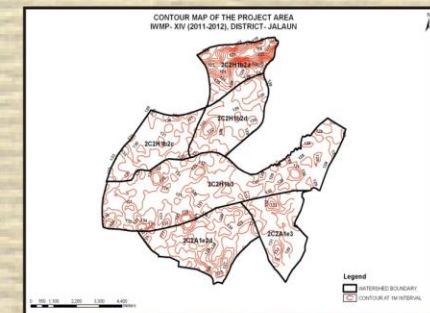
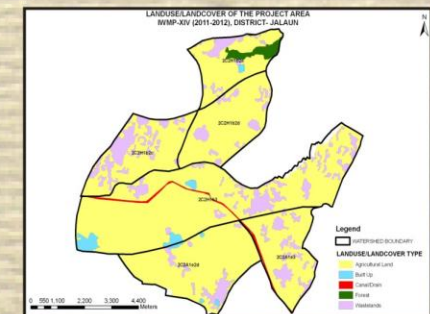
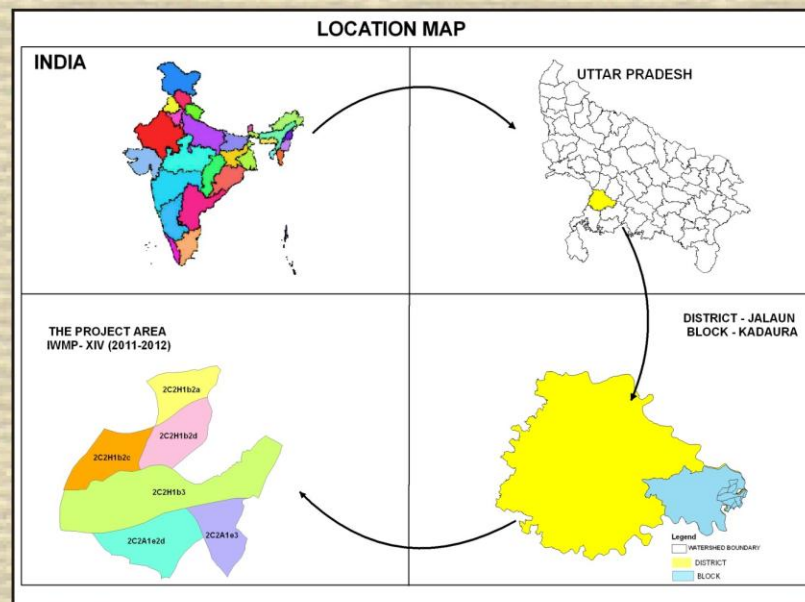
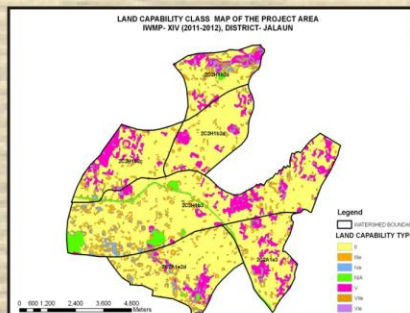
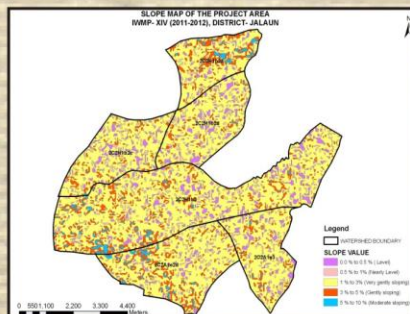


DETAILED PROJECT REPORT

OF INTEGRATED WATERSHED MANAGEMENT PROGRAMME- XIV JALAUN (2011-12)



Prepared by :
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CERTIFICATE

It is certified that the proposed IWMP-XIV project of Jalaun district of U.P. comprising six micro-watersheds of district Jalaun, 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-XIV for financial year 2011-12 is submitted for its approval and implementation.

Bhoomi Sanrakshan Adhikari
Department of Agriculture,
Rashtriya Jalagam Orai, Distt. Jalaun,
Uttar Pradesh

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EXECUTIVE SUMMARY

IWMP-XIV Project is located in Kadaura Block of Jalaun district, Uttar Pradesh. The Project comprises of 6 Micro-watersheds with code No. **2C2H1b2a (R.B. Yamuna), 2C2H1b2d (R.B. Yamuna), 2C2H1b2c (R.B. Yamuna), 2C2H1b3 (R.B. Yamuna), 2C2A1e3 (L.B. Betwa), 2C2A1e2d (L.B. Betwa)**. The total geographical area of the project is 6462.609 ha, out of which 4312.42 ha area has been taken for treatment under Integrated Watershed Management Programme starting year 2011-12. Total 25 villages namely Babina, Bagi, Ekona, Etor Bavani, Gohana, Harchandpur, Jaksiya, Jamrehi, Kadora, Kharehta, Khutmila, Kusauli, Kusmra Bavani, Lahera, Lodipur, Matota, Nisvapur, Okaruaa, Parosa-2, Raela, Sahadatpur, Sajehra, Sarsai, Todarpur, Udanpur are being covered under this project. This watershed has been identified by the state department under I.W.M.P. scheme by proper prioritization of different parameters for watershed selection criteria. The above watershed is located in the Eastern part of the district, between 25°57'43"N to 26°3'38"N latitude and 79°50'5"E to 79°57'9"E longitude. Brief details of various component of the project are given below.

The altitude of the area, on an average, ranges from 113 to 139 m above the Mean Sea Level (MSL). The summer, rainy and winter temperatures range between 30-44°C, 20-24°C and 14-21°C respectively. The May and June are the hottest months and sometime temperature goes up to 48.0°C and minimum temperature falls to 2.0°C during December-January. The run-off of the project area is about

Agriculture practices in the area are generally **mono-cropping** due to **Anna Pratha**. The farmers generally leave their fields fallow for free range grazing system in Kharif season, which makes cultivation difficult. These livestock, generally sheep, goat and indigenous cattle, having low productivity are let loose for grazing.

The baseline surveys have been conducted at individual household level. The details are given in chapter 3. The institution arrangement like PIA and its staff, WDT, UG, SHG and WC details have been annexed in chapter 4. The management and action plan like livelihood, production system and treatment area action plan details have been annexed in the respective chapters. All the thematic maps pertaining to the project area have been attached along with the action plan map. Finally an attempt has been made to prepare individual project wise file for all the MWS wise.

Table 1: PROJECT AT A GLANCE

1.	Name of Project	IWMP-XIV, R.B. YAMUNA & L.B. BETWA RIVER WATERSHED					
2.	Name of Block	KADAURA					
3.	Name of District	JALAUN					
4.	Name of State	UTTAR PRADESH					
5.	No of Micro Watershed	06					
6.	Name of Village under Micro Watershed	Babina, Bagi, Ekona, Etor Bavani, Gohana, Harchandpur, Jaksiya, Jamrehi, Kadora, Kharehta, Khutmila, Kusauli, Kusmra Bavani, Lahera, Lodipur, Matota, Nisvapuri, Okaruaa, Parosa 2, Raela, Sahadatpur, Sajehra, Sarsai, Todarpur, Udanpur					
7.	Micro Watershed Code	2C2H1b2a	2C2H1b2d	2C2H1b2c	2C2H1b3	2C2A1e3	2C2A1e2d
8.	Total Area of the Project	6462.609 ha					
9.	Proposed Area for Treatment	4312.42 ha					
10.	Cost per Hectare	Rs. 12000 per ha					
11.	Project Period	YEAR 2011-12 TO 2015-16					
12.	Total Cost of Project	Rs. 517.49 Lakhs					
13.	Proposed man days	232200 Nos.					

**Table 2: YEAR WISE PHASING (PHYSICAL & FINANCIAL) OF I.W.M.P.-XIV, JALAUN
(U.P.) (2011-12 to 2015-16)**

S. No.	Particulars	Ist Year 2011-12		IInd Year 2012-13		IIIrd Year 2013-14		IVth Year 2014-15		Vth Year 2015-16		Total	
		Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy
1	Administrative Cost-10%	2.59	-	7.76	-	13.97	-	13.97	-	13.45	-	51.75	-
2	Monitoring -1%	-	-	1.03	-	1.03	-	1.03	-	2.07	-	5.17	-
3	Evaluation - 1%	-	-	1.56	-	0.91	-	0.91	-	1.81	-	5.17	-
4	Entry Point Activity- 4%	20.70	-	-	-	-	-	-	-	-	-	20.70	-
5	Institution & Capacity Building-5%	2.59	-	12.94	-	3.88	-	3.88	-	2.59	-	25.87	-
6	DPR-1%	5.17	-	-	-	-	-	-	-	-	-	5.17	-
7	Watershed Dev. Work- 56%	-	-	38.81	577.52	83.70	1245.60	83.70	1245.60	83.57	1243.70	289.79	4312.42
8	Livelihood Activity-9%	-	-	5.17	-	12.94	-	12.94	-	15.52	-	46.57	-
9	Production System & Micro Enterprises 10%	-	-	5.17	-	12.94	-	12.94	-	20.70	-	51.75	-
10	Consolidation-3%	-	-	-	-	-	-	-	-	15.52	-	15.52	-
	Total	31.05	-	72.45	577.52	129.37	1245.60	129.37	1245.60	155.24	1243.70	517.49	4312.42

Table 3: Budget for Various Components (I.W.M.P. - XIV, JALAUN)

S. No.	Budget Component	%	Total (Rs)	Total (lacs)
A.	1. Administrative Cost	10	5,174,904	51.75
	2. Monitoring Cost	1	517,490	5.17
	3. Evaluation	1	517,387	5.17
B.	PREPARATORY PHASE			
	1. Entry Point Activities	4	2,069,962	20.70
	2. Institution and Capacity Building	5	2,587,452	25.87
	3. Detailed Project Report(DPR)	1	517,490	5.17
C.	WATERSHED WORKS PHASE			
	1. Watershed Development Works	56	28,979,462	289.79
	2. Livelihood Activities for the asset less persons	9	4,657,414	46.57
	3. Production System and Micro Enterprises.	10	5,174,904	51.75
D.	Consolidation Phase	3	1,552,471	15.52
	GRAND TOTAL	100	51,748,937	517.49

CHAPTER-1

INTRODUCTION & BACKGROUND

The IWMP – XIV project in Kadaura Block of Jalaun district, Uttar Pradesh is located at a distance of about 5 km from Kadaura Block and 42 km from district head quarter. Six Micro-watersheds with code No. 2C2H1b2a, 2C2H1b2d, 2C2H1b2c, 2C2H1b3, 2C2A1e3, and 2C2A1e2d are included in the project. It comprise of 25 villages namely Babina, Bagi, Ekona, Etora Bavani, Gohana, Harchandpur, Jaksiya, Jamrehi, Kadora, Kharehta, Khutmila, Kusauli, Kusmra Bavani, Lahera, Lodipur, Matota, Nisvapur, Okaruaa, Parosa 2, Raela , Sahadatpur, Sajehra, Sarsai, Todarpur, Udanpur. It is located in Eastern part of Jalaun district. Total area of Watershed is 6462.609 ha out of which 4312.42 ha is proposed to be treated under IWMP Programme.

The watershed is proposed to be taken by Bhoomi Sanrakshan Adhikari, Department Agriculture, Rashtriya Jalagam Orai, Distt. Jalaun, Uttar Pradesh 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 Jalaun district, Uttar Pradesh is given in Table Nos. 1.1, 1.2 and 1.3.

Table 1.1: Status of watershed programme, District- Jalaun

Details	No.	Area (ha.)
1	2	3
Total Micro watersheds in the district	508	456500
Untreatable micro-watersheds	147	131922
Workable Micro Watersheds	361	324578
Micro Watersheds already treated by DLWR & other agencies	156	140587
Balance Micro Watersheds (MWS) for treatment (Before start of IWMP in district)	64	47914

**Table 1.2 : Approved plan (PPRs) by Steering Committee (SC)/
Gov. of India, District- Jalaun**

Year	Project/ Phase IWMP.....	Name of Block(s)	MWS	Area (ha)	Project Cost Rs. lakh	Name of PIA	S.C. Meeting Date
1	2	4	5	6	7	8	9
2011-12	IWMP- XIV*	Kadaura	6	4312.42	517.49	BSA, Deptt. Of Agriculture, Rashtriya Jalagam Orai, Distt. Jalaun,	25.10.2011
2011-12	IWMP- XV		6	2739.00	328.68		
Total			12	7057.42	853.17		

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

Watershed project IWMP	Micro Watersheds (MWS) detail	Micro watersheds code	Geographical Area (ha)	Treatable Area (ha)	Name of Watershed in which MWS is falling (River / Nala name)
IWMP-XIV	Parosa	2C2H1b2a	608.268	124.297	R.B. Yamuna River
IWMP-XIV	Harchandpur	2C2H1b2d	800.887	656.735	R.B. Yamuna River
IWMP-XIV	Nisvapur	2C2H1b2c	776.595	522.944	R.B. Yamuna River
IWMP-XIV	Kusmara	2C2H1b3	2485.916	2211.009	R.B. Yamuna River
IWMP-XIV	Udanpur	2C2A1e3	711.152	579.738	L.B. Betwa River
IWMP-XIV	Sahadatpur	2C2A1e2d	1079.791	217.694	L.B. Betwa River
Total			6462.609	4312.42	

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.

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 1.4: Problem identification and prioritization for watershed

S. No.	Problem	Rank
1	Low production of field crops due to soil erosion	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 1.5: A SWOT analysis of watershed is presented as below:

Strength (S)	Weakness(W)
1- Cooperative work culture is traditional activities 2- Close ethnic tier 3- Road at the top as well as outlet of the watershed 4- Hard working man power 5- Resource pool of crop genetic diversity 6- Awareness of farmers about watershed management program 7- Well established CPR maintaining and sharing system 8- good productivity of soil. 9- Social outlook of the community towards landless	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)
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 rainfed crop diversification 5- Good scope for agro-forestry and dry land horticulture. 6- Potential for collective active action and management of CPRs.	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 1.6: Weightage of the Project

District		Name of the Project		No. of micro-watersheds proposed to be covered		Proposed project area (ha)		Proposed cost (Rs. in lakh)	
Jalaun		IWMP-XIV		06		4312.42		517.49	
Weightage									
i	ii	iii	iv	v	vi	vii	viii	ix	
7.5	5	5	5	0	10	10	5	10	
x	xi	xii	xiii	xiv					
15	10	10	0	92.50					

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)	
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)	

Criteria	Maximum Score	Ranges & Scores			
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)	
Total	150	150	90	41	2.5

Major reasons for selection of watersheds

1. Poverty index above 80%.
2. Actual wages are significantly lower than minimum wages.
3. Area under rain-fed agriculture is more than 80%.
4. Land with low production and production may be increased by reasonable efforts.

CHAPTER – 2

GENERAL DESCRIPTION OF PROJECT AREA

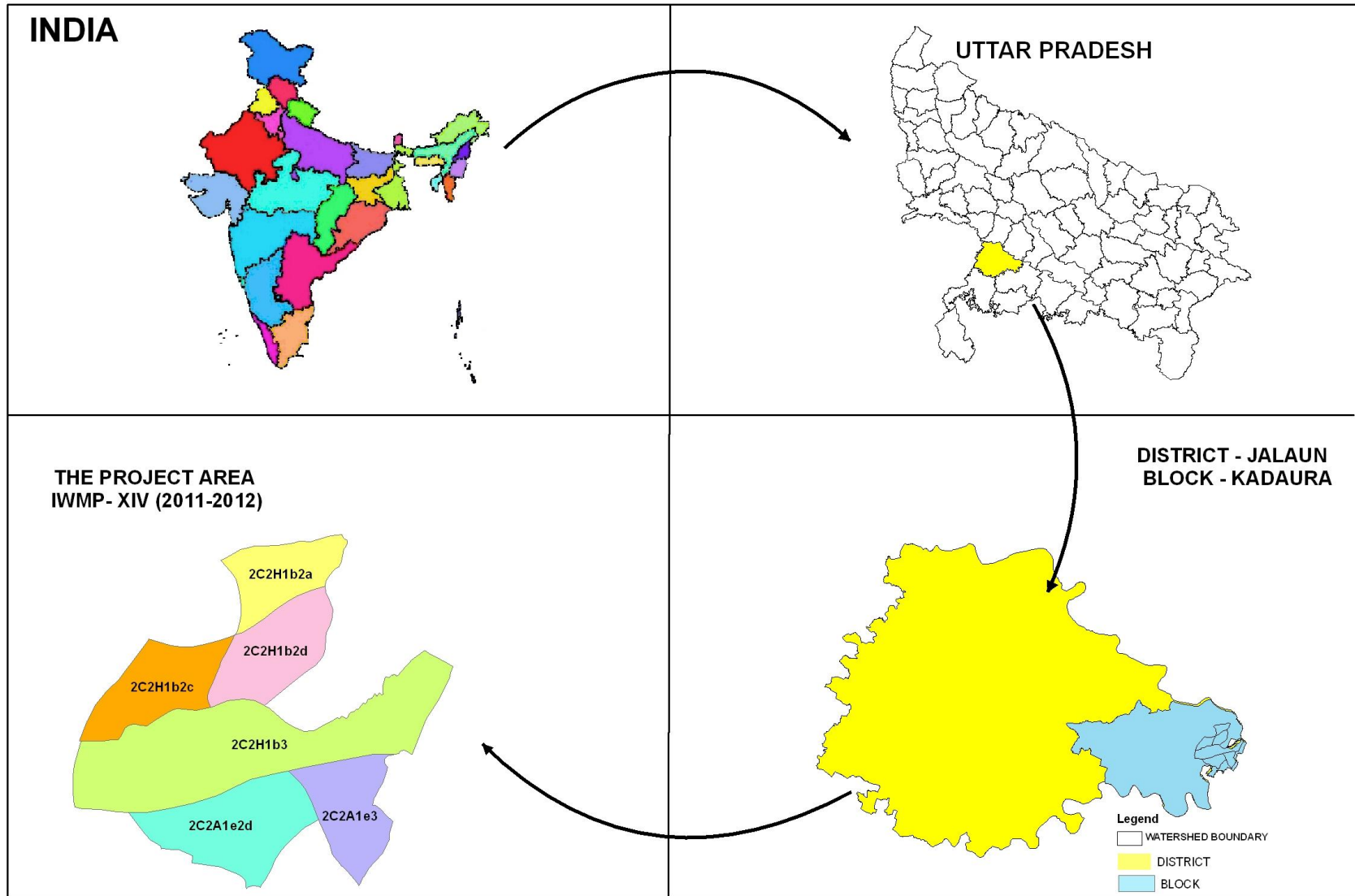
Location: - The micro-watershed IWMP-XIV is situated in Kadaura Block of Jalaun district, U.P., at a distance of about 5 km from Kadaura Block and 42 km from district head quarter. It represents the eastern part of the district. The details about micro-watersheds, their geographical location (lat/long), Gram Panchayat, villages and its geographical area, etc. is given in Table 2.1

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

S. No.	Name of micro watershed with Code	Latitude / Longitude	Name of GP	Names of villages	Name of Block	Geog. Area of village included in MWS	Details of important /approach road with distance km
1	2	3	4	5	6	7	8
1	Parosa 2C2H1b2a	26°1'56"N to 26°3'38"N; 79°52'48"E to 9°55'12"E	Raela	Raela	Kadaura	3.379	5 km from Kadaura Block and 42-45 km from district head quarter
			Ekona	Ekona		21.588	
			Jaksiya	Jaksiya		27.786	
			Jamrehi	Lodipur		246.638	
			Jamrehi	Jamrehi		241.005	
			Nisvapuri	Nisvapuri		67.872	
				TOTAL		608.268	
2	Harchandpur 2C2H1b2d	25°57'43"N to 25°59'42"N 79°51'7"E to 79°54'40"E	Jaksiya	Jaksiya		0.109	
			Jamrehi	Jamrehi		276.583	
			Nisvapuri	Nisvapuri		141.911	
			Harchandpur	Harchandpur		123.751	
			Jamrehi	Gohana		190.246	
			Kusmra Bavani	Kusmra Bavani		68.287	
				TOTAL		800.887	
3	Nisvapuri 2C2H1b2c	26°0'10"N to 26°1'57"N; 79°50'11"E to 79°53'7"E	Nisvapuri	Nisvapuri		196.496	
			Harchandpur	Harchandpur		297.729	
			Babina	Babina		0.717	
			Parosa	Parosa 2		214.158	
			Etor Bavani	Etor Bavani		67.495	
				TOTAL		776.595	

S. No.	Name of micro watershed with Code	Latitude / Longitude	Name of GP	Names of villages	Name of Block	Geog. Area of village included in MWS	Details of important /approach road with distance km
1	2	3	4	5	6	7	8
4	Kusmara 2C2H1b3	25°59'0"N to 26°1'41"N; 79°50'5"E to 79°57'9"E	Babina	Babina		6.320	
			Harchandpur	Harchandpur		51.259	
			Kusmra Bavani	Kusmra Bavani		1431.660	
			Parosa	Parosa 2		273.565	
			Etor Bavani	Etor Bavani		584.638	
			Kadora	Kadora		15.986	
			Parosa	Matota		69.975	
			Udanpur	Udanpur		18.928	
			Okaruaa	Sahadatpur		33.585	
				TOTAL		2485.916	
5	Udanpur 2C2A1e3	25°57'47"N to 26°0'0"N; 79°54'3"E to 79°56'3"E	Kusmra Bavani	Kusmra Bavani		51.040	
			Udanpur	Udanpur		329.169	
			Khutmili	Khutmili		330.943	
				TOTAL		711.152	
6	Sahadatpur 2C2A1e2d	26°0'45"N to 26°2'48"N; 79°54'54"E to 79°54'55"E	Parosa	Parosa 2		65.698	
			Etor Bavani	Etor Bavani		29.465	
			Parosa	Matota		72.542	
			Udanpur	Udanpur		181.346	
			Khutmili	Khutmili		271.615	
			Okaruaa	Sahadatpur		259.323	
			Bagi	Bagi		97.551	
			Okaruaa	Sajehra		79.631	
			Okaruaa	Okaruaa		22.620	
				TOTAL		1079.791	
			Total Geog. Area			6462.609	

LOCATION MAP



Area and Landuse: Total area of the watershed is 6462.61 ha out of which treatable area is 4312.42 ha. Rainfed area is 5820.50 ha out of which 4920.50 ha is agriculture land. Details of present land-use are given in Table 2.2. Micro-watershed-wise details of the land use/land cover are depicted in Table 2.3. The watershed area is also classified under different Land Capability Classes (LCC) II to VII as detailed in Table 2.4.

Table 2.2: Present land use of the watershed

S. No.	Code of MWS	Name of MWS	Cultivated and wasteland				Area details (ha)							
			area (ha)				(falling within the projects)							
			Cultivated rainfed area	Cultivated irrigated area	Uncultivated wasteland/ fallow		Pvt. Agri. Land				Forest Land	Community land	Others (Pl. specify)	Total area (ha)
					Temp.	Permanent	Gen	SC/ST	OBC	Total				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	2C2H1b2a	Parosa	118.08	185.40	6.21	92.52	88.01	69.80	145.67	303.49	175.20	24.67	6.17	608.268
2	2C2H1b2d	Harchandpur	623.90	55.22	32.84	62.25	196.95	156.20	325.98	679.12	0.00	21.34	5.34	800.887
3	2C2H1b2c	Nisvapur	496.80	97.17	26.15	78.24	172.25	136.61	285.10	593.97	0.00	62.59	15.65	776.595
4	2C2H1b3	Kusmara	2100.46	105.31	110.55	50.88	639.67	507.33	1058.77	2205.77	0.00	83.10	35.61	2485.916
5	2C2A1e3	Udanpur	550.75	50.34	28.99	52.70	174.32	138.25	288.53	601.09	0.00	22.70	5.67	711.152
6	2C2A1e2d	Sahadatpur	206.81	330.26	10.88	170.19	155.75	123.53	257.79	537.07	0.00	253.15	108.49	1079.791
	Total		4096.80	823.72	215.62	506.78	1426.95	1131.72	2361.85	4920.51	175.20	467.56	176.94	6462.609

LAND CAPABILITY CLASSIFICATION (LCC)

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

Table 2.3: Area under Different Land Capability Class (LCC)

Land Capability Class	Area (ha)	Main Problem
II	4625.770	Sheet Erosion
III	593.940	Sheet and Rill Erosion
IV	76.876	Gully Erosion
V	830.185	High Gully Erosion
VI	142.545	Sevier Gully Erosion
VII	24.762	Sevier Gully Erosion due to water logging
Others	168.544	-
Total	6462.622	

Physiography: The micro watershed of the IWMP-XIV is located at an elevation of 117 to 143 m above mean sea level (msl) and Relief height difference from 9 m to 33 m. Elevation range and relief are given in Table 2.4.

