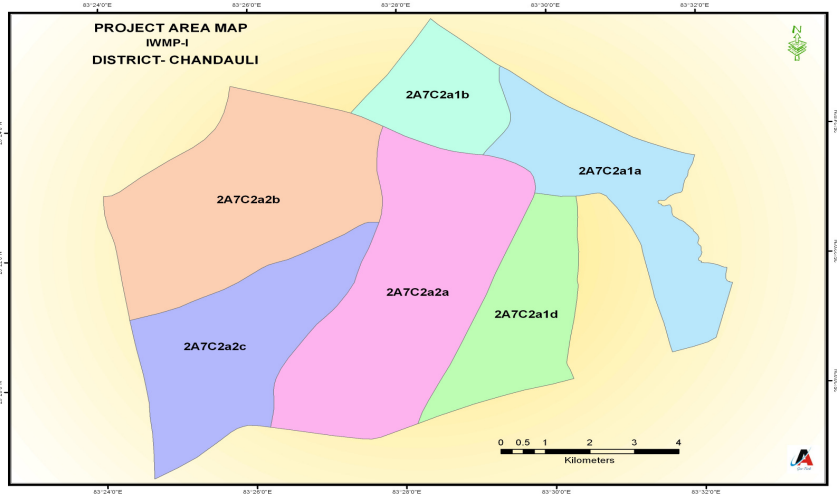
DETAILED PROJECT REPORT (D.P.R.)

(I.W.M.P. Ist– CHANDAULI)

INTEGRATED WATERSHED MANAGEMENT PROGRAMME, BLOCK- BARAHANI & DHANAPUR

DISTRICT - CHANDAULI (UTTAR PRADESH)



Submitted to: -

Department of Land Development &
Water Resources. Lucknow (U.P.)

Prepared By:-

Bhoomi Sanrakshan Adhikari
Department of Land Development
& Water Resources, DPAP-IInd, Sonbhadra

Land Development & Water Resources Government of U. P. Lucknow

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ABOUT THE SCHEME:

Integrated Watershed Management Programme (IWMP) is a modified programme of erstwhile Drought Prone Areas Programme (DPAP), Desert Development Programme (DDP) and Integrated Wastelands Development Programme (IWDP) of the Department of Land Resources. This consolidation is for optimum use of resources, sustainable outcomes and integrated planning. The scheme was launched during 2009-10. The programme is being implemented as per Common Guidelines for Watershed Development Projects 2008. The main objectives of the IWMP are to restore the ecological balance by harnessing, conserving and developing degraded natural resources such as soil, vegetative cover and water. The outcomes are prevention of soil erosion, regeneration of natural vegetation, rain water harvesting and recharging of the ground water table. This enables multi-cropping and the introduction of diverse agro-based activities, which help to provide sustainable livelihoods to the people residing in the watershed area.

The salient features of IWMP are as below:

(i) Setting up of Dedicated Institutions with multi-disciplinary experts at State level - State Level Nodal Agency (SLNA), District level - Watershed Cell cum Data Centre (WCDC), Project level - Project Implementing Agency (PIA) and Village level - Watershed Committee (WC).
(ii) Cluster Approach in selection and preparation of projects: Average size of project - about 5,000 ha.
(iii) Enhanced Cost Norms from Rs. 6000 per ha. to Rs.12,000/ha. in plains; Rs.15,000/ ha in difficult/hilly areas(Now Revised)
(iv) Uniform Funding pattern of 90:10 between Centre & States.
(v) Release of central assistance in three installments (20%, 50% & 30%) instead of five installments.
(vi) Flexibility in the project period i.e. 4 to 7 years
(vii) Scientific planning of the projects by using IT, Remote Sensing Techniques, GIS facilities for planning and monitoring & evaluation
(viii) Earmarking of project funds for DPR preparation (1%), Entry point activities (4%), Capacity building (5%), Monitoring (1%) and Evaluation (1%).
(ix) Introduction of new livelihood component with earmarking of project fund under Watershed Projects i.e. 9% of project fund for livelihoods for assetless people and 10% for production system & micro-enterprises
(x) Delegation of power of sanction of projects to States.

EXCUTIVE SUMMERY

The Watershed comprises of Fourty nine villages in Barahani and Dhanapur Block of Chandauli District of Utter Pradesh. All these watersheds has been identified by the Land development and water resources by IWMP scheme proper prioritization of different parameter for watershed selection criteria Chandauli. The watershed is located in the North-East of Chandauli District. Its lives between 25^0 18' 36.77" to $25^0$25' 39.914"N latitudes and 83^0 24' 1.878" to 83^0 32' 26.042" E longitudes (Code No. **2A7C2a2c, 2A7C2a2b, 2A7C2a1d, 2A7C2a2a, 2A7C2a1b, 2A7C2a1a**) Its altitude 57 to 81 M above the mean sea Level (MSL) The total area of watershed is 10448.32 ha. It is surrounded to river Ganga. All these watershed are surrounded by the 30 grampanchayat. A watershed is the entire land areas which drain into a stream from its mouth. The watershed of a steam has not only area, but also depth extending from the top of the vegetation to the confining geologic strata beneath. It is a hydrologic unit. There is an infinite relationship between land & water. In simple words it can be refused to the divide separating one drainage basin from other. It is also used a synonym for catchments over or a drainage basin.

The intensification of land use in to traditional agricultural sifting is self depting because it is exploitive the present agricultures practice greatly increase runoff is soil erosion, reduce ground water recharge, cause flood & sedimentation of reservoirs etc. As a result, the cultivated land resource base is shirking and its productive co capacity is diminishing.

Run off, erosion & unsistmetic drainage sytem are major problems of the project area. These problems can be solved by evolving developmental programmers which take into consideration natural topography and drainage pattern of the land. The collection of excess water and its utilization to provide greater stability to rainfed agriculture appears to be a variable developmental alternative. The watershed is the natural frame work for resource development in relation to crop production.

The climate of the region is characterized as arid to semi arid with average annual rainfall ranges 800 mm annually with an average of 35 rainy days. Out of which above 85% is received during the monsoon season from July to September. The area received very less rainfall in the winter season. How ever temperature ranges from as high as 43.5ºc in the May- June to as low as 5ºc during December January the pattern of rainfall is highly erratic & maximum water goes as run off.

The most soils of targeted area are sodic in nature, where productivity is very low. PH of these soils ranges from 8.5 to 10. These soils are deficient in organic matter, water holding capacity & micronutrients. Improved greed's of animal & high yielding varieties of different crops, which have sodieness tolerance capacity like Usar Dhan 1 & 3 Daincha, Wheat, Barley, Beer, Bal & Anola, Guava have need to introduce, In spite of that 33% area of sandy clay loam in nature, which have good soil characteristics along with productivity.

Farming is the main occupation of the dwellers of the watershed. The major crops over Rice Wheat , Arher, Mustard, Sugarcane etc. raised most of the lands kept fallow during khariff because of irregular & uncertain rainfall during the rainy season; Rice & Wheat are the most pre dominant cropping system in the area. A tune off 42 % area under agricultural crop is covered during khariff season in the watershed. Among them various crops like race. Shares maximum area (28%) followed by Arhar (5%) Jowar (4%), Maize (3%) & sugarcane (2%).

Natural vegetation of watershed is not very scientific way. The Forest vegetation is far-dominant with shisham (*Dalbergia sissoo*) Karanj (*Dongamain global*), Mango (*Manjifera indica*) Babul (*Acacia lilotica*) Golar, Neem (*Azadirchta indica*) etc. There is no proper pasture in the watershed. Grass patches are seen only on the bunds, road side & other such palaces, the principal grasses are serpat, dub (Cynolon ducty bin) Kans.

The erosion is main problem of the watersheds is to be locked by harvesting additional water is existing water harvesting structure, which have lost most of their capacity due to siltation & creating new water bodies. Water stored in the water harvesting structures shall be properly recycled to provide supplemental irrigation of critical growth stages of crops & for the establishment of fruit orchards and forest trees.

Agricultural land will be treated with bunding alongwith minor leveling. Waste land will be treated with the engineering measures like staggered trenchs and a forestation etc.

Budget for the various components is given as below –

FINANCIAL BREAKUP OF VARIOUS COMPONENT IN TERMS OF % OF IWMP-I, DISTRICT-CHANDAULI														
											Amount in Lacs			
S. No.	**Name of MWS**	**Project Area**	**Proposed Amount**	**Administrative 10%**	**EPA 4%**	**Institution and CB 5%**	**DPR 1%**	**Watershed development work 56%**	**Livelihood for assetless 9%**	**Production system and Microenterprises 10%**	**Monitoring 1%**	**Evaluation 1%**	**Consolidation 3%**	**Total 100%**
1	NOORI	798	95.76	9.58	3.83	4.79	0.96	53.63	8.62	9.58	0.96	0.96	2.85	95.76
2	PAIKUSHI	374	44.88	4.49	1.80	2.25	0.45	25.12	4.04	4.49	0.45	0.45	1.34	44.88
3	SIKATA	853.85	102.46	10.25	4.10	5.12	1.02	57.38	9.22	10.25	1.02	1.02	3.09	102.46
4	VIRASARAI	756.85	90.82	9.08	3.63	4.54	0.91	50.86	8.17	9.08	0.91	0.91	2.73	90.82
5	BARHAN	1337.3	160.48	16.05	6.42	8.02	1.60	89.87	14.44	16.05	1.60	1.60	4.83	160.48
6	JIGNA	380	45.60	4.56	1.82	2.28	0.46	25.54	4.10	4.56	0.46	0.46	1.36	45.60
	TOTAL	**4500**	**540**	**54**	**21.6**	**27**	**5.4**	**302.4**	**48.6**	**54**	**5.4**	**5.4**	**16.2**	**540**

PROJECT AT A GLANCE

1	Name of Project	IWMP-Ist
2	Name of Block(s)	Barhani and Dhanapur
3	Name of District	Chandauli
4	Name of State	Uttar Pradesh
	Region	Ganga
	Basin	R.B. Ganga
	Catchment	R.B. Ganga and Veer bahuria
5	Name of Watershed	R.B. Ganga
6	Name and Code of Micro watershed	2A7C2a2a (Noori), 2A7C2a1d (Paikusi), 2A7C2a2c (Sikta), 2A7C2a1a (Veera Sarai), 2A7C2a2b (Barhan), 2A7C2a1b (Jigna).
	Name of Gram Panchayat	Amara, Emiliya, Daina, BhasaKala, Dighi, Sikata, Khajhara, SawalJalalpur, Noori, Kamhariya, Kandawa, Piperdaha, BahoraChandel, Ramrupdaspur, Baghari, SisauraKala, Avahi, Paikusi, Medhan,Jigna,Awaty, Sirkalpur,Dewkali,Janauli,Silauta,Karjara,Raitha,Khajhara,Bhaisur,Sawal Jalalpur, Murlipur, Mahuji, Dedgoan,Mahura.
	Name of Villages	Kusha,Salempur Khurd,Bagadeya,Bahora Chandel ,Khamanpur Paikushi ,RaiBahanpur Kurshikhurd , Manikpur taluka kamria ,Barila ,Balipur, Chandelpur,Dhaminaosat Lodipur, Dhaminakhurd, Noori ,Chakniyantulla,Chilbilla,Tambagarh Sikata,Akauni,Ashapur,Darunchak,Dighi ,Chakhaniya Kamhariya , Amara,Kandwa ,Jhagaru chack,Dubey chack, Viswanathpur, Barali ,Piperdaha SawalJalalpur Baburakhas Baburakhurd Barikala urf dhini Bhasakala Basantpur Daina Bardeeha Emiliya Gorkha Vishunpurakhurd Ramrupdaspur Awahi Sisaura kala Baghari Kapasia
	Shape	Rectangular
	Extent	11.56 km North to South and 13.13 km East to West,
7	Total Geographical area of Project (ha)	**10448.32**
8	Treatable area(ha)	**4500.00**
9	Total Project cost(Lacs)	**540.00 Lakh**
10	Cost to be met through convergence MNREGA	**127.95**
11	No. of Gram Panchayats.	36
12	No. of concerned villages.	97
13	**Demographic Features**	
i	Total Polpulation	53766

ii	Male Population	27900
iii	Female Population	25866
iv	Total SC Population	13091
v	Sex Ratio	1000:927
vi	Total No. of BPL	2946
	Total No. of Housholds	6646
vii	Landless Person	1402
14	Total Farmer	5244
15	Large Farmer	638
16	Small Farmer	2132
17	Marginal Farmer	2474
18	Project Period	2009-2010 to 2012-13
19	No. of WCs	26
20	No. members	272
21	Formation of SHGs	-
22	Total SHG Nos	136
23	Female SHG Nos.	50
24	Total No. of Members	950
25	Formation of UGs	25
26	No. of UGs	25
27	No. of Members (UG)	295
28	**Important Outcomes indicators**	
	(1) Rainfed area (ha)	4301.69
	(2) Area under irrigation (ha)	5178.78
	(3) Area under crops (ha)	9480.47
30	Ground water status (m)	8.50
31	Milk Production (Liters)/per day	11518.82(lt)
32	Average income per family (Rs.)	19190.50
33	Land holding families	5244
34	Landless/ Poor families	1402
35	Employment Generation (Mandays in Lakh)	

	(1) During Project Period	3.222
	(2) After Project	0.8055

INTRODUCTION AND BACKGROUND

1.1 Project Background

IWMP- Ist Chandauli district UP watershed with code No. 2A7C2a2c, 2A7C2a2b, 2A7C2a1d, 2A7C2a2a, 2A7C2a1b, 2A7C2a1a respectively having area 10448.32 ha. located in North-East part of Chandauli district of Uttar Pradesh has been taken up by Department of Integrated watershed management programme District- Chandauli.U.P. Under funded Ministry of rural development, GOI. The afore said watershed has also been taken up programme implementation comprising of development & management plan during next five years 2009-10 to 2012-13). The total area of watershed is 10448.32 ha and treatable area is 4500.00 ha

1.2: Basic Project information

Name of Project	District	Block	No of Village	No of MWS	Geographical Area	Proposed Area	Treatable Area	Cost (Rs in Lacs)
IWMP -Ist	Chandauli	Barahani and Dhanapur	97	6	10448	10448.32	4500	540

1.3 Watershed Information

S. No.	Name of the Project	Type of watershed	Micro watershed Name	Code	Treatable Area (ha)
1	IWMP - I CHANDAULI	Micro watershed	SIKATA	2A7C2a2c	854.00
2		Micro watershed	BARHAN	2A7C2a2b	1337.00
3		Micro watershed	PAIKUSI	2A7C2a1d	374.00
4		Micro watershed	NOORI	2A7C2a2a	798.00
5		Micro watershed	JIGNA	2A7C2a1b	380.00
6		Micro watershed	VIRA SARAY	2A7C2a1a	757.00
	Total				**4500.00**

Source: secondary data

1.4 Status of previous watershed programmes & other development project/scheme in the watershed area

The IWMP -I watershed area being very backword, has been on top priority of a number of development project. These programmes are

- mahatma Gandhi National Rural Employment Guarantee Scheme (MGNREGS),
- Swarnjayanti Gram Swarojgar Yojna (SGSY),
- Indra Awas Yojna etc.

Table no.1.1: Developmental Programmes running in the project area

S. No.	Name of Programmes/Scheme	Sponsored Agencies	Objectives	Commencement (year)	Village Covered
1	MGNREGS	Rural Development Dept.	Employment	2009	29
2	IAY	Rural Development Dept.	Housing	2005	28
3	SGSY	Rural Development Dept.	Self employment	1999	22

Source: Primary data

1.5 PROBLEMS AND NEEDS OF THE AREA

1.5.1 Problem Identification and prioritization

Food sufficiency, economic growth and environmental security ware identified as the major issues to be addressed in the watershed area. The area has undulating topography, steep unstable slopes, and excessive channel gradient and hence highly prone to soil erosion. Effective soil depth is limited and spatially highly variable hampering good crop growth (Table 11).

Problems identified and prioritized during the transact walk and PRA exercises in all the villages of this IWMP -I watershed were pooled and a list of nine problems representing the whole watershed was prepared. Problems were ranked as per their total weight age in the three villages. Lack of irrigation water was the greatest problem experienced by the people followed by low production of field crops, lack of fodder availability and low animal productivity (Annexure- I).

Strength, weakness, opportunity and threat (SWOT) analysis is a useful decision support tool, A SWOT analysis of the Micro watersheds is presented in Table 25.

Table no. 1.2: Problem identification and prioritization for Micro Watersheds

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

Table no. 1.3: SWOT analysis of the Micro Watersheds

Strengths (S)		Weakness (W)	
i.	Cooperative work culture in traditional activities	i.	Poor water management
ii.	Close ethic ties	ii.	Resource poor farmers
iii.	Road at the top as well as outlet of the watershed	iii.	Out migration of youth
iv.	Hard Working	iv.	Low and erratic rainfall
v.	Resource pool of crop genetics diversity	v.	Fragile geology
vi.	Awareness of farmers about watershed management programme	vi.	Fragmented land holing
vii.	Well established CPR maintaining and sharing system	vii.	Heavy infestation of wild animals
viii.	Stall feeding of animals	viii.	Problem of fuel and fodder
ix.	Well maintained seasonal water bodies	ix.	Shallow soil depth and with high percentage of gravel
x.	Social outlook of the community towards land less		
	Opportunities (O)		**Threats (T)**
i.	Wide range of annual and perennial crops	i.	Prone to adverse climate like drought
ii.	Scope of regular employment opportunities	ii.	High market risk
iii.	Strengthening of existing irrigation system	iii.	Social conflicts owing to PRI and WSM polices and local politics
iv.	Conducive climate for rain fed crop diversification	iv.	Weak coordination among lin departments
v.	Good Scope for Agro forestry and dry land horticulture	v.	Lack of expertise of implementing agency in different aspects of WSM
vi.	Potential for collective action and management of CPR		

Source: District statistic magazine and Secondary data

1.6 Need and Scope for Watershed Development

Watershed Development Programme is prioritized on the basis of thirteen parameters namely Poverty Index, Percentage of SC/ST, Actual wages, Percentage of small and marginal farmers, Ground water status, Moisture index, Area under rainfed agriculture, Drinking water situation in the area, Percentage of the degraded land, Productivity potential of the land, Continuity of another watershed that has already developed/treated, cluster approach for plain or for hilly terrain. Based on these thirteen parameters a composite ranking was given to Eval Watershed project as given in Table no. 2 the total number of families under BPL is above 50 percent of the total households of the village. Hence a score of 7.5 is allotted. The percentage of schedule castes in the village is about 35 percent to the total population; hence a score of 10 was allotted. Rainfed agriculture for is the primary occupation of the village due to the fact that ground water is saline and hence unfit for usage. More than 80 percent of the farmers are small and marginal by natural and the actual wages earned by the labour is less than the minimum wages hence a composite rank of 5, and 10 are allotted respected.

Since the rainfall received is erratic and irregular. Drinking water is problematic in the village. The soil is very permeable and production of the land can be significantly enriched with the availability of timely irrigation. All watersheds falls in continuity with other watershed. Cluster approach was followed taking into consideration four micro-watersheds covering a total area of 10448.00 ha. Thus a cumulative score of 85.All the parameters taken together give a cumulative score of 85 to the watershed (reference Table below).

Objectives and Scope of Project

a. Conservation, development and sustainable management of natural resources including their use
b. Enhancement of agriculture production and productivity in a sustainable manner.
c. Restoration of ecological balance in the degraded and fragile rain-fed ecosystem.
d. Reduction in regional disparity between rain-fed and irrigated areas.
e. Creation of sustainable employment opportunities for the rural community for livelihood security.

Table no. 1.4: Weightage of the project

Project Name	Project Type	Weightage													Total
IWMP-I	Eastern plain	i	ii	iii	iv	v	Vi	vii	v-	ix	x	xi	xii	x-	85
		7.5	5	5	10	5	0	10	7.5	10	10	5	10	0	

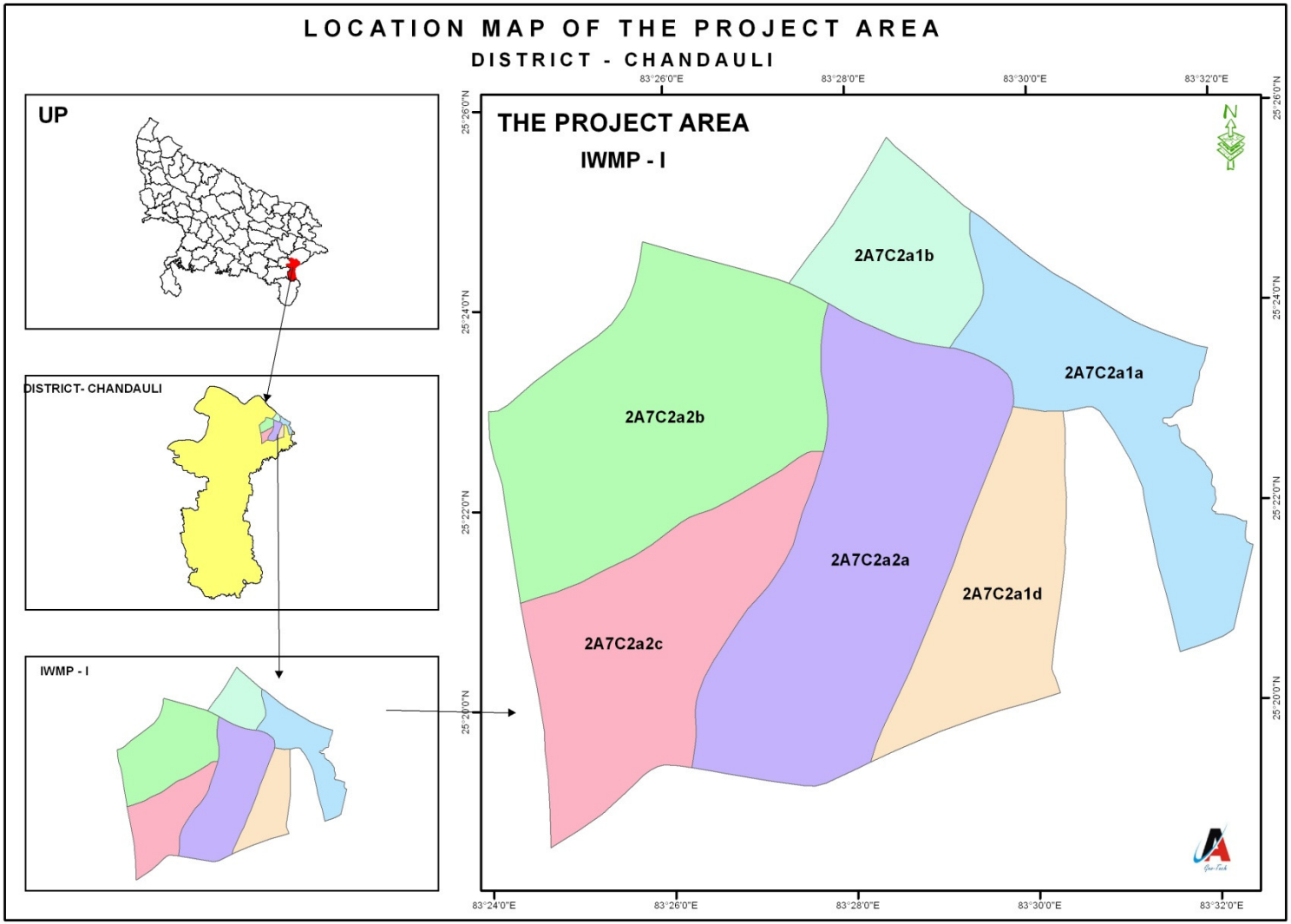
Table no 1.5: Criteria and weightage for selection of watershed

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)	
-	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)
v-	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 microwatersheds in the project (10)	Contiguity within the microwatersheds in the project but non contiguous to previously treated watershed (5)	Neither contiguous to previously treated watershed nor contiguity within the microwatersheds 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 microwatersheds in cluster (10)	2 to 4 microwatersheds in cluster (5)	
x-	Cluster approach in the hills (more than one contiguous micro-watersheds in the project)	15	Above 5 micro-watersheds in cluster (15)	3 to 5 microwatersheds in cluster (10)	2 to 3 microwatersheds in cluster (5)	
	Total	**150**	**150**	**90**	**41**	**2.5**

2. GENERAL DISCRIPTION OF THE WATERSHED

2.1 Location

The IWMP-I Chandauli is Situated in block Barahani and Dhanapur in district Chandauli (U.P.) It is 20 Km away from Sayyad Raja and lies between 25^0 18' 36.77" to $25^0$25' 39.914"N latitudes and 83^0 24' 1.878" to 83^0 32' 26.042" E.



2.2 Watershed Characteristics

2.2.1 Shape and Size

The watershed (IWMP-I Chandauli) shape is elongated type. The maximum length and width of the watershed is 11.56 km Nort to South and 13.13 km East to West, respectively with the length: width ratio of 2:1.

TABLE NO. 2.1: SHAPE AND SIZE OF IWMP Chandauli

S.No.	Code No.	Micro Watershed Name	Micro Watershed Area (ha.)	Shape of Micro Watershed	Approx size in Km.		Ratio Length : Width
					North to South	East to west	
1.	2A7C2a2c	Sikata	1744.24	Trapezoidal	8.84	3.90	1.09 : 1
2.	2a7C2a2b	Barhan	2516.25	Rectangular	7.21	6.22	3:1
3.	2A7C2a1d	Paikusi	1182.08	Trapezoidal	7.17	2.16	2.33:1
4	2A7C2a2a	Noori	2729.97	Trapezoidal	8.47	3.0	1.09 : 1
5	2A7C2a1b	Jigna	807.46	Rectangular	3.58	3.6	3:1
6	2A7C2a1a	Vira Saray	1468.32	Trapezoidal	9.11	4.72	2.33:1

2.2.2 Length of main stream, drainage density, average slope, watershed relief etc.

Table no. 2.2: Length of main stream, drainage density, average slope, watershed relief etc

S.No.	Project Name	Main stream	Drainage Density	Average Slope	Watershed Relief
1	IWMP -I Chandauli	I-35000 meter II- 7000 meter III- 5000 meter	0.90-1.20 meter/second	0-2%	57-81 Mrt (appx.)

2.3 Area: Land use Pattern

The IWMP -I watersheds has diversified land uses namely agriculture, waste land (open scrub), seasonal water bodies etc. The varied present land use and area under different categories in watershed is shown in Table 5. The mixed land use followed in the watershed is almost similar in other parts of the U.P. During PRA exercise, the villagers prepared land use. One such map of village of IWMP -I watershed is shown below.

Table 2.3. Area under major land uses, irrigated and rain fed area, etc

Area under Major Land Uses

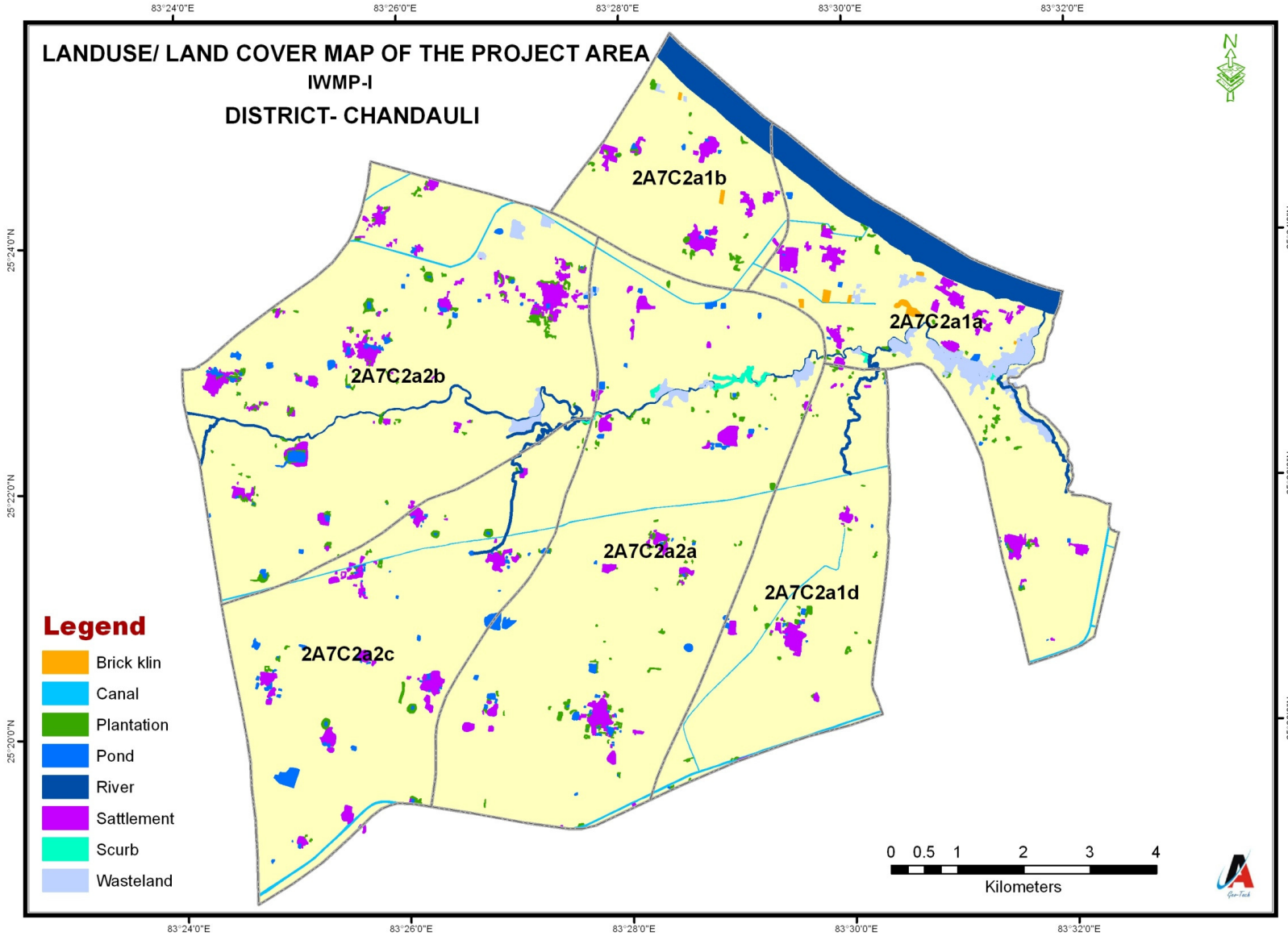
SN	Name of micro watershed with Code	No. of Gram Panchayat	Cultivated and wasteland area of the village (ha)				Area details (ha) (falling within the projects)								
			Cultivated rainfed area	Cultivated irrigated area	Uncultivated wasteland/ fallow		Pvt. Agri. Land					Forest Land	Community land	Others (Pl. specify)	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
	Noori 2A7C2a2a	13	743.84	1757.86	54.16	51.24	1526.41	241.46	0	733.83	2501.70	0	63.58	59.29	2729.97
2	**Paikusi 2A7C2a1d**	6	357.35	744.09	16.65	21.10	536.25	140.99	0	424.20	1101.44	0	23.40	19.49	1182.08
3	**Sikta 2A7C2a2c**	9	823.08	683.06	30.92	63.53	1022.86	54.11	0	429.17	1506.14	0	54.45	89.20	1744.24
4	**Veerasarai 2A7C2a1a**	9	707.54	600.42	39.46	37.53	588.0	262.72	0	447.04	1297.96	0	48.40	44.97	1468.32
5	**Barhan 2A7C2a2b**	15	1295.21	1042.78	41.79	40.77	1233.88	270.94	0	833.07	2337.99	0	49.18	46.52	2516.25

6	**Jigna 2A7C2a1b**	7	364.67	370.57	15.33	14.46	378.85	86.50	0	269.89	735.24	0	12.72	19.71	807.46
	Total		**4301.69**	**5178.78**	**198.31**	**228.63**	**5286.25**	**1056.72**	**0**	**3137.20**	**9480.47**	**0**	**261.73**	**279.18**	**10448.32**

Sources of data-Satellite data and other Secondary data

Area in hectare

Various agricultural land uses in the watershed are extended to diversified land capabilities starting fro marginal to good class II lands. The watershed distinctly has three types of lands 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 under agriculture in the watershed is about 9480.47 ha out of which 5178.78 ha is irrigated while 4301.69 ha is under rain-fed agriculture. The water (both irrigated and drinking) is most scarce natural resource in the watershed. The problem of tube wells for irrigation of agricultural crops frequently leads to the drinking water problem to the farmers of watershed forcing them to carry drinking water from out side the watershed area. The agricultural field bunds are common in the watershed, however, they frequently breach on heavy rains adversely affecting the in situ percolation of rain water in the soils.


LANDUSE/ LAND COVER MAP OF THE PROJECT AREA
IWMP-I
DISTRICT- CHANDAULI
N
83°24'0"E
83°26'0"E
83°28'0"E
83°30'0"E
83°32'0"E
25°24'0"N
25°22'0"N
25°20'0"N
2A7C2a1b
2A7C2a1a
2A7C2a2b
2A7C2a2a
2A7C2a1d
2A7C2a2c
Legend
Brick klin
Canal
Plantation
Pond
River
Sattlement
Scurb
Wasteland
0 0.5 1 2 3 4
Kilometers

2.4 Physiography

Physiography a description of the physical nature (form, substance, arrangement, changes) of objects, especially of natural features. The term was introduced in geography in the project area for the study or description of 'natural phenomena in general', but later came to mean, 'a description of the surface features of the earth, as bodies of air, water and land', with an emphasis on mode of origin;

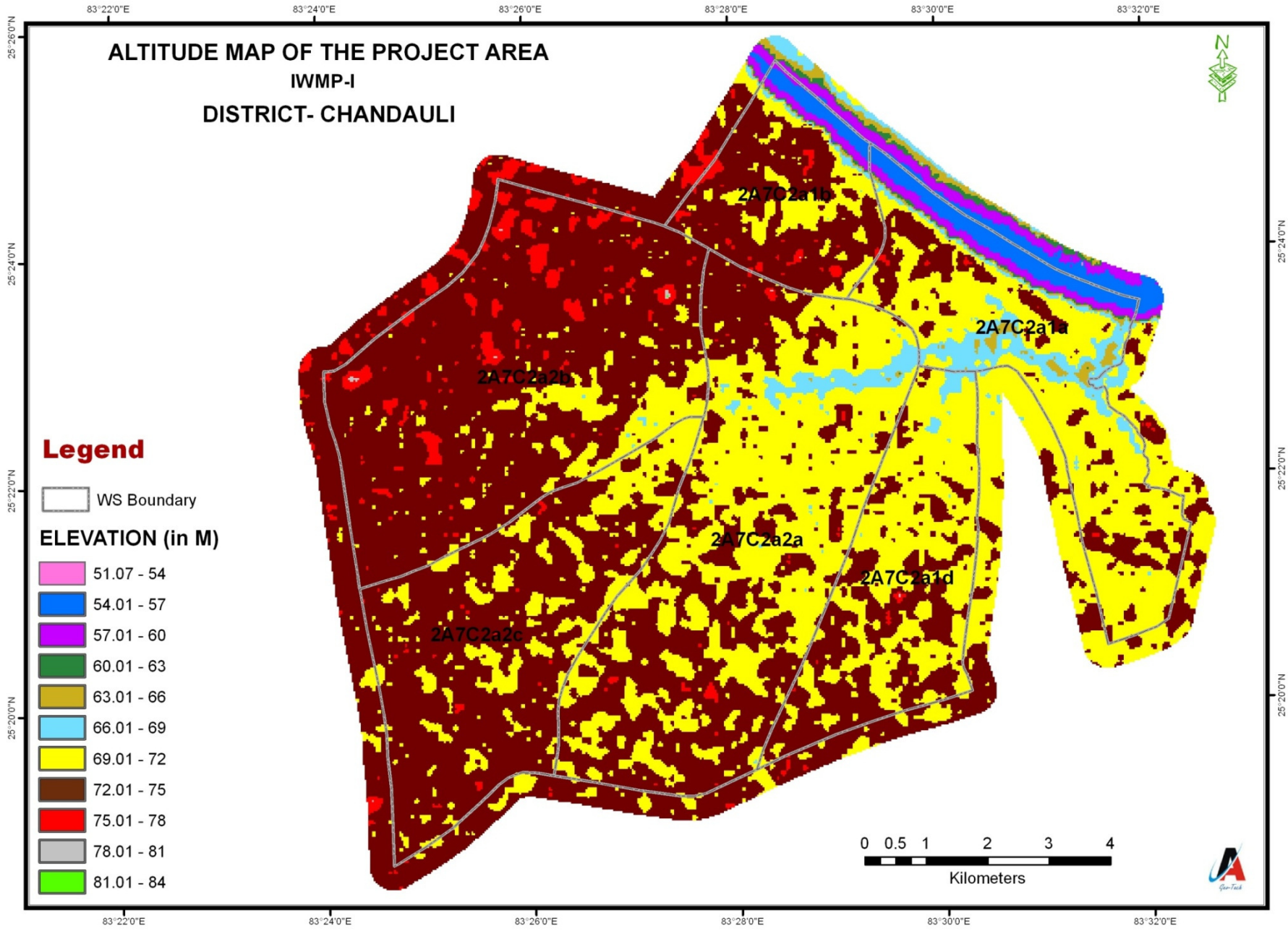
Total area of the IWMP -I Chandauli is 10448.32 ha with treatable area 4500.00 ha. Elevation range and location of altogether five micro watershed shed are given below above:

Table no. 2.4: Elevation range, longitude latitude, relief height difference etc

Location of watershed						Elevation of watershed from MSL		
District	**Mandal**	**Micro watershed**	**Habitation**	**Longitude**	**Latitudes**	**Highest**	**Lowest**	**Relief height difference**
Chandauli	Varanasi	2A7C2a2c	Sikta, sawal jalalpur, Birbhanpur, Kapsya, Dayna,Dighi	83^0 24' 20.784"E to 83^0 27' 41.495"E	25^0 18' 37.74" N to 25^0 22' 32.935" N	76	70	6
Chandauli	Varanasi	2a7C2a1a	Awhi, Virasrai, bayanpur,Sisaura Khurd,Mahuji,Kusha,dedhgavan, Tikri,Gosasipur	83^0 29' 7.78"E" to 83^0 32' 26.12"E	25^0 20' 28.69" Nto 25^0 24' 55.661"N	77	57	20
Chandauli	Varanasi	2A7C2a1d	Kusha,SalempurKhurd, Bagdiya,Paikusi, Lodipur,Kursikhurd	83^0 27' 22.75''E' to 83^0 29' 29.867" E	25^0 23' 33.724" Nto 25^0 25 40.5' 35"N	78	67	11
Chandauli	Varanasi	2A7C2a2b	Chilbili,Malwari,khaujhara,Kambhari, Rapuri,Awti,Barhan, Alamkhatopur,Raitha,Sitalpur	83^0 24' 1.83" E to 83^0 27' 45.53"E	25^0 21' 5.268"Nto 25^0 24' 40.50" N	81	68	13
Chandauli	Varanasi	2A7C2a2a	Tambaghad, Chilbila,Chakniyamtula,Visunpurakhurd ,baghri.Sisaurakala,Noori, Salempurkhurd,Awhi,Ramropdaspur	83^0 26' 15.24" Eto 83^0 29' 48.88"E	25^0 19' 11.977" Nto 25^0 24' 1.479" N	79	66	16

Chandauli	Varanasi	2A7C2a1b	Jigna,Medhan,Daunpura,Hinauta, Sisaurakala,Awhi,Sisaurkhurd	83^0 28' 10.151" Eto 83^0 30' 16.675"	25^0 19' 26.74" N to 25^0 22 58.274" N	78	57	21

Source: GPS Data


ALTITUDE MAP OF THE PROJECT AREA
IWMP-I
DISTRICT- CHANDAULI
N
83°22'0"E
83°24'0"E
83°26'0"E
83°28'0"E
83°30'0"E
83°32'0"E
25°26'0"N
25°24'0"N
25°22'0"N
25°20'0"N
2A7C2a1b
2A7C2a1a
2A7C2a2b
2A7C2a2a
2A7C2a1d
2A7C2a2c
Legend
WS Boundary
ELEVATION (in M)
51.07 - 54
54.01 - 57
57.01 - 60
60.01 - 63
63.01 - 66
66.01 - 69
69.01 - 72
72.01 - 75
75.01 - 78
78.01 - 81
81.01 - 84
0 0.5 1 2 3 4
Kilometers

2.5 Drainage Pattern

The land area whose runoff drains through a single stream is called that stream's DRAINAGE BASIN. The area outside the Roney Building at GSW, for instance, provides runoff to the small stream that drains College Lake, and so is in the drainage basin of that stream.

Due to prevalence of mild to steep slopes and presence of a number of drainage lines in the watershed, the drainage system is adequate. The watershed forms part of Ganga basin.

2.5.1 Major stream

The watershed is in the mid of IWMP -I Chandauli, in the form of Ganga and Beer Bahuria. This is a great river and flows on the northern border of the district. It has its origin in the mountains of Kumaon and is formed of the combined waters of the Chauka, the Kauriala, the Rapti and other smaller streams. During the rains it swells to a great extent and as the current becomes very strong and rapid it causes much damage to the adjoining area. The course of the river is interrupted by kankar reefs at a few places such as Jigna, Hinauta, Veera sarai, and Awati and the variations in the channel are continuous but the greatest changes are those which occur east of Maniar. In this part of the district the whole tract south of the river is low alluvium which gets submerged during the floods. It includes all the land north of the towns of Sayad raja. The changes made by the Ganga are more sudden and sweeping than those of the Ganga. Ganga river having precipitous slop and drained in gully of small river. About 4 % of watershed area has slop more than 1% upright ridges. The top of the watershed exhibit extremely precipitous and manifesting moderate to severe erosion class. The lower portion of the watershed has moderate slope (less than 2 %). At the outlet of water shed small gullied are notice, covered with sparse vegetation. In Total (1^{st} order-9, 2^{nd} order-2 numbers and 3^{rd} order-2 numbers) numbers of streams of different order are found in the watershed, with total stream length of 47000.00 m. Stream characteristics of watershed are presented in the table.

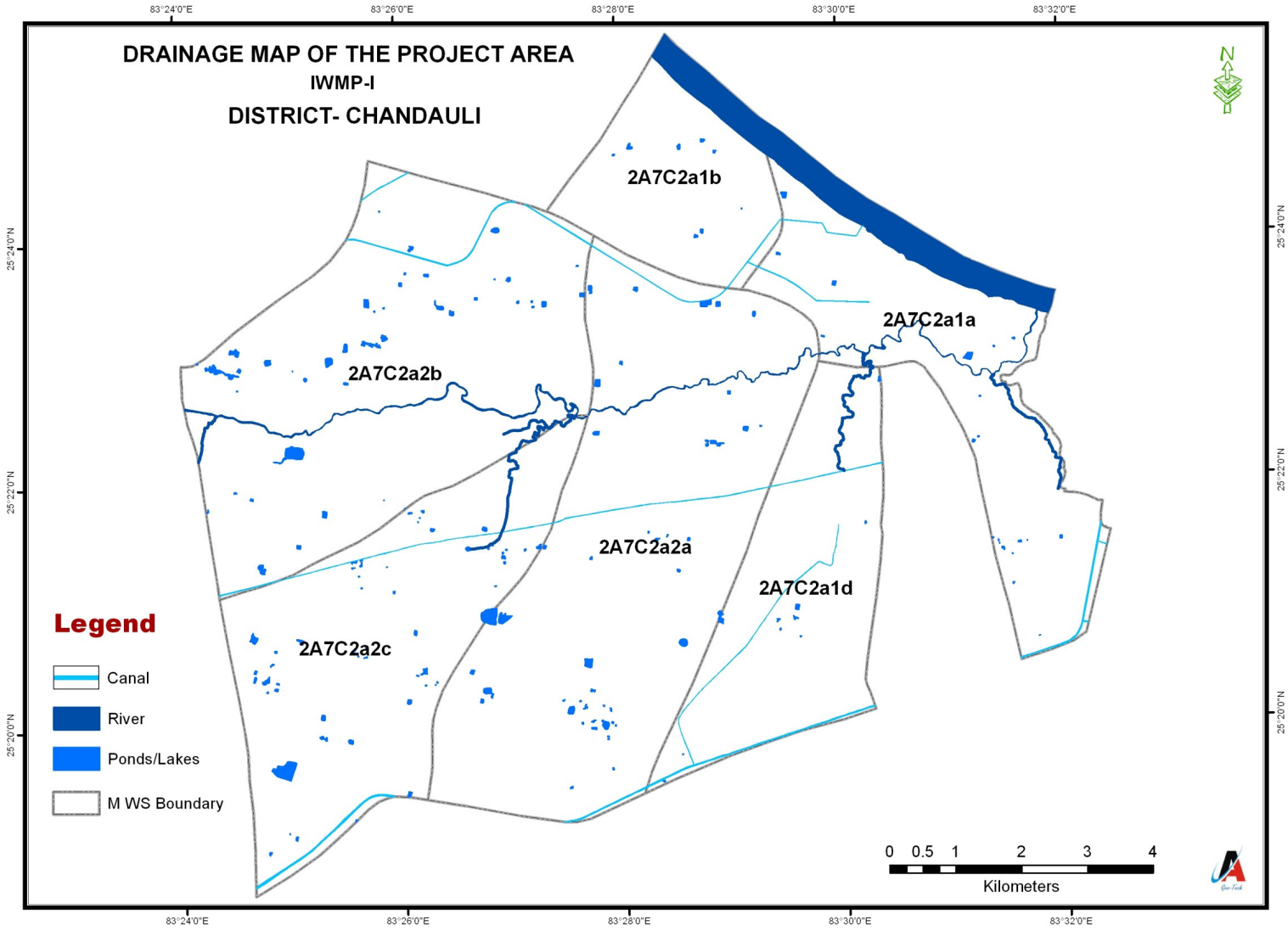

DRAINAGE MAP OF THE PROJECT AREA
IWMP-I
DISTRICT- CHANDAULI
2A7C2a1b
2A7C2a1a
2A7C2a2b
2A7C2a2a
2A7C2a1d
2A7C2a2c
Legend
Canal
River
Ponds/Lakes
M WS Boundary
0 0.5 1 2 3 4
Kilometers
N
83°24'0"E
83°26'0"E
83°28'0"E
83°30'0"E
83°32'0"E
25°24'0"N
25°22'0"N
25°20'0"N

Table No.2.5: Stream characteristics of watershed (IWMP -Ist Chandauli)

Stream order	Stream number	Main stream length Mtr.
1st order	09	35000
2nd order	02	7000
3rd order	02	5000
Total	**13**	**47000**

2.6 Climatic Condition

The watershed falls under the semi-arid region of tropical climate. The average annual precipitation is 633 mm spreading over 85 rainy days. Most of the rainfall (about 85 %) is received during July to September. The rainfall is of moderate to high intensity. The area receives on or scanty rainfall in the winter season. The temperature variation ranges from as high as 43.5^{o}C in the month of May- June to as low as 5^{o}C in December- January.

Table no. 2.6: Climatic Condition

Month	Year/ Rainfall in mm,					
	2004	**2005**	**2006**	**2007**	**2008**	**Average**
January	27	14	-	-	09	10
February	-	44	-	42	11	19.4
March	-	47	10	24	-	16.20
April	05	-	20	-	03	5.60
May	-	-	04	15	-	3.80
June	146	12	65	64	100	77.40
July	140	294	232MM	198	211	215.00
August	185.5	370.50	004	82	288	226.00

September	65.00	25.30	59	97	28	54.86
October	-	14.00	02	-	-	03.20
November	-	-	-	-	-	-
December	-	8.00	-	-	-	1.60
Total	**568.5**	**828.8**	**164**	**522**	**650**	**633.06**

Temperature and Humidity

Month	**Temperature^{0}C**		**Relative Humidity (%)**
	Maximum	**Minimum**	
Jan. 09	24.5	5.0	30-86
Feb. 09	28.5	12.4	38-84
March 09	35.1	16.2	16-82
April 09	38.52	15.2	15-52
May 09	40.5	28	20-52
June 09	43.5	28.6	19-60
July 09	34.6	26.5	58-86
August 09	34.5	24.8	62-90
September 09	32.5	24.2	65-88
October 08	34.5	15	35-39
November 08	29.1	11.4	86.20
December 08	26.4	7.4	50.65

Description of Agro-climatic Zone & major agro ecological situations (based on soil and topography)

Agro-climatic zone : Eastern Plain Zone

Sl. No.	Particulars	Characteristics
1.	Alluvial Soil	Sandy, Sandy loam or Clay loam.
2.	Calcareous Soil	Black Soil
3.	Rocky Track	Sandy loam with small stones
4.	Holding size	Small & Marginal farmers and less Large farmers
5.	Temperature	05 to 43.5^{0}C
6.	Rainfall	623- 800 mm.
7.	Irrigation facilities	Canal, Boring and Tubewells
8.	Production system	Rice-wheat
Sl. No.	**Agri-Eco System**	**Characteristics**
1.	AES-I	Irrigated Clay loam Soil
2.	AES-II	Irrigated Loam Soil
3.	AES-III	Irrigated Sandy loam Soil
4.	AES-IV	Rainfed Sandy soil
5.	AES-V	Water logged Clay condition.
6.	AES-VI	Rocky track

Geomorphology and Soils

2.6.1 Geomorphology

Geomorphology publishes peer-reviewed works across the full spectrum of the discipline from fundamental theory and science to applied research of relevance to sustainable management of the environment. Our journal's scope includes geomorphic themes of: tectonics and regional structure; glacial processes and landforms; fluvial sequences, Quaternary environmental change and dating; fluvial processes and landforms; mass movement, slopes and periglacial processes; hillslopes and soil erosion;

The IWMP -I Chandauli watershed is located North-East side of the Chandauli district. The entire watershed is topographically divided into three major landforms. Accordingly, the soils of watershed can be grouped into three major categories. Such as

1. Plain land 2. Sloppy land

3. Soil types

Sl. No.	Soil type	Characteristics
1.	Clay	Paddy, Wheat, Lentil
2.	Clay Loam	Paddy, Wheat, Lentil, Rai
3.	Loam	Paddy, Wheat, Gram, Lentil, Pea, Rai, Vegetable, Urd (Summer)
4.	Sandy Loam	Arhar, Gram, Vegetable pea, Vegetable, Maize, Sesamum, Ground nut, Urd, Moong
5.	Sandy	Arhar, Maize, Gram, Papaya, Bajra, Vegetable Sesamum, Rai & Toria etc.

2.6.2 Sloppy Land-Sandy Loam

The topmost portion (western & northwest part) of the watershed is Sloppy land with occasional depressions of flat land. These soils are derived from the Sandy loam and are located at some height of around 10 feet. They have developed from typical alluvial soil slightly alkaline in nature with occasional thin layers of silt in small patches. Near the high level, the soils are coarse and underlying with hard sandstones. The soils of the upper level and very nearby adjoining areas are loamy sand to sand in texture. Depth is the major limitations of these soil groups. As move away upper level, the soil depth gradually increases along with clay content thereby improving the fertility. The soils are alluvial in colour with ferruginous concretions with slightly alkaline in reaction.

2.6.3 Fine textured Clay soils

These soils are the most extensive soil group found in the IWMP -I Chandauli watershed. The middle portion of watershed is relatively flat land with fine soil texture. These soils are grey in colour and are inherently high in fertility status. These grey soils are sticky with high pH and on drying develop numerous cracks 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 calcium carbonate accumulation in the form of Kankar nodules. A subsurface indurate pan of kankar of clay or mixtures of both locally called as Potni soils are prevalent, which impede the downward movement of water thereby creating problems of high runoff.

2.6.4 Coarse textured Clay Loam soils

These soils are lying mostly near the adjoining areas of gullies of Ganga River near the outlet and around the lower portion of foot hill 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. The soils are derived from the alluvial deposit and also from residual soils of the hill region. Rill and gully formation in some parts particularly near the outlet of watershed can be seen.

2.7 Morphology of a typical soil profile of micro watershed (dominant soil)

Table no. 2.7: Morphology of a typical soil profile of micro watershed (dominant soil)

Horizon	Depth (cm)	Morphology
A	0-50	Black in colour, clay content 28%, with free $CaCO_3$, sticky when moist, hard when dry, high elasticity, fissures and cracks, occasional occurrence of tree calcium carbonate granules pH 8.3-8.7.
B	50-75	Whitish-yellow in colour, high effervescence with dilute HCl, very fine mixed with tree $CaCO_3$ and granules, very hard when dry, compact & indurate land pan, restricting development of root and downward water transmission (locally called as pathrili soil)
C	75-100	Red & While sand stone, Regolith (Parent material)

2.7.1. Soil characteristics and fertility status

Table no. 2.8: Soil characteristics and Fertility Status up to 6"

Soil properties	LCC II	LCC III	LCC IV
Sand (%)	45.5	74.30	74.14
Silt (%)	25.03	19.40	19.20
Clay (%)	29.5	6.52	6.53
Texture	Sandy Clay loam	Loamy sand	Loamy sand
pH (1 : 2)	8.01	8.52	6.96
EC (DSm^{-1})	0.47	0.11	0.15
Organic carbon (%)	0.36	0.13	0.18
Available N ($Kgha^{-1}$)	322	175	222
Available P ($Kgha^{-1}$)	28	16	6-7
Available K ($Kgha^{-1}$)	180	318	232

Values correspond to soil fraction

2.7.2. Land Capability Classification (LCC)

Land capability classification was done to classify the soils in different groups based upon the capabilities & limitation and to emphasize the hazards prevailing in the watershed under different kinds of soils. Initially reconnaissance survey was carried out for entire watershed in order to find out the different topo-sequences, land forms, soil depth and erosion hazards. This was followed by the detailed investigation of selected land forms to bring out the LCC classes of the IWMP-I, Chandauli watershed. Three classes of land capabilities namely II, III and IV were demarcated in the watershed. The areas under different classes are shown in table 16.

Table no. 2.9: Area under different land capability class under micro watersheds.

Land capability class	Area (ha)
II	4020.11
II	3120.11
III	2220.11
IV	120.11
Total	**9480.47**

2.7.3. Land capability class I (White)

This group is one of the most extensive LCC class of the IWMP-I, Chandauli watershed. This group of soil is occupying around 1800 ha of the watershed area. The soils are clay loam or silly clay loan in texture. The land under this class is nearly level to wild sloping (1-3%). The soils are deep and erosion hazard in slight. Most of the production agriculture land comes under class II. A considerable area of watershed is seasonally water logged comes under this LCC class, primarily found near the earthen check. These areas are subject to water logging in most part of the year. The lands are almost flat, silty clay or clay loam, in texture,

deep and very mild slopping. These lands have no major limitations other than occasional water logging. During rabi seasons, the water is drained out and cultivation is carried out. These lands potentially very productive but due to water logging during the rainy season, it could not be brought out under cultivation during the kharif season. The mapping unit for this class is given as under-

Land capability class IV = Scl-d_5/B-e_1

2.7.4 Land capability class II (whitish yellow)

A considerable area of watershed i.e. 4020.11 ha is under class II. This class is found in lower portion i.e. near the outlet of watershed. The soils are coarser in texture (loamy sand/sand), deep, susceptible to erosion hazard and undertaking in topography. Limiting factors in this class and steep slopes, severe past erosion, severe credibility, shallow soils, lower water holding capacity, severe alkalinity and salinity with poor drainage are common features. Rill & initiation of gully can be seen near the outlet of the watershed. In some part of calcareous soils particularly near the foot hill, where soils are coarser in texture and shallow in depth, is also coming under this class. The mapping unit for their class is as follows.

Land capability class II_e = 1s-d_5/C-e_3, II_{es}=1s-d_3/D-e_3 (calcareous soils)

2.7.5. Land capability class -/IV (Greysh yellow)

These lands are occupying an area of 120.11 ha of the watershed. This class of land is mostly found in patchily area of watershed. The soils are very shallow underlying hard rock, steep slope (>22%) and coarser in texture. Mostly brown soils are found under this class. Class II and III-one intermixed in top of the foot trill of watershed. Mostly class V- (450.00 ha) lands are located on moderately trill topes (Bhita), where soil depth is almost negligible. Soils with admixture of gravels/rock fragments one found in these classes of lands. The mapping unit for this class of land is as follows.

Land capability class IIe=gls-d_1/H/I-e_4

2.7.6. Mapping units symbol

Soils depth (cm) d_5 - > 90 cm; d3-22.5-45.0; d1, < 7.5 cm. Texture cl-clay loan; IS-loamy sand; gls-gravelly loamy sand, slop %) B-1-3; C-3-5; D-5-10%, H-25-33; I-33-50

Erosion e_1-25% of A horizon lost; e_2 = 50-75% of a horizon lost; e_4=50-75% B horizon lost.

2.7.7 Detail of soil Erosion in the Project Area

Table no. 2.10 a

1	2	3	4	5
Cause	**Type Of erosion**	**Area affected (h)**	**Run Off (mm/year)**	**Average soil loss (Tonnes/ha/year)**
Water erosion		IWMP-I		
a	Sheet	3500		
b	Rill	1400	353	
c	Gully	100	mm	16.00 to 20.00
Sub-Total		5000		
Wind erosion			NA	
Total		**5000**	**353 mm**	

CONCLUSION

The land capability classification of IWMP-I, Chandauli Watershed provides reasonable good information with regard to capability of soil. That could be used for agriculture, agri-horticulture, and silviculture & pasture development. The majority of land from is coming under class II, which give an insight of good agriculture production potential of this watershed. The productivity of these lands could be further enhanced by adoption of simple soil & water conservation measures like mild leveling, bunding, diversion drain and in site moisture conservation practices. The reasonable area is under class VII indicating greater potential of this watershed for forestry and pasture development. The major physical limitation in case of agriculture soils are the sub soil hardness, low limitations in case of agriculture soils are the sub soils hardness, low water in filterability and slope. In case of area under calcareous soils, pronounced limitations of soils depth was noticed following by severe erosion hazard and coarse soil texture. A small portion watershed is under seasonally water logged. The soils under waterlogged are could be used for some other beneficial farming activities during the kharif and season also.

2.8. Land Use Pattern

2.8.1 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 2.2 ha. These small land holding are further scattered at different places, which makes cultivation very difficuLtr. Distribution of farm families according to the size of the land holdings are given in the table.

Table no. 2.11: Distribution of farm families according to their size of landings.

S.N.	Name of Micro Watershed	Name of Villages	Land holding			
			Marginal (<1 ha)	Small (1-2 ha)	Large (>2 ha)	Total
1	**2A7C2a2c**	Sikta, sawal jalalpur, Birbhanpur, Kapsya, Dayna,Dighi	502	518	248	**1268**
2	**2a7C2a1a**	Amara, kamhariya, Balipur, Dighi, Chakhaniya, Kandwa	384	355	69	**808**
3	**2A7C2a1d**	Kusha,SalempurKhurd, Bagdiya,Paikusi, Lodipur,Kursikhurd	240	95	37	**372**
4	**2A7C2a2b**	Chilbili,Malwari,khaujhara,Kambhari, Rapuri,Awti,Barhan, Alamkhatopur,Raitha,Sitalpur	712	789	152	**1653**
5	**2A7C2a2a**	Tambaghad, Chilbila,Chakniyamtula,Visunpurakhurd ,baghri.Sisaurakala,Noori, Salempurkhurd,Awhi,Ramropdaspur	188	115	51	**354**
6	**2A7C2a1b**	Jigna,Medhan,Daunpura,Hinauta, Sisaurakala,Awhi,Sisaurkhurd	448	260	81	**789**
		Total	**2474**	**2132**	**638**	**5244**
		%	**46.02**	**35.82**	**18.16**	

Source: District statistic magazine and Secondary data

2.8.2. Land Use

The IWMP -I watersheds has diversified land uses namely agriculture, waste land (open scrub), seasonal water bodies etc. The varied present land use and area under different categories in watershed is shown in Table 18. The mixed land use followed in the watershed is almost similar in other parts of the U.P. During PRA exercise, the villagers prepared land use. One such map of village of IWMP -I watershed is shown in table

2.8.3 Agriculture

Various agricultural land use in the watershed are extended to diversified land capabilities starting from marginal to good class-II land. The watershed distinctly has three types of land i.e. leveled, sloping & degraded and undulating. The agriculture is practiced on all these soil types through the productivity considerably vary. The total area under agriculture in the watershed is about 8480.47 ha out of which 5178.78 ha is irrigated while 4301.69 ha is under rainfed agriculture. The water (both irrigated 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 formers of watershed & occasionally forcing them to carry drinking water from another side of the watershed area. The agricultural field bund are common in

the watershed, however, they have poor thickness & usually water flow feely from top of bunds as well as frequently breach on heavy rains adversely affecting the in site percolator of rain water in the soils.

