND BUDGETING 180
8. EXPECTED PROJECT OUTCOME 189
8.1 Employment generation 190
8.2 Water Resource Management and Soil Conservation 190
8.3 Proposed Landuse 197
9. ENVIRONMENTAL QUALITY & SUSTAINABILITY 207
10. MONETORING, EVALUATION & CONSOLIDATION 210

11. GIS MAPS **225**

ANNEXURES **235**

CHAPTER – 1

PROJECT BACKGROUND

1.1 INTRODUCTION

The Allahabad District comprises of 408 micro-watersheds having an area of 372379.00 hectare. In the present scheme I.W.M.P. I, 9 micro-watersheds namely 2A7D2e2a, 2A7D2e2b, 2A7D2e2c, 2A7D5a1a, 2A7D5a1b, 2A7D2e1b, 2A7D2e3a, 2A7D2e3c, 2A7D2e3b having area of 4962.00 hectare has been selected. These micro watersheds are situated in the catchment of Tons river. The watershed is situated in the southern part of Allahabad district. It lies between 24° 59' N to 25° 03' N latitude and 81° 55' E to 81° 53' E Longitude. The schemes are implemented through Bhoomi Sanrakshan Adhikari, Land Development and water resources Dept. Under I.W.M.P. for rain-fed Area (NWDPRA) Scheme funded by ministry of rural Development Government of India is Programme Implementing Agency (PIA).The watershed has been also taken up for programme implementation comprising of Development Management plan during five year (2009-10 to 2013-14).

The basic source of livelihood of the people is primarily based on rain-fed agriculture, animal husbandry, wage labour, goat and sheep rearing etc. Total area of the project is 4962 hac. Treatable area for the project is 3573 hac.

Table 1.1 Status of watershed programme in District Allahabad

Details	No.	Area (in hac.)
1	2	3
Total Micro watersheds in the district	600	548200
Workable Micro Watersheds	408	372379
Micro Watersheds already treated by DLWR & other agencies	364	335333
Balance Micro Watersheds (MWS) for treatment (Before start of IWMP in dist.)	44	37046

Table 1.2 Approved plan (PPRs) by Steering Committee (SC)/Gov. of India

Year	Project/Phase IWMP	MWS	Area (ha)	Project Cost Rs. lakh	Name of PIA	S.C. Meeting Date
1	2	4	5	6	7	8
2009-10	IWMP- I	9	4962.00	428.76	Dept. of Land Development and Water Resource, Allahabad	25-02-2009

Table 1.3 Status of Previous DPR

Sl. No.	Approved Project	Status of DPR under preparation/ prepared/approved by SLNA with date	Project Area ha	Treatable Area ha	Project cost Rs.(Lakh)	Project period (Fin. Year)	PIA
1	2	3	4	5	6	7	8
1	IWMP –I	Prepared/ Under revision	4962	3573	428.76	2010- 11 to 2013-14	LDWR Allahabad
2	IWMP – II	Prepared/ Under revision	3910	3519	422.28	2010- 11 to 2013-14	LDWR Allahabad
3	IWMP - III	Prepared/ Under revision	6154	4460	535.20	2010- 11 to 2014-15	LDWR Allahabad
4	IWMP - IV	Prepared/ Under revision	4348	3160	379.20	2010- 11 to 2014-15	LDWR Allahabad

Table 1.4 Details of IWMP – I for which this DPR is Prepared

Watershed project	Micro Watersheds (MWS) detail	Micro watersheds code	Treatable Area (in ha.)	Name of Watershed in which MWS is falling (River / Nala name)
IWMP I (2009-10)	Toung Kalan	2A7D2e2a	279.0	Tons River
	Mahuli Khurd	2A7D2e2b	380.0	
	Pathakpur	2A7D2e2c	712.0	
	Unchgoan	2A7D5a1a	290.0	
	Nidaura	2A7D5a1b	225.0	
	Khaptiya	2A7D2e1b	592.0	
	Bhagol	2A7D2e3a	505.0	
	Bahraicha - I	2A7D2e3c	264.0	
	Bahraicha - II	2A7D2e3b	326.0	
TOTAL			3573.00	

1.2 NEED OF WATERSHED DEVELOPMENT PROGRAMME

The project is prioritized on the criteria of some important parameters to check the level of development and livelihood pattern of the people residing in the area to be implemented. These parameters are poverty index, percentage of SC/ST population to the total population, percentage of literacy, percentage of marginal and small farmers, ground water status, drinking water conditions, moisture index, area under rain-fed agriculture, percentage of wasteland, land capability classes

and actual labour wages etc. On the basis of these parameters scores has been assigned to each indicator to select the project area.

Table 1.4 Weightages of the project

Project name	Project type	Weightages												
IWMP-I	Semi-arid	i	ii	iii	iv	v	vi	vii	viii	ix	x	xi	xii	Xiii
		7.5	10	5	10	3	5	5	5	15	15	0	15	0

Table 1.4 Criteria and weightages for selection of watershed

S. No.	Criteria	Maximum score	Ranges & scores			
i	Poverty index (% of poor to population)	10	Above 80 % (10)	80 to 50 % (7.5)	50 to 20 % (5)	Below 20 % (2.5)
ii	% of SC/ ST population	10	More than 40 % (10)	20 to 40 % (5)	Less than 20 % (3)	
iii	Actual wages	5	Actual wages are significantly lower than minimum wages (5)	Actual wages are equal to or higher than minimum wages (0)		
iv	% of small and marginal farmers	10	More than 80 % (10)	50 to 80 % (5)	Less than 50 % (3)	
v	Ground water status	5	Over exploited (5)	Critical (3)	Sub critical (2)	Safe (0)
vi	Moisture index/ DPAP/ DDP Block	15	-66.7 & below (15) DDP Block	-33.3 to -66.6 (10) DPAP Block	0 to -33.2 (0) Non DPAP/ DDP Block	

vii	Area under rain-fed agriculture	15	More than 90 % (15)	80 to 90 % (10)	70 to 80% (5)	Above 70 % (Reject)
viii	Drinking water	10	No source (10)	Problematic village (7.5)	Partially covered (5)	Fully covered (0)
ix	Degraded land	15	High – above 20 % (15)	Medium – 10 to 20 % (10)	Low- less than 10 % of TGA (5)	
x	Productivity potential of the 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)	
xi	Contiguity to another watershed that has already been developed/ treated	10	Contiguous to previously treated watershed & contiguity within the micro-watersheds in the project (10)	Contiguity within the micro-watersheds in the project but non contiguous to previously treated watershed (5)	Neither contiguous to previously treated watershed nor contiguity within the micro-watersheds in the project (0)	
xii	Cluster approach in the plains (more than one contiguous micro-watersheds in the project)	15	Above 6 micro-watersheds in cluster (15)	4 to 6 micro-watersheds in cluster (10)	2 to 4 micro-watersheds in cluster (5)	
xiii	Cluster approach in the hills (more than one contiguous micro-watersheds in	15	Above 5 micro-watersheds in cluster (15)	3 to 5 micro-watersheds in cluster (10)	2 to 3 micro-watersheds in cluster (5)	

	the project)					
TOTAL		150	150	90	41	2.5

1.3 OTHER DEVELOPMENT PROJECTS/ SCHEMES

The villages selected in the Tons Watershed are very backward and number of government has been on top priority for the development. These programmes are Mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS) and with other development schemes.

I. **MGNREGS:** In the present scheme watershed development activity such as contour bunds, submergence bund, check dams has been taken-up under MNREGA.

CHAPTER – 2

GENERAL DESCRIPTION OF THE PROJECT AREA

2.1 INTRODUCTION

The Allahabad District comprises of 408 micro-watersheds having an area of 372379.00 hectare. These are available for I.W.M.P., out of which 9 micro-watersheds namely 2A7D2e2a, 2A7D2e2b, 2A7D2e2c, 2A7D5a1a, 2A7D5a1b, 2A7D2e1b, 2A7D2e3a, 2A7D2e3c, 2A7D2e3b having area of 4962.00 hectare has been selected under I.W.M.P. Ist Allahabad. These micro watersheds are situated in the catchment of Tons river. The watershed is situated in the Northern part of Allahabad district. It lies between 24° 59' N to 25° 03' N latitude and 81° 55' E to 81° 53' E Longitude.

Area and Elevation:

Total area of the watershed is 4962.00 ha. Elevation ranges from 82m to 110m above mean sea level. In the present scheme twenty-seven villages, namely Taunga Kala, Taunga Khurd, Mahuli Khurd, Kharka Khas, Kaundi, Gargata, Chhapar, Mojra Mishra, Basgadhi, Unchgaon, Pathakpur, Padiya, Dihipataka, Nadaura, Khiri, Khapatiha, Dihar, Puredattu, Baghol, Datehara, Jorawat, Kalyanpur, Magra, Baharaicha, Khauriya, Gaura, Lohra are covered in the watershed.

Table 2.1 General Description of the Project area

S. No.	Name of micro-watershed with Code	Latitude	Longitude	Name of GP	Names of villages	Name of Block	Area of village included in MWS	Details of important /approach road with distance km
1	2	3	4	5	6	7	8	9
1	Toungkalan/ 2A7D2e2a	25° 2' 10.842"	81° 47' 2.0256"	Toungkalan	Pandiya	Koron	2.940	Koraon/ Approachable with MDR, 25km
					Mahulikhurd		110.002	
		25° 3' 59.5008" N	81° 48' 3.1716" E		Toungkalan		43.975	
					Toungkhurd		73.741	

				Kharka	Kharka		131.368	
2	Mahulikhurd/ 2A7D2e2b	25° 1' 43.1436"	81° 45' 34.0704"	Chhapar	Gargata		144.574	Koraon/ Approachable with MDR, 25km
					Chhapar		35.629	
		25° 3' 50.5548" N	81° 46' 11.226" E	Koundi	Koundi		91.656	
				Toungkalan	Mahulikhurd		206.044	
3	Pathakpur/ 2A7D2e2c	25° 0' 43.0596"	81° 46' 11.226"	Jorvat	Pathakpur		127.322	Koraon/ Approachable with MDR, 24km
				Toungkalan	Toungkalan		34.762	
					Mahulikhurd		53.705	
				Kheeri	Kheeri		88.241	
		25° 2' 54.7332" N	81° 50' 10.1688" E	Khaptiha	Khaptiha		3.999	
				Chhapar	Chhapar		51.920	
					Unchgaon padia		49.819	
				Koundi	Koundi		164.819	
				Basgadhi	Basgadhi		35.816	
4	Unchgaon/ 2A7D5a1a	25° 0' 40.5036"	25° 2' 14.676"	Chhapar	Gargata		6.216	Koraon/ Approachable with MDR, 27km
					Chhapar		107.431	
		25° 2' 20.6412" N	25° 1' 5.2176" E		Unchgaon		104.517	
				Basgadhi	Basgadhi		73.099	
				Lohra	Gaura	Shankargarh	49.006	
5	Nidaura/ 2A7D5a1b	25° 0' 6.4116"	81° 47' 17.0772"	Basgadhi	Nidaura		219.876	Koraon/ Approachable with MDR, 27km
		25° 1' 5.2176" N	81° 49' 0.5556" E		Basgadhi		61.148	
6	Khaptiha/ 2A7D2e1b	25° 0' 34.5348"	81° 48' 3.1716"	Jokhat	Jokhat	Koraon	49.036	Koraon/ Approachable with MDR, 26km
				Khaptiha	Khaptiha		37.248	
					Dihar		129.337	
					Ratehara		6.602	
		25° 3' 0.6984" N	81° 51' 1.908" E	Kheeri	Kheeri		439.838	
				Puradattu	Puradattu		228.002	

7	Baghol/ 2A7D2e3a	25° 0' 7.6896"	81° 51' 29.6568"	Baghol	Baghol		444.300	Koraon/ Approachable with MDR, 20km
				Puradattu	Puradattu		23.928	
		25° 2' 49.6176" N	81° 52' 42.0924" E	Mahulikala	Kalyanpur		127.435	
8	Behraicha 1st/ 2A7D2e3c	24° 59' 47.6628" - 25° 1' 15.87" N	81° 51' 21.1932" - 81° 52' 30.3348" E	Behraicha	Behraicha		255.511	Koraon/ Approachable with MDR, 19 km
9	Behraicha 2nd/ 2A7D2e3b	24° 59' 18.6828" - 25° 1' 6.9204" N	81° 52' 30.3348" - 81° 53' 41.3592" E	Behraicha	Behraicha		213.530	Koraon/ Approachable with MDR, 19 km
				Baghol	Baghol		160.197	

Shape:

Maximum length and width of the watershed area is 14500 meter and 5000 metre respectively with a length: width ratio is 2.9:1.

Physiography:

The watershed is in the Vindhya region having moderate slopes and drains into river Tones and Belan. About the 50% are of the watershed has slope inclination less than 1% and 30% area has slopes up to 1% to 2% area has slopes from 2 to 3 %. A number of streams join the main perennial stream of Tones. Total 19 numbers of streams of different order are found in watershed, with total length 34250 meters. But, it was noted that these streams are flow during the rainy season and does not play important role to the drainage system of watershed.

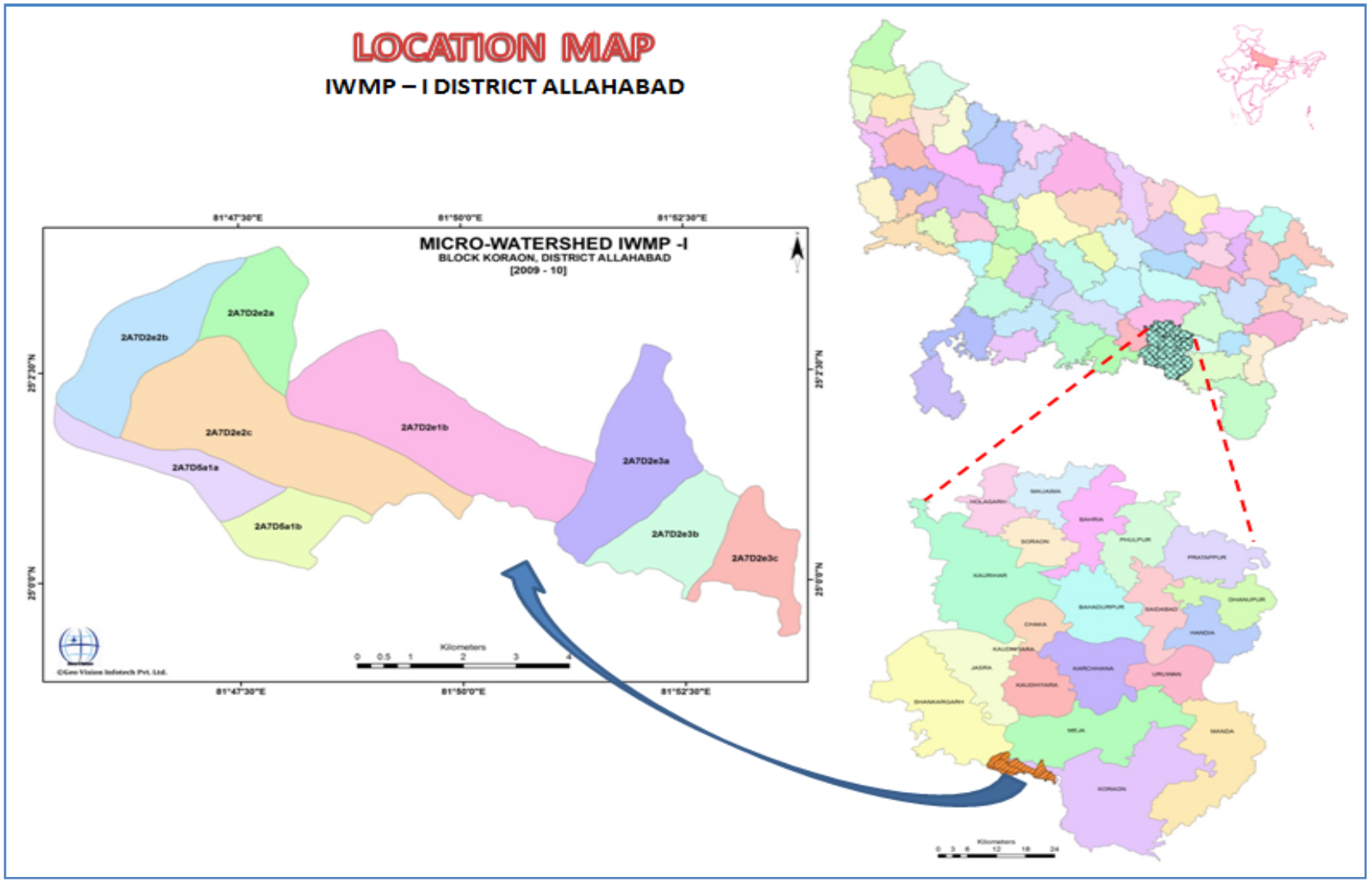


Figure 1.1 Location map of IWMP-I scheme in the Koraon Block of District Allahabad (Uttar Pradesh)

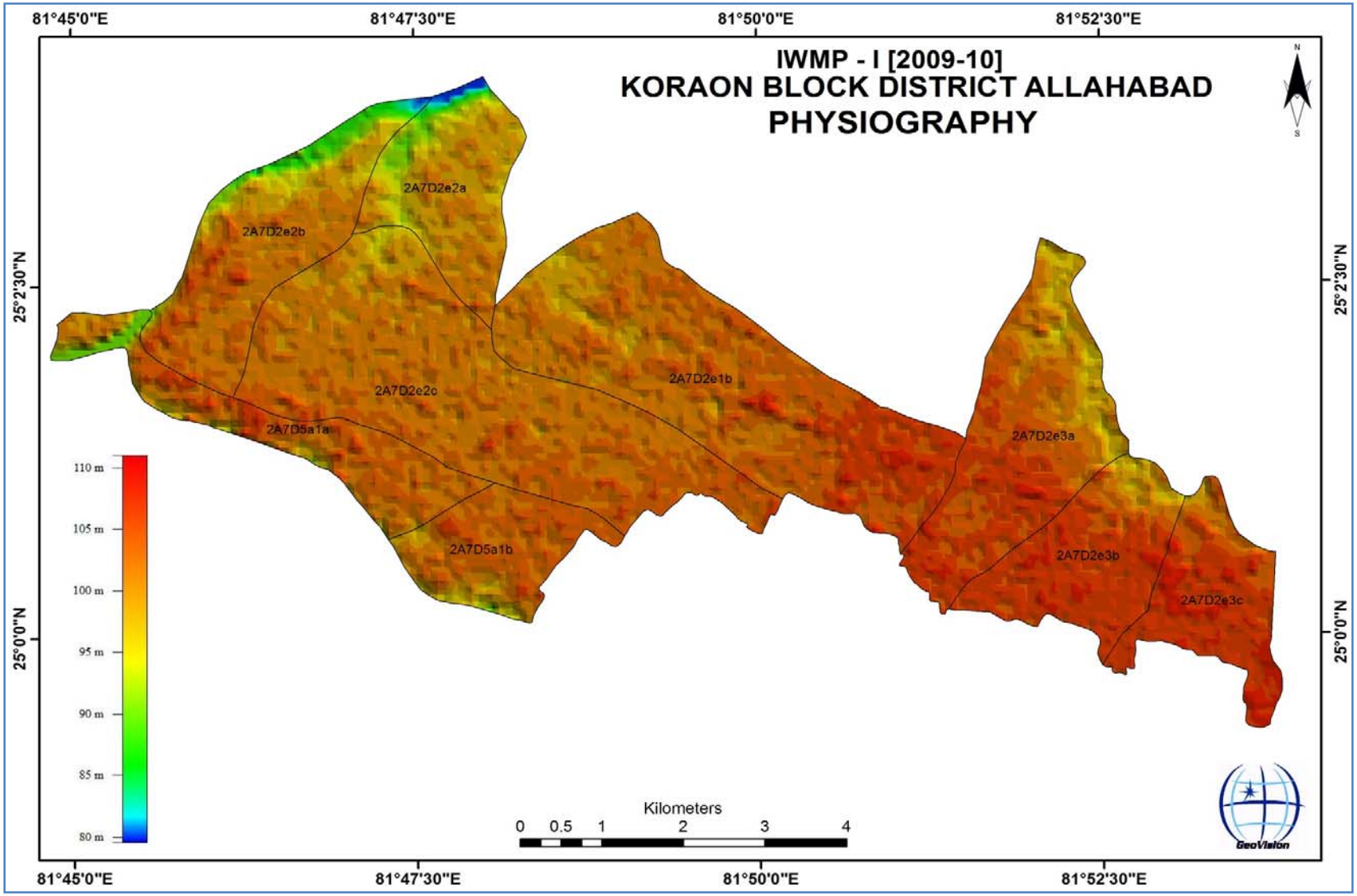

IWMP - I [2009-10]
KORAON BLOCK DISTRICT ALLAHABAD
PHYSIOGRAPHY
81°45'0"E
81°47'30"E
81°50'0"E
81°52'30"E
25°2'30"N
25°0'0"N
2A7D2e2a
2A7D2e2b
2A7D2e2c
2A7D2e1b
2A7D5a1a
2A7D5a1b
2A7D2e3a
2A7D2e3b
2A7D2e3c
110 m
105 m
100 m
95 m
90 m
85 m
80 m
Kilometers
0 0.5 1 2 3 4
N
S
GeoVision

Table 2.2 Details of land resources in IWMP-I of Allahabad district

S.No.	Name Of Project	No Of Micro Watershed	No Of Villages	Geographical Area Of The Villages	Forest Area	Land under Agriculture Use	Rainfed Area	Permanent Pastures	Wasteland		Treatable Area
									Cultivable	Uncultivable	
1	2	3	4	5	6	7	8	9	10	11	12
1	I.W.M.P. Ist. Allahabad	9	27	4962	0	3582	3970	0	1150	230	3573

2.3 SLOPE

About 33.5 % of the watershed area has slope more than 6 % and upright ridges. The top of the watershed exhibits extremely precipitous and manifesting moderate to moderate erosion category. The lower portion of the watershed has moderate slopes (less than 2.3%). At the outlet of the watershed small gullies are noticed, covered with sparse vegetation.

Table 2.3 Slope range in the project area

Sl. No.	Name of MWS & code	Slope range wise area (ha)						
		0-05%	0.5-1.0%	1-3%	3-5%	>5%		Total Area in ha.
						Undulating	Terraced	
1	2	3	4	5	6	7	8	9
1	2A7D2e2a	149.54	237.11	571.12	131.44	25.11	0	
2	2A7D2e2b	56.2	131.78	298.1	76.53	26.18	0	
3	2A7D2e2c	23.12	150.2	250.32	7.21	0	0	
4	2A7D5a1a	45.09	230.65	187.42	11.68	2.43	0	

5	2A7D5a1b	85.03	450.11	370.14	37.65	15.31	0	
6	2A7D2e1b	34.07	123.33	243.32	68.13	4.25	0	
7	2A7D2e3a	21.32	120.38	211.43	82.87	19.92	0	
8	2A7D2e3c	28	75.23	243.32	23.92	7.34	0	
9	2A7D2e3b	35.32	60.32	340.12	12.76	5.14	0	
TOTAL		477.69	1579.11	2715.29	452.19	105.68	0	

Table 2.4 Stream Characteristics of Watershed

Stream Order	**Stream number**	**Mean Stream Length(M)**
1st order	14	27500
2nd order	03	2750
3rd order	02	4000
Total	**19**	**34250**

2.4 Climate

The watershed lies in the semi-arid region having tropical climate. The average annual precipitation is 713 mm Most of the annual rain fall (about 90%) is received during the rainy season (July to September) accompanied with high intensity storm. The temperature in the area rarely goes up to 48°c during summer and reaches 5.00°c in winter.

Table 2.5 Details of Temperature and Rainfall

Month	Rainfall in mm.						Temperature °c	
	2006	2007	2008	2009	2010	Average	Max.	Min.
January	0.00	0.10	0.60	0.00	3.60	0.86	12.5	3.5
February	0.00	75.80	10.00	0.50	19.20	21.10	16.4	10.4
March	24.00	25.10	0.00	14.40	0.00	12.70	28.9	17.2
April	23.50	1.20	3.10	3.20	0.50	6.30	38.4	26.8
May	6.20	21.90	38.50	26.80	7.50	20.18	42.1	29.5
June	62.50	77.00	322.40	3.10	8.50	94.70	47.2	32.1
July	456.10	295.40	446.90	172.70	201.70	314.56	40.2	33.6
August	237.60	295.40	326.10	64.80	160.60	216.90	38.8	31.7
September	47.40	209.20	67.50	177.80	126.40	125.66	36.7	24.1
October	39.50	2.80	20.30	33.60	45.50	28.34	34.7	21.9
November	0.00	0.00	1.70	15.90	5.30	4.58	31.4	17.4
December	0.00	5.40	0.00	6.00	0.00	2.28	18.4	9.3

Source: Hydromet Division, India Meteorological Department

The open pan evaporation varied in the range of 0.5 to 23 mm/day during the year with average of about 4.5 mm/day. Average relative

Humidity varied in the range of 22 to 97 per cent; however the range of wind speed is 0.25 to 24 kmph.

CHAPTER – 3

BASELINE SURVEY & PARTICIPATORY RURAL APPRASIAL

3.1 INTRODUCTION

a. Baseline Survey

It is very crucial for successful implementation of any watershed development programme to conduct a detailed baseline survey of the project area and involve village community in the planning process. To serve the purpose Participatory Rural Appraisal (PRA) is one of the best tested method with focused group discussion and community mobilization. This acts a benchmark for any intervention during and post implementation of any development programme. A detailed baseline survey was undertaken which involved household census survey, Bio-physical survey and Village level data collection. Household survey includes a detailed questionnaire which was been filled by visiting person for each and every household in the village. This gave in the details of the demographic profile of the village, the literacy percentage, SC/ST population, number of BPL household, cattle population and NET consumption rate in the village, average milk production of the cattle and various schemes running and their benefits.

Bio-physical survey was undertaken to identify various natural resources available in the village. It included the soil typology, wells in the area, crop taken for the present scheme.

b. Participatory Rural Appraisal (PRA)

The past experience of watershed has given tremendous input to focus on creating accountability of the stakeholders towards the programme. This has created an emphasis to include all the stakeholder communities and their local and indigenous Technological Knowledge (ITK) while planning development activity. Participatory approach provides a new path for planning, implementing and monitoring and post-withdrawal activities with a complete accountability of the stakeholders. Various PRA techniques like resource mapping, social mapping, and season calendars were used to understand the physical and social orientation of the village in general and watershed in specific. These tools put the villagers in ease than the

complicated questionnaires. Various tools like Matrix ranking, Venn diagram were used to identify various local vegetations (apt for afforestation), fodders crops, various institutions and their significance in the life of the farmers.

3.2 SOCIO-ECONOMIC ANALYSIS

It is apparent from the social profile that the micro-watershed is inhabited by different caste and class. About 23 per cent of the population is scheduled caste. Population details of the IWMP-I are depicted in Table 3.1. In general 7 per cent population migrate from the project area due to drought and earn more money, 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 Delhi, Haryana and Punjab for the employment. The scenario of migration, infrastructure and common properties resources available in the project was analysed through house hold survey and is depicted in Table 3.1, respectively.

Table 3.1 Demographic Features with Ethnographic Details of Communities

S. No.	Name	No. of House Hold	Total Population			SC Population			ST Population		
			Total	Male	Female	Total	Male	Female	Total	Male	Female
1	Kharka	248	1605	872	733	312	166	146	0	0	0
2	Lohra	342	2249	1197	1052	541	287	254	0	0	0
3	Mahuli Khurd	76	556	292	264	131	74	57	0	0	0
4	Gargata	56	384	220	164	124	75	49	0	0	0
5	Tounga Khurd	81	366	184	182	295	144	151	0	0	0
6	Kalyanpur	48	341	187	154	7	3	4	5	3	2
7	Deehar	114	571	307	264	67	33	34	0	0	0
8	Jokhat	214	1390	758	632	298	172	126	0	0	0
9	Koundi	273	1734	916	818	537	280	257	0	0	0

10	Tounga Kala	190	1069	570	499	310	164	146	0	0	0
11	Kheri	856	5331	2807	2524	1158	584	574	0	0	0
12	Gaura	85	460	246	214	113	62	51	0	0	0
13	Mojara Mishra	16	164	83	81	117	61	56	0	0	0
14	Pandiya	8	68	38	30	0	0	0	0	0	0
15	Khouriya	118	847	447	400	303	149	154	0	0	0
16	Khaptiha	193	1084	557	527	538	274	264	0	0	0
17	Baghol	284	1640	851	789	863	440	423	0	0	0
18	Chhapar	79	605	324	281	98	50	48	130	72	58
19	Pathakpur	134	807	429	378	339	170	169	16	8	8
20	Pura Dattu	181	1222	621	601	436	235	201	0	0	0
21	Kundwa Urf Unch Gaon	257	1889	1004	885	160	84	76	0	0	0
22	Bashgarhi	95	589	309	280	201	99	102	57	32	25
23	Deehee Patka	149	765	397	368	15	7	8	65	35	30
24	Behraicha	338	2366	1232	1134	537	293	244	0	0	0
25	Nidoura	75	415	225	190	5	3	2	61	34	27
26	Kundari	6	40	22	18	39	21	18	0	0	0
27	Katghar	9	56	28	28	0	0	0	0	0	0

3.3 SOIL

Soil type, slope and erosion status are the critical for the planning soil and water conservation. These details obtained by transect of the project area and soil sampling.

Fine textured alluvial soils

These soils are the most extensive soil group found in the Koraon IWMP-I Allahabad watershed. The middle portion of watershed is relatively flat land with fine soil texture. These soils are Yellow in colour and are inherently high in fertility status. These yellow soils are calcareous and on drying develop numerous some and fissures. Soil texture is silty clay loam particularly in depressions and loam in the elevated portion. The soils of the lower horizon are invariably heavier than the surface, being a zone of compaction and invariably a zone of chikni mitty in the form of *hard soil*, A subsurface indurate pan of clay or mixtures of both locally called as chikni mitty soils are prevalent, which impede the downward movement of water thereby creating problems of high run-off.

Coarse textured alluvial soils

These soils are lying mostly near the adjoining areas of Hindan River near the outlet and around the lower portion of river down steam of watershed. These soils are coarser in texture and are relatively poor in fertility status. The soils are loamy sand in texture. These soils also occupy significant area of the watershed.

Table 3.2 Depth of soil and slope morphology

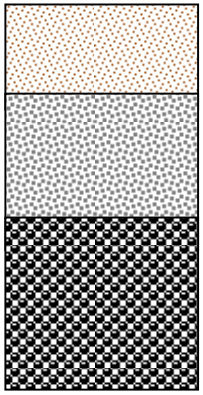
S. No.	Soil Type	Total extent (Hact.)	Based on Depth (cms) (Mention area in Hact.)					Based on Slop (%) (Mention Area in Hact.				Erosion (Mention area in Hact.)			
			V.Shallow (0-75)	Shallow (7.5-22.5)	Moderatlyd eed (22.5-45.00)	Deep (45.0-90.0)	Very deep (>90)	Nearly Level (0-2)	Moderate e slope (2-6)	Strong slope (6-15)	steep (>15)	Water			Wind
												Sheet	Ril	Gully	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Sandy Soil	2379.5	1713.2	547.3	119	-	-	2474.68	2141.55	142.77	-	2384	1194	323	NA
2	Sandy Loam Soil	1903.6	1370	437.6	93	0									
3	Loam Soil	475.9	300.5	109.4	23.5	42.50									
Total		4759	3383.70	1094.30	235.50	42.50									

Soil Morphology:

The selected area is situated in the south of District-Allahabad. The entire watershed is topographically divided into three major land forms. Accordingly, the soils of watershed have been grouped in the three major categories.

a) Plain land
b) Moderate sloppy land
c) Ravinous land.

Soil Profile: **A Representative Soil Profile**



1-1.65 (Heavy texture clay-soil Blackish Brown in color)

5 -8m (Kanker soil")

7 –8 m [Bed rock (red sand stone)]

Morphology Of Typical Solid Profile Of Tones Watershed

Horizon	Depth(Cm)	Morphology
A	0-150	Blackish brown in colour, clay content > 80%, soft and easily erodible when moist, hard when dry, high elasticity, Cracks occur when dried.
B	150-800	whitish brown in colour, very hard when dry, clay content > 60%
C	>800	Bedrock(Red and White sand stone)

Soil Characteristics and Fertility Status

Four types of soils are in the watershed area. The fertility status is about normal range due to production of major pulses crops. There is scarcity of phosphorus due to continuous growing of pulses. The two soil samples of each village have been send to laboratory. After receiving the analysis report effort will be made to motivate the farmers to use nutrients and micronutrients according to the any analysis report. For the demonstration of crops during the Kharif and Rabi seasons have been proposed under agriculture production activity.

Land Capability Classification (LCC)

Land capability classification(LCC) is crucial for appropriate land use planting consisting of practiced like choice of vegetation /crops, tillage practices, use of scientific method of cultivation and desirous conservation practices, Detailed LCC Survey carried out in the Tones watershed brought out the prevailing LCC classes as I,II,III,IV.

Area under Various LCC Classes Tones Watershed

LCC class	Area ha
I	180.0
II	2145.00
III	715.00
IV	533.00
Total	**3573.00**

The land capability classification of the Tones watershed provides reasonable good information with regard to capability of soil that could be used for agriculture, agri-horticulture, and pasture development. The majority of landform is coming under class II, which give an insight of good agriculture production potential of these watersheds. The productivity of these lands could be further enhanced by adoption of simple soil & water conservation measures like contour bunding for moisture conservation practices. In class III submergence bund, marginal and peripheral bund are planned and in class IV, gully plugging structures, earthen check dam and water harvesting bunds are proposed with permanent pucca Drop Spill Way structures.

b. SOIL CHARACTERISITCS AND FERTILITY

Soil characteristics pertaining to soil fertility of various classes are given in the table 3.6.

Table 3.3 Soil Characteristics and Fertility Status

Soil properties	LCC II	LCC IV	LCC VII/VIII
Sand (%)	47.04	75.04	73.04
Silt (%)	24.6	18.6	20.3
Clay (%)	28.36	6.36	6.66
Texture	Sandy clay loam	Loamy sand	Loamy sand
pH (1: 2)	8.41	8.67	6.85
EC (dS m^{-1})	0.47	0.12	0.16
Organic carbon (%)	0.37	0.12	0.19
Available N (kg ha^{-1})	316	173	224
Available P (kg ha^{-1})	29	15	5-8
Available K (kg ha^{-1})	189	325	230

*Values correspond to soil frication <2m

3.4 LAND HOLDING

Majority of the farmers are in the category of marginal (< 1 ha) and small (1-2 ha) with average land holding of about 2.4 ha. These small land holding are further scattered at different places, which makes cultivation very difficult. Distribution of farm families according to the size of the land holdings are given in the table.

Table 3.4 Distribution of farm families according to their size of landings

S. No.	Name of village	Marginal	Small	Medium	Total
1	Taunga kala	62	33	08	**103**
2	Tauga khurd	30	16	03	**49**
3	Mahulikhurd	70	37	10	**117**
4	Kharka kash	307	164	41	**512**
5	Kuandi	210	112	28	**350**
6	Gargata	20	10	03	**33**
7	Chhapar	54	28	08	**90**
8	Mojra Mishra	07	03	02	**12**
9	Basgadhi	37	20	04	**61**
10	Unchagoan	154	82	21	**257**
11	Pathakpur	95	50	13	**158**
12	Padiya	10	05	03	**18**
13	Dihi patka	103	55	14	**172**
14	Nidaura	53	28	07	**88**
15	Khiri	266	142	35	**443**
16	Khaptiha	31	17	04	**52**
17	Dihar	53	28	08	**89**
18	Pura Dattu	103	56	14	**173**
19	Baghol	286	152	38	**476**
20	Ratehra	05	03	01	**09**
21	Jorwat	51	27	07	**85**
22	Kalyanpur	151	81	20	**252**
23	Magra	03	01	01	**05**
24	Bahraicha	361	192	48	**601**

25	Koriya	61	33	08	**102**
26	Gaura	19	10	03	**32**
27	Lohra	38	20	05	**63**
Total		**2640**	**1405**	**357**	**4402**

3.5 AGRICULTURE

Various agriculture land uses in the watershed are extended to diversified land capabilities starting from marginal to good class IInd lands. The watershed distinctly has three types of land i.e. leveled, sloping and degraded and undulating. The agriculture is practiced on all these soil types though the productivity considerably varies. The total area in agriculture in the watershed is about 3582.00 ha. The water (both for irrigation and drinking) is most scarce natural resource in the watershed. The operation of tube wells for irrigation of agricultural crops frequently leads to the drinking water problem to the farmers for watershed.

The agricultural soils in the watershed have diversified texture i.e. clay, silty clay, sand mixed with gravel and loam which are located in patches throughout the watershed. Four types of soil *Mar, Kaber, Padwa and Rocker* are the main soil of district-Allahabad. The heavy soils are almost kept fallow during rainy season. The irrigation water is conveyed in earthen channels and surface irrigation methods following mainly border method of free flooding method of irrigation by farmers in the watershed. The factors substantially reduce the water use efficiency of limited available and valuable irrigation water in the watershed. To test the quality of irrigation water samples of water of each selected village has sent to laboratory for testing.

Rehabitation of waste lands with appropriate drought hardy species live introduction of suitable multipurpose tree, promoting agro foresting on agricultural lands with appropriate fruit and forest species, suitable vegetative barriers on sloping lands can of high future value in meeting out not only fire wood and fodder demands in the watershed but also for soil and water

conservation, Rehabitation of wasteland and substantial income generation for socio-economic uplift of farmers in the watershed.

One Year Crop Rotation:

Single Cropping: Fallow-Lentil, Fallow-gram, Fallow-wheat, arhar, Fallow-pea.

Double Cropping: Bajra - Lentil, Arhar + Jowar, Mazie-Potato.

Irrigated Agriculture:

One Year Crop Rotation: Urad/Moong-wheat, Urad/Moong-Potato, Urad/Moong-Vegetables, Paddy-Gram, Paddy-Lentil, Maize-Potato.

Crop Productivity

Food crop production is a major land based activity in the watershed. Traditional cultivation practices, coupled with poor quality seeds and long duration crops varieties result in low crop yields. Crops are taken under rainfed as well as irrigated conditions. The yield levels of rainfed crops are particularly very poor. Large variation has been noticed in productivity of wheat (13 Kuintal.) and rice (21.31 Kuintal/ ha.) under rainfed and irrigation, condition respectively. At present level of rainfed farming. The total produce from Rabi and Kharif crops obtained by a medium size of holding owning family can meet food requirements for upto 6 to 7 months only.

The farmers also do not have suitable cropping systems to deal aberrant weather. Weeds impose considerable constrant in producing of both Kharif and rabi crops under irrigation as well as rain-fed production system. Use of weedicide is rare in the watershed.

The mixed cropping is in practice in limited area with Kharif crops like bajra and jowar+Arhar but it is not only irrational but also unscientific and beset with low productivity. Subsequent rabi crops in general are raised on residual soil moisture under rain-fed production system during past monsoon season. Imbalanced use of fertilizers is common in not only Rabi and Kharif

crops but also in rain fed and irrigated production system the recommended deep ploughing for enhanced in situ residual soil moisture conservation and higher production is also not followed in the watershed. The shallow ploughing tractors drawn tillage implements are available with the farmers in the watershed but deep ploughing implements yet need to be introduced.

The soil fertility/health restoration practices like green manuring, crop rotations and intercropping specially with legumes, use of FYM/compost, vermi-compost ,biofertilizers ,soil and water conservation measures, use of brought up or in situ mulches are widely lacking in the watershed. The soil and water conservation measures are limited to mechanical/earthen measures created by the state Govt. agencies. Conservation agronomical measures like seeding and ploughing across the slope, wed mulching, agro-forestry, vegetative barriers etc also completely lack in the watershed.

Indigenous Technological Knowledge: (I.T.K.)

Agriculture is an old age occupation which farmers have practiced and improved in their own manner to earn livelihood under the condition of area. The villagers have their traditional village ponds, practice of field bunding, production of Arhar crop on the bunds in paddy area which typically constitute agriculture related ITKs in the watershed. The indigenous farming technology in the watershed is observed to cover a vast spectrum of activities involving tillage, implement crop selection, storage of produce and value condition in Vindhyachal region line showing is in the traditional practice due to the soil condition. Seed drill, seed comfort drills are used with tractor and Nai/chonga with indigenous plough. These ITKs are eco-friendly, cost effective and involve use of local materials with farmers own wisdom. These techniques equip farmers with skills and strength to adapt to the prevailing adverse conditions.

Forest And Other Vegetation

Forests: The selected watershed has no resource forest area.

Horticulture / Agro-forestry:

Agro-Forestry

The agro forestry practices are highly lacking in the watershed though it has good potential under existing dispositions and may play a vital role particularly with respect to minimization of cropping risk, built up soil fertility and productivity soil conservation, partly meeting out the fire wood demand of rural community and moreover, optimizing the watershed the other agro-forestry systems like bund and boundary plantations also have good potential to cater the firewood and fodder demands of the rural community it the watershed. The existing area under agro Forestry is almost negligible. *Prosopis juliflora* may be planted as block or sole plantation especially on marginal and degraded lands in the watershed. The agro-forestry interventions comprising of ber, bel, amla, guava, teak etc may be applied for benefit of farmers under rainfed to irrigated production systems on leveled to slopy and marginal agricultural using proper planting techniques and termite control measures. The multipurpose trees may also help in supplementing fire wood and fodder demands of the rural community in the watershed and may be planted as hedge rows on rain-fed, marginal and degraded lands.

Table 3.5 Details of Landuse pattern

S. No.	Name of micro watershed with Code	Name of village	Area in Ha.	Cultivated and wasteland area of the village (ha)				Area details (ha) (falling within the projects)								
				Cultivated rainfed area	Cultivated irrigated area	Uncultivated wasteland/ fallow		Pvt. Agri. Land					Forest Land	Community land	Others (Settlement, road etc.)	Total area (ha)
						Temp.	Permanent	Gen	SC	ST	OBC	Total				
1	2	3		4	5	6	7	8	9	10	11	12	13	14	15	16
1	Toungkalan/ 2A7D2e2a	Mahulikala, Mahulikhurd, Toungakala,Toungakhurd, Kharka	365.55	248.21	15.72	0	17.64	167.5	19.79	0	76.63	263.93	0	17.64	83.98	365.55

2	Mahulikhurd/2A7D2e2b	Gargara, Chhapar, Mojra Mishra, Kaudi, Mahulikhurd	501.17	340.29	21.55	0	24.4	265.23	27.14	0	69.48	361.84	0	24.4	114.93	501.17
3	Pathakpur/2A7D2e2c	Pathakpur, Toungakala, Mahulikhurd, Kheeri,Khaptiha,Chhapar,Unchgaon Padia,Kaudi,Dihipatka	1102.12	748.34	47.39	0	54.5	340	59.68	0	396.05	795.73	0	54.5	251.89	1102.12
4	Unchgaon/2A7D5a1a	Gargata, Chhapar, Mojra Mishra, Unchgaon, Basgadhi, Pathakpur, Gaura	362.77	246.32	15.60	0	17.3	189.2	19.64	0	53.08	261.92	0	17.3	83.55	362.77
5	Nidaura/2A7D5a1b	Pathakpur,Nidaura,Dihipatka,Basgadhi	294.05	199.66	12.64	0	21.09	76.45	15.92	0	119.93	212.30	0	21.09	60.66	294.05
6	Khaptiha/2A7D2e1b	Jorvat,Khaptiha,Dihar,Ratehara,Kheeri,Kharka, Puradattu,Khauriya	1030.46	699.68	44.31	0	37.8	234.76	55.80	0	453.43	743.99	0	37.8	248.67	1030.46
7	Baghol/2A7D2e3a	Baghol,Puradattu,Kalyanpur	598.06	406.08	25.72	0	26.34	245.5	32.38	0	153.91	431.80	0	26.34	139.92	598.06
8	Behraicha 1st/2A7D2e3c	Behraicha	324.28	220.19	13.94	0	14.3	134.5	17.56	0	82.07	234.13	0	14.3	75.85	324.28
9	Behraicha 2nd/2A7D2e3b	Behraicha,Baghol	383.49	260.39	16.49	0	29.4	167.1	20.77	0	89.01	276.88	0	29.4	77.21	383.49
Total			4961.95	3369.16	213.36	0	242.77	1820.24	268.69	0	1493.60	3582.53	0	242.77	1136.65	4961.95

Table 3.6 Landuse Pattern and Relationship with Soil

So. No.	Soil Type	Total extent (Hac.)	Based on Depth (cm.) (Area in Hac.)					Based on Slope (%) (Area in Hac.)				Erosion (Area in Hac.)			
			V.Shallow (0-75)	Shallow (7.5-22.5)	Moderatly d eed (22.5-45.00)	Deep (45.0-90.0)	Very deep (>90)	Nearly Level (0-2)	Moderate slope (2-6)	Strong slope (6-15)	steep (>15)	Water			Wind
												Sheet	Ril	Gully	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Sandy Soil	3235.65	2329.66	770.99	135.00	-	-	3345.00	2912.00	214.29	-	3111	1457	722	NA
2	Sandy Loam Soil	2588.50	129.43	1811.95	388.27	258.85									
3	Loam Soil	647.14	61.50	384.59	155.50	45.55									
Total		6471.29	2520.59	2975.53	678.77	304.40									

In the villages insufficient use of FYM (Farm Yard Manure), green manure and use of chemical fertilizer is one of the prominent causes of low productivity in the watershed. If use of green manure and bio-fertilizer has promoted it will be not only increase crops productivity but also retain soil fertility for longer duration. It was found that there is no compost pits exist in the any villages. Fresh to semi decomposed farm yard manure is found in the field during the period fields are not used for cultivation can be used for the green mannuring of Dhaincha, Sinhemp, mesta and moong etc. which have good potential in the watershed area. However, practice of green manure is still less practiced in the watershed, in spite of the fact that organic manure status as well fertility of the soils is poor to fairly good.

Among rabbi corps farmers are using high yielding verity seeds like pub W343, 373, 502, Ra 3077, 3765, UP2329, 2338, 2425 of wheat and PT303, 360, for Toria Besides this local variety of lentil is also gown by the farmers. During the Kharif season HYV of paddey such as Krishna, padma, jaya etc. are used by farmers.

Table 3.7 Landuse and Irrigation status

S. No.	Name & Micro Watershed with code	Name of Village	Gross Cultivated Area				Net Cultivated Area	Gross Irrigated Area				Net Irrigated Area	Rainfed Area
			Kharif	Rabi	Zaid	Total		Kharif	Rabi	Zaid	Total		
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Toungkaan/ 2A7D2e2a	Mahulikala,Mahulikhurd, Toungakala,Toungakhurd, Kharka	135.27	153.89	0	289.16	263.93	4.6	14.93	0	19.53	15.72	248.21
2	Mahulikhurd/2 A7D2e2b	Gargara,Chhapar,Mojra Mishra,Kaudi,Mahulikhurd	185.46	210.98	0	396.44	361.84	10.5	20.47	0	30.97	21.55	340.29
3	Pathakpur/2A7 D2e2c	Pathakpur,Toungakala,Mahulikhurd,Kheeri,Khaptiha ,Chhapar,Unchgaon Padia,Kaudi,Dihipatka	407.85	463.97	0	871.82	795.73	2.5	45.02	0	47.52	47.39	748.34
4	Unchgaon/2A7 D5a1a	Gargata,Chhapar,Mojra Mishra,Unchgaon,Basgadhi,Pathakpur,Gaura	134.24	152.72	0	286.96	261.92	7.4	14.82	0	22.22	15.60	246.32
5	Nidaura/2A7D5 a1b	Pathakpur,Nidaura,Dihipatka,Basgadhi	108.81	123.79	0	232.60	212.30	2.3	12.01		14.31	12.64	199.66

6	Khaptiha/2A7D2e1b	Jorvat,Khaptiha,Dihar,Ratehara,Kheeri,Kharka,Puradattu,Khauriya	381.33	433.80	0	815.13	743.99	1.5	42.09	0	43.59	44.31	699.68
7	Baghol/2A7D2e3a	Baghol,Puradattu,Kalyanpur	221.32	251.77	0	473.09	431.80	8.1	24.43	0	32.53	25.72	406.08
8	Behraicha 1st/2A7D2e3c	Behraicha	120.00	136.52	0	256.52	234.13	4.3	13.25	0	17.55	13.94	220.19
9	Behraicha 2nd/2A7D2e3b	Behraicha,Baghol	141.91	161.44	0	303.35	276.88	5.7	15.67	0	21.37	16.49	260.39
Total			1836.19	2088.88	0	3925.08	3582.53	46.9	202.70	0	249.60	213.36	3369.16

Table 3.8 Source of Irrigation in the Project area

S. No.	Name &Micro watershed with code	Name of Village	Canal Area	State Tube wells		Tanks		Open well		Bore wells		Lift irrigation		Others (Specify)		Total Irrigated Area	Remarks
				No.	Area	No.	Area	No.	Area	No.	Area	No.	Area	No.	Area		
1	2	3	4	5	6	7	8	9	10		12	13	14	15	16	17	18
1	Toungkaan/ 2A7D2e2a	Mahulikala, Mahulikhurd, Toungakala,Toungakhurd, Kharka	8.9	0		0		0		3	3.12	4	3.7	0		15.72	
2	Mahulikhurd/2A7D2e2b	Gargara,Chhapar,Mojra Mishra,Kaudi,Mahulikhurd	16.8	0		0		0		7	3.25	2	1.5	0		21.55	
3	Pathakpur/2A7D2e2c	Pathakpur,Toungakala, Mahulikhurd,Kheeri,Khaptiha, Chhapar,Unchgaon Padia, Kaudi,Dihipatka	28.5	0		0		0		23	18.89	0		0		47.39	
4	Unchgaon/2A7D5a1a	Gargata,Chhapar,Mojra Mishra,Unchgaon,Basgadhi,Pathakpur,Gaura	13.65	0		0		0		2	1.95	0		0		15.60	
5	Nidaura/2A7D5a1b	Pathakpur,Nidaura ,Dihipatka,Basgadhi	12.64	0		0		0		0	0.00	0		0		12.64	

6	Khaptiha/2A7D2e1b	Jorvat,Khaptiha,Dihar, Ratehara,Kheeri,Kharka ,Puradattu,Khauriya	37.2	0		0		0		9	7.11	0		0		44.31	
7	Baghol/2A7D2e3a	Baghol, Puradattu, Kalyanpur	22.98	0		0		0		5	2.74	0		0		25.72	
8	Behraicha 1st/2A7D2e3c	Behraicha	12.1	0		0		0		4	1.84	0		0		13.94	
9	Behraicha 2nd/2A7D2e3b	Behraicha, Baghol	14.7	0		0		0		7	1.79	0		0		16.49	
Total			141.77	0		0		0		60	40.69	6		0		213.36	

The majority of farmers in the watershed area are facing considerable problem of fire Wood, fodder due to majer forest area and pastures. Cow dung, stem of mustard, sesame, Dhaincha and eucalyptus are main sources of fuel wood. The watershed has a good potential of fruit and forest tree species like Mango, ber, bail guava, karonda, jamun, neem, peepal, Banayan, and Popular etc. If proper planting techniques involving the multipurpose trees have also very good potential for supplementing fuel and fodder demands in the watershed and may be included in appropriate land use option. The main source of green fodder for animal is limited to jowar berseem and grasses in the watershed .Though, the vegetable have good potential in the watershed however, their cultivation is limited mostly to kitchen garden. Almost all tropical sub-tropical vegetable may be successfully being able to be grown in the watershed. The vegetable grown in the Watershed are cucurbits, okra, radish, tomato, cauliflower, cabbage, garlic, onion, brinjal potato and chilly etc.

a. CROP CLASSIFICATION

Crops classification gives on idea how much area is in intensive cultivation and the scope for agriculture Development in single cropped areas and the objective would be to provide food and employment security.

b. Crop Calendar

The present crop calendar in the watershed comprise of fallow-mustard, fallow-wheat, sugarcane-wheat, bajra-mustard, wheat, mustard, jowar-wheat, jowar-mustard, black gram-wheat, black gram-mustard, green gram-wheat, green gram-mustard, fallow-berseem etc. Fallow-mustard is the most prevailing crop rotations on the agricultural lands both in rain-fed and irrigated conditions in the watershed. Organized vegetable cultivation, fruit plantation and traditional agro-forestry systems are lacking widely in the watershed. The limited vegetable cultivation in the watershed is confined either to kitchen gardens or to the irrigated conditions in a scattered manner on extremely small area with view to meet out the domestic demand for vegetables. The cultivation of cash crops other than the mustard also lacks in the watershed.