Table 2.4: Elevation Range, Longitude/ Latitude, Relief Height Difference of the MWS

S. No.	Watershed Code	Location		Elevation of watershed from Mean Sea level		
		Latitude (N)	Longitude (E)	Highest (M)	Lowest (M)	Relief (M)
1	2C2H1b2a	26°3'38"N - 26°1'56"N	79°52'48"E- 79°55'12"E	131	113	18
2	2C2A1e2d	25°59'42"N-25°57'43"N	79°51'7"E - 79°54'40"E	135	122	13
3	2C2H1b2c	26°1'57"N - 26°0'10"N	79°50'11"E - 79°53'7"E	135	129	6
4	2C2H1b3	26°1'41"N - 25°59'0"N	79°50'5"E - 79°57'9"E	139	126	13
5	2C2A1e3	26°0'0"N - 25°57'47"N	79°54'3"E - 79°56'3"E	134	126	8
6	2C2H1b2d	26°2'48"N - 26°0'45"N	79°54'54."E 79°54'55"E	135	126	9

Slope: Slope map of the micro watershed was prepared using Arc GIS software. Slope was divided into different class viz. 0-0.5%, 0.5-1.0%, 1-3%, 3-5% and more than 5% and data is presented in Table 2.5 below. The maximum slope area, in the micro-watershed, falls in the category were 1-3% (4573.905 ha) followed by 0-0.5% (400.044 ha).

Table 2.5: Slope Range in the Project Area

Sl. No.	Name of MWS & code	Slope range wise area (ha)						
		0-05% (Level)	0.5-1% (Nearly Level)	1-3% (Very gently sloping)	3-5% (Gently sloping)	>5%		Others Specify 15-35%
						5-10% (Moderate sloping)	10-15%	
1	2	3	4	5	6	7	8	9
1.	Parosa 2C2H1b2a	20.291	40.428	397.735	123.364	25.054		
2.	Harchandpur 2C2H1b2d	40.127	74.958	765.831	166.282	30.156		
3.	Nisvapur 2C2H1b2c	57.503	90.893	559.380	65.062	1.972		
4.	Kusmara 2C2H1b3	157.877	214.783	1748.683	311.343	47.596		
5.	Udanpur 2C2A1e3	49.719	71.686	522.146	62.534	3.472		
6	Sahadatpur 2C2A1e2d	74.527	91.446	580.130	51.622	1.332		
	Total	400.044	584.194	4573.905	780.207	109.582		

Climate: The climate of the region is characterized as arid to semi-arid with average annual rainfall less than 536 mm annually with an average of 35 rainy days. Out of which 85% is received during the monsoon season from July to September. The area received very less rainfall in the winter season. Temperature ranges from as high as 49°C in the May-June to as low as 4°C during December-January. The trend of the rainfall is very erratic and maximum (62%) water goes as runoff.

Table 2.6: Average monthly rainfall, and Temperature of the last five years

Month	Year/Rainfall in mm.					
	2006	2007	2008	2009	2010	Average
January	0	0	-	0	0.3	0.06
February	0	3.7	-	0	13.8	3.5
March	-	14	0	0.4	0	2.88
April	0	0	0	-	0	0
May	0	0	0	-	1.7	0.34
June	14.3	77.5	176	0	5.8	54.72
July	252	82.9	310	132	243	203.98
August	66.4	88.2	135	154	177	124.12
September	36.2	57.1	107	105	216	104.26
October	19.3	0	8.7	109	0	27.4
November	0	-	0	27.5	41.5	13.8
December	0	-	0	4.8	1	1.16

Agro-Climate Conditions

The Agro-Climate condition of the project area of JALAUN district is briefly described in Table 2.7 below.

Table- 2.7: DETAILS OF AGRO-CLIMATE CONDITIONS

S. No.	Name of the District	Name of the Project	Name of the Agro-climatic zone covers project area	Area in ha	No. of the villages	Major soil types		Topo-graphy	Average rainfall in mm (preceding 5 years average)	Major crops	
						a)Type	b) Area in ha			a) Name	b) Area in ha
1.	JALAUN	I.W.M.P. - XIV	Bundel-khand Zone	4312.42	25	Rakar	3234	Undulating	520.00	Kharif: Jowar, Til, Arhar	2392
						Kabar				Rabi: Wheat, Gram, Mustard, Masoor	
						Mar				Total	2392
						Padwa					

The details of flood and drought in the project area have been given in Table 2.8.

Table 2.8: Details of Flood and Drought in the Project Area (IWMP-XIV, Jalaun)

Name of Micro Watershed	Particulars	Villages	Periodicity		Not affected
			Annual	Any other (please specify)	
Parosa 2C2H1b2a Harchandpur 2C2H1b2d Nisvapur 2C2H1b2c Kusmara 2C2H1b3 Udanpur 2C2A1e3 Sahadatpur 2C2A1e2d	Flood	No. of villages	-	-	Not affected
		Name(s) of villages	-	-	
	Drought	No. of villages: 25			
		Name(s) of villages: Babina, Bagi, Ekona, Etor Bavani, Gohana, Harchandpur, Jaksiya, Jamrehi, Kadora, Kharehta, Khutmila, Kusauli, Kusmra Bavani, Lahera, Lodipur, Matota, Nisvapur, Okaruua, Parosa 2, Raela, Sahadatpur, Sajehra, Sarsai, Todarpur, Udanpur		Alternate after every 2-3 years	

Watershed Characteristics

Shape and Size

The shape of watershed (IWMP -XIV, JALAUN) is more or less rectangle in shape. The shape and size of the micro watershed is given in Table 2.9.

Table- 2.9: SHAPE AND SIZE OF WATERSHED

S. No.	Micro watershed Code	Geog. Area (ha)	Shape	Approximate size (m)	
				Length	Width
1	2C2H1b2a	608.268	Rectangular	1974	3253
2	2C2H1b2d	800.887	Rectangular	3419	5836
3	2C2H1b2c	776.595	Linear	2610	2943
4	2C2H1b3	2485.929	Rectangular	2597	10671
5	2C2A1e3	711.152	Rectangular	4068	1833
6	2C2A1e2d	1079.791	Square	2964	2777

Geomorphology:

The watershed is located in the Eastern corner of the JALAUN district. The entire watershed is topographically divided into three major landforms. Accordingly, the soils of watershed can be grouped into three major categories, Such as Plain land, Moderate land, and Ravinous land. The annual soil erosion in the project area is 24 to 28 tons/year as detailed below.

Table- 2.10: DETAIL OF SOIL EROSION (I.W.M.P-XIV), JALAUN

S. No.	Name of the Project	Soil Erosion (Ha)				Run-Off (mm/yr)	Average Soil Loss in tons/ha/yr	Wind Erosion
		Sheet	Rill	Gully	Total			
1	IWMP – XIV	2850.20	2129.95	810.20	5790.35	312	24 to 28	N.A.

Table- 2.11: Employment Related Outcome

S. NO.	DISTRICT	NO OF VILLAGES	WAGE EMPLOYMENT										SELF EMPLOYMENT				
			NO. OF MANDAYS (IN LAKH)					NO. OF BENEFICIARIES					NO. OF BENEFICIARIES				
			SC	ST	Other	Women	Total	SC	ST	Other	Women	Total	SC	ST	Other	Women	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
1	JALAUN	25	0.646.-	1.676	0.258	2.2580	847	-	2853	150	3850	62	-	148	20	230	

CHAPTER-3

BASELINE SURVEY

SOCIO-ECONOMIC CONDITION

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 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.

Details of the population of the micro watershed are given in Table 3.1. About 25% population is scheduled caste. Due to hard life and low seasonal income in the area a large number of people migrate to large cities where they work as daily labour / rickshaw puller.

Table 3.1: Demographic Features in the project area IWMP- XIV

S. No.	Name of villages	Total House holds	Total Population	Total Male	Total Female	Total SC	Male SC	Females SC
1.	Babina	857	5726	3094	2632	1914	1037	877
2.	Bagi	491	3127	1677	1450	1079	578	501
3.	Ekona	309	1780	984	796	255	152	103
4.	Etora Bavani	311	1616	874	742	850	467	383
5.	Gohana	74	572	302	270	27	15	12
6.	Harchandpur	379	2189	1169	1020	1096	591	505
7.	Jaksiya	258	1509	818	691	314	172	142
8.	Jamrehi	162	1065	607	458	697	404	293
9.	Kadora	74	572	302	270	27	15	12
10.	Kharehta	121	1039	564	475	590	323	267
11.	Khutmila	179	1182	629	553	200	106	94
12.	Kusauli	491	3127	1677	1450	1079	578	501
13.	Kusmra Bavani	385	2273	1248	1025	204	116	88
14.	Lahera	145	800	434	366	201	111	90
15.	Lodipur	129	947	486	461	124	61	63
16.	Matota	237	1550	869	681	602	346	256
17.	Nisvapur	130	912	521	391	282	157	125
18.	Okaruaa	81	487	258	229	90	50	40
19.	Parosa 2	209	1378	738	640	522	280	242
20.	Raela	439	2527	1370	1157	896	482	439
21.	Sahadatpur	60	366	199	167	0	0	0
22.	Sajehra	83	452	252	200	189	95	94
23.	Sarsai	439	2527	1370	1157	896	482	414
24.	Todarpur	94	632	358	274	314	179	135
25.	Udanpur	329	1959	1056	903	392	215	177
	TOTAL	6466	40314	21856	18458	12840	7012	5853

Table 3.3: Details of seasonal migration from Project area: Pre-project status

Sl. No.	Name of villages	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	Expected reduction in no. of persons migrating	Income from such occupation (Rs. in lakh)
1	3	4	5	6		7	8	9
1	Babina, Bagi, Ekona, Etor Bavani, Gohana, Harchandpur, Jaksiya, Jamrehi, Kadora, Kharehta, Khutmila, Kusauli, Kusmra Bavani, Lahera, Lodipur, Matota, Nisvapur, Okaruua, Parosa 2, Raela , Sahadatpur, Sajehra, Sarsai, Todarpur, Udanpur	340	170-190	Lack of employment, less wages, higher wages outside	300-500 km	Labour	155	0.25 to 0.50

Table 3.4: Typical soil profile of the watershed (dominant soil)

Horizon	Dpth (cm)	Morphology
A	0-150	Yellow & Black in colour, clay content 28%, with free CaCO ₃ , sticky when moist, hard when dry, high elasticity, fissures and cracks, occasional occurrence of free calcium carbonate granules pH 8.0-8.5
B	150-600	Whitish-Yellow in colour, high effervescence with dilute HCl, very fine mixed with free CaCO ₃ and granules, very hard when dry, compact & indurate hard pan, restricting development of root and downward water transmission (locally called as Point soil)
C	> 600	Red and white sand

Soil Texture:

Light brown loam to clay, generally structure less, average in water holding capacity and organic matter, moderately alkaline, restricted drainage, surface soil poor in lime content but the middle layer is calcareous, medium in soluble salts. The Carbonates and sulphates practically absent.

Table 3.5: Details of Soil texture in IWMP-XIV, Jalaun

Sl. 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)	Geographical Area	Others specify
1	Parosa 2C2H1b2a	72.992	194.646	340.630	608.268	Rakar, Kabar, Mar, Padwa
2	Harchandpur 2C2H1b2d	96.106	256.284	448.497	800.887	Rakar, Kabar, Mar, Padwa
3	Nisvapur 2C2H1b2c	93.191	248.510	434.893	776.595	Rakar, Kabar, Mar, Padwa
4	Kusmara 2C2H1b3	298.310	795.493	1392.113	2485.916	Rakar, Kabar, Mar, Padwa
5	Udanpur 2C2A1e3	85.338	227.569	398.245	711.152	Rakar, Kabar, Mar, Padwa
6	Sahadatpur 2C2A1e2d	129.575	345.533	604.683	1079.791	Rakar, Kabar, Mar, Padwa
	Total	775.513	2068.035	3619.061	6462.609	

Table 3.6: Soil characteristics and fertility status

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

Values correspond to soil fraction <2mm.

Table 3.7: Details of land holding pattern

1	2	3	4	5	6	7		
S. No.	Names MWS with code	Name of Village	Type of Farmer	No. of households	No. of BPL households	Land holding (ha)		
						Irrigated	Rainfed	Total
1	Parosa 2C2H1b2a	Raela Ekona Jaksiya Lodipur Jamrehi Nisvapur	(i) Large farmer	-	-	-	-	-
			(ii) Small farmer	13	-	-	-	-
			(iii) Marginal farmer	28	-	-	-	-
			(iv) Landless person	24	-	-	-	-
			Sub-Total	41	-	18.297	106.00	124.297
2	Harchandpur 2C2H1b2d	Jaksiya Jamrehi Nisvapur Harchandpur Gohana Kusmra Bavani	(i) Large farmer	139	-	-	-	-
			(ii) Small farmer	207	-	-	-	-
			(iii) Marginal farmer	102	-	-	-	-
			(iv) Landless person	37	39	-	-	-
			Sub-Total	564	39	170.650	488.085	656.735
3	Nisvapur 2C2H1b2c	Nisvapur Harchandpur Parosa 2 Etor Bavani	(i) Large farmer	136	-			
			(ii) Small farmer	268	-			
			(iii) Marginal farmer	214	-			
			(iv) Landless person	152	69			
			Sub-Total	770	69	124.700	398.244	522.944
4	Kusmara 2C2H1b3	Babina Harchandpur Kusmra Bavani Parosa 2 Etor Bavani Kadora Udanpur Sahadatpur	(i) Large farmer	1270	-	-	-	-
			(ii) Small farmer	8640	-	-	-	-
			(iii) Marginal farmer	4430	-	-	-	-
			(iv) Landless person	287	265	-	-	-
			Sub-Total	14730	265	687.400	1413.327	2111.009

1	2	3	4	5	6	7		
S. No.	Names MWS with code	Name of Village	Type of Farmer	No. of households	No. of BPL households	Land holding (ha)		
						Irrigated	Rainfed	Total
5	Udanpur 2C2A1e3	Kusmra Bavani Udanpur Khutmil	(i) Large farmer	86	-	-	-	-
			(ii) Small farmer	207	-	-	-	-
			(iii) Marginal farmer	205	-	-	-	-
			(iv) Landless person	37	62	-	-	-
			Sub-Total	545	62	206.870	574.165	679.738
6	Sahadatpur 2C2A1e2d	Parosa 2 Etor Bavani Matota Udanpur Khutmila Sahadatpur Okaruaa	(i) Large farmer	68	-	-	-	-
			(ii) Small farmer	239	-	-	-	-
			(iii) Marginal farmer	202	-	-	-	-
			(iv) Landless person	42	67	-	-	-
			Sub-Total	550	67	-	217.694	217.694

Table 3.8: Major Crops, their Productivity and Production

Due to mono cropping, Anna Pratha and non manageable condition of mar and kabar soil are the specific characteristics of the district. Mono cropping is the most common farming system. Mixed farming in the combination of agriculture and live stock is also quite common in all the areas. Micro-watershed wise grown crops, their productivity and production are given below:

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	165.36	1822.30	14.00	10.00	0.00	18223.00	0.00	27334.50
2	Maize	0.00	135.60	0.00	2.00	0.00	271.20	0.00	406.80
3	Arhar	0.00	565.24	0.00	4.25	0.00	2402.27	0.00	3603.41
4	Urd/Moong	0.00	398.23	0.00	5.00	0.00	1991.15	0.00	1991.15
	Total	165.36	2921.37				22887.62		33335.86
B	Rabi								
1	Wheat	214.69	1554.21	22.00	18.00	4723.18	27975.78	1890.00	41963.67
2	Barley	0.00	196.20	0.00	10.50	0.00	2060.10	0.00	3090.15
3	Gram	0.00	612.40	0.00	6.50	0.00	3980.60	0.00	4975.75
4	Mustard	0.00	416.35	0.00	4.25	0.00	1769.49	0.00	2654.23
	Total	214.69	2779.16				35785.97		52683.80
C	Zaid								
Cultivable Area		4920.51	Cropping Intensity			123.58			

Summary

It was found that the productivity of wheat, Gram, Paddy, Arhar and Masoor are mainly grown in the project area. Overall cropping intensity of the project area is 123.58%.

Livestock Population

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

Table 3.11: Livestock Population in IWMP- XIV, Jalaun

All Figure in No.

S. N.	Name of Village	Cow		Buffalo		Ox/ Bull	Goat	Sheep	Pigg- eries	Poultry			Other
		Desi	Crossed	Desi	Murrah					Broiler	Layers	Total	Specify
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1.	Babina	360	60	135	20	10	450	250	100	-	-	-	6
2.	Bagi	540	56	640	64	20	800	480	210	-	-	-	10
3.	Ekona	300	32	436	45	32	600	320	164	-	-	-	9
4.	Etora Bavani	-	-	-	-	-	-	-	-	-	-	-	
5.	Gohana	430	64	236	44	-	-	212	90	-	-	-	8
6.	Harchandpur	210	22	460	49	20	700	336	186	-	-	-	30
7.	Jaksiya	-	-	-	-	-	-	-	-	-	-	-	
8.	Jamrehi	-	-	-	-	-	-	-	-	-	-	-	
9.	Kadora	220	21	430	46	22	780	360	358	-	-	-	10
10.	Kharehta	280	28	425	51	15	600	200	80	-	-	-	7
11.	Khutmila	-	-	-	-	-	-	-	-	-	-	-	
12.	Kusauli	340	32	786	80	30	1000	400	756	-	-	-	6

13.	Kusmra Bavani	310	30	467	47	28	1400	856	859	-	-	-	8
14.	Lahera	330	36	830	90	26	1200	695	852	-	-	-	12
15.	Lodipur	180	38	135	30	50	135	-	-	-	-	-	11
16.	Matota	180	38	135	30	50	135	-	-				11
17.	Nisvapur	-	-	-	-	-	-	-	-	-	-	-	-
18.	Okaruaa	-	-	-	-	-	-	-	-	-	-	-	
19.	Parosa 2	75	36	90	35	12	140	22	-	-	-	-	-
20.	Raela	132	36	156	44	24	200	17	12	-	-	-	6
21.	Sahadatpur	134	30	152	42	19	222	-	-	-	-	-	8
22.	Sajehra	168	36	225	78	22	620	72	44	-	-	-	-
23.	Sarsai	235	52	148	48	25	115	-	-	-	-	-	-
24.	Todarpur	383	60	267	72	30	335	-	-	-	-	-	6
25.	Udanpur	130	52	230	52	26	600	-	-	-	-	-	-
	Total												

Table 3.12: Details of Livestock Productivity

S. No.	Name of Village	Milk Production (Liter Per day)				Goatry	Poultry		Piggeries weight Kg/Pig
		Cows		Buffalos		Weight in (Kg/goat)	Broiler Weight (in Kg/ Brl)	Layers No. of eggs/day	
		Desi	Crossed	Desi	Murrah				
1	3	4	5	6	7		9	10	11
1.	Babina	1.4	2.5	2.1	5.5	25	-	-	-
2.	Bagi	1.3	2.6	2.6	5.6	28	-	-	-
3.	Ekona	1.5	2.6	2.4	5.1	26	-	-	-
4.	Etora Bavani	-	-	-	-	-	-	-	-
5.	Gohana	1.4	2.7	2.9	5	23	-	-	-
6.	Harchandpur	1.2	2.7	2.7	5.6	21	-	-	-
7.	Jaksiya	-	-	-	-	-	-	-	-
8.	Jamrehi	-	-	-	-	-	-	-	-
9.	Kadora	1.8	2.7	2.1	5.6	24	-	-	-
10.	Kharehta	1.6	2.7	2.3	5.1	23	-	-	-
11.	Khutmila	-	-	-	-	-	-	-	-
12.	Kusauli	1.4	2.6	2.5	5.8	27	-	-	-
13.	Kusmra Bavani	1.6	2.8	2.6	5.1	28	-	-	-

14.	Lahera	1.2	2.7	2.1	5.3	24	-	-	-
15.	Lodipur	1.3	2.6	2.6	5.6	28	-	-	-
16.	Matota	1.5	2.6	2.4	5.1	26	-	-	-
17.	Nisvapur	-	-	-	-	-	-	-	-
18.	Okaruaa	-	-	-	-	-	-	-	-
19.	Parosa 2	1.2	2.5	2.7	5.6	21	-	-	-
20.	Raela	1.4	2.5	2.1	5.5	25	-	-	-
21.	Sahadatpur	1.8	2.5	2.1	5.6	24	-	-	-
22.	Sajehra	1.6	2.6	2.3	5.1	23	-	-	-
23.	Sarsai						-	-	-
24.	Todarpur	1.4	2.6	2.5	5.8	27	-	-	-
25.	Udanpur	1.2	2.5	2.7	5.6	21	-	-	-
	Average	1.032	1.88	1.748	3.904	17.76	-	-	-

SUMMARY OF LIVELIHOOD

S. No.	Names of the villages	Existing livelihood activities	Possible livelihood interventions under the project	Current status of migration (No. of people)	Main reasons for migration
1-	Babina, Bagi, Ekona, Etora Bavani, Gohana, Harchandpur, Jaksiya, Jamrehi, Kadora, Kharehta, Khutmila, Kusauli, Kusmra Bavani, Lahera, Lodipur, Matota, Nisvapur, Okaruaa, Parosa 2, Raela , Sahadatpur, Sajehra, Sarsai, Todarpur, Udanpur	1-Animal husbandry 2-Local employment in Agriculture	Dairy, Fisheries, Local Employment in Agriculture	340	Lack employment, more wages available outside,

Table 3.13: Ground Water Status

S. No.	Name of Village	Source	Pre-Project level	Expected post-project level	Remarks
1	2	3	4	5	6
1	Babina, Bagi, Ekona, Etora Bavani, Gohana, Harchandpur, Jaksiya, Jamrehi, Kadora, Kharehta, Khutmila, Kusauli, Kusmra Bavani, Lahera, Lodipur, Matota, Nisvapur, Okaruua, Parosa 2, Raela , Sahadatpur, Sajehra, Sarsai, Todarpur, Udanpur	Open wells	12-13 m	9-11 m	-

Status of Drinking Water

S. No.	Name of Village	Availability of drinking water (no. of months in a year)		Quality of drinking water		Comment s
1	2	3		4		5
1	Babina, Bagi, Ekona, Etor Bavani, Gohana, Harchandpur, Jaksiya, Jamrehi, Kadora, Kharehta, Khutmila, Kusauli, Kusmra Bavani, Lahera, Lodipur, Matota, Nisvapur, Okaruaa, Parosa 2, Raela , Sahadatpur, Sajehra, Sarsai, Todarpur, Udanpur	10	12	Hard & Soft	Soft	-

Table 3.14: Details of infrastructure in the project areas

S No	Name of Micro Watershed	Name of villages	Parameters		Status			
1	2	3	4		5			
1	Parosa 2C2H1b2a	Raela Ekona Jaksiya Lodipur Jamrehi Nisvapur	(i)	Name of villages connected to the main road by an all-weather road	3 km			
			(ii)	Village's Name provided with electricity	✓			
			(iii)	No. of households without access to drinking water	X			
			(iv)	No. of educational institutions : Primary(P)/ Secondary(S)/ Higher Secondary(HS)/ vocational institution(VI)	(P) ✓	(S)	(HS)	(VI)
			(v)	Names of villages with access to Primary Health Centre	X			
			(vi)	Names of villages with access to Veterinary Dispensary	X			
			(vii)	Names of villages with access to Post Office	X			
			(viii)	Names of villages with access to Banks	X			
			(ix)	Names of villages with access to Markets/ mandis	X			
			(x)	Names of villages with access to Agro-industries	X			
			(xi)	Total quantity of surplus milk deficit	X			
			(xii)	No. of milk collection canters (e.g. Union(U)/ Society(S)/ Private agency(PA)/ others (O))	(U)	(S) ✓	(PA)	(O)
			(xiii)	Name of villages with access to Anganwadi Centre	X			
			(xiv)	Any other facilities with names of villages (please specify)	X			