The agriculture soils are in the watershed have diversified texture i.e. clay loam, sandy clay loam and Kankar mixed textures which are located in patches throughout the watershed. The heavy soils and almost used by paddy crop during rainy season. The sodic soils also have hard calcium pan at variable depths. The irrigation water is conveyed either by earthen channels or plastic pipes and surface irrigation methods following mainly border method or flood method of irrigation by the farmers in the watershed. These factors substantially reduce the water use efficiency of limited available & valuable irrigation water in the watershed. The quality of irrigation water needs to be tested for assessing fitness of the quality for irrigation & other purposes. Rehabilitation of waste lands with appropriate drought hardy species like Karanj (*Pongamia glabra*), introduction of suitable malti-purpose trees, promoting agro-forestry on agricultural lands with appropriate fruits & forest species, suitable vegetative barriers on sloping lands can of high future value in meeting out not only fire wood & fodder demands in the watershed but also for soil & water conservation, eco-friendly environment, rehabilitation of watershed and substantial income generation for socio-economic upliftment of resource poor farmers in the watershed.

One year rotation

Single cropping : Fallow-mustard/wheat/gram/pea/lentil/winter vegetables (In watershed area rabi crops are mostly raised on fallow fields of rabi season while kharif crops are grown on fallow of zaid season).

Double cropping *:* Wheat/Maize/black gram-mustard/ gram/lentil/winter vegetables. growing of two or more than two crops simultaneously in the same field at the same time with an objective to mitigate the risk factors as well as enhancement in the productivity & profitability in the per unit area e.g. wheat mustard, lentil+ line seed, Sugarce + mustard Gram + Line seed , Maize + Arhar etc.

Irrigated Agriculture

One Year Rotation **:** Growing of number of crops in such a way that must complete their life cycle within agricultural year in a strict rotation without deteorating soil fertility is called one year crop rotation. Examples Rice-wheat, Rice- mustard, maiz-potato, maize-gram/pea/lentil, rice-barley-zaid maize, maize-potato-urd/mung etc.

2.8.3.1 Area, Production and Productivity of major crops cultivated in the district

Sl. No.	Crop	Area (ha)	Productivity (qtl/ha)	Production (qtl)
Kharif				
1.	Paddy	94847	26.09	2474558
2.	Maize	69	14.05	969.45
3.	Jowar	373	12.21	4554.33
4.	Arhar	2368	9.23	21856.64
5.	Pearl millet	4899	14.43	70692.57
6.	Groundnut	99	7.17	709.83
7.	Urd	167	3.88	647.96
8.	Moong	39	2.16	84.24
Rabi				
1.	Wheat	93371	22.59	2109251
2.	Barley	709	18.79	13322.11
3.	Gram	208	8.40	1747.2
4.	Pea	1999	16.59	33163.41
5.	Lentil	11815	7.14	84359.1
6.	Rai	353	11.58	4087.74
7.	Toria	1262	3.58	4517.96
8.	Potato	914	207.53	189682.4

Table No.2.12: Area, Production and Productivity of major crops cultivated in the project area

Major Crops, their Productivity and Production

Name of MWS Noori 2A7C2a2a

Area in ha

S.No	Crop.	Area in (ha.)		Productivity Q,/ha		Production (Q.)				Remarks
						Grain/Main product		Fodder/Fuel/ other Product.		
		Irrigated	Rainfed	Irrigated	Rainfed.	Irrigated	Rainfed	Irrigated	Rainfed	
A	**Kharif**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
1	Rice	1540.00	260.00	42.00	11.00	64680.00	286.00	**-**	**-**	
2	Maze	-	-	-	-	-	-	**-**	**-**	
3	Arhar	-	10.00	-	12.00	-	120.00	**-**	**-**	
4	Urd/Mung	-	-	-	-	-	-	**-**	**-**	
5	vegetables (Cropwise)	-	-	-	-	-	-	**-**	**-**	
6	Fodder	-	3.00	-	80.00	-	240.00	**-**	**-**	
..	Other, specify	-	-	-	-	-	-	**-**	**-**	
B	**Rabi**	-	-	-	-	-	-	**-**	**-**	
1	Wheat	1470.00	-	31.00	-	45570.00	-	1350.00	-	
2	Barley	-	6.00	-	11.00	-	66.00	-	-	
3	Masoor	-	25.00	-	10.00	-	250.00	-	-	
4	Gram	-	32.00	-	9.00	-	288.00	-	-	
5	Pea	-	-	-	-	-	-	-	-	
6	Mustard	28.00	3.00	10.00	7.00	280.00	70.00	84.00	21.00	
7	Potato	22.00	-	110.00	10.00	2420.00	-	-	-	
8	vegetables (Cropwise)	-	-	-	-	-	-	-	-	
9	Fodder	8.00	-	120.00	-	-	-	960.00	-	
..	Other, specify	-	-	-	-	-	-	-	-	
C	**Zaid**	-	-	-	-	-	-	-	-	
1	vegetables (Cropwise)	-	-	-	-	-	-	-	-	
2	Fodder	-	-	-	-	-	-	-	-	
3	Urd/Mung	-	-	-	-	-	-	-	-	
4	Sugarcane	4.00	-	450.00	-	1800.00	-	-	-	
..	Other, specify	-	-	-	-	-	-	-	-	
	Total	**3072.00**	**339.00**	**-**	**-**	**114750.00**	**3894.00**	**2394.00**	**21.00**	

Summary

	Food Production (Qtls.	Quantity
a	**Cerals**	113176.00
b	**Pulses**	658.00
C	**Oilseeds**	350.00
d		
	Potato	2420.00
e	**Others**	-
	Total	116604
	Fodder Production (qtls.)	
a	**Dry foder**	1350.00
b	**Green Fodder**	1200.00
	Fuel Production (qtls.)	-
a	**Mustard**	105.00
	Sugarcane	1800.00
	Grand Total	**121059.00**

Crop Intensity%=Gross area Sown /Net area Sown*100
Gross area sown=**3411.00** Hec.
Net area sown=**2501.70** Hec.
CI.=**136.34**%

Name of MWS **Paikushi 2A7C2a1d**

Area in ha

S.No	Crop.	Area in (ha.)		Productivity Q,/ha		Production (Q.)				Remarks
						Grain/Main product		Fodder/Fuel/ other Product.		
		Irrigated	Rainfed	Irrigated	Rainfed.	Irrigated	Rainfed	Irrigated	Rainfed	
A	**Kharif**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
1	Rice	712.60	18.00	45.00	12.00	32067.00	2160.00	**-**	**-**	
2	Maze	**-**	**-**	**-**	**-**	**-**	-	**-**	**-**	
3	Arhar	**-**	**-**	**-**	**-**	**-**	-	**-**	**-**	
4	Urd/Mung	**-**	**-**	**-**	**-**	**-**	-	**-**	**-**	
5	vegetables (Cropwise)	**-**	**-**	**-**	**-**	**-**	-	**-**	**-**	
6	Fodder	**-**	**-**	**-**	**-**	**-**	-	**-**	**-**	
..	Other, specify	-	-	-	-	-	-	**-**	**-**	
B	**Rabi**	-	-	-	-	-	-	**-**	**-**	
1	Wheat	631.00	-	30.00	-	18930.00	-	750.00	-	
2	Barley	-	75.00	-	9.00	-	675.00	-	-	
3	Masoor	-	32.00	-	10.00	-	320.00	-	-	
4	Gram	-	49.00	-	9.00	-	441.00	-	-	
5	Pea	-	-	-	-	-	-	-	-	
6	Mustard	30.00	35.00	10.00	6.00	300.00	210.00	90.00	63.00	
7	Potato	5.00		120.00	-	600.00	-	-	-	
8	vegetables (Cropwise)	-	-	-	-	-	-	-	-	
9	Fodder	3.00	-	110.00	-	-	-	330.00	-	
..	Other, specify	-	-	-	-	-	-	-	-	
C	**Zaid**	-	-	-	-	-	-	-	-	
1	vegetables (Cropwise)	-	-	-	-	-	-	-	-	
2	Fodder	-	-	-	-	-	-	-	-	
3	Urd/Mung	-	-	-	-	-	-	-	-	
4	Sugarcane	-	-	-	-	-	-	-	-	
..	Other, specify	-	-	-	-	-	-	-	-	
	Total	**1381.60**	**371.00**	**-**	**-**	**51897.00**	**3806.00**	**1070.00**	**63.00**	

Summary

Food Production (Qtls.)

		Quantity
a	**Cerals**	53832.00
b	**Pulses**	761.00
C	**Oilseeds**	510.00
d		
	Potato	600.00
e	**Others**	-
	Total	55703.00
	Fodder Production (qtls.)	
a	**Dry foder**	750.00
b	**Green Fodder**	330.00
	Fuel Production (qtls.)	-
a	**Mustard**	153.00
	Sugarcane	-
	Grand Total	56936.00

Crop Intensity%=Gross area Sown /Net area Sown*100
Gross area sown=**1752.60** Hec.
Net area sown=**1101.44** Hec.
CI.=**159.11**%

Name of MWS Sikta (2A7C2a2c)

Area in ha

S.No	Crop.	Area in (ha.)		Productivity Q,/ha		Production (Q.)				Remarks
						Grain/Main product		Fodder/Fuel/ other Product.		
		Irrigated	Rainfed	Irrigated	Rainfed.	Irrigated	Rainfed	Irrigated	Rainfed	
A	**Kharif**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
1	Rice	610.00	425.00	36.00	14.00	21960.00	5950.00			
2	Maze	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
3	Arhar	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
4	Urd/Mung	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
5	vegetables (Cropwise)	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
6	Fodder	**-**	**8.00**	**-**	**90.00**	**-**	-	**-**	**720.00**	
..	Other, specify	-	-	-	-	-	-	**-**	**-**	
B	**Rabi**									
1	Wheat	620.00	300.00	31.00	13.00	19220.00	3900.00	580.00		
2	Barley	-	150.00	-	11.00	-	1650.00	**-**	**-**	
3	Masoor	-	50.00	-	9.00	-	450.00	**-**	**-**	
4	Gram	-	40.00	-	10.00	-	400.00	**-**	**-**	
5	Pea	-	-	-	-	-	-	**-**	**-**	
6	Mustard	20.00	10.00	10.00	6.00	200.00	60.00	**-**	**-**	
7	Potato	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
8	vegetables (Cropwise)	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
9	Fodder	6.00	-	125.00	-	-	-	750.00	-	
..	Other, specify	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
C	**Zaid**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
1	vegetables (Cropwise)	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
2	Fodder	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
3	Urd/Mung	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
4	Sugarcane	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
..	Other, specify	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
	Total	**1266.00**	**983.00**	**-**	**-**	**42780.00**	**12410.00**	**1330.00**	**720.00**	

Summary

	Food Production (Qtls.)	Quantity
a	**Cerals**	52680.00
b	**Pulses**	850.00
C	**Oilseeds**	260.00
d		
	Potato	1400.00
e	**Others**	-
	Total	55190.00
	Fodder Production (qtls.)	-
a	**Dry foder**	580.00
b	**Green Fodder**	1470.00
	Fuel Production (qtls.)	-
a	**Mustard**	-
	Sugarcane	-
	Grand Total	57240.00

Crop Intensity%=Gross area Sown /Net area Sown*100
Gross area sown=**2249.00** Hec.
Net area sown=**1506.14** Hec.
CI.=**149.32**%

Name of MWS **Beera Saray2A7C2a1a**

Area in ha

S.No	Crop.	Area in (ha.)		Productivity Q,/ha		Production (Q.)				Remarks
						Grain/Main product		Fodder/Fuel/ other Product.		
		Irrigated	Rainfed	Irrigated	Rainfed.	Irrigated	Rainfed	Irrigated	Rainfed	
A	**Kharif**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
1	Rice	560.00	360.00	38.00	12.00	21280.00	4320.00	**-**	**-**	
2	Maze	**-**	**25.00**	**-**	**16.00**	**-**	**400.00**	**-**	**-**	
3	Arhar	**-**	**12.00**	**-**	**10.00**	**-**	**120.00**	**-**	**-**	
4	Urd/Mung	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
5	vegetables (Cropwise)	**2.00**	**-**	**80.00**	**-**	**160.00**	**-**	**-**		
6	Fodder	**-**	**16.00**	**-**	**70.00**	**-**	**-**	**-**	**1120.00**	
..	Other, specify	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
B	**Rabi**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
1	Wheat	540.00	160.00	28.00	12.00	15120.00	1920.00	460.00	-	
2	Barley	-	105.00	-	14.00	-	1470.00	**-**	**-**	
3	Masoor	-	20.00	-	9.00	-	180.00	**-**	**-**	
4	Gram	-	25.00	-	10.00	-	250.00	**-**	**-**	
5	Pea	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
6	Mustard	15.00	8.00	10.00	6.00	150.00	48.00	**45.00**	**14.00**	
7	Potato	**30.00**	**-**	**125.00**	**-**	**3750.00**	**-**	**-**	**-**	
8	vegetables (Cropwise)	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
9	Fodder	16.00	-	140.00	-	-	-	2240.00		
..	Other, specify	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
C	**Zaid**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
1	vegetables (Cropwise)	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
2	Fodder	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
3	Urd/Mung	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
4	Sugarcane	**4.00**	**-**	**400.00**	**-**	**1600.00**	**-**	**-**	**-**	
..	Other, specify	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
	Total	**1167.00**	**731.00**	**-**	**-**	**4260.00**	**8708.00**	**2745.00**	**1134.00**	

Summary

		Quantity
	Food Production (Qtls.)	
a	**Cerals**	44510.00
b	**Pulses**	550.00
C	**Oilseeds**	190.00
d		
	Potato	3750.00
e	**Vigitable**	160.00
	Total	49168.00
	Fodder Production (qtls.)	
a	**Dry foder**	460.00
b	**Green Fodder**	3360.00
	Fuel Production (qtls.)	-
a	**Mustard**	59.00
	Sugarcane	1600.00
	Grand Total	54647.00

Crop Intensity%=Gross area Sown /Net area Sown*100
Gross area sown=1898 Hec.
Net area sown=**1297.96** Hec.
CI.=**146.22**%

Name of MWS Barhan 2A7C2a2b

Area in ha

S.No	Crop.	Area in (ha.)		Productivity Q,/ha		Production (Q.)				Remarks
						Grain/Main product		Fodder/Fuel/ other Product.		
		Irrigated	Rainfed	Irrigated	Rainfed.	Irrigated	Rainfed	Irrigated	Rainfed	
A	**Kharif**	-	-	-	-	-	-	-	-	
1	Rice	860.00	450.00	41.00	11.00	35260.00	4950.00	-	-	
2	Maze	**2.00**	-	**16.00**	-	**32.00**	-	-	-	
3	Arhar	-	**4.00**	-	**10.00**	-	**40.00**	-	-	
4	Urd/Mung	-	-	-	-	-	-	-	-	
5	vegetables (Cropwise)	-	-	-	-	-	-	-	-	
6	Fodder	-	**8.00**	-	**60.00**		-	-	**480.00**	
..	Other, specify	-	-	-	-	-	-	-	-	
B	**Rabi**	-	-	-	-	-	-	-	-	
1	Wheat	880.00	350.00	30.00	12.00	26400.00	4200.00	790.00	-	
2	Barley	-	180.00	-	12.00	2160.00	-	-	-	
3	Masoor	-	50.00	-	9.00	-	450.00	-	-	
4	Gram	-	30.00	-	10.00	-	300.00	-	-	
5	Pea	-	-	-	-	-	-	-	-	
6	Mustard	30.00	10.00	10.00	6.00	300.00	60.00	**90.00**	**18.00**	
7	Potato	-	-	-	-	-	-	-	-	
8	vegetables (Cropwise)	-	-	-	-	-	-	-	-	
9	Fodder	2.00	-	110.00	-	-	-	220.00		
..	Other, specify	-	-	-	-	-	-	-	-	
C	**Zaid**	-	-	-	-	-	-	-	-	
1	vegetables (Cropwise)	-	-	-	-	-	-	-	-	
2	Fodder	-	-	-	-	-	-	-	-	
3	Urd/Mung	-	-	-	-	-	-	-	-	
4	Sugarcane	-	-	-	-	-	-	-	-	
..	Other, specify	-	-	-	-	-	-	-	-	
	Total	**1814.00**	**1082.00**	-	-	**62552.00**	**12160.00**	**1100.00**	**498.00**	

Summary

	Food Production (Qtls.)	Quantity
a	**Cerals**	73002.00
b	**Pulses**	790.00
C	**Oilseeds**	360.00
d		
	Potato	560.00
e	**Vigitable**	-
	Total	74712.00
	Fodder Production (qtls.)	
a	**Dry foder**	790.00
b	**Green Fodder**	700.00
	Fuel Production (qtls.)	-
a	**Mustard**	108.00
	Sugarcane	-
	Grand Total	76310.00

Crop Intensity%=Gross area Sown /Net area Sown*100
Gross area sown=2896 Hec.
Net area sown=**2337.99** Hec.
CI.=**123.86**%

Name of MWS Jigna2A7C1a1b

Area in ha

S.No	Crop.	Area in (ha.)		Productivity Q,/ha		Production (Q.)				Remarks
						Grain/Main product		Fodder/Fuel/ other Product.		
		Irrigated	Rainfed	Irrigated	Rainfed.	Irrigated	Rainfed	Irrigated	Rainfed	
A	**Kharif**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
1	Rice	335.00	160.00	40.00	10.00	13400.00	1600.00	**-**	**-**	
2	Maze	**4.00**	**-**	**15.00**	**-**	**60.00**	**-**	**-**	**-**	
3	Arhar	**-**	**8.00**	**-**	**10.00**	**-**	**80.00**	**-**	**-**	
4	Urd/Mung	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
5	vegetables (Cropwise)	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
6	Fodder		**10.00**	**-**	**80.00**	**-**	**-**	**-**	**800.00**	
..	Other, specify	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
B	**Rabi**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
1	Wheat	306.00	50.00	30.0	16.00	9180.00	800.00	780.00	-	
2	Barley	-	8.00	-	12.00	-	96.00	**-**	**-**	
3	Masoor	-	5.00	-	10.00	-	50.00	**-**	**-**	
4	Gram	-	10.00	-	10.00	-	100.00	**-**	**-**	
5	Pea	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
6	Mustard	12.00	5.00	8.00	4.00	96.00	20.00	**28.80**	**6.00**	
7	Potato	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
8	vegetables (Cropwise)	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
9	Fodder	7.00	-	110.00	-	-	-	770.00	-	
..	Other, specify	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
C	**Zaid**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
1	vegetables (Cropwise)	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
2	Fodder	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
3	Urd/Mung	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
4	Sugarcane	**2.00**	**-**	**425.00**	**-**	**850.00**		**-**	**-**	
..	Other, specify	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	
	Total	**674.00**	**256.00**	**-**	**-**	**24626.00**	**2846.00**	**1578.80**	**806.00**	

Summary

	Food Production (Qtls.)	Quantity
a	**Cerals**	25136.00
b	**Pulses**	230.00
C	**Oilseeds**	116.00
d		
	Potato	1040.00
e	**Vigitable**	-
	Total	25722.00
	Fodder Production (q.)	-
a	**Dry foder**	780.00
b	**Green Fodder**	1570.00
	Fuel Production (q.)	-
a	**Mustard**	34.80
	Sugarcane	850.00
	Grand Total	28956.80

Crop Intensity%=Gross area Sown /Net area Sown*100
Gross area sown=930.00 Hec.
Net area sown=**735.24** Hec.
CI.=**126.48%**

Crop productivity: The agricultural productivity is primarily driven by the amount and distribution of rain water specifically during two cropping seasons i.e. rabi & kharif. Productivity of kharif crops is also affected by the late onset or early withdrawal of monsoon as well as intermittent droughts of variable duration & intensity. The farmers also do not have suitable cropping systems to deal aberrant weather, weeds impose considerable.

Constraint in productivity of both kharif and rabi crops under irrigated as well as rainfed production system. Farmers undertake normally one manual weeding in paddy & other valuable crops, however, practice is energy and time consuming. Use of we divided is rare in the watershed.

The mixed cropping is in practice in limited area with kharif crops like Arher, maize, mung, urd, bajra & jowar but it is not only irrational but also unscientific and be set with low productivity. Subsequent rabi crops in general and mustard, gram pea, barley crops, in particular are raised on.

Residual soil moisture under rainfed production system during post monsoon season. Imbalanced use of fertilizers is common is not only rabi & kharif crops but also in rainfed and irrigated production system. The recommended deep ploughing for enhanced in sites residual soil moisture conservation and higher production is also not followed in the watershed. The shallow ploughing through tractor drawn till age implements are available with the farmers in the watershed but deep ploughing 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 specifically with legumes, use of FYM/compost, vermi-compost, bio fertilizers, soils & water conservation measures use of brought up or in sites 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, weed mulching, agro-forestry, vegetative barriers etc also completely lack in watershed.

2.9. Indigenous technological knowledge (ITK)

The agriculture is an old traditional practice of farmers in the watershed who have improved themselves with passage of the time according to their domestic need and technological reforms in the nearby areas. The villagers have their traditional village ponds, practice of field bunding which typically constitute agriculture related ITKs in the watershed. The mustard being a cash/fire wood crop of the watershed is being cultivated in self designed manner by the farmers. However, limited fertilizer application specifically the DAP came in to practice since about 20 years.

2.10 Horticulture

The subtropical fruits and vegetables have very good potential in the watershed. The fruit trees has limited in number like mango, guava, papaya, lemon, lime, ber, aonal, bael as vegetables like cucurbits, okra, radish, tomato,cauliflower cabbage, garlic, onion, brinjal, chilly, but they are found surviving well in the watershed villages. Organized orchards, commercial vegetable cultivation, horti-agri and other systems of agro-forestry etc are lacking but have good potential in the water shed.

2.11. Forest and other Vegetation

2.11.1. Forests

The watershed has no forest area only some wild trees are found in scattered manner.

2.11.2. Horticulture/ Agro-forestry

No horticulture and Agro forestry practices were observed in the watershed.

2.11.3. 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, build up soil fertility and productivity, soil conservation, partly meeting out the fire wood demand of rural community and moreover, optimizing the economical return from system as a whole under typical semi arid climate in the watershed. The other agro-forestry systems like agri-silvi, silvi-pastoral, bund and boundary plantations also have good potential to cater the fire wood and fodder demands of the rural community in the watershed. The existing area under agro-forestry is almost negligible. *Prosopis juliflora* may be planted as block or sole plantation specifically on marginal and degraded lands in the watershed. The agro-forestry interventions comprising of ber, bail, aonla, guava, popular etc may be applied to benefit of the farmers under rain-fed to irrigated production systems on leveled to sloping 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.

Conclusions

The land capability classification of IWMP -I watershed provides reasonable good information with regard to capability of soil, that could be used for agriculture, agri-horticulture, silviculture and pasture development. The majority of land form is coming under class II, which give an insight of good agriculture production potential of this watershed. The productivity of these lands could be further enhanced by adoption of simple soil & water conservation measures like mild leveling, bunding, diversion drain and in-situ moisture conservation practices. The reasonable area is under class - indicating greater potential of this watershed for forestry and pasture development. The major physical limitations in case of agriculture soils are the sub soil hardness, low water infiltrability and slope. In case of area under topes of watershed, the most pronounced limitation of soil depth was noticed followed by severe erosion hazard and coarse soil texture. A small portion of watershed is under seasonally waterlogged. The soils under waterlogged area could be used for some other beneficial farming activities during the kharif season also.

3. BASELINE SURVEY AND PARTICIPATORY RURAL PLANNING

3.1 Demographic pattern

The total populations of the project area are 53766 and 6646 no. households. The literacy rate of the people are satishfactory, total no of literate person are **39375** The average family size is 8.08 persons. In details given below table-

Table No.3.1 Demographic pattern

S.N.	Name of Micro Watershed	Name of Gram Panchayat	Name of Village	Total Population			Population of SC/ST		
				Total	Male	Female	Total	Male	Female
1	2	3	4	5	6	7	8	9	10
1.	Noori 2A7C2A2A	NOORI	NOORI	1567	813	754	290	154	136
			TAMBAGARH	685	375	310	265	150	115
			CHILBILA	Unhabitate					
		BAGHARI	BAGHARI	1178	627	551	252	139	113
		RAMRUP DASPURI	RAMRUP DASPURI	1824	939	885	267	143	124
			VISUNPURA KHURD	476	262	214	-	-	-
		PIPERDAHA	PIPERDAHA	782	403	379	249	133	116
	Total			**6512**	**3419**	**3093**	**1323**	**719**	**604**
2.	PAIKUSI	PAIKUSI	PAIKUSI	2285	1201	1084	609	324	285
	2A7C2a1d		KHAMANPUR	Unhabitate					
			RAIBHANPUR	Unhabitate					
		BAHORA	BAHORACHANDEL	1279	655	624	160	78	82
		CHANDEL	SALEMPUR KHURD	220	107	113	37	20	17
			KUSAHA	595	309	286	-	-	-
	Total			**4379**	**2272**	**2107**	**806**	**422**	**384**
3.	SIKATA 2A7C2a2c	SIKATA	SIKATA	1483	765	718	252	130	122

			DAINA	1103	597	506	148	76	72
			BASANT PUR	265	144	121	47	18	29
		BHAISUR	BHAISUR	734	371	363	120	64	56
			GORKHA	395	205	190	12	05	07
			BHASHAKALAN	388	186	202	-	-	-
		DIGHI	DIGHI	1489	800	689	333	169	164
			KAPASIYA	429	221	208	87	50	37
		EMILIYA	EMILIYA	1701	915	786	418	222	196
			BARDIHA	918	492	426	196	106	90
		AMRA	AMRA	2901	1490	1411	832	420	412
	Total			**11806**	**6186**	**5620**	**2445**	**1260**	**1185**
4.	BERHAN	GOPALPUR	SIRKALPUR	684	342	342	185	91	94
		KHAJHARA	BERI KALAN	456	254	202	115	70	45

			KHAJHARA	600	307	293	172	95	77
			BERIKHURD	422	224	198	08	05	03
		SAWAL JALALPUR	SAWAL JALALPUR	844	441	403	228	125	103
			KAMHARI	172	88	84	134	68	66
		AWATI	AWATI	2753	1439	1314	1131	602	529
		GANDHINAGAR	BERHAN	2249	1168	1081	324	173	151
		(BERHAN)	SHITALPUR	544	279	265	-	-	-
		PRAKASHPUR (MAHURA)	MAHURA	2265	1151	1114	220	118	102
			ALAMKHTOPUR	776	409	367	355	196	159
		RAITHA	RAITHA	2035	1020	1015	533	268	265
			CHILBILI	613	311	302	613	311	302
	Total			**14413**	**7433**	**6980**	**4018**	**2122**	**1896**
5.	Veera Sarai	VEERA SARAI (MURLIPUR)	VEERA SARAI	1906	977	929	247	176	121
			BAYANPUR	383	190	193	214	112	102
		MAHUJI	MAHUJI	2830	1445	1385	685	350	335
		AWAHI	AWAHI	1670	882	788	507	278	229
			HINAUTA	813	417	396	683	351	332
		DEDGAON	DEDGAON	1366	694	672	195	101	94
			TIKARI	640	328	312	105	55	50
			GISASIPUR	43	20	23	43	20	23
	Total			**9651**	**4953**	**4698**	**2679**	**1443**	**1286**
6.	JIGNA	JIGNA	JIGNA	1303	683	620	335	172	163
		MEDHAN	MEDHAN	2525	1339	1186	457	243	214

			DAWANPURA	352	186	166	03	1	2
		SISURAKALA	SISURAKALA	2825	1429	1396	1025	543	482
	TOTAL			**7005**	**3637**	**3368**	**1820**	**959**	**861**
GRAND TOTAL				**53766**	**27900**	**25866**	**13091**	**6925**	**6216**

3.2. Literacy

Literacy has been described as the ability to read for knowledge and write coherently and think critically about the written word. Literacy can also include the ability to understand all forms of communication, be it body language, pictures, video & sound (reading, speaking, listening and viewing). Evolving definitions of literacy often include all the symbol systems relevant to a particular community. Literacy encompasses a complex set of abilities to understand and use the dominant symbol systems of a culture for personal and community development. In a technological society, the concept of literacy is expanding to include the media and electronic text, in addition to alphabetic and number systems. These abilities vary in different social and cultural contexts according to need and demand. The details of literacy rate are given below in tabular form-

Table no. 3.2: Literacy rate detail

S. No.	Name of Micro Watershed	Name of Villages	Total population	% of Literacy		
				Male	Female	Total
1	2A7C2a2c	Sikta, Sawal jalalpur, Birbhanpur, Kapsya, Dayna, Dighi	11806	5620	3210	**8830**
2	2a7C2a1a	Awhi, Virasrai, bayanpur,Sisaura Khurd,Mahuji,Kusha,dedhgavan, Tikri,Gosasipur	9651	4360	3125	**7485**
3	2A7C2a1d	Kusha,SalempurKhurd, Bagdiya,Paikusi, Lodipur,Kursikhurd	4379	1830	1200	**3030**
4	2A7C2a2b	Chilbili,Malwari,khaujhara,Kambhari, Rapuri,Awti,Barhan, Alamkhatopur,Raitha,Sitalpur	14413	6875	4500	**11375**
5	2A7C2a2a	Tambaghad, Chilbila,Chakniyamtula,Visunpurakhurd ,baghri.Sisaurakala,Noori, Salempurkhurd,Awhi,Ramropdaspur	6512	3100	1120	**4220**
6	2A7C2a1b	Jigna,Medhan,Daunpura,Hinauta, Sisaurakala,Awhi,Sisaurkhurd	7005	3085	1350	**4435**
Total			**53766**	**24870**	**14505**	**39375**

Source: District statistic magazine and Secondary data

3.3. Migration pattern

Human migration is physical movement by humans from one area to another, sometimes over long distances or in large groups. Historically this movement was nomadic, often causing significant conflict with the indigenous population and their displacement or cultural assimilation. Only a few nomadic people have retained this form of lifestyle in modern times. Migration has continued under the form of both voluntary migration within one's region, country, or beyond and involuntary migration (which includes the slave trade, trafficking in human beings and ethnic cleansing). People who migrate into a territory are called immigrants, while at the departure point they are called emigrants. Small populations migrating to develop a territory considered void of settlement depending on historical setting, circumstances and perspective are referred to as settlers or colonists, while populations displaced by immigration and colonization are called refugees. The rest of this article will cover sense of a "change of residence", rather than the temporary migrations of travel, tourism, pilgrimages, or the commute.

Table no. 3.3: Migration detail

S. No.	Name of Micro Watershed	No. of Villages	Total population	Migration			Main reason for migration	Income during migration (Appx.)/Person
				Total	Male	Female		
1	2A7C2a2c Sikata	22	11806	856	750	106	Poverty & Un-Employment	Rs 3500-6000/ month
2	2a7C2a2a Vira Saray	18	9651	612	586	26	Poverty & Un-Employment	Rs 3500-6000/ month
3	2A7C2a1d Paikusi	18	4379	310	262	48	Poverty & Un-Employment	Rs 3500-6000/ month
4	2A7C2a2b Noori	31	6512	598	540	58	Poverty & Un-Employment	Rs 3500-6000/ month
5	2A7C2a1b Jigna	10	7005	645	589	56	Poverty & Un-Employment	Rs 3500-6000/ month
6	2A7C2a1a Barhan	31	14413	1496	1340	156	Poverty & Un-Employment	Rs 3500-6000/ month
	Total	**130**	**53766**	**4517**	**4067**	**450**		

Source: District statistic magazine and Secondary data

Table No.3.4: Details of infrastructure in the project areas

SN	Name of Micro Watershed	CODE NO.	Parameters		Status			
1	2	3	4		5			
1	SIKTA	2A7C2a2c	(i)	Name of villages connected to the main road by an all-weather road	EMILIYA, DAINA,DIGHI, AMRA,SIKTA			
			(ii)	Village's Name provided with electricity	ALL PROJECT VILLAGES			
			(iii)	No. of households without access to drinking water	36			
			(iv)	No. of educational institutions : Primary(P)/ Secondary(S)/ Higher Secondary(HS)/ vocational institution(VI)	(P) 9	(S) 2	(HS) 1	(VI) ---
			(v)	Names of villages with access to Primary Health Centre	All vill. In Brurakhurd PHC			
			(vi)	Names of villages with access to Veterinary Dispensary	All Vill.			
			(vii)	Names of villages with access to Post Office	All Vill. In Barikala, dighi PO			
			(viii)	Names of villages with access to Banks	All Vill. In Barikala, dhina Bank			
			(ix)	Names of villages with access to Markets/ mandis	Dhina			
			(x)	Names of villages with access to Agro-industries	----			
			(xi)	Total quantity of surplus milk deficit	700 Ltr.			
			(xii)	No. of milk collection centres (e.g. Union(U)/ Society(S)/ Private agency(PA)/ others (O))	(U) ---	(S) ----	(PA) 4	(O) 2
			(xiii)	Name of villages with access to Anganwadi Centre	ALL VILLAGES			
			(xiv)	Any other facilities with names of villages (please specify)	THANA -DHINA, RLY. DHINA			

S N	Name of Micro Watershed	CODE NO	Parameters		Status			
1	2	3	4		5			
	VEERASARAI	2A7C2aia	(i)	Name of villages connected to the main road by an all-weather road	VEERASARAI,MAHUJI,AWHI, DEDGAON,			
			(ii)	Village's Name provided with electricity	VEERASARAI,MAHUJI,AWHI, DEDGAON,			
			(iii)	No. of households without access to drinking water	28			
			(iv)	No. of educational institutions : Primary(P)/ Secondary(S)/ Higher Secondary(HS)/ vocational institution(VI)	(P) 5	(S) 2	(HS) 1	(VI) ----
			(v)	Names of villages with access to Primary Health Centre	All Villages			
			(vi)	Names of villages with access to Veterinary Dispensary	All Villages			
			(vii)	Names of villages with access to Post Office	VEERASARAI			
			(viii)	Names of villages with access to Banks	All Villages			
			(ix)	Names of villages with access to Markets/ mandis	All Villages			
			(x)	Names of villages with access to Agro-industries	-------			
			(xi)	Total quantity of surplus milk deficit	650 ltr.			
			(xii)	No. of milk collection centres (e.g. Union(U)/ Society(S)/ Private agency(PA)/ others (O))	(U) ----	(S) ---	(PA) 2	(O) 5
			(xiii)	Name of villages with access to Anganwadi Centre	ALL VILLAGES			
			(xiv)	Any other facilities with names of villages (please specify)	POLICE STATION- AWAHI			

S N	Name of Micro Watershed	CODE NO	Parameters		Status			
1	2	3	4		5			
	BERHAN	2A7C2a2b	(i)	Name of villages connected to the main road by an all-weather road	BERHAN, RAITHA, KHAJHARA AWATI			
			(ii)	Village's Name provided with electricity	BERHAN, RAITHA, KHAJHARA, AWATI			
			(iii)	No. of households without access to drinking water	46			
			(iv)	No. of educational institutions : Primary(P)/ Secondary(S)/ Higher Secondary(HS)/ vocational institution(VI)	(P) 6	(S) 2	(HS) 1	(VI) ----
			(v)	Names of villages with access to Primary Health Centre	All Vill. In AWATI			
			(vi)	Names of villages with access to Veterinary Dispensary	All Vill. In AWATI			
			(vii)	Names of villages with access to Post Office	AWATI, BERHAN,RAITHA			
			(viii)	Names of villages with access to Banks	----			
			(ix)	Names of villages with access to Markets/ mandis	----			
			(x)	Names of villages with access to Agro-industries	-----			
			(xi)	Total quantity of surplus milk deficit	460 Ltr.			
			(xii)	No. of milk collection centres (e.g. Union(U)/ Society(S)/ Private agency(PA)/ others (O))	(U) ---	(S) ---	(PA) 2	(O) 7
			(xiii)	Name of villages with access to Anganwadi Centre	ALL VILLAGES			
			(xiv)	Any other facilities with names of villages (please specify)	-----			

S N	Name of Micro Watershed	CODE NO	Parameters		Status			
1	2	3	4		5			
	JIGNA	2A7C2a1b	(i)	Name of villages connected to the main road by an all-weather road	JIGNA, MEDHAN, SISURAKALA, AWATI			
			(ii)	Village's Name provided with electricity	SISURAKALA,SISURAKALA,AWATI			
			(iii)	No. of households without access to drinking water	34			
			(iv)	No. of educational institutions : Primary(P)/ Secondary(S)/ Higher Secondary(HS)/ vocational institution(VI)	(P) 7	(S) 2	(HS) ----	(VI) ----
			(v)	Names of villages with access to Primary Health Centre	SISURAKALA, MEDHAN			
			(vi)	Names of villages with access to Veterinary Dispensary	-----			
			(vii)	Names of villages with access to Post Office	MEDHAN, SISURAKALA			
			(viii)	Names of villages with access to Banks	All Vill.			
			(ix)	Names of villages with access to Markets/ mandis	All Vill.			
			(x)	Names of villages with access to Agro-industries	-----			
			(xi)	Total quantity of surplus milk deficit	635 ltr.			
			(xii)	No. of milk collection centres (e.g. Union(U)/ Society(S)/ Private agency(PA)/ others (O))	(U) --	(S) --	(PA) 5	(O) 2
			(xiii)	Name of villages with access to Anganwadi Centre	ALL VILLAGES			
			(xiv)	Any other facilities with names of villages (please specify)	------			

S N	Name of Micro Watershed	CODE NO	Parameters		Status			
1	2	3	4		5			
	NOORI	2A7C2a2a	(i)	Name of villages connected to the main road by an all-weather road	All Villages			
			(ii)	Village's Name provided with electricity	All Villages			
			(iii)	No. of households without access to drinking water	15			
			(iv)	No. of educational institutions : Primary(P)/ Secondary(S)/ Higher Secondary(HS)/ vocational institution(VI)	(P) 13	(S) 3	(HS) 1	(VI) ----
			(v)	Names of villages with access to Primary Health Centre	All Villages			
			(vi)	Names of villages with access to Veterinary Dispensary	All Villages			
			(vii)	Names of villages with access to Post Office	All Villages			
			(viii)	Names of villages with access to Banks	All Villages			
			(ix)	Names of villages with access to Markets/ mandis	-----			
			(x)	Names of villages with access to Agro-industries	-----			
			(xi)	Total quantity of surplus milk deficit	465 Ltr.			
			(xii)	No. of milk collection centres (e.g. Union(U)/ Society(S)/ Private agency(PA)/ others (O))	(U) --	(S) --	(PA) 4	(O) 3
			(xiii)	Name of villages with access to Anganwadi Centre	ALL VILLAGES			
			(xiv)	Any other facilities with names of villages (please specify)	------			

S N	Name of Micro Watershed	CODE NO	Parameters		Status			
1	2	3	4		5			
	PAIKUSHI	2A7C2a1d	(i)	Name of villages connected to the main road by an all-weather road	All Villages			
			(ii)	Village's Name provided with electricity	Paikushi, Bahora Chandel, kusaha			
			(iii)	No. of households without access to drinking water	30			
			(iv)	No. of educational institutions : Primary(P)/ Secondary(S)/ Higher Secondary(HS)/ vocational institution(VI)	(P) 4	(S) ---	(HS) -	(VI) ----
			(v)	Names of villages with access to Primary Health Centre	All Villages (Kandawa & Paikushi)			
			(vi)	Names of villages with access to Veterinary Dispensary	All Villages (Kandawa & Paikushi)			
			(vii)	Names of villages with access to Post Office	All Villages			
			(viii)	Names of villages with access to Banks	All Villages			
			(ix)	Names of villages with access to Markets/ mandis	-----			
			(x)	Names of villages with access to Agro-industries	-----			
			(xi)	Total quantity of surplus milk deficit	600 ltr.			
			(xii)	No. of milk collection centres (e.g. Union(U)/ Society(S)/ Private agency(PA)/ others (O))	(U) --	(S) --	(PA) 6	(O) 2
			(xiii)	Name of villages with access to Anganwadi Centre	ALL VILLAGES			
			(xiv)	Any other facilities with names of villages (please specify)	------			

The Block **Barahani and Dhanapur** is situated in Vindhyan Zone of Chandauli district and the border of Bihar. Block lies in eastern-north part of the district and is about 45 kilometers away from District Headquarter. Broad-gauge railway line from Mugal Sarai to Patna Pass through to selected micro watershed area. The Block comes under Agro climatic Zone 9. 3/4th of the total cultivated area is rain fed so therefore, farmers of the block have to dependent on rainwater for their crop production, although limited quantity of water remains available for crop production during rabi but that's too comes through the water bodies completely fed by rain water

GRAM PANCHYAT BAGHARI

P.R.A

RESOURCES MAP

GRAM PANCHYAT NOORI

SOCIAL MAP

RESOURCES MAP

Table No.3.5: DETAILS OF COMMON PROPERTY RESOURCES IN THE PROJECT AREA

1	2	4	5				6			
S. No.	Names of MWS with code	CPR Particulars	Total Area (ha) Area owned/ In possession of				Area available for treatment (ha)			
			Pvt. persons	Govt. (specify deptt.)	PRI	Any other (Pl. Specify)	Pvt. persons	Govt. (specify deptt.)	PRI	Any other (Pl. Specify)
	Noori 2A7C2a2a	1. Wasteland/ degraded land	54.16	51.24	-	-	47.64	-	-	-
		2. Pastures	-	6.52	-	-	-	6.52	-	-
		3. Orchards	-	-	-	-	-	-	-	-
		4. Village Woodlot	-	-	-	-	-	-	-	-
		5. Forest	-	-	-	-	-	-	-	-
		6. Village Ponds/ Tanks	-	10.24	-	-	-	-	-	-
		7. Community Buildings	-	-	0.74	-	-	-	-	-
		8. Weekly Markets	-	-	-	-	-	-	-	-
		9. Permanent markets	-	-	-	-	-	-	-	-
		10. Temples/ Places of worship	-	0.034	-	-	-	-	-	-
		11. Others (Pl. specify)/Comnity land	-	45.74	-	59.29	-	-	-	-
	Paikusi 2A7C2a1d	1. Wasteland/ degraded land	16.65	21.10	-	-	-	-	-	-
		2. Pastures	-	2.54	-	-	-	2.54	-	-
		3. Orchards	-	-	-	-	-	-	-	-
		4. Village Woodlot	-	-	-	-	-	-	-	-
		5. Forest	-	-	-	-	-	-	-	-
		6. Village Ponds/ Tanks	-	3.54	-	-	-	-	-	-
		7. Community	-	-	0.66	-	-	-	-	-

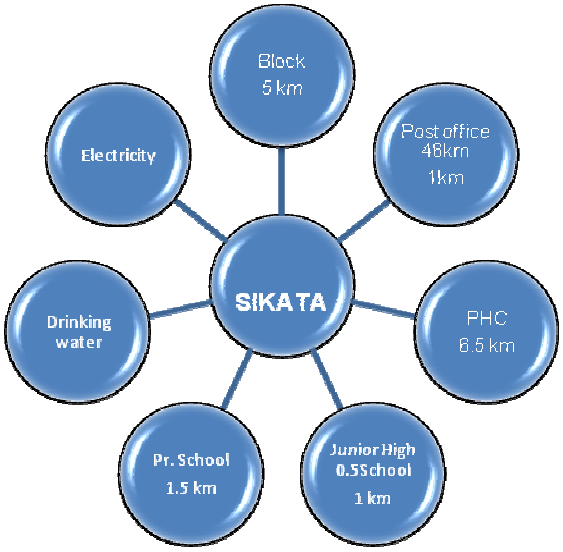
		Buildings								
		8. Weekly Markets	-	-	-	-	-	-	-	-
		9. Permanent markets	-	-	-	-	-	-	-	-
		10. Temples/ Places of worship	-	0.53	-	-	-	-	-	-
		11. Others (Pl. specify)/Comnity land	-	16.25	-	19.49	-	-	-	-
	Sikta 2A7C2a2c	1. Wasteland/ degraded land	30.92	63.53	-	-	30.92	-	-	-
		2. Pastures	-	-	-	-	-	-	-	-
		3. Orchards	-	-	-	-	-	-	-	-
		4. Village Woodlot	-	-	-	-	-	-	-	-
		5. Forest	-	-	-	-	-	-	-	-
		6. Village Ponds/ Tanks	-	13.41	-	-	-	-	-	-
		7. Community Buildings	-	-	3.32	-	-	-	-	-
		8. Weekly Markets	-	-	-	-	-	-	-	-
		9. Permanent markets	-	-	-	-	-	-	-	-
		10. Temples/ Places of worship	-	0.51	-	-	-	-	-	-
		11. Others (Pl. specify)/Comnity land	-	37.21	-	89.20	-	-	-	-
	Veerasarai 2A7C2a1a	1. Wasteland/ degraded land	39.46	37.53	-	-	39.46	-	-	-
		2. Pastures	-	-	-	-	-	-	-	-
		3. Orchards	0.32	-	-	-	-	-	-	-
		4. Village Woodlot	-	-	-	-	-	-	-	-
		5. Forest	-	-	-	-	-	-	-	-
		6. Village Ponds/ Tanks	-	3.23	-	-	-	-	-	-
		7. Community	-	-	2.85	-	-	-	-	-

		Buildings								
		8. Weekly Markets	-	-	-	-	-	-	-	-
		9. Permanent markets	-	-	-	-	-	-	-	-
		10. Temples/ Places of worship	-	1.42	-	-	-	-	-	-
		11. Others (Pl. specify)/Comnity land	-	40.58	-	44.97	-	-	-	-
	Barhan 2A7C2a2b	1. Wasteland/ degraded land	41.79	40.77	-	-	41.79	-	-	-
		2. Pastures	-	-	-	-	-	-	-	-
		3. Orchards	1.54	-	-	-	-	-	-	-
		4. Village Woodlot	-	-	-	-	-	-	-	-
		5. Forest	-	-	-	-	-	-	-	-
		6. Village Ponds/ Tanks	-	20.02	-	-	-	-	-	-
		7. Community Buildings	-	-	1.94	-	-	-	-	-
		8. Weekly Markets	-	-	-	-	-	-	-	-
		9. Permanent markets	-	-	-	-	-	-	-	-
		10. Temples/ Places of worship	-	2.83	-	-	-	-	-	-
		11. Others (Pl. specify)/Comnity land	-	22.85	-	46.52	-	-	-	-
	Jigna 2A7C2a1b	1. Wasteland/ degraded land	15.33	14.46	-	-	15.33	-	-	-
		2. Pastures	-	-	-	-	-	-	-	-
		3. Orchards	-	-	-	-	-	-	-	-
		4. Village Woodlot	-	-	-	-	-	-	-	-
		5. Forest	-	-	-	-	-	-	-	-
		6. Village Ponds/ Tanks	-	6.43	-	-	-	-	-	-
		7. Community	-	-	0.80	-	-	-	-	-

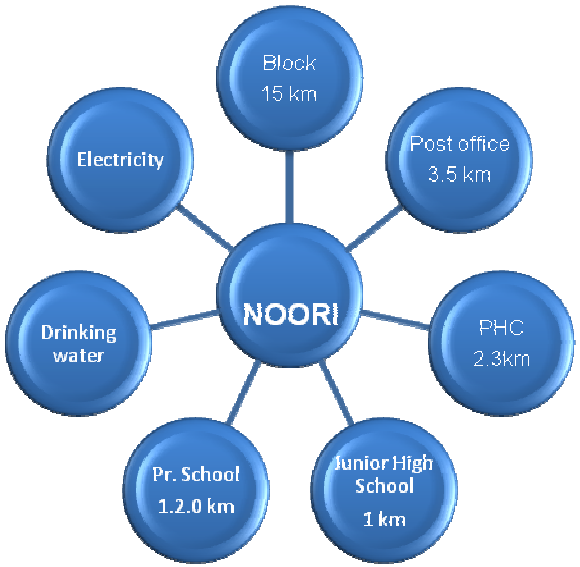
		Buildings								
		8. Weekly Markets	-	-	-	-	-	-	-	-
		9. Permanent markets	-	-	-	-	-	-	-	-
		10. Temples/ Places of worship	-	0.49	-	-	-	-	-	-
		11. Others (Pl. specify)/Comnity land	-	5.00	-	19.71	-	-	-	-

3.5.1 Venn diagram

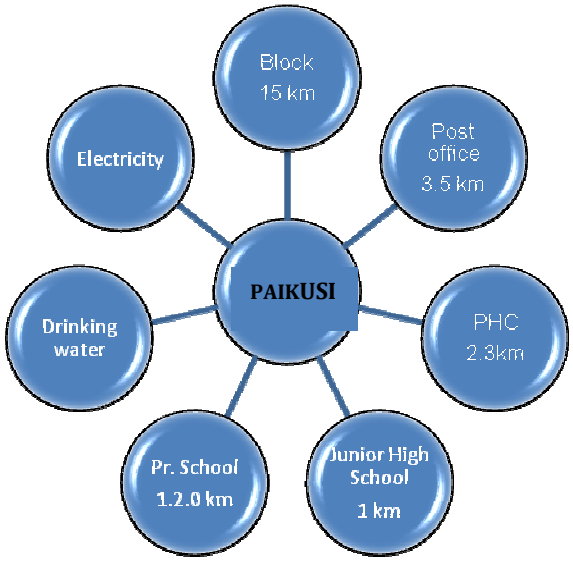
In the Venn diagram , farmers perceptions was recorded for importance and role of different development institution is relation to infrastructure development in the villages, importance has been depicted with size of circle and role with distance from the village circle. The Venn diagram of the IWMP -I watershed major villages are being shown below:



VENN DIGRAM OF VILLAGE SIKATA

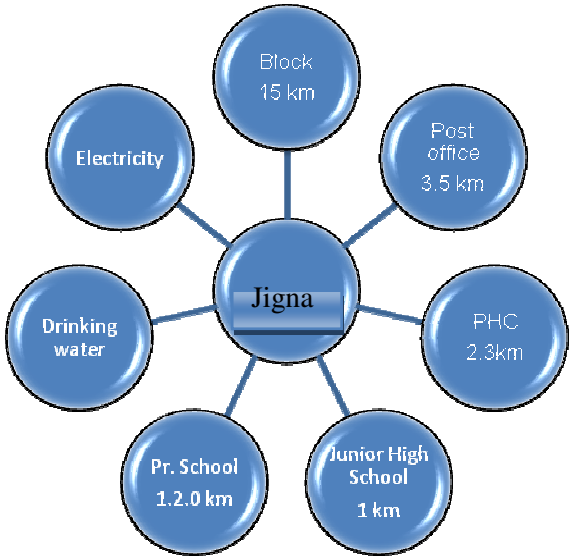


VENN DIGRAM OF VILLAGE NOORI

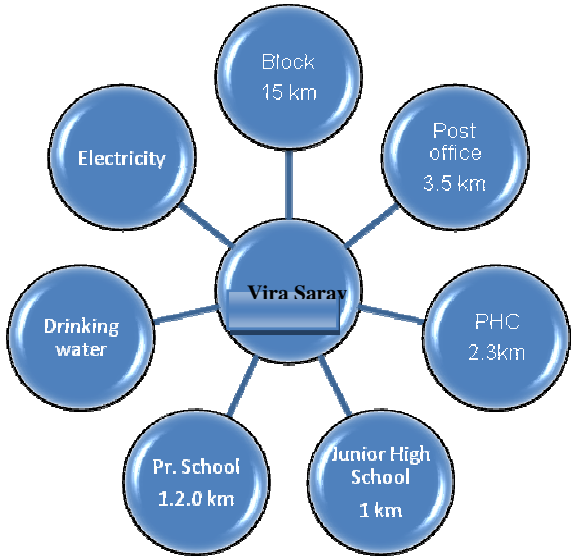


VENN DIGRAM OF VILLAGE PAIKUSI

VENN DIGRAM OF VILLAGE BARHAN



VENN DIGRAM OF VILLAGE JIGNA



VENN DIGRAM OF VILLAGE VIRA SARAY

FIELD SURVEY AND PLANNING

FIELD SURVEY (CONTOURING) WITH THE HELP OF GPS

Model No. Orgon-550

3. 6. Historical timeline

An historical timeline is the chronological record of important events in the history of the village which is useful in understanding its background in the context of three watersheds of Chandauli district. Historical timeline depicting important events in respect of different villages of the IWMP -I watershed was prepared through PRA. Historical timeline for important villages are given in table.

Village- Sikta- 2A7C2a2c		**Village-Noori-** 2a7C2a2a	
Year	**Activities**	**Year**	**Activities**
1700	Established	1710	Established
1963	Construction Bandhi (water harvesting structure)	1964	Construction Bandhi (water harvesting structure)
1965	Opening up Primary School	1985	Opening up Primary School
1976	Introduction of Tractor	1980	Introduction of Tractor
1978	Establishment of Gobar gas plant	1978	Establishment of Gobar gas plant
1979	Kacha road	1982	Kacha road
1985	Introduction of thresher	1987	Introduction of thresher
1986	First Tube well	1988	First Tube well
1990	First motorcycle	1992	First motorcycle
1993	TV and DVD player	1996	TV and DVD player
2002	Electricity in the village	2002	Electricity in the village
2003	Bituminous road	2003	Bituminous road
2005	Temple renovation	2007	Temple renovation
2009-10	Planning for watershed project	2009-10	Planning for watershed project
Village- Paikusi- 2A7C2a1d		**Village-Barhan-** 2A7C2a2b	
Year	**Activities**	**Year**	**Activities**
1700	Established	1710	Established
1963	Construction Bandhi (water harvesting structure)	1964	Construction Bandhi (water harvesting structure)
1965	Opening up Primary School	1985	Opening up Primary School
1976	Introduction of Tractor	1980	Introduction of Tractor
1978	Establishment of Gobar gas plant	1978	Establishment of Gobar gas plant
1979	Kacha road	1982	Kacha road
1985	Introduction of thresher	1987	Introduction of thresher
1986	First Tube well	1988	First Tube well
1990	First motorcycle	1992	First motorcycle
1993	TV and DVD player	1996	TV and DVD player
2002	Electricity in the village	2002	Electricity in the village
2003	Bituminous road	2003	Bituminous road
2005	Temple renovation	2007	Temple renovation
2009-10	Planning for watershed project	2009-10	Planning for watershed project

Village- Jigna- 2A7C2a1b		**Village-Vira Saray-** 2a7C2a1a	
Year	**Activities**	**Year**	**Activities**
1700	Established	1710	Established
1963	Construction Bandhi (water harvesting structure)	1964	Construction Bandhi (water harvesting structure)
1965	Opening up Primary School	1985	Opening up Primary School
1976	Introduction of Tractor	1980	Introduction of Tractor
1978	Establishment of Gobar gas plant	1978	Establishment of Gobar gas plant
1979	Kacha road	1982	Kacha road
1985	Introduction of thresher	1987	Introduction of thresher
1986	First Tube well	1988	First Tube well
1990	First motorcycle	1992	First motorcycle
1993	TV and DVD player	1996	TV and DVD player
2002	Electricity in the village	2002	Electricity in the village
2003	Bituminous road	2003	Bituminous road
2005	Temple renovation	2007	Temple renovation
2009-10	Planning for watershed project	2009-10	Planning for watershed project

Source: District statistic magazine and Secondary data

Table No.3.7: 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
			Before Monsoon	After Monsoon		
1	2	3	4	5	6	7
1	**Veerasarai 2A7C2a1a**	Veerasarai	7.90	6.20	2	
		Bayanpur	8.10	6.50	2	
		Mahuji	8.30	6.00	3	
		Awahi	7.60	5.80	3	
		Hinauta	7.80	6.10	2	
		Tekari	7.80	6.00	2	
		Gosasipur	7.75	5.90	1	
		Kusaha	7.50	5.60	1	
2	**Berhan 2A7C2a2b**	Sirkalpur	8.20	6.60	2	
		Khajhara	8.70	6.90	2	
		Veri Khurd	8.90	7.10	2	
		Raipuri	8.10	7.00	2	
		Kamhari	8.40	7.00	2	
		Berhan	7.90	6.50	3	

		Shitalpur	8.10	6.80	2	
		Raitha	8.40	5.40	2	
		Chilbili	7.50	5.10	2	
		Alamkhato pur	8.60	7.20	2	
		Awati	9.20	8.10	2	
		Mahura	9.10	7.80	2	
3	**Jigna 2A7C2a1b**	Jigna	8.00	6.00	3	
		Medhan	5.00	3.10	2	
		Sisurakala	6.00	4.90	3	
		Awahi	5.50	3.10	4	
		Hinuta	9.00	6.40	4	
		Davanpura	7.00	5.25	5	
		RamRupdashpur	6.50	4.40	5	
4	**Sikata 2A7C2a2c**	Sikata	5.00	3.65	3	
		Daina	6.00	4.90	5	
		Bhasure	5.50	4.30	2	
		Bhasakala	5.10	4.00	4	
		Gorkha	6.10	4.80	3	
		Dighi	6.10	4.70	6	

		Kapasia	5.45	4.15	2	
		Emiliya	5.80	4.30	7	
		Berdeeha	5.80	4.40	3	
		Amara	5.20	4.05	8	
		Sawaljalal pur	4.30	3.50	2	
		Bir Bhanpur	5.30	4.10	3	
		Tambagarh	6,50	5.10	1	
		Verikala	5.75	4.20	3	
		BaburaKhrd	5.50	4.00	2	
		BaburaKhas	5.60	4.30	3	
5	Noori 2A7c2a2a	Noori	8.5	7.3	4	-
		Tambagadh	9.00	8.10	5	-
		Salempur Khurd	8.6	7.5	3	-
		Baghari	8.7	7.00	3	-
		Bisunpur Khurd	9.5	8.10	2	-
		Ramrupdaspur	9.5	8.4	4	-
		Pipardaha	9.00	7.9	3	-
	Total	-	-	-	-	-
6	Paikusi 2A7C2a1d	Paikusi	7.60	5.90	3	-
		Bahora Chandel	7.90	6.10	2	-
		Kusha	6.80	5.3	2	-

3.7. Water Resource

Table no. 3.8: Information about water resources

S. N.	Name of Micro Watershed	Canal		Wells/Borewells		Tubewells		Ponds		Govt. handpump		Pvt. handpumps		Others	
		D	N	D	N	D	N	D	N	D	N	D	N	D	N
1	2A7C2a2c Sikata	100	4	300	7	250	5	310	7	235	18	284	42	-	-
2	2a7C2a1a Vira saray	100	5	300	7	250	5	310	7	235	18	284	32	-	-
3	2A7C2a1d Paikusi	100	3	300	2	250	2	310	9	235	14	284	10	-	-
4	2A7C2a2a Noori	100	4	300	7	250	5	310	7	235	18	284	42	-	-
5	2A7C2a1b Jigna	100	5	300	7	250	5	310	7	235	18	284	32	-	-
6	2A7C2a2b Barhan	100	3	300	2	250	2	310	9	235	14	284	10	-	-

D= Availability of water in days **N= Number**

Source: District statistic magazine and Secondary data

3.7.1. Per capita Average income

Table no. 3.9: Per capita average annual income in IWMP -I Chandauli

S. no.	Name of Project	Agriculture (Rs)	A. Husbandry (Rs)	Casual labour (Rs)	Others (Rs)	Total (Rs)
1	IWMP -I Chandauli	9000.0	6000.5	3500.0	690.0	**19190.5**

3.8 Livelihood :

What is Livelihood?

