

CERTIFICATE

It is certified that the proposed IWMP-XII project comprising six micro-watersheds of district Banda II, Uttar Pradesh has been selected for its sustainable development on watershed basis under Integrated Watershed Management Programme. The land is physically available for proposed interventions and is not overlapping with any other schemes. It will be developed as per Common Guidelines for Watershed Development Project-2008, GOI, New Delhi. The significant results will be achieved through proposed interventions on soil and water conservation, ground water recharge, availability of drinking and irrigation water, agricultural production systems, livestock, fodder availability, livelihoods of asset-less, capacity building, etc. The proposed Detailed Project Report of IWMP-XII for financial year 2011-12 is submitted for its approval and implementation.



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TABLE OF CONTENTS

CHAPTER No.	DESCRIPTIONS	PAGE NO.
	EXECUTIVE SUMMARY	04
1.	INTRODUCTION AND BACKGROUND	08
2.	GENERAL DESCRIPTION OF PROJECT AREA	16
3.	BASELINE SURVEY	24
4.	INSTITUTIONAL BUILDING AND PROJECT MANAGEMENT	47
5.	MANAGEMENT / ACTION PLAN	74
6.	LIVELIHOOD ACTIVITIES	76
7.	CAPACITY BUILDING PLAN	103
8.	PHASING OF PROGRAMME AND BUDGETING	105
9.	QUALITATIVE ISSUES	109
10.	CONSOLIDATION / WITHDRAWAL STRATEGY	112
11.	EXPECTED OUTCOME	115
12.	COST NORMS & DESIGN OF STRUCTURE PROPOSED	121
13.	MAPS (ALL THE THEMATIC MAP, TREATMENT AREA PLAN MAP)	129
14.	ANNEXURE	147
15.	ABBREVIATIONS/REFERENCES	151

EXECUTIVE SUMMARY

A watershed is a dynamic and integrated social, economic and bio-physical system which may contain people, urban and rural communities, agriculture and forestry, primary and secondary industry, communications, services and recreational facilities. The land resources of soil, water and vegetation cannot be managed for quality and sustained availability in isolation from each other or from the watershed environment. The natural balance of these resources can be easily disrupted by changes in land use, by mismanagement or simply through bad planning.

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 run-off, 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. In addition, there is a Scheme of Technology Development, Extension and Training (TDET) is also being implemented to promote development of cost effective and proven technologies to support watershed management. The entire study area falls in Bundelkhand region which is situated in Vindhyan hills, catchment of the Bagen River.

All the micro watersheds of IWMP-12(2011-12) are located in Naraini block of BANDA District of Uttar Pradesh. The extent of the Project area is 25°12'5"N to 25°16'30"N Latitude and 80°30'27"E To 80°39'45"E Longitude. The project area consists of Six (6) micro watershed clusters. The total geographical area of the project is 6407.95 ha, Out of which 4850 ha has been proposed for the treatment. Total outlay of the project is Rs. 582.00 lacs under Integrated Watershed Development

Programme. The project implementation agency (PIA) is Bhoomi Sanrakshan Adhikari, Dept of Agriculture, Banda .U.P.

The project area falls in agro-climatic zone of Bundelkhand Zone (ACZ-VI).The elevation of the project area is 122 to 142 m above mean sea levels.

The Soils in the project area are Parwa, Kabar and Mar. the runoff of the project area is calculated is about 299 mm per year.

The livestock population in the study area are mainly desi breed cows and buffalos but 5 to 10 per cent high breed of jarsi and murreh are also found.

Major crops in the watershed area are Arhar, Paddy, Jowar, and Bajra, in Rabi season Wheat, Gram and Mustard are grown in the study area.

A detailed baseline survey was undertaken which involved household census survey, Bio-physical survey and Village level data collection from Talati – cum mantra.

The Institutional arrangement of the project area viz Watershed Committee (WC) and Self Help Group, User Groups were constituted for active participation and co-operation for community development.

The Action plans of livelihood, Production system and Treatment area development have been prepared according to the need of the project area.

Table-0.1: Project at a Glance IWMP-XII (Banda)

S. No.	Particulars	Details
1	Name of the State	Uttar Pradesh
2	Name of the Project	IWMP-XII Banda
3	Name of the District	Banda
4	Name of the Blocks	Naraini
5	No. of Micro Watershed	6
6	Code of Micro Watershed	2C1A4e2a, 2C1A4e2d, 2C1A4e1e, 2C1A4e1b, 2C1A4e2c, 2C1A4e2e
7	No. of Gram Panchayats	17
8	No. of Villages Covered	20
9	Four major reasons for selection of watershed	1. Population are poor 80% to 50% 2. Rain fed area is more than 70% 3. % of small and Marginal farmer >80% 4. Land with moderate production
10	Annual Rainfall (Average)	544.40 mm
11	Rainfed area of the project (ha)	3572.00
12	Area of the Project (ha)	6407.95
13	Area Proposed to be treated (ha)	4850.00
14	Financial Year of Sanction	2011-2012
15	Project Duration	2011-12 to 2015-2016
16	Project Cost (Rs. In Lacs)	582.00
17	Date of Sanction of State authority	11/8/2011

Table-0.2: IWMP-XII (2011-2012) DISTRICT BANDA
YEAR WISE PHASING OF IWMP WORKS (COMPONENTS - WISE)

District: BANDA

Starting Year: 2011-12

Area: ha, Amount: Lacs

S. No.	Particulars	2010-11		2011-12		2012-13		2013-14		2014-15		Total	
		Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy
1	Administrative Cost-10%	2.91	-	8.73	-	15.71	-	15.71	-	15.13	-	58.20	-
2	Monitering-1%	-	-	1.16	-	1.16	-	1.16	-	2.33	-	5.82	-
3	Evaluation - 1%	-	-	1.75	-	1.02	-	1.02	-	2.03	-	5.82	-
4	Entry Point Activity- 4%	23.28	-	-	-	-	-	-	-	-	-	23.28	-
5	Institution & Capacity Building-5%	2.91	-	14.55	-	4.37	-	4.37	-	2.91	-	29.10	-
6	DPR-1%	5.82	-	-	-	-	-	-	-	-	-	5.82	-
7	Watershed Dev. Work- 56%	-	-	43.65	650	94.14	1401	94.14	1401	93.99	1399	325.92	4850
8	Livelihood Activity-9%	-	-	5.82	-	14.55	-	14.55	-	17.46	-	52.38	-
9	Production System & Micro Enterprises 10%	-	-	5.82	-	14.55	-	14.55	-	23.28	-	58.20	-
10	Consolidation-3%	-	-	-	-	-	-	-	-	17.46	-	17.46	-
	Total	34.92	-	81.48	650	145.50	1401	145.50	1401	174.59	1399	582.00	4850

CHAPTER – 1

INTRODUCTION AND BACKGROUND

INTRODUCTION:-

The I.W.M.P.-XII (2011-12) of Banda, in Naraini block of Banda district, is located on Naraini-Kalinger road about 55 kms from district and 10 kms from block. A total no of six MWS included in the project area. There are 21 revenue villages in the project area. It is located in South of the district. Total area of the Watershed is 6407.95 ha; Out of which 4850.00 ha area has been proposed for the treatment.

The watershed is proposed to be taken by Bhoomi Sanrakshan Adhikari, Department of Agriculture, Banda for IWMP programme starting from 2011-12. It is proposed to be completed by 2015-16.

The Status of Integrated Watershed Management Programme as approved by Steering Committee, Govt. of India for Banda district, Uttar Pradesh is given in Table Nos. 1.1 and 1.2

Table 1.1: Status of previous DPRs, District- Banda

S. No.	Approved Project (IWMP-I, II,....)	Status of DPR under preparation/prepared/approved by SLNA with date	Project Area ha	Treatable Area ha	Project cost Rs.(Lacs)	Project period (Fin. Year from.....to.....)	PIA
1	2	3	4	5	6	7	8
1	IWMP-XII	Preparation	6407.96	4850	582	2011-12 to 2015-16	

Table 1.2: Details of IWMP for which this DPR is Prepared

Watershed project	Micro Watersheds Name	Micro watersheds code	Treatable Area (ha.)	Name of Watershed in which MWS is falling (River / Nala name)
IWMP-XII of (BANDA) 2011-12	Ludhaura	2C1A4e2a	948.00	Bagen River Watershed
	Palhari	2C1A4e2d	658.50	
	Turra	2C1A4e1e	944.50	
	Hadaha Mafi	2C1A4e1b	794.00	
	Piparahari	2C1A4e2c	800.00	
	Terra_B	2C1A4e2e	705.00	
		Total	4850.00	

Table 1.4: Weightage of the project

Project name	Project Type	Weightage														Total Weightage (%)
		i	ii	iii	iv	v	vi	vii	viii	ix	x	xi	xii	xiii	Total	
IWMP-BANDA XII	IWMP-XII	7	3	5	10	5	0	15	10	10	15	10	15	0	105	70.00

Table 1.5: Criteria and Weightage for selection of watershed

Criteria	Maximum Score	Ranges & Scores			
Poverty index (% of poor to population)	10	Above 80 % (10)	80 to 50 % (7.5)	50 to 20 % (5)	Below 20 % (2.5)
% 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)		
% of small and marginal farmers	10	More than 80 % (10)	50 to 80 % (5)	Less than 50 % (3)	
Ground water status	5	Over exploited (5)	Critical (3)	Sub critical (2)	Safe (0)
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	
Area under rain-fed agriculture	15	More than 90 % (15)	80 to 90 % (10)	70 to 80% (5)	Above 70 % (Reject)
Drinking water	10	No source (10)	Problematic village (7.5)	Partially covered (5)	Fully covered (0)
Degraded land	15	High – above 20 % (15)	Medium – 10 to 20 % (10)	Low- less than 10 % of TGA (5)	

Criteria	Maximum Score	Ranges & Scores			
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)	
Contiguity to another watershed that has already been developed/ treated	10	Contiguous to previously treated watershed & contiguity within the micro watersheds in the project (10)	Contiguity within the micro watersheds in the project but non contiguous to previously treated watershed (5)	Neither contiguous to previously treated watershed nor contiguity within the micro watersheds in the project (0)	
Cluster approach in the plains (more than one contiguous micro-watersheds in the project)	15	Above 6 micro-watersheds in cluster (15)	4 to 6 micro watersheds in cluster (10)	2 to 4 micro watersheds in cluster (5)	
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 micro watersheds in cluster (10)	2 to 3 micro watersheds in cluster (5)	
	150	150	90	41	2.5

MAIN OBJECTIVES FOR WATERSHED DEVELOPMENT

- (a) Conservation, development and sustainable management of natural resources including their uses.
- (b) Enhancement of agricultural 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.
- (f) The main problem in a watershed is the soil erosion by rainfall. The runoff water transport the sediments which may block the channel head, dam, reservoir and storage structures, etc. Which in turn affect the agriculture production in the area.

Table 1.6: Problem identification and prioritization for watershed

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

Strength, Weakness, Opportunity and Threat (Swot) Analysis Is a Useful Decision Support Tool and detailed below.

Table 1.7: A SWOT analysis of watershed is presented as below:

Strength (S)	Weakness(W)
<ul style="list-style-type: none"> 1- Cooperative work culture is traditional activities 2- Close ethnic tier 3- Road at the top as well as outlet of the watershed 4- Hard working man power 5- Resource pool of crop genetic diversity 6- Awareness of farmers about watershed management program 7- Well established CPR maintaining and sharing system 8- Good productivity of soil. 9- Social outlook of the community towards landless 	<ul style="list-style-type: none"> 1- Poor water management 2- Resource poor farmers 3- Out migration of youth 4- Low and erratic rainfall 5- Fragile geography 6- Fragmented land holding. 7- Heavy infestation of wild animals 8- Problem of fuel and fodder 9- ANNA-PRATHA
Opportunities(O)	Threats (T)
<ul style="list-style-type: none"> 1- Wide range of annual and perennial crops 2- Scope of regular employment opportunity to check out migration 3- Strengthening of existing irrigation system 4- Conducive climate for rain fed crop diversification 5- Good scope for agro-forestry and dry land horticulture. 6- Potential for collective active action and management of CPRs. 	<ul style="list-style-type: none"> 1- Prone to adverse climate like drought 2- High market risk 3- Social conflicts owing to PRI & WSM policies and local policies. 4- Weak coordination among line departments. 5- Lack of expertise of implementing agencies in different aspect of WSM.

Table 1.8: WATERSHED INFORMATION

Name of the Project	No. of Watershed to be treated	Watershed Code	Watershed Regime/type/order
IWMP - XII Banda	6	2C1A4e2a, 2C1A4e2d 2C1A4e1e, 2C1A4e1b 2C1A4e2c, 2C1A4e2e	Micro watershed

The watershed falls under the semi arid region of Tropical climate. The average annual rain fall is about 544.40 mm. Most of the rainfall (about 90 %) is received during July to September. The intensity of Rainfall is moderate to high. The Temperature ranges from as high as 47.6°C in the month of May – June to as low as 3.3°C in December - January.

STATUS OF PREVIOUS WATERSHED PROGRAMMES AND OTHER DEVELOPMENTAL PROJECTS/SCHEMES RUNNING IN THE VILLAGES:

These villages of the project area being very backward therefore have been on top priority for a number of developmental projects. These programmes are Swarnajayanti Gram Swarojgar Yojana (SGSY) and Indira Awas Yojana (IAY).

The basic information regarding project area are given as under-

Table 1.9: Details of ongoing Development Programme

S. No.	Name of Programme	Impleme-nting agency	Objectives of the programme	Year of Commencement	Villages covered	Project Cost
1	Swarnajayanti Gram Swarojgar Yojana (SGSY)	DRDA	Formulation of groups for weaker section of the BC/SC	On going	All the villages of the project area	-
2	Indira Awas Yojana (IAY)	DRDA	Provide low cast houses to the weaker section SC/ST	On going	All the villages of the project area	-

CHAPTER – 2

GENERAL DESCRIPTION OF THE PROJECT AREA

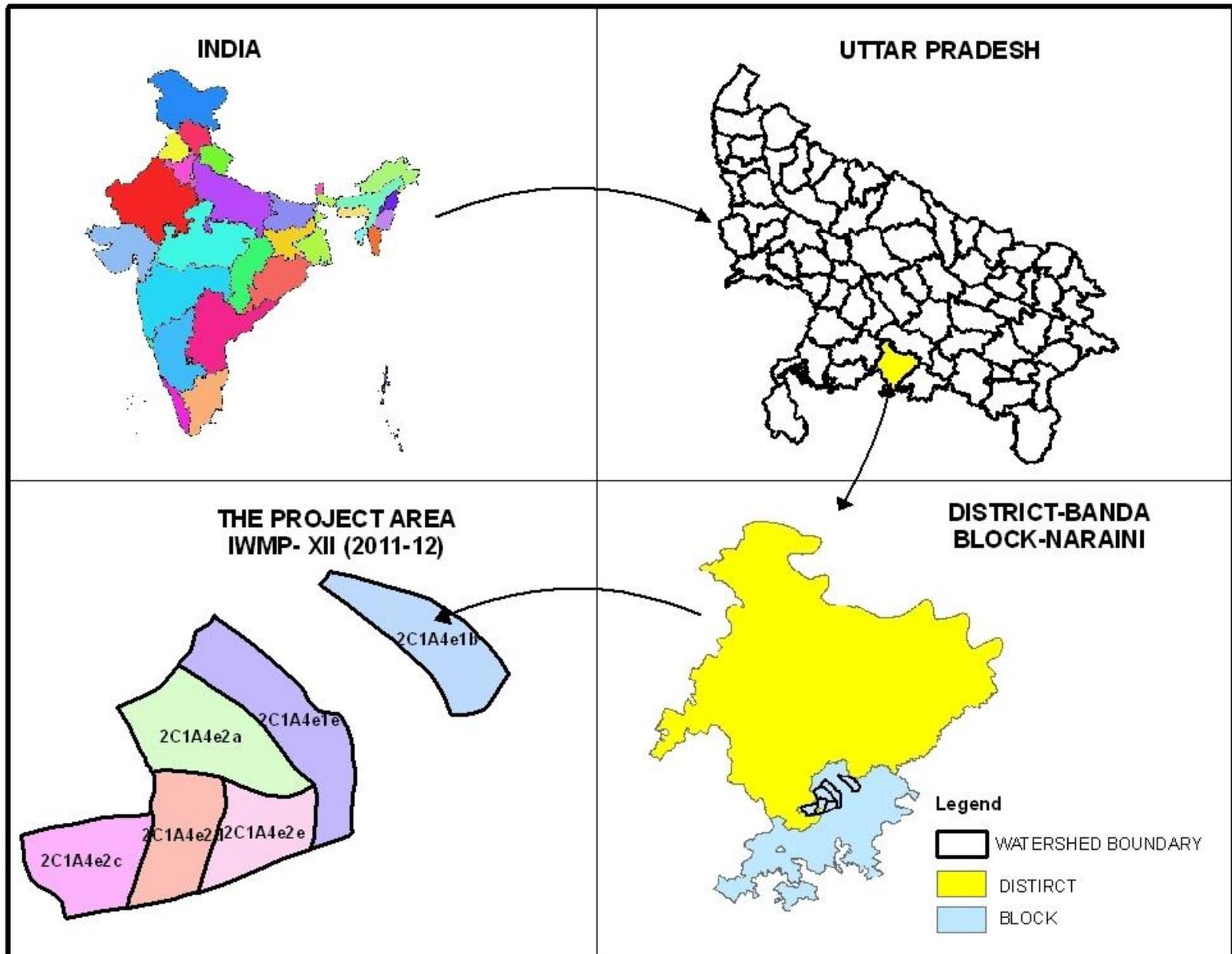
2.1: Location:-

The micro-watershed of IWMP-XII BANDA II is located in Naraini block of the district. It is about 55km. from district Headquarter on the Naraini-Kalinger road. The details of the location are given below:

Table 2.1: Micro-watershed wise details of location, Gram Panchayat, Villages and Geographical area

S. No.	Name of MWS with code	Latitude / Longitude	Name of GP	Names of villages	Name of Block	Area of village included in MWS	Details of important /approach road with distance km
1	2	3	4	5	6		7
1	2C1A4e2a	25°14'15"To25°16'30"& 80°32'17"To80°36'5"	Aterra (MB+Rural), Ludhaura, Pachokhar, Palhari, Turra	Anchwar, Aterra (MB+Rural), Ludhaura, Pachokhar, Palhari, Turra	Naraini	158.17	20 km
2	2C1A4e2d	25°12'17"To25°14'42"& 80°32'30"To80°34'24"	Ludhaura, Mahuta, Mungaura, Palhari	Palhari,Diwari, Ludhaura, Mahuta, Mungaura	Naraini	289.78	13 km
3	2C1A4e1e	25°13'19"To25°17'24"& 80°33'27"To 80°36'50"	Aterra (Rural), Mahuta, Turra	Aterra (Rural), Mahuta Turra	Naraini	480.74	18 km
4	2C1A4e1b	25°15'37"To25°18'10"& 80°36'8" To 80°39'45"	Nagwara, Oraha, Semariya Kushal, Turra Hadaha Mafi	Nagwara, Oraha, Semariya Kushal, Turra Hadaha Mafi	Naraini	327.46	28 km
5	2C1A4e2c	25°12'5" To25°13'59" & 80°30'27"To 80°33'4"	Motiyari, Mugoura, Palhari, Paramai, Piparhari	Motiyari, Mugoura, Palhari, Paramai, Piparhari	Naraini	302.50	10 km
6	2C1A4e2e	25°12'34"To25°14'35"& 80°33'49" To 80°36'7"	Mahuta, Turra, Diwali, Ludhaura Terra_B	Mahuta, Turra, Diwali, Ludhaura Terra_B	Naraini	506.00	12 km

LOCATION MAP



Exiting land use/land cover information is prerequisite of any future planning activities. Therefore an attempt has been made to prepare detail landuse map using large scale satellite data. The details of exiting land use categories are given below:

Table 2.2: Area under major land uses

S. No.	Name of micro watershed with Code	Name of village	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					Plantation	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
1	Ludhaura/ 2C1A4e2a	Anchwar, Aterra (MB+Rural), Ludhaura, Pachokhar, Palhari, Turra	918.55	254.16	27.65	15.40	398.72	258.00	0.00	515.99	1172.71	12.89	67.34	4.60	1300.59
2	Palhari/ 2C1A4e2d	Palhari, Diwari, Ludhaura, Mahuta, Mungaura	633.10	147.55	23.20	16.10	265.42	171.74	0.00	343.49	780.65	52.49	2.20	4.00	878.64
3	Turra/ 2C1A4e1e	Aterra (Rural), Mahuta Turra	921.20	255.81	22.80	65.60	400.18	258.94	0.00	517.88	1177.01	87.28	0.50	26.20	1379.39
4	Hadaha Mafi/ 2C1A4e1b	Nagwara, Oraha, Semariya Kushal, Turra Hadaha Mafi	755.85	132.14	35.75	16.50	301.92	195.36	0.00	390.72	887.99	49.27	2.40	3.50	995.41
5	Piparahari/ 2C1A4e2c	Motiyari, Mugoura, Palhari, Paramai, Piparahari	730.90	23.47	67.30	10.20	256.49	165.96	0.00	331.92	754.37	9.25	1.80	4.00	846.92
6	Terra_B/ 2C1A4e2e	Mahuta, Turra, Diwali, Ludhaura Terra_B	690.30	191.40	12.80	29.90	299.78	193.97	0.00	387.95	881.70	68.50	1.90	12.20	1007.00
		Total	4649.90	1004.53	189.50	153.70	1922.51	1243.97	0.00	2487.95	5654.43	279.68	76.14	54.50	6407.95

Physiography: -

The project area is situated in Bundelkhand zone which is undulating terrain. The elevation ranges from 122msl to 142msl. The details of individual MWS is given below:

Table 2.3: Micro-watershed wise elevation range and relief

S. No.	Name of MWS & Code	Minimum	Maximum	Relief
1	2	3	4	5
1	Ludhaura/2C1A4e2a	126	140	14
2	Palhari/2C1A4e2d	130	136	6
3	Turra/2C1A4e1e	124	142	18
4	HadahaMafi/2C1A4e1b	122	136	14
5	Piparahari/2C1A4e2c	133	140	7
6	Terra_B/2C1A4e2e	128	135	7

Slope

An attempt has been made to prepare the slope map of the study area using SRTM elevation model. The details of micro watershed wise slope range are given below:

Table 2.4: Slope classes in the MWS IWMP-XII

S. No.	Name of MWS & code	Slope range wise area (ha)						
		0-05%	0.5-1.0%	1-3%	3-5%	>5%		Others Specify
						Undulating	Terraced	
1	2	3	4	5	6	7	8	9
1	2C1A4e2a	351	250	218	480	1.59		
2	2C1A4e2d	215.5	102	132.6	423.9	4.64		
3	2C1A4e1e	432.69	56	368.5	520	2.2		
4	2C1A4e1b	199.01	181	218	395	2.4		
5	2C1A4e2c	43.22	200	235	365	3.7		
6	2C1A4e2e	300	180	190	335	2		
	Total	1541.42	969	1362.1	2518.9	16.53		

Climate:-

The climate of project area is of typical Central Indian climate, with mild winters and hot summers. Hot wave flows during May and 1st week of June locally designated as "Loo". The temperature during summer goes up to 46^oC. The rainy season is limited to 1½ - 2 months of July and August only. Winter rain fall is rare. Average rain fall is 600 - 700 mm but concentrated only during July – August. Most of the rain fall is run-off due to rocky nature of the soil.

The yearly season may be divided into four: The cold season from mid November to February is followed by the summer season from March to mid June. The period from mid June to the end of September is the south-west monsoon season and the October and the first half of November constitute the post-monsoon season.

Temperature: -

From mid November there is a rapid fall in temperature. January is the coldest month with the mean daily maximum temperature at 22.8^o C and the mean daily minimum temperature at 9.3^o C. In association with cold waves in the wake of the western disturbances passing eastwards in the winter season, temperature tends to go down to a degree or two above the freezing point. Day temperature begins to rise rapidly after February. May is the hottest with mean daily maximum temperature at 48.4 C and the mean daily minimum at 25.1^o C. With the advent of the monsoon by about the middle of June there is appreciable drop in the day temperature, however, the nights continue to be warm. In September there is a slight increase again in the day temperature but the night temperature decreases after September. With the withdrawal of monsoon by the beginning of October it decreases progressively.

Humidity: -

During the monsoon and the post monsoon seasons the relative humidity are high ranging between 70 and 85 per cent. In the winter months humidity decreases and in summer the air is comparatively drier.

Table 2.5: Average monthly rainfall of the last seven years:-

Month	Year/Rainfall in mm.							
	2004	2005	2006	2007	2008	2009	2010	Average
January	8.10	0.00	0.00	0.00	0.00	0.00	7.30	2.20
February	0.00	3.90	0.00	88.00	0.00	4.80	24.10	17.26
March	0.00	14.26	22.60	29.10	0.00	0.00	0.00	9.42
April	5.20	0.00	0.00	0.00	0.00	0.00	0.00	0.74
May	6.60	13.60	16.00	0.00	8.60	48.30	2.30	13.63
June	167.30	39.80	56.40	27.20	274.80	13.40	6.05	83.56
July	88.45	210.30	291.20	91.30	335.70	140.17	154.60	187.39
August	170.90	177.30	148.10	165.80	143.52	125.90	123.90	150.77
September	64.10	152.60	20.30	79.80	204.50	106.10	140.90	109.76
October	184.00	0.00	17.10	0.00	5.90	66.90	0.00	39.13
November	0.00	0.00	2.20	0.00	9.80	18.20	0.00	4.31
December	0.00	13.20	0.00	0.00	0.00	7.30	0.00	2.93
Total	694.65	624.96	573.9	481.2	982.82	531.07	459.15	621.1

CHAPTER – 3

BASELINE SURVEY

SOCIO-ECONOMIC CONDITION OF THE PROJECT

In the proposed watershed management plan of proper blending of bio- engineering measures will be applied. Based 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 40 % and 65 % respectively. The proposed land use plan will improve the land utilization index and crop diversification 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.

ECONOMIC ANALYSIS

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

Photographs of PRA exercise



DEMOGRAPHIC INFORMATION

Human Population

The total population of the study area is about 51763, residing in the 21 villages of the project area, with average family size of 5 persons.

S. No.	Name of Micro Watershed	Name of village	Total Population			Population of SC/ST				
			Total	Male	Female	Total	Male	Female		
1	2	3	4	5	6	7	8	9		
IWMP- XII (BANDA)	Ludhaura/2C1A4e2a Palhari/2C1A4e2d Turra/2C1A4e1e HadahaMafi/2C1A4e1b Piparahari/2C1A4e2c Tera_B/2C1A4e2e	Anchawara	734	401	333	144	77	67		
		Aterra (MB+Rural)	7616	3912	3704	1180	602	578		
		Basrehi	1105	595	510	562	301	262		
		Divali	1202	660	542	74	39	35		
		Hadaha	2606	1359	1247	316	172	144		
		Hadaha Mafi	1890	1000	890	594	297	297		
		Kalhara	1029	540	489	353	193	160		
		Ludhoura	1419	791	628	486	270	216		
		Mahuta	3436	1830	1606	1031	565	466		
		Motiyari	3379	1842	1537	861	462	399		
		Mungaura	1725	943	782	667	352	315		
		Nagwara	1212	686	526	594	344	250		
		Oraha	2403	1272	1131	661	347	314		
		Pachokhar	3999	2159	1840	1241	674	567		
		Palhari	2927	1615	1312	452	255	197		
		Paramai	1674	932	742	552	306	246		
		Piparahari	2448	1312	1186	1010	554	456		
		Semariya Kushal	1581	835	746	284	153	131		
		Turra	6761	3625	3136	1281	697	584		
				TOTAL	49146	26309	22887	12343	6660	5684

Table 3.2: Details of seasonal migration from Project area: Pre-project status *

S. No.	Names of Watershed	Name of village	No. of persons migrating	No. of days per year of migration	Major reason(s) for migrating	Distance of destination of migration from the village (km)	Occupation during migration	Income from such occupation (Rs. in lakh)	
1	2	3	4	5	6		7	8	
1	Ludhaura/ 2C1A4e2a	Anchawara	336	6 months	Lack of employment, less wages, Higher wages outside	150-500 km	Labour	0.25 to 0.50	
		Aterra(MB+Rural)	1156	6 months		150-500 km	Labour	0.25 to 0.50	
2	Palhari/ 2C1A4e2d	Basrehi	349	6 months		150-500 km	Labour	0.25 to 0.50	
		Divali	114	6 months		150-500 km	Labour	0.25 to 0.50	
		Hadaha	393	6 months		150-500 km	Labour	0.25 to 0.50	
		Hadaha Mafi	250	6 months		150-500 km	Labour	0.25 to 0.50	
		Kalhara	1764	6 months		150-500 km	Labour	0.25 to 0.50	
		Ludhoura	1400	6 months		150-500 km	Labour	0.25 to 0.50	
3	Turra/ 2C1A4e1e	Mahuta	95	6 months		150-500 km	Labour	0.25 to 0.50	
		Motiyari	90	6 months		150-500 km	Labour	0.25 to 0.50	
4	HadahaMafi/ 2C1A4e1b	Mungaura	13	6 months		Lack of employment, less wages, Higher wages outside	150-500 km	Labour	0.25 to 0.50
		Nagwara	235	6 months		150-500 km	Labour	0.25 to 0.50	
		Oraha	706	6 months		150-500 km	Labour	0.25 to 0.50	
5	Piparahari/ 2C1A4e2c	Pachokhar	348	6 months		150-500 km	Labour	0.25 to 0.50	
		Palhari	243	6 months		150-500 km	Labour	0.25 to 0.50	
		Paramai	195	6 months		150-500 km	Labour	0.25 to 0.50	
		Piparahari	513	6 months	150-500 km	Labour	0.25 to 0.50		
		Semariya Kushal	210	6 months	150-500 km	Labour	0.25 to 0.50		
6	TeraB/ 2C1A4e2e	Turra	422	6 months	150-500 km	Labour	0.25 to 0.50		

Table 3.3: Soil Texture:-

S. No.	MWS Project	Area in different Soil Group (ha)				
		Light textured soil (sand, loamy sand)	Medium textured soil (Sandy loam, loam, silt loam)	Heavy textured soil (Clayey)	Treatable Area	Others specify
1	Ludhaura/2C1A4e2a	21.5	123.3	615.2	948	Rakar, Kabar, Mar, Padwa
2	Palhari/2C1A4e2d	29.2	230.4	480.4	658.5	Rakar, Kabar, Mar, Padwa
3	Turra/2C1A4e1e	21.8	110.5	597.7	944.5	Rakar, Kabar, Mar, Padwa
4	HadahaMafi/2C1A4e1b	22	153	275	794	Rakar, Kabar, Mar, Padwa
5	Piparahari/2C1A4e2c	23.4	146.6	530	800	Rakar, Kabar, Mar, Padwa
6	TeraB/2C1A4e2e	20	130	260	705	Rakar, Kabar, Mar, Padwa
Total		137.9	893.8	2758.3	4850	

Table 3.4: Soil characteristics and fertility status

Soil properties	LCC - II	LCC - IV	LCC - VII
Sand%	28.36	55.00	73.04
Silt%	24.60	18.6	20.3
Clay%	47.04	26.36	6.66
Texture	Clay loam	Loamy sand	Sandy sand
pH (1:2)	7.5	7.3	7.10
EC (dsm ⁻¹)	0.17	0.12	0.16
Organic carbon%	0.37	0.30	0.21
Available N (kg ha ⁻¹)	380	310	240
Available P (kg ha ⁻¹)	10	9.0	8
Available K (kg ha ⁻¹)	310	292.5	265

Values correspond to soil fraction <2mm

Table 3.5: Details of land holding pattern in the project areas *

S. No.	Name of Villages	Land holding classification				
		Marginal	Small	Large	Landless	Total
1	Anchawara	58	40	6	12	116
2	Atara (MB)	360	291	34	72	757
3	Atara (Rural)	410	301	38	82	831
4	Basrehi	61	59	7	12	139
5	Divali	245	191	22	49	507
6	Terra (B)	366	222	35	73	696
7	Hadaha Mafi	248	172	23	50	493
8	Kalhara	252	208	27	50	537
9	Ludhaura	127	155	14	25	321
10	Mahuta	424	304	41	85	854
11	Motiyari	491	295	46	98	930
12	Mungaura	65	76	8	13	162
13	Nagwara	247	174	23	49	493
14	Oraha	198	173	17	40	428
15	Pachokhar	370	264	39	74	747
16	Palhari	336	90	13	67	506
17	Paramai	188	352	28	38	606
18	Piparhari	187	113	15	37	352
19	Semariya Kushal	121	124	14	24	283
20	Turra	765	471	72	153	1461
	Total	5519	4075	522	1104	11220

Table 3.6: Major Crops, their Productivity and Production

S. No.	Crop.	Area (ha)		Productivity (q/ha)		Production (q)			
						Grain/Main product		Fodder/Fuel/other Product	
		Irrigated	Rainfed	Irrigated	Rainfed	Irrigated	Rainfed	Irrigated	Rainfed
A	Kharif								
1	Paddy	625.20	2422.20	16	12	10003.20	29066.40	15004.80	43599.60
2	Maize	0.00	175.60	-	3.5	0.00	614.60	-	921.90
3	Arhar	0.00	536.40	-	7.5	0.00	4023.00	-	6034.50
4	Urd/Moong	0.00	241.30	-	5	0.00	1206.50	-	1206.50
5	vegetables (Crop wise)	11.50	14.10	160	122	1840.00	1720.20	1840.00	1720.20
	Total	636.70	3389.60			11843.20	36630.70	16844.80	53482.70
B	Rabi								
1	Wheat	632.60	1435.00	13	11	8223.80	15785.00	12335.70	23677.50
2	Barley	54.50	227.60	9	7	490.50	1593.20	735.75	2389.80
3	Masoor	0.00	273.50	-	4.8	0.00	1312.80	0.00	1641.00
4	Gram	0.00	335.60	-	6.5	0.00	2181.40	0.00	2726.75
5	Pea	0.00	7.50	-	8	0.00	60.00	0.00	60.00
6	Mustard	241.30	496.30	5.5	4.5	1327.15	2233.35	2896.93	3350.03
	Total	928.40	2775.50						
C	Zaid								
	Cultivable Area	5654.43		Cropping Intensity		136.71			

Summary It was found that the productivity of wheat, Gram, Paddy, Arhar, Barley and Masoor are mainly grown in the project area. Overall cropping intensity of the project area is 136.71%.