S No	Name of Micro Watershed	Name of villages	Parameters		Status			
1	2	3	4		5			
2	Harchandpur 2C2H1b2d	Jaksiya Jamrehi Nisvapur Harchandpur Gohana Kusmra Bavani	(i)	Name of villages connected to the main road by an all-weather road	6 km			
			(ii)	Village's Name provided with electricity	√			
			(iii)	No. of households without access to drinking water	X			
			(iv)	No. of educational institutions : Primary(P)/ Secondary(S)/ Higher Secondary(HS)/ vocational institution(VI)	(P) √	(S)	(HS) √	(VI)
			(v)	Names of villages with access to Primary Health Centre	X			
			(vi)	Names of villages with access to Veterinary Dispensary	√			
			(vii)	Names of villages with access to Post Office	√			
			(viii)	Names of villages with access to Banks	X			
			(ix)	Names of villages with access to Markets/ mandis	X			
			(x)	Names of villages with access to Agro-industries	X			
			(xi)	Total quantity of surplus milk deficit	X			
			(xii)	No. of milk collection canters (e.g. Union(U)/ Society(S)/ Private agency(PA)/ others (O))	(U)	(S) √	(PA)	(O)
			(xiii)	Name of villages with access to Anganwadi Centre	√			
			(xiv)	Any other facilities with names of villages (please specify)	X			

S No	Name of Micro Watershed	Name of villages	Parameters		Status			
1	2	3	4		5			
3	Nisvapur 2C2H1b2c	Nisvapur Harchandpur Parosa 2 Etorā Bavani	(i)	Name of villages connected to the main road by an all-weather road	√			
			(ii)	Village's Name provided with electricity	√			
			(iii)	No. of households without access to drinking water	X			
			(iv)	No. of educational institutions : Primary(P)/ Secondary(S)/ Higher Secondary(HS)/ vocational institution(VI)	(P) √	(S) √	(HS) √	(VI) √
			(v)	Names of villages with access to Primary Health Centre	√			
			(vi)	Names of villages with access to Veterinary Dispensary	√			
			(vii)	Names of villages with access to Post Office	√			
			(viii)	Names of villages with access to Banks	√			
			(ix)	Names of villages with access to Markets/ mandis	√			
			(x)	Names of villages with access to Agro-industries	X			
			(xi)	Total quantity of surplus milk deficit	X			
			(xii)	No. of milk collection centers (e.g. Union(U)/ Society(S)/ Private agency(PA)/ others (O))	(U)	(S) √	(PA)	(O)
			(xiii)	Name of villages with access to Anganwadi Centre	√			
			(xiv)	Any other facilities with names of villages (please specify)	X			

S N	Name of Micro Watershed	Name of villages	Parameters		Status			
1	2	3	4		5			
4	Kusmara 2C2H1b3	Babina Harchandpur Kusmra Bavani Parosa 2 Etor Bavani Kadora Udanpur Sahadatpur	(i)	Name of villages connected to the main road by an all-weather road	3 km			
			(ii)	Village's Name provided with electricity	√			
			(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)	(S) √	(HS)	(VI)
			(v)	Names of villages with access to Primary Health Centre	X			
			(vi)	Names of villages with access to Veterinary Dispensary	X			
			(vii)	Names of villages with access to Post Office	X			
			(viii)	Names of villages with access to Banks	X			
			(ix)	Names of villages with access to Markets/ mandis	X			
			(x)	Names of villages with access to Agro-industries	X			
			(xi)	Total quantity of surplus milk deficit	X			
			(xii)	No. of milk collection canter (e.g. Union(U)/ Society(S)/ Private agency(PA)/ others (O))	(U)	(S) √	(PA)	(O)
			(xiii)	Name of villages with access to Anganwadi Centre	√			
			(xiv)	Any other facilities with names of villages (please specify)	X			

S No	Name of Micro Watershed	Name of villages	Parameters		Status			
1	2	3	4		5			
5	Udanpur 2C2A1e3	Kusmra Bavani Udanpur Khutmil	(i)	Name of villages connected to the main road by an all-weather road	Main Road			
			(ii)	Village's Name provided with electricity	√			
			(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)	(S)	(HS)	(VI) √
			(v)	Names of villages with access to Primary Health Centre	√			
			(vi)	Names of villages with access to Veterinary Dispensary	√			
			(vii)	Names of villages with access to Post Office	√			
			(viii)	Names of villages with access to Banks	X			
			(ix)	Names of villages with access to Markets/ mandis	X			
			(x)	Names of villages with access to Agro-industries	X			
			(xi)	Total quantity of surplus milk deficit	X			
			(xii)	No. of milk collection canter (e.g. Union(U)/ Society(S)/ Private agency(PA)/ others (O))	(U)	(S)	(PA) √	(O)
			(xiii)	Name of villages with access to Anganwadi Centre	X			
			(xiv)	Any other facilities with names of villages (please specify)	X			

S No	Name of Micro Watershed	Name of villages	Parameters		Status			
1	2	3	4		5			
6	Sahadatpur 2C2A1e2d	Parosa 2 Etor Bavani Matota Udanpur Khutmila Sahadatpur Okaruaa	(i)	Name of villages connected to the main road by an all-weather road	Main Road			
			(ii)	Village's Name provided with electricity	X			
			(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) √	(S)	(HS)	(VI)
			(v)	Names of villages with access to Primary Health Centre	X			
			(vi)	Names of villages with access to Veterinary Dispensary	X			
			(vii)	Names of villages with access to Post Office	X			
			(viii)	Names of villages with access to Banks	X			
			(ix)	Names of villages with access to Markets/ mandis	X			
			(x)	Names of villages with access to Agro-industries	X			
			(xi)	Total quantity of surplus milk deficit				
			(xii)	No. of milk collection canter (e.g. Union(U)/ Society(S)/ Private agency(PA)/ others (O))	(U)	(S)	(PA)	(O)
			(xiii)	Name of villages with access to Anganwadi Centre	X			
			(xiv)	Any other facilities with names of villages (please specify)	X			

The details of PRA exercise in the Project Area



CHAPTER - 4

INSTITUTION BUILDING & PROJECT MANAGEMENT

Project Implementing Agency: The Project Implementing Agency (PIA) for IWMP-XIV, Jalaun is BSA, Bhoomi Sanrakshan Unit, Land Development and Water Resources Department, District Jalaun, Uttar Pradesh. The project implementing agency was selected by State Level Nodal Agency (SLNA) for Integrated Watershed Management Program (IWMP) in Jalaun district. The PIA was given responsibility to develop the micro-watershed by District Watershed Development Unit (DWDU) 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)
Project- IWMP XIV **District - Jalaun**

S. No.	Particulars of PIA	
1	2	3
(i)	Date of selection of PIA	28-5-2010.
(ii)	Type of organization	Govt.
(iii)	Name of organization	Soil Conservation Unit Dept of Agriculture, Dist – Jalaun U.P.
(iv)	Designation & Address	Bhoomi Sanrakshan Adhikari, Rashtriya Jalagam -Orai, Dept of Agriculture, District -Jalaun
(v)	Telephone	09235629527
(vi)	Fax	-
(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.	Dharmendra Kumar	M	M.sc. (Agriculture)	16	
2.	T. A.	Babloo Kumar	M	M.sc. (Agriculture)	5	
3.	Junior Engineer	R.K. Gupta	M	Diploma in Civil Engg	34	
4.	Junior Engineer	K.K. Sharma	M	Diploma in Civil Engg	34	
5.	Accountant	S. P. Dube	M	M.Com	10	
6.	Sr. Clerk	Virendra Singh	M	B.A.	30	
7.	Sr. Clerk	Indra pal Singh	M	M.Com	15	
8.	Sr. Clerk	Shiv Bhajan	M	B.A.	15	
9.	Draftman	Ram Singh	M	B.A., Diploma in Drawing	31	
10.	T.A.(B).	Bans Gopal	M	Intermediate & Diploma (Ag.)	31	
11.	T.A.(B).	Suresh Chandra Gupta	M	Intermediate & Diploma (Ag.)	20	
12.	T.A.(B).	Amar Singh	M	Intermediate & Diploma in (Ag.)	31	
13.	T.A.(B).	Balram Sharma	M	Intermediate & Diploma in (Ag.)	33	
14.	T.A.(c).	Ramnarain	M	B.Sc. (Ag.)	32	
15.	T.A.(c).	Santosh Kumar	M	B.Sc. (Ag.)	24	
16.	T.A.(c).	Rambabu	M	M.Sc. (Agronomy)	15	
17.	T.A.(c).	Mataprasad	M	B.Sc. (Bio.)	15	
18.	T.A.(c).	Suresh Chandra Mishra	M	M. Sc.(Ag.)	-	
19.	T.A.(c).	Ramprakash Niranjana	M	B.Sc. (Ag.)	26	
20.	T.A.(c).	Rambihari Shukla	M	B.Sc. (Ag.)	25	

S. NO.	Designation	Name	M/F	Qualification	Field of Experience & Period	Remarks
1	2	3		4	5	6
21.	T.A.(c).	Rajendra Babu Niranjana	M	B.Sc. (Ag.)	26	
22.	T.A.(c).	Munnalal Prajapati	M	Intermediate & Diploma in (Ag.)	26	
23.	T.A.(c).	Premnarain Niranjana	M	Intermediate & Diploma in (Ag.)	20	
24.	T.A.(c).	Shabbir Khan	M	Intermediate & Diploma in (Ag.)	25	
25.	T.A.(c).	Ashok Kumar Niranjana	M	Intermediate & Diploma in (Ag.)	21	
26.	T.A.(c).	Udai Singh	M	Intermediate & Diploma in (Ag.)	15	

Note:- Details of all the persons working in BSA Unit is to be incorporated

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 - XIV				PIA- BSA, Ag,		District - Jalaun	
1	2	3	4	5	6	7	8
S. N.	Name of WDT member	M/F	Age	Qualification / Experience	Description of professional training	Role/ Function# #	Date of appointment of WDT member
1.	Suresh Chandra Mishra	M	55	M.Sc. (Ag.)	Agronomy	Watershed Management	21.06.12
2.	Ram Prakash Niranjana	M	53	B.Sc. (Ag.)	B.Sc. (Ag.)	Watershed Management	23.06.12
3.	Ram Bihari Shukla	M	54	B.Sc. (Ag.)	Soil Conservation	Watershed Management	21.06.12
4.	Rajendra Babu Niranjana	M	50	B.Sc. (Ag.)	Agronomy	Watershed Management	22.06.12

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 Committee 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)

Name of Project: - IWMP-XIV, District- JALAUN

1	2	3		4	5	6	7	8	9	10	11	12	13	14	15	16	17
Sl. No	Name of Gram Sabha/ GP	Date of Constitution/ Registration as a Society (dd/mm/yyyy)	Name	Designation	M/ F	S C	ST	SF	MF	LF	Land-less	UG	SHG	GP	Any other	Educa-tional qualifi-cation	Function(s) assigned#
1	Parosa	18.6.12	Ram Bahadur	President	M				√			√				B.A.	
			Govinda	Secretary	M				√			√				B.A.	
			Bhagwan Das	Member	M		√	√				√				Inter	
			Rasid	Member	M			√				√				8	
			Raja singh	Member	M			√				√				5	
			Tej Ram	Member	M				√			√				5	
			Jainandan	Member	M	√						√				5	
			Veer Singh	Member	M		√	√				√				8	
			Vakil	Member	M				√			√				10	
			Krepal	Member	M	√						√				Inter	
			Ram Lakhan	Member	M	√						√				8	
2	Kusmara	2.6.2012	Mal Khan Singh	President	M		√	√				√				Inter	
			Jag Dev	Secretary	M		√	√				√				Inter	
			Suresh Kumar	Member	M			√				√				JH	
			Ram Das	Member	M				√			√				BA	
			Granga Devi	Member	F				√			√				BA	
			Ram Awatar	Member	M				√			√				BA	
			Bachcha Ram	Member	M				√			√				BA	
			Lakshmi	Member	M			√				√				Inter	
			Lala Ram	Member	M			√				√				HS	
			Jagat	Member	M				√			√				BA	

7	Niswapur	16.6.12	Arvinda Kuswaha	President	M		√				√				BA	
			Jageshwar	Secretary	M		√		√		√				8	
			Shayamu Kuswaha	Member	M		√		√		√				5	
			Munim Namdev	Member	M		√	√			√				BA	
			Sarvesh Nigam	Member	M		√	√			√				BA	
			Hira lal Kushwaha	Member	M		√		√		√				INTER	
			Ratiram Kuswaha	Member	M		√		√		√				JH	
			Ram Sajivan	Member	M		√		√		√				INTER	
			Devi Prasad	Member	M	√			√		√				HS	
			Dharmendra Chaudhri	Member	M	√			√		√				5	
			Ramakant Yadav	Member	M		√		√		√				JH	
1	Gohana	17.6.12	Ram Babu	President	M	√		√			√				BA	
			Ram Sajivan	Secretary	M	√			√		√				INTER	
			Shiv Balak	Member	M	√		√			√				8	
			Raja Babu	Member	M	√	√	√			√				8	
			Tulsi Ram	Member	M		√		√		√				8	
			Devi Din	Member	M		√		√		√				8	
			Naresh	Member	M		√		√		√				inter	
			Ganga Ram	Member	M	√		√			√				Illiterate	
			Jag Jivan	Member	M	√		√			√				B A	
			Ramesh	Member	M	√		√			√				8	
			Bhup Singh	Member	M	√		√	√		√				Illiterate	
5	Udanpur	14.6.12	Arvinda Kumar	President	M		√	√			√				5	
			Naresh Kumar	Secretary	M		√	√			√				BA	

			Chandra Bhan	Member	M		√		√			√				BA	
			Bhup Singh	Member	M		√		√			√				Inter	
			Devesh	Member	M	√			√			√				HS	
			Devi Prashad	Member	M		√					√				JH	
			Bhagwan Das	Member	M		√	√				√				JH	
			Anant Ram	Member	M		√	√	√			√				JH	
			Charan Singh	Member	M		√					√				HS	
			Ram Prashad	Member	M		√	√	√			√				JH	
			Ram Pal	Member	M		√					√				5	
6	Sahadat-pur	17.6.12	Veer Singh	President	M		√	√				√				JH	
			Makhanlal	Secretary	M			√				√				Inter	
			Ram Prakash	Member	M	√		√				√				Inter	
			Dinesh	Member	M		√	√				√				Inter	
			Ram Sanehi	Member	M	√						√				JH	
			Pasadi	Member	M	√		√	√			√				Illiterate	
			Ram Kailash	Member	M	√		√				√				JH	
			RamSewar	Member	M	√		√				√				BA	
			Ramhit	Member	M	√			√			√				JH	
				Member	M		√		√			√				Illiterate	
			Ram Srup	Member	M		√	√				√				Illiterate	
				Member	M		√	√				√				H.S.	
7	Kadaura	18-06-12	Akhilesh kumar	President	M	√		√								High School	
			Harikishan	Secretary	M			√								Inter	
			Ramnarain	Member	M	√		√								JH	
			Rajkumar	Member	M			√								Inter	
			Ravishankar	Member	M	√		√								High School	
			Chandrakesh	Member	M	√		√								JHS	
			Jetendra	Member	M			√								Primary	
			Rajendra kumar	Member	M			√								JHS	

			Mahendra Singh	Member	M			√								JHS	
			Durga Prasad	Member	M	√		√								High School	
			Sant Kumar	Member	M	√		√								Inter	
8	Itaura Bawani	04-06-12	Surendra Kumar	President	M			√								Graduate	
			Kamlesh	Secretary	M			√								Graduate	
			Smt Rajeshwari	Member	F			√								High School	
			Shyamsunder	Member	M			√								H S	
			Amarsingh	Member	M			√								H S	
			Mahendra	Member	M			√								High School	
			Hari Prasad	Member	M			√								High School	
			Balkhandi	Member	F	√		√								High School	
			Pappu	Member	M	√		√								High School	
			Nand Lal	Member	M			√								High School	
			Mulayam	Member	M			√								High School	
9	Baagi	11-06-2012	Daya Ram	President	M			√								H S	
			Munna	Secretary	M			√								Primary	
			Tulsi Ram	Member	M			√								Illiterate	
			Salim	Member	M			√								Primary	
			Shyam Karan	Member	M			√								Intermediate	
			Naseem	Member	M			√								Primary	
			Aslam	Member	M			√								Illiterate	
			Jali	Member	F			√								Primary	
			Ram Balak	Member	M			√								Primary	
			Mohabbat	Member	M			√								Primary	
			Babu	Member	M	√		√								Primary	

Formation of Self Help Groups:

The formation of SHGs in all watershed villages is underway. It is proposed to form at least 2 SHGs in each village. Each SHG will consist of 12/15 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 SHGs 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	2	3	4				5				6			7			8
S. N.	Name of MWS	Names of villages	Total no. of Constituted/registered SHGs				No. of members				No. of SC/ST in each category			No. of BPL in each category			Date of formation of SHGs
			With only Men	With only Women	With both	Total	Categories	M	F	Total	M	F	Total	M	F	Total	
1.	Parosa 2C2H1b2a	UNDER PROCESS					(i) Landless										
							(ii) SF										
							(iii) MF										
							(iv) LF										
2.	Harchandpur 2C2H1b2d						(i) Landless										
							(ii) SF										
							(iii) MF										
							(iv) LF										
3.	Nisvapur 2C2H1b2c						(i) Landless										
							(ii) SF										
							(iii) MF										
							(iv) LF										
4.	Kusmara 2C2H1b3						(i) Landless										
							(ii) SF										

							(iii) MF											
							(iv) LF											
5.	Udanpur 2C2A1e3						(i) Landless											
							(ii) SF											
							(iii) MF											
							(iv) LF											
6.	Sahadatpur 2C2A1e2d						(i) Landless											
							(ii) SF											
							(iii) MF											
							(iv) LF											
	Total																	

Table 4.6: Details of Formation of Self Help Groups

S. N.	Name of micro watershed	Name of village	Name of group	Date of constitution	Name of Adhyaksh	Name of Sachiv	Total No. of Members				Name of Bank and Address	Account No. & Date	Up to date Saving 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	Parosa 2C2H1b2a		UNDER PROCESS											
2	Harchandpur 2C2H1b2d													
3	Nisvapur 2C2H1b2c													
4	Kusmara 2C2H1b3													
5	Udanpur 2C2A1e3													
6	Sahadatpur 2C2A1e2d													
	Total for MWS													
	Total for Project													

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 4.7: Details of User Groups

1		2	3				4				5			6			7
S N	Name of Micro watershed with code	Names of villages	Total no. of UGs				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	
1.	Parosa 2C2H1b2a	UNDER PROCESS															
2.	Harchandpur 2C2H1b2d																

3.	Nisvapur 2C2H1b2c																	
4.	Kusmara 2C2H1b3																	
5.	Udanpur 2C2A1e3																	
6.	Sahadatpur 2C2A1e2d																	
	Total																	

Table 4.8: Details of Formation of User Groups (UGs)

S. N	Name of micro watershed	Name of village	Name of group	Date of constitution	Name of Adhyaksh	Name of Sachiv/ Treasurer	Total No. of Members				Name of Bank and Address	Account No. & Date	Up to date Saving	Group Active ties	Status of User Agreement
							Women	Sc/ St	Other	Total					
1	2	3	4		5	6	7	8	9	10					
1.	Parosa 2C2H1b2a	UNDER PROCESS									Under process				
2.	Harchandpur 2C2H1b2d										Under process				
3.	Nisvapur 2C2H1b2c										Under process				
4.	Kusmara 2C2H1b3										Under process				
5	Udanpur 2C2A1e3										Under process				
6.	Sahadatpur 2C2A1e2d														
	Total for Project														

Table 4.9: Details of Fund flow of Watershed Committee Accounts (Amount in Rs.)

S. No.	Name of MWS with code	Name of watershed committee (WC)	Opening Balance (in lakh)	Deposit			Withdrawal			Interest accrued	Closing balance
				DRDA/ ZP cheque No./date	Amount / Date of deposit in WC Account	Total amount available in WC Account	Amount withdrawn by Cash/ Cheque	Date of with- drawal	Purpose of with- drawal		
1	2	3	4	5	6	7	8	9	10	11	12
1.	Parosa 2C2H1b2a				under process						
2.	Harchandpur 2C2H1b2d				under process						
3.	Nisvapur 2C2H1b2c				under process						
4.	Kusmara 2C2H1b3				under process						
5	Udanpur 2C2A1e3				under process						
6.	Sahadatpur 2C2A1e2d				under process						

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

Table 4.10: 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 Deptt.	To increase seed replacement ratio for higher productivity
2	NWPRA	Agriculture Deptt.	To increase soil moisture conservation & ground water recharge
3	RIDF-16	Agriculture Deptt.	To increase soil moisture conservation & ground water recharge
4	Cane Bagain (RVP)	Agriculture Deptt.	To increase soil moisture conservation & ground water recharge

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 20.70 Lacs 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.

In total 25 EPA activities were executed in the project area with a budget of Rs. 20.70 Lacs. Photographs of Entry Point Activities done in the project are given below:

Table 5.1: Entry point activities (EPA)

S. No.	Name of The Project	Amount Earmarked for EPA	Entry Point Activities	Estimated Cost (Rs. in Lakh)
1	Parosa 2C2H1b2a	20.70	Kharanza	0.60
2	Harchandpur 2C2H1b2d		Kharanza	3.15
3	Nisvapur 2C2H1b2c		Kharanza, boundary of cremation ground, Chak road	2.51
4	Kusmara 2C2H1b3		Kharanza	10.61
5	Udanpur 2C2A1e3		Kharanza, Drain, Culvert	2.78
6	Sahadatpur 2C2A1e2d		Kharanza, Culvert	1.04
			Total	20.70

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

Table 5.2: LIVELIHOOD ACTION PLAN-LAP

YEARWISE FINANCIAL BREAK UP OF LIVELIHOOD ACTIVITIES IWMP-XIV, DISTRICT-JALAUN

Amount in Lacs

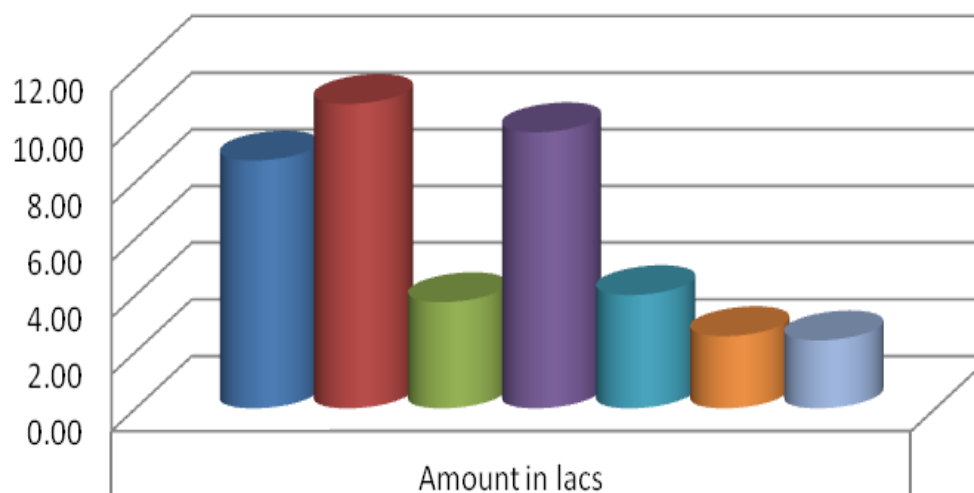
S. No.	GRAM PANCHAYAT	Proposed Amount	Livelihood Activities 9% of the Total project Cost					
			2011-12	2012-13	2013-14	2014-15	2015-16	TOTAL
1	Babina	3.90	0.00	0.85	1.00	1.10	0.95	3.90
2	Bagi	2.00	0.00	0.15	0.95	0.40	0.50	2.00
3	Ekona	2.00	0.00	0.00	0.25	0.95	0.80	2.00
4	Etora Bavani	2.95	0.00	0.40	0.85	0.75	0.95	2.95
5	Harchandpur	2.65	0.00	0.35	0.50	1.00	0.80	2.65
6	Jaksiya	2.50	0.00	0.00	0.75	0.80	0.95	2.50
7	Jamrehi	2.00	0.00	0.15	0.40	0.70	0.75	2.00
8	Khutmili	1.55	0.00	0.00	0.25	0.50	0.80	1.55
9	Kusmra Bavani	7.75	0.00	0.95	2.40	2.20	2.20	7.75
10	Nisvapur	1.55	0.00	0.00	0.15	0.75	0.65	1.55
11	Okaruaa	2.00	0.00	0.00	0.65	0.00	1.35	2.00
12	Parosa	7.35	0.00	1.40	2.40	1.65	1.90	7.35
13	Raela	1.75	0.00	0.00	0.25	0.85	0.65	1.75
14	Udanpur	2.00	0.00	0.40	0.85	0.00	0.75	2.00
	Total	41.95	0.00	4.65	11.65	11.65	14.00	41.95
Total allocation of the fund in this activity is Rs. 46.57 lacs, out of which an action plan gram panchayat wise have been prepared for Rs. 41.95 lacs, as per the requirement of the project area Rs. 4.62 lacs would be in corporate in the above plan later.								