Livelihood is primarily intended for use by policymakers, planners, and implementers of local, regional and national government bodies interested or engaged in facilitating a more responsive, sustainable, and risk-reducing recovery process. Yet, IRP recognizes that governments are not the sole actors in disaster recovery and believes that the experiences collected in this document can benefit the many other partners working together to build back better.

Livelihood draws from documented experiences of past and present recovery efforts, collected through a desk review and consultations with relevant experts. These experiences and lessons learned are classified into two major issues:

1. Enabling livelihood protection
2. Improving livelihood promotion

The people of watershed area earn their livelihood from agriculture and animal husbandry. During lean period they migrate for daily wage laborers in block and district head quarter and as agriculture labor in other parts of the state. Another occupation of the people is parental small scale occupation.

Table No.3.10: Livelihood Status of Landless People

S. N.	Name & Code of micro watershed	Name of Village	Name of Livelihood Activity	No. of house hold engaged					Pre project Average Income	Desired Activities	Expected Income from desired activities	Remarks
				Sc	St	Other	Women	Total				
1	2	3	4	5	6	7	8	9	10	11	12	13
1	**Veerasarai 2A7C2a1a**	Veerasarai	Poultry	1	--	---	---	1	12000	Poultry	16000	
		Bayanpur	Poultry	2	---	---	---	2	23000	Poultry	34000	
		Mahuji	Poultry	--	--	3	---	3	33000	Poultry	49000	
		Awahi	Dairy	1	---	---	---	1	10000	Dairy	17000	
		Hinauta	Fish pro	2	---	---	---	2	22000	Fish p.	34000	
		Tekari	Dairy	2	---	---	---	2	22000	Dairy	35000	
		Gosasipur	Dairy	1	---	1	---	2	24000	Dairy	36000	
		Kusaha	Dairy	---	---	2	---	2	23000	Dairy	38000	
		Total of project	**-----**	**9**	**---**	**6**	**----**	**15**	**169000**	**------**	**269000**	
2	**Berhan 2A7C2a2b**	Sirkalpur	Dairy	1	---	1	---	2	17000	Dairy	26000	
		Khajhara	Fish	1	---	----	---	1	8000	Fish	10000	
		Veri Khurd	Dairy	1	---	---	----	1	8000	Dairy	11000	
		Raipuri	Dairy	---	---	1	---	1	9000	Dairy	12000	
		Kamhari	Dairy	---	---	1	---	1	8000	Dairy	12000	
		Berhan	Dairy	1	---	---	---	1	8000	Dairy	12000	
		Shitalpur	Dairy	1	---	1	---	2	16000	Dairy	24000	
		Raitha	Poultry	---	---	1	---	1	8000	Poultry	13000	
		Chilbili	Poultry	1	---	----	---	1	9000	Poultry	14000	
		Alamkhatopur	Dairy	1	---	1	---	2	16000	Dairy	25000	
		Awati	Dairy	---	---	1	----	1	8000	Dairy	12000	
		Mahura	Dairy	1	---	1	----	2	17000	Dairy	27000	
		Total of project	**-----**	**8**	**---**	**9**	**---**	**17**	**132000**	**------**	**198000**	
3	**Jigna 2A7C2a1b**	Jigna	Masala Pro.	1	---	---	1	2	21000	Masala Pro.	34000	

		Medhan	Poultry	1	---	1	---	2	22000	Poultry	37000	
		Sisurakala	----	---	---	---	----	---	----	----	----	
		Awahi	-----	--	--	---	---	---	----	----	----	
		Hinuta	---	---	--	---	---	---	----	---	----	
		Davanpura	Goatry	---	---	1	---	1	8000	Goatry	24000	
		RamRupdashpur	Poultry	1	--	---	---	1	10000	Poultry	14000	
		Total of project	-----	3	---	2	1	6	61000	-----	109000	
4	**Sikata 2A7C2a2c**	Sikata	Dairy	3	---	4	---	7	72000	Dairy	105000	
		Daina	Dairy	2	--	2	1	5	55000	Dairy	70000	
		Bhasure	Dairy	1	---	2	---	3	35000	Dairy	42000	
		Bhasakala	Dairy	1	---	2	1	4	45000	Dairy	60000	
		Gorkha	Dairy	1	---	1	---	2	20000	Dairy	26000	
		Dighi	Dairy	2	---	2	1	5	56000	Dairy	65000	
		Kapasia	Dairy	1	---	1	----	2	23000	Dairy	28000	
		Emiliya	Dairy	2	---	3	1	6	68000	Dairy	86000	
		Berdeeha	Dairy	2	---	3	1	6	65000	Dairy	78000	
		Amara	Dairy	2	--	3	1	6	70000	Dairy	90000	
		Sawaljalal pur	Dairy	2	---	5	1	8	85000	Dairy	112000	
		Bir Bhanpur	----	---	---	---	---	----	----	---	----	
		Tambagarh	Dairy	1	---	1	---	2	22000	Dairy	30000	
		Verikala	Dairy	1	--	1	---	2	51000	Dairy	28000	
		BaburaKhrd	Dairy	2	---	1	---	3	30000	Dairy	38000	
		BaburaKhas	Dairy	1	---	---	1	2	22000	Dairy	30000	
		Total of project	**-----**	**24**	**---**	**31**	**8**	**63**	**689000**	**-----**	**888000**	

1	2	3	4	5	6	7	8	9	10	11	12	13
1	Noori 2A7c2a2a	Noori	Fisheries	2	-	2	-	4	3800	Fisheries	56000	-
		Tambagadh	poultry	2	-	1	-	3	31000	Poultry	47000	-
		Salempur Khurd	Dairy	1	-	4	-	5	54000	Dairy	78000	-

		Baghari	Poultry	-	-	4	-	4	41000	Poultry	64000	-
		Bisunpur Khurd	Fisheries	-	-	5	-	5	51000	Fisheries	77000	-
		Ramrupdaspur	Dairy	2	-	3	-	5	48000	Dairy	75000	-
		Pipardaha	-	-	-	-	-	-	-	-	-	-
	Total		-	7	-	19	-	26	263000	-	397000	-
2	Paikusi 2A7C2a1d	Paikusi	Dairy	2	-	5	-	7	68000	Dairy	87000	-
		Bahora Chandel	"	1	-	2	-	3	29000	"	41000	-
		Kusha	"	-	-	1	-	1	9000	"	14000	-
	Total			3	-	8	-	11	106000	"	142000	-

Table No.3.11 Details of Livelihood Status Other Farmers

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	Remarks
				Sc	St	Other	Women	Total				
1	2	3	4	5	6	7	8	9	10	11	12	13
1	**Veerasarai 2A7C2a1a**	Veerasarai	Dairy	4	--	2	----	6	75000	Dairy	120000	
		Bayanpur	Poultry	2	---	----	----	2	22000	Dairy	32000	
		Mahuji	Dairy	2	---	3	---	5	56000	Dairy	72000	
		Awahi	Dairy	4	---	2	---	6	68000	Dairy	93000	
		Hinauta	Dairy	4	--	4	---	8	90000	Dairy	125000	
		Tekari	Dairy	3	---	---	1	4	42000	Dairy	58000	
		Gosasipur	Dairy	2	---	---	---	2	23000	Dairy	38000	
		Kusaha	Dairy	--	---	4	---	4	43000	Dairy	61000	

		Total of project	**-----**	**21**	**---**	**17**	**1**	**39**	**419000**	**-----**	**599000**	
2	**Berhan 2A7C2a2b**	Sirkalpur	Dairy	1	---	1	---	2	25000	Dairy	30000	
		Khajhara	Poultry	1	--	3	1	5	60000	Poultry	95000	
		Veri Khurd	Dairy	1	---	1	---	2	24000	Dairy	28000	
		Raipuri	Dairy	---	---	3	---	3	36000	Dairy	42000	
		Kamhari	Dairy	---	---	2	---	2	25000	Dairy	32000	
		Berhan	Poultry	2	---	3	---	5	52000	Poultry	75000	
		Shitalpur	Poultry	1	--	2	---	3	36000	Poultry	42000	
		Raitha	Poultry	3	---	1	1	5	53000	Poultry	76000	
		Chilbili	Dairy	2	---	2	---	4	48000	Dairy	71000	
		Alamkhatopur	Dairy	1	---	2	---	3	49000	Dairy	73000	
		Awati	Dairy	1	---	4	---	5	61000	Dairy	66000	
		Mahura	Dairy	2	---	2	---	4	40000	Dairy	60000	
		Total of project	----	17	---	26	2	45	533000	-----	718000	
3	**Jigna 2A7C2a1b**	Jigna	Dairy	4	---	2	---	6	70000	Dairy	85000	
		Medhan	Poultry	3	---	1	---	4	45000	Poultry	60000	
		Sisurakala	Dairy	4	---	2	----	6	65000	Dairy	80000	
		Awahi	-----	---	---	---	---	---	------	------	-----	
		Hinuta	-----	---	---	---	---	---	------	------	-----	

		Davanpura	Dairy	2	--	2	--	4	45000	Dairy	60000	
		RamRupdash pur	Dairy	3	---	2	---	5	55000	Dairy	70000	
		Total of project	------	16	---	9	---	25	280000	-----	355000	
4	**Sikata 2A7C2a2c**	Sikata	Dairy	6	--	8	--	14	150000	Dairy	195000	
		Daina	Dairy	2	---	5	---	7	75000	Dairy	120000	
		Bhasure	Dairy	1	---	1	---	2	22000	Dairy	28000	
		Bhasakala	Dairy	1	---	3	---	4	42000	Dairy	56000	
		Gorkha	Dairy	---	---	3	---	3	32000	Dairy	40000	
		Dighi	Dairy	2	---	4	----	6	68000	Dairy	80000	
		Kapasia	Dairy	2	---	----	----	2	21000	Dairy	27000	
		Emiliya	Dairy	2	---	4	---	6	68000	Dairy	85000	
		Berdeeha	Dairy	1	---	1	---	2	22000	Dairy	28000	
		Amara	Dairy	3	---	5	----	8	85000	Dairy	115000	
		Sawaljalal pur	Dairy	4	---	5	---	9	95000	Dairy	128000	
		Bir Bhanpur	-----	---	---	---	---	---	---	---	---	
		Tambagarh	Dairy	3	---	4	---	7	70000	Dairy	90000	
		Verikala	---	---	---	---	---	---	---	----	---	
		BaburaKhrd	Dairy	--	--	2	1	3	35000	Dairy	50000	
		BaburaKhas	---	---	---	---	---	---	---	---	---	
		Total of project	**-----**	**27**	**---**	**45**	**1**	**73**	**785000**	**---**	**1042000**	
5	Noori 2A7c2a2a	Noori	Dairy	3	-	6	-	9	82000	Dairy	132000	-
		Tambagadh	“	2	-	4	1	7	71000	“	102000	-

		Salempur Khurd	“	-	-	6	-	6	58000	“	84000	-
		Baghari	Poultary	4	-	6	-	10	92000	Poultary	142000	-
		Bisunpur Khurd	Dairy	1	-	5	-	6	55000	Dairy	83000	-
		Ramrupdas pur	“	2	-	5	1	8	76000	“	112000	-
	Total			12	-	32	2	46	434000		655000	-
6	Paikusi 2A7C2a1d	Paikusi	Dairy	-	-	3	-	3	28000	Dairy	44000	-
		Bahora Chandel	“	-	-	4	-	4	41000	“	62000	-
		Kusha	“	-	-	3	-	3	32000	“	47000	-
	Total			**-**	**-**	**10**	**-**	**10**	**101000**	**“**	**153000**	**-**

Table no. 3.12: Livelihood pattern (Occupational Distribution)

S. N.	Name of Micro Watershed	Total Workforce	Agriculture	A. Husbandry	Agriculture + A. Husbadary	Casual Labour	Service	Handcraft	Daily wage labour
1	2A7C2a2c Sikata	3908	1830	300	565	925	16	7	265
2	2a7C2a1a Vira saray	3570	1625	268	500	821	14	7	335
3	2A7C2a1d Paikusi	1736	800	130	248	402	09	2	145
4	2A7C2a2a Noori	3749	1715	282	525	865	12	5	345
5	2A7C2a1b Jigna	1783	830	140	247	367	11	03	185
6	2A7C2a2b Barhan	6335	2870	470	885	1500	23	9	578

Source: District statistic magazine and Secondary data

3.9 Live Stock Population

Total livestock population of the IWMP -I watersheds is 3312 bufallow is preferred as milch animal compared to cow, but milk yield is very low. Goats are also kept for milk as well as for meat purpose. The detail of live stock population is given in table below.

Table No.3.13: Livestock Population

All Figure in No.

S. N.	Name of Micro watershed with code.	Name of Village	Cow		Buffalow		Ox/ Bull	Goat	Sheep	Piggeries	Poultry		Other specify	
			Desi	Cross	Desi	Murr					Broiler	Layers	Total	
1	2	3			5	6	7	7	8	9	10	11	12	13
1	**Veerasarai 2A7C2a1a**	Veerasarai	40	11	90	20	3	110	---	----	60	30	90	---
		Bayanpur	35	10	55	12	2	115	---	---	500	80	580	---
		Mahuji	120	20	250	20	16	220	---	---	450	40	490	---
		Awahi	40	10	80	20	4	120	---	---	70	30	100	---
		Hinauta	25	7	50	15	2	95	---	---	35	25	60	---
		Tekari	50	6	42	10	2	90	---	---	90	20	110	---
		Gosasipur	6	2	7	2	----	----	---	---	----	----	----	----
		Kusaha	16	2	12	4	2	30	---	---	----	----	----	----
		Total of project	**332**	**68**	**586**	**103**	**31**	**880**	**---**	**---**	**1205**	**225**	**1430**	----
2	**Berhan 2A7C2a2b**	Sirkalpur	9	---	16	1	2	106	---	---	37	13	50	---
		Khajhara	21	11	76	6	2	151	---	16	11	3	14	---
		Veri Khurd	6	---	9	---	3	11	---	---	2	5	7	---
		Raipuri	11	6	17	8	2	7	---	---	9	7	16	---
		Kamhari	12	2	14	1	4	22	---	---	6	9	15	---
		Berhan	36	21	106	11	2	148	651	---	5211	62	5273	---

		Shitalpur	26	6	31	2	3	33	---	---	34	19	53	---
		Raitha	41	11	39	6	2	198	431	---	82	71	153	---
		Chilbili	24	6	31	3	1	19	---	---	24	20	44	---
		Alamkhatopur	42	31	217	7	3	126	---	11	36	27	63	---
		Awati	102	66	306	---	6	256	---	76	53	15	68	---
		Mahura	31	29	99	5	4	121	---	---	49	27	76	---
		Total of project	**331**	**189**	**961**	**50**	**43**	**1198**	**1082**	**103**	**5554**	**278**	**5832**	
3	**Jigna 2A7C2a1b**	Jigna	72	18	98	25	5	155	---	---	200	56	256	---
		Medhan	145	25	100	30	6	215	---	---	400	95	495	---
		Sisurakala	105	15	65	22	3	150	---	---	110	25	135	---
		Awahi	10	2	12	3	1	15	---	---	25	12	37	---
		Hinuta	21	2	15	5	1	73	---	---	26	15	41	---
		Davanpura	45	10	32	7	2	56	---	---	42	20	62	---
		Total of project	**398**	**72**	**322**	**94**	**18**	**664**	**---**		**803**	**223**	**1036**	**---**
4	**Sikata 2A7C2a2c**	Sikata	50	12	80	18	5	210	---	---	42	32	74	---
		Daina	72	20	56	22	5	125	---	---	28	52	80	---
		Bhasure	15	7	10	3	2	21	---	---	---	22	22	---
		Bhasakala	20	5	7	5	2	25	---	---	20	15	35	---
		Gorkha	48	12	23	7	2	65	---	---	---	67	67	---
		Dighi	50	20	15	5	3	35	---	---	30	45	75	----
		Kapasia	28	11	22	7	2	57	---	---	---	42	42	---
		Emiliya	57	18	32	12	3	131	---	---	63	57	120	---
		Berdeeha	62	25	32	8	2	105	---	---	50	150	200	---
		Amara	65	23	18	7	1	145	---	---	85	101	186	---
		Sawaljalal	35	7	62	13	3	80	---	---	30	20	50	---

		pur												
		Bir Bhanpur	23	8	16	5	2	37	---	---	22	35	59	---
		Tambagarh	10	2	6	2	1	15	---	---	---	25	25	---
		Verikala	42	13	15	7	2	25	---	---	---	10	10	---
		BaburaKhrd	25	8	10	5	2	18	---	---	---	---	---	---
		BaburaKhas	15	3	5	2	1	20	---	---	---	20	20	---
		Total of project	**617**	**199**	**409**	**128**	**38**	**1107**	**---**	**---**	**370**	**695**	**1065**	**----**
5	Noori 2A7c2a2a	Noori	60	15	85	20	5	170	-	-	60	25	85	-
		Tambagadh	52	12	63	17	4	190	-	-	68	26	94	-
		Salempur Khurd	26	6	28	-	3	70	-	-	25	6	31	-
		Baghari	48	9	56	14	6	185	-	-	72	21	93	-
		Bisunpur Khurd	35	7	26	9	2	135	-	-	37	21	58	-
		Ramrupdaspur	70	20	58	11	5	125	-	-	70	22	92	-
		Pipardaha	50	20	30	20	4	123	-		60	18	78	-
	Total		**341**	**89**	**346**	**101**	**29**	**1005**	**-**	**-**	**392**	**139**	**531**	-
6	Paikusi 2A7C2a1d	Paikusi	45	18	70	20	4	85	-	-	-	38	38	-
		Bahora Chandel	52	24	65	16	5	45	-	-	-	27	27	-
		Kusha	38	12	32	9	3	31	-	-	-	20	20	-
	Total		**135**	**54**	**167**	**45**	**12**	**161**	**-**	**-**	**-**	**85**	**85**	-
	Grand Total		**2154**	**671**	**2791**	**521**	**171**	**5015**	**1082**	**103**	**8324**	**1645**	**9979**	

Source: District statistic magazine and Secondary data

Table No.3.14: Details of Livestock Productivity

SN	Name of Micro watershed with code	Name of Village	Milk Production (Liter Per day)				Goatry	Poultry		Piggeries weight Kg/Pig
			Cows		Buffalos		Weight in Kg/goat	Broiler Weight in Kg/ Brl	Layers No. of eggs/day	
			Desi	Crossed	Desi	Murrah				
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**
1	**Veerasarai 2A7C2a1a**	Veerasarai	60	27	184	62	14	1.60	15	---
		Bayanpur	55	25	102	31	15	1.40	40	---
		Mahuji	320	60	520	60	13	1.30	20	---
		Awahi	62	32	122	57	13	1.50	15	---
		Hinauta	40	11	102	48	14	1.40	13	--
		Tekari	74	16	85	28	15	1.40	10	----
		Gosasipur	10	5	13	6	12	1.60	----	----
		Kusaha	21	5	29	11	14	----	----	----
		Total of project	**642**	**181**	**1157**	**303**	**---**	**----**	**113**	**----**
2	**Berhan 2A7C2a2b**	Sirkalpur	5	11	5	9	15	1.40	19	---
		Khajhara	4	8	4	7	15	1.15	20	46
		Veri Khurd	4	7	5	7	16	1.00	16	---
		Raipuri	4	13	6	11	17	1.30	16	---
		Kamhari	5	9	6	8	18	1.50	17	---
		Berhan	6	11	7	9	17	1.00	17	---

		Shitalpur	5	12	5	8	16	1.25	18	---
		Raitha	4	9	6	9	18	1.50	21	---
		Chilbili	5	12	6	10	20	2.00	22	---
		Alamkhatopur	4	6	5	9	16	1.20	17	54
		Awati	3	9	4	8	14	1.00	18	65
		Mahura	3	5	4	8	17	1.30	16	42
		Total of project	**52**	**112**	**63**	**103**	**----**	**---**	**215**	**-----**
3	**Jigna 2A7C2a1b**	Jigna	80	75	150	60	11	1.50	25	---
		Medhan	120	85	110	90	10	1.40	35	---
		Sisurakala	130	30	90	75	18	1.30	14	---
		Awahi	12	5	21	6	10	1.25	6	---
		Hinuta	22	5	22	15	12	1.70	7	---
		Davanpura	40	25	40	24	9	1.60	5	---
		Total of project	404	225	433	270	---	---	92	---
4	**Sikata 2A7C2a2c**	Sikata	72	76	165	46	15	1.45	16	---
		Daina	100	40	80	60	14	1.50	56	---
		Bhasure	20	15	20	6	13	---	8	---
		Bhasakala	24	10	15	12	14	1.40	5	---
		Gorkha	68	35	50	24	14	----	25	---
		Dighi	60	40	30	18	13	1.60	15	---
		Kapasia	40	30	45	18	14	1.50	16	---
		Emiliya	68	40	60	36	14	1.50	22	---

		Berdeeha	80	75	105	54	13	1.50	20	---
		Amara	88	40	40	18	15	1.40	30	---
		Sawaljalal pur	46	12	119	32	14	1.60	10	---
		Bir Bhanpur	32	12	10	---	---	1.25	12	---
		Tambagarh	15	6	10	6	13	---	10	---
		Verikala	60	30	25	18	12	---	5	---
		BaburaKhrd	20	15	25	24	13	---	---	---
		BaburaKhas	16	6	15	12	14	---	6	---
		Total of project	**809**	**432**	**814**	**376**	**----**	**----**	**256**	**---**
5	Noori	Noori	65	51		155	60	15.00	1.50	13
		Tambagarh	54	37		128	48	14.00	1.55	13
	2A7C2a2a	Salempur Khurd	38	24		58	29	12.00	1.40	3
		Baghari	62	32		102	38	13.00	1.65	10
		Bisunpur Khurd	42	23		52	27	15.00	1.45	10
		Ramrupdaspur	86	43		87	31	14.50	1.50	11
		Pipardha	57	41		48	43	13.00	1.60	9
	Toatl		404	251		630	276	-	-	69
6	Paikusi 2A7C2a1d	Paikusi	45	57		95	55	9.50	1.45	25
		Bahora Chandel	52	60		75	40	10	1.5	20
		Kusha	30	45		60	25	8.75	1.4	15
	Total		**127**	**162**		**230**	**120**	**-**	**-**	**60**
		Grand Total	**2438**	**1362**		**3327**	**1178**	**--**	**--**	**--**

6. Production and productivity of livestock, Poultry, Fisheries etc. in the project area

Sl. No.	Category	Population (No.)	Productivity (lit/d/Animal)	Milk Production (lit)
1	Cattle			
	Crossbreed	671	3.8	**2549.8**
	Indigenous	654	1.13	**739.02**
2	Buffalo	3292	2.5	**8230**
3	Sheep			
	Crossbreed	-	-	
	Indigenous	1082	-	
4	Goat	5015	-	
5	Pig	106		
	Crossbreed	-	-	
	Indigenous	106	-	
6	Poultry			
	Broiler & Cheeks	9969	-	
	Duck and others	9979.00	-	

3.6 Fisheries

Commercial fish farming was not done by the farmers of in IWMP -I, but there is a big scope for fish farming in these area. Aware farmers gated 25.00 q/ha production, it was very low.

4. INSTITUTION BUILDING AND PROJECT MANAGEMENT

4.1 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 the all stakeholder's communities and their local indigenous technological knowledge while planning for any activity. Participatory approach provides a new path for planning, implementing, monitoring and post withdrawal activities with a complete accountability of the stakeholders. Various PRA techniques like resource mapping, social mapping, matrix ranking and season calendar were used to understand the physical and social orientation of the village in general and watershed specific. These tools put the villagers in ease than the complicated questionnaires. Various tool like matrix ranking, Venn diagramme were used to identify various local vegetation (apt for afforestation), fodder crops, various institution and their significance in the life of the farmers.

4.2 Social Mobilization and Community Organization

Table no. 4.1: Physical outlays oh PIA,U.G., S.H.G., W.D.T. and W.C.

S. No.	Name & Code of watershed	U.G. (No.)	SHG (No.)	WDT (No.)	PIA	WC (No.)
1	2A7C2a2c Sikata	7	26	1	1	6
2	2a7C2a1a Vira saray	5	23			4
3	2A7C2a1d Paikusi	6	11			3
4	2A7C2a2a Noori	5	25			3
5	2A7C2a1b Jigna	7	12			3
6	2A7C2a2b Barhan	6	39			7

4.2 Details of Staff at PIA Level

S.No.	Name	Designation	M/F	Qualification	Remark
1	AK Sinha	BSA	M	Diploma in Agri. Engg.	
2	HN Ram	JE	M	Diploma in Civil Engg.	
3	Kamlesh Verma	ASCI	M	M.Sc. Ag.	
4	Dr. S.N Pal	ASCI	M	M.Sc. Ag, P.hd(Horti)	
5	Sivanand Srivastav	Accountant	M	M.Com.	
6	Aslam	Draughtman	M	Inetrmediate, ITI	
7	Keshav Prasad	Treasure	M	Inetrmediate,Diploma	
8	Indrapal	Junior Clerk	M	Inetrmediate	
9	Jaskaran Verma	Work Incharge	M	High School	
10	Ram Khilawan Yadav	Work Incharge	M	Intermediate	
11	Nandkishore Pathak	Work Incharge	M	Inetrmediate	
12	Ramdhan	Work Incharge	M	Inetrmediate	
13	Brij Kishore	Work Incharge	M	B.A.	
14	Bechulal	Work Incharge	M	Inetrmediate	

4.2.2 Watershed Development Team

As per as common guide line direction/ instruction given in para 5.3 point 40 P.I.A. has been constitute watershed development team as given below

Table no.4.2 : Details of Watershed Development Teams (WDTs) in the project area

S. No.	*Name of the PIA*	*Name of the Project*	*Names of WDT members*	*M/F*	*Age*	*Qualification/ Experience*	*Description of professional training*	*Role/ Function##*	*Date of appointment of WDT member*
1	**Bhomi Sanrakshan Adhikari Land development and water resources Department Chandauli (U.P.)**	IWMP -I	H.N. Ram						
				M	56	Civil Diploma	JE	Water Management	-
			Kamlesh Verma	M	55	M.Sc. Ag.	Agronomi	J	-
			S.N. Pal	M	30	M.Sc. Ag. P.hd.	Horticulture	A B	-
			Rina Maura	F	35	B.A.	Social Moblizer	C D F	-

M – Male, F- Female

In column 8, only the letter, assigned as below, needs to be typed, except for '3', where the type may be specifically mentioned.

A	Participatory Net Planning (PNP) and Participatory Rural Approach (PRA), Traning and Capacity Building		
B	Planning	C	Maintenance of Accounts
D	Signing of cheques and making payments	E	Social audit
F	Engineering surveys, drawings and cost estimations	G	Physical verification & measurement
H	Record of labour employed	I	Livelihood opportunities for landless
J	Post project operation, maintenance of assets	K	Any other (please specify)

Table No.4.3: Details of Self Help Groups (SHGs) in the project area

1	2	3	4				5				6			7			8
S. N.	**Name of MWS**	**Names of villages**	**Total no. of Constituted/registered SHGs**				**No. of members**				**No. of SC/ST in each category**			**No. of BPL in each category**			**Date of formation of SHGs**
			With only Men	**With only Women**	**With both**	**Total**	**Categories**	**M**	**F**	**Total**	**M**	**F**	**Total**	**M**	**F**	**Total**	
	PAIKUSHI	PAIKUSHI	--	--	1	1	(i) Landless	9	1	10	7	1	8	9	1	10	26-5-04
							(ii) SF										
							(iii) MF										
							(iv) LF										
	VEERASRAI	VERASRAI	--	--	1	1	(i) Landless	8	2	10	3	2	5	8	2	10	8-4-04
							(ii) SF										
							(iii) MF										
							(iv) LF										
		Total															

(M – Male, F – Female)

Table No.4.4: Details of Formation of Self Help Groups

Project- IWMP I

S. N.	Name of micro watershed	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	Group activities
							Wo-men	Sc/St	Other	Total			Rs.	
1	2	3	4		5	6	7	8	9	10	11	12		13
	SIKTA	SIKTA	JAY BAJRAG BALI	3-3-011	KASHI YADAW	RATN SINGH	--	2	9	11	--	--	2000	DAIRY
		SIKTA	JAY MA DURGA	20-6-011	MUNNI DEVI	LAXMINA	10	--	--	10	---	---	2000	TAILRING
		SIKTA	PARGTISHIL	8-4-011	ROOPWATI	ARTI	12	--	---	12	---	---	1500	TAILRING
		DAINA	SANKAT MOCHAN	8-9-011	SURESH CHANDRA	MANISH KUMAR	---	3	7	10	---	---	1500	DAIRY
		SAWALJALALPUR	JAY MAKALLI	6-4-011	SUKHARI	PYARE LAL	1	2	7	10	---	---	2000	GOATRY
		DIGHI	JAY LAXMI	12-5-011	RAMDAYAL	RAHGUBAR	--	5	5	10	---	---	2000	POULTRY
	Total for MWS	6					23	12	28	63	---	---	11000	---
	NOORI	NOORI	DURGA MATA	15-8-011	GAYTRI DEVI	PARVATI	13	---	--	13	---	----	2000	TAILRING
		NOORI	JAYBAJARG	8-8-011	DENESH	JOGANDRA	--	--	10	10	--	--	2500	MASALAPAIK
		TAMBAGARH	MA KALI	18-8-011	BINU DEVI	URMIKA	11	--	--	11	---	---	2000	DAIRY
		TAMBAGARH	JAY SRIRAM	28-8011	RAM JATAN	SIRIKISHUN	---	6	4	10	--	--	2000	FISHRY
		BISANPURA KHURD	JAY AMBAY	18-8-011	RAMA NAND	RAMPRVESH	---	---	10	10	---	--	1500	DAIRY
		RAMROOPDASHPUR	MA SARSWTI	12-8-011	RUKMINA	SAROJ DEVI	11	---	--	11	---	---	2000	GOAITRY

	Total for MWS		**6**				**35**	**6**	**24**	**65**	**--**	**--**	**12000**	**---**
	VEERASARAI	VEERASARAI	BABA RAVIDASH	18-7-011	SIVAJI	RAMJI	--	4	8	12	---	---	2500	DAIRY
		,,	JAY BHIM	18-7-011	JAMUNA	RAMPATI	--	11	---	11	---	---	2000	FISHRY
		,,	JAY SANKAR	20-7-011	SUNIL KUMAR	HARI KESH	1	9	2	12	---	--	1500	POULTRY
		,,	MALAXMI	20-7-011	RAMAYAN	RAJENDRA	--	2	8	10	---	---	2000	FISHRY
		TEKARI	KUBER	22-8-011	RAMAWADH	PARBHUNATH	--	4	6	10	---	---	2000	DAIRY
	Total for MWS		**5**				**1**	**30**	**24**	**55**	**---**	**---**	**10000**	
	BERHAN	BERHAN	JAY MA KALI	4-10-11	MANJUDAVI	KANCHAN YADVE	10	--	---	10	----	----	1000	TALRING
		,,	JAY MA DURGA	4-10-11	VIRANDRA	SUNIL YADVE	----	---	10	10	----	----	1000	FISHRIER
		KHAJHARA	BABA KENARAM	5-10-11	DEVMUNI	AUDHES SARMA	----	---	10	10	----	----	1000	DARYE
		,,	SAT0 BAHINYA	5-10-11	RINKI	SABITRI	10	---	---	10	----	----	1000	POULTRY
		GOPALPUR	BABAGOBARDHN	6-10-11	SHEMA YADVE	RAMESH SINGH	4	---	6	10	----	----	1000	DARYE
		RAITHA	786	7-10-11	DILSHER	RAMJANM	---	---	10	10	----	----	1000	GOATRY
		,,	DEVASHRIF	7-10-11	SHALMABANO	KHATIJA	10	----	---	10	-----	----		TALRING
	Total for MWS		**7**	**-----**	**-----**	**-----**	**34**	**----**	**36**	**70**	**----**	**----**	**7000**	**----**
	JIGNA	JIGNA	SIVAM	18-6-11	SHAYM SUNDR	SHAYM NARAYAN	---	6	4	10	----	----	3000	MASALA PAKING
		,,	SUNDREM	18-6-11	CHANDRA MUHAN	BALVANT	---	5	5	10	-----	----	2500	POULTRY
		RAMROOPDASPUR	JAY BAJRANG	15-6-11	MUNNA	RAJENDRARAM	---	5	5	10	-----	-----	2500	POULTRY
		MEDHAN	JAY AMBAY	5-7-11	DHAWEL	RANJEET	---	---	10	10	-----	----	2500	DARIY
		SISURAKALA	JAY BHARTH	18-4-11	RAJESH	PRAMODH	---	4	6	10	----	-----	3000	DARIY
	Total		**5**					**20**	**30**	**50**	**----**	**----**	**13500**	**----**

	for MWS														

1	Paikusi 2A7C2a1d	Paikusi	PAL Blanket	24-9-2010	Trilokinath	Upendra Pal	-	4	6	10	-	-	1000.00	Making of Blenkets
		Barela	Sarvoday	14-01-2011	Jumman Ali	Chandrama	-	5	6	11	-	-	1000	Dairy
		Baela	Utthan	19-08-2011	Punam	Nirmala	6	-	-	6	-	-	1200	Sewing
		Kusha	Prgatsheel	12-10-2011	Dharmendara	Subhasram	-	6	4	10	-	-	1000	Dairy
		Kusha	Jayanti	7-08-2011	Noorjha	Sharjha	-	-	5	5	-	-	500	Poultry
		Salempur	Upkar	7-8-2011	Munni Devi	Gita Devi	6	-	-	6	-	-	1200	Sewing
		Paikusi	Uchhatar	22-8-2011	Prema Devi	Indra Devi	5	-	-	5	-	-	500	Genaral Store
		Paikusi	Bajrang	29-09-2011	Ramcharan	Chanadhan	-	-	5	5	-	-	1000	Tent
		Bahora Chandel	Jaiambe	23-08-2011	Prmsheela	Sukhwanta	6	-	-	6	-	-	1200	Poultry
		“	JagDhantri	29-08-211	Bijali	Chandarjyoti	7	-	-	7	-	-	700	General Store
	Total						**30**	**15**	**26**	**71**				

Table No.4.5: Details of Formation of User Groups (UGs)

Project- IWMP I, **District - Chandauli**

S. N	Name of micro watershed	Name of village	Name of group	Date of constitution	Name of Adhyaksh	Name of Sachiv/ Treasurer	Total No. of Members				Name of Bank and Address	Account No. & Date	Up to date Saving	Group Activeties	Status of User Agreement
							Women	Sc/ St	Other	Total					
	NOORI	NOORI	RAJU	16-9-11	RAMAUAR	SANJAY SINGH	---	2	8	10	----	----	---	----	------
		TAMBAGARH	SIV	20-9-11	SHEYAM SUNDER	SHEYAM BIHARI	--	2	7	9	----	----	----	----	-----
		SISURAKALA	SUBEDAR	2-10-11	RAMBIRTHS	RAMA KANTH	---	1	8	9	----	----	----	----	----
		BAGHARI	SIYAMU	5-10-11	SANKAR	PANKAJ	---	1	7	8	----	----	----	----	-----
		AWAHI	AMER	6-10-11	KAWAL	RAMESH	--	--	9	9	----	----	----	----	----
	Total for Project	**5**						**6**	**39**	**45**	**---**	**---**	**-----**	**-----**	**-----**
	SIKATA	SIKATA	RATAN	20-7-11	RATANKUMAR	PAWAN KUMAR	--	---	8	8	----	----	----	----	----
		,,,	NANDAN	22-7-11	NANLAL	CHUTELAL	---	---	8	8	----	----	-----	----	---
		,,,	UMA	25-7-11	UMESH SINGH	SIVPUJAN SINGH	----	----	9	9	-----	----	---	-----	----
		,,	TIRPATI	20-7-11	VINOD SINGH	SIVAJEET	---	---	8	8	----	---	----	----	-----
		DAINA	TERVANI	10-7-11	TERV	POTAN	--	--	7	7	-----	----	----	----	----

					ANIRAY			-							
		,,	VARANASHI	15-7-11	SURESH SINGH	DAMUDAR SINGH	---	----	8	8	----	----	----	----	----
		DIGHI	GORU	17-7-11	GOR PARSADH	NAND KISORH	---	----	8	8	-----	----	-----	----	----
	Total for Project		**7**						**57**	**57**	**---**	**---**	**----**	**-----**	**----**
	PAIKUSI	PAIKUSI	KALI	18-7-11	HAMRAJ	RAJ NARAYAN	---	2	8	10	-----	-----	----	----	-----
		KUSAHA	SANKER	20-7-11	CHANDEV SINGH	PARMODH SINGH	----	1	7	8	---	-----	----	----	-----
		,,	KALI	21-7-11	SIVBADEN	GIRESH CHAND	----	1	6	7	-----	----	----	----	-----
		BAHORA CHANDEL	SARVSHASATI	23-7-11	RAM PEARA	RADHA SIYHAM	---	----	9	9	-----	----	-----	----	-----
		,,	UMA	24-7-11	SAUDARGAR	GOPAL	---	---	7	7	-----	----	-----	-----	-----
		,,	JAGAT	28-7-11	UPANDR PARTAP	BIHARI	---	---	6	6	-----	----	-----	-----	----- -
	Total for Project	**6**						**2**	**43**	**45**	**------**	**-----**	**-----**	**-----**	**-----**
	VEERASARAI	VEERASARAI	JVAHAR	28-9-11	VINOD	CHANDEV	---	3	7	10	-----	-----	-----	----	------
		,,	JANGI	26-9-	GEV	JANGI	---	2	7	9	-----	----	----	-----	--

				11	BODHAN										--
		MAHU JI	NARAYN	6-10-11	RAM NARAYN	VASHI ST	----	3	5	8	-----	----	----	---	----
		,,	KESHRI	8-10-11	RAM DHYAN	RAJKU MAR	---	4	6	10	-----	----	-----	------	-----
		GOSAS IPUR	BEAJU	25-10-11	JAGAN NATH	KARU NA KANTH	----	1	5	6	-----	----	----	-----	----
	Total for Project	**5**						**13**	**30**	**43**	**----**	**----**	**----**	**----**	**----**
	BERHAN	BERHAN	YADUVANSHI	20-7-11	BALKISHUN	BUDHU PAL	1	1	8	10	----	-----	-----	-----	-----
		RAIPURI	BAJRANG	22-7-11	KASHI NATH	RAKESH	1	----	9	10	----	----	-----	------	-----
		KHAJHARA	SATYAM	27-7-11	KAMAL NATH	GIRJA	1	2	7	10	----	----	-----	------	-----
		KAMHARI	KAMAL	2-8-11	VERANDRA	HARIMANGAL	1	---	9	10	---	-----	-----	-----	-----
		RAITHA	SAYAD	2-8-11	ABDULSAMED	RAMKISHUN	1	---	9	10	----	-----	-----	----	----

															----
		ALAM KHATO PUR	JAY BHIM	7-8-11	DASHRATH	ALIHU SAIN	1	2	7	10	----	-----	-----	-----	----
	Total for Project														

	JIGNA	JIGNA	GANGA	20-7-011	DAYA	DURGA	-	-	6	6	---	--	--	--	--
	,,	,,	SATYAM	15-10-011	BACHAN	RADHE	-	-	5	5	--	--	--	--	--
		,,	SIVAM	15-10-011	RAJESH SINGH	NANDLAL	-	-	10	10	--	--	--	--	--
		SISURAKALA	BAJRAG	20-10-011	PARDUMAN	MURAT	-	-	7	7	--	--	--	--	--
		SISURAKALA	BAJRAG	20-10-011	PARDUMAN	MURAT	-	-	7	7	--	--	--	--	--
		,,	SIVAJI	20-10-011	KAMLAKANT	PARSURAM	-	-	4	4	--	--	--	--	--
		MEDHAN	BIND	20-10-011	KASHINATH	RAMDEV	-	-	6	6	--	--	--	-	--
	Total for Project		**6**						**45**	**45**	**--**	**---**	**---**	**--**	**--**
	Grand Total		**25**				**6**	**26**	**263**	**295**	**--**	**---**	**--**	**--**	**---**

Table No.4.6: DETAILS OF WATERSHED COMMITTTEE (WC)

NAME OF MICRO WATERSHED- NOORI

1	2	3		4	5	6	7	8	9	10	11	12	13	14	15	16	17
S. N.	Name of Gram Sabha/GP	Date of Constitution (dd/mm/ yyyy)	Name	Designation	M/F	SC	ST	SF	MF	LF	LAND-LESS	UG	SHG	GP	ANY OTHER	EDUCATIONAL	FUNCTION (S) ASSIGNED#
1.	Noori	10/08/2010	Smt.Punam singh	President	F	-	-	-	-	✔	-	✔	-	✔	✔	Inter	
2.			Rajesh Singh	Secretary	M	-	-	-	-		-	-	-	-	✔	Inter	
3.			Jaskaran Verma	Member	M	-	-	-	-		-	-	-	-	✔		
4.			Shiv kumar	Member	M	-	-	-	✔		-	✔	-	-	✔		
5.			Sunil kumar singh	Member	M	-	-	-	-	✔	-	✔	-	-	✔		
6.			Smt.Nirmala Devi	Member	F	-	-	-	-		✔		✔	-	✔		
7.			Smt.Gangu Devi	Member	F	✔	-	-	-		✔		-	-	-		
8.			Munsi	Member	M	✔	-	-	-		✔		-	-	-		
9.			Rampati	Member	M	✔	-	-	-		✔		-	-	-		
10.			Babban Singh	Member	M	-	-	✔	-	-	-	✔	-	-	✔		
1.	Ramroop Daspur	27.12.10	Smt.Nandni Devi	President	F	-	-	-	✔	-	-	✔	-	✔	✔	High School	
2.			Rajendra Parsad	Secretary	M	✔	-	✔	-	-	-	✔	-	-	-	B.A.	
3.			Jaskaran Verma	Member	M	-	-	-	-	-	-	-	-	-	✔		
4.			Nagendra Maurya	Member	M	-	-	✔	-	-	✔	-	-	-	✔		
5.			Laxmi Yadav	Member	M	-	-	-	✔	-	-	✔	-	-	✔		
6.			Pintu	Member	M	-	-	✔	-	-	-	✔	-	-	✔		
7.			Shiv Bachchan	Member	M	✔	-	-	-	-	✔	-	✔	-	-		
8.			ShiyaRam	Member	M	✔	-	-	-	-	✔	-	-	-	-		
9.			Sunil Kumar	Member	M	-	-	-	✔	-	-	-	-	-	✔		
10.			Smt.Gandhi	Member	F	-	-	-	-	-	✔	-	-	-	✔		
1.	Baghari	25.12.10	Moti Ram	President	M	✔	-		-	-	✔	-	-	✔	-	8th	
2.			Rakash kumar	Secretary	M	✔	-		-	-	✔	-	-	-	-	12th	
3.			Jaskaran verma	Member	M		-		-	-		-	-	-	✔		
4.			Fekan Ram	Member	M	✔	-		-	-	✔	-	-	-	-		
5.			Pachu Ram	Member	M	✔	-	✔	-	-		-	-	-	-		
6.			RamBhajan Singh	Member	M	-	-	✔	-	-		✔	-	-	✔		

7.			Jangi Yadav	Member	M	-	-	✔	-	-		-	-	-	✔		
8.			Lalchad Ram	Member	M	✔	-	✔	-	-		-	-	-	-		
9.			Rambachan	Member	M	✔	-	✔	-	-		✔	-	-	-		
10.			Kamta Yadav	Member	M	-	-	✔	-	-		-	-	-	✔		
11.			Sobha Nath	Member		✔	-	✔	-	-		-	-	-	-		
1.	Pipardaha	19.05.2011	Akhilesh yadav	President	M	-	-	-	-	✔	-	-	-	✔	-	10th	
2.			Shiv kumar yadav	Secretary	M	-	-	-	✔	-	-	-	-	-	✔	Inter	
3.			Jaskaran verma	Member P.I.A.	M	-	-	-	-	-	-	-	-	-	-		
4.			Smt.Nish Singh	Member	F	-	-	✔	-	-	-	-	-	-	-		
5.			Ram Avadh yadav	Member	M	-	-	-	✔	-	-	-	-	-	-		
6.			Goverdhan	Member	M	-	-	✔	-	-	-	-	✔	-	-		
7.			Haridwar Ram	Member	M	-	-	✔	-	-	-	-	✔	-	-		
8.			Smt.ramawati	Member	F	✔	-	-	-	-	✔	-	-	-	-		
9.			Lal vihari yadav	Member	2	-	-	✔	-	-	-	-	-	-	-		
10.			Udit yadav	Member	M	-	-	-	✔	-	-	-	-	-	-		
11.			Arjun yadav	Member	M	✔	-	-	-	-	✔	-	-	-	-		
1.	PAIKUSI	12.08.2010	Hemendra Rai	President	M	-	-	-	✔	-	-	-	-	G.P	-	आठवीं	
2.			Raj Kumar	Secretary	M	-	-	✔	-	-	-	✔	-	-	-	हाईस्कूल	
3.			N.K. Pathak	Member	M	-	-	-	-	-	-	-	-	-	-		
4.			Smt. Girija Devi	Member	F	✔	-	-	-	-	-	✔	-	-	-		
5.			Vijai Kharwar	Member	M	✔	-	✔	-	-	-	✔	✔	-	-		
6.			Syam Lal	Member	M	-	-	-	-	-	✔	-	-	-	-		
7.			Ram Badan	Member	M	-	-	✔	-	-	-	✔	-	-	-		
8.			Lal Jee	Member	M	-	-	-	✔	-	-	✔	-	-	-		
9.			Rajendra Pal	Member	F	-	-	-	-	✔	-	✔	-	-	-		
10.			Mithilesh	Member	M	-	-	-	✔	-	-	-	-	-	-		
11.			Raj Guru	Member		-	-	✔	-	-	-	-	-	-	-		
1.	Bahora Chandel	12.08.2010	Smt. Chand Singh	President	F	-	-	-	-	✔	-	✔	-	✔	-	B.A.	
2.			Dharmendra Upadhyai	Secretary	M	-	-	-	✔	-	-	✔	-	-	-	B.A.	

3.			M.K. Pathak	Member	M	-	-	-	-	-	-	-	-	-	-		
4.			Subhash Ram Kharwar	Member	M	✔	-	✔	-	-	-	✔	-	-	-		
5.			Dulari Devi	Member	F	✔	-	✔	-	-	-	-	✔	-	-		
6.			Sushil Devi	Member	F	✔	-	-	-	✔	-	-	-	-	-		
7.			Potan Bind	Member	M	-	-	✔	-	-	-	✔	-	-	-		
8.			Ram Prakash Singh	Member	M	-	-	-	✔	-	-	✔	-	-	-		
9.			Syam Narain Upadhyay	Member	M	-	-	-	-	✔	-	✔	-	-	-		
10.			Anga Dupadhyai	Member	M	-	-	-	✔	-	-	✔	-	-	-		
11.			Promod Singh	Member		-	-	-	-	✔	-	✔	-	-	-		
1.	SIKATA	29.07.2010	Smt.Dharm sheel Singh	President	F	-	-	-	-	-	✔	-	-	✔	✔		
2.			Hiramanraj	Secretary	M	-	-	✔	-	-	-	-	-	-	✔		
3.			Kesav prsad	Member	M	-	-	-	-	-	-	-	-	-	-		
4.			Roopa urf Roopwanti	Member	F	-	-	-	-	-	✔	-	✔	-	-		
5.			Kashi	Member	M	-	-	-	✔	-	-	-	✔	-	✔		
6.			Anilkumar Singh	Member	M	-	-	✔	-	-	-	-	-	-	✔		
7.			Sukkhu Ram	Member	M	✔	-	✔	-	-	-	-	-	-	-		
8.			Nandlal Singh	Member	M	-	-	-	✔	-	-	-	-	-	✔		
9.			Ram Ashish	Member	M	-	-	-	-	-	✔	-	-	-	-		
10.			Babulal Gaurh	Member	M	✔	-	-	✔	-	-	-	-	-	-		
11.			Iswarchand	Member	M	-	-	-	✔	-	-	-	-	-	-		
1.	EM1L1YA	21.07.2010	Bachau Yadav	President	M	-	-	-	✔	-	-	-	-	✔	✔	Litrat	
2.			Shiv kumar Yadav	Secretary	M	-	-	-	-	-	✔	-	-	-	✔	12th	
3.			Kesav Parsad	Member	M	-	-	-	-	-	-	-	-	-	-		
4.			Randhir Ram	Member	M	✔	-	-	✔	-	-	-	-	-	-		
5.			Pintu Yadav	Member	M	-	-	-	-	-	✔	-	-	-	✔		
6.			Dharmendra Yadav	Member	M	-	-	-	✔	-	-	-	-	-	✔		
7.			Smt.SunriDavi	Member	F	✔	-	-	-	-	✔	-	-	-	-		
8.			Lalmani	Member	M	-	-	✔	-	-	-	-	-	-	✔		

9.			Vijendra	Member	M	✔	-	-	-	-	✔	-	-	-	-		
10.			Viranjay	Member	M	-	-	-	-	-	✔	-	-	-	✔		
1.	DAINA	29.07.2010	Brijash kumar Ray	President	M	-	-	-	-	-	✔	-	-	✔	✔	M.A.	
2.			Amrendra kumar	Secretary	M	-	-	-	-	-	✔	-	-	-	✔	12th	
3.			Kesav Parsad	P.I.A.	M	-	-	-	-	-	-	-	-	-	-		
4.			Ramlal Ram	Member	M	✔	-	-	-	-	✔	-	-	-	-		
5.			Sipahi Ram	Member	M	✔	-	-	-	-	✔	-	-	-	-		
6.			Badam Singh	Member	M	-	-	-	✔	-	-	-	-	-	✔		
7.			Imamuddin	Member	M	-	-	-	-	-	✔	-	-	-	✔		
8.			Chandrika Parsad	Member	M	-	-	-	✔	-	-	-	✔	-	✔		
9.			Jaybun Nisha	Member	F	-	-	-	-	-	✔	-	-	-	✔		
10.			Manish Kumar Ray	Member	M	-	-	-	-	-	✔	-	✔	-	✔		
1.	DIGHI	28.07.2010	Ram lal Yadav	President	M	-	-	-	✔	-	-	-	-	✔	✔	M.A. L.L.B.	
2.			Amrendra kumar	Secretary	M	-	-	-	-	-	✔	-	-	-	✔	12th	
3.			Keshav Parsad	Member,P.I.A	M	-	-	-	-	-	-	-	-	-	-		
4.			Rajmuni Devi	Member	F	✔	-	-	-	-	✔	-	-	-	-		
5.			Dinesh Yadav	Member	M	-	-	-	✔	-	-	-	✔	-	✔		
6.			Madanprjapati	Member	M	-	-	-	-	-	✔	-	-	-	✔		
7.			Pawan Kumar	Member	M	✔	-	-	-	-	✔	-	-	-	-		
8.			Malal Devi	Member	F	-	-	-	-	-	✔	-	-	-	✔		
9.			Laxan	Member	M	✔	-	-	-	-	✔	-	-	-	-		
10.			Ramesh Yadav	Member	M	-	-	✔	-	-	-	-	✔	-	✔		
1.	AMRA	18.07.2010	Manju Devi	President	F	-	-	-	-	-	✔	-	-	✔	✔	Litrat	
2.			Amrendra Kumar	Secretary	M	-	-	-	-	-	✔	-	-	-	✔	12th	
3.			Keshav parsad	Member P.I.A.	M	-	-	-	-	-	-	-	-	-	-		
4.			Rewati Raman	Member	M	-	-	✔	-	-	-	-	-	-	✔		

			Panday														
5.			Dileep kharwar	Member	M	✔	-	-	-	-	✔	-	-	-	-		
6.			Ram Awtar Thakur	Member	M	-	-	-	-	-	-	-	-	-	✔		
7.			Kumari Devi	Member	F	✔	-	-	-	-	✔	-	-	-	-		
8.			Omkar Paswan	Member	M	✔	-	-	-	-	✔	-	-	-	-		
9.			Nandlal	Member	M	✔	-	-	-	✔	-	✔	-	-	-		
10.			Kanhaya	Member	M	-	-	✔	-	-	-	-	-	-	-		
1.	BHASUR	20.07.2010	Parmod kumar Yadav	President	M	-	-	-	-	-	✔	-	✔	-	✔	10^{th}	
2.			Amrendra Kumar	Secretary	M	-	-	-	-	-	✔	-	-	-	✔	12th	
3.			Keshav parsad	Member .P.I.A.	M	-	-	-	-	-	-	-	-	-	-		
4.			Ram Parvash Ram	Member	M	✔	-	-	✔	-	-	-	-	-	-		
5.			Murari Gupta	Member	M	-	-	-	✔	-	-	-	-	-	✔		
6.			Rajesh Kumar Shukla	Member	M	-	-	-	✔	-	-	-	-	-	-		
7.			Ram Murat Yadav	Member	M	-	-	-	-	-	-	-	-	-	✔		
8.			Dhunmun Devi	Member	F	✔	-	-	-	-	✔	-	-	-	-		
9.			Bablu Panday	Member	M	-	-	-	✔	-	-	-	-	-	✔		
10.			Pappu Ray	Member	M	-	-		-	✔	-	-	-	-	✔		
1.	VERASARAI	18.05.2011	Neetu Devi	President	M	✔	-	✔	-	-	-	-	-	✔	-	12^{th}	
2.			Chandra Shekhar Singh	Secretary	M	-	-	✔	-	-	-	-	-	-	✔	B.A.	
3.			Kamlesh kumr Verma	Member ,P.I.A.	M	-	-	-	-	-	-	-	-	-	-	Msc.Ag.	
4.			Shudarshan	Member	M	-	-	✔	-	-	-	-	-	-	✔		
5.			Dhanauta Devi	Member	F	-	-	✔	-	-	-	-	-	-	✔		
6.			Amarnath	Member	M	✔	-	-	-	-	✔	-	-	-	✔		
7.			Godhan	Member	M	-	-	-	-	-	✔	-	✔	-	✔		

8.			Lalbhadur	Member	M	-	-	✔	-	-	-	-	-	-	✔		
9.			Ramesh	Member	M	-	-	✔	-	-	-	-	-	-	✔		
10.			Shivbachan	Member	M	-	-	✔	-	-	-	✔	-	-	✔		
1	MAHUJI	20.05.2011	Savita Gond	President	F	-	-	✔	-	-	-	-	-	✔	-	Inter	
2			Chandra Shekhar Singh	P.I.A. Secretary	M	-	-	✔	-	-	-	-	-	-	✔	B.A.	
3			Kamlesh kumr Verma	Member	M	-	-	-	-	-	-	-	-	-	-	Msc.Ag	
4			Uma Shankar Singh	Member	M	-	-	-	-	✔	-	✔	-	-	✔		
5			Ram Dhyan Gond	Member	M	-	-	-	✔	-	-	-	-	-	✔		
6			Ram kumar	Member	M	-	-	✔	-	-	-	-	✔	-	✔		
7			Jitendra	Member	M	-	-	✔	-	-	-	-	✔	-	-		
8			Fekan	Member	M	✔	-	✔	-	-	-	-	-	-	-		
9			Sheela	Member	F	-	-	✔	-	-	-	-	-	-	-		
10			Bhulie	Member	M	✔	-	-	-	-	✔	-	-	-	✔		
11			Shukh Ram	Member	M	-	-	✔	-	-	-	-	-	-	-		
1	DEDGAON	21.05.2011	Raj kapoor	President	M	✔	-	✔	-	-	-	-	-	✔	-	Inter	
2			Rakesh kumar singh	Secretary	M	-	-	-	✔	-	-	✔	-	-	-	B.A.	
3			Kamlesh kumr Verma	Member P.I.A.	M	-	-	-	-	-	-	-	-	-	-	Msc.Ag	
4			Dhirendra vikram	Member	M	-	-	-	-	✔	-	✔	-	-	-		
5			Upendra Partap	Member	M	-	-	-	✔	-	-	-	-	-	-		
6			Vijay Laxmi	Member	F	-	-	-	✔	-	-	-	-	-	-		
7			Virbal Ram	Member	M	✔	-	✔	-	-	-	-	-	-	-		
8			Navab Ali	Member	M	-	-	-	-	-	✔	-	-	-	-		
9			Baij Nath	Member	M	-	-	-	-	-	-	-	✔	-	-		
10			Kandhaiya	Member	M	-	-	-	-	-	-	-	✔	-	-		

1	AWAHI	23.05.2011	Raj kapoor	President	M	✔	-	✔	-	-	-	-	-	✔	-	Inter	
2			Rakesh kumar singh	Secretary	M	-	-	-	✔	-	-	✔	-	-	-	B.A.	
3			Kamlesh kumr Verma	Member P.I.A	M	-	-	-	-	-	-	-	-	-	-	Msc.Ag	
4			Dhirendra vikram	Member	M	-	-	-	-	✔	-	✔	-	-	-		
5			Upendra Partap	Member	M	-	-	-	✔	-	-	-	-	-	-		
6			Vijay Laxmi	Member	F	-	-	-	✔	-	-	-	-	-	-		
7			Virbal Ram	Member	M	✔	-	✔	-	-	-	-	-	-	-		
8			Navab Ali	Member	M	-	-	-	-	-	✔	-	-	-	-		
9			Baij Nath	Member	M	-	-	-	-	-	-	-	✔	-	-		
10			Kandhaiya	Member	M	-	-	-	-	-	-	-	✔	-	-		
1	KHAJHARA	03.08.2011	Mamta Mishra	President	F	-	-	-	✔	-	-	-	-	✔	-	5th	
2			Parbhat Chandra Mishra	Secretary	M	-	-	-	-	-	-	-	-	-	✔	12th	
3			S.N.Pal	Member P.I.A	M	-	-	-	-	-	-	-	-	-	-	Msc.Ag,Phd. Hort.	
4			Ram Nagina Bind	Member	M	-	-	✔	-	-	-	✔	-	-	-		
5			Sri Parkash Mishra	Member	M	-	-	-	-	✔	-	✔	-	-	-		
6			Dev Muni	Member	M	-	-	-	✔	-	-	-	✔	-	-		
7			Rinki	Member	F	-	-	-	✔	-	-	-	✔	-	-		
8			Mamta	Member	F	-	-	-	✔	-	-	-	-	-	-		
9			Prahlad	Member	M	-	-	-	-	-	-	-	✔	-	-		
10			Pyarey lal	Member	M	-	-	-	-	-	✔	-	-	-	-		
11			Avadhash Sharma	Member	M	-	-		✔	-	-	✔	-	-	-		
1	SAWAL JALALPUR	03.08.2011	Syamlal	President	M	-	-	-	✔	-	-	-	-	✔	-	12th	
2			Ran Vijay yadav	Secretary	M	-	-	✔	-	-	-	-	-	-	-	12th	
3			S.N.Pal	Member P.I.A	M	-	-	-	-	-	-	-	-	-	-	Msc.Ag,Phd. Hort.	