Table 3.9 Cropping Pattern

SN	Crop Classification	Area (Hact.)
1	2	3
1	Single Crop	1615.00
2	Double Crop	1260.00
3	Multiple Crop	1064.00
4	Relay Crops	-

c. CROPS & CROPPING PATTERN:

Season wise, crop wise and whether they are irrigated area not detail obtained from resource mapping and revenue record production and productivities and cost of cultivation is obtained through focus group discussion and secondary data of

agricultural statics for the concern project area.

Table 3.10 Crops and Irrigation Status

S.N	Season	Crop Sown	Rain fed				Irrigated				Total				
			Area (Hact.)	Productivity (Kgs/Ha.)	Production (Ton/yr)	Cost of cultivation (Rs./Hact.)	Area Hact.	Productivity (Kgs/Ha)	Production (Ton/yr)	Cost of cultivation (Rs./Hact	Area Hact.	Productivity (Kgs/Ha)	rate	Production (Ton/yr)	Cost of cultivation (Rs./Hact
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	Kharif	Jwar	135	906	122.31	18120	0	1050	12.6	21000	147	978	20	134.91	19560
		maize	10	2300	23	36800	0	2430	133.65	38880	65	2365	16	156.65	37840
		Arehar	55	980	53.9	58800	0	0	0	0	55	980	60	53.9	58800
		Munge/urd	25	400	10	26000	5	450	2.25	29250	30	425	65	12.25	27625
		Sugarcane	1746	610	1065.06	1525	46.9	700	203	1750	2036	655	2.5	1268.06	1638
					0	0			0	0	0	0		0	0
2	Rabi	Wheat	1389	3669	5096.241	51366	202.70	4010	497.24	56140	1513	3839.5	14	5593.481	53753
		Muster	21	1000	21	24000	0	0	0	0	21	1000	24	21	24000
		Barseem	15	2500	37.5	6250	0	2550	38.25	6375	30	4437.5	2.5	75.75	11094
		Pea	10	1229	12.29	61450	0	-	0	0	10	1229	50	12.29	61450
3	Summer	Tomato	12	1200	14.4	18000	0	-	0	0	12	1200	15	14.4	18000
		Ladyfinger	5	1250	6.25	18750	0	-	0	0	5	1250	15	6.25	18750
		Vegetable etc	15	1050	15.75	15750	0	-	0	0	15	1050	15	15.75	15750
	Total		3438				213.36	-	-		3939				

d. CROPING PATTERN

i. Single cropping

Fallow- mustered /wheat /gram /lentil/ winter vegetable, bajra/ Jwar / sesame/ mong / urd (black Gram)- fallow.

ii. Double cropping

Bajra / jowar/ sesame /-mustard / wheat / gram / lentil/ Potato/ winter vegetable.

CROPS PRODUCTIVITY

The agricultural productivity is primary driven by the amount and distribution of rain water specifically during Kharif. Productivity of Kharif corps is also affected by the late onset or early withdrawal of monsoon as well as intermittent drought of variably duration and intensity. The farmer although have suitable cropping system and irrigation potential to deal aberrant weather weeds impose considerable constraint in productivity of both Kharif and corps. Farmer undertakes normally one manual weeding in Bajra, urad mustered and other valuable crops however, practice is required large number of labours and very time consuming. Use of chemicals to vanish weeds is rare in the watershed. Particularly, pulses crops grown in the both Kharif and Rabi.

The mixed cropping pattern is in practice in limited area with Kharif crops like Bajra and jowar but it is not only irrational but also unscientific and best with low productivity. Seseem til crop in particular is raised on residual soil moisture under rain- fed production system during Kharif Season. Imbalanced use of fertilizers is not only prevalent in rabi and Kharif crops but also in practice during Zayad season. The recommended deep ploughing for enhanced in situ residual soil moisture conservation and higher production is also not followed in the watershed. The shallow Ploughing tractor bullock drawn tillage implements' are available with the farmers in the watershed but deep ploughing implements yet need to be widely used.

The soil fertility/ health restoration practice like green manuring, crop rotation and intercropping specifically with legumes use of FYM / compost, vermin-compost bio fertilizer soil and water conservation measure use brought up or in situ mulches are not widely practiced in the watershed. The soil and water conservation measure or limited to mechanical /earthen measure created by state Govt. agencies. Conservation of agronomical measure like seeding and ploughing across the slope, weed mulching, agro forestry, vegetative barriers are also lacking in the watershed.

3.6 AGROFORESTRY & HORTICULTURE

There is no systematic agro-forestry and orchard in the project area, however, few scattered trees of Mango, Amla, Guva, Lemon, etc. was found in the micro-watersheds which is consumed locally. The agriculture land of the village in the watershed have small area of eucalyptus plantation in south west zone mixed plantation of popular and eucalyptus in rest part of the watershed although eucalyptus plantation is not suitable to watershed area resulting depleting ground water, reducing soil fertility and destroying other growing vegetation. Some scattered trees of Neem, Babool, peepal, can be seen in the area.

The agriculture fields of the village have some forest or horticultural plantation. At places, some isolated trees of Acacia nilotica can be seen, whose frequency is less than one thirteen per running length of 100 m.

Table 3.11 Details of Horticulture in the project area

S. N.	Name of micro watershed with code	Name of village	Name of Important horticultural crop						
			Whole Fruit Crop				Scattered Fruit Crop		
			Name	Area ha.	Productivity qtl/ha	Production qtl/No.	No.	Productivity qtl/No.	Production qtl/No.
1	2	3	4	5	6		7	8	

1	Toungkaan/ 2A7D2e2a	Mahulikala,Mahulikhurd, Toungakala,Toungakhurd, Kharka	Nil	Nil	Nil	Nil	50		1.5
2	Mahulikhurd/2A7D2e2b	Gargara,Chhapar,Mojra Mishra,Kaudi,Mahulikhurd	Nil	Nil	Nil	Nil	23		1.3
3	Pathakpur/2A7D2e2c	Pathakpur,Toungakala, Mahulikhurd,Kheeri, Khaptiha,Chhapar, Unchgaon Padia, Kaudi, Dihipatka	Nil	Nil	Nil	Nil	56		1.3
4	Unchgaon/2A7D5a1a	Gargata,Chhapar ,Mojra Mishra, Unchgaon,Basgadhi, Pathakpur,Gaura	Nil	Nil	Nil	Nil	23		1.5
5	Nidaura/2A7D5a1b	Pathakpur, Nidaura,Dihipatka ,Basgadhi	Nil	Nil	Nil	Nil	12		2
6	Khaptiha/2A7D2e1b	Jorvat,Khaptiha, Dihar,Ratehara, Kheeri,Kharka, Puradattu,Khauriya	Nil	Nil	Nil	Nil	87		1
7	Baghol/2A7D2e3a	Baghol,Puradattu, Kalyanpur	Nil	Nil	Nil	Nil	33		1.5
8	Behraicha 1st/2A7D2e3c	Behraicha	Nil	Nil	Nil	Nil	14		1.75
9	Behraicha 2nd/2A7D2e3b	Behraicha,Baghol	Nil	Nil	Nil	Nil	24		1.5

3.7 LIVESTOCK

Total Livestock Population of the watershed is 28071. Buffalo is preferred as milchy animal compared to cow, but milk yield is very low. Goats are also kept for milk as for as concern for meat. The breakup of livestock population is as follows.

Table 3.12 Livestock population in the Project Area

S. No.	Name of Village	No. of Milchy Animal			Ox	Calf	Goat	Hen	Pigs
		Buffalo	Cow	Goat					
1	Taunga kala	98	176	34	40	60	160	84	0
2	Tauga khurd	80	86	56	30	75	150	105	0
3	Mahulikhurd	160	150	156	70	90	200	70	0
4	Kharka	260	320	34	45	80	240	30	0
5	Kuandi	140	360	22	50	65	160	20	0
6	Gargata	80	150	54	30	70	105	-	0
7	Chhapar	167	340	65	60	145	150	-	0
8	Mojra Mishra	40	156	33	20	47	120	24	0
9	Basgadhi	100	150	67	-	72	25	6	0
10	Uchagoan	400	250	134	100	140	550	400	0
11	Pathakpur	160	280	178	21	95	24	-	0
12	Padiya	345	165	23	2	10	8	-	0
13	Dihi patka	78	120	332	30	65	40	8	0
14	Nidaura	150	260	23	75	160	70	-	4
15	Khiri	365	458	56	50	115	2000	250	3
16	Khaptiha	100	676	4	-	150	50	100	0
17	Dihar	432	500	344	20	340	100	40	4
18	Pura Dattu	120	200	445	-	60	25	10	0
19	Baghol	180	240	3	65	130	130	50	2
20	Ratehra	97	150	23	40	80	50	10	0

21	Jorwat	340	700	34	50	560	300	150	1
22	Kalyanpur	360	765	23	85	280	110	110	0
23	Magra	67	176	39	10	40	18	-	0
24	Bahraicha	348	675	54	70	160	425	-	23
25	Koriya	70	345	37	30	50	60	40	2
26	Gaura	263	432	123	50	80	50	35	0
27	Lohra	150	654	176	60	70	70	50	2
Total		5150	8934	2572	1103	3289	5390	1592	41

Table 3.13 Details of Livestock in the Project Area

S.N.	Type of Animals	Existing Nos.	Milk production (Ltrs/day) (if applicable)	Milk Quantity Sold (Ltrs/day)	Income generated per annum (lac)
1	2	3	4	5	6
1	Cow	1269	3Kgper day	38.07 qtl.	137.052per annum
2	Buffalo	17231	7Kgper day	1206 qtl.	4754/annum
3	Goat/sheep	15980	1Kgper day	15.98qtl.	5.83/annum
4	Ox		-	-	-
5	He buffalo		-	-	-
6	Poultry	-	-	-	-
7	Piggery	-	-	-	-
8	Other animals (specify)	-	-	-	-

3.8 FOREST & VEGETATIVE COVER

In the present scheme most of the area used for cultivation. There are few patches of forest area found in the watershed which have grown naturally on the wasteland which could be technically called as “Bhurs”. The common species of tree is babool in theses area. Often there has been some plantation of popular tree has been done along the field bunds. The selected watershed has no forest area.

Natural vegetation of the watershed is very poor. The forest vegetation is predominant with Vilayati Babul (Prosopis juliflora) followed by Babul (Acacia nilotica). There are occasional occurrence of Neem plants (Azadirachta indica), Papdi (Holopteila integrifolia), Shisham (Dalbergia sissoo), Karanj (Pongamia glabra) and Chonkra (Prosopis cineraria). There is no grass land in the watershed. Grass patches are seen only on the bunds, road sides and other such places. The principal grasses are Anjan grass, Munj and Gandher.

Table 3.14 Details of Forest Cover in the Project Area

S. N.	Name of micro watershed with code	Name of village	Forest (Area ha)			Grass Land (Area ha)		Other vegetative cover (Area ha)	
			Reserve	Gram Samaj (Natural / Planted)	Total	Gram Samaj	Private	Gram Samaj	Private
1	2	3	4	5	6		7	8	1.25
1	Toungkalan/ 2A7D2e2a	Mahulikala,Mahulikhurd, Toungakala,Toungakhurd, Kharka	Nil	Nil	Nil	Nil	Nil		2.6
2	Mahulikhurd/2A7D2e2b	Gargara,Chhapar,Mojra Mishra,Kaudi,Mahulikhurd	Nil	Nil	Nil	Nil	Nil		1.05

3	Pathakpur/2A7D2e2c	Pathakpur,Toungakala,Mahulikhurd,Kheeri,Khaptiha ,Chhapar,Unchgaon Padia,Kaudi,Dihipatka	Nil	Nil	Nil	Nil	Nil		6.4
4	Unchgaon/2A7D5a1a	Gargata,Chhapar,Mojra Mishra,Unchgaon,Basgadhi,Pathakpur,Gaura	Nil	Nil	Nil	Nil	Nil		2.31
5	Nidaura/2A7D5a1b	Pathakpur,Nidaura,Dihipatka,Basgadhi	Nil	Nil	Nil	Nil	Nil		0.06
6	Khaptiha/2A7D2e1b	Jorvat,Khaptiha,Dihar,Ratehara,Kheeri,Kharka,Puradattu,Khauriya	Nil	Nil	Nil	Nil	Nil		1.23
7	Baghol/2A7D2e3a	Baghol,Puradattu,Kalyanpur	Nil	Nil	Nil	Nil	Nil		0.5
8	Behraicha 1st/2A7D2e3c	Behraicha	Nil	Nil	Nil	Nil	Nil		0.27
9	Behraicha 2nd/2A7D2e3b	Behraicha,Baghol	Nil	Nil	Nil	Nil	Nil		1.08
Total									16.75

3.9 LIVELIHOOD STATUS

Assestless/landless people earn their livelihood mainly from labour and *batai.* They were earning about Rs. 3000/per month. It is expected that their income will enhance due to watershed management as it will generate sustained employment opportunity. Intervention based on piggeries, fisheries, black smithy and carpenter was not in practice. Livelihood status of landless, farmers and interventions based livelihood status are shown in Tables given below:

Table 3.15 Present Livelihood Status

S. No.	Name & Code of micro watershed	Name of Village	Name of Livelihood Activity	No. of house hold engaged					Pre project Average annual Income	Desired Activities	Expected annual Income from desired activities
				Sc	St	Other	Women	Total			
1	2	3	4	5	6	7	8	9	10	11	12
1	Toungkaan/ 2A7D2e2a	Mahulikala, Mahulikhurd, Toungakala,Toungakhurd, Kharka	Agriculture labor, lease cultivation, animal husbandry	45		12	29	86	Rs. 27500/-	Goatry, Dairy, Poultry, Handicrafts, Pigggeries	Rs. 36500/-
2	Mahulikhurd/ 2A7D2e2b	Gargara,Chhapar, Mojra Mishra,Kaudi,Mahulikhurd	Agriculture labor, lease cultivation, animal husbandry	34		24	23	81	Rs. 27500/-	Goatry, Dairy, Poultry, Handicrafts, Pigggeries	Rs. 36500/-
3	Pathakpur/ 2A7D2e2c	Pathakpur,Tounga kala,Mahulikhurd, Kheeri,Khaptiha,Chhapar,Unchgaon Padia,Kaudi,Dihipatka	Agriculture labor, lease cultivation, animal husbandry	12		27	45	84	Rs. 27500/-	Goatry, Dairy, Poultry, Handicrafts, Pigggeries	Rs. 36500/-
4	Unchgaon/ 2A7D5a1a	Gargata,Chhapar, Mojra Mishra,Unchgaon, Basgadhi,Pathakpur,Gaura	Agriculture labor, lease cultivation, animal husbandry	16		22	23	61	Rs. 27500/-	Goatry, Dairy, Poultry, Handicrafts, Pigggeries	Rs. 36500/-
5	Nidaura/ 2A7D5a1b	Pathakpur,Nidaura,Dihipatka,Basgadhi	Agriculture labor, lease cultivation, animal husbandry	12	6	56	21	95	Rs. 27500/-	Goatry, Dairy, Poultry, Handicrafts, Pigggeries	Rs. 36500/-

6	Khaptiha/ 2A7D2e1b	Jorvat,Khaptiha,Dihar,Ratehara,Kheeri,Kharka,Puradattu,Khauriya	Agriculture labor, lease cultivation, animal husbandry	54		23	14	91	Rs. 27500/-	Goatry, Dairy, Poultry, Handicrafts, Pigggeries	Rs. 36500/-
7	Baghol/ 2A7D2e3a	Baghol,Puradattu, Kalyanpur	Agriculture labor, lease cultivation, animal husbandry	17	5	54	23	99	Rs. 27500/-	Goatry, Dairy, Poultry, Handicrafts, Pigggeries	Rs. 36500/-
8	Behraicha 1st/ 2A7D2e3c	Behraicha	Agriculture labor, lease cultivation, animal husbandry	34		48	67	149	Rs. 27500/-	Goatry, Dairy, Poultry, Handicrafts, Pigggeries	Rs. 36500/-
9	Behraicha 2nd/ 2A7D2e3b	Behraicha,Baghol	Agriculture labor, lease cultivation, animal husbandry	32	3	58	54	147	Rs. 27500/-	Goatry, Dairy, Poultry, Handicrafts, Pigggeries	Rs. 36500/-

Table 3.16 Household engaged in livelihood activity and average annual income

S. No.	Name & Code of micro watershed	Name of Village	Name of Livelihood Activity	No. of Persons engaged					Pre project Average Income	Desired Activities	Expected Income from desired activities
				Sc	St	Other	Women	Total			
1	2	3	4	5	6	7	8	9	10	11	12
1	Toungkaan/ 2A7D2e2a	Mahulikala,Mahulikhurd, Toungakala,Toungakhurd, Kharka	Agriculture labor, lease cultivation, animal husbandry	123		56	69	248	Rs. 27500/-	Goatry, Dairy, Poultry, Handicrafts, Pigggeries	Rs. 36500/-

2	Mahulikhurd/2A7D2e2b	Gargara,Chhapar,Mojra Mishra,Kaudi,Mahulikhurd	Agriculture labor, lease cultivation, animal husbandry	109		45	87	241	Rs. 27500/-	Goatry, Dairy, Poultry, Handicrafts, Pigggeries	Rs. 36500/-
3	Pathakpur/2A7D2e2c	Pathakpur,Toungakala, Mahulikhurd,Kheeri,Khaptiha,Chhapar,Unchgaon Padia,Kaudi,Dihipatka	Agriculture labor, lease cultivation, animal husbandry	23		45	98	166	Rs. 27500/-	Goatry, Dairy, Poultry, Handicrafts, Pigggeries	Rs. 36500/-
4	Unchgaon/2A7D5a1a	Gargata,Chhapar,Mojra Mishra,Unchgaon,Basgadhi,Pathakpur,Gaura	Agriculture labor, lease cultivation, animal husbandry	32		66	76	174	Rs. 27500/-	Goatry, Dairy, Poultry, Handicrafts, Pigggeries	Rs. 36500/-
5	Nidaura/2A7D5a1b	Pathakpur,Nidaura,Dihipatka,Basgadhi	Agriculture labor, lease cultivation, animal husbandry	12	6	56	21	95	Rs. 27500/-	Goatry, Dairy, Poultry, Handicrafts, Pigggeries	Rs. 36500/-
6	Khaptiha/2A7D2e1b	Jorvat,Khaptiha,Dihar,Ratehara,Kheeri,Kharka, Puradattu,Khauriya	Agriculture labor, lease cultivation, animal husbandry	56		34	45	135	Rs. 27500/-	Goatry, Dairy, Poultry, Handicrafts, Pigggeries	Rs. 36500/-

7	Baghol/2A7D2e3a	Baghol,Puradattu,Kalyanpur	Agriculture labor, lease cultivation, animal husbandry	65	18	123	65	271	Rs. 27500/-	Goatry, Dairy, Poultry, Handicrafts, Pigggeries	Rs. 36500/-
8	Behraicha 1st/2A7D2e3c	Behraicha	Agriculture labor, lease cultivation, animal husbandry	48		87	143	278	Rs. 27500/-	Goatry, Dairy, Poultry, Handicrafts, Pigggeries	Rs. 36500/-
9	Behraicha 2nd/2A7D2e3b	Behraicha,Baghol	Agriculture labor, lease cultivation, animal husbandry	35	9	143	154	341	Rs. 27500/-	Goatry, Dairy, Poultry, Handicrafts, Pigggeries	Rs. 36500/-

Table 3.17 Details of livelihood activity

S. No	Name of MWS with code	Name of village	Activities																			
			Dairy		Poultry		Goatry		Piggeries		Fisheries		Black Smithy		Carpentry		Stitching/ knitting		Wages		Others (Specify)	
			No	Av. income	No	Av. income	No	Av. income	No	Av. income	No	Av. income	No	Av. income	No	Av. income	No	Av. income	No	Av. income	No	Av. income
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23

1	Toungkaan/ 2A7D2e2a	Mahulikala,Mahulikhurd, Toungakala,Toungakhurd, Kharka	24	Rs. 27500/-	0		34	Rs. 28500/-	0		0		2	Rs. 26500/-	3	Rs. 27500/-	2	Rs. 27500/-	23	Rs. 29500/-		
2	Mahulikhurd/ 2A7D2e2b	Gargara,Chhapar ,Mojra Mishra,Kaudi, Mahulikhurd	36	Rs. 27500/-	0		76	Rs. 28500/-	0		0		1	Rs. 26500/-	2	Rs. 27500/-	1	Rs. 27500/-	56	Rs. 29500/-		
3	Pathakpur/ 2A7D2e2c	Pathakpur,Toungakala ,Mahulikhurd,Kheeri ,Khaptiha,Chhapar, Unchgaon Padia,Kaudi, Dihipatka	58	Rs. 27500/-	0		83	Rs. 28500/-	0		0		3	Rs. 26500/-	1	Rs. 27500/-	3	Rs. 27500/-	65	Rs. 29500/-		
4	Unchgaon/ 2A7D5a1a	Gargata,Chhapar,Mojra Mishra,Unchgaon, Basgadhi,Pathakpur, Gaura	47	Rs. 27500/-	0		23	Rs. 28500/-	0		0		1	Rs. 26500/-	2	Rs. 27500/-	2	Rs. 27500/-	23	Rs. 29500/-		
5	Nidaura/ 2A7D5a1b	Pathakpur,Nidaura ,Dihipatka,Basgadhi	24	Rs. 27500/-	0		45	Rs. 28500/-	0		0		2	Rs. 26500/-	3	Rs. 27500/-	3	Rs. 27500/-	45	Rs. 29500/-		
6	Khaptiha/ 2A7D2e1b	Jorvat,Khaptiha ,Dihar,Ratehara, Kheeri,Kharka, Puradattu,Khauriya	43	Rs. 27500/-	0		32	Rs. 28500/-	0		0		1	Rs. 26500/-	5	Rs. 27500/-	2	Rs. 27500/-	47	Rs. 29500/-		
7	Baghol/ 2A7D2e3a	Baghol,Puradattu, Kalyanpur	12	Rs. 27500/-	0		23	Rs. 28500/-	0		0		1	Rs. 26500/-	2	Rs. 27500/-	1	Rs. 27500/-	34	Rs. 29500/-		
8	Behraicha 1st/2A7D2e3c	Behraicha	8	Rs. 27500/	0		26	Rs. 28500/	0		0		2	Rs. 26500/	1	Rs. 2750	2	Rs. 27500/	23	Rs. 29		

				-				-						-		0/-		-		500/-		
9	Behraicha 2nd/2A7D2e3b	Behraicha,Baghol	8	Rs. 27500/-	0		23	Rs. 28500/-	0		0		1	Rs. 26500/-	2	Rs. 27500/-	1	Rs. 27500/-	34	Rs. 29500/-		
Total			260	Rs. 27500/-	0		365	Rs. 28500/-	0		0		14	Rs. 26500/-	21	Rs. 27500/-	17	Rs. 27500/-	350	Rs. 29500/-		

3.11 GROUND WATER STATUS

Ground water status is moderately good in the project area along the Tons River. In these area ground water fluctuation is very low in comparison to the area is away from the river. Open 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 low due to low water holding capacity of the soils. In the name of soil and moisture conservation only field bund Use of micro-irrigation is almost nil in the area. Groundwater status, irrigation status and source are given in Table 3.18 respectively.

Table 3.18 Details of Ground Water Status

S. No.	Name & Code of Micro watershed	Name of Village	Depth of Ground Water Table (Below Ground level) in Meter		No. of Observation well	Remarks
			Pre Monsoon	Post Monsoon		
1	2	3	4	5	6	7
1	Toungkalan/ 2A7D2e2a	Mahulikala, Mahulikhurd, Toungakala,Toungakhurd, Kharka	6.35	5.8	6	Data used of Borewells and Wells
2	Mahulikhurd/2A7D2e2b	Gargara,Chhapar,Mojra Mishra,Kaudi,Mahulikhurd	6.5	5.5	8	Data used of Borewells and Wells

3	Pathakpur/2A7D2e2c	Pathakpur,Toungakala,Mahulikhurd,Kheeri,Khaptiha,Chhapar,Unchgaon Padia,Kaudi,Dihipatka	5.9	5.1	6	Data used of Borewells and Wells
4	Unchgaon/2A7D5a1a	Gargata,Chhapar,Mojra Mishra,Unchgaon,Basgadhi,Pathakpur,Gaura	6.8	5.25	2	Data used of Borewells and Wells
5	Nidaura/2A7D5a1b	Pathakpur,Nidaura,Dihipatka,Basgadhi	6.1	5.2	4	Data used of Borewells and Wells
6	Khaptiha/2A7D2e1b	Jorvat,Khaptiha,Dihar,Ratehara,Kheeri,Kharka,Puradattu, Khauriya	6.8	5.2	3	Data used of Borewells and Wells
7	Baghol/2A7D2e3a	Baghol, Puradattu, Kalyanpur	7.3	5.8	6	Data used of Borewells and Wells
8	Behraicha 1st/2A7D2e3c	Behraicha	6.5	5.4	5	Data used of Borewells and Wells
9	Behraicha 2nd/2A7D2e3b	Behraicha, Baghol	6.25	5.5	2	Data used of Borewells and Wells

3.11 VILLAGE INFRASTRUCTURE

Table 3.19 Details of Infrastructures village-wise

S. No.	NAME OF VILLAGE	INFRASTRUCTURE DETAILS													
		ANGANWADI	PRIMA--RY SCHOOL	SECONDA--RY SCHOOL	GOVT. COLLA-GE	BANK	POST OFFI-CE	P.H.C.	VETERINA-RI	MARK-ET	COLL MILL OF CENTR-E	CONNECTIVI-TY FROM MAIN ROAD	ELECTRICI-TY	AGRO INDUSTRY CENTRE	OTHERE
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

1	TAUNGA KALA	&	gjA	&	&	&	&	&	&	&	&	&	gjA	&	&
2	TAUNGA KHURD	&	&	&	&	&	&	&	&	&	&	&	gjA	&	&
3	MAHULI KHURD	&	gjA	&	&	&	&	&	&	&	&	&	gjA	&	&
4	KHARKA KASH		&	&	&	&	&	&	&	&	&	&	gjA	&	&
5	KAUNDI	gjA	gjA	&	&	&	&	&	&	&	&	&	gjA	&	&
6	GARGATA	&	&	&	&	&	&	&	&	&	&	&	gjA	&	&
7	CHHAPAR	&	gjA	&	&	&	gjA	&	&	&	&	&	gjA	&	&
8	MOJRA MISHRA	&	&	&	&	&	&	&	&	&	&	&	gjA	&	&
9	BASGADI	&	gjA	&	&	&	&	&	&	&	&	&	gjA	&	&
10	UCHGOAN	gjA	gjA	&	&	&	&	&	&	&	&	&	gjA	&	&
11	PATHAKPUR	&	gjA	&	&	&	&	&	&	&	&	&	gjA	&	&
12	PADIYA	&		&	&	xj vkckn				&	&	&		&	&
13	DIHI PATKA	&	gjA	gjA	&	&	&	&	&	&	&	&	gjA	&	&
14	NIDAURA	&	gjA		&	&	&	&	&	&	&	&	gjA	&	&
15	KHIRI	gjA	gjA	&	&	gjA	gjA	gjA	gjA	gjA	&	gjA	gjA	&	&
16	KHAPTIA	&	gjA										gjA	&	&
17	DIHAR	&	gjA	gjA									gjA	&	&
18	PURA DATTU	gjA	&										gjA	&	&

19	BAGHOL	gkA	gkA	gkA	&	&	&	&	&	&	&	gkA	gkA	&	&
20	RATEHRA	&	&	&	&	xkj vkckn					&	&	&	&	&
21	JORWAT	&	gkA	&	&	&	&	&	&	&	&	&	gkA	&	&
22	KALYANPUR	&	gkA	&	&	&	&	&	&	&	&	&	gkA	&	&
23	MOGRA	&	&	&	&	xkj vkckn						&	&	&	&
24	BAHRAICHA	&	gkA	gkA	&	&	gkA	gkA	&	&	&	&	gkA	&	&
25	KORIYA	&	gkA	&	&	&	&	&	&	&	&	&	gkA	&	&
26	GAURA	&	gkA	&	&	&	&	&	&	&	&	&	gkA	&	&
27	LOHRA	&	gkA	&	&	&	&	&	&	&	&	&	gkA	&	&

Table 3.20 Details of Agriculture Equipments

SL.NO.	NAME OF VILLAGE	TYPE OF INFRASTRUCTURE			
		TRACTOR (NOS)	SPRAYERS MANNUAL/POWER (NOS.)	CULTVATOR/HARROW (NOS.)	SEED DRILL (NOS.)
1	2	3	4	5	6
1	TAUNGA KALA	7	&	7	&
2	TAUNGA KHURD	2	&	2	&

3	MAHULI KHURD	9	&	9	&
4	KHARKA KASH	10	&	8	&
5	KAUNDI	6	&	6	&
6	GARGATA	3	&	3	&
7	CHHAPAR	4	&	4	&
8	MOJRA MISHRA	&	&	&	3
9	BASGADI	8	&	8	4
10	UNCHGOAN	10	&	10	&
11	PATHAKPUR	7	&	11	&
12	PADIYA	**Un-inhabited**	&	&	&
13	DIHI PATKA	7	&	7	&
14	NIDAURA	9	&	9	&
15	KHIRI	18	&	18	&
16	KHAPTIA	2	&	&	&
17	DIHAR	3	&	3	&
18	PURA DATTU	7	&	7	&
19	BAGHOL	7	&	7	&
20	RATEHRA	**Un-inhabited**	&	&	&
21	JORWAT	&	&	8	&

22	KALYANPUR	5	&	5	&
23	MOGRA	**Un-inhabited**	&	&	&
24	BAHRAICHA	11	&	11	&
25	KHAURIYS	5	&	5	&
26	GAURA	7	&	7	&
27	LOHRA	8	&	8	&
	TOTAL				

Table 3.21 Details of Common Property Resources in the Project Area

SL.NO.	NAME OF VILLAGE	VILLAGE PONDS /TANK	COMMUNITY BUILDING	DETAIL OF COMMUNITY PROPERTY RESOURCES						
				PERMANENT MARKET	TEMPLES/PLACES OF WORSHIP	FOREST Land	WOOD LOT	PASTURE	ORCHED	
1	2	3	4	5	6	7	8	9	10	11
1	TAUNGA KALA	1	1	&	&	&	&	&	&	&
2	TAUNGA KHURD	1	1	&	1	&	&	&	&	&
3	MAHULI KHURD	1	&	&	1	&	&	&	&	&
4	KHARKA KASH	&	&	&	1	&	&	&	&	&
5	KAUNDI	3	&	&	&	&	&	&	&	&

6	GARGATA	&	1	&	1	&	&	&	&	&
7	CHHAPAR	&	&	&	1	&	&	&	&	&
8	MOJRA MISHRA	&	&	&	&	&	&	&	&	&
9	BASGADI	1	1	&	1	&	&	&	&	&
10	UNCHGOAN	&	1	&	&	&	&	&	&	&
11	PATHAKPUR	1	&	&	2	&	&	&	&	&
12	PADIYA	Un-inhabited		&	&	&	&	&	&	&
13	DIHI PATKA	1	&	&	1	&	&	&	&	&
14	NIDAURA	1	1	&	1	&	&	&	&	&
15	KHIRI	2	1	&	3	&	&	&	&	&
16	KHAPTIA	&	1	&	1	&	&	&	&	&
17	DIHAR	&	&	&	&	&	&	&	&	&
18	PURA DATTU	2	&	&	1	&	&	&	&	&
19	BAGHOL	2	&	&	1	&	&	&	&	&
20	RATEHRA	&	&	Un-inhabited		&	&	&	&	&
21	JORWAT	1	&	&	1	&	&	&	&	&
22	KALYANPUR	&	&	&	1	&	&	&	&	&
23	MOGRA	&	&	Un-inhabited		&	&	&	&	&

24	BAHRAICHA	2	1	&	1	&	&	&	&	&
25	KORIYA	&	&	&	&	&	&	&	&	&
26	GAURA	&	&	&	&	&	&	&	&	&
27	LOHRA	1	1	&	1	&	&	&	&	&
	TOTAL									

HISTORICAL TIMELINE VILLAGE-WISE

Village Baghol		Village Khapatiha	
Year	**Activity**	**Year**	**Activity**
1763	Village was established. At a distance 62 Km. from Allahabad Nari Bari Koraon Road	1685	Village was established. . At a distance 56 Km. from Allahabad Nari Bari Koraon Road
1995	Construction of First Road.	1960	First Radio was purchased by Sri Mohit Lal Dubey.
1975	First Radio was purchased in the village by Ram Vilash Pandey.	1985	First Motorbike was purchased by Sri Mohit Lal Dubey.
1975	First Television was purchased in this village by Sri Dasharath.	1985	First Tractor was purchased by Sri Lakhman Prasad Dubey.
1985	First Motorbike was purchased in this village by Sri Sarashwati Prasad Chaubey.	1975	First road was constructed.
1960	First Tractor was purchased in this village by Sri Sarashwati Prasad Chaubey.	1995	Village was Electrified.
1984	Village was Electrified.		

Village Checheria Baharaicha		Village Pathakpur	
Year	**Activity**	**Year**	**Activity**
1510	Village was established. . At a distance 64 Km.	1752	Village was established. At a distance 59 Km. from

	from Allahabad Nari Bari Koraon Road.		Allahabad Nari Bari Koraon Road.
1955	Construction of First Road.		
1985	First Radio was purchased in the village Sri Shitala Prasad Pandey.	1978	First Radio was purchased by Sri Rama Shankar.
1990	First Television was purchased in this village by Sri Shiv Prasad Gupta.	1980	First Motorbike was purchased by Vishnu Datt Shukla.
1990	First Motorbike was purchased in this village by Sri Arun Kumar Mishra.	1978	First Tractor was purchased by Shakuntala Shukla.
1975	First Tractor was purchased in this village by Sri Devmuni.	1990	
1980	Village was Electrified.		Village was Electrified.

Village Unchgaon		**Village Nidaura**	
Year	**Activity**	**Year**	**Activity**
1770	Village was established, At a distance 56 Km. from Allahabad Nari Bari Koraon Road.	1718	Village was established, At a distance 55 Km. from Allahabad Nari Bari Koraon Road
1980	Construction of First Road.		
1980	First Radio was purchased in the village Sri Ganga Singh.	1980	First Radio was purchased
1990		1985	First Television was purchased
1980	First Tube well was installed.	1980	First Motorbike was purchased
1990	First Motorbike was purchased in this village by Sri Ganga Singh.	1975	First Tractor was purchased
1991	First Tractor was purchased in this village by Sri Mukh Lal Singh.	1973	Village was Electrified.
	Village was Electrified.	1910	First road was constructed.

Village Garagata		Village Dihar	
Year	**Activity**	**Year**	**Activity**
1750	Village was established, At a distance 68 Km. from Allahabad Nari Bari Koraon Road	1985	Village was established, At a distance 56 Km. from Allahabad Nari Bari Koraon Road
1980	First Motorbike was purchased in this village by Sri Hriday Narayan Mishra.	1995	First Motorbike was purchased by Sri Vishwanath.
1980	First Tractor was purchased in this village by Sri Hriday Narayan Mishra.	1995	First Tractor was purchased by Sri Vishwanath.
2010	Village was Electrified.	2000	Village was Electrified.
		1989	First Tube well was installed.
Village Khiri		**Village Puradattu**	
Year	**Activity**	**Year**	**Activity**
1716	Village was established, At a distance 57 Km. from Allahabad Nari Bari Koraon Road.	1762	Village was established, At a distance 61 Km. from Allahabad Nari Bari Koraon Road.
1955	Construction of First Road.		
1987	First Telivision was purchased in this village by Sri Bhagawat.	1990	First Motorbike was purchased by Sri Vijay.
1985	First Motorbike was purchased in this village by Sri Bhagawat.	1982	First Tractor was purchased by Sri Golal.
1970	First Tractor was purchased in this village by Sri Ramanuj Tiwari.	2008	Village was Electrified.
1982	Village was Electrified.	1987	First Tube well was installed.
		1987	First Radio was purchased by Sri Ramsanai.

Village Dihipataka		Village Basgadhi	
Year	**Activity**	**Year**	**Activity**
1535	Village was established, At a distance 60 Km. from	1907	Village was established, At a distance 59 Km. from

	Allahabad Nari Bari Koraon Road.		Allahabad Nari Bari Koraon Road.
1980	First Radio was purchased in the village by Sri NArayan Das Tiwari.	1990	First Radio was purchased by Ramsiroman Mishra.
1980	First Tractor was purchased by Sri Onkar Nath Mishra.	1988	First Television was purchased by Sri Ram Lakhan.
1990	First Motorbike was purchased in this village by Sri Ram Yatan Mishra.	1984	First Motorbike was purchased by Sri Ram Jatan.
1990	Village was Electrified.	1990	First Tractor was purchased by Sri Onkar Nath Mishra.
2000	First Tube well was installed.	1999	First Tube well was installed.
Village Chhapar		**Village Kaundi**	
Year	**Activity**	**Year**	**Activity**
1568	Village was established, At a distance 56 Km. from Allahabad Nari Bari Koraon Road.	1550	Village was established, At a distance 52 Km. from Allahabad Nari Bari Koraon Road.
1995	Construction of First Road.	1972	First Radio was purchased by Sri Amarjeet Singh.
1980	First Radio was purchased in the village by Sri Ganga Deen.	1985	First Television was purchased by Sri Daljeet Singh.
1985	First Television was purchased in this village by Avadhesh Prasad.	1977	First Motorbike was purchased by Sri Dr. Ranjit Singh
1970	First Motorbike was purchased in this village by Sri Ram Prasad SIngh.	1982	First Tractor was purchased by Ram Kripal Singh.
1965	First Tractor was purchased in this village by Sri Mariraj Singh.	1970	Village was Electrified.
1980	First Tube well was installed by Sri Ram Kripal Singh.		First road was constructed.
Village Kalyanpur		**Village Kharkakhas**	
Year	**Activity**	**Year**	**Activity**
1528	Village was established. At a distance 70 Km. from Allahabad Nari Bari Koraon Road	1428	Village was established, At a distance 56 Km. from Allahabad Nari Bari Koraon Road

2005	Construction of First Road.		
1973	First Radio was purchased in the village by	1980	First Radio was purchased by Ramu.
1980	Vishwanath.	1993	First Television was purchased by Harishankar.
	First Television was purchased in this village by		
1987	Sri Mukutdhari.	1993	First Tractor was purchased by Banni Pathak.
	First Motorbike was purchased in this village by	1992	Village was Electrified.
1975	Sri Lovkesh Patel.		
	First Tractor was purchased in this village by	1994	First road was constructed.
2004	Sri Heera Lal.		
	Village was Electrified.		

Village Taungakala		**Village Jorwat**	
Year	**Activity**	**Year**	**Activity**
1750	Village was established, At a distance 55 Km. from Allahabad Nari Bari Koraon Road.	1457	Village was established, At a distance 55 Km. from Allahabad Nari Bari Koraon Road.
1972	Construction of First Road.	1985	First Radio was purchased.
1985	First Television was purchased by Badri Prasad	1993	First Television was purchased by Amrit Lal.
1962	Shukla.	1996	First Tractor was purchased by Babbu Mishra
	First Tractor was purchased by Krishna Kumar.	1972	Village was Electrified.
1966		1955	First road was constructed.
	Village was Electrified.		

Village Mahulikhurd	
Year	**Activity**
1610	Village was established, At a distance 53 Km. from Allahabad Nari Bari Koraon Road.
	Construction of First Road.
1968	First Radio was purchased in the village by Late. Ram Naresh Yadav.
1980	First Television was purchased in this village by Late. Ram Naresh Yadav.

1986 1966 1972	First Tractor was purchased in this village by Suryabhan Singh. Village was Electrified.

SEASONAL ANALYSIS

Seasonal analysis has done with the help of farmers about rainfall patterns, cultivated crops, employment, income, availability of fuel, fodder, migration, transport and health hazards, etc. with respect to seasonal variation in a year which is shown as below:

Month Item	January	February	March	April	May	June	July	August	September	October	November	December
Festivals			Holi	Baisakhi			Rakshabandhan			Dashara	Diwali	Guru Parv
Sowing crops/ harvesting			Mustard			Maize, Paddy, Arhar				Wheat		
				Wheat, Arhar					Maize, Paddy			
Disease	Cough & Cold					Gastro Intestinal/ Loose-motion.			Fever			
Purchase/ Expending					☺☺☺☺☺						☺☺☺☺☺☺☺☺☺☺	

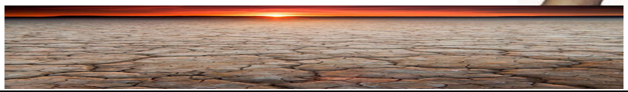
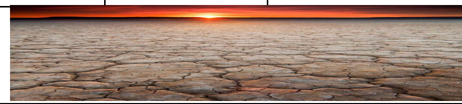
Rains							''					
Fodder Scarcity												
Fuel/ wood scarcity												
Loaning period (required)												
Marriage Period												
Drinking Water Scarcity												
Irrigation Water Scarcity												

Plate 1 Village Meeting and motivation to Women's for formation of SHG to generate source of Livelihood

Plate 2 Village Meeting and Focused Group discussing for on farm development activity.

Plate 3 Village Meeting and Focused Group discussion for village development activity.

Plate 4 Village Meeting and Focused Group discussing for EPA activity and need based prioritization of development works.

ग्राम पंचायत / ग्राम सभा से विस्तृत परियोजना रिपोर्ट के अनुमोदन हेतु प्रारूप

क्र० सं०	ग्राम पंचायत का नाम	ग्राम प्रधान का नाम	हस्ताक्षर
1	2	3	4
1	टौंगा कला	श्री राघवेन्द्र मिश्र	राघवेन्द्र कुमार मिश्र
2	टौंगा खुर्द	श्री राघवेन्द्र मिश्र	राघवेन्द्र कुमार मिश्र
3	मदुली खुर्द	श्री राघवेन्द्र मिश्र	राघवेन्द्र कुमार मिश्र
4	खरका खास	श्री महेश प्रताप सिंह	
5	मैरवी	श्री देवेन्द्र प्रताप सिंह	देवेन्द्र
6	गरगटा	श्री रघुवंश मणि	
7	छापर	श्री रघुवंश मणि	रघुवंश मणि
8	मोजरा मिश्रा	श्री रघुवंश मणि	
9	बसगढ़ी	श्री नारायणदास तिवारी	रघुवंश मणि
10	ऊंचगाव	श्री रघुवंश मणि	
11	पालकपुर	श्रीमती गुलाबकली	गुलाबकली
12	पड़िया	श्री रघुवंश मणि	
13	डिहीपटका	श्री नारायणदास तिवारी	नारायण
14	नदौरा	श्री नारायणदास तिवारी	

1	2	3	4
14	निदौरा		
15	खीरी	श्री रामलाल	
16	खपटिहा	सरोज कुमारी	सरोज कुमारी
17	डिहार		
18	पूरेदत्तू	शिव प्रसाद मिश्रा	
19	ववील	श्रीमती मुनिया देवी	मुनिया देवी
20	रतेहरा	—	
21	जोरवट	श्रीमती गुलाबकली	
22	कल्यानपुर	शान्तिचन्द्र तिवारी	शान्तिचन्द्र तिवारी
23	मोगरा	—	
24	वहेरवा	दयाशंकर	दयाशंकर
25	खैरिहा		
26	शीरा		
27	लोहरा		

CHAPTER – 4

INSTITUTIONAL BUILDING &

PROJECT MANAGEMENT

4.1. INTRODUCTION

The Project Implementing Agencies (PIA) is selected by an appropriate mechanism by Land Development and Water Resource Department, Uttar Pradesh, the State Level Nodal Agency (SLNA) for Integrated Watershed Management Programme (IWMP) in Uttar Pradesh. The PIAs are responsible for implementation of watershed project. These PIAs may include relevant line departments, autonomous organizations under State/ Central Governments, Government Institutes/ Research bodies, Intermediate Panchayats, Voluntary Organizations (VOs). The PIA for Tons watershed is District watershed development Unit (DWDU), Allahabad.

4.2 ABOUT LAND DEVELOPMENT AND WATER RESOURCE DEPARTMENT UNIT (LDWRD), ALLAHABAD

The District Watershed Development Unit (DWDU) is a district level nodal agency and was established for smooth implementation of watershed projects in the district. The District Development Officer (DDO) is the chairman of the DWDU. The DWDU has dedicated and experienced staff comprising one Project Manager, a technical expert and a multidisciplinary team of agriculture expert, community mobilization expert and Data Entry Operator, civil engineer, MIS coordinator, system analyst, surveyor, and accountant. The objectives of the DWDU, Allahabad are supervising, planning, implementing, documenting and promoting watershed development projects and related developmental activities in the district as per guidelines. The DWDU, Allahabad also works as a PIA for some IWMP projects.

4.3 Project Implementing Agency (PIA)

The SLNA would evolve appropriate mechanisms for selecting and approving the PIAs, who would be responsible for implementation of watershed projects in different. These PIAs may include relevant line departments. Autonomous organizations under State/Central Governments, Government Institutes/Research bodies, intermediate Panchayats, Voluntary Organizations (VOS). However, the following criteria may be observed in the selection of these PIAs:

1. They should preferably have prior experience in watershed related aspects or management of watershed development project.
2. They should be prepared to constitute dedicated Watershed Development Teams.

Table 4.1 Details of PIA

S. No.	Names of project	Details of PIA	
1	Tons Watershed	1. Date of Selection of PIA	Letter No. 796(1) 54-1-10/20087c/ Date: 28-10-2010
		2. Type of organization	District Level Nodal Agency
		3. Name of organization	Department of Land Development and Water Resource
		4. Designation & Address	Bhoomi Sanrakshan Adhikari, DLDWR, Allahabad
		5. Telephone	0532-2250334
		6. Fax	-
		7. E-mail	Bsaldwrah-up@nic.in

Selected PIAs will sign a contract/MOU with the concerned DWSUs/District Level Committee as referred in para 29 that will spell out well-defined annual outcomes, against which the performance of each PIA will be monitored each year and evaluated on a regular basis by institutional evaluators from a panel approved by the SLNA/Departmental Nodal Agency at the central level. Each PIA must put in position a dedicated watershed development team (WDT) with the approval of DWDU. The WDT will be hired on contract/deputation. Transfer etc for a term not exceeding the project period. The composition of the WDT will indicate in the contract/MOU. No programme funds for DPR and watershed works under any circumstances should be released to either the PIA or Watershed Committee (WC) unless the composition of the WDT has been clearly indicated in the MOU/contract and the team members are fully in place.

Table 4.2 Staff at PIA Level

S. No.	Name	Designation	Qualification	Experience (Year)
1	Sri Rajendra Singh	BSA	Intermediate Diploma in Ag. Engg.	31
2	Sri Manoj Kumar Singh	Jr. Engg.	High School, Diploma Ag. Engg	29
3	Sri Vinay Kumar Maurya	Jr. Engg.	Intermediate, Diploma Ag. Engg	27
4	Sri Kuldeep Narain Srivastava	Jr. Engg.	Intermediate, Diploma Ag. Engg	25
5	Sri Dinesh Kumar Vajpai	Accountant	M.Com., B.Ed	24
6	Sri Narendra Kumar Yadav	Accountant	M.Com., C.S., C.A.(inter)	26
7	Sri Haridas	Sr. clerk	B.A.	29
8	Sri Suryabhan Singh Tomar	Draftt Man	Intermediate, Diploma in Draft man	30
9	Sri C.B. Singh	Draftt Man	B.Com	30
10	Sri Rameshwar Singh	Tracer	B.A.	32
11	Sri R. B. Yadav	Jr.Clerk	Intermediate	20

12	Smt. Pushaplata Singh	Jr.Clerk	Intermediate	24
13	Smt. Anita	Munsi	B.A.	20
14	Sri Shitala Prasad Pandey	Munsi	Intermediate	32
15	Sri Radheshyam Verma	A.S.C.I.	Intermediate	32
16	Sri Santosh Kumar	A.S.C.I.	M.Sc.(Ag) Agronomy	07
17	Sri Shushil Kumar	A.S.C.I.	M.Sc. Ag Soil Conservation	07
18	Sri Ashok Kumar Singh	Work Incharge	B.com	21
19	Sri Dilip Kumar Sharma	Work Incharge	Intermediate	20
20	Sri Ram Kumar Dixit	Work Incharge	Intermediate	24
21	Sri Harishankar Singh	Work Incharge	Intermediate	24
22	Sri Yogendra Kumar Tiwari	Work Incharge	Intermediate	25
23	Sri Shivbaran Yadav	Jiledar	Intermediate	29
24	Sri AnilKumar Singh	Seench Pal	Intermediate	21
25	Sri Bhupendra Tripathi	Seench Pal	Intermediate	25
26	Sri Mukul Srivastava	Seench Pal	B.Com.	20
27	Sri Dayashankar Mishra	Seench Pal	Intermediate	25
28	Mohd. Ahamad	Seench Pal	Intermediate	21
29	Sri Ramakant Yadav	IV Class	High School	26
30	Sri Baratilal Upadhyay	IV Class	Jr.High School	29
31	Sri Purshottam	IV Class	Educated	29
32	Sri Bharat Prasad Gupta	IV Class	Educated	31
33	Smt. Leelawati	IV Class	Intermediate	30
34	Smt. Kalawati	IV Class	Educated	30

Roles and Responsibilities of the PIA

The project implementing Agency (PIA) will provide necessary technical guidance to the Gram Panchayat for preparation of development plans for the watershed through Participatory Rural Appraisal (PRA) exercise; undertake community organization and training for the village communities, supervise watershed development activities, inspect and authenticate project accounts, encourage adoption of low cost technologies and build upon indigenous technical knowledge, monitor and review the overall project implementation and set up institutional arrangements for post-project operation and maintenance and further development of the assets created during the project period.

The PIA, after careful scrutiny, shall submit the action plan for watershed development project for approval of the DWDU/DRDA and other arrangements. The PIA shall submit the periodical progress report to DWDU. The PIA shall also arrange physical, financial and social audit of the work undertaken. It will facilitate the mobilization of additional financial resource from other government programmes, such as NREGA, BRGF, SGRY, National Horticulture Mission, Tribal, Welfare Schemes, Artificial Ground Water Recharging, Greening India, etc.

4.4 WATERSHED DEVELOPMENT TEAM

The WDT is an integral part of the PIA and will be set up by the PIA, Each WDT should have at least four members, broadly with knowledge and experience in agriculture, soil science, water management, social mobilization and institutional building. At least one of the WDT members should be a woman. The WDT members should preferable have a professional degree. However, the qualification can be relaxed by the DWDU with the approval of SNLA in deserving cases keeping in view the practical field experience of the candidate. The WDT should be located as close as possible to the watershed project. At the same time, it must be ensured that the WDT should function in close collaboration with the team of experts at the district and

state level. The expenses towards the salaries of the WDT members shall be charged from the administrative support to the PIA.

DWDU will facilitate the training of the WDT members.