DETAILS OF LIVELIHOOD ACTIVITIES AT GLANCE UNDER IWMP-XIV, DISTRICT-JALAUN

S. N o.	Gram Panchayat	General Merchant Shop						Goat Keeping						Poultry						Dairy					
		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	Babina		1	1	2		4		1	1		2	4				1		1			2		1	3
2	Bagi					2	2			2			2			1			1				1		1
3	Ekona				1		1				2		2					1	1			1		1	2
4	Etora Bavani			1		1	2		1	1		2	4				1		1				2		2
5	Harchan dpur				2		2				2		2			1			1			1		2	3
6	Jaksiya			1		1	2			2		1	3					1	1				2		2
7	Jamrehi					2	2				1	1	2				1		1			1			1
8	Khutmili				2		2			1			1						0					2	2
9	Kusmra Bavani			2		2	4			3	4	2	9		1	1		1	3		1	2	4	3	10
10	Nisvapur				1		1				1		1				1		1					2	2
11	Okaruaa					1	1			1		1	2			1			1					2	2
12	Parosa		1	3	1	3	8			2	3	2	7		1	1			2		1	2	2	2	7
13	Raela			1		1	2				2		2						0					1	1
14	Udanpur		1			1	2			1		1	2					1	1			1			1

DETAILS OF LIVELIHOOD ACTIVITIES AT GLANCE UNDER IWMP-XIV, DISTRICT-JALAUN																			
S. No.	Gram Panchayat	Tailoring						Black Smithy						Carpentry					
		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	Babina		1		1	1	3				1		1		1				1
2	Bagi			1			1		1				1				1		1
3	Ekona				1		1					1	1					1	1
4	Etor Bavani			1		1	2			1			1		1				1
5	Harchandpur		1				1		1			1	2					1	1
6	Jaksiya					1	1				1		1				1		1
7	Jamrehi				1		1		1				1			1			1
8	Khutmili						0					1	1					1	1
9	Kusmra Bavani			2	1	1	4		1				1		2				2
10	Nisvapur						0			1			1					1	1
11	Okaruua					1	1					1	1			1			1
12	Parosa		1	2			3		2		1		3		1			1	2
13	Raela				1		1					1	1				1		1
14	Udanpur			1			1			1			1		1				1

Livelihood Expenditure on Different Activities



General Merchant Shop	8.75
Goat Keeping	10.75
Poultry	3.75
Dairy	9.75
Tailoring	4.00
Black Smithy	2.55
Carpantry	2.40

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:

Name of Activity	Unit Cost (amount in lacs)
General Merchant Shop	0.25
Goat Keeping	0.25
Poultry	0.25
Dairy	0.25
Tailoring	0.20
Black Smithy	0.15
Carpentry	0.15

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:

CROP PRODUCTION SYSTEM (10%)

GRAM PANCHAYAT WISE FINANCIAL BREAK UP OF PRODUCTION & MICRO ENTERPRISES, IWMP-XIV, DISTRICT-JALAUN

Amount in Lacs

S. No.	GRAM PANCHAYAT	Proposed Amount	Production System & Microenterprises 10% of the Total Project Cost						WDF
			2011-12	2012-13	2013-14	2014-15	2015-16	TOTAL	
1	Babina	3.10	0.00	0.37	0.77	0.85	1.12	3.10	0.31
2	Bagi	3.47	0.00	0.96	0.46	0.75	1.31	3.47	0.35
3	Ekona	2.45	0.00	0.07	0.89	0.52	0.97	2.45	0.24
4	Etora Bavani	3.14	0.00	0.23	0.83	0.66	1.42	3.14	0.31
5	Harchandpur	2.57	0.00	0.00	0.82	0.55	1.21	2.57	0.26
6	Jaksiya	2.74	0.00	0.20	0.40	1.37	0.78	2.74	0.27
7	Jamrehi	2.81	0.00	0.53	0.74	0.33	1.21	2.81	0.28
8	Khutmili	2.39	0.00	0.27	0.49	0.94	0.69	2.39	0.24
9	Kusmra Bavani	9.39	0.00	0.96	2.73	1.62	4.09	9.39	0.94
10	Nisvapur	3.30	0.00	0.27	0.59	1.17	1.28	3.30	0.33
11	Okaruaa	2.37	0.00	0.07	0.59	0.88	0.84	2.37	0.24
12	Parosa	8.25	0.00	0.98	2.55	1.42	3.31	8.25	0.82
13	Raela	3.25	0.00	0.17	0.58	0.95	1.56	3.25	0.32
14	Udanpur	2.56	0.00	0.13	0.51	0.96	0.96	2.56	0.26
	Total	51.75	0.00	5.17	12.94	12.94	20.70	51.75	5.17

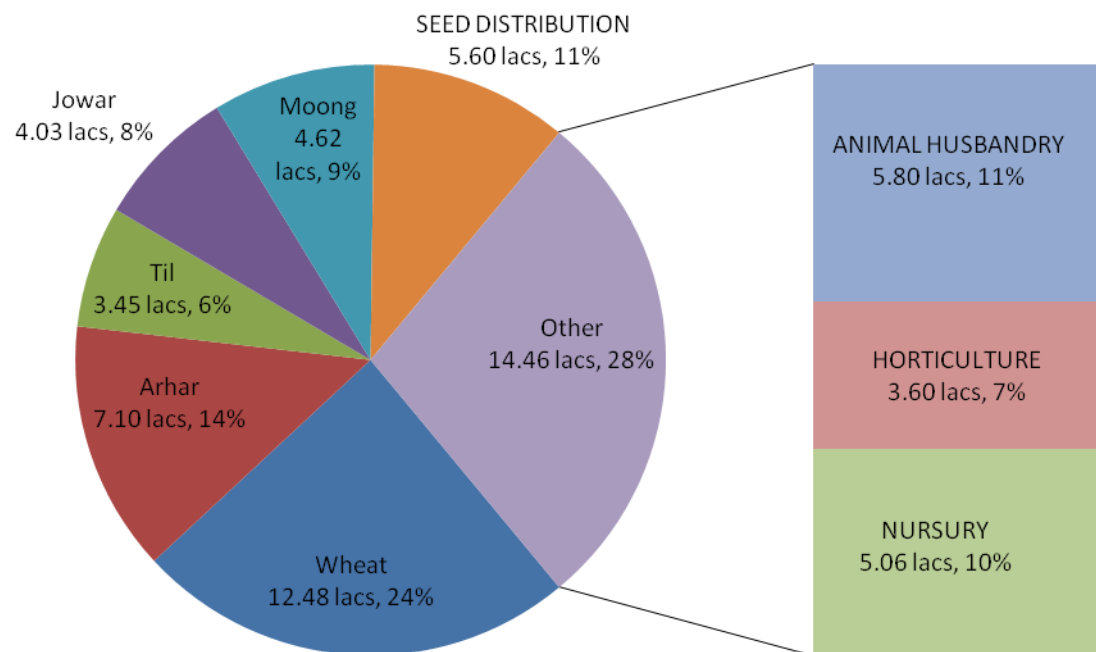
**DETAILS OF PRODUCTION SYSTEM & MICRO ENTERPRISES ACTIVITIES AT GLANCE UNDER
IWMP-XIV, DISTRICT-JALAUN**

S. No.	Gram Panchayat	CROP DEMOSTRATION																													
		Wheat						Arhar						Til						Jowar						Moong					
		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	2011-12	2012-13	2013-14	2014-15	2015-16	Total
1	Babina			2	2	1	5		1	1	1	2	5			2		1	3		1		1	2	4			2		3	5
2	Bagi		1	1		3	5			2	2	1	5		2		2	1	5			2		1	3		2		1	1	4
3	Ekona			2	3	1	6			1		3	4			1		2	3		1		2	2	5			1		2	3
4	Etora Bavani			1		3	4		1	2	2	1	6		1		2	2	5			2		2	4		1		2	1	4
5	Harchandpur			2		2	4			1		2	3			2		2	4				3	1	4			2		2	4
6	Jaksiya		1	1	3	1	6				3	1	4		1		1	1	3			1		1	2				3	1	4
7	Jamrehi			2		2	4		2	2		2	6			2		1	3		1		2	1	4		1			3	4
8	Khutmili			2	2	1	5			1	2	1	4		1		1	1	3			1		2	3			1	1	1	3
9	Kusmra Bavani		3	4	6	9	22			1		6	7			1		3	4			3	1	5	9		3	4		4	11
10	Nisvapur			2	3	1	6		2		3	2	7				3	1	4		1			3	4			2	2	1	5
11	Okaruaa			2	1	2	5			2		1	3			1		2	3			1	2	1	4		1			2	3
12	Parosa		2	3	5	4	14		1	1	2	4	8		1	3		3	7			2		4	6		2	3	3	6	14
13	Raela			1	3	2	6		1	1	1	2	5			1	2	1	4		1		2	2	5			2		2	4
14	Udanpur			1	2	1	4			1	2	1	4		1			1	2			1	1	3	5		1		1	1	3

**DETAILS OF PRODUCTION SYSTEM & MICRO ENTERPRISES ACTIVITIES AT GLANCE UNDER
IWMP-XIV, DISTRICT-JALAUN**

S. No .	Gram Panchayat	ANIMAL HUSBANDRY (in nos.)						HORTICULTURE (Area in ha.)						NURSURY (in nos.)						SEED DISTRIBUTION (in nos.)					
		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	Babina		1			1	2			1			1				1		1				1	1	2
2	Bagi				1		1		1		1		2		1			1	2		1			2	3
3	Ekona			1			1					1	1						0			1			1
4	Eora Bavani					2	2			1			1			1			1				1	1	2
5	Harchandpur			1	1		2				1		1					1	1					1	1
6	Jaksiya				1		1					1	1				1		1			1		1	2
7	Jamrehi		1			1	2			1			1					1	1				1		1
8	Khutmili				1		1				1		1						0		1			1	2
9	Kumra Bavani			3		2	5		1	1	1	2	5		1	2	1	2	6			2	2	2	6
10	Nisvapuri			1		1	2				1		1					1	1					1	1
11	Okaruaa				1		1					1	1				1		1				1		1
12	Parosa		1	2		2	5			2	1	2	5		1	2	1	2	6			2		2	4
13	Raela					2	2			1		1	2					1	1				1		1
14	Udanpur			1		1	2				1		1				1		1					1	1

CROP DEMOSTRATION



Item	Unit Cost (Amount in Lacs)
WHEAT	0.130
ARHAR	0.100
TIL	0.065
JOWAR	0.065
MOONG	0.065
SEED DISTRIBUTION	0.200
ANIMAL HUSBANDRY	0.200
HORTICULTURE	0.150
NURSURY	0.220

The above action plan has been prepared according to the need and resources available in the project area. Individual activity fund distribution has been made the details would be given beneficiary wise in the project file. Demonstration of crop, animal husbandry camp distribution of sheed and plantation of fruit trees are the essential requirement of the project area. Therefore the above plan has been constituted according to the aforesaid activity and the funds were allocated as per the norms.

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 have been proposed for the annual schedule from 2009 to 2013. The details given below.

ANNUAL ACTION PLAN

Physical & Financial Break up of Watershed Development Works														Fin. : in Lacs	
MWS Code	Gram Panchayat	Activity	Target as AAP												
			2011-12		2012-13		2013-14		2014-15		2015-16		Total		
			Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	
Parosa / 2C2H1b2a Harchandpur / 2C2H1b2d Nisvapur/ 2C2H1b2c Kusmara/ 2C2H1b3 Udanpur/ 2C2A1e3 Sahadatpur/ 2C2A1e2d	Babina Bagi Ekona Etor Bavani Harchandpur Jaksiya Jamrehi Khutmili Kusmra Bavani Nisvapur Okaruaa Parosa Raela Udanpur	Land Development													
		Horticulture	0.00	0.00	1.21	24.11	2.60	51.99	2.60	51.99	2.60	51.91	9.00	180.00	
		Afforestation	0.00	0.00	0.54	18.08	1.17	38.99	1.17	38.99	1.17	38.93	4.05	135.00	
		Agriculture	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		SMC													
		Contour Bunding	0.00	0.00	4.53	141.55	9.77	305.30	9.77	305.30	9.76	304.84	33.84	1057.00	
		Bench terracing	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Others FB/MB/PFB	0.00	0.00	9.61	171.42	20.73	369.72	20.73	369.72	20.70	369.15	71.78	1280.00	
		Veg. & Engg. Structures													
		Loose Boulders/GP	0.00	0.00	4.52	30.20	9.75	65.13	9.75	65.13	9.73	65.03	33.75	225.50	
		Gabion Structures	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
		Others	0.00	0.00	3.96	16.80	8.53	36.23	8.53	36.23	8.52	36.17	29.54	125.42	
		WHS													
		Check dams/Tanks	0.00	0.00	2.81	41.78	6.06	90.12	6.06	90.12	6.05	89.98	20.97	312.00	
		Others WHB/SB/Ground Water Recharge Structures/Ponds	0.00	0.00	11.63	133.59	25.09	288.12	25.09	288.12	25.05	287.68	86.86	997.50	
Sub Total			0.00	0.00	38.81	577.52	83.70	1245.60	83.70	1245.60	83.57	1243.70	289.79	4312.42	

MWS Code	Gram Panchayat	Livelihood	General Merchant Shop	Goat Keeping	Poultry	Dairy	Tailoring	Black Smithy	Carpentry	Amount
Parosa / 2C2H1b2a Harchandpur/ 2C2H1b2d Nisvapur/ 2C2H1b2c Kusmara/ 2C2H1b3 Udanpur/ 2C2A1e3 Sahadatpur/ 2C2A1e2d	Babina	General Merchant Shop @ Rs. 25000/- per beneficiary. Goat Keeping @ Rs. 25000/- per Goat and 02 Goat will be given per beneficiary costing Rs. 3000/- per number Poultry -(Chuja, feed and other support item) per beneficiary @ Rs.25000/- Diary @ Rs. 25000/- per beneficiary Tailoring @ Rs. 20000/- per beneficiary Black Smithy @ Rs. 15000/- per beneficiary, Carpentry @ 15000/-per beneficiary	4	4	1	3	3	1	1	3.90
	Bagi		2	2	1	1	1	1	1	2.00
	Ekona		1	2	1	2	1	1	1	2.00
	Etor Bavani		2	4	1	2	2	1	1	2.95
	Harchandpur		2	2	1	3	1	2	1	2.65
	Jaksiya		2	3	1	2	1	1	1	2.50
	Jamrehi		2	2	1	1	1	1	1	2.00
	Khutmili		2	1	0	2	0	1	1	1.55
	Kusmra Bavani		4	9	3	10	4	1	2	7.75
	Nisvapur		1	1	1	2	0	1	1	1.55
	Okaruaa		1	2	1	2	1	1	1	2.00
	Parosa		8	7	2	7	3	3	2	7.35
	Raela		2	2	0	1	1	1	1	1.75
	Udanpur		2	2	1	1	1	1	1	2.00
	Sub Total		35	43	15	39	20	17	16	41.95
	Others (Revolving Fund)									4.62
	Total									46.57

MWS Code	Gram Panchayat	Production System & Microenterprises	Wheat	Arhar	Til	Jowar	Moong	SEED DISTRIBUTION		HORTICULTURE	NURSURY	Amount
Parosa / 2C2H1b2a Harchandpur/ 2C2H1b2d Nisvapur/ 2C2H1b2c Kusmara/ 2C2H1b3 Udanpur/ 2C2A1e3 Sahadatpur/ 2C2A1e2d	Babina	Crop demonstration is wheat @ Rs. 13000/ha, Arhar @ Rs.10000/ha, Til @ Rs. 6500/ha, Jowar @ Rs. 6500/ha, Moong @ Rs. 6500/ha, Seed Distribution @ Rs. 20000/-, Horticulture toolkit @ Rs. 15000/- and Nursery @ Rs. 22000/- , Animal Husbandry @ 20000/-	5	5	3	4	5	2	2	1	1	3.10
	Bagi		5	5	5	3	4	3	1	2	2	3.47
	Ekona		6	4	3	5	3	1	1	1	0	2.45
	Etor Bavani		4	6	5	4	4	2	2	1	1	3.14
	Harchandpur		4	3	4	4	4	1	2	1	1	2.57
	Jaksiya		6	4	3	2	4	2	1	1	1	2.74
	Jamrehi		4	6	3	4	4	1	2	1	1	2.81
	Khutmili		5	4	3	3	3	2	1	1	0	2.39
	Kusma Bavani		22	7	4	9	11	6	5	5	6	9.39
	Nisvapur		6	7	4	4	5	1	2	1	1	3.30
	Okaruaa		5	3	3	4	3	1	1	1	1	2.37
	Parosa		14	8	7	6	14	4	5	5	6	8.25
	Raela		6	5	4	5	4	1	2	2	1	3.25
	Udanpur		4	4	2	5	3	1	2	1	1	2.56
	Sub Total		96	71	53	62	71	28	29	24	23	51.75
	Grand Total											421.71

CHAPTER – 6

CAPACITY BUILDING PLAN

The total amount in this activity is Rs 25.87 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.

			I Year				II Year				III 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	No of person to be trained	No of training to be conduct	Training day	Total Cost
1	SLNA					0.517				0.621				0.310
2	WCDC					0.517				2.070				0.880
3	PIA	19	19	2	2	0.310	18	6	4	2.049	13	3	3	0.538
4	WDT	4	4	4	3	0.155	5	7	5	1.025	5	4	3	0.269
5	SHG	260	90	1	2	0.388	155	3	2	2.562	100	1	2	0.673
6	UG	320	110	2	1	0.466	200	3	2	3.074	125	1	2	0.942
7	WC	150	45	2	1	0.233	100	3	2	1.537	75	1	1	0.269
	TOTAL					2.587				12.937				3.881
				IVth Year				Vth Year				Grand total		
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					0.310					0.517	2.277		
2	WCDC					0.880					0.517	4.864		
3	PIA	19	16	4	2	0.538	15	3	2	0.310	3.747			
4	WDT	4	4	5	3	0.269	5	3	2	0.155	1.873			
5	SHG	260	100	2	1	0.673	100	1	1	0.388	4.683			
6	UG	320	135	2	1	0.942	125	1	1	0.466	5.889			
7	WC	150	75	1	1	0.269	75	1	1	0.233	2.541			
	TOTAL					3.881					2.587	25.875		

CHAPTER -7

PHASING OF PROGRAMME & BUDGETING

**FINANCIAL BREAKUP OF VARIOUS COMPONENTS IN TERMS OF % OF IWMP-XIV,
DISTRICT- JALAUN**

Amount in Lacs

S. No.	MWS Code	MWS Name	Project Area	Proposed Amount	Administrative 10%	EPA 4%	Institution and CB 5%	DPR 1%	Watershed development work 56%	Livelihood for assetless 9%	Production system and Microenterprises 10%	Monitoring 1%	Evaluation 1%	Consolidation 3%	Total 100%
1	2C2H1b2a	Parosa	124.297	14.92	1.49	0.60	0.75	0.15	8.35	1.34	1.49	0.15	0.15	0.45	14.92
2	2C2H1b2d	Harchandpur	656.735	78.81	7.88	3.15	3.94	0.79	44.13	7.09	7.88	0.79	0.79	2.36	78.81
3	2C2H1b2c	Nisvapur	522.944	62.75	6.28	2.51	3.14	0.63	35.14	5.65	6.28	0.63	0.63	1.88	62.75
4	2C2H1b3	Kusmara	2211.009	265.32	26.53	10.61	13.27	2.65	148.58	23.88	26.53	2.65	2.65	7.96	265.32
5	2C2A1e3	Udanpur	579.738	69.57	6.96	2.78	3.48	0.70	38.96	6.26	6.96	0.70	0.70	2.09	69.57
6	2C2A1e2d	Sahadatpur	217.694	26.12	2.61	1.04	1.31	0.26	14.63	2.35	2.61	0.26	0.26	0.78	26.12
		Total	4312.42	517.49	51.75	20.70	25.87	5.17	289.79	46.57	51.75	5.17	5.17	15.52	517.49

**YEARWISE PHYSICAL AND FINANCIAL BREAK UP OF WORK COMPONENT OF IWMP-XIV,
DISTRICT- JALAUN
Watershed Development Works**

Amount in Lacs, Phy. in ha.