4			Sanjay yadav	Member	M	-	-	✔	-	-	-	✔	-	-	-		
5			Akhilesh Singh	Member	M	-	-	-	-	✔	-	✔	-	-	-		
6			Harihar Ram	Member	M	✔	-	-	-	-	✔	-	-	-	-		
7			Kumar Ram	Member	M	✔	-	-	-	-	✔	-	-	-	-		
8			Bairister Gond	Member	M	-	-	-	-	-	✔	-	-	-	-		
9			Sunita	Member	F	-	-	-	-	-	-	-	-	-	✔		
10			Badami	Member	F	-	-	-	✔	-	-	-	-	-	-		
11			Sukhari Parsad	Member	M	-	-		✔	-	-	-	✔	-	-		
1	BARHAN	03.08.2011	Subedar Singh yadav	President	M	-	-	-	✔	-	-	-	-	✔	-	12th	
2			Yaswat	Secretary	M	-	-	✔	-	-	-	-	-	✔	-	12th	
3			S.N.Pal	Member P.I.A	M	-	-	-	-	-	-	-	-	-	-	Msc.Ag,Phd. Hort.	
4			Ravindra yadav	Member	M	-	-	-	✔	-	-	✔	-	-	-		
5			Dhyachnd yadav	Member	M	-	-	-	✔	✔	-	✔		-	-		
6			Sunil kumar	Member	M	-	-	-	-	-	-	-	✔	-	-		
7			Kanchan yadav	Member	F	-	-	-	-	-	-	-	✔	-	-		
8			Sunita yadav	Member	F	-	-	-	-	-	-	-	-	-	-		
9			Jhanku Ram	Member	M	-	-	-	-	-	-	-	-	-	-		
10			Kamla Parsad	Member	M	-	-	-	-	-	✔	-	-	-	-		
11			Sushila	Member	F	-	-		-	-	-	-	-	-	-		
1	RAITHA	04.08.2011	Smt.Shayra bano	President	F	-	-	✔	-	-	-	-	-	✔	-	5th	
2			Yaswant	Secretary	M	-	-	✔	-	-	-	-	-	-	-	12th	
3			S.N.Pal	Member P.I.A	M	-	-	-	-	-	-	-	-	-	-	Msc.Ag,Phd. Hort.	
4			Sudarshan Pal	Member	M	-	-	✔	-	-	-	✔	-	-	-		
5			Jagat Narayan	Member	M	-	-	✔	-	-	-	✔		-	-		

6			Ram janam Ram	Member	M	-	-	-	-	-	-	-	✔	-	-		
7			Khatija	Member	F	-	-	-	-	-	-	-	✔	-	-		
8			Sarjha	Member	F	-	-	-	-	-	-	-	-	-	-		
9			Gulab Ram	Member	M	✔	-	-	-	-	-	-	-	-	-		
10			Mo.Jamir	Member	M	-	-	-	-	-	✔	-	-	-	-		
11			Mo. Dilsher	Member	M	-	✔		-	-	-	-	-	-	-		
12			Matber Ali	Member	M						✔		✔				
1	GOPALPUR	04.08.2011	Subedar Singh	President	M	-	-	-	-	✔	-	-	-	✔	-	B.A	
2			Yaswant	Secretary	M	-	-	✔	-	-	-	-	-	-	-	12th	
3			Brajkishor	Member P.I.A	M	-	-	-	-	-	-	-	-	-	-	B.A.	
4			Rajendra yadav	Member	M	-	-	✔	-	-	-	✔	-	-	-		
5			Raja Ram yadav	Member	M	-	-	✔	-	-	-	✔		-	-		
6			Bidu yadav	Member	F	-	-	-	✔	-	-	-	✔	-	-		
7			Syam yadav	Member	M	-	-	-	✔	-	-	-	✔	-	-		
8			Kanti Devi	Member	F	-	-	-	-	-	✔	-	-	-	-		
9			Ramesh	Member	M	✔	-	-	-	-	-	-	-	-	-		
10			Sresh yadav	Member	M	-	-	-	-	-	✔	-	-	-	-		
11			Kamlesh yadav	Member	M	-	-	✔	-	-	-	-	-	-	-		
1	PARKASHPUR (MAHURA)	06.08.2011	Ram janam	President	M	-	-	-	✔	-	-	-	-	✔	-	B.A	
2			Bansh narayan	Secretary	M	-	-	-	-	✔	-	-	-	-	-	12th	
3			Brajkishor	Member P.I.A	M	-	-	-	-	-	-	-	-	-	-	B.A.	
4			Markanday	Member	M	-	-	✔	-	-	-	✔	-	-	-		
5			Subedar yadav	Member	M	-	-	✔	-	-	-	✔		-	-		

6			Daulat yadav	Member	M	-	-	-	-	-	-	-	-	-	-		
7			Virendra bahadur Maurya	Member	M	-	-	-	-	-	-	-	✔	-	-		
8			Simni	Member	F	-	-	-	-	-	-	-	✔	-	-		
9			Jagdamba	Member	M	✔	-	-	-	-	✔	-	-	-	-		
10			Jiyachi	Member	F	-	-	-	-	-	✔	-	-	-	-		
11			Raj kishor Shingh	Member	M	-	-	✔	-	-	-	-	-	-	-		
1	AWATI	06.08.2011	Om Parkash Singh	President	M	-	-	-	✔	-	-	-	-	✔	-	10th	
2			Yaswant	Secretary	M	-	-	✔	-	-	-	-	-	-	-	12th	
3			Brajkishor	Member P.I.A	M	-	-	-	-	-	-	-	-	-	-	B.A.	
4			Hanuman yadav	Member	M	-	-	-	-	-	-	✔	-	-	-		
5			Sunil yadav	Member	M	-	-	-	-	-	-	✔		-	-		
6			Parmeswar yadav	Member	M	-	-	-	-	-	-	-	✔	-	-		
7			Shivaji Singh	Member	M	-	-	-	-	-	✔	-	-	-	-		
8			Urmila Devi	Member	F	-	-	-	-	-	✔	-	-	-	-		
9			Mahendra Ram	Member	M	✔	-	-	-	-	-	-	-	-	-		
10			Vinod kumar	Member	M	✔	-	-	-	-	-	-	-	-	-		
11			Vjay Bahadur Maurya	Member	M	-	-	✔	-	-	-	-	-	-	-		
1	JIGNA	10.08.2011	Smt.Chinta mari	President	F	-	-	✔	-	-	-	-	-	✔	-	10th	
2			Mani Shanker	Secretary	M	-	-	✔	-	-	-	-	-	-	-	10th	
3			Ram khelawan yadav	Member P.I.A	M	-	-	-	-	-	-	-	-	-	-	B.A.	
4			Bhagolu Gond	Member	M	✔	-	✔	-	-	-	✔	✔	-	-		
5			Bhagwan Gupta	Member	M	-	-	-	-	-	-	✔		-	-		
6			Ram Sundar	Member	M	✔	-	✔	✔	-	-	✔	-	-	-		
7			Smt.Shanti Devi	Member	F	✔	-	-	-	-	✔	-	-	-	-		

8			Pachu Maghi	Member	M	-	-	✔	-	-	-	✔	-	-	-		
9			Chanra Bhushan Singh	Member	M	-	-	-	-	✔	-	✔	-	-	-		
10			Ram charan	Member	M	✔	-	-	-	-	-	✔	-	-	-		
11			Shyam Sudar	Member	M	✔	-	✔	-	-	-	✔	✔	-	-		
1	MEDHAN	12.08.2011	Shyam lal Bind	President	M	-	-	✔	-	-	-	-	-	✔	-	10th	
2			Basawan	Secretary	M	-	-	✔	-	-	-	-	-	-	-	10th	
3			Ram khelawan yadav	Member P.I.A	M	-	-	-	-	-	-	-	-	-	-		
4			Sushil kumar	Member	M	✔	-	✔	-	-	-	✔	-	-	-		
5			Mahesh Bind	Member	M	-	-	✔	-	-	-	✔		-	-		
6			Tripat Ram	Member	M	-	-	✔	✔	-	-	✔	-	-	-		
7			Jay Chand	Member	M	-	-	✔	-	-	-	✔	-	-	-		
8			Vijay kumar	Member	M	-	-	✔	-	-	-	✔	-	-	-		
9			Sanjay Devi	Member	F	-	-	-	-	-	✔	✔	-	-	-		
10			Balistar	Member	M	-	-	✔	-	-	-	✔	-	-	-		
11			Durvesh	Member	M	-	-	-	-	-	✔	✔	-	-	-		
12			Rattan lal	Member	M	-	-	-			✔	✔					
1	SISURA KALA	13.08.2011	Narpat	President	M	-	-	✔	-	-	-	✔	-	✔	-	5th	
2			Nikesh yadav	Secretary	M	-	-	✔	-	-	-	✔	-	-	-	10th	
3			Ram khelawan yadav	Member P.I.A	M	-	-	-	-	-	-	-	-	-	-		
4			Raj kumar	Member	M	-	-	✔	-	-	-	-	-	-	-		
5			Rajesh yadav	Member	M	-	-	✔	-	-	-	-		-	-		
6			Sunita	Member	F	-	-	-	-	-	✔	✔	-	-	-		
7			Nithlesh	Member	M	-	-	-	-	✔	-	✔	-	-	-		
8			Asish Pal	Member	M	-	-	✔	-	-	-	✔	-	-	-		

9			Iswar chanra	Member	M	-	-	✔	-	-	-	✔	-	-	-		
10			Kandahiya	Member	M	-	-	✔	-	-	-	-	-	-	-		
11			Smt. Meena	Member	F	✔	-	-	-	-	✔	-	-	-	-		

4.7 PROJECT IMPLEMENTING AGENCIES

U.P. Government, Land Development Water Resources Department Section-1 Lucknow has nominated as PIA to Bhoomi Sanrakshhan Unit, Land Development Water Resources Department Chandauli for IWMP - Wide letter no-667/54-1-10/1(9)/2008,28-5-10-2010.

Table no. 4.7: Project Implementing Agency (PIA)

S.No.	Particulars of PIA	
(i)	Date of selection of PIA	28.05.2010
(ii)	Type of organization	Govt. organization
(-)	Name of organization #	DoLR
(iv)	Designation & Address	BSA, IWDP, Chandauli
(v)	Telephone	05444-223394
(vi)	Fax`	-
(vii)	E-Mail	Bsaldwtcd-un@nic.in

Only the letter assigned to each type, as given below, needs to be typed.

A	Line Dept.	B	Autonomous organization
C	Govt. Institute	D	Research Bodies
E	Zila Parishad	F	Intermediate Panchayat
G	Voluntary Organisations	H	Any other (please specify).

4.8 Project Implementation Strategy

Watershed management as a strategy has been adopted by Government of India especially in the rainfed region of semi arid tropics. These region are characterized by low and undependable rain, low soil fertility, poor infrastructure development, low literacy and high incidence of migration. Several studies have identified that there is a dire need of a systematic and scientific approach to deal with the watershed development. The common guideline generates a fresh and flexible framework for the next generation watershed development.

4.8.1 Scientific Planning

i) Cluster Approach

This envisages a broader vision of Geo-hydrological unit which involves treating a cluster of micro watershed. The IWMP -I Chandauli watershed project consist of five micro watershed

ii) Base line Survey

To access the impact of any watershed development programme a detailed baseline survey has to be conducted. 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 from *PIA*. Household census survey includes a detailed questionnaire which was been filled by visiting 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, net consumption rate in the IWMP -, 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, well in the area, crop taken in the field, Cropping pattern, fertilizer used and various sources of irrigation in the field.

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 for any 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 institution and their significance in the life of the farmers

iv) Use of GIS and Remote sensing for planning

Use of various high science tools has been promoted at various stages of watershed development.

a) Prioritization

Geographical Information System (GIS) has been used for prioritization process. Various layer maps were created like Geo-morphological, Soil, BPL Population, SC/ST population, Ground water Status, Drinking water situation Slope percent. These were all given proper weight age according to the DoLR specification. This helped in prioritization of various watershed areas.

b) Planning

A action plan matrix was formulated by State Level Nodal Agency (SLNA) taking into account various features like the slope percent, soil Depth, Soil Texture, Soil erosion in the area for wasteland, forest land and agricultural land. Global positioning System (GPS) was used to identify each and every water conservation structures available in the project area. This was used to create a map. Contour Map of vertical interval of 1 meter at a scale of 1:8000 was used for identifying various locations for soil and water conservation structures.

c) Hydrological modelling

Hydrology modelling technique was used for locating drainage, stream length, flow direction, sink, and flow accumulation. This model overlaid over cadastral map to calculate the catchments area of each structures like the gully plug etc. This has helped to remove the human error which generally occurs while calculating the catchments area of a check dam.

Table no. 4.9: Details of Scientific Planning and Inputs in IWMP-I projects

Scientific criteria/ inputs used	**Whether scientific criteria was used**
1	**2**
(A) Planning	
Cluster approach	Yes
Whether technical back-stopping for the project has been arranged? If yes, mention the name of the Institute	
Baseline survey	Yes
Hydro-geological survey	Yes
Contour mapping	Yes
Participatory Net Planning (PNP)	Yes
Remote sensing data-especially soil/ crop/ run-off cover	
Ridge to Valley treatment	
Online IT connectivity between	
(1) Project and DRDA cell/ZP	Yes
(2) DRDA and SLNA	Yes
(3) SLNA and DoLR	Yes
Availability of GIS layers	
1. Cadastral map	Yes
2. Village boundaries	Yes
3. Drainage	Yes
4. Soil (Soil nutrient status)	Yes
5. Land use	Yes

6. Ground water status	Yes

1	2
7. Watershed boundaries	Yes
8. Activity	Yes
Crop simulation models#	No
Integrated coupled analyzer/ near infrared visible spectroscopy/ medium spectroscopy for high speed soil nutrient analysis	No
Normalized difference vegetation index (NDVI)#	No
Weather Station	
(B) Inputs	No
1. Bio-pesticides	No
2. Organic manures	Yes
3. Vermicompost	Yes
4. Bio-fertilizer	Yes
5. Water saving devices	Yes
6. Mechanized tools/ implements	Yes
7. Bio-fencing	Yes
8. Nutrient budgeting	No
9. Automatic water level recorders & sediment samplers	No

5. PHASING AND BUDGETING

5.1 FINANCIAL BREAKUP OF VARIOUS COMPONENT IN TERMS OF % OF IWMP-I, DISTRICT-CHANDAULI

Amount in Lacs

S. No.	Name of MWS	Project Area	Proposed Amount	Administrative 10%	EPA 4%	Institution and CB 5%	DPR 1%	Watershed development work 56%	Livelihood for assetless 9%	Production system and Microenterprises 10%	Monitoring 1%	Evaluation 1%	Consolidation 3%	Total 100%
1	**NOORI**	798	95.76	9.58	3.83	4.79	0.96	53.63	8.62	9.58	0.96	0.96	2.87	95.76
2	**PAIKUSHI**	374	44.88	4.49	1.80	2.24	0.45	25.13	4.04	4.49	0.45	0.45	1.35	44.88
3	**SIKATA**	853.85	102.46	10.25	4.10	5.12	1.02	57.38	9.22	10.25	1.02	1.02	3.07	102.46
4	**VIRASARAI**	756.85	90.82	9.08	3.63	4.54	0.91	50.86	8.17	9.08	0.91	0.91	2.72	90.82
5	**BARHAN**	1337.3	160.48	16.05	6.42	8.02	1.60	89.87	14.44	16.05	1.60	1.60	4.81	160.48
6	**JIGNA**	380	45.60	4.56	1.82	2.28	0.46	25.54	4.10	4.56	0.46	0.46	1.37	45.60
	Total	**4500**	**540**	**54**	**21.6**	**27**	**5.4**	**302.4**	**48.6**	**54**	**5.4**	**5.4**	**16.2**	**540**

5.1.1 YEARWISE FINANCIAL BREAK UP OF INST. & CAP. BULDG. PROGRAMME OF IWMP-I, DISTRICT-CHANDAULI								
							Amount in Lacs	
S. No.	**Name of MWS**	**Project Area**	**Proposed Amount**	**Institutional & Capacity Building 5% of the Total Project Cost**				
				2009-10	**2010-11**	**2011-12**	**212-13**	**Total**
1	**NOORI**	798	4.79	2.87	0.72	0.72	0.48	4.79
2	**PAIKUSHI**	374	2.24	1.35	0.34	0.34	0.22	2.24
3	**SIKATA**	853.85	5.12	3.07	0.77	0.77	0.51	5.12
4	**VIRASARAI**	756.85	4.54	2.72	0.68	0.68	0.45	4.54
5	**BARHAN**	1337.3	8.02	4.81	1.20	1.20	0.80	8.02
6	**JIGNA**	380	2.28	1.37	0.34	0.34	0.23	2.28
	Total	**4500**	**27.00**	**16.20**	**4.05**	**4.05**	**2.70**	**27.00**

5.1.2 YEARWISE PHYSICAL AND FINANCIAL BREAK UP OF WORK COMPONENT OF IWMP-I, DISTRICT-CHANDAULI													
												Amount in Lacs	
Watershed Development Works 56% of Project Cost												Phy. in ha.	
S. No.	Name of MWS	Project Area	Proposed Amount	2009-10		2010-11		2011-12		2012-13		TOTAL	
				Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy (ha,)	Fin.
1	**NOORI**	798	53.63	106.85	7.18	233.02	15.66	227.99	15.32	230.14	15.47	798.00	**53.63**
2	**PAIKUSHI**	374	25.13	50.08	3.37	109.21	7.34	106.85	7.18	107.86	7.25	374.00	**25.13**
3	**SIKATA**	853.85	57.38	114.33	7.68	249.32	16.75	243.94	16.39	246.25	16.55	853.85	**57.38**
4	**VIRASARAI**	756.85	50.86	101.34	6.81	221.00	14.85	216.23	14.53	218.28	14.67	756.85	**50.86**
5	**BARHAN**	1337.3	89.87	179.06	12.04	390.49	26.24	382.07	25.68	385.68	25.92	1337.30	**89.87**
6	**JIGNA**	380	25.54	50.88	3.42	110.96	7.46	108.57	7.30	109.59	7.36	380.00	**25.54**
	TOTAL	**4500**	**302.4**	**602.55**	**40.5**	**1314**	**88.29**	**1285.65**	**86.4**	**1297.8**	**87.21**	**4500**	**302.4**

5.1.3 YEARWISE FINANCIAL BREAK UP OF LIVELIHOOD ACTIVITIES IWMP-I, DISTRICT-CHANDAULI								
							Amount in Lacs	
S. No.	Name of MWS	Project Area	Proposed Amount	Livelihood 9% of the Project Cost				
				2009-10	2010-11	2011-12	2012-13	TOTAL
1	NOORI	798	8.62	0.96	2.39	2.39	2.87	**8.62**
2	PAIKUSHI	374	4.04	0.45	1.12	1.12	1.35	**4.04**
3	SIKATA	853.85	9.22	1.02	2.56	2.56	3.07	**9.22**
4	VIRASARAI	756.85	8.17	0.91	2.27	2.27	2.72	**8.17**
5	BARHAN	1337.3	14.44	1.60	4.01	4.01	4.81	**14.44**
6	JIGNA	380	4.10	0.46	1.14	1.14	1.37	**4.10**
	TOTAL	**4500**	**48.6**	**5.4**	**13.5**	**13.5**	**16.2**	**48.6**

5.1.4 YEARWISE FINANCIAL BREAK UP OF PRODUCTION & MICRO ENTERPRISES OF IWMP-I, DISTRICT-CHANDAULI								
							Amount in Lacs	
S. No.	Name of MWS	Project Area	Proposed Amount	Production System & Mocro-enterprises 10% of the Project Cost				
				2009-10	2010-11	2011-12	2012-13	Total
1	NOORI	798	9.58	0.96	2.39	2.39	3.83	**9.58**
2	PAIKUSHI	374	4.49	0.45	1.12	1.12	1.80	**4.49**
3	SIKATA	853.85	10.25	1.02	2.56	2.56	4.10	**10.25**
4	VIRASARAI	756.85	9.08	0.91	2.27	2.27	3.63	**9.08**
5	BARHAN	1337.3	16.05	1.60	4.01	4.01	6.42	**16.05**
6	JIGNA	380	4.56	0.46	1.14	1.14	1.82	**4.56**
	TOTAL	**4500**	**54**	**5.4**	**13.5**	**13.5**	**21.6**	**54**

5.2 FINANCIAL BREAKUP OF VARIOUS COMPONENT IN TERMS OF % OF IWMP-I, DISTRICT-CHANDAULI														
											Amount in Lacs			
S. No.	**Name of Gram Panchayat**	**Project Area**	**Sanctioned Amount**	**Administrative 10%**	**EPA 4%**	**Institution and CB 5%**	**DPR 1%**	**Watershed development work 56%**	**Livelihood for assetless 9%**	**Production system and Microenterprises 10%**	**Monitoring 1%**	**Evaluation 1%**	**Consolidation 3%**	**Total 100%**
1	Noori	298.7	35.84	3.58	1.43	1.79	0.36	20.07	3.23	3.58	0.36	0.36	1.08	35.84
2	Ramroopdas Pur	124.83	14.98	1.50	0.60	0.75	0.15	8.39	1.35	1.50	0.15	0.15	0.45	14.98
3	Baghari	94.84	11.38	1.14	0.46	0.57	0.11	6.37	1.02	1.14	0.11	0.11	0.34	11.38
4	Paikushi	264.8	31.78	3.18	1.27	1.59	0.32	17.79	2.86	3.18	0.32	0.32	0.95	31.78
5	Bahura Chandel	161.9	19.43	1.94	0.78	0.97	0.19	10.88	1.75	1.94	0.19	0.19	0.58	19.43
6	Pipardaha	134.55	16.15	1.61	0.65	0.81	0.16	9.04	1.45	1.61	0.16	0.16	0.48	16.15
7	Sikta	163.73	19.65	1.96	0.79	0.98	0.20	11.00	1.77	1.96	0.20	0.20	0.59	19.65
8	Emiliya	212.31	25.48	2.55	1.02	1.27	0.25	14.27	2.29	2.55	0.25	0.25	0.76	25.48
9	Amra	52.46	6.30	0.63	0.25	0.31	0.06	3.53	0.57	0.63	0.06	0.06	0.19	6.30
10	Dighi	122.61	14.71	1.47	0.59	0.74	0.15	8.24	1.32	1.47	0.15	0.15	0.44	14.71

11	Daina	134.37	16.12	1.61	0.64	0.81	0.16	9.03	1.45	1.61	0.16	0.16	0.48	16.12
12	Bhasoure	19.32	2.32	0.23	0.09	0.12	0.02	1.30	0.21	0.23	0.02	0.02	0.07	2.32
13	Virasarai	207.95	24.95	2.50	1.00	1.25	0.25	13.97	2.25	2.50	0.25	0.25	0.75	24.95
14	Mahuji	295.2	35.42	3.54	1.42	1.77	0.35	19.84	3.19	3.54	0.35	0.35	1.06	35.42
15	Dedgaon	177.9	21.35	2.13	0.85	1.07	0.21	11.95	1.92	2.13	0.21	0.21	0.64	21.35
16	Avahi	107.98	12.96	1.30	0.52	0.65	0.13	7.26	1.17	1.30	0.13	0.13	0.39	12.96
17	Khajhara	204.54	24.54	2.45	0.98	1.23	0.25	13.75	2.21	2.45	0.25	0.25	0.74	24.54
18	Sawal Jalalpur	285.76	34.29	3.43	1.37	1.71	0.34	19.20	3.09	3.43	0.34	0.34	1.03	34.29
19	Gandhi Nagar	267.3	32.08	3.21	1.28	1.60	0.32	17.96	2.89	3.21	0.32	0.32	0.96	32.08
20	Raitha	196.6	23.59	2.36	0.94	1.18	0.24	13.21	2.12	2.36	0.24	0.24	0.71	23.59
21	Gopalpur	45.25	5.43	0.54	0.22	0.27	0.05	3.04	0.49	0.54	0.05	0.05	0.16	5.43
22	Mahura	299.05	35.89	3.59	1.44	1.79	0.36	20.10	3.23	3.59	0.36	0.36	1.08	35.89
23	Awati	178.15	21.38	2.14	0.86	1.07	0.21	11.97	1.92	2.14	0.21	0.21	0.64	21.38
24	Jigna	140.1	16.81	1.68	0.67	0.84	0.17	9.41	1.51	1.68	0.17	0.17	0.50	16.81
25	Medhan	124.4	14.93	1.49	0.60	0.75	0.15	8.36	1.34	1.49	0.15	0.15	0.45	14.93
26	Sisaurakala	185.4	22.25	2.22	0.89	1.11	0.22	12.46	2.00	2.22	0.22	0.22	0.67	22.25
	Total	**4500**	**540**	**54**	**21.6**	**27**	**5.4**	**302.4**	**48.6**	**54**	**5.4**	**5.4**	**16.2**	**540**

5.2.1 YEARWISE FINANCIAL BREAK UP OF INST. & CAP. BULDG. PROGRAMME OF IWMP-I, DISTRICT-CHANDAULI

Amount in Lacs

S. No.	Name of Gram Panchayat	Project Area	Proposed Amount	Institutional & Capacity Building 5% of the Total Project Cost				
				2009-10	2010-11	2011-12	212-13	Total
1	Noori	298.7	1.79	1.08	0.27	0.27	0.18	1.79
2	Ramroopdas Pur	124.83	0.75	0.45	0.11	0.11	0.07	0.75
3	Baghari	94.84	0.57	0.34	0.09	0.09	0.06	0.57
4	Paikushi	264.8	1.59	0.95	0.24	0.24	0.16	1.59
5	Bahura Chandel	161.9	0.97	0.58	0.15	0.15	0.10	0.97
6	Pipardaha	134.55	0.81	0.48	0.12	0.12	0.08	0.81
7	Sikta	163.73	0.98	0.59	0.15	0.15	0.10	0.98
8	Emiliya	212.31	1.27	0.76	0.19	0.19	0.13	1.27
9	Amra	52.46	0.31	0.19	0.05	0.05	0.03	0.31
10	Dighi	122.61	0.74	0.44	0.11	0.11	0.07	0.74
11	Daina	134.37	0.81	0.48	0.12	0.12	0.08	0.81
12	Bhasoure	19.32	0.12	0.07	0.02	0.02	0.01	0.12
13	Virasarai	207.95	1.25	0.75	0.19	0.19	0.12	1.25
14	Mahuji	295.2	1.77	1.06	0.27	0.27	0.18	1.77
15	Dedgaon	177.9	1.07	0.64	0.16	0.16	0.11	1.07

16	Avahi	107.98	0.65	0.39	0.10	0.10	0.06	0.65
17	Khajhara	204.54	1.23	0.74	0.18	0.18	0.12	1.23
18	Sawal Jalalpur	285.76	1.71	1.03	0.26	0.26	0.17	1.71
19	Gandhi Nagar	267.3	1.60	0.96	0.24	0.24	0.16	1.60
20	Raitha	196.6	1.18	0.71	0.18	0.18	0.12	1.18
21	Gopalpur	45.25	0.27	0.16	0.04	0.04	0.03	0.27
22	Mahura	299.05	1.79	1.08	0.27	0.27	0.18	1.79
23	Awati	178.15	1.07	0.64	0.16	0.16	0.11	1.07
24	Jigna	140.1	0.84	0.50	0.13	0.13	0.08	0.84
25	Medhan	124.4	0.75	0.45	0.11	0.11	0.07	0.75
26	Sisaurakala	185.4	1.11	0.67	0.17	0.17	0.11	1.11
	Total	**4500**	27.00	16.20	4.05	4.05	2.70	27.00

5.2.3 YEARWISE PHYSICAL AND FINANCIAL BREAK UP OF WORK COMPONENT OF IWMP-I, DISTRICT-CHANDAULI													
													Amount in Lacs
Watershed Development Works 56% of Project Cost													Phy. in ha.
S. No.	Name of GP	Project Area	Proposed Amount	2009-10		2010-11		2011-12		2012-13		TOTAL	
				Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy (ha,)	Fin.
1	Noori	298.7	20.07	40.00	2.69	87.22	5.86	85.34	5.74	86.15	5.79	298.70	**20.07**
2	Ramroopdas Pur	124.83	8.39	16.71	1.12	36.45	2.45	35.66	2.40	36.00	2.42	124.83	**8.39**
3	Baghari	94.84	6.37	12.70	0.85	27.69	1.86	27.10	1.82	27.35	1.84	94.84	**6.37**
4	Paikushi	264.8	17.79	35.46	2.38	77.32	5.20	75.65	5.08	76.37	5.13	264.80	**17.79**
5	Bahura Chandel	161.9	10.88	21.68	1.46	47.27	3.18	46.25	3.11	46.69	3.14	161.90	**10.88**
6	Pipardaha	134.55	9.04	18.02	1.21	39.29	2.64	38.44	2.58	38.80	2.61	134.55	**9.04**
7	Sikta	163.73	11.00	21.92	1.47	47.81	3.21	46.78	3.14	47.22	3.17	163.73	**11.00**
8	Emiliya	212.31	14.27	28.43	1.91	61.99	4.17	60.66	4.08	61.23	4.11	212.31	**14.27**
9	Amra	52.46	3.53	7.02	0.47	15.32	1.03	14.99	1.01	15.13	1.02	52.46	**3.53**
10	Dighi	122.61	8.24	16.42	1.10	35.80	2.41	35.03	2.35	35.36	2.38	122.61	**8.24**
11	Daina	134.37	9.03	17.99	1.21	39.24	2.64	38.39	2.58	38.75	2.60	134.37	**9.03**
12	Bhasoure	19.32	1.30	2.59	0.17	5.64	0.38	5.52	0.37	5.57	0.37	19.32	**1.30**
13	Virasarai	207.95	13.97	27.84	1.87	60.72	4.08	59.41	3.99	59.97	4.03	207.95	**13.97**
14	Mahuji	295.2	19.84	39.53	2.66	86.20	5.79	84.34	5.67	85.14	5.72	295.20	**19.84**
15	Dedgaon	177.9	11.95	23.82	1.60	51.95	3.49	50.83	3.42	51.31	3.45	177.90	**11.95**

16	Avahi	107.98	7.26	14.46	0.97	31.53	2.12	30.85	2.07	31.14	2.09	107.98	**7.26**
17	Khajhara	204.54	13.75	27.39	1.84	59.73	4.01	58.44	3.93	58.99	3.96	204.54	**13.75**
18	Sawal Jalalpur	285.76	19.20	38.26	2.57	83.44	5.61	81.64	5.49	82.41	5.54	285.76	**19.20**
19	Gandhi Nagar	267.3	17.96	35.79	2.41	78.05	5.24	76.37	5.13	77.09	5.18	267.30	**17.96**
20	Raitha	196.6	13.21	26.32	1.77	57.41	3.86	56.17	3.77	56.70	3.81	196.60	**13.21**
21	Gopalpur	45.25	3.04	6.06	0.41	13.21	0.89	12.93	0.87	13.05	0.88	45.25	**3.04**
22	Mahura	299.05	20.10	40.04	2.69	87.32	5.87	85.44	5.74	86.25	5.80	299.05	**20.10**
23	Awati	178.15	11.97	23.85	1.60	52.02	3.50	50.90	3.42	51.38	3.45	178.15	**11.97**
24	Jigna	140.1	9.41	18.76	1.26	40.91	2.75	40.03	2.69	40.40	2.72	140.10	**9.41**
25	Medhan	124.4	8.36	16.66	1.12	36.32	2.44	35.54	2.39	35.88	2.41	124.40	**8.36**
26	Sisaurakala	185.4	12.46	24.83	1.67	54.14	3.64	52.97	3.56	53.47	3.59	185.40	**12.46**
	Total	**4500**	**302.4**	**602.55**	**40.5**	**1314**	**88.29**	**1285.65**	**86.4**	**1297.8**	**87.21**	**4500**	**302.4**

5.2.4 YEARWISE FINANCIAL BREAK UP OF LIVELIHOOD ACTIVITIES IWMP-I, DISTRICT-CHANDAULI								
							Amount in Lacs	
S. No.	Name of Gram Panchayat	Project Area	Sanctioned Amount	Livelihood 9% of the Project Cost				
				2009-10	2010-11	2011-12	2012-13	TOTAL
1	Noori	298.7	3.23	0.36	0.90	0.90	1.08	**3.23**
2	Ramroopdas Pur	124.83	1.35	0.15	0.37	0.37	0.45	**1.35**
3	Baghari	94.84	1.02	0.11	0.28	0.28	0.34	**1.02**
4	Paikushi	264.8	2.86	0.32	0.79	0.79	0.95	**2.86**
5	Bahura Chandel	161.9	1.75	0.19	0.49	0.49	0.58	**1.75**
6	Pipardaha	134.55	1.45	0.16	0.40	0.40	0.48	**1.45**
7	Sikta	163.73	1.77	0.20	0.49	0.49	0.59	**1.77**
8	Emiliya	212.31	2.29	0.25	0.64	0.64	0.76	**2.29**
9	Amra	52.46	0.57	0.06	0.16	0.16	0.19	**0.57**
10	Dighi	122.61	1.32	0.15	0.37	0.37	0.44	**1.32**
11	Daina	134.37	1.45	0.16	0.40	0.40	0.48	**1.45**
12	Bhasoure	19.32	0.21	0.02	0.06	0.06	0.07	**0.21**
13	Virasarai	207.95	2.25	0.25	0.62	0.62	0.75	**2.25**

14	Mahuji	295.2	3.19	0.35	0.89	0.89	1.06	**3.19**
15	Dedgaon	177.9	1.92	0.21	0.53	0.53	0.64	**1.92**
16	Avahi	107.98	1.17	0.13	0.32	0.32	0.39	**1.17**
17	Khajhara	204.54	2.21	0.25	0.61	0.61	0.74	**2.21**
18	Sawal Jalalpur	285.76	3.09	0.34	0.86	0.86	1.03	**3.09**
19	Gandhi Nagar	267.3	2.89	0.32	0.80	0.80	0.96	**2.89**
20	Raitha	196.6	2.12	0.24	0.59	0.59	0.71	**2.12**
21	Gopalpur	45.25	0.49	0.05	0.14	0.14	0.16	**0.49**
22	Mahura	299.05	3.23	0.36	0.90	0.90	1.08	**3.23**
23	Awati	178.15	1.92	0.21	0.53	0.53	0.64	**1.92**
24	Jigna	140.1	1.51	0.17	0.42	0.42	0.50	**1.51**
25	Medhan	124.4	1.34	0.15	0.37	0.37	0.45	**1.34**
26	Sisaurakala	185.4	2.00	0.22	0.56	0.56	0.67	**2.00**
	Total	**4500**	**48.6**	**5.4**	**13.5**	**13.5**	**16.2**	**48.6**

5.2.5 YEARWISE FINANCIAL BREAK UP OF PRODUCTION & MICRO ENTERPRISES OF IWMP-I, DISTRICT-CHANDAULI								
							Amount in Lacs	
S. No.	Name of Gram Panchayat	Project Area	Proposed Amount	Production System & Mocro-enterprises 10% of the Project Cost				
				2009-10	2010-11	2011-12	2012-13	Total
1	Noori	298.7	3.58	0.36	0.90	0.90	1.43	**3.58**
2	Ramroopdas Pur	124.83	1.50	0.15	0.37	0.37	0.60	**1.50**
3	Baghari	94.84	1.14	0.11	0.28	0.28	0.46	**1.14**
4	Paikushi	264.8	3.18	0.32	0.79	0.79	1.27	**3.18**
5	Bahura Chandel	161.9	1.94	0.19	0.49	0.49	0.78	**1.94**
6	Pipardaha	134.55	1.61	0.16	0.40	0.40	0.65	**1.61**
7	Sikta	163.73	1.96	0.20	0.49	0.49	0.79	**1.96**
8	Emiliya	212.31	2.55	0.25	0.64	0.64	1.02	**2.55**
9	Amra	52.46	0.63	0.06	0.16	0.16	0.25	**0.63**
10	Dighi	122.61	1.47	0.15	0.37	0.37	0.59	**1.47**
11	Daina	134.37	1.61	0.16	0.40	0.40	0.64	**1.61**
12	Bhasoure	19.32	0.23	0.02	0.06	0.06	0.09	**0.23**
13	Virasarai	207.95	2.50	0.25	0.62	0.62	1.00	**2.50**
14	Mahuji	295.2	3.54	0.35	0.89	0.89	1.42	**3.54**
15	Dedgaon	177.9	2.13	0.21	0.53	0.53	0.85	**2.13**
16	Avahi	107.98	1.30	0.13	0.32	0.32	0.52	**1.30**
17	Khajhara	204.54	2.45	0.25	0.61	0.61	0.98	**2.45**
18	Sawal Jalalpur	285.76	3.43	0.34	0.86	0.86	1.37	**3.43**
19	Gandhi Nagar	267.3	3.21	0.32	0.80	0.80	1.28	**3.21**
20	Raitha	196.6	2.36	0.24	0.59	0.59	0.94	**2.36**

21	Gopalpur	45.25	0.54	0.05	0.14	0.14	0.22	**0.54**
22	Mahura	299.05	3.59	0.36	0.90	0.90	1.44	**3.59**
23	Awati	178.15	2.14	0.21	0.53	0.53	0.86	**2.14**
24	Jigna	140.1	1.68	0.17	0.42	0.42	0.67	**1.68**
25	Medhan	124.4	1.49	0.15	0.37	0.37	0.60	**1.49**
26	Sisaurakala	185.4	2.22	0.22	0.56	0.56	0.89	**2.22**
	Total	**4500**	**54**	**5.4**	**13.5**	**13.5**	**21.6**	**54**

5.2.6 PROJECTWISE/YEARWISE FINANCIAL BREAK UP OF WORK COMPONENT OF IWMP-I, DISTRICT-CHANDAULI

Amount in Lacs

S. No.	Name of GP	Project Area	Proposed Amount	Work Component 56% of Project Cost				
				2009-10	2010-11	2011-12	2012-13	Total
1	Noori	298.7	20.07	2.69	5.86	5.74	5.79	20.07
2	Ramroopdas Pur	124.83	8.39	1.12	2.45	2.40	2.42	8.39
3	Baghari	94.84	6.37	0.85	1.86	1.82	1.84	6.37
4	Paikushi	264.8	17.79	2.38	5.20	5.08	5.13	17.79
5	Bahura Chandel	161.9	10.88	1.46	3.18	3.11	3.14	10.88
6	Pipardaha	134.55	9.04	1.21	2.64	2.58	2.61	9.04
7	Sikta	163.73	11.00	1.47	3.21	3.14	3.17	11.00
8	Emiliya	212.31	14.27	1.91	4.17	4.08	4.11	14.27
9	Amra	52.46	3.53	0.47	1.03	1.01	1.02	3.53
10	Dighi	122.61	8.24	1.10	2.41	2.35	2.38	8.24
11	Daina	134.37	9.03	1.21	2.64	2.58	2.60	9.03
12	Bhasoure	19.32	1.30	0.17	0.38	0.37	0.37	1.30
13	Virasarai	207.95	13.97	1.87	4.08	3.99	4.03	13.97
14	Mahuji	295.2	19.84	2.66	5.79	5.67	5.72	19.84
15	Dedgaon	177.9	11.95	1.60	3.49	3.42	3.45	11.95
16	Avahi	107.98	7.26	0.97	2.12	2.07	2.09	7.26
17	Khajhara	204.54	13.75	1.84	4.01	3.93	3.96	13.75

18	**Sawal Jalalpur**	285.76	19.20	2.57	5.61	5.49	5.54	19.20
19	**Gandhi Nagar**	267.3	17.96	2.41	5.24	5.13	5.18	17.96
20	**Raitha**	196.6	13.21	1.77	3.86	3.77	3.81	13.21
21	**Gopalpur**	45.25	3.04	0.41	0.89	0.87	0.88	3.04
22	**Mahura**	299.05	20.10	2.69	5.87	5.74	5.80	20.10
23	**Awati**	178.15	11.97	1.60	3.50	3.42	3.45	11.97
24	**Jigna**	140.1	9.41	1.26	2.75	2.69	2.72	9.41
25	**Medhan**	124.4	8.36	1.12	2.44	2.39	2.41	8.36
26	**Sisaurakala**	185.4	12.46	1.67	3.64	3.56	3.59	12.46
	Total	**4500**	**302.4**	**40.5**	**88.29**	**86.4**	**87.21**	**302.4**

6. MANAGEMENT /ACTION PLAN

6.1 PREPARATORY PHASE

6.1.1 Entry Point Activities

Integrated Watershed Development Programme - is aimed at the socio economic up liftments of the dweller of watershed area and to create trust about the programme to be implemented so that they can coordinate in participatory mode for the success of the programme. As per the new common guidelines total financial outlay for the entry point activities is 4 % of the total project cost. To increase the per capita availability of drinking water older hand pump rapier of the village will be as well as pacca platform and socking pits will be constructed, to increase the irrigation water availability older bundhies which are already existed but not functioning will be reconstructed/ renovated. Repairing and maintenance of water bodies have been proposed on priority basis. School lies in the watershed areas will be equipped with drinking water. To approach watershed village construction and repairing of damaged pulia, link road & seating platform has also been proposed. Total estimated cost for these activities is Rs 21.60 Lacs.

Table no. 6.1: Entry point activities (EPA)

(All financial figures in lakh Rs.)

S.no.	Names of the Villages	Amount earmarked for EPA	Entry point Activities planned	Estimated cost in Lac.	Expected outcome	Name of agency which selected the EPA#	Expected month & year of completion (mm/yyyy)
1	2	3	4	5	6	7	8
1	2A7C2a2c Sikata	1.311	Repair of well/ Jagat-3	0.900	-	WC, PIA, WDT	2011
			Kishan Manch-1	0.4110	-	WC, PIA, WDT	2011
2	2a7C2a1a Vira Saray	4.60	Repair of well/ Jagat-5	2.00	-	WC, PIA, WDT	2011
			Kishan Manch-2	.90	-	WC, PIA, WDT	2011
			Repair of Hand pump and Jagat-3	.45	-	WC, PIA, WDT	2011
			Repair of Road and pullia	1.25	-	WC, PIA, WDT	2011
3	2A7C2a1d Paikusi	1.736	Repair of well/ Pacca jagat-4	1.20	-	WC, PIA, WDT	2011
			Kishan Manch-2	0.536	-	WC, PIA, WDT	2011
4	2A7C2a2a	4.345	Repair of well/ Jagat-6	2.065	-	WC, PIA, WDT	2011

	Noori		Kishan Munch-4	1.60	-	WC, PIA, WDT	2011
			Repair of Pond Staire-1	.2 0	-	WC, PIA, WDT	2011
			Construction of Both Room-1	0. 18	-	WC, PIA, WDT	2011
			Repaire of Hand pump and Jagat-2	.30			
5	2a7C2a1b Jigna	2.947	Repair of well/ Pacca jagat-5	1.597	-	WC, PIA, WDT	2011
			Repairing of Handpump and Jagat-3	0.45	-	WC, PIA, WDT	2011
			Kishan manch-2	.90	-	WC, PIA, WDT	2011
6	2A7C2a2b Barhan	6.661	Repair of well/ Pacca jagat-5	1.60	-	WC, PIA, WDT	2011
			Repairing of Handpump and Jagat-6	1.411	-	WC, PIA, WDT	2011
			Kishan manch-3	1.50	-	WC, PIA, WDT	2011
			Repairing of Both Room-2	0.40	-	WC, PIA, WDT	2011
			Repair of Road and Pullia	1.75	-	WC, PIA, WDT	2011
	Total	**21.60**		**21.60**			

Was the EPA selected by Gram Panchayat/WC/PIA/WDT/Any other (please specify)

Pre & After Photograph Of E.P.A. Work

Micro Watershed-Paikusi(2A7C2a1d)Gram-Paikusi

Pre & After Photograph Of E.P.A. Work

Micro Watershed-Sikata(2A7C2a2c) Gram-Emiliya

Pre & After Photograph Of E.P.A. Work

Micro Watershed-Noori(2A7C2a2a)Gram-Noori Tambagarh

6.2 WORK PHASE

Table No.6.2: WORK DETAILS OF LAND DEVELOPMENT IN IWMP-Ist

S.NO.	NAME & CODE OF MWS	Name of GP	Name of Work							
			Plantation		Agro-forestry		Agro-horticulture		TOTAL	
			Area	Cost	Area	Cost	Area	Cost	Area	Cost
1	Noori/ 2A7C2a2a	Noori	28.25	3.164	6.75	1.35	7.75	1.47	42.25	5.964
		Ramrup Daspur	12.75	1.428	3.0	0.60	3.25	0.65	19.00	2.678
		Baghari	9.0	1.008	2.25	0.45	2.50	0.50	13.75	1.958
	TOTAL		**50.0**	**5.600**	**12.00**	**2.40**	**13.00**	**2.60**	**75.00**	**10.60**
2	Paikusi/2A7C2a1d	Paikusi	11.75	1.316	2.25	0.45	2.25	0.45	16.25	2.216
		Bahora Chandel	7.25	0.812	1.50	0.30	1.5	0.30	10.25	1.412
		Piper Daha	6.00	0.672	1.25	0.25	1.25	0.25	8.5	1.172
	TOTAL		**25.00**	**2.800**	**5.00**	**1.00**	**5.00**	**1.00**	**35.00**	**4.800**
3	Sikta/2A7C2a2c	Sikata	13.20	1.478	2.75	0.55	2.50	0.50	18.45	2.528
		Emiliya	17.00	1.904	3.75	0.75	3.5	0.70	24.25	3.354
		Amara	4.15	0.465	1.00	0.20	1.00	0.20	6.15	0.865
		Dighi	9.80	1.098	2.25	0.45	2.0	0.40	14.05	1.948
		Daina	14.00	1.568	3.00	0.60	2.75	0.55	19.75	2.718
		Bhasaur	0.85	0.207	0.25	0.05	0.25	0.05	2.35	0.307
	TOTAL		**60.00**	**6.720**	**13.00**	**2.60**	**12.00**	**2.40**	**85.00**	**11.720**
4	Virasarai/2A7C2a1a	Muralipur(Virasari)	13.00	1.456	3.50	0.70	3.50	0.70	20.00	2.856
		Mahuji	18.75	2.10	4.75	0.95	4.75	0.95	28.25	4.00

		Dedgaon	11.25	1.26	3.00	0.60	3.00	0.60	17.25	2.46
		Awahi	7.00	0.784	1.75	0.35	1.75	0.35	10.50	1.484
	TOTAL		**50.00**	**5.600**	**13.00**	**2.60**	**13.00**	**2.60**	**76.00**	**10.800**
5	Barhan/2A7C2a2b	Khajhara	12.75	1.428	3.50	0.70	3.50	0.70	19.75	2.828
		Sawaljalapur	17.65	1.977	4.75	0.95	4.75	0.95	27.15	3.877
		Gandhi Nagar(Barhan)	16.75	1.876	4.50	0.90	4.50	0.90	25.75	3.676
		Raitha	12.75	1.428	3.25	0.65	3.25	0.65	19.25	2.728
		Gopalpur	2.85	0.319	0.75	0.15	0.75	0.15	4.35	0.619
		Prakashpur(Mahura)	16.25	1.820	4.25	0.85	4.25	0.85	24.75	3.520
		Awati	11.00	1.232	3.0	0.60	3.0	0.60	17.00	2.432
	TOTAL		**90.00**	**10.080**	**24.0**	**4.80**	**24.0**	**4.80**	**138.00**	**19.680**
6	Jigna/2A7C2a1b	Jigna	8.00	0.896	2.00	0.40	2.25	0.45	12.25	1.746
		Medhan	7.00	0.784	1.75	0.35	2.00	0.40	10.75	1.534
		Sisaura Kala	10.00	1.120	2.25	0.45	2.75	0.55	15.00	2.120
	TOTAL		**25.00**	**2.800**	**6.00**	**1.20**	**7.00**	**1.40**	**38.00**	**5.400**
	GRAND TOTAL		**300.00**	**33.60**	**73.00**	**14.60**	**74.00**	**14.80**	**447.00**	**63.000**

Table no. 6.3: Technical Details of Horticultural Activities in 1ha

Particulars	Value	
Crop Name	*Aonla, bael Ber, Guava etc*	
Plant To Plant Spacing	8.00	M
Row to Row Spacing	8.00	M
Pit Length	1.00	M
Pit Width	1.00	M
Pit Depth	1.00	M
No. of Plants	156	Nos.
Plantation Area	1.00	ha.
No. of Plants per ha	1,56	Nos.
Gap Filling	20	%

6.3 Soil and moisture conservation

For soil and moisture conservation, water resource development, horticulture, besides agro forestry vegetation / plantation work, engineering structure have also been proposed under the project. Engineering structure are important components of soil and water conservation that can play a vital role in erosion control on arable land. Engineering measure usually involves in creating mechanical barriers across the direction of flow of water and thus retards or retains runoff on the following principles:

- Increase the time of concentration.
- Break a long slope into short ones.
- Protection of drainage channel against damage.
- Prevent excessive soil and water losses.

1. **Ridge Area Treatment Plans:**

It is very important to treat the ridge as this is where the major water resources originate. For the ridge area treatment of IWMP 1st watershed following structure are been Proposed after interaction between the watershed committee, Range Forest Officer (RFO) and other field staff of forest.

A. Contour Bunding/Field Bunding :

Contour bunding is and effective in erosion control and moisture conservation in dry areas having less than 1 % slope to reduce the length of slope. Contour bund/Field Bunds constructed treatable area in 1011.00 ha of lands with total estimated cost of Rs. 29.00 lacs

B. Graded/Marginal and Peripheral Bund:

Marginal bunds are the engineering structure to reduce the volume and speed of runoff. Those locations where change in slope and soil texture founded there is peripheral bund will be constructed along with nala bank. Total proposed treatable area is 2666.00 ha with financial outlay of Rs. 186.70 lacs

2. Water Harvesting bundhies and Ponds:

Water harvesting bundhies are primarily aimed at collecting and storing any form of water enter through rainfall, runoff or subsurface flow for multiple purpose. There will be 8 water harvesting bundhies with farm ponds structure on 146.00 h of land will be constructed on lower reaches of the watershed. Estimated financial outlay is Rs. 18.04 lacs.

3. Pucca check dam Structure:

These structure of built of mossonary. Pucca structure have been proposed constructed in big gullies / ravines carrying relatively high run off and sediment load. Water stored in Pucca structure will be utilized as source of irrigation water during post mansoon season. There will 9 pucca check dam Costed 54.68 area will treated by CD 190.00ha.

4. Kuchcha(Earthen) check dam Structure:

These structure of built of mossonary. Pucca structure have been proposed constructed in big gullies / ravines carrying relatively high run off and sediment load. Water stored in Pucca structure will be utilized as source of irrigation water during post mansoon season. There will 4 pucca check dam Costed 4.02 area will treated by CD 40.00ha.

5. Agroforestry:

About 73.00 ha lands will be taken from the waste land faling in the class-VII category in the watershed. The cost of Agro-forestry of total planned area are 14.60 Lakhs. These lands will be planted with in which urd, moong, til etc planted as intercrop, Subabool, Shisam, sagon and Popular will be used as fuel, timber as well as fodder.

6. Agro-Horticulture

About 74.00 ha area and amount 14.80 lakh, will taken for the plantation of fruit trees like aonla, bael, ber, karaunda, mango, guvava will be planted at suitable spacing in the watershed.

7. Plantation:-

In the project area there is very few community land to block plantation so for make eco-balance here prescribed scatterd plantation area near about 300.00 ha. The total amount of plantation 33.60.

Total Treated area (By Soil Moisture Conservation and Water Harvesting Structure) of Micro Watershed

S. NO.	NAME & CODE OF MWS	Name of GP	Treatable Area	Field Bunds			Contour Bunds			Marginal Bunds			Peripheral Bunds			Ponds			ECD			Nala Bandh/ MCD			Pukka Structure		TOTAL	
				Area	Length	Cost	Area	Length	Cost	Area	Length	Cost	Area	Length	Cost	Area	No.	Cost	Area	No.	Cost	Area	No.	Cost	No.	Cost	Area	Cost
1	Noori/ 2A7C2a2a	Noori	239.15	66	9970	1.71	4.5	564	0.21	50	3950	3.62	54.65	3788	4.03	14	1	2.7	0	0	0	50	2	12.15	139	4.17	239.15	28.69
	Paikusi/2A7C2a1d		0	0	0	0	0	221	0.08	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.08
	Virasarai/ 2A7C2a1a		1.15	0			1.15	614	0.23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.15	0.23
	Sikta/2A7C2a2c		9.55	0		0	5.55	2173	0.82	1.5	252	0.23	2.5	986	1.05	0	0	0	0	0	0	0	0	0	0	0	9.55	2.1
	TOTAL		**249.85**	**66**	**9970**	**1.71**	**11.2**	**3572**	**1.34**	**51.5**	**4237**	**3.85**	**57.15**	**4774**	**5.08**	**14**	**1**	**2.7**	**0**	**0**	**0**	**50**	**2**	**12.15**	**139**	**4.17**	**249.85**	**31**
2	Noori/ 2A7C2a2a	Piper Daha	70.55	70.55	888	0.15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	70.55	0.15
	Paikusi/2A7C2a1d		39	5	599	0.11	6	716	0.27	28	599	0.54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	39	0.92
	TOTAL		**109.55**	**75.55**	**1087**	**0.26**	**6**	**716**	**0.27**	**28**	**599**	**0.54**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**109.55**	**1.07**
3	Noori/ 2A7C2a2a	Ramrup Daspur	124.83	116.83	408	0.07	0	0	0	0	0	0	8	97	0.11	0	0	0	0	0	0	0	0	0	0	0	124.83	0.18
	Jigna/2A7C2a1b		10	0	0	0	0	0	0	10	599	0.54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0.54
	TOTAL		**134.83**	**116.83**	**408**	**0.07**	**0**	**0**	**0**	**10**	**599**	**0.54**	**8**	**97**	**0.11**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**134.83**	**0.72**
4	Noori/ 2A7C2a2a	Baghari	94.84	28.6	4301	0.74	5.15	617	0.23	35.0	3690	3.35	26.09	2925	3.11	0	0	0	0	0	0	0	0	0	0	0	94.84	7.43
	TOTAL		**94.84**	**28.6**	**4301**	**0.7**	**5.15**	**617**	**0.23**	**35.0**	**3690**	**3.35**	**26.09**	**2925**	**3.11**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**94.84**	**7.43**

						4																						
5	Paikusi/2A7C2a1d	Paikusi	239.8	8.9	894	0.15	86	4311	1.62	144.9	6370	5.78	0	0	0	0	0	0	0	0	0	0	0	0	40	1.2	239.8	8.75
	TOTAL		**239.8**	**8.9**	**894**	**0.15**	**86**	**4311**	**1.62**	**144.9**	**6370**	**5.78**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**40**	**1.2**	**239.80**	**8.75**
6	Paikusi/2A7C2a1d	Bahora Chandel	70.20	8.70	1315	0.23	21.50	10031.00	3.76	20.00	4682.00	4.25	20.00	4843.00	5.15	0.00	0.000	0.00	0.00	0.000	0.000	0	0	0	33	0.99	70.2	26.53
	Noori/2A7C2a2a		53.60	16.00	3068	0.53	1.0	158	0.06	4.60	289	0.25	2	96	0.1	0	0	0	0	0	0	0	30	2	12.15	0	0	53.6	0.94
	Virasarai/2A7C2a1a		28.10	3.70	416	0.07	0	0	0	16.50	1175	1.07	7.9	1000	1.07	0	0	0	0	0	0	0	0	0	0	0	0	28.1	2.61
	TOTAL		**151.90**	**28.40**	**4799**	**0.83**	**22.500**	**10189**	**3.82**	**41.10**	**6136**	**5.57**	**29.9**	**5939**	**6.32**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**30**	**2**	**12.15**	**33**	**0.99**	**151.90**	**29.68**
7	Sikta/2A7C2a2c	Sikata	163.73	0.00	0	0	45.73	5802	2.17	38.00	3879	3.52	30	2431	2.59	10	1	2	0	0	0	40	2	12.15	20	0.6	163.73	23.03
	TOTAL		**163.73**	**0.00**	**0**	**0**	**45.73**	**5802**	**2.17**	**38.00**	**3879**	**3.52**	**30**	**2431**	**2.59**	**10**	**1**	**2**	**0**	**0**	**0**	**40**	**2**	**12.15**	**20**	**0.6**	**163.73**	**23.03**
8	Sikta/2A7C2a2c	Emiliya	162.31	0	0	0	8.5	596	0.22	123.81	2029	1.84	0	0	0	30	1	2	0	0	0	0	0	0	8	0.24	162.31	4.30
	TOTAL		**162.31**	**0**	**0**	**0**	**8.5**	**596**	**0.22**	**123.81**	**2029**	**1.84**	**0**	**0**	**0**	**30**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**0.24**	**162.31**	**4.30**
9	Sikta/2A7C2a2c	Amara	42.46	0	0	0	4.5	521	0.19	37.96	8878	2.61	0	0	0	0	0	0	0	0	0	0	0	0	10	0.3	42.46	3.10
	TOTAL		**42.46**	**0**	**0**	**0**	**4.5**	**521**	**0.19**	**37.96**	**8878**	**2.61**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**10**	**0.3**	**42.46**	**3.10**
10	Sikta/2A7C2a2c	Dighi	107.61	0	0	0	6.5	794	0.3	71.11	4203	3.81	0	0	0	30	1	2	0	0	0	0	0	0	14	0.42	107.61	6.53
	TOTAL		**107.61**	**0**	**0**	**0**	**6.5**	**794**	**0.3**	**71.11**	**4203**	**3.81**	**0**	**0**	**0**	**30**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**14**	**0.42**	**107.61**	**6.53**
11	Sikta/2A7C2a2c	Daina	124.37	0	0	0	23.00	2760	1.03	39.30	3339	3.03	40.07	2456	2.61	22	1	2	0	0	0	0	0	0	20	0.60	124.37	9.27

	Barhan/2A7C2a2b		40.0	3.50	312	0.05	0	0	0	36.50	992	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	40.00	0.95
	TOTAL		**164.37**	**3.50**	**312**	**0.05**	**23**	**2760**	**1.03**	**85.80**	**431**	**3.93**	**40.07**	**2456**	**2.61**	**22**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**20**	**0.60**	**164.37**	**10.22**
12	Sikta/2A7C2a2c	Bhasure	19.32	0	0	0	5	584	0.22	14.32	857	0.78	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	19.32	1.0
	TOTAL		**19.32**	**0**	**0**	**0**	**5**	**584**	**0.22**	**14.32**	**857**	**0.78**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**19.32**	**1.0**
13	Virasarai/2A7C2a1a	Murlipur(Virasari)	176.80	10.5	746	0.13	15.30	1389	0.52	85.00	4526	4.11	26.00	1043	1.11	0	0	0	0	0	0	0	40	1	6.08	0	0	176.8	11.95
	Noori/2A7C2a2a		0	0	204	0.03	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.03
	TOTAL		**176.80**	**10.5**	**950**	**0.16**	**15.30**	**1389**	**0.52**	**85.00**	**4526**	**4.11**	**26.00**	**1043**	**1.11**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**40**	**1**	**6.08**	**0**	**0**	**176.8**	**11.98**
14	Virasarai/2A7C2a1a	Mahuji	260.2	30.0	4619	0.79	41.85	6278	2.35	128.15	24802	22.50	25.2	3780	4.02	10	1	2.50	25.00	3	3.02	0	0	0	40	1.20	2060.2	36.38
	TOTAL		**260.2**	**30.0**	**4619**	**0.79**	**41.85**	**6278**	**2.35**	**128.15**	**24802**	**22.50**	**25.2**	**3780**	**4.02**	**10**	**1**	**2.50**	**25.00**	**3**	**3.02**	**0**	**0**	**0**	**40**	**1.20**	**2060.2**	**36.38**
15	Virasarai/2A7C2a1a	Dedgaon	166.90	16.90	2029	0.35	3.5	406	0.15	80.8	14804	13.43	55.7	5645	6.00	10	1	2.50	0	0	0	0	0	0	35	1.05	166.90	23.48
	Paikusi/2A7C2a1d		0	0	0	0	0	0	0	0	0	0	0	255	0.27	0	0	0	0	0	0	0	0	0	0	0	0	0	0.27
	TOTAL		**166.90**	**16.90**	**2029**	**0.35**	**3.5**	**406**	**0.15**	**80.8**	**14804**	**13.43**	**55.7**	**5900**	**6.27**	**10**	**1**	**2.50**	**0**	**0**	**0**	**0**	**0**	**0**	**35**	**1.05**	**166.90**	**23.75**
16	Virasarai/2A7C2a1a	Avahi	49.00	25.00	788	14	11.00	614.00	0.23	11.00	540.00	0.49	0.00	0.00	0.00	0.00	0.000	0.00	0.00	0.000	0.000	0.000	0.000	0.00	0	0	49.00	0.86
	Jigna/2A7C2a1b		22.50	0	0	0	4.500	519	0.19	18	1434	1.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	22.50	1.49
	Noori/2A7C2a2a		36.48	6.15	735	0.13	5.00	769	0.29	13.83	2238	2.03	11.50	1214	1.29	0	0	0	0	0	0	0	0	0	20	0.60	36.48	4.34
	TOTAL		**107.**	**31.**	**152**	**0.**	**22.**	**190**	**0.**	**42.**	**4212**	**3.8**	**11.**	**121**	**1.**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**20**	**0.**	**107**	**6.6**