Table 4.3 Details of Watershed Development Team in the Project Area

S. No.	Name of the WDT member	Male/Female	Role / Function	Qualification /Experience
1.	Sri Ram Briksh Seth	M	Soil & Water Management	Ag. Diploma, Retd. Soil Science Inspector 38yrs exp.
2	Mrs. Archana Singh	F	Community Mobilization	M.A. Social Science
3	Sri Santos Kumar Dohre	M	Agriculture	M. Sc. Agriculture
4	Sri Manoj Kumar Singh	M	Soil & Water Management	Agricultural Engineering Diploma
5	Sri Kuldeep Naraian	M	Soil & Water Management	Agricultural Engineering Diploma
6	Sri Vinay Kumar Mourya	M	Soil & Water Management	Agricultural Engineering Diploma
7	Sri Sushil Kumar	M	Horticulture	M.Sc. Ag
8	Sri Radhye Shyam Verma	M	Agriculture	Ag. Diploma/ 34years exp.
9	Sri Ashok Kumar singh	M	Soil Conservation	B.Com/ 10yrs exp.
10	Sri Gayanendra Kumar Saroj	M	Food Processing	M. Sc. Food Technology

a. Roles and Responsibilities of WDT

The WDT will guide the watershed committee (WC) in the formulation of the watershed action plan. An indicative list of the roles and responsibilities of the WDT would include among other s, the following.

a. Assist Gram Panchayat /Gram Sabha in constitution of the watershed committee and their functioning.
b. Organizing and nurturing User Groups and Self-Help Groups.
c. Mobilizing women to ensure that the perspectives and interests of women are adequately related in the watershed action plan.
d. Conducting the participatory base –line surveys, training and capacity building.
e. Preparing detailed resource development plans including water and soil conservation or redemption etc. to promote sustainable livelihood at household level.
f. Common property resource management and equitable sharing.
g. Preparing Detailed Project Report (DPR) for the consideration of Gram Sabha.
h. Undertake engineering surveys, prepare engineering drawing and cost estimates for any structure to be built.
i. Monitoring, checking, accessing, and undertaking physical verification and measurement of work done.
j. Facilitating the development of livelihood opportunities for the landless.
k. Maintaining project accounts.
l. Arranging physical, financial and social audit of the work undertaken.
m. Setting up suitable arrangements for post-project operation, maintenance and future development of the assets created during the project period.

i) Watershed Committee (WC)

It is a committee that is constituted by Gram Sabha to implement the watershed project with technical support of WDT in the village. This committee is registered under society Registration Act 1860. The Gram Sabha of the village selects the chairman of the watershed committee with the secretary who will be a paid functionary. A watershed Committee was formed accordingly in Project village. Since the watershed has only one village so no separate watershed sub-committee was formed in the village. Capacity building training to the watershed committee is given by WDT.

The watershed committee has a pivotal role to play during and after the project implementation period.

Table 4.4 Details of Watershed Committee

Sl. No.	Name of Gram Sabha/ GP	Date of Constitution/ Registration as a Society (dd/mm/ yyyy)	Designation	Name	M/F	SC	ST	OBC/ GEN	SF	LF	Land-less	UG	SHG	WDT	Function(s) Assigned
1	Taungakala	06-01-2010	President	Sashi Kala	F	√	-	-	-	-	-	-	-	-	Implementation of Watershed programme under the supervision of PIA (as per common guide lines)
			Secretary	Phool Chandra	M	-	-	√	-	-	-	√	-	-	
			Member	Ram Swaroop	M	-	-	√	-	-	-	√	-	-	
			Member	Hari Lal	M	√	-	-	-	-	-	-	√	-	
			Member	Dhanraji Devi	F	-	-	√	-	-	-	√	-	-	
			Member	Chhavi Lal	M	√	-	-	-	-	-	-	-	-	
			Member	Manish Mishra	M	-	-	√	-	-	-	√	√	-	
			Member	Hari Lal	M	√	-	-	√	-	-	-	-	-	
			Member	Ashok Kumar Singh	M	√	-	-	-	-	-	√	-	√	
			Member	Arendra Kumar	M	√	-	-	-	-	√		-	-	
			Member	Vindeshwari Prasad	M	-	-	√	√	-	-	√	-	-	

			Member	Jawaharlal	M	-	-	√	√	-	-	-	-	-	
2	Khapatiha	06-02-2010	President	Prem Kali	F	√	-	-	-	-	-	-	-	-	Implementation of Watershed programme under the supervision of PIA (as per common guide lines)
			Secretary	Lavlesh	M	√	-	-	-	-	-	-	-	-	
			Member	Ram Murat	M	√	-	-	-	-	-	√	-	-	
			Member	Savita Devi W/O Laxmi Kant	F	-	-	√	-	-	-	-	√	-	
			Member	Sant Lal	M	-	-	√	-	-	-	√	-	-	
			Member	Rajit Ram	M	-	-	√	-	-	-	-	-	-	
			Member	Ram Pratap	M	√	-	-	-	-	-	-	√	-	
			Member	Bhandari Lal	M	√	-	-	-	-	-	√	-	-	
			Member	Anju Devi	F	√	-	-	-	-	-	-	-	-	
			Member	Sunita	F	√	-	-	-	-	-	√	-	-	
			Member	Radhe Shyam Verma	M	-	-	√	-	-	-	√	-	√	
			Member	Pawan Kumar	M	-	-	√	-	-	√	-	-	-	
3	Khiri	06-02-2010	President	Sharda Prasad Kesarwani	F	√	-	-	-	-	-	-	-	-	Implementation of Watershed programme under the supervision of PIA (as per common guide lines)
			Secretary	Geeta Devi	M	√	-	-	-	-	-	-	-	-	
			Member	Siraj Ahmad	M	-	-	√	-	-	-	√	-	-	
			Member	Radhe Shyam Verma	M	-	-	√	-	-	-	-	-	√	
			Member	Kedar Nath	M	-	-	√	-	-	-	√	-	-	
			Member	Shiv Prasad	M	-	-	√	-	-	-	√	-	-	
			Member	Chandra Mani	F	√	-	-	-	-	-	-	√	-	
			Member	Sant Lal	M	-	-	√	-	-	-	√	-	-	
			Member	Anju Devi	F	√	-	-	-	-	-	-	√	-	
			Member	Prem Shankar	F	√	-	-	-	-	-	-	-	-	
			Member	Molai	M	√	-	-	-	-	√	-	-	-	
4	Jorwat	06-03-2010	President	Brijesh Shukla	F	-	-	√	-	-	-	-	-	-	Implementation of Watershed programme under the supervision of
			Secretary	Shailendra Shukla	M	-	-	√	-	-	-	-	-	-	
			Member	Triloki Nath	M	√	-	-	-	-	-	√	-	-	

			Member	Angad Prasad	M	-	-	√	-	-	-	-	√	-	PIA (as per common guide lines)
			Member	Vishwa Nath	M	-	-	√	-	-	-	√	-	-	
			Member	Shyam Lal	M	-	-	√	-	-	-	-	-	-	
			Member	Reshma Devi	F	-	-	√	-	-	-	√	√	-	
			Member	Ashok Kumar Singh	M	√	-	√	-	-	-	-	√	-	
			Member	Anar Kali	F	-	-	-	-	-	-	√	-	-	
			Member	Radhe Shyam Verma	M	-	-	√	-	-	-	-	-	√	
			Member	Moti Lal	F	√	-	-	-	-	-	-	-	-	
			Member	Ram Deen	M	√	-	-	-	-	√	-	-	-	
5	Mahuli Kala	31/05/2010	President	Rahamunia	F	√	-	-	-	-	-	-	-	-	Implementation of Watershed programme under the supervision of PIA (as per common guide lines)
			Secretary	Ramesh Kumar	M	-	-	√	-	-	-	-	-	-	
			Member	Triveni Prasad	M	-	-	√	-	-	-	√	-	-	
			Member	Kripa Shankar	F	√	-	-	-	-	-	-	√	-	
			Member	Saroj W/O Triveni Prasad	F	-	-	√	-	-	-	√	-	-	
			Member	Suhsil Kumar	M	√	-	-	-	-	-	-	√	√	
			Member	Ram Jiyawan	M	-	-	√	-	-	-	√	-	-	
			Member	Dhanraji	F	-	-	√					√	-	
			Member	Hinchh Lal	F	√	-	-	-	-	-	-	-	-	
			Member	Ramayan Prasad	M	-	-	√	-	-	√	-	-	-	
6	Bahraicha	06-05-2010	President	Daya Shankar	F	√	-	-	-	-	-	-	-	-	Implementation of Watershed programme under the supervision of PIA (as per common guide lines)
			Secretary	Tej Pratap Singh	M	√	-	-	-	-	-	-	-	-	
			Member	Radhe Shyam	M	√	-	-	-	-	-	√	-	-	
			Member	Kedar	F	-	-	√	-	-	-	-	√	-	
			Member	Ram Kali W/O Ram Siya	F	-	-	√	-	-	-	√	-	-	
			Member	Devmuni	M	-	-	√	-	-	-		√	-	
			Member	Ram Adhar	M	-	-	√	-	-	-	√	-	-	

			Member	Kamla Kant	M	-	-	√	-	-	-		-	-	
			Member	Ashok Kumar Singh	M	-	-	√	-	-	-	√	-	√	
			Member	Sudama	F	√	-	-	-	-	-	-	-		
			Member	Mool Chandra	M	-	-	√	-	-	√	-	-	-	
7	Baghol	06-06-2010	President	Rahamunia	F	-	-	√	-	-	-	-	-	-	Implementation of Watershed programme under the supervision of PIA (as per common guide lines)
			Secretary	Ramesh Kumar Singh	M	-	-	√	-	-	-	-	-	-	
			Member	Laxmi Prasad	M	√	-	-	-	-	-	√	-	-	
			Member	Ram Prasad	F	√	-	-	-	-	-	-	√	-	
			Member	Phool Kali W/O Ramesh Kumar	F	√	-	-	-	-	-	√	-	-	
			Member	Ganga Jali W/O Rajit Ram	F	√	-	-	-	-	-	√	-	-	
			Member	Ashok Kumar Singh	M	-	-	√	-	-	-	√		√	
			Member	Sahesram	M	√	-	-	-	-	-	√		-	
			Member	Nathai	M	√	-	√	-	-	-	-	√	-	
			Member	Baijnath	M	√	-	-	-	-	-	-		-	
			Member	Daya Shankar	M	-	-	√	-	-	√	-	-	-	
8	Chhapar	06-02-2010	President	Raghuvansh Mani	F	√	-	-	-	-	-	-	-	-	Implementation of Watershed programme under the supervision of PIA (as per common guide lines)
			Secretary	Sambhu Nath	M	-	-	√	-	-	-	-	-	-	
			Member	Pramod Kumar	M	-	-	√	-	-	-	√	-	-	
			Member	Rakesh	F	√	-	-	-	-	-	-	√	-	
			Member	Shushil Kumar	M	√	-	-	-	-	-	√		√	
			Member	Hanuman Prasad	M	-	-	√	-	-	-	-	√	-	
			Member	Chandrika Prasad	M	√	-	-	-	-	-	√	-	-	
			Member	Suresh chandra	M	√	-	-	-	-	-	-	-	-	
			Member	Sirmana	F	-	-	√	-	-	-	√	-	-	
			Member	Ram Sagar	F	√	-	-	-	-	-	√	-	-	

			Member	Hanuman Prasad	M	-	-	√	-	-	√	-	-	-	
9	Basgadhi	06-04-2010	President	Shiv Mani Devi	F	√	-	-	-	-	-	-	-	-	Implementation of Watershed programme under the supervision of PIA (as per common guide lines)
			Secretary	Laxmi Prasad	M	√	-	-	-	-	-	-	-	-	
			Member	Ram Karan	M	√	-	-	-	-	-	√	-	-	
			Member	Jagjahir	F	-	-	√	-	-	-	-	√	-	
			Member	Radhe Shyam	M	√	-	-	-	-	-	√		-	
			Member	Ram Bahore	M	√	-	-	-	-	-	-	√	-	
			Member	Gokul Prasad	M	√	-	-	-	-	-	-	-	-	
			Member	Shushil Kumar	M	√	-	-	-	-	-	√		√	
			Member	Gulli Devi	F	-	-	√	-	-	-	-	-	-	
			Member	Maiku	F	√	-	-	-	-	-	√	-	-	
			Member	Sitaram	M	-	-	√	-	-	√	-	-	-	
10	Kharka	08-06-2010	President	Jamuna Prasad	F	√	-	-	-	-	-	-	√	-	Implementation of Watershed programme under the supervision of PIA (as per common guide lines)
			Secretary	Mangla Prasad	M	√	-	-	-	-	-	-	-	-	
			Member	Rajendra Prasad	M	√	-	-	-	-	-	√	-	-	
			Member	Harish Chandra	M	√	-	-	-	-	-	-	√	-	
			Member	Heera lal	M		-	√	-	-	-	√	-	-	
			Member	Jagananath	M	√	-	-	-	-	-		-	-	
			Member	Devi Prasad	M	√	-	-	-	-	-	√	-	-	
			Member	Ram Kumari	F	-	-	-	-	-	-	√	-	-	
			Member	Radhe Shyam Verma	M	-	-	√	-	-	-	-	-	√	
			Member	Jagai	F	√	-	-	-	-	-	-	-	-	
			Member	Bhumiheen Bhola	M	-	-	-	-	-	√	-	-	-	
10	Lohra	06-12-2010	President	Hansraj	F	√	-	-	-	-	-	-	-	-	Implementation of Watershed programme under the supervision of PIA (as per common guide lines)
			Secretary	Ramesh	M	√	-	-	-	-	-	-	-	-	
			Member	Ayodhya Prasad	M	-	-	√	-	-	-	√	-	-	
			Member	Shiv Mohan	F	√	-	-	-	-	-	-	√	-	
			Member	Dhadhai Devi	F	-	-	√	-	-	-	√	-	-	

			Member	Ayodhya Pal	M	-	-	√	-	-	-		√	-	
			Member	Jagananath	M	√	-	-	-	-	-	√	-	-	
			Member	Shushil Kumar	M	√	-	-	-	-	-	√	-	√	
			Member	Indra Mani	M	√	-	-	-	-	-	-	-	-	
			Member	Goli	F	√	-	-	-	-	-	√	-	-	
			Member	Arvind Kumar	M	-	-	√	-	-	√	-	-	-	
11	Pura Dattu	06-03-2010	President	Saroj Devi	F	√	-	-	-	-	-	√	-	-	Implementation of Watershed programme under the supervision of PIA (as per common guide lines)
			Secretary	Lavkush Kumar	M	√	-	-	-	-	-	-	√	-	
			Member	Rama Kant	M	√	-	-	-	-	-	√	-	-	
			Member	Indra Wati	F	-	-	√	-	-	-	-	√	-	
			Member	Shiv Mohan	F	√	-	-	-	-	-	√	-	-	
			Member	Ram Rati	F	√	-	-	-	-	-	-	-	-	
			Member	Vishwa Nath Prasad	M	-	-	√	-	-	-	-	-	-	
			Member	Shitla Prasad	M	√	-	-	-	-	-	√	-	-	
			Member	Braj Lal	M	-	-	-	-	-	√	-	-	-	
			Member	Radhe Shyam Verma	M	-	-	√	-	-	-	-	-	√	
			Member	Durga	-	√	-	-	-	-	-	-	-	-	
12	Kaundi	06-09-2010	President	Santosh Kumar	F	-	-	√	-	-	-	√	-	-	Implementation of Watershed programme under the supervision of PIA (as per common guide lines)
			Secretary	Sangam Lal	M	√	-	-	-	-	-	-	√	-	
			Member	Shyam Kali	M	√	-	-	-	-	-	√	-	-	
			Member	Raja Ram	F	√	-	-	-	-	-	-	√	-	
			Member	Rekha Singh	F	√	-	-	-	-	-	-	-	-	
			Member	Raja Ram Singh	M		-	√	-	-	-	√	-	-	
			Member	Devi Prasad	M	√	-	-	-	-	-	-	√		
			Member	Ashok Kumar Singh	M		-	√	-	-	-	-	-	-	
			Member	Chhote Lal	M	√	-	-	-	-	-	√	-	-	
			Member	Shushil Kumar	M	√	-	-	-	-	-	-	-	√	
			Member	Hari Lal;	F	√	-	-	-	-	-	-	-	-	
			Member	Tarun Pal	M	-	-	√	-	-	√	-	-	-	

ii)Self Help Group

Self Help Groups are motivated, small homogenous groups organized together through credit and thrift activities. Self help group initiative especially for women help uplift their livelihood. Generally self help groups include landless and poor women. Before formation of the SHGs, during PRA activities, Focussed Group Discussions (FGDs) were held with the women, which came up with the following observations:

a) Lack of proper credit facilities due to low intervention of formal financial credit institution.

b) Excessive exploitation of weaker section by money lenders

c) Lack of attitude for saving among poor people

d) Lack of knowledge on credit and thrift activity and banking.

Table 3.5 Details of Self Help Groups

Sr. No.	Name of village	Name of group	Date of constitution	Name of Adhyaksh	Name of Sachiv	Total No. of Members				Name of Bank and Address Account No. & Date	Up to date Saving Rs.	Group activities
						Women	Sc/St	Other	Total			
1	Baghol	BamBhole SHG	12.06.2010	Sri Ram Sajivan S/O Nankau	Sri Manik Lal		10		10			Dairy Work
2	Baghol	Jai Bajrang Bali SHG	10.06.2010	Phool Kali	Smt Suneeta	10			10			Goat Keeping
3	Baghol	Bol Bam SHG	24.07.2010	Khushai	Brij Mangal				10			General Merchant
4	Baghol	Shankar SHG	18.06.2010	Kanhaiya Lal S/O Shyam Lal Kole	Mahendra S/O Ram Dev				8			Hen Keeping
	Baghol	Under Progress				3	5	2	10			Dairy Work

	Baghol	Under Progress					6	4	10			Goat Keeping
	Baghol	Under Progress				2	5	4	11			General Merchant
	Baghol	Under Progress					7	4	11			Hen Keeping
	Baghol	Under Progress					6	4	10			Dairy Work
	Baghol	Under Progress				7	4		11			Goat Keeping
	Baghol	Under Progress					6	5				General Merchant
	Baghol	Under Progress					7	3	10			Hen Keeping
5	Bahraicha	Jai Bajrang Bali SHG	12.06.2010	Sheetla Prasad	Ram prasad	10			10			Dairy Work
6	Bahraicha	Bol Bam SHG	10.06.2010	Khothai S/O Mangal	Sri Brij Mangal S/O Ladar				10			Dairy Work
7	Bahraicha	Jai Hanuman	24.07.2010	Raj Kali W/O Ram Chandra	Suman Devi W/O Tel Pratap	8	3		11			Goat Keeping
	Bahraicha	Under Progress				3	5	3	11			Dairy Work
	Bahraicha	Under Progress					7	4	11			Goat Keeping
	Bahraicha	Under Progress				3	6	2	11			General Merchant
	Bahraicha	Under Progress				2	7	3	12			Hen Keeping
	Bahraicha	Under Progress				3	5	3	11			Dairy Work
	Bahraicha	Under Progress				1	6	4	11			Goat Keeping
	Bahraicha	Under Progress					7	3	10			General Merchant
8	Nidaura	Jan Chetna SHG	18.06.2010	Mulai Ram	Genda Lal		12		12			Hen Keeping
	Nidaura	Under Progress				3	7	2	12			Dairy Work
	Nidaura	Under Progress				2	5	5	12			Goat Keeping
	Nidaura	Under Progress					7	5	12			General Merchant
	Nidaura	Under Progress				2	7	3	12			Hen Keeping
	Nidaura	Under Progress					7	4	11			General Merchant
	Nidaura	Under Progress				1	8	3	12			Hen Keeping

9	Chhapar	Jai Mata Di SHG	12.06.2010	Lal Bahadur	Rajesh Kumar		11		12			General Merchant
10	Chhapar	Mahila Swayam SHG	10.06.2010	Smt. Meena W/O Buddh Sen	Smt. Prabhawati W/O Indra Lal		11		11			Goat Keeping
	Chhapar	Under Progress					6	5	11			Dairy Work
	Chhapar	Under Progress				3	7	1	11			Goat Keeping
	Chhapar	Under Progress				1	6	4	11			General Merchant
	Chhapar	Under Progress				2	7	2	11			Hen Keeping
	Chhapar	Under Progress					8	4	12			General Merchant
	Chhapar	Under Progress				1	8	3	12			Hen Keeping
11	Khiri	Vindhyavasini SHG	24.07.2010	Indra Mani	Chandra Mani			9	9			General Merchant
12	Khiri	Phool Mati Swayam SHG	18.06.2010	Shakuntala W/O Dash Raj	Sunita W/O Chhedi Lal	12	7	5	12			Goat Keeping
	Khiri	Under Progress				3	7	12	12			General Merchant
	Khiri	Under Progress				2	6	3	11			Hen Keeping
	Khiri	Under Progress				4	6	2	12			General Merchant
	Khiri	Under Progress				1	8	3	12			Hen Keeping
	Khiri	Under Progress				2	6	4	12			Goat Keeping
13	Khapatiha	Subhan Devi Swayama SHG	12.06.2010	Saroj Kumari W/O Kamta Prasad	Savita Devi W/O Laxmi Kant	10	7	3	10			Goat Keeping
	Khapatiha	Under Progress				3	5	3	11			General Merchant
	Khapatiha	Under Progress					7	4	11			Hen Keeping
	Khapatiha	Under Progress				1	6	4	11			General Merchant
	Khapatiha	Under Progress				1	7	3	11			Hen Keeping
	Khapatiha	Under Progress					6	4	10			General Merchant

	Khapatiha	Under Progress				3	5	3	11			Hen Keeping
	Khapatiha	Under Progress					7	4	11			General Merchant
14	Jorwat	Sangam Swayam SHG	10.06.2010	Devi Prasad S/O Kamta Prasad	Ramesah Chandra S/O Tribhuwan Nath		2	9	11			Dairy Work
15	Jorwat	Tiwari SHG	24.07.2010	Anar Kali W/O Raj Bahadur	Tribhuvan Singh S/O Kanhaiya Lal	2	2	6	10			Dairy Work
	Jorwat	Under Progress				1	5	6	12			Tent House
	Jorwat	Under Progress					7	4	11			Carpentary
	Jorwat	Under Progress				2	5	4	11			Tailoring
	Jorwat	Under Progress					7	3	10			Fruit Processing
	Jorwat	Under Progress				3	5	2	10			Vermi Compost
	Jorwat	Under Progress					7	4	11			Poultry
16	Pathak Pur	Pragati Sheel SHG	18.06.2010	Ram Khilawan S/O Videshi	Kishan Lal S/O Shyam Lal		10		10			Goat Keeping
17	Pathak Pur	Mahamayi SHG	12.06.2010	Shanti Devi W/O Mohan Lal	Ram Kali W/O Bhagauti Lal	10	10		10	Baroda Regioanl Co. Bank Kheri A/c 52710100 009548	Rs.3000 /-	Goat Keeping
18	Pathak Pur	Jai Durga SHG	10.06.2010	Dirha W/O Ramesh	Shiv Kali W/O Ram Khilawan	11	11		11			Dairy Work
19	Pathak Pur	Mahamai	24.07.2010	Mamta W/O Lal Ji	Muniya Devi W/O Tulsi Prasad	11	11		11			Fish Keeping
	Pathak Pur	Under Progress				2	7	2	11			Poultry
	Pathak Pur	Under Progress					7	4	11			Carpentary
	Pathak Pur	Under Progress				3	5	3	11			Rope making
	Pathak Pur	Under Progress					8	3	11			Mini Dal Mill
	Pathak Pur	Under Progress				1	6	5	12			Mini Flour Mil
	Pathak Pur	Under Progress					7	5	12			Black Smith
	Pathak Pur	Under Progress					7	4	11			Dairy Work

20	Kaundi	Dr. V.R.SHG	18.06.2010	Dev Muni S/O Ram Saran	Munna Lal S/O Pairanu		10		10			Dairy Work
21	Kaundi	Laxmi	12.06.2010	Shyam Kali W/O Tarun Kumar	Sita Devi W/O Shankar Lal	13	13		13			Goat Keeping
	Kaundi	Under Progress				2	8	3	13			Dairy Work
	Kaundi	Under Progress				1	7	5	13			Goat Keeping
	Kaundi	Under Progress					11	2	13			Goat Keeping
	Kaundi	Under Progress				4	7	2	13			General Merchant
	Kaundi	Under Progress					10	3	13			Tailoring
	Kaundi	Under Progress				2	9	2	13			Carpentary
22	Unchagaon	Kaveri SHG	10.06.2010	Ram Pati S/O Deen Dayal	Dharmendra Kumar S/O Raghuvanshmani	10	8	2	10			Dairy Work
23	Unchagaon	Jai Maa Laxmi	24.07.2010	Om Prakash S/O Mangal Singh	Krishna Kumar S/O Sudama Singh			10	10			Tent House
	Unchagaon	Under Progress				3	5	2	10			Goat Keeping
	Unchagaon	Under Progress					7	3	10			Mini Dal Mill
	Unchagaon	Under Progress				1	6	3	10			Fruit Processing
	Unchagaon	Under Progress					6	4	10			Poultry
	Unchagaon	Under Progress				1	6	4	11			Carpentary
	Unchagaon	Under Progress					7	4	11			Goat Keeping
24	Taunga Khurd	Mahamaya SHG	18.06.2010	Vimla Devi W/O Hari Lal	Phool Kali W/O Chandra Vijay	11		11	11			Goat Keeping
25	Taungakala	Satyasai Ram SHG	12.06.2010	Anita Devi W/O Rajesh	Kamla Devi W/O Bhai Lal	8			8	Baroda Regioanl Co. Bank Kheri A/c 52710100 009547	Rs. 2400/-	Goat Keeping
	Taungakala	Under Progress				2	5	3	10			Mini Dal Mill
	Taungakala	Under Progress					7	3	10			Mini Flour Mil
	Taungakala	Under Progress				3	5	3	11			General

												Merchant
	Taungakala	Under Progress					6	4	10			Tent House
	Taungakala	Under Progress					7	3	10			Carpentary
	Taungakala	Under Progress				2	7	2	11			Tailoring
	Taungakala	Under Progress				2	6	3	11			Black Smith
26	Mhuli Khurd	Jai Mata SHG	10.06.2010	Asha Devi W/O Raj Kumar	Laxmi Devi W/O Buddh Raj	10		10	10			Goat Keeping
	Mhuli Khurd	Under Progress					7	3	10			Goat Keeping
	Mhuli Khurd	Under Progress				2	8	1	11			Poultry
	Mhuli Khurd	Under Progress					8	3	11			Carpentary
	Mhuli Khurd	Under Progress				1	7	3	11			General Merchant
	Mhuli Khurd	Under Progress				1	6	4	11			Tent House
27	Mojra Mishra	Bajrang Bali SHG	24.07.2010	Devi Deen S/O Sukh Lal	Allar S/O Babu Lal		10		10			Dairy Work
28	Mojra Mishra	Jai Santoshi SHG	18.06.2010	Raj Pati W/O Devideen	Mamta Devi W/O Waram Devi	11	11		11			Dairy Work
	Mojra Mishra	Under Progress					6	4	10			Carpentary
	Mojra Mishra	Under Progress				2	6	2	10			Goat Keeping
	Mojra Mishra	Under Progress					7	4	11			Tent House
	Mojra Mishra	Under Progress				3	6	2	11			Black Smith
	Mojra Mishra	Under Progress				2	7	2	11			Goat Keeping
29	Karkakash	Vikash SHG	12.06.2010	Harish Chandra	Mangla Prasad			11	11			Goat Keeping
	Karkakash	Under Progress				3	7	1	11			Tailoring
	Karkakash	Under Progress				2	7	2	11			Poultry
	Karkakash	Under Progress					8	3	11			Mini Dal Mill
	Karkakash	Under Progress				1	8	2	11			Mini Flour Mil
	Karkakash	Under Progress					7	4	11			General

												Merchant
	Karkakash	Under Progress				2	5	4	11			Tailoring
30	Garkata	Sharda SHG	10.06.2010	Ram Chandra S/O Dashat Lal	Roshan Lal S/O Vidhya Prasad		10		10			Dairy Work
	Garkata	Under Progress					6	4	10			Goat Keeping
	Garkata	Under Progress				1	5	4	10			Goat Keeping
	Garkata	Under Progress					7	3	10			Goat Keeping
	Garkata	Under Progress				2	7	2	11			Vermi Compost
	Garkata	Under Progress				2	7	2	11			Vermi Compost
	Garkata	Under Progress				1	7	3	11			Mini Dal Mill
	Garkata	Under Progress					7	4	11			Mini Flour Mil
31	Puredattu	Jai Maa Kali	24.07.2010	Lalita Devi W/O Kamlesh	Indra Wati W/O Ram Lochan	8		8	8			Silai
32	Puredattu	Jai Maa Durga SHG	18.06.2010	Balram Prajapati	Abhay Kumar			9	9			Dairy Work
	Puredattu	Under Progress				2	7	1	10			Silai
	Puredattu	Under Progress					6	4	10			Carpentary
	Puredattu	Under Progress				1	7	2	10			Black Smith
	Puredattu	Under Progress				2	5	3	10			Tailoring
	Puredattu	Under Progress					6	4	10			Mini Dal Mill
	Puredattu	Under Progress				2	5	7	11			Goat Keeping
Total						281	824	425	1418			

With a detailed discussion with some of the local NGOs working in the area like SEWA, it was planned to have some capacity building training regarding SHG activities. It was also proposed to have some livelihood activities which will promote women empowerment.

i. **User Group**

User Groups are normally formed to manage an activity or asset created under the programme on a long term basis. The user group collect user charges from their members, oversee the works and manage the benefits.

It was decided that each group would formulate certain internal rules and have a feeling of ownership with community spirit.

Table 3.6 Details of User Groups

S. No.	Name Of Micro Watershed	Area Of Micro Watershed Ha	Selected Area For Treatment	No. Of User Group Constituted
1	2A2D2e2a	365.55	279	25
2	2A2D2e2b	501.17	380	17
3	2A7D2e2c	1102.12	712	34
4	2A7D5a1a	362.77	290	23
5	2A7D5a1b	294.04	225	21
6	2A7D2e1b	1030.46	592	13
7	2A7D2e3a	598.06	505	36
8	2A7D2e3c	324.28	264	26
9	2A7D2e3b	383.49	326	27
Total		**4961.94**	**3573**	**223**

Table 4.7 Details of Convergence of IWMP with other Schemes

S. No.	Name of Micro Watershed	Names of Departments with Schemes converging with IWMP	Fund made available to IWMP due to convergence (Rs. in lakh)	Was this fund included in Rs.12,000/ 15,000 per ha.		Name of activity/task/structure undertaken with converged funds	Reference no. of activity/ task/ structure in DPR@	Level at which decision for convergence was taken$
				Yes	No	(a) Structures		
						(b) livelihoods		
						(c) Any other (pl. specify)#		
1	2	4	5	6	7	8	9	10
1	Toungakala/2A7D2e2a	MANREGA	1076362.99	No		Water Shed Development Work		DRDA

2	Mahulikhurd/2A7D2e2b	MANREGA	Nill			Water Shed Development Work		
3	Pathakpur/2A7D2e2c	MANREGA	Nill			Water Shed Development Work		
4	Unchgaon/2A75a1a	MANREGA	1242502.00	No		Water Shed Development Work		DRDA
5	Nidaura/2A7D5a1b	MANREGA	1292313.82	No		Water Shed Development Work		DRDA
6	Khaptiha/2A7D2e1b	MANREGA	238473.02	No		Water Shed Development Work		DRDA
7	Baghol/2A7D2e3a	MANREGA	Nill			Water Shed Development Work		
8	Behraicha 1st/2A7D2e3c	MANREGA	Nill			Water Shed Development Work		
9	Behraicha 2nd/2A7D2e3b	MANREGA	12,12,147.69	No		Water Shed Development Work		DRDA
	Total for project		5061799.52					

4.6 SWAT ANALYSIS BY LDWRD

Income generation economic growth and environmental security were identified as the major issues to be addressed in the watershed area. It has moderate slopes and hence moderate Soil erosion. Light soil texture low water holding capacity and low soil fertility is the major problem hampering high crop production. Problem identified and prioritized during the transact walk and PRA exercise in all 35village were pooled and list of 10 problem representing the whole watershed was prepared. Problems were ranked as per their total weight age in the 35 village. Production of failed crops lack of fodder availability, low animal productivity and threat (SWOT) analysis is a useful decision support tool. A SWOT analysis of the watershed is presented in Table 4.8.

Table 4.8 Problem identification and prioritization for watershed

S. No.	Problems	Rank
1	Low production of Agriculture crops	5
2	Lack of irrigation water	4
3	Lack of drinking water	3
4	Non availability of fuel wood	5
5	Lack of inputs like quality seeds, fertilizers, pesticides etc.	2
6	Medical and health care facilities for mulching animals and low productivity	5
7	Lack of fodder availability and low annual productivity	5
8	Lack of medical educational and transportation facilities	7

Table 4.9 SWOT analysis of the watershed

Strength (S)	Weakness(W)
1- Cooperative work culture is traditional activities 2- Close ethnic tier 3- Road at the top as well as outlet of the watershed 4- Hard working man power 5- Resource pool of crop genetic diversity 6- Awareness of farmers about watershed management program 7-Well established CPR maintaining and sharing system 8- Well maintained seasonal water bodies. 9- Social outlook of the community towards	1- Poor water management 2- Resource poor farmers 3- Out migration of youth 4- Low and erotic rain fall 5- Fragile geography 6- Fragmented land holding. 7- Heavy infestation of wild animals 8- Problem of fuel and fodder
Opportunities(O)	Threats (T)
1- Wide range of annual and personal crops 2- Scope of regular employment opportunity to check out migration	1- Prone to adverse climate like drought 2- High market risk 3- Social conflicts owing to PRI & WSM policies and

3- Strengthening of existing irrigation system 4- Conductive climate for rainfed crop diversification 5- Good scope for agro forestry and dry land Horticulture. 6- Potential for collective active action and Management of CPRs.	local Politics. 4- Weak coordination among line departments. 5- Lack of expertise of implementing agencies in different aspect of WSM.

Chapter – 5

MANAGEMENT/ACTION PLAN

5.1 ENTRY POINT ACTIVITIES

EPA activities are taken up under watershed projects to build a rapport with the village community at the beginning of the project; generally, certain important works which are in urgent demand of the local community are taken up. A group discussion was conducted with watershed Development Committee regarding the EPA activity. It was conveyed to the WC that an amount of Rs. 26.51 Lakh was allotted for EPA activity, which was 4 per cent of total allocated budget. The villagers discussed various activities which they felt is important but after a brief discussion it was conveyed to them that only those activities can be taken, which revive the common natural resources. It was also taken into priority that there should be an instrument of convergence which will result in sustainability of activities.

Table 5.1 Details of Entry Point Activities

Project-IWMP I				EPA 4% of the Project Cost					
S. No.	Micro-watershed	Treatable Area (ha)	Sanctioned Amount (in Lacs)	2009-10	2010-11	2011-12	2012-13	2013-14	Total
1	2A7D2e2b	279.0	45.01	1.8	-	-	-	-	1.8
2	2A7D5a1a	380.0	26.19	1.048	-	-	-	-	1.048
3	2A7D5a1b	712.0	24.82	0.993	-	-	-	-	0.993
4	2A7D2e2c	290.0	92.02	3.681	-	-	-	-	3.681
5	2A7D2e1b	225.0	91.68	3.667	-	-	-	-	3.667
6	2A7D2e2a	592.0	30.23	1.209	-	-	-	-	1.209
7	2A7D2e3a	505.0	55.8	2.232	-	-	-	-	2.232
8	2A7D2e3b	264.0	34.01	1.36	-	-	-	-	1.36
9	2A7D2e3c	326.0	29	1.16	-	-	-	-	1.16
TOTAL		3573.0	428.76	17.15					17.15

SUMMARY OF E.P.A. WORK

Sr.No	Name of Work	No.	Rate	Amount
1	Well Jagat	4	31600 /No	126400.00
2	Panchaiti Chabutara	8	75388/No	603104.00
3	Handpump	8	54800/No	438400.00
4	Bathroom	8	61060.00/No	488460.00
5	Drainage Pucca Channel	40 mtr	515/Mtr	20600.00
6	Soaking Pit	8	4757	38076.00
	Total			1715040.00

Plate 5 Panchayat Chabutar Constructed in Village Bahraicha

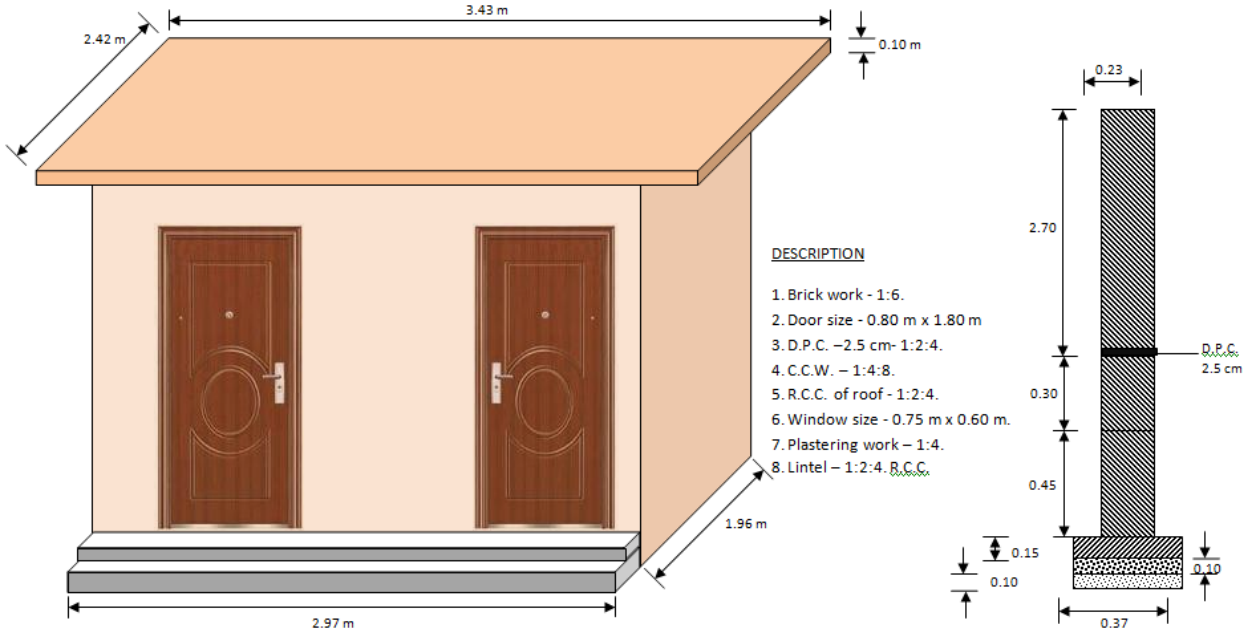
Plate 6 Public Bathroom constructed near Well in the village Toungkalan

Plate 7 Panchayat Chabutra in the Village Pathakpur

Plate 8 India Marka II Handpump in village Pathakpur

DRAWINGS

a. Drawing of Cloth Changing Room



Detail Estimate of proposed Public Toilet Room (Bathroom)

S.N.	Description of work	No.	Length (M)	Width (M)	Height/Depth (M)	Quantity
1	**Earth work in digging**	2	3.85	0.60	1.30	6.00
		2	1.68	0.60	1.30	2.62
		1	1.68	0.60	1.30	1.31
					Total	**9.93 cum**
2	**C.C.W. 1:4:8 in foundation**	2	3.85	0.48	0.10	0.369
		2	1.68	0.48	0.10	0.161
		1	1.46	0.35	0.10	0.051
					Total	**5.81 cum**
3	**Brick work 1:6 in foundation up to plingth**	2	3.84	0.47	0.56	2.021
		2	1.46	0.47	0.56	0.768
		1	1.46	0.35	0.56	0.286
		2	3.72	0.35	0.54	1.406
		2	1.69	0.35	0.54	0.638
		1	1.69	0.23	0.54	0.209
	Super Structure	2	3.60	0.23	2.40	3.974
		2	1.80	0.23	2.40	1.897
		1	1.80	0.11	2.40	0.475
					Total	**11.764 cum**
	Deduction from Brick work					
	door	2	0.75	0.23	2.10	0.724

	Net brick masonry work					**11.04 cum**
4	**Lintal RB 1:3 Roof**	1	3.60	2.70	0.11	1.069
	" " Door	2	2.30	0.23	0.11	0.116
5	**Brick work Around Root**	2	3.60	0.11	0.07	0.055
		2	2.48	0.11	0.07	0.038
					Total	0.093
4	**Plastering 1:4**	2	1.50	1.80	-	5.40
		2x4	1.50	-	2.40	28.50
		2	3.60	-	2.40	17.28
		2	1.50	1.80	-	5.40
		1	3.50	-	0.40	1.40
		1	2.28	-	0.40	1.82
	Total					**71.04**
	Deduction for doors	2x2	0.75	-	2.10	6.30 sq.m
	Net plastering work					**64.74** sq.m
9	**Flooring C.C.W. 1:2:4**	1	1.80	1.50	0.10	0.270 cum
10	**white washing**	**2X2**	**1.77**	**-**	**2.40**	**16.99**
		2X2	1.50	-	2.40	14.40
		2	3.60	-	2.40	17.28
		2	2.28	-	2.40	10.94
		2	1.77	1.50	-	5.31

	Total					**64.93 sq.m**
	Deduction for doors	2.2	0.75	-	1.50	6.30 sq.m
	Net white washing					**58.63 sq.m**
10	**Earth work in filling**	2	1.80	1.50	1.20	3.24
11	**Floor c.c. Work 1:4:8**	2	1.80	1.50	0.10	0.54
	Channel	1	6.70	0.35	0.11	0.257
		2	6.70	0.11	0.07	0.103
					TOTAL	0.360 CUM
	Door Painting	2X2	0.75	-	2.10	6.30 M^2

CONSUMPTION OF MATERIALS

S. N.	Particulars	Quantity	Cement (Bags)	Coarse sand (cum)	Brick (Nos)	Brick Ballsat	M.S. Bar 8 mm	White cement	Paint
1	C.C.W. 1:4:8	1.121 cum	3.81	0.504	-	1.042	-		-
2	Brick work 1:4	11.04 cum	19.87	2.98	5078	-	-	-	-
3	Brick work in channel	0.360 cum	0.50	0.086	171				
4	Plastering 1:4	71.04 m^2	7.81	1.065	-	-	-	-	-
5	R.B work 1:3	1.069	3.99	0.352	454	-	67kg		
5	White washing	58.63 m^2	-	-	-	-	-	11.72 kg	-
7	Doors 2 no.	6.30 m^2	-	-	-	-	-	-	0.94 lt

Total		**35.98**	**4.987**	**5703**	**1.042**	**67 kg**	**11.72 kg**	**0.94**
Say		**36.00**	**4.99**	**5700**	**1.042**	**67 kg**	**11.72 kg**	**1 lt**

LABOUR CHARGES

1.	Earth Work	12.67 cum	33.33/cum	422.29
2.	C.C.W. 1:4:8	1.021 cum	494.00/cum	504.37
3.	Brick work	11.40 cum	308.00/cum	3514.96
4.	Plastering	71.04 m^2	40.00/m^2	2841.60
5.	R.B. Work Roof	1.069	250.00/ M^2	267.25
6.	R.B.Work Door	1.116 M^3	126/ M^2	14.61
7.	SHUTRING	9.72 M^2	241.10 M^2	2343.49
7.	White washing	58.63 m^2	2.70/m^2	158.30
8	Door Painting	6.30 M^2	13.50/ M^2	85.05
9.	Curing	11.40 M^3	25.00/m^3	285.00
10	Chawkidari	21 Mad day	100	2100.0
	Total			12536.88

Cost Of Material

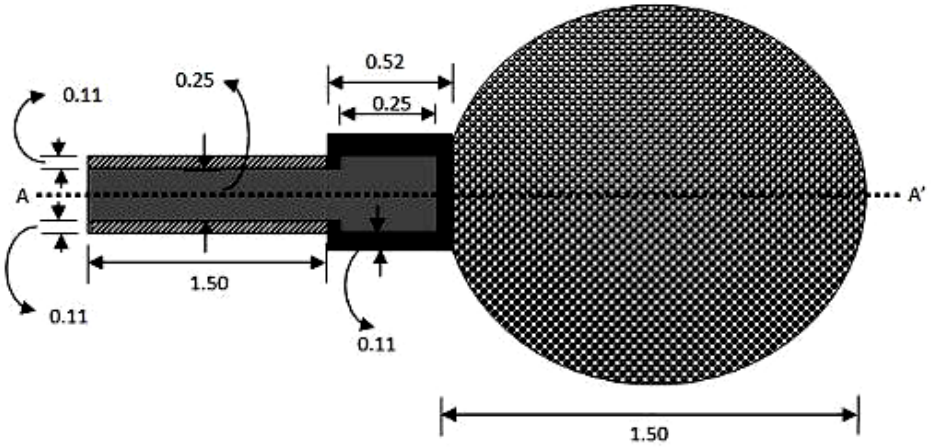
S.No.	Particulars	Quantity	Rate	Amount
1.	Cement	36 bags	285.00/bag	10260.00
2.	Coarse sand	4.98 cum	887.00/cum	4417.26
3.	Bricks	5700 Nos.	4284.00/thousand	24418.80
4.	M.S. Bar 8 mm Ø	67. Kg.	45/ kg	3015.00
5.	Door	2 No	3034/ N o	6068.00

6.	Paint	1 lt	165/ lt	165.00
7.	White Cement	12 Kg.	15/kg	180.00
Total				**Rs. 48524.06**

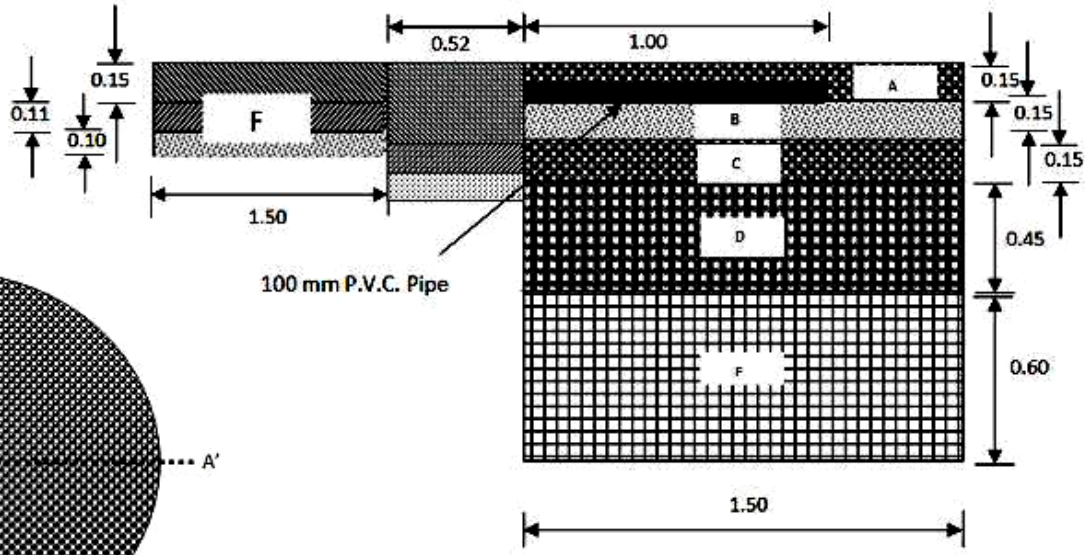
Total Cost	
1. Cost of materials	48524.00
2. Labour charges	12536.88
Total	**Rs. 61060.88**
	Say Rs. 61060.00 only.

b. Drawing of Soaking Pit

All Dimensions Are in Metre



PLAN OF SOAKING PITS WITH SILTING TANKS



SECTION A-A'

DESCRIPTION.