S. No.	MWS Code	MWS Name	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	2C2H1b2a	Parosa	124.30	8.35	0	0	16.65	1.12	35.90	2.41	35.90	2.41	35.85	2.41	124	8.35
2	2C2H1b2d	Harchandpur	656.74	44.13	0	0	87.95	5.91	189.69	12.75	189.69	12.75	189.40	12.73	657	44.13
3	2C2H1b2c	Nisvapur	522.94	35.14	0	0	70.03	4.71	151.05	10.15	151.05	10.15	150.82	10.13	523	35.14
4	2C2H1b3	Kusmara	2211.01	148.58	0	0	296.10	19.90	638.63	42.92	638.63	42.92	637.65	42.85	2211	148.58
5	2C2A1e3	Udanpur	579.74	38.96	0	0	77.64	5.22	167.45	11.25	167.45	11.25	167.20	11.24	580	38.96
6	2C2A1e2d	Sahadatpur	217.69	14.63	0	0	29.15	1.96	62.88	4.23	62.88	4.23	62.78	4.22	218	14.63
	Total		4312.42	289.79	0	0	577.52	38.81	1245.60	83.70	1245.60	83.70	1243.70	83.57	4312	289.79

ANNUAL ACTION PLAN of Budget Components of IWMP-XIV, JALAUN

S. No.	Physical And Financial Target (Fin in Lacs)	Unit	Ist Year		IInd Year		IIIrd Year		IVth Year		Vth Year		Total	
			2011-12		2012-13		2013-14		2014-15		2015-16			
			Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy
1	Administration		2.59		7.76		13.97		13.97		13.45		51.75	
2	Monitoring				1.03		1.03		1.03		2.07		5.17	
3	Evaluation				1.56		0.91		0.91		1.81		5.17	
4	Entry Point Activities		20.70										20.70	
	Planned													
	No. of Activities	No.		25										
	No. of Beneficiaries	No.		475										
	Executed													
	No. of Activities	No.												
	No. of Beneficiaries	No.												
5	Institutional & Capacity Building													
	No. of Persons to be Trained													
	SLNA Level	No.												
	District Level	No.												
	PIA	No.		19		18		13		16		15		81
	WDT Level	No.		4		5		5		4		5		23
	SHG	No.		90		155		100		100		100		545
	User Groups	No.		110		200		125		135		125		695
	WC Level	No.		45		100		75		75		75		370
	Total			268		478		318		330		320		1714
	No. of Total Persons Trained													
	SLNA Level	No. of stake holder	0.52		0.62		0.31		0.31		0.52		2.28	
	District Level		0.52		2.07		0.88		0.88		0.52		4.86	
	PIA		0.31	38	2.05	108	0.54	39	0.54	64	0.31	45	3.75	294
	WDT Level		0.16	16	1.02	35	0.27	20	0.27	20	0.16	15	1.87	106
	SHG		0.39	90	2.56	465	0.67	100	0.67	200	0.39	100	4.68	955
	User Groups		0.47	220	3.07	600	0.94	125	0.94	270	0.47	125	5.89	1340
	WC Level		0.23	90	1.54	300	0.27	75	0.27	75	0.23	75	2.54	615
	Sub Total		2.59	454	12.94	1508	3.88	359	3.88	629	2.59	360	25.87	3310

S. No.	Physical And Financial Target (Fin in Lacs)	Unit	Ist Year		IInd Year		IIIrd Year		IVth Year		Vth Year		Total	
			2011-12		2012-13		2013-14		2014-15		2015-16			
			Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy
6	DPR Preparation		5.17										5.17	
7	Watershed Development Works													
	Land Development													
	Afforestation (on total land)	ha	0.00	0.00	0.54	18.08	1.17	38.99	1.17	38.99	1.17	38.93	4.05	135.00
	Horticulture (on wasteland)	ha	0.00	0.00	1.21	24.11	2.60	51.99	2.60	51.99	2.60	51.91	9.00	180.00
	Sub Total		0.00	0.00	1.75	42.19	3.77	90.98	3.77	90.98	3.77	90.84	13.05	315.00
	Soil And Moisture Conservation													
	1. Field Bund	ha												
	2. Contour Bund	ha	0.00	0.00	4.53	141.55	9.77	305.30	9.77	305.30	9.76	304.84	33.84	1057.00
	3. Marginal Bund	ha	0.00	0.00	2.50	44.57	5.39	96.13	5.39	96.13	5.38	95.98	18.66	332.80
	4. Sub Marginal Bund	ha	0.00	0.00	6.08	100.06	13.11	215.82	13.11	215.82	13.09	215.49	45.38	747.20
	5. Peripheral Bund	ha	0.00	0.00	3.84	68.57	8.29	147.89	8.29	147.89	8.28	147.66	28.71	512.00
	Others/ Ponds	ha	0.00	0.00	15.59	150.38	33.62	324.34	33.62	324.34	33.57	323.85	116.40	1122.92
	Sub Total		0.00	0.00	32.54	505.13	70.18	1089.48	70.18	1089.48	70.08	1087.82	242.99	3771.92
	Water Harvesting Structure (New Created)													
	Farm Ponds	ha												
	Check dams	ha												
	Nallah bunds	ha												
	Gully Plug	ha	0.00	0.00	4.52	30.20	9.75	65.13	9.75	65.13	9.73	65.03	33.75	225.50
	Ground water recharge structures	ha												
	Sub Total		0.00	0.00	4.52	30.20	9.75	65.13	9.75	65.13	9.73	65.03	33.75	225.50
	c. Water Harvesting Structure (Storage Capacity of New Structure)													
	Farm Ponds	Cubic meter												
	Check dams													
	Nallah bunds													
	Gully Plug			0.00		9048		19512		19512		19488		67560
	Ground water recharge structures													
	Total				38.81	577.52	83.70	1245.60	83.70	1245.60	83.57	1243.70	289.79	4312.42

S. No.	Physical And Financial Target (Fin in Lacs)	Unit	Ist Year		IInd Year		IIIrd Year		IVth Year		Vth Year		Total	
			2011-12		2012-13		2013-14		2014-15		2015-16			
			Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy
8	Livelihood Activities Through SHGs													
	1. Activity General Merchant Shop													
	a) No. of SHG's		0.00	0.00	0.75	3	2.25	9	2.25	9	3.50	14	8.75	35
	b) No. of Member's					3		9		9		14		35
	2. Activity Goat Keeping													
	a) No. of SHG's		0.00	0.00	0.50	2	3.50	14	3.75	15	3.00	12	10.75	43
	b) No. of Member's					18		126		135		108		387
	3. Activity Poultry													
	a) No. of SHG's		0.00	0.00	0.50	2	1.25	5	1.00	4	1.00	4	3.75	15
	b) No. of Member's					18		45		36		36		135
	4. Activity Dairy													
	a) No. of SHG's		0.00	0.00	0.50	2	2.50	10	2.75	11	4.00	16	9.75	39
	b) No. of Member's					8		40		44		64		156
	5. Activity Tailoring													
	a) No. of SHG's		0.00	0.00	0.60	3	1.40	7	1.00	5	1.00	5	4.00	20
	b) No. of Member's					9		21		15		15		60
	6. Activity Black Smithy													
	a) No. of SHG's		0.00	0.00	0.90	6	0.45	3	0.45	3	0.75	5	2.55	17
	b) No. of Member's					6		3		3		5		17
	7. Activity Carpentry													
	a) No. of SHG's		0.00	0.00	0.90	6	0.30	2	0.45	3	0.75	5	2.40	16
	b) No. of Member's					6		2		3		5		16
	Others		0.00	0.00	0.52		1.29		1.29		1.52		4.62	
	Sub Total		0.00	0.00	5.17	92	12.94	296	12.94	295	15.52	308	46.57	991

S. No.	Physical And Financial Target (Fin in Lacs)	Unit	Ist Year		IInd Year		IIIrd Year		IVth Year		Vth Year		Total	
			2011-12		2012-13		2013-14		2014-15		2015-16			
			Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy
9	Production System & Micro – Enterprises													
	Agriculture													
	a) Crop Demonstration													
	1. No. of Demo.	no’s	0.00	0.00	3.21	38	7.78	85	8.17	86	12.52	144	31.67	353
	2. Area	ha				15.20		34.00		34.40		57.60		141.20
	Sub Total		0.00	0.00	3.21	38	7.78	85	8.17	86	12.52	144	31.67	353
	b) Horticulture		0.00	0.00	0.30	2	1.05	7	1.05	7	1.20	8	3.60	24
	c) Nursery		0.00	0.00	0.66	3	1.10	5	1.32	6	1.98	9	5.06	23
	d) Animal Husbandry		0.00	0.00	0.60	3	1.80	9	1.00	5	2.40	12	5.80	29
	e) Seed Distribution		0.00	0.00	0.40	2	1.20	6	1.40	7	2.60	13	5.60	28
	Sub Total		0.00	0.00	1.96	10	5.15	27	4.77	25	8.18	42	20.06	104
	Total		0.00	0.00	5.17		12.94		12.94		20.70		51.75	
10	Consolidation & Withdrawal Phase Activities										15.52		15.52	
	Grand Total		31.05	0.00	72.45	577.52	129.37	1245.60	129.37	1245.60	155.24	1243.70	517.49	4312.42

CHAPTER -8

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.-14 Jalaun watershed, proper blending of bio engineering measures will be applied on 56% 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 30% and 50% 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 -9

EXPECTED OUTCOME

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 has been analyzed 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	1822.30	10.00	4000	1000	6000	10933800.00
2	Arhar	565.24	4.25	2300	4500	16825	9510163.00
3	Urd/Moong	398.23	5.00	3300	800	700	278761.00
4	Wheat	1554.21	18.00	4200	1000	13800	21448098.00
5	Mustard	416.35	4.25	2600	2000	5900	2456465.00
	Total	4756.33					44627287.00

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	1920.50	12.50	4000	1000	8500	16324250.00
2	Arhar	584.60	6.50	2300	4500	26950	15754970.00
3	Urd/Moong	412.60	7.50	3600	800	2400	990240.00
4	Wheat	1625.80	20.20	4200	1000	16000	26012800.00
5	Mustard	535.20	6.50	2600	2000	10400	5566080.00
	Total	5078.70					64648340.00

After the treatment of Land

64648340.00

Before the treatment of Land

44627287.00

Net Profit

20021053.00

Ratio of cost and profit

1.45

The above ratio clearly indicated that the conservation of land is extremely profitable.

SUMMARY OF EXPECTED /ESTIMATED OUTCOMES OF IWMP-XIV of District- Jalaun (2011-12)

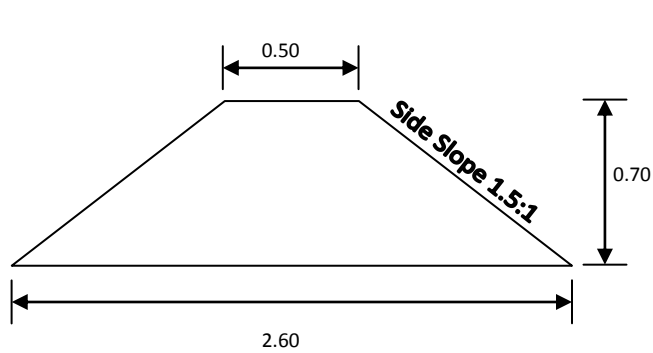
Name of the District	Item	Unit of Measurement	Pre-project Status	Expected Post-project Status
2	3	4	5	6
Jalaun	Status of water table	Meter	16.00-17.00	14.00-15.00
	Grand water structure repaired/ rejuvenated	-	-	-
	Quality of drinking water	Good	Good	Good
	Availability of drinking water	Meter	09 months	12 Months
	Increase in irrigation potential			
	Change in cropping/land use pattern	-	Jowar, Til	Double Cropping
	Area under agriculture crop	ha	4920.51	5120.00
	i- Area under single crop	ha	2280.00	2100.00
	ii- Area under double crop	ha	1914	2400
	iii- Area under multiple crop	ha	-	50
	iv-Cropping Intensity	%	123.58	130.50
	Increase in area under vegetation	ha	175	250
	Increase in area under horticulture	ha	165	300
	Increase in area under fuel & fodder	ha	3.50	9.0
	Increase in milk production	%	3	4
	No. of SHGs	No.	16	25
	Increase in no. of livelihoods	No.	-	54
	Migration	No.	260	150
	SHG Federation formed	No.	-	-
	Credit Linkage with banks	-	-	-

Chapter-10

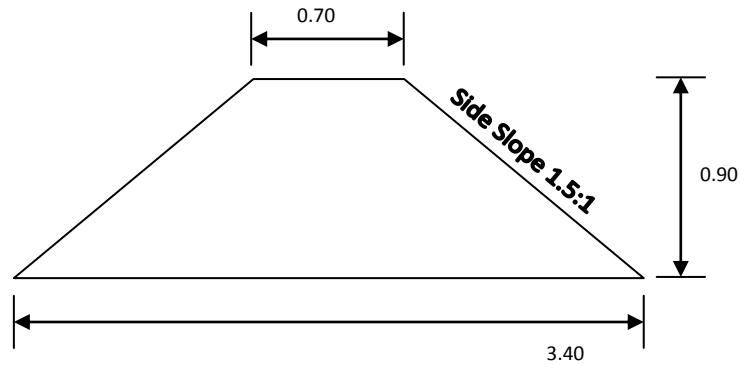
COST NORMS & DESIGN OF STRUCTURE PROPOSED

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

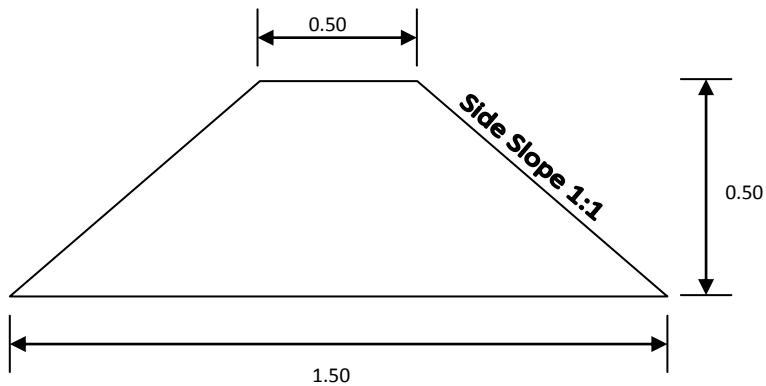
(Not to Scale)



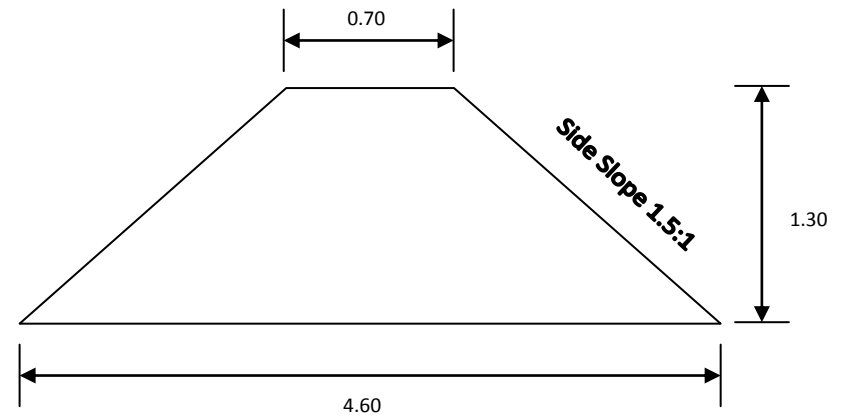
(C.B., Cross-Section – 1.085 m²)



(S.B., Cross-Section – 1.845m²)



(Field Bund, Cross-Section – 0.50 m²)

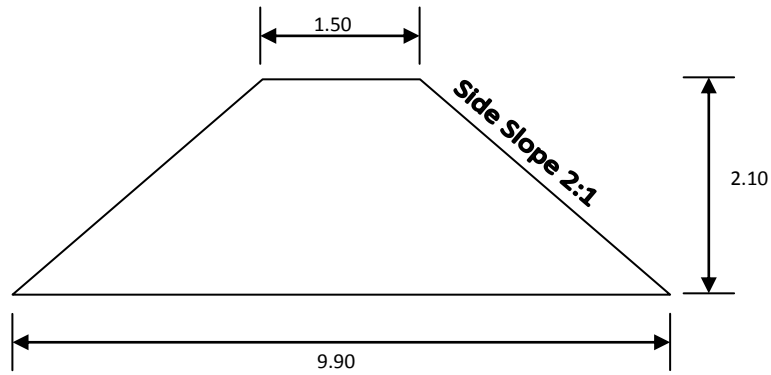


(S.B. /P.B. /M.B., Cross-Section – 3.445 m²)

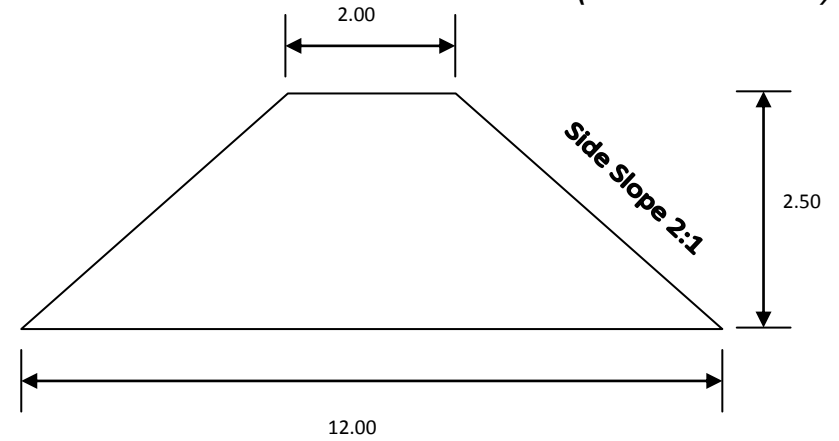
(All dimensions in Meter)

DRAWING OF EARTHEN CHEKDAM / GULLY PLUG

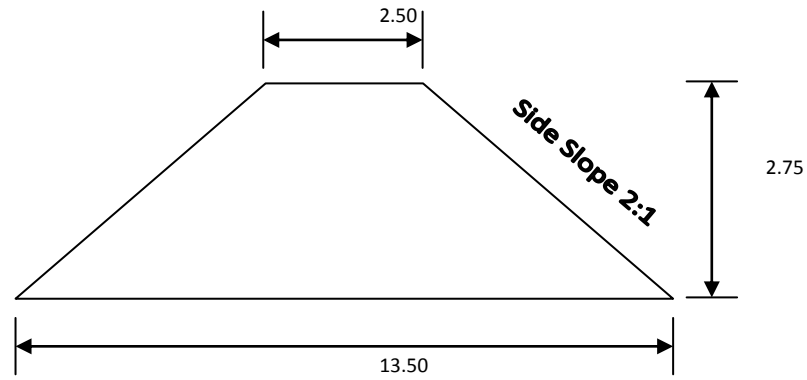
(Not to Scale)



(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 -25 cm
Field Slope -1%	
Vertical Interval (VI)	$= [s/3+2] \times 0.3$ $= [1/3+2] \times 0.3$ $= 0.70 \text{ m}$
Horizontal Interval (HI)	$= 100 \times V.I/s$ $= 100 \times 0.7/1$
Height of bund h	$= \sqrt{(Re \times VI)/50}$ Re=maximum rainfall in cm $= \sqrt{(25 \times 0.7)/50}$ $= \sqrt{0.35}$ $= 0.59$ Say 0.60 m
Free board	=15% of height minimum -10 cm
Height	$= 0.60 + 0.10$ $= 0.70 \text{ m}$
Taking top width of bund 0.50 m and side slope 1.5:1	
Then base of Bund	$= 0.50 + (1.50 \times h) \times 2$ $= 2.60 \text{ m}$
Cross-Section of bund	$= (0.50 + 2.60) \times 0.70 / 2$ $= 1.085 \text{ m}^2$
Length of bund	$= 100 \times s / V.I.$ $= 100 \times 1 / 0.70$ $= 142.85 \text{ m/ha}$ Say 150 m/ha
Earth work/ha	$= 150 \times 1.085$ $= 162.75 \text{ cum}$
Cost Rs. / ha	$= 162.75 \times 39.16 = 6373.29$ Say 6375.00

DESIGN OF SUBMERGENCE BUND

Types of soil – -Loam, Sandy Loam

Rainfall intensity for 24 hrs – 25cm

Field slope 3%

$$V.I. = [s/3+2] \times 0.30$$

$$= 0.90 \text{ m}$$

$$\text{Horizontal Interval} = (100 \times V.I.) / s$$

$$= (100 \times 0.90) / 3$$

$$= 30 \text{ m}$$

$$\text{Height of bund } h = \sqrt{(Re \times V.I.) / 50}$$

$$= \sqrt{(25 \times 0.90) / 50} = \sqrt{0.45} = 0.67 \text{ m. Say } 0.70 \text{ m}$$

Free board 20% of height minimum 20cm

Total Height

$$= 0.90 \text{ m}$$

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

$$= (0.70 + 3.40) \times 0.90 / 2$$

$$= 1.845 \text{ m}^2$$

Length of bund

$$= 100 \text{ s} / V.I.$$

$$= (100 \times 3) / 0.90$$

$$= 333 \text{ m}$$

Feasible length

$$100 + 25 + 25$$

$$= 150 \text{ m}$$

Earth work/ha

$$= 150 \times 1.845$$

$$= 276.75$$

Cost per ha

$$= 276.75 \times 39.16$$

$$= 10,837.53$$

$$\text{Say } 10,850 = 00$$

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., S.B.

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

TYPICAL SECTION OF EARTHEN CHECK DAM / GULLY PLUG

Top width	= 1.50 m
Side slope	= 2:1
Height	= 2.10m
Bottom Width	= 9.90 m
Cross section	= $(1.50 + 9.90) \times 2.10 / 2$ = 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	$= (2.50 + 13.50) \times 2.75 / 2$ $= 22.00 \text{ m}^2$
Per meter cost	= Rs. 1085.92

CHAPTER -11

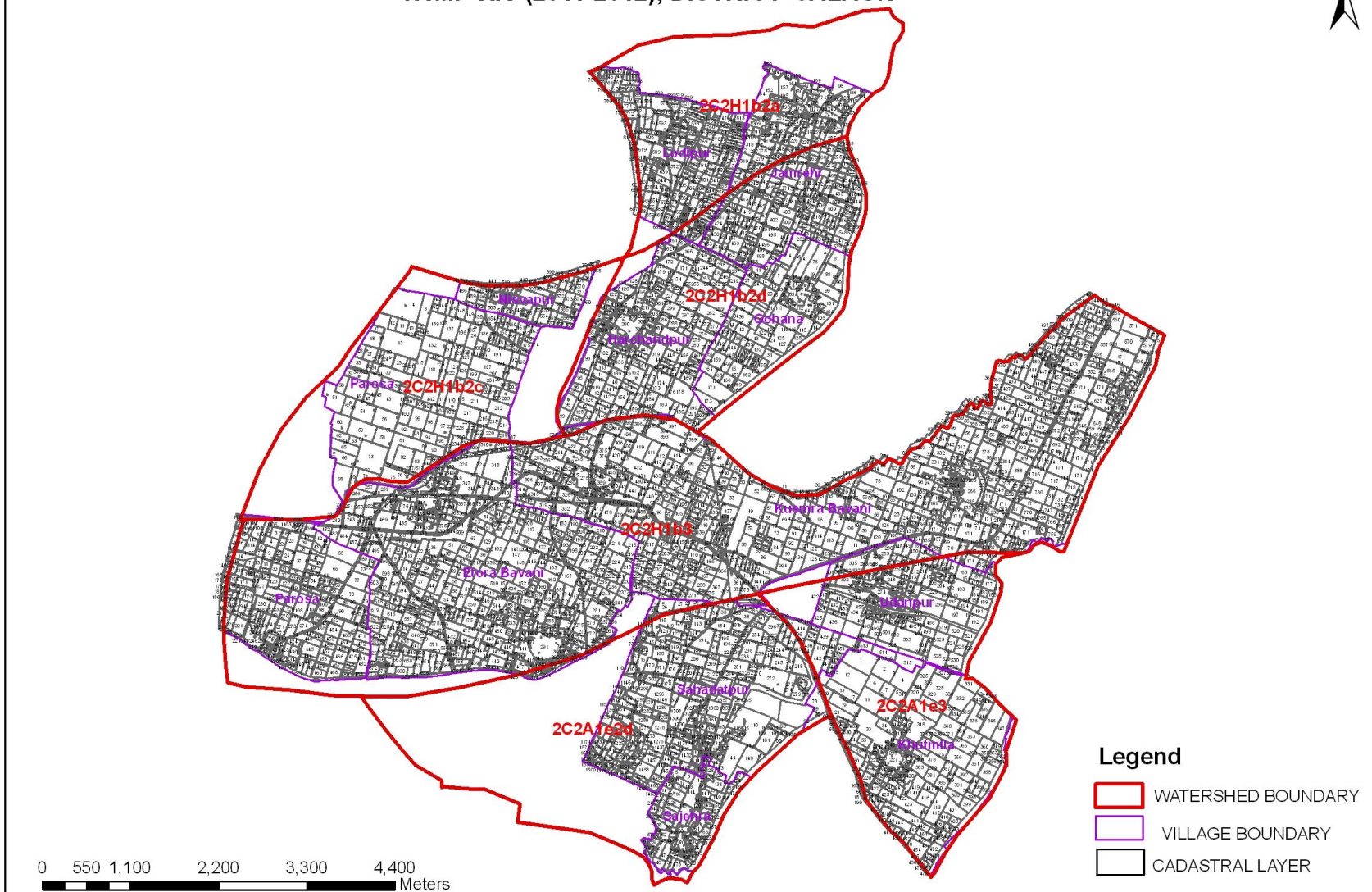
MAPS

MAPS

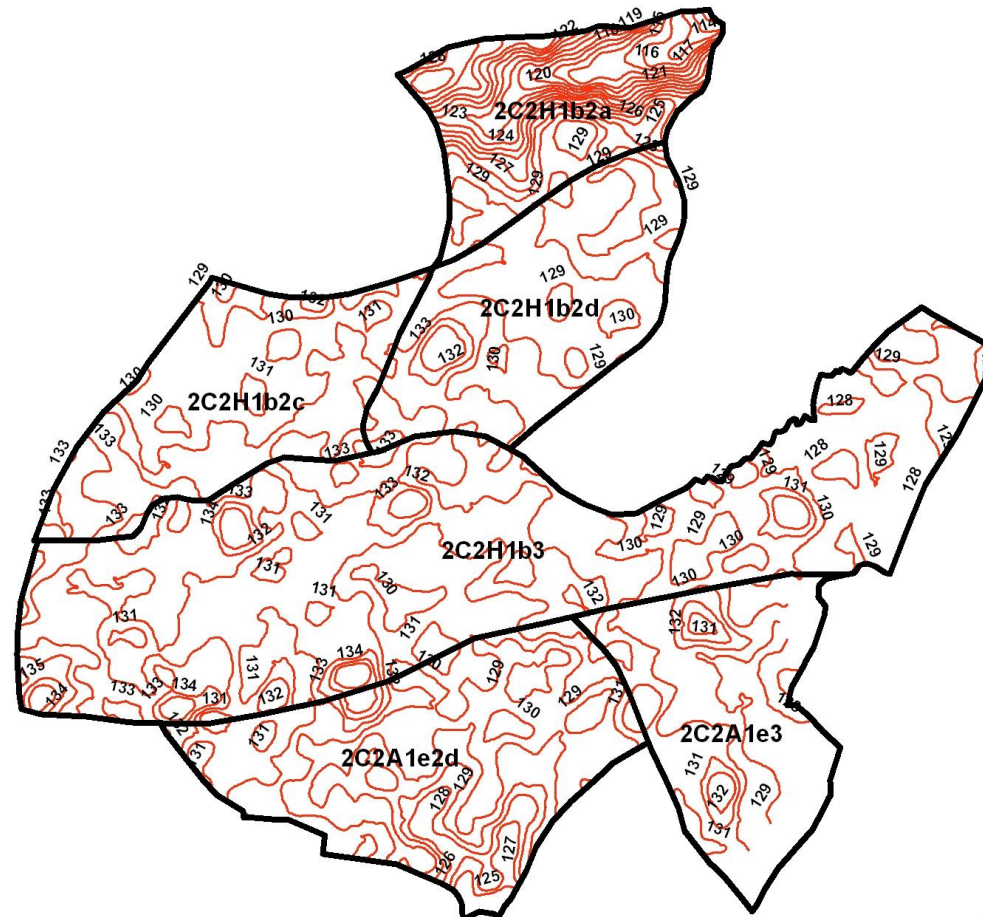
An attempt has been to map the surface details of the project area, as per the instruction of the common Guide lines-2008, All the thematic maps of the study area have been prepared through using remote sensing and geographical information system(G.I.S.) technique, following the fundamental norms of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