			98	**15**	**5**	**27**	**50**	**2**	**71**	**83**		**2**	**50**	**4**	**29**										**60**	**.98**	**9**
17	Barhan/2A7C2a2b	Khajhara	147	35.0	4214	0.72	0	0	0	59.0	14340	13.01	27.0	2066	2.20	0	0	0	0	0	0	30.0	1	6.08	40	1.2	147	23.21
	Sikta/2A7C2a2c		47.54	0	0	0	0	0	0	0	0	0	45.54	838	0.89	0	0	0	0	0	0	0	0	0	0	0.00	47.54	0.89
	TOTAL		**194.54**	**35.0**	**4214**	**0.72**	**0**	**0**	**0**	**59.0**	**14340**	**13.01**	**70.54**	**2904**	**3.09**	**0**	**0**	**0**	**0**	**0**	**0**	**30.0**	**1**	**6.08**	**40**	**1.20**	**194.54**	**24.10**
18	Barhan/2A7C2a2b	Gandhi Nagar	237.3	22.4	2688	0.46	18	2196	0.82	116.9	7331	6.5	60	2949	3.14	20	1	2.54	0	0	0	3	1	6.07	40	1.2	237.3	20.73
	TOTAL		**237.3**	**22.4**	**2688**	**0.46**	**18**	**2196**	**0.82**	**116.9**	**7331**	**6.5**	**60**	**2949**	**3.14**	**20**	**1**	**2.54**	**0**	**0**	**0**	**3**	**1**	**6.07**	**40**	**1.2**	**237.3**	**20.73**
19	Barhan/2A7C2a2b	Raitha	176.6	6.5	685	0.12	4.6	467	0.18	109.5	4947	4.49	56	1453	1.55	0	0	0	0	0	0	0	0	0	30	0.9	176.6	7.24
	TOTAL		**176.6**	**6.5**	**685**	**0.12**	**4.6**	**467**	**0.18**	**109.5**	**4947**	**4.49**	**56**	**1453**	**1.55**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**30**	**0.9**	**176.6**	**7.24**
20	Barhan/2A7C2a2b	Awati	158.15	3.5	312	0.05	0	0	0	104.5	1956	1.77	50.15	828	0.88	0	0	0	0	0	0	0	0	0	6	0.18	158.15	2.88
	Sikta/2A7C2a2c		0	0	0	0	0	0	0	0	0	0	0	136	0.15	0	0	0	0	0	0	0	0	0	0	0	0	0.15
	TOTAL		**158.15**	**3.5**	**312**	**0.05**	**0**	**0**	**0**	**104.5**	**1956**	**1.77**	**50.15**	**964**	**1.03**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**0.18**	**158.15**	**3.03**
21	Barhan/2A7C2a2b	Prakashpur(Mohara)	219.05	0	0	0	0	0	0	212.55	3940	3.57	6.5	174	0.18	0	0	0	0	0	0	0	0	0	8	0.24	219.05	3.99
	TOTAL		**219.05**	**0**	**0**	**0**	**0**	**0**	**0**	**212.55**	**3940**	**3.57**	**6.5**	**174**	**0.18**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**0.24**	**219.05**	**3.99**
22	Barhan/2A7C2a2b	Gopalpur	45.25	28.50	2663	0.46	0	0	0	16.75	133	0.12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	45.25	0.58
	TOTAL		**45.25**	**28.50**	**2663**	**0.46**	**0**	**0**	**0**	**16.75**	**133**	**0.12**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**45.25**	**0.58**

23	Barhan/2A7C2a2b	Swaljalapur	175.65	5	629	0.11	15.15	1818	0.68	111.6	11774	10.68	43.9	3296	3.51	0	0	0	0	0	0	0	0	0	20	0.6	175.65	15.58
	Sikta/2A7C2a2c		92.11	0	0	0	20.5	1515	0.57	40.00	991	0.9	31.61	822	0.87	0	0	0	0	0	0	0	0	0	0	0	92.11	2.34
	TOTAL		**267.76**	**5**	**629**	**0.11**	**35.65**	**3333**	**1.25**	**151.60**	**12765**	**11.58**	**75.51**	**4118**	**4.38**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**20**	**0.6**	**267.76**	**17.92**
24	Jigna/2A7C2a1b	Sisaura Kala	78.00	0	0	0	22.00	2724	1.02	41.00	4085	3.71	0	0	0	0	0	0	15.00	1	1	0	0	0	20	0.60	78.0	6.33
	Noori/2A7C2a2a		92.40	27	2443	0.42	8.40	746	0.28	57.00	1351	1.22	0	0	0	0	0	0	0	0	0	0	0	0	8	0.24	92.40	2.16
	TOTAL		**170.40**	**27**	**2443**	**0.42**	**30.40**	**3470**	**1.30**	**98.00**	**5436.00**	**4.93**	**0.00**	**0.00**	**0.00**	**0.000**	**0.00**	**15.00**	**1.000**	**1.000**	**0.000**	**0.000**	**0.00**	**28.00**	**0.84**	**170.40**	**8.49**
25	Jigna/2A7C2a1b	Jigna	120.10	0	0	0	35.00	429	1.58	70.00	4779	4.34	15.10	1362	1.45	0	0	0	0	0	0	0	0	0	20	0.60	120.1	7.97
	TOTAL		**120.10**	**0**	**0**	**0**	**35.00**	**429**	**1.58**	**70.00**	**4779**	**4.34**	**15.10**	**1362**	**1.45**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**20**	**0.60**	**120.1**	**7.97**
26	Jigna/2A7C2a1b	Medhan	111.4	0	0	0	36	4373	1.64	75.4	5329	4.83	0	0	0	0	0	0	0	0	0	0	0	0	8	0.24	111.4	6.71
	TOTAL		**111.4**	**0**	**0**	**0**	**36**	**4373**	**1.64**	**75.4**	**5329**	**4.83**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**0.24**	**111.4**	**6.71**
	GRAND TOTAL		**4053.00**	**544.23**	**44528**	**7.72**	**466.880**	**54109**	**21.91**	**2032.48**	**151208.00**	**135.12**	**643.41**	**44483.00**	**47.33**	**146.00**	**8.000**	**18.24**	**40.00**	**4.000**	**4.002**	**193.00**	**9.000**	**54.68**	**579.00**	**17.37**	**4053.00**	**306.39**

Table no. 6.4: Technical detail of Farm Ponds and Injection Well

S. No	Particulars	Value	Ponds	Injection Well
1	**Top area**	M^2	500.00 (25X20)	1.00
2	**Bottom area**	M^2	300.00 (20X15)	1.00
3	**Depth**	M	2.50	1.00
4	**Side Slope**	-	2:1	-

Table no 6.5: Activities related to recharging ground water resources in the project areas @

S. No.	Names of villages	Type of structures	Pre-project		Proposed target								Expected month & year of completion (mm/yyyy)
			No.	Area irrigated (ha)	Augmentation/repair of existing structures			Construction of new structures			Total target		
					No.	Area irrigated (ha)	Estimated cost	No.	Area irrigated (ha)	Estimated cost	Area irrigated (ha)	Estimated cost	
1	2A7C2a2c Sikata	(i) Open wells	3	1.50	2	4.00	0.24	-	-	-	4.00	0.24	2013
		(ii) Bore wells	6	6.00	3	11.00	0.66	-	-	-	11.00	0.66	2013
2	2a7C2a1a Noori	(i) Open wells	2	1.00	2	5.00	0.30	-	-	-	5.00	0.30	2013
		(ii) Bore wells	5	5.00	5	20.00	1.20	-	-	-	20.00	1.20	2013
3	2A7C2a1d Paikusi	(i) Open wells	1	0.50	1	2.00	0.12	-	-	-	2.00	0.12	2013
		(ii) Bore wells	4	4.00	4	18.00	1.08	-	-	-	18.00	1.08	2013
4	2A7C2a2a Barhan	(i) Open wells	3	1.50	2	4.00	0.24	-	-	-	4.00	0.24	2013
5	2A7C2a2b	(ii) Bore wells	6	6.00	3	11.00	0.66	-	-	-	11.00	0.66	2013
6.	2a7C2a1b Jigna	(i) Open wells	2	1.00	2	5.00	0.30	-	-	-	5.00	0.30	2013
	Total for the project		**32**	**26.5**	**24**	**80**	**4.8**	**0**	**0**	**0**	**80**	**4.8**	

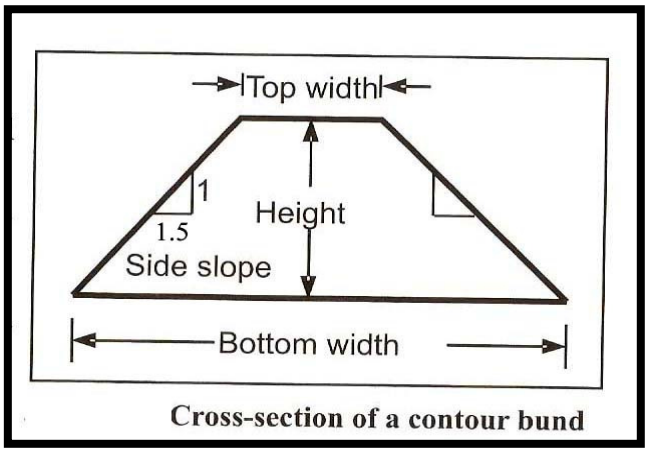
Table 6.6: Activities executed by User Groups in the Project

S.no	Names of Project	Major activities				No. of UGs involved	Estimated Cost (Rs. In lakh)	Amount of WDF to be collected (Rs. In lakh)
		Structure/activity proposed			Expected month & year of completion (mm/yyyy)			
		Type	No.#	Treatment				
1	IWMP -I	Structure work		Engineering	2012-13	25	76.74	5.60

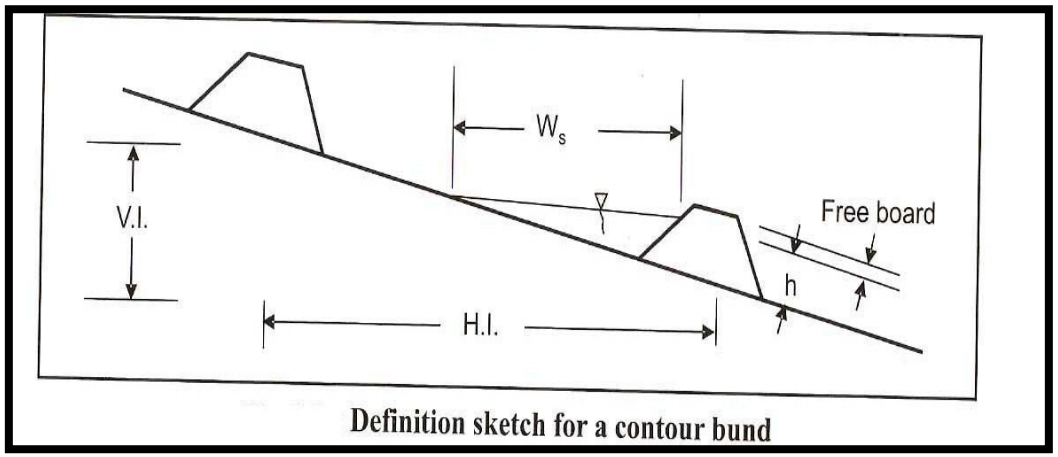
Table no 6.7: Technical detail of engineering works in project area

S. No.	Project	No of villages	Type of bund	Type of soil	Particulars (meter)				
					Top	Base	Height	Slope	Cross section
1	IWMP -I	97	Field Bund	Normal	0.30	1.65	0.45	1.5:1	0.438
			Contour Bund	Clay	0.45	1.65	0.60	1.0:1	0.63
				Loam	0.45	2.25	0.60	1.5:1	0.81
				Sandy	0.45	2.85	0.60	2.0:1	0.99
			Marginal/CRB & peripheral Bund	Plain land	0.60	3.60	1.00	1.5:1	2.10
				Undulating land	1.00	4.00	1.00	1.5:1	2.50
			Peripheral Bunds	Normal	1.00	4.00	1.00	1.5:1	2.50
			Earther CD	Average	2.00	12.00	2.50	2:1	17.5
			Gully Plug	At 3% or above3 % slope gully plug will be made between two drainage line with emergency					

				temporary spill way

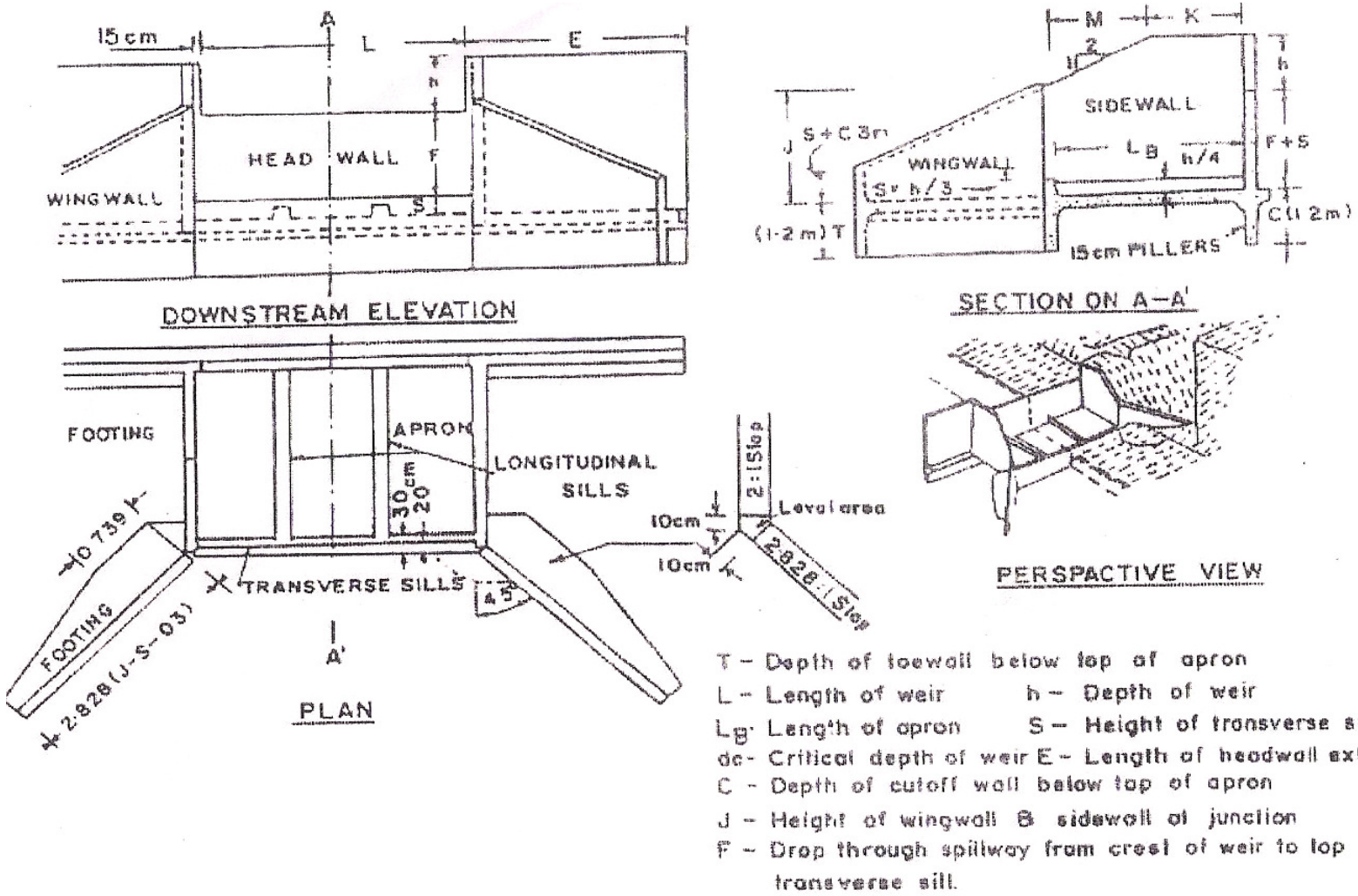


Cross-section of a contour bund



Definition sketch for a contour bund

PERIPHERAL BUND



T – Depth of toewall below top of apron
L – Length of weir h – Depth of weir
Lg – Length of apron S – Height of transverse sill
dc – Critical depth of weir E – Length of headwall extention
C – Depth of cutoff wall below top of apron
J – Height of wingwall & sidewall at junction
F – Drop through spillway from crest of weir to top of transverse sill.


जल संचय बंधी


चेक डैम (डाउन स्ट्रीम)

Cost Estimation for Horticultural Activities in 1ha

S. No	Description	No.	Length (m.)	Width (m.)	Depth (m.)	Unit	Quantity	Rate	Amount
1	Digging of pits for plants	156	1	1	1	Cum	156.00	10	1560.00
2	Plants samplings for plantation in Govt. pasture area, sampling not less than 30 cm. height	156				Nos.	156.00	10	1560.00
3	Transportation of plants from nursery to camp site up to 15Km	156				Nos.	156.00	2	312.00
4	Loading and unloading of plants	156				Nos.	156.00	2	312.00
5	Rehandling of plants from camp site to actual planting site upto 200m.	156				Nos.	156.00	2	312.00
6	Cost of fertiliser & insecticides incl. application	156				Nos.	156.00	10	1560.00
7	Weeding and Hoeing two times (Twice in year)	156				Nos.	156.00	2.46	384.00
Total									**6000.00**

5.2.4 PRODUCTION SYSTEM AND MICRO ENTERPRIZES (Financial out lays 13% i.e., Rs. 70.20 lacs)

PROPOSED EXTENSION STRATEGIES

The following feasible extension strategies have been proposed based on the analysis of data collected through PRA & related issues/problems in IWMP 1st Chandauli district.

Strategies:

A. Improvement of productivity and income of farmers in the existing enterprises and farming system.
B. Diversification and intensification of existing farming system.
C. Sustainability in productivity/income.
D. Integrated nutrient management.
E. Integrated pest management.
F. Seed multiplication and replacement.
G. Horticulture planting material
H. Success story.
I. Natural resources management.
J. Issue for Policy consideration
K. Farm mechanization.
L. Marketing & Media strategies.
M. Human Resource Development.
N. Farmers Organization.
O. Public Private Partnership.

A. Improvement of Productivity and income fo farmers in the existing enterprises and farming system

Agriculture Production

Crop	Critical Gap	Strategic issue	Strategies
1	**2**	**3**	**4**
1. Wheat	Yield stagnation	Use of recommended seed rate, Weed management, Popularizing Seed production programme, Popularizing Organic farming	Demonstration, Exposure visits, Training
	Use of untreated seeds	Encouraging sowing with treated seeds	Demonstration, Exposure visits, Training
	Un judicious use of Irrigation water	Irrigation management	Demonstration, Exposure visits, Training
2. Paddy	Imbalance use of Fertilizer	To promote INM	Demonstration, Soil testing, Exposure visits, - Training
	Un Availability of Quality Seed	In crease seed replacement ratio Promote seed production Programme	Demonstration, Exposure visits, Training
	1. Improper nursery raising	-Raised seed beds	Demonstration, Exposure visits, Training
	2. Inadequate Pest and disease management	Popularization of Integrated pest and disease management	- Demonstration - Exposure visits - Training
	3. Weed management	Popularization of chemical Pesticide	Demonstration, Exposure visits, Training
1	**2**	**3**	**4**
3..Maize	1. Non adoption of seed treatment	Application of seed treatment	Demonstration, Exposure visits, Training
	2. Excess application of fertilizes	Use of recommended dose of fertilizer	Demonstration, Exposure visits, Training
	3. Use of Micro nutrients	-Use of recommended quantity of micro nutrients	Demonstration, Exposure visits, Training
	4. Non adoption of hand pollination practices	Following hand pollination	Demonstration, Exposure visits, Training
4. Mustard	1. Higher plant population	Popularization of plant population technique per	Demonstration, Exposure visits, Training
	2. Low production	-Suitable agronomical practices will be popularized	Demonstration, Exposure visits, Training
	3. Imbalance use of fertilizer	-Use of balanced fertilizer promote, sulpher	Demonstration, Exposure visits, Training
	4. Pest & disease management	-Adoption of proper pest and disease management practice	Demonstration, Exposure visits, Training
	5. Post harvest technology	Popularization of improved storage method	Demonstration, Exposure visits, Training

Horticultural Production:-

(1) Potato	I. Un Identified verities	Popularization of Identified Recommended verities	Demonstration, Exposure visits, Training
	2. No seed treatment	Adoption of recommended seed treatment	Demonstration, Exposure visits, Training
	3. Non use of Micro nutrients	-Application of recommended Micro nutrients	Demonstration, Exposure visits, Training
	4. Non Adoption of pest and disease management	-IDM	Demonstration, Exposure visits, Training
(2) Tomato	1. No seed treatment	Adoption of recommended seed treatment	Demonstration, Exposure visits, Training
	2. Imbalace use of fertilizers	Application of recommended dose of fertilizers	Demonstration, Exposure visits, Training
	3. Low quantity use of F.Y.M.	Adoption of recommended doseOf F.Y.M.	Demonstration, Exposure visits, Training
	4. Inadequate plant protection measure	Popularization of recommended plant protection techniques	Demonstration, Exposure visits, Training
(3) Banana	1. Low quantity use of F.Y.M.	Use of Recommended dose of F.Y.M	Demonstration, Exposure visits, Training
	2. No seed treatment	Popularization of bio agents, *Tricoderma* and P*seudomonas* For seed treatments	Demonstration, Exposure visits, Training
	3. Inadequate plant protection technique	Popularization of plan protectiontechnique	Demonstration, Exposure visits, Training

ANIMAL HUSBANDRY

Animal	Critical gap	Strategy	Activities
Cow & Bufallow	a) Artificial Insemination partial adoption of AI	a) Improving knowledge about advantage and disadvantages of AI	a) Awareness campaign b) Ensure the availability of technical staff. c) Ensure the availability of semen f) Conducting fertility improvement camps. g) Conducting camps for castration of scrub bulls at village level h) Providing wide month cry can & 1 Lit. Thermos for easy transportation of semen to remote villages
	b) Unavailable of quality fodder feed.	Improving the knowledge about animal production capacity and its fodder requirement	a) Organizing awareness camp about animal production capacity, its requirements and dairy economics. b) ensure the supply of good quality fodder seeds. c) Demonstration of conservation of fodder by silage making
	c) Minerals & vitamins. Full gap in adoption of feeding	Motivating farmers about importance of minerals & vitamins.	a) Intensify the awareness programmers about importance of feeding minerals & vitamins by promoting stall feeding
	d) Inter-calving period is long period	Awarding about "a calf a year"	a) Awareness camp for reduction calving period
	e) Health care gap in health care management	Providing knowledge about animal health and hygiene	a) organizing awareness programme about animal health & hygiene through trainings and field visits. b) Awareness campaign about animal health camps
	f) General management Partial gap in Adoption of general. Management	Technology dissemination about animal management and its importance	a organizing awareness programme about animal management through training and field visits.
	g) Average milk yield. Full gap in average milk yield.	Technology dissemination about complete dairy management	By providing awareness about complete dairy management
Goat & Poultry	a) Breed up gradation	Awareness about feed and fodder management	a) Providing awareness programme through training and field visits. b) Refresher training course to technical
	b) Feed management Partial adoption of feed management	Awareness about feed and fodder management	a) Providing awareness programme about the feed and fodder requirement of the animal. b) Intesify the supply of fodder seeds
	d) Health care -gap in health care management -non adoption of deworming schedule	-Popularizing the importance of deworming. - Providing knowledge about animal health and hygiene	a) awareness camp about importance of deworming b) Conducting deworming comps c) Organizing awareness programme about animal health and hygiene through training and field visit.
	d) General Management - Partial gap in adoption of general management	- Technology dissemination about animal management and its importance	- Organizing awareness programme about animal management through training and field visit

Fish Production

1. Fish production	1 Poor ground water resource during summer	Water storage facilities from on going schemes	Linkage with credit institution
	2. Silt & weed problem in existing ponds	Desalting of ponds & eradication of weed	Demonstration, Exposure visits, Training
	3. Improper stocking measures	Promotion of proper stocking measures	Demonstration, Exposure visits, Training
	4. Unawareness about composite fish farming	Creating awareness about composite fish farming	Demonstration, Exposure visits, Training
	5. Improper artificial feeding	Promotion of proper artificial feeding	Demonstration, Exposure visits, Training
	6. Marketing of fish through unorganized sectors	To promote marketing of fish through organized sectors	Demonstration, Exposure visits, Training
	7. Unawareness about cold storage and processing of fish	To create awareness about storing fish in cold storage and process the fish	Demonstration, Exposure visits, Training

6.2.5 LIVELIHOOD ACTIVITIES

Income generating activities through self help groups for landless farmers like goat farming, poultry farming bee keeping, livestock development activities, vocational training given with the involvement of KVK, Varanasi and NGOs. Financial out lays for this component is 10 % i.e., Rs 54.00 lacs, details are given below in table.

6.2.6 Marketing linkage

The direct livelihood activities need good forward and backward support. Without such support system the activities may fail to deliver the desired results. These linkages would involve credit, machinery, input supply, marketing, etc.

Table no. 5.8: Backward and Forward Linkage

S. No.	Project	Type of Marketing Facility	Pre-project (no.)	During the project (no.)	Post-project (no.)
1	*IWMP -*	**Backward linkages**			
		Seed certification	1	1	1
		Seed supply system	5	12	20
		Fertilizer supply system	2	18	20
		Pesticide supply system	6	6	10
		Credit institutions	Bank-5	Bank-7	Bank-10
		Water supply	-	-	-
		Extension services	3	3	12
		Nurseries	1	1	12
		Tools/machinery suppliers	-	-	2
		Price Support system	-	-	4
		Labour	-	-	-
		Any other (please specify)	-	-	-
		Forward linkages			
		Harvesting/threshing machinery	4	8	12
		Storage (including cold storage)	1	1	4
		Road network			
		Transport facilities	-	-	-
		Markets / Mandis	8	9	12
		Agro and other Industries	1	5	6
		Milk and other collection centres	-	2	6
		Labour	-	-	-
		Hatchery (Portable)	-	5	8
		Vermi-compost unit	-	2	5
		Animal Mineral Mixture	-	-	50 gm/day/animal

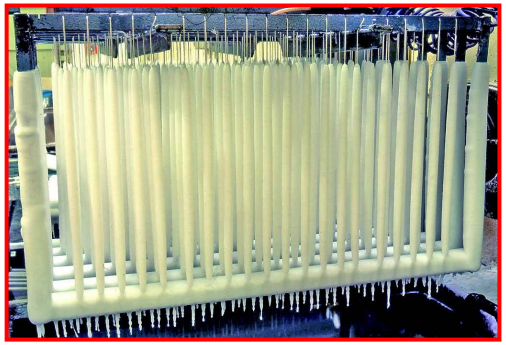
Table No.6.9: DETAILS OF ACTION PLAN

Year wise Action Plan for Livelihood

Table: 2009-10

Livelihood Activities Year Wise Fin. & Phy. Breakup												Phy. In No/Ha., Fin. In Lakhs	
		Goat Keeping		Poultry		Dairy		Sewing		Fishereg		Total	
S.No.	Name of MWS	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Noori	0	0	1	0.25	1	0.25	1	0.25	0	0	**3**	**0.75**
2	Paikusi	0	0	0	0	1	0.25	0	0	0	0	**1**	**0.25**
3	Sikata	1	0.25	1	0.25	1	0.25	0	0	0	0	**3**	**0.75**
4	Virasarai	0	0	1	0.25	0	0	0	0	1	0.25	**2**	**0.5**
5	Barhan	0	0	1	0.25	1	0.25	1	0.25	1	0.25	**4**	**1**
6	Jigna	0	0	0	0	1	0.25	0	0	0	0	**1**	**0.25**
	Total-	**1**	**0.25**	**4**	**1**	**5**	**1.25**	**2**	**0.5**	**2**	**0.5**	**14**	**3.5**

CANDLE MAKING



FISHERIES

Table: 2010-11

Phy. In No/Ha., Fin. In Lakhs

S.No.	Name of MWS	Goat Keeping		Poultry		Dairy		General Stores		Sewing		Carpentry		Black smithy		Fishereg		Butter/Creem		Punchar		Total	
		Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Noori	0	0	0	0	2	0.5	2	0.5	1	0.25	0	0	1	0.25	0	0	0	0	0	0	6	1.5
2	Paikusi	0	0	0	0	1	0.25	1	0.25	1	0.25	0	0	0	0	0	0	0	0	0	0	3	0.75
3	Sikata	0.1	0.25	1	0.25	1	0.25	1	0.25	1	0.25	0	0	0	0	1	0.25	0	0	1	0.25	7	1.75
4	Virasarai	0	0	1	0.25	1	0.25	1	0.25	1	0.25	1	0.25	1	0.25	0	0	0	0			6	1.5
5	Barhan	1	0.25	1	0.25	1	0.25	1	0.25	2	0.5	1	0.25	1	0.25	1	0.25	1	0.25	1	0.25	11	2.75
6	Jigna	0	0	0	0	1	0.25	1	0.25	0	0	0	0	0	0	1	0.25					3	0.75
	Total-	**1.1**	**0.5**	**3**	**0.75**	**7**	**1.75**	**7**	**1.75**	**6**	**1.5**	**2**	**0.5**	**3**	**0.75**	**3**	**0.75**	**1**	**0.25**	**2**	**0.5**	**36**	**9**

BLACK SMITHY

CARPENTRY

CARPENTRY

Table: 2011-12

Phy. In No/Ha., Fin. In Lakhs

S.No.	Name of MWS	Goat Keeping		Poultry		Dairy		General Stores		Tent Housh		Sewing		Carpentry		Black smithy		Hair Cutting		Fishereg		Butter/Creem		Candle		Punchar		Total	
		Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Noori	0	0	0	0	2	0.5	1	0.25	0	0	1	0.25	0	0	0	0	0	0	1	0.25	1	0.25	0	0	1	0.25	7	1.75
2	Paikusi	0	0	0	0	0	0	1	0.25	1	0.25	0	0	0	0	0	0	0	0	1	0.25	0	0	0	0	0	0	3	0.75
3	Sikata	0	0	0	0	2	0.5	1	0.25	0	0	1	0.25	0	0	0	0	1	0.25	0	0	0	0	1	0.25	1	0.25	7	1.75
4	Virasarai	0	0	1	0.25	2	0.5	1	0.25	0	0	0	0	0	0	0	0	1	0.25	0	0	1	0.25			1	0.25	7	1.75
5	Barhan	1	0.25	1	0.25	2	0.5	1	0.25	0	0	2	0.5	1	0.25	1	0.25	1	0.25	0	0	0	0	0	0	0	0	11	2.75
6	Jigna	0	0	0	0	1	0.25	1	0.25	0	0	1	0.25	0	0	0	0	0	0	0	0	0	0	0	0	1	0.25	4	1
	Total-	**1**	0.25	**2**	**0.5**	**9**	**2.25**	**6**	**1.5**	**1**	**0.25**	**5**	**1.25**	**1**	**0.25**	**1**	0.25	3	0.75	**2**	**0.5**	**2**	**0.5**	1	0.25	**4**	**1**	**39**	**9.75**

GOAT KEEPING

Table: 2012-13

Phy. In No/Ha., Fin. In Lakhs

S.No.	Name of MWS	Goat Keeping		Poultry		Dairy		General Stores		Sewing		Carpentry		Hair Cutting		Fishereg		Butter/Creem		Candle		Punchar		Total	
		Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Noori	1	0.25	2	0.5	2	0.5	1	0.25	1	0.25	0	0	0	0	0	0	1	0.25	0	0	0	0	8	2
2	Paikusi	0	0	1	0.25	1	0.25	0	0	1	0.25	1	0.25	0	0	0	0	0	0	0	0	0	0	4	1
3	Sikata	1	0.25	1	0.25	2	0.5	2	0.5	1	0.25	0	0	1	0.25	0	0	0	0	1	0.25	0	0	9	2.25
4	Virasarai	0	0	1	0.25	2	0.5	1	0.25		0	1	0.25	0	0	1	0.25	0	0	0	0	1	0.25	8	2
5	Barhan	2	0.5	1	0.25	3	0.75	1	0.25	2	0.5	1	0.25	2	0.5	1	0.25	0	0	0	0	0	0	13	3.25
6	Jigna	0	0	1	0.25	1	0.25	0	0	1	0.25	0	0	0	0	1	0.25	0	0	0	0	0	0	4	1
	Total-	**4**	1	**7**	**1.75**	**11**	**2.75**	**5**	**1**	**6**	**1.5**	**3**	**0.75**	3	0.75	**3**	**0.75**	**1**	**0.25**	1	0.25	**0**	**0.25**	**46**	**11.5**

POULTRY

SEWING MACHINE

DAIRY

Table No.6.10: Year wise Action Plan for Production System

Table: 2009-10 Production System

Phy. In No/Ha., Fin. In Lakhs

S.No.	Name of MWS	Wheat			Gram			Mustard			Paddy			Masoor			Maiz			Veg kit	Total		
		Phy.	No.	Fin	Phy.	No.	Fin.	Phy.	No.	Fin.	Phy.	No.	Fin.	Phy.	No.	Fin.	Phy.	No.	Fin.	Fin.	Phy	No.	Fin.
1	NOORI	1.5	6	0.15	1	4	0.16	0.5	2	0.06	1.5	6	0.15	0.5	2	0.06	0	0	0		5	20	0.58
2	PAIKUSI	0.5	2	0.05	0.5	2	0.08	0.5	2	0.06	0.75	3	0.075	0	0	0	0	0	0	0.005	2.25	9	0.27
3	SIKATA	1.5	6	0.15	1	4	0.16	0.75	3	0.09	1.5	6	0.15	0.5	2	0.06	0	0	0	0	5.25	21	0.61
4	VIRASARI	1.5	6	0.15	0	0	0	1	4	0.12	1.5	6	0.15	0	0	0	1	4	0.12		5	20	0.54
5	BARHAN	3	12	0.3	1	4	0.16	1	4	0.12	3	12	0.3	0.5	2	0.06	0	0	0	0.02	8.5	34	0.96
6	JIGNA	0.5	2	0.05	0.75	3	0.12	0	0	0	0.5	2	0.05	0	0	0	0.5	2	0.06	0	2.25	9	0.28
	TOTAL	8.5	34	0.85	4.25	14	0.68	3.75	15	0.45	8.75	35	0.875	1.5	6	0.18	1.5	6	0.18	0.025	28.25	113	3.24

Table: 2010-11 Production System

Phy. In No/Ha., Fin. In Lakhs

S.No.	Name of MWS	Wheat			Gram			Mustard			Paddy			Masoor			Maiz			Veg kit	Total		
		Phy.	No.	Fin	Phy.	No.	Fin.	Phy.	No.	Fin.	Phy.	No.	Fin.	Phy.	No.	Fin.	Phy.	No.	Fin.	Fin.	Phy	No.	Fin.
1	NOORI	5	20	0.5	1	4	0.16	1	4	0.12	5.25	21	0.525	1	4	0.12	0	0	0	0.005	13.25	53	1.43
2	PAIKUSI	2	8	0.2	0.5	2	0.08	1	4	0.12	2	8	0.2	0.5	2	0.06	0	0	0	0.01	6	24	0.67
3	SIKATA	5	20	0.5	1.5	6	0.24	1	4	0.12	5	20	0.5	1.5	6	0.18	0	0	0	0	14	56	1.54
4	VIRASARI	5	20	0.5	0.75	3	0.12	1	4	0.12	5	20	0.5	0	0	0	1	4	0.12	0	12.75	51	1.36
5	BARHAN	4	36	0.9	2	8	0.32	2	8	0.24	8	32	0.8	1	4	0.12	0	0	0	0.02	22	88	2.4
6	JIGNA	1	4	0.1	1	4	0.16	1	4	0.12	1	4	0.1	1	4	0.12	0.5	2	0.06	0.02	5.5	22	0.68
	TOTAL	22	108	2.7	6.75	27	1.08	7	28	0.84	26.25	105	2.625	5	20	0.6	1.5	6	0.18	0.055	73.5	294	8.08

Table: 2011-12 Production System

Phy. In No/Ha., Fin. In Lakhs

S.No.	Name of MWS	Wheat			Gram			Mustard			Paddy			Masoor			Maiz			Veg kit	Total		
		Phy.	No.	Fin	Phy.	No.	Fin.	Phy.	No.	Fin.	Phy.	No.	Fin.	Phy.	No.	Fin.	Phy.	No.	Fin.	Fin.	Phy	No.	Fin.
1	NOORI	5.25	21	0.525	1	4	0.16	1	4	0.12	5	20	0.5	1	4	0.12	0	0	0	0.015	13.25	53	1.44
2	PAIKUSI	1.5	6	0.15	1	4	0.16	0.75	3	0.09	2	8	0.2	0.5	2	0.06	0	0	0	0.01	5.75	23	0.67
3	SIKATA	4.5	18	0.45	1.5	6	0.24	1.5	6	0.18	5.5	22	0.55	1	4	0.12	0	0	0	0	14	56	1.54
4	VIRASARI	5	20	0.5	0.75	3	0.12	1	4	0.12	5	20	0.5	0.5	2	0.06	0.5	2	0.06	0	12.75	51	1.26
5	BARHAN	11	44	1.1	2	8	0.32	2	8	0.24	6	24	0.6	1	4	0.12	0	0	0	0.02	22	88	2.4
6	JIGNA	1.25	5	0.125	0	0	0	1	4	0.12	1.25	5	0.125	1.25	5	0.15	1.25	5	0.15	0.01	6	24	0.68
	TOTAL	**28.5**	**114**	**2.85**	**6.25**	**25**	**1**	**7.25**	**29**	**0.87**	**24.75**	**99**	**2.475**	**5.25**	**21**	**0.63**	**1.75**	**7**	**0.21**	**0.055**	**73.75**	**295**	**7.99**

Table: 2012-13 Production System

Phy. In No/Ha., Fin. In Lakhs

S.No.	Name of MWS	Wheat			Gram			Mustard			Paddy			Masoor			Maiz			Veg kit	Total		
		Phy.	No.	Fin	Phy.	No.	Fin.	Phy.	No.	Fin.	Phy.	No.	Fin.	Phy.	No.	Fin.	Phy.	No.	Fin.	Fin.	Phy	No.	Fin.
1	NOORI	9	36	0.9	1.5	6	0.24	1.5	6	0.18	8	32	0.8	1.5	6	0.18	0	0	0	0	21.5	86	2.3
2	PAIKUSI	3	12	0.3	1.5	6	0.24	1	4	0.12	3	12	0.3	1	4	0.12	0	0	0	0	9.5	38	1.08
3	SIKATA	8.5	34	0.85	2	8	0.32	2	8	0.24	8	32	0.8	2	8	0.24	0	0	0	0.01	22.5	90	2.46
4	VIRASARI	8	32	0.8	2	8	0.32	1	4	0.12	7	28	0.7	1	4	0.12	1	4	0.12		20	80	2.18
5	BARHAN	12	48	1.2	5	20	0.8	3	12	0.36	12	48	1.2	2.25	9	0.27	0	0	0	0.02	34.25	137	3.85
6	JIGNA	2	8	0.2	2	8	0.32	1	4	0.12	2	8	0.2	0	0	0	2	8	0.24	0.01	9	36	1.09
	TOTAL	42.5	170	4.25	14	56	2.24	9.5	38	1.14	40	160	4	7.75	31	0.93	3	12	0.36	0.04	116.75	467	13

Table No.6.11: YEAR WISE ACTION PLAN FOR MICRO-ENTERPRISES

2009-10

Phy. In No, Fin. In Lakhs

S.No.	Name of MWS	Nadef Compost		Flour Machine		Total	
		No.	**Fin**	**No.**	**Fin**	**No.**	**Fin.**
1	**NOORI**	2	0.21	-	-	2	**0.21**
2	**PAIKUSI**	2	0.2	-	-	2	**0.2**
3	**SIKATA**	3	0.27	-	-	3	**0.27**
4	**VIRASARAI**	-	-	1	0.4	1	**0.41**
5	**BARHAN**	2	0.2	1	0.4	3	**0.6**
6	**JIGNA**	2	0.21	-	-	2	**0.21**
	TOTAL	**11**	**1.09**	**2**	**0.81**	**13**	**1.9**

DALIYA MAKING MACHINE

FLOUR MACHINE

DALIYA MAKING MACHINE

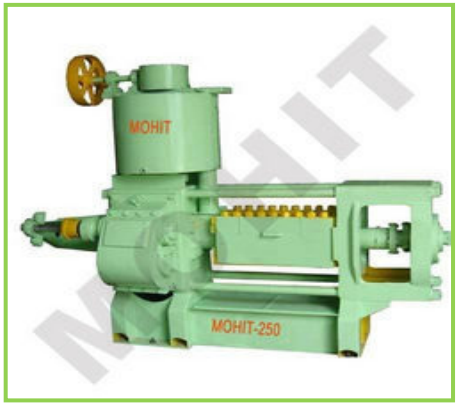
FLOUR MACHINE

FLOUR MACHINE

Table:2010-11

Phy. In No, Fin. In Lakhs

S.No.	Name of MWS	Flour Machine		Oil Speller		Daliya Machine		Rice Machine		Vermi Culture		Repair of Pumpset		Total	
		No.	Fin	No.	Fin.	No.	Fin.	No.	Fin.	No.	Fin.	No.	Fin.	No.	Fin.
1	NOORI	1	0.4	-	-	-	-	1	0.4	-	-	1	0.09	**3**	**0.89**
2	PAIKUSI	1	0.37	-	-	-	-	-	-	-	-	-	-	**1**	**0.37**
3	SIKATA	1	0.4	-	-	-	-	1	0.42	-	-	-	-	**2**	**0.82**
4	VIRASARAI	-	-	1	0.4	1	0.37	-	-	-	-	-	-	**2**	**0.77**
5	BARHAN	-	-	1	0.4	1	0.4	1	0.4	1	0.06	-	-	**4**	**1.26**
6	JIGNA	1	0.4	-	-	-	-	-	-	-	-	-	-	**1**	**0.39**
	TOTAL	**4**	**1.56**	**2**	**0.8**	**2**	**0.77**	**3**	**1.22**	**1**	**0.06**	**1**	**0.09**	**13**	**4.5**



OIL EXPELLER

Table:2011-12

Phy. In No, Fin. In Lakhs

S.No.	Name of MWS	Nadef Compost		Flour Machine		Oil Speller		Daliya Machine		Rice Machine		Vermi Culture		Repair of Pumpset		Total	
		No.	Fin.	No.	Fin	No.	Fin.	No.	Fin.	No.	Fin.	No.	Fin.	No.	Fin.	No.	Fin.
1	NOORI	1	0.1	-	-	-	-	1	0.4	-	-	1	0.08	1	0.07	**4**	**0.65**
2	PAIKUSI	-	-	-	-	-	-	1	0.3	-		-	-	-	-	**1**	**0.37**
3	SIKATA	-	-	-	-	1	0.41	1	0.4	-	-	-	-	-	-	**2**	**0.81**
4	VIRASARAI	1	0.12		-	-	-	-	-	1	0.4	-	-	-	-	**2**	**0.52**
5	BARHAN	-	-	1	0.4	1	0.4	1	0.4	-	-	1	0.07	-	-	**4**	**1.27**
6	JIGNA	-	-	-	-	-	-	-	-	-	-	-	-	1	0.13	**1**	**0.13**
	TOTAL	2	0.22	1	0.4	2	0.81	4	1.57	1	0.4	2	0.15	2	0.2	**14**	**3.75**

Table:- 2012-13

Phy. In No, Fin. In Lakhs

S.No.	Name of MWS	Nadef Compost		Flour Machine		Daliya Machine		Rice Machine		Vermi Culture		Repair of Pumpset		Total	
		No.	Fin	No.	Fin	No.	Fin.	No.	Fin.	No.	Fin.	No.	Fin.	No.	Fin.
1	NOORI	-	-	1	0.4	1	0.4	-	-	-		1	0.07	3	0.87
2	PAIKUSI	-	-	-	-	-	-	1	0.35	-	-	-	-	1	0.35
3	SIKATA	-	-	-	-	1	0.4	1	0.42	-	-	-	-	2	0.84
4	VIRASARAI	2	0.2	1	0.4	-	-	-	-	-		1	0.13	4	0.73
5	BARHAN	2	0.2	1	0.4	1	0.4	1	0.4	1	0.08	1	0.08	7	1.5
6	JIGNA	-	-	-	-	1	0.37	-	-	-	-	-	-	1	0.37
	TOTAL	**4**	**0.4**	**3**	**1.2**	**4**	**1.57**	**3**	**1.17**	**1**	**0.08**	**3**	**0.28**	**18**	**4.7**

6.4 CAPACITY BUILDING PLAN

Capacity Building is the process of assisting the group or individuals to identify and address issues and gain the insights, knowledge and experience needed to solve problems and implement change.

There is a realization in the development sector that there is a need to appraise the success of development interventions by going beyond the conventional development targets and measures of success (e.g. in the form of commodities, goods and services) to take into account improvements to human potential. Capacity building of stakeholders is also increasingly viewed as an important factor in developmental projects that involve participation of stakeholders at all levels for effective implementation of projects.

Scope of capacity building at IWMP -

- Alternative Land Use Plan
- Scientific technique of Soil and Moisture conservation
- Improved and Scientific agriculture practices
- Fodder development and Management
- Afforestation
- Meteorological Information
- Dairy Development and Management
- Rural Craft
- Income Generation Activities
- Stitching
- Food Processing
- Post Harvest management practices
- Fish Production

6.4.1 Capacity Building

Capacity building and training are the most important components of watershed management programme both for the field level project staff/ officers and functionaries of people institutions i.e. watershed community. Apart from enhancing technical skill of the project staff, this would also provide opportunities to community members to develop their capacity as the feature custodians of the programmes after project's withdrawal. IWMP - Chandauli financial outlay for capacity buildings is 5% (Rs. 27.00) of the total project cost and out of which Rs 1.00 laks will be expanded for initiation of village level institution..

6.4.1 YEARWISE FINANCIAL BREAK UP OF INST. & CAP. BULDG. PROGRAMME OF IWMP-I, DISTRICT-CHANDAULI

Amount in Lacs

S. No.	Microwatershed	Project Area	Proposed Amount	Institutional & Capacity Building 5% of the Total Project Cost				
				2009-10	2010-11	2011-12	212-13	Total
1	NOORI	798	4.79	2.87	0.72	0.72	0.48	4.79
2	PAIKUSHI	374	2.25	1.35	0.34	0.34	0.22	2.25
3	SIKATA	853.85	5.12	3.07	0.77	0.77	0.51	5.12
4	VIRASARAI	756.85	4.54	2.72	0.68	0.68	0.45	4.54
5	BARHAN	1337.3	8.02	4.81	1.20	1.20	0.80	8.02
6	JIGNA	380	2.28	1.37	0.34	0.34	0.23	2.28
	TOTAL	**4,500.00**	**27.00**	**16.20**	**4.05**	**4.05**	**2.70**	**27.00**

Table No.6.12: Capacity Building plan

S.No.	Level	Total No. of Person	No. Of Person to be Trainend	No. of training to be Conduct	Training Days	Expenses per Person per Days (Rs)	Total Cost (Rs)
			I st Year				
1	**SLNA**	-	-	-	-	-	108000.00
2	**WCDC**	20	20	4	2	1687.5	270000.00
3	**PIA**	15	15	2	3	750	67500.00
4	**WDT**	4	4	2	5	500	20000.00
5	**SHG**	380	380	1	2	750	570000.00
6	**UGs**	295	295	1	1	250	73750.00
7	**WC**	272	272	2	2	450	489600.00
8	**Others**	130	130	1	1	250	21150.00
	Total	**1116**	**1116**				**16,20,000.00**
			II nd Year				
1	**SLNA**	**-**	**-**	**-**	**-**	-	27000.00
2	**WCDC**	20	20	2	1	1687.50	67500.00
3	**PIA**	15	15	2	3	750	67500.00
4	**WDT**	4	4	2	3	500	12000.00
5	**SHG**	380	190	1	1	750	142500.00
6	**UGs**	295	109	1	1	250	27300.00
7	**WC**	272	136	1	1	450	61200.00
8	**Others**	-	-	-	-	-	-
	Total	**1106**	**474**				**4,05,000.00**
			III rd Year				
1	**SLNA**	-	-	-	-	-	27000.00
2	**WCDC**	20	20	2	1	1687.50	67500.00
3	**PIA**	15	15	1	2	750	22500.00
4	**WDT**	4	4	1	2	500	4000.00
5	**SHG**	380	190	1	1	750	142500.00
6	**UGs**	295	295	1	1	250	73750.00
7	**WC**	272	136	1	1	450	61200.00
8	**Others**	26	26	1	1	250	6550.00
	Total	**1012**	**686**				**4,05,000.00**

IVth Year							
1	**SLNA**	**-**	**-**	**-**	**-**	**-**	**-**
2	**WCDC**	20	8	3	2	1687.22	81000.00
3	**PIA**	15	-	-	-	750	-
4	**WDT**	4	-	-	-	500	-
5	**SHG**	380	136	1	1	750	1,02,000.00
6	**UGs**	295	161	1	1	250	40250.00
7	**WC**	272	52	2	1	450	46800.00
8	**Others**	-	-	-	-	250	-
	Total	**986**	**357**				**2,70,050.00 Say 2,70,000.00**

Table no6.13 : Information, Education & Communication (IEC) activities in the project area

S.no.	Activity	Executing agency	Estimated expenditure (Rs.)	Expected Outcome (may quantify wherever possible)
1	Street plays	Local Drama Groups	50000.00	Awareness about importance of watershed project
2	Video Shows	IWMP, Chandauli	50000.00	
3	Pamphlets and Poster	IWMP, Chandauli	50000.00	
4	Banners and Hoardings	IWMP, Chandauli	50000.00	
		Total	**200000.00**	

Convergence of watershed programmes

6.5.1 Earthen bund, contour bund, Marginal bunds, Peripheral Bunds, percolation tank, injection well will be made in watershed area convergence with MNREGS

6.5.2 Dry land horticulture also convergence with department of horticulture.

Table no. 6.14 : Details of Convergence of other Schemes in the Project area with IWMP Project

S.No.	Name of the MW	Names of Departments with Schemes converging with IWMP*	Fund made available to IWMP project 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		
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
1	2A7C2a2c Sikata	Horticulture Dept. Minor Irrigation dept.	11.59	Yes		**Fodder bank, Nursery, SGPE Pipe and Perculation Tank**	**---**	DRDA & District Level

		Total	11.59					
2	2a7C2a1a Vira Saray	MNREGS Minor Irrigation dept. & Horticulture Dept.	45.74	Yes		**Structures, Nursery, SGPE Pipe and Purculation tank**	**---**	DRDA & District Level
		Total	45.74					
3	2A7C2a1d Paikusi	MNREGS Minor Irrigation dept. & Horticulture Dept	29.66	Yes		**Structures, Irrigation channels Nursery, SGPE Pipe and Purculation tank**	**---**	DRDA & District Level
		Total	29.66					
4	2A7C2a2a Noori	Minor Irrigation dept. & Horticulture Dept	11.00	Yes		**Irrigation channels, Fodder Bank, Nursery, SGPE Pipe and Purculation tank**	**---**	DRDA & District Level
		Total	11.00					
5	2a7C2a1b Jigna	MNREGS Minor Irrigation dept. & Horticulture Dept	8.53	Yes		**Structure, Fodder bank, Nursery, SGPE Pipe**	**---**	DRDA & District Level
		Total	8.53					
6	2A7C2a2b Barhan	MNREGS Minor Irrigation dept. & Horticulture Dept	21.43	Yes		**Structure, Irrigation Channel, Fodder bank, Nursery, SGPE Pipe and Purculation Tank**	**---**	DRDA & District Level
		Total	21.43					
		Grand Total	**127.95**					

only letter (a) or (b) or (c) needs to be filled. In case more than one activity has been undertaken all the concerned letters may be indicated e.g. (a) + (b)

$ WC/GP/WDT/PIA/DRDA cell/ZP/DPC/SLNA / DoLR- only initials as indicated here need to be entered.

* DA= Department of Agriculture, DHO= Department of Horticulture, VO= Department of Veterinary, DF= Department of Fisheries, F= Forest

Table No.6.15: List of identified training institutes for capacity building

Sr. No.	Name of the Training Institute	Full Address with contact no, website & e-mail	Designation of the Head of Institute	Type of Institute	Area(s) of specialization	No. of training assigned	No. of persons to be trained	Allocation to be made to the institute
1	2	3	4	5	6	7	8	9
1	Walmi Utretia lucknow	Utretia Lucknow. 0522.2440309	Nodel officer Training	Water Manegment	Water Manegment and Soil Congervation	01	25	375 Km. from Dist. Chandauli
2	K.V.K. Chandauli	K.V.K.Bichiya Farm Po.Jagdishpur. PIN No-232104,Mb.-09415688023	Officer Incharg	Agricalture Training Resarch Center and Rural Development	Water Manegment and livilyhood	06	606	Lokated at Chandauli Near-C.D.O.office
3	Pt.Dindayal Upadhaya State Rular Devlopment Ins. B.K.T Lucknow	Bakshi Ka Talab, Lucknow, UP	Director	Rular devlopment	livilyhood & Rular Devlopment	-	-	390Km. from Distt. Chandauli

4	Narendra Dev Agriculture University Faizabad	Narendra Dev Agriculture University Faizabad	Nodel Officer training	Agriculture Resarch & training Centre	Water Management & Agriculture Devlopment and Micro-Enterprises			

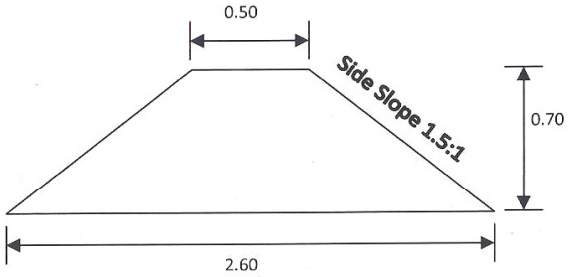
6.6 Details of Fund Allocation of WDW, Livelihood and Production System & Micro Enterprises at WC Level

S.No.	Name of Gram Panchayat	Amount of WDW(56%)	Amount of Livelihood(9%)	Amount of P.S. & M.E.(10%)	Total at WC Level
1	Noori	20.07	3.23	3.58	26.88
2	Ramroopdas Pur	8.39	1.35	1.5	11.23
3	Baghari	6.37	1.02	1.14	8.54
4	Paikushi	17.79	2.86	3.18	23.83
5	Bahura Chandel	10.88	1.75	1.94	14.57
6	Pipardaha	9.04	1.45	1.61	12.11
7	Sikta	11	1.77	1.96	14.74
8	Emiliya	14.27	2.29	2.55	19.11
9	Amra	3.53	0.57	0.63	4.72
10	Dighi	8.24	1.32	1.47	11.03
11	Daina	9.03	1.45	1.61	12.09
12	Bhasoure	1.3	0.21	0.23	1.74
13	Virasarai	13.97	2.25	2.5	18.72
14	Mahuji	19.84	3.19	3.54	26.57
15	Dedgaon	11.95	1.92	2.13	16.01
16	Avahi	7.26	1.17	1.3	9.72
17	Khajhara	13.75	2.21	2.45	18.41
18	Sawal Jalalpur	19.2	3.09	3.43	25.72
19	Gandhi Nagar	17.96	2.89	3.21	24.06
20	Raitha	13.21	2.12	2.36	17.69
21	Gopalpur	3.04	0.49	0.54	4.07
22	Mahura	20.1	3.23	3.59	26.91
23	Awati	11.97	1.92	2.14	16.03
24	Jigna	9.41	1.51	1.68	12.61
25	Medhan	8.36	1.34	1.49	11.2
26	Sisaurakala	12.46	2	2.22	16.69
	Total	**302.4**	**48.6**	**54**	**405**

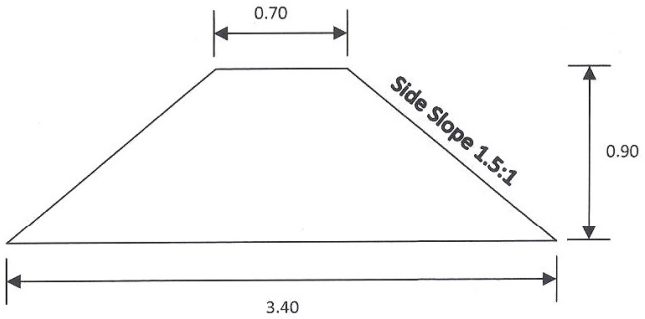
DETAILS ESTIMATE OF WATERSHED DEVELOPMENT WORK PHASES (ANNEXURE-1)

DRAWING OF C.B., S.B., P.B., AND M.B.