A – 0.10 x 0.20 Grit.
B – Coarse Sand.
C - 0.10 x 0.20 Grit.
D – 025 x 0.50 Grit.
E – Cut Stone / Random Rubble.
F – Brick wall 0.11 m x 0.25 m Width channel

DETAIL ESTIMATE OF SOAKING PIT

S.No.	Description of Work	No.	L.	B.	D./H.	Quantity
1.	Earth work in excavation	1	1.50	1.50	1.50	3.37 cum
2.	Brick work 1:4	2	1.24	0.11	1.74	0.474
		2	1.00	0.11	1.74	0.382
			total			0.856
3.	Laying of Khanda	1	1.00	1.00	0.50	0.50 cum
4.	Laying of Coarse sand	1	1x1	1.00	0.15	0.150 cum
5.	Lintal 1:2:3	1	1.25	1.25	0.10	0.156 cum

CONSUMPTION OF MATERIAL

S.No.	Description of work	Quantity	Cement (bag)	Brick (nos)	Khanda (cum)	Steel bar	G.S.Grit 10-20 mm (cum)	Coarse Sand
1.	Laying of khanda	0.50 cum	-	-	0.50	-	-	-
2.	Laying of coarse sand	0.334 cum	-	-	-	-	-	0.150
3.	Brick work 1:4	0.856 cum	1.19	428	-	-	-	0.235
4.	R.C.C. work	0.156	0.95	-	-	12.24	0.132	0.065
Total			**2.14**	**428**	**0.50**	**12.24**	**0.132**	**0.450**

COST OF MATERIALS

S.No.	Particulars	Quantity	Rate	Amount
1.	Khanda	0.50 cum	736.00/cum	368.00
2.	Cement	2.14Bags	285.00/Bag	609.90
3.	Brick	428 nos	4284.00/Thousand	1833.55
4.	Coarse Sand	0.407 cum	887.00/cum	361.00
5.	Steel bar	12.24 Kg	35/Kg	428.40
6.	G.S.Grit	0.132 cum	1295.00/cum	170.94
	Total			**Rs. 3744.72**

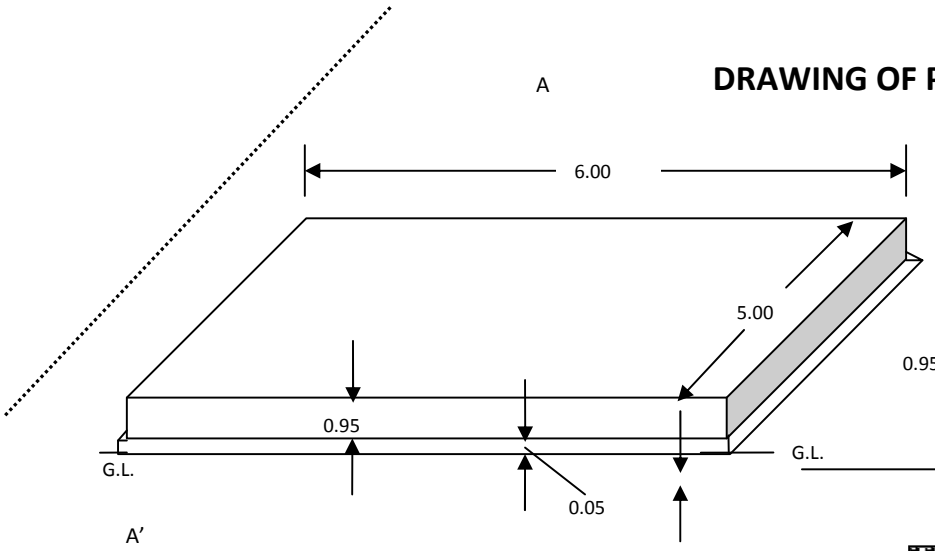
LABOUR CHARGES

S.No.	Particulars	Quantity	Rate	Amount
1.	Earth work	3.37 cum	33.33/cum	112.32
2.	Khanda laying	0.699 cum	33.33/cum	23.29
3.	R.C.C. work	0.156 cum	560/ cum	87.36
4.	Laying of sand	0.150 cum	33.33/cum	4.99
5.	Brick work 1:4	0.699 cum	308.33/cum	215.52
6.	Curing	0.126 cum	25.00/cum	3.15
7.	Transportation 15% cost of material			565.65
	Total			**Rs. 1012.28**

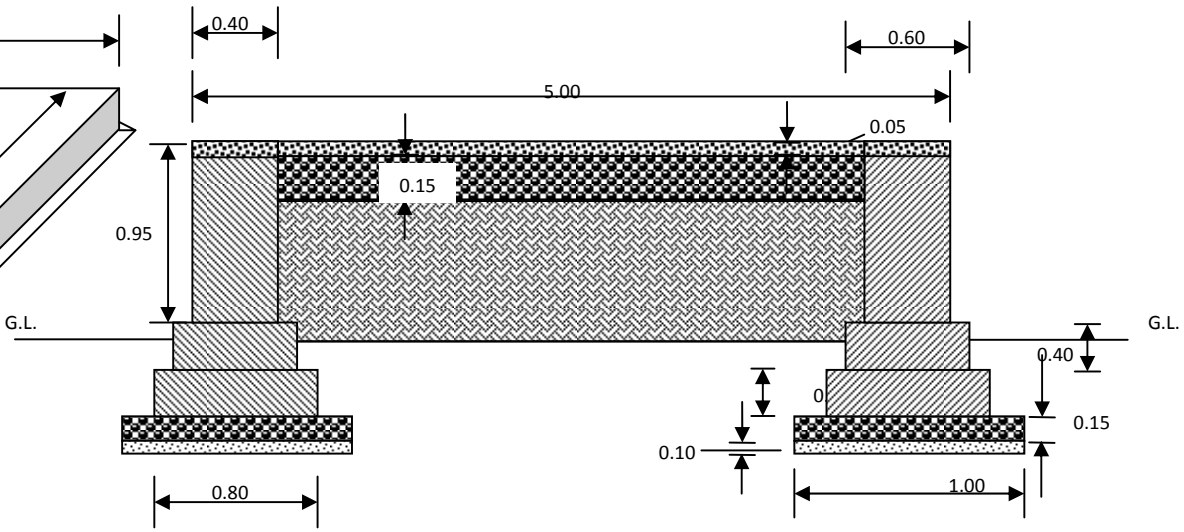
Total Expenditure	
1. Cost of materials	3744.72
2. Labour Charges	1012.28
Total	**Rs. 4757.00**

DRAWING OF PANCHAYATI CHABUTARA

DRAWING OF PLATFOR



ISOMETRIC VIEW OF PLATFORM (CHABUTRA)



SECTION AT A-A'

DESCRIPTION

1. C.C.W. - 1:4:8.
2. R.R. Stone masonry- 1:4
3. Plastering- 1:4
4. Raised Pointing- 1:3.

DETAIL ESTIMATE OF PANCHAYATI CHABUTARA

Name of project- Mahulikhurd

S.No.	Description of Work	No.	L.	B.	D/H	Quantity
1.	Earth work in foundation Long Wall Short Wall	 2 2	 6.50 4.53	 0.80 0.80	 0.90 0.90	 9.36 6.52
	Total					**15.88 cum**
2.	C.C.W. 1:4:8 Long Wall Short Wall	 2 2	 6.30 4.53	 0.50 0.50	 0.10 0.10	 6.650 0.453
	Total					**1.103 cum**
3.	Brick work 1:4 in foundation & super structure **Foundation.** Long Wall Short Wall **Super Structure** Long Wall Short Wall **Stair**	 2 2 2 2	 6.30 4.53 6.00 4.30	 0.47 0.47 0.35 0.35	 0.60 0.60 1.00 1.00	 3.553 2.554 4.200 3.010

	Ist Footing	2	1.00	1.40	0.20	0.560
	IInd Footing	2	1.00	1.10	0.20	0.440
	IIIrd Footing	2	1.00	0.80	0.20	0.320
	IVth Footing	2	1.00	0.55	0.20	0.220
	Vth Footing	2	1.00	0.22	0.12	0.052
Total						**14.909 cum**
4.	**Earth work in filling**					
	Long wall	2	6.50	0.33	1.00	4.29
	Short wall	2	4.53	0.33	1.00	2.98
	Floor	1	5.30	4.30	1.10	25.06
	Total					**32.33 cum**
5.	C.C.W. 1:4:8	1	5.30	4.30	0.10	2.279 cum
6.	C.C.W. 1:2:4	1	5.30	4.30	0.05	1.139 cum
7.	Plastering 1:4					
	Long Wall	2	6.00	-	1.00	12.00
	Short Wall	2	5.00	-	1.00	10.00
	Floor	1	6.00	5.00	-	30.00

	Strair	4 2 2	1.00 0.92 0.92	- - -	1.00 1.00 1.00	4.00 1.84 1.84
Total						**59.68 m^2**

ABSTRACT OF WORK

1.	Earth Work	34.61+25.06 cum
2.	C.C.W. 1:4:8 Brick Ballast	1.103 cum
3.	C.C.W. 1:4:8 Stone Grit	2.279 cum
4.	C.C.W. 1:2:4 Brick Ballast	1.139 cum
5.	Brick Work	14.909 cum
6.	Plastering	59.68 m^2

CONSUMPTION OF MATERIALS

S.No.	Particulars	Quantity	Cement (cum)	Coarse Sand (cum)	Brick (No)	Brick Ballast	Stone Grit 10-20 mm (cum)
1.	C.C.W 1:4:8 Stone	2.279 cum	7.44	1.025	-	-	2.119

	Grit						
2.	C.C.W 1:4:8	1.103 cum	3.75	0.496	-	1.025	-
3.	C.C.W. 1:2:4	1.139 cum	6.94	0.478	-	0.968	-
4.	Brick work	14.909 cum	26.83	4.025	6858.00	-	-
5.	Plastering	59.68 m^2	6.56	0.895	-	-	-
Total			**51.52**	**6.919**	**6858.00**	**1.993**	**2.119**
Say			**51.50 Bags**	**6.92**	**6858.00**	**1.99**	**2.12**

COST OF MATERIALS

S.No.	Particulars	Quantity	Rate	Amount
1.	Cement	51.50 Bags	285/Bag	14677.00
2.	Coarse Sand	6.92 cum	887.00/cum	6138.00
3.	G.S. Grit 10-20 mm	2.12 cum	736.00/cum	1560.00
4.	Brick work	6858. cum	4284/ Hundred	29379.00
5.	Brick Ballast	1.99 m^3	750/ cum	1492.00
Total				**Rs. 53246.00**

LABOUR CHARGES

S.No.	Particulars	Quantity	Rate	Amount
1.	Earth Work	23.15 cum	33.33/cum	771.58
2.	C.C.W.	4.521 cum	494.00/cum	2233.37
3..	Brick work	14.909 cum	308.33/cum	4596.89
4.	Plastering 1:4	68.58 m^2	40Sq/mt	2743.20
5.	Curing Charges	14.909 cum	25.00/cum	372.72
6.	Chowkidar	14 Man Days	100.00/Man Day	1400.00
7.	Head Load	30.08 Ton	53/ton	1594.24
8.	Earth work in filling	25.06 cum (8 Tralli)	300/ Tralli	2400.00
Total				**Rs 16112.00**

Total Expenditure	
1. Cost of Materials	53246.00
2. Labour Charges	16112.00
Total	**Rs. 69352.00**
Say	**Rs. 69352.00 only**

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1	2	3	4	5	6
1	जल निगम भण्डार से रिंग मशीन एवं हैण्ड पम्प सामग्री, पी0वी0सी0 पाइप, स्ट्रेनर एवं सम्पूर्ण प्लेटफार्म सामग्री, सीमेंट आदि, स्थल तक ले जाना, हैण्ड पम्प का अधिष्ठापन कार्य हेतु आवश्यक सामग्री निम्नानुसार की आपूर्ति का मूल्य	कार्य	1	2500.00	2500.00
2	हैण्ड पम्प अधिष्ठापन कार्य हेतु आवश्यक सामग्री की निम्नानुसार आपूर्ति।				
	इण्डिया मार्क– II हैण्डपम्प को जी0आई0 पाइप व कनेक्टिंग राड के साथ अधिष्ठापित करना।	कार्य	1	5380.00	5380.00
	140 एम0एम0 पी0वी0सी0 पाइप 6 किग्रा0 / से0मी0^2	मीटर	20	240.00	4800.00
	32 एम0एम0 की मीडियम क्वालिटी की जी0आई0 पाइप	मीटर	30	202.90	6087.00
3	डी0टी0एच0 रिंग मशीन से छिद्रण का कार्य एवं पी0वी0सी0 एरोम्बलिंग की लोवरिंग	मीटर	80	359.00	28720.00
3.1	पी0वी0सी0 केसिंग की लागत	मीटर			4800.00
3.2	छिद्रण की लागत	मीटर			28720.00
	असफल बोर की लागत				33520.00
4	प्रति हैण्ड पम्प असफल बोर हेतु प्राविधान (असफल बोर की लागत का 5 प्रतिशत)				1676.00
5	बोर वेल एवं केसिंग पाइप के बीच आवश्यकतानुसार विन्टोनाइट की भराई (सामग्री की आपूर्ति सहित)	कार्य	1	110.00	110.00
6	इण्डिया मार्क II हैण्ड पम्प को जी0आई0 पाइप व कनेक्टिंग राड के साथ अधिष्ठापन करना।	कार्य	1	300.00	300.00
7	हैण्ड पम्प अधिष्ठापन के बाद इंजीनियर इंचार्ज के संतुष्टि तक विकास कार्य।	कार्य	1	100.00	100.00
8	विकास कार्य के बाद डिस्इनफेक्शन कार्य सामग्री सहित।	कार्य	1	50.00	50.00
9	स्वीकृत डाइंग के अनुसार 1.85 मीटर व्यास के हैण्ड पम्प चबूतरे का निर्माण (समस्त सामग्री एवं सीमेंट सहित)	कार्य	1	3200.00	3200.00
10	नाली का निर्माण कार्य लेबर चार्ज एवं सामग्री सहित।	मीटर	3	175.00	525.00
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			ek=k	nj	/kujkf'k
11	इम्बोसिंग कार्य	कार्य	1	44.00	44.00
12	जल परीक्षण	कार्य	1	400.	400.00
	;kx				53982.00

13	आकस्मिकता			5 प्रतिशत	2694.60
14	कार्य की कुल लागत				56586.60
15	विभागीय दक्षता के दृष्टिगत 5 प्रतिशत कटौती के पश्चात कार्य की लागत				53757.27
16	पर्यवेक्षण शुल्क (सेन्टेज) क्रमांक 15 का 12.5 प्रतिशत				6719.66
17	रिंग मशीन का रेन्टल चार्ज				2000.00
18	हैण्ड पम्प अधिष्ठापन की कुल लागत				62476.93
	अर्थात				62500.00
	जनसहभागिता अंश क्रमांक 15 का 10 प्रतिशत				5375.73
	अर्थात				5400.00

प्राक्कलनकर्ता

(आर0सी0मौर्य)
सहायक अभियन्ता

जांचकर्ता

(वी0एन0लाल)
जूनियर इंजी0(टी)

संस्तुतिकर्ता

(डा0एस0डी0मिश्रा)
अधिशासी अभियन्ता

स्वीकृतकर्ता

अधीक्षण अभियन्ता
यांत्रिक मण्डल
उ0प्र0 जल निगम
इलाहाबाद ।

5.2 WORKS PHASE

Following are the major problems of the watersheds

a) Water scarcity both for drinking as well as irrigation
b) Excess runoff and soil loss
c) Low water holding capacity of the soil
d) Low productivity of crops
e) Low fertility of soil
f) Low cropping intensity
g) Lack of technical knowledge
h) *Anna Pratha* (let loose system of cattle)
i) Poor vegetative cover
j) Poor/low productive breeds of miltch animals
k) Lack of feed & fodder availability
l) Non availability of wood/fuel
m) Lack of proper market facilities
n) Low income of the households
o) Lack of employment opportunity.

a. 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 18 years data (1990-2009) with a gap of 2005 and 2006). It is estimated that runoff potential of the project area is 463 mm, equivalent to 17 per cent of average annual rainfall. Expected runoff and soil loss from the project area are depicted Table 5.3.

Table 5.3 Details of Soil erosion in the Project area

S. No.	Name of Micro-watershed	Cause	Type of erosion	Area affected (ha)	Run off (mm/ year)	Average soil loss (Tonnes/ ha/ year)
		Water erosion				
1	Toungkalan/ 2A7D2e2a	a	Sheet	193.7	463.00	16.0
		b	Rill	85.17		
		c	Gully	16.92		
		Total		295.80		
2	Mahulikhurd/2A7D2e2b	a	Sheet	265.6		
		b	Rill	116.77		
		c	Gully	23.20		
		Total		405.55		
3	Pathakpur/2A7D2e2c	a	Sheet	584.0		
		b	Rill	256.79		
		c	Gully	51.03		
		Total		891.84		
4	Unchgaon/2A7D5a1a	a	Sheet	192.2		
		b	Rill	84.53		
		c	Gully	16.80		
		Total		293.55		
5	Nidaura/2A7D5a1b	a	Sheet	155.8		
		b	Rill	68.51		
		c	Gully	13.61		

		Total		237.94		
6	Khaptiha/2A7D2e1b	a	Sheet	546.0		
		b	Rill	240.10		
		c	Gully	47.71		
		Total		833.85		
7	Baghol/2A7D2e3a	a	Sheet	316.9		
		b	Rill	139.35		
		c	Gully	27.69		
		Total		483.95		
8	Behraicha 1st/2A7D2e3c	a	Sheet	171.8		
		b	Rill	75.56		
		c	Gully	15.01		
		Total		262.41		
9	Behraicha 2nd/2A7D2e3b	a	Sheet	203.2		
		b	Rill	89.35		
		c	Gully	17.76		
		Total		310.32		

Watershed Development Works

Watershed development works are to be done during second phase of watershed project. A multi-tier ridge to valley sequence approach should be approached towards implementation of watershed development projects. A net budget of 50 percent is allotted for this work.

Ridge Area Treatment Plans:

It is very important to treat the ridge as this is where the major water resources originate. This involves mainly hilly and forest region in Tons watershed. For the ridge area treatment of Sot watershed following structure are been Proposed after interaction between the watershed committee, Range Forest Officer (RFO) and other field staff of forest.

1. Stone Bunding

2. Staggered Contour Trenches

3. Border Contour Trenching with Tree plantations

4. Grass seeding

Table 5.4 Micro-watershed wise break-up of watershed development works propsed in the IWMP – I Allahabad

Sr. No.	Particular of Measures/Activities	Unit	Toungakala / 2A7D2e2a		Pathakpur / 2A7D2e2c		Mahulikhurd / 2A7D2e2b		Khaptiha / 2A7D2e1b	
		No., Length/ ha, Volume								
			Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost
1	2	3	–	–	–	–	–	–	–	–
I	**Soil & Water Conservation Measures**		–	–	–	–	–	–	–	–
	A- Moisture Conservation Measures		–	–	–	–	–	–	–	–
	1. Field Bund	-	–	–	–	–	–	–	–	–
	2. Contour Bund	Length	–	–	–	–	–	–	–	–
	3. Peripheral Bund	Length	–	–	–	–	–	–	–	–
	4. Marginal Bund	Length	815	0.7979	2980	2.9174	615	0.602	1995	9.785
	5.Submergence Bundhi	Length	7130	5.5842	46375	36.3209	20630	16.157	24440	19.141
	B- Water Resource Development		–	–	–	–	–	–	–	–
	1. Tank/Pond	No	–	–	–	–	–	–	–	–
	1a - Water storing capacity	cum.	–	–	–	–	–	–	–	–
	1b- Area proposed for irrigation	ha	–	–	–	–	–	–	–	–
	2- Water Harvesting Bundhi/GP	cum.	–	–	–	–	–	–	–	–
	2a- Water storing capacity	cum.	–	–	–	–	–	–	–	–
	2b- Area proposed for irrigation	ha	–	–	–	–	–	–	–	–
	3. Check Dam	No.	23	6.7392	4	0.8931	11	2.398	3	0.600
	3a-Drop Spillway	No.	1	1.9722	1	1.9722	1	1.972	2	3.544
	3b. Pipe Putlet	No.	10	2.1438	14	3.0013	9	1.929	15	3.216
	4. Well recharging unit	No	–	–	–	–	–	–	–	–
	4a. Expected Volume of Recharge	cum.	–	–	–	–	–	–	–	–
	4b-Expected irrigated area to be increased (only		–	–	–	–	–	–	–	–
	one irrigation)	ha	–	–	–	–	–	–	–	–

II	Livelihood for landless People		–	–	–	–	–	–	–	–
	1. Goatary	No. of SHGs/ No. of beneficiaries	4/40	1.0	14/142	3.5	8/80	2.0	12/120	3.0
	2. Back Yard Poultry	do	2/20	0.40	5/50	1.0	2/20	0.50	2/22	0.40
	3. Poultry (Broiler)	do	1/10	0.102	2/20	0.50	1/10	0.104	1/10	0.15
	4. Black Smithy	do	1/10	0.25	3/30	0.75	1/10	0.25	1/10	0.15
	5. Rope Making (Linseed)	do	–	–	–	–	–	–	–	–
	6. Tailoring	do	1/10	0.25	4/40	1.0	2/20	0.250	1/10	0.243
	7. Repairing of Diesel Engine / Implements		–	–	–	–	1/10	0.25	–	–
	8. Vermi composting	do	–	–	3/30	0.25	–	–	1/10	0.50
	9. Fruit Processing	do	2/20	0.50	1/10	0.25	1/10	0.25	1/10	0.25
	10. Mini Dal Mill	do	–	–	–	–	–	–	–	–
	11. Mini flour Mill	do	–	–	–	–	–	–	–	–
	12. Mini Oil Expeller	do	–	–	–	–	–	–	–	–
	13. Carpentry	do	–	–	–	–	2/20	0.250	–	–
	Tent House		1/10	0.25	1/10	0.189	1/10	0.250	1/10	0.50
	G.M.S.		1/10	0.25	1/10	0.25	–	–	3/30	0.75
	Agriculture Production		–	–	–	–	–	–	–	–
III	System		–	–	–	–	–	–	–	–
	A- Crop Demonstrations- (Crop Wise)		–	–	–	–	–	–	–	–
	(1)SMC Area:		–	–	–	–	–	–	–	–
	1. Lentil (ICM)	No. of farmers/Area	–	–	–	–	–	–	–	–
	2. Chickpea (ICM)	No. of farmers/Area	–	–	–	–	–	–	–	–
	3. Field Pea (ICM)	No. of farmers/Area	10/4.0	0.32	–	–	10/4.0	0.32	–	–
	4. Linseed (ICM)	No. of farmers/Area	–	–	–	–	–	–	–	–
	5. Mustard (ICM)	No. of farmers/Area	18/8.0	0.8	–	–	12/6.0	0.6	–	–
	6. Masoor	No. of farmers/Area	10/2.0	0.16	–	–	8/4.0	0.32	–	–

	7. Paddy	No. of farmers/Area	17/8.0	1.2	20/10.0	1.4	24/12.0	1.8	12/6.0	0.9
	8. Gram	No. of farmers/Area	12/5.0	0.425	10/5.0	0.425	16/7.0	0.6	4/1.0	0.085
	9. Arhar (ICM)	No. of farmers/Area	10/5.0	0.45	14/6.0	0.54	18/6.0	0.54	7/3.0	0.27
	10. Wheat	No. of farmers/Area	20/10.0	1.4	10/5.0	0.7	28/14.0	1.96	16/8.0	1.28
	(2) Total		4.755	—	—	3.065	—	6.14	—	2.535
	Live Stock Management		—	—	—	—	—	—	—	—
	A. Rearing of Milch cattle-		—	—	—	—	—	—	—	—
	1- Cow-	No. of Units / Farmers	—	—	—	—	—	—	—	—
	2- Buffalloes-	No. of Units / Farmers	5/5.0	2	3/3.0	1.2	—	—	—	—
	3- Goatry-	No. of Units / Farmers	—	—	—	—	—	—	—	—
	4- Poultry-	No. of Units / Farmers	—	—	—	—	—	—	—	—
	5- Broiler-	No. of Units / Farmers	—	—	—	—	—	—	—	—
	6- Layers-	No. of Units / Farmers	—	—	—	—	—	—	—	—
	7- Piggeries-	No. of Units / Farmers	—	—	—	—	—	—	—	—
	8- Fisheries -	No. of Units / Farmers	—	—	—	—	—	—	—	—
	9- Dairy -	No. of Units / Farmers	—	—	—	—	—	—	—	—
	10- Green Fodder	ha/farmer	—	—	—	—	—	—	—	—
	Total		—	—	—	—	—	—	—	—
	B. Veterinary Services/		—	—	—	—	—	—	—	—
	1- Vaccination/Medication	No. of Animals	100	0.2	156	0.295	6/6.0	2.404	2/2.0	0.813
	2- Infertility Management	No. of Animals	—	—	—	—	—	—	—	—
	3- Others	No. of Animals	—	—	—	—	—	—	—	—

	Total		–	–	–	–	–	–	–	–
	C. Live stock Improvement Measures		–	–	–	–	–	–	–	–
	1- Artificial Insemination	No. of Animals	149	0.149	–	–	–	–	–	–
	2- Natural Service.	He Buffalo	–	–	–	–	–	–	–	–
	Total		–	–	–	–	–	–	–	–
	Total Live stock management		–	–	–	–	–	–	–	–
Total for Ag. Production System			–	–	–	–	–	–	–	–
Total				27.3433		56.9190		39.847		45.112

Continued…….

Sr. No.	Particular of	Unit	Bahraicha 2nd / 2A7D2e3b		Nidaura / 2A7D5a1b		Unchgaon / 2A7D5a1a		Baghol / 2A7D2e3a		Baraicha 1st / 2A7D2e3c	
	Measures/Activities	No., Length/ ha, Volume	Qanty.	Cost	Qanty.	Cost	Qanty.	Cost	Qnty	Estimated Cost	Qnty	Estimated Cost
1	2	3	4	5	6	7	8	9	12	13	14	15
1	**Soil & Water Conservation Measures**	–	–	–	–	–	–	–	–	–	–	–
	A- Moisture Conservation Measures	–	–	–	–	–	–	–	–	–	–	–
	1. Field Bund	–	–	–	–	–	–	–	–	–	–	–
	2. Contour Bund	Length	–	–	–	–	5270	2.0431	9450	3.664	11570	4.486
	3. Peripheral Bund (Pipe Outlet)	Length	–	–	–	–	–	–	420	0.705	–	–
	4. Marginal Bund (Pipe Outlet)	Length	3680	5.446	3530	0.346	2750	5.6293	7490	7.773	4575	4.479
	5.Submergence Bundhi (with Sodding)	Length	–	–	1250	0.979	1785	1.3980	–	–	–	–
	B- <u>Water Resource Development</u>	–	–	–	–	–	–	–	–	–	–	–
	1. Tank/Pond	No	–	–	–	–	–	–	–	–	–	–
	1a - Water storing capacity	cum.	–	–	–	–	–	–	–	–	–	–
	1b- Area proposed for irrigation	ha	–	–	–	–	–	–	–	–	–	–

	2- Water Harvesting Bundhi/GP	cum.	–	–	–	–	–	–	–	–	–	–
	2a- Water storing capacity	cum.	–	–	–	–	–	–	–	–	–	–
	2b- Area proposed for irrigation	ha	–	–	–	–	–	–	–	–	–	–
	3. Check Dam / Drop Spill Way	No.	25	10.005	7	3.459	10	4.5970	29	9.341	5	2.394
	3a- Drop Spillway	No.	1	1.972	2	3.944	1	1.9722	3	5.917	1	1.972
	3b. Pipe Outlet	No.	12	2.573	9	1.929	10	2.1438	15	3.216	13	2.787
	4. Well recharging unit	No	–	–	–	–	–	–	–	–	–	–
	4a. Expected Volume of Recharge	cum.	–	–	–	–	–	–	–	–	–	–
	4b-Expected irrigated area to be increased (only one irrigation)	–	–	–	–	–	–	–	–	–	–	–
		ha	–	–	–	–	–	–	–	–	–	–
	C- Drainage Line Treatment	–	–	–	–	–	–	–	–	–	–	–
	Upper reaches	–	–	–	–	–	–	–	–	–	–	–
	1. Vegetative / Brush wood checks	No.	–	–	–	–	–	–	–	–	–	–
	2. Loose Boulder checks / Structure.	No.	–	–	–	–	–	–	–	–	–	–
	3. Gabion structures	No (each 3 cum.)	–	–	–	–	–	–	–	–	–	–
II	Livelihood for landless People	–	–	–	–	–	–	–	–	–	–	–
	1. Goatary	No. of SHGs/ No. of beneficiaries	7/70	1.75	5/52	1.25	6/60	1.5	10/102	2.5	6/62	1.5
	2. Back Yard Poultry	do	2	0.50	1/10	0.25	3/30	0.45	4/42	1.0	2/20	0.50
	3. Poultry (Broiler)	do	–	–	–	–	2/20	0.45	2/20	0.30	2/20	0.40
	4. Black Smithy	do	1/10	0.25	1/10	0.25	–	–	2/20	0.40	1/10	0.25
	5. Rope Making (Linseed)	do	–	–	–	–	–	–	–	–	–	–
	6. Tailoring	do	2/20	0.5	–	–	1/10	0.20	1/10	0.254	–	–
	7. Repairing of Diesel Engine / Implements	–	–	–	–	–	1/10	0.132	–	–	–	–
	8. Vermi composting	do	–	–	–	–	1/10	0.15	1/10	0.25	1/10	0.201
	9. Fruit Processing	do	–	–	–	–	1/10	0.25	–	–	–	–
	10. Mini Dal Mill	do	1/10	0.25	1/10	0.25	–	–	1/10	0.25	–	–

	11. Mini flour Mill	do	–	–	–	–	–	–	–	–	–	–
	12. Mini Oil Expeller	do	–	–	–	–	–	–	1/10	0.25	–	–
	13. Carpentry	do	1/10	0.25	1/10	0.25	–	–	–	–	–	–
	G.M.S.	–	–	–	–	1/10	0.25	–	–	–	–	–
	Total	–	–	–	–	–	–	–	–	–	–	–
	Agriculture Production	–	–	–	–	–	–	–	–	–	–	–
III	System	–	–	–	–	–	–	–	–	–	–	–
	A- Crop Demonstrations- (Crop Wise)	–	–	–	–	–	–	–	–	–	–	–
	(1)SMC Area:	–	–	–	–	–	–	–	–	–	–	–
	1. Lentil (ICM)	No. of farmers/Area (ha)	–	–	–	–	–	–	–	–	–	–
	2. Chickpea (ICM)	No. of farmers/Area	–	–	–	–	8/3.0	0.24	12/5.0	0.4	8/3.5	0.28
	3. Field Pea (ICM)	No. of farmers/Area	–	–	–	–	–	–	–	–	–	–
	4. Linseed (ICM)	No. of farmers/Area	–	–	–	–	–	–	–	–	–	–
	5. Mustard (ICM)	No. of farmers/Area	–	–	18/4.0	0.4	6/3.0	0.3	18/8.0	0.8	6/2.0	0.2
	6. Masoor	No. of farmers/Area	12/3.0	0.27	8/1.0	0.08	–	–	17/7.0	0.56	4/1.0	0.8
	7. Paddy	No. of farmers/Area	12/6.0	0.9	10/3.0	0.45	6/3.0	0.45	20/10.0	1.5	12/6.0	0.9
	8. Gram	No. of farmers/Area	6/15.0	0.12	4/1.0	0.085	14/6.0	0.51	–	–	–	–
	9. Arhar (ICM)	No. of farmers/Area	14/3.0	0.27	10/4.0	0.36	4/1.0	0.09	15/6.0	0.54	–	–
	10. Wheat	No. of farmers/Area	10/5.0	0.9	8/4.0	0.6	17/8	1.12	22/10.0	1.4	04-Aug	0.56
	(2) Total	–	–	2.11	–	2.017	–	2.285	–	5.71	–	2.74
	B- Production of seeds	–	–	–	–	–	–	–	–	–	–	–
	1. Bajra	No. of farmers/Area	–	–	–	–	–	–	–	–	–	–

	2. Tur	No. of farmers/Area	–	–	–	–	–	–	–	–	–	–
	3. Field Pea	No. of farmers/Area	–	–	–	–	–	–	–	–	–	–
	4. Masoor	No. of farmers/Area	–	–	–	–	–	–	–	–	–	–
	5. Mustard	No. of farmers/Area	–	–	–	–	–	–	–	–	–	–
	6. Wheat	No. of farmers/Area	–	–	–	–	–	–	–	–	–	–
	7. Gram	No. of farmers/Area	–	–	–	–	–	–	–	–	–	–
	8. Paddy	No. of farmers/Area	–	–	–	–	–	–	–	–	–	–
	Live Stock Management	–	–	–	–	–	–	–	–	–	–	–
	A. Rearing of Milch cattle-	–	–	–	–	–	–	–	–	–	–	–
	1- Cow-	No. of Units / Farmers	–	–	2/2.0	0.6	–	–	–	–	–	–
	2- Buffalloes-	No. of Units / Farmers	4/4.0	1.802	–	–	3/3.0	1.195	–	–	1/1.0	0.428
	3- Goatry-	No. of Units / Farmers	–	–	–	–	–	–	–	–	–	–
	4- Poultry-	No. of Units / Farmers	–	–	–	–	–	–	–	–	–	–
	5- Broiler-	No. of Units / Farmers	–	–	–	–	–	–	–	–	–	–
	6- Layers-	No. of Units / Farmers	–	–	–	–	–	–	–	–	–	–
	7- Piggeries-	No. of Units / Farmers	–	–	–	–	–	–	–	–	–	–
	8- Fisheries -	No. of Units / Farmers	–	–	–	–	–	–	–	–	–	–
	9- Dairy -	No. of Units / Farmers	–	–	–	–	–	–	–	–	–	–
	10- Green Fodder	ha/farmer	–	–	–	–	–	–	–	–	–	–
	Total	–	–	–	–	–	–	–	–	–	–	–

	B. Veterinary Services/	–	–	–	–	–	–	–	–	–	–	–
	1- Vaccination/Medication	No. of Animals	–	–	–	–	–	–	–	–	–	–
	2- Infertility Management	No. of Animals	–	–	–	–	–	–	–	–	–	–
	3- Others	No. of Animals	–	–	–	–	–	–	–	–	–	–
	Total	–	–	–	–	–	–	–	–	–	–	–
	C. Live stock Improvement Measures	–	–	–	–	–	–	–	–	–	–	–
	1- Artificial Insemination	No. of Animals	–	–	86	0.083	–	–	350	0.35	–	–
	2- Natural Service.	He Buffalo	–	–	–	–	–	–	–	–	–	–
	Total	–	–	–	–	–	–	–	–	–	–	–
	Total Live stock management	–	–	–	–	–	–	–	–	–	–	–
	Total for Ag. Production System		–	–	–	–	–	–	–	–	–	–
Total				29.868		16.582		25.6053		44.579		23.376

Details of Development works estimates of Beneficiaryi-wise givne in the annexures.

Table 5.5 Micro-watershed wise break-up of watershed development works (MNREGA Convergence)

Sr. No.	Particular of Measures/Activities	Unit	Khaptiha / 2A7D2e1b		Pathakpur / 2A7D2e2c		Toungakala / 2A7D2e2a	
		No., Length/ ha, Volume						
			Quantity	Cost	Quantity	Cost	Quantity	Cost
1	2	3	–	–	–	–	–	–
I	**Soil & Water Conservation Measures**		–	–	–	–	–	–
	A- Moisture Conservation Measures		–	–	–	–	–	–
	1. Field Bund	-	–	–	–	–	–	–
	2. Contour Bund	Length	70360	401640.0	29855.00	2058902.00	–	–
	3. Peripheral Bund	Length	–	–	–	–	–	–
	4. Marginal Bund	Length	–	–	–	–	700	68530.00
	5.Submergence Bundhi	Length	25320	1983062.40	10250	1428031.0	3070	240442.40
	B- Water Resource Development		–	–	–	–	–	–

	1. Tank/Pond	No	–	–	–	–	–	–
	1a - Water storing capacity	cum.	–	–	–	–	–	–
	1b- Area proposed for irrigation	ha	–	–	–	–	–	–
	2- Water Harvesting Bundhi/GP	cum.	–	–	–	–	–	–
	2a- Water storing capacity	cum.	–	–	–	–	–	–
	2b- Area proposed for irrigation	ha	–	–	–	–	–	–
	3. Check Dam	No.	–	–	–	–	–	–
	3a- Drop Spillway	No	–	–	–	–	–	–
	3b. Pipe Putlet	No	–	–	10	214380.0	20	767390.6
	4. Well recharging unit	No	–	–	–	–	–	–
	4a. Expected Volume of Recharge	cum.	–	–	–	–	–	–
	4b-Expected irrigated area to be increased (only		–	–	–	–	–	–
	one irrigation)	ha	–	–	–	–	–	–
	C- Drainage Line Treatment Upper reaches		–	–	–	–	–	–
			–	–	–	–	–	–
	1. Vegetative / Brush wood checks	No.	–	–	–	–	–	–
	2. Loose Boulder checks / Structure.	No.	–	–	–	–	–	–
	3. Gabion structures	No (each 3 cum.)	–	–	–	–	–	–
	4. Water Harvesting Bund	No.	–	–	–	–	–	–
	4a-Water storing capacity	cum.	–	–	–	–	–	–
			–	–	–	–	–	–
	4b. Area proposed for irrigation by WHB	ha	–	–	–	–	–	–
	Middle reaches		–	–	–	–	–	–
	1.Loose Boulder checks / structures	No.	–	–	–	–	–	–
	2. Gabion structures.	No.	–	–	–	–	–	–
	3. Sunken Pond (Kadahi Tal) /	No.	–	–	–	–	–	–
	4. Percolation Tank	No.	–	–	–	–	–	–
	4. WHB	No	–	–	–	–	–	–
	4a-Water storing capacity	cum.	–	–	–	–	–	–
			–	–	–	–	–	–
	4b-Area proposed for irrigation by	ha	–	–	–	–	–	–

	WHB							
	Lower reaches		–	–	–	–	–	–
	1. Loose Boulder checks /Structure	No.	–	–	–	–	–	–
	2. Gabion structures.	No.	–	–	–	–	–	–
	3. Percolation Tank.	No.	–	–	–	–	–	–
			–	–	–	–	–	–
	4. Gully Plug / Nala Bund / Earthen Checkdam	CMT	–	–	–	–	–	–
	4a- Water storing capacity	Cub. M	–	–	–	–	–	–
	4b- Area proposed for irrigation by Nala Bund		–	–	–	–	–	–
	Total		–	2384702.4	–	3701313.00	–	1076362.99

Continued…

Sr. No.	Particular of Measures/Activities	Unit	Bahraicha 2nd / 2A7D2e3b		Nidaura / 2A7D5a1b		Unchgaon / 2A7D5a1a		Baghol / 2A7D2e3a		Baraicha 1st / 2A7D2e3c	
		No., Length/ ha, Volume	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost
1	2	3	–	–	–	–	–	–	–	–	–	–
I	**Soil & Water Conservation Measures**		–	–	–	–	–	–	–	–	–	–
	A- Moisture Conservation Measures		–	–	–	–	–	–	–	–	–	–
	1. Field Bund	-	5830	226019.77	17360	673019.42	10590	41055.0	–	–	–	–
	2. Contour Bund	Length	–	–	–	–	–	–	–	–	–	–
	3. Peripheral Bund	Length	–	–	–	–	–	–	–	–	–	–
	4. Marginal Bund	Length	990	146500.00			6180	605022.00	–	–	–	–
	5.Submergence Bundhi	Length	–	–	5170	404914.40	–	–	–	–	–	–
	B- Water Resource Development		2285	178961.20	–	–	–	–	–	–	–	–
	1. Tank/Pond	No	–	–	–	–	–	–	–	–	–	–
	1a - Water storing capacity	cum.	–	–	–	–	–	–	–	–	–	–

	1b- Area proposed for irrigation	ha	–	–	–	–	–	–	–	–	–	–
	2- Water Harvesting Bundhi/GP	cum.	–	–	–	–	–	–	–	–	–	–
	2a- Water storing capacity	cum.	–	–	–	–	–	–	–	–	–	–
	2b- Area proposed for irrigation	ha	–	–	–	–	–	–	–	–	–	–
	3. Check Dam	No.	8	291942.7	–	–	1	12545.0	–	–	–	–
	3a- Drop Spillway	No.	1	197220.0	–	–	–	–	–	–	–	–
	3b. Pipe Putlet	No.	8	171504.0	10	214380.0	10	214380.0	–	–	–	–
	4. Well recharging unit	No	–	–	–	–	–	–	–	–	–	–
	4a. Expected Volume of Recharge	cum.	–	–	–	–	–	–	–	–	–	–
	4b-Expected irrigated area to be increased (only		–	–	–	–	–	–	–	–	–	–
	one irrigation)	ha	–	–	–	–	–	–	–	–	–	–
	C- Drainage Line Treatment Upper reaches		–	–	–	–	–	–	–	–	–	–
			–	–	–	–	–	–	–	–	–	–
	1. Vegetative / Brush wood checks	No.	–	–	–	–	–	–	–	–	–	–
	2. Loose Boulder checks / Structure.	No.	–	–	–	–	–	–	–	–	–	–
	3. Gabion structures	No (each 3 cum.)	–	–	–	–	–	–	–	–	–	–
	4. Water Harvesting Bund	No.	–	–	–	–	–	–	–	–	–	–
	4a-Water storing capacity	cum.	–	–	–	–	–	–	–	–	–	–
			–	–	–	–	–	–	–	–	–	–
	4b. Area proposed for irrigation by WHB	ha	–	–	–	–	–	–	–	–	–	–
	Middle reaches		–	–	–	–	–	–	–	–	–	–
	1.Loose Boulder checks / structures	No.	–	–	–	–	–	–	–	–	–	–
	2. Gabion structures.	No.	–	–	–	–	–	–	–	–	–	–
	3. Sunken Pond (Kadahi Tal) /	No.	–	–	–	–	–	–	–	–	–	–
	4. Percolation Tank	No.	–	–	–	–	–	–	–	–	–	–
	4. WHB	No	–	–	–	–	–	–	–	–	–	–
	4a-Water storing capacity	cum.	–	–	–	–	–	–	–	–	–	–
			–	–	–	–	–	–	–	–	–	–
	4b-Area proposed for irrigation by WHB	ha	–	–	–	–	–	–	–	–	–	–
	Lower reaches		–	–	–	–	–	–	–	–	–	–

	1. Loose Boulder checks /Structure	No.	–	–	–	–	–	–	–	–	–	–
	2. Gabion structures.	No.	–	–	–	–	–	–	–	–	–	–
	3. Percolation Tank.	No.	–	–	–	–	–	–	–	–	–	–
			–	–	–	–	–	–	–	–	–	–
	4. Gully Plug / Nala Bund / Earthen Checkdam	CMT	–	–	–	–	–	–	–	–	–	–
	4a- Water storing capacity	Cub. M	–	–	–	–	–	–	–	–	–	–
	4b- Area proposed for irrigation by Nala Bund		–	–	–	–	–	–	–	–	–	–
	Total		–	1212147.7	–	1292313.8	–	873002.0	–	–	–	–

Table 5.5 Gram Panchayat wise details of Micro-watershed of watershed development works

Name of Micro-watershed- 2A7D2e2a

Sr. No.	Particular of Measures/Activities	Unit	Name of Gram Panchayat				Total
		No., Length/ ha, Volume	Tounga Kalan		Kharka		
			Quantity	Cost	Quantity	Cost	
1	2	3					
I	**Soil & Water Conservation Measures**						
	A- Moisture Conservation Measures						
	1. Field Bund	-					
	2. Contour Bund	Length (m)					
	3. Peripheral Bund	Length (m)					
	4. Marginal Bund	Length (m)	815	0.798			0.798
	5.Submergence Bundhi	Length (m)	7130	5.584			5.584
	B- Water Resource Development						
	1. Tank/Pond	No					
	1a - Water storing capacity	cum.					
	1b- Area proposed for irrigation	ha					
	2- Water Harvesting Bundhi/GP	cum.					
	2a- Water storing capacity	cum.					
	2b- Area proposed for irrigation	ha					
	3. Check Dam	No.	23	6.739			6.739
	3a- Drop Spillway	No.	1	1.972			1.972
	3b. Pipe out-let	No.	10	2.144			2.144
	4. Well recharging unit	No					
	C. Land Development						

	1. Affortation	ha					
	2. Horticulture	ha	6.046	1.511			1.511
Total				18.75			18.75

Name of Micro-watershed- 2A7D2e2b

Sr. No.	Particular of Measures/Activities	Unit	Name of Gram Panchayat						Total
		No., Length/ ha, Volume	Tounga Kalan		Koundi		Chhapar		
			Quantity	Cost	Quantity	Cost	Quantity	Cost	
1	2	3							
I	**Soil & Water Conservation Measures**								
	A- Moisture Conservation Measures								
	1. Field Bund	-							
	2. Contour Bund	Length (m)							
	3. Peripheral Bund	Length (m)							
	4. Marginal Bund	Length (m)	615	0.602					
	5.Submergence Bundhi	Length (m)	5520	4.323	11 680	9.147776	3430	2.6864	16.158
	B- Water Resource Development								
	1. Tank/Pond	No							
	1a - Water storing capacity	cum.							
	1b- Area proposed for irrigation	ha							
	2- Water Harvesting Bundhi/GP	cum.							
	2a- Water storing capacity	cum.							
	2b- Area proposed for irrigation	ha							
	3. Check Dam	No.	6	0.840	5	1.559379			2.399
	3a- Drop Spillway	No.	1	1.972					

	3b. Pipe out-let	No.	4	0.858	3	0.64314	2	0.4288	1.929
	4. Well recharging unit	No							
	C. Land Development								
	1. Affortation	ha							
	2. Horticulture	ha	10.640	1.276	6.000	0.72	4.000	0.48	2.476
Total				9.87		12.07029		3.5951	25.54

Name of Micro-watershed- 2A7D2e2c

Sr. No.	Particular of Measures/Activities	Unit	Name of Gram Panchayat												Total
		No., Length/ ha, Volume	Jorwat		Toungakala		Kheeri		Chhapar		Kaundi		Basgadhi		
			Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	
1	2	3													
I	**Soil & Water Conservation Measures**														
	A- Moisture Conservation Measures														
	1. Field Bund	-													
	2. Contour Bund	Length (m)													
	3. Peripheral Bund	Length (m)													
	4. Marginal Bund	Length (m)			2980	2.917									
	5.Submergence Bundhi	Length (m)	9115	7.139	12720	9.962	7725	6.05	745	0.58	2040	1.598	14030	10.99	36.32
	B- Water Resource Development														
	1. Tank/Pond	No													
	1a - Water storing capacity	cum.													
	1b- Area proposed for irrigation	ha													
	2- Water Harvesting Bundhi/GP	cum.													
	2a- Water storing capacity	cum.													

	2b- Area proposed for irrigation	ha													
	3. Check Dam	No.			6	0.893									0.89
	3a- Drop Spillway	No.			1	1.972									1.97
	3b. Pipe out-let	No.	2	0.429	3	0.643	3	0.643	2	0.43	2	0.429	2	0.43	2.57
	4. Well recharging unit	No													
	C. Land Development														
	1. Affortation	ha													
	2. Horticulture	ha	12.542	1.505			7.51667	0.90	2.787	0.33					2.74
Total				9.07		16.39		7.60		1.35		2.026		11.42	20.04

Name of Micro-watershed- 2A7D5a1a

Sr. No.	Particular of Measures/Activities	Unit	Name of Gram Panchayat								Total
		No., Length/ ha, Volume	Chhapar		Basgadhi		Jorvat		Lohra		
			Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	
1	2	3									
I	**Soil & Water Conservation Measures**										
	A- Moisture Conservation Measures										
	1. Field Bund	-									
	2. Contour Bund	Length (m)	5270	2.04							2.04
	3. Peripheral Bund	Length (m)									
	4. Marginal Bund	Length (m)	3570	3.50	2180	2.13					5.63
	5.Submergence Bundhi	Length (m)	1785	1.40							1.40
	B- Water Resource Development										
	1. Tank/Pond	No									
	1a - Water storing capacity	cum.									

	1b- Area proposed for irrigation	ha									
	2- Water Harvesting Bundhi/GP	cum.									
	2a- Water storing capacity	cum.									
	2b- Area proposed for irrigation	ha									
	3. Check Dam	No.	9	3.96	1	0.64					4.60
	3a- Drop Spillway	No.			1	1.97					1.97
	3b. Pipe out-let	No.	5	1.07	5	1.07					2.14
	4. Well recharging unit	No									
	C. Land Development										
	1. Affortation	ha									
	2. Horticulture	ha	7.333	0.88	6.879	0.83					1.71
Total				5.91		6.64					12.55

Name of Micro-watershed- 2A7D5a1b

Sr. No.	Particular of Measures/Activities	Unit	Name of Gram Panchayat				Total
		No., Length/ ha, Volume	Jorwat		Basgadhi		
			Quantity	Cost	Quantity	Cost	
1	2	3					
I	**Soil & Water Conservation Measures**						
	A- Moisture Conservation Measures						
	1. Field Bund	-					
	2. Contour Bund	Length (m)					
	3. Peripheral Bund	Length (m)					
	4. Marginal Bund	Length (m)			3530	3.46	3.46
	5.Submergence Bundhi	Length (m)			1250	0.98	0.98

	B- Water Resource Development						
	1. Tank/Pond	No					
	1a - Water storing capacity	cum.					
	1b- Area proposed for irrigation	ha					
	2- Water Harvesting Bundhi/GP	cum.					
	2a- Water storing capacity	cum.					
	2b- Area proposed for irrigation	ha					
	3. Check Dam	No.			7	3.44	3.44
	3a- Drop Spillway	No.			2	3.94	3.94
	3b. Pipe out-let	No.			9	1.93	1.93
	4. Well recharging unit	No					
	C. Land Development						
	1. Affortation	ha					
	2. Horticulture	ha			11.438	1.37	1.37
Total						15.1	15.12

Name of Micro-watershed- 2A7D5e1b

Sr. No.	Particular of Measures/Activities	Unit	Name of Gram Panchayat										Total
		No., Length/ ha, Volume	Jorvat		Khaptiha		Kheeri		Kharka		Puradattu		
			Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	
1	2	3											
I	**Soil & Water Conservation Measures**												
	A- Moisture Conservation Measures												
	1. Field Bund	-											
	2. Contour Bund	Length (m)											

	3. Peripheral Bund	Length (m)											
	4. Marginal Bund	Length (m)	2605	2.55	1570	1.54	4370	4.28			1450	1.42	8.37
	5.Submergence Bundhi	Length (m)	3880	3.04	7920	6.20	7770	6.09			4870	3.81	15.33
	B- Water Resource Development												
	1. Tank/Pond	No											
	1a - Water storing capacity	cum.											
	1b- Area proposed for irrigation	ha											
	2- Water Harvesting Bundhi/GP	cum.											
	2a- Water storing capacity	cum.											
	2b- Area proposed for irrigation	ha											
	3. Check Dam	No.	3	0.60									0.60
	3a- Drop Spillway	No.			1	1.97	1	1.97					3.94
	3b. Pipe out-let	No.	3	0.65	6	1.29	4	0.86			2	0.43	2.80
	4. Well recharging unit	No											
	C. Land Development												
	1. Affortation	ha											
	2. Horticulture	ha	12.665	1.52	6.000	0.72	4.000	0.48			3.0	0.36	2.72
Total				8.36		11.725		13.678				6.0	25.40

Name of Micro-watershed- 2A7D5e3a

Sr. No.	Particular of Measures/Activities	Unit	Name of Gram Panchayat				Total	
		No., Length/ ha, Volume	Baghol		Mahuli Kalan			
			Quantity	Cost	Quantity	Cost		
1	2	3						
I	**Soil & Water Conservation Measures**							

	A- Moisture Conservation Measures							
	1. Field Bund	-						
	2. Contour Bund	Length (m)	4550	1.764	4900	1.90	3.664	
	3. Peripheral Bund	Length (m)	720	0.705			0.705	
	4. Marginal Bund	Length (m)	790	0.773	7150	7.00	7.773	
	5.Submergence Bundhi	Length (m)						
	B- Water Resource Development							
	1. Tank/Pond	No						
	1a - Water storing capacity	cum.						
	1b- Area proposed for irrigation	ha						
	2- Water Harvesting Bundhi/GP	cum.						
	2a- Water storing capacity	cum.						
	2b- Area proposed for irrigation	ha						
	3. Check Dam	No.	1	0.261	28	9.08	9.341	
	3a- Drop Spillway	No.			3	5.92	5.917	
	3b. Pipe out-let	No.	3	0.643	12	2.57	3.216	
	4. Well recharging unit	No						
	C. Land Development							
	1. Affortation	ha						
	2. Horticulture	ha	10.174	1.22082	17.500	2.1	3.32082	
Total				5.37		28.568	33.94	

Name of Micro-watershed- 2A7D5e3c

Sr. No.	Particular of Measures/Activities	Unit	Name of Gram Panchayat				Total
		No., Length/ ha, Volume	Bahraicha				
			Quantity	Cost	Quantity	Cost	
1	2	3					
I	**Soil & Water Conservation Measures**						
	A- Moisture Conservation Measures						
	1. Field Bund	-					
	2. Contour Bund	Length (m)	11570	4.49			4.486
	3. Peripheral Bund	Length (m)					
	4. Marginal Bund	Length (m)	4575	4.48			4.479
	5.Submergence Bundhi	Length (m)					
	B- Water Resource Development						
	1. Tank/Pond	No					
	1a - Water storing capacity	cum.					
	1b- Area proposed for irrigation	ha					
	2- Water Harvesting Bundhi/GP	cum.					
	2a- Water storing capacity	cum.					
	2b- Area proposed for irrigation	ha					
	3. Check Dam	No.	5	2.39			2.394
	3a- Drop Spillway	No.	1	1.97			1.972
	3b. Pipe out-let	No.	13	2.79			2.787
	4. Well recharging unit	No					
	C. Land Development						

	1. Affortation	ha					
	2. Horticulture	ha	13.530	1.62			1.624
Total				17.74			17.741

Name of Micro-watershed- 2A7D5e3b

Sr. No.	Particular of Measures/Activities	Unit	Name of Gram Panchayat				Total
		No., Length/ ha, Volume	Baghol		Bahraicha		
			Quantity	Cost	Quantity	Cost	
1	2	3					
I	**Soil & Water Conservation Measures**						
	A- Moisture Conservation Measures						
	1. Field Bund	-					
	2. Contour Bund	Length (m)					
	3. Peripheral Bund	Length (m)					
	4. Marginal Bund	Length (m)	3680	5.446			5.446
	5.Submergence Bundhi	Length (m)					
	B- Water Resource Development						
	1. Tank/Pond	No					
	1a - Water storing capacity	cum.					
	1b- Area proposed for irrigation	ha					
	2- Water Harvesting Bundhi/GP	cum.					
	2a- Water storing capacity	cum.					
	2b- Area proposed for irrigation	ha					
	3. Check Dam	No.	22	8.585	3	1.42	10.01
	3a- Drop Spillway	No.			1	1.97	1.97

	3b. Pipe out-let	No.	10	2.144	2	0.43	2.57
	4. Well recharging unit	No					
	C. Land Development						
	1. Affortation	ha					
	2. Horticulture	ha	7.508	0.901	8.422	1.01	1.91
Total				17.08		4.83	16.46

Watershed Development Works –Drawings

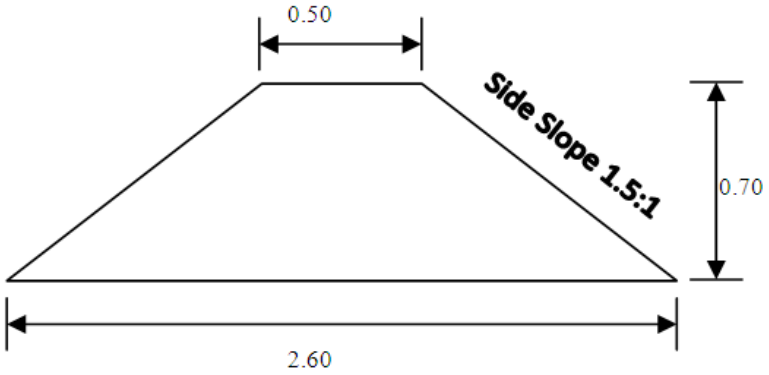


Figure 4.1: C.B., Cross-Section – 1.085 m²)

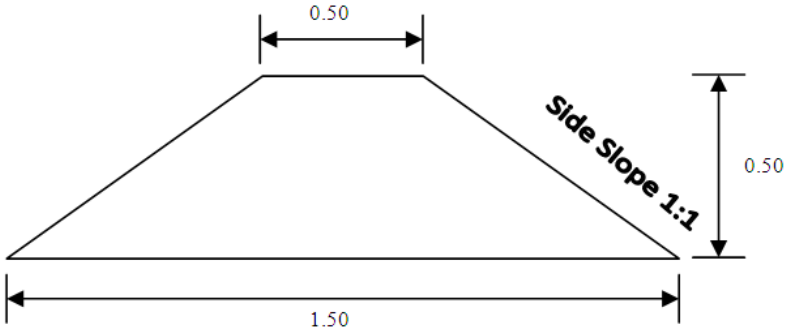


Figure 4.2: Field Bund, Cross-Section – 0.50 m²)

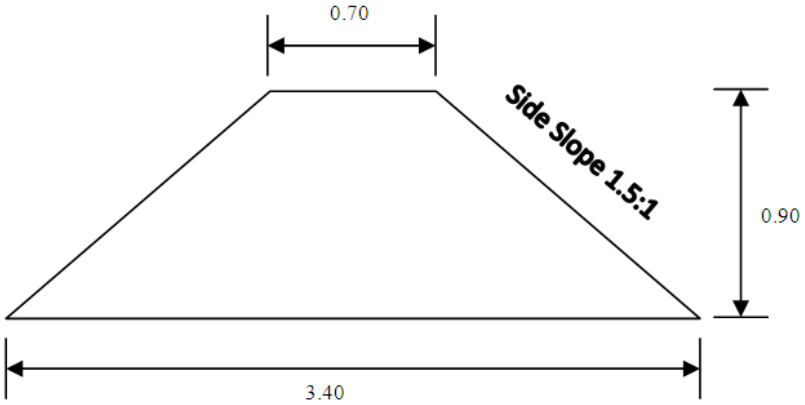


Figure 4.3: S.B., Cross-Section – 1.845m²

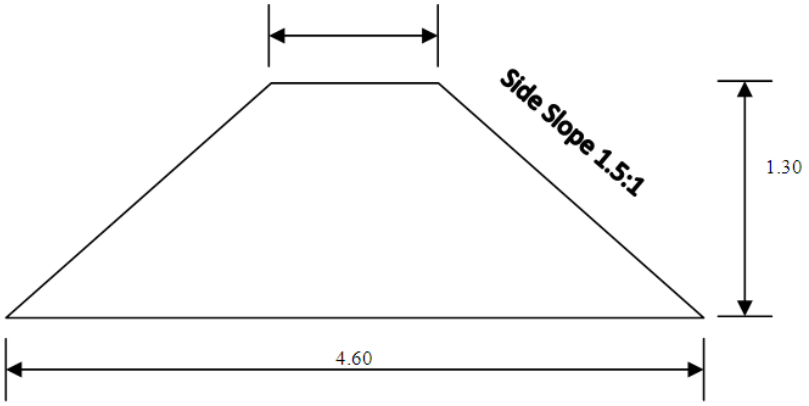


Figure 4.4: S.B. /P.B. /M.B., Cross-Section – 3.445 m²

DRAWING OF EARTHEN CHEKDAM / GULLY PLUG

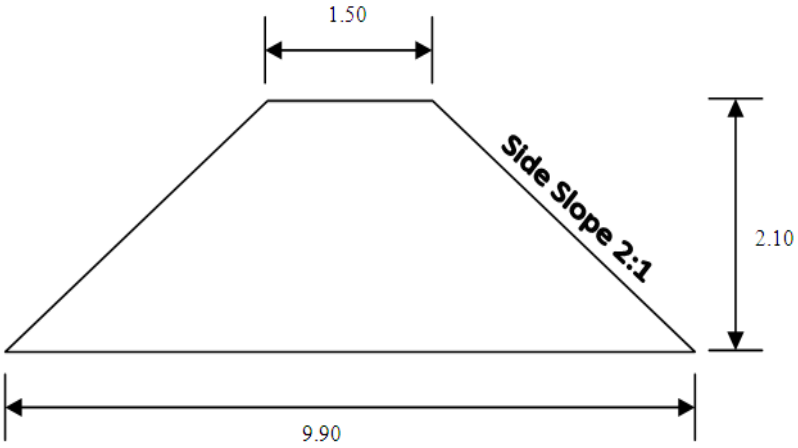


Figure 4.5: C.D. /G.P., Cross-Section – 11.97 m^2

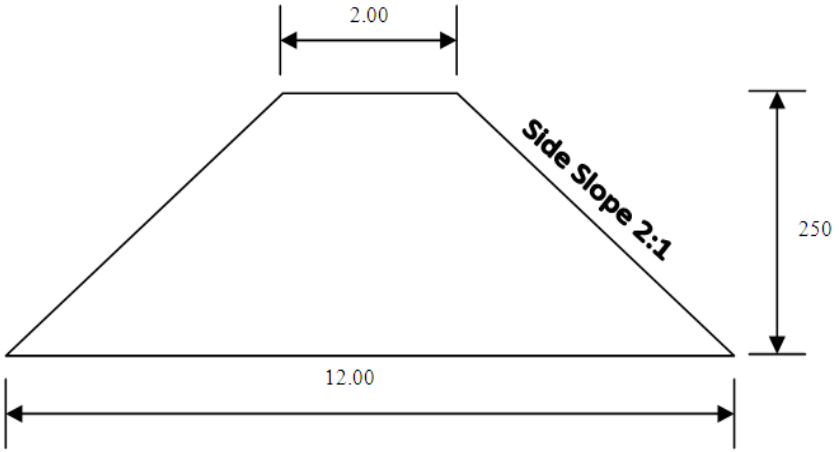


Figure 4.6: C.D. /G.P., Cross-Section – 17.50 m^2

DESIGN OF CONTOUR BUND

Type of Soil	-Clay
Rain fall	-24 hr in cm -25 cm
Field Stop -1%	
Vertical Interval (VI)	= [s/3+2] x 0.3
	= [1/3+2] x 0.3
	= 0.70 m
Horizontal Interval (HI)	= 100 x V.I/s
	= 100 x 0.7/1
Height of bund h	$= \sqrt{(\text{Re x VI})/50}$ Re=maximum rainfall in cm
	$= \sqrt{(25 \text{ x } 0.7)/50}$
	$= \sqrt{0.35}$
	= 0.59
	Say 0.60 m
Free board	=15% of height minimum -10 cm
Height	= 0.60 + 0.10

= 0.70 m

Taking top width of bund 0.50 m and side slope 1.5:1

Then base of Bund = 0.50 + (1.50 d) x 2

= 2.60 m

Cross-Section of bund = (0.50 + 2.60) x 0.70 / 2

= 1 .085 m^2

Length of bund = 100 s / V.I.