Details of individual MWS wise Crop production and their productivity

MWS Code: 2C1A4e2a

MWS Name: Ludhaura

S. No.	Crop	Area (ha)		Productivity (q/ha)		Production (q)			
						Grain/Main product		Fodder/Fuel/other Product	
		Irrigated	Rainfed	Irrigated	Rainfed	Irrigated	Rainfed	Irrigated	Rainfed
A	Kharif								
1	Paddy	122.20	473.45	16	12	1955.26	5681.43	2932.90	8522.15
2	Maize	0.00	34.32	-	3.5	0.00	120.13	0.00	180.20
3	Arhar	0.00	104.85	-	7.5	0.00	786.35	0.00	1179.53
4	Urd/Moong	0.00	47.17	-	5	0.00	235.83	0.00	235.83
5	vegetables (Crop wise)	2.25	2.76	160	122	359.65	336.24	359.65	336.24
	Total	124.45	662.54			2314.92	7159.98	3292.55	10453.94
B	Rabi								
1	Wheat	123.65	280.49	13	11	1607.46	3085.40	2411.18	4628.10
2	Barley	10.65	44.49	9	7	95.88	311.41	143.81	467.12
3	Masoor	0.00	53.46	-	4.8	0.00	256.61	0.00	320.76
4	Gram	0.00	65.60	-	6.5	0.00	426.38	0.00	532.98
5	Pea	0.00	1.47	-	8	0.00	11.73	0.00	11.73
6	Mustard	47.17	97.01	5.5	4.5	259.41	436.54	566.24	654.81
	Total	181.47	542.51						
C	Zaid								
	Cultivable Area	1172.71		Cropping Intensity		128.84			

MWS Code: 2C1A4e2d

MWS Name: Palhari

S. No.	Crop.	Area (ha)		Productivity (q/ha)		Production (q)			
						Grain/Main product		Fodder/Fuel/other Product	
		Irrigated	Rainfed	Irrigated	Rainfed	Irrigated	Rainfed	Irrigated	Rainfed
A	Kharif								
1	Paddy	84.89	328.87	16	12	1358.17	3946.44	2037.25	5919.66
2	Maize	0.00	23.84	-	3.5	0.00	83.45	0.00	125.17
3	Arhar	0.00	72.83	-	7.5	0.00	546.22	0.00	819.32
4	Urd/Moong	0.00	32.76	-	5	0.00	163.81	0.00	163.81
5	vegetables (Crop wise)	1.56	1.91	160	122	249.82	233.56	249.82	233.56
	Total	86.45	460.22			1607.99	4973.47	2287.07	7261.52
B	Rabi								
1	Wheat	85.89	194.83	13	11	1116.57	2143.18	1674.86	3214.77
2	Barley	7.40	30.90	9	7	66.60	216.31	99.90	324.47
3	Masoor	0.00	37.13	-	4.8	0.00	178.24	0.00	222.80
4	Gram	0.00	45.57	-	6.5	0.00	296.18	0.00	370.22
5	Pea	0.00	1.02	-	8	0.00	8.15	0.00	8.15
6	Mustard	32.76	67.38	5.5	4.5	180.19	303.23	393.32	454.84
	Total	126.05	376.84						
C	Zaid								
	Cultivable Area	780.65		Cropping Intensity		134.45			

MWS Code: 2C1A4e1e

MWS Name: Turra

S. No.	Crop.	Area (ha)		Productivity (q/ha)		Production (q)			
						Grain/Main product		Fodder/Fuel/other Product	
		Irrigated	Rainfed	Irrigated	Rainfed	Irrigated	Rainfed	Irrigated	Rainfed
A	Kharif								
1	Paddy	121.75	471.70	16	12	1948.05	5660.46	2922.07	8490.68
2	Maize	0.00	34.20	-	3.5	0.00	119.69	0.00	179.53
3	Arhar	0.00	104.46	-	7.5	0.00	783.45	0.00	1175.17
4	Urd/Moong	0.00	46.99	-	5	0.00	234.96	0.00	234.96
5	vegetables (Crop wise)	2.24	2.75	160	122	358.33	335.00	358.33	335.00
	Total	123.99	660.10			2306.37	7133.55	3280.39	10415.34
B	Rabi								
1	Wheat	123.19	279.46	13	11	1601.52	3074.01	2402.28	4611.01
2	Barley	10.61	44.32	9	7	95.52	310.26	143.28	465.40
3	Masoor	0.00	53.26	-	4.8	0.00	255.66	0.00	319.57
4	Gram	0.00	65.36	-	6.5	0.00	424.81	0.00	531.01
5	Pea	0.00	1.46	-	8	0.00	11.68	0.00	11.68
6	Mustard	46.99	96.65	5.5	4.5	258.45	434.93	564.15	652.39
	Total	180.80	540.51						
C	Zaid								
	Cultivable Area	1177.01		Cropping Intensity		127.90			

MWS Code: 2C1A4e1b

MWS Name: Hadaha Mafi

S. No.	Crop.	Area (ha)		Productivity (q/ha)		Production (q)			
						Grain/Main product		Fodder/Fuel/other Product	
		Irrigated	Rainfed	Irrigated	Rainfed	Irrigated	Rainfed	Irrigated	Rainfed
A	Kharif								
1	Paddy	102.35	396.54	16	12	1637.64	4758.50	2456.46	7137.75
2	Maize	0.00	28.75	-	3.5	0.00	100.62	0.00	150.93
3	Arhar	0.00	87.81	-	7.5	0.00	658.61	0.00	987.92
4	Urd/Moong	0.00	39.50	-	5	0.00	197.52	0.00	197.52
5	vegetables (Crop wise)	1.88	2.31	160	122	301.23	281.62	301.23	281.62
	Total	104.24	554.92			1938.87	5996.86	2757.68	8755.72
B	Rabi								
1	Wheat	103.56	234.93	13	11	1346.33	2584.18	2019.49	3876.28
2	Barley	8.92	37.26	9	7	80.30	260.82	120.45	391.24
3	Masoor	0.00	44.78	-	4.8	0.00	214.92	0.00	268.65
4	Gram	0.00	54.94	-	6.5	0.00	357.12	0.00	446.40
5	Pea	0.00	1.23	-	8	0.00	9.82	0.00	9.82
6	Mustard	39.50	81.25	5.5	4.5	217.27	365.62	474.26	548.44
	Total	151.99	454.38						
C	Zaid								
	Cultivable Area	887.99		Cropping Intensity		142.52			

MWS Code: 2C1A4e2c

MWS Name: Piparahari

S. No.	Crop.	Area (ha)		Productivity (q/ha)		Production (q)			
						Grain/Main product		Fodder/Fuel/other Product	
		Irrigated	Rainfed	Irrigated	Rainfed	Irrigated	Rainfed	Irrigated	Rainfed
A	Kharif								
1	Paddy	79.92	309.64	16	12	1278.76	3715.70	1918.14	5573.56
2	Maize	0.00	22.45	-	3.5	0.00	78.57	0.00	117.85
3	Arhar	0.00	68.57	-	7.5	0.00	514.28	0.00	771.42
4	Urd/Moong	0.00	30.85	-	5	0.00	154.23	0.00	154.23
5	vegetables (Crop wise)	1.47	1.80	160	122	235.22	219.90	235.22	219.90
	Total	81.39	433.31			1513.98	4682.69	2153.36	6836.96
B	Rabi								
1	Wheat	80.87	183.44	13	11	1051.29	2017.88	1576.93	3026.81
2	Barley	6.97	29.10	9	7	62.70	203.67	94.05	305.50
3	Masoor	0.00	34.96	-	4.8	0.00	167.82	0.00	209.78
4	Gram	0.00	42.90	-	6.5	0.00	278.86	0.00	348.57
5	Pea	0.00	0.96	-	8	0.00	7.67	0.00	7.67
6	Mustard	30.85	63.44	5.5	4.5	169.66	285.50	370.33	428.25
	Total	118.68	354.81						
C	Zaid								
	Cultivable Area	754.37		Cropping Intensity		131.00			

MWS Code: 2C1A4e2e

MWS Name: Terra_B

S. No.	Crop.	Area (ha)		Productivity (q/ha)		Production (q)			
						Grain/Main product		Fodder/Fuel/other Product	
		Irrigated	Rainfed	Irrigated	Rainfed	Irrigated	Rainfed	Irrigated	Rainfed
A	Kharif								
1	Paddy	90.88	352.09	16	12	1454.07	4225.12	2181.11	6337.67
2	Maize	0.00	25.53	-	3.5	0.00	89.34	0.00	134.01
3	Arhar	0.00	77.97	-	7.5	0.00	584.79	0.00	877.18
4	Urd/Moong	0.00	35.08	-	5	0.00	175.38	0.00	175.38
5	vegetables (Crop wise)	1.67	2.05	160	122	267.46	250.05	267.46	250.05
	Total	92.55	492.72			1721.54	5324.67	2448.57	7774.29
B	Rabi								
1	Wheat	91.96	208.59	13	11	1195.42	2294.52	1793.13	3441.78
2	Barley	7.92	33.08	9	7	71.30	231.59	106.95	347.38
3	Masoor	0.00	39.76	-	4.8	0.00	190.83	0.00	238.54
4	Gram	0.00	48.78	-	6.5	0.00	317.09	0.00	396.36
5	Pea	0.00	1.09	-	8	0.00	8.72	0.00	8.72
6	Mustard	35.08	72.14	5.5	4.5	192.92	324.64	421.10	486.96
	Total	134.95	403.45						
C	Zaid								
	Cultivable Area	881.7		Cropping Intensity		127.44			

Livestock Population

Desi cows and buffaloes are mostly found in the project area. The details of livestock population are given below:

Table 3.7: livestock population in IWMP XII, BANDA II

All Figure in No.

S. No.	Name of Village	livestock Resolution					TOTAL
		Buffaloes	Cows	Bullocks	Goat	Other	
1	Anchawara	45	26	22	46	35	174
2	Atara (MB)	105	40	20	30	85	280
3	Atara (Rural)	155	56	36	65	102	414
4	Basrehi	50	40	28	42	60	220
5	Divali	96	60	90	156	200	602
6	Terra (B)	141	78	80	180	62	541
7	Hadaha Mafi	126	76	82	138	45	467
8	Kalhara	73	46	44	36	28	227
9	Ludhoura	140	38	36	76	40	330
10	Mahuta	256	135	80	256	190	917
11	Motiyari	300	142	112	240	65	859
12	Mungaura	75	38	60	190	55	418
13	Nagwara	160	65	102	85	35	447
14	Oraha	140	66	60	150	36	452
15	Pachokhar	190	72	114	126	33	535
16	Palhari	91	37	80	105	30	343
17	Paramai	180	105	102	65	46	498
18	Piparhari	101	62	68	155	43	429
19	Semariya Kushal	98	60	60	64	37	319
20	Turra	503	237	222	437	76	1475

Table 3.8: Details of Livestock Productivity

S. No.	Name of Micro watershed with code	Name of Village	Milk Production (Liter Per day)				Goatry	Poultry		Piggerie s 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	2C1A4e1e, 2C1A4e2a	Anchawara	2	5	3	7	10-15	1.0 - 2.0	10	40
2	2C1A4e1e, 2C1A4e2a	Atara (MB)	2	3	3	7	10-12	1.0 - 2.0	12	30
3	2C1A4e1e, 2C1A4e2a, 2C1A4e2d	Atara (Rural)	1.5	5	2.5	6	10-15	1.0 - 2.2	10	47
4	2C1A4e1b	Basrehi	2	5	3	7	10-15	1.0 - 2.0	7	44
5	2C1A4e2d, 2C1A4e2e	Divali	1.8	4.5	3	7	10-15	1.0 - 2.0	10	8
6		Terab	2	5	3	7	11-12	1.0-2.2	8	7
7	2C1A4e1b	Hadaha Mafi	2	5	3	7	10-15	1.0 - 2.0	9	12
8	2C1A4e2c	Kalhara	2	5	3	7	10-15	1.0 - 2.0	10	40
9	2C1A4e2a, 2C1A4e2d, 2C1A4e2e	Ludhoura	2	5	3	7	10-15	1.0 - 2.0	10	40
10	2C1A4e1e, 2C1A4e2d, 2C1A4e2e	Mahuta	2	3	3	7	10-12	1.0 - 2.0	12	30
11	2C1A4e2c	Motiyari	1.5	5	2.5	6	10-15	1.0 - 2.2	10	47
12	2C1A4e2d, 2C1A4e2c	Mungaura	2	5	3	7	10-15	1.0 - 2.0	7	44
13	2C1A4e1b	Nagwara	1.8	4.5	3	7	10-15	1.0 - 2.0	10	8
14	2C1A4e1b	Oraha	2	5	3	7	10-15	1.0 - 2.0	10	40
15	2C1A4e2a, 2C1A4e2c	Pachokhar	2	3	3	7	10-12	1.0 - 2.0	12	30
16	2C1A4e2a, 2C1A4e2d, 2C1A4e2e, 2C1A4e2c	Palhari	1.5	5	2.5	6	10-15	1.0 - 2.2	10	47
17	2C1A4e2c	Paramai	2	5	3	7	10-15	1.0 - 2.0	7	44
18	2C1A4e2d, 2C1A4e2c	Piparhari	1.8	4.5	3	7	10-15	1.0 - 2.0	10	8
19	2C1A4e1b	Semariya Kushal	2	5	3	7	11-12	1.0-2.2	8	7
20	2C1A4e1b, 2C1A4e1e, 2C1A4e2a, 2C1A4e2e	Turra	2	5	3	7	10-15	1.0 - 2.0	9	12

Table 3.9: Ground Water Status

S. No.	Name & Code of Micro watershed	Depth of Ground Water Table (Below Ground level) in Meter		No. of Observation well	Remarks
		Before Monsoon	After Monsoon		
1	2	4	5	6	7
1	Ludhaura/2C1A4e2a	8 - 8.7	7.5 - 8.00	15	
2	Palhari/2C1A4e2d	8 - 8.5	7.5 - 8.00	14	
3	Turra/2C1A4e1e	8 - 8.5	7.5 - 8.00	10	
4	HadahaMafi/2C1A4e1b	8 - 8.5	7.5 - 8.00	15	
5	Piparahari/2C1A4e2c	8 - 8.5	7.5 - 8.00	9	
6	Terra_B/2C1A4e2e	8 - 8.5	7.5 - 8.00	11	

Table 3.10: Details of infrastructure in IWMP XII, BANDA

S. No.	Name of Micro Watershed	Name of Villages	Parameters				Status			
1	2	3	4				5			
	Ludhaura/2C1A4e2a	Anchwar, Aterra (MB+Rural), Ludhaura, Pachokhar, Palhari, Turra	(i)	Name of villages connected to the main road by an all-weather road	Yes					
			(ii)	Village's Name provided with electricity	Yes					
			(iii)	No. of households without access to drinking water						
			(iv)	No. of educational institutions : Primary(P)/ Secondary(S)/ Higher Secondary(HS)/ vocational institution(VI)	(P) 15	(S) 9	(HS) 8	(VI) 1		
			(v)	Names of villages with access to Primary Health Centre	Aterra					
			(vi)	Names of villages with access to Veterinary Dispensary	Aterra					
			(vii)	Names of villages with access to Post Office	Aterra					
			(viii)	Names of villages with access to Banks	Aterra					
			(ix)	Names of villages with access to Markets/ mandis	Aterra					
			(x)	Names of villages with access to Agro-industries	Aterra					
			(xi)	Total quantity of surplus milk deficit	150 liter					
			(xii)	No. of milk collection centres (e.g. Union(U)/ Society(S)/ Private agency(PA)/ others (O))	(U)	(S)	(PA) Yes	(O)		
			(xiii)	Name of villages with access to Anganwadi Centre	Yes					
			(xiv)	Any other facilities with names of villages (please specify)						

S. No.	Name of Micro Watershed	Name of Villages	Parameters		Status					
1	2	3	4		5					
	Palhari/2C1A4e2d	Palhari, Diwari, Ludhaura, Mahuta, Mungaara, Terab	(i)	Name of villages connected to the main road by an all-weather road	Yes					
			(ii)	Village's Name provided with electricity	Yes					
			(iii)	No. of households without access to drinking water						
			(iv)	No. of educational institutions : Primary(P)/ Secondary(S)/ Higher Secondary(HS)/ vocational institution(VI)	(P) 6	(S) 4	(HS)	(VI)		
			(v)	Names of villages with access to Primary Health Centre	Terab					
			(vi)	Names of villages with access to Veterinary Dispensary	No					
			(vii)	Names of villages with access to Post Office	No					
			(viii)	Names of villages with access to Banks	No					
			(ix)	Names of villages with access to Markets/ mandis	No					
			(x)	Names of villages with access to Agro-industries	No					
			(xi)	Total quantity of surplus milk deficit	300 liter					
			(xii)	No. of milk collection centres (e.g. Union(U)/ Society(S)/ Private agency(PA)/ others (O))	(U)	(S)	(PA)	(O)		
			(xiii)	Name of villages with access to Anganwadi Centre	Yes					
			(xiv)	Any other facilities with names of villages (please specify)						

S. No.	Name of Micro Watershed	Name of Villages	Parameters				Status					
1	2	3	4				5					
	Turra/2C1A4e1e	Aterra (Rural), Mahuta, Turra	(i)	Name of villages connected to the main road by an all-weather road			Yes					
			(ii)	Village's Name provided with electricity			Yes					
			(iii)	No. of households without access to drinking water								
			(iv)	No. of educational institutions : Primary(P)/ Secondary(S)/ Higher Secondary(HS)/ vocational institution(VI)			(P) 15	(S) 8	(HS) 7	(VI) 1		
			(v)	Names of villages with access to Primary Health Centre			Aterra					
			(vi)	Names of villages with access to Veterinary Dispensary			Aterra					
			(vii)	Names of villages with access to Post Office			Aterra					
			(viii)	Names of villages with access to Banks			Aterra					
			(ix)	Names of villages with access to Markets/ mandis			Aterra					
			(x)	Names of villages with access to Agro-industries			Aterra					
			(xi)	Total quantity of surplus milk deficit			200 liter					
			(xii)	No. of milk collection centres (e.g. Union(U)/ Society(S)/ Private agency(PA)/ others (O))			(U)	(S)	(PA)	(O)		
			(xiii)	Name of villages with access to Anganwadi Centre			Yes					
			(xiv)	Any other facilities with names of villages (please specify)								

S. No.	Name of Micro Watershed	Name of Villages	Parameters				Status					
1	2	3	4				5					
	Hadaha Mafi / 2C1A4e1b	Nagwara, Oraha, Semariya Kushal, Turra Hadaha Mafi	(i)	Name of villages connected to the main road by an all-weather road			Yes					
			(ii)	Village's Name provided with electricity			Yes					
			(iii)	No. of households without access to drinking water								
			(iv)	No. of educational institutions : Primary(P)/ Secondary(S)/ Higher Secondary(HS)/ vocational institution(VI)			(P) 4	(S) 3	(HS)	(VI)		
			(v)	Names of villages with access to Primary Health Centre			Hadaha Mafi					
			(vi)	Names of villages with access to Veterinary Dispensary			No					
			(vii)	Names of villages with access to Post Office			Hadaha Mafi					
			(viii)	Names of villages with access to Banks			No					
			(ix)	Names of villages with access to Markets/ mandis			No					
			(x)	Names of villages with access to Agro-industries			No					
			(xi)	Total quantity of surplus milk deficit			Yes					
			(xii)	No. of milk collection centres (e.g. Union(U)/ Society(S)/ Private agency(PA)/ others (O))			(U)	(S)	(PA)	(O) 25		
			(xiii)	Name of villages with access to Anganwadi Centre			Yes					
			(xiv)	Any other facilities with names of villages (please specify)								

S. No.	Name of Micro Watershed	Name of Villages	Parameters		Status			
1	2	3	4		5			
			(i)	Name of villages connected to the main road by an all-weather road	Yes			
			(ii)	Village's Name provided with electricity	Yes			
			(iii)	No. of households without access to drinking water				
			(iv)	No. of educational institutions : Primary(P)/ Secondary(S)/ Higher Secondary(HS)/ vocational institution(VI)	(P) 6	(S) 2	(HS)	(VI)
			(v)	Names of villages with access to Primary Health Centre	No			
			(vi)	Names of villages with access to Veterinary Dispensary	No			
			(vii)	Names of villages with access to Post Office	Paramai			
			(viii)	Names of villages with access to Banks	Paramai			
			(ix)	Names of villages with access to Markets/ mandis	No			
			(x)	Names of villages with access to Agro-industries	No			
			(xi)	Total quantity of surplus milk deficit				
			(xii)	No. of milk collection centres (e.g. Union(U)/ Society(S)/ Private agency(PA)/ others (O))	(U)	(S)	(PA)	(O) 10
			(xiii)	Name of villages with access to Anganwadi Centre	Yes			
			(xiv)	Any other facilities with names of villages (please specify)				

S. No.	Name of Micro Watershed	Name of Villages	Parameters		Status			
1	2	3	4		5			
			(i)	Name of villages connected to the main road by an all-weather road	Yes			
			(ii)	Village's Name provided with electricity	Yes			
			(iii)	No. of households without access to drinking water				
			(iv)	No. of educational institutions : Primary(P)/ Secondary(S)/ Higher Secondary(HS)/ vocational institution(VI)	(P) 8	(S) 5	(HS)	(VI)
			(v)	Names of villages with access to Primary Health Centre	Terra, Turra			
			(vi)	Names of villages with access to Veterinary Dispensary	No			
			(vii)	Names of villages with access to Post Office	Turra			
			(viii)	Names of villages with access to Banks	No			
			(ix)	Names of villages with access to Markets/ mandis	No			
			(x)	Names of villages with access to Agro-industries	No			
			(xi)	Total quantity of surplus milk deficit				
			(xii)	No. of milk collection centres (e.g. Union(U)/ Society(S)/ Private agency(PA)/ others (O))	(U)	(S)	(PA)	(O) 20
			(xiii)	Name of villages with access to Anganwadi Centre	Terra, Turra, Mahuta			
			(xiv)	Any other facilities with names of villages (please specify)	No			

CHAPTER - 4
INSTITUTION BUILDING &
PROJECT MANAGEMENT

Project Implementing Agency:

The Project Implementing Agency (PIA) for IWMP-XII, BANDA II is BSA, Bhoomi Sanrakshan Adhikari Soil Conservation Unit Banda II, Agricultural Department, District Banda, Uttar Pradesh. The project implementing agency was selected by State Level Nodal Agency (SLNA) for Integrated Watershed Management Program (IWMP) in Banda II district. The PIA was given responsibility to develop the micro-watershed by WCDC and State Level Nodal Agency (SLNA) considering its vast experiences in handling land and water management issues in the region. The PIA has well experienced trained and sufficient staff to handle the watershed management programme efficiently.

The PIA will put dedicated Watershed Development team and will provide necessary technical guidance to the Gram Panchayat for preparation of Development Plans for the Watershed Projects through Participatory Rural Appraisal exercise. PIA will also undertake **a)** Community Organization, **b)** Trainings for the village communities, **c)** supervise Watershed development Activities, **d)** inspect & authenticate project accounts, **e)** monitor & review the overall project implementation, **f)** set up institutional arrangements for post project operations and **g)** maintenance and further development of the assets created during the project period.

Table 4.1: Details of Project Implementing Agency (PIA)

S. No.	Particulars of PIA	
1	2	3
(i)	Date of selection of PIA	7-12-2011
(ii)	Type of organization	Govt.
(iii)	Name of organization	Soil Conservation
(iv)	Designation & Address	Bhoomi Sanrakshan Adhikari, Banda II
(v)	Telephone	9235629612
(vi)	Fax	05192224698
(vii)	E-mail	

Table 4.2: Details of Staff at PIA

S. NO.	Designation	Name	M/F	Qualification	Field of Experience & Period	Remarks
1	2	3		4	5	6
1	B.S.A.	Sri Vijay Singh	M	M.Sc. In Agriculture	G. Ag. & Soil Cons. 29 yrs	
2	S.T.A. G.P. 'A'	Neeraj Ran	M	M.Sc. In Agriculture	Soil Cons. 4 yrs	
3	J.E.	Shyam Lal	M	Engg. Dip.	G. Ag. & Soil Cons. 19 yrs	
4	J.E.	Shivaji Singh	M	Engg. Dip.	G. Ag. & Soil Cons. 21 yrs	
5	S.T.A. G.P. 'B'	Sharma Ram	M	Agriculture Diploma	Soil Cons. 30 yrs	
6	S.T.A. G.P. 'B'	R. R. Shankhwar	M	B.Sc. In Agriculture	Soil Cons. 30 yrs	
7	S.T.A. G.P. 'B'	Ram Nagina Prasad	M	B.Sc. In Agriculture	S.E. 30 Year	
8	S.T.A. G.P. 'B'	Shitalla Prasad Saxena	M	Agriculture Diploma	S.E. 32 Year	
9	T.A. G.P. 'C'	Hari Narain Sachan	M	B.Sc. In Agriculture	Soil Cons. 31 yrs	
10	T.A. G.P. 'C'	Suresh Pal Singh	M	Agriculture Diploma	Soil Cons. 34 yrs	
11	T.A. G.P. 'C'	C. S. Singh	M	M.Sc. In Agriculture	G. Ag. & Soil Cons. 26 yrs	
12	T.A. G.P. 'C'	Raj Bir Singh	M	Agriculture Diploma	Soil Cons. 31 yrs	
13	T.A. G.P. 'C'	Raj Kishore Sharma	M	Agriculture Diploma	Soil Cons. 33 yrs	
14	T.A. G.P. 'C'	Mohan Lal Singh	M	B.Sc. In Agriculture	G. Ag. & Soil Cons. 30 yrs	
15	T.A. G.P. 'C'	Bholla Prasad	M	B.Sc. In Agriculture	S.E. 32 Year	
16	T.A. G.P. 'C'	Lalbrat	M	Agriculture Diploma	S.E. 32 Year	
17	T.A. G.P. 'C'	Subhash Pawar	M	Agriculture Diploma	S.E. 32 Year	
18	T.A. G.P. 'C'	Mahipal Singh	M	Agriculture Diploma	S.E. 33 Year	
19	T.A. G.P. 'C'	Sudama Prasad	M	B.Sc. In Agriculture	S.E. 32 Year	

The Watershed Development Team (WDT): It is an integral part of the PIA. WDT will assist gram Sabha in **a)** constitution of Watershed Committee and its functioning, **b)** organize and strengthening User groups, Self Help Groups, **c)** conducting participatory baseline survey, **d)** training and Capacity Building, **e)** preparing detailed resource development plan including Soil & Water Conservation, **f)** undertake engineering surveys, **g)** prepare engineering drawings and cost estimate for structure to be built.

Table 4.3: Details of Watershed Development Team (WDT) in the project area

Project- IWMP XII PIA- BSA, District – Banda

1	2	3	4	5	6	7	8
S. No.	Name of WDT member	M/F#	Age	Qualification / Experience	Description of professional training	Role/ Function##	Date of appointment of WDT member
1	2	3	4	5	6	7	8
1	Ram Nagina Prasad	M	53	B.Sc. Agriculture	Trained	Team Leader	15-10-2011
2	Shitalla Prasad Sexena	M	56	Agriculture Diploma	Trained	Team Leader	15-10-2011
3	Bhollu Prasad	M	52	B.Sc. Agriculture	Trained	Member	15-10-2011

Watershed Committees:

Watershed committees are being formed in all villages. Each committee would consist of at least of 10 members. Their representation will be as under:

- Minimum of 50% members from SHGs and UGs, SCs, women and landless
- One member from Watershed Development Team, especially women member (subject matter specialist in Social Science).