- 1- Cadastral Map
- 2- Contour map
- 3- LCC Map
- 4- Land use/ Land cover map
- 5- Project Area Map
- 6- Soil Map
- 7- Soil Depth Map
- 8- Soil Erosion Map
- 9- Action Plan- Parosa / 2C2H1b2a Harchandpur/ 2C2H1b2d Nisvapur/ 2C2H1b2c Kusmara/
2C2H1b3 Udanpur/ 2C2A1e3 Sahadatpur/ 2C2A1e2d

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



CONTOUR MAP OF THE PROJECT AREA IWMP- XIV (2011-2012), DISTRICT- JALAUN

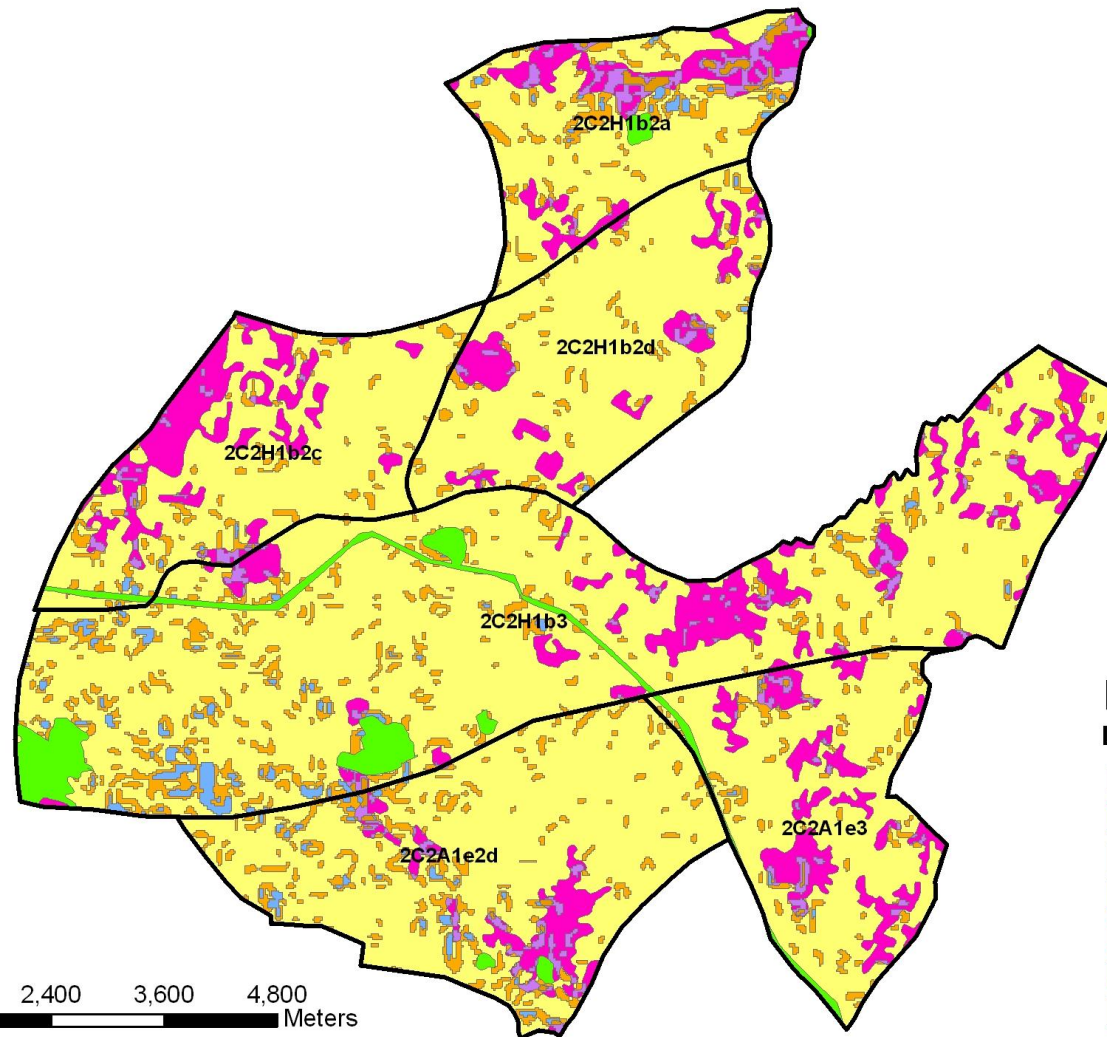


0 550 1,100 2,200 3,300 4,400
Meters

Legend

- WATERSHED BOUNDARY
- CONTOUR AT 1M INTERVAL

**LAND CAPABILITY CLASS MAP OF THE PROJECT AREA
IWMP- XIV (2011-2012), DISTRICT- JALAUN**



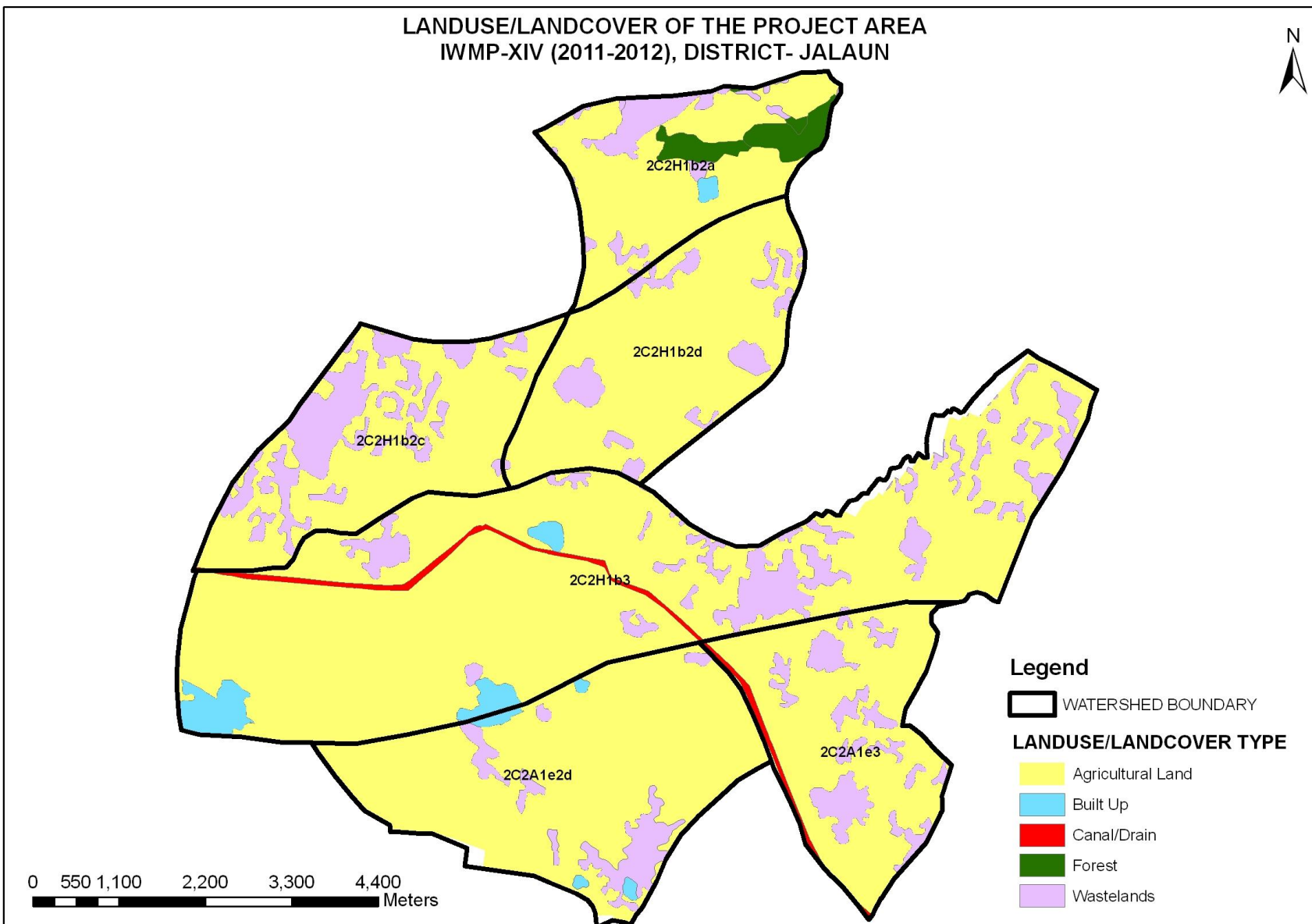
Legend

WATERSHED BOUNDARY

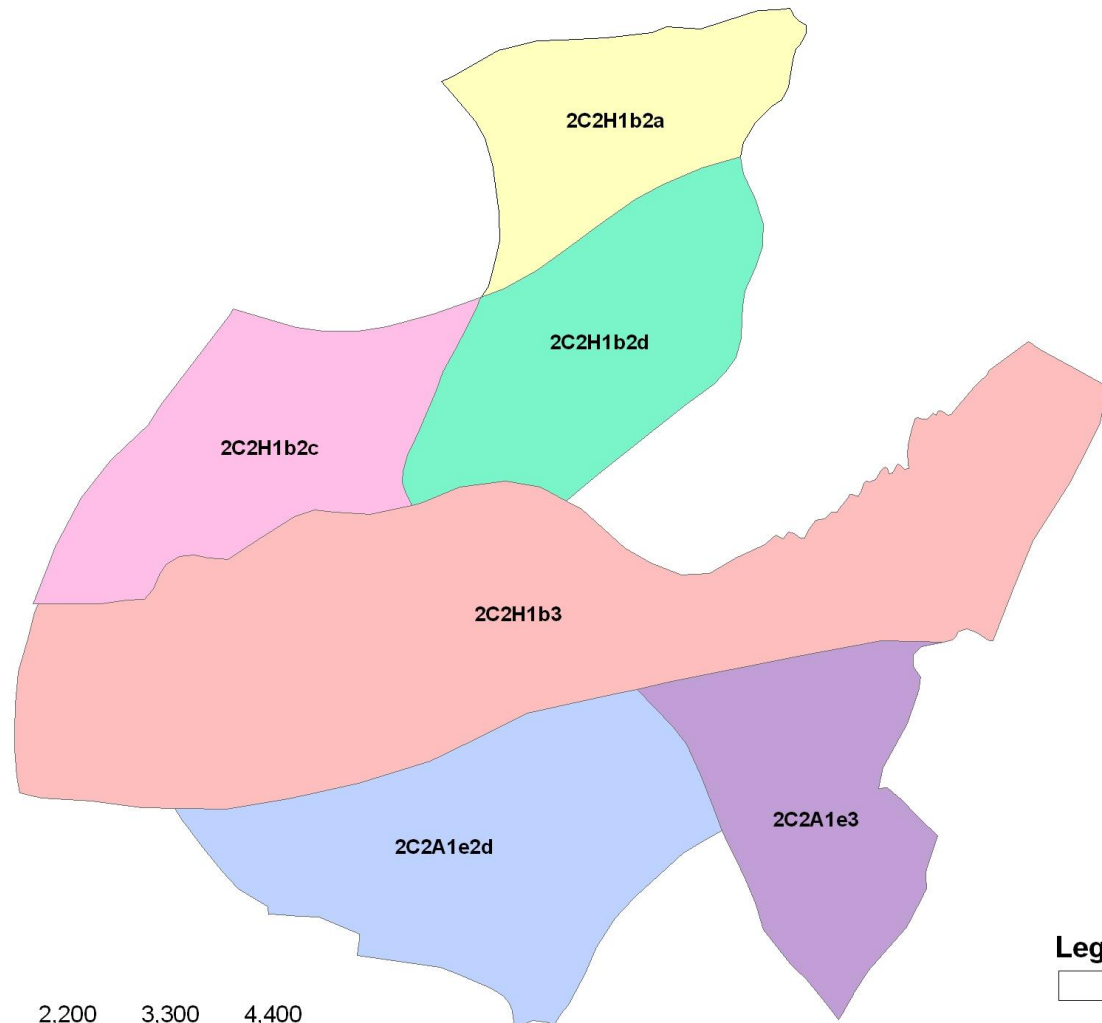
LAND CAPABILITY TYPE

- II
- IIIe
- IVe
- N/A
- V
- VIIe
- VIe

0 600 1,200 2,400 3,600 4,800
Meters



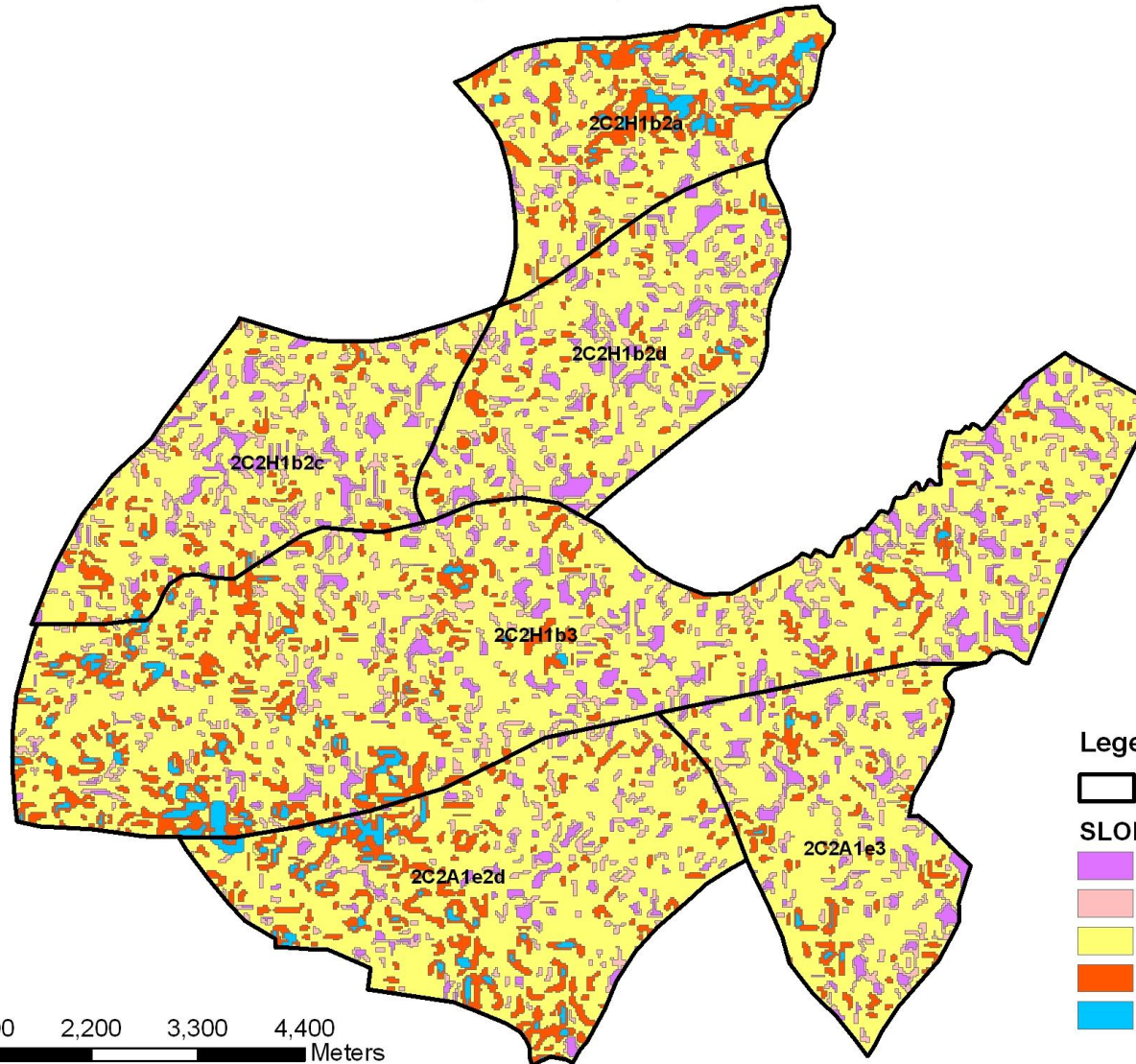
**THE PROJECT AREA
IWMP- XIV (2011-2012), DISTRICT- JALAUN**



0 550 1,100 2,200 3,300 4,400 Meters

Legend
WATERSHED BOUNDARY

**SLOPE MAP OF THE PROJECT AREA
IWMP- XIV (2011-2012), DISTRICT- JALAUN**



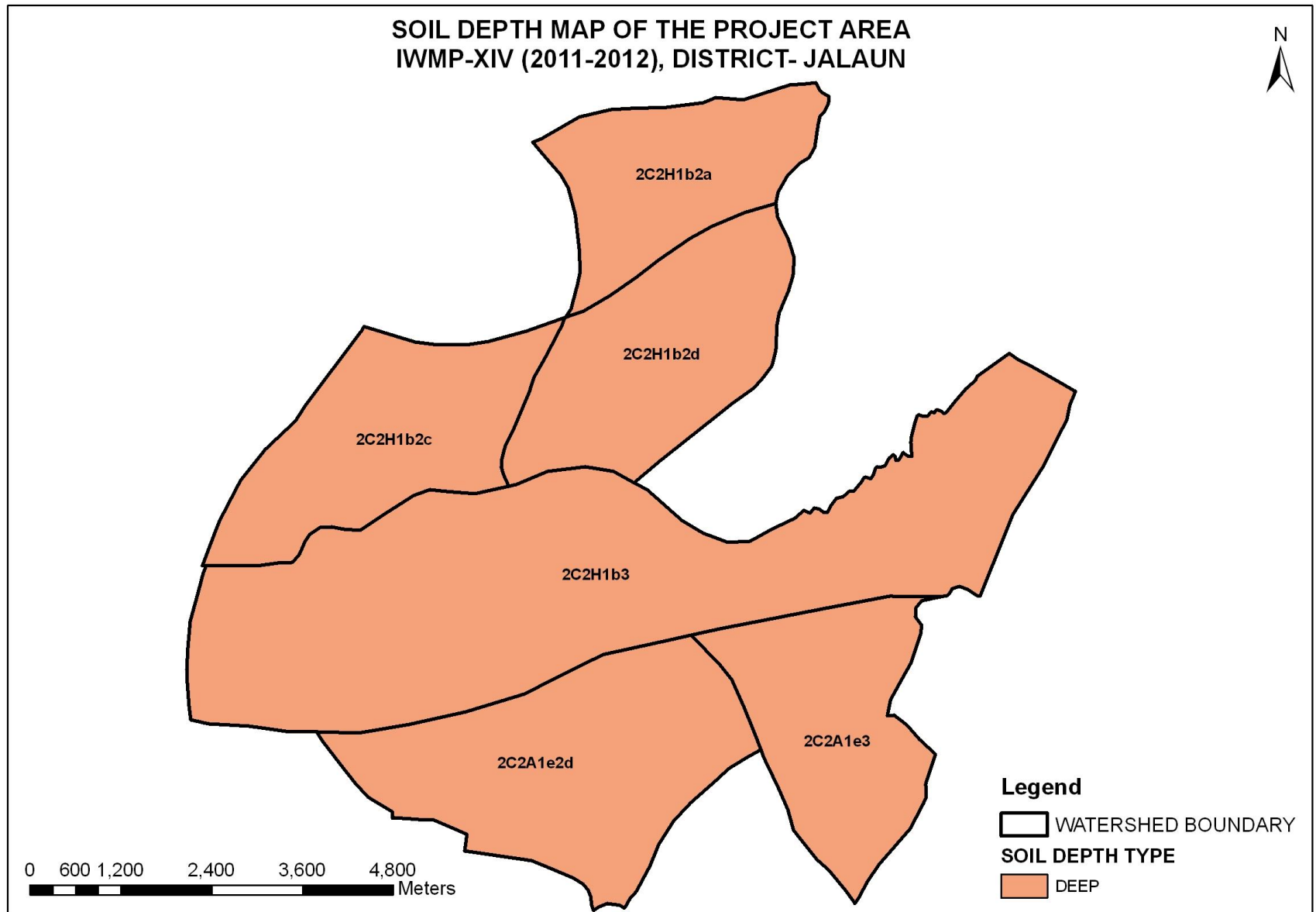
Legend

WATERSHED BOUNDARY

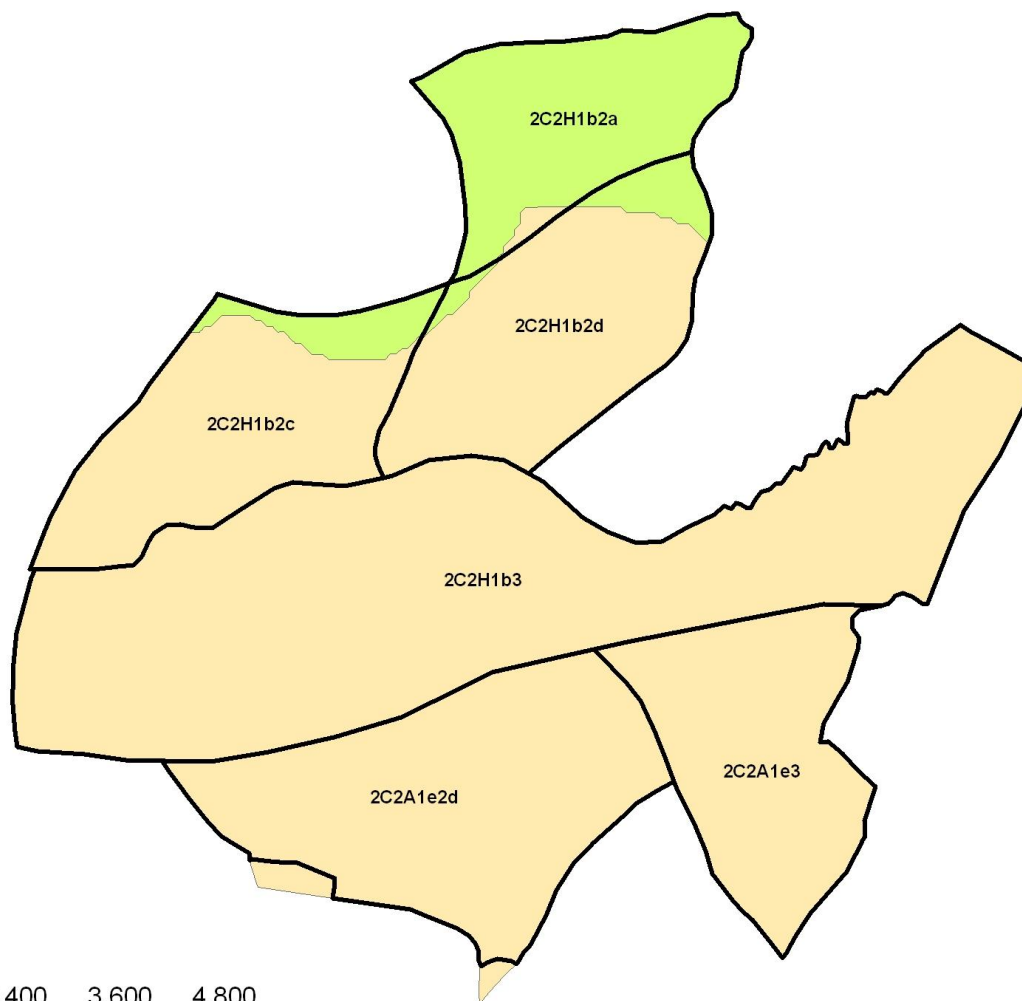
SLOPE VALUE

- 0.0 % to 0.5 % (Level)
- 0.5 % to 1% (Nearly Level)
- 1 % to 3% (Very gently sloping)
- 3 % to 5 % (Gently sloping)
- 5 % to 10 % (Moderate sloping)

0 550 1,100 2,200 3,300 4,400
 Meters



SOIL EROSION MAP OF THE PROJECT AREA
IWMP- XIV (2011-2012), DISTRICT- JALAUN



0 600 1,200 2,400 3,600 4,800
Meters

Legend

 WATERSHED BOUNDARY

SOIL EROSION TYPE

 MODERATE EROSION

 SLIGHT EROSION

ACTION PLAN MAP OF JALAUN



ACTION PLAN MAP OF JALAUN

Project Name- IWMP-XIV(2011-2012)
District Name - Jalaun
Code No. - 2C2H1b2a
Total Area- 608.268 ha.