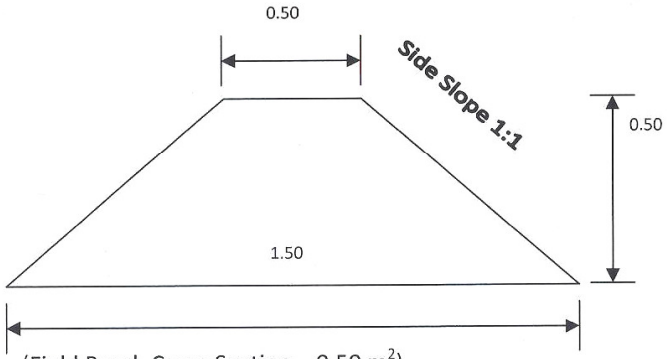
(All dimensions in Metre) *(Not to Scale)*



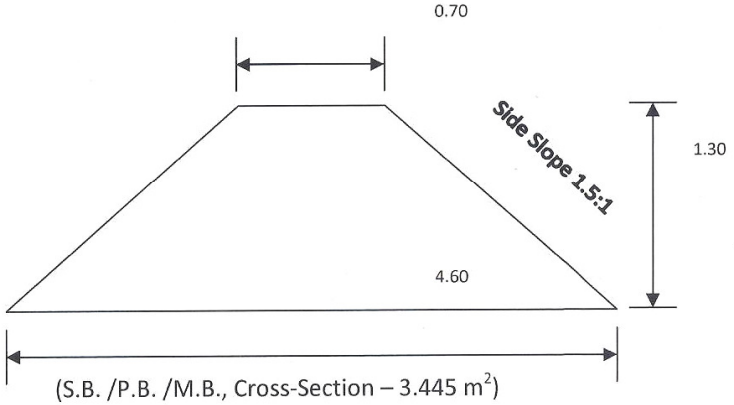
(C.B., Cross-Section – 1.085 m^2)



(S.B., Cross-Section – 1.845m^2)



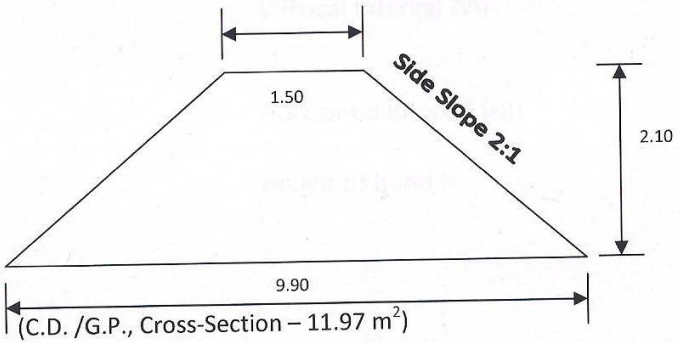
(Field Bund, Cross-Section – 0.50 m^2)



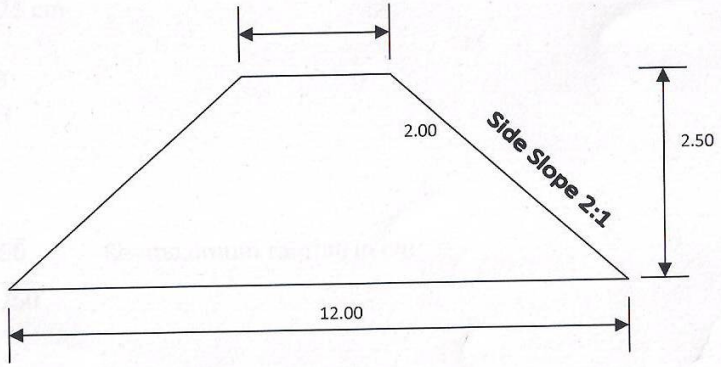
(S.B. /P.B. /M.B., Cross-Section – 3.445 m^2)

DRAWING OF EARTHEN CHEKDAM / GULLY PLUG

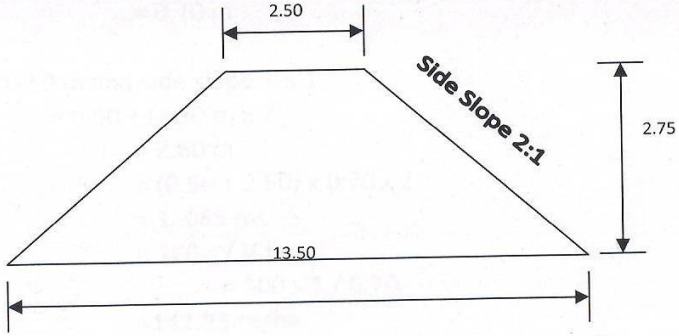
(Not to Scale)



(C.D. /G.P., Cross-Section – 11.97 m^2)



(C.D. /G.P., Cross-Section – 17.50 m^2)



(W.H.B., Cross-Section – 22.00 m^2)

(All dimensions in Metre)

DESIGN OF CONTOUR BUND

Type of Soil	- Clay
Rain fall	- 24 hr in cm -25 cm
Fied Stop -1%	
Virtical interval (Vi)	= [s/3+2]
	= [1/3+2]
Horizontal interval (HI)	= 0.70 m
	= 100xV.I/s
Heidht of Bond h	= (Rex vi)/50
	= (25x0.7) /50
	0.35
	0.59
	Say 0.6 m
Ferr bord	= 15% of high minimum -10 cm
Hight	= 0.60+0.10
	= 0.70m
Taking top widh of bond 0.50 m and side slope 1.5:1	
Then base of bond	=0.50+(1.10d)x 2
	= 2.60 m
Coress-Seclion of bond	=(2.50+ 2.60) x0.70/2
	=1.085m^2
Length of bond	= 100s/V.I.
	=100x1/0.70
	= 142.85 m/ha
	Say 120 m/ha
Earth work /ha	= 250x1.085
	= 162.75 cum
	= 162 .75 cum
Cort Rs./ ha	=162.7 x39.16=6373.29
	Say 6375.00

DESIGN OF SUMBERGENCE BOND

Types siol – Caly	Rainfall intensiy for 24 hrs – 25 cm
Fild slope 3%	V.I. =[s/3+2] x0.30
	= 0.909 m
Horizontal Interval =(100xV.I.)/s	= (100x0).3
	= 30m
Height of bond h = (Re x V.I.)/50	=(25 x 0.90)/0 =0.45 =0.67m. Say 0.70m
Feree bord 20% of hight minimum 20 cm	=
Total Hight	= 0.90 m
Takingh top wigth of bond 0.70 m and side slope 1.5:1	
Bottom of bund	= 0.70+2x 1.5d
	= 0.70+2.70
	= 3.40
Cross section of Submergence Bond	= (0.70+3.40)x09.90/2
	= 1.845 m^2
Lengh of bond	= 100s/V.I.
	= (100x3) /0.90
	= 333 m
Feasible length	= 100+25+25
	= 150m
Earth work/ha	= 150x1.845
	= 276.75
	= 276.75x39.16
Cost per has	= 10,837.53
	Say 10,850=00

TYPICAL SECAION OF FILED BUND

Top widht	= 0.50m
Side slope	=1:1
Height of bound	= 0.50m
Bottom Widht	= 1.50m
Cross section	= (0.580+1.50)x0.50/2=100cum
Length per hectare	= 200 m
Earhwork	= 200x0.50=100cum
Cost 39.16/cum	= Rs.3916.00
Cost per hectare	=Rs. 3916.00

TYPICAL SECTION OF P.B., M.B., S.B0.

Top width	= 0.70m
Side slope	= 1.5: 1
Height	= 1.30 m
Bottom	=4.60 m
Cross section	= (0.70+4.60)x1.30/2=3.445m^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) x2.10 / 2 =11.97 m^2
Cost per meter	= Rs. 551.45

TYPICAL SECION OF CHEK DAM / GULLY PLUG

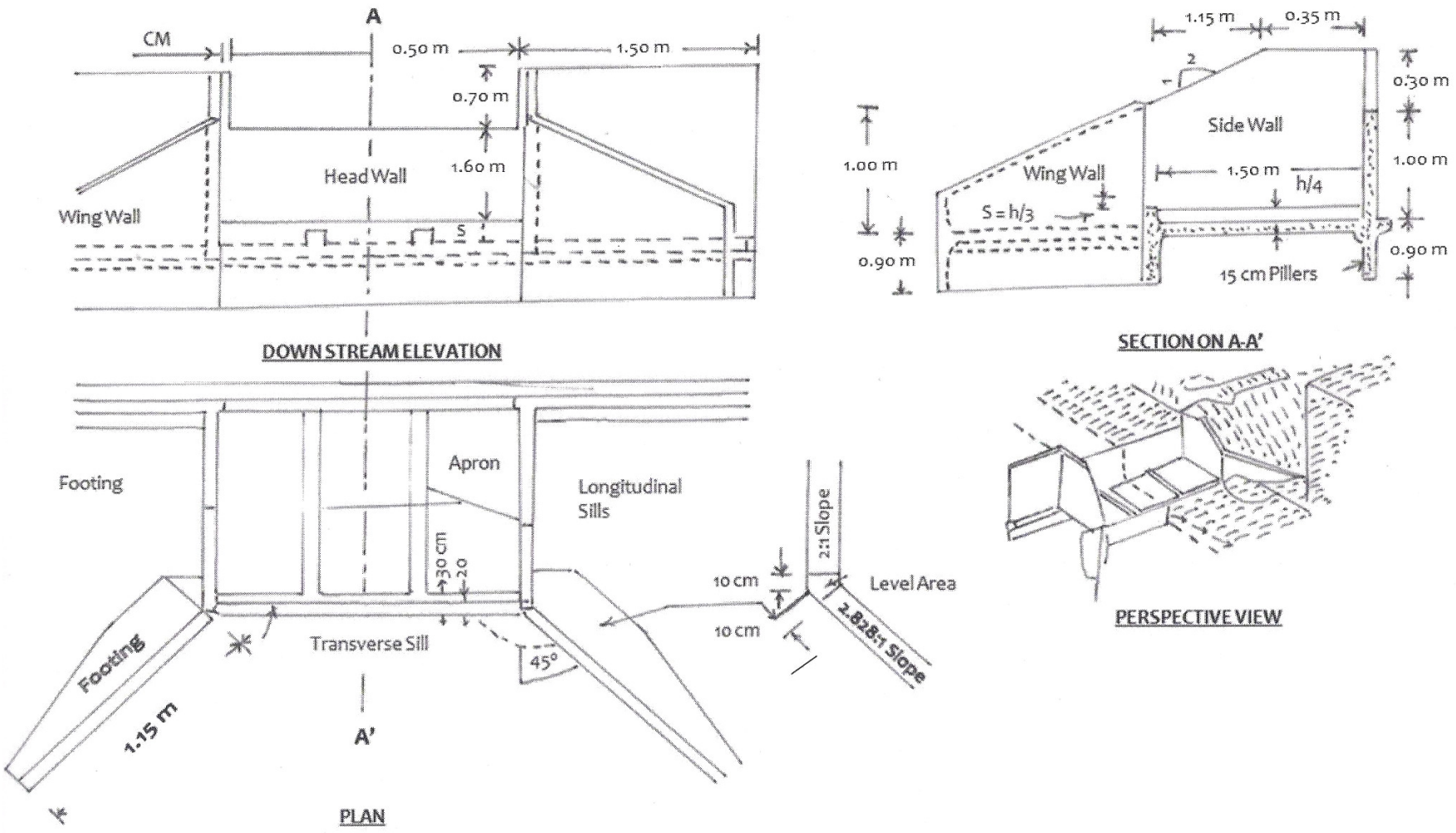
Top Width	= 2.00m
Side slope	=2:1
Height	= 2.50 m
Bottom Width	= 12.00 m
Cross Section	= (2.00 + 12.00) x 2.50 / 2 = 17.50 m^2
Cost/meter	= Rs. 839.12

TYPICAL SECTIO0N OF W.H.B

Top width	= 2.50 m
Side slope	= 2:1
Height	= 2.75 m
Bottom Width	= 13.50 m
Cross section	= (2.50 + 13.50) x 2.75/2 = 22.00 m^2
Per meter cost	= Rs. 1085.92

DRAWING OF SPILLWAY OF CREST LENGTH 0.5 m

Not to Scale



Design of Drop Spillway to be constructed at a place in a gully having width of 1.0 m and catchment area 1.00 and net drop 0.50 m Taking rainfall intensity for duration equal to time of concentration of watershed and design return period of 25 years , as 120 mm/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 form Rational formula is given as :

$$Q = \frac{C.I.A.}{360} = \frac{0.3 \times 120 \times 1.00}{360} = 36/360 = 0.10 \text{ cum /second}$$

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

$$Q = \frac{1.711LH^{3/2}}{(1.1+0.01f)} = \text{o find suitable value of L\&H}$$

Let us assume L=0.50 m(since width of gully is 1.00m)

$$0.10 = \frac{1.711LH^{3/2}}{(1.1.+0..01 \times 0.5)} = \frac{1.711L\,H^{3/2}}{(1.105)}$$

$$L\,H^{3/2} = \frac{1.105 \times .10}{1.711} = \frac{0.1105}{1.711} = 0.064$$

$$H^{3/2} = \frac{0.064}{0.50} = 0.128$$

$$H = (0.128)^{3/2} = 0.25\text{m}$$

Test $L / h = 0.50 = 2. \geq$ 2. 0 hence O.K.; $0.25\ h / f = \frac{0.25}{0.50} = 0.50 \leq 0.5$ hence O.K.

3. Structural design -

1. Minimum headwall extension , E =(3h +0.6) or 1.5 f whichever is greater E= 3x0.5+0.6 or 1.5x0.50
   E = 2.10m or 0.75+m = Adopted 2.10m
2. Length of apron basin L_B = (2.28 h/f + 0.54) =0.50 (2.20 x 0.5 + 0.54)-0.5
   =0.50x2.74 =1.37 m says 1.40m
3. Height of end sill, S =h=0.50= 0.16m says 0.20m

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 x 0.20 or [0.50 + 0.50+0.16 – (1.37+0.10/2)]

   = 1.0 or [1.16 -0.735] = 1.0 or 0.425 (adopt J = 1.00 m)

5. M = 2(f + 1.33 h –J) = 2 (0.050 + 1.16 – 0.733x 0.25 – 1.00) = 2x (-0.167) = -0.335

6. K = (L_B + 0.1) – M = (1.037 + 0.1) – 0.335 =1.47 – 0.335 =1.135 m

Toe and cut off walls

Normal scour depth (N S D) =0.473 x $(Q / f)^{1/3}$ = 0.473 x $(0.1/1)^{1/3}$ = 0.473 x0.464 = 0.219

Maximum Scour depth (M S D) = 1.5 x N S D = 1.5 x 0.219 = 0.328m Says 0.35 m

Depth of cutoff / Toe wall = 0.35 m

Apron thickness : For an over fall of 0.5 m .The apron thickness in concrete construction is 0.20m since structure is constructed in masonry ,the Apron thickness will be 0.20x1.50=0.30m

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

Description	Thickness of wall	
	Top width	Bottom width
Head wall	0.40	1.00
Side wall	0.30	0.80
Wing all and head wall extension	0.30	0.60

DETAIL ESTIMATE OF DROP SPILLWAY OF CREST LENGTH 0.5 METRE

1. Earth work in cutting in foundation

S.No.	Description of work	No.	L	B	D/H	Quantity
1	Side wall	2	1.50	1.00	1.15	3.45
2	Head wall	1	0.50	1.20	1.15	0.69
3	Head wall extension	2	2.20	0.80	1.15	4.04
4	Wing wall	2	1.15	0.80	1.15	2.11
5	Tow wall	1	0.50	0.80	0.60	0.24
6	Cut off wall	1	4.70	0.80	0.60	2.25
7	Apron	1	0.50	1.50	0.60	0.45
Total						13.23 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	1.50	1.00	0.10	0.300
2	Head wall	1	0.50	0.40	0.10	0.020
3	Wing wall	2	1.15	0.80	0.10	0.184
4	Toe wall	2	0.50	0.80	0.10	0.040
5	Cut off wall	1	4.70	0.80	0.10	0.376
6	Apron	1	0.50	1.50	0.10	0.075
Total						0.995 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	4.70	0.80	0.15	0.564
2	Head wall	1	0.50	0.40	0.15	0.030
3	Side wall	2	1.50	1.00	0.15	0.450
4	Wing wall	2	1.15	0.80	0.15	0.276
5	Toe wall	1	0.50	0.80	0.15	0.060
6	Apron	1	0.50	1.50	0.15	0.112
			Total			1.492 cum

4 Brick masonry 1:4

S.No.	Description of work	No.	L	B	D/H	Quantity
1	Cut off wall	1	4.70	0.80	0.45	1.692
		1	4.70	0.60	0.45	1.269
2	Head wall	1	0.50	1.10	0.45	0.247
		1	0.50	1.00	0.45	0.225
		1	0.50	(0.40+1.00)/2	0.60	0.180
3	Head wall extension	2	2.10	0.80	0.45	1.512
		2	2.10	0.60	0.45	1.134
		2	2.10	0.60	0.60	1.512
		2	2.10	0.40	0.70	1.176
4	Side wall	2	1.50	1.00	0.45	1.350
		2	1.50	0.80	0.45	1.080
		2	1.50	0.80	0.60	1.440
		2	1.50	0.60	0.40	0.720
		2	(0.35+1.50)/2	0.40	0.30	0.222
5	Wing wall	2	1.15	0.80	0.45	0.828
		2	1.15	0.60	0.45	0.621
		2	1.15	0.40	(1.00+0)/2	0.460
6	Tow wall	1	0.50	0.80	0.45	0.180
		1	0.50	0.60	0.45	0.135
		1	0.50	0.40	0.20	0.040
7	Apron	1	0.50	1.50	0.45	0.337
					Total	16.360cum

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

S.No.	Description of work	No.	L	B	D/H	Quantity
1	Head wall	1	0.50	0.40	0.025	0.005
2	Side wall	2 2	0.35 0.18	0.40 0.40	0.025 0.025	0.007 0.023
3	Head wall extension	2	2.10	0.40	0.025	0.042
4	Wing wall	2	1.52	0.40	0.025	0.030
5	Toe wall	1	0.50	0.40	0.025	0.005
6	Apron	1	0.50	1.50	0.025	0.018
					Total	0.130cum

6. Tuck Pointing 1:3

S.No.	**Description of work**	**No.**	**L**	**B**	**D/H**	**Quantity**
1	Head wall	1 1	0.50 0.50	-	0.60 0.84	0.30 0.42
2	Side wall	2 2	1.50 (0.30+1.50)/2	-	1.00 0.30	3.00 0.55
3	Head wall extension	2	2.10	-	1.00	4.20
4	Wing wall	2	1.15		(1.00+0)/2	1.15
					Total	$9.62m^2$

CONSUMPTAION OF MATERIALS

S.No.	Particulars	Quantity	Cement (Bags)	Coarse Sand (cum)	Brick (No.)	G.S.B. 25-40 mm (cum)	G.S. Grit 10-20 mm (cum)
1	Sand laying	0.995cum	-	0.995	-	-	-
2	C.C.W. 1:3:6	1.492 cum	6.61	0.671	-	1.342	-
3	Brick Masonry	16.360 cum	29.26	5.562	1880	-	-
4	C.C.W. 1:2:4	0.130 cum	0.79	0.045	-	-	0.110
5	Tuck Pointing 1:3	9.62 m^2	0.44	0.045	-	-	
	Total		46.90	7.327	8180	1.342	0.110
	Say	47 Bags					

Cost of Materials

S.No.	Name of Materials	Quantity	Rate	Amount
1	Cement	47 Bags	255.00/bag	11985.00
2	Coarse sand	7.327 cum	910.00/cum	6667.57
3	Brick	8180	4500.00/th	36810.00
4	G.S.B. 25-40 mm	1.342 cum	855.00/cum	1147.41
5	Grit 10-20 mm	0.110 cum	1250.00/cum	137.50
	Total			**Rs.56747.48**

LABOUR CHARGE

S.No.	Name of Materials	Quantity	Rate	Amount
1	Earth Work	13.23cum	36.66/cum	485.01
2	Sand Laying	0.995cum	33.33/cum	33.16
3	C.C.W. 1:3:6	1.495cum	494/cum	337.04
4	Brick masonry	16.36cum	400/cum	6544.00
5	C.C.W. 1:2:4	0.130cum	494/cum	64.22
6	Tuck Pointing	9.62m^2	51.61/m^2	496.48
7	Curing	16.36cum	25.00/cum	409.00
8	Chowkidar	6 Man days	100.00/Man day	600.00
9	Head Load & local taion cost 10% cost of material	-	-	3670.64
Total				**Rs. 13039.55**

Total Expenditure	
1. Cost of Materials	56747.48
2 Labour Charges	13039.55
Total	**Rs. 69787.03**
	Says Rs. 69800.00 only

Design of Drop Spillway to be constructed at a place in a gully having width of 1.0 m and Catchments area 1.00 and net drop 0.50 m Taking rainfall intensity for duration equal to time of concentration of watershed and design return period of 25 years , as 120 mm/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 form Rational formula is given as :

$$Q = \frac{C.I.A.}{360} = \frac{0.3 \times 120 \times 5.0}{360} = 0.50\ m^3/s$$

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

$$Q = \frac{1.711LH^{3/2}}{(1.1+0.01f)} =$$

To find suitable value of L&H

Let us assume L=1.0 m(since width of gully is 2.00m)

$$0.50 = \frac{1.711LH^{3/2}}{(1.1.+0..01 \times 0.5)} = \frac{1.711L\,H^{3/2}}{(1.2)}$$

$$L\,H^{3/2} = \frac{1.120 \times 0.5}{1.711} = 0.350$$

$$H^{3/2} = \frac{0.375}{1.711 \times 4} = 0.35$$

$$H = (0.350)^{3/2} = 0.49 \text{ m says } 0.50\text{m}$$

Test $L / h = \frac{1.00}{0.25} = 2.00 \geq 2.0$ hence O.K.;

$h / f = \frac{0.50}{1.00} = \leq 0.5 \leq$ hence O.K.

Heace he designed hydraulic dimensions of the Spilay are :

Crest Length (L) = 1.00 m

Weir depth (h) = 0.50m

3. Structural design -

1. Minimum headwall extension , E =(3h +0.6) or 1.5 f whichever is greater ; 3x0.50+0.6 or 1.5x1
E =(1.5+060) or 21.50m

= 2.10 or 1.50 Adopted = 2.10 m

2. Length of apron basin L_B = (2.28 h/f + 0.54) =1(2.28 x $\underline{0.50}$ + 0.54 = 1.68m

3. Height of end sill, S =$\underline{h}$=$\underline{0.50}$= 0.16m

3 3

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 x 0.50 or [1.0+ 0.50+0.16 – (1.68+0.10/2)]

= 1.0 or [1.66 -0.89] = 1.00 or 0.77(adopt J = 1.00 m)

5. M = 2(f + 1.33 h –J) = 2 (1.0+ 1.33 x 0.50 – 1.00) = 2 (-0.1665-1.00) = 1.33m

6. K = (L_B + 0.1) – M = (1.68 + 0.1) – 1.33 =0.45 m

Toe and cut off walls

Normal scour depth (N S D) =0.473 x (Q / f)$^{1/3}$ = 0.473 x (0.5/1.0) $^{1/3}$ taking f =1

= 0.473 x(0.5)$^{1/3}$ = 0.473 x0.793 =0.375 m

Maximum Scour depth (M S D) = 1.5 x N S D = 1.5 x 0.375 = 0.56m Says

Depth of cutoff / Toe wall 0.56 m say 0.60m

Apron thickness : For an over fall of 1.0 m .The apron thickness in concrete construction is 0.30m since structure is constructed in masonry ,the Apron thickness will be 0.30x1.50=0.45m

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

Description	Thickness of wall	
	T op width	Bottom width
Head wall	0.45	1.00
Side wall	0.30	0.80
Wing all and head wall extension	0.30	0.60

6.8 Detail Estimate of Machinary Check Dam

Structural Specification of Machitionary Check Dam (C.D.)

Project Name:	IWMP - I		District:	Chandauli		Block:	Barhani			MWS Code:	2A7C2a1d	
MWS Name:	Paikushi		Village:	Paikushi				CD No:	1	Khasra No:	237	
Location:	Longitude		Latitude		Elevation:	MAX	MIN	AVG	Slope (%):	MIN	MAX	AVG
	83°29' 56.012" E		25°22' 14.717" N			81	58	69.5		3	9	6
Side Wall:	6.00		Width:	1.75	CD Length (mt):	20		Hight:	2.50	Output	2.73	

Description

Work Description

S. No	Name of work	No.	Length (mt)	Width (mt)	Hieght (mt)	Quantity (qmt)
1	EW	0	20.00	1.75	2.50	87.50
		4	6.00	1.75	2.50	105.00
	Total					192.50
2	CCW	2	20.00	6.00	0.20	48.00
		0	20.00	1.00	0.20	4.00
		4	6.00	1.00	0.20	4.80
	Total					56.80
3	BW	0	20.00	0.71	1.75	24.85
		4	6.00	0.59	2.50	35.40
		2	20.00	6.00	0.11	26.40
		1	18.82	0.35	0.48	3.16
	Total					89.81
4	CC top	0	20.00	0.47	0.05	0.47
		4	6.00	0.47	0.05	0.56
		2	20.00	6.00	0.05	12.00
	Total					13.034
5	Pointing	2	20.00	1.00	0.00	40.00
		4	6.00	1.75	0.00	42.00
	Total					82.00

Material Consumption

S No	Work	Quantity (qmt)	Brick (Nos)	Ciment (Bags)	Core Sand (qmt)	Stone Gritee (qmt)	Mistree (Nos)	Labour (Nos)
1	EW	192.50	0.00	0.00	0.00	0.00	0.00	70.51
2	CCW	56.80	17767.04	193.12	25.56	0.00	11.36	26.13
3	BW	89.81	44905.88	161.66	24.70	0.00	89.81	179.62
4	CC top	13.03	0.00	86.81	5.73	11.47	7.24	36.21
5	Pointing	82.00	0.00	2.87	0.30	0.00	8.20	8.20
6	Quring	0.00	0.00	0.00	0.00	0.00	0.00	3.50
	Total		**62672.92**	**444.46**	**56.29**	**11.47**	**116.61**	**324.17**

Material/Labour Cost

1	Bricks @ Rs 5000/1000 Bricks or Rs 5/Brick	313364.60
2	Ciment @ Rs 260/Bag	115558.98
3	Core Sand @ Rs 1500/qmt.	84432.59
4	Stone Gritee @ Rs 2500/qmt.	28674.80
5	Mistree @ Rs 230/Mistree	26820.96
6	Labour @ Rs 120/Labour	38900.39
	Total Cost	**607752.32**

6.9 DETAIL ESTIMATE OF CHUTE SPILLWAY CREST LENGTH

Estimate of Small Chute Spillway having 0.30 m Crest and 0.60 m drop

Sr. No.	Particulars	No.	Measurements			Qty.	Unit	Rate	Amount
			Length	Width	Height				
1	**Earth Work**								
	a) Head Wall Extention + Head Wall	1	0.9	0.38	0.15	0.051	cmt	44	2.2572
	b) Conduit	1	2.44	0.3	0.11	0.081	cmt	44	3.542
	c) Toe Wall + Wing Wall	1	0.75	0.38	0.45	0.128	cmt	44	5.6452
	d) Side Wall	2	2.04	0.3	0.23	0.141	cmt	44	6.1952
						0.401	cmt	44	17.6396
2	**Cement Concrete in Foundation**								
	a) Head Wall Extention + Head Wall	1	0.9	0.38	0.15	0.051	cmt	3000	153.9
	b) Toe Wall + Wing Wall	1	0.75	0.38	0.15	0.043	cmt	3000	128.4
	c) Side Wall	2	2.04	0.3	0.15	0.184	cmt	3000	550.8
						0.278	cmt	3000	833.1
3	**Brick Work**								
	a) Head Wall Extention	2	0.3	0.23	0.45	0.062	cmt	3645	226.3545
	b) Head Wall	1	0.3	0.23	0.15	0.01	cmt	3645	37.908
	c) Side Wall								
	(i)	2	0.4	0.23	0.3	0.055	cmt	3645	201.204
	(ii)	2	1.64	0.23	0.23	0.174	cmt	3645	632.4075
	d) Toe Wall	1	0.3	0.23	0.45	0.031	cmt	3645	113.3595
	e) Wing Wall	2	0.3	0.23	0.23	0.032	cmt	3645	115.5465
4	**Brick on Edge on Conduit & Apron**	1	2.04	0.3	0.11	0.067	cmt	3645	245.3085
						0.431		3645	1572.089
5	**1/2 " (12 mm) Cement Plastering 1:4**								
	Cement and Coarse Sand mixture	2	0.3	0.83		0.498	sqmt	95.6	47.6088
	a) Head Wall Extention	2	2.04	0.7		2.856	sqmt	95.6	273.0336
	b) Side Wall	1	2.44	0.3		0.732	sqmt	95.6	69.9792

	c) Conduit	1	1	0.6		0.6	sqmt	95.6	57.36
	d) Toe Wall	2	0.23	0.7		0.322	sqmt	95.6	30.7832
	e) Wing Wall					5.008	sqmt	95.6	478.7648
	1. Add 10% of cartage of material to site of Structure								**290**
	2. .5 Labour 10 days for curing								**600**
Total Cost of Structure Rs.									**2901.593**
SAY									**3000.00**

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

$$Q = \frac{C.I.A.}{360} = \frac{0.3 \times 120 \times 20.0}{360} = 2.00\ m^3/s$$

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

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

To find suitable value of L&H

Let us assume L =2.0 m (since width of gully is 3.00m)

$$2.00 = \frac{1.711LH^{3/2}}{(1.1.+0..01 \times 0.5)} = \frac{1.711L\,H^{3/2}}{(1.10+1.15)}$$

$$L\,H^{3/2} = \frac{2.0 \times 1.115}{1.711} = 0.350$$

$$H^{3/2} = \frac{2.23}{1.711 \times 4} = 0.65$$

$$H = (0.65)^{3/2} = 0.75\ m$$

Test $L / h = \frac{2.00}{0.25} = 2.66 \geq 2.0$ hence O.K.;

$h / f = \frac{0.75}{1.50} = \leq 0.5$ hence O.K.

Heace he designed hydraulic dimensions of the Spill way are :

Crest Length (L) = 2.00 m

Weir depth (h) = 0.81m

3. Structural design -

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

E = 3x0.81+0.6 or 1.5x1.50

E =3.03 m or 2.25 m

Adopted = 3.03m

2. Length of apron basin L_B = (2.28 h/f + 0.54) =1.5(2.28 x 0.08 + 0.54)

= 1.50 (1.20 + 0.54) =2.61 m

3. Height of end sill, S =h=0.50= 0.16m

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 x 0.80 or [1.50+ 0.81+0.27 – (2.61+0.10/2]

= 1.0 or [1.66 -0.89] = 1.00 or 0.77(adopt J = 1.00 m)

adopt J = 1.62 m

5. M = 2(f + 1.33 h –J) = 2(1.50 + 1.33 x 0.81 – 1.62) = 1.90 m

6. K = (L_B + 0.1) – M = (2.61 + 0.1) – 190 =0.81 m

Toe and cut off walls

Normal scour depth (N S D) =0.473 x $(Q / f)^{1/3}$ = 0.473 x $(2/1)^{1/3}$ = 0.473 x 1.259 = 0.595 m

Maximum Scour depth (M S D) = 1.5 x N S D = 1.5 x 0.595= 0.89m

Depth of cutoff / Toe wall 0.89 m say 0.60m

Apron thickness : For an over fall of 1.0 m .The apron thickness in concrete construction is 0.30m since structure is constructed in masonry ,the Apron thickness will be 0.30x1.50=0.45m

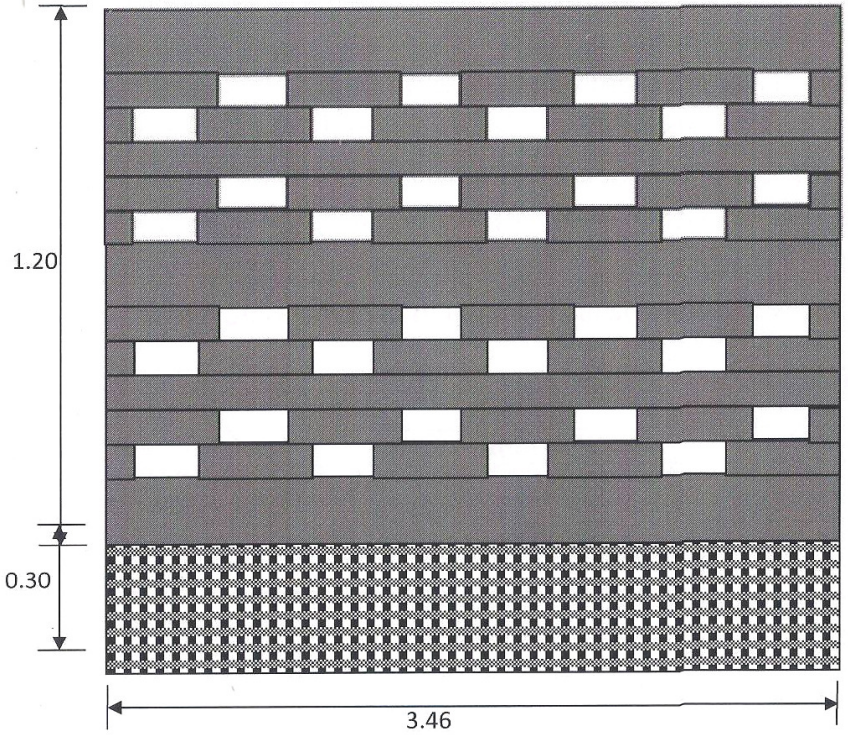
Wall thickness : The thickness of wall of the structure (masonry construction) is given below . **:**

Description	Thickness of wall	
	T op width	Bottom width
Head wall	0.38	1.33
Side wall	0.30	1.10
Wing all and head wall extension	0.30	0.80

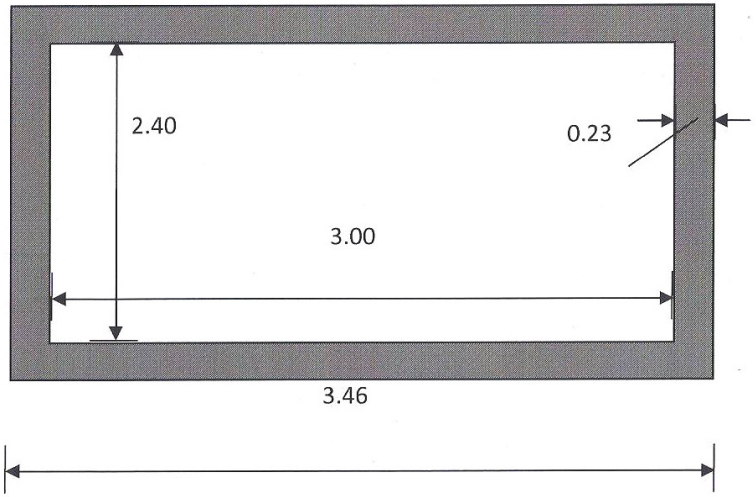
DRAWING AND DETAILS ESTIMATE OF THE NADEF PROGRAMME

(ANNEXURE-2)

DRAWING OF NADEF COMPOST STRUCTURE



ELEVATION



PLAN

DESCRIPTION.

1. Brick work = 1:4.
2. Plastering = 1:4.
3. Thickness of wall = 0.23 m.
4. Total height of Structure = 1.20 + 0.30 = 1.50 m.

(Not to Scale)

3.46

ELEVATION

3. Thickness of wall = 0.23 m.
4. Total height of Structure = 1.20 + 0.30 = 1.50 m.

(Not to Scale)

PERPARATION OF COMPOST BY NANDEF METHD

NADEP is the name of the method. in this method glazed pit of brick masonry above Ground level is made as shown in the drying. in this method by using a little quantity of cow during, and crop residue, leaf of trees, straw and other organic materials. The method of filling up the pit is – first of all best soil of pond or field is spread in the bottom of pit as least 3" thickness and then one layer of 6" thickness and other agriculture waste is made then best soil is spread on in and on this layer the liquid made of cow dung is spread to wet the crop residue, straw etc. this method is repeated unit the pit is net completely filled up. On the top layer of this material a bulk is made and then pit is closed by earthen gara. water is spread on the top of bulk and from glazed side weekly. This process is repeated to moist the filling material always. The decomposition in filling material started and within six month filled material become compost khad.

S.No.	Description of work	No.	L.	B.	D./H.	Quantity
1.	Earth work					
	Long Wall	2	3.60	0.30	0.30	0.648
	Short Wall	2	2.33	0.30	0.30	0.419
	Total					1.067 cum
2.	Brick work 1:4					
	Long wall solid	2	3.46	0.23	0.90	1.432
	Short Wall Solid	2	2.40	0.23	0.90	0.993
	Total					2.425 cum
3.	Plastering Work					
	Long Wall	2	3.46	-	0.60	4.152
	Short Wall	2	2.40	-	0.60	2.880
	Top of Long Wall	2	3.46	0.23	-	1.591
	Top of Short Wall	2	2.40	0.23	-	1.104
	Total					9.727 m^2

ABSTRACT OF WORK

S.N.	Particulars	Quantity
1.	Earth Work	1.06 com
2.	Brick Work 1:4 2.425 + 1.616/2	3.233 cum
3.	Plastering 1:4	9.727 m^2

CONSUMPTION OF MATERIALS

S.NO.	Particulars	Quantity	Cement (Bags)	Coarse Sand (cum)	Brick (nos.)
1.	Brick work 1:4	3.233 cum	5.82	0.873	1487
2.	Plastering 1:4	9.727 m^2	1.07	0.146	-
	Total		6.89	1.019	1487
	Say		7 Bags	1.02 cum	1500 nos.

COST OF MATERIALS

S.NO.	Particulars	Quantity	Rate	Amount
1.	Cement	7 Bags	255.00/Bag	1785.00
2.	Coarse Sand	1.02 cum	910.00/cum	928.20
3.	1st Class Brick work 1:4	1500 nos.	4050.00/ Thousand	6075.00
	Total			**Rs. 8,788.20**

LABOUR CHARGES

S.NO.	Particulars	Quantity	Rate	Amount
1.	Earth Work	1.06 cum	36.66/cum	30.85
2.	Brick	3.233 cum	370.00/cum	1196.21
3.	Plastering	9.727 m^2	40.00/m^2	389.08
	Total			**Rs. 1616.14**

Total Expenditure	
1. Cost of Materials	**8788.20**
2. Labour Charges	**1616.14**
Total	**Rs.10,404.34**
	Say Rs. 10,400.00 only

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 Unit for S.H.G.'s formed in I.W.M.P. – I, Chandauli

Project

District Chandauli - is situated in eastern part of state, where the number of goat/sheep is very less and they are small in nature, Goat Population is appreciable and is 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 dewormmed twice, 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 framers to goat farming with the formation of more S.H.G. 's and in turn availability of goats for processing unit. Goat excreta shall be of immense help in enrichment of soil fertility.

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

Eastern 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. Kepping in view above fact, goat unit shall be formed in the area in intensive way.

16 Goat Unit are Proposed in I.W.M.P. - 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 benficiaries 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 unit, 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 goat of improved breed (Not less than 6 months of age) @Rs. 3000.00 each	**30000.00**
2	Cost of 1 back of improved breed @ Rs.10448.32	**10448.32**
3	Cost of insurance @ 11.63/unit	**4070.00**
4	Feed cost for 3 months @ 250gm/day for goats @Rs.11.84/250gm	**2930.00**
5	Provision of deworming, mineral and vitamin supplement, treatment, vaccination @ Rs/160/animal	**1760.00**
6	The expense including monitoring expenses, register and record @Rs.170.00/unit	**170.00**
	Total	**Rs. 43,930.40**
		Say Rs. 43.950.00

Estimate of Livestock Development Activities

Total number of female animals: Buffa1o - 3295

Cow - 2825

Total - 6120

1. Artificial Insemination (A.I.): 33% of total animals per year, i 2020

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

Total Amount - Rs. 2,02,00.00

2. Vaccination: Total number of animals in I.W.M.P Ist - 12657 nos.

1. H.S. + B.Q. @ 5.50 69,613.50

2. F.M.D. @10.50 2 (Twice in a year)

Total Amount - Rs. 3,35,410.00

3. Deworming: Adult animals -. 11472

Child animals - 1185

Albendazole for 11472 animals @ 40.56 4,65,304.00

1185 child animals@20.28 24,032.00

Total Amount - Rs. 4,89,336.00

4. Mineral Mixture: Agnmine Forte Chelated for 8205 animals @ 115.00 Rs. 9,43,575.00

GRAND TOTAL - Rs. 19,70,321.00

DRAWING AND DETAILS ESTIMATE OF PRODUCTION SYSTEM AND MICRO-ENTERPRISES

(ANNEXURE-3)

DEMOSTRATION OF WHEAT

Demonstration Budget(Component wise) of Wheat					
S. No.	**Particulars**	**Quantity**	**Rate**	**Amount**	**Remarks**
1	Soil Testing	-	38/-	38	
2	Tillage Operation or Preparation of Field for sowing	-	-	-	Done by the Farmer
3	Cost of Seed	100/kg	18/kg	1800	
4	Seed treatment	200 gm Carbandazym	500/kg.	200	
5	Sowing by Seed Drill	-	-	-	Done by the Farmer
6	D.A.P.	210 kg	911/50 kg	3826.2	
7	Urea	150 kg	311/50 kg	933	
8	Potash M.O.P.)	67 kg	300/ 50 kg	402	
9	IPM	1 .00 ha	1000/ ha	1000	
10	FYM	10 t/ha	L.S.	1500	
11	Irrigation (two times)	-	-	-	Done by the Farmer
12	Harvesting	-	-	-	Done by the Farmer
13	Board	1	500	500	
TOTAL :				**10199.2**	
Crop Demonstration for 0.25 ha/farmer				**2549.8**	
Farmer's Contribution					
For SC/ST 10%				**255**	WDF
For Others 20%				**509.96**	WDF

DEMOSTRATION OF MUSTARD

Table No. 4.8.3: Mustard

Demonstration Budget(Component wise) of Mustard					
S. No.	**Particulars**	**Quantity**	**Rate**	**Amount**	**Remarks**
1	Soil Testing	-	38/-	38	
2	Tillage Operation or Preparation of Field for sowing	-	-	-	Done by the Farmer
3	Cost of Seed	5.00 kg	90/kg	450	
4	Seed treatment	30 gm Carbandazym	500/kg.	75	
5	Sowing by Seed Drill	-	-	-	Done by the Farmer
6	D.A.P.	210 kg	911/50 kg	3826.2	
7	Urea	150 kg	311/50 kg	933	
8	Potash M.O.P.)	67 kg	300/ 50 kg	402	
9	IPM	1 .00 ha	1000/ ha	1000	
	IPM Kit	10 nos.	150/kit	1500	
10	FYM	10 t/ha	L.S.	1500	
11	Irrigation (two times)	-	-	-	Done by the Farmer
12	Harvesting	-	-	-	Done by the Farmer
13	Board	1	500	500	
TOTAL :				**10224.2**	
Crop Demonstration for 0.25 ha/farmer				**2556.05**	
Farmer's Contribution					
For SC/ST 10%				**256**	
For Others 20%				**511.21**	

DEMOSTRATION OF GRAM IN WATERSHED AREA (per ha)

Gram					
S. No.	**Particulars**	**Quantity**	**Rate**	**Amount**	**Remarks**
1	Soil Testing	-	38/-	38	
2	Tillage Operation or Preparation of Field for sowing	-	-	-	Done by the Farmer
3	Cost of Seed	80/kg	90/kg	7200	
4	Seed treatment	2 kg Rhizobium Culture	500/kg.	200	
5	Sowing by Seed Drill	-	-	-	Done by the Farmer
6	D.A.P.	175 kg	911/50 kg	3188.5	
7	Sulpher	20 kg	100/kg	2000	
8	Potash M.O.P.)	65 kg	300/ 50 kg	390	
9	IPM	1 .00 ha	1000/ ha	1000	
10	FYM	10 t/ha	L.S.	1500	
11	Irrigation (two times)	-	-	-	Done by the Farmer
12	Harvesting	-	-	-	Done by the Farmer
13	Board	1	500	500	
TOTAL :				**16016.5**	
Crop Demonstration for 0.25 ha/farmer				**4004.13**	
Farmer's Contribution					
For SC/ST 10%				**400**	
For Others 20%				**801**	

DEMOSTRATION OF MAIZE IN WATERSHED AREA (per ha)

Maize					
S. No.	**Particulars**	**Quantity**	**Rate**	**Amount**	**Remarks**
1	Soil Testing	-	38/-	38	
2	Tillage Operation or Preparation of Field for sowing	-	-	-	Done by the Farmer
3	Cost of Seed	5.00 kg	75/kg	375	
4	Seed treatment	30 gm Carbandazym	500/kg.	75	
5	Sowing by Seed Drill	-	-	-	Done by the Farmer
6	D.A.P.	210 kg	911/50 kg	3826.2	
7	Urea	150 kg	311/50 kg	933	
8	Potash M.O.P.)	67 kg	300/ 50 kg	402	
	Zinc Sulphate	5 kg	1340/20kg	335	
9	IPM	1 .00 ha	1000/ ha	1000	
	IPM Kit	10 nos.	150/kit	1500	
10	FYM	10 t/ha	L.S.	1500	
11	Irrigation (two times)	-	-	-	Done by the Farmer
12	Harvesting	-	-	-	Done by the Farmer
13	Board	1	500	500	
TOTAL :				**10484.2**	
Crop Demonstration for 0.25 ha/farmer				**2621.05**	
For SC/ST 10%				**262**	
For Others 20%				**524.21**	

DEMOSTRATION OF PADDY

Paddy					
S. No.	**Particulars**	**Quantity**	**Rate**	**Amount**	**Remarks**
1	Soil Testing	-	38/-	38	
2	Tillage Operation or Preparation of Field for sowing	-	-	-	Done by the Farmer
3	Cost of Seed	5/kg	75/kg	375	
4	Seed treatment	200 gm Carbandazym	500/kg.	200	
5	Sowing by Seed Drill	-	-	-	Done by the Farmer
6	D.A.P.	210 kg	911/50 kg	3826.2	
7	Urea	150 kg	311/50 kg	933	
8	Potash M.O.P.)	67 kg	300/ 50 kg	402	
9	IPM	1 .00 ha	1000/ ha	1000	
	IPM Kit	10 nos.	150/kit	1500	
10	FYM	10 t/ha	L.S.	1500	
11	Irrigation (two times)	-	-	-	Done by the Farmer
12	Harvesting	-	-	-	Done by the Farmer
13	Board	1	500	500	
TOTAL :				**10274.2**	
Crop Demonstration for 0.25 ha/farmer				**2568.55**	
Farmer's Contribution					
For SC/ST 10%				**257**	
For Others 20%				**513.71**	

DEMONSTRATION OF AGRO-HORTICULTURE USING PLASTIC DRUM OF 200 LITRES CAPACITY

District Chandauli is situated in Eastern U.P. region where there is scarcity of water and in summer temperature rises up to 45c causing upper layer of fields dry and therefore mortality rate of plants is very high. Farmers usually like to grow grain crops only. They are not interested in horticulture because of less holding. The production of crops decreases below the tree. Therefore to promote horticulture with crops a demonstration model using plastic drums for horticulture is made. Mainly crops roots go in to the soil up to "4-5" in cereal crops and "6-9" in pulses. Using plastic drums the plants will be planted 50-60 cm below the ground level which is below the root zone of crops. Therefore trees will not able to take nutrients from upper layer of fields and there will no effect of plants on crops

In summer season up to 1 to 1.50m depth of soil becomes dry causes more mortality rate of plants, using drums plants are planted below 50-60 from Ground level and in rainy and winter season up to February roots of plants goes below 2.lOm below where moisture will be available and plants will be safe in summer also. Using barbed wire fencing the plants will be protected. Therefore, it is hoped that farmers will adapt this procedure for Agro-forestry and will become prosperous.

DETAIL ESTIMATE OF DEMONSTRATION OF HORTICULTURE AND MIXED CROPPING

S.No.	Description of Works	No.	L.	B.	D./H.	Quantity
1	Earth work in cutting	156	3.14 x 1.20	-	1.35	793.54
	Trench	156	1.50	0.75	0.75	131.62
	Fencing Poll	133	0.20	0.20	0.20	1.064
	Total					**926.22 cum**
	Farm yard manure	156x 10		-		1560 kg
	Filling of earth work with farm yard manure	156	3.14 x 1.00	-	1.20	587.80 cum
	C.C.W. 1:2:4 for fencing poll	133	0.20	0.20	0.20	1.064 cum
	Angle iron of poll	133	1.80	-	-	239.40 m
	Barbed wire	3	400	-	-	1200.00 m
	Plants	156	-	-	-	156 nos
	Plastic drum (200 litre)	156	-	-	-	156 nos

CONSUMPTION OF MATERIAL

S.N.	Description of Work	Quantity	Farmyard Manure (Kg>	Cement Bags (nos)	Coarse Sand (cum)	G.S. Grit 10-20 mm	Angle Iron (m)	Barbed Wire (Kg)	Planting Drum (nos)
1	C.C.W. 1:2:4	1.064 cum	-	6.49	-	-	-	-	-
2	Angle Iron	239.4 m	-	-	-	-	-	-	-
3	Barbed wire	1200.0m	-	-	-	-	-	-	-
4	Farmyard manure	1560.0 kg	1560 kg	-	-	-	-	-	-
5	Plastic drum	156 nos	-	-	-	-	-	-	-
Total			1560.0 kg	6.49	0.446	0.883	239.40	1200.00	156
Say			1560.0 kg	6.50 bags	0.450 bags	0.900 cum	239.40	1200.0 m	156

COST OF MATERIALS

S.No.	Particulars	Quantity	Rate	Amount
1.	Fram yard manure	1560.0kg	10,00 kg	15600.00
2.	Barbed wire	1200.0m/120.0kg	60.50/kg	7260.00
3.	Angle Iron	239.40m/785kg	40.50/kg	31792.50
4.	plastick drum	156 nos	690.50each	107640.00
5.	Cement	6.50bags	255.00/bag	1657.50
6.	Coarse Sand	0.450 cum	910.00/cum	409.50
7.	G.S.Grit 10-20mm	0.900 cum	1250.00/cum	1125.00
8.	Plants	156 nos	18.00each	2808.00
		Total		Rs.1,68,292,50

LABOUR CHARGES

S.NO.	Particulars	Quantity	Rate	Amount
1.	Earth work	1514.02cum	36.66/cum	55503.97
2.	C.C.W 1:2:3:	1.064 cum	492.00 cum	523.88
3.	Fixing of angle iron	10 man days	100/Man Day	1000.00
4.	Fixing of barbed wire	15 man days	100/Man Day	1500.00
Total				**Rs, 58,527.85**

Total Expenditure	
1. Cost of materials	**1,68,292.50**
2. Labour Charges	**58,527.85**
Total	Rs.2,26,819.50.00
say	Rs.2,26,820.00 only

5- 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. fueJ from pruned-shoots and dried- bra 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 évapotrànspiration, 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 i.e. 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, Be), Amla, Lemon, and Phalsa etc. are the plants which fulfill this requirement and all these fruit plants are most suitable for Bunde region.

2- **Planting Techniques:_**

For degraded lands, pits should be dug of im x im x im 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.

3- **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 Chandauli ritiana, 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.

4- **In Situ 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.

5-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.

6-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.

Estimate of Scatterd Plantation in the Watersheds per Hectare (Without Fencing)

S.No.	Particulars	Quantity	Rate	Amount	Remarks
A, Horticulture					
1.	Soil Working 1m x 1m size pits (160nos.) including cost of refilling	232.00 cum	39.15/cum	9082.80	Since,the project is to be operated in a participatory mode,countribution in the form of labour input for pit digging, FYM and its applications, weeding and hoeing are to be provieded by the participating farmers, hens the cots are no included in the eastmates,
2.	Aplicetion of Farmyard manure inclding cast		L.S.	450.00	
3.	Cost of NPK mixture. neemicide @ 250 gm/plants		L.S.	400.00	
4.	Cost of plants (including 15% etc. for mortality) including transportation and planting	310 nos.	25.00/Plant	7750.00	
5.	Casualty replacement @ 10% of item no. 4&5			465.00	
6.	Cost of 2 weeding and hoeing		1.00/Plant	1040	
7.	Contingency and unforeseen (3%)			400.00	
	Maintenance cost 2nd Year onwards – 15% of 1st year cost			900.00	
	Total			**20487.80**	
		Say		**20487.80**	

Estimate of Orchard Development in the Watersheds per Hectare (Without Fencing)

S.No.	Particulars	Quantity	Rate	Amount	Remarks
A, Horticulture					
1.	Soil Working 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,countribution in the form of labour input for pit digging, FYM and its applications, weeding and hoeing are to be provieded by the participating farmers, hens the cots are no included in the eastmates,
2.	Aplicetion of Farmyard manure inclding cast		L.S.	450.00	
3.	Cost of NPK mixture. neemicide @ 250 gm/plants		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 weeding 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. 900x5			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 year @ Rs. 10,000.00			10500.00	The remarks mentioned under Horticulture are also applicable for agro Horticulture.
2	Cost of rasising agricultural Crops @ Rs. 5,000 per hectare per year			10448.32	
	Total			**Rs.20948.32**	

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

S. n	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	8.00
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

DEMONSTRATION OF GREEN MANURING

Green Manuring is very useful but due to sowing of Kharif season crop, lack of suitable type of seeds, and limitation of moisture, it is not widely practiced. Green Manuring brings immediate advantage because of its quick decomposition where as FYM and compost improves the soil physical condition in the long-run. Benefits of Green Manuring accrue from substitution of chemical fertilizers, enhance soil biological activities and erosion control due to vegetative cover. Sesbania Species (Dhaincha) and Crotolaria Juneea (Sunhemper Sanai) are most common green manure crops. They accumulate about 100 kg N/ha in their biomass and 64-88% of this is derived from atmosphere. Apart from direct benefit of green Manuring as a source of nutrients and organic matter, it has the capacity to mobilize soil phosphorus and other nutrients. It also helps in reclamation of problem of soil, e.g., Sesbania helps in removing exchangeable sodium and reclamation of salt affected soils.

In District Chandauli more fields are kept fallow and only single crop in Rabi is grown. Therefore, this area is suitable for Green Manuring. Therefore, in I.W.M.P.I Chandauli Project, efforts will be made to oblise the farmers for Green Manuring.

4 typical estimate is made for Green Manuring is given below:

ESTIMATE FOR GREEN MANURING IN THE WATERSHED (PER ha)

S.No.	Parcticulurs	Rate	Cost	Remark
1	Seed of Sesbania (Dhanicha) 25 Kg /ha	25.00 /kg	625	Since the prokect to be operated in a participatory mode contribution in the form of tillage will be done by farmers in not included in the estimate
2	Tillage operation before sowing and to plough the plants of dhaincha after 40 – 45 days of sowing for Green Manuring	1000/ ha Before and after saring	2000.00	
	Total		**Rs . 2625.00**	

Therefore cost per hectare of Green Manuring is Rs. 2625.00/ha

6.10 PASTURE MANAGEMENT

Introduction:

The sound animal industry in any country centers around good quality feed and fodders. The livestock population in India is nearly 15%of the total livestock population of the world, tough we have only 2% of the world's geographical area. The project on for green and dry fodder requirement in India has been estimated at 1061 and 590 million tons by 2010 A-D, while the present feed and fodder resources in the country can meet only 4% of the requirement. The grazing intensity is very high i.e., 26 adult cattle unit (ACU)/ha as against 0.8 ACU in the developing countries. The importance of grasses for protection and production, the two aspects of soil and water conservation is well known. Grass is unique in that it is the only resource utilized in situ by grazing. A "grassland" or more appropriately, a "range" is defined as "the areas which are predominantly covered with grasses or grass like plants and are primarily utilized as for age for grazing animals or used as hay." The grasslands are the major sources of food to the animals.

Pasture Management:

All grazing areas are referred to as pastures, but ore specifically the term is applied to cultivated grassland used for grazing. Thus pastures are artificial grasslands with or without non-grass vegetation (such as legumes) that are created with selected high forage-yielding grass and legume species and with inputs like fertilizers and irrigation and carefully managed to exclude all other vegetation. Pastures are usually fenced and used either for grazing, for gay and silage making or for both.

Intensive Fodder Production:

In areas where. the. major enterprise of the farmers centers around the milk production. Continuous supply of green fodder round the year is the basis for success of such as industry. Under the aegis of ICAR's all India coordinated Research Project on Forage Crops, several highly productive fodder cropping system have been tested and recommendations made for their general use. For central region important intensive crop rotations are presented as given below:

Zone wise crop rotations	Green fodder yield(t / ha)
Central region	
1- Hybrid napier +Cowpea-Berseem+Japanrape	286.3
2- Maize+Cowper-Jowar-Berseem+Japanrape	197.2
3- iawar+Cowper-Berseem+Japanrape-Jawer+Cowpea	168.6

Conservation on of Forages:

In order to sustain animal production, it is essential that the optimum feeding should be maintained round the year. In India, we have two seasons, rainy season and winter season, when surplus quantities of green fodder is available-country to this there are 2 to 3 months of lean periods(October-November and April to July) when the fodder availability to animals is at its low. In the summer months, it is difficult even to meet the maintenance

requirements of the animals.

Stage of maturity to feed the animals adequately during the lean period. The conservation of forages could be done in the form of silage from cultivated fodders (legumes and cereals) and also pasture grasses.

Forages could also be conserved in the form of hay when dried to its nutrients. This feed stuff is quantitatively important from both maintenance and nutritional point of view.

Agro-forestry system for fodder production:

_A number of fodder trees play an important role in human food security through their function as animal food sources, especially as drought services. Agro-forestry systems consisting of such tress and animals and/or pasture are called Silvo-Pastoral system. Silvi-Pasture (or Silvo-Pastoral system) is the most promising alternate land use system which integrates multipurpose trees, shrubs, legumes and grasses mostly on non arable, degraded and marginal lands for optimizing land productivity. It helps in conservation of vegetation, soil and nutrients and provides forage, timber and fuel wood on a sustainable basis. Potentials of Semi-arid region for different **forage production systems.**

Region Forge Production Systems

Semi arid Integration of Agro-Silvi-Pasture, dry land agriculture on cultivated lands. Forage-cum- Copping forming on the marginal and sub marginal lands with intercropping dry lands cereals and legumes

6.11 ROLE OF GRASSLAND IN SOIL CONSERVATION

The grass plant itself protects the soil from the forces of water erosion including the impact of rain drops and surface flow. Grass acts a spring cushion intercepting and broking up the falling rain drops in their way down. Conducting the water down the blades and stems of the plants and finally allowing it to reach the ground as fine sprays without disturbing the surface. Clamps of grass plants, in a mechanical way, obstruct-flowing water and reduce its rate of flow. In fact to control soil erosion whatever technique is adopted, there are four approaches to deal with the problem:

1- To condition the soil to make it resistant to determent and transportation and create more absorptive surface layer.

2- To cover the soil so that it is protected from the impact of wind and rain drops.

3- To decrease the velocity of wind or runoff water.

4- To provide safe disposal outlet for surplus run off.

Grass in the nature highly efficient device to protect the soil from destructive forces like rain , wind etc. Grass and legumes increase the aggregation of soil particles; improve soil structure and water holding capacity of the soil. Grasses gives quicker protection to eroded lands. To establish gully sides, water ways, gully head and check dams. Grass is perhaps the most effective and economical tool. It can put to various uses in soil conservation:

1- Strip cropping, rotational cropping or lay farming.

2- Stabilization of bunds and terraces.

3- Stabilization of gullies, diversion or drainage channels.

4- Stabilization of sand dunes.

5- Meadows and pasture on steep slopes.

6- Fertility builder for eroded soil.

7. Consolidation and Withdrawal Strategy

7.1 Quality and Sustainability Issues

7.1.1 Plans for Monitoring and Evaluation

A Web-based GIS System is being developed for monitoring and evaluating the project in its planning & implementation phases. The system would be available on a public domain and can be accessed by all the stakeholders of the project. The system shows the entire state of Uttar Pradesh and all of those areas selected over the next 18 years. Filtering allows the user to zoom onto one particular project. Details related to soil type, Land-use classification, inhabitation etc., can be obtained village-wise. Furthermore, survey-number wise details related to ownership, irrigation source, yield etc., can also be accessed by the users of the system. This system is being used for pooling up the details obtained from the DPR. In other words, the DPR is made available online in the form of a database which will help the stakeholders know areas of importance viz., already treated areas/historical works in the area, proposed areas for treatment etc., for further treatment and planning. The system would also show the satellite imageries of various years from the project inception stage to the project closing stages. This allows the user to evaluate the effectiveness of the treatment and thereby plan corrective measures for the project area. The system would serve as an aiding tool to the planners and evaluators for judging the efficacy of the project.

Yet another component of the Web-based GIS system is the Mobile based Monitoring & Evaluation System, which will help the ground staff alias WDTs (Watershed Development Team) to transmit information from the ground level to the central server. Also, any higher-up official in charge of the project can obtain information regarding the project area on their mobile phone by means of an SMS. The system works in the following manner. The WDT equipped with a GPS instrument marks the latitude-longitude information of various treatment areas during the DPR. The probable sites are then transferred onto the central server. During the works phase, any progress in the treatment areas is reported to the server by means of an SMS by the WDT. Similarly, any nodal officer or higher-up official can view the progress in a project by means of summarized reports generated over frequent periods of time.

7.1.2 Plans for Project management:

The Project management of any watershed programme is very important. It mainly depends upon the community organization and the village level institutes in IWMP -I Chandauli watershed committee and various user groups have been formulated for post project operation and maintenance of assets created during project period. Major emphasis will be on equity and sustainable benefit of the project even after implementation stage. A proper link-up will be built during project period with various institutes and capacity building organization. They will act as a major kingpin during post implementation for scaling up the successful experience during project.

7.1.3 Watershed Development Fund:

The major source of financial assistance after post implementation period is watershed Development Fund. The contribution of it will comes mainly fund the following: Attention:

7.1.4 User Charges:

Various user groups will be formed in village. These user groups will collect user charges according to the designated rules formed during the formation of user group. These funds will be transferred to the WDF funds as per these formulated rules. The secretary of watershed committee (WC) shall maintain the records of the following.