Watershed Committees would nominate one of their members as Watershed Secretary to perform the following duties:

1. Convening meetings of Watershed Committee, Gram Sabha.
2. Maintaining all records and proceedings of the meetings.
3. Follow up action on all decisions taken in the meetings.
4. Ensuring people's participation.

Watershed Secretary will be imparted training in maintaining the accounts as well other activities related to Project.

Table 4.4: Details of Watershed Committee (WC)

The Watershed Committee have been formed by the PIA as per Gram Panchayat wise.

Name of Micro watershed-2C1A4e2a, 2C1A4e2d, 2C1A4e2e																			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
S. No.	Name of Gram Sabha/ GP	Date of Constitution/ Registration as a Society (dd/mm/yyyy)	Name	Designation	M/F	SC	ST	SF	MF	LF	Land-less	UG	SHG	GP	Any other	Qualification	Function (s) assigned		
1	Ludhara		Suresh	President	M	-	-	-	√	-	-	√	-	-	-	Intermediate			
			Suresh	Secretary	M	-	-	-	-	-	-	√	-	√	-	-	Graduate		
			Munni	Member	F	-	-	-	-	-	-	-	√	-	√	-	-	Graduate	
			Kunjbihari	Member	M	-	-	-	-	√	-	-	-	√	-	-	-	8th Pass	
			kamta	Member	M	-	-	√	-	-	-	-	-	-	√	-	-	8th Pass	
			Khenan	Member	M	-	-	√	-	-	-	-	-	-	√	-	-	Intermediate	
			Ramesh Chandra	Member	M	-	-	-	-	√	-	-	-	√	-	-	-	High School	
			Pappu	Member	M	-	-	√	-	-	-	-	-	-	√	-	-	High School	
			Raju	Member	M	-	-	-	-	-	√	-	-	√	-	-	-	High School	
			Kalu	Member	M	-	-	√	-	-	-	-	√	-	√	-	-	High School	
			Harish Chandra	Member	M	√	-	√	-	-	-	-	-	-	-	-	-	Literate	
Narayan Dev	Member	M	-	-	-	-	-	-	√	-	√	-	-	-	8th Pass				

Name of Micro watershed-2C1A4e2d																		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
S. No.	Name of Gram Sabha/ GP	Date of Constitution/ Registration as a Society (dd/mm/yyyy)	Name	Designation	M/F	SC	ST	SF	MF	LF	Land-less	UG	SHG	GP	Any other	Qualification	Function (s) assigned	
2	Palhari		Hajari Lal	President	M	-	-	-	-	√	-	√	-	-	-	Intermediate		
			Braham Dutt	Secretary	M	-	-	-	-	√	-	√	-	-	-	-	Graduate	
			Shiv Sevak	Member	M	-	-	√	-	-	-	-	-	√	√	-	High School	
			Shiv Nandan	Member	M	-	-	√	-	-	-	-	-	√	-	-	Literate	
			Sri Ram	Member	M	-	-	-	√	-	-	-	√	-	-	-	Literate	
			Mahadev	Member	M	-	-	-	√	-	-	-	√	-	-	-	Literate	
			Balram	Member	M	-	-	-	√	-	-	-	√	-	-	-	Literate	
			Puchuwa	Member	M	√	-	-	√	-	-	-	-	√	-	-	Literate	
			Shiv Ratan	Member	M	√	-	√	-	-	-	-	-	√	-	-	Literate	
			Ram Swaroop	Member	M	√	-	√	-	-	-	-	-	√	-	-	Literate	
			Shankar	Member	M	-	-	√	-	-	-	-	-	√	-	-	Literate	

Name of Micro watershed-2C1A4e1e, 2C1A4e1b, 2C1A4e2a																	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
S. No.	Name of Gram Sabha/ GP	Date of Constitution/ Registration as a Society (dd/mm/yyyy)	Name	Designation	M/F	SC	ST	SF	MF	LF	Land-less	UG	SHG	GP	Any other	Qualification	Function (s) assigned
3	Turra		Ganga Prasad	President	M	-	-	-	-	√	-	-	√	-	-	Jr. High School	
			Shiv Varan	Secretary	M	-	-	-	√	-	-	√	-	-	-	Graduate	
			Satyanarayan	Member	M	-	-	√	-	-	-	-	-	-	-	Jr. High School	
			Jitendra Kumar	Member	M	-	-	√	-	-	-	-	√	-	-	Intermediate	
			Suresh Kumar	Member	M	√	-	-	-	-	-	-	-	-	-	Jr. High School	
			Fusunawa	Member	M	-	-	√	-	-	-	-	√	-	-	Jr. High School	
			Mithai Lal	Member	M	-	-	-	-	-	√	-	√	-	-	Primary	
			Kunjan	Member	M	-	-	-	√	-	-	√	-	-	-	Primary	
			Maheshwari	Member	M	-	-	√	-	√	-	-	√	-	-	Primary	
			Asha Devi	Member	F	-	-	-	-	-	-	-	√	-	-	-	Illiterate
Manoj	Member	M	-	-	-	-	-	-	√	-	√	-	-	High School			

Name of Micro watershed-2C1A4e1e, 2C1A4e2e																				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18			
S. No.	Name of Gram Sabha/ GP	Date of Constitution/ Registration as a Society (dd/mm/yyyy)	Name	Designation	M/F	SC	ST	SF	MF	LF	Land-less	UG	SHG	GP	Any other	Qualification	Function (s) assigned			
4	Mahuta		Parmeshwari Dayal	President	M	-	-	-	-	√	-	√	-	-	-	Jr. High School				
			Vishmbhar Dayal	Secretary	M	-	-	-	-	√	-	√	-	-	-	-	Graduate			
			Maiyadin	Member	M	√	-	-	-	-	-	√	-	√	√	-	Graduate			
			Ram Kripal	Member	M	-	-	-	-	-	√	-	√	-	-	-	Jr. High School			
			Annapurna	Member	F	-	-	-	-	-	√	-	√	-	-	-	Jr. High School			
			Jageshwar	Member	M	-	-	-	-	√	-	-	-	-	√	-	-	Jr. High School		
			Rameshwar	Member	M	-	-	-	-	√	-	-	-	-	-	-	-	Jr. High School		
			Shravan	Member	M	-	-	-	-	√	-	-	-	-	√	-	-	Intermediate		
			Narayan Singh	Member	M	-	-	-	-	-	√	-	-	-	-	√	-	-	Jr. High School	
			Chandra Bhan	Member	M	-	-	-	-	-	√	-	-	-	-	-	-	Jr. High School		
Munni Lal	Member	M	-	-	-	-	-	√	-	-	-	√	-	-	Jr. High School					

Name of Micro watershed-2C1A4e1b																			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
S. No.	Name of Gram Sabha/ GP	Date of Constitution/ Registration as a Society (dd/mm/yyyy)	Name	Designation	M/F	SC	ST	SF	MF	LF	Land-less	UG	SHG	GP	Any other	Qualification	Function (s) assigned		
5	Oraha		Ram Lakhan	President	M	-	-	√	-	-	-	-	-	-	-	-	Jr. High School		
			Bajjnath	Secretary	M	-	-	√	-	-	-	-	-	-	-	-	-	Graduate	
			Bhale	Member	M	√	-	-	-	√	-	-	-	-	-	√	-	Intermediate	
			Laxmi	Member	F	-	-	-	-	-	-	-	√	-	√	-	-	Post Graduate	
			Monu	Member	F	-	-	-	-	-	-	-	√	-	√	-	-	Jr. High School	
			Sunita	Member	F	-	-	-	-	-	-	√	-	-	√	-	-	Primary	
			Shiv Kanya	Member	F	-	-	-	-	-	-	√	-	-	√	-	-	Primary	
			Pramod	Member	M	-	-	-	-	-	-	√	-	-	√	-	-	High School	
			Rajesh	Member	M	-	-	-	-	√	-	-	-	-	√	-	-	High School	
			Rama Kant	Member	M	-	-	-	-	-	√	-	-	-	√	-	-	Jr. High School	
			Harwansh	Member	M	-	-	-	-	√	-	-	-	-	√	-	-	Primary	

Name of Micro watershed-2C1A4e1b																			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
S. No.	Name of Gram Sabha/ GP	Date of Constitution/ Registration as a Society (dd/mm/yyyy)	Name	Designation	M/F	SC	ST	SF	MF	LF	Land-less	UG	SHG	GP	Any other	Qualification	Function (s) assigned		
6	Nagwara		Uday Narayan	President	M	-	-	-	-	√	-	-	-	-	-	Post Graduate			
			Babu Lal	Secretary	M	-	-	√	-	-	-	-	-	-	-	-	Post Graduate		
			Ramesh Chandra	Member	M	√	-	-	√	-	-	-	-	-	√	-	Jr. High School		
			Girdhari	Member	M	√	-	√	-	-	-	-	√	-	-	-	Illiterate		
			Saukhi	Member	M	-	-	√	-	-	-	-	√	-	-	-	Primary		
			Chiraunji	Member	M	-	-	√	-	-	-	-	√	-	-	-	Primary		
			Dashrath	Member	M	√	-	√	-	-	-	-	√	-	-	-	Primary		
			Shiv Kumar	Member	M	-	-	√	-	-	-	-	√	-	-	-	High School		
			Sadhana	Member	F	-	-	-	-	-	√	-	-	-	√	-	-	Jr. High School	
			Savita	Member	F	-	-	-	-	-	√	-	-	-	√	-	-	Primary	
			Brij Mohan	Member	M	-	-	-	-	√	-	-	-	-	√	-	-	Jr. High School	

Name of Micro watershed-2C1A4e1b																			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
S. No.	Name of Gram Sabha/ GP	Date of Constitution/ Registration as a Society (dd/mm/yyyy)	Name	Designation	M/F	SC	ST	SF	MF	LF	Land-less	UG	SHG	GP	Any other	Qualification	Function (s) assigned		
7	Hadaha Mafi		Om Prakash	President	M	-	-	√	-	-	-	-	-	-	-	Jr. High School			
			Ram Dhani	Secretary	M	-	-	√	-	-	-	-	-	-	-	-	Intermediate		
			Vijay Pal	Member	M	-	-	√	-	-	-	-	-	-	√	-	High School		
			Shital	Member	M	√	-	-	√	-	-	-	√	-	-	-	Primary		
			Ram Swaroop	Member	M	-	-	√	-	-	-	-	√	-	-	-	Graduate		
			Samliya	Member	M	-	-	-	√	-	-	-	√	-	-	-	Primary		
			Awadh Bihari	Member	M	-	-	√	-	-	-	-	√	-	-	-	Jr. High School		
			Dinesh	Member	M	-	-	√	-	-	-	-	√	-	-	-	High School		
			Manju	Member	F	-	-	-	-	-	-	-	√	-	√	-	-	Graduate	
			Krishna	Member	M	-	-	-	-	-	-	-	√	-	√	-	-	Primary	
Bacchu	Member	M	-	-	√	-	-	-	-	-	-	√	-	-	Intermediate				

Name of Micro watershed-2C1A4e2d, 2C1A4e2e																		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
S. No.	Name of Gram Sabha/ GP	Date of Constitution/ Registration as a Society (dd/mm/yyyy)	Name	Designation	M/F	SC	ST	SF	MF	LF	Land-less	UG	SHG	GP	Any other	Qualification	Function (s) assigned	
8	Terra-B		Asha Ram	President	M	-	-	-	√	-	-	√	-	-	-	Jr. High School		
			Mahesh	Secretary	M	-	-	√	-	-	-	-	√	-	-	-	Graduate	
			Jagnandan	Member	M	-	-	√	-	-	-	-	√	-	-	-	Illiterate	
			Shyam Lal	Member	M	-	-	√	-	-	-	-	√	-	-	-	Jr. High School	
			Awadhesh	Member	M	-	-	-	√	-	-	-	√	-	-	-	Jr. High School	
			Sita Ram	Member	M	-	-	-	√	-	-	-	√	-	-	-	Jr. High School	
			Gokul	Member	M	-	-	-	√	-	-	-	-	-	-	-	Primary	
			Vishwanath	Member	M	√	-	-	-	-	-	-	-	-	-	-	Primary	
			Rameshwar	Member	M	-	-	-	√	-	-	-	√	-	-	-	Jr. High School	
			Tarawati	Member	F	-	-	√	-	-	-	-	-	-	-	-	Jr. High School	
			Uday Raj	Member	M	-	-	-	-	-	-	-	-	√	-	-	-	High School

Name of Micro watershed-2C1A4e2c																			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		
S. No.	Name of Gram Sabha/ GP	Date of Constitution/ Registration as a Society (dd/mm/yyyy)	Name	Designation	M/F	SC	ST	SF	MF	LF	Land-less	UG	SHG	GP	Any other	Qualification	Function (s) assigned		
9	Piparhari		Uma Shankar	President	M	-	-	√	-	-	-	-	-	-	-	Intermediate			
			Kapil Dev	Secretary	M	-	-	√	-	-	-	-	-	-	-	-	Graduate		
			Asha	Member	F	-	-	-	-	-	-	-	-	-	-	-	Primary		
			Ramkesh	Member	M	-	-	√	-	-	-	-	√	-	-	-	Jr. High School		
			Purshottam	Member	M	-	-	√	-	-	-	-	√	-	-	-	Primary		
			Shyam Sundar	Member	M	-	-	-	√	-	-	-	√	-	-	-	Primary		
			Kishori	Member	M	√	-	-	-	-	-	-	-	-	-	-	Illiterate		
			Santosh	Member	M	√	-	-	-	-	-	-	-	-	-	-	Primary		
			Jagwan Singh	Member	M	-	-	-	-	-	-	√	-	-	-	-	-	Jr. High School	
			Raja Singh	Member	M	-	-	-	-	-	-	√	-	√	-	-	-	Jr. High School	
Chote	Member	M	-	-	-	-	-	-	-	-	-	-	-	-	Primary				

Name of Micro watershed-2C1A4e2c																		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
S. No.	Name of Gram Sabha/ GP	Date of Constitution/ Registration as a Society (dd/mm/yyyy)	Name	Designation	M/F	SC	ST	SF	MF	LF	Land-less	UG	SHG	GP	Any other	Qualification	Function (s) assigned	
10	Motiyari		Shushil Kumar	President	M	-	-	-	√	-	-	√	-	-	-	Jr. High School		
			Rameshwar	Secretary	M	-	-	-	√	-	-	-	-	-	-	-	Intermediate	
			Lalu	Member	M	√	-	√	-	-	-	-	√	-	-	-	Primary	
			Satya Narayan	Member	M	-	-	-	-	-	-	-	√	-	-	-	Jr. High School	
			Acche Lal	Member	M	-	-	-	-	-	-	√	-	-	-	-	Primary	
			Pramod	Member	M	-	-	-	√	-	-	-	√	-	-	-	Primary	
			Brij Kishor	Member	M	-	-	-	√	-	-	-	√	-	-	-	Jr. High School	
			Ramsaran	Member	M	-	-	√	-	-	-	-	√	-	-	-	High School	
			Sita Ram	Member	M	-	-	-	√	-	-	-	-	-	-	-	Primary	
			Bhoora	Member	M	-	-	√	-	-	-	-	-	-	-	-	Primary	
			Nathu	Member	M	√	-	-	-	-	-	-	-	-	-	-	-	Illiterate

Name of Micro watershed-2C1A4e2c																		
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	
S. No.	Name of Gram Sabha/ GP	Date of Constitution/ Registration as a Society (dd/mm/yyyy)	Name	Designation	M/F	SC	ST	SF	MF	LF	Land-less	UG	SHG	GP	Any other	Qualification	Function (s) assigned	
11	Paramai		Abhilash	President	M	-	-	-	√	-	-	√	-	-	-	High School		
			Jitendra	Secretary	M	-	-	-	√	-	-	√	-	-	-	Graduate		
			Surajdin	Member	M	√	-	-	-	-	-	-	-	-	-	-	Primary	
			Ram Chandra	Member	M	-	-	-	-	√	-	√	-	-	-	Jr. High School		
			Hira Lal	Member	M	-	-	-	√	-	-	√	-	-	-	Primary		
			Phool Chandra	Member	M	-	-	√	-	-	-	√	-	-	-	Primary		
			Rajju	Member	M	-	-	√	-	-	-	-	-	-	-	Primary		
			Ram Sanehi	Member	M	-	-	-	√	-	-	-	-	-	-	Illiterate		
			Abhishek	Member	M	-	-	-	√	-	-	-	-	-	-	Jr. High School		
			Shiv Prasad	Member	M	-	-	-	-	-	√	-	√	-	-	Jr. High School		
Rama Devi	Member	F	-	-	-	-	-	-	-	-	-	-	-	Jr. High School				

Formation of Self Help Groups:

The formation of SHGs in all watershed villages is underway. It is proposed to form at least 5 SHGs in each village. Each SHG will consist of 5/7 members. The members would be mainly from landless, SCs and women, small and marginal farmers. Few groups exclusively of unemployed youth have also been identified. These groups will be homogeneous having common goal for increasing their income by establishing micro enterprise. Under the Project, each SHG would be given a revolving fund of Rs.20000/25000 each after 6 months from the date of formation (subject to qualifying the 1st grading and meeting the laid down norms). After having discussions with the village community The SHGs may opt any of the Income Generating Activities from the list given below.

1. Bakery Products 2. Soap & Detergent making 3. Cutting and Tailoring 4. Embroidery 5. Fisheries 6. Mushroom cultivation 7. Household wiring, Motor winding 8. Plumbing 9. Carpentry 10. Bee keeping 11. Pickles, sauces, jam, jelly etc. 12. Two wheelers repairing 13. Animal husbandry 14. Backyard poultry 15. Vermi Compost

However, decision for adopting Economic Activities would rest with respective SHGs. Accordingly; these SHGs would be imparted trainings in the IGAs they opt for. Preliminary survey reveals reasonable potentials for the above mentioned Economic Activities and these could prove to be beneficial to poor people residing in selected Watershed villages.

Table 4.5: Details of Self Help Groups (SHGs) in the project area

1 S. N.	2 Name of MWS	3 Names of villages	4 Total no. of Constituted/registered SHGs				5 No. of members				6 No. of SC/ST in each category			7 No. of BPL in each category			8 Date of formation of SHGs			
			With only Men	With only Women	With both	Total	Categories	M	F	Total	M	F	Total	M	F	Total				
1.	Ludhaura/ 2C1A4e2a	Anchwar, Aterra (MB+Rural), Ludhaura, Pachokhar, Palhari, Turra	3	2		5	(i) Landless													
							(ii) SF													
							(iii) MF													
							(iv) LF													
2.	Palhari/ 2C1A4e2d	Palhari, Diwari, Ludhaura, Mahuta, Mungaura	3	4		7	(i) Landless													
							(ii) SF													
							(iii) MF													
							(iv) LF													
3.	Turra/ 2C1A4e1e	Aterra (Rural), Mahuta Turra	1	2		3	(i) Landless													
							(ii) SF													
							(iii) MF													
							(iv) LF													
4.	HadahaMafi/ 2C1A4e1b	Nagwara, Oraha, Semariya Kushal, Turra Hadaha Mafi	1	2		3	(i) Landless													
							(ii) SF													
							(iii) MF													
							(iv) LF													
5.	Piparahari/ 2C1A4e2c	Motiyari, Mugoura, Palhari, Paramai, Piparahari	1	2		3	(i) Landless													
							(ii) SF													
							(iii) MF													
							(iv) LF													
6.	Terra_B/ 2C1A4e2e	Mahuta, Turra, Diwali, Ludhaura Terra_B	3	1		4	(i) Landless													
							(ii) SF													
							(iii) MF													
							(iv) LF													

Table 4.6: Details of Formation of Self Help Groups

S. N.	Name of micro watershed	Name of village	No. of group	Date of constitution	Name of Adhyaksh	Name of Sachiv	Total No. of Members				Name of Bank and Address	Account No. & Date	Up to date Saving Rs.	Group activities
							Wo-men	Sc/St	Other	Total				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Ludhaura/ 2C1A4e2a	Anchwar, Aterra (MB+Rural), Ludhaura, Pachokhar, Palhari, Turra	22											Under Process
2	Palhari/ 2C1A4e2d	Palhari, Diwari, Ludhaura, Mahuta, Mungaura	18											Under Process
3	Turra/ 2C1A4e1e	Aterra (Rural), Mahuta Turra	20											Under Process
4	HadahaMafi/ 2C1A4e1b	Nagwara, Oraha, Semariya Kushal, Turra Hadaha Mafi	24											Under Process
5	Piparahari/ 2C1A4e2c	Motiyari, Mugoura, Palhari, Paramai, Piparahari	25											Under Process
6	Terra_B/ 2C1A4e2e	Mahuta, Turra, Diwali, Ludhaura Terra_B	22											Under Process

User groups:

The members of User groups would be those persons who would directly derive benefits from Watershed Activities. Resource use agreements are being worked out. The User groups will be responsible for the operation and maintenance of all the assets created under the Project. Formation of User groups is under process in all the villages covered under the Project. The members of User Groups would be imparted training by PIA for effectively managing the assets created.

Table 4.4: Details of User Groups

1 S. NO.	2 Name of MWS code	3 Names of Group	4 Total no. of Beneficiary				5 No. of members			6 No. of SC/ST in each category			7 No. of BPL in each category			8 Date of formation of UGS		
			Men	Women	Both	Total	Categories	M	F	Total	M	F	Total	M	F		Total	
1	2C1A4e2c	Dalhan Utpadan	14	-	-	14	(i) Landless	-	-	-	-	-	-	-	-	-	24.02.2012	
							(ii) SF	-	-	-	-	-	-	-	-	-		
							(iii) MF	-	-	-	-	-	-	-	-	-		
							(iv) LF	14	-	14	-	-	-	-	-	-		
		Jaivik Utpadan	15	-	-	15	(i) Landless	-	-	-	-	-	-	-	-	-	-	24.02.2012
							(ii) SF	-	-	-	-	-	-	-	-	-		
							(iii) MF	-	-	-	-	-	-	-	-	-		
							(iv) LF	15	-	15	-	-	-	-	-	-		
		Sabji Utpadan	11	2	-	13	(i) Landless	-	-	-	-	-	-	-	-	-	-	24.02.2012
							(ii) SF	-	-	-	-	-	-	-	-	-		
							(iii) MF	11	2	13	-	-	-	-	-	-		
							(iv) LF	-	-	-	-	-	-	-	-	-		
		Tilhan Utpadan	18	-	-	18	(i) Landless	-	-	-	-	-	-	-	-	-	-	24.02.2012
							(ii) SF	2	-	2	-	-	-	-	-	-		
							(iii) MF	16	-	16	-	-	-	-	-	-		
							(iv) LF	-	-	-	-	-	-	-	-	-		
Khadyaan	12	-	-	12	(i) Landless	-	-	-	-	-	-	-	-	-	-	24.02.2012		
					(ii) SF	-	-	-	-	-	-	-	-	-				
					(iii) MF	-	-	-	-	-	-	-	-	-				
					(iv) LF	12	-	12	-	-	-	-	-	-				

1	2	3	3				4				5			6			7	
S. NO.	Name of MWS code	Names of Group	Total no. of Beneficiary				No. of members				No. of SC/ST in each category			No. of BPL in each category			Date of formation of UGS	
			Men	Women	Both	Total	Categories	M	F	Total	M	F	Total	M	F	Total		
2	2C1A4e2e	Dalhan Utpadan	15	-	-	15	(i) Landless	-	-	-	-	-	-	-	-	-	28.02.2012	
							(ii) SF	-	-	-	-	-	-	-	-	-		
							(iii) MF	15	-	15	-	-	-	-	-	-		
							(iv) LF	-	-	-	-	-	-	-	-	-		
		Jaivik Utpadan	13	-	-	13	(i) Landless	-	-	-	-	-	-	-	-	-	-	28.02.2012
							(ii) SF	-	-	-	-	-	-	-	-	-		
							(iii) MF	13	-	13	-	-	-	-	-	-		
							(iv) LF	-	-	-	-	-	-	-	-	-		
		Sabji Utpadan	17	2	-	17	(i) Landless	-	-	-	-	-	-	-	-	-	-	28.02.2012
							(ii) SF	2	-	2	-	-	-	-	-	-		
							(iii) MF	15	-	15	-	-	-	-	-	-		
							(iv) LF	-	-	-	-	-	-	-	-	-		
		Tilhan Utpadan	14	-	-	14	(i) Landless	-	-	-	-	-	-	-	-	-	-	28.02.2012
							(ii) SF	4	-	4	-	-	-	-	-	-		
							(iii) MF	10	-	10	-	-	-	-	-	-		
							(iv) LF	-	-	-	-	-	-	-	-	-		
Khadyaan	12	-	-	12	(i) Landless	-	-	-	-	-	-	-	-	-	-	28.02.2012		
					(ii) SF	-	-	-	-	-	-	-	-	-				
					(iii) MF	8	-	8	-	-	-	-	-	-				
					(iv) LF	4	-	4	-	-	-	-	-	-				
3	2C1A4e1b	Dalhan Utpadan	15	-	-	15	(i) Landless	-	-	-	-	-	-	-	-	-	26.02.2012	
							(ii) SF	-	-	-	-	-	-	-	-	-		
							(iii) MF	-	-	-	-	-	-	-	-	-		
							(iv) LF	15	-	15	-	-	-	-	-	-		
		Jaivik Utpadan	11	-	-	11	(i) Landless	-	-	-	-	-	-	-	-	-	-	26.02.2012
							(ii) SF	-	-	-	-	-	-	-	-	-		
							(iii) MF	-	-	-	-	-	-	-	-	-		
							(iv) LF	11	-	11	-	-	-	-	-	-		
		Sabji Utpadan	15	-	-	15	(i) Landless	-	-	-	-	-	-	-	-	-	-	26.02.2012
							(ii) SF	-	-	-	-	-	-	-	-	-		
							(iii) MF	15	-	15	-	-	-	-	-	-		
							(iv) LF	-	-	-	-	-	-	-	-	-		
		Tilhan Utpadan	12	-	-	12	(i) Landless	-	-	-	-	-	-	-	-	-	-	26.02.2012
							(ii) SF	4	-	4	-	-	-	-	-	-		
							(iii) MF	8	-	8	-	-	-	-	-	-		
							(iv) LF	-	-	-	-	-	-	-	-	-		
Khadyaan	13	-	-	13	(i) Landless	-	-	-	-	-	-	-	-	-	-	26.02.2012		
					(ii) SF	10	-	10	-	-	-	-	-	-				
					(iii) MF	3	-	3	-	-	-	-	-	-				
					(iv) LF	-	-	-	-	-	-	-	-	-				

1	2	3	3				4				5			6			7	
S. NO.	Name of MWS code	Names of Group	Total no. of Beneficiary				No. of members				No. of SC/ST in each category			No. of BPL in each category			Date of formation of UGS	
			Men	Women	Both	Total	Categories	M	F	Total	M	F	Total	M	F	Total		
4	2C1A4e2d	Dalhan Utpadan	11	-	-	11	(i) Landless	-	-	-	-	-	-	-	-	-	20.02.2012	
							(ii) SF	-	-	-	-	-	-	-	-	-		
							(iii) MF	8	-	8	-	-	-	-	-	-		
							(iv) LF	3	-	3	-	-	-	-	-	-		
		Jaivik Utpadan	11	-	-	11	(i) Landless	-	-	-	-	-	-	-	-	-	-	20.02.2012
							(ii) SF	2	-	2	-	-	-	-	-	-		
							(iii) MF	6	-	6	-	-	-	-	-	-		
							(iv) LF	3	-	3	-	-	-	-	-	-		
		Tilhan Utpadan	12	-	-	12	(i) Landless	-	-	-	-	-	-	-	-	-	-	20.02.2012
							(ii) SF	-	-	-	-	-	-	-	-	-		
							(iii) MF	4	-	4	-	-	-	-	-	-		
							(iv) LF	8	-	8	-	-	-	-	-	-		
Khadyaan	15	-	-	15	(i) Landless	-	-	-	-	-	-	-	-	-	-	20.02.2012		
					(ii) SF	2	-	2	-	-	-	-	-	-				
					(iii) MF	6	-	6	-	-	-	-	-	-				
					(iv) LF	7	-	7	-	-	-	-	-	-				
5	2C1A4e2a	Dalhan Utpadan	13	-	-	13	(i) Landless	-	-	-	-	-	-	-	-	-	15.02.2012	
							(ii) SF	-	-	-	-	-	-	-	-	-		
							(iii) MF	2	-	2	-	-	-	-	-	-		
							(iv) LF	11	-	11	-	-	-	-	-	-		
		Jaivik Utpadan	20	-	-	20	(i) Landless	-	-	-	-	-	-	-	-	-	-	15.02.2012
							(ii) SF	2	-	2	-	-	-	-	-	-		
							(iii) MF	10	-	10	-	-	-	-	-	-		
							(iv) LF	8	-	8	-	-	-	-	-	-		
		Tilhan Utpadan	11	-	-	11	(i) Landless	-	-	-	-	-	-	-	-	-	-	15.02.2012
							(ii) SF	-	-	-	-	-	-	-	-	-		
							(iii) MF	7	-	7	-	-	-	-	-	-		
							(iv) LF	4	-	4	-	-	-	-	-	-		
Khadyaan	10	-	-	10	(i) Landless	-	-	-	-	-	-	-	-	-	-	15.02.2012		
					(ii) SF	-	-	-	-	-	-	-	-	-				
					(iii) MF	8	-	8	-	-	-	-	-	-				
					(iv) LF	2	-	2	-	-	-	-	-	-				

1	2	3	4				5			6			7					
S. NO.	Name of MWS code	Names of Group	Total no. of Beneficiary				No. of members				No. of SC/ST in each category			No. of BPL in each category			Date of formation of UGS	
			Men	Women	Both	Total	Categories	M	F	Total	M	F	Total	M	F	Total		
6	2C1A4e1e	Dalhan Utpadan	11	-	-	11	(i) Landless	-	-	-	-	-	-	-	-	-	05.02.2012	
							(ii) SF	2	-	2	-	-	-	-	-	-		
							(iii) MF	2	-	2	-	-	-	-	-	-		
							(iv) LF	7	-	7	-	-	-	-	-	-		
		Jaivik Utpadan	12	-	-	12	(i) Landless	-	-	-	-	-	-	-	-	-	-	05.02.2012
							(ii) SF	2	-	2	-	-	-	-	-	-		
							(iii) MF	-	-	-	-	-	-	-	-	-		
							(iv) LF	10	-	10	-	-	-	-	-	-		
		Tilhan Utpadan	10	-	-	10	(i) Landless	-	-	-	-	-	-	-	-	-	-	05.02.2012
							(ii) SF	2	-	2	-	-	-	-	-	-		
							(iii) MF	3	-	3	-	-	-	-	-	-		
							(iv) LF	5	-	5	-	-	-	-	-	-		
Khadyaan	11	-	-	11	(i) Landless	-	-	-	-	-	-	-	-	-	-	05.02.2012		
					(ii) SF	3	-	3	-	-	-	-	-	-				
					(iii) MF	6	-	6	-	-	-	-	-	-				
					(iv) LF	2	-	2	-	-	-	-	-	-				