= 100 x 1 / 0.70

=142.85 m/ha

Say 150 m/ha

Earth work/ha = 150x1.085

= 162.75 cum

Cost Rs. / ha = 162.75 x 39.16 = 6373.29

Say 6375.00

DESIGN OF SUBMERGENCE BUND

Types of soil –Clay

Rainfall intensity for 24 hrs – 25cm

Field slope 3%

V.I.=[s/3+2]x0.30

=0.90 m

Horizontal Interval = (100xV.I.)/s

= (100x0.90)/3

=30 m

Height of bund h=$\sqrt{(\text{Re x V. I.})/50}$ =$\sqrt{(25 \text{ x } 0.90)/50}$ =$\sqrt{0.45}$ = 0.67 m. **Say 0.70m**

Free board 20% of height minimum 20cm

Total Height =0.90m

Taking top width of bund 0.70m and side slope 1.5:1

Bottom of bund = 0.70+2 x 1.5d

= 0.70+2.70

= 3.40

Cross Section of Submergence Bund = (0.70+3.40) x 0.90 / 2

= 1.845 m^2

Length of bund = 100 s / V.I.

= (100 x 3) /0.90

= 333 m

Feasible length 100 + 25 + 25

= 150 m

Earth work/ha =150 x 1.845

=276.75

Cost per ha =276.75 x 39.16

=10,837.53

Say 10,850=00

TYPICAL SECTION OF FIELD BUND

Top width = 0.50 m

Side slope = 1:1

Height of bound = 0.50 m

Bottom Width = 1.50 m

Cross section = (0.50+1.50)x0.50/2 = 0.50 m^2

Length per hectare	= 200 m
Earthwork	= 200 x 0.50 = 100 cum
Cost 39.16/cum	= Rs. 3916.00
Cost per hectare	= Rs. 3916.00

TYPICAL SECTION OF P.B., M.B., S.B.

Top width	= 0.70 m
Side slope	= 1.5:1
Height	= 1.30 m
Bottom	= 4.60 m
Cross section	= (0.70+4.60)x1.30/2
	= 3.445 m^2
Cost/ meter	= Rs. 142.00

TYPICAL SECTION OF EARTHEN CHECK DAM / GULLY PLUG

Top width	= 1.50 m
Side slope	= 2:1

Height = 2.10m

Bottom Width = 9.90 m

Cross section = (1.50 + 9.90) x 2.10 / 2

= 11.97 m^2

Cost per meter = Rs. 551.45

Estimate of Pipe Outlet

S.No.	Item	Unit	Length	W	H	Qty (Cmt)
1	E.W. in foundation					
(i)	Pipe laying	1	4.15	0.70	1.00	0.80
(ii)	Para pit wall	2	2.30	0.75	1.10	3.80
(iii)	Collor support wall	1	1.25	0.50	1.10	0.68
	Total					5.28
2	Brik work (1:4)					
(i)	Para pit wall	1	2.00	0.48	2.10	4.032
(ii)	Collor support wall	1	1.00	0.37	1.10	0.407
(iii)	floor D/s	1	1.00	1.00	0.11	0.110
	Total					4.549
	Deduction	2	3.14	$(0.175)^2$	0.48	0.092

		1	3.14	$(0.175)^2$	0.37	0.035
	Total					0.127
	Net B/w					4.422
3	Plaster work (1:4)					
(i)	Para pit wall	2	2.00	-	0.48	1.92
(ii)	"	2x2	2.00	-	1.25	10.00
(iii)	"	2x2	0.48	-	1.25	2.45
(iv)	On floor	1	1.00	1.00	-	1.00
(v)	floor sides	3	1.00	1.11	-	0.33
	Total plaster work					15.70
	Deduction	2	3.14	$(0.175)^2$		0.19
	Net plaster work					15.51
4	Extra E.W. in filling	2	2.75	2.50	0.35	4.81

onsumption of Material

S.No.	Item	Unit	Qty	Cement	Morum	Brick work	Pipe + collor
1	Brick work 1:4	m3	4.422	7.95	1.193	2034	–

2	plaster work	m^2	15.51	1.70	0.232	_	–
3	Pipe Fixing	No	2 No	_	-	.	5 Mt 2 (300mm)
	Total			9.65 Say 9.70	1.425 say 1.43	2034 say 2035	5 Mt 2 (300mm

Cost Of Material

S.N.	Item	Unit	Qty	Rate	Amount	Remark
1	Brick	No	2035	4650/	9462.75	
2	Morum	Cmt	1.43	2000/	2860.00	
3	Cement	No.	9.70	285/	2764.50	

4	Pipe + Coloor	M/no	5m/1	892.50/no 79/no	1864.00	
	Total				16951.25	

Labour Charges

S.n.	Item	Unit	Qty	Rate	Amount	Remark
1	E/W in exaction and dressing	Cmt	10.09	36.66/ Cmt	369.89	
2	B/W^{r} 1:4	Cmt	4.422	370/ Cmt	1636.14	
3	Hume Pipe Laying	No	2	175/pipe	350.00	
4	Plaster work	M^2	15.51	40/m^2	620.40	
7	Chaukidari	–	4 days	100/	400.00	
8	Curing	Cmt	4.422	25/	110.55	
9	Water Purchaging One bullock card with driver two days	Day	2 days	300 Per days	600.00	
10	Head Load Approximate	–	–	–	400.00	
	Total				4486.98 Say 4487.00	

S.n.	Item	Amount	Remark
1	Cost of material	16951.25	
2	Labour cost	4486.89	
	Total	21438.14	
	Say	21438	

COST IN PLANTING ONE PLANT WITH DIGGING, FILLING MIXED WITH FYM AND COST OF PLANT

Table 4.6 Details of Cost of Agro-forestry

S.No.	Particular	No.	L	B	D/H	Quantity	Rate	Amount
1	Earth work in digging	1	1.0	1.0	1.00	1.00	36.66	36.66
2	Cost of FYM, in Kg/pit	1	-	-	-	10Kg	8.00	80.00
3	Filling of pits mixed with FYM and soil	1	1.0	1.0	1.0	1.00	36.66	36.66
4	Cost of plants	1	-	-	-	1	18.00	18.oo
Total								**171.32**
Say								**Rs. 172.00**

HORTICULTURE DEVELOPMENT FOR WATERSHED MANAGEMENT

Horticulture is an important component of land use management. Now India is the second largest producer of fruits in the world after Brazil. However, 53% of the total geographical area of the country is degraded due to various reasons. Fruit trees

and fruit based systems are the viable alternatives for economic utilization of such lands. The basic philosophy behind the conservation horticulture is the use of available resources and skillful choice of fruits. The use of available soil moisture , collection of the runoff water from the catchment area to make up the deficit requirements as well as in situ water harvesting techniques are some of the measures . The in situ water harvesting techniques should be used for growing trees in such a way that each tree has its own micro catchment area. The success of the conservation of horticulture entirely depends on the selection of economically viable hardy varieties of fruit crops resistant to moisture stress or drought and other adverse climate conditions. The fruit crops selected for degraded lands must be such that their maximum growth take place during the period of maximum water availability in the soil and should have low demand.

The main constraints which restrict development of the horticulture land use in degraded lands are enumerated below:

(A) Basic constraints

1- Lack of suitable agro-techniques for degraded lands

2- Lack of trained resource persons

3- Inadequate dissemination of the technologies

4- Lack of community approach

5- High biotic interference

6- Lack of infrastructure including marketing.

(B) Soil constraints

1- Poor nutrient status of the soil

2- Physical impediment

3- Moisture stress / water logging / inadequate drainage.

(C) Plant related constraints

1- Problem of plant establishment

2- Physiological disorders

3- Fruit drop and poor productivity

4- Incidence of insects-pests.

However , apart from the above mentioned constraints, the measure bottleneck in horticulture development are poor technological advancements, high initial establishment cost, high input demand , timely operation and seasonal shortage of labours, etc.

CONCEPTS AND ADVANTAGES OF CONSERVATION HORTICULTURE

Conservation horticulture or horticulture land use based on soil and water conservation principle is a suitable alternative for utilization and management of land under rainfed conditions. Thus horticulture development in watershed management appears to be the most appropriate technique for sustained productivity as well as for restoration of degraded lands. In fact, horticulture system meet all the basic needs-food, fruits, fodder, fuel and timber besides, providing employment and sustaining a number of products for industries.

The fruit trees grown with crops can provide fuel from pruned shoots and dried branches, leaf fodder for animals and leaf litter that can be utilized as mulch material and organic matter the leaf litter of deciduous fruit trees not only protects the top soil from the impact of raindrops but also improve soil structure, reduces evapotranspiration, increases infiltration and add to

the nutrient status of soil. Therefore conservation based horticulture land use system assumes great significance as fruit trees on degraded lands provide higher returns and offer alternative opportunity in non-arable areas where cropping may not be possible.

CONSERVATION HORTICULTURE PRACTICES

Some of the important practices are given below

1- Selection of Suitable Fruits Types

For the success of conservation horticulture, selection of hardy varieties resistant to diseases and pests and use of local or other hardy root stocks for raising fruit-trees is of great importance. The major part of the reproductive cycle ie. Period from flowering to fruiting must also fall during maximum water availability period and the root ripening must be completed before the onset of dry summer (April-May).

Ber, Guava, Karonda, Bel, Amla, Lemon, and Phalsa etc. are the plants which fulfill this requirement and all these fruit plants are most suitable for Vindhya region.

2- Planting Techniques

For degraded lands, pits should be dug of 1m x 1m x 1m size, the excavated soil is mixed with Farmyard Manure (FYM) @ 5-10kg/pit with doses of potash and phosphorous and some insecticide / pesticide (numicide / aldrex) for prevention of white ant. Planting of the fruits plants should be done with the onset of monsoon.

Use of Root Stokes

Budding and grafting on the wild root stock gives benefit of the establishment root and in turn provides better quality fruits with high field potential. For example, Ziziphun mauritiana, a wild ber can be successful budded with scion of improved cultivars, This practice is only successful where sizable patch of wild root stock is available. The budded/grafted stock needs intensive management as it is required to be protected from the wild animals, birds, insects, pests etc. The wild root stock

develops efficient top root to provide moisture and nutrients to the scion. Amla. Bel is other examples of raising the improved cultivation the wild root stock.

In Site Water Harvesting

Since on slopy lands, runoff water is considerably higher, therefore, it should be harvested and used. The run off can be utilized for growing fruit plants in such a way that each tree in the established plants is at the time of fruit setting and fruiting. Moisture available at this critical period improves the fruit yield.

Runoff water will be harvested and stored in tanks during the rains. The stored water will be utilized at the time when the fruit trees show moisture stress during dry months. Counter trenches will dug between the rows of fruit trees because this is effective in conserving moisture and providing soil erosion.

Mulching:

Mulching is practiced to conserve moisture. It prevents the loss of moisture by evaporation and improve water intake by the soils. Various organic (Straw, hay, manure, tree leaves, dry wads) Mulches are used for mulching. Use of plastic mulch has been taken in rainfed and dryfarrming conditions to increase the productivity by minimizing evapotranspiration losses.

Drip Irrigation

Drip irrigation saves water by 40 to 70 percent and two to three times mare area can be irrigated with the same amount of available water. It has the advantages that it ensures uniform distribution of water, provides perfect control over water application and minimizing the losses during convergence and seepage.

Table 5.4 Detail Cost of Digging and Earth work

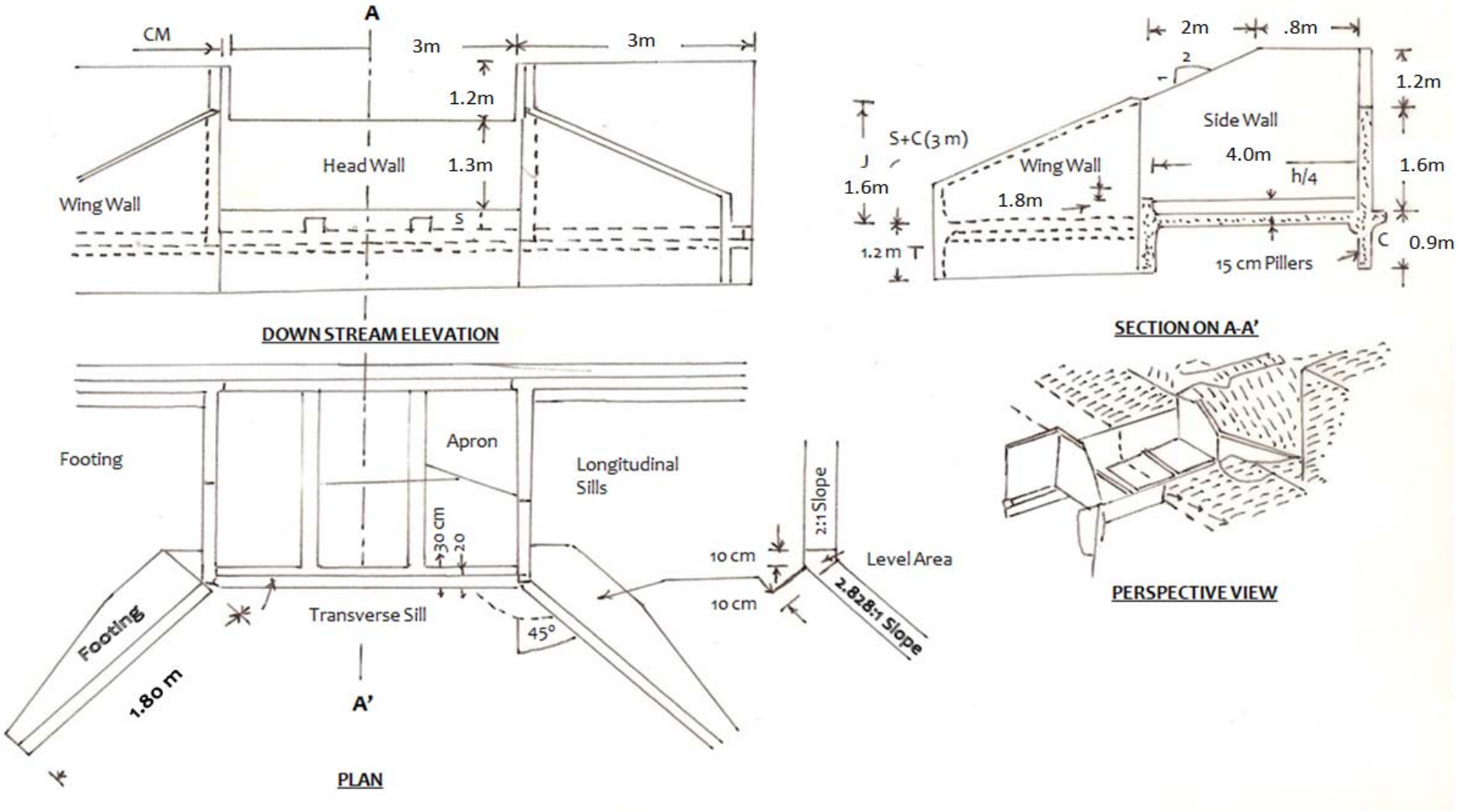
S.No.	Particular	No.	L	B	D/H	Quantity	Rate	Amount
1	Earth work in digging	1	1.0	1.0	1.00	1.00	36.66	36.66
2	Cost of FYM, in Kg/pit	1	-	-	-	10Kg	8.00	80.00
3	Filling of pits mixed with FYM and soil	1	1.0	1.0	1.0	1.00	36.66	36.66
4	Cost of plants	1	-	-	-	1	18.00	18.00
Total								**171.32**
Say								**Rs. 172.00**

Estimate of Orchard Development in the Watersheds Per Hectare (With Fencing)

S.No.	Particulars	Quantity	Rate	Amount	Remarks
A. Horticulture					
1.	Soil working 1m x 1m x 1m size pits (270nos.) including cost of refilling	270.00 cum	36.66/cum	9898.20	Since, the project is to be operated in a participatory mode, contribution in the form of labour input for pit digging, FYM and its applications, weeding and hoeing are to be provided by the participating farmers, hence the costs are not included in the estimates.
2.	Application of Farmyard Manure, including cost		L.S.	450.00	
3.	Cost of NPK mixture, neemicide @ 250 gm/plant		L.S.	400.00	
4.	Cost of plants (including 15% etc. for mortality) including transportation and planting	310 nos.	15.00/Plant	4650.00	
5.	Casualty replacement @ 10% of item No. 4 & 5			465.00	
6.	Cost of 2 weedings and hoeing		1.00/Plant	540	
7.	Contingency and unforeseen (3%)			492.00	
	Total			**Rs. 6,007.00**	
	Say			**Rs. 6,000.00**	
	Maintenance cost 2nd year onwards – 15 % of 1st year cost			900.00	
	For next 5 years i.e., Rs. 900 x 5			4500.00	
	Total Cost			**Rs. 10,500.00**	
	Say			**Rs. 10,500.00**	
B. Agro-Horticulture (cost per ha)					
1.	Cost of raising 270 plants up to 5 years @ Rs. 10,000.00			10500.00	The remarks mentioned under Horticulture are also applicable for Agro-Horticulture.
2.	Cost of raising agricultural crops @ Rs. 5,000 per hectare per year			5000.00	
3.	Fencing			45300.00	
	Total			**Rs. 60,800.00**	

DRAWING OF SPILLWAY OF CREST LENGTH 3.0 m

Not to Scale



Design of Drop Spillway to be constructed at a place in a gully having width of 4.0 m and catchment area 30 ha net drop 1.5 m Taking rainfall intensity for duration equal to time of concentration of watershed and design return period of 25 years , as 120mm/hr. The coefficient of runoff for the watershed is 0.3.

1. Hydrologic design- The design peak runoff rate (m^3/s) for the watershed from Rational formula is given as:

$$Q = \frac{C.I.A.}{360} = \frac{0.3x120x30.0}{360} = 3.0\ m^3/s$$

2. Hydraulic design- The maximum discharge capacity of the rectangular weir given by

$$Q = \frac{1.711\ L\ H^{3/2}}{(1.1+0.01\ F)}$$

To find suitable value of L & H

Let us assume L = 3.0 m (since width of gulley is 4.00 m)

$$3.0 = \frac{1.711\ L\ H^{3/2}}{(1.1+0.01x1.5)} = \frac{1.711\ L\ H^{3/2}}{(1.1+0.15)}$$

$$L\ H^{3/2} = \frac{3.00 \times 1.25}{1.711}$$

$$H^{3/2} = \frac{3.75}{} = 0.73$$

1.711 x 3

` H = $(0.73)^{2/3}$ = 0.80 m

Test: L / h = 3.00/0.80 = 3.75 ≥ 2.0 hence O.K.

h / f = $\frac{0.80}{1.50}$ = 0.53 ≤ which is approximately 0.50. Hence, O.K.

Hence the designed hydraulic dimensions of the Spillway are:

Crest Length (L) = 3.00 m

Weir depth (h) = 0.80 m

3. Structural design –

1-Minimum headwall extension, E = (3h + 0.6) or 1.5 f whichever is greater

E = 3x0.80+0.6 or 1.5x1.50

E = 3.0 m or 2.25 m

Head wall extension = 3.0 m

2- Length of apron basin L_B = f (2.28 h/f +0.54) = 1.5 (2.28 x $\frac{0.8}{1.5}$ + 0.54)

= 1.50 (1.216 + 0.54) = 1.5 x 1.756

= 2.634 m says 2.63 m

3- Height of end sill , $S = \frac{h}{3} = \frac{0.80}{3} = 0.26$ m

4- Height of wing wall and side wall at Junction :

$J = 2h$ or $[f + h + S - (L_B + 0.10)/2]$ whichever is greater

$= 2 \times 0.80$ or $[1.50+0.80+0.26 - (2.63+0.10)/2]$

$= 1.6$ or $[2.56 - 1.365]$

$= 1.6$ or 1.195

adopt J = 1.60 m

5- $M = 2 (f + 1.33 h - J) = 2 (1.50 + 1.33 \times 0.80 - 1.60) = 2 (2.564 - 1.60)$

$= 1.928$ m

6- $K = (L_B + 0.1) - M = (2.63 + 0.1) - 1.93$

= 0.80 m

Toe and cut off walls

Normal scour depth (N S D) $= 0.473 \times (Q/f)^{1/3}$

$= 0.473 \times (3/1)^{1/3}$

$= 0.473 \times 1.442$

= 0.68 m

Maximum Scour depth (M S D) = 1.5x N S D

= 1.5 x 0.68

= 1.02 m

Depth of cutoff /Toe wall = 1.02 m

Apron thickness: For an over fall of 1.50 m. The Apron thickness in concrete construction is 0.30 m since the structure is constructed in masonry, the Apron thickness will be 0.30 x 1.50 = 0.45 m

Wall thickness: The thickness of different wall of the structure (masonry construction) is given below:

Description	Thickness of wall	
	Top width	Bottom width
Head wall	0.45	1.33
Side wall	0.30	1.10
Wing wall and head wall extension	0.30	0.80

DETAIL ESTIMATE OF DROP SPILLWAY OF CREST LENGTH 3.00 METRE

1. Earth work in cutting in foundation

S.No.	Description of work	No.	L	B	D/H	Quantity
1	Side wall	2	3.40	1.20	1.15	9.38
2	Head wall	1	3.00	1.60	1.15	5.52
3	Head wall extension	2	3.00	1.00	1.15	6.90
4	Wing wall	2	1.80	1.20	1.15	4.96
5	Toe wall	1	3.00	1.00	1.15	3.45
6	Cut off wall	1	9.00	1.00	1.15	10.35
7	Apron	1	3.00	2.65	0.70	5.56
Total						46.12 cum

2. Laying of sand in the bed of foundation

S.No.	Description of work	No.	L	B	D/H	Quantity
1	Side wall	2	3.40	1.00	0.10	0.680
2	Head wall	1	3.00	0.60	0.10	0.180
3	Wing wall	2	1.80	1.00	0.10	0.360
4	Toe wall	1	3.00	0.80	0.10	0.240
5	Cut off wall	1	9.00	1.00	0.10	0.900
6	Apron	1	3.00	2.65	0.10	0.795
Total						3.155 cum

3. C.C.W. 1: 3: 6 in foundation

S.No.	Description of work	No.	L	B	D/H	Quantity
1	Cut off wall	1	9.00	1.00	0.15	1.35
2	Head wall	1	3.00	0.60	0.15	0.27
3	Side wall	2	3.40	1.00	0.15	1.02
4	Wing wall	2	1.80	1.00	0.15	0.54
5	Toe wall	1	3.00	0.80	0.15	0.36
6	Apron	1	3.00	2.65	0.15	1.192
Total						4.732 cum

4. R/R Stone masonry 1:4

S.No.	Description of work	No.	L	B	D/H	Quantity
1	Cut off wall	1	9.00	1.00	0.90	8.100
2	Head wall	1	3.00	1.50	0.90	4.050
		1	3.00	(1.50+0.50) /2	1.50	4.500
3	Head wall extension	2	3.00	0.80	0.45	2.160
		2	3.00	0.60	0.45	1.620
		2	3.00	0.60	0.60	2.160
		2	3.00	0.50	0.60	1.800
		2	3.00	0.40	1.30	3.120
4	Side wall	2	3.40	1.00	0.45	3.060
		2	3.60	0.80	0.45	2.592
		2	3.80	0.60	0.60	2.736
		2	3.90	0.50	1.00	3.900

		2	(4.00+1.40) /2	0.40	1.50	3.240
5	Wing wall	2	1.80	1.00	0.45	1.620
		2	1.80	0.80	0.45	1.296
		2	1.80	0.50	(1.60+0) /2	1.440
6	Toe wall	1	3.00	0.80	0.45	1.080
		1	3.00	0.60	0.45	0.810
		1	3.00	0.40	0.30	0.360
7	Apron	1	3.00	2.65	0.45	3.577
8	Longitudinal sill	2	2.60	0.20	0.45	0.468
				Total		53.689 cum

5. C.C.W. 1:2:4 on the wall

S.No.	Description of work	No.	L	B	D/H	Quantity
1	Head wall	1	3.00	0.50	0.025	0.037
2	Side wall	2	1.40	0.40	0.025	0.028
		2	3.00	0.40	0.025	0.060
3	Head wall extension	2	3.00	0.40	0.025	0.060
4	Wing wall	2	2.40	0.50	0.025	0.060
5	Longitudinal sill	2	2.65	0.20	0.025	0.026
6	Apron	3	2.65	0.86	0.025	0.170
Total						0.441 cum

6. Raised Pointing 1:3

S.No.	Description of work	No.	L	B	D/H	Quantity
1	Head wall	1	3.00	-	1.00	4.56
		1	3.00	-	1.18	5.40
2	Side wall	2	3.40	-	1.60	10.88
		2	(1.40+3.40)/2	-	1.50	7.20
3	Head wall extension	2	3.00	-	1.50	9.00
4	Wing wall	2	1.80	-	(1.60+0)/2	2.88
Total						39.86 m^2

CONSUMPTION OF MATERIALS

S.No.	Particulars	Quantity	Cement (Bags)	Sand (cum)	Khanda (cum)	G.S.B 25-40 mm (cum)	G.S. Grit 10-20 mm (cum)
1	Sand laying	3.155 cum	-	3.155	-	-	-
2	C.C.W. 1:3:6	4.732 cum	20.34	2.129	-	4.258	-
3	C.C.W. 1:2:4	0.441 cum	2.69	0.185	-	-	0.374
4	S/M 1:4	53.689 cum	128.85	18.254	53.689	-	-
5	Raised Pointing 1:3	39.86 m^2	1.83	0.187	-	-	-
Total			**153.71**	**23.910**	**53.689**	**4.258**	**0.374**
Say			**154**	**23.910**	**53.68**	**4.26**	**0.374**

COST OF MATERIALS

S.N0	Name of materials	Quantity	Rate	Amount
1	Cement	154 Bags	285.00	43890.00
2	Coarse sand	23.91	910.00	21758.10
3	Khanda	53.68	950.00	50996.00
4	G.S.B. 25-40 mm	4.26	855.00	3633.75
5	Grit 10-20 mm	0.374	1250.00	467.50
Total				**12,0745.35**

LABOUR CHARGE

S.No.	Particulars	Quantity	Rate	Amount
1.	Earth Work	46.12 cum	36.66/cum	1690.75
2.	Sand Laying	3.155 cum	33.33/cum	105.15
3.	C.C.W. 1:3:6	4.732 cum	494/cum	2337.60
4.	C.C.W. 1:2:4	1.441 cum	494/cum	217.85
5.	S/M 1:4	53.689 cum	370/cum	19864.93
6.	Raised Pointing	39.86 m^2	51.61/m^2	2057.17
7.	Curing	53.689 cum	25.00/cum	1342.22
8.	Chowkidar	13 Man Days	100.00/Man Day	1300.00
9.	Head load & local transportation cost 10% cost of material	-	-	12074.53
	Total			**Rs. 40504.22**

Total Expenditure	
1. Cost of materials	120745.35
2. Labour Charges	40504.22
Total	**Rs. 1,61,735.57**
	Say Rs. 1,61,700.00 only

Estimate of Pipe Outlet

S.No.	Item	Unit	Length	W	H	Qty (Cmt)
1	E.W. in foundation	1				
(i)	Upper side wall	1	2.00	1.00	1.10	2.20
(ii)	Collor support	1	1.00	1.00	1.05	1.05
(iii)	Down side wall	1	2.00	1.00	1.10	2.20
(iv)	Apron	1	1.00	1.00	0.25	0.25
(v)	Under Hume Pipe	1	5.00	0.80	0.80	3.20
(vi)	E.W. in filling	1	4.50	0.80	0.50	1.80
	Total					10.70 m^3
2	C.C. work in foundation					
(i)	Upper side wall	1	2.00	0.70	0.15	0.21
(ii)	Collor support	1	1.00	0.70	0.15	0.105

(iii)	Down side wall	1	2.00	0.70	0.15	0.210
(iv)	Apron	1	1.00	1.00	0.15	0.150
	Total					0.675 m^3
3	Khanda Work					
(i)	Upper side wall	1	2.00	0.68	0.90	1.224
		1	2.00	0.45	0.68	0.612
(ii)	Collor support	1	1.00	0.68	0.45	0.306
		1	1.00	0.45	0.45	0.202
(iii)	Down side wall	1	2.00	0.68	0.90	1.224
S.No.	**Item**	**Unit**	**Length**	**W**	**H**	**Qty (Cmt)**
		1	2.00	0.45	0.68	0.612
(iv)	Apron	1	1.00	1.00	0.22	0.220
	Total					4.400
	Deduction opening pipe	1x	2x3.14 x	$(.175)^2$x45		= 086
			Net Khanda Work			4.314 m^3
4	Pointing Side Wall					
	Side	2x2	&	0.45	0.68	1.22
		2x2	&	0.68	0.45	1.22

	Front	2x2	2.00	&	1.13	9.04
	Back	2x2	2.00	&	1.13	9.04
	Deduction opening pipe	2x2	x3.14(.175)^{2}x.38			20.52
			Net Pointing			20.14 m^2
5	Plastering					
	Top	2	2.00	0.45	&	1.80 m^2

Consumption of Material

S.No.	Item	Unit	Qty	Cement	Morum	Khanda	Stone Ballast	Pipe + collor
1	C.C. Work 1:4:8	m3	0.675	2.29	0.310	&	0.63	&
2	Khanda Work	m3	4.314	10.35	1.51	4.314	&	&
3	Pointing	m2	20.14	0.70	0.07	&	&	&
4	Plastering	m2	1.80	0.19	0.027	&	&	&

				13.53	1.917	4.314	0.63	2 Pipe + 1 collor
			Say	13.5	1.92	4.32	0.63	

Cost Of Material						
S.N.	**Item**	**Unit**	**Qty**	**Rate**	**Amount**	**Remark**
1	Stone Khanda	Cmt	4.32	850/	3672.00	
2	Morum	Cmt	1.92	800/	1536.00	
3	Cement	No.	13.5	285/	3847.50	
4	Pipe + Coloor	M/no	5m/1	357/RM 79/RM	1864.00	
5	Stone Ballast	Cmt	0.63	1250/	787.50	
	Total				11707.00	

Labour Charges

S.n.	Item	Unit	Qty	Rate	Amount	Remark
1	E/W in exvation	Cmt	10.70	44.05/ Cmt	471.33	
2	C.C.Work 1%4%8	Cmt	0.675	494/ Cmt	333.45	
3	B/WZ 1%4	Cmt	4.314	370/ Cmt	1596.18	
4	Layu Pipe lane	M	5	175/pipe	350.00	
5	Pointing work 1%4	M	20.14 mtr	50/m^2	1007.00	
6	Plastering	M	1.80	40/m^2	72.00	
7	Chaukidari	&	4 days	100/	400.00	
8	Quring	Cmt	4.314	25/	107.85	
9	Water Cost	Cmt	4.314	9/	38.82	
10	Head Load	&	&	&	1170.70	
	Total				**5547.33**	

Total Expenditure in Pipe outlet

S.n.	Item	Amount	Remark
1	Cost of material	11707	
2	Labour cost	5547	
	Total	17254	
	Say	17300	

4.3 LIVELIHOOD ACTIVITY

In the present scheme various livelihood activities has been planned for the poor, assestless people residing in the project area. This region has lots of potential for animal husbandry and development of household activity which can generate a good amount of income for the livelihood. To provide a better source of livelihood various self help groups were made to give them seed money for start of activity. Dairy, poultry, goatry, piggeries, mini dal mill, nadef compost are the activities which are undertaken for the projects. Some important activity is listed below.

DAIRY WORK

In income generating activities through Self Help Group, landless and marginal farmers are advised to use three or four cows of *SANKER* breed or two or three buffalos of *MURRA* breed, for their good life.

Establishment of Goat Units form S.H.G.'s

District Allahabad is situated in Vindhya region where the number of sheep is very less and they are small in nature. Goat population is appreciable and in fact, it is the major source of livelihood for poor people of the district.

In the state, on an average, 16 kg of meat is obtained from a goat, if they are deformed twice, there shall be increment of 4 kg in meat on an average, benefiting the farmers of the state.

Deworming and vitamins, mineral- supplement to the goats shall enhance their productivity and also improve anti-body response and protection level through vaccination, i.e., importance in efficiency of vaccination. More productivity and assured health and low mortality shall result into adoption of more farmers to goat farming with the formation of more S.H.G.'s and in turn availability of goats for processing units.

Goat excreta shall be of immense help in enrichment of soil fertility. Vindhya region, due to the geo-climate conditions and land pattern is favorable for goat husbandry. Goats thrive well in dry and semi-dry climate with bushes and thorny vegetation. Presently in this area, farmers rear goats for their livelihood. If goat husbandry would be transformed to intensive husbandry, there shall be more economic stability of farmers, more profit sharing and availability of running capital for future expansion. Keeping in view the above facts, goat units shall be formed in the area in intensive way.

16 Goat Units are proposed in I.W.M.P. Ist Project for S.H.G. One unit constituting 10 goats and 1 buck will be distributed to one S.H.G. A register of S.H.G. will be maintained by Secretary of S.H.G. in the supervision of W.D.T. member. The details of beneficiaries of S.H.G. including the breed of goat reared, breeding and feeding status, deworming status, deaths, post mortem conducted claim settlement and working status of unit will be maintained in the register.

Preferences shall be given in consecutive years in purchasing the goats and bucks for new units, from old units for which database maintained shall be of use and it should be assured by buy back arrangement.

Financial Component

S.No.	Component	Amount
1.	Cost of 10 goats of improved breed (not less than 6 months of age) @ Rs. 3000.00 each	30000.00
2.	Cost of 1 buck of improved breed @ Rs. 5000.00	5000.00
3.	Cost of insurance @ 11.63 / unit	4070.00
4.	Feed cost for 3 months @ 250 gm/ day for goats @ Rs. 11.84/ 250 gm	2930.40
5.	Provision of deworming, mineral and vitamin supplement, treatment, vaccination @ Rs.160/ animal	1760.00
6.	The expense including monitoring expenses, register and records @ Rs. 170.00/ unit	170.00
	Total	**Rs. 43,930.40**
		Say Rs. 43,950.00

Livestock Development

Total number of female animals: Buffalo - 2770

Cow - 3875

Total - 6645

1. Artificial Insemination (A.I.): 33% of total animals per year, i.e., 2193

Amount required for A.I. by BAIF @ 100.00/ animal.

Total Amount - Rs. 219300.00

2. Vaccination: Total number of animals in I.W.M.P. Ist - 7860 nos.

1. H.S. + B.Q.	@ 5.50	42330.00
2. F.M.D.	@10.50	16.005060
	(Twice in a year)	

Total Amount - Rs. 274858.00

3. Deworming: Adult animals - 7074

Child animals - 786

Albendazole for	70750 animals	@ 40.56	286962.00
	1037 child animals	@20.28	15940.08

		Total Amount		**- Rs. 302902.08**
4. Mineral Mixture:	**Agrimine Forte Chelated for 7015 animals**	**@ 115.00**		**Rs. 611340.00**
		GRAND TOTAL	**-**	**Rs. 1341832.28**
		Say	**-**	**Rs. 1341840.00**

5.4 PRODUCTION SYSTEM & MICRO-ENTERPRISES

The scheme emphasized to through various crop demonstration activities extend awareness among farmers about use of high yielding variety seeds to increase productivity and crops diversifications. These techniques are very usefull for both retaining soil fertility and increasing productivity. The important crops for which crops demonstration has been proposed are Wheat, Gram, Farm Pea, Lentil and mustard of Rabi season and Paddy, Bajra, Tur are selected for the Kharif seasons. Through the scientific techniques suitable HYV has been selected for the area. The details production cost of these crops has been kept in the micro-watershed file.

It was also seem worthy full that through the micro-enterprise activity such as which can increase household income through the small scale activity are also proposed in the scheme. These are includes Dairy, Goatry, Poultry, Mini Dal, Small Oil expeller, and other mini plants to the individual/ needy person from the project area. The details of the beneficiary have been kept in the records of micro-watersheds for the implementation.

CHAPTER – 6

CAPACITY BUILDING PLAN

6.1 INTRODUCTION

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 respectively.

Table 6.1 List of training programme conducted

Sr. No.	Name of the Training Institute	Full Address with contact no, website	Designation of the Head of Institute	Type of	Area(s) of specialization	No. of training assigned	No. of persons to be trained	Allocation to be made to the institute
1	SIRD	Bakshi Ka Talab, Lucknow	Director General	State Govt.	Rural Development, Grass-root level planning	16	800	Proposal with budget will be received
2	Agricultural University	Naini, Allahabad	Programme Dirctr	State Govt.	Ag. Extension, Agronomy Home Science, Soil Science	8	300	Proposal with budget will be received
3	Krishi Vigyan	Naini, Allahabad	Programme Cordinator	State Govt.	Ag. Extension, Agronomy Home Science, Soil Science	16	800	Proposal with budget will be received
3	District Gram Vikas Sansthan	Basnehta, Phoolpur Allahabad	Coordinator	State Govt.	Small scale	4	100	-do-

Table 6.2 Detail of Action Plan of Capacity Building

S. No.	Particulars	No.	First Year		Second Year		Third Year		Fourth Year		Total	
			Phy	Fin.	Phy	Fin.	Phy	Fin.	Phy.	Fin.	Phy.	Fin.
1	Capacity Building											
	(a) PIA level	No. of Person to Trained	2 x 2 x 20	1.60	2 x 2 x 20	1.60	2 x 2 x 20	1.60	-	-	20	4.8
	(b) District level	„	2x2x50	1.2	2x2x50	1.2	2x2x50	1.2	-		50	3.60
	(c) WDT level	„	3x3x4	0.18	3x3x4	0.18	3x3x4	0.18	-	-	36	0.54
	(d) WC level	„	3x3x90	3.64	2x1x40	0.235	-	-	-	-	90	3.88
	(d) SHG	„	1x4x170	5.10		-	-	-	1x3x100	1.15	270	6.25
	(e) User Groups	„	1x1x450	1.143	-	-	1x1x100	0.24	1x1x200	0.4	750	1.94
	(f) Others	„	-	-	-	-	-	-	1x1x240	0.593	240	0.59
Total				12.86		3.22		3.22		2.143	1456	21.44

CHAPTER – 7

PHASING OF PROGRAMME AND BUDGETING

7.1 BUDGET

The first step in budgeting is dividing the cost of the project into various component s as detailed in the common guidelines and done accordingly. It helps us in further identifying activities under different components and allocate appropriate funds.

Table 7.1 Budget at a Glance

S. No.	Micro-watershed	Treatable Area (ha)	Estimated Cost (Rs. Lacs)
1	2A7D2e2b	279.0	33.480
2	2A7D5a1a	380.0	45.600
3	2A7D5a1b	712.0	85.440
4	2A7D2e2c	290.0	34.800
5	2A7D2e1b	225.0	27.000
6	2A7D2e2a	592.0	71.040
7	2A7D2e3a	505.0	60.600
8	2A7D2e3b	264.0	31.680
9	2A7D2e3c	326.0	39.120
Total		3573.0	428.760

Table 7.2 Budget component at a Glance

S. No.	Micro-watershed	Treatable Area (ha)	Estimated Cost (Rs. Lacs)	Administrative Cost	Monitoring	Evaluation	EPA	ICB	DPR	Watershed Dev.Works	Livelihood	Production System & ME	Consolidation	Total
1	2A7D2e2b	279.0	33.48	3.35	0.33	0.33	1.34	1.67	0.33	18.75	3.01	3.35	1.00	33.48
2	2A7D5a1a	380.0	45.60	4.56	0.46	0.46	1.82	2.28	0.46	25.54	4.10	4.56	1.37	45.60
3	2A7D5a1b	712.0	85.44	8.54	0.85	0.85	3.42	4.27	0.85	47.85	7.69	8.54	2.56	85.44
4	2A7D2e2c	290.0	34.80	3.48	0.35	0.35	1.39	1.74	0.35	19.49	3.13	3.48	1.04	34.80
5	2A7D2e1b	225.0	27.00	2.70	0.27	0.27	1.08	1.35	0.27	15.12	2.43	2.70	0.81	27.00
6	2A7D2e2a	592.0	71.04	7.10	0.71	0.71	2.84	3.55	0.71	39.78	6.39	7.10	2.13	71.04
7	2A7D2e3a	505.0	60.60	6.06	0.61	0.61	2.42	3.03	0.61	33.94	5.45	6.06	1.82	60.60
8	2A7D2e3b	264.0	31.68	3.17	0.32	0.32	1.27	1.58	0.32	17.74	2.85	3.17	0.95	31.68
9	2A7D2e3c	326.0	39.12	3.91	0.39	0.39	1.56	1.96	0.39	21.91	3.52	3.91	1.17	39.12
Total		3573.0	428.76	42.88	4.29	4.29	17.15	21.44	4.29	240.11	38.59	42.88	12.86	428.76

Table 7.3 Phasing of Fund allocations

S. No.	Particulars	Phasing of Budget				Total
		1st Year	2nd Year	3rd Year	4th Year	
1	Administrative Cost-10%	8.575	11.577	11.577	11.148	42.88
2	Monitering-1%	0.858	0.86	0.86	1.71504	4.29
3	Evalution-1%	1.286	–	1.50	1.50066	4.29
4	Entry Point Activity-4%	17.150	–	–	–	17.15
5	Institution & Capacity Building-5%	12.863	3.22	3.22	2.1438	21.44
6	DPR-1%	4.288	–	–	–	4.29
7	Watershed Dev. Work-56%	32.157	70.10	68.60	69.24474	240.11
8	Livelihood Activity-9%	4.288	10.72	10.72	12.8628	38.59
9	Production System & Micro enterprises-10%	4.288	10.72	10.72	17.1504	42.88
10	Consolidation-3%	–	–	–	12.8628	12.86
Total		85.75	107.19	107.19	128.628	428.76

Table 7.6 PHASING OF WORK (FINANCIAL & PHYSICAL)

S.No.	Component	Unit	Quantity	Unit Cost (Lakhs)	1st Year (Lakhs)	2st Year (Lakhs)	3nd Year (Lakhs)	4rd Year (Lakhs)	5th Year (Lakhs)	Total (Lakhs)
A.	**MANAGEMENT COSTS**									
	Administrative cost- TD & DA, POL/ Hiring of vehicles/ Office and payment of electricity and phone bill, etc. computer, stationary and office consumable and contingency				2.1438	6.4314	12.8628	12.8628	8.5752	**42.876**
	Monitoring					0.85752	1.14336	1.14336	1.14336	**4.2876**
	Evaluation					**1.28628**	**1.00044**	**1.00044**	**1.00044**	**4.2876**
B.	**PREPARATORY PHASES**									
	(1.) Entry point Activities						-	-	-	
	a. Bathroom Cum Cloth Changing room for Female use near Well, Hand Pump, Pond, River,	nos	8	0.61060	4.88460	-	-	-	-	**-**
	b. Drainage Channel	mtr	40	0.0515	0.20600	-	-	-	-	**-**
	c. Soaking Pit	nos	8	0.4757	0.38076	-	-	-	-	**-**
	d. Hand Pump	nos	8	0.54800	4.38400	-	-	-	--	**-**
	e. Panchayati Chabutara	nos	8	0.75388	**6.03104**	**-**	**-**	**-**	**-**	**-**
	f. Well Jagat	Nos	4	0.31600	**1.2640**	**-**	**-**	**-**	**-**	**-**
	Sub Total				**17.15040**					**17.15040**
	(2.) Institutional and Capacity Building		NA	-	2.1438	10.719	3.2157	3.2157	2.1438	**21.438**
	(3.) Detail Project Report				**4.2876**	**-**	**-**	**-**	**-**	**4.2876**
	Sub Total									
C.	**WATERSHED WORKS**									
	(1.) Watershed Development Works									

	a. Construction of Bunds (Field Bund, Contour Bund, Submergence Bund, Marginal Bund and Peripheral Bund)	ha	2857	0.04545		13.977	44.01992	44.01992	29.34663	**131.36347**
	b. Rainfed Horticulture with Fencing	ha								
	c. Water Harvesting Structure/ Gully Plug/ Chek Dam	ha	538	0.07500		15.6081	9.32062	9.32062	6.15657	**40.40591**
	d. Afforestation and Development	ha	178	0.11000		1.50	6.84711	6.84711	4.56474	**19.75896**
	e. Drainage Line Treatment (Pucca Structure / Gully Plug and Chek Dam)	Nos	13	1.97220		-	9.86100	9.86100	5.91660	**25.6386**
	Pipe Outlet	Nos	107	0.21438		1.07190	7.93206	7.93206	6.00264	**22.93866**
	Sub Total					32.157	**77.98071**	**77.98071**	**51.98718**	**240.1056**
	(2.) Livelihood Programme (Community Based)									
	Income Generating Activities through S.H.G.'s for Landless and Marginal Farmers									
	a. Establishment of Nadep-Compost Units	nos	50	0.11260		0.56300	1.8016	1.8016	1.4638	**5.63**
	b. Dairy Work	nos	18	0.50000		1.500	3.00	3.00	1.50	**9.00**
	c. Goat-keeping	nos	20	0.43950		1.758	2.637	2.637	1.758	**8.79**
	d. General Merchant Shop	nos	7	0.25000		0.2500	0.5000	0.500	0.500	**1.750**
	e. Livestock Development Activities	Detail Attached				0.21660	4.9242	4.9242	3.3534	**13.4184**
	Sub Total					**4.2876**	**12.8628**	**12.8628**	**8.5752**	**38.5884**
	(3.) Production System and Micro-nterprises									
	a. Crop Production, Diversification of Agriculture	ha	172	0.05975		1.13525	3.04725	0.04725	3.04725	**10.277**
	b. Introduction of Agro-forestry / Horticulture 70%	ha	11.48	2.27		2.58985	8.09055	8.09055	8.09055	**26.8615**
	c. Demonstration of Green Manuring	ha	918	0.00625		0.5625	1.725	1.725	1.725	**5.7375**
	Sub Total					**4.2876**	**12.8628**	**12.8628**	**12.8628**	**42.876**
D.	**CONSOLIDATION PHASE**	-	-						**12.8628**	**12.8628**
	GRAND TOTAL				**25.7256**	**60.0264**	**121.9279**	**121.9279**	**99.15078**	**428.76**

Table 7.7 Physical Outlays

Activities Related To	1st Year (quantity)	2st Year (quantity)	3nd Year (quantity)	4rd Year (quantity)	5th Year (quantity)	Total (quantity)
ADMINISTRATIVE COSTS						
TD & DA, POL/ Hiring of vehicles/ Office and payment of electricity and phone bill etc. computer, stationary and office consumable and contingency.	√	√	√	√	√	√
Expert for monitoring and evaluation.		√	√	√	√	√
PREPARATORY PHASES						
Entry Point Activities improvement in Panchvati Drinking Water System, School, etc.	√	-	-	-	-	√
Institutional and capacity building	√	√	√	-	-	√
WATERSHED WORKS						
Watershed Development Works						
Construction of Bunds (Field Bund, Contour Bund, Submergence Bund, Marginal Bund and Peripheral Bund)	-	1145.08	1579.80	329.56	-	3054.50
Rainfed Horticulture with Fencing	-	5.39	2.72	5.39	-	13.50
Water Harvesting Structure/ Gully Plug/ Chek Dam	-	112.00	56.00	112.00	-	280.00
Afforestation and Development	-	90.00	45.00	90.00	-	225.00
Drainage Line Treatment (Pucca Structure / Gully Plug , Chek Dam and Pipe outlet) (nos)	-	30	22	30	-	82
Total Treatable Area						3573

LIVELIHOOD PROGRAMME (community based)						
Income generating activities through SHG's for landless and marginal farmers.	-					
a. Goat keeping. (nos)	10	2	8	-	-	20
b. Establishment of Nadep Compost Unit. (nos)	40	10	-	-		50
c. Dairy Work. (nos)	3	7	8	-		18
d. General Merchant Shop. (nos)	3	3	1	-		7
e. Livestock development activities	√	√	√	√	√	√
PRODUCTION SYSTEM AND MICRO ENTERPRISES						
Demonstration and assessment of improved composting system using alternate materials (50 Nadef compost) and 52 Nutrient Analysis (Nos.)	40 52	10 -	- -	- -		50 52
Introduction of improved crop production practices. i). For *Kharif* crops (ha). ii).For *Rabi* crops (ha).	31 33 233	18 19 252	11 12 221	22 26 212		82.00 90.00 918
CONSOLIDATION PHASE		-	-	-	√	√

CHAPTER - 8
EXPECTED OUTCOMES

8.1 EMPLOYMENT GENERATION

Employment has always been a problem in the village. The principal occupations of the people are dry land agriculture, animal husbandry and casual labour work. However, rainfall being very limited and erratic, agriculture suffers, i.e. at best they can take only a single crop, which keeps them partially engaged for about 4 months. Lack of fodder makes animal husbandry very difficult too. So, animal husbandry does not keep them engaged full time. Thus the people mainly depend upon casual labour, either in the village itself or outside it.