7.2 Sustainability and environment security

In the proposed watershed management plan of watershed, proper blending of bio engineering measures will be applied on 60% of the total watershed area, Bases on the results of studies conducted in this region, it is estimated that more than 50% of the watershed area will be treated and consequently the soil loss and runoff from the area is expected to be reduced by 70% and 65%, respectively, The proposed land use plan will improve the land utilization index and crop diversification index signification index significantly as compared to the existing one. It will help in maintaining ecosystem integrity on sustained basis along with improving the livelihood security of the farming community.

7.3 Economic Analysis

Economic analysis of the project was carried by taking direct benefits and costs considering 25 years project life at 10 percent discount rate for this purpose of economic analysis. Whole watershed development plan was divided into three sector namely agriculture, horticulture and forest/Fuel wood plantation, Benefit Cost ratio (BC ratio) criteria was employed to judge the economic efficiency of each enterprise and sector.

7.3.1 Agriculture

At present agriculture is being done on well maintained field, therefore, the development cost can be recovered within few year as it does not require much investment. Horticultural plantations of dry land fruit will be done on 74 ha of land with a proposed BC ratio of 1.85:1 Agro-forestry which not practiced in the watershed area will be promoted on 170 ha land with a proposed BC ratio of 1.85:1.

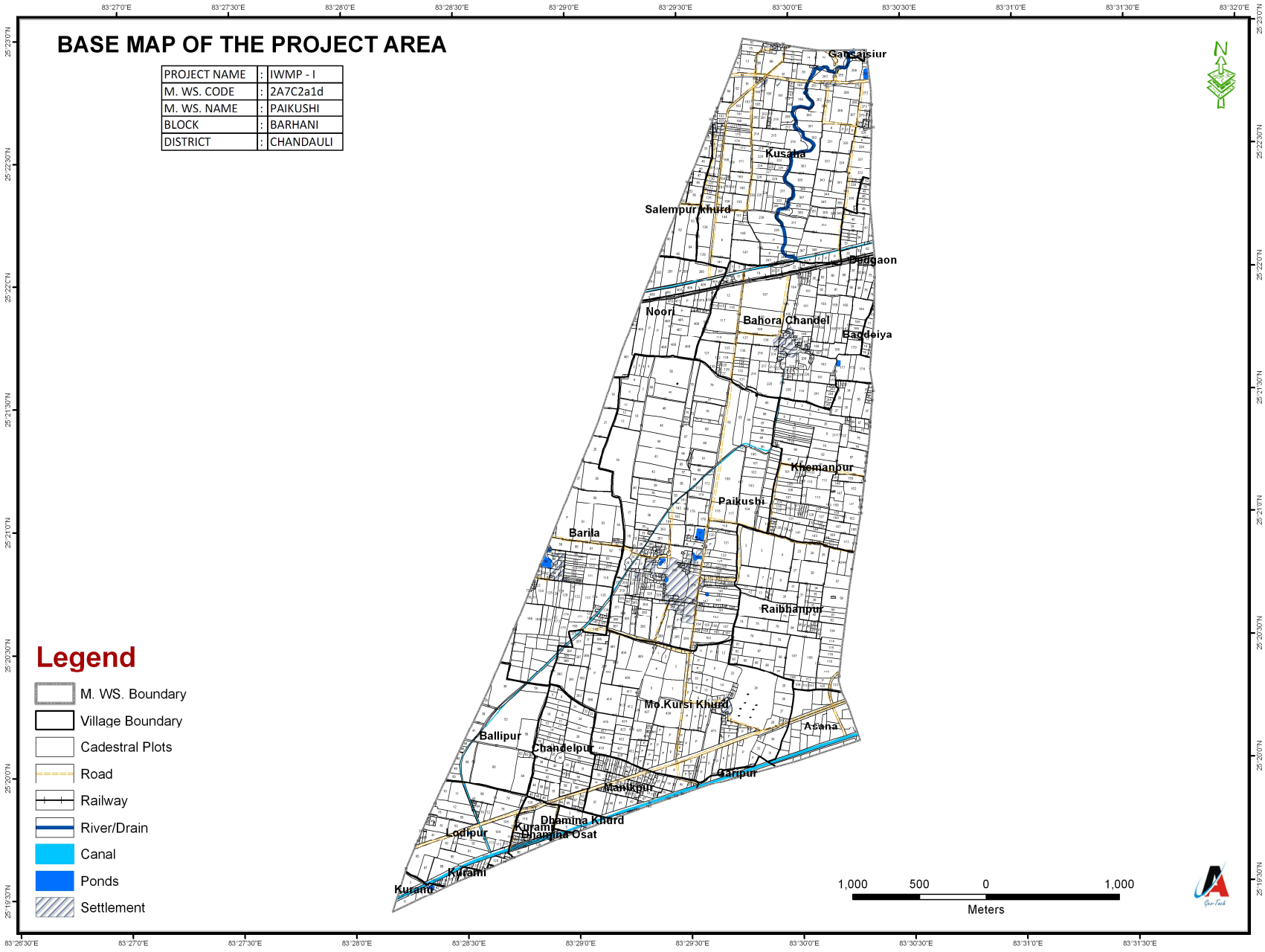
Table No.7.1: Expected/Estimated Outcomes (IWMP-I) Chandauli

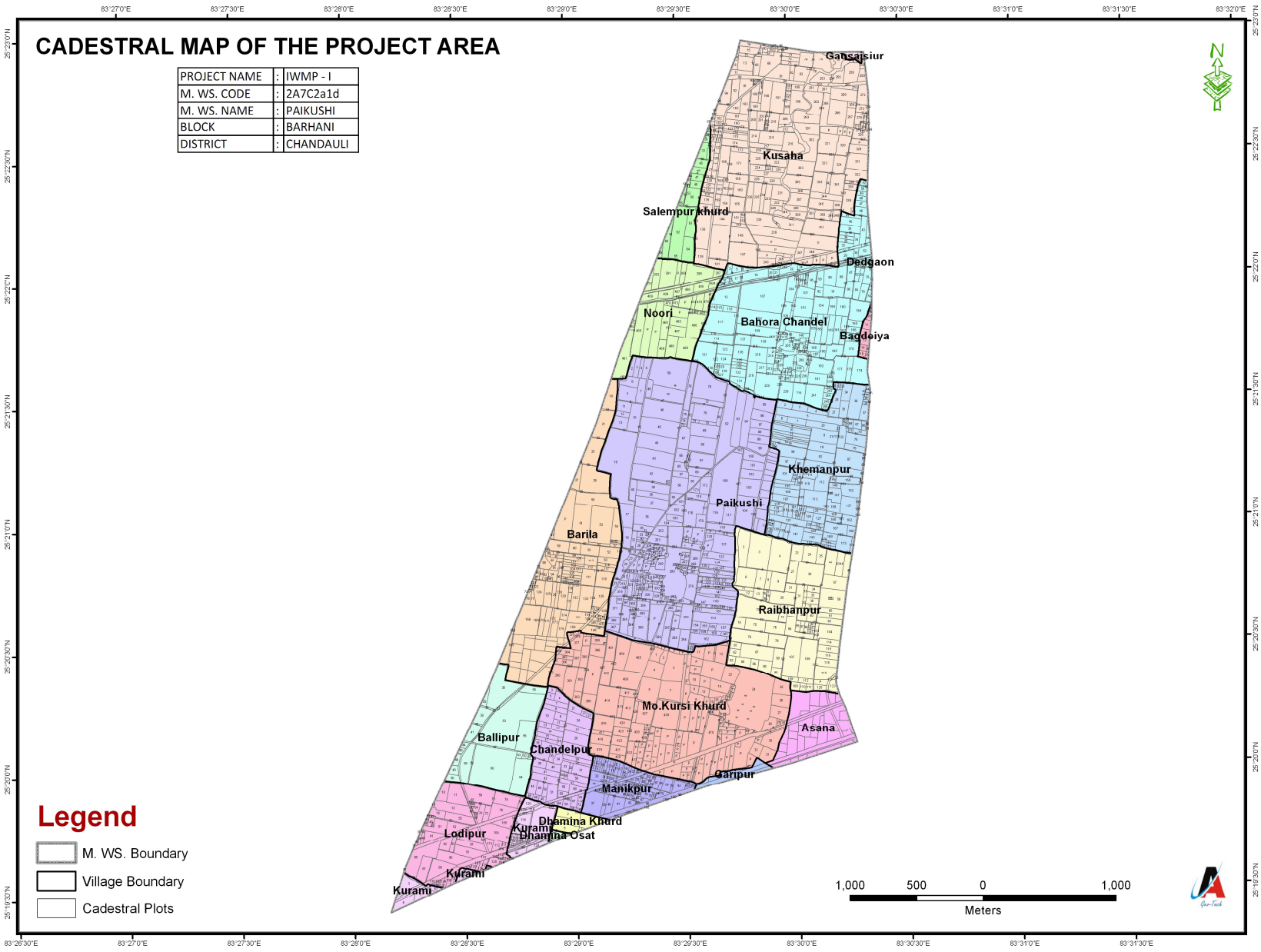
S. No.	Name of the District	Item	Unit of measurement	Pre-project Status	Expected Post-project Status	Remarks
1	CHANDAULI	Status of water table	Meters	8.5	7.30	
2		Ground water structures repaired/ rejuvenated	No.	-	120	
3		Quality of drinking water	Quality	General Water	Improved water	
4		Availability of drinking water	No of Days	310	365	
5		Increase irrigated area	% ha	5178.78	5688.00	
6		Rainfed area	Cropping pattern	Single/ double	Double/ multiple	
7		Area under agricultural crop	Ha	9480.47	9678.78	
8		i Area under single crop	Ha	5800.72	3067.00	
9		ii Area under double crop	Ha	2865.40	4372.50	
10		iii Area under multiple crop	Ha	814.35	2259.28	
		iv Croping Intensity		140%	185 %	
12		Increase in area under vegetation(tree cover)	Ha	-	300	
13		Increase in area under horticulture	Ha	-	74	
14		Increase in area under fuel & fodder	Ha	210	340	
15		Increase in milk production	Av.lit/day/ cattle	1.88	2.5	
16		No. of SHGs	No.	2	136	
17		Increase in no. of livelihoods	No.	5	15	
18		Increase in income	Rs.	19190	24500	
19		Migration	%	4517	2710	
20		SHG Federations formed	No.	-	15	
21		Credit linkage with banks	No.	6	20	
		User Group		-	25	
22		No. of WSC Found	No.	-	26	
		Summary of lessons learnt				

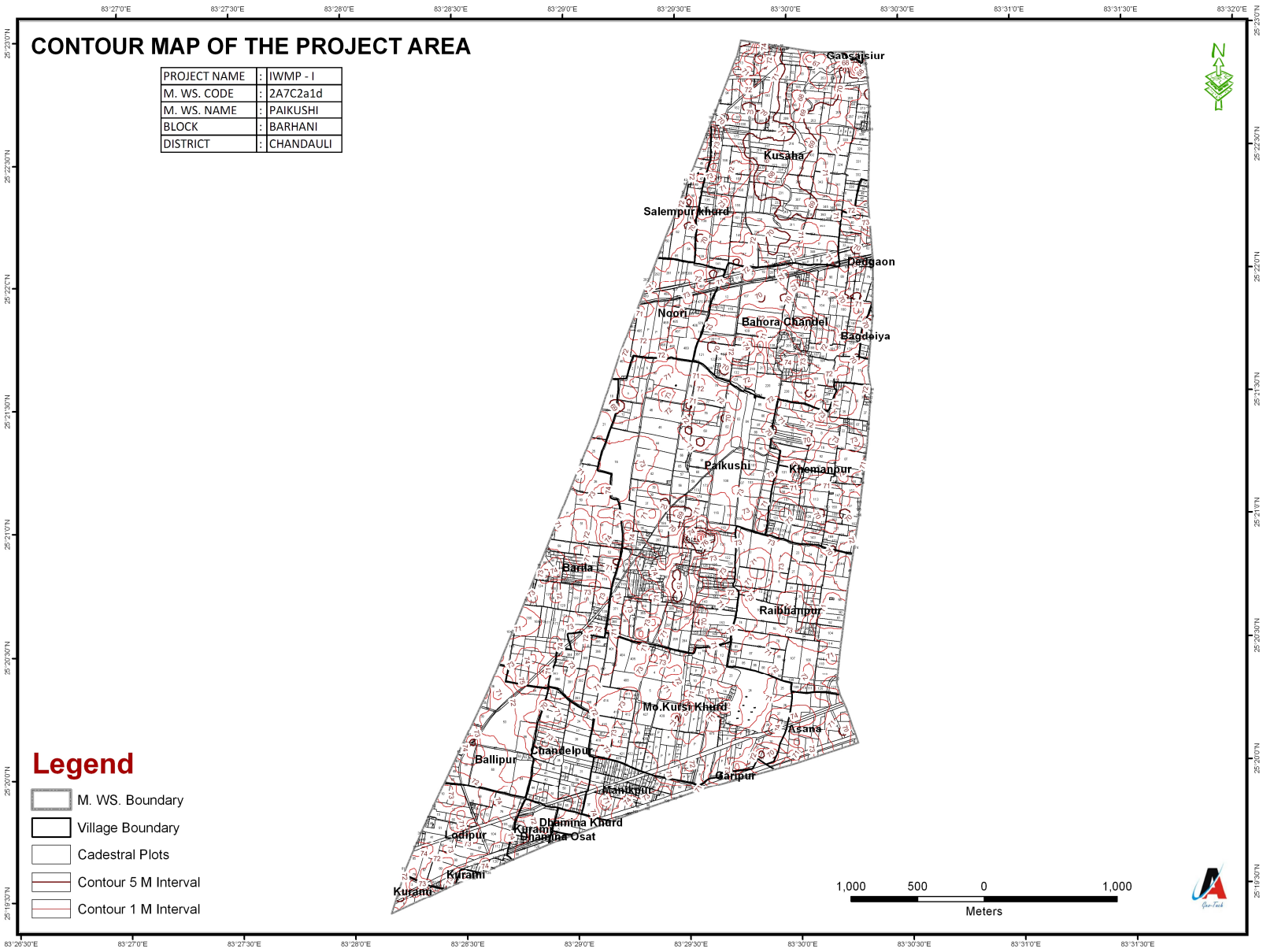
Date;

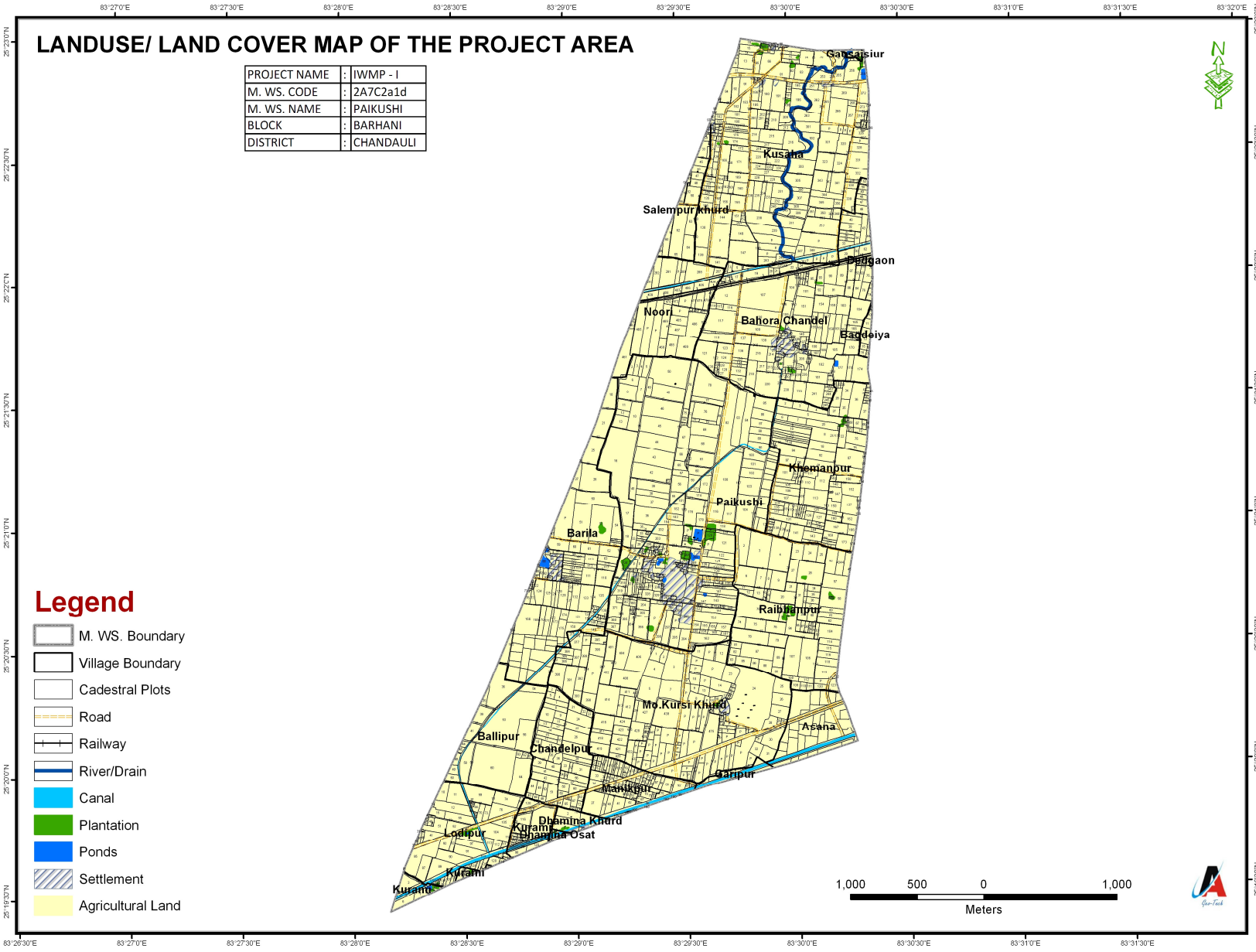
Signature of officers authorized
by State Govt. with name and Designation

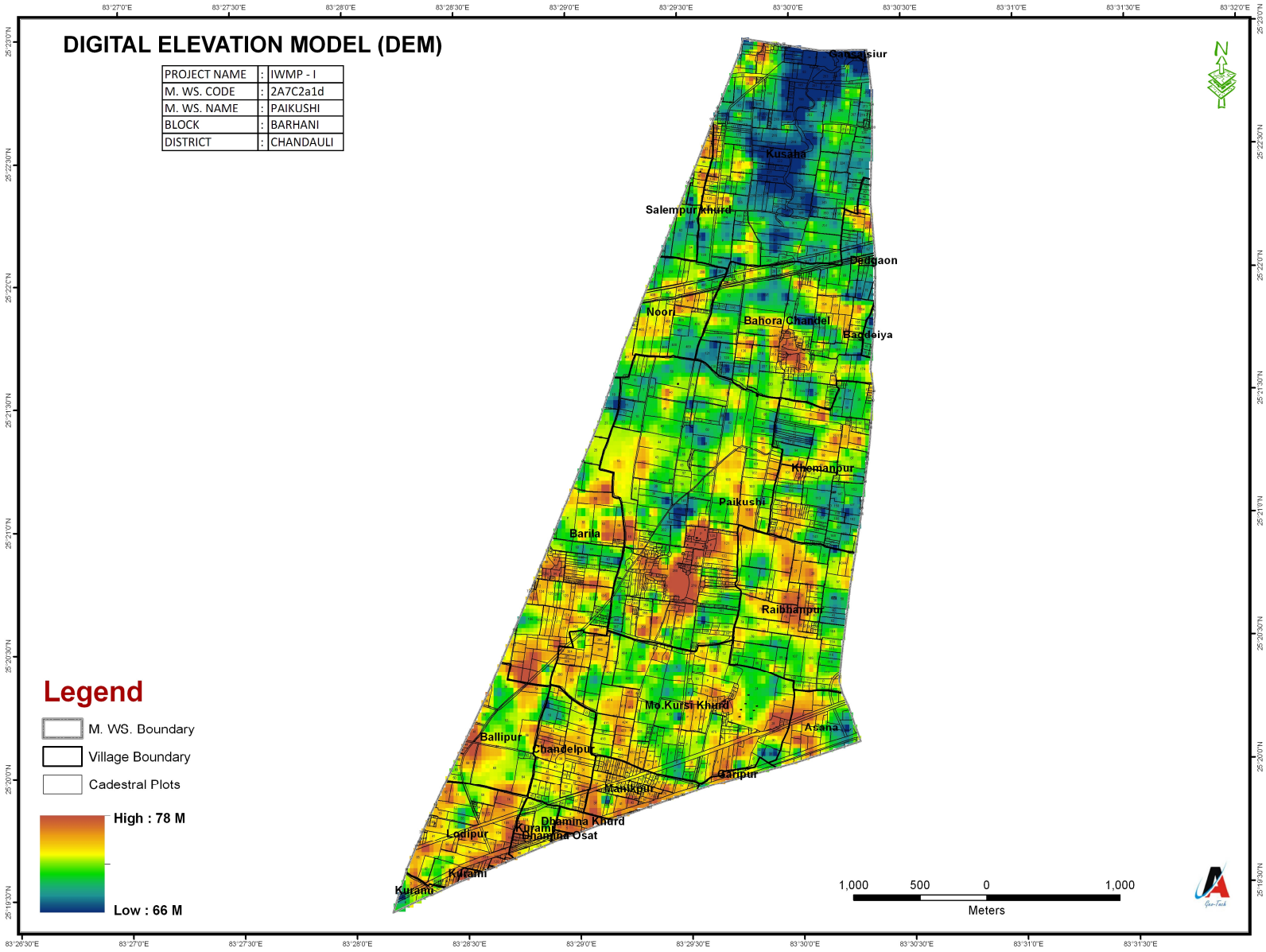
MAPS OF MICROWATERSHED- PAIKUSHI (2A7C2a1d)

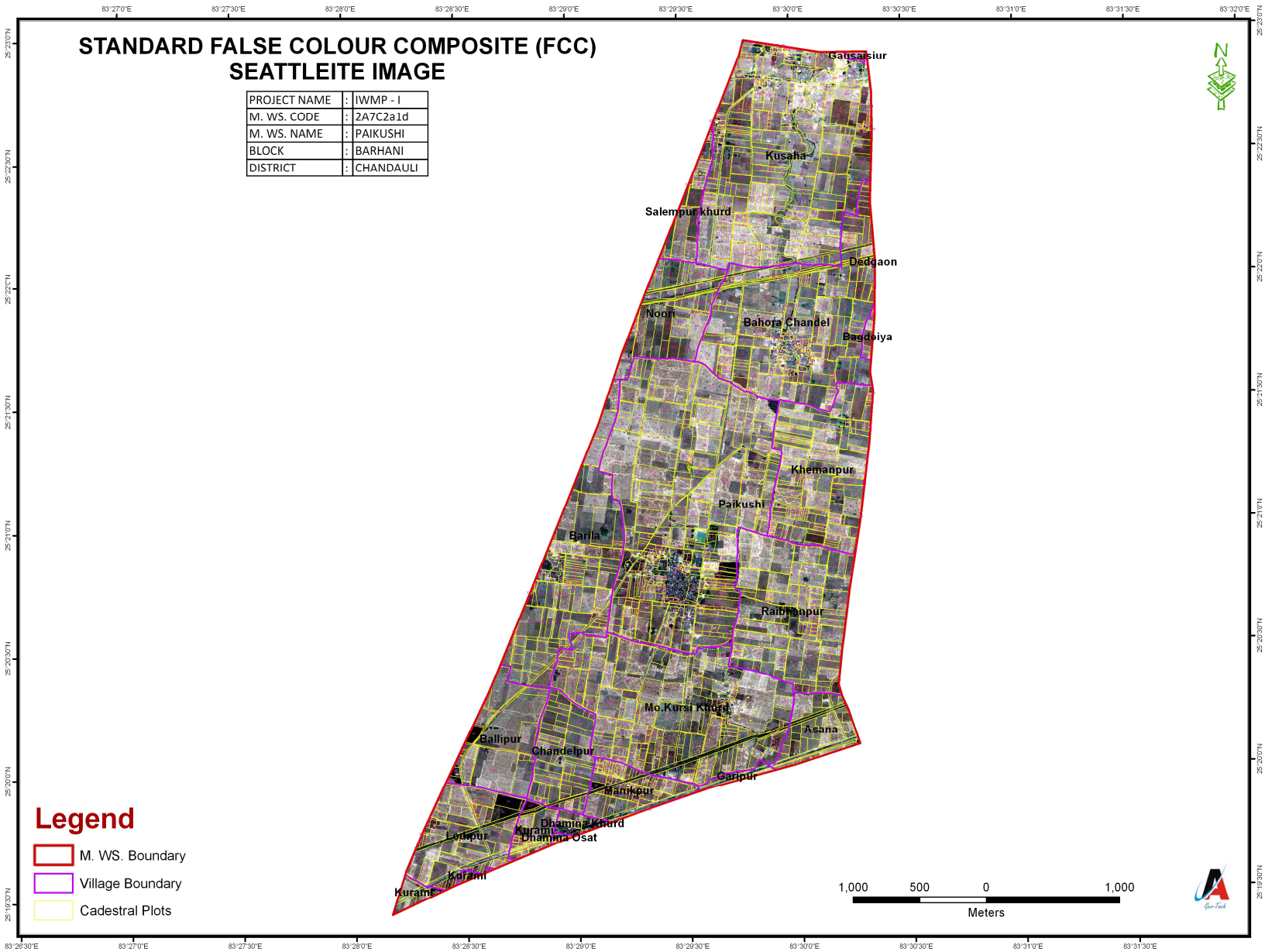

BASE MAP OF THE PROJECT AREA
PROJECT NAME : IWMP - I
M. WS. CODE : 2A7C2a1d
M. WS. NAME : PAIKUSHI
BLOCK : BARHANI
DISTRICT : CHANDAULI
Legend
M. WS. Boundary
Village Boundary
Cadestral Plots
Road
Railway
River/Drain
Canal
Ponds
Settlement
Gansaisiur
Kusaha
Salempur Khurd
Dadgaon
Noori
Bahora Chandel
Bagdeiya
Khemanpur
Paikushi
Barila
Raibhanpur
Mo.Kursi Khurd
Asana
Ballipur
Chandelpur
Ganpur
Manikpur
Dhamina Khurd
Kuramni
Dhamina Osat
Lodipur
Kuramni
Kuramni
1,000 500 0 1,000
Meters

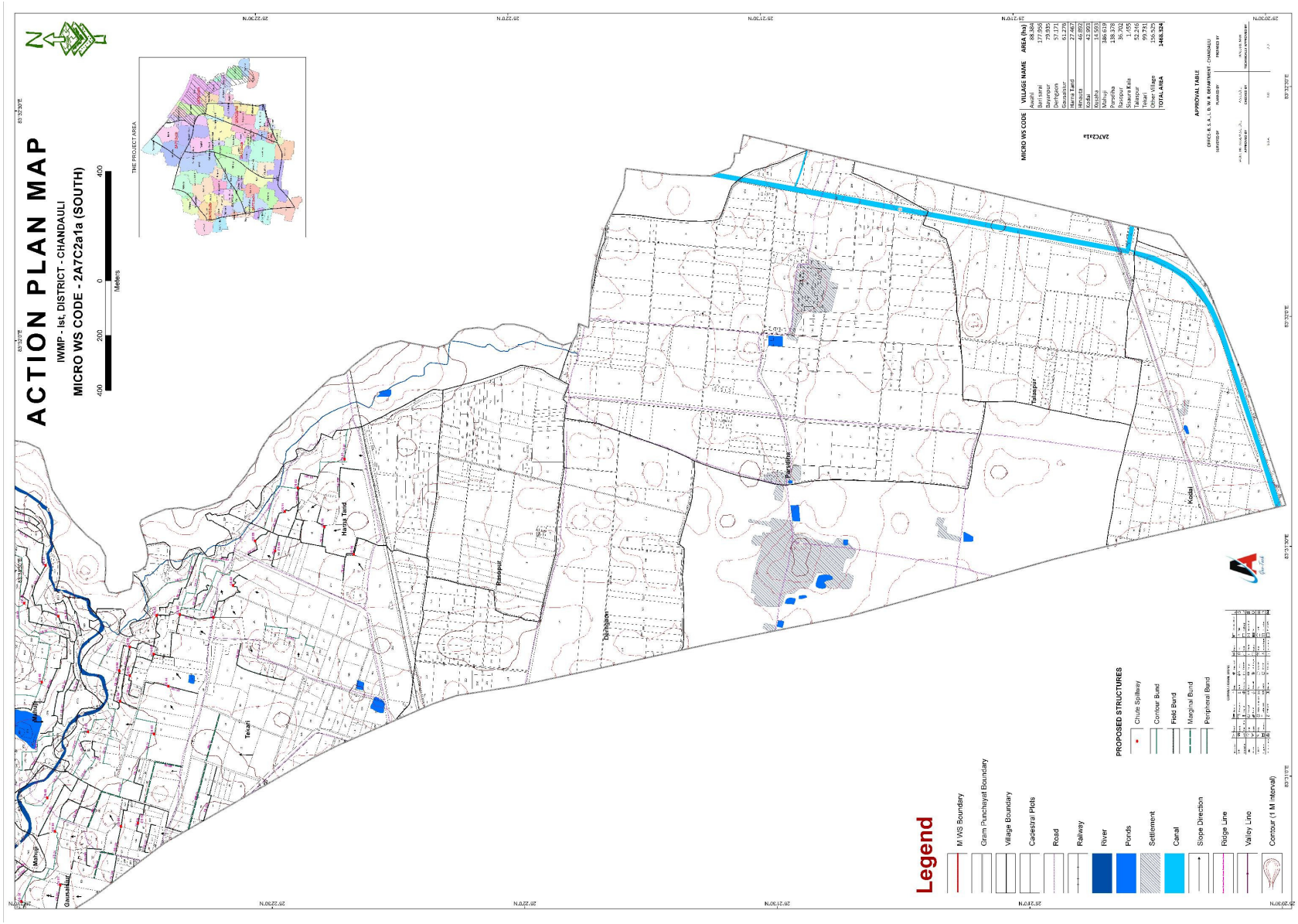

CADESTRAL MAP OF THE PROJECT AREA
PROJECT NAME : IWMP - I
M. WS. CODE : 2A7C2a1d
M. WS. NAME : PAIKUSHI
BLOCK : BARHANI
DISTRICT : CHANDAULI
Gansaisiur
Kusaha
Salempur khurd
Dedgaon
Noori
Bahora Chandel
Bagdeiya
Khemanpur
Paikushi
Barila
Raibhanpur
Mo.Kursi Khurd
Asana
Ballipur
Chandelpur
Garipur
Manikpur
Dhamina Khurd
Dhamina Osat
Kurami
Lodipur
Kurami
Kurami
Legend
M. WS. Boundary
Village Boundary
Cadestral Plots
1,000 500 0 1,000
Meters

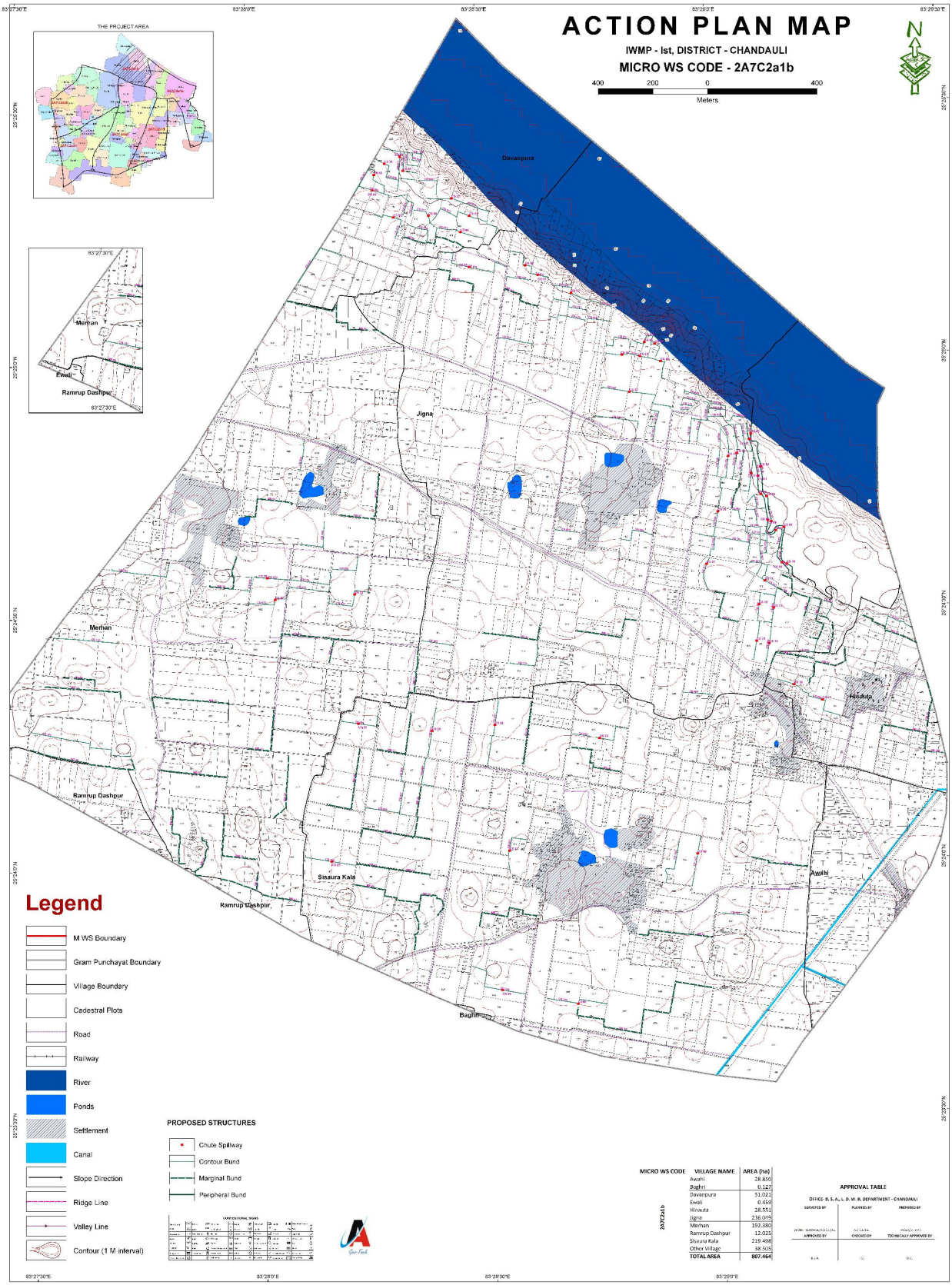

CONTOUR MAP OF THE PROJECT AREA
PROJECT NAME : IWMP - I
M. WS. CODE : 2A7C2a1d
M. WS. NAME : PAIKUSHI
BLOCK : BARHANI
DISTRICT : CHANDAULI
Legend
M. WS. Boundary
Village Boundary
Cadestral Plots
Contour 5 M Interval
Contour 1 M Interval
Sahsaisiur
Kusaha
Salempur Khurd
Deogaon
Noori
Bahora Chandel
Bagdaiya
Paikushi
Khemanpur
Barila
Rajbhanpur
Mo.Kursi Khurd
Asana
Ballipur
Chandelpur
Ganpur
Manikpur
Dhamina Khurd
Kuraini
Dhangha Osat
Lodipur
Kuraini
Kuraini
1,000 500 0 1,000
Meters
N

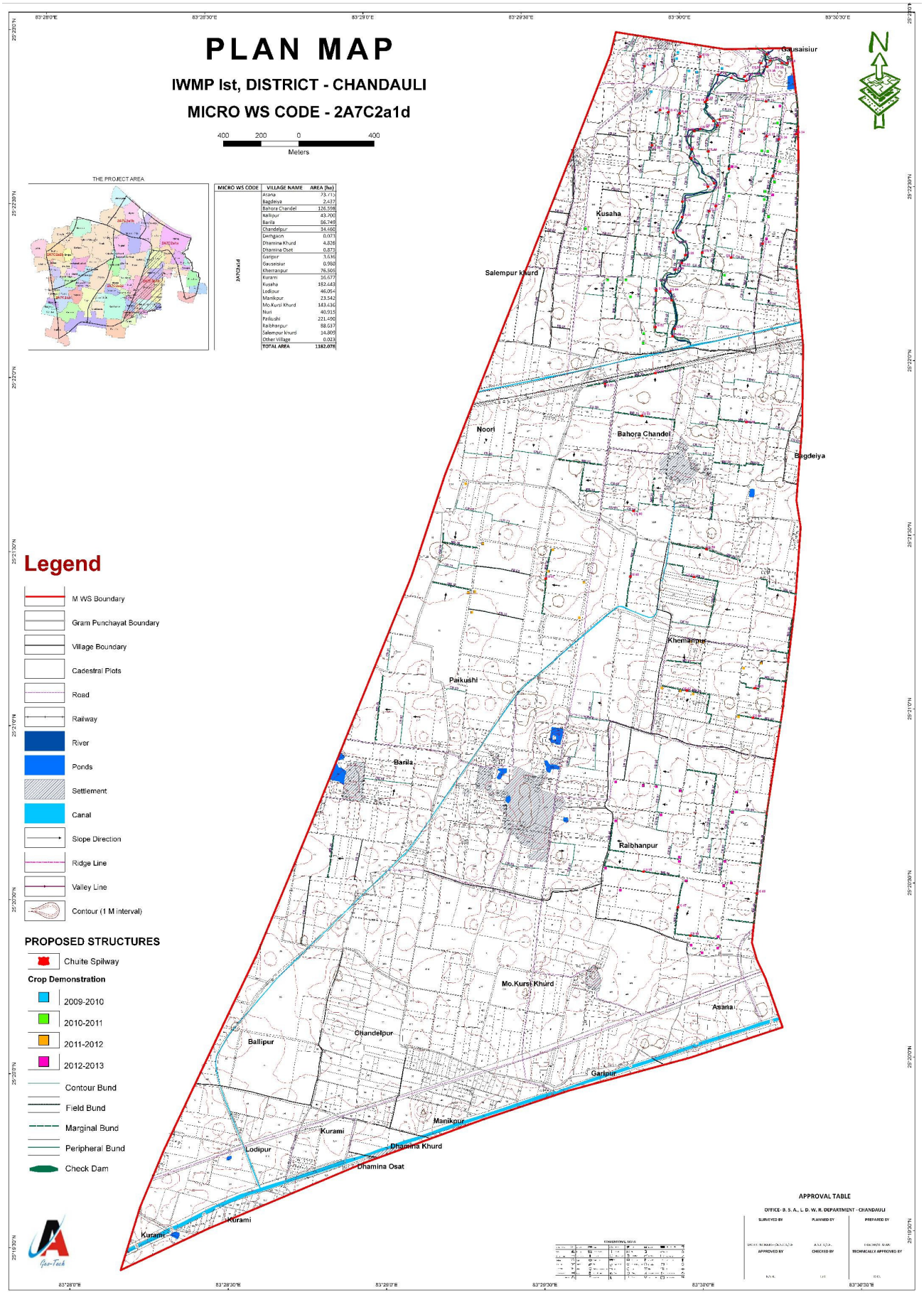

LANDUSE/ LAND COVER MAP OF THE PROJECT AREA
PROJECT NAME : IWMP - I
M. WS. CODE : 2A7C2a1d
M. WS. NAME : PAIKUSHI
BLOCK : BARHANI
DISTRICT : CHANDAULI
Legend
M. WS. Boundary
Village Boundary
Cadestral Plots
Road
Railway
River/Drain
Canal
Plantation
Ponds
Settlement
Agricultural Land
Ganjasiur
Kusaha
Salempur khurd
Noori
Bahora Chandel
Khemanpur
Paikushi
Barila
Mo.Kursi Khurd
Asana
Ballipur
Chandelpur
Manikpur
Dhamina Khurd
Dhamina Osat
Kurami
Lodipur
1,000 500 0 1,000
Meters

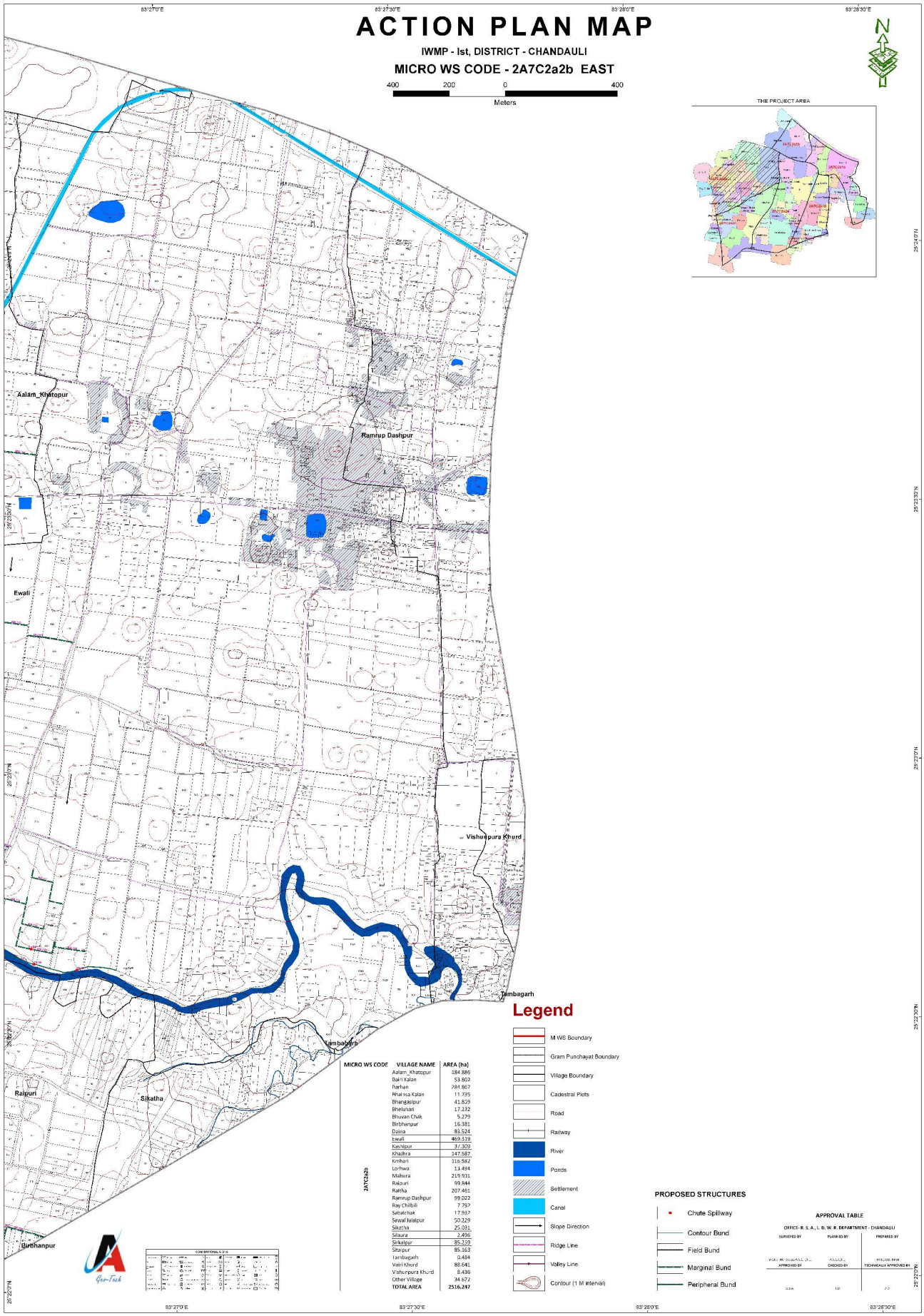

DIGITAL ELEVATION MODEL (DEM)
PROJECT NAME : IWMP - I
M. WS. CODE : 2A7C2a1d
M. WS. NAME : PAIKUSHI
BLOCK : BARHANI
DISTRICT : CHANDAULI
Legend
M. WS. Boundary
Village Boundary
Cadestral Plots
High : 78 M
Low : 66 M
Kusaha
Salempur khurd
Dadgaon
Noor
Bahora Chandel
Baddeiya
Khemanpur
Paikushi
Barila
Raibhanpur
Mo Kursi Khurd
Asaha
Ballipur
Chandelpur
Garipur
Manikpur
Dhamina Khurd
Dhamina Osat
Lodipur
Kurami
1,000 500 0 1,000
Meters

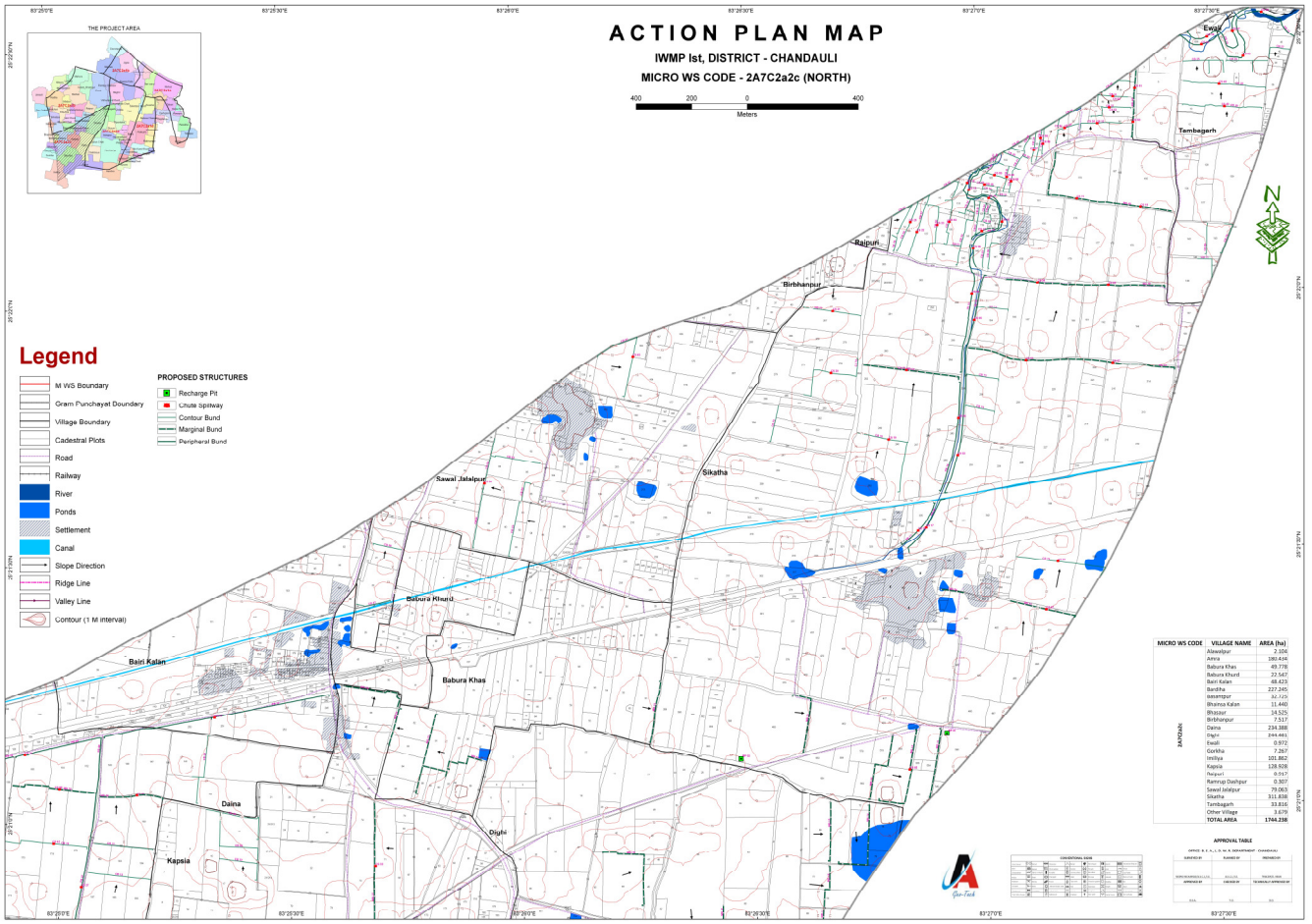

STANDARD FALSE COLOUR COMPOSITE (FCC)
SEATTLEITE IMAGE
PROJECT NAME : IWMP - I
M. WS. CODE : 2A7C2a1d
M. WS. NAME : PAIKUSHI
BLOCK : BARHANI
DISTRICT : CHANDAULI
Gausaisiur
Kusaha
Salempur khurd
Dedgaon
Noori
Bahora Chandel
Bagdeiya
Khemanpur
Paikushi
Barla
Raibhanpur
Mo.Kursi Khurd
Asana
Ballipur
Chandelpur
Garipur
Manikpur
Dhamina Khurd
Kuraini
Ledapur
Dhamina Dsat
Kuraini
Legend
M. WS. Boundary
Village Boundary
Cadestral Plots
1,000 500 0 1,000
Meters

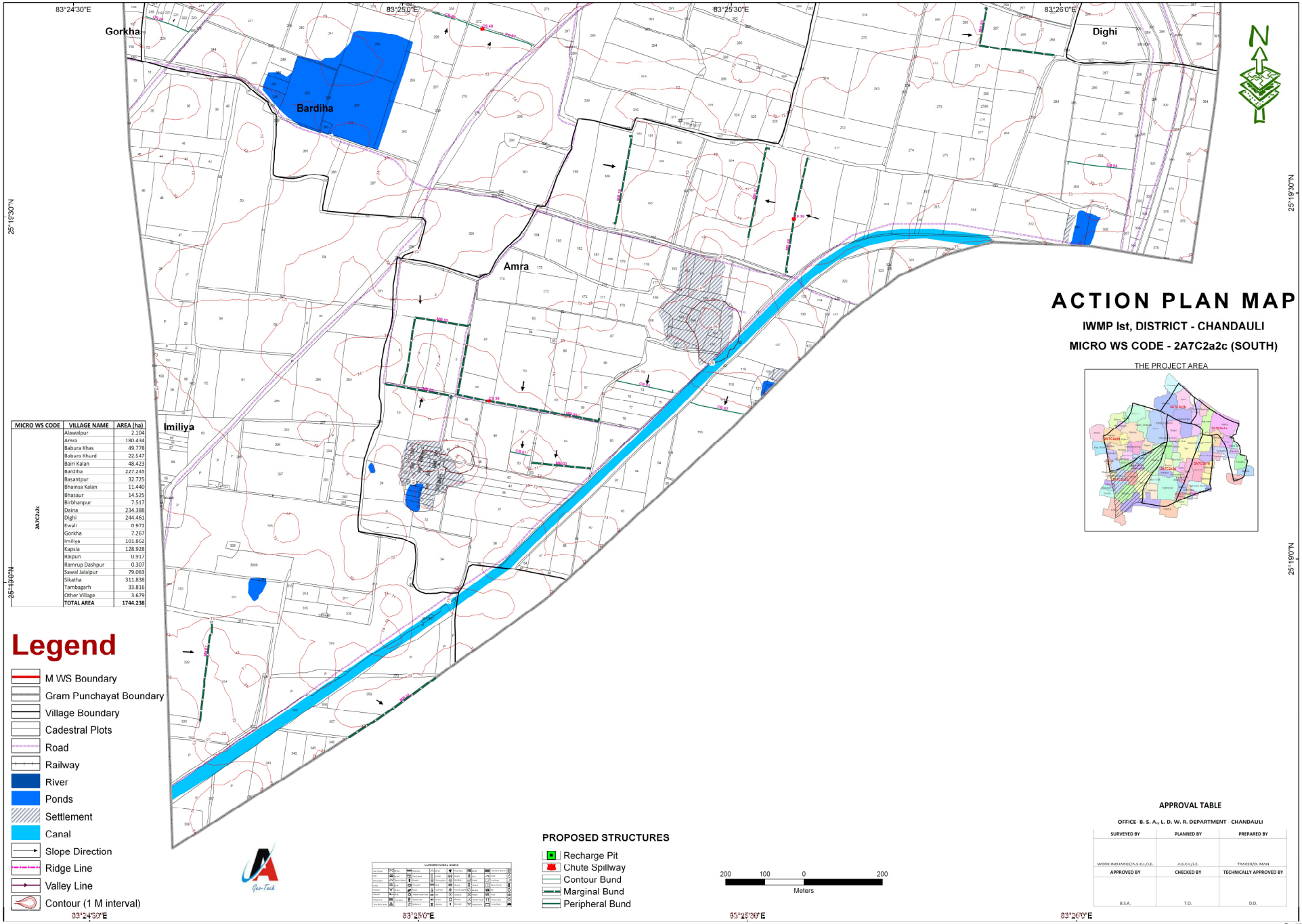

ACTION PLAN MAP
IWMP - Ist, DISTRICT - CHANDAULI
MICRO WS CODE - 2A7C2a1a (SOUTH)
THE PROJECT AREA
Legend
M WS Boundary
Gram Panchayat Boundary
Village Boundary
Cadastral Plots
Road
Railway
River
Ponds
Settlement
Canal
Slope Direction
Ridge Line
Valley Line
Contour (1 M interval)
PROPOSED STRUCTURES
Chute Spillway
Contour Bund
Field Bund
Marginal Bund
Peripheral Bund
Harila Tand
Rasapur
Dehgaon
Pasaiha
Kodai
Talaspur
Tekari
Mahua
Gaisahaur


ACTION PLAN MAP
IWMP - Ist, DISTRICT - CHANDAULI
MICRO WS CODE - 2A7C2a1b
400 200 0 400
Meters
N
THE PROJECT AREA
Davanpura
Jigna
Merhan
Ewaili
Ramrup Dashpur
Sisaura Kala
Baghri
Awalhi
Hinauta
Legend
M WS Boundary
Gram Punchayat Boundary
Village Boundary
Cadestral Plots
Road
Railway
River
Ponds
Settlement
Canal
Slope Direction
Ridge Line
Valley Line
Contour (1 M interval)
PROPOSED STRUCTURES
Chute Spillway
Contour Bund
Marginal Bund
Peripheral Bund
MICRO WS CODE
VILLAGE NAME
AREA (ha)
Awalhi 28.650
Baghri 0.127
Davanpura 51.021
Ewaili 0.459
Hinauta 28.551
Jigna 236.049
Merhan 192.380
Ramrup Dashpur 12.035
Sisaura Kala 219.498
Other Village 38.505
TOTAL AREA 807.464
2A7C2a1b
APPROVAL TABLE
OFFICE: D. S. A. L. D. W. R. DEPARTMENT - CHANDAULI
SURVEYED BY
PLANNED BY
PREPARED BY
APPROVED BY
CHECKED BY
TECHNICALLY APPROVED BY


PLAN MAP
IWMP Ist, DISTRICT - CHANDAULI
MICRO WS CODE - 2A7C2a1d
400 200 0 400
Meters
THE PROJECT AREA
MICRO WS CODE
VILLAGE NAME
AREA (ha)
Asana 73.713
Bagdeiya 2.437
Bahora Chandel 126.598
Ballipur 49.700
Barila 86.749
Chandelpur 34.460
Dehgaon 0.073
Dhamina Khurd 4.826
Dhamina Osat 0.873
Garipur 1.616
Gausaisiur 0.960
Khemanpur 76.565
Kurami 16.677
Kusaha 182.643
Lodipur 46.054
Manikpur 23.542
Mo.Kursi Khurd 143.436
Nuri 40.915
Paikushi 221.490
Raibhanpur 88.637
Salempur khurd 14.809
Other Village 0.023
TOTAL AREA 1382.078
Gausaisiur
Kusaha
Salempur khurd
Noori
Bahora Chandel
Bagdeiya
Khemanpur
Paikushi
Barila
Raibhanpur
Mo.Kursi Khurd
Asana
Chandelpur
Ballipur
Garipur
Manikpur
Kurami
Dhamina Khurd
Dhamina Osat
Lodipur
Legend
M WS Boundary
Gram Punchayat Boundary
Village Boundary
Cadestral Plots
Road
Railway
River
Ponds
Settlement
Canal
Slope Direction
Ridge Line
Valley Line
Contour (1 M interval)
PROPOSED STRUCTURES
Chuite Spilway
Crop Demonstration
2009-2010
2010-2011
2011-2012
2012-2013
Contour Bund
Field Bund
Marginal Bund
Peripheral Bund
Check Dam
APPROVAL TABLE
OFFICE- B. S. A., L. D. W. R. DEPARTMENT - CHANDAULI
SURVEYED BY
PLANNED BY
PREPARED BY
APPROVED BY
CHECKED BY
TECHNICALLY APPROVED BY


ACTION PLAN MAP
IWMP - Ist, DISTRICT - CHANDAULI
MICRO WS CODE - 2A7C2a2b EAST
400 200 0 400
Meters
THE PROJECT AREA
Aalam_Khatopur
Ramrup Dashpur
Ewali
Vishunpura Khurd
Tambagarh
Raipuri
Sikatha
Birbhanpur
Legend
MWS Boundary
Gram Panchayat Boundary
Village Boundary
Cadastral Plots
Road
Railway
River
Ponds
Settlement
Canal
Slope Direction
Ridge Line
Valley Line
Contour (1 M interval)
PROPOSED STRUCTURES
Chute Spillway
Contour Bund
Field Bund
Marginal Bund
Peripheral Bund
APPROVAL TABLE
MICRO WS CODE VILLAGE NAME AREA (ha)
2A7C2a2b
Aalam_Khatopur 184.886
Bakri Kalan 53.802
Parhan 284.867
Khairwa Kalan 11.735
Bhangasipur 41.859
Bheluhari 17.232
Bhuvan Chak 5.279
Birbhanpur 16.381
Daina 83.524
Ewali 469.319
Kashipur 37.309
Khaithra 147.587
Kmhari 116.582
Lorhwa 13.494
Mahura 219.931
Raipuri 99.944
Raitha 207.461
Ramrup Dashpur 99.022
Ray Chilbili 7.797
Sabalchak 17.937
Sawal Jalalpur 50.229
Sikatha 25.091
Sitaura 2.496
Sirkalpur 85.239
Sitalpur 85.163
Tambagarh 0.494
Veer Khurd 88.641
Vishunpura Khurd 8.436
Other Village 34.672
TOTAL AREA 2516.247


ACTION PLAN MAP
IWMP Ist, DISTRICT - CHANDAULI
MICRO WS CODE - 2A7C2a2c (NORTH)
400 200 0 400
Meters
THE PROJECT AREA
Legend
M WS Boundary
Gram Punchayat Boundary
Village Boundary
Cadestral Plots
Road
Railway
River
Ponds
Settlement
Canal
Slope Direction
Ridge Line
Valley Line
Contour (1 M interval)
PROPOSED STRUCTURES
Recharge Pit
Chute Spillway
Contour Bund
Marginal Bund
Peripheral Bund
Ewali
Tambagarh
Rajpuri
Birbhanpur
Sikatha
Sawal Jalalpur
Babura Khurd
Babura Khas
Bairi Kalan
Daina
Kapsia
Dighi
MICRO WS CODE
VILLAGE NAME
AREA (ha)
2A7C2a2c
Alawalpur 2.104
Amra 180.444
Babura Khas 49.778
Babura Khurd 22.567
Bairi Kalan 68.423
Bardiha 227.245
Bhaimo Kalan 11.440
Bhatotar 14.525
Birbhanpur 7.517
Daina 234.388
Ewali 0.972
Gorkha 7.267
Imiliya 101.862
Kapsia 128.928
Ramrup Dadhpur 0.307
Sawal Jalalpur 79.063
Sikatha 311.838
Tambagarh 33.816
Other Village 3.679
TOTAL AREA 1744.238
APPROVAL TABLE