Table 4.5: Details of Formation of User Groups (UGs)

S. No.	Name of MWS	Name of Village	Name of Group	Date of Constitution	Name of Adhyaks	Name of Sachiv	Total No. of Members				Name of Bank & Address	Account No. & Date	Up to date Saving	Group Activity	Status of User Agreement
							Women	Sc/St	Other	Total					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	2C1A4e2c	Piparhari	Dalhan Utpadan	24.02.2012	Balram	Rameshwar	-	-	14	14	-	-	-	-	-
			Jaivik Utpadan	24.02.2012	Rameshwar	Raja Ram	-	-	15	15	-	-	-	-	-
			Sabji Utpadan	24.02.2012	Asha	Bona	2	-	11	13	-	-	-	-	-
			Tilahan Utpadan	24.02.2012	Kishori	Jagan Nath	-	-	18	18	-	-	-	-	-
			Khadyamaan Utpadan	24.02.2012	Santosh	Hajari Prasad	-	-	12	12	-	-	-	-	-
2	2C1A4e2e	Terra-B	Dalhan Utpadan	28.02.2012	Uday Raj	Shiv Mohan	-	-	15	15	-	-	-	-	-
			Jaivik Utpadan	28.02.2012	Nathu	Gyan Swaroop	-	-	13	13	-	-	-	-	-
			Sabji Utpadan	28.02.2012	Rameshwar	Shiv Badan	-	-	17	17	-	-	-	-	-
			Tilahan Utpadan	28.02.2012	Chandra Kishor	Kuldeep	-	-	14	14	-	-	-	-	-
			Khadyamaan Utpadan	28.02.2012	Jag Nandan	Rameshwar	-	-	12	12	-	-	-	-	-
3	2C1A4e1b	Hadaha Mafi	Dalhan Utpadan	26.02.2012	Kunji Lal	Shiv Pujan	-	-	15	15	-	-	-	-	-
			Jaivik Utpadan	26.02.2012	Bhola	Shyam Lal	-	-	11	11	-	-	-	-	-
			Sabji Utpadan	26.02.2012	Ram Lakhan	Barati Lal	-	-	15	15	-	-	-	-	-
			Tilahan Utpadan	26.02.2012	Chandra Mohan	Jeevan Lal	-	-	12	12	-	-	-	-	-
			Khadyamaan Utpadan	26.02.2012	Shambhu	Awadhesh Kumar	-	-	13	13	-	-	-	-	-

S. No.	Name of MWS	Name of Village	Name of Group	Date of Constitution	Name of Adhyaks	Name of Sachiv	Total No. of Members				Name of Bank & Address	Account No. & Date	Up to date Saving	Group Activity	Status of User Agreement
							Women	Sc/St	Other	Total					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
4	2C1A4e2d	Palhari	Dalhan Utpadan	20.02.2012	Sajjan	Ram Ji	-	-	11	11	-	-	-	-	-
			Jaivik Utpadan	20.02.2012	Arjun	Omkar	-	2	9	11	-	-	-	-	-
			Tilahan Utpadan	20.02.2012	Shiv Mohan	Rameshwar	-	-	12	12	-	-	-	-	-
			Khadyamaan Utpadan	20.02.2012	Jayant	Ved Prakash	-	-	15	15	-	-	-	-	-
5	2C1A4e2a	Ludhaura	Dalhan Utpadan	15.02.2012	Mohan	Gajodhar	-	1	12	13	-	-	-	-	-
			Jaivik Utpadan	15.02.2012	Suresh	Mithai Lal	-	2	18	20	-	-	-	-	-
			Tilahan Utpadan	15.02.2012	Jag Prasad	Suresh	-	4	7	11	-	-	-	-	-
			Khadyamaan Utpadan	15.02.2012	Parvat	Chunbadiya	-	-	10	10	-	-	-	-	-
6	2C1A4e1e	Mahuta	Dalhan Utpadan	05.02.2012	Hariwansh	Ram Nihor	-	2	9	11	-	-	-	-	-
			Jaivik Utpadan	05.02.2012	Dowram	Hari Shankar	-	-	12	12	-	-	-	-	-
			Tilahan Utpadan	05.02.2012	Vijay Kant	Lalit	-	-	10	10	-	-	-	-	-
			Khadyamaan Utpadan	05.02.2012	Satya Narayan	Rampal	-	-	11	11	-	-	-	-	-

Convergence in IWMP-XII Banda: Several Central and State Govt. sponsored programmes are running in the district Banda. Some of them are listed below.

Table 4.9: List of Central/State sponsored schemes

S. No.	Name of Programme	Implementing Agency	Objectives of the Programme
1.	Seed Distribution Programme (Pulse Development & ISOPAM)	U.P. Agriculture Dept.	To increase seed replacement ratio for higher productivity
2.	Pump set Distribution (Food Security Mission)	Agriculture Dept.	To Provide irrigation facilities
3.	Training Programme	Agriculture Dept.	To increase Capacity building of the farmers
4.	HDPE pipe	Agriculture Dept.	-
5.	National Horticulture Mission (NHM)	Horticulture Dept.	To Increase fruits & vegetable production
6.	Sanitation Programme	Gram Vikash	To make hygienic condition in the rural areas
7.	Mid Day Meal	Gram Panchayat (DSO)	To provide education to school children without hunger
8.	MGNERGA (Bunding, Farm Pond, Adarsh Jalashay, Blast well, Chakroad, etc.)	Gram Panchayat	To provide work to all village personnel under the Rojgar Guarantee Yojana

CHAPTER – 5

MANAGEMENT / ACTION PLAN

ENTRY POINT ACTIVITY (EPA)

EPA activities are taken up under watershed projects to newly build or repair the already existing structures with the consultation of village community at the beginning of the project; generally, certain important works which are in urgent demand of the local community are taken up. A group Discussion was conducted with watershed Development Committee regarding the EPA activity, It was conveyed to the WC that an amount of Rs. 23.28 Lakhs was allotted for EPA activity, which was 4 per cent of total allocated budget. The villagers discussed various activities which they felt is important but after a brief discussion it was conveyed to them that only those activities can be taken, which revive the common natural resources. It was also taken into priority that there should be an instrument of convergence which will result in sustainability of activities.

EPA activities would be executed in the project area with a budget of Rs. 23.28 Lakhs.

PROPOSE EPA ACTIVITY



Details of Livelihood Activities in the project area

During discussions with the village communities by our Livelihood experts, several activities were discussed with them. The main objectives of these discussions were:

- Assure one livelihood option to poor families
- Assured livelihood for at least 300 days in a year
- At least one daily job per family SCs/BPL/ very poor families.

Form SHGs would be imparted skill training on identified Economic Activities and it is proposed to impart them trainings. It is proposed to lend revolving fund of Rs. 25000/- to each SHG/individuals formed in the watershed villages. Since the members from SHGs/landless are very poor, they do not have resources to start micro enterprises. It is envisaged that they should be assisted and given loan of this amount in the shape of Revolving Fund Assistance (RFA) so that they do not get trapped by money lenders. Funds thus given on loan are recoverable from SHGs/individuals in easy installments. It is also proposed to impart skill training to at least 10 unemployed youth from each village and give them trainings of their choice so that they establish some small enterprises. It is further proposed to give them interest free loan of Rs. 12000/- each as Revolving Fund Assistance (RFA) to meet their urgent needs of funds for establishing micro enterprises. Such funds recovered could either be back to SHGs/ individuals so some other SHGs/ individuals depending upon assessment of their respective needs. It is proposed to form 2 SHGs in each village and identify at least 10 youths in each village for imparting training and giving Revolving Fund.

Activities that is likely to be taken up by SHGs/ individuals

YEARWISE FINANCIAL BREAK UP OF LIVELIHOOD ACTIVITIES IWMP-XII, DISTRICT- Banda II

Amount in Lacs

S. No.	Micro watershed	Proposed Amount	Livelihood Activities 9% of the Total project Cost					TOTAL
			2011-12	2012-13	2013-14	2014-15	2015-16	
1	Ludhaura	10.24	0.00	1.14	2.84	2.84	3.41	10.24
2	Palhari	7.11	0.00	0.79	1.98	1.98	2.37	7.11
3	Turra	10.20	0.00	1.13	2.83	2.83	3.40	10.20
4	Hadhaha Mafi	8.58	0.00	0.95	2.38	2.38	2.86	8.58
5	Paramai	8.64	0.00	0.96	2.40	2.40	2.88	8.64
6	Tera B	7.61	0.00	0.85	2.12	2.12	2.54	7.61
Total		52.38	0.00	5.82	14.55	14.55	17.46	52.38

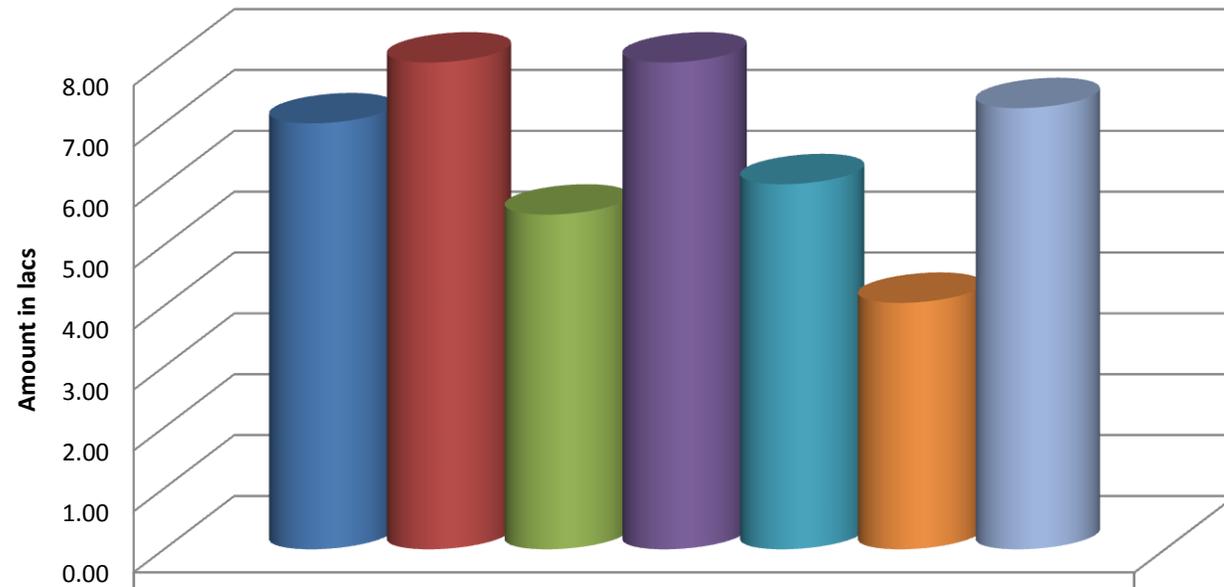
DETAILS OF LIVELIHOOD ACTIVITIES AT GLANCE UNDER IWMP-XII, DISTRICT- BANDA II

S. No.	Gram Panchayat	General Merchant Shop						Goat Keeping						Poultry					
		2011-12	2012-13	2013-14	2014-15	2015-16	Total	2011-12	2012-13	2013-14	2014-15	2015-16	Total	2011-12	2012-13	2013-14	2014-15	2015-16	Total
1	Aterra (MB+Rural)		1				1			1		1	2		1		1		2
2	Ludhaura				1	1	2		1			1	2			1			1
3	Pachokhar			1			1				1		1		1				1
4	Palhari		1				1			1		1	2				1		1
5	Turra			1		1	2		1	1			2			1			1
6	Mahuta		1		1		2				1	1	2		1				1
7	Piparhari			1			1			1		1	2					1	1
8	Turra		1			1	2		1				1			1			1
9	Barhenda		1		1		2			1	1		2		1		1		2
10	Nagwara			1		1	2		1			1	2					1	1
11	Oraha				1		1			1	1		2		1				1
12	Semariya Kushal		1		1		2		1			1	2				1		1
13	Motiyari				1		1				1		1		1	1			2
14	Mugoura		1	1			2		1	1		1	3					1	1
15	Paramai					1	1				1		1		1				1
16	Mahuta		1		1		2		1			1	2				1		1
17	Diwali			1		1	2			1	1		2			1		1	2
18	Tera B					1	1		1				1		1				1

S. No.	Gram Panchayat	Diary						Tailoring						Pottery						Weaving					
		2011-12	2012-13	2013-14	2014-15	2015-16	Total	2011-12	2012-13	2013-14	2014-15	2015-16	Total	2011-12	2012-13	2013-14	2014-15	2015-16	Total	2011-12	2012-13	2013-14	2014-15	2015-16	Total
1	Aterra (MB+Rural)		1			1	2		1		1		2			1			1		1				1
2	Ludhaura			1	1	1	3			1		1	2		1			1	2				1	1	2
3	Pachokhar		1				1				1		1				1		1			1			1
4	Palhari			1		1	2		1			1	2			1			1		1		1		2
5	Turra				1		1			1	1		2		1		1	1	3			1		1	2
6	Mahuta		1				1		1				1			1			1		1				1
7	Piparhari			1		1	2					1	1		1			1	2				1	1	2
8	Turra		1		1		2			1	1		2				1		1			1			1
9	Barhenda			1		1	2		1				1		1				1		1			1	2
10	Nagwara		1	1			2				1	1	2				1	1	2			1	1		2
11	Oraha				1		1			1			1			1			1					1	1
12	Semariya Kushal			1		1	2		1		1		2		1		1		2		1	1			2
13	Motiyari		1		1		2				1	1	2					1	1				1	1	2
14	Mugoura			1		1	2			1			1		1				2			1			1
15	Paramai		1			1	2		1			1	2			1			1		1			1	2
16	Mahuta			1	1		2			1	1	1	3					1	1			1	1		2
17	Diwali		1				1		1				1		1		1		2					1	1
18	Tera B				1	1	2				1	1	2			1		1	2		1	1			2

General Merchant Shop @ Rs. 25000/- per shop., Goat Keeping @ Rs. 25000/- per Goat and 02 Goat will be given per beneficiary costing Rs. 3000/- per number, Poultry - 20 Chuja per beneficiary @ Rs. 10/- per chuja costing 200/- and 20 k.g. feed and other support item L.s. Rs. 800/- Total 1000/- per beneficiary, Diary @ Rs. 25000/- per beneficiary, Tailoring @ Rs. 20000/- per beneficiary, Pottery @ Rs. 15000/- per beneficiary, Weaving @ Rs. 25000/- per beneficiary

Livelihood Expenditure on Different Activities



	1
■ General Merchant Shop	7.00
■ Goat Keeping	8.00
■ Poultry	5.50
■ Dairy	8.00
■ Tailoring	6.00
■ Pottery	4.05
■ Weaving	7.25

ACTIVITIES RELATED TO SHGs: Activities relating to income generation have been identified after several discussions with village communities. However final discussion in this regard will be taken after SHGs matures for 1st grading. Some of the activities identified are as under:

<u>Name of Activity</u>	<u>Unit Cost (Rs. In Lacs)</u>
• General Merchant Shop	0.25
• Goat Keeping	0.25
• Diary	0.25
• Tailoring & Cutting	0.20
• Pottery	0.15
• Poultry	0.25
• Weaving	0.25

There appears to be great potential for these activities and these activities are likely to generate income of Rs.2000/- to Rs.2500/- per member/per month. However no activities would be forced upon any SHGs and they would be free to decide the activity they would like to opt for their additional income. Based on their choice, Project report for the specified activity would be prepared and revolving fund of Rs.20000/ Rs.25000/- per SHG would be given for running their respective micro enterprise. If need arises for more funds for their Income Generation Activities at later stage, they would be assisted in getting loan from banks. SHGs thus formed would be provided all possible assistance to uplift for their Socio-Economic upliftment.

The following table gives expected income likely to be generated by SHGs:

FARM PRODUCTION SYSTEM (10%)

Type	Seed Demonstration Details	
Rabi Season	Wheat	Sorghum
	<p>1. Variety K 8027, NW-1012, 1076, HDR-77, Raj -107 2. Sowing Time: 15 November to 25 December 3- Seed rate – 100 -125 Kg/ hectare 4- Requirement of fertilizers / ha N- 125 Kg , P- 70 -75 Kg, K-70-75 Kg 5. FYM: 60 Ou. 6. Flowering Period: 80 to 85 days. 7. Crop Duration: 120-145 days. 8. Harvesting time: April to May 9. Yield: Irrigated: 50-60 Q/ha Un-irrigated: 30-35 Q/ha</p> <p>Note- Hence demonstration cost of wheat /ha is Rs 13000.00 and the Total cost increases @ 10 % for next year</p>	<p>1. Variety: CSH-16, 9, 14, CSB-13, 15 2. Requirement of Seed /ha - 15 kg 3. Sowing Time - 15 th July to 15 th August 4. Requirement of fertilizers/ha N- 60.0 Kg , P- 40.00Kg, K- 40.00 Kg 5. Fertilizers requirement / ha N- 80.0 Kg , P- 50Kg, K- 40 Kg FYM: 50q 6. Flowering Period: 80-85 days. 7. Crop Duration: 120 to 130 days. 8. Harvesting time : 25 September to 5 October 9. Yield: Grain: 18-20 q/ha Dry Fodder: 200-250q/ha</p> <p>Note- Hence demonstration cost of SORGHUM /ha is Rs 6500.00 and the Total cost increases @ 10 % for next year.</p>
	Gram	Mustard
	<p>1.Variety Irrigated - Udai , KWR – 108 , Pant G 186, Pusa-356 Rainfed - J.G. – 315 , Avrdhi 2. Sowing Time: 20 October to 15 November 3.Seed rate /ha – 75 -80 Kg 4.Fertilizers requirement / ha N- 25.0 Kg , P- 80Kg, K- 30 Kg 5.FYM: 60 q 6. Flowering Period: 60 to 75 days. 7. Crop Duration: 130-145 days. 8.Harvesting time : March To April 9.Harvesting time : February-March</p> <p>Note- Hence demonstration cost of Gram /ha is Rs 16500.00 and the Total cost increases @ 10 % for next year.</p>	<p>1.Variety: Varsha, CSV 13, 15 Late – Vjeta, Bundela 2. Requirement of Seed /ha - 12 kg/ha 3. Sowing Time - June last week 4. Requirement of fertilizers / ha N- 80.0 Kg , P- 40.00Kg, K- 30.00 Kg 5. FYM: 50 q 6. Flowering Period: 60-55 days. 7. Crop Duration: 100 to 110 days. 8. Harvesting time : Last December to January 9. Yield: Grain: 20-25 q/ha</p> <p>Note- Hence demonstration cost of Mustard /ha is Rs 6500.00 and the Total cost increases @ 10 % for next year.</p>

	Arhar	Maize
Kharif Season	<p>1. Variety -Long Duration: Malviya -13 NA -1, NA-2 Short Duration: UPAS-120, ICPL-151, 8801</p> <p>2- Seed rate /ha – 20 Kg</p> <p>3. Sowing Time: June-July</p> <p>4- Fertilizers requirement / ha N- 20.0 Kg, P- 50Kg, K- 40 Kg</p> <p>4. FYM: 50 q</p> <p>5. Flowering Period: Long Duration: 160 to 175 days. Short Duration: 110-120 days</p> <p>6. Crop Duration: Long Duration: 270-280 days. Short Duration: 130-140 days</p> <p>7. Harvesting time: Long Duration: March To April, Short Duration: November to December</p> <p>8. Yield: Long Duration: 18-20 Q/ha Short Duration: 20-25 Q/ha</p> <p>Note- Hence demonstration cost of Aarahar /ha is Rs 3500.00 and the Total cost increases @ 10 % for next year.</p>	<p>1. Variety: Hybrid: Ganga-2, 11,Shaktiman, Dakkan-7, Prakash, Sartaj</p> <p>2. Sankul: Tarun, Naveen, Kanchan, Sweta, Prabhat, Gaurav</p> <p>3. Requirement of Seed /ha - 15 kg I</p> <p>3. Sowing Time - 15 th July to 15 th August</p> <p>4. Requirement of fertilizers / ha N- 60.0 Kg , P- 40.00Kg, K- 40.00 Kg</p> <p>5. Fertilizers requirement / ha N- 80.0 Kg , P- 50Kg, K- 40 Kg FYM: 50 q</p> <p>6. Flowering Period: 80-85 days.</p> <p>7. Crop Duration: 120 to 130 days.</p> <p>8. Harvesting time: 25 September to 5 October</p> <p>9. Yield: Grain: 18-20 Q/ha Dry Fodder: 200-250 Q/ha</p> <p>Note- Hence demonstration cost of SORGHUM /ha is Rs 6500.00 and the Total cost cost increases @ 10 % for next year.</p>
	Seed	Distribution of high yield verity seed of Arhar, Wheat and maize, etc.
	Animal Husbandry	Organize of health camp animals, and feed for animals.
	Agriculture Toolkit	Distribution of agriculture toolkit to the individual.

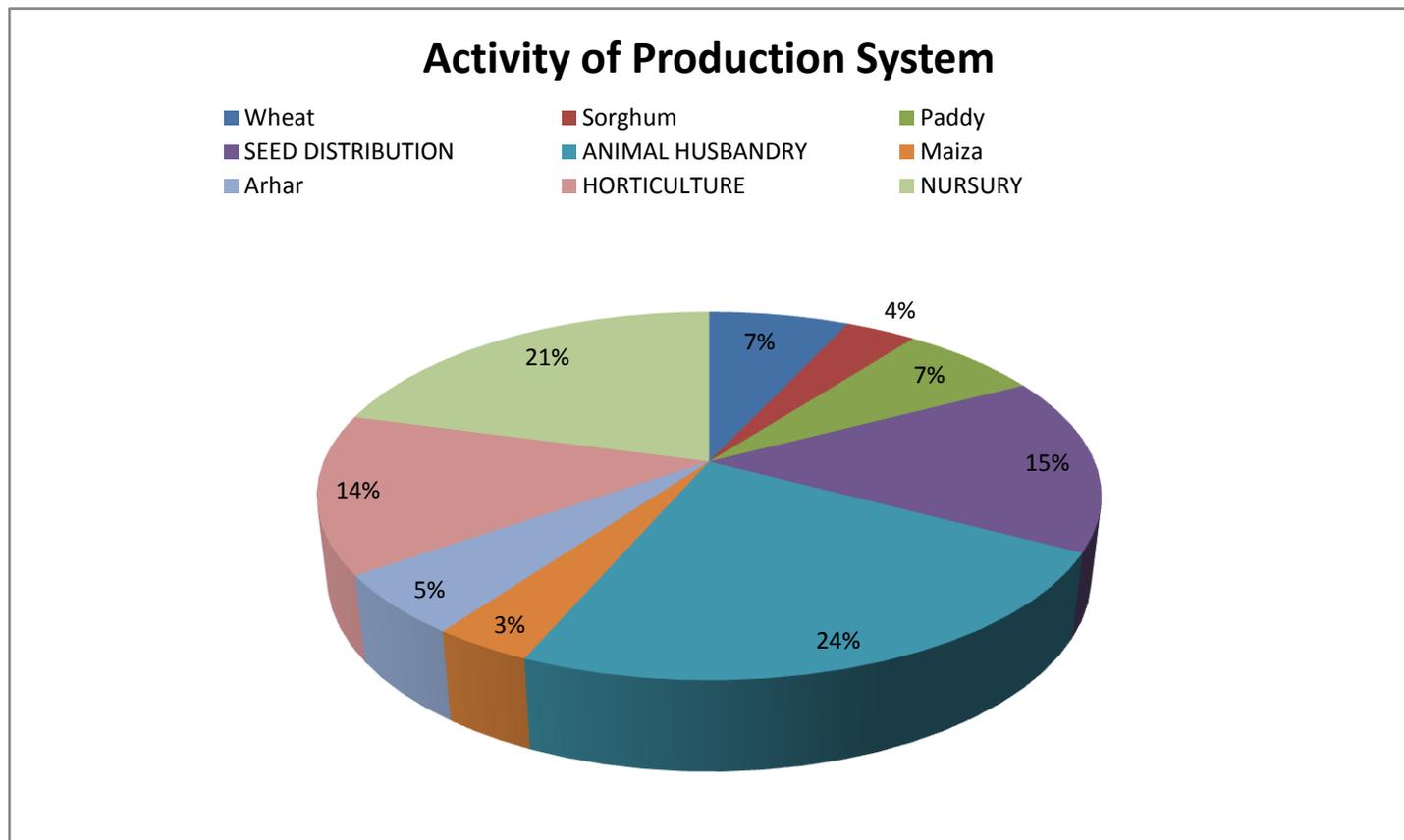
**DETAILS OF PRODUCTION SYSTEM & MICRO ENTERPRISES ACTIVITIES AT GLANCE
UNDER IWMP-XII, DISTRICT- BANDA II**

S. No	Gram Panchayat	CROP DEMONSTRATION					ANIMAL HUSBANDRY					HORTICULTURE					NURSURY					SEED DISTRIBUTION									
		2011-12	2012-13	2013-14	2014-15	2015-16	Total	2011-12	2012-13	2013-14	2014-15	2015-16	Total	2011-12	2012-13	2013-14	2014-15	2015-16	Total	2011-12	2012-13	2013-14	2014-15	2015-16	Total						
1	Aterra (MB+Rural)	0	1			1	2	0	1		2	1	4	0	1		1	1	3	0		1		1	2	0		1		1	2
2	Ludhoura	0		1			1	0		1		1	0		2	1		3	0	1		1		2	0	1		1		2	
3	Pachokhar	0			1		1	0	1	1	1	4	0	1	1	1	1	4	0		2		2	4	0	1	1	1	1	4	
4	Palhari	0	1			1	2	0	2		2	1	5	0	1		1	2	0	1		1		2	0		1	1		2	
5	Turra	0		1			1	0	1	1	1	2	5	0		1	1	1	3	0		1	2	1	4	0	1		1	1	3
6	Mahuta	0			1	1	2	0	2		2	1	5	0	1	1	2	4	0	1		1	2	4	0		1	1		2	
7	Piparhari	0	1		1		2	0	1	1	1	3	0			1	1	2	0		1	1		2	0	1			1	2	
8	Turra	0		1			1	0		2		4	0	1	1		1	3	0	1	2		1	4	0		1	1		2	
9	Barhenda	0			1	1	2	0	2	1	1	4	0	1		1	1	3	0		1	1		2	0	1	1		1	3	
10	Nagwara	0	1			1	2	0	1	1	2	1	5	0	1	2	1	4	0	1	1		2	4	0		1	1		2	
11	Oraha	0		1	1		2	0	2	1		4	0	1		1	1	3	0		1	2		3	0	1			1	2	
12	Semariya Kushal	0				1	1	0		2	1	4	0		1	1		2	0	1		1	1	3	0		1	1		2	
13	Motiyari	0	1		1		2	0	1	1	1	4	0	1		1	1	3	0		1	1		2	0	1	1	1	1	4	
14	Mugoura	0		1		1	2	0		1	1	2	4	0		2	1	4	0	1		1	2	4	0	1		1	1	3	
15	Paramai	0	1		1		2	0	1		1	2	0	1	1		1	3	0		2	1		3	0		1	1		2	
16	Mahuta	0		1		1	2	0	2	1		4	0			1	1	2	0	1	1	1	1	4	0	1	1		1	3	
17	Diwali	0	1	1			2	0	1	1	1	3	0	1	2	1		4	0		1	2		3	0		1	1		2	
18	Tera B	0		1	1		2	0		2		4	0		1		1	2	0	1		1	1	3	0	1		1	1	3	

Approx cost of crop demonstration is No. 1. Wheat - 13000.00 per ha, 2. Surghum - 6500.00 per ha, Arhar - 10000.00 per ha, Paddy - 13000.00 per ha and Maize - 6500.00 per ha. The Seed distribution cost is Rs. 20000.00 per GP, Animal husbandry - 20000.00 per GP, Horticulture - 15000.00 per GP and Nursery - 22000.00 per GP.

YEARWISE FINANCIAL BREAK UP OF PRODUCTION & MICRO ENTERPRISES, IWMP-XII, DISTRICT- Banda
Amount in Lacs

S. No.	Micro watershed	Proposed Amount	Production System & Microenterprises 10% of the Total Project Cost					WDF	
			2011-12	2012-13	2013-14	2014-15	2015-16		TOTAL
1	Ludhaura	11.38	0.00	1.14	2.84	2.84	4.55	11.38	1.14
2	Palhari	7.90	0.00	0.79	1.98	1.98	3.16	7.90	0.79
3	Turra	11.33	0.00	1.13	2.83	2.83	4.53	11.33	1.13
4	Hadhaha Mafi	9.53	0.00	0.95	2.38	2.38	3.81	9.53	0.95
5	Paramai	9.60	0.00	0.96	2.40	2.40	3.84	9.60	0.96
6	Tera B	8.46	0.00	0.85	2.12	2.12	3.38	8.46	0.85
Total		58.20	0.00	5.82	14.55	14.55	23.28	58.20	5.82



MAJOR PROBLEMS OF THE WATERSHEDS

- Moisture stress-Drought conditions
- Erosion hazard
- Excess runoff.
- Land degradation
- Low fertility of soil
- Ground water depletion/Low ground water table, poor quality of groundwater
- Low cropping intensity
- Lack of technical knowledge
- Lack of irrigation facilities
- Low productivity of crops
- Low availability of drinking water for human as well as animals
- Overgrazing
- Poor vegetative cover
- Poor/low productive breeds of milch animals
- Lower milk production
- Lack of feed & fodder availability
- Non availability of wood/fuel
- Lack of proper market facilities
- Lack of educational, transportation, medical & health care facilities
- Low wages
- Small land holdings
- Low income of the households
- Lack of employment opportunity.
- Migration from the project area.