The project plans for creation of both wage employment and self employment opportunities. Wage employment would be created by engaging people in watershed physical works like construction of earthen bunds, farm bunds, village pond, plantation, etc. Self employment would be created by providing the people with cash support in the form of direct livelihood activities like agriculture, animal husbandry and enterprise development.

8.2 WATER RESOURCE DEVLOPMET AND SOIL CONSERVATION MEASURES

8.2.1 Status of Present Water Resource Utilization

The watershed is having some irrigation system like state tube well, private Tube Well and Pump set bore from minor irrigation department on community land and private land. Management and maintenance of these water bodies is still in the hand of minor irrigation department and by farmers.

8.2.2 Proposed plan for Irrigation Devolvement of existing water resources

For efficient utilization of available water resources in the watershed, present system of Irrigation need to be made more efficient from water management point of view to minimize losses in the existing water courses. The upgradation of the existing system of irrigation will result in.:

a. Improved water use efficiently to minimization of conveyance losses.
b. Adoption of high yielding varieties of crops and production development.
c. Assured cultivation of cash crops.
d. Drinking water problem will also solve.
e. Diversification of farmer's enterprises for regular income and employment.
f. Local ecosystem will also improve.
g. Productivity and livelihood improvement.
h. Conduct of Participatory net planning.
i. Institutional and capacity building plan.
j. Change of Cropping pattern/ Diversification.
k. Use of ITK at Local level.

Renovation of water harvesting structure (ponds)

There are few ponds on community land and two small check dam have been proposed to harvest excess runoff of the watershed. Harvested water will be used for changing ground water level and fisheries. Water Harvesting bunds are also proposed for store of extra water and control of run-off.

GROUND WATER

Rainfall has been scanty and increased exploitation of ground water has been increasing all the time. The ground water table thus has depleted over the years. Presently it stands at an average of 6.5 m. Proper water harvesting structures and percolation tanks would go long way in increasing water table depth from 6.5 m in the pre-project level to 5.5m in the post project period.

In order of augment the flow in the drainage line, it is necessary to undertake moisture conservation and water recharge measure in the watershed area. For the purpose of ground water recharge the area of upper whole watershed is recommended for ground water recharge and moisture conservation contour bunds felid bunds and peripheral bunds/CRB.

S. No.	Item	Unit	Pre Project	Post Project Status
1	2	3	4	5
1	Status of the water table	Mtr.	5 -6m	4-5m
2.	Ground water Structure repaired/ rejuvenated	Nos.	-	82
3.	Quality of Drinking water	Quality	Normal	Good Quality
4.	Availability of drinking water	No of Days	280	365
5.	Increased in irrigated area	Ha.	213.36	403.36
6.	Changing in Cropping / Land use pattern	-	-	-
	A-Area under agriculture crops	Ha.	3582	3582
	i- Area under Single crops	Ha.	2670	3162
	ii- Area under double crops	Ha.	1050	2056
	iii- Area under Multiple crops	Ha.	-	212

	iv- Cropping intensity	%	104	146
7.	Increased in area under vegetation cover	Ha.	30	225
8.	Increased in area under horticulture	Ha.	-	38.50
9.	Area under fuel & fodder	Ha.	30	225
10.	Increased in milk production	per capita per day per Ltr.	1.50 to 2.00	2.00 to 3.00
11.	No. of SHG	Nos	0	30
12.	Increased in livelihood	Rs./capita/- Annum	Approximate <9000	Approximate 18000
13.	Migration	Nos.	280	112
14.	SHG Federation Formed	Nos.	-	2
15.	Credit linkage with bank	Nos.	-	30

DRINKING WATER

The village has two dug wells on which they depend for their drinking water. Many an effort at finding sweet water at different other places in the same village has failed. A farmer called Khan bhai has a well in his farm and he allows the villagers to take water from the well. There is another well in a common land too; but the water is not as good as the other well. WASMO has constructed a tank to store water brought through pipeline from Khan bhai's well.

As a result of the watershed activities, it is expected that the quantity and quality of drinking water would improve.

AGRICULTURE

Agriculture primarily depends upon water; but this is lacking in the project villages. The surface water is scanty due to high run-off of rainwater and ground water is depleting, which is unfit for crop production. All this can change with the integrated land and water management during the watershed project. The planned earthen bunds would prevent the surface run-off and increase infiltration of rain water and also help preserve moisture content in the soil. This will help in expanding area under cultivation and substantially increasing productivity of crops. The farmers can take more than one crops in a year that will increase crops intensity which is 104% presently to 146 % as planned in the project. Different varieties of crops can be taken.

Table 8.1 Estimate of Demonstration of wheat/ paddy in Watershed (PER ha)

S.N.	Particulars	Quantity	Rate	Wheat	Quantity	Rate	Paddy	Remarks
1	Tillage operation of Preparation of Field for Sowing	1.0 ha.	200.00 ha	2000.00	-	-	2000.00	
2	Cost of Seed	100 kg	22 kg	2200	Vasmati 30 kg	60 kg	1800.00	
3	Swing /Planting		1000	1000.	-	-	3200.00	
4	Fertilizer 120-60-60	210 kg	288/Bag	1240	-	-	1200.00	

	46% NPK 10-26-26	200kg	410/Bag	1640			1600.00	
5	Plant Protection (Zinc etc)	-	-	1000	-	-	1400.00	
6	Irrigation Diesel Ps	5 No	800	4000	-	-	4000.00	
7	Harvesting	-	-	3600	-	-	3000.00	
	Total			**16640.00**			**18200.00**	
	Say			**16600.00**			**18200.00**	

Table 8.2 Estimate of Demonstration of Arhar in Watershed (per ha)

S.N.	Particulars	Quantity	Rate	Amount	Remark
1	Tillage operation or Preparation of field for Sowing	1.0 ha.	2000.00 ha.	2000.00	

2	Cost of Seed	10.00 kg	180.00 kg.	1800.00	
3	Fertilizer NPK 10-26-26	150.00kg	400.00 kg.	1200.00	
4	Urea	100.00 kg.	285.00 /Bag	570.00	
5	Harvesting	1.0 ha.	800.00	800.00	
6	Irrigation	1 No	1000.00	1000.00	
	Total			**7370.00**	
	Say			**7400.00**	

Table 8.3 Estimate of Demonstration of Urad/till Watershed (per ha.)

S.N.	**particulars**	**Quantity**	**Rate**	**Urad**	**Quantity**	**Rate**	**Urad+till Kharef**	**Remarks**
1	Tillage operation or Preparation of field for Sowing	-	-	2000	-	-	2000.00	
2	Cost of Seed	40.00 kg	100.00	4000.00	12.00kg	120.00	1440.00	

3	Fertilizer	80.00 kg	10.60	848.00	-	-	848.00	
4	Plant Protections	-	-	800.00	-	-	800.00	
5	Irrigation Diesel Ps	-	-	800.00	-	-	1000.00	
6	Harvesting	-	-	1000.00	-	-	1000.00	
Total				**9448.00**			**6888.00**	
Say				**9500.00**			**6900.00**	
Hence per ha urad+ Mixed Crop of Mustered								

8.3 PROPOSED LAND USE

Watershed management plan for the watershed was prepared with specific objective of food Sufficiency and income and employment security. In plan Preparations due importance was Given to topographic , land suitability, irrigation potential ,prevailing farming system micro Farming situation , Farming, farmers, preference and priorities along with economic and Environment securities . Crop and tree selection and area distribution was done as per farmer.

Watershed management plan for Tones watershed is proposed with specific objectives of food efficiency and income and employment generation with environmental security. In plan preparation due importance is given to topology, land suitability, irrigation potentiality, prevailing forming systems, micro-farming situation, farmers preferences and priorities along with economic and environmental securities, crop and tree selection and area distribution is done as per farmers priorities

revealed through PRA exercise. Technological options are blended with the indigenous knowledge based on the latest available research/experimental findings for this region. Due attention is given to resource of the farmers and adjustments has made in capital intensive/high resource demanding technological outputs while making them adoptable to the resource poor farmers. Emphasis is given on maximum use of Farmyard Manure (FYM) and green manuring. The proposed land use plan of watershed is given as below:

Table 8.4 Present and Proposed land use plan of the selected watershed

S.No.	Land use	Present (ha)	Proposed(ha)
1	Agriculture	3582.00	3582.00
a	Rainfed	3241.00	3172.00
	(i) Crop	3241.00	3133.50
	(ii) Agro-forestry	NIL	38.50
b	Irrigated	213.36	403.36
	(i)Assured	-	25.00
	(ii)Partial	213.36	385.00
2	Wasteland	402.00	402.00
	(a) Afforestation	-	225.00
	(b) Pasture	-	-
	(c) Untreatable	230.00	177.00
3	Village land	978.00	978.00
	Total	**4962.00**	**4962.00**

Important HYV of Various Crops

Sr. No.	Crops Types	HYV Seeds	Remarks
1	Wheat	'WR 544' CPusa Gold'), 'HD 2824', 'HD2781' CAditya'), 'HW 2045', (Kaushambi), 'HD 2824' (Poorva'), 'HD 2864' ('Urja'), 'HD 2851' (,Pusa Vishesh'), 'HD 2833' ('Tripti'). 'HW 2034' (,MACS 6145'), 'HW 3094' CCOW(W)-1'), 'HI 1531', 'HD 2888' RR – 21, Sonalika,1553, Sona, Sorab, 2329	

2	Paddy	Puss 1121' ('lET 18004'), 'PNR 17900' 570-15-10, 'Jaldi Dhan', 'Pusa Sugandh 5' Musuri, Swarana	
3	Maize	'Puss Composite 4' C Composite 8551'),'AH 421' CPEHM 5'), 'Puse Composite - 3', 'Composite - PC-3', 'PEHM - 3'	

4	Mustard	'IGC-01' (,Pusa Swarnima'), 'SEJ-2' (,Pusa Agrani'), 'LES 39' (,Pusa Karishma') 'JD-6' (Mahak' Swati, RH-30, Varuna, Kranti, RH-30, Rohini RH-781, Pusa Bold	
5	Mustard (Rye)	'NPC-9'	

6	Tur/ Pigeanpea	851, Shards, B.R.-65, C-11, T-21, Panth A-3 Prabhat, Pusa-84, Laxmi Bahar, NDA-1, Amar, Azad AKSHAY – 1515 Akshay Vaishali	
7	Urad/ Moong	PDU 1 (Basant Bahar)& IPU 94-1 (Uttara) AKSHAY VAIBHAV	

8	Masoor/ Lentil	Rani, Pusa-4, T-36, Pant L-209 BR-25, DPL-15, B-77	
9	Field Peas	IPF 5-19 (Aman) IPF 4-9	
10	Potato	G-4, Alankar, Jyoti, Jeevan, Kundan Kufri, K-12, Kufri Ashoka Kufri Jawahar	

11	Tomato	Pusa Rabi, Cross-B, Cross-S, Avinash, Pusa Early Rashmi, Rupali, Naveen, Roma	

WATER RESOURCE DEVELOPMENT AND SOIL CONSERVATION MEASURES

Status of Present Water Resources Utilization:

There is no natural water body in the selected area which may use for irrigation. Present assured/Partial irrigation is done by private tub wells.

Proposed Plan for Irrigation of Water Resources

Sprinkler sets for irrigation from private tube well are distributed by Agriculture Department to Tube well holders on the basis of & Irrigation group. Effort will made to help the tube well holders of selected area to form group and to get sprinkler sets. Therefore, more area will be irrigated by the available irrigation water.

Crop Production

In the light of the land capability classification of the watershed and need of the farmers, the reallocation of watershed area rainfed and irrigated lands has been done for improving productivity, income generation and maintaining ecological balance. The production crop management plan has the following salient features:

Organic Farming System

Organic Farming System will be achieved in the following manner:

1- Maximum use of crop residues in the Integrate plant Nutrients System(IPNS)
2- Prevision of legumes composed in the cropping system.
3- Green manuring with appropriate legumes.
4- Rapid compost using crop residue, domestic and farm waste animal dung.
5- **Milching and Crop Residue Management:**

   Sources of milch material include weeds, pruning from agro-foresting trees and *in situ* grown legumes and green manure crops. The concept of live milching is based on the principle of mixed cropping whereby a fast growing legumes is established before or simultaneously along with a widely spaced seasonal grain crops such maize, and is incorporated into the soil at an appropriate stage to act on as a milch. Application of organic milch material 4-5 t / ha is recommended.

6- **Green Manuring**

   To improve the organic matter and physical condition of the soils , green manuring crops like Dhaincha and sun hemp which supply 20-30 t / ha of green mutter and 85-125 kg/ha of Nitrogen shall be raised and incorporated in to the soil. In 918, ha area green manuring is planned.

7- **Seed Treatment With Rhyzobium Culture**

The seed of leguminous crop like black gram, soybean, pea, etc. should be treated with Rhyzobium culture before sowing.

8- **Tillage operation**

It is advisable to carry out tillage operation like ploughing followed by planking just after the harvest of Kharif crops. This will be helpful in conserving moisture for sowing and germination of Rabi crop in addition, coverage of soil surface with milch material is also recommended to ensure the soil moisture.

9- **Introduction Of Improved Seeds/Varieties**

Short duration and high yielding varieties suitable for this region have been proposed in long duration varities. Demonstrations of High Yielding Varieties (HYVs) of different crops in 172.00 ha is planned in the watershed however for self sufficiency in seed requirement farmers of the watershed will be involved to produce required quantity of seed of the recommended crop varieties.

10- **Sowing Methods**

Agronomical practices like contour cultivation, strip or inter-cropping, optimum time of sowing , optimum plant population by keeping proper distance through line sowing and placement of fertilizer below the seed will help in enhancing the crop yields without involving monetary inputs.

11- **Control Of Insects Pest And Diseases**

Pod borer in gram is the major insect in the watershed area leading to loss in crop productivity. Similarly white blister is also a common disease in the mustard crop the management strategies of these insects, pests and diseases will also be demonstrated in the watershed for benefit of the growers.

12- **Dry Land Horticulture**

In the selected area 225.0 ha land is planned for horticulture and agro horticulture. Species like amla, guava, ber, bel, lemon will be planted at suitable spacing in the watershed.

CHAPTER -9
QUALITY AND SUSTAINABILITY ISSUES

SOCIO ECONOMIC ANALYSIS OF THE PROJECT

Sustainability and Environmental Security

In the proposed watershed management plan of Tones, proper blending of bio engineering measures will be applied. The proposed land use plan will improve the land utilization index and crop diversification index significantly as compared to existing one. It will help in maintaining ecosystem integrity on sustained basis.

Economic Analysis

Economic analysis of the project is carried out by taking direct benefits and costs, considering 30 year project life at 10% discount rate. For the purpose of economic analysis, whole watershed development plan is divided into four sectors namely agriculture (rainfed and irrigated), pure horticulture, agro-horticulture. Net present value (NPV), Benefit Cost Ratio(BCR) , Payback Period(PBR) and internal rate of return(IRR) criteria is employed to judge the economic efficiency of each enterprise, sector and project as a whole.

Table 9.1 ECONOMICS OF AGRICULTURAL SECTOR OF TONS WATERSHED

S.No.	Sector	Area in ha	NPV (Rs.)	BCR	PBP (yrs.)	IRR %
1.	Irrigated Agriculture	213.36	1053690.00	1.70 : 1	3	15.60
2.	Rainfed Agriculture	3241.00	7308455.00	1.45 : 1	1	-
	Total Agriculture	**3582.00**	**8362145.00**	**1.57 : 1**	**1**	**-**

ECONOMIC ANALYSIS OF HORTICULTURE SYSTEM IN TONS WATERSHED CONSIDERING 30 YRS. PROJECT LIFE & 10 % DISCOUNT RATE

S.No.	Tree Species	Area (ha)	NPV (Rs.)	BCR	PBP (yrs.)	IRR %
1.	Amla	17.50	4308325.00	2.71 : 1	12	25.50
2.	Mango	9.60	2363424.00	2.61 : 1	11	34.05

3.	Guava	11.40	2525909.00	2.48 : 1	9	29.10
	Total Horticulture	**38.50**	**9197658.00**	**2.60 :1**	**11**	**29.55**

BENEFIT COST RATIO OF I.W.M.P.- Ist ALLAHABAD

Year	**Construction cost (00,000 Rs.)**	**Operation and maintenance cost (00,000 Rs.)**	**Benefit (00,000 Rs.)**
1	85.752	3.43	10.29
2	128.628	8.57	35.52
3	85.752	12.00	69.67
4	128.628	17.15	171.50
5	-	17.15	171.50
6	-	17.15	171.50
7	-	17.15	171.50
8	-	17.15	171.50
9	-	17.15	171.50
10	-	17.15	171.50

BY BENEFIT, COST RATIO METHOD

S.No	Item	1	2	3	4	5	6	7	8	9	10	
1	Discount factor 10%	0.909	0.826	0.751	0.683	0.621	0.564	0.513	0.467	0.424	0.386	
2	Total cost(00,000 Rs.)	89.18	137.19	97.75	145.77	17.15	17.15	17.15	17.15	17.15	17.15	
3	Benefit(00,000 Rs.)	10.29	35.52	69.67	171.50	171.50	171.50	171.50	171.50	171.50	171.50	
4	$\sum$ Cost	81.06	113.32	73.41	99.56	10.65	9.67	8.79	8.00	7.27	6.61	**418.34**
5	$\sum$ Benefit	9.35	29.33	52.32	117.13	106.50	96.72	87.97	80.09	72.71	66.19	**718.31**

Benefit cost ratio = $\frac{\sum Benefit}{\sum Cost}$ **= 718.31 414.34**

=1.71:1

Hence OK

STATUS OF FOOD REQUIREMENT AND AVAILABILITY PER ANNUM IN TONES WATERSHED

S.No.	Item	Requirement Q / yr.	Before Project		Proposed	
			Availability Q / yr.	Deficit or Surplus Q / yr.	Availability Q / yr.	Deficit or Surplus Q / yr.
1.	Cereals	33054	26456	- 6598	33928	+ 874
2.	Pulses	8920	11718	+ 2798	12966	+ 4046
3.	Oil Seeds	6821	5894	- 927	7493	+ 672
4.	Vegetables	22770	15552	-7218	23680	+ 910

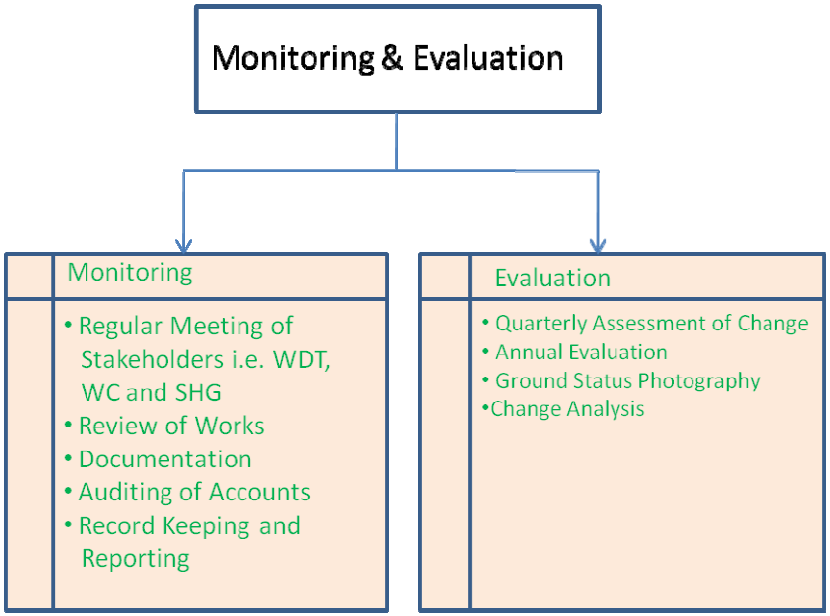
Employment Generation

Labour migration in search of gainful employment is one of the major problems in the remote watershed in particular. Casua employment opportunities to the tune of more than 2.581 lakhs will be generated during the implementation of the project activities. However, changes in the land use pattern and adoption of other subsidiary enterprises will generate employment opportunities for persons of 3.125 lakhs in the watershed.

CHAPTER – 10
MONETORING, EVALUTION AND CONSOLIDATION

10.1 MONITORING AND EVALUATION

Under the present IWMP-I Programme Monitoring at regular interval is essential for maintaining the pace of development and checking the shift. The funding and supervising agency and the supporting and facilitation agency (PIA) should follow the identified indicators for measuring physical and financial progress in respect of various activities and works of watershed and reporting mechanism. In addition WC will also State Nodal Agency/or the Government of India May appoint an Outside Agency from time to time to monitor the monitor the progress of programme implementation. The task of monitoring comprises observation, reporting and correction measures. The procedure for monitoring is detailed under and its various activities are presented in the following Chart.



10.1.1 Monitoring of Meetings

It will emphasize in the present schemes to motivate project stakeholders such as SHGs, UGs and Watershed Committee to convene their meeting at least once in a month on pre-decided date, time and place. It is observed that Watershed Committee meeting could be held quarterly and at least twice in a year to review the project plan, progress of programme implementation, remittance of donations and contribution and utilization of project funds. In these meeting approval of accounts and performance of WC will be done and solution to the problem and resolving conflicts are the major priority.

10.1.2 Review

Reviewing the implementation of programme (success, failure, problems and constraints) and deciding corrective measures for successful implementation of project.

10.1.3 Documentation

Record keeping is most appropriate as observations, experiences, innovations, successes, failures, problems and constraints in implementing the programme. Suggestions and views of beneficiaries to overcome the constraints. Specifying the expected support of sectoral functionaries is required for the smooth functioning of the programme and extent of convergence of other developmental programmes and its impact.

10.1.4 Record Keeping& Reporting

Regular records of physical and financial progress are required of Project and PIA level. Preparing and submitting monthly, physical and financial reports to DRDA/or State Nodal Agency through PIA.

10.1.5 Auditing

Annual audit of accounts and records is required to be maintained at PIA and WC to avoid any discrepancy in fund allocation. This is also required to keep vigilance during the programme implementation and taking action on audit report. Studying the audit report thoroughly will help in understanding the budget components and fund utilizations. If there is something suspicious objections should be raised. Following the suggestions made in the audit report.

10.1.6 Assessment of changes

Studying the physical changes in the watershed area and its impact on production, ecology and socio- economic status of village community the overall condition can be assessed. Visiting the Watershed area during the implementation and after completion of works to assess the changes is very important. Discussion with the beneficiaries about programme implementation and its impact with their suggestions is needed for improvement and how to tackle the problems of the watershed. A detailed study of performance and maintenance of assets and CPR on quarterly basis should be done for annual assessment. Assessing every year qualitative impact on working group and participation and cooperation, taking responsibility in the project work.

10.1.7 Annual Evaluation

Assessment of changes in socio-economic status of village community, equity and social justice, vegetative cover, conservation of soil and moisture, groundwater recharge, cropped area and yield per unit, cropping intensity and cropping pattern. New crops introduced in the package of practices, Fertilizer application use of Pesticides, use of improved seeds and cultural practices adopted. Horticultural plantations, CPR management, operation and maintenance of created assets and structures, animal husbandry and dairy activity.

10.1.8 Reporting

Preparing monthly, quarterly and annual reports and submitting to DRDA/State Nodal Agency in the prescribed format..

10.1.9 Concurrent & Post-facto Evaluation

Getting concurrent and post-facto evaluation done by an outside agency. State Nodal Agency/or Government of India as the case may be will appoint an outside agency for concurrent and post-facto evaluation. Entrusting the concurrent and pWatershed- facto evaluation to agency. Conducting concurrent and post-facto evaluation. Entrusting the concurrent and post-facto evaluation to agency. Conducting concurrent and post-facto evaluation. Obtaining and reviewing the evaluation report. Submitting the evaluation report to the State Level Implementation and Review Committee and to the Central Government with their (DRDA/State Nodal Agency) comments.

Routine and regular Monitoring & Evaluation will be done by the PIA with the active help of WDT, WC and Users Group. Specific, Annual, Concurrent & Post-facto Evaluation will be done by the outside agency appointed by the State Nodal Agency/or the Government of India. Details of Yea-wise amount to be spent on Monitoring & Evaluation under the present IWMP-I programme is given below.

10.2 CONSOILDATION

Consolidation is a very important and last phase of activity under the present IWMP-I programme. It includes sum-up of programme, Follow-up, Withdrawal of PIA, Maintenance of Community works & Assets, Handing over the charge etc. Details of various activities under the consolidation phase are given below:-

10.3 FOLLOW-UP AND MAINTENANCE

A large number of projects and schemes have gone bad due to improper follow-up and maintenance. These projects in past were implemented by the external agency with involvement of stakeholder. The stakeholders, because of their ignorance on

one hand and lack of post-project management arrangements on the other, could not associate themselves in the maintenance and management of the project. The process and mechanism under the various tasks and activities are given in the following Chart.

10.3.1 Follow-up-Withdrawal of PIA and Continuation of WC

Calling the General Body Meeting of WC. Presenting the Project period report. Ensuring the continuance of WC after project period. Getting the resolution passed for the continuation of WC. Working out the procedures for the functioning of WC Announcing the withdrawal.

10.3.2 Continuation of Watershed Secretary

Passing resolution for the continuation of service of Watershed Secretary. According sanction for the monthly honorarium to Watershed Secretary from WDF.

10.3.3 Assessment o f Works

Preparing the List of CPR and the Assets, created during the project period. Preparing the list of approved works/activities that are in progress and not initiated. Assessing the quantum of execution and maintenance of works with cost estimates. Ascertaining the availability of funds.

10.3.4 Execution of Works

Convening the meeting of WC for reviewing the spill over and left over works and maintenance of created assets and CPR. Finalising the ways and means for completing the spill-over and left over works, operation and maintenance of created assets and CPR. Fixing the responsibility for carrying out different works and activities. Completing the spill-over and left over works. Maintaining the assets and CPR.

10.3.5 Review

WC, SHGs and UGs should organize the meetings regularly to: review the performance and progress of development works and activities taken up with WDF and other funds. Maintenance of community assets. Activities to be taken up for further development of village community and maintaining their interest in atershed development. Mobilising donations and contributions to WDF to meet financial requirements.

Frequency of Meeting of Stakeholders	
Watershed Committee	Monthly/ Quarterly
SHG & User Group	Monthly/ Fortnight

Maintenance-Community Works and Assets: - Preparing the estimates for repairs and maintenance for different community works and structures. Approving and sanctioning estimates for repairs and maintenance of community works and assets. Taking up the maintenance of community works.

10.3.6 Monitoring

Overseeing the progress of completion and maintenance of individual and community works and assets. Utilising of WDF for the execution and maintenance of community works. Loan to individuals for the repairs of works in their lands may be considered.

10.3.7 Election of Office Bearers-Special General Body Meeting of WC

Notifying the and place for General Body Meeting of WC. Presenting the Project report and getting approval. Election of office bearers and President of WC (if required). Fixing date for election of office bearers and President of Association. Conducting Election. Announcing the names of elected office bearers and President. Making entry in the Proceeding Register about the election and names of elected members. Handing over and taking over of Management of WC.

An Amount of Rs. 31.78 Lakhs will be spent on various activities of consolidation under the present IWMP-I programme.

Continuation of Watershed Secretary

Passing resolution for the continuation of service of Watershed Secretary. According sanction for the monthly honorarium to Watershed Secretary from WDF.

10.3.8 Assessment of Works

Preparing the List of CPR and the Assets, created during the project period. Preparing the list of approved works/activities that are in progress and not initiated. Assessing the quantum of execution and maintenance of works with cost estimates. Ascertaining the availability of funds.

10.3.9 Execution of Works

convening the meeting of WC for reviewing the spill over and left over works and maintenance of created assets and CPR.

Finalising the ways and means for completing the spill-over and left over works, operation and maintenance of created assets and CPR. Fixing the responsibility for carrying out different works and activities. Completing the spill-over and left over works . Maintaining the assets and CPR.

10.3.10 Review

WC, SHGs and UGs should organize the meetings regularly to: review the performance and progress of development works and activities taken up with WDF and other funds. Maintenance of community assets. Activities to be taken up for further development of village community and maintaining their interest in atershed development. Mobilising donations and contributions to WDF to meet financial requirements.

10.4 MAINTENANCE OF RECORDS

Following records will be maintained under the IWMP-I implementation programme

a. Maintaining record of group meetings, user group meetings, WC meetings.
b. Maintaining the UGs and SHGs Registers.
c. Maintaining the Physical and Financial Progress Component-wise.
d. Maintaining cash book with details of receipt and payments. For each cheque and cash transaction.
e. Making entry of every of receipt and payments in the cash book on the date of transaction.
f. Maintaining ledger (component-wise and item-wise), receipts and vouchers.
g. Maintaining Muster Roll, Pass Book and Cheque Book.
h. Maintaining Measurements Book.
i. Maintaining Stock Register.
j. Maintaining Work Register.
k. Record of beneficiaries contribution.
l. Maintaining Project fund account.
m. Maintaining record of asset and properties created under the program

10.5 BANK ACCOUNTS

Bank Accounts:-

Following Bank Accounts will be opened in the Bank and operated in the manner prescribed below:-

1. P.I.A. Account:-

    a. Joint S.B. Account in the name of PIA

    b. It will be opened in the Government Recognized Bank of District- Bagpat

    c. It will be operated jointly by BSA & Accountant of P.I.A.

2. Project Fund Account of WC :-

    i) Joint S.B. Account in the name of Watershed Project for the Watershed Fund received from the PIA

    ii) It will be opened in the local Bank Branch

    iii) It will be operated jointly by

- Chairman - WC
- Secretary - WC
- Nominated Member - WDT

Structure of Watershed Committee (WC)

Category Members

    i) Chairman: 1

    ii) Secretary: 1

    iii) Representing User Group: 3-4

    iv) Representing Self Help Group: 2.3

    v) Representing Women: 1

vi) Representing SC/ST: 1

vii) Representing Landless: 1

viii) Representing WDT: 1

Total No. of Members: 10-12

Office Bearer of WC

i) Chairman

ii) Secretary

2. WDF Account

Opening of Watershed Development Fund Accounts

Under the IWMP-I implementation programme a separate Watershed Development Fund Account will be opened and maintained as per the IWMP Guidelines. Following activities will be taken for mobilizing the beneficiaries' contribution –

a. Briefing the beneficiaries about the purpose, utility and rate of contribution.
b. Informing the beneficiaries about the implications of non-payment of contribution.
c. Motivating beneficiaries for making contribution.
d. Collecting and depositing the contribution in the Watershed Development Fund.

WDT, WC and Secretary of the WC will be responsible for obtaining the contribution.

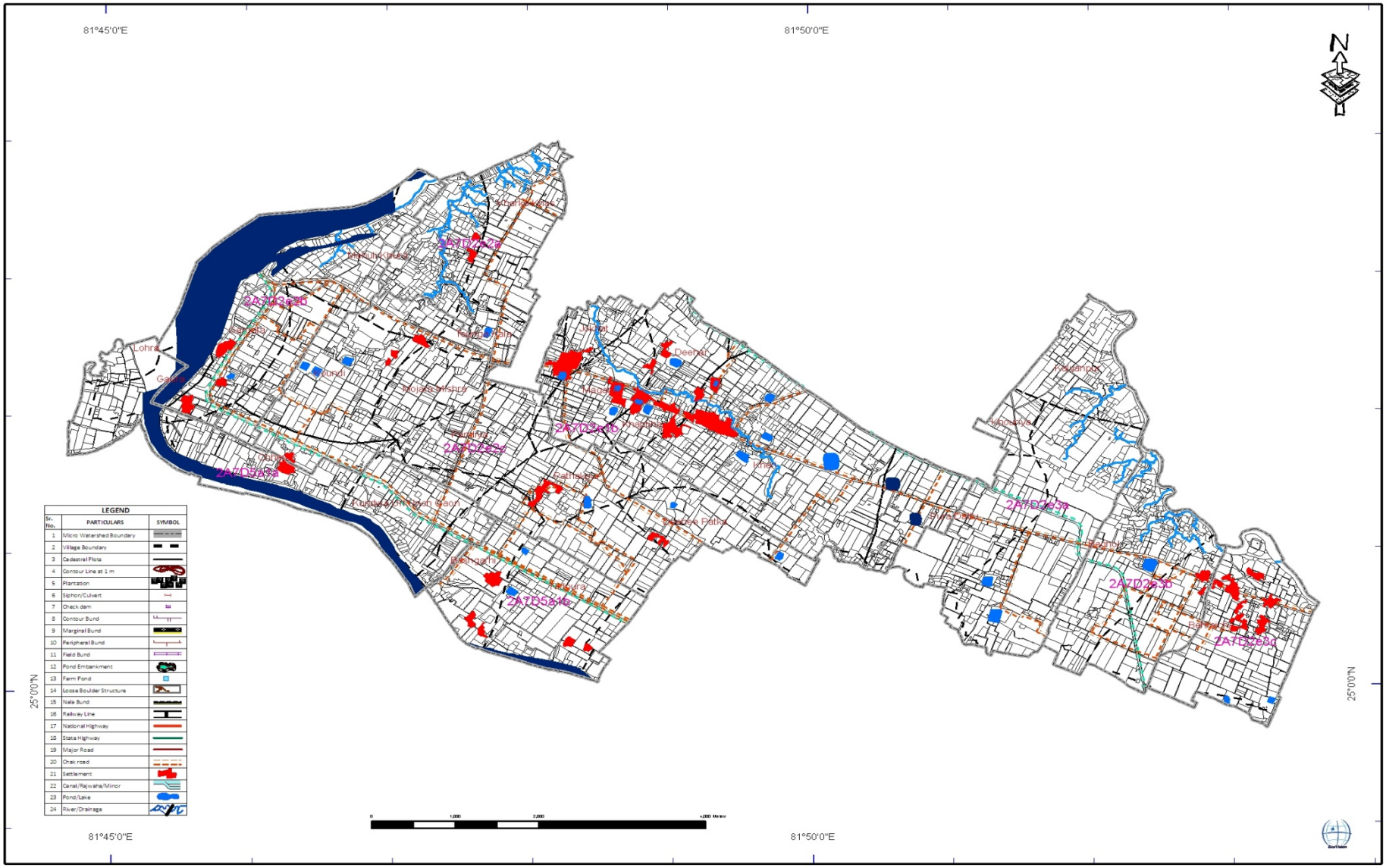
Utilization of WDF

a. Watershed Development Fund shall be in operation only after the project period.
b. It will be operated jointly by the President and Secretary of the Watershed Committee.

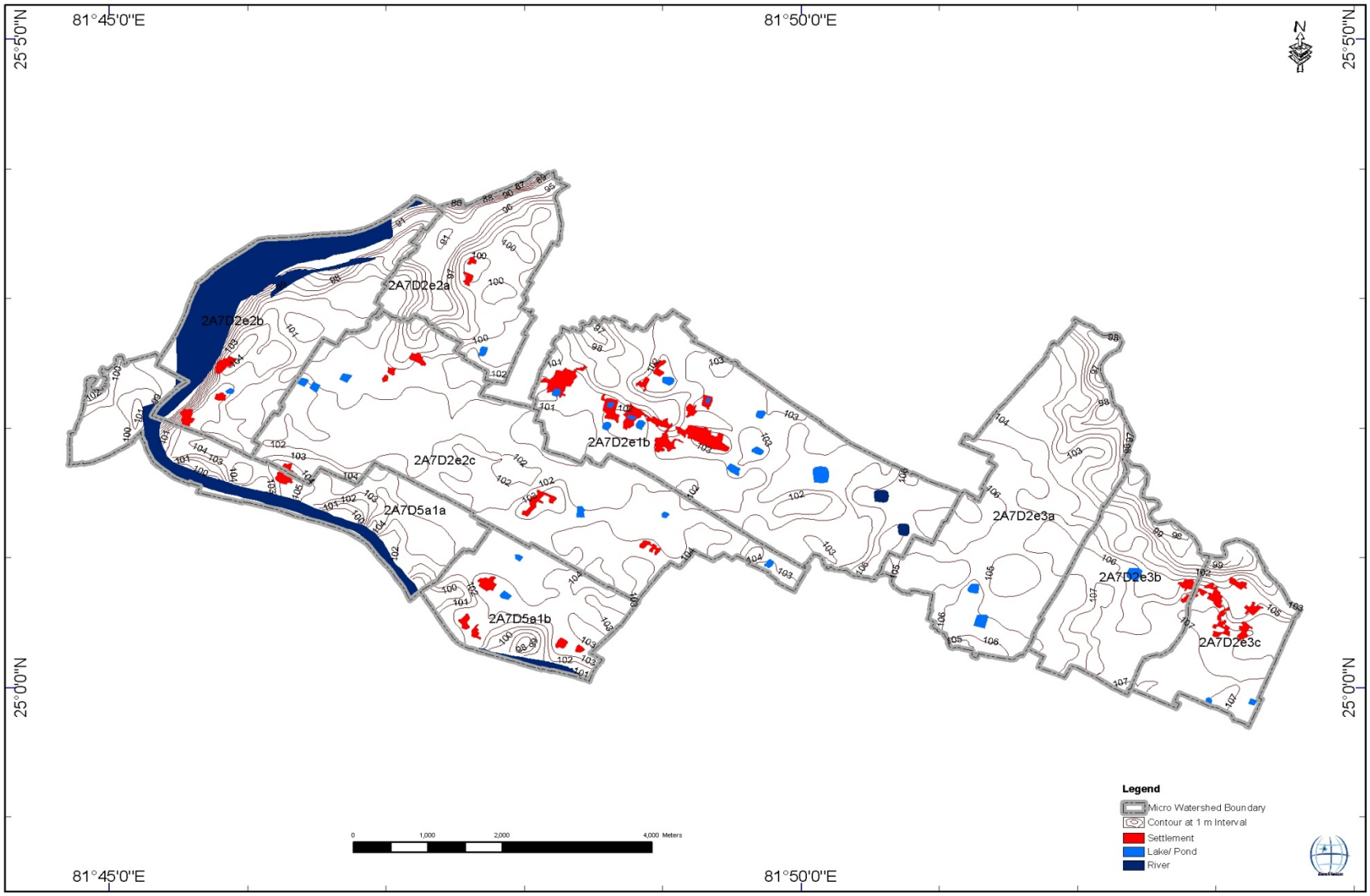
c. This fund should be utilized only with the approval of watershed committee for the maintenance and development of Community Assets, CPR and administrative cost if watershed secretary is continued after the project period with the approval of WC.
d. No money shall be withdrawn during the project period.
e. Watershed Project Fund should not be used for individual work.

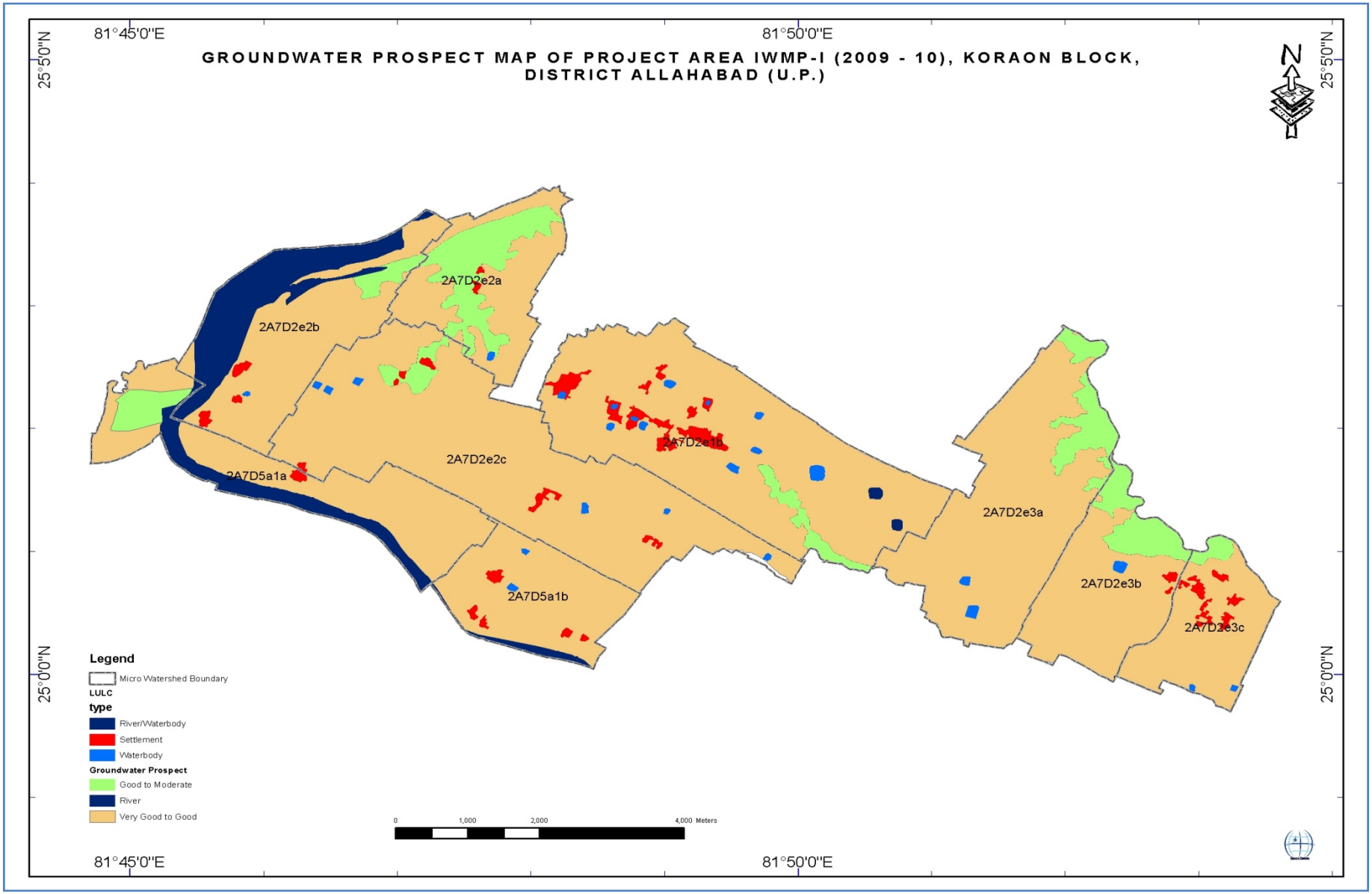
CHAPTER -11
GIS MAPS

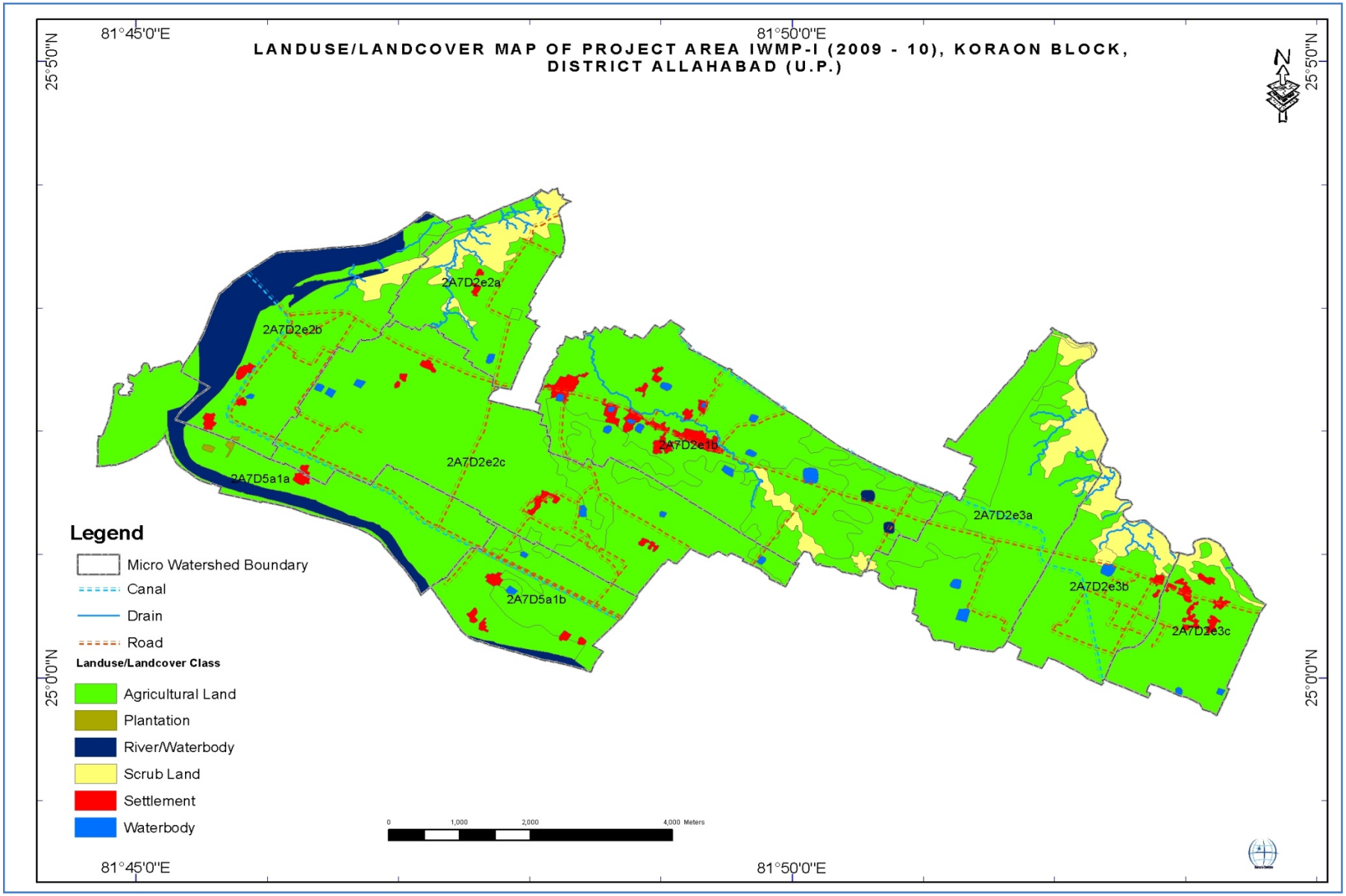
CADASTRAL MAP OF PROJECT AREA IWMP - I (2009 -10), KORAON BLOCK, DISTRICT ALLAHABAD (U.P.)

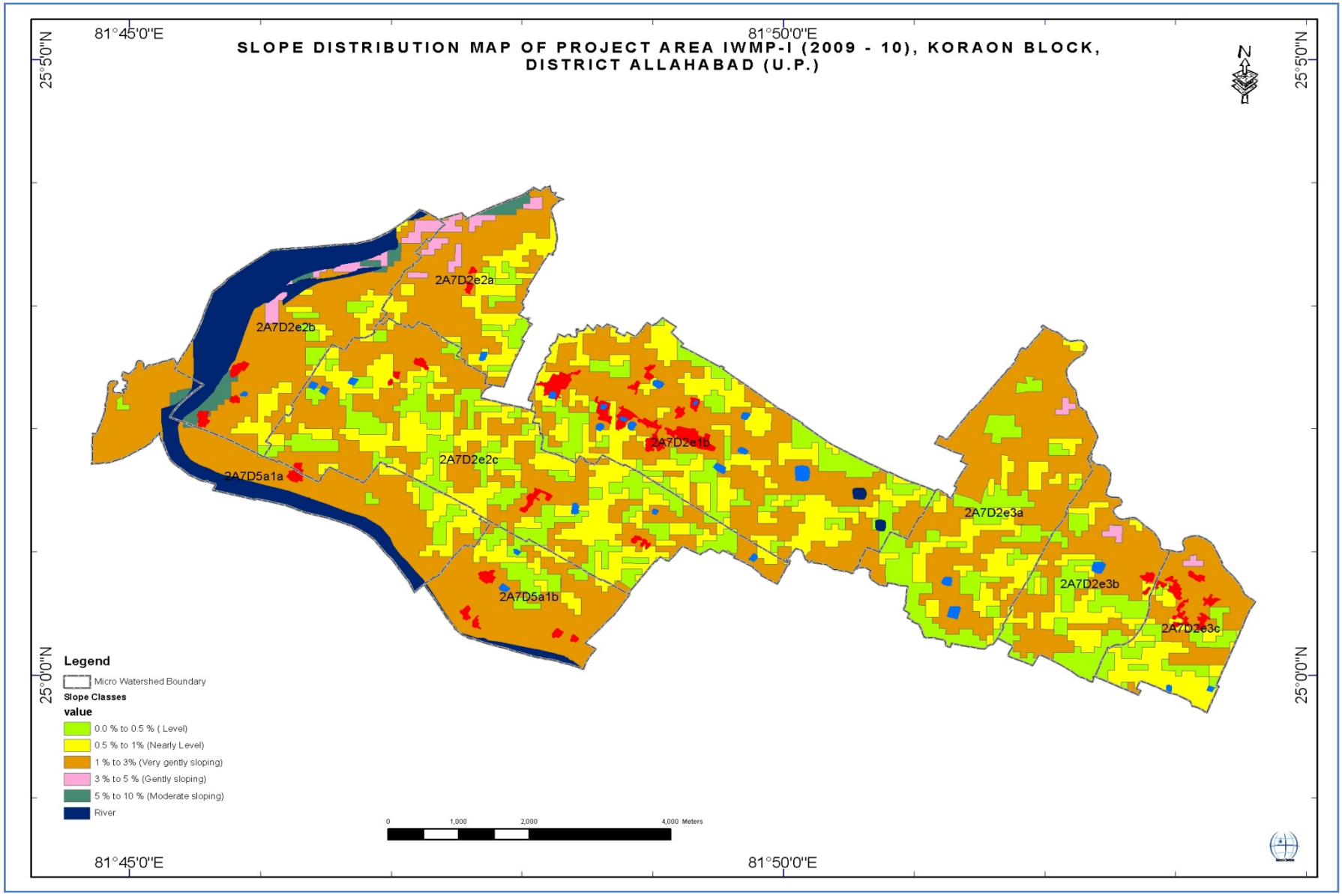


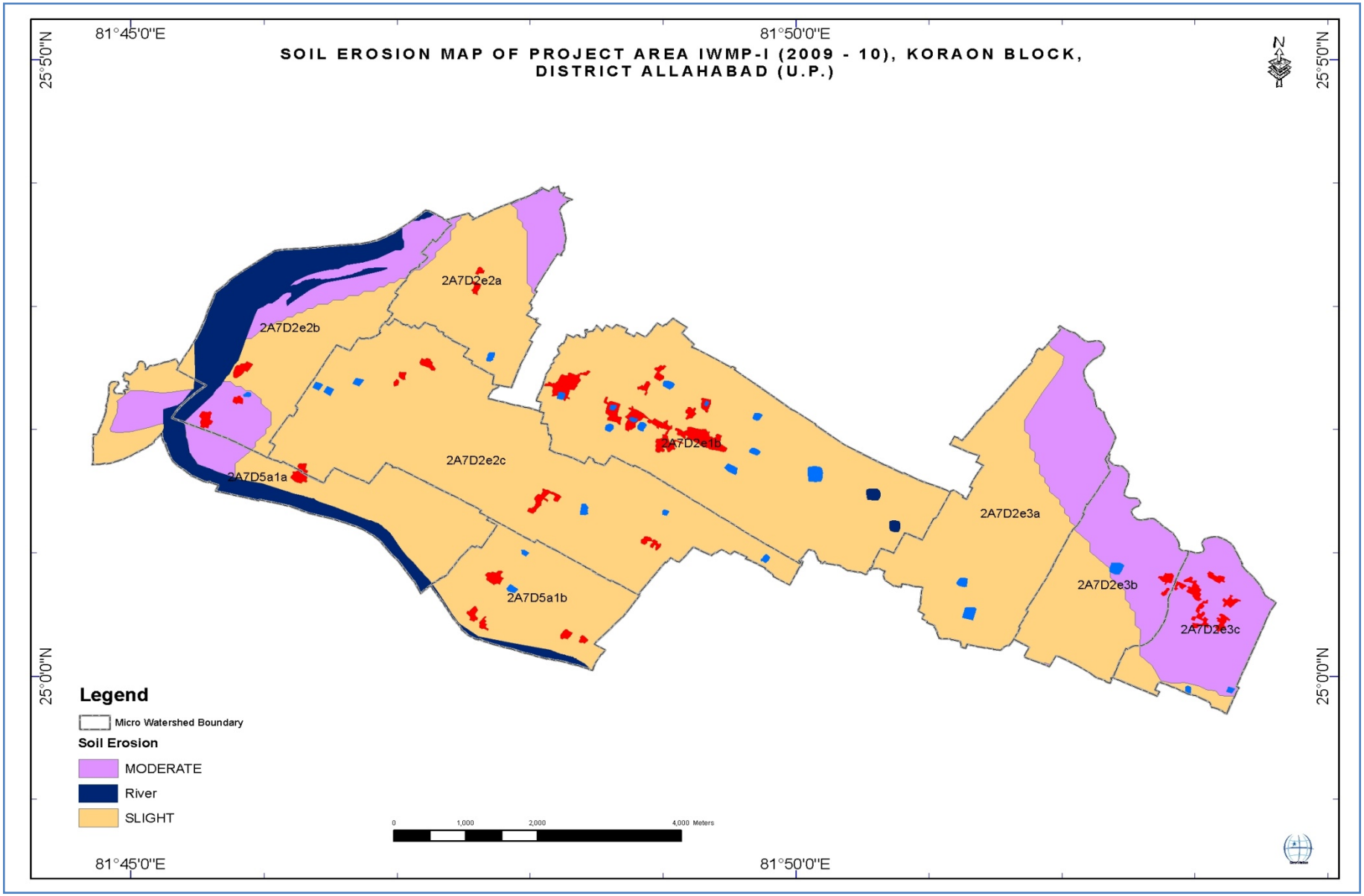
TOPOGRAPHIC CONTOUR MAP OF PROJECT AREA IWMP-I (2009 - 10), KORAON BLOCK,DISTRICT ALLAHABAD (U.P.)