MICRO WS CODE	VILLAGE NAME	AREA (ha)
2A7C2a2c	Alawalpur	2.104
	Amra	180.434
	Babura Khas	49.778
	Babura Khurd	22.547
	Bairi Kalan	48.423
	Bardiha	227.245
	Basantpur	32.725
	Bhainsa Kalan	11.440
	Bhasaur	14.525
	Birbhanpur	7.517
	Daina	234.388
	Dighi	244.461
	Ewali	0.972
	Gorkha	7.267
	Imiliya	101.862
	Kapsia	128.928
	Kaipuri	0.917
	Ramrup Dashpur	0.307
	Sawal Jalalpur	79.063
	Sikatha	311.838
	Tambagarh	33.816
	Other Village	3.679
	TOTAL AREA	1744.238

ANNEXURE-4

Farmer Contribution Details

Name & Code of MWS- Paikushi(2A7C2a1d)										
S.No.	Name of GP	Name of Work	Total Length	Total Cost	Name of Farmer	Cat.	Khasra No.	Area	Length in kh.	Farmer Contribution
1	3	4	5	6	7	8	9	10	11	12
1	Bahora Chandel	C.B.1	118	4425.37	Lalji, Harbans	Gen.	15	0.68	60	225.02
					Lalji, Harbans	Gen.	16	0.939	58	217.52
		C.B.2	104	3883	Lalji, Harbans	Gen.	15	0	56	209.08
					Lalji, Harbans	Gen.	16	0	48	179.22
		C.B.3	112	4212.26	Ramkaran,Balram,Gulab,Omprakash	OBC	13	1.214	97	364.81
					Parsotam	Gen.	14	0.235	15	56.41
		C.B.4	143	5338.74	Bansnrayan,Rekha,Ramdas	OBC	65	0.619	143	533.87
		C.B.5	160	6001.92	Ram Pravesh,Lalan,Chandradev Singh	Gen.	66	0.495	160	600.19
		C.B.6	90	3360.03	Avdesh,Dinesh	Gen.	66	0.534	90	336
		C.B.7	88	3296.77	Smt Rekha,Randa pratap Singh	Gen.	66	0.516	88	329.68
		C.B.8	126	4726.52	Arjun,Shiv Raj	OBC	70	0.35	30	112.54
					Bansnrayan,Rekha,Ramdas	Gen.	71	0.348	20	75.02
					Sobedar,Chhan,Jasvant	Gen.	72	0.486	40	150.05
					Chandradev,Bhadursingh	Gen.	73	0.334	36	135.04
		C.B.9	114	4288.38	Rajnrayan,Mahendra	OBC	82	0.397	114	428.84
		C.B.10	116	4361.88	Dukhanti Angnu	OBC	83	0.206	116	436.19
		C.B.11	236	8843.22	Jnardan,Sohlabh,Kamta	OBC	190	2.276	236	884.32
		C.B.12	227	8515.62	Sohlabh Atwari	S.C.	191	0.517	227	425.78
		C.B.13	223	8363.02	Rajnrayan,Ram Autar	OBC	193	0.125	30	112.51
					Umesh, Suresh	OBC	194	0.178	45	168.76
					Faujdar	OBC	197	0.178	40	150

					Faku,Mangru,Ramagya	OBC	198	0.413	108	405.03
		C.B.14	82	3056.09	Kanaiha,Baijnath	OBC	251	0.2	82	305.61
		C.B.15	95	3545.01	Sushil Kumar,Sangram	OBC	262	0.21	95	354.5
		C.B.16	185	6924.65	Sushil Kumar,Sangram	OBC	262	0.45	185	692.47
		C.B.17	89	3348.42	Kanta,Shiv Murat	OBC	265	0.205	89	334.84
		C.B.18	201	7528.26	Shyamnarayan,Hari	OBC	266	1.537	201	752.83
		C.B.19	227	8503.22	Ram Bhajan,Lalta	OBC	269	1.757	227	850.32
		C.B.20	207	7770.07	Shyamnarayan,Hari	OBC	266	1	207	777.01
		C.B.21	191	7154.39	Shivbadan	OBC	263	0.823	100	374.55
					Shivbadan	OBC	301	0.388	91	340.89
		C.B.22	136	5108.62	Mangru,Nanahk	OBC	263	0.412	136	510.86
		C.B.23	99	3697.45	Potan,Musafir	OBC	301	0.215	99	369.75
		C.B.24	107	4022.35	Lalji,ramadhar Singh	Gen.	302	0.26	107	402.23
		C.B.25	216	8095.26	Lalji,harbans	Gen.	302	0.225	90	333.7
					Mangru,Shyamnarayan	OBC	303	0.506	126	475.92
		C.B.26	176	6590.04	Ramkrit	Gen.	302	0.187	50	187.22
					Ram sakhi	OBC	303	0.45	126	471.79
		C.B.27	117	4369.21	Bansnrayan,Satyanarayan	Gen.	321	0.57	117	436.92
		C.B.28	73	2728.02	Radheshyam	Gen.	326	1.015	73	272.8
		C.B.29	141	5291.35	Bansnrayan,Satyanarayan	Gen.	323	0.658	141	529.13
		C.B.30	87	3276.9	Raghubans	Gen.	209	0.753	87	327.69
		C.B.31	76	2859.71	Raghubans	Gen.	209	0.259	76	285.97
		C.B.32	101	3774.36	Girish chandra & Others	Gen.	208	0.2	101	377.44
		C.B.33	91	3424.48	Raghubans	Gen.	209	1.068	91	344.45
		C.B.34	105	3915.66	Angad.Kamesoar	Gen.	214	0.688	105	391.57
		C.B.35	148	5526.64	Shivsankar	Gen.	215	1.753	103	384.62
					Jamuna & Others	Gen.	217	0.918	45	168.04
		C.B.36	137	5144.43	Munsi	OBC	216	0.35	137	514.44
		C.B.37	119	4445.4	Shiv Murat	OBC	219	0.433	40	149.43
					Shiv Murat,Kamta	OBC	220	1.072	79	295.12
		C.B.38	117	4587.48	Komal	S.C.	221	0.91	65	123.87
					Parmal	S.C.	222	0.506	52	97.5

		C.B.39	139	5223.15	Buddhu	OBC	224	0.29	50	187.88
					Ramsuchit	OBC	227	0.425	40	150.31
					Subas	OBC	228	0.23	49	184.13
		C.B.40	135	5038.33	Buddhu	OBC	224	0.2	48	179.14
					Ramsuchit	OBC	227	0.425	40	149.28
					Subas	OBC	228	0.136	47	175.41
		C.B.41	139	5190.14	Munsi	OBC	225	0.212	50	186.7
					Ramsuchit	OBC	227	0.425	40	149.35
					Rambriksh,Nanahk	OBC	229	0.225	49	182.96
		C.B.42	106	3954.36	Munsi & Other	OBC	231	0.294	106	395.44
		C.B.43	238	8919.62	Ravikant & other	Gen.	233	1.04	148	554.67
					deenanath	Gen.	234	0.324	30	112.43
					Foolmati	Gen.	235	0.506	60	224.86
		C.B.44	113	4245.93	Munsi & Other	OBC	231	0.28	113	424.59
		C.B.45	63	2362.73	Munsi & Other	OBC	231	0.285	63	236.27
		C.B.46	181	6786.88	deenanath	Gen.	144	1.242	181	678.69
		C.B.47	180	6731.77	Shiv Murat	OBC	238	0.68	95	355.19
					Ravikant & other	Gen.	149	0.6	85	317.9
		C.B.48	134	5003.21	Jan Vijay	Gen.	240	0.339	70	261.36
					Jamuna & Others	Gen.	241	0.2	64	238.96
		C.B.49	161	6031.14	Ram Bachan	OBC	308	0.64	161	603.11
		C.B.50	435	16276.57	Prem Prakash	OBC	343	0.665	170	436.1
					Mu. Mevati	OBC	344	0.6	125	467.72
					Bihari	OBC	356	2.039	140	523.84
		C.B.51	126	4701.21	Harindar	OBC	353	0.253	126	470.12
		C.B.52	262	9813.39	Vihari	OBC	356	1	182	681.69
		0	0	0	Ram Das	OBC	357	0.539	80	299.65
		C.B.53	180	6743.86	Sangram	Gen.	40	0.906	180	674.39
		C.B.54	254	9521.97	Kesav	Gen.	39	0.91	180	674.78
					Ramasankar	Gen.	43	0.911	50	187.44
					Vindhya Chal	Gen.	44	0.906	24	89.97
		C.B.55	61	2284.65	ramayan	OBC	86	0.688	61	228.47

		C.B.56	127	4774.83	Shiv pujan	S.C.	76	0.717	60	120.7
					Surendra	OBC	84	0.717	67	236.07
		C.B.57	240	8992.41	Readhe Shyam	Gen.	91	1.303	180	674.39
					Majad	Gen.	92	0.45	60	224.81
		C.B.58	135	5074.04	Shiv sankar	Gen.	101	1.048	35	507.4
		C.B.59	190	7101.78	"	Gen.	114	0.202	45	168.2
					"	Gen.	115	0.202	50	186.89
					Jamuna & Others	OBC	116	0.405	95	355.09
		C.B.62	113	4232.38	Jamuna & Others	OBC	136	1.271	113	423.24
		C.B.63	115	4314.32	Vindhya Chal	Gen.	132	0.66	115	431.43
		C.B.64	179	6691.93	Kasi	Gen.	217	0.502	60	224.31
					Radha Krishna singh	Gen.	218	1.509	119	444.88
		C.B.65	116	4331.92	mohd. Hanif	OBC	222	0.356	116	433.19
		C.B.66	101	3774.19	Ram ratan	OBC	227	0.134	32	119.58
					Ramavadh	OBC	230	0.134	32	119.58
					Sriram	OBC	231	0.263	37	138.26
		C.B.67	183	6866.19	Rama sankar	Gen.	O	1.963	183	686.62
		C.B.68	121	4520.04	Hari Nath		164	2.221	121	452
		C.B.69	70	2638.59	Ram singhasan	Gen.	12	1.216	70	263.86
		C.B.70	128	4791.38	Baikunth	Gen.	146	0.571	128	479.14
		C.B.71	125	4676.76	Nali		192	0.045	20	74.83
					Vindhya Chal	Gen.	197	0.34	45	168.36
					Markande	Gen.	198	0.257	45	168.36
					Rama sankar	Gen.	199	0.049	15	56.12
2	**Paikusi**	C.B.72	190	7128.92	Mu. Dev Sundari	Gen.	2	0.45	70	262.64
					Aditya Narayan	Gen.	3	0.623	40	150.08
					Indrasan	Gen.	4	0.356	30	112.56
					Uttpal dharan	Gen.	5	0.776	50	187.6
		C.B.73	216	8102.1	Rajev Kumar	Gen.	51	6.067	216	810.21
		C.B.74	96	3608.94	Sarda Devi	Gen.	11	0.501	70	263.15
					Gopal Ji	Gen.	12	0.432	26	97.74
		C.B.75	233	8725.75	Dowarika	Gen.	10	0.105	100	391.29

		0			Nathuni	Gen.	13	0.135	133	481.29
		C.B.76	191	7168.92			97	0.866	131	491.69
							98	0.441	60	225.2
		C.B.77	181	6787.4	Naven parti	0	117	0.445	181	678.74
		C.B.78	223	8364.53	Ram priy	Gen.	118	0.413	223	836.45
		C.B.79	139	5200.45	Dhurv Narayan	Gen.	123	0.402	139	520.04
		C.B.80	299	11193.06	Ram priy	Gen.	121	0.403	140	524.09
					sadhna devi	Gen.	122	0.337	159	595.22
		C.B.83	110	4128.93	Maheswri Prasad	Gen.	17	1.777	210	412.89
		C.B.85	85	3166.21	Raj Nrayan	Gen.	297	0.067	50	186.25
					Jamuna & Others	Gen.	298	0.041	35	130.37
		C.B.86	115	4307.97	Ram bali	Gen.	286	0.507	115	430.8
		C.B.87	367	13730.78	Gopal Ji	Gen.	151	0.312	97	362.91
					Ram bali	Gen.	152	0.101	50	187.07
					Smt Atalvasi	Gen.	153	0.101	85	318.02
					Befoo	OBC	156	0.102	45	336.72
					prins kumar	Gen.	160	0.101	90	168.36
		C.B.88	145	5444.31	Shyam sundar	OBC	72	0.862	145	544.43
		C.B.89	83	3120.47	Gauri sankar	Gen.	95	0.3	83	312.05
		C.B.90	97	3617.2	Gauri sankar	Gen.	99	0.11	29	108.14
					"	"	100	0.113	30	111.87
					"	"	101	0.113	38	141.78
		C.B.91	150	5627.96	Sursh shyam Sundar	Gen.	40	0.745	150	562.8
		C.B.92	138	5159.71	Ram raj	Gen.	34	0.725	138	515.97
		C.B.93	190	7112.87	Badtu	S.C.	34	0.413	36	67.39
					Murat	S.C.	35	0.388	45	84.23
					Kasi Nath	S.C.	36	0.388	45	84.23
					Srinivas	S.C.	37	0.388	64	119.8
		C.B.94	194	7281.58	Heeravati	S.C.	32	0.194	80	150.13
					Rakesh	S.C.	33	0.198	114	213.94
		C.B.95	280	10488.36	Timanu	S.C.	57	1.495	280	524.41
		C.B.96	258	9666.77	Siling bhume		4	3.155	158	0

		C.B.97	177	6640.72	Kailash	Gen.	9	1.602	177	664.07
		C.B.98	152	5685.03	Ramjeet	Gen.	20	1.724	152	568.5
3	**Noori**	C.B.60	282	10580.54	Awadh Bihari	Gen.	469	1.57	80	300.16
					Anil Kumar	"	465	2.342	73	300.16
					"	"	"	0.765	65	273.89
					"	"	"	0.445	64	243.88
		C.B.61	238	8925.9	Virndra Jitendra	Gen.	486	2.273	155	240.13
		0			"	Gen.	487	0.04	83	606.81
4	**Pipardaha**	C.B.81	192	7182.91	Appu Visarjan	Gen.	26	0.445	192	718.29
		C.B.82	264	9876.88	murli	Gen.	53	0.375	264	987.69
		C.B.84	261	9764.28	Tilak Dhari	OBC	104	0.647	162	606.06
					Gulabrai	OBC	111	0.56	99	370.37
		Total	**15576**	**583703**			**26237**	**104.2**	**15476**	**55192**
5	**Kusha**	M.B.1	228	20690.01	Sohrab Subba	S.C.	191	1	228	1184.5
		M.B.2	206	18671.02	Chandradev Bhadur Singh	Gen	267	0.926	266	1746.31
					Mahngu, Rghunath	OBC	268	0.251	40	420.8
		M.B.3	163	14757.83	Saudagar Lochan	Gen	272	1.275	163	1475.78
		M.B.4	172	15575.22	Radheshyam Suryanath	Gen	273	0.502	122	1404.75
					Mu. Mevati,Santosh	Gen	275	0.113	50	452.77
		M.B.5	292	26442.77	Ram Bhajan,Lalta	OBC	305	0.999	129	146.82
					Ram Kisun,Ram Nandan	OBC	306	0.188	30	271.67
					Ram Dhani ,Umar	OBC	307	0.405	133	1204.41
		M.B.6	234	21189.63	Bansnarayan Ramdas	Gen	321	1.462	233	2418.96
		M.B.7	202	18363.14	Havaldar Singh,Jangi Singh	Gen	320	1.353	202	2123.31
		M.B.8	298	27030.98	Chandradev ,Lognath	Gen	328	1.906	40	362.83
					Ram Karan Kharpattu	OBC	329	2.383	170	634.96
					Subedar Singh,Bhadur Singh	Gen	331	3.558	128	1461.06
					Ram Bijas sangram	OBC	332	1.611	60	544.25
		M.B.11	194	16680.44	Chandradev ,Loknath	Gen	324	0.498	194	2056.98
		M.B.12	212	13242.94	Bansnarayan Ramdas	Gen	341	1.602	50	752.55
					Prem Prakash	Gen	344	0.361	162	1466.27

		M.B.13	144	13038.62	Ram narayan,Ram dhyani	OBC	301	0.837	144	1603.86
		M.B.14	225	20428.73	Anuruddh	OBC	236	1.032	225	2342.87
		M.B.15	240	21756.38	Ravikant	Gen	149	0.805	72	652.69
					Ravikant	Gen	150	0.332	33	299.15
					Dena Nath Sampatti	Gen	151	0.49	135	1223.79
		M.B.16	429	38891.65	Subas	OBC	228	0.266	165	1795.83
					janvijay	Gen	240	0.1	70	634.6
					Jamuna	Gen	241	0.602	55	498.61
					Ram	Gen	242	0.6	109	1288.16
					Sabha jeet	Gen	247	0.68	30	271.97
		M.B.19	167	15118.95	Seetal vasi	Gen	244	0.3	35	316.86
					Ashok	Gen	245	1.376	132	119.5
		M.B.20	163	14796.21	Pursottam	Gen	350	0.781	163	1479.62
		M.B.21	138	12557.39	Seetal vasi	Gen	348	0.47	138	1255.74
6	**Bahora chandel**	M.B.9	184	16680.44	Rama	Gen	52	0.384	40	662.62
					rasta	Gen	51	0.069	6	54.39
					Sudama	OBC	50	0.454	40	362.62
					Smt Bechani	OBC	49	0.454	35	317.29
					Bechan	S.C.	48	0.454	35	158.64
					Padma Akhilesh	OBC	47	0.506	28	253.83
		M.B.10	146	13242.94	Padma Akhilesh	OBC	47	0.4	146	1624.29
		M.B.17	175	15867.73	Anil Kumar	OBC	112	2.02	175	1886.77
		M.B.18	365	33138.9	Ram Bilas	S.C.	107	2.246	365	1806.95
		M.B.22	380	34446.78	Kamla rajgovind	Gen	108	3.533	380	3744.68
		M.B.23	239	21634.97	Ram Akhilesh	OBC	119	1.676	239	2163.5
		M.B.24	254	23015.29	Ram Kisun	OBC	123	0.765	77	643.34
					Ram Kisun	OBC	124	0.773	183	1658.19
		M.B.25	192	17375.32	Shri Ram	OBC	213	0.368	80	723.97
					Amar dev	OBC	214	0.688	112	1013.56
		M.B.26	147	13312.19	Lalan	Gen	236	0.522	147	1331.22
		M.B.27	333	30220.42	Ram Uchhah	Gen	154	1.509	163	1779.26

					Shiv Pujan	S.C.	159	0.696	70	317.63
					Gauri Jamun	Gen	160	1.368	100	907.52
		M.B.28	185	16752.13	Marjat tirveni	Gen	188	0.571	95	860.25
					Jan Vijay	Gen	186	0.49	90	814.97
		M.B.29	179	16221.63	Kamla Gauri	Gen	185	1.319	179	1622.16
7	**Paikusi**	M.B.30	239	21684.08	Krushn prasd	Gen	7	1.175	60	544.37
					Gopal Harihar	Gen	8	1.639	179	1624.4
		M.B.31	219	19828.83	Krishn Prasd	Gen	16	1.404	219	1982.88
		M.B.32	375	33994.98	Abhya Krishna	Gen	68	1.862	140	1269.15
					Abhya Krishna	Gen	69	2.084	100	1206.53
					Murat Sitra	OBC	71	0.303	25	226.63
					Kanahya balram	OBC	76	0.218	110	997.19
		M.B.33	359	32534.35	Kalindi Prasad	Gen	85	1.068	80	755
					Satya Charn	Gen	86	1.064	80	725
					devi Charan	Gen	87	0.798	70	634.36
					Anupam Mangla Charan	Gen	88	0.798	55	498.44
					Radhe Charan	Gen	89	0.798	60	543.75
					Shyama Charan	Gen	90	0.749	14	126.88
		M.B.34	393	35660.84	Navijul Ansari	S.C.	2	0.595	115	671.76
					Anvar Ali	S.C.	3	0.591	125	567.13
					Tasvar Ali	S.C.	4	0.705	153	694.16
		M.B.35	249	22592.17	Radhika	S.C.	85	0.478	85	771.22
					Ganga Dhar	OBC	75	1.954	164	1488
		M.B.36	326	29577.31	Mohd Safi	S.C.	5	2.764	90	816.55
					Ram Awadh	OBC	7	0.627	145	1315.56
					Sriram	OBC	20	1.25	95	825.62
		M.B.37	259	23471.33	Vseer	S.C.	8	0.38	100	453.11
					ram Avdhes	OBC	18	1.361	70	634.36
					ram Avdhes	OBC	92	1.562	89	806.54
		M.B.38	286	25959.3	Arun Kumar	OBC	87	2.76	125	1134.59
					Jagdish	Gen	88	1.42	161	1461.35

		M.B.39	416	37766.36	Musafir	Gen	147	0.856	176	1897.81
					Ram Naresh	Gen	152	1.574	240	2178.83
		M.B.40	270	24497.9	Shiv Muni	Gen	166	0.882	90	816.6
					Sachidanand	Gen	167	1.323	180	1933.19
		M.B.41	190	17273.91	Mahendra	Gen	101	1.501	100	1209.15
					Siling Bhome		102	0.397	40	363.66
					Dena Nath	OBC	103	0.218	20	181.83
					Hari Narayan	OBC	104	0.218	30	272.75
		M.B.42	446	40470.28	Shiv sankar	OBC	115	0.324	100	907.45
					Angnu	OBC	118	0.336	32	990.37
					Meeta	OBC	119	0.336	33	299.44
					Sitaram	OBC	120	0.336	36	326.67
					Kisun	OBC	121	0.125	16	145.19
					Ram Pati	OBC	122	0.125	16	145.19
					Shiv sankar	OBC	123	0.125	16	145.19
					Shiv Kumar	OBC	124	0.125	120	1088.89
					Gullan	Gen	131	1.339	77	698.7
		M.B.45	482	43717.27	Gauri sankar	Gen	74	0.7	100	1207
					Uma Sankar	Gen	75	1.299	152	1370.64
					Uma Sankar	Gen	76	1.323	230	2086.09
		M.B.46	239	21650.8	Ram Vilas	S.C.	70	0.388	239	2165.08
		M.B.47	328	29759.97	Tarkesor	Gen	27	1.214	85	771.22
					Kailash	Gen	28	0.595	243	2204.78
		M.B.48	321	29129.59	Ramdev	OBC	58	3.533	140	1270.45
					Vanarsi	OBC	60	1.043	40	362.99
					Ashok	S.C.	61	0.5	40	362.99
					Hari Narayan	OBC	62	0.472	101	916.54
		M.B.49	457	41434.47	Gauri sankar	Gen	104	2.822	227	2811.46
					Jeevnath	S.C.	114	0.998	60	272
					Vinod	S.C.	115	0.999	60	272
					Surendra Pratap	S.C.	116	0.999	60	272
		M.B.50	516	46829.74	Krishna Kumar	Gen	79	1.339	90	1116.8

					Ram Dular	Gen	89	1.145	426	4166.18
8	**Pipar daha**	M.B.43	362	32874.71	Sakal Narayan	Gen	51	1.343	362	3287.47
		M.B.44	237	21487.93	triubi Narayan	Gen	170	0.999	237	2148.79
		Total	**13455**	**1213337**			**16436**	**112.6**	**13614**	**122060**
9	**Dedhgawa**	P.B.1	255	27093.39	Sukkhu,Balmukunj	OBC	25	1.206	255	3309.34
		P.B.2	279	29639.51	Arjun, Komal	OBC	70	1.193	150	1593.52
					Saudagar Lochan Singh	Gen	51	0.58	80	849.88
					Bidesi Bhosan	OBC	258	0.602	49	820.55
		P.B.3	353	37519.73	Tuliya	OBC	255	0.372	157	1668.73
					Lalbachan	OBC	253	0.6	196	2083.25
		P.B.4	599	63718.54	Rasta	0	253	0.924	125	1329.69
					Tuliya	OBC	254	0.065	25	265.94
					Shiv Badan	OBC	255	0.3	449	4776.23
		P.B.5	346	36761.63	Potan	OBC	263	0.823	160	1699.96
					Lalji Harbans	Gen	301	0.388	66	701.23
					Raghubans	Gen	302	1.234	120	1274.97
		P.B.6	411	43730.2	Rajnarayan	S.C.	212	0.392	60	638.4
					Komal	S.C.	216	0.713	240	2553.59
					Parmal	S.C.	221	0.91	71	755.44
					Ram Karan	OBC	222	0.906	40	425.6
		P.B.7	423	44970.38	Ram Uchah	Gen	311	0.75	130	1382.07
					Janbajay	Gen	239	0.744	100	1063.13
					Jamuna	Gen	240	0.721	60	637.88
					Naven Parti	0	241	0.4	45	478.41
					Ram Karan, Kharpattu	OBC	246	0.206	88	935.56
		P.B.8	431	45802.77	Ram Uchah	Gen	311	0.776	100	1062.71
					Janmejay	Gen	239	1	100	1062.71
					Jamuna	Gen	240	0.6	60	637.63
					Naven Parti	0	241	0.402	45	478.22
					Rakesh	OBC	246	0.15	26	133.9

		P.B.9	744	79152.71	Ram gayani	OBC	209	0.712	90	957.49
					Raghubans	Gen	212	0.392	60	638.33
					Rajnarayan	Gen	216	1.213	275	2925.67
					Komal	S.C.	221	0.91	60	319.16
					Parmal	S.C.	222	0.906	75	372.36
					Pannalal	S.C.	226	0.372	60	319.16
					Ram Krite	OBC	229	0.551	90	557.49
					Munsi,Ram Brich	OBC	231	0.794	39	414.92
		P.B.10	297	31586.62	Munni	OBC	231	0.5	125	1329.4
					Manohar	OBC	232	0.412	70	744.46
					Balnikunj	OBC	248	0.413	102	1084.79
		P.B.11	277	29460.91	Ram Kisun	OBC	306	0.388	50	531.79
					Sumer	OBC	307	1.023	120	127.63
					Ram bachan lal	OBC	308	0.64	30	319.07
					Nala	0	249	0.486	77	818.95
		P.B.12	380	40443.57	Khel maidan	0	195	0.39	70	0
					Amar Nath	OBC	196	1.906	310	3296.84
		P.B.13	111	11856.04	Shiv Badan	OBC	263	0.823	111	1185.6
		P.B.14	96	10234.07	Saudagar Lochan Singh	Gen	51	0.5	96	1023.41
		P.B.15	99	10501.98	Gopal	Gen	256	0.503	99	1050.2
		Total	**5101**	**542472**			**10573**	**30.79**	**5006**	**50635.3**
10		F.B.1	171	2944.07	Raghubans	Gen	181	0.073	171	294.41
		F.B.2	143	2463.11	Chavinath	Gen	172	0.198	143	246.31
		F.B.3	162	2775.18	Smt. Chandra kala	Gen	160	3.767	162	277.56
		F.B.4	125	2148.24	"	Gen	154	0.107	125	214.82
	Kusha	F.B.5	101	1733.09	"	Gen	139	0.053	101	176.31
11		F.B.6	108	1853.85	Umakant	Gen	46	0.115	108	185.38
		F.B.7	94	1608.09		Gen	48	0.63	94	160.81
	Salempur	F.B.8	411	7068.1	Sakuntala	Gen	62	0.22	411	706.81
12		F.B.9	307	5265.03	Anil Kumar	OBC	45	4.237	307	526.5
	Paikusi	F.B.10	305	5233.22	Jagdish	OBC	44	3.707	305	523.32

		F.B.11	227	3891.15	Fantu Singh	Gen	73	1.067	227	389.12
		F.B.12	372	6389.88	dwarika Rai	Gen	174	0.754	372	177.07
					Kauleshwar	Gen	175	0.63	0	761.92
		F.B.13	282	4850.37	Sankar	OBC	5	0.315	282	485.04
		Total	**2808**	**48223.4**			**1478**	**15.87**	**2808**	**5125.38**
Grand Total			**36940**	**2387736**			**55410**	**263.5**	**37002**	**233675**

Detail Estimate of Contour Bund (2A7C2a1d Paikushi)

MICROWATERSHED CODE- 2A7C2a1d													SODING CHARGES			
WORK	KH. NO.	VILL. NAME	LENGTH	BASE	TOP	HIGHT	CS	EW	RATE	MD	L. CHARGES	T. COST	Sqr. Mtr.	RATE	S. AMOUNT	T. AMOUNT
CB 01	14	Kusaha	118	2.25	0.45	0.6	0.81	95.71	39.15	44	100	3746.92	308.39	**2.2**	678.45	4425.37
CB 02	14	Kusaha	104	2.25	0.45	0.6	0.81	83.98	39.15	39	100	3287.71	270.59	**2.2**	595.31	3883.02
CB 03	13	Kusaha	112	2.25	0.45	0.6	0.81	91.10	39.15	42	100	3566.48	293.54	**2.2**	645.78	4212.26
CB 04	65	Kusaha	143	2.25	0.45	0.6	0.81	115.46	39.15	53	100	4520.26	372.04	**2.2**	818.48	5338.74
CB 05	81	Kusaha	160	2.25	0.45	0.6	0.81	129.80	39.15	60	100	5081.76	418.25	**2.2**	920.15	6001.92
CB 06	66	Kusaha	90	2.25	0.45	0.6	0.81	72.67	39.15	34	100	2844.90	234.15	**2.2**	515.13	3360.03
CB 07	80	Kusaha	88	2.25	0.45	0.6	0.81	71.30	39.15	33	100	2791.35	229.74	**2.2**	505.43	3296.77
CB 08	73	Kusaha	126	2.25	0.45	0.6	0.81	102.22	39.15	47	100	4001.90	329.37	**2.2**	724.62	4726.52
CB 09	84	Kusaha	114	2.25	0.45	0.6	0.81	92.74	39.15	43	100	3630.93	298.84	**2.2**	657.45	4288.38
CB 10	84	Kusaha	116	2.25	0.45	0.6	0.81	94.33	39.15	44	100	3693.16	303.96	**2.2**	668.72	4361.88
CB 11	191	Kusaha	236	2.25	0.45	0.6	0.81	191.25	39.15	88	100	7487.47	616.25	**2.2**	1355.76	8843.22
CB 12	191	Kusaha	227	2.25	0.45	0.6	0.81	184.17	39.15	85	100	7210.09	593.42	**2.2**	1305.53	8515.62
CB 13	198	Kusaha	223	2.25	0.45	0.6	0.81	180.87	39.15	84	100	7080.89	582.79	**2.2**	1282.14	8363.02
CB 14	251	Kusaha	82	2.25	0.45	0.6	0.81	66.09	39.15	31	100	2587.56	212.97	**2.2**	468.53	3056.09
CB 15	262	Kusaha	95	2.25	0.45	0.6	0.81	76.67	39.15	35	100	3001.53	247.04	**2.2**	543.49	3545.01
CB 16	263	Kusaha	185	2.25	0.45	0.6	0.81	149.76	39.15	69	100	5863.03	482.55	**2.2**	1061.62	6924.65
CB 17	265	Kusaha	89	2.25	0.45	0.6	0.81	72.42	39.15	33	100	2835.08	233.34	**2.2**	513.35	3348.42
CB 18	266	Kusaha	201	2.25	0.45	0.6	0.81	162.81	39.15	75	100	6374.11	524.62	**2.2**	1154.16	7528.26
CB 19	269	Kusaha	227	2.25	0.45	0.6	0.81	183.90	39.15	85	100	7199.59	592.56	**2.2**	1303.63	8503.22
CB 20	268	Kusaha	207	2.25	0.45	0.6	0.81	168.04	39.15	78	100	6578.84	541.47	**2.2**	1191.23	7770.07
CB 21	302	Kusaha	191	2.25	0.45	0.6	0.81	154.73	39.15	72	100	6057.55	498.56	**2.2**	1096.84	7154.39
CB 22	301	Kusaha	136	2.25	0.45	0.6	0.81	110.48	39.15	51	100	4325.42	356.00	**2.2**	783.20	5108.62
CB 23	302	Kusaha	99	2.25	0.45	0.6	0.81	79.96	39.15	37	100	3130.59	257.66	**2.2**	566.86	3697.45
CB 24	302	Kusaha	107	2.25	0.45	0.6	0.81	86.99	39.15	40	100	3405.67	280.30	**2.2**	616.66	4022.34
CB 25	304	Kusaha	216	2.25	0.45	0.6	0.81	175.07	39.15	81	100	6854.18	564.13	**2.2**	1241.09	8095.26
CB 26	304	Kusaha	176	2.25	0.45	0.6	0.81	142.52	39.15	66	100	5579.72	459.24	**2.2**	1010.32	6590.04
CB 27	321	Kusaha	117	2.25	0.45	0.6	0.81	94.49	39.15	44	100	3699.37	304.47	**2.2**	669.84	4369.21
CB 28	327	Kusaha	73	2.25	0.45	0.6	0.81	59.00	39.15	27	100	2309.79	190.11	**2.2**	418.23	2728.02
CB 29	323	Kusaha	141	2.25	0.45	0.6	0.81	114.44	39.15	53	100	4480.14	368.74	**2.2**	811.22	5291.35
CB 30	P	Kusaha	87	2.25	0.45	0.6	0.81	70.87	39.15	33	100	2774.52	228.36	**2.2**	502.38	3276.90
CB 31	209	Kusaha	76	2.25	0.45	0.6	0.81	61.85	39.15	29	100	2421.29	199.28	**2.2**	438.42	2859.71
CB 32	212	Kusaha	101	2.25	0.45	0.6	0.81	81.63	39.15	38	100	3195.71	263.02	**2.2**	578.65	3774.36
CB 33	218	Kusaha	91	2.25	0.45	0.6	0.81	74.06	39.15	34	100	2899.47	238.64	**2.2**	525.01	3424.48
CB 34	215	Kusaha	105	2.25	0.45	0.6	0.81	84.68	39.15	39	100	3315.35	272.87	**2.2**	600.31	3915.66
CB 35	216	Kusaha	148	2.25	0.45	0.6	0.81	119.52	39.15	55	100	4679.35	385.13	**2.2**	847.29	5526.64

CB 36	216	Kusaha	137	2.25	0.45	0.6	0.81	111.26	39.15	51	100	4355.74	358.50	**2.2**	788.69	5144.43
CB 37	222	Kusaha	119	2.25	0.45	0.6	0.81	96.14	39.15	44	100	3763.88	309.78	**2.2**	681.52	4445.40
CB 38	222	Kusaha	117	2.25	0.45	0.6	0.81	94.89	39.15	44	100	3714.83	305.75	**2.2**	672.64	4387.48
CB 39	228	Kusaha	139	2.25	0.45	0.6	0.81	112.96	39.15	52	100	4422.39	363.98	**2.2**	800.76	5223.15
CB 40	230	Kusaha	135	2.25	0.45	0.6	0.81	108.96	39.15	50	100	4265.90	351.10	**2.2**	772.43	5038.33
CB 41	229	Kusaha	139	2.25	0.45	0.6	0.81	112.25	39.15	52	100	4394.44	361.68	**2.2**	795.70	5190.14
CB 42	231	Kusaha	106	2.25	0.45	0.6	0.81	85.52	39.15	40	100	3348.11	275.56	**2.2**	606.24	3954.36
CB 43	248	Kusaha	238	2.25	0.45	0.6	0.81	192.90	39.15	89	100	7552.15	621.58	**2.2**	1367.47	8919.62
CB 44	231	Kusaha	113	2.25	0.45	0.6	0.81	91.83	39.15	42	100	3594.99	295.88	**2.2**	650.94	4245.93
CB 45	232	Kusaha	63	2.25	0.45	0.6	0.81	51.10	39.15	24	100	2000.50	164.65	**2.2**	362.23	2362.73
CB 46	p	Kusaha	181	2.25	0.45	0.6	0.81	146.78	39.15	68	100	5746.38	472.95	**2.2**	1040.50	6786.88
CB 47	p	Kusaha	180	2.25	0.45	0.6	0.81	145.59	39.15	67	100	5699.73	469.11	**2.2**	1032.05	6731.77
CB 48	p	Kusaha	134	2.25	0.45	0.6	0.81	108.20	39.15	50	100	4236.17	348.66	**2.2**	767.04	5003.21
CB 49	308	Kusaha	161	2.25	0.45	0.6	0.81	130.43	39.15	60	100	5106.51	420.29	**2.2**	924.63	6031.14
CB 50	347	Kusaha	435	2.25	0.45	0.6	0.81	352.01	39.15	163	100	13781.21	1134.26	**2.2**	2495.36	16276.57
CB 51	353	Kusaha	126	2.25	0.45	0.6	0.81	101.67	39.15	47	100	3980.46	327.61	**2.2**	720.74	4701.21
CB 52	348	Kusaha	262	2.25	0.45	0.6	0.81	212.23	39.15	98	100	8308.90	683.86	**2.2**	1504.49	9813.39
CB 53	40	Bahora Chandel	180	2.25	0.45	0.6	0.81	145.85	39.15	67	100	5709.96	469.96	**2.2**	1033.90	6743.86
CB 54	34	Bahora Chandel	254	2.25	0.45	0.6	0.81	205.93	39.15	95	100	8062.15	663.55	**2.2**	1459.81	9521.97
CB 55	88	Bahora Chandel	61	2.25	0.45	0.6	0.81	49.41	39.15	23	100	1934.39	159.21	**2.2**	350.26	2284.65
CB 56	76	Bahora Chandel	127	2.25	0.45	0.6	0.81	103.26	39.15	48	100	4042.80	332.74	**2.2**	732.03	4774.83
CB 57	92	Bahora Chandel	240	2.25	0.45	0.6	0.81	194.48	39.15	90	100	7613.78	626.65	**2.2**	1378.63	8992.41
CB 58	151	Bahora Chandel	135	2.25	0.45	0.6	0.81	109.74	39.15	51	100	4296.14	353.59	**2.2**	777.90	5074.04
CB 59	116	Bahora Chandel	190	2.25	0.45	0.6	0.81	153.59	39.15	71	100	6013.00	494.90	**2.2**	1088.77	7101.78
CB 60	468	Nuri	282	2.25	0.45	0.6	0.81	228.82	39.15	106	100	8958.43	737.32	**2.2**	1622.10	10580.54
CB 61	489	Nuri	238	2.25	0.45	0.6	0.81	193.04	39.15	89	100	7557.47	622.01	**2.2**	1368.43	8925.90
CB 62	136	Bahora Chandel	113	2.25	0.45	0.6	0.81	91.53	39.15	42	100	3583.52	294.94	**2.2**	648.87	4232.38
CB 63	219	Bahora Chandel	115	2.25	0.45	0.6	0.81	93.31	39.15	43	100	3652.89	300.65	**2.2**	661.43	4314.32
CB 64	219	Bahora Chandel	179	2.25	0.45	0.6	0.81	144.73	39.15	67	100	5665.99	466.34	**2.2**	1025.94	6691.93
CB 65	221	Bahora Chandel	116	2.25	0.45	0.6	0.81	93.69	39.15	43	100	3667.79	301.88	**2.2**	664.13	4331.92
CB 66	230	Bahora Chandel	101	2.25	0.45	0.6	0.81	81.62	39.15	38	100	3195.57	263.01	**2.2**	578.62	3774.19
CB 67	147	Bahora Chandel	183	2.25	0.45	0.6	0.81	148.49	39.15	69	100	5813.53	478.48	**2.2**	1052.66	6866.19
CB 68	165	Bahora Chandel	121	2.25	0.45	0.6	0.81	97.75	39.15	45	100	3827.07	314.99	**2.2**	692.97	4520.04
CB 69	12	Bagdeiya	70	2.25	0.45	0.6	0.81	57.06	39.15	26	100	2234.07	183.87	**2.2**	404.52	2638.59
CB 70	146	Bahora Chandel	128	2.25	0.45	0.6	0.81	103.62	39.15	48	100	4056.81	333.89	**2.2**	734.57	4791.38
CB 71	192	Bahora Chandel	125	2.25	0.45	0.6	0.81	101.14	39.15	47	100	3959.76	325.91	**2.2**	716.99	4676.76
CB 72	7	Paikushi	190	2.25	0.45	0.6	0.81	154.18	39.15	71	100	6035.99	496.79	**2.2**	1092.94	7128.92
CB 73	48	Paikushi	216	2.25	0.45	0.6	0.81	175.22	39.15	81	100	6859.97	564.61	**2.2**	1242.13	8102.10
CB 74	12	Paikushi	96	2.25	0.45	0.6	0.81	78.05	39.15	36	100	3055.65	251.49	**2.2**	553.29	3608.94
CB 75	13	Paikushi	233	2.25	0.45	0.6	0.81	188.71	39.15	87	100	7388.00	608.07	**2.2**	1337.74	8725.75
CB 76	97	Khemanpur	191	2.25	0.45	0.6	0.81	155.04	39.15	72	100	6069.85	499.58	**2.2**	1099.07	7168.92
CB 77	117	Paikushi	181	2.25	0.45	0.6	0.81	146.79	39.15	68	100	5746.82	472.99	**2.2**	1040.58	6787.40
CB 78	118	Paikushi	223	2.25	0.45	0.6	0.81	180.90	39.15	84	100	7082.16	582.89	**2.2**	1282.37	8364.53

CB 79	124	Paikushi	139	2.25	0.45	0.6	0.81	112.47	39.15	52	100	4403.12	362.40	**2.2**	797.27	5200.39
CB 80	124	Paikushi	299	2.25	0.45	0.6	0.81	242.07	39.15	112	100	9477.05	780.00	**2.2**	1716.01	11193.06
CB 81	27	Barila	192	2.25	0.45	0.6	0.81	155.34	39.15	72	100	6081.70	500.55	**2.2**	1101.21	7182.91
CB 82	52	Barila	264	2.25	0.45	0.6	0.81	213.61	39.15	99	100	8362.66	688.28	**2.2**	1514.23	9876.88
CB 83	17	Paikushi	110	2.25	0.45	0.6	0.81	89.30	39.15	41	100	3495.92	287.73	**2.2**	633.01	4128.93
CB 84	111	Barila	261	2.25	0.45	0.6	0.81	211.17	39.15	98	100	8267.32	680.44	**2.2**	1496.96	9764.28
CB 85	296	Paikushi	85	2.25	0.45	0.6	0.81	68.48	39.15	32	100	2680.80	220.64	**2.2**	485.41	3166.21
CB 86	294	Paikushi	115	2.25	0.45	0.6	0.81	93.17	39.15	43	100	3647.51	300.21	**2.2**	660.46	4307.97
CB 87	162	Paikushi	367	2.25	0.45	0.6	0.81	296.95	39.15	137	100	11625.71	956.85	**2.2**	2105.07	13730.78
CB 88	73	Raibhanpur	145	2.25	0.45	0.6	0.81	117.74	39.15	54	100	4609.64	379.39	**2.2**	834.67	5444.31
CB 89	96	Raibhanpur	83	2.25	0.45	0.6	0.81	67.49	39.15	31	100	2642.07	217.45	**2.2**	478.40	3120.47
CB 90	96	Raibhanpur	97	2.25	0.45	0.6	0.81	78.23	39.15	36	100	3062.64	252.07	**2.2**	554.55	3617.20
CB 91	40	Raibhanpur	150	2.25	0.45	0.6	0.81	121.71	39.15	56	100	4765.13	392.19	**2.2**	862.82	5627.96
CB 92	40	Raibhanpur	138	2.25	0.45	0.6	0.81	111.59	39.15	52	100	4368.67	359.56	**2.2**	791.04	5159.71
CB 93	38	Raibhanpur	190	2.25	0.45	0.6	0.81	153.83	39.15	71	100	6022.39	495.67	**2.2**	1090.47	7112.87
CB 94	38	Raibhanpur	194	2.25	0.45	0.6	0.81	157.48	39.15	73	100	6165.24	507.43	**2.2**	1116.34	7281.58
CB 95	58	Raibhanpur	280	2.25	0.45	0.6	0.81	226.83	39.15	105	100	8880.39	730.90	**2.2**	1607.97	10488.36
CB 96	5	Raibhanpur	258	2.25	0.45	0.6	0.81	209.06	39.15	97	100	8184.76	673.64	**2.2**	1482.01	9666.77
CB 97	10	Raibhanpur	177	2.25	0.45	0.6	0.81	143.62	39.15	66	100	5622.63	462.77	**2.2**	1018.09	6640.72
CB 98	64	Raibhanpur	152	2.25	0.45	0.6	0.81	122.95	39.15	57	100	4813.46	396.17	**2.2**	871.57	5685.03
TOTAL			**15579**					**12619.32**		**5835**		**494046.31**	**40662.25**		**89456.95**	**583503.26**

Detail Estimate of Field Bund (2A7C2a1d Paikushi)

MICROWATERSHED CODE- 2A7C2a1d

WORK	KH. NO.	VILL. NAME	LENGTH	BASE	TOP	HIGHT	CS	EW	RATE	MD	L. CHARGES	T. COST
FB 01	181	Kusaha	171	1.65	0.3	0.45	0.44	75.20	39.15	29	100	2944.07
FB 02	172	Kusaha	143	1.65	0.3	0.45	0.44	62.91	39.15	25	100	2463.11
FB 03	160	Kusaha	162	1.65	0.3	0.45	0.44	70.90	39.15	28	100	2775.58
FB 04	154	Kusaha	125	1.65	0.3	0.45	0.44	54.87	39.15	21	100	2148.24
FB 05	139	Kusaha	101	1.65	0.3	0.45	0.44	44.27	39.15	17	100	1733.09
FB 06	46	Salempur khurd	108	1.65	0.3	0.45	0.44	47.35	39.15	19	100	1853.85
FB 07	48	Salempur khurd	94	1.65	0.3	0.45	0.44	41.08	39.15	16	100	1608.09
FB 08	65	Salempur khurd	411	1.65	0.3	0.45	0.44	180.54	39.15	71	100	7068.10
FB 09	45	Paikushi	307	1.65	0.3	0.45	0.44	134.48	39.15	53	100	5265.03
FB 10	44	Paikushi	305	1.65	0.3	0.45	0.44	133.67	39.15	52	100	5233.22
FB 11		Barila	227	1.65	0.3	0.45	0.44	99.39	39.15	39	100	3891.15
FB 12		Barila	372	1.65	0.3	0.45	0.44	163.22	39.15	64	100	6389.88
FB 13	5	Raibhanpur	282	1.65	0.3	0.45	0.44	123.89	39.15	49	100	4850.37
TOTAL			**2807**					**1231.77**		**482**		**48223.78**

Detail Estimate of Marginal Bund (2A7C2a1d Paikushi)

MICROWATERSHED CODE- 2A7C2a1d													SODING CHARGES			
WORK	KH. NO.	VILL. NAME	LENGTH	BASE	TOP	HIGHT	CS	EW	RATE	MD	L. CHARGES	AMOUNT	Sqr. Mtr.	RATE	S. AMOUNT	T. AMOUNT
MB 01	192	Kusaha	228	3.6	0.6	1	2.10	479.00	39.15	207	100	18753.01	880.46	**2.2**	1937.00	20690.01
MB 02	268	Kusaha	206	3.6	0.6	1	2.10	432.26	39.15	187	100	16923.03	794.54	**2.2**	1747.98	18671.02
MB 03	272	Kusaha	163	3.6	0.6	1	2.10	341.67	39.15	148	100	13376.20	628.01	**2.2**	1381.63	14757.83
MB 04	273	Kusaha	172	3.6	0.6	1	2.10	360.59	39.15	156	100	14117.07	662.80	**2.2**	1458.15	15575.22
MB 05	307	Kusaha	292	3.6	0.6	1	2.10	612.19	39.15	264	100	23967.19	1125.26	**2.2**	2475.57	26442.77
MB 06	321	Kusaha	234	3.6	0.6	1	2.10	490.57	39.15	212	100	19205.85	901.72	**2.2**	1983.78	21189.63
MB 07	325	Kusaha	202	3.6	0.6	1	2.10	424.44	39.15	183	100	16616.79	780.16	**2.2**	1716.35	18333.14
MB 08	332	Kusaha	298	3.6	0.6	1	2.10	625.81	39.15	270	100	24500.33	1150.29	**2.2**	2530.64	27030.98
MB 09	47	Bahora Chandel	184	3.6	0.6	1	2.10	386.18	39.15	167	100	15118.81	709.83	**2.2**	1561.62	16680.44
MB 10	46	Bahora Chandel	146	3.6	0.6	1	2.10	306.59	39.15	132	100	12003.13	563.55	**2.2**	1239.81	13242.94
MB 11	324	Kusaha	194	3.6	0.6	1	2.10	406.77	39.15	176	100	15924.95	747.68	**2.2**	1644.89	17569.85
MB 12	356	Kusaha	212	3.6	0.6	1	2.10	444.24	39.15	192	100	17391.87	816.55	**2.2**	1796.41	19188.28
MB 13	202	Kusaha	144	3.6	0.6	1	2.10	301.86	39.15	130	100	11817.94	554.85	**2.2**	1220.68	13038.62
MB 14	235	Kusaha	225	3.6	0.6	1	2.10	472.95	39.15	204	100	18516.19	869.34	**2.2**	1912.54	20428.73
MB 15	P	Kusaha	240	3.6	0.6	1	2.10	503.69	39.15	218	100	19719.55	925.83	**2.2**	2036.84	21756.38
MB 16	243	Kusaha	429	3.6	0.6	1	2.10	900.40	39.15	389	100	35250.61	1655.02	**2.2**	3641.04	38891.65
MB 17	12	Bahora Chandel	175	3.6	0.6	1	2.10	367.36	39.15	159	100	14382.20	675.25	**2.2**	1485.54	15867.73
MB 18	107	Bahora Chandel	365	3.6	0.6	1	2.10	767.21	39.15	331	100	30036.43	1410.21	**2.2**	3102.47	33138.90
MB 19	347	Kusaha	167	3.6	0.6	1	2.10	350.03	39.15	151	100	13703.51	643.38	**2.2**	1415.44	15118.95
MB 20	352	Kusaha	163	3.6	0.6	1	2.10	342.55	39.15	148	100	13410.99	629.65	**2.2**	1385.22	14796.21
MB 21	352	Kusaha	138	3.6	0.6	1	2.10	290.72	39.15	126	100	11381.76	534.37	**2.2**	1175.62	12557.39
MB 22	108	Bahora Chandel	380	3.6	0.6	1	2.10	797.49	39.15	344	100	31221.87	1465.87	**2.2**	3224.91	34446.78
MB 23	120	Bahora Chandel	239	3.6	0.6	1	2.10	500.88	39.15	216	100	19609.50	920.67	**2.2**	2025.47	21634.97
MB 24	129	Bahora Chandel	254	3.6	0.6	1	2.10	532.84	39.15	230	100	20860.60	979.41	**2.2**	2154.69	23015.29
MB 25	216	Bahora Chandel	192	3.6	0.6	1	2.10	402.26	39.15	174	100	15748.64	739.40	**2.2**	1626.68	17375.32
MB 26	237	Bahora Chandel	147	3.6	0.6	1	2.10	308.20	39.15	133	100	12065.90	566.49	**2.2**	1246.29	13312.19
MB 27	162	Bahora Chandel	333	3.6	0.6	1	2.10	699.65	39.15	302	100	27391.18	1286.02	**2.2**	2829.24	30220.42
MB 28	186	Bahora Chandel	185	3.6	0.6	1	2.10	387.84	39.15	168	100	15183.80	712.88	**2.2**	1568.34	16752.13
MB 29	185	Bahora Chandel	179	3.6	0.6	1	2.10	375.55	39.15	162	100	14702.95	690.30	**2.2**	1518.67	16221.63
MB 30	8	Paikushi	239	3.6	0.6	1	2.10	502.02	39.15	217	100	19654.01	922.76	**2.2**	2030.07	21684.08
MB 31	16	Paikushi	219	3.6	0.6	1	2.10	459.07	39.15	198	100	17972.46	843.81	**2.2**	1856.38	19828.83
MB 32	71	Paikushi	375	3.6	0.6	1	2.10	787.03	39.15	340	100	30812.37	1446.64	**2.2**	3182.61	33994.98
MB 33	87	Paikushi	359	3.6	0.6	1	2.10	753.22	39.15	325	100	29488.48	1384.49	**2.2**	3045.87	32534.35
MB 34	4	Khemanpur	393	3.6	0.6	1	2.10	825.60	39.15	357	100	32322.26	1517.53	**2.2**	3338.57	35660.84
MB 35	74	Khemanpur	249	3.6	0.6	1	2.10	523.04	39.15	226	100	20477.09	961.40	**2.2**	2115.08	22592.17
MB 36	8	Khemanpur	326	3.6	0.6	1	2.10	684.76	39.15	296	100	26808.28	1258.65	**2.2**	2769.03	29577.31
MB 37	8	Khemanpur	259	3.6	0.6	1	2.10	543.40	39.15	235	100	21273.94	998.81	**2.2**	2197.39	23471.33

MB 38	89	Khemanpur	286	3.6	0.6	1	2.10	601.00	39.15	260	100	23528.99	1104.69	**2.2**	2430.31	25959.30
MB 39	153	Khemanpur	416	3.6	0.6	1	2.10	874.35	39.15	378	100	34230.67	1607.13	**2.2**	3535.69	37766.36
MB 40	166	Khemanpur	270	3.6	0.6	1	2.10	567.16	39.15	245	100	22204.40	1042.50	**2.2**	2293.50	24497.90
MB 41	105	Khemanpur	190	3.6	0.6	1	2.10	399.92	39.15	173	100	15656.72	735.08	**2.2**	1617.19	17273.91
MB 42	130	Khemanpur	446	3.6	0.6	1	2.10	936.95	39.15	405	100	36681.44	1722.20	**2.2**	3788.83	40470.28
MB 43	51	Barila	362	3.6	0.6	1	2.10	761.10	39.15	329	100	29796.98	1398.97	**2.2**	3077.73	32874.71
MB 44		Barila	237	3.6	0.6	1	2.10	497.48	39.15	215	100	19476.23	914.41	**2.2**	2011.70	21487.93
MB 45	77	Raibhanpur	482	3.6	0.6	1	2.10	1012.12	39.15	437	100	39624.46	1860.37	**2.2**	4092.82	43717.27
MB 46	73	Raibhanpur	239	3.6	0.6	1	2.10	501.25	39.15	217	100	19623.85	921.34	**2.2**	2026.95	21650.80
MB 47	29	Raibhanpur	328	3.6	0.6	1	2.10	688.99	39.15	298	100	26973.84	1266.42	**2.2**	2786.13	29759.97
MB 48	62	Raibhanpur	321	3.6	0.6	1	2.10	674.39	39.15	291	100	26402.47	1239.60	**2.2**	2727.12	29129.59
MB 49	114	Raibhanpur	457	3.6	0.6	1	2.10	959.27	39.15	414	100	37555.37	1763.23	**2.2**	3879.10	41434.47
MB 50	106	Raibhanpur	516	3.6	0.6	1	2.10	1084.18	39.15	468	100	42445.53	1992.82	**2.2**	4384.21	46829.74
TOTAL			**13451**					**28248.06**		**12201**		**1105911.69**	**51922.63**		**114229.79**	**1220141.48**

Detail Estimate of Peripheral Bund (2A7C2a1d Paikushi)

													SODING CHARGES			
WORK	KH. NO.	NAME OF VILL.	LENGTH	BASE	TOP	HIGHT	CS	EW	RATE	MD	L. CHARGES	T. COST	Sqr. Mtr.	RATE	S. AMOUNT	T. AMOUNT
PB 01	9	Gausaisiur	255	4	1	1	2.50	636.79	39.15	271	100	24930.34	983.20	**2.2**	2163.05	27093.39
PB 02	p	Kusaha	279	4	1	1	2.50	696.63	39.15	296	100	27273.18	1075.60	**2.2**	2366.32	29639.51
PB 03	80	Kusaha	353	4	1	1	2.50	881.85	39.15	375	100	34524.27	1361.57	**2.2**	2995.45	37519.73
PB 04	262	Kusaha	599	4	1	1	2.50	1497.61	39.15	637	100	58631.46	2312.31	**2.2**	5087.08	63718.54
PB 05	302	Kusaha	346	4	1	1	2.50	864.03	39.15	368	100	33826.70	1334.06	**2.2**	2934.93	36761.63
PB 06	305	Kusaha	411	4	1	1	2.50	1027.81	39.15	437	100	40238.92	1586.94	**2.2**	3491.28	43730.20
PB 07	p	Kusaha	423	4	1	1	2.50	1056.96	39.15	450	100	41380.09	1631.95	**2.2**	3590.29	44970.38
PB 08	146	Kusaha	431	4	1	1	2.50	1076.53	39.15	458	100	42146.02	1662.16	**2.2**	3656.75	45802.77
PB 09	231	Kusaha	744	4	1	1	2.50	1860.37	39.15	792	100	72833.41	2872.41	**2.2**	6319.30	79152.71
PB 10	248	Kusaha	297	4	1	1	2.50	742.40	39.15	316	100	29064.84	1146.26	**2.2**	2521.77	31586.62
PB 11	308	Kusaha	277	4	1	1	2.50	692.44	39.15	295	100	27108.84	1069.12	**2.2**	2352.06	29460.91
PB 12	196	Kusaha	380	4	1	1	2.50	950.57	39.15	404	100	37214.69	1467.67	**2.2**	3228.88	40443.57
PB 13	263	Kusaha	111	4	1	1	2.50	278.66	39.15	119	100	10909.49	430.25	**2.2**	946.55	11856.04
PB 14	78	Kusaha	96	4	1	1	2.50	240.54	39.15	102	100	9417.01	371.39	**2.2**	817.06	10234.07
PB 15	p	Kusaha	99	4	1	1	2.50	246.83	39.15	105	100	9663.53	381.11	**2.2**	838.44	10501.98
TOTAL			**5100**					**12750.01**		**5425**		**499162.81**	**19686.01**		**43309.23**	**542472.04**

DETAIL PROJECT REPORT PREPARATION TEAM

Detail Project Report (DPR) of Integrated Watershed Management Programme IWMP-Ist had been prepared through base line/ Bench Mark Survey for Physiography Climate, Soil, Land use/Cover, Vegetation, Hydrology and Socio-Economic data analysis. PRA have been exercised to collect primary data, secondary data have been collected from Revenue, Statistics department, Statistical Magazine of the district, Chandauli, Toposheets (1:50000) Survey of India- Deheradoon and technical & specific input and health with preparation and drafting of detail project report.

S.No.	Name	Designation
1.	**Mr. C.L. Paul**	Scientist, Advanced Geo-Tech Solutions, 7,Vrindavan Vihar Bahadurpur, Lucknow-226021
2.	**Dr. Rakesh Kushwaha**	Scientist, Advanced Geo-Tech Solutions, 7,Vrindavan Vihar Bahadurpur, Lucknow-226021
3.	**Dr. N.K. Singh**	Scientist (Agriculture), KVK.
4.	**Mr. SM Mishra**	GIS Engineer, Advanced Geo-Tech Solutions, 7,Vrindavan Vihar Bahadurpur, Lucknow-226021
5.	**AK Sinha**	BSA
6.	**HN Ram**	JE
7.	**Kamlesh Verma**	ASCI
8.	**Dr. S.N Pal**	ASCI
9.	**Sivanand Srivastav**	Accountant
10.	**Aslam**	Draughtman
11.	**Keshav Prasad**	Treasure
12.	**Indrapal**	Junior Clerk
13.	**Jaskaran Verma**	Work Incharge
14.	**Ram Khilawan Yadav**	Work Incharge
15.	**Nandkishore Pathak**	Work Incharge
16.	**Ramdhan**	Work Incharge
17.	**Brij Kishore**	Work Incharge
18.	**Bechulal**	Work Incharge

DPR PLAN ABSTRACT

The collection of all the relevant data of watershed area and the possible option and solution are described with the help of feedback of focused discussion and detailed perspective plan for the watershed area with year wise and activity wise semmarized for the DPR plan sbstract for 5 year (2009-10 to 2013-14).

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

Prepared By:

Bhoomi Sanrakshan Adhikari
Dept. of Land Development & Water Resources
D.P.A.P.-II Sonbhadra

Technically Approved By:

Deputy Director
Dept. Of Land Development & Water Resources
Region- Varanasi

Physically & Financially Approved:

Project Director
District Rural Development Authority
Chandauli

Chief Development Officer
District- Chandauli