An annual action plan for the entire activity of the project according to availability of budget has been proposed for the annual schedule from 2011 to 2016. The details given below:

Financial Break up of Watershed Development Works											Fin. : in Lacs		
MWS Code- 2C1A4e1e							MWS Name- Turra						
Activity	Target as AAP												
	2011-12		2012-13		2013-14		2014-15		2015-16		Total		
	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	
Land Development													
Afforestation													
Horticulture	0.00	0.00	0.00	0.00	1.25	0.21	1.75	0.30	2.00	0.34	5.00	0.85	
Agriculture													
SMC													
Contour Bonding													
PB/MB	0.00	0.00	32.40	2.18	40.50	2.72	40.50	2.72	48.60	3.26	162.00	10.88	
Bench terracing													
Veg. & Engg. Structures													
Earthen Checks													
Gully Plugs													
Others													
WHS													
SB													
CD/ RCD (WHB)	0.00	0.00	155.50	6.83	194.38	8.54	194.38	8.54	233.25	10.25	777.50	34.15	
Ground Water Recharge Structures		0.00		3.70		4.63		4.63		5.55		18.50	
Others													
Sub Total	0.00	0.00	187.90	12.71	236.13	16.09	236.63	16.18	283.85	19.40	944.50	64.38	
Livelihood		0.00		2.07		2.59		2.59		3.10		10.34	
Production System		0.00		2.30		2.87		2.87		3.45		11.50	
Grand Total	0.00	0.00	187.90	17.07	236.13	21.55	236.63	21.64	283.85	25.95	944.50	86.21	

Financial Break up of Watershed Development Works											Fin. : in Lacs	
MWS Code- 2C1A4e2a						MWS Name- Ludhaura						
Activity	Target as AAP											
	2011-12		2012-13		2013-14		2014-15		2015-16		Total	
	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
Land Development												
Afforestation												
Horticulture	0.00	0.00	0.00	0.00	1.25	0.21	1.75	0.30	2.00	0.34	5.00	0.85
Agriculture												
SMC												
Contour Bonding												
PB/MB	0.00	0.00	17.00	0.98	21.25	1.23	21.25	1.23	25.50	1.48	85.00	4.92
Bench terracing												
Veg. & Engg. Structures												
Earthen Checks												
Gully Plugs												
Others												
WHS												
SB	0.00	0.00	50.00	3.52	62.50	4.40	62.50	4.40	75.00	5.28	250.00	17.59
CD/ RCD (WHB)	0.00	0.00	121.60	6.28	152.00	7.85	152.00	7.85	182.40	9.42	608.00	31.41
Ground Water Recharge Structures		0.00		1.79		2.24		2.24		2.68		8.94
Others												
Sub Total	0.00	0.00	188.60	12.57	237.00	15.93	237.50	16.01	284.90	19.20	948.00	63.71
Livelihood		0.00		2.05		2.56		2.56		3.07		10.23
Production System		0.00		2.28		2.84		2.84		3.41		11.38
Grand Total	0.00	0.00	188.60	16.89	237.00	21.33	237.50	21.41	284.90	25.68	948.00	85.31

MWS Code- 2C1A4e2e				MWS Name- Terra-B								
Target as AAP												
Activity	2011-12		2012-13		2013-14		2014-15		2015-16		Total	
	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
Land Development												
Afforestation	0.00	0.00	0.00	0.14	0.00	0.24	0.00	0.27	0.00	0.20		0.68
Horticulture	0.00	0.00	0.00	0.00	1.25	0.21	1.75	0.30	2.00	0.34	5.00	0.85
Agriculture												
SMC												
Contour Bonding	0.00	0.00	20.00	0.59	25.00	0.74	25.00	0.74	30.00	0.89	100.00	2.97
PB/MB	0.00	0.00	14.00	0.65	17.50	0.82	17.50	0.82	21.00	0.98	70.00	3.27
Bench terracing												
Veg. & Engg. Structures												
Earthen Checks												
Gully Plugs												
Others												
WHS												
SB	0.00	0.00	16.00	0.80	20.00	1.00	20.00	1.00	24.00	1.19	80.00	3.98
CD/ RCD (WHB)	0.00	0.00	90.00	4.06	112.50	5.08	112.50	5.08	135.00	6.10	450.00	20.32
Ground Water Recharge Structures		0.00		2.88		3.60		3.60		4.32		14.40
Others												
Sub Total	0.00	0.00	140.00	9.12	176.25	11.69	176.75	11.80	212.00	14.03	705.00	46.47
Livelihood		0.00		1.49		1.86		1.86		2.24		7.45
Production System		0.00		1.66		2.08		2.08		2.49		8.30
Grand Total	0.00	0.00	140.00	12.27	176.25	15.62	176.75	15.74	212.00	18.75	705.00	62.22

MWS Code- 2C1A4e1b						MWS Name- Hadaha Mafi						
Target as AAP												
Activity	2011-12		2012-13		2013-14		2014-15		2015-16		Total	
	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
Land Development												
Afforestation	0.00	0.00	0.00	0.11	0.00	0.20	0.00	0.22	0.00	0.17	0.00	0.56
Horticulture	0.00	0.00	0.00	0.00	1.00	0.18	1.40	0.25	1.60	0.28	4.00	0.70
Agriculture												
SMC												
Contour Bonding	0.00	0.00	5.00	0.15	6.25	0.19	6.25	0.19	7.50	0.22	25.00	0.74
PB/MB	0.00	0.00	13.00	0.61	16.25	0.76	16.25	0.76	19.50	0.91	65.00	3.04
Bench terracing												
Veg. & Engg. Structures												
Earthen Checks												
Gully Plugs												
Others												
WHS												
SB	0.00	0.00	31.20	1.55	39.00	1.94	39.00	1.94	46.80	2.33	156.00	7.76
CD/ RCD (WHB)	0.00	0.00	108.80	5.57	136.00	6.96	136.00	6.96	163.20	8.35	544.00	27.84
Ground Water Recharge Structures		0.00		2.54		3.18		3.18		3.82		12.72
Others												
Sub Total	0.00	0.00	158.00	10.53	198.50	13.40	198.90	13.49	238.60	16.08	794.00	53.36
Livelihood		0.00		1.71		2.14		2.14		2.57		8.55
Production System		0.00		1.90		2.38		2.38		2.85		9.51
Grand Total	0.00	0.00	158.00	14.14	198.50	17.91	198.90	18.01	238.60	21.50	794.00	71.42

MWS Code- 2C1A4e2d						MWS Name- Palhari						
Activity	Target as AAP											
	2011-12		2012-13		2013-14		2014-15		2015-16		Total	
	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
Land Development												
Afforestation												
Horticulture	0.00	0.00	0.00	0.00	1.25	0.23	1.75	0.32	2.00	0.36	5.00	0.90
Agriculture												
SMC												
Contour Bonding												
PB/MB	0.00	0.00	4.40	0.30	5.50	0.37	5.50	0.37	6.60	0.44	22.00	1.48
Bench terracing												
Veg. & Engg. Structures												
Earthen Checks												
Gully Plugs												
Others												
WHS												
SB	0.00	0.00	20.40	1.37	25.50	1.72	25.50	1.72	30.60	2.06	102.00	6.86
CD/ RCD (WHB)	0.00	0.00	105.90	5.52	132.38	6.90	132.38	6.90	158.85	8.27	529.50	27.58
Ground Water Recharge Structures		0.00		1.49		1.86		1.86		2.23		7.43
Others												
Sub Total	0.00	0.00	130.70	8.67	164.63	11.06	165.13	11.15	198.05	13.37	658.50	44.25
Livelihood		0.00		1.42		1.78		1.78		2.13		7.11
Production System		0.00		1.58		1.98		1.98		2.37		7.90
Grand Total	0.00	0.00	130.70	11.67	164.63	14.82	165.13	14.91	198.05	17.87	658.50	59.26

MWS Code- 2C1A4e2c				MWS Name- Piparhari								
Activity	Target as AAP											
	2011-12		2012-13		2013-14		2014-15		2015-16		Total	
	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
Land Development												
Afforestation	0.00	0.00	0.00	0.23	0.00	0.40	0.00	0.45	0.00	0.34	0.00	1.13
Horticulture	0.00	0.00	0.00	0.00	1.25	0.36	1.75	0.50	2.00	0.57	5.00	1.42
Agriculture												
SMC												
Contour Bonding	0.00	0.00	20.00	0.59	25.00	0.74	25.00	0.74	30.00	0.89	100.00	2.97
PB/MB	0.00	0.00	47.00	2.19	58.75	2.74	58.75	2.74	70.50	3.29	235.00	10.97
Bench terracing												
Veg. & Engg. Structures												
Earthen Checks												
Gully Plugs												
Others												
WHS												
SB	0.00	0.00	20.00	1.00	25.00	1.25	25.00	1.25	30.00	1.49	100.00	4.98
CD/ RCD (WHB)	0.00	0.00	72.00	1.48	90.00	1.85	90.00	1.85	108.00	2.22	360.00	7.40
Ground Water Recharge Structures		0.00		4.98		6.22		6.22		7.47		24.89
Others												
Sub Total	0.00	0.00	159.00	10.47	200	13.55	200.50	13.75	240.50	16.27	800.00	53.76
Livelihood		0.00		1.73		2.16		2.16		2.59		8.64
Production System		0.00		1.92		2.40		2.40		2.88		9.60
Grand Total	0.00	0.00	159.00	14.12	200	18.11	200.50	18.31	240.50	21.74	800.00	72.00
Grand Total	0.00	0.00	964.20	86.17	1212.5	109.34	1215.40	110.02	1457.90	131.48	4850.00	436.50

Gram Panchayat Wise Annual Action Plan

MWS Code- 2C1A4e2a, 2C1A4e2d, 2C1A4e2e										GP Name-Ludhaura			
Activity	Target as AAP												
	2011-12		2012-13		2013-14		2014-15		2015-16		Total		
	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	
Land Development													
Afforestation													
Horticulture	0.00	0.00	0.00	0.00	1.25	0.21	1.75	0.30	2.00	0.34	5.00	0.85	
Agriculture													
SMC													
Contour Bonding													
PB/MB	0.00	0.00	4.00	0.37	5.00	0.46	5.00	0.46	6.00	0.55	20.00	1.83	
Bench terracing													
Veg. & Engg. Structures													
Earthen Checks													
Gully Plugs													
Others													
WHS													
SB	0.00	0.00	5.80	0.52	7.25	0.65	7.25	0.65	8.70	0.77	29.00	2.58	
CD/ RCD (WHB)	0.00	0.00	103.00	4.75	128.75	5.94	128.75	5.94	154.50	7.13	515.00	23.77	
Ground Water Recharge Structures		0.00		2.22		2.77		2.77		3.32		11.08	
Others													
Sub Total	0.00	0.00	112.80	7.85	142.25	10.03	142.75	10.11	171.20	12.12	569.00	40.11	
Livelihood		0.00		1.29		1.61		1.61		1.94		6.45	
Production System		0.00		1.43		1.79		1.79		2.15		7.16	
Grand Total	0.00	0.00	112.80	10.57	142.25	13.43	142.75	13.52	171.20	16.20	569.00	53.72	

MWS Code- 2C1A4e2d, 2C1A4e2e							GP Name-Terra-B					
Activity	Target as AAP											
	2011-12		2012-13		2013-14		2014-15		2015-16		Total	
	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
Land Development												
Afforestation	0.00	0.00	0.00	0.14	0.00	0.24	0.00	0.27	0.00	0.20	0.00	0.68
Horticulture	0.00	0.00	0.00	0.00	2.50	0.33	3.50	0.46	4.00	0.52	10.00	1.30
Agriculture												
SMC												
Contour Bonding	0.00	0.00	19.40	0.57	24.25	0.72	24.25	0.72	29.10	0.86	97.00	2.87
PB/MB	0.00	0.00	11.60	0.54	14.50	0.68	14.50	0.68	17.40	0.81	58.00	2.70
Bench terracing												
Veg. & Engg. Structures												
Earthen Checks												
Gully Plugs												
Others												
WHS												
SB	0.00	0.00	18.40	1.00	23.00	1.25	23.00	1.25	27.60	1.50	92.00	5.00
CD/ RCD (WHB)	0.00	0.00	89.40	4.04	111.75	5.06	111.75	5.06	134.10	6.07	447.00	20.22
Ground Water Recharge Structures		0.00		2.15		2.69		2.69		3.23		10.75
Others												
Sub Total	0.00	0.00	138.80	8.44	176.00	10.95	177.00	11.11	212.20	13.19	704.00	43.52
Livelihood		0.00		1.40		1.75		1.75		2.10		7.00
Production System		0.00		1.55		1.94		1.94		2.33		7.77
Grand Total	0.00	0.00	138.80	11.40	176.00	14.64	177.00	14.80	212.20	17.62	704.00	58.29

MWS Code- 2C1A4e1e, 2C1A4e2e							GP Name-Mahuta					
Activity	Target as AAP											
	2011-12		2012-13		2013-14		2014-15		2015-16		Total	
	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
Land Development												
Afforestation												
Horticulture	0.00	0.00	0.00	0.00	0.63	0.10	0.88	0.14	1.00	0.16	2.50	0.39
Agriculture												
SMC												
Contour Bonding	0.00	0.00	0.60	0.02	0.75	0.03	0.75	0.03	0.90	0.03	3.00	0.10
PB/MB	0.00	0.00	3.60	0.24	4.50	0.30	4.50	0.30	5.40	0.36	18.00	1.19
Bench terracing												
Veg. & Engg. Structures												
Earthen Checks												
Gully Plugs												
Others												
WHS												
SB	0.00	0.00	2.40	0.12	3.00	0.14	3.00	0.14	3.60	0.17	12.00	0.58
CD/ RCD (WHB)	0.00	0.00	21.50	1.26	26.88	1.57	26.88	1.57	32.25	1.89	107.50	6.29
Ground Water Recharge Structures												
Others												
Sub Total	0.00	0.00	28.10	1.63	35.75	2.14	36.00	2.18	43.15	2.60	143.00	8.54
Livelihood		0.00		0.27		0.34		0.34		0.41		1.37
Production System		0.00		0.31		0.38		0.38		0.46		1.53
Grand Total	0.00	0.00	28.10	2.21	35.75	2.86	36.00	2.90	43.15	3.47	143.00	11.44

MWS Code- 2C1A4e1b				GP Name-Hadaha Mafi								
Activity	Target as AAP											
	2011-12		2012-13		2013-14		2014-15		2015-16		Total	
	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
Land Development												
Afforestation	0.00	0.00	0.00	0.11	0.00	0.20	0.00	0.22	0.00	0.17	0.00	0.56
Horticulture	0.00	0.00	0.00	0.00	1.00	0.18	1.40	0.25	1.60	0.28	4.00	0.70
Agriculture												
SMC												
Contour Bonding												
PB/MB												
Bench terracing												
Veg. & Engg. Structures												
Earthen Checks												
Gully Plugs												
Others												
WHS												
SB	0.00	0.00	3.20	0.13	4.00	0.17	4.00	0.17	4.80	0.20	16.00	0.66
CD/ RCD (WHB)	0.00	0.00	33.80	2.68	42.25	3.35	42.25	3.35	50.70	4.01	169.00	13.38
Ground Water Recharge Structures		0.00		2.54		3.18		3.18		3.82		12.72
Others												
Sub Total	0.00	0.00	37.00	5.46	47.25	7.06	47.65	7.16	57.10	8.48	189.00	28.02
Livelihood		0.00		0.90		1.13		1.13		1.35		4.50
Production System		0.00		1.00		1.25		1.25		1.50		5.00
Grand Total	0.00	0.00	37.00	7.36	47.25	9.44	47.65	9.53	57.10	11.33	189.00	37.52

MWS Code- 2C1A4e1b			GP Name-Oraha									
Activity	Target as AAP											
	2011-12		2012-13		2013-14		2014-15		2015-16		Total	
	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
Land Development												
Afforestation												
Horticulture												
Agriculture												
SMC												
Contour Bonding												
PB/MB	0.00	0.00	2.40	0.11	3.00	0.14	3.00	0.14	3.60	0.17	12.00	0.57
Bench terracing												
Veg. & Engg. Structures												
Earthen Checks												
Gully Plugs												
Others												
WHS												
SB	0.00	0.00	13.60	0.80	17.00	1.00	17.00	1.00	20.40	1.19	68.00	3.98
CD/ RCD (WHB)	0.00	0.00	22.00	1.37	27.50	1.71	27.50	1.71	33.00	2.05	110.00	6.83
Ground Water Recharge Structures												
Others												
Sub Total	0.00	0.00	38.00	2.28	47.50	2.85	47.50	2.85	57.00	3.41	190.00	11.38
Livelihood		0.00		0.37		0.46		0.46		0.55		1.83
Production System		0.00		0.41		0.51		0.51		0.61		2.03
Grand Total	0.00	0.00	38.00	3.05	47.50	3.81	47.50	3.81	57.00	4.57	190.00	15.24

MWS Code- 2C1A4e1b			GP Name-Nagwara									
Activity	Target as AAP											
	2011-12		2012-13		2013-14		2014-15		2015-16		Total	
	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
Land Development												
Afforestation												
Horticulture												
Agriculture												
SMC												
Contour Bonding	0.00	0.00	5.00	0.15	6.25	0.19	6.25	0.19	7.50	0.22	25.00	0.74
PB/MB	0.00	0.00	8.60	0.44	10.75	0.55	10.75	0.55	12.90	0.66	43.00	2.19
Bench terracing												
Veg. & Engg. Structures												
Earthen Checks												
Gully Plugs												
Others												
WHS												
SB	0.00	0.00	4.40	0.19	5.50	0.24	5.50	0.24	6.60	0.28	22.00	0.94
CD/ RCD (WHB)												
Ground Water Recharge Structures												
Others												
Sub Total	0.00	0.00	18.00	0.77	22.50	0.97	22.50	0.97	27.00	1.16	90.00	3.87
Livelihood		0.00		0.12		0.16		0.16		0.19		0.62
Production System		0.00		0.14		0.17		0.17		0.21		0.69
Grand Total	0.00	0.00	18.00	1.04	22.50	1.30	22.50	1.30	27.00	1.55	90.00	5.18

MWS Code- 2C1A4e2c							GP Name-Paramai					
Activity	Target as AAP											
	2011-12		2012-13		2013-14		2014-15		2015-16		Total	
	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
Land Development												
Afforestation												
Horticulture												
Agriculture												
SMC												
Contour Bonding	0.00	0.00	10.00	0.30	12.50	0.38	12.50	0.38	15.00	0.45	50.00	1.50
PB/MB	0.00	0.00	5.00	0.45	6.25	0.57	6.25	0.57	7.50	0.68	25.00	2.26
Bench terracing												
Veg. & Engg. Structures												
Earthen Checks												
Gully Plugs												
Others												
WHS												
SB												
CD/ RCD (WHB)												
Ground Water Recharge Structures												
Others												
Sub Total	0.00	0.00	15.00	0.75	18.75	0.94	18.75	0.94	22.50	1.13	75.00	3.76
Livelihood		0.00		0.12		0.15		0.15		0.18		0.60
Production System		0.00		0.13		0.17		0.17		0.20		0.67
Grand Total	0.00	0.00	15.00	1.01	18.75	1.26	18.75	1.26	22.50	1.51	75.00	5.03

MWS Code- 2C1A4e2c						GP Name-Motiyari						
Activity	Target as AAP											
	2011-12		2012-13		2013-14		2014-15		2015-16		Total	
	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
Land Development												
Afforestation												
Horticulture												
Agriculture												
SMC												
Contour Bonding												
PB/MB												
Bench terracing												
Veg. & Engg. Structures												
Earthen Checks												
Gully Plugs												
Others												
WHS												
SB												
CD/ RCD (WHB)	0.00	0.00	13.00	1.03	16.25	1.29	16.25	1.29	19.50	1.55	65.00	5.16
Ground Water Recharge Structures												
Others												
Sub Total	0.00	0.00	13.00	1.03	16.25	1.29	16.25	1.29	19.50	1.55	65.00	5.16
Livelihood		0.00		0.17		0.21		0.21		0.25		0.83
Production System		0.00		0.18		0.23		0.23		0.28		0.92
Grand Total	0.00	0.00	13.00	1.38	16.25	1.73	16.25	1.73	19.50	2.07	65.00	6.91

MWS Code- 2C1A4e2c			GP Name-Piparhari									
Activity	Target as AAP											
	2011-12		2012-13		2013-14		2014-15		2015-16		Total	
	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
Land Development												
Afforestation	0.00	0.00	0.00	0.23	0.00	0.40	0.00	0.45	0.00	0.34	0.00	1.13
Horticulture	0.00	0.00	0.00	0.00	1.25	0.36	1.75	0.50	2.00	0.57	5.00	1.42
Agriculture												
SMC												
Contour Bonding	0.00	0.00	10.00	0.29	12.50	0.37	12.50	0.37	15.00	0.44	50.00	1.47
PB/MB	0.00	0.00	42.00	1.74	52.50	2.18	52.50	2.18	63.00	2.61	210.00	8.71
Bench terracing												
Veg. & Engg. Structures												
Earthen Checks												
Gully Plugs												
Others												
WHS												
SB	0.00	0.00	20.00	1.00	25.00	1.25	25.00	1.25	30.00	1.49	100.00	4.98
CD/ RCD (WHB)	0.00	0.00	59.00	0.45	73.75	0.56	73.75	0.56	88.50	0.67	295.00	2.24
Ground Water Recharge Structures		0.00		4.98		6.22		6.22		7.47		24.89
Others												
Sub Total	0.00	0.00	131.00	8.68	165.00	11.32	165.50	11.52	198.50	13.59	660.00	44.84
Livelihood		0.00		1.44		1.80		1.80		2.16		7.20
Production System		0.00		1.60		2.00		2.00		2.40		8.00
Grand Total	0.00	0.00	131.00	11.72	165.00	15.12	165.50	15.32	198.50	18.15	660.00	60.04

MWS Code- 2C1A4e2d						GP Name-Palhari							
Activity	Target as AAP												
	2011-12		2012-13		2013-14		2014-15		2015-16		Total		
	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	
Land Development													
Afforestation													
Horticulture	0.00	0.00	0.00	0.00	0.63	0.11	0.88	0.16	1.00	0.18	2.50	0.45	
Agriculture													
SMC													
Contour Bonding													
PB/MB	0.00	0.00	4.00	0.26	5.00	0.33	5.00	0.33	6.00	0.39	20.00	1.30	
Bench terracing													
Veg. & Engg. Structures													
Earthen Checks													
Gully Plugs													
Others													
WHS													
SB	0.00	0.00	15.60	1.05	19.50	1.32	19.50	1.32	23.40	1.58	78.00	5.27	
CD/ RCD (WHB)	0.00	0.00	39.90	0.40	49.88	0.51	49.88	0.51	59.85	0.61	199.50	2.02	
Ground Water Recharge Structures		0.00		2.24		2.80		2.80		3.36		11.19	
Others													
Sub Total	0.00	0.00	59.50	3.96	75.00	5.06	75.25	5.10	90.25	6.11	300.00	20.23	
Livelihood		0.00		0.65		0.81		0.81		0.98		3.25	
Production System		0.00		0.72		0.91		0.91		1.09		3.62	
Grand Total	0.00	0.00	59.50	5.33	75.00	6.78	75.25	6.82	90.25	8.18	300.00	27.10	

MWS Code- 2C1A4e1e, 2C1A4e1b, 2C1A4e2c											GP Name-Turra	
Activity	Target as AAP											
	2011-12		2012-13		2013-14		2014-15		2015-16		Total	
	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
Land Development												
Afforestation												
Horticulture	0.00	0.00	0.00	0.00	0.75	0.12	1.05	0.16	1.20	0.18	3.00	0.46
Agriculture												
SMC												
Contour Bonding												
PB/MB	0.00	0.00	46.60	2.76	58.25	3.45	58.25	3.45	69.90	4.14	233.00	13.80
Bench terracing												
Veg. & Engg. Structures												
Earthen Checks												
Gully Plugs												
Others												
WHS												
SB	0.00	0.00	54.20	3.44	67.75	4.30	67.75	4.30	81.30	5.15	271.00	17.18
CD/ RCD (WHB)	0.00	0.00	271.60	13.76	339.50	17.20	339.50	17.20	407.40	20.64	1358.00	68.79
Ground Water Recharge Structures		0.00		3.26		4.07		4.07		4.89		16.29
Others												
Sub Total	0.00	0.00	372.40	23.21	466.25	29.13	466.55	29.18	559.80	35.00	1865.0	116.53
Livelihood		0.00		3.75		4.68		4.68		5.62		18.73
Production System		0.00		4.16		5.20		5.20		6.24		20.80
Grand Total	0.00	0.00	372.40	31.12	466.25	39.01	466.55	39.06	559.80	46.86	1865.0	156.06
Grand Total	0.00	0.00	963.60	86.19	1212.5	109.37	1215.7	110.05	1458.2	131.52	4850.0	436.50

CHAPTER – 6

CAPACITY BUILDING PLAN

The total amount in this activity is Rs 29.10 lacs have been allocated. According to distribution of fund in different level, a comprehensive detail action plan has been prepared for proper execution of human resource development in the project activities.

			First Year				Second Year			
S. No.	Level	Total no of person	No of person to be trained	No of training to be conduct	Training day	Total Cost	No of person to be trained	No of training to be conduct	Training day	Total Cost
1	SLNA					0.70				0.47
2	WCDC	21	21	2	3	1.75	15	2	3	1.16
3	PIA	19	19	3	4	1.61	14	3	4	1.07
4	WDT	3	3	3	3	0.80	3	2	4	0.54
5	SHG	160	160	1	2	2.01	125	1	3	1.34
6	UG	240	240	1	2	2.81	190	1	2	1.87
7	WC	170	170	1	2	0.80	115	1	2	0.54
	TOTAL					10.48				6.98
Third Year					Fourth Year					
No of person to be trained	No of training to be conduct	Training day	Total Cost	No of person to be trained	No of training to be conduct	Training day	Total Cost			
			0.58				0.00			
12	2	4	1.46	0	0	0	0.87			
12	2	4	1.34	10	2	4	0.41			
3	2	6	0.67	3	2	6	0.20			
90	1	3	1.67	50	1	1	0.51			
175	1	2	2.34	125	1	1	0.71			
95	1	2	0.67	65	2	1	0.20			
			8.73				2.91			

CHAPTER -7
PHASING OF PROGRAMME &
BUDGETING

**FINANCIAL BREAKUP OF VARIOUS COMPONENT IN TERMS OF % OF IWMP-XII,
DISTRICT- BANDA II**

Amount in Lacs

S. No.	Micro Watershed	Project Area	Proposed Amount	Administrative 10%	EPA 4%	Institution and CB 5%	DPR 1%	Watershed development work 56%	Livelihood for asset less 9%	Production system and Microenterprises 10%	Monitoring 1%	Evaluation 1%	Consolidation 3%	Total 100%
1	Ludhaura	948	113.76	11.38	4.55	5.69	1.14	63.71	10.24	11.38	1.14	1.14	3.41	113.76
2	Palhari	658.5	79.02	7.90	3.16	3.95	0.79	44.25	7.11	7.90	0.79	0.79	2.37	79.02
3	Turra	944.5	113.34	11.33	4.53	5.67	1.13	63.47	10.20	11.33	1.13	1.13	3.40	113.34
4	Hadhaha Mafi	794	95.28	9.53	3.81	4.76	0.95	53.36	8.58	9.53	0.95	0.95	2.86	95.28
5	Paramai	800	96.00	9.60	3.84	4.80	0.96	53.76	8.64	9.60	0.96	0.96	2.88	96.00
6	Tera B	705	84.60	8.46	3.38	4.23	0.85	47.38	7.61	8.46	0.85	0.85	2.54	84.60
	Total	4850	582.00	58.20	23.28	29.10	5.82	325.92	52.38	58.20	5.82	5.82	17.46	582.00

**YEARWISE PHYSICAL AND FINANCIAL BREAK UP OF WORK COMPONENT OF IWMP-XII,
DISTRICT- BANDA II**

Phy. in ha, Amount in Lacs

Watershed Development Works 56% of the Project Cost

S. No.	Micro Watershed	Project Area	Proposed Amount	2011-12		2012-13		2013-14		2014-15		2015-16		TOTAL	
				Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
1	Ludhaura	948.00	113.76	0.00	0.00	126.96	8.53	273.82	18.40	273.82	18.40	273.40	18.37	948.00	63.71
2	Palhari	658.50	79.02	0.00	0.00	88.19	5.93	190.20	12.78	190.20	12.78	189.91	12.76	658.50	44.25
3	Turra	944.50	113.34	0.00	0.00	126.49	8.50	272.81	18.33	272.81	18.33	272.39	18.30	944.50	63.47
4	Hadhaha Mafi	794.00	95.28	0.00	0.00	106.33	7.15	229.34	15.41	229.34	15.41	228.99	15.39	794.00	53.36
5	Paramai	800.00	96.00	0.00	0.00	107.14	7.20	231.07	15.53	231.07	15.53	230.72	15.50	800.00	53.76
6	Tera B	705.00	84.60	0.00	0.00	94.41	6.35	203.63	13.68	203.63	13.68	203.32	13.66	705.00	47.38
	Total	4850.00	582.00	0.00	0.00	649.51	43.65	1400.87	94.14	1400.87	94.14	1398.74	93.99	4850.00	325.92

**GRAM PANCHAYAT WISE PHYSICAL AND FINANCIAL BREAK UP OF WORK COMPONENT OF IWMP-XII,
DISTRICT- BANDA II**

Watershed Development Works 56% of the Project Cost

Phy. in ha, Amount in Lacs

S. No.	Gram Panchayat	Project Area	Proposed Amount	2011-12		2012-13		2013-14		2014-15		2015-16		TOTAL	
				Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
1	Aterra (MB+Rural) Ludhaura Pachokhar Palhari Turra	948.00	113.76	0.00	0.00	126.96	8.53	273.82	18.40	273.82	18.40	273.40	18.37	948.00	63.71
2	Ludhaura Mahuta Mungaora Piparhari	658.50	79.02	0.00	0.00	88.19	5.93	190.20	12.78	190.20	12.78	189.91	12.76	658.50	44.25
3	Aterra (Rural) Mahuta Turra	944.50	113.34	0.00	0.00	126.49	8.50	272.81	18.33	272.81	18.33	272.39	18.30	944.50	63.47
4	Nagwara Oraha Semariya Kushal Turra	794.00	95.28	0.00	0.00	106.33	7.15	229.34	15.41	229.34	15.41	228.99	15.39	794.00	53.36
5	Motiyari Mugoura Palhari Paramai Piparhari	800.00	96.00	0.00	0.00	107.14	7.20	231.07	15.53	231.07	15.53	230.72	15.50	800.00	53.76
6	Mahuta Turra Diwali Ludhaura Tera B	705.00	84.60	0.00	0.00	94.41	6.35	203.63	13.68	203.63	13.68	203.32	13.66	705.00	47.38
	Total	4850.00	582.00	0.00	0.00	649.51	43.65	1400.87	94.14	1400.87	94.14	1398.74	93.99	4850.00	325.92

CHAPTER -8

QUALITATIVE ISSUES

PLAN FOR MONITORING OF THE PROJECT

The above project would be monitored regularly by the Watershed Development Team as per the norms of common guideline 2008. There will be every fortnight monitoring schedule have been proposed by the PIA of the project. 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 stakeholder 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 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.

PLAN FOR EVALUATION OF THE PROJECT

The evaluation of the project would be done by the state and central agency as proposed by the SLNA of the state. The evaluation of the project would also be done by the expert of the respective field like Water Management and Land Resources Management after the completion of the project.

PLAN FOR PROJECT MANAGEMENT

The project management of a watershed programme is very important. It mainly depends upon the community organization and the village level institutes. In watershed committee and various user groups have been formulated for post project operation and maintenance of assets created during project period. Major emphasis will on equity and sustainable benefit of the project even after implementation stage. A proper linkup 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.