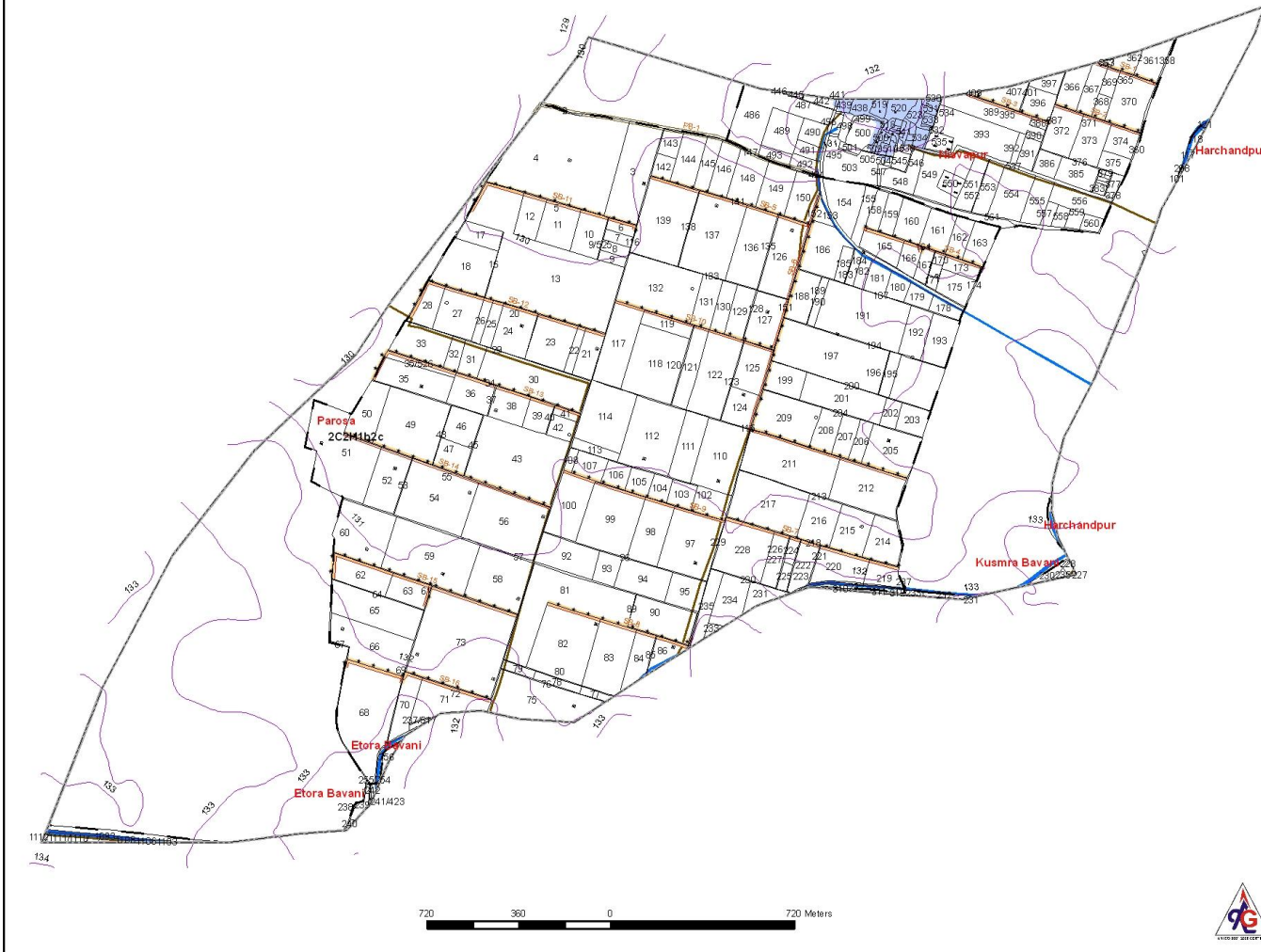
S.No.	Village Name	Area(ha.)
1	Harchandpur	0.066
2	Jamrehi	130.939
3	Lodipur	205.173
Total		336.179

S.No.	Feature Type	Feature No.
1	Peripheral Bund	1
2	Sub Marginal Bund	9
3	Check Dam	1

Legend

- Watershed Boundary
- village boundary
- cadastral plots
- contour 1m
- Check Dam
- Peripheral Bund
- Sub Marginal Bund
- canal
- settlement
- drainage
- Road

ACTION PLAN MAP OF JALAUN



ACTION PLAN MAP OF JALAUN

Project Name- IWMP-XIV(2011-2012)
District Name - Jalaun
Code No. - 2C2H1b2c
Total Area- 776.594 ha.

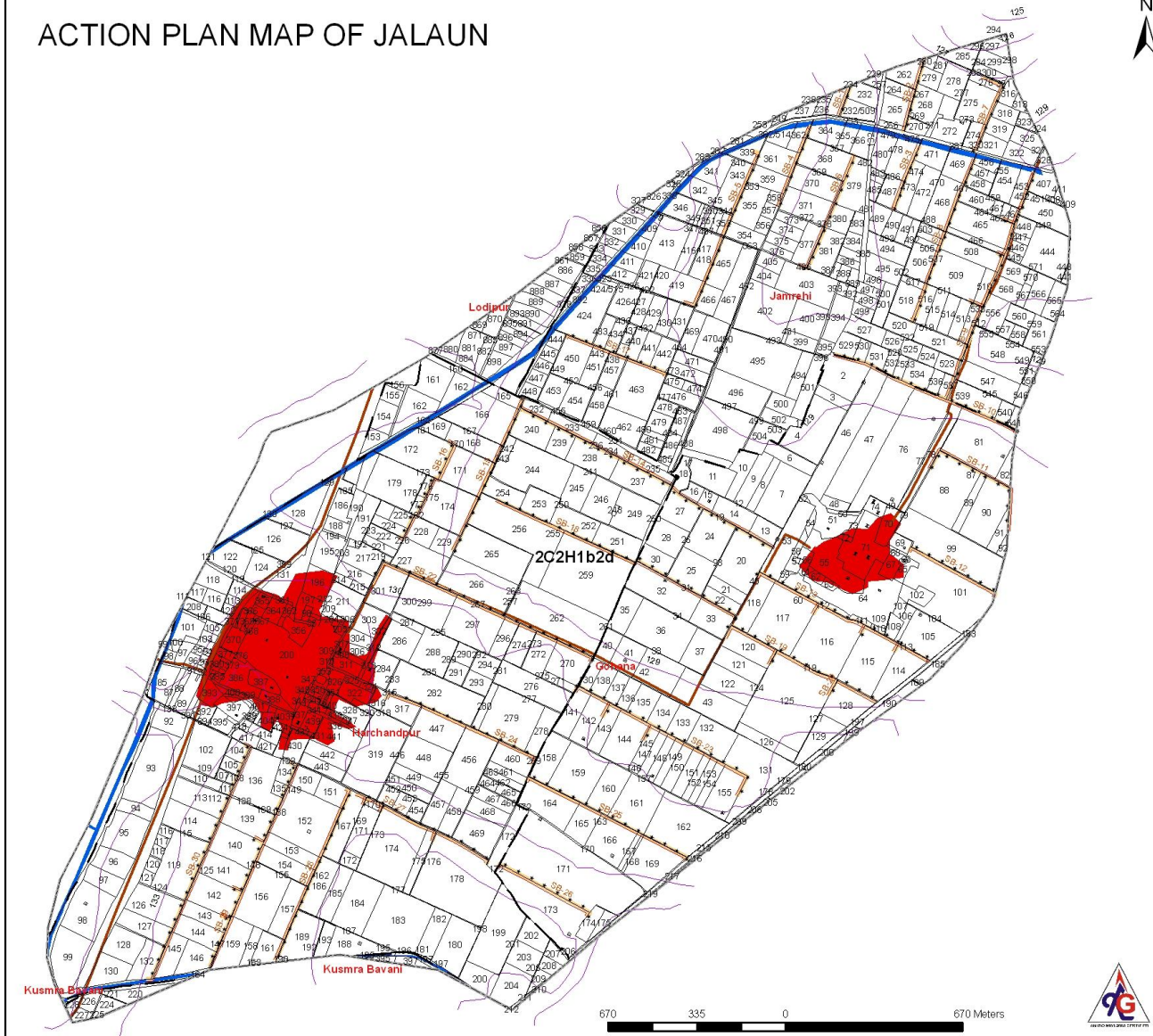
S.No.	Feature Type	Feature No.
1	Peripheral Bund	1
2	Sub Marginal Bund	16

S.No.	Name	Area (Ha.)
1	Etor Bavani	1.347
2	Harchandpur	0.870
3	Kusma Bavani	1.185
4	Nisvapur	71.879
5	Parosa	447.664
	Total Area	522.944

Legend

- Watershed Boundary
- Village Boundary
- cadastral
- contour
- Sub Marginal Bund
- Peripheral Bund
- Road
- canal
- satllement

ACTION PLAN MAP OF JALAUN



ACTION PLAN MAP OF JALAUN
 Project Name- IWMP-XIV(2011-2012)
 District Name - Jalaun
 Code No. - 2C2H1b2d
 Total Area- 800.887 ha.

S.No.	Feature Type	Feature No.
1	Sub Marginal Bund	30

S.No.	Name	Area(Ha.)
1	Gohana	220.585
2	Harchandpur	334.862
3	Jamrehi	209.036
4	Kusma Bavani	3.895
5	Lodipur	12.659
	Total Area	781.037

Legend

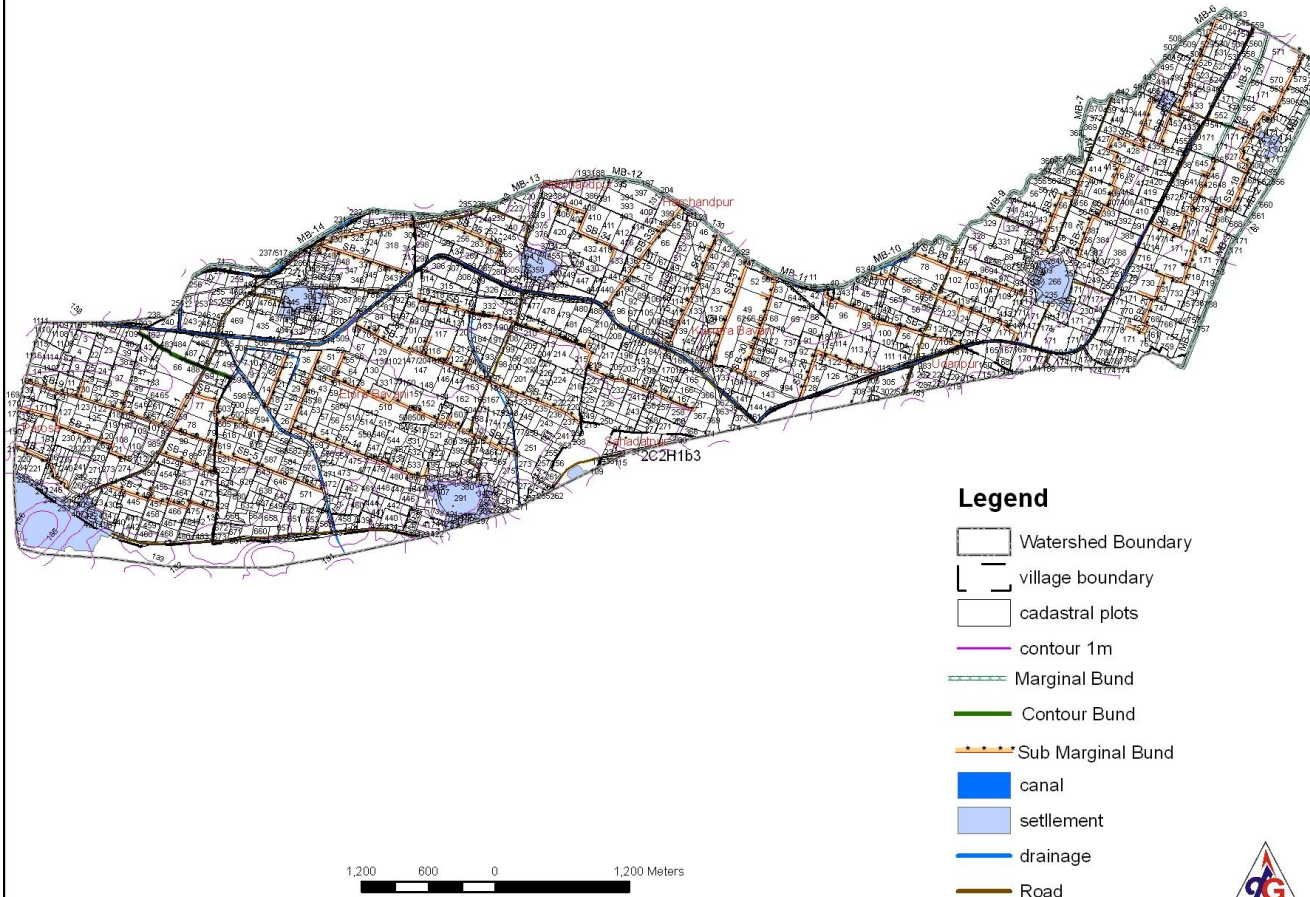
- Watershed Boundary
- Village Boundary
- cadastral
- contour
- Sub Marginal Bund
- drainage
- Road
- canal
- satllement

ACTION PLAN MAP OF JALAUN



ACTION PLAN MAP OF JALAUN

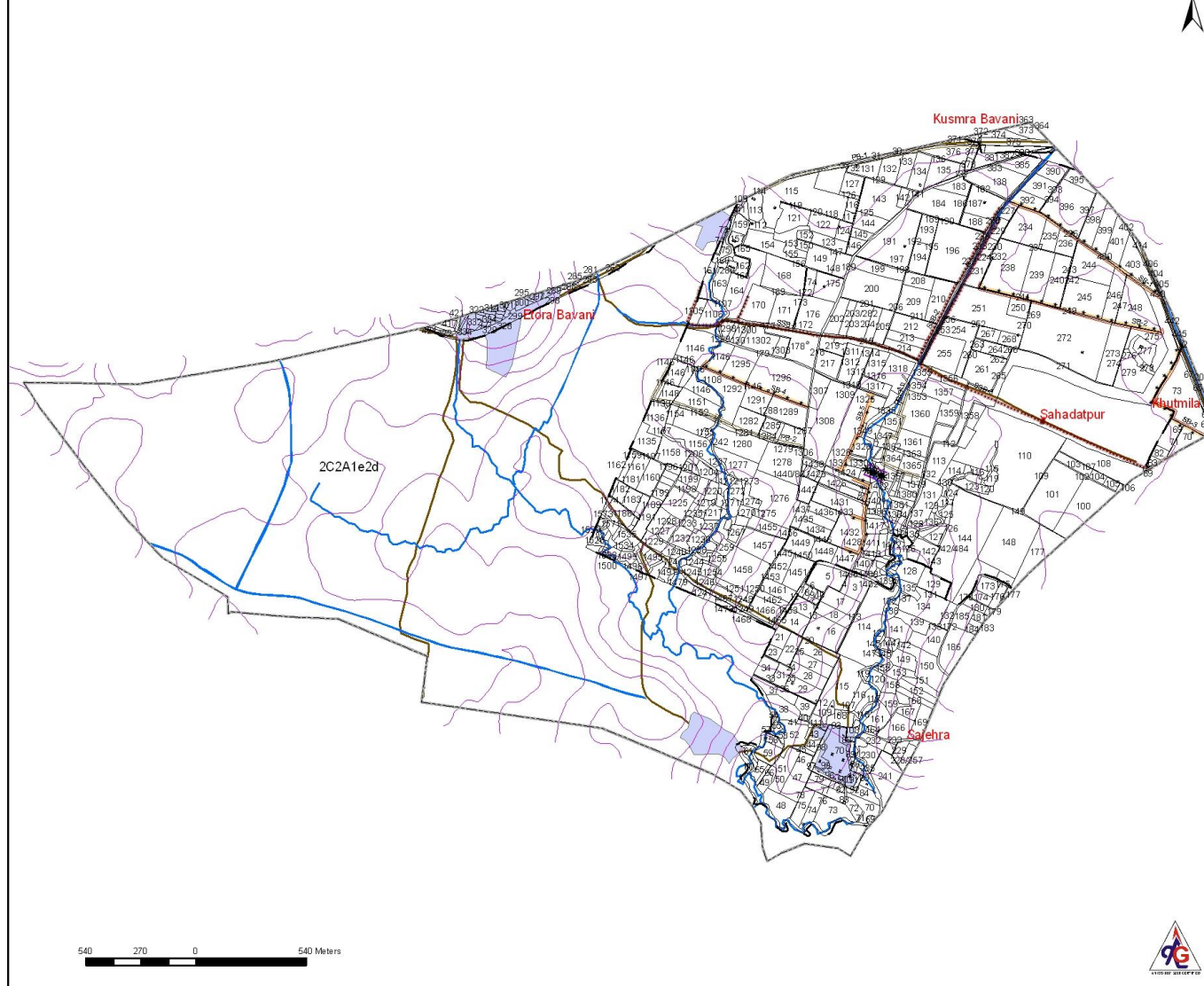
Project Name- IWMP-XIV(2011-2012)
District Name - Jalaun
Code No. - 2C2H1b3
Total Area- 2485.929 ha.



S.No.	Village Name	Area(ha.)
1	Etor Bavani	751.857
2	Harchandpur	0.789
3	Kusmra Bavani	1258.766
4	Parosa	308.916
5	Sahadatpur	11.307
6	Udanpur	33.660
Total		2365.296

S.No.	Feature Type	Feature No.
1	Marginal Bund	14
2	Sub Marginal Bund	37
3	Contour Bund	1

ACTION PLAN MAP OF JALAUN



ACTION PLAN MAP OF JALAUN

Project Name- IWMP-XIV(2011-2012)
District Name - Jalaun
Code No. - 2C2H1e2d
Total Area- 1079.791 ha.

S.No.	Village Name	Area(ha.)
1	Etora Bavani	7.770
2	Khutmila	9.601
3	Kusmra Bavani	4.341
4	Sahadatpur	474.792
5	Sajehra	106.991
Total		603.494

S.No.	Feature Type	Feature No.
1	Peripheral Bund	3
2	Sub Marginal Bund	6
3	Gully Plug	1
4	SSB	3

Legend

- Watershed Boundary
- Village Boundary
- cadastral
- contour
- Sub Marginal Bund
- Peripheral Bund
- SSB
- Gully Plug
- Road
- canal
- satllement
- drainage

ACTION PLAN MAP OF JALAUN



ACTION PLAN MAP OF JALAUN

Project Name- IWMP-XIV(2011-2012)
District Name - Jalaun
Code No. - 2C2A1e3
Total Area- 711.151 ha.

S.No.	Feature Type	Feature No.
1	Peripheral Bund	7
2	Sub Marginal Bund	17

S.No.	Name	Area(Ha.)
1	Khutnila	397.328
2	Kusma Bavani	11.614
3	Sahadatpur	45.066
4	Udanpur	225.731
	Total Area	679.738

Legend

- Watershed Boundary
- Village Boundary
- cadastral
- contour
- Peripheral Bund
- Sub Marginal Bund
- drainage
- canal
- satllement

Annexure-1**MWS Code: - 2C2H1b2a**

S. No.	Activity	Khasra No.	Length	Top	Base	Height	C. S.	E. W.	Rate	Amount	Village Name
1	SB-1	659,655, 658, 655, 662, 660	340	0.60	4.20	1.20	2.88	979	41.22	40363	Lodipur
2	SB-2	662, 626, 660, 654, 653, 649, 625	400	1.00	4.20	1.50	7.50	3000	41.22	123660	Lodipur
3	SB-3	661, 644, 628, 640, 641	330	0.60	4.20	1.20	2.88	950	41.22	39175	Lodipur
4	SB-4	621, 622, 623, 636	390	1.00	6.00	1.50	7.50	2925	41.22	120569	Lodipur
5	SB-5	630, 639, 635, 633, 632, 631, 636	360	0.60	4.20	1.20	2.88	1037	41.22	42737	Lodipur
6	SB-6	638, 572, 573	120	1.00	6.00	1.50	7.50	900	41.22	37098	Lodipur
7	SB-7	571, 638, 572, 676	250	0.60	4.20	1.20	2.88	720	41.22	29678	Lodipur
8	SB-8	570, 565, 566, 560	290	1.00	6.00	1.50	7.50	2175	41.22	89654	Lodipur
9	SB-9	609, 608, 619, 618, 620, 638	380	0.60	4.20	1.20	2.88	1094	41.22	45111	Lodipur
	Total		2860					13781		568045	
1	PB-1	818, 598, 597, 604, 605, 605/916, 605/917, 605/919, 605/918, 813, 820, 638	580	1.00	6.00	1.50	7.50	4350	45.45	197708	Lodipur
	Total		580					4305		197708	
1	GP-1	569, 546, 553	60	2	14	3	24	1440	49.95	71928	Lodipur
	Total		60					1440		71928	

MWS Code: - 2C2H1e2d

S. No.	Activity	Khasra No.	Length	Top	Base	Height	C. S.	E. W.	Rate	Amount	Village Name
1	SB-1	403, 400, 226, 392	880	0.60	4.20	1.20	2.88	2534	41.22	104468	Sahadatpur
2	SB-2	241, 240, 245, 249, 248, 247, 246, 243, 242, 238, 233	960	1.00	6.00	1.50	7.50	7200	41.22	296784	Sahadatpur
3	SB-3	70, 71, 69, 73, 404, 405	650	0.60	4.20	1.20	2.88	1872	41.22	77164	Sahadatpur, Khutmila
4	SB-4	1146, 1296, 1108	590	1.00	6.00	1.50	7.50	4425	41.22	182399	Sahadatpur
5	SB-5	1331, 1329, 1330, 1423, 1325, 1328, 1327, 1326, 1324, 1309	480	0.60	4.20	1.20	2.88	1382	41.22	56983	Sahadatpur
6	SB-6	1446, 1432, 1431, 1427, 1428, 1426, 1424, 1425, 1423	590	1.00	6.00	1.50	7.50	4425	41.22	182399	Sahadatpur
	Total		4150					21839		900195	
1	PB-1	114, 115, 33, 32, 379, 376	1130	1.00	6.00	1.50	7.50	8475	45.45	385189	Sahadatpur
2	PB-2	1284, 1287, 1281, 1286, 1283, 1282, 1153, 1152, 1149, 1151, 1148, 1292, 1108	1030	1.00	6.00	1.50	7.50	7725	45.45	351101	Sahadatpur
3	PB-3	1367, 1368, 1364, 1365, 1341, 1362, 1353, 1354, 1360	670	1.00	6.00	1.50	7.50	5025	45.45	228386	Sahadatpur
	Total		2830					21225		964676	
1	GP-1	1333, 1332, 1367, 1335	100	2	14	3	24	2400	49.95	119880	Sahadatpur
	Total							2400		119880	
1	SSB-1	1106, 1105, 1298, 177, 178, 170, 164	1078	1.00	6.00	1.50	5.25	5662	42.26	239262	Sahadatpur
2	SSB-2	215, 219, 213, 212, 211, 210, 222, 196	1337	3.50	10.00	1.60	10.80	14441	42.26	610276	Sahadatpur
3	SSB-3	89, 1358, 1356, 1355, 254, 255, 249, 231, 228, 230	2320	3.50	10.00	1.60	10.80	25053	42.26	1058724	Sahadatpur, Khutmila
	Total		4735					45155		1908262	