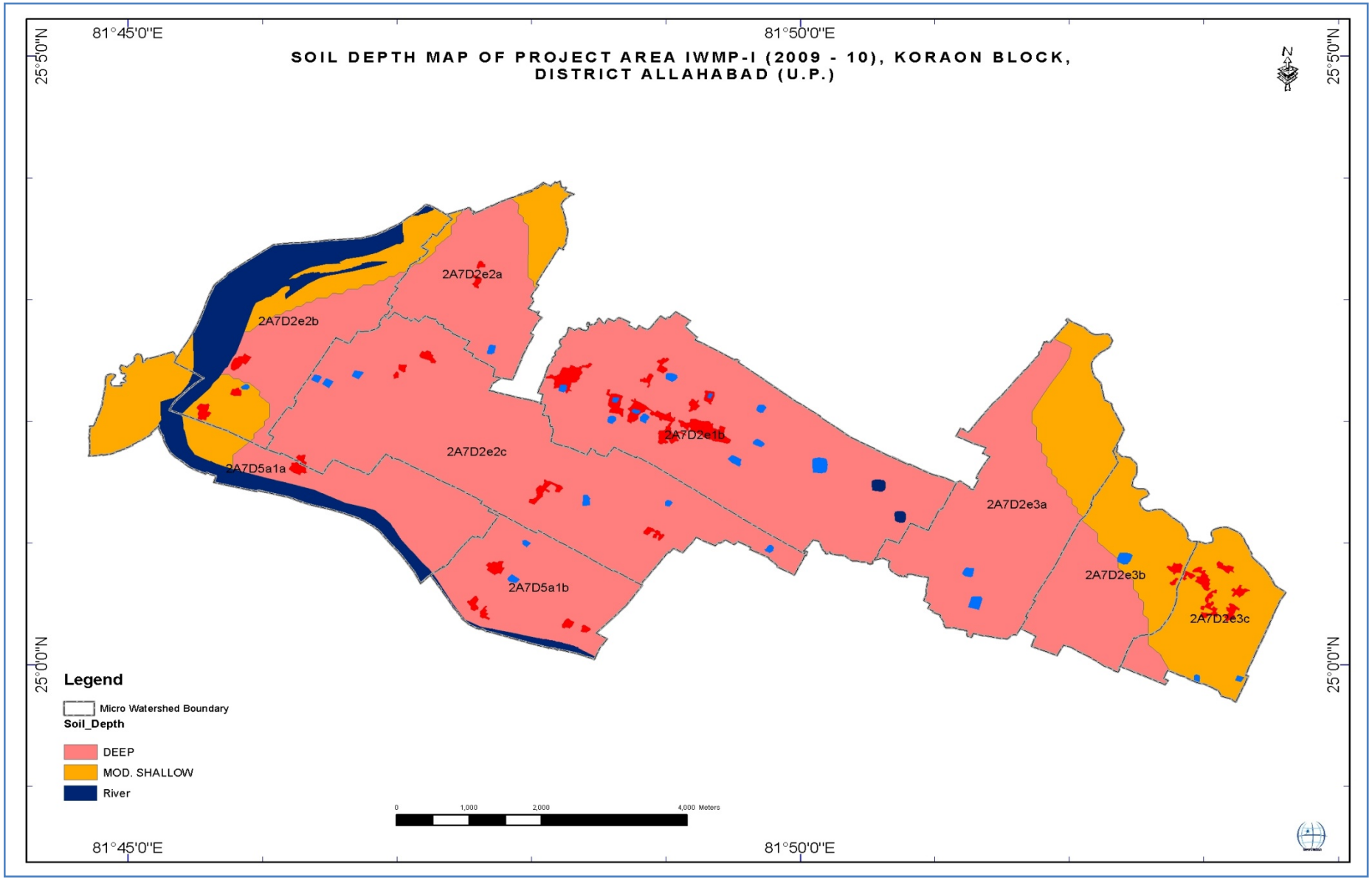


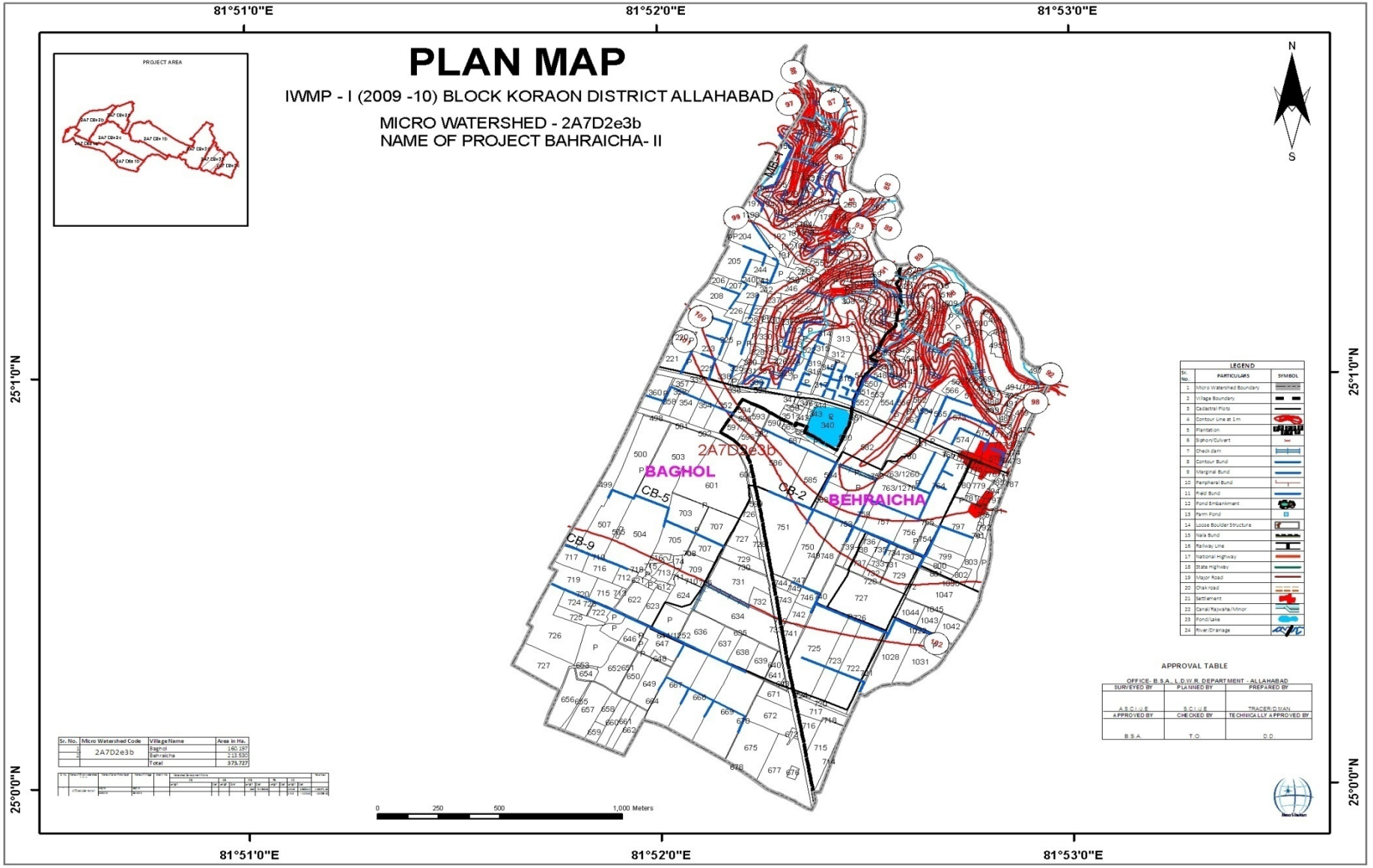

GROUNDWATER PROSPECT MAP OF PROJECT AREA IWMP-I (2009 - 10), KORAON BLOCK, DISTRICT ALLAHABAD (U.P.)
81°45'0"E
81°50'0"E
25°50'0"N
25°0'0"N
N
2A7D2e2a
2A7D2e2b
2A7D2e2c
2A7D2e1b
2A7D5a1a
2A7D5a1b
2A7D2e3a
2A7D2e3b
2A7D2e3c
Legend
Micro Watershed Boundary
LULC
type
River/Waterbody
Settlement
Waterbody
Groundwater Prospect
Good to Moderate
River
Very Good to Good
0
1,000
2,000
4,000 Meters

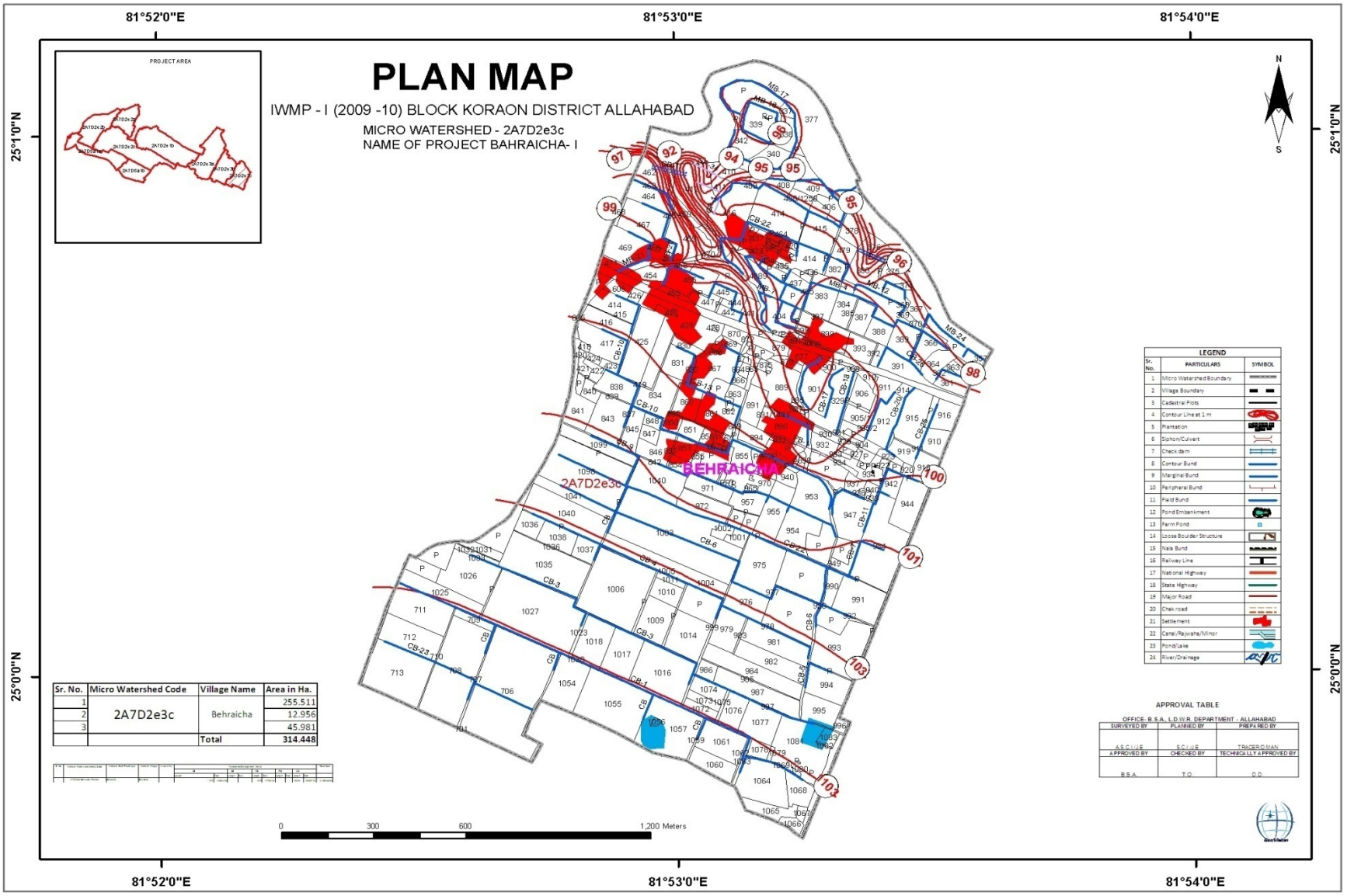

LANDUSE/LANDCOVER MAP OF PROJECT AREA IWMP-I (2009 - 10), KORAON BLOCK, DISTRICT ALLAHABAD (U.P.)
81°45'0"E
81°50'0"E
25°50'0"N
25°0'0"N
N
2A7D2e2a
2A7D2e2b
2A7D2e2c
2A7D5a1a
2A7D5a1b
2A7D2e1b
2A7D2e3a
2A7D2e3b
2A7D2e3c
Legend
Micro Watershed Boundary
Canal
Drain
Road
Landuse/Landcover Class
Agricultural Land
Plantation
River/Waterbody
Scrub Land
Settlement
Waterbody
0
1,000
2,000
4,000 Meters


SLOPE DISTRIBUTION MAP OF PROJECT AREA IWMP-I (2009 - 10), KORAON BLOCK, DISTRICT ALLAHABAD (U.P.)
81°45'0"E
81°50'0"E
25°50'N
25°0'0"N
N
2A7D2e2a
2A7D2e2b
2A7D2e1b
2A7D2e2c
2A7D5a1a
2A7D2e3a
2A7D2e3b
2A7D5a1b
2A7D2e3c
Legend
Micro Watershed Boundary
Slope Classes
value
0.0 % to 0.5 % (Level)
0.5 % to 1% (Nearly Level)
1 % to 3% (Very gently sloping)
3 % to 5 % (Gently sloping)
5 % to 10 % (Moderate sloping)
River
0
1,000
2,000
4,000 Meters


SOIL EROSION MAP OF PROJECT AREA IWMP-I (2009 - 10), KORAON BLOCK,
DISTRICT ALLAHABAD (U.P.)
81°45'0"E
81°50'0"E
25°50'N
25°0'0"N
N
2A7D2e2a
2A7D2e2b
2A7D2e2c
2A7D2e1b
2A7D5a1a
2A7D5a1b
2A7D2e3a
2A7D2e3b
2A7D2e3c
Legend
Micro Watershed Boundary
Soil Erosion
MODERATE
River
SLIGHT
0
1,000
2,000
4,000 Meters


SOIL DEPTH MAP OF PROJECT AREA IWMP-I (2009 - 10), KORAON BLOCK,
DISTRICT ALLAHABAD (U.P.)
81°45'0"E
81°50'0"E
25°5'0"N
25°0'0"N
N
2A7D2e2a
2A7D2e2b
2A7D2e2c
2A7D2e1b
2A7D5a1a
2A7D5a1b
2A7D2e3a
2A7D2e3b
2A7D2e3c
Legend
Micro Watershed Boundary
Soil_Depth
DEEP
MOD. SHALLOW
River
0
1,000
2,000
4,000 Meters


PLAN MAP
IWMP - I (2009 -10) BLOCK KORAON DISTRICT ALLAHABAD
MICRO WATERSHED - 2A7D2e3b
NAME OF PROJECT BAHRAICHA- II
PROJECT AREA
81°51'0"E
81°52'0"E
81°53'0"E
25°1'0"N
25°0'0"N
N
S
2A7D2e3b
BAGHOL
BEHRAICHA
CB-5
CB-2
CB-9
LEGEND
Sr. No.
PARTICULARS
SYMBOL
1 Micro Watershed Boundary
2 Village Boundary
3 Cadastral Plots
4 Contour Line at 1m
5 Plantation
6 Siphon/Culvert
7 Check dam
8 Contour Bund
9 Marginal Bund
10 Peripheral Bund
11 Field Bund
12 Pond Embankment
13 Farm Pond
14 Loose Boulder Structure
15 Nala Bund
16 Railway Line
17 National Highway
18 State Highway
19 Major Road
20 Chak road
21 Settlement
22 Canal/Kajwaha/Minor
23 Pond/Lake
24 River/Drainage
APPROVAL TABLE
OFFICE- B.S.A., L.D.W.R. DEPARTMENT - ALLAHABAD
SURVEYED BY
PLANNED BY
PREPARED BY
A.S.C.I.U.E
S.C.I.U.E
TRACER/DMAN
APPROVED BY
CHECKED BY
TECHNICALLY APPROVED BY
B.S.A.
T.O.
D.D.
Sr. No.
Micro Watershed Code
Village Name
Area in Ha.
1
2A7D2e3b
Baghol
160.197
2
Behraicha
213.530
Total
373.727
0
250
500
1,000 Meters



Sr. No.	Micro Watershed Code	Village Name	Area in Ha.
1	2A7D2e3c	Behraicha	255.511
2			12.956
3			45.981
		Total	314.448

ANNEXURES – I

PROJECT WISE DETAILS OF WATER SHED DEVELOPMENT (DEPARTMENTAL)

S. No.	Name of Micro-watershed & Code	Name of Gram Panchayat	Name of Village	Area in Ha.	Watershed Development Works										Total Cost	Pipe Outlet		Cost of Drop Spillway		Cost of Afforestation	Grand Total
					CB		SB		MB		PB		CD								
					Length	Cost	Length	Cost	Length	Cost	Length	Cost	Length	Cost		No.	Cost	No.	Cost		
1	Bahraicha II	Baghol	Baghol						3680	544565.66			22/665	858506.20	1403071.86	12/21438	257256.00		197220.00	191163.0	2048710.86
		Baraicha	Baraicha										3/165	142009.60	142009.60						142009.60
2	Nidaura 2a7d5a1b	Jorvat	Jorvat												0.00						0.00
		Vasgadhi	Nidaura,Dihipatka				1250	97900	3530	345587.00			7No./285m	343873.00	787360.00	9	192942.00	2/1972220	394440.00	137258.0	1512000.00
3	Unch Gaon	Chhapar	Shargata,Chhapar Mojra Mishra		5270	204309	1785	139801	3570	349503.00			9No./370m.	396030.00	1089643.00	10/21438	214380.00		197220.00	170550.0	1671793.00
		Vasgadhi	Vasgadhi						2180	213422.00			1No./45m.	63665.00	277087.00						277087.00
4	Baghol	Baghol	Baghol		4550	176396.00	790	77341.00			720	70488.00	1No./60m.	26138.00	350363.00						350363.00
		Mahulikala	Kalyanpur		4900	189965.00	7150	699985.00					28No.	907975.00	1797925.00	15/21438	321570.00	3/1972220	591660.00	332082.0	3043237.00
5	Behraicha Pratham	Behraicha	Behraicha		11570	448550.38			4575	447892.50			195/5m.	239367.00	1135809.88	13/21438	278694.00		197220.00	162357	1774080.88
6	Khaptiha	Jorvat	Jorvat				3880	303881.6	2605	255029.50			135	59983.56	618894.66	15/21548	323220.00	2/1972200	394400.00	307981	1644495.66

		Puradant	Puradant				2260	177003.2	1450	141955.00					318958.20						318958.20
		Khaptiha	Khaptiha				1700	133144	800	783200.00					916344.00						916344.00
		Kheeri	Kheeri				7770	608546.4	4370	427823.00					1036369.40						1036369.40
		Dihar	Dihar				5570	436242.4							436242.40						436242.40
		Khauria	Khauria				2610	204415.2							204415.20						204415.20
		Ratehata	Ratehata				650	50908							50908.00						50908.00
7	Mahulikhurd 2A7D2e2b	Toungakala	Mahulikhurd				5520	432326.40	615	60208.50			6No./160 m.	83969.37	576504.27						576504.27
		Kaundhi	Mahulikhurd				11680	914777.60					5No./105 m.	155837.85	1070615.45						1070615.45
		Chhapar	Mahulikhurd				3430	268637.60							268637.60						268637.60
8	Pathakpur	Toungakala	Toungakala				9695	759312.00	2310	226149.00			140	38854.00	1024315.00						
		"	Mahulikhurd				3025	236918.00	670	65593.00			150	50458.00	352969.00						
		Chhapar	Chhapar				475	37202.00							37202.00						
		"	Unchgaon				270	21146.00							21146.00						
		"	Padia												0.00						
		Jorvat	Pathakpur				9115	713887.00							713887.00						
		Basgadhi	Dihipatka				14030	1098830.00							1098830.00						
		Kaundi	Kaundi				2040	159773.00							159773.00						
		Kheeri	Kheeri				7725	605022.00							605022.00						
9	Toungakala 2A7D2e2a	Toungakala	Mahulikhurd				7130	558421.60	815	79788.50			23	673924.00	1312134.10						
				Total	26290	1019220.4	109550	8735421	31170	3940716.66	720.00	70488.00		4040590.58	**17806436.62**		**1588062.0**		**1972160.0**	**1301391.0**	**17342771.52**

PROJECT WISE DETAILS OF WATER SHED DEVELOPMENT (CONVERGENCE)

S. No.	Name of Micro-watershed & Code	Name of Gram Panchayat	Name of Village	Area in Ha.	Watershed Development Works								Total Cost	Pipe Outlet		Cost of Drop Spillway	Cost of Afforestation	Grand Total
					CB		SB		MB		CD							
					Length	Cost	Length	Cost	Length	Cost	Length	Cost		No.	Cost			
1	Behraicha	Behraicha	Behraicha		4405	17077480.00	180	14175920.00	990	146500.00	8/585	29194272.00	75097670.00					
		Baghol	Baghol		1425	5524497.00	475	37202.00					9244697.00	8/2142	171504			
2	Nidaura	Vasgadhi	Vasgadhi		14930	578812.21	5170	404914.40					983726.61	10	214380			
		Jorwat	Jorwat		2430	94207.21							94207.21	21438	1292313.82			
3	Unch Gaon	Unch Gaon	Unch Gaon		4085	158368.00			2740	268246.00			426614.00					
		Vasgadhi	Vasgadhi		800	31014.00							31014.00					
		Jorvat	Pathakpur		660	25587.00							25587.00					
		Lohra	Gaura		5045	195586.00			3440	336776.00	1/30m.	12545.00	544907.00					
4	Baghol																	
5	Behraicha 1st																	
6	Khaptiha	Kheeri	Kheeri		6010	232998.08	10780	844289.60										
		Puradutt	Puradutt		2790	108163.83	5860	458955.20										
		Khauriya	Khauriya		1560	60478.70												
		Didar	Didar				1750	137060.00										
		Kharga	Kharga				310	24279.20										
		Jorat	Jorat				6620	518478.40										
8	Pathakpur	Toungakala	Toungakala		1750	120686.00									120686.00			120686
		"	Mahulikhurd												0.00			0
		Chhapar	Chhapar		1370	94480.00									94480.00			94480
		"	Unchgao		14120	973763.00									973763.00			973763

			n															
		"	Padia		1885	129996.00									129996.00			129996
		Jorvat	Jorvat				780	108670.00							108670.00			108670
		"	Pathakpur		1720	118617.00	2365	329492.00							448109.00			448109
		Basgadhi	Dihipatka												0.00			0
		Kaundi	Kaundi		9010	621360.00	380	52942.00							674302.00			674302
		Kheeri	Kheeri				4325	602559.00							602559.00			602559
		Khaptiha	Khaptiha				2400	334368.00							334368.00			334368
9	Toungakala 2A7D2e2a	Kharkakhas	Kharkakhas				2060	161339.20	510	49929.00	20No./119	767390.59			978658.79			0
		Toungakala	Toungakala				1010	79103.20	190	18601.00					97704.20			
				Total	73995	26146094.03	44465	18269572.20	7870	820052.00		29974207.59	86448422.82		6241493.81			3486933

ACTION PLAN OF PRODUCTION SYSTEM & MICRO-ENTERPRISES

Sr No.	Name of Village	Name of Farmer	Father Name	Showing Season	Crops	Cadastre No.	Area (ha)	Cost of Demonstration (Rs.)	Showing Months	Harvesting Month	Production (ha)
1	Baghol	Madan Mohan	Roshan Prasad	Rabi	Gram	340	0.2	300	Oct	Apr	2.256
2	Baghol	Rama Shankar	Roshan Prasad	Rabi	Wheat	340	0.5	4500	Nov	Apr	16.45
3	Baghol	Lalta Prasad	Ram Dhari	Rabi	Wheat	295	0.5	4500	Nov	Apr	16.45
4	Baghol	Mukut Dhari	Khurmut	Rabi	Wheat	299	0.5	4500	Nov	Apr	16.45
5	Baghol	Masuriyadeen	Dasrath	Rabi	Lentil	234	0.2	400	Oct	Apr	2.82
6	Baghol	Jai Nath	Vindeshwari Prasad	Rabi	Lentil	347	0.2	400	Oct	Apr	2.82
7	Baghol	Chintamani	Indra Lal	Rabi	Lentil	272	0.2	400	Oct	Apr	2.82
8	Baghol	Lalta Prasad	Braj Lal	Rabi	Farm Pea	144	0.2	300	Oct	Apr	1.728
9	Baghol	Tribhuwan	Bhagwan Deen	Rabi	Farm Pea	27	0.2	300	Oct	Apr	1.728
10	Baghol	Radhika Prasad	Gopi	Rabi	Farm Pea	79	0.2	300	Oct	Apr	1.728
11	Baghol	Ram Sajivan	Ram Dash	Kharif	Paddy	27	0.5	6000	June	Nov	30
12	Baghol	Ram Raj	Jagat Dhari	Kharif	Paddy	299	0.5	6000	June	Nov	30
13	Baghol	Ram Adhar	Khurmut	Kharif	Tur	348	0.2	300	June	Nov	14.172
14	Baghol	Fateh Bahadur	Ayodhya Singh	Kharif	Tur	346	0.2	300	June	Nov	14.172
15	Baghol	Vishva Nath	Moti Lal	Kharif	Tur	428	0.2	300	June	Nov	14.172
16	Baghol	Surya Pal	Roshan Prasad	Kharif	Tur	340	0.2	300	June	Nov	14.172
17	Baghol	Shiv Nath	Moti Lal	Kharif	Bajra	428	0.5	1500	June	Nov	7
18	Baghol	Dev Raj	Ram Dhari	Kharif	Bajra	295	0.5	1500	June	Nov	7
19	Baghol	Surya Maan	Prithvi	Kharif	Paddy	328	0.5	6000	June	Nov	30
20	Baghol	Paras Nath	Kedar Nath	Kharif	Paddy	27	0.5	6000	June	Nov	30
21	Baghol	Krishna Prasad	Sarda Prasad	Rabi	Wheat	333	0.5	4500	Nov	Apr	16.45
22	Baghol	Jagbandan	Ram Swaroop	Rabi	Gram	160	0.2	300	Oct	Apr	2.256
23	Baghol	Nathai	Ram Swaroop	Rabi	Gram	160	0.2	300	Oct	Apr	2.256
24	Baghol	Baij Nath	Rameshwer	Rabi	Lentil	162	0.2	400	June	Apr	2.82
25	Baghol	Chandra Wali	Mullu	Rabi	Lentil	177	0.2	400	June	Apr	2.82
26	Baghol	Sita Ram	Purushottam	Rabi	Lentil	175	0.2	400	June	Apr	2.82
27	Baghol	Manik Chandra	Ram Chhabile	Rabi	Gram	255	0.2	300	Oct	Apr	2.256
28	Baghol	Dharm Pal Singh	Sadman Singh	Rabi	Wheat	568	0.5	4500	Nov	Apr	16.45
29	Baghol	Sahas Ram	Ram Surat	Rabi	Wheat	758	0.5	4500	Nov	Apr	16.45
30	Baghol	Pradeep Kumar	Sahas Ram	Rabi	Wheat	751	0.5	4500	Nov	Apr	16.45
31	Baghol	Sangam Lal	Gaya Prasad	Rabi	Lentil	564	0.2	400	Oct	Apr	2.82
32	Baghol	Hanuman Prasad	Ram Sewak	Rabi	Lentil	565	0.2	400	Oct	Apr	2.82

33	Baghol	Vijay Shankar	Prandhar	Kharif	Tur	554	0.2	300	June	Nov	14.172
34	Baghol	Teerath Nath	Ram Pratap	Kharif	Tur	537	0.2	300	June	Nov	14.172
35	Baghol	Ram Jeet	Gokul Prasad	Rabi	Wheat	645	0.5	4500	Nov	Apr	16.45
36	Baghol	Satya Narayan	Ram Bihor	Rabi	Wheat	488	0.5	4500	Nov	Apr	16.45
37	Baghol	Sanjay	Kedar	Rabi	Wheat	762	0.5	4500	Nov	Apr	16.45
38	Bahraicha	Dev Muni	Ram Pratap	Rabi	Wheat	827	0.5	4500	Nov	Apr	16.45
39	Bahraicha	Satya Narayan	Ram Nihor	Rabi	Wheat	825	0.5	4500	Nov	Apr	16.45
40	Bahraicha	Ayodhya	Dai	Kharif	Tur	1039	0.2	300	June	Nov	14.172
41	Bahraicha	Ram Adhar	Ram Roop	Rabi	Wheat	1042	0.5	4500	Nov	Apr	16.45
42	Bahraicha	Doodh Nath	Fulwari	Rabi	Wheat	1043	0.5	4500	Nov	Apr	16.45
43	Bahraicha	Fulwari	Bauddh	Rabi	Gram	115	0.2	300	Oct	Apr	2.256
44	Bahraicha	Sukh Wanti	Dev Ram Kailash	Rabi	Gram	365	0.2	300	Oct	Apr	2.256
45	Bahraicha	Ram Sajeevan	Kedar Nath	Rabi	Wheat	860	0.5	4500	Nov	Apr	16.45
46	Bahraicha	Radheshyam	Sri Nath	Rabi	Wheat	146	0.5	4500	Nov	Apr	16.45
47	Bahraicha	Teerath Nath	Ram Pratap	Rabi	Wheat	827	0.5	4500	Nov	Apr	16.45
48	Bahraicha	Raj Man	Baldev	Kharif	Tur	831	0.2	300	June	Nov	14.172
49	Bahraicha	Ram Naresh	Baldev	Rabi	Wheat	832	0.5	4500	Nov	Apr	16.45
50	Bahraicha	Rajeshwari	Ram Pyare	Rabi	Wheat	814	0.5	4500	Nov	Apr	16.45
51	Bahraicha	Bindeshwari	Shiv Mangal	Rabi	Wheat	817	0.5	4500	Nov	Apr	16.45
52	Bahraicha	Ram Karan	Govind	Rabi	Wheat	816	0.5	4500	Nov	Apr	16.45
53	Bahraicha	Kamal Kant	Dwarika Prasad	Rabi	Wheat	712	0.5	4500	Nov	Apr	16.45
54	Bahraicha	Lalta Prasad	Dwarika	Kharif	Tur	712	0.2	300	June	Nov	14.172

55	Bahraicha	Ram Bhumi	Beni Prasad	Rabi	Wheat	971	0.5	4500	Nov	Apr	16.45
56	Bahraicha	Triveni Prasad	Ram Kripal	Rabi	Wheat	891	0.5	4500	Nov	Apr	16.45
57	Unch Gaon	Sambhu Nath		Kharif	Paddy	513	0.5	6000	June	Nov	30
58	Unch Gaon	Dilawer Khan		Kharif	Paddy	305	0.5	6000	June	Nov	30
59	Unch Gaon	Rajendra Prasad		Kharif	Paddy	560	0.5	6000	June	Nov	30
60	Gaura	Ayodhya Pal		Rabi	Wheat	65	0.5	4500	Nov	Apr	16.45
61	Gaura	Jagannath		Rabi	Wheat	2	0.5	4500	Nov	Apr	16.45
62	Gaura	Braj Lal		Rabi	Wheat	105	0.5	4500	Nov	Apr	16.45
63	Gaura	Appu		Rabi	Wheat	26	0.5	4500	Nov	Apr	16.45
64	Gaura	Indra Mani		Rabi	Wheat	123	0.5	4500	Nov	Apr	16.45
65	Gargata	Sangam Lal		Kharif	Tur	56	0.2	300	June	Nov	14.172
66	Gargata	Hriday Prasad		Kharif	Tur	51	0.2	300	June	Nov	14.172
67	Gargata	Govind Prasad		Kharif	Tur	155	0.2	300	June	Nov	14.172
68	Chhapar	Hanuman Prasad		Rabi	Lentil	119	0.2	400	Oct	Apr	2.82
69	Chhapar	Chandrika Prasad		Rabi	Lentil	143	0.2	400	Oct	Apr	2.82
70	Chhapar	Suresh Chandra		Rabi	Lentil	188	0.2	400	Oct	Apr	2.82
71	Basgadhi	Radhe Shyam		Kharif	Tur	7	0.2	300	June	Nov	14.172
72	Basgadhi	Ram Ashre		Kharif	Tur	114	0.2	300	June	Nov	14.172
73	Basgadhi	Ram Bahor		Kharif	Tur	136	0.2	300	June	Nov	14.172
74	Basgadhi	Som Nath		Kharif	Tur	194	0.2	300	June	Nov	14.172
75	Basgadhi	Gokul Prasad		Kharif	Tur	98	0.2	300	June	Nov	14.172
76	Pathak Pur	Panna Lal		Kharif	Paddy	278	0.5	6000	June	Nov	30
77	Deehi Patka	Shiv Sewak		Kharif	Paddy	274	0.5	6000	June	Nov	30
78	Deehi Patka	Ram Karan		Kharif	Paddy	277	0.5	6000	June	Nov	30
79	Deehi Patka	Shiv Shankar		Kharif	Paddy	274	0.5	6000	June	Nov	30
80	Deehi Patka	Girdhari		Kharif	Paddy	209	0.5	6000	June	Nov	30
81	Deehi Patka	Prabhu		Kharif	Paddy	291	0.5	6000	June	Nov	30
82	Deehi Patka	Girdhari		Rabi	Wheat	266	0.5	4500	Nov	Apr	16.45
83	Deehi Patka	Matuk Dhari		Rabi	Wheat	260	0.5	4500	Nov	Apr	16.45
84	Deehi Patka	Mathura Prasad		Rabi	Wheat	178	0.5	4500	Nov	Apr	16.45
85	Nidaura	Diwaker		Kharif	Tur	3	0.2	300	June	Nov	14.172
86	Nidaura	Bantu Ram		Kharif	Tur	190	0.2	300	June	Nov	14.172
87	Nidaura	Kunjal Prasad		Kharif	Tur	32	0.2	300	June	Nov	14.172
88	Nidaura	Narayan Dash		Kharif	Tur	86	0.2	300	June	Nov	14.172
89	Nidaura	Suresh Prasad		Rabi	Wheat	70	0.5	4500	Nov	Apr	16.45
90	Nidaura	Jai Karan Prasad		Kharif	Tur	50	0.2	300	June	Nov	14.172

91	Nidaura	Kesri Prasad		Kharif	Tur	104	0.2	300	June	Nov	14.172
92	Basgadhi	Ram Bahor		Rabi	Wheat	115	0.5	4500	Nov	Apr	16.45
93	Basgadhi	Shiv Adhar		Rabi	Wheat	59	0.5	4500	Nov	Apr	16.45
94	Basgadhi	Ayodhya Prasad		Rabi	Wheat	63	0.5	4500	Nov	Apr	16.45
95	Pathak Pur	Heera Lal		Kharif	Paddy	304	0.5	6000	June	Nov	30
96	Pathak Pur	Rama Shankar		Kharif	Paddy	297	0.5	6000	June	Nov	30
97	Khaptiha	Rajit Ram	Ram Yagya	Rabi	Lentil	4	0.2	400	Oct	Apr	2.82
98	Khaptiha	Shiv Gopal	Ram Bharose	Rabi	Lentil	9	0.2	400	Oct	Apr	2.82
99	Khaptiha	Bal Krishan		Rabi	Gram	15	0.2	300	Oct	Apr	2.256
100	Khaptiha	Ram Pratap	Ram Dhan	Rabi	Farm Pea	56	0.2	300	Oct	Apr	1.728
101	Khaptiha	Bhola Nath	Kashi	Rabi	Wheat	129	0.5	4500	Nov	Apr	16.45
102	Khaptiha	Laxmi Kant	Adha Prasad	Rabi	Wheat	132	0.5	4500	Nov	Apr	16.45
103	Khaptiha	Hajari Lal	Krishan Chandra	Rabi	Gram		0.2	300	Oct	Apr	2.256
104	Khaptiha	Banwari	Krishan Chandra	Rabi	Gram		0.2	300	Oct	Apr	2.256
105	Khaptiha	Amar Nath	Jagai	Rabi	Gram		0.2	300	Oct	Apr	2.256
106	Khaptiha	Angad Prasad	Magru	Kharif	Tur	122	0.2	300	June	Nov	14.172
107	Khaptiha	Vishva Nath	Mahangu	Kharif	Tur	126	0.2	300	June	Nov	14.172
108	Khaptiha	Mangla Prasad	Mahangu	Rabi	Wheat	182	0.5	4500	Nov	Apr	16.45
109	Khaptiha	Ram Kumar	Vishva Nath	Kharif	Paddy	204	0.5	6000	June	Nov	30
110	Khaptiha	Shyam Lal	Ram Bharose	Kharif	Paddy	210	0.5	6000	June	Nov	30
111	Khaptiha	Ram Suchit	Ram Awtar	Kharif	Paddy	247	0.5	6000	June	Nov	30
112	Khaptiha	Sheetla Prasad		Kharif	Paddy		0.5	6000	June	Nov	30
113	Khaptiha	Amar Nath	Vishram	Rabi	Wheat	293	0.5	4500	Nov	Apr	16.45
114	Khaptiha	Sant Lal	Chhote	Rabi	Mustard	352	0.5	3750	Oct	Apr	8.46
115	Khaptiha	Ram Adhar	Mahesh Prasad	Kharif	Paddy	354	0.5	6000	June	Nov	30
116	Khaptiha	Ashutosh	Santosh Kumar	Kharif	Paddy	85	0.5	6000	June	Nov	30
117	Khaptiha	Sateesh Chandra	Som Dhar	Kharif	Tur	81	0.2	300	June	Nov	14.172
118	Khaptiha	Alok	Som Dhar	Kharif	Tur	193 a	0.2	300	June	Nov	14.172
119	Khaptiha	Radheshyam	Ambika	Kharif	Tur	193	0.2	300	June	Nov	14.172
120	Khaptiha	Rajit Ram	Ambika	Rabi	Gram	38	0.2	300	Oct	Apr	2.256
121	Khaptiha	Ashok Kumar	Madan Mohan	Kharif	Tur	38	0.2	300	June	Nov	14.172
122	Khaptiha	Bhandari Lal	Sukkhu	Kharif	Tur		0.2	300	June	Nov	14.172
123	Khaptiha	Ved Prakash	Ganga	Rabi	Wheat	92	0.5	4500	Nov	Apr	16.45
124	Khaptiha	Ram Awtar	Udit Narayan	Kharif	Paddy		0.5	6000	June	Nov	30
125	Khaptiha	Chandra Prasad	Triveni Prasad	Kharif	Paddy	24	0.5	6000	June	Nov	30
126	Khaptiha	Prasann Kumar	Santosh Kumar	Kharif	Tur	125	0.2	300	June	Nov	14.172
127	Khaptiha	Kedar Nath	Ram Nath	Rabi	Gram	9	0.2	300	Oct	Apr	2.256
128	Khaptiha	Sattar Ahmad	Rahmatulla	Rabi	Wheat	111	0.5	4500	Nov	Apr	16.45

129	Khaptiha	Masuriya Deen	Buddhu	Rabi	Wheat	136	0.5	4500	Nov	Apr	16.45
130	Khaptiha	Suresh Kumar	Jawaher Lal	Kharif	Paddy	160	0.5	6000	June	Nov	30
131	Khaptiha	Shiv Prasad	Ram Awtar	Kharif	Tur	163	0.2	300	June	Nov	14.172
132	Khaptiha	Sant Lal	Madhav	Kharif	Tur	143	0.2	300	June	Nov	14.172
133	Pathak Pur	Jugnu	Nakai	Kharif	Paddy		0.5	6000	June	Nov	30
134	Pathak Pur	Ram Vishal	Maiku	Kharif	Paddy		0.5	6000	June	Nov	30
135	Pathak Pur	Ram Khilawan	Manrali	Kharif	Paddy		0.5	6000	June	Nov	30
136	Pathak Pur	Sipahi Lal	Daddan	Kharif	Paddy		0.5	6000	June	Nov	30
137	Pathak Pur	Brajesh	Rama Shankar	Kharif	Tur		0.2	300	June	Nov	14.172
138	Pathak Pur	Santosh Kumar	Deep Narayan	Kharif	Tur		0.2	300	June	Nov	14.172
139	Pathak Pur	Gulab Chandra	Mangla Prasad.	Kharif	Tur		0.2	300	June	Nov	14.172
140	Pathak Pur	Anusuiya Prasad	Rohini Prasad	Kharif	Tur		0.2	300	June	Nov	14.172
141	Pathak Pur	Shiv Shankar	Gurudeen	Kharif	Tur		0.2	300	June	Nov	14.172
142	Pathak Pur	Sukhdev	Jawaher Lal	Rabi	Farm Pea		0.2	300	Oct	Apr	1.728
143	Pathak Pur	Rajesh	Daya Shankar	Rabi	Gram		0.2	300	Oct	Apr	2.256
144	Unch Gaon	Lallan Singh	Surya Nath Singh	Rabi	Wheat		0.5	4500	Nov	Apr	16.45
145	Padiya	Sipahi Singh	Ganga Singh	Rabi	Wheat		0.5	4500	Nov	Apr	16.45
146	Unch Gaon	Gopal Singh	Dilip Singh	Kharif	Tur		0.2	300	June	Nov	14.172
147	Unch Gaon	Meeru	Matriu	Kharif	Tur		0.2	300	June	Nov	14.172
148	Khapatiha	Laxman Prasad	Kaushlesh	Rabi	Wheat		0.5	4500	Nov	Apr	16.45
149	Khapatiha	Uma Shankar	Mohit Lal	Rabi	Wheat		0.5	4500	Nov	Apr	16.45
150	Khapatiha	Bhola Nath	Bhagirathi	Kharif	Tur		0.2	300	June	Nov	14.172
151	Deehi Patka	Ram Lagan Singh	Jhassi	Kharif	Tur		0.2	300	June	Nov	14.172
152	Deehi Patka	Ram Wali Singh		Kharif	Tur		0.2	300	June	Nov	14.172
153	Deehi Patka	Narayan Singh		Kharif	Tur		0.2	300	June	Nov	14.172
154	Deehi Patka	Jhubba Lal Pal		Kharif	Tur		0.2	300	June	Nov	14.172
155	Taunga Kala	Kashi Prasad	Tersu	Kharif	Tur		0.2	300	June	Nov	14.172
156	Taunga Kala	Samarjeet		Kharif	Tur		0.2	300	June	Nov	14.172
157	Taunga Kala	Shiv Kumar	Tersu	Kharif	Tur		0.2	300	June	Nov	14.172
158	Taunga Kala	Ayodhya Prasad		Rabi	Gram		0.2	300	Oct	Apr	2.256
159	Taunga Kala	Mishri Lal	Tersu	Kharif	Tur		0.2	300	June	Nov	14.172
160	Mahuli Khurd	Raja Ram	Ram Yagya	Kharif	Paddy		0.5	6000	June	Nov	30
161	Khiri	Ram Lakhan	Ramanuj	Kharif	Tur		0.2	300	June	Nov	14.172
162	Khiri	Ram Abhilash	Ramanuj	Kharif	Tur		0.2	300	June	Nov	14.172
163	Deehi Patka	Kalu	Shiv Baran	Rabi	Gram		0.2	300	Oct	Apr	2.256
164	Deehi Patka	Kedar Singh	Ganga Singh	Rabi	Mustard		0.5	3750	Oct	Apr	8.46
165	Deehi Patka	Krishan Chandra	Sukh Dev	Rabi	Wheat		0.5	4500	Nov	Apr	16.45
166	Deehi Patka	Jeevan Lal	Ram Kishor	Rabi	Wheat		0.5	4500	Nov	Apr	16.45

167	Taunga Kala	Manish Mishra	Moti Lal	Kharif	Paddy	204	0.5	6000	June	Nov	30
168	Taunga Khurd	Hari Lal	Hind Baj	Kharif	Paddy	120	0.5	6000	June	Nov	30
169	Taunga Khurd	Nachkaiya	Sukaru	Kharif	Paddy	121	0.5	6000	June	Nov	30
170	Taunga Khurd	Bindeshwari Prasad	Gokai	Kharif	Paddy	153	0.5	6000	June	Nov	30
171	Taunga Khurd	Jawahar Lal	Vansh Dhari	Kharif	Paddy	150	0.5	6000	June	Nov	30
172	Taunga Khurd	Parmanand	Naghai	Kharif	Paddy	137	0.5	6000	June	Nov	30
173	Mahuli Khurd	Ram Jiyawan	Sri Nath	Kharif	Tur	233	0.2	300	June	Nov	14.172
174	Mahuli Khurd	Dhanraji	Janardan	Kharif	Tur	295	0.2	300	June	Nov	14.172
175	Taunga Khurd	Chhavi Lal	Alagu Ram	Kharif	Tur	89	0.2	300	June	Nov	14.172
176	Taunga Khurd	Ram Swaroop	Telai	Rabi	Wheat	146	0.5	4500	Nov	Apr	16.45
177	Taunga Khurd	Nanhe Lal	Hind Saj	Rabi	Wheat	120	0.5	4500	Nov	Apr	16.45
178	Taunga Khurd	Amar Nath	Kinkau	Rabi	Wheat	96	0.5	4500	Nov	Apr	16.45
179	Taunga Khurd	Gorakh Nath	Ram Dash	Rabi	Wheat	116	0.5	4500	Nov	Apr	16.45
180	Taunga Khurd	Nachkaiya	Sukaru	Rabi	Wheat	121	0.5	4500	Nov	Apr	16.45
181	Taunga Khurd	Jawahar Lal	Vanshdhari	Rabi	Wheat	150	0.5	4500	Nov	Apr	16.45
182	Mahuli Khurd	Kripa Shankar		Rabi	Gram	16	0.2	300	Oct	Apr	2.256
183	Mahuli Khurd	Rajendra Prasad	Aditya Nath	Rabi	Gram	4	0.2	300	Oct	Apr	2.256
184	Mahuli Khurd	Jag Man Singh	Sri Pati Singh	Rabi	Gram	4	0.2	300	Oct	Apr	2.256
185	Mahuli Khurd	Ram Jiyavan	Sri Nath	Kharif	Bajra	269	0.5	1500	June	Nov	7
186	Taunga Khurd	Ghanai Ram	Badal	Kharif	Lentil	90	0.2	300	June	Nov	4
187	Mahuli Khurd	Jagman Singh	Sri Pati Singh	Kharif	Paddy	209	0.5	6000	June	Nov	30
188	Mahuli Khurd	Heera Lal	Mangla	Kharif	Paddy	211	0.5	6000	June	Nov	30
189	Mahuli Khurd	Ram Dhari	Bhassu	Kharif	Paddy	180	0.5	6000	June	Nov	30
190	Mahuli Khurd	Rajendra Prasad	Aditya Nath	Kharif	Paddy	366	0.5	6000	June	Nov	30
191	Kaudi	Raja Ram Singh	Ram Pal	Kharif	Paddy	308	0.5	6000	June	Nov	30
192	Chhapar	Chhote Lal	Satrughan Prasad	Kharif	Paddy	85	0.5	6000	June	Nov	30
193	Mahuli Khurd	Rajendra Prasad	Aditya Nath	Rabi	Wheat	366	0.5	4500	Nov	Apr	16.45
194	Kaudi	Hari Lal		Rabi	Wheat	291	0.5	4500	Nov	Apr	16.45
195	Mahuli Khurd	Heera Lal	Mangla	Rabi	Wheat	211	0.5	4500	Nov	Apr	16.45
196	Mahuli Khurd	Jagannath	Bhassu	Rabi	Wheat	180	0.5	4500	Nov	Apr	16.45
197	Kaudi	Devi Prasad		Rabi	Wheat	377	0.5	4500	Nov	Apr	16.45
198	Kaudi	Ashok Kumar Singh		Rabi	Wheat	370	0.5	4500	Nov	Apr	16.45
199	Kaudi	Chhote Lal	Satrughan Prasad	Rabi	Wheat	85	0.5	4500	Nov	Apr	16.45
200	Gargata	Ganesh Deen		Kharif	Tur	3	0.2	300	June	Nov	14.172
201	Gargata	Badri Nath		Kharif	Tur	20	0.2	300	June	Nov	14.172
202	Gargata	Sangam Lal;		Kharif	Tur	42	0.2	300	June	Nov	14.172
203	Gargata	Vindhya Vasini		Rabi	Gram	34	0.2	300	Oct	Apr	2.256
204	Gargata	Ganesh Deen		Rabi	Farm Pea	6	0.2	300	Oct	Apr	1.728