CHAPTER -9

CONSOLIDATION / EXIT STRATEGY

WATERSHED DEVELOPMENT FUND

The major source of financial assistance after post implementation period is Watershed Development Fund. The contribution of it will come mainly from the fund generated.

USER CHARGES

Various user groups will be formed in village. These user groups will collect user 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.

SUSTAINABILITY AND ENVIRONMENT SECURITY

In the proposed watershed management plan of I.W.M.P.-XII Banda watershed, proper blending of bio engineering measures will be applied on 60% of the total watershed area. Based on the results of studies conducted in this region, it is estimated that more 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 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.

ECONOMIC ANALYSIS

Economic analysis of the project was carried by taking direct benefits and costs considering 25 year project life at 10 per cent discount rate. For this purpose of economic analysis, whole watershed development plan was divided into three sectors namely,

Agriculture, horticulture and forest/fuel wood plantation. Net present value (NPV), Benefit cost ratio (BC) ratio criteria were employed to judge the economic efficiency of each enterprise and sector.

AGRICULTURE

In rainfed agriculture the development cost can be recovered within one year as the present rainfed agriculture is being done on well maintained field, therefore, does not require much investment.

CHAPTER -10

EXPECTED OUTCOME

EMPLOYMENT

Employment has always been a problem in the village. The principal occupations of the people are dry land agriculture, animal husbandry and casual labour work. Animal husbandry does not keep them engaged full time, thus the people mainly depend upon casual labour, either in the village itself or outside it.

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

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

MIGRATION

On account of agriculture and animal husbandry providing only part time employment for some part of the year, the people migrate for a better half of the year for wage labour. Employment opportunities in the local area as mentioned above will ensure lessening seasonal migration from the area.

DRINKING WATER

As a result of the watershed activities, it is expected that the quantity and quality of drinking water would be improve. The ground water quality of the project area is normal to good, the average Ph value is 6.7 to 7.8, the Electric conductivity of the ground water is about 957 to 1125 μ . The overall analysis of the ground water shows that the water is good for the drinking purpose. The water level in the project area ranges from 14.0 to 17.0 meters.

VEGETATIVE COVER

There is negligible area under tree cover. The village has a negligible forest area which consists of only Prosopis Juliflora (babool). Trees like Neem and Alianthus are seen just here and there, not concentrated in any area.

AGRICULTURE

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

The farmers also do not have suitable cropping systems to deal aberrant weather. Weeds impose considerable constraints in producing of both Kharif and rabi crops under irrigation as well as rain-fed

production system. Use of weedicide is rare in the watershed. It is expected that the post project period would see a substantial increase in agriculture production and yield from them.

LIVESTOCK

The village has quite a good of livestock population. These include cows, bullocks, buffaloes, goats. The interventions like provision of good quality cows and buffaloes, the establishment of a fodder bank and other such related activities would spur up the dairy development in the village. It is expected that the post project period would see a substantial increase in livestock population and yield from them.

ABTRACT OF OUTCOMES

The overall assessment of the project certain parameters have been evaluated on the present and future basis. As mentioned in the above the food grain production according to the expenditure have been analysed after the completion of the project.

Ratio of Cost and Profit							
S. No.	Name of Cereal	Area in ha	Production /ha in q	Invest Cost/ha	Rate/q	Net profit/ha	Total Net profit
1	Paddy	3047.40	16.50	4000	1000	12500	38092500.00
2	Arhar	536.40	7.50	2300	4500	31450	16869780.00
3	Urd/Moong	241.30	5.50	3300	800	1100	265430.00
4	Wheat	2067.60	22.00	4200	1000	17800	36803280.00
5	Mustard	737.60	5.25	2600	2000	7900	5827040.00
	Total	6630.30					97858030.00

Status After Work:							
S. No.	Name of Cereal	Area in hectare	Production /ha in q	Invest Cost/ha	Rate/q	Net profit/ha	Total Net profit
1	Paddy	3550.00	20.00	4000	1000	16000	56800000.00
2	Arhar	675.50	8.50	2300	4500	35950	24284225.00
3	Urd/Moong	280.00	7.50	3600	800	2400	672000.00
4	Wheat	2380.60	26.05	4200	1000	21850	52016110.00
5	Mustard	790.80	7.50	2600	2000	12400	9805920.00
	Total	7676.90					143578255.00
After the treatment of Land						143578255.00	
Before the treatment of Land						97858030.00	
Net Profit						45720225.00	
Ratio of cost and profit						1.47	
The above ratio clearly indicated that the conservation of land is extremely profitable.							

SUMMARY OF EXPECTED /ESTIMATED OUTCOMES OF IWMP-XII of District- Banda (2011-2016)

S. No.	Name of the District	Item	Unit of Measurement	Pre-project Status	Expected Post-project Status
1	2	3	4	5	6
1	Banda	Status of water table	Meter	16.00-17.00	14.00-15.00
2		Grand water structure repaired/ rejuvenated	-	-	-
3		Quality of drinking water	Good	Good	Good
4		Availability of drinking water	Meter	09 months	12 Months
5		Increase in irrigation potential			
6		Change in cropping/land use pattern	-	Jowar, Til	Double Cropping
7		Area under agriculture crop	ha	5654.40	5720.50
8		i- Area under single crop	ha	3703.90	3600.00
9		ii- Area under double crop	ha	2914.00	3015.50
10		iii- Area under multiple crop	ha	-	50
11		iv-Cropping Intensity	%	136.71	140.20
12		Increase in area under vegetation	ha	175	250
13		Increase in area under horticulture	ha	165	300
14		Increase in area under fuel & fodder	ha	3.50	5.75
15		Increase in milk production	Lt/day	3.00	3.50
16		No. of SHGs	No.	16	25
17		Increase in no. of livelihoods	No.	-	54
18		Migration	No.	260	150
19		SHG Federation formed	No.	-	-
20		Credit Linkage with banks	-	-	-

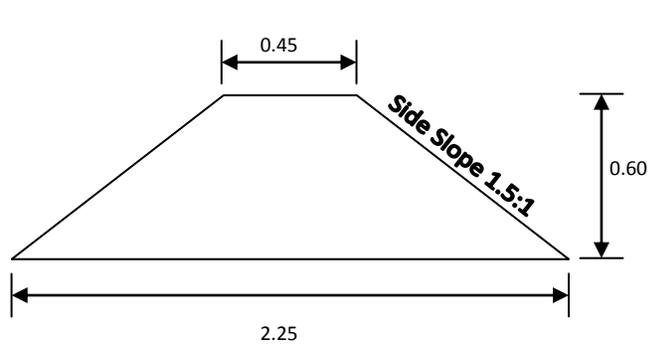
Chapter-11

COST NORMS & DESIGN OF STRUCTURE

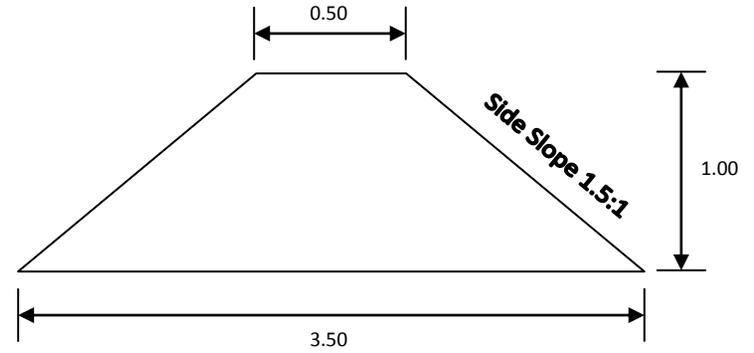
PROPOSED

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

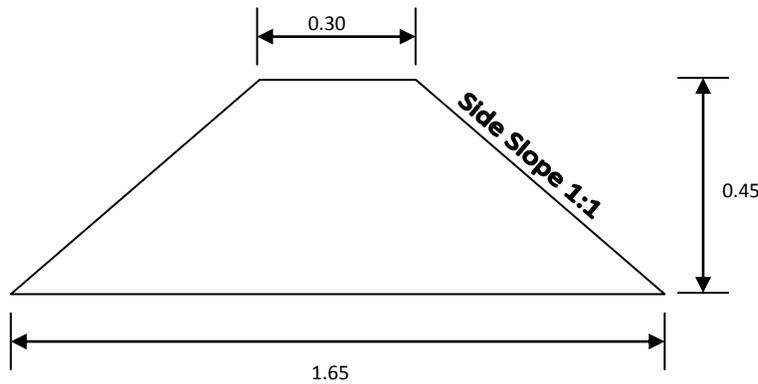
(Not to Scale)



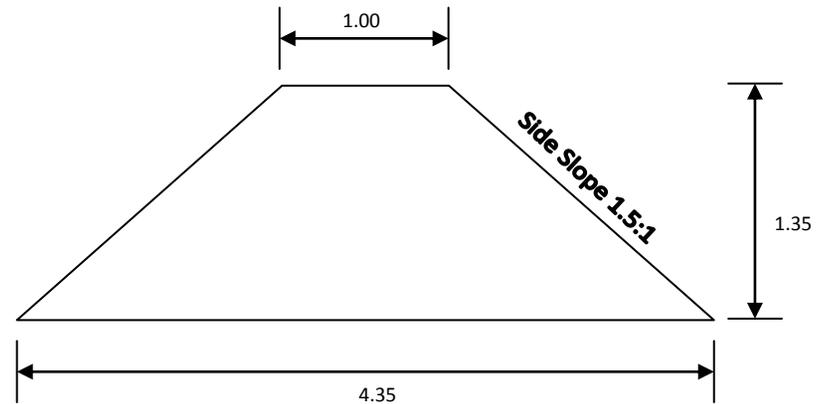
(C.B., Cross-Section – 1.081 m²)



(S.B., Cross-Section – 2.00m²)



(Field Bund, Cross-Section – 0.438 m²)

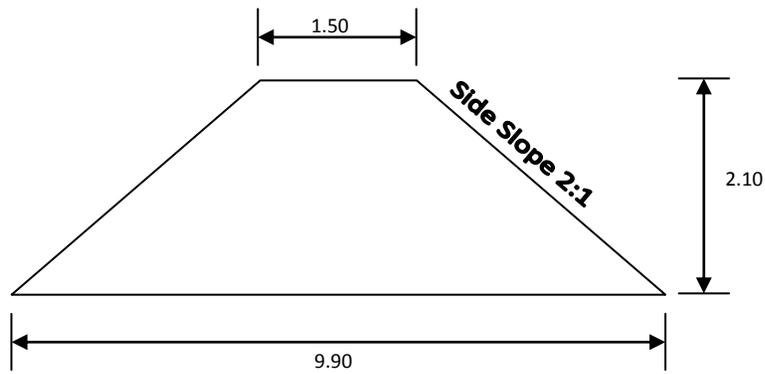


(P.B. /M.B., Cross-Section – 3.60 m²)

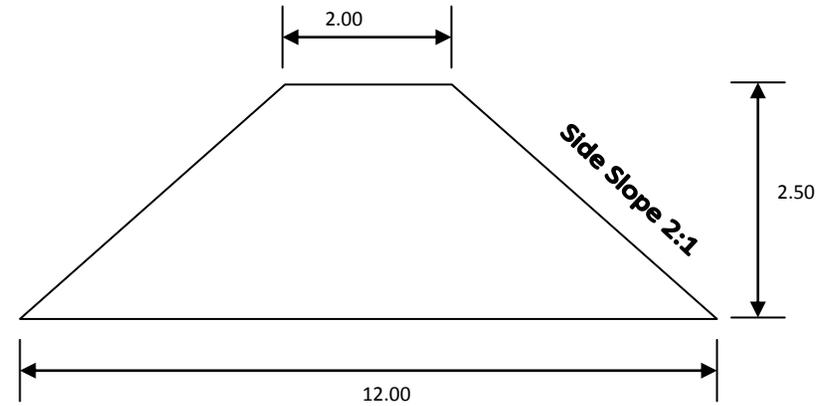
(All dimensions in Meter)

DRAWING OF EARTHEN CHEKDAM / GULLY PLUG

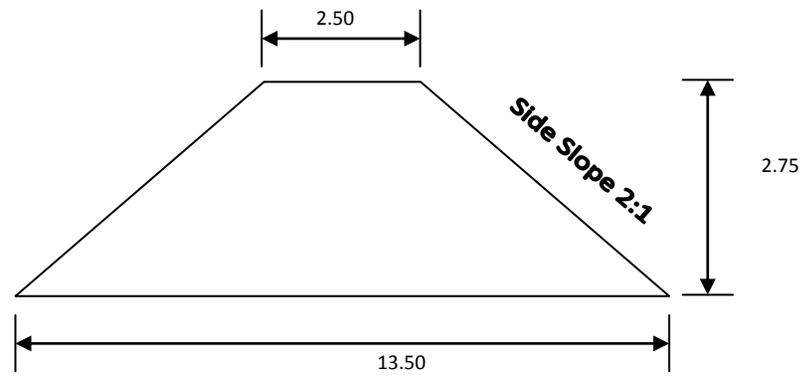
(Not to Scale)



(C.D. /G.P., Cross-Section – 11.97 m²)



(C.D. /G.P., Cross-Section – 17.50 m²)



(W.H.B., Cross-Section – 22.00 m²)

(All dimensions in Meter)

DESIGN OF CONTOUR BUND

Type of Soil	-Loam, Sandy Loam	
Rain fall	-24 hr in cm -10 cm	
Field -1%		
Vertical Interval (VI)	$= [s/3+2] \times 0.3$ $= [1/3+2] \times 0.3$ $= 0.70 \text{ m}$	
Horizontal Interval (HI)	$= 100 \times \text{V.I./s}$ $= 100 \times 0.7/1$	
Height of bund h	$= \sqrt{(\text{Re} \times \text{VI})/50}$ $= \sqrt{(10 \times 0.7)/50}$ $= \sqrt{0.37}$ $= \mathbf{0.40}$	Re=maximum rainfall in cm
	Say 0.60 m	
Free board	=15% of height minimum -20 cm	
Height	$= 0.60 + 0.10$ $= 0.60 \text{ m}$	
Taking top width of bund 0.50 m and side slope 1.5:1		
Then base of Bund	$= 0.45 + (1.50 \text{ d}) \times 2$ $= 2.60 \text{ m}$	
Cross-Section of bund	$= (0.50 + 2.60) \times 0.70 / 2$ $= 1.085 \text{ m}^2$	
Length of bund	$= 100 \text{ s} / \text{V.I.}$ $= 100 \times 1 / 0.70$ $= \mathbf{142.85 \text{ m/ha}}$	
	Say 150 m/ha	
Earth work/ha	$= 150 \times 1.085$ $= 162.75 \text{ cum}$	
Cost Rs. / ha	$= 162.75 \times 39.16 = 6373.29$ $\mathbf{\text{Say 6375.00}}$	

DESIGN OF SUBMERGENCE BUND

Types of soil – -Loam, Sandy Loam	Rainfall intensity for 24 hrs – 10cm
Field slope 3%	$V.I. = [s/3+2] \times 0.30$ $= 0.90 \text{ m}$
Horizontal Interval = $(100 \times V.I.) / s$	$= (100 \times 0.90) / 3$ $= 30 \text{ m}$
Height of bund $h = \sqrt{(Re \times V.I.) / 50}$	$= \sqrt{(10 \times 0.90) / 50} = \sqrt{0.18} = 0.42 \text{ m. Say } 0.4\text{m}$
Free board 20% of height minimum 20cm	
Total Height	= 0.90m
Taking top width of bund 0.70m and side slope 1.5:1	
Bottom of bund	$= 0.70 + 2 \times 1.5d$ $= 0.70 + 2.70$ $= 3.40$
Cross Section of Submergence Bund	$= (0.50 + 3.40) \times 1.00 / 2$ $= 2.00\text{m}^2$
Length of bund	$= 100 s / V.I.$ $= (100 \times 3) / 0.90$ $= 333 \text{ m}$
Feasible length	$100 + 25 + 25$ $= 150 \text{ m}$
Earth work/ha	$= 150 \times 1.845$ $= 276.75$
Cost per ha	$= 276.75 \times 39.16$ $= 10,837.53$ Say 10,850=00

TYPICAL SECTION OF FIELD BUND

Top width	= 0.50 m
Side slope	= 1:1
Height of bound	= 0.50 m
Bottom Width	= 1.50 m
Cross section	= $(0.50+1.50) \times 0.50 / 2 = 0.50 \text{ m}^2$
Length per hectare	= 200 m
Earthwork	= $200 \times 0.50 = 100 \text{ cum}$
Cost 39.16/cum	= Rs. 3916.00
Cost per hectare	= Rs. 3916.00

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

Top width	= 0.70 m
Side slope	= 1.5:1
Height	= 1.30 m
Bottom	= 4.60 m
Cross section	= $(0.70+4.60) \times 1.30 / 2$ = 3.60 m^2
Cost/ meter	= Rs. 142.00

TYPICAL SECTION OF EARTHEN CHECK DAM / GULLY PLUG

Top width	= 1.50 m
Side slope	= 2:1
Height	= 2.10m
Bottom Width	= 9.90 m
Cross section	= $(1.50 + 9.90) \times 2.10 / 2$ = 11.97 m ²
Cost per meter	= Rs. 551.45

TYPICAL SECTION OF CHECK DAM / GULLY PLUG

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

TYPICAL SECTION OF W.H.B

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

CHAPTER-12

MAPS

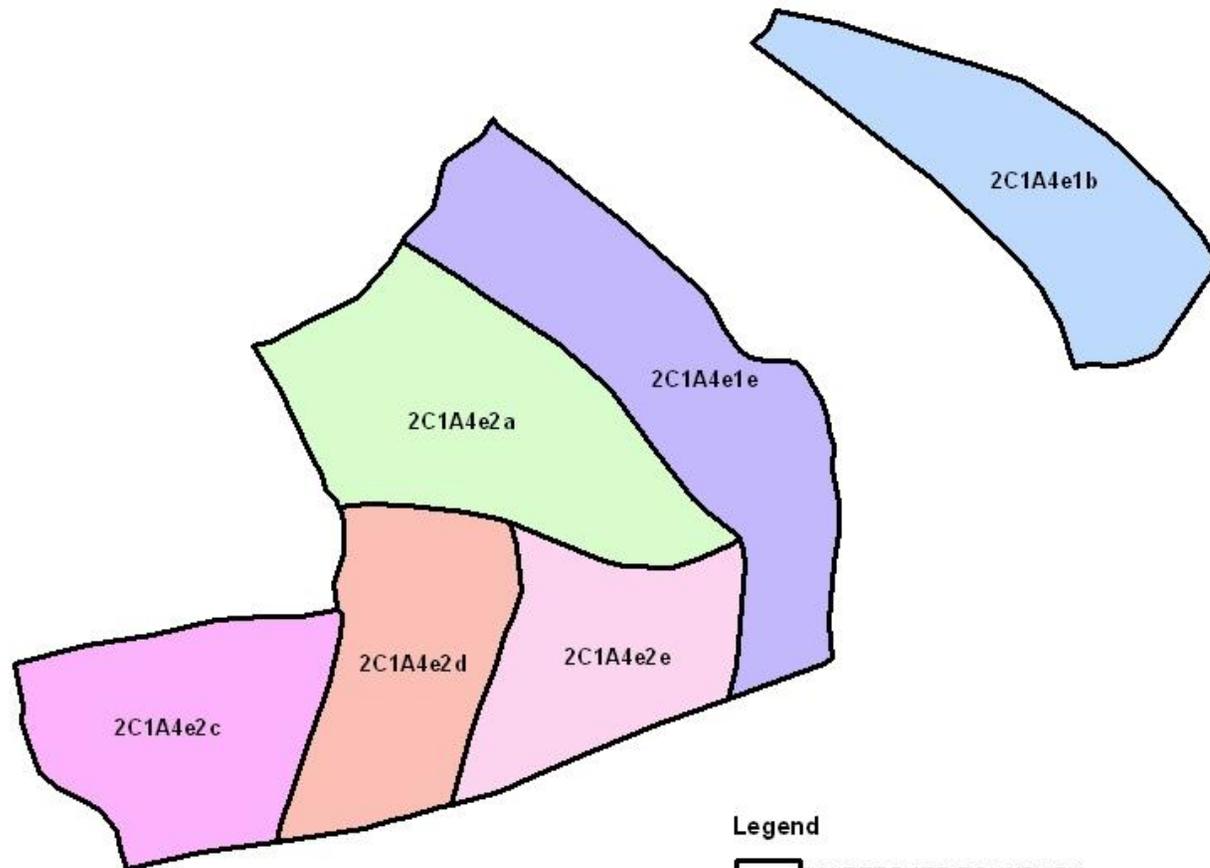
MAPS

An attempt has been to map the surface details of the project area, as per the instruction of the common Guide lines-2008, All the thematic maps of the study area have been prepared through using remote sensing and geographical information system(G.I.S.) technique, following the fundamental norms of the National Map Policy-2006. The details of the thematic maps have been given below.

- 1- Project area Map
- 2- Land Capability Class Map
- 3- Drainage map
- 4- Land use/ Land cover map
- 5- Contour map
- 6- Slope map.
- 7- Soil Depth Map.
- 8- Soil Texture Map.
- 9- Cadastral Map.
- 10- Treatment Area Plan Map (All MWS)

These maps were interpreted from the high resolution satellite data freely available on internet.

THE PROJECT AREA IWMP- XII (2011-12), DISTRICT - BANDA

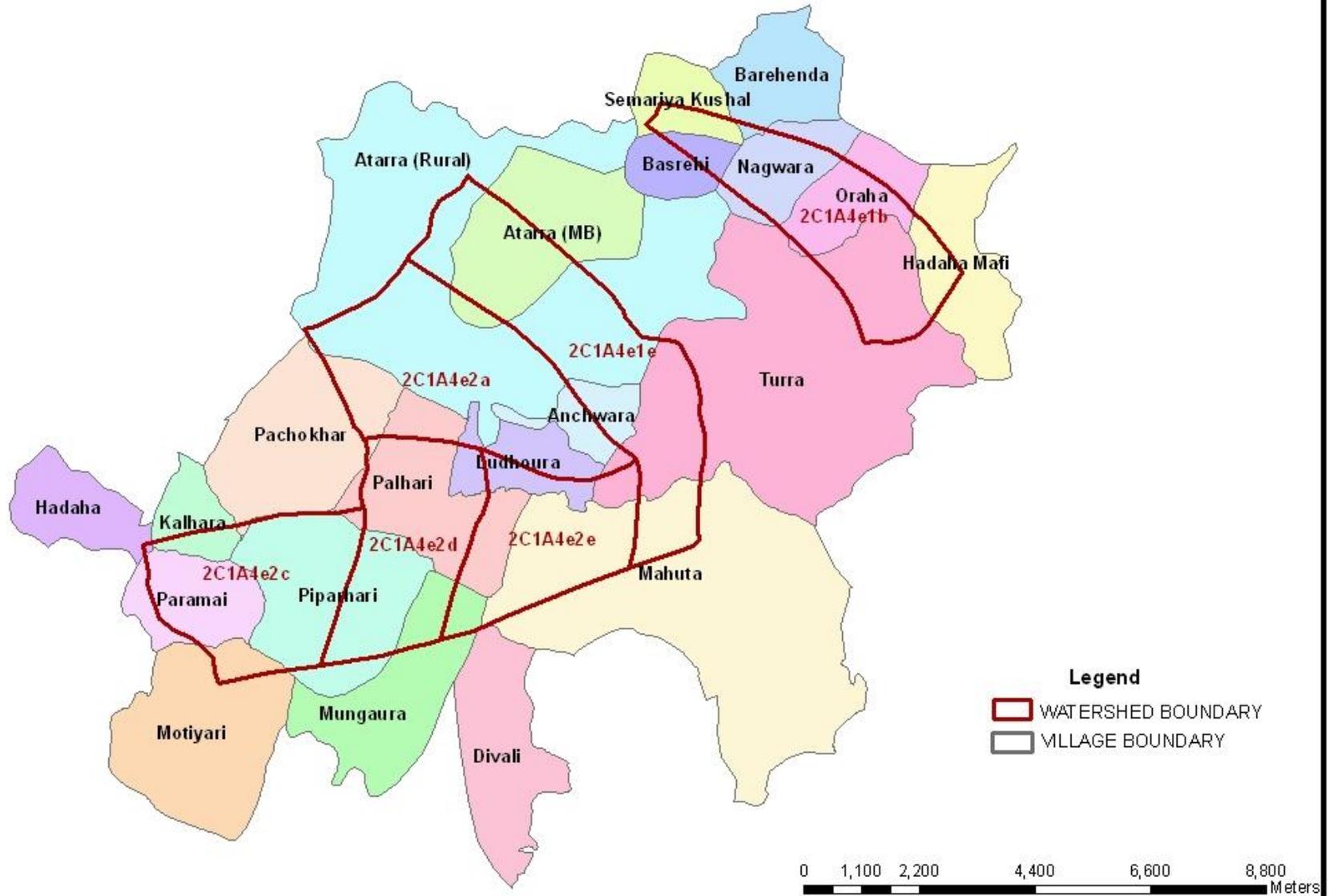


Legend

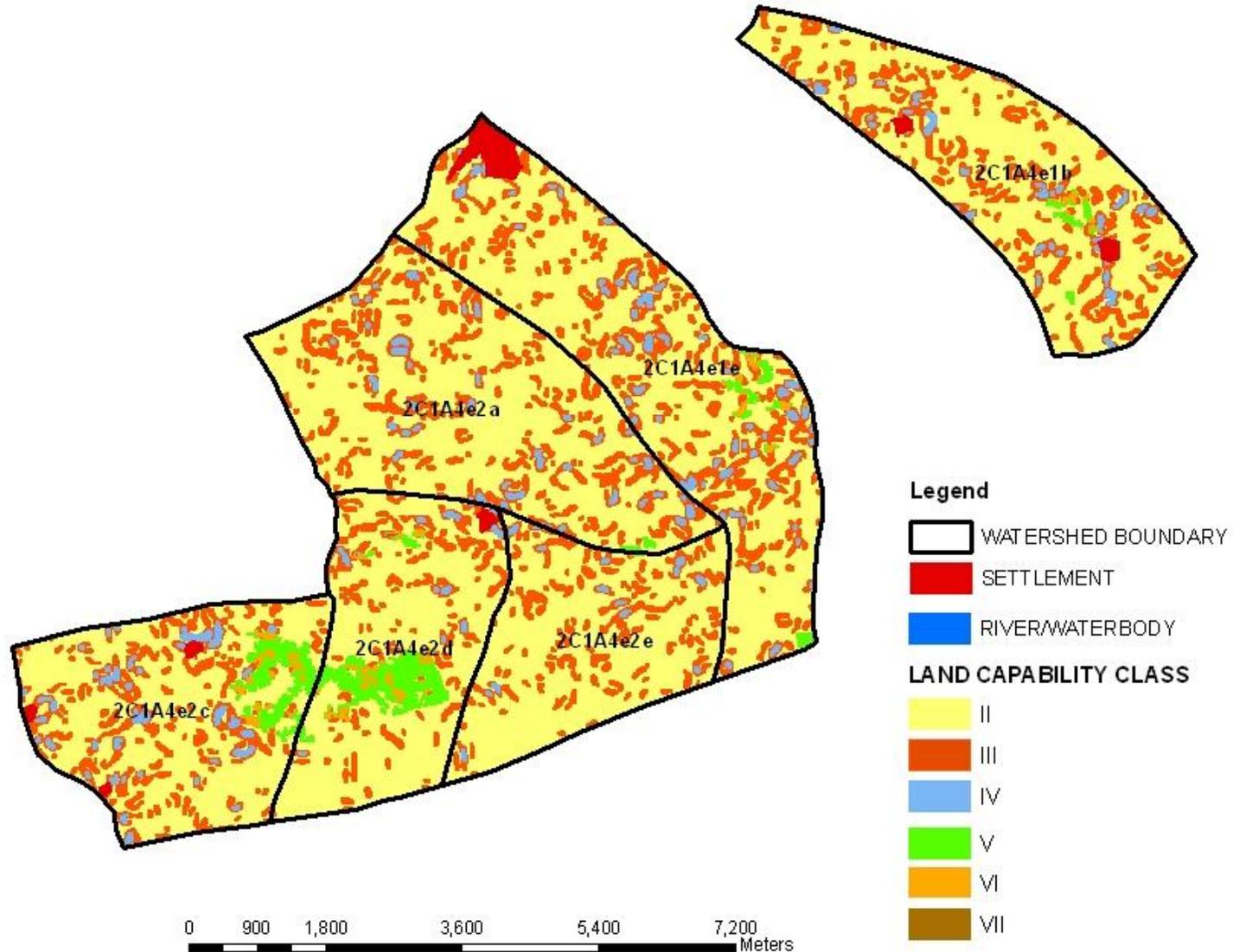
 WATERSHED BOUNDARY



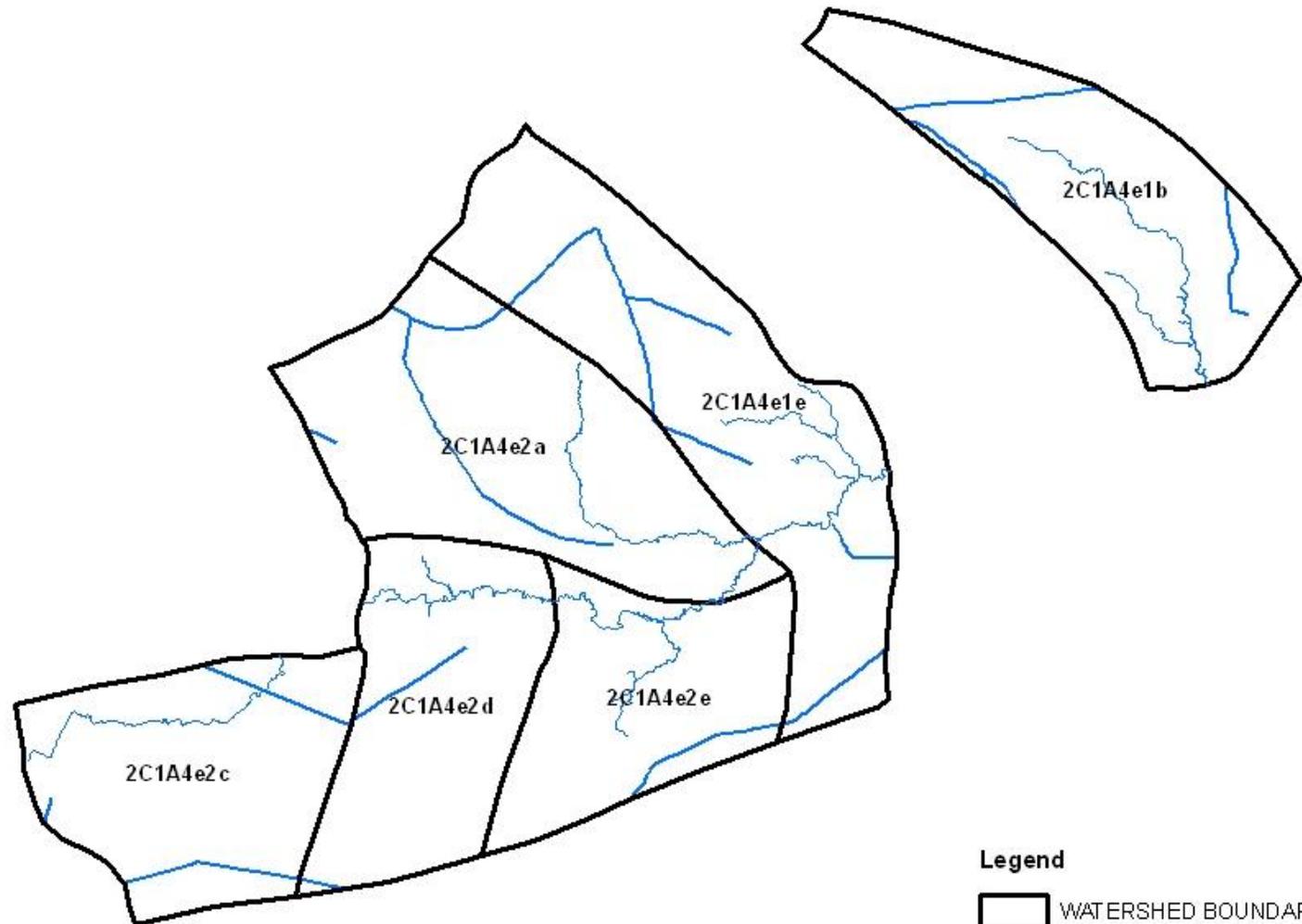
VILLAGE BOUNDARY MAP OF THE PROJECT AREA IWMP - XII (2011 - 2012) DISTRICT - BANDA