MWS Code: - 2C2H1b2c

S. No.	Activity	Khasra No.	Length	Top	Base	Height	C. S.	E. W.	Rate	Amount	Village Name
1	SB-1	365, 370, 361, 362, 363	247	0.60	4.20	1.20	2.88	711	41.22	29321	Nisvapur
2	SB-2	367, 366, 371, 368, 360, 370	351	1.00	6.00	1.50	7.50	2632	41.22	108483	Nisvapur
3	SB-3	409, 396, 395, 407, 387, 408	342	0.60	4.20	1.20	2.88	984	41.22	40541	Nisvapur
4	SB-4	166, 167, 165, 164, 160, 155	547	1.00	6.00	1.50	7.50	4106	41.22	169258	Parosa
5	SB-5	126, 135, 136, 137, 151, 141, 138	657	0.60	4.20	1.20	2.88	1893	41.22	78042	Parosa
6	SB-6	205, 206, 209, 151, 115, 199, 200, 188, 186, 152	1596	1.00	6.00	1.50	7.50	11972	41.22	493495	Parosa
7	SB-7	218, 219, 220, 224, 226, 227	703	0.60	4.20	1.20	2.88	2026	41.22	83510	Parosa
8	SB-8	84, 85, 86, 83, 82, 81, 90	609	1.00	6.00	1.50	7.50	4564	41.22	188120	Parosa
9	SB-9	100, 102, 106, 107, 108	665	0.60	4.20	1.20	2.88	1915	41.22	78939	Parosa
10	SB-10	127, 130, 131, 132	652	1.00	6.00	1.50	7.50	4889	41.22	201533	Parosa
11	SB-11	116, 1, 6, 5, 12, 16	760	0.60	4.20	1.20	2.88	2190	41.22	90271	Parosa
12	SB-12	21, 20, 22, 23, 24, 25, 26, 27, 28, 1	878	1.00	6.00	1.50	7.50	6584	41.22	271407	Parosa
13	SB-13	35/526, 34, 41, 40, 36, 39, 37, 38	924	0.60	4.20	1.20	2.88	2662	41.22	109736	Parosa
14	SB-14	47, 55, 43, 49, 50	859	1.00	6.00	1.50	7.50	6440	41.22	265466	Parosa
15	SB-15	69, 73, 63, 62, 67, 61	945	0.60	4.20	1.20	2.88	2723	41.22	112241	Parosa
16	SB-16	68, 70, 72, 66, 69, 71	664	1.00	6.00	1.50	7.50	4982	41.22	205352	Parosa
	Total		11401					61274		2525714	
1	PB-1	3, 2, 4, 147, 492, 493, 494	1170	6.00	1.00	1.50	7.50	8775	45.45	398824	Nisvapur, Parosa
	Total		1170							398824	

MWS Code: - 2C2H1b2d

S. No.	Activity	Khasra No.	Length	Top	Base	Height	C. S.	E. W.	Rate	Amount	Village Name
1	SB-1	234, 235	120	0.60	4.20	1.20	2.88	346	41.22	14246	Jamrehi
2	SB-2	264, 265, 387, 262, 261, 267	300	1.00	6.00	1.50	7.50	2247	41.22	92633	Jamrehi
3	SB-3	487, 488, 482, 474, 478	270	0.60	4.20	1.20	2.88	778	41.22	32053	Jamrehi
4	SB-4	359, 361, 362, 363	330	1.00	6.00	1.50	7.50	2475	41.22	102020	Jamrehi
5	SB-5	419, 464, 418, 352, 407, 344, 345, 340, 353,	700	0.60	4.20	1.20	2.88	2015	41.22	83047	Jamrehi
6	SB-6	406, 381, 380, 378, 379, 368	510	1.00	6.00	1.50	7.50	3825	41.22	157667	Jamrehi
7	SB-7	275, 387, 274, 320, 301, 276	370	0.60	4.20	1.20	2.88	1066	41.22	43924	Jamrehi
8	SB-8	519, 516, 517, 511, 506, 505, 507, 503, 488, 468, 467	670	1.00	6.00	1.50	7.50	5025	41.22	207131	Jamrehi
9	SB-9	523, 521, 519, 512, 511, 510, 466, 538, 462, 465, 464, 450, 452	1070	0.60	4.20	1.20	2.88	3082	41.22	127024	Jamrehi
10	SB-10	534, 532, 531, 81, 78, 541, 76, 47, 539, 46, 536, 529	760	1.00	6.00	1.50	7.50	5700	41.22	234954	Jamrehi, Gohana
11	SB-11	79, 87, 88, 89, 90	540	0.60	4.20	1.20	2.88	1555	41.22	64105	Gohana
12	SB-12	79, 101	400	1.00	6.00	1.50	7.50	3000	41.22	123660	Gohana

13	SB-13	113, 114, 115, 116, 117, 118, 178, 45	870	0.60	4.20	1.20	2.88	2506	41.22	103281	Gohana
14	SB-14	19, 27, 260, 45, 20, 24, 237, 239, 240, 236	1110	1.00	6.00	1.50	7.50	8325	41.22	343157	Harchandpur,Gohana
15	SB-15	174, 229, 173, 171, 170, 168, 167, 231, 166, 165	650	0.60	4.20	1.20	2.88	1872	41.22	77164	Harchandpur
16	SB-16	182, 175, 176, 223, 226, 224, 225, 177, 173, 171, 172	670	1.00	6.00	1.50	7.50	5025	41.22	207131	Harchandpur
17	SB-17	463, 457, 456, 451, 450, 449, 443, 464	440	0.60	4.20	1.20	2.88	1267	41.22	52234	Jamrehi
18	SB-18	260, 22, 32, 31,25, 30, 45, 259, 256, 255	1030	1.00	6.00	1.50	7.50	7725	41.22	318425	Harchandpur,Gohana
19	SB-19	127, 128, 125, 124, 120, 119, 43	670	0.60	4.20	1.20	2.88	1930	41.22	79538	Gohana
20	SB-20	127, 125	70	1.00	6.00	1.50	7.50	525	41.22	21641	Gohana
21	SB-21	124	60	0.60	4.20	1.20	2.88	173	41.22	7123	Gohana
22	SB-22	269, 270, 272, 273, 274, 281, 296, 297, 299, 300, 301	990	1.00	6.00	1.50	7.50	7425	41.22	306059	Harchandpur
23	SB-23	154, 155, 144, 145, 143, 142, 131, 269	970	0.60	4.20	1.20	2.88	2794	41.22	115152	Gohana

24	SB-24	459, 460, 456, 455, 447, 317, 316, 315	660	1.00	6.00	1.50	7.50	4950	41.22	204039	Harchandpur
25	SB-25	168, 169, 167, 166, 165, 164, 163, 269, 178	710	0.60	4.20	1.20	2.88	2045	41.22	84287	Harchandpur, Gohana
26	SB-26	171, 172, 173, 174	430	1.00	6.00	1.50	7.50	3225	41.22	132935	Gohana
27	SB-27	169, 170, 167, 176, 178, 174, 175, 173, 171, 269	680	0.60	4.20	1.20	2.88	1958	41.22	80725	Harchandpur
28	SB-28	162, 152, 161, 157, 154, 155, 153, 151	720	1.00	6.00	1.50	7.50	5400	41.22	222588	Harchandpur
29	SB-29	139, 147, 146, 144, 143, 142, 141, 140, 148, 138, 139, 149, 134, 133, 136	980	0.60	4.20	1.20	2.88	2822	41.22	116339	Harchandpur
30	SB-30	132, 126, 124, 119, 105, 125, 104	980	1.00	6.00	1.50	7.50	7350	41.22	302967	Harchandpur
	Total		18729					98429		4057244	

MWS Code: - 2C2A1e3

S. No.	Activity	Khasra No.	Length	Top	Base	Height	C. S.	E. W.	Rate	Amount	Village Name
1	SB-1	211, 162, 212, 213, 226, 204, 205, 217, 228, 210, 220, 224	980	0.60	4.20	1.20	2.88	2822	41.22	116339	Udanpur
2	SB-2	174, 182, 183, 184, 189	330	1.00	6.00	1.50	7.50	2475	41.22	102020	Kusmra Bavani
3	SB-3	193, 194, 196, 190, 184, 185, 182, 170, 171, 169, 167, 168, 182	680	0.60	4.20	1.20	2.88	1958	41.22	80725	Udanpur
4	SB-4	197, 173, 192, 191, 197, 190, 203, 199, 205	1710	1.00	6.00	1.50	7.50	12825	41.22	528647	Kusmra Bavani, Udanpur
5	SB-5	504, 493, 501, 492, 499, 498, 497, 478, 494, 492, 489, 480	980	0.60	4.20	1.20	2.88	2822	41.22	116339	Udanpur
6	SB-6	454, 436, 435, 425, 496	960	1.00	6.00	1.50	7.50	7200	41.22	296784	Sahadatpur
7	SB-7	451,450, 442, 440, 441, 443, 430, 429, 452, 431	620	0.60	4.20	1.20	2.88	1786	41.22	73602	Sahadatpur
8	SB-8	451, 1, 4, 3, 2, 512, 516, 513	1120	1.00	6.00	1.50	7.50	8400	41.22	346248	Sahadatpur, Khutmila
9	SB-9	7, 6, 5, 11, 12, 319, 15, 1	1030	0.60	4.20	1.20	2.88	2966	41.22	122275	Khutmila
10	SB-10	33, 34, 32, 19, 20, 17	1060	1.00	6.00	1.50	7.50	7950	41.22	327699	Khutmila
11	SB-11	221, 64, 223, 51, 63, 225, 33	390	0.60	4.20	1.20	2.88	1123	41.22	46298	Khutmila
12	SB-12	415, 423, 419, 416, 422, 257, 241, 242, 243, 235, 237	1030	1.00	6.00	1.50	7.50	7725	41.22	318425	Khutmila

13	SB-13	470, 469, 464, 463, 428, 441/496, 436, 435, 429, 441	1310	0.60	4.20	1.20	2.88	3773	41.22	155515	Khutmila
14	SB-14	460, 459, 452, 451, 457, 448, 447, 432/494	700	1.00	6.00	1.50	7.50	5250	41.22	216405	Khutmila
15	SB-15	402, 408, 401, 400, 413, 414, 417, 419, 420	1300	0.60	4.20	1.20	2.88	3744	41.22	154328	Khutmila
16	SB-16	385, 384, 379, 378, 366, 367, 376, 375, 350, 335, 332, 342, 331, 344	1600	1.00	6.00	1.50	7.50	12000	41.22	494640	Khutmila
17	SB-17	303, 527, 305, 306, 307, 318, 330, 321, 320, 328, 534, 521	2100	0.60	4.20	1.20	2.88	6048	41.22	249299	Udanpur
	Total		17900					90868		3745587	
1	PB-1	162, 231, 254, 236, 253, 230, 295	640	1.00	6.00	1.50	7.50	4801	45.45	218220	Udanpur
2	PB-2	454, 418, 419, 417	640	1.00	6.00	1.50	7.50	4800	45.45	218160	Udanpur
3	PB-3	344, 345, 343, 346	600	1.00	6.00	1.50	7.50	4500	45.45	204525	Udanpur
4	PB-4	480, 470, 471, 469, 468	580	1.00	6.00	1.50	7.50	4350	45.45	197708	Khutmila
5	PB-5	399, 396, 395, 357, 356, 376, 348, 349, 347	1760	1.00	6.00	1.50	7.50	13200	45.45	599929	Khutmila
6	PB-6	385, 388, 376, 362, 363, 336, 345, 339, 344	1570	1.00	6.00	1.50	7.50	11775	45.45	535174	Khutmila
7	PB-7	521, 520, 519, 518, 487, 486	930	1.00	6.00	1.50	7.50	6975	45.45	317014	Udanpur
	Total		6720					50401		2290729	

MWS Code:- 2C2H1b3

CB											
S. No.	Activity	Khasra No.	Length	Top	Base	Height	C. S.	E. W.	Rate	Amount	Village Name
1	C.B.-01	498, 70, 69, 499, 67, 494, 66, 487, 490, 483, 45, 488, 487, 482, 1094,	1567.74	0.45	2.25	0.6	0.81	1270	39	49779	Parosa, Etora Bavani
		Total	1567.74							49779	
MB											
S. No.	Activity	Khasra No.	Length	Top	Base	Height	C. S.	E. W.	Rate	Amount	Village Name
1	M.B.-01	171, 588, 580, 578, 575, 601, 576, 575	2094.01	0.6	3.6	1	2.1	4397	39.21	172423	Kusmra Bavani
2	M.B.-02	660, 655, 171, 603, 656, 658, 655, 659	1846.73	0.6	3.6	1	2.1	3878	39.21	152062	Kusmra Bavani
3	M.B.-03	719, 713, 711, 714, 689, 688, 171	1881.04	0.6	3.6	1	2.1	3950	39.21	154887	Kusmra Bavani
4	M.B.-04	757, 753, 738	1800.22	0.6	3.6	1	2.1	3780	39.21	148232	Kusmra Bavani
5	M.B.-05	560, 552, 171, 556, 557, 561	2437.42	0.6	3.6	1	2.1	5119	39.21	200699	Kusmra Bavani
6	M.B.-06	493, 502, 503, 508, 509, 510, 544, 495, 464, 492, 493	2387.01	0.6	3.6	1	2.1	5013	39.21	196549	Kusmra Bavani
7	M.B.-07	441, 359, 370, 443, 442, 372, 491, 489, 369	1791.64	0.6	3.6	1	2.1	3762	39.21	147526	Kusmra Bavani

8	M.B.-08	361, 360, 365, 364, 369, 359, 366, 368, 369	2197.26	0.6	3.6	1	2.1	4614	39.21	180925	Kusmra Bavani
9	M.B.-09	329, 338, 340, 56, 83, 328, 357, 344	2344.18	0.6	3.6	1	2.1	4923	39.21	193022	Kusmra Bavani
10	M.B.-10	85, 80, 82, 11, 15, 44, 62, 63, 64, 40, 14, 11	2449.94	0.6	3.6	1	2.1	5145	39.21	201731	Kusmra Bavani
11	M.B.-11	42, 43, 39, 37, 49, 46, 42, 28, 11, 36, 38, 40	2257.47	0.6	3.6	1	2.1	4741	39.21	185882	Kusmra Bavani
12	M.B.-12	29, 32, 42, 43, 44, 45, 6, 216, 200, 397, 395, 197, 30, 47, 28, 6, 13, 7/272, 212, 211, 204, 210, 395	2957.26	0.6	3.6	1	2.1	6210	39.21	243504	Kusmra Bavani
13	M.B.-13	222, 230, 227, 224, 225, 220, 162, 236, 235, 221, 164, 231, 233, 313, 311, 193, 192, 195, 189	3050.29	0.6	3.6	1	2.1	6406	39.21	251164	Kusmra Bavani
14	M.B.-14	75, 76, 233, 311, 232, 235, 71,77, 76, 80, 86, 231, 234, 229, 256, 84	3405.16	0.6	3.6	1	2.1	7151	39.21	280384	Parosa, Etor Bavani
		Total	32899							2708988	

SB											
S. No.	Activity	Khasra No.	Length	Top	Base	Height	C. S.	E. W.	Rate	Amount	Village Name
1	S.B.-01	58, 59, 67, 65	1243.67	0.60	4.20	1.20	2.88	3582	41.22	147640	Parosa
2	S.B.-02	19, 127, 130, 117, 108, 120, 126, 127, 121, 172, 170, 171	1983.81	0.60	4.20	1.20	2.88	5713	41.22	235506	Parosa
3	S.B.-03	242, 241, 243, 245, 244, 240, 239, 197, 196, 199, 227, 198	1282.58	0.60	4.20	1.20	2.88	3694	41.22	152260	Parosa
4	S.B.-04	77, 73, 611, 594, 605, 606, 602, 595, 598, 603	1620.71	0.60	4.20	1.20	2.88	4668	41.22	192400	Parosa, Etora Bavani
5	S.B.-05	572, 573, 562, 574, 575, 585, 644, 621, 619, 587, 80, 79, 78	2261.05	0.60	4.20	1.20	2.88	6512	41.22	268417	Parosa, Etora Bavani
6	S.B.-06	91, 85, 88, 82, 92, 87, 86, 90	1231.05	0.60	4.20	1.20	2.88	3545	41.22	146142	Parosa
7	S.B.-07	465, 466, 473, 474, 457, 456, 445, 439, 425, 424, 446, 448	1859.20	0.60	4.20	1.20	2.88	5355	41.22	220713	Parosa
8	S.B.-08	14, 15, 8, 13, 4	1135.81	0.60	4.20	1.20	2.88	3271	41.22	134836	Etora Bavani
9	S.B.-09	30, 20, 32, 35, 103, 102, 58, 104, 55, 34, 12, 18, 16, 17, 13, 37, 41, 21	2329.64	0.60	4.20	1.20	2.88	6709	41.22	276560	Parosa
10	S.B.-10	337, 322, 321, 319, 112, 109, 108, 103, 104, 100, 111	1183.08	0.60	4.20	1.20	2.88	3407	41.22	140448	Kusmra Bavani, Etora Bavani
11	S.B.-11	126, 127, 126/2040, 119, 124, 123, 121/2053, 107, 102, 118, 88, 87, 71, 72, 73, 89, 101, 147, 99	2401.44	0.60	4.20	1.20	2.88	6916	41.22	285083	Etora Bavani
12	S.B.-12	150, 152, 178, 173, 177, 176/2044, 392, 175/2056, 173, 174, 393, 170, 172, 159, 162, 505, 157, 169, 174, 168, 509, 160, 131, 151, 48, 49, 63, 50, 66, 64, 128	2969.98	0.60	4.20	1.20	2.88	8554	41.22	352577	Etora Bavani

13	S.B.-13	231, 230, 222, 220, 200, 197, 201, 196	1617.83	0.60	4.20	1.20	2.88	4659	41.22	192058	Etora Bavani
14	S.B.-14	29, 30, 32, 53, 492, 493, 491, 533, 54, 42, 26, 38, 27, 32, 27, 34, 33, 36	2847.40	0.60	4.20	1.20	2.88	8200	41.22	338025	Etora Bavani
15	S.B.-15	486, 485, 489, 214, 484, 337, 333, 331, 332, 474, 338, 327	1769.64	0.60	4.20	1.20	2.88	5097	41.22	210081	Kusmra Bavani
16	S.B.-16	180, 220, 176, 167, 201, 200, 168, 177, 219, 207, 218, 182, 215, 206	1945.74	0.60	4.20	1.20	2.88	5604	41.22	230986	Kusmra Bavani
17	S.B.-17	171, 562, 620, 573, 570, 571	1949.59	0.60	4.20	1.20	2.88	5615	41.22	231443	Kusmra Bavani
18	S.B.-18	648, 668, 649, 686, 664, 636, 627, 171	1586.76	0.60	4.20	1.20	2.88	4570	41.22	188369	Kusmra Bavani
19	S.B.-19	722, 717, 714, 171, 684, 685, 689	1850.93	0.60	4.20	1.20	2.88	5331	41.22	219731	Kusmra Bavani
20	S.B.-20	762, 171, 774, 768, 757, 753, 731, 730, 722	1632.95	0.60	4.20	1.20	2.88	4703	41.22	193853	Kusmra Bavani
21	S.B.-21	714, 171, 694, 646, 692, 689, 676, 678, 679, 659, , 642, 643, 644, 645	1960.10	0.60	4.20	1.20	2.88	5645	41.22	232691	Kusmra Bavani
22	S.B.-22	433, 460, 462, 453, 451, 459, 515, 522, 525, 526, 529, 532, 540, 464	2275.61	0.60	4.20	1.20	2.88	6554	41.22	270146	Kusmra Bavani
23	S.B.-23	423, 422, 421, 426, 428, 433, , 434, 446, 447, 489, 445	1837.17	0.60	4.20	1.20	2.88	5291	41.22	218097	Kusmra Bavani
24	S.B.-24	382, 56, 416, 421, 415, 171, 393, 406, 413, 402, 405, 413	1844.77	0.60	4.20	1.20	2.88	5313	41.22	218999	Kusmra Bavani
25	S.B.-25	261, 337, 351, 339, 343, 56, 372, 413, 359	1691.94	0.60	4.20	1.20	2.88	4873	41.22	200856	Kusmra Bavani
26	S.B.-26	111, 108, 79, 106, 105, 104, 96, 78	1979.63	0.60	4.20	1.20	2.88	5701	41.22	235009	Kusmra Bavani

27	S.B.-27	171, 137, 136, 135, 134, 124, 56, 99, 70, 68, 101, 76	2463.68	0.60	4.20	1.20	2.88	7095	41.22	292472	Kusmra Bavani
28	S.B.-28	108, 119, 127, 56, 57, 101, 100, 99, 46, 97, 41, 43, 44	2382.80	0.60	4.20	1.20	2.88	6862	41.22	282871	Kusmra Bavani
29	S.B.-29	125, 123, 136, 122, 121, 128, 119, 115, 116, 118	1716.35	0.60	4.20	1.20	2.88	4943	41.22	203755	Kusmra Bavani
30	S.B.-30	129, 86, 61, 85, 57, 65, 49, 62, 52, 50	2101.22	0.60	4.20	1.20	2.88	6052	41.22	249444	Kusmra Bavani
31	S.B.-31	151, 152, 155, 153, 154, 49, 137, 60, 33, 52, 30, 47	1783.80	0.60	4.20	1.20	2.88	5137	41.22	211762	Kusmra Bavani
32	S.B.-32	126, 125, 128, 124, 121, 120, 119, 117, 114, 113/278, 73, 48, 44, 45, 46	1932.36	0.60	4.20	1.20	2.88	5565	41.22	229397	Kusmra Bavani
33	S.B.-33	439, 94, 438, 440, 441, 437, 436, 417, 401, 402	1896.28	0.60	4.20	1.20	2.88	5461	41.22	225114	Kusmra Bavani
34	S.B.-34	432, 433, 418, 406, 380, 419	1612.92	0.60	4.20	1.20	2.88	4645	41.22	191476	Kusmra Bavani
35	S.B.-35	265, 262, 251, 256, 259, 258, 257, 252, 244	1516.60	0.60	4.20	1.20	2.88	4368	41.22	180041	Kusmra Bavani
36	S.B.-36	335, 325, 330, 316, 300, 326, 328, 318, 319, 260, 234, 232, 313	1525.96	0.60	4.20	1.20	2.88	4395	41.22	181153	Etora Bavani, Kusmra Bavani
37	S.B.-37	342, 337, 343, 344, 345, 346, 348, 349, 350, 356	1572.50	0.60	4.20	1.20	2.88	4529	41.22	186678	Etora Bavani
		Total	68796							8167087	
		Grand Total	103264							10925854	

CHAPTER -12

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 Sanrakshan Adhikari
WDT	Watershed Development Team
WC	Watershed Committee
UC	User Group
SHG	Self Help Group
CB	Contour Bund
MB	Marginal Bund
PB	Peripheral Bund
CD	Check Dam

REFERENCES

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

Preparation of DPR

Detail Project Report of Integrated Watershed Management Programme IWMP-XIV 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, Jalaun, Topo sheet (1 : 50000) survey of India- Deheradoon and technical & specific input and health with preparation and drafting of detail project report.

S. No.	Name	Designation
1	Dharmendra kumar	B.S.A.
2	Babloo Kumar	T.A.
3	R.K. Gupta	Junior Engineer
4	K.K. Sharma	Junior Engineer
5	Ram Singh	Draftman
6	S. P. Dube	Accountant
7	Virendra Singh	Sr. Clerk
8	Indra pal singh	Sr. Clerk
9	Shivbhajan	Sr. Clerk
10	Sri A. K. Srivastava	M.D., Kalyani Geospatial, Lucknow
11	Dr. A. K. Kulshestra	Consultant, Kalyani Geospatial, Lucknow
12	Sri Sandeep Kumar Singh	Consultant (RS & GIS), Kalyani Geospatial, Lucknow
13	Sri Dipendra Kumar Sharma	Statistical Analyst, Kalyani Geospatial, Lucknow