Details of User Groups

Gram Panchayat / Sabha:--Behraicha 2nd

Gram / Majre Ka Naam:-- Behraicha

Vikas Khand:- Korav

Sr. No.	Users Group	Date	No. Of Members	Proposed Activites	Khasra No. / Location	Total Cost	Area For Irrigation	President Name
1	**N**		2	C.D.-20	538		0.399	Teerath Nath
			2	"	539		0.126	
			3	"	543		0.228	
		Total	7	C.D.-20	3	19159.49	0.753	
2	**O**		9	C.D.-18	545		0.884	Lal Bahadur
			1	"	546		0.571	
		Total	10	C.D.-18	2	12312.12	1.455	
3	**P**		4	C.D.-19	547		0.415	Vijay Shanker
			2	"	548		0.29	.
			1	"	553		0.501	
			1	"	554		1.013	
		Total	8	C.D.-19	4	43447.18	2.219	
4	**Q**		3	C.D.-21	543		0.28	Shiv Prasad
			3	"	537		0.867	
		Total	6	C.D.-21	2	9437.55	1.095	
5	**R**		2	C.D.-23	530		0.723	Baban Prasad Singh
			2	"	531		0.057	
			7	"	513		0.423	
		Total	11	C.D.-23	3	64377.37	1.203	

6	**S**		2	C.D.-24	506		0.502	Idhnath
			Banjar	"	507		0.114	
			1	"	500		1.084	
			2	"	517		0.571	
			1	"	518		0.080	
			6	C.D.-24	5	75504.24	2.351	
7	**T**		3	C.D.-25	512		0.355	Shiv Prasad
			15	"	560		1.849	
			1	"	544		0.205	
			3	"	537		0.867	
		Total	22	C.D.-25	4	32266.12	3.276	
8	**U**		9	C.D.-26	545		0.884	Taulan
			1	"	546		0.571	
			1	"	561		0.457	
			3	"	566		0.447	
		Total	14	C.D.-26	3	37915.39	2.429	
9	**V**		4	C.D.-27	556		0.953	Sangam Lal
			1	"	562		0.582	
			5	"	564		0.732	
			2	"	564		0.272	
		Total	12	C.D.-27	4	48221.78		
10	**W**		13	C.D.-28	582		6.79	Deshraj
			1	"	583		1.372	
		Total	14	C.D.-28	2	57071.84	8.162	
11	**X**		3	C.D.-29	567		0.104	Krishna Pal Singh
			2	"	568		0.251	
			Banjar	"	569		0.046	
			"	"	570		0.034	

			"	"	571		0.080	
		Total	5	C.D.-29	5	34239.24	0.415	

Gram Panchayat / Sabha:--Baghol **Gram / Majre Ka Naam:-- Baghol** **Vikas Khand:-- Korav**

12	**Y**		4	C.D.-1	153		1.774	Rama Shanker
			4	"	155		0.552	
			2	"	154		0.734	
		Total	10	C.D.-1	3	69530.88		
13	**Z**		4	C.D.-2	159		1.688	Kamta Prasad
			2	"	160		0.845	
		Total	6	C.D.-2	2	59644.34	2.533	
14	**A+1**		2	C.D.-3	157		1.134	Naghai
			3	"	155		0.552	
		Total	5	C.D.-3	2	21464.17	1.686	
15	**B+1**		2	C.D.-4	152		2.849	Heera Lal
			4	"	153		1.774	
			3	"	156		1.124	
		Total	9	C.D.-4	3	13813.55	5.747	
16	**C+1**		2	C.D.-5	196		1.481	Rajmani
			3	"	164		0.285	
			6	"	161		2.100	
		Total	11	C.D.-5	3	52317.91	3.866	
17	**D+1**		1	C.D.-6	163		0.080	Matadin
			6	"	162		0.719	
			3	"	165		0.262	
			1	"	171		0.365	

			1	"	169		0.583	
			1	"	179		1.187	
		Total	13	C.D.-6	6	52400.17	3.196	
18	**E+1**		1	C.D.-7	181		0.788	Matadin
			1	"	179		1.187	
			1	"	186		0.148	
		Total	3	C.D.-7	3	60553	2.123	
19	**F+1**		1	C.D.-8	195		0.97	Jagdish Prasad
			1	"	194		0.685	
		Total	2	C.D.-8	2	34281.47	1.655	
20	**H+1**		1	C.D.-9	185		0.126	Ganga Prasad
			1	"	192		0.640	
			Sarvjanik	"	198		0.137	
		Total	2	C.D.-9	3	37857.17	0.903	
21	**I+1**		1	C.D.-10	189		0.011	Ganga Prasad
			1	"	186		0.148	
			2	"	192		0.64	
		Total	4	C.D.-10	3	25308.13	0.799	
22	**J+1**		3	C.D.11	188		0.023	Ganga Prasad
			Sarvjanik	"	185		0.126	
			"	"	186		0.148	
		Total	3	C.D.11	3	22646.53	0.297	
23	**K+1**		4	C.D.12	275		0.448	Sumreshwar Nath
			4	"	276		0.604	
			4	"	277		0.571	
		Total	12	C.D.12	3	24582.14	1.623	
24	**L+1**		2	C.D.-13	274		0.137	Kamta Prasad

			5	"	273		0.565	
			4	"	275		0.448	
		Total	11	C.D.-13	3	58052.22	1.150	
25	**M+1**		2	C.D.-14	174		0.183	Manik Chandra
			2	"	263		0.822	
			1	"	262		0.952	
		Total	5	C.D.-14	3	58591.18	10957	
26	**N+1**		5	C.D.-15	273		0.565	Kamta Prasad
			4	"	272		0.148	
			4	"	271		0.262	
			Banjar	"	270		0.011	
			2	"	287		0.137	
			5	"	288		0.068	
		Total	20	C.D.-15	6	70515.46	1.191	
27	**O+1**		1	C.D.-16	236		0.370	Kewla Prasad
			Banjar	"	231		0.217	
			1	"	235		1.346	
			4	"	321		0.012	
		Total	6	C.D.-16	4	55452.41	1.943	
28	**P+1**		2	C.D.-17	337		0.080	Krishna Prasad
			5	"	333		0.161	
			4	"	324		0.353	
			1	"	325		0.187	
		Total	12	C.D.-17	4	13966.39	0.781	

Gram Panchayat / Sabha:--Behraicha / Baghol | **Gram / Majre Ka Naam:--Behraicha / Baghol** | **Vikas Khand:--Korav**

29	**Q+1**		2	C.D.-18	540		0.205	Nathai

			2	"	548		0.29	
			9	"	316		2.41	
		Total	13	C.D.-18	3	12312.12	20905	
30	**R+1**		4	C.D.-20	318		0.006	Kewla Prasad
		Total	4		1	19159.49	0.006	
31	**S+1**		1	C.D.-21	309		0.468	Bhagwan Prasad
				"	310		0.762	
		Total		C.D.-21	2	9437.55	1.230	
32	**T+1**		1	C.D.-22	301		0.068	Baijnath
			2	"	302		0.046	
			2	"	303		0.046	
			2	"	304		0.411	
		Total	7	C.D.-22	1	22182.32	0.571	

Gram Panchayat / Sabha:-- Baghol **Gram / Majre Ka Naam:-- Baghol** **Vikas Khand:-- Korav**

33	**W+1**		Banjar	C.D.-23	298		0.319	Kewla Prasad
			4	"	297		0.079	
			4	"	296		0.239	
			4	"	295		0.137	
		Total	12	C.D.-23	4	64377.37	0.774	

Gram Panchayat / Sabha:--Jorvat **Gram / Majre Ka Naam:-- Jorvat**

Vikas Khand:--

Korav

Sr.No.	Users Group	Date	No. Of Members	Proposed Activites	Khasra No. / Location	Total Cost	Area For Irrigation	President Name
1	**B-1**		3	5B-221	331,332,333	19587.00	1.435	Ramjatan
2	**B-2**		3	5B-227	303,307,308	28195.20	2.019	Sudhakar
3	**B-3**		5	5B-233	261,262,263,265,267	25062.00	3.22	Ram Lochan
4	**B-4**		6	5B-234	256,,253,,252,,249,,246,,244	33677.60	0.859	Lalji
5	**B-5**		3	5B-53	149,151,155	21145.40	0.945	Kamta

Gram Panchayat / Sabha:--Khaptiha **Gram / Majre Ka Naam:--Khaptiha** **Vikas Khand:--Korav**

6	**B-6**		4	5B-206	53,52,51,45	14880.80	1.051	Ashq Ali
7	**B-7**		5	5B-207	144,143,142,138,160	16447.20	2.131	Santosh Kumar
8	**B-8**		3	5B-19	172,170,171	14097.60	0.796	Ram Chandra
9	**B-9**		3	5B-26	152,151,149	5482.40	1.018	Amrit Lal
10	**B-10**		5	5B-46	52,137,139,140,146	20363.20	2.825	Hajari Lal
11	**B-11**		4	5B-51	29,20,19,16	35244.00	4.906	Gomti Prasad
12	**B-12**		4	5B-52	5,7,6,11	11748.00	1.645	Dubri
13	**B-13**			5B-2	5,6,7,11	10964.80	1.565	Nand Lal
14	**B-14**		4	5B-6	95,96,98,193	66572.00	10.728	Udai Kant

Gram Panchayat / Sabha:--Kheeri **Gram / Majre Ka Naam:--Kheeri** **Vikas Khand:--Korav**

15	**B-15**		3	5B-178	1040,,1041,,1039	20363.00	3.069	Surya Pratap
16	**B-16**		3	5B-183	981,982,987	21146.40	8.095	Raj Dev Singh
17	**B-17**		4	5B-192	884,883,882,881	12531.20	1.702	Nankau
18	**B-18**		5	5B-3	217,210,207,201	25974.80	3.037	Masuriyaddin
19	**B-19**		5	5B-76	361,360,362,363	57956.80	10.245	Ishwar Chand
20	**B-20**		11	5B-77	449,448,447,446			
					445,444,435,436			
					416,415,414	34460.80	3.953	Lulli

21	**B-21**		4	5B-78	473,456,455,451	29761.60	2.974	Maheshwari Prasad
22	**B-22**		4	5B-87	421,419,418,410	14682.00	4.467	Ram Khilawan
23	**B-23**		5	5B-88	384,380,379,378,377	18263.2	3.184	Diwakar Prasad
24	**B-24**		4	5B-179	1034,1038,,1045,1047	27412	2.277	Ram Lal
25	**B-25**		4	5B-187	835.838.839.846	35244	2.237	Salik Ram
26	**B-26**		5	MB-30	992,993,994,996,997	45034.00	4.515	Ranjit Singh
27	**B-27**		8	5B-7	15,16,211,210,183,206,203	68087.65	10.079	Sursh Narayan
28	**B-28**		5	5B-10	189,38,167,171,173	50907.60	4.144	Mangla

Gram Panchayat / Sabha:-Puradattu **Gram / Majre Ka Naam:-- Puradattu** **Vikas Khand:-- Korav**

29	**B-29**		4	MB-37	151,152,168,169	24475.00	0.579	Vidhya Kant
30	**B-30**		3	MB-38	148,146,145	26433.00	1.129	Bhagauti Prasad
31	**B-31**		3	CB-11	87,88,89	12793.50	4.735	Thakur Prasad

Gram Panchayat / Sabhao War Sammlit Gaon Ke Naam:--- Tauga Kala

Gram Panchayat / Sabha:-- Tauga Kala **Gram / Majre Ka Naam:-- Mahuli Khurd** **Vikas Khand:-- Korav**

Sr. No.	Users Group	Date	No. Of Members	Proposed Activites	Khasra No. / Location	Total Cost	Area For Irrigation	President Name
1	**1**		4	CD-17	2,3,4,5	55838.00	2.351	Kripa Shanker
2	**2**		5	CD-18	5,6,7	25199.13	1.346	Asha Devi

3	**3**		6	CD-20	13,25,26,24	32838.00	1.105	Rajendra Prasad
4	**4**		6	CD-21	21	55771.25	2.498	Dev Narayan
5	**5**		6	CD-29	67,65,68	36316.76	3.238	Jagman Singh
6	**6**		4	CD-30	70,71,72	31370.65	1.059	Dhanraji Devi
7	**7**		8	CD-31	73,74,86,79,85	39356.00	2.26	Ram Dhari
8	**8**		4	CD-32	249.246.254.245	18755.21	0.737	Dev Kali
9	**9**		5	CD-33	233,230,227	26339.48	1.578	Ram Jiyawan
10	**10**		5	CD-34	274,275,276,277	26807.28	0.582	Bhagwan Prasad
11	**11**		5	CD-35	229,268,274,272	21067.8	0.947	Dev KAli
12	**12**		4	CD-37	279,280,281,282	23518.86	0.0813	Ram Jiyawan
13	**13**			CD-40	324,325,326,327	31145.17	1.29	Ram Sajiwan

Sukshya Jalagam Ka Naam & Code:- 2A7D2C2B Tauga Kala

Gram Panchayat / Sabha:--Tauga Kala

Gram / Majre Ka Naam:-- Mahuli Khurd

1	**A**		9	CD-1	9,11,12,27,30,31,32,33,34	12381.06	4.234	Bola Nath
2	**B**		11	CD-2	150,153,154,155,157	16872.71	3.147	Kripa Shaner
					158,159,160,162,163			
3	**C**		9	CD-3	150,146,163,162	16359.68	2.443	Amrit Lal
					164,163			

4	**D**		10	CD-4	166,167,168,169	10765.67	4.77	Jagmohan
					170,171,172,173			
					174,175			
5	**E**		4	5B-5	35,36,37	21929.60	2.173	Jagmaan Singh

Gram Panchayat / Sabhao War Sammlit Gaon Ke Naam:---Kaudi

Gram Panchayat / Sabha:-- Kaudi **Gram / Majre Ka Naam:-- Kaudi** **Vikas Khand:-- Korav**

6	**F**		6	CD-5	47,45,48,50,186	2147.86	2.290	Ram Khelawan
7	**G**		8	CD-6	175,44,45,5,6,7	46859.12	2.636	Hausla Prasad
8	**G**		8	CD-7	51,52,187,46,41,42	1230.05	5.38	Bahadur Singh
9	**I**		6	CD-8	8,30,31,41,42,39	51845.99	3.990	Lalta
10	**J**		11	CD-9	91,92,93,94,95,97	155837.85	4.757	Dede Pratap
					98,100,101,102			
					103,109			
11	**K**		5	5B-43	50,51,52,54,55	32894.40	4.169	Indramaji
12	**L**		4	5B-46	46,49,35,32	37598.60	3.629	Meraj
13	**M**		5	5B-95	164,165,166,167,168	14097.60	1.471	Hari Lal
14	**N**		3	5B-113	188,189,190	14097.60	1.586	Awpal Singh

Gram Panchayat / Sabhao War Sammlit Gaon Ke Naam:--- Chhapar

Gram Panchayat / **Gram / Majre Ka** **Vikas Khand:--**

Sabha:-- Chhapar **Naam:-- Kaudi** **Korav**

15	**O**		8	5B-129	101,100,103,105,106	16447.2	0.378	Sangam Lal
16	**P**		15	5B-134	86,85,83,82	82236	8.711	Chhote Lal

Gram Panchayat / Sabha:-- Wasgadhi

Gram / Majre Ka Naam:-- Wasgadhi Nidaura

Vikas Khand:-- Korav

Sr. No.	Users Group	Date	No. Of Members	Proposed Activites	Khasra No. / Location	Total Cost	Area For Irrigation	President Name
1	**A**		5	CD-1	155,156		4.048	Hindamani
					157,158,160	96386.00		
					161			
2	**B**		4	CD-2	138,141	21236.00	6.09	Diwakar Prasad
					142,158			
3	**C**		3	CD-3	161,165	19976	1.574	Wanduram
					168			

Gram Panchayat / Sabha:--Jovat

Gram / Majre Ka Naam:--Dihipatka

Vikas Khand:- -Korav

4	**D**		3	CD-5	273			
					274	80014.00	6.277	Shiv Shanker
					267			
5	**E**		3	CD-6	275,276	63028	4.737	Sonmkali
					219			
					221			

Gram Panchayat / Sabha:-- Wasgadhi **Gram / Majre Ka Naam:--Nidaura Dihipatka** **Vikas Khand:- -Korav**

6	**F**			CD-4	195,197,209	44364.00	1.563	Ramjeet
					210,211			
	G			CD-7	254,255	18866	5.721	Baijnath
					263,266			

Gram Panchayat / Sabha:-- Wasgadhi **Gram / Majre Ka Naam:--Nidaura** **Vikas Khand:- -Korav**

7	**H**		3	CB-19	85	7792.00	3.988	Ram Lakhan
					86			
					87			

Gram Panchayat / Sabha:--Lohar | **Gram / Majre Ka Naam:-- Gaura** | **Vikas Khand:-- Shankergarh**

Sr. No.	Users Group	Date	No. Of Members	Proposed Activites	Khasra No. / Location	Total Cost	Area For Irrigation	President Name
1	A		5	GP	28,29,32,20,26	12545.00	2.276	Chhota

Gram Panchayat / Sabha:--Chhapar | **Gram / Majre Ka Naam:-- Gargata,Mojramishra Chhapar** | **Vikas Khand:-- Korao**

2	B		5	GP-2	75,78,153,115	12215.00	1.344	Govind
3	C		5	GP-3	166,55,56,58	55255.00	1.436	Sangam Lal
4	D		4	GP-4	115,116,117	24925.00	5.115	Awadhesh Pratap Singh
5	E		4	GP-6	141,142,147,148,149	26015.00	1.581	Arun Kumar Singh
6	F		4	GP-8	194,195,196,197	28607.00	1.095	Somaghar

Gram Panchayat / Sabha:--Chhapar | **Gram / Majre Ka Naam:-- Unchgaon** | **Vikas Khand:-- Korao**

7	G		5	GP-10	554,556,557,558			
					559	15295.00	1.969	Ram Nidher

8	**H**		3	GP-12	74,75,76	30940.00	1.164	Gainda Lal
9	**I**		3	CD-1	533,534	41375.00		
					583		2.327	Samayraj Singh
					584			
10	**J**		3	CD-2	564,566,568,570	19850.00		
					567		0.864	Rajendra Pratap Singh

Gram Panchayat / Sabha:--Wasgadhi **Gram / Majre Ka Naam:-- Wasgadhi** **Vikas Khand:-- Korao**

11	**K**		5	CD-4	131,132,133,134	63565.00	0.909	Jamuna Prasad
					135			
12	**L**		4	GP-5	117/2,118/1,119	27890.00	6.773	Sant Pratap Singh
					1250/1			
13	**M**		5	GP-7	173,175/1	22890.00	3.189	Chandra Pratap Singh
					176,182			
14	**N**		6	GP-9	193,188,189,190	19240.00	1.594	Mangal
					191,192			

Gram Panchayat / Sabha:--Wasgadhi **Gram / Majre Ka Naam:-- Wasgadhi Nidaura**

Vikas Khand:--Korav

Sr. No.	Users Group	Date	No. Of Members	Proposed Activites	Khasra No. / Location	Total Cost	Area For Irrigation	President Name
1	A		5	CD-1	155,156		4.048	Hindamani
					157,158,160	96386.00		
					161			
2	B		4	CD-2	138,141	21236.00	6.09	Diwakar Prasad
					142,158			
3	C		3	CD-3	161,165	19976	1.574	Wanduram
					168			

Gram Panchayat / Sabha:--Jovat **Gram / Majre Ka Naam:-- Dihipatka** **Vikas Khand:-- Korav**

4	D		3	CD-5	273			
					274	80014.00	6.277	Shiv Shanker
					267			
5	E		3	CD-6	275,276	63028	4.737	Sonmkali
					219			
					221			

Gram Panchayat / Sabha:--Wasgadhi **Gram / Majre Ka Naam:-- Nidaura Dihipatka** **Vikas Khand:-- Korav**

6	F			CD-4	195,197,209	44364.00	1.563	Ramjeet
					210,211			
	G			CD-7	254,255	18866	5.721	Baijnath

					263,266			

Gram Panchayat / Sabha:--Wasgadhi **Gram / Majre Ka Naam:-- Nidaura** **Vikas Khand:-- Korav**

7	**H**		3	CB-19	85	7792.00	3.988	Ram Lakhan
					86			
					87			

Gram Panchayat / Sabha:--Lohar **Gram / Majre Ka Naam:--Gaura** **Vikas Khand:-- Shankergarh**

Sr. No.	Users Group	Date	No. Of Members	Proposed Activites	Khasra No. / Location	Total Cost	Area For Irrigation	President Name
1	**A**		5	GP	28,29,32,20,26	12545.00	2.276	Chhota

Gram Panchayat / Sabha:--Chhapar **Gram / Majre Ka Naam:-- Gargata,Mojramishra Chhapar** **Vikas Khand:-- Korao**

2	**B**		5	GP-2	75,78,153,115	12215.00	1.344	Govind
3	**C**		5	GP-3	166,55,56,58	55255.00	1.436	Sangam Lal
4	**D**		4	GP-4	115,116,117	24925.00	5.115	Awadhesh Pratap Singh
5	**E**		4	GP-6	141,142,147,148,149	26015.00	1.581	Arun Kumar Singh

6	**F**		4	GP-8	194,195,196,197	28607.00	1.095	Somaghar

Gram Panchayat / Sabha:--Chhapar **Gram / Majre Ka Naam:--Unchgaon** **Vikas Khand:--Korao**

7	**G**		5	GP-10	554,556,557,558			
					559	15295.00	1.969	Ram Nidher
8	**H**		3	GP-12	74,75,76	30940.00	1.164	Gainda Lal
9	**I**		3	CD-1	533,534	41375.00		
					583		2.327	Samayraj Singh
					584			
10	**J**		3	CD-2	564,566,568,570	19850.00		
					567		0.864	Rajendra Pratap Singh

Gram Panchayat / Sabha:--Wasgadhi **Gram / Majre Ka Naam:--Wasgadhi** **Vikas Khand:--Korao**

11	**K**		5	CD-4	131,132,133,134	63565.00	0.909	Jamuna Prasad
					135			
12	**L**		4	GP-5	117/2,118/1,119	27890.00	6.773	Sant Pratap Singh
					1250/1			

13	**M**		5	GP-7	173,175/1	22890.00	3.189	Chandra Pratap Singh
					176,182			
14	**N**		6	GP-9	193,188,189,190	19240.00	1.594	Mangal
					191,192			

Gram Panchayat / Sabha:-- Behraicha

Gram / Majre Ka Naam:-- Behraicha

Vikas Khand:- -Korav

Sr. No.	Users Group	Date	No. Of Members	Proposed Activites	Khasra No. / Location	Total Cost	Area For Irrigation	President Name
1	**A**		1	M.B.-4	389	9790.00	0.512	Bal Krishna
			1	"	387	9790.00	0.455	
			2	"	385	4895.00	0.671	
			Banjar	"	405	14685.00	0.233	
		Total	4	M.B.-4	4	39160.00	1.871	
2	**B**		1	M.B.-14	415	9790.00	1.068	Ramayan Prasad
			1	"	414	18601.00	1.464	
			5	"	412	10769.00	1.405	
		Total	7	M.B.-14	3	39160.00	3.937	
3	**C**		2	M.B.-15	406	6853.00	0.297	Guru Sas
			Banjar	"	409	12727.00	0.126	
			2	"	408	5874.00	0.251	
		Total	4	M.B.-15	3	25454.00	0.674	
4	**D**		4	M.B.17	342	11748.00	0.605	Birju
			16	"	340	16643.00	1.643	
			1	"	338	11748.00	0.491	

			1	"	339	3916.00	0.126	
			1	"	339	14685.00	0.126	
		Total	23	M.B.17	5	58740.00	2.991	
5	**E**		4	C.D.-1	412		1.405	Ssummari
			Banjar	"	463		0.122	
		Total	4	C.D.-1	2	135568.35		
6	**F**		1	C.D.-2	380		1.015	Hanuman Prasad
		Total	1	C.D.-2	1	81182.6	1.015	
7	**G**		Banjar	C.B.-1	1057	4652.2	0.162	Sheshmani
			2	"	1055	7753.68	2.636	
			1	"	1054	3101.47	1.502	
			2	"	1061	7365.99	0.962	
			2	"	706	10467.46	3.4	
			1	"	708	775.36	3.73	
			1	"	709	4652.2	0.161	
			1	"	711	7753.68	1.45	
		Total	10	C.B.-1	8	46522.04	14.003	
8	**H**		3	C.B.-2	1064	3876.84	1.381	Surya Lal
			4	"	1068	4652	0.605	
		Total	7	C.B.-2	2	8528.84	1.986	
9	**I**		2	C.B.-3	181	4652.20	0.103	Krihsna Nand
			3	"	1077	3876.84	0.846	
			4	"	1076	2326.10	0.309	
			1	"	7074	3489.15	0.553	
			2	"	1016	7753.68	2.016	
			2	"	1017	3101.47	2.073	
			6	"	1018	2713.78	0.877	

			2	"	1027	9304.41	1.865	
			4	"	1026	5427.57	0.214	
		Total	26	C.B.-3	9	42645.20	80856	
10	**J**		1	C.B.-4	981	8529.04	1.075	Bindeshwari
			1	"	979	2713.78	0.649	
			1	"	1013	6202.94	0.634	
			1	"	1011	3101.47	0.105	
			1	"	1006	6202.94	2.236	
			1	"	1039	3876.84	0.388	
			1	"	1038	2713.78	0.557	
			Banjar	"	1036	1550.73	0.066	
			7	C.B.-4	8	37891.52	5.710	
11	**K**		2	C.B.-6	993	3101.47	2.230	Satis Chandra
			1	"	977	7753.68	3.033	
			2	"	976	6978.31	0.994	
			6	"	1003	17058.09	5.091	
			1	"	1041	11630.52	2.192	
		Total	12	C.B.-6	5	46522.07	13.540	
12	**L**		Banjar	C.B.-8	985	5815.26	0.051	Ram Niranjan
			1	"	955	6202.94	0.891	
			1	"	957	3876.84	0.761	
			12	"	971	6978.31	0.571	
			2	"	1020	38765.84	1.253	
			16	C.B.-8	5	26750.19	3.527	
13	**M**		4	C.B.-9	1048	1163.05	2.449	Sukh Dehi
			4	"	1049	7753.68	0.396	
		Total	8	C.B.-9	2	8916.73	2.745	

14	**N**		1	C.B.-10	953	6978.31	1.003	Lalta Prasad
			Banjar	"	940	2713.78	0.137	
			"	"	962	2713.78	0.047	
			2	"	855	3896.29	1.427	
			Banjar	"	852	3101.47	0.012	
			1	"	853	2326.1	0.314	
			1	"	846	1938.42	0.532	
			3	"	848	3876.84	0.205	
			1	"	845	3937.00	0.658	
			2	"	843	6978	1.156	
			Banjar	"	833	3937.00	0.029	
			1	"	817	6978	0.924	
		Total	12	C.B.-10	12	49356.11	6.444	
							.	
15	**O**		4	C.B.-13	861	5815.26	0.869	
			3	"	860	2326.1	0.655	
			1	"	832	5427.57	0.323	
		Total	8	C.B.-13	3	13568.93	1.847	
16	**P**		2	C.B.-16	900	775.36	0.228	Kamla Kant
			4	"	901	6202.94	0.97	
			6	C.B.-16	2	6978.30	1.198	
17	**Q**		1	C.B.-22	990	1550.73	0.343	Krishna Nand
			1	"	991	1550.73	1.228	
			1	"	977	8916.73	3.033	
			1	"	975	3876.84	1.5	
			1	"	1009	1550.73	0.962	
			6	"	1003	13181.25	5.091	
			1	"	1002	1938.42	0.124	
			1	"	1098	6202.94	0.103	
		Total	13	C.B.-22	8	38768.37	12.384	

18	**R**		1	C.B.-23	713	5815.26	2.374	Sheshmani
			1	"	708	2427.57	3.73	
			2	"	706	8141.36	3.4	
		Total	4	C.B.-23	3	16384.19	9.504	
19	**S**		1	C.B.-27	415	5427.57	1.068	Ramayan Prasad
			1	"	414	6202.94	1.464	
			5	"	412	5427.57	1.405	
		Total	7	C.B.-27	3	17058.08	3.937	

Gram Panchayto / Sabhao War Sammalit Gramo K Naam:--Baghol,MahuliKala,Puradutt **Vikas Khand:-Korav**

Sr. No.	Users Group	Date	No. Of Members	Proposed Activites	Khasra No. / Location	Total Cost	Area For Irrigation	President Name
1	C-1		4	C.D.-1	55,56	68281	4.771	Ram Murti
2	C-2		4	C.D.-2	56,57	27363.89	2.266	Lalta Prasad
3	C-3		7	C.D.-4	78,66	29382.35	2.055	Amrit lal
4	C-4		5	C.D.-13	205,208	15565.94		
					206,207			Ramesh Chandra
					209	1.995		
5	C-5		5	C.D.-15	377,378	47107.08		Roshan Prasad
					379			
					381,382		1.36	
6	C-6		5	C.D.-16	247,255	12801.83		Sheshmani
					256,258		3.415	
					306			
7	C-7		10	C.D.-17	217,218	41336.99	1.351	Amar Pal Singh
					219,272			
					270.271			
8	C-8		10	C.D.-18	370,368	108965.87	0.673	Amar Nath
9	C-9		12	C.D.-20	393,394	18331.64	10821	Bagauti
					395,398			

					399			
10	C-10		8	C.D.-21	413,425	39420.18	4.566	Rajesh Prasad
11	C-11		7	C.D.-24	277,278	15035.09	0.285	Raj Kishor
12	C-12		7	C.D.-25	282,287	20853.1	5.255	Indra Lal
					346			
13	C-13		6	C.D.-29	432,130	26138.28	2..762	Shiv Nath
					131,132			
14	C-14		6	M.B.-9	87,88	4895	4.539	Ram Surat
					89,198			
					199,200			
15	C-15		8	M.B.-13	226,228	9790	2.043	Fateh Bahadur
					201			
16	C-16		5	M.B.-47	428	29370	13.727	Radheshyam
17	C-17		5	M.B.-48	429,430	10769	1.709	Amar Nath
					431			
18	C-18		5	M.B.-49	428	14685	13.727	Vishwanath
19	C-19		5	M.B.-50	432,433	9790	1.048	Shyam Bihari
					434,435			
20	C-20		6	M.B.-51	92	11784	0.765	Sita Ram
21	C-21		10	M.B.-52	109,107	48795	0.925	Rajendra Prasad
22	C-22		6	M.B.-55	122,121	22517	1.86	Rama Shanker
					120			
23	C-23		10	P.F.B.-1	88,87	28391	6.096	Jagdish Prasad
					89,344			
24	C-24		6	P.F.B.-2	93,95	42097	2.717	Vinod Kumar
					106,78			
					107			
25	C-25		5	C.D.-3	57,78,58	19603.95	5.679	Ragho
					65,665			
26	C.-26		6	C.D.-5	77,79	19533.06	6.545	Ram Lochan
					81,83,84			
27	C.-27		5	C.D.-6	86,54,81	24354.42	6.97	Radhika Prasad
					58,79			
28	C.-28		7	C.D.-7	76,198	15411.96	4.061	Ranjeet Prasad
					199,77			
29	C.-29		6	C.D.-28	76,198	26553.23	2.742	Sita Ram
					87,88			
					199			

30	C.-30		6	C.D.-9	69,70	40931.86	2.384	Buddhiman
					73,77,83			
31	C.-31		6	C.D,-10	75,79	17805.13	4.707	Bhagwat Singh
					198,87,88			
32	C.-32		5	C.D.-11	203,227	2079844	3.182	Fateh Bahadur Singh
					228,200,229			
33	C.-33		5	C.D.-12	203,204	15155.08	2.874	Brij Raj Singh
					227,228			
					225			
34	C.-34		6	C.D.-14	235,236	43400.29	1.02	Ram Pati
					238,239			
					240			
35	C.-35		6	C.D.-19	385,381	19742.48	2.651	Ram Raj
					387,388			
					370			
36	C.-36		5	C.D.-22	413,425	29713.46	6.666	Shiv Nath
					404,407,405			
37	C.-37		6	C.D.-23	278,277	65567.79	1.442	Raj Kishor
					350,351,362			
38	C.-38		6	C.D.-24	278,277	15035.09	1.517	Gulab Chandra
					279,274			
					273			
39	C.-39		6	C.D.-26	286,283	41507.35	3.671	Indra Lal
					285,282			
					343			
40	C.-40		7	C.D.-27	244,88	294427.16	3.71	Sita Ram
					85,86,87			
41	C.-41		5	C.D.-28	433,434	30532.77	5.015	Gulab Chandra
					425,129,130			

Micro-watershed wise Details of proposed Development Works – Bahraicha – I

S. No	Name of Work	Benefited area (ha)	Field No. / Khasara No.	Area of work					Quantity of Erath Work	Rate/ cubic m	Total Cost (Rs.)	Man-day Rs. 120/- per labor	Contribution SC/ST/SF/MF-5, LF- 10%	Name of Farmers
				Length (m)	Bottom Width (m)	Top Width (m)	Height/ Depth (m)	C.S. (Area m^2)						
1	MB-1	0.451	361	80	4.00	1.00	1.00	2.50	200.00	39.16	7832.00	65	391.6	Shyam Kali
2	MB-2	1.07	365	150	4.00	1.00	1.00	2.50	375.00	39.16	14685.00	122	734.25	Shukhwanti
3	MB-3	0.512	389	80	4.00	1.00	1.00	2.50	200.00	39.16	7832.00	65	391.6	Shyam Kali
4	MB-4	0.512	389	100	4.00	1.00	1.00	2.50	250.00	39.16	9790.00	82	489.5	Shyam Kali
5	"	0.455	387	100	4.00	1.00	1.00	2.50	250.00	39.16	9790.00	82	489.5	Smt.Ganga Jali
6	"	0.671	385	50	4.00	1.00	1.00	2.50	125.00	39.16	4895.00	41	244.75	Balkrishna Aadi
7	"	0.233	405	150	4.00	1.00	1.00	2.50	375.00	39.16	14685.00	122	734.25	Balkrishna Aadi
8	MB-5	0.845	404	50	4.00	1.00	1.00	2.50	125.00	39.16	4895.00	41	244.75	Sri Narayan
9	MB-6	"	404	100	4.00	1.00	1.00	2.50	250.00	39.16	9790.00	82	489.5	Sri Narayan
10	MB-7	"	404	125	4.00	1.00	1.00	2.50	312.50	39.16	12237.50	102	611.88	Sri Narayan
11	MB-8	0.249	437	90	4.00	1.00	1.00	2.50	225.00	39.16	8811.00	73	440.55	Shushil Singh
12	MB-9	1.197	438	120	4.00	1.00	1.00	2.50	300.00	39.16	11748.00	98	587.4	Hari Prasad
13	MB-10	0.128	434	90	4.00	1.00	1.00	2.50	225.00	39.16	8811.00	73	440.55	Hari Krishna
14	MB-11	0.249	437	100	4.00	1.00	1.00	2.50	250.00	39.16	9790.00	82	489.5	Shuhsil singh
15	MB-12	0.071	355	150	4.00	1.00	1.00	2.50	375.00	39.16	14685.00	122	734.25	Shyam Kali
16	MB-13	0.071	355	110	4.00	1.00	1.00	2.50	275.00	39.16	10769.00	90	538.45	Shyam Kali
17	MB-14	1.068	415	100	4.00	1.00	1.00	2.50	250.00	39.16	9790.00	82	489.5	Vishwanath Prasad
18	"	1.464	414	190	4.00	1.00	1.00	2.50	475.00	39.16	18601.00	155	930.05	Ramayan Prasad
19	"	1.405	412	110	4.00	1.00	1.00	2.50	275.00	39.16	10769.00	90	538.45	Summari

20	MB-15	0.297	406	70	4.00	1.00	1.00	2.50	175.00	39.16	6853.00	57	342.65	Guru Saran
21	"	0.126	409	130	4.00	1.00	1.00	2.50	325.00	39.16	12727.00	106	636.35	Guru Saran
22	"	0.251	408	60	4.00	1.00	1.00	2.50	150.00	39.16	5874.00	49	293.7	Ramayan Prasad
23	MB-16	1.405	412	100	4.00	1.00	1.00	2.50	250.00	39.16	9790.00	82	489.5	Summari
24	MB-17	0.605	342	120	4.00	1.00	1.00	2.50	300.00	39.16	11748.00	98	587.4	Birju
25	"	1.643	340	170	4.00	1.00	1.00	2.50	425.00	39.16	16643.00	139	832.15	Birju
26	"	0.491	338	120	4.00	1.00	1.00	2.50	300.00	39.16	11748.00	98	587.4	Birju
27	"	0.126	339	40	4.00	1.00	1.00	2.50	100.00	39.16	3916.00	33	195.8	Birju
28	"	0.126	339	150	4.00	1.00	1.00	2.50	375.00	39.16	14685.00	122	734.25	Birju
29	MB-18	0.491	338	350	4.00	1.00	1.00	2.50	875.00	39.16	34265.00	286	1713.25	Birju
30	MB-19	0.795	454	130	4.00	1.00	1.00	2.50	325.00	39.16	12727.00	106	636.35	Lallu Ramraj Aadi
31	MB-20	1.173	467	250	4.00	1.00	1.00	2.50	625.00	39.16	24475.00	204	1223.75	Gokaran Ramji
32	MB-21	0.863	469	220	4.00	1.00	1.00	2.50	550.00	39.16	21538.00	179	1076.9	Munimahesh Harishanker
33	MB-22	0.04	452	120	4.00	1.00	1.00	2.50	300.00	39.16	11748.00	98	587.4	Munimahesh Harishanker
34	MB-23	0.006	442	90	4.00	1.00	1.00	2.50	225.00	39.16	8811.00	73	440.55	Munimahesh Harishanker
35	"	0.155	445	110	4.00	1.00	1.00	2.50	275.00	39.16	10769.00	90	538.45	Vishwanath Prasad
36	MB-24	0.119	366	100	4.00	1.00	1.00	2.50	250.00	39.16	9790.00	82	489.5	Vishwanath Prasad
37	MB-25	0.119	366	120	4.00	1.00	1.00	2.50	300.00	39.16	11748.00	98	587.4	Vishwanath Prasad
38	MB-26	0.261	382	80	4.00	1.00	1.00	2.50	200.00	39.16	7832.00	65	391.6	Guru Saran

Details of Contour Bunds

S. No	Name of Work	Benefited area (ha)	Field No. / Khasara No.	Area of work					Quantity of Earth work	Rate/ cubic m.	Total Cost (Rs.)	Man-day Rs. 120/- per labor	Contribution SC/ST/SF/ MF 5%, LF 10%	Name of Farmers
				Length (m)	Bottom Width	Top Width	H/D	C.S. (Area m²)						
1	CB-1	0.962	1061	190	2.85	0.45	0.60	0.99	188.10	39.16	7365.996	61	368.30	Deenanath,Ramnaresh
2	"	0.962	1051	120	2.85	0.45	0.60	0.99	118.80	39.16	4652.208	39	232.61	Deenanath,Ramnaresh
3	"	2.636	1055	200	2.85	0.45	0.60	0.99	198.00	39.16	7753.68	65	387.68	Ram Khelawan
4	"	1.502	1054	80	2.85	0.45	0.60	0.99	79.20	39.16	3101.472	26	155.07	Viswanath Prasad
5	"	3.4	706	270	2.85	0.45	0.60	0.99	267.30	39.16	10467.47	87	523.37	Ramayan Prasad
6	"	3.73	708	20	2.85	0.45	0.60	0.99	19.80	39.16	775.368	6	38.77	Sheshmani
7	"	0.161	709	120	2.85	0.45	0.60	0.99	118.80	39.16	4652.208	39	232.61	Shri Narayan
8	"	1.45	711	200	2.85	0.45	0.60	0.99	198.00	39.16	7753.68	65	387.68	Savitri Devi
9	"	1.381	1064	140	2.85	0.45	0.60	0.99	138.60	39.16	5427.576	45	271.38	Surya Lal
10	CB-2	0.605	1068	80	2.85	0.45	0.60	0.99	79.20	39.16	3101.472	26	155.07	Surya Lal
11	"	0.103	181	120	2.85	0.45	0.60	0.99	118.80	39.16	4652.208	39	232.61	Shriman Singh
12	CB-3	0.846	1077	100	2.85	0.45	0.60	0.99	99.00	39.16	3876.84	32	193.84	Dayanand
13	"	0.309	1076	60	2.85	0.45	0.60	0.99	59.40	39.16	2326.104	19	116.31	Surya Narayan
14	"	0.553	1074	90	2.85	0.45	0.60	0.99	89.10	39.16	3489.156	29	174.46	Ram Lallu
15	"	2.016	1016	200	2.85	0.45	0.60	0.99	198.00	39.16	7753.68	65	387.68	Krishna Nand
16	"	0.073	1017	80	2.85	0.45	0.60	0.99	79.20	39.16	3101.472	26	155.07	Tarachand Prem Chandra
17	"	0.877	1010	70	2.85	0.45	0.60	0.99	69.30	39.16	2713.788	23	135.09	Kallu Sumer
18	"	1.865	1027	240	2.85	0.45	0.60	0.99	237.60	39.16	9304.416	78	465.22	Ramayan Prasad
19	"	0.214	1026	140	2.85	0.45	0.60	0.99	138.60	39.16	5427.576	45	271.38	Kamlesh Aadi
20	CB-4	1.075	981	220	2.85	0.45	0.60	0.99	217.80	39.16	8529.048	71	426.45	Taradevi

21	"	0.649	979	70	2.85	0.45	0.60	0.99	69.30	39.16	2713.788	23	135.09	Ram Karan
22	"	0.634	1013	160	2.85	0.45	0.60	0.99	158.40	39.16	6202.944	52	310.15	Ram Jeet
23	"	0.105	1011	80	2.85	0.45	0.60	0.99	79.20	39.16	3101.472	26	155.07	Sohami Devi
24	"	2.236	1006	160	2.85	0.45	0.60	0.99	158.40	39.16	6202.944	52	310.15	Vindeshwari Devi
25	"	0.388	1039	100	2.85	0.45	0.60	0.99	99.00	39.16	3876.84	32	193.84	Ayodhya
26	"	0.557	1038	70	2.85	0.45	0.60	0.99	69.30	39.16	2713.788	23	135.69	Rajeshwari Prasad
27	"	0.066	1036	40	2.85	0.45	0.60	0.99	39.60	39.16	1550.736	13	77.54	Rajeshwari Prasad
28	CB-5	0.036	994	170	2.85	0.45	0.60	0.99	168.30	39.16	6590.628	55	329.53	Rajeshwari Prasad
29	CB-6	2.23	993	80	2.85	0.45	0.60	0.99	79.20	39.16	3101.472	26	155.07	Saket Kumar
30	"	3.033	977	200	2.85	0.45	0.60	0.99	198.00	39.16	7753.68	65	387.68	Satish Chandra
31	"	0.994	976	180	2.85	0.45	0.60	0.99	178.20	39.16	6978.312	58	348.92	ayodhya
32	"	5.091	1003	440	2.85	0.45	0.60	0.99	435.60	39.16	17058.1	142	852.90	Krishna Nand
33	CB-6	2.192	1041	300	2.85	0.45	0.60	0.99	297.00	39.16	11630.52	97	1163.05	Shiv Shanker
34	CB-7	1.311	984	150	2.85	0.45	0.60	0.99	148.50	39.16	5815.26	48	581.53	Chhaviraji Parasnath
35	CB-8	0.051	985	150	2.85	0.45	0.60	0.99	148.50	39.16	5815.26	48	290.76	Chhaviraji Parasnath
36	"	0.891	955	160	2.85	0.45	0.60	0.99	158.40	39.16	6202.944	52	310.15	Fulwari
37	"	0.761	957	100	2.85	0.45	0.60	0.99	99.00	39.16	3876.84	32	193.84	Ranjeet Kumar
38	"	0.571	971	180	2.85	0.45	0.60	0.99	178.20	39.16	6978.312	58	348.92	Indrapal Rajmani Aadi
39	"	1.253	1020	100	2.85	0.45	0.60	0.99	99.00	39.16	3876.84	32	193.84	Ram Niranjan
40	CB-9	2.449	1048	30	2.85	0.45	0.60	0.99	29.70	39.16	1163.052	10	58.15	Sukhdai
41	"	0.396	1049	200	2.85	0.45	0.60	0.99	198.00	39.16	7753.68	65	387.68	Hridayanand
42	CB-10	1.003	953	180	2.85	0.45	0.60	0.99	178.20	39.16	6978.312	58	348.92	Kalawati devi
43	"	0.137	940	70	2.85	0.45	0.60	0.99	69.30	39.16	2713.788	23	135.69	Kalawati devi
44	"	0.047	962	70	2.85	0.45	0.60	0.99	69.30	39.16	2713.788	23	135.69	Kalawati devi
45	"	1.427	855	100	2.85	0.45	0.60	0.99	99.00	39.16	3876.84	32	193.84	Lalta Prasad
46	"	0.012	852	80	2.85	0.45	0.60	0.99	79.20	39.16	3101.472	26	155.07	Lalta Prasad
47	"	0.314	853	60	2.85	0.45	0.60	0.99	59.40	39.16	2326.104	19	116.31	Somdhar
48	"	0.532	846	50	2.85	0.45	0.60	0.99	49.50	39.16	1938.42	16	96.92	Harishanker

49	CB-10	0.205	848	100	2.85	0.45	0.60	0.99	99.00	39.16	3876.84	32	193.84	Sangamlal
50	"	0.629	845	30	2.85	0.45	0.60	0.99	29.70	39.16	1163.052	10	58.15	Harikant
51	"	1.156	843	180	2.85	0.45	0.60	0.99	178.20	39.16	6978.312	58	348.92	Krishna Nand
52	"	0.029	833	30	2.85	0.45	0.60	0.99	29.70	39.16	1163.052	10	58.15	Krishna Nand
53	"	0.924	817	180	2.85	0.45	0.60	0.99	178.20	39.16	6978.312	58	348.92	Vindeshwari Devi
54	CB-11	1.311	984	150	2.85	0.45	0.60	0.99	148.50	39.16	5815.26	48	581.53	Chhaviraji Parasnath
55	CB-12	1.01	890	150	2.85	0.45	0.60	0.99	148.50	39.16	5815.26	48	581.53	Jagdishprasad
56	CB-13	0.869	861	150	2.85	0.45	0.60	0.99	148.50	39.16	5815.26	48	290.76	Dudhnath
57	"	0.655	866	60	2.85	0.45	0.60	0.99	59.40	39.16	2326.104	19	116.31	Ram Sajeewan
58	"	0.323	832	140	2.85	0.45	0.60	0.99	138.60	39.16	5427.576	45	271.38	Ram Naresh
59	CB-14	0.778	814	160	2.85	0.45	0.60	0.99	158.40	39.16	6202.944	52	310.15	Rajeshwari Prasad
60	CB-15	1.595	867	150	2.85	0.45	0.60	0.99	148.50	39.16	5815.26	48	290.76	Sangamlal
61	CB-16	0.228	900	20	2.85	0.45	0.60	0.99	19.80	39.16	775.368	6	38.77	Ramayan Prasad
62	"	0.97	901	160	2.85	0.45	0.60	0.99	158.40	39.16	6202.944	52	310.15	Kamlakant
63	CB-17	0.064	929	200	2.85	0.45	0.60	0.99	198.00	39.16	7753.68	65	387.68	Kamlakant
64	CB-18	0.551	906	100	2.85	0.45	0.60	0.99	99.00	39.16	3876.84	32	193.84	Baburam
65	"	0.631	905	70	2.85	0.45	0.60	0.99	69.30	39.16	2713.788	23	135.69	Baburam
66	CB-19	0.937	912	160	2.85	0.45	0.60	0.99	158.40	39.16	6202.944	52	310.15	Dev Prasad
67	CB-20	1.257	915	200	2.85	0.45	0.60	0.99	198.00	39.16	7753.68	65	775.37	Rama Shanker
68	"	0.534	919	50	2.85	0.45	0.60	0.99	49.50	39.16	1938.42	16	193.84	Rama Shanker
69	CB-21	1.759	948	200	2.85	0.45	0.60	0.99	198.00	39.16	7753.68	65	387.68	Deshraj
70	CB-22	0.343	990	40	2.85	0.45	0.60	0.99	39.60	39.16	1550.736	13	77.54	Kalawati devi
71	"	1.228	991	40	2.85	0.45	0.60	0.99	39.60	39.16	1550.736	13	77.54	Ram Mani
72	"	3.033	977	230	2.85	0.45	0.60	0.99	227.70	39.16	8916.732	74	445.84	Satish Chandra
73	"	1.58	975	100	2.85	0.45	0.60	0.99	99.00	39.16	3876.84	32	193.84	Hari Prasad
74	"	0.962	1009	40	2.85	0.45	0.60	0.99	39.60	39.16	1550.736	13	77.54	Ram Surat
75	"	5.091	1003	340	2.85	0.45	0.60	0.99	336.60	39.16	13181.26	110	659.06	Krishna Nand
76	"	0.124	1002	50	2.85	0.45	0.60	0.99	49.50	39.16	1938.42	16	96.92	Jagdishprasad
77	"	0.103	1098	160	2.85	0.45	0.60	0.99	158.40	39.16	6202.944	52	310.15	Ramanuj

78	CB-23	2.374	713	150	2.85	0.45	0.60	0.99	148.50	39.16	5815.26	48	290.76	Sidhnath
79	"	3.73	708	140	2.85	0.45	0.60	0.99	138.60	39.16	5427.576	45	271.38	Sheshmani
80	"	3.4	706	200	2.85	0.45	0.60	0.99	198.00	39.16	7753.68	65	387.68	Ramayan Prasad
81	CB-24	0.07	942	100	2.85	0.45	0.60	0.99	99.00	39.16	3876.84	32	387.68	Shyam Kali
82	"	0.829	944	30	2.85	0.45	0.60	0.99	29.70	39.16	1163.052	10	193.84	Shyam Kali
83	CB-25	0.991	916	100	2.85	0.45	0.60	0.99	99.00	39.16	3876.84	32	58.15	Shyam Kali
84	"	0.029	917	100	2.85	0.45	0.60	0.99	99.00	39.16	3876.84	32	193.84	Shyam Kali
85	"	0.432	918	20	2.85	0.45	0.60	0.99	19.80	39.16	775.368	6	38.77	Shyam Kali
86	CB-26	0.582	391	180	2.85	0.45	0.60	0.99	178.20	39.16	6978.312	58	348.92	Shyam Kali
87	CB-27	1.068	415	140	2.85	0.45	0.60	0.99	138.60	39.16	5427.576	45	271.38	Viswanath Prasad
88	"	1.464	414	160	2.85	0.45	0.60	0.99	158.40	39.16	6202.944	52	310.15	Ramayan Prasad
89	"	1.405	412	140	2.85	0.45	0.60	0.99	138.60	39.16	5427.576	45	271.38	Summari Fulwari

Details of Check Dam

S. No	Name of Work	Benefited area (ha)	Field No. / Khasara No.	Area of work					Quantity of Earth Work	Rate/ cubic m	Total Cost (Rs.)	Man-day Rs. 120/- per labor	Contribution SC/ST-5, OBC/Gen-10%	Name of Farmers
				Length (m)	Bottom Width	Top Width	H/D	C.S. (Area m^2)						
1	CD-1	0.122	4,63,412	50	16.66	3	3.06	2315.4	57.32/cmt		132718.72			Summari,Fulwari
		1.405												
		Dag belling		50x5					69.75/km		17.43			
		Clearing		50x16.66					1.35/m2		1124.55			
		Side digging		50x16.66					2.05/m2		1707.65			
		Total									**135568.35**		6778.418	
2	CD-2	1.015	380	60	14.42	2.5	2.38	1564.4	50/CMT		78220.00			Hanuman Prasad
		Dag belling		60x5					69.75/km		20.92			
		Clearing		60x14.42					1.35/m2		1168.02			
		Side digging		60x14.42					2.05/m2		1773.66			
		Total									**81182.60**		8118.26	
		Grand Total									**216750.95**		14896.68	

Details of Gully Plug

S. No	Name of Work	Benefited area (ha)	Field No. / Khasara No.	Area of work					Quantity of Earth Work	Rate/ cubic m	Total Cost (Rs.)	Man-day Rs. 120/- per labor	Contribution SC/ST/ SF/MF 5 %, LF 10%	Name of Farmers
				Length (m)	Bottom Width	Top Wdith	H/D	C.S. (Area m^2)						
1	GP-1	1.618	413	30	7.25	1.5	1.5	-	245	37.54	9197.30		459.87	Fulwari
2	GP-2	1.405	412	30	7.25	1.5	1.5	-	245	39.16	9594.20		479.71	Summari
3	GP-3	0.264	411	25	7.25	1.5	1.5	-	112.5	39.16	4405.50		220.28	Summari