LAND CAPABILITY CLASS MAP OF THE PROJECT AREA IWMP- XII (2011-12), DISTRICT - BANDA

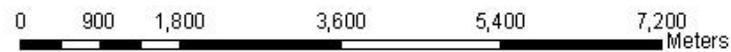


DRAINAGE MAP OF THE PROJECT AREA IWMP- XII (2011-12), DISTRICT - BANDA

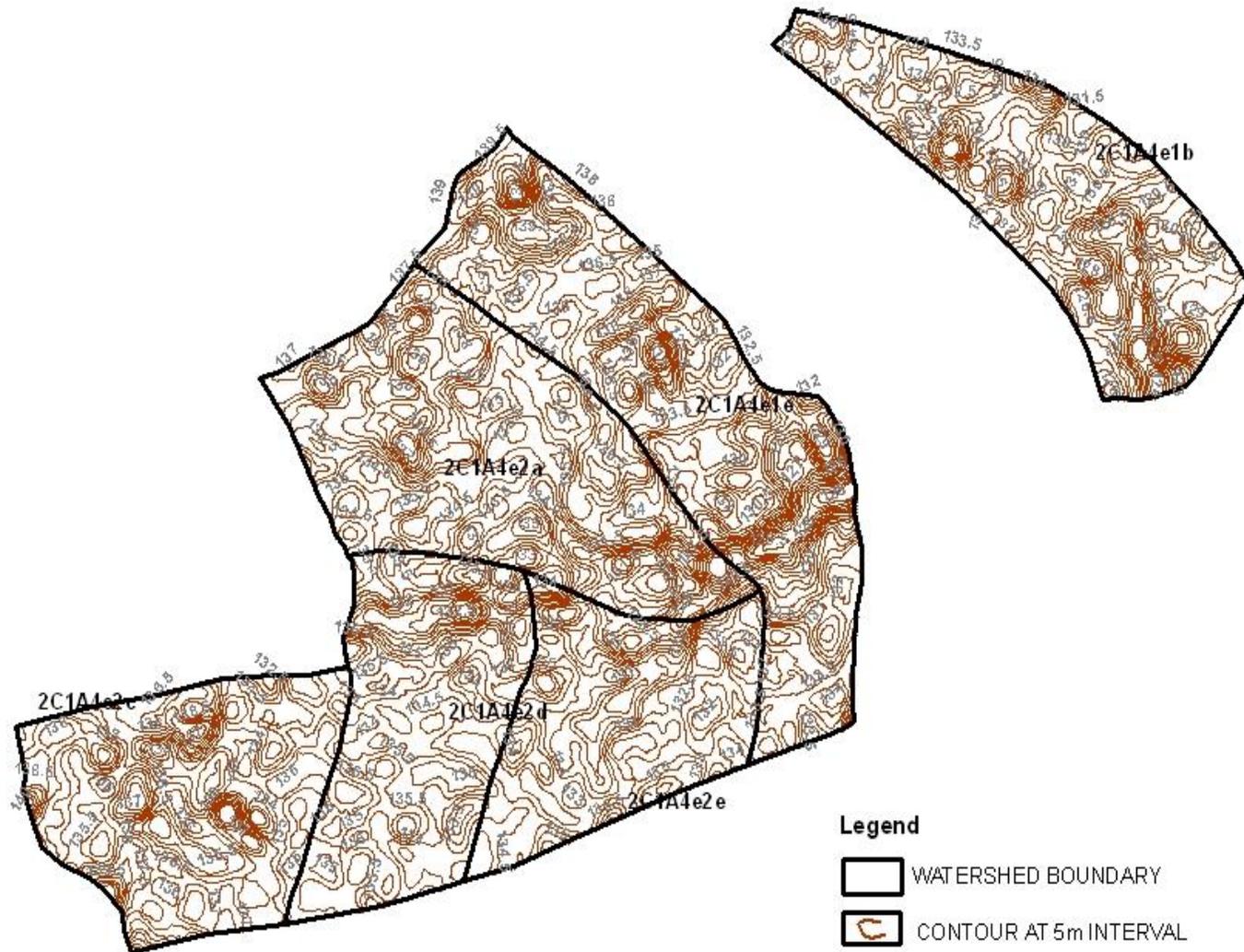


Legend

-  WATERSHED BOUNDARY
-  CANAL/DRAIN



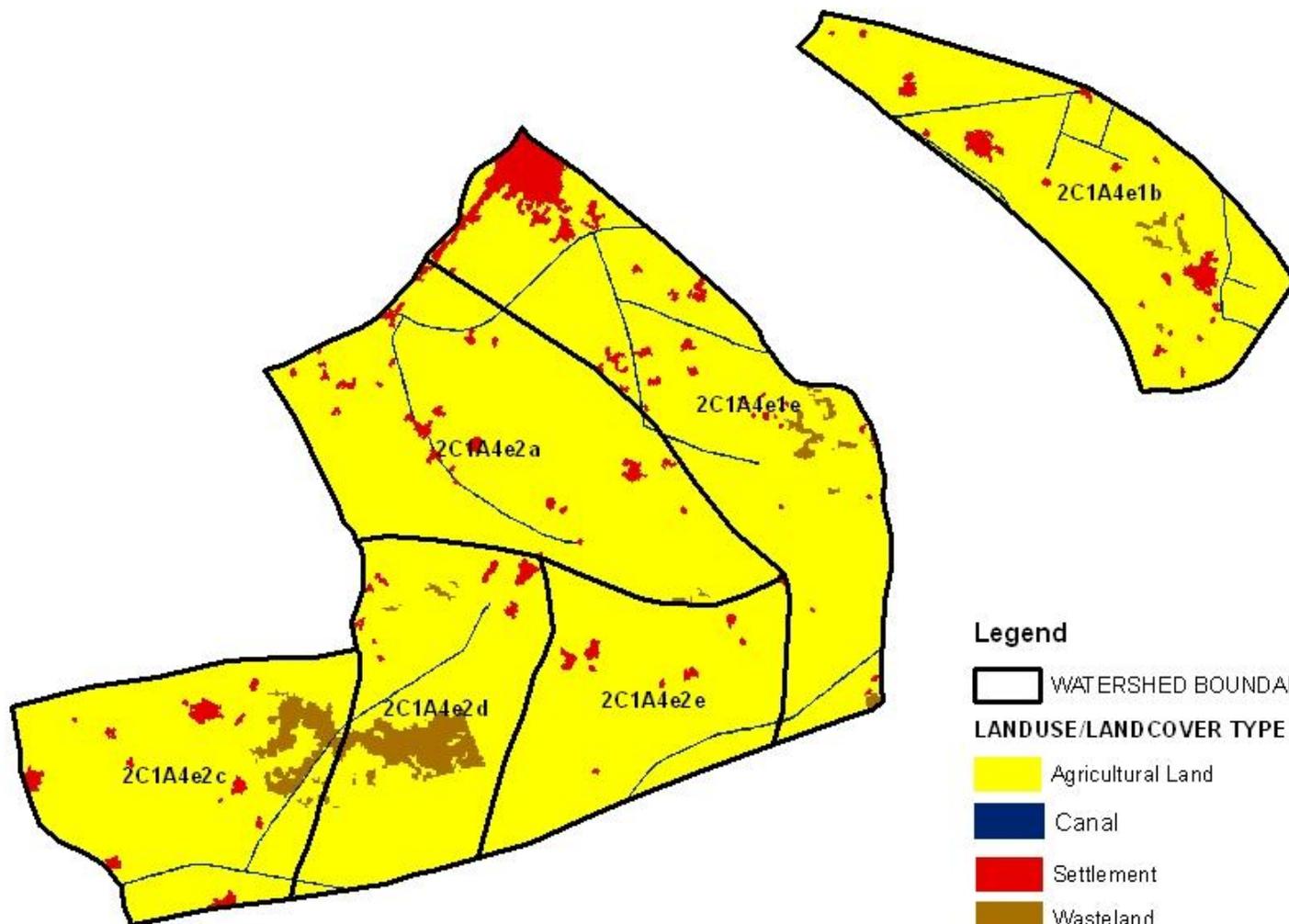
CONTOUR MAP OF THE PROJECT AREA IWMP- XII (2011-12), DISTRICT - BANDA



0 875 1,750 3,500 5,250 7,000 Meters

SOURCE: SRTM DEM

LANDUSE/LANDCOVER MAP OF THE PROJECT AREA IWMP- XII (2011-12), DISTRICT - BANDA



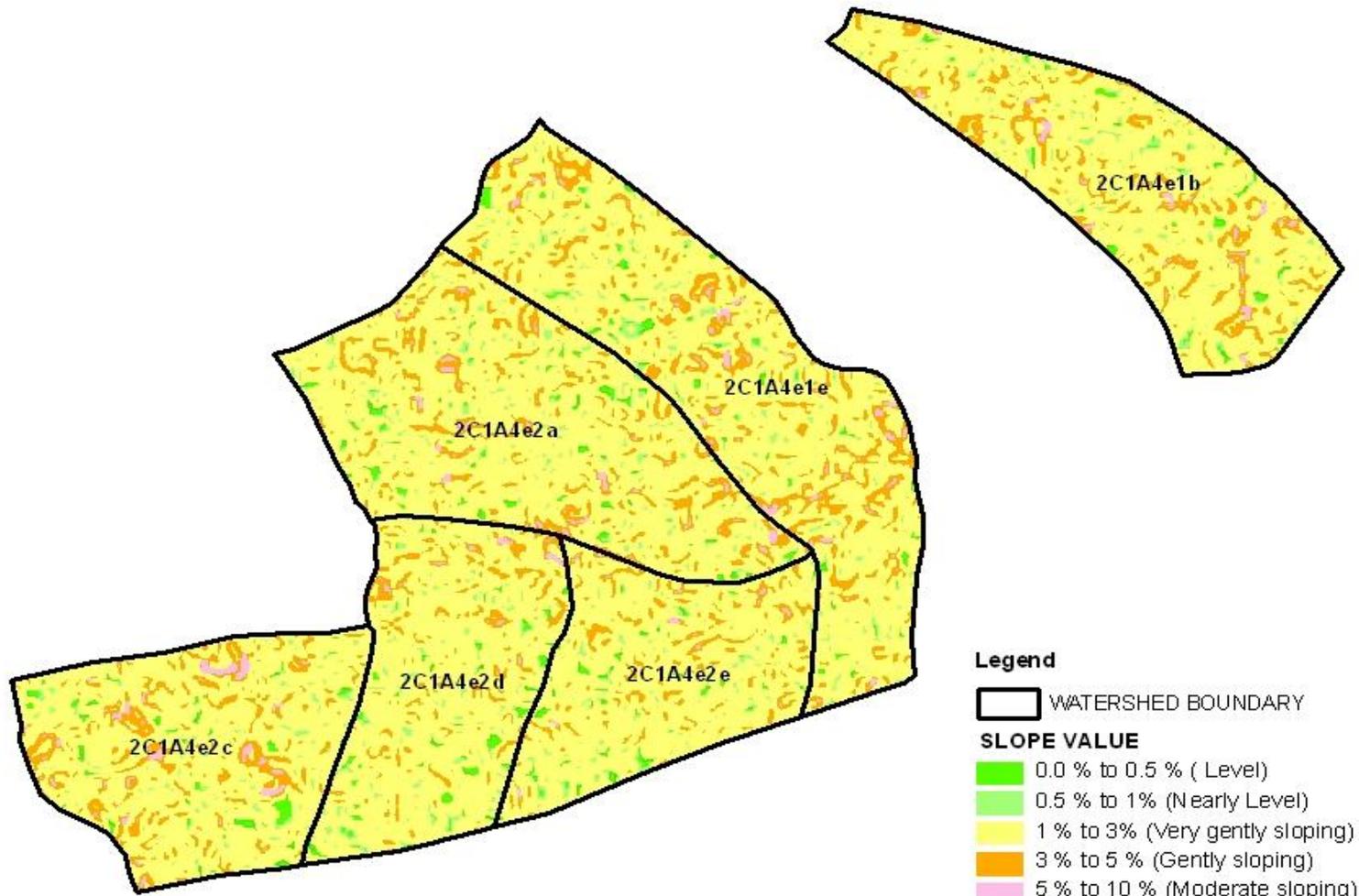
Legend

-  WATERSHED BOUNDARY
- LANDUSE/LANDCOVER TYPE**
-  Agricultural Land
-  Canal
-  Settlement
-  Wasteland
-  Waterbody

0 875 1,750 3,500 5,250 7,000
Meters

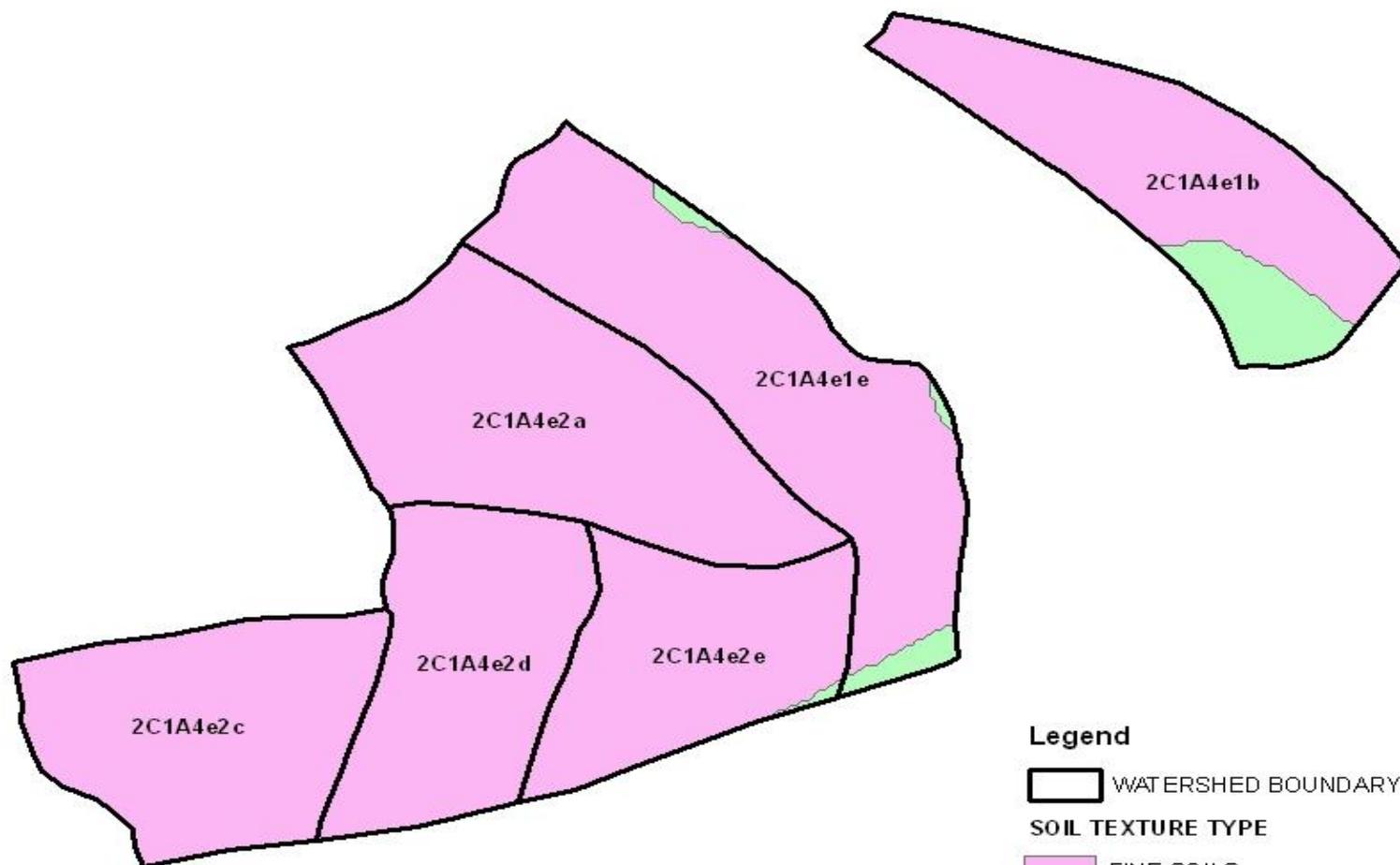
SOURCE: AS INTERPRETED FROM SATELLITE DATA

SLOPE MAP OF THE PROJECT AREA IVMP- XII (2011-12), DISTRICT - BANDA



0 850 1,700 3,400 5,100 6,800 Meters

SOIL TEXTURE MAP OF THE PROJECT AREA IWMP- XII (2011-12), DISTRICT - BANDA



Legend

 WATERSHED BOUNDARY

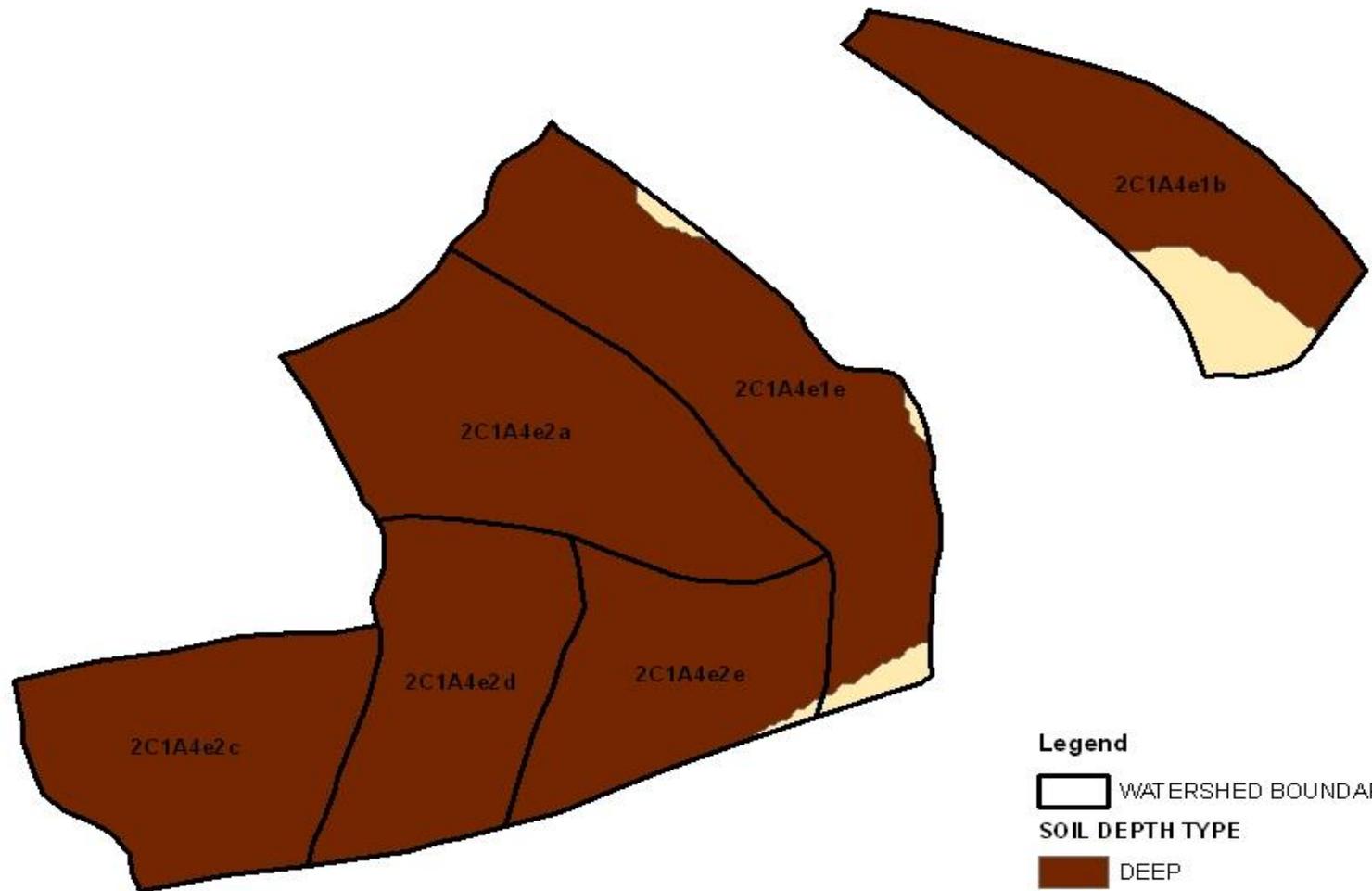
SOIL TEXTURE TYPE

 FINE SOILS

 SANDY SKELETAL

0 875 1,750 3,500 5,250 7,000 Meters

SOIL DEPTH MAP OF THE PROJECT AREA IWMP- XII (2011-12), DISTRICT - BANDA

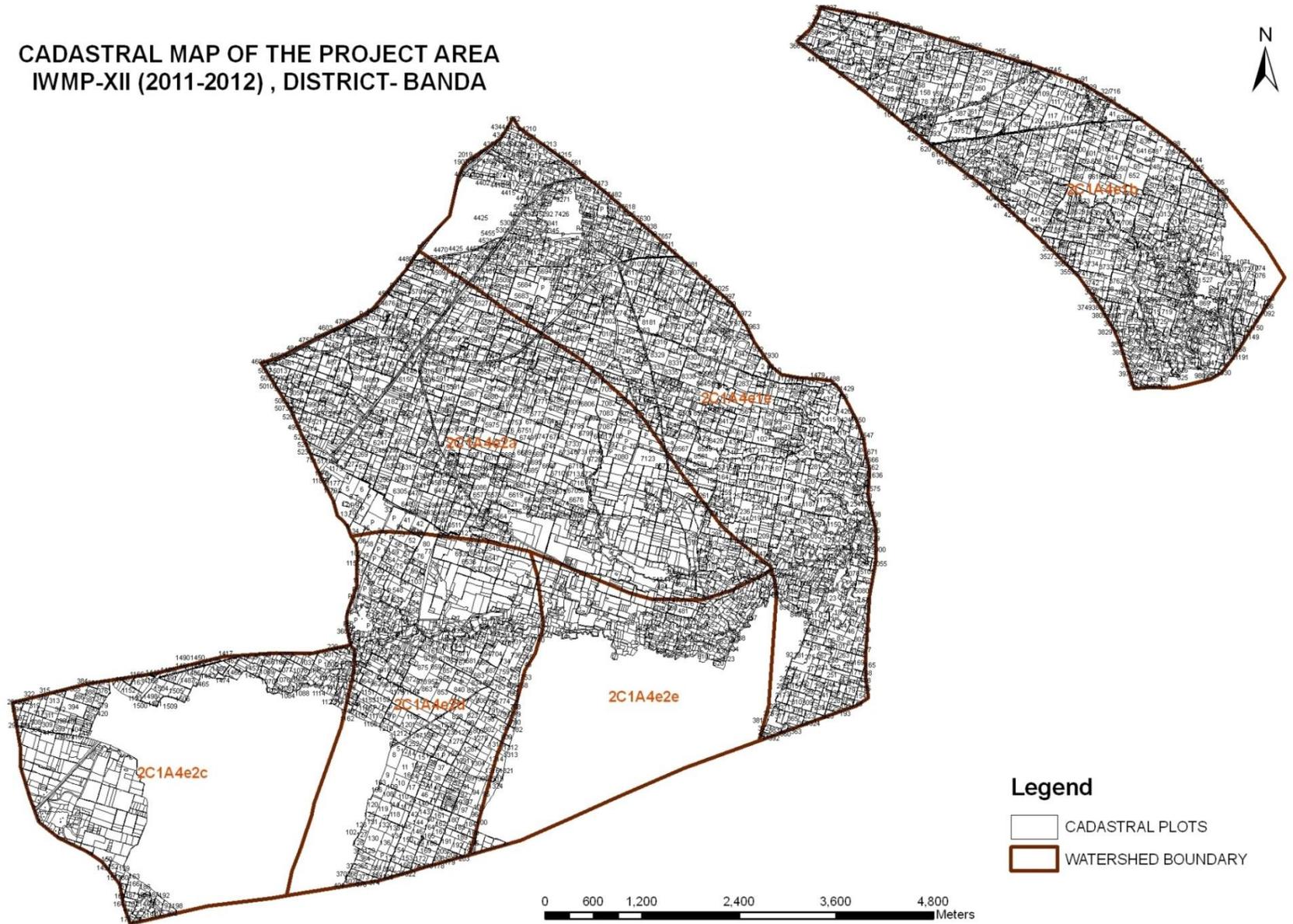


Legend

-  WATERSHED BOUNDARY
- SOIL DEPTH TYPE**
-  DEEP
-  MOD. SHALLOW

0 900 1,800 3,600 5,400 7,200 Meters

**CADASTRAL MAP OF THE PROJECT AREA
IWMP-XII (2011-2012) , DISTRICT- BANDA**



Legend

-  CADASTRAL PLOTS
-  WATERSHED BOUNDARY



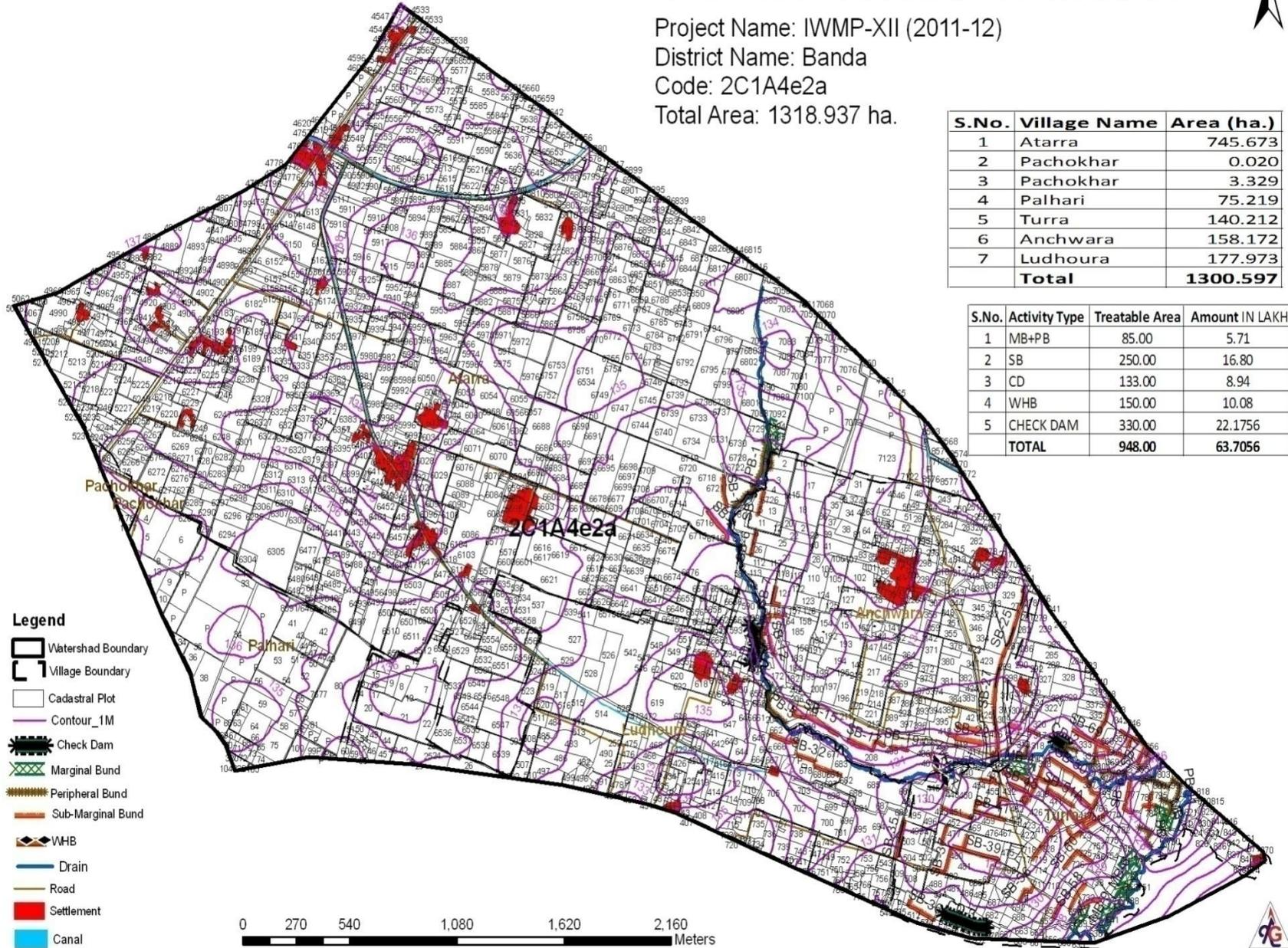
ACTION PLAN MAP OF BANDA

Project Name: IWMP-XII (2011-12)

District Name: Banda

Code: 2C1A4e2a

Total Area: 1318.937 ha.

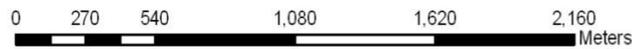


S.No.	Village Name	Area (ha.)
1	Atarra	745.673
2	Pachokhar	0.020
3	Pachokhar	3.329
4	Palhari	75.219
5	Turra	140.212
6	Anchwara	158.172
7	Ludhaura	177.973
Total		1300.597

S.No.	Activity Type	Treatable Area	Amount IN LAKH
1	MB+PB	85.00	5.71
2	SB	250.00	16.80
3	CD	133.00	8.94
4	WHB	150.00	10.08
5	CHECK DAM	330.00	22.1756
TOTAL		948.00	63.7056

Legend

- Watershad Boundary
- Village Boundary
- Cadastral Plot
- Contour_1M
- Check Dam
- Marginal Bund
- Peripheral Bund
- Sub-Marginal Bund
- WHB
- Drain
- Road
- Settlement
- Canal



ACTION PLAN MAP OF BANDA



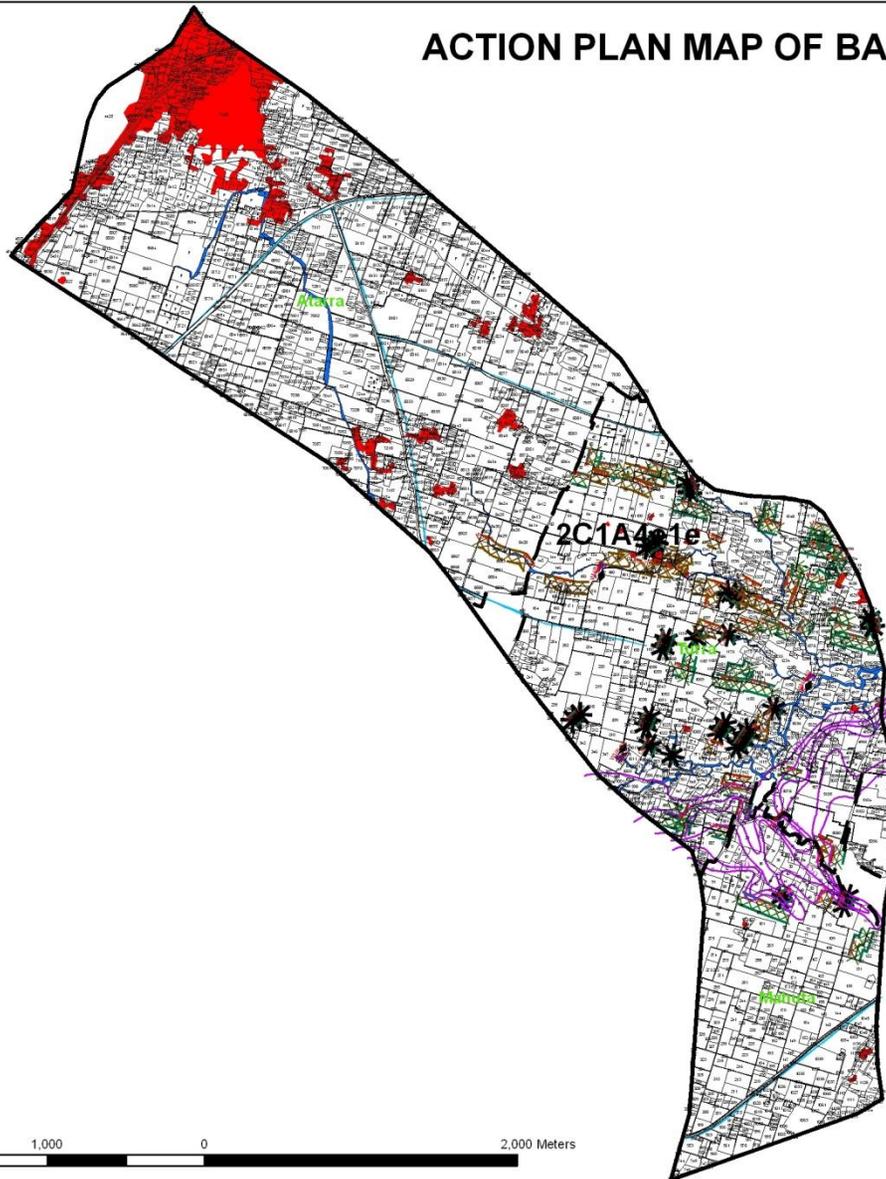
ACTION PLAN MAP OF BANDA

Project Name: XII (2011-12)

District Name: Banda (UP)

Code:- 2C1A4e1e

Total Area:- 1400.548 ha.



S.No.	Village Boundary	Area (ha.)
1	Atarra	684.121
2	Mahuta	214.532
3	Turra	480.739
TOTAL		1379.392

2,000 1,000 0 2,000 Meters

Legend

- Watershed_Boundary
- Village_Boundary
- Cadasatra_Plot
- Contour-1M
- Check Dam
- Marginal Bund
- Peripheral Bund
- Water Harvasting Bund
- Settlement
- Canal
- Drainage

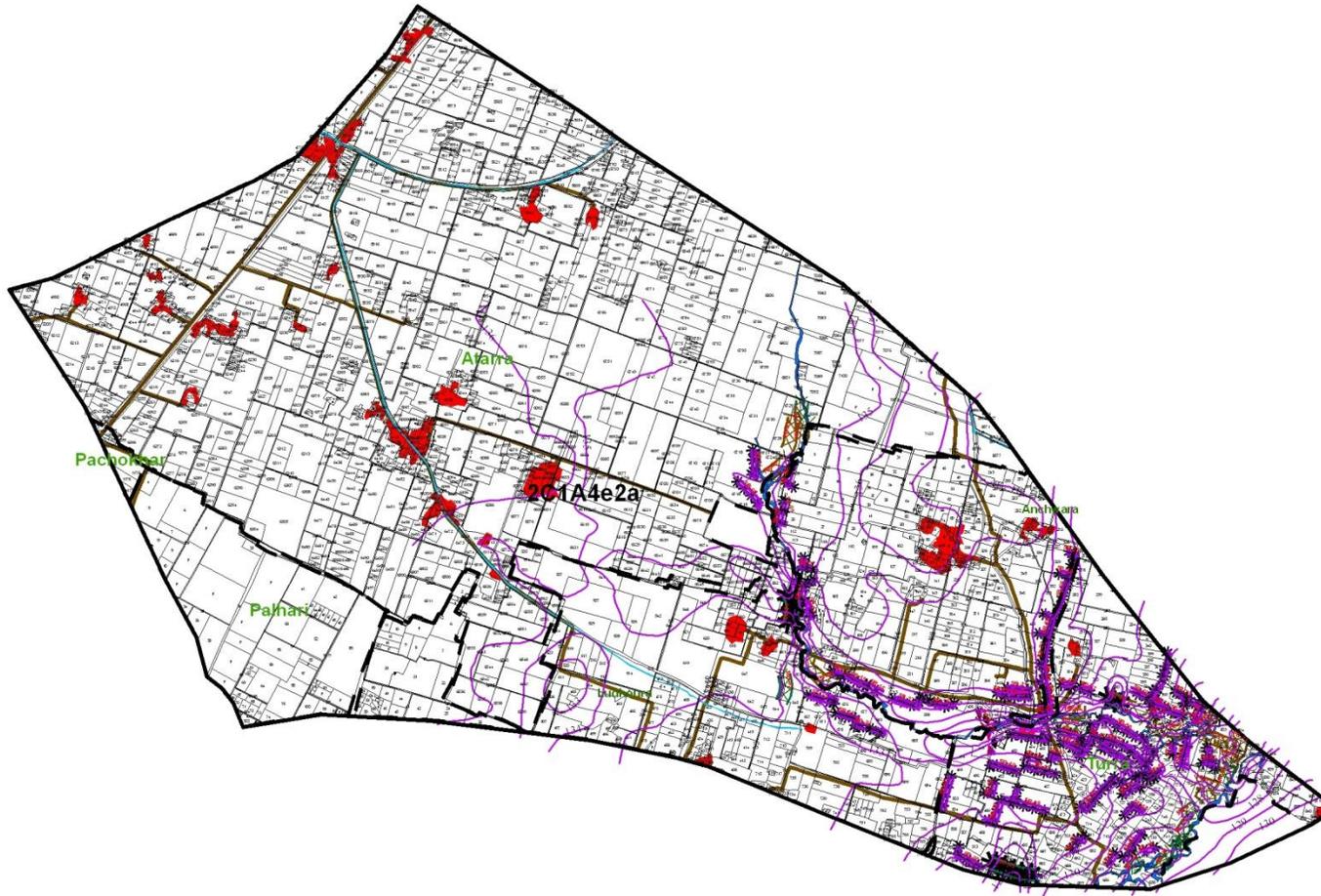


ACTION PLAN MAP OF BANDA



ACTION PLAN MAP OF BANDA

Project Name: XII (2011-12)
 District Name: Banda (UP)
 Code:- 2C1A4e2a
 Total Area:- 1318.937 ha.



S.No.	Village Name	Area (ha.)
1	Atarra	745.673
2	Pachokhar	0.020
3	Pachokhar	3.329
4	Palhari	75.219
5	Turra	140.212
6	Anchwara	158.172
7	Ludhaura	177.973
TOTAL		1300.597

Legend

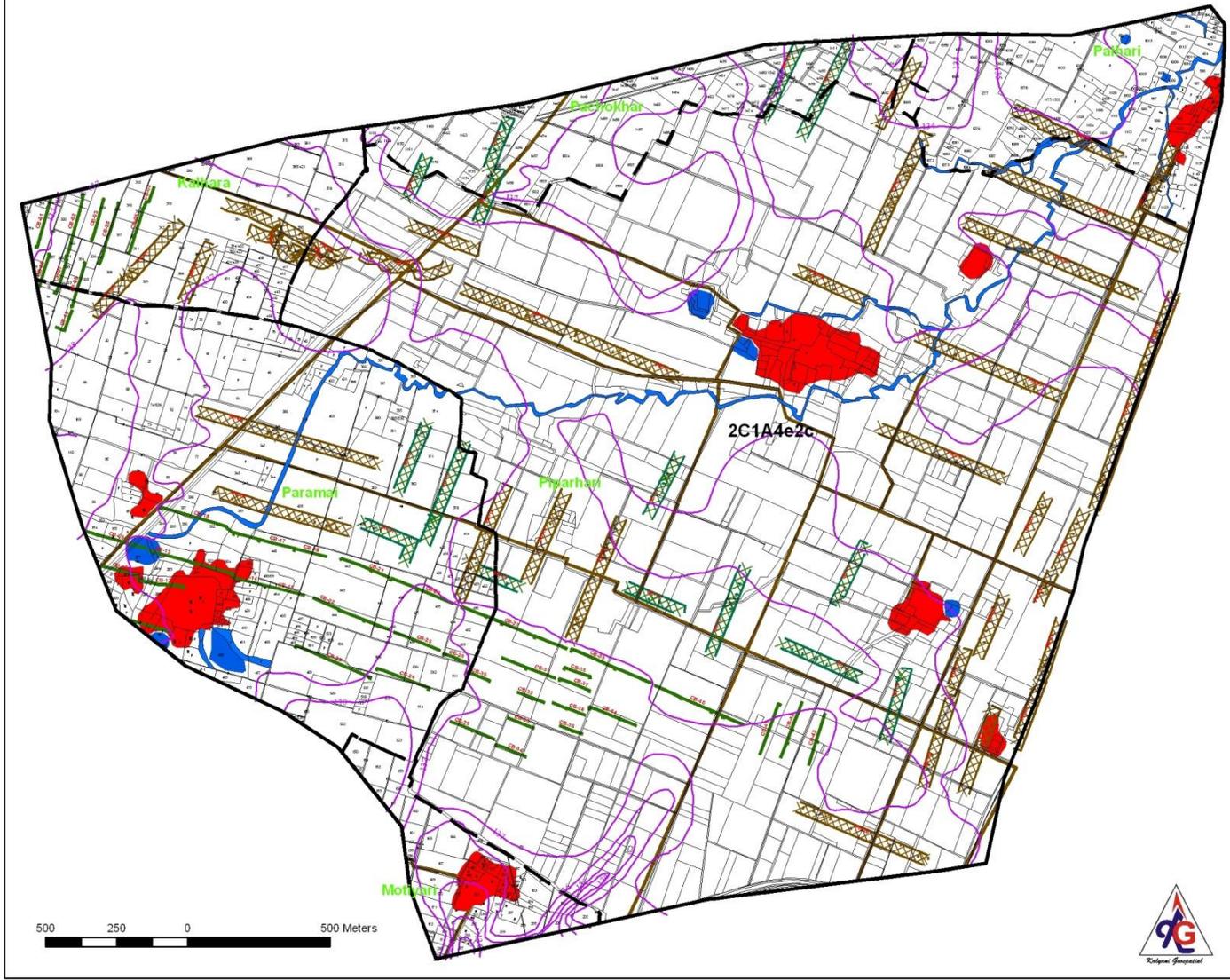
- Watershed_Boundary
- Village_Boundary
- Cadastral_Plot
- Contour-1M
- Check Dam
- Marginal Bund
- Peripheral Bund
- Sub Marginal Bund
- Water Harvasting Bund
- Drainage1
- Drainage
- Canal
- Settlement
- Road



ACTION PLAN MAP OF BANDA

ACTION PLAN MAP OF BANDA

Project Name: XII (2011-12)
 District Name: Banda (UP)
 Code:- 2C1A4e2c
 Total Area:- 968.253 ha.



S.No.	Village Name	Area (ha.)
1	Kalhara	51.142
2	Motiyari	24.106
3	Pachokhar	46.862
4	Palhari	54.886
5	Paramai	183.719
6	Piparhari	608.638
TOTAL		969.354

Legend

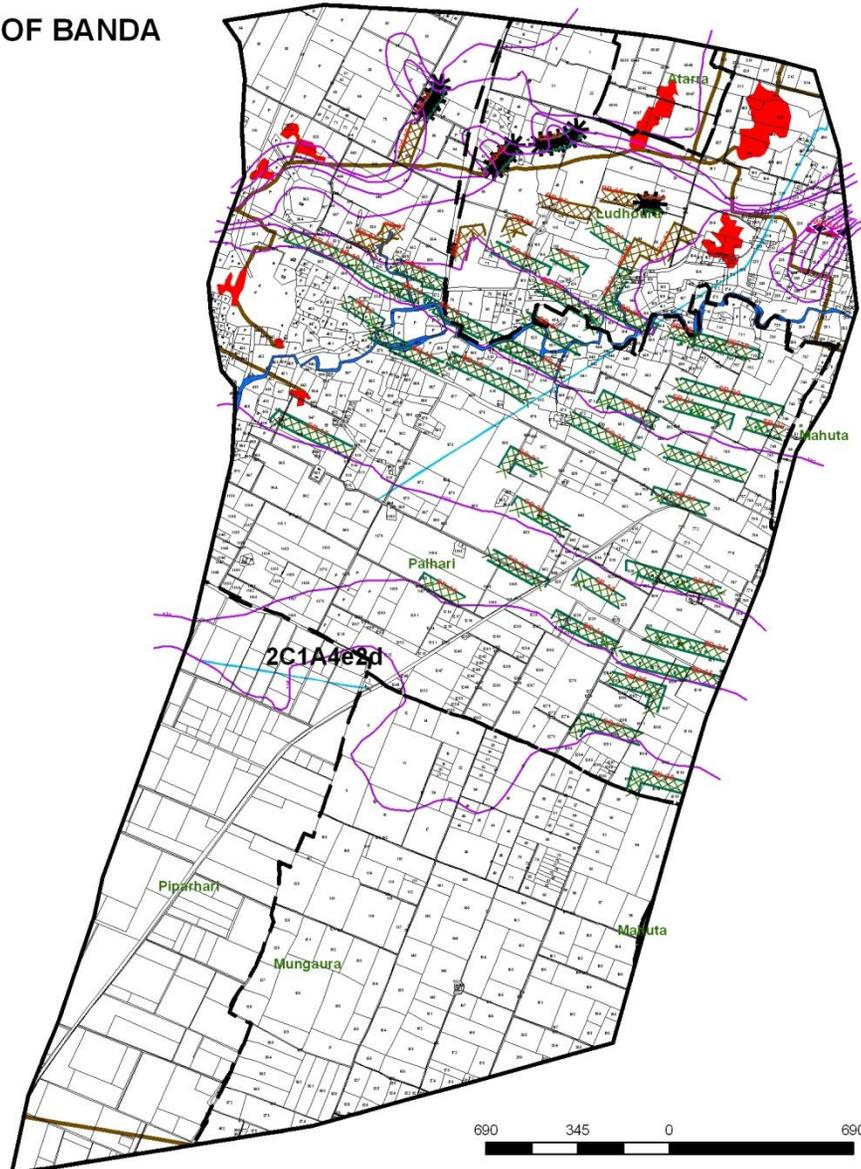
- Watershed_Boundary
- Village Boundary
- Cadastral_Plot
- Contour-1M
- Contour Bund
- Peripheral Bund
- Sub Marginal Bund
- Settlement
- Drainage
- River_WB
- Road



ACTION PLAN MAP OF BANDA

ACTION PLAN MAP OF BANDA

Project Name: XII (2011-12)
 District Name: Banda (UP)
 Code:- 2C1A4e2d
 Total Area:- 882.248 ha.

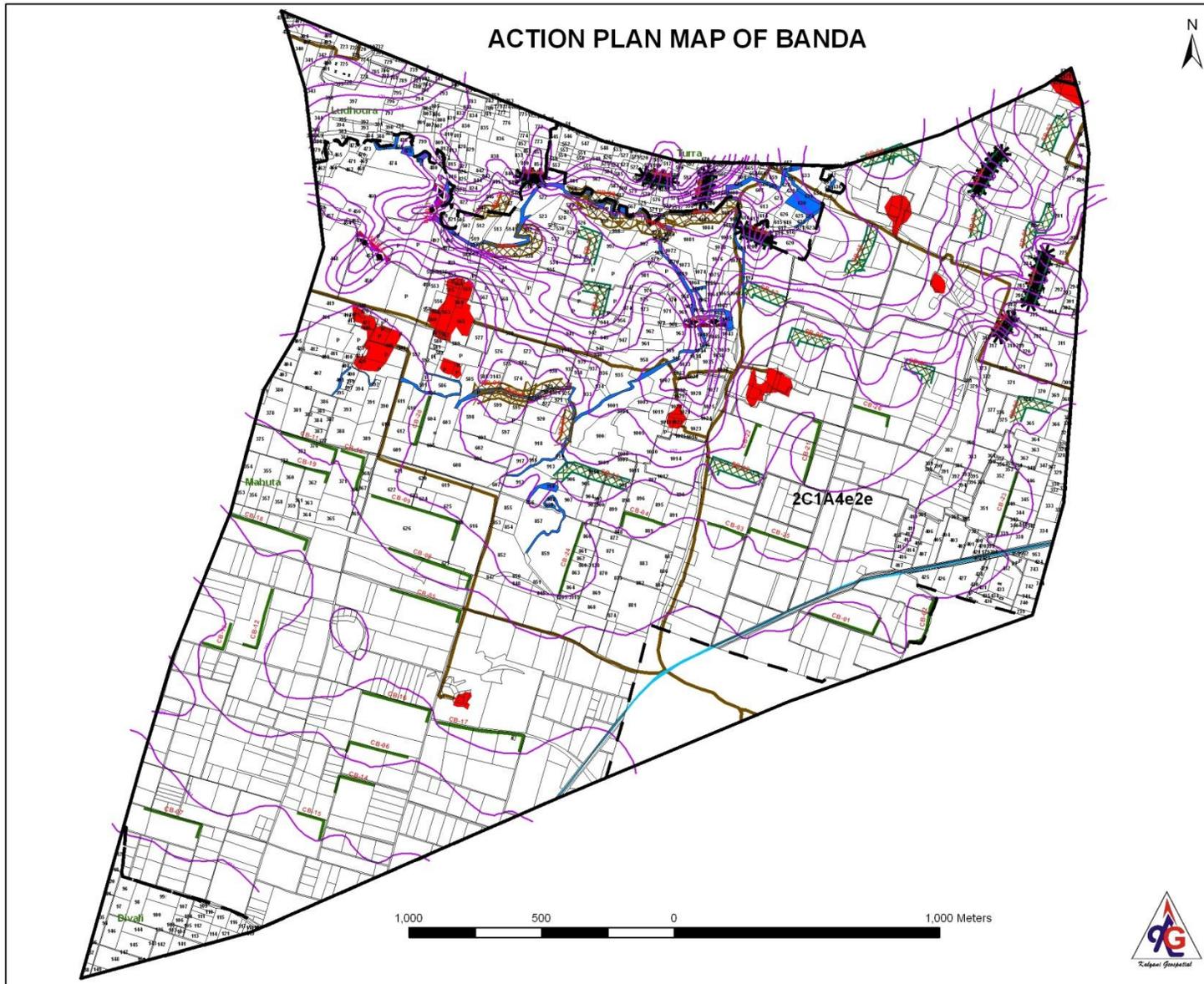


S.No.	Village Name	Area (ha.)
1	Atarra	15.535
2	Ludhaura	132.272
3	Mahuta	4.096
4	Mungaura	185.767
5	Palhari	400.594
6	Piparhari	140.404
TOTAL		878.669

Legend

- Watershed_Boundary
- Village_Boundary
- Cadastral_Plot
- Contour-1M
- Check Dam
- Peripheral Bund
- Sub Marginal Bund
- Water Harvasting Bund
- Sttlement
- Canal
- Drainage
- Road





ACTION PLAN MAP OF BANDA
 Project Name: XII (2011-12)
 District Name: Banda (UP)
 Code:- 2C1A4e2e
 Total Area:- 788.251 ha.

S.No.	Village Name	Area (ha.)
1	Divali	13.747
2	Ludhaura	35.673
3	Mahuta	687.970
4	Turra	24.058
TOTAL		761.448

- Legend**
- Watershed_Boundary
 - Village_Boundary
 - Cadastral_Plot
 - Contour-1M
 - Contour Bund
 - Check Dam
 - Peripheral Bund
 - Sub Marginal Bund
 - Water Harvasting Bund
 - Settlement
 - Drainage
 - Canal
 - Road

Details Cost Estimate of MWS 2C1A4e1b (Hadaha Mafi)

A		Gram Panchayat name - Nagwara									
CB											
S. No.	Activity	Area	Khasra No.	Length	Top	Base	Height	C. S.	E. W.	Rate	Amount
1	CB-1	3.95	322 to 324	300	2.50	0.40	0.70	1.00	300	39.15	11745
2	CB-2	1.97	225	150	2.50	0.40	0.70	1.00	150	39.15	5873
3	CB-3	1.98	209	150	2.50	0.40	0.70	1.00	150	39.15	5873
4	CB-4	1.31	197	100	2.50	0.40	0.70	1.00	100	39.15	3915
5	CB-5	2.64	134	200	2.50	0.40	0.70	1.00	200	39.15	7830
6	CB-6	2.61	138,140	200	2.50	0.40	0.70	1.00	200	39.15	7830
7	CB-7	2.63	69	200	2.50	0.40	0.70	1.00	200	39.15	7830
8	CB-8	5.28	1,10	400	2.50	0.40	0.70	1.00	400	39.15	15660
9	CB-9	1.31	20	100	2.50	0.40	0.70	1.00	100	39.15	3915
10	CB-10	1.32	22	100	2.50	0.40	0.70	1.00	100	39.15	3915
Total											74385
PB											
S. No.	Activity	Area	Khasra No.	Length	Top	Base	Height	C. S.	E. W.	Rate	Amount
1	PB-1	8.2	322 to 324	250	5.50	0.60	1.40	4.27	1068	39.15	41793
2	PB-2	9.85	136,148	300	5.50	0.60	1.40	4.27	1281	39.15	50151
3	PB-3	9.85	72 to 79	300	5.50	0.60	1.40	4.27	1281	39.15	50151
4	PB-4	5.25	86, 88, 89	160	5.50	0.60	1.40	4.27	683	39.15	26747
5	PB-5	9.85	103	300	5.50	0.60	1.40	4.27	1281	39.15	50151
Total											218993
SB											
S. No.	Activity	Area	Khasra No.	Length	Top	Base	Height	C. S.	E. W.	Rate	Amount
1	SB-1	4.78	345	150	5.50	0.60	1.40	3.32	497	41.22	20497
2	SB-2	6.37		200	5.50	0.60	1.40	3.32	663	41.22	27329
3	SB-3	4.49	353 to 358	140	5.50	0.60	1.40	3.32	464	41.22	19130
4	SB-4	3.18	106	100	5.50	0.60	1.40	3.32	332	41.22	13664
5	SB-5	3.18	426, 129	100	5.50	0.60	1.40	3.32	332	41.22	13664
Total											94285
Grand Total											387663

B	Gram Panchayat - Turra										
PB											
S. No.	Activity	Area	Khasra No.	Length	Top	Base	Height	C. S.	E. W.	Rate	Amount
1	PB-1	10	4597	160	5.50	0.60	1.40	4.27	683	39.15	26747
Total											26747
SB											
S. No.	Activity	Area	Khasra No.	Length	Top	Base	Height	C. S.	E. W.	Rate	Amount
1	SB-1	9.38	3593, 3594	300	4.50	0.60	1.30	3.32	994.5	41.22	40993
2	SB-2	6.24	3526, 3527	200	4.50	0.60	1.30	3.32	663	41.22	27329
3	SB-3	6.24	3549, 3550	200	4.50	0.60	1.30	3.32	663	41.22	27329
4	SB-4	6.24	3735	200	4.50	0.60	1.30	3.32	663	41.22	27329
5	SB-5	18.8	3733, 3738, 3748	600	4.50	0.60	1.30	3.32	1989	41.22	81987
6	SB-6	3.1	3147	100	4.50	0.60	1.30	3.32	331.5	41.22	13664
Total											218631
CD											
S. No.	Activity	Area	Khasra No.	Length	Top	Base	Height	C. S.	E. W.	Rate	Amount
1	CD-1	9.1	3761 to 3764	90	14.00	2.00	2.25	18.00	1620	44.34	71831
2	CD-2	35.9	3793, 3794, 3786	160	14.00	2.00	2.25	18.00	2880	44.34	127699
3	CD Invest in Pakka Work	---	---	---	---	---	---	---	---	---	156470
Total											356000
WHB											
S. No.	Activity	Area	Khasra No.	Length	Top	Base	Height	C. S.	E. W.	Rate	Amount
1	WHB-1	45	3910, 3911, 3935, 3936	150	16.00	2.00	3.00	27.00	4050	51.08	206874
2	WHB Invest in Pakka Work	---		---	---	---	---	---	---	---	200000
Total											406874
Grand Total											1008481

C	Gram Panchayat - Orha										
PB											
S. No.	Activity	Area	Khasra No.	Length	Top	Base	Height	C. S.	E. W.	Rate	Amount
1	PB-1	8.2	664, 665	250	5.50	0.60	1.40	4.27	1068	39.15	41793
2	PB-2	3.8	291	80	5.50	0.60	1.40	4.27	342	39.15	13374
Total											55166
SB											
S. No.	Activity	Area	Khasra No.	Length	Top	Base	Height	C. S.	E. W.	Rate	Amount
1	SB-1	8.5	116,117	400	4.50	0.60	1.30	3.32	1326	41.22	54658
2	SB-2	4.78	244	150	4.50	0.60	1.30	3.32	497	41.22	20497
3	SB-3	6.38	231, 261, 262	300	4.50	0.60	1.30	3.32	995	41.22	40993
4	SB-4	3.24	461	200	4.50	0.60	1.30	3.32	663	41.22	27329
5	SB-5	14.6	420 to 436	500	4.50	0.60	1.30	3.32	1658	41.22	68322
6	SB-6	3.24	300 to 301	200	4.50	0.60	1.30	3.32	663	41.22	27329
7	SB-7	6.12	661	250	4.50	0.60	1.30	3.32	829	41.22	34161
8	SB-8	6.12	641	250	4.50	0.60	1.30	3.32	829	41.22	34161
9	SB-9	10.35	303 to 396, 399, 403	450	4.50	0.60	1.30	3.32	1492	41.22	61490
10	SB-10	4.07	443	210	4.50	0.60	1.30	3.32	696	41.22	28695
Total											397635
WHB											
S. No.	Activity	Area	Khasra No.	Length	Top	Base	Height	C. S.	E. W.	Rate	Amount
1	WHB-1	110	702 to 706, 666 to 672, 3646 to 3672	350	16.00	2.00	3.00	27.00	9450	51.08	482706
2	WHB Invest in Pakka Work	---	---		---	---	---	---	---	---	200000
Total											682706
Grand Total											1138505

D											
Gram Panchayat - Hadha Mafi											
SB											
S. No.	Activity	Area	Khasra No.	Length	Top	Base	Height	C. S.	E. W.	Rate	Amount
1	SB-1	3.35	253	100	4.50	0.60	1.30	3.32	332	41.22	13664
2	SB-2	3.3	190	100	4.50	0.60	1.30	3.32	332	41.22	13664
3	SB-3	3.3	349	100	4.50	0.60	1.30	3.32	332	41.22	13664
4	SB-4	3.35	1085	100	4.50	0.60	1.30	3.32	332	41.22	13664
5	SB-5	2.55	944,945	80	4.50	0.60	1.30	3.32	265	41.22	10932
Total											65589
CD											
S. No.	Activity	Area	Khasra No.	Length	Top	Base	Height	C. S.	E. W.	Rate	Amount
1	CD-1	30.6	310 to 314	100	14.00	2.00	2.25	18.00	1800	44.34	79812
2	CD-2	30.8	321, 327, 331 to 335, 396 to 406, 414 to 416	100	14.00	2.00	2.25	18.00	1800	44.34	79812
3	CD-3	38	426 to 430, 379	120	14.00	2.00	2.25	18.00	2160	44.34	95774
4	CD-4	8.6	931 to 941	80	14.00	2.00	2.25	18.00	1440	44.34	63850
Total											319248
WHB											
S. No.	Activity	Area	Khasra No.	Length	Top	Base	Height	C. S.	E. W.	Rate	Amount
1	WHB-2	65	593 to 597, 617 to 619 3709 to 3711	200	16.00	2.00	3.00	27.00	5400	51.08	275832
2	Pakka Check Dam	175	---		---	---	---	---	---	---	---
Total											275832
Grand Total											660669

CHAPTER -13
**ABBREVIATIONS/
REFERENCES**

LIST OF ABBRIVIATIONS/REFERENCES

DOLR	Department of Land Resources
IWMP	Integrated Watershed Management Programme
SLNA	State Level Nodal Agency
RS	Remote Sensing
GIS	Geographical Information System
GPS	Global Positioning System
CGL	Common Guidelines
PIA	Project Implementing Agency
BSA	Bhoomi Sangrakshan Adhikari
WDT	Watershed Development Team
WC	Watershed Committee
UC	User Group
SHG	Self Help Group
CB	Countour Bund
MB	Marginal Bund
PB	Peripheral Bund
CD	Check Dam

REFERENCES

- Common Guideline of watershed development-2008.
- Jila Sankhikiya Patrika
- Census 2001
- www.banda.nic.in

Preparation of DPR

Detail Project Report of Integrated Watershed Management Programme IWMP-XII had been prepared through base line/ bench Mark survey for physiography climate, soil, land use, vegetation, and 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 Banda II.

S. No.	Name	Designation
1	3	2
1	Sri Vijay Singh	B. S. A.
2	Neeraj Ran	S.T.A. G.P. 'A'
3	Shyam Lal	J. E.
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