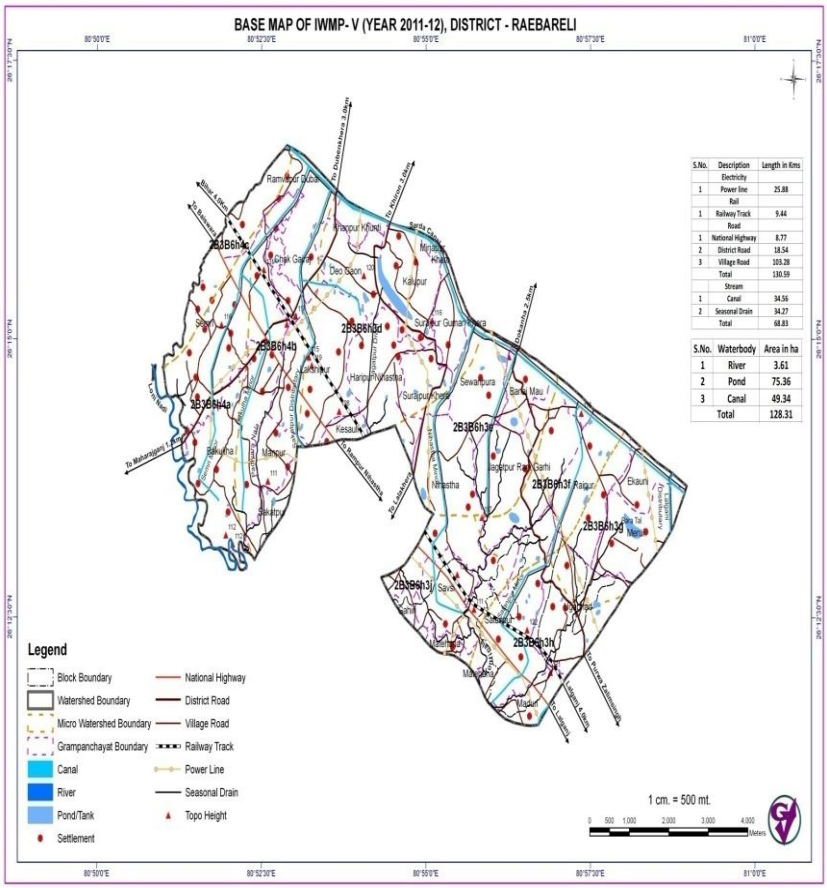
DPR OF KHIRON WATERSHED (IWMP-V), DISTRICT RAEBARELI



S.No.	Description	Length in Kms
	Electricity	
1	Power line	25.88
	Rail	
1	Railway Track	9.44
	Road	
1	National Highway	8.77
2	District Road	18.54
3	Village Road	103.28
	Total	130.59
	Stream	
1	Canal	34.56
2	Seasonal Drain	34.27
	Total	68.83

S.No.	Waterbody	Area in ha
1	River	3.61
2	Pond	75.36
3	Canal	49.34
	Total	128.31

Prepared by:

State Institute of Rural Development (SIRD), Lucknow, U.P.

2011-2012

Detailed Project Report DPR of Khiron Watershed, Raebareli District, Uttar Pradesh

INDEX

Chapter	Contents	Page No.
	Foreword	i
	Message	ii
	Acknowledgement	iii
	Executive Summary	iv
1	**Introduction and Background**	
1.1	Background of IWMP	01
1.5	Watershed – Khiron , Raebareli	02
2	**Objectives and Project Implementing Agency (PIA)**	
2.1	Major objectives	04
2.2	Project Implementing Agency (PIA)	04
3	**Present scenario of the watershed**	
3.1	General profile of the watershed	05
3.2	Village wise land use of the watershed	07
3.3	Watershed maps	11
3.3.1	Base map	11
3.3.2	Slope map	12
3.3.3	Contour map	13
3.3.4	Drainage map – Seasonality	14
3.3.5	Drainage map - Stream order map	15
3.3.6	Soil Map	16
3.3.7	Land Capability Map	17
3.3.8	Land degradation map	18
3.3.9	Landuse Map	19
3.3.10	Ground water level map	20
3.4	Climate	22
3.5	Natural calamities	23
3.6	Physio-graphy and Soils	23
3.7	Hydrology	25
3.8	Human population	26
3.9	Literacy rate	28
3.10	Socio-economic aspects	29
3.11	Details of farming community, land less families and families below poverty line	30
3.12	Details about social categories of farmers	31
3.13	Details about social categories of farmers based on gender	33
3.14	Details about occupation	35
3.15	Details about land holding	37

3.16	Details about livelihood activities	38
3.17	Details about fuel used for cooking meal	39
3.18	Details of migration	41
3.19	PRA (Participatory Rural Appraisal)	42
3.20	List of agencies/projects/schemes presently working in the watershed	42
3.21	Peoples Institution	42
3.22	List of UGs formed	43
3.23	List of members of the Watershed Committee (WC)	44
3.24	Gram Panchayat wise area under different crops	51
3.25	Existing Engineering Works	53
3.26	Details of Common Property Resources (CPR)	55
3.27	Existing package of practices of crops	55
3.28	Existing crop rotation	56
3.29	Existing Package of practices of orchard	57
3.30	Livestock population	58
3.31	Average productivity of field crop /animal	60
3.32	Animal productivity	61
3.33	Existing avenue trees in the Gram Panchayat	62
3.34	Existing grasses in the gram panchayat	63
3.35	Status of existing farm machinery and equipments	63
3.36	Bench marking of project area	65
4	**The problems and need of the area**	
4.1	Crop productivity/soil and land degradation and soil and water conservation problems	67
4.2	Socio-economical problems	68
4.2.1	Details of SWOT analysis	69
4.2.2	Details of gap analysis	72
5	**Recommended management programme**	74
6	**Proposed interventions**	
6.1	Soil management and landuse	75
6.2	Efficient use of water resources and management	75
6.3	Seed and planting material	76
6.4	Technology Dissemination	77
6.5	Farm mechanization	78
6.6	Horticulture	79
6.7	Commercial fruits	80
6.8	Proposed intervention for livestock	81
6.9	Works under Production system	83
6.9.1	Proposed grampanchayat wise area under demonstration (ha)	83
6.9.2	Cost of Crop production system intervention	85
6.9.3	Area under horticulture system	87

6.9.4	Farm mechanization	89
6.9.5	Proposed cropping intensity	91
6.9.6	Animal production system related work (with MGNREGA convergence)	93
6.10	Livelihood activities	95
6.10.1	Non-farm based livelihood activities	95
6.10.2	On-farm based livelihood activities	97
6.11	Soil and water conservation work under NRM	99
6.11.1	Detail dimensions of soil and water conservation works under NRM	99
6.11.2	Cost of Soil and water conservation works under NRM	101
6.12	Gram Panchayat wise proposed EPA activities	103
7	**Benefit and cost**	
7.1	Net benefit in future	105
7.1.1	Proposed net benefit in future from cropping system	105
7.1.2	Present and future production and value of horticulture system	107
7.1.3	Production and profit from major animal /live stock	109
7.1.4	Net profit of the system through various interventions	111
7.1.5	Gram Panchayat wise cost of project under IWMP	112
7.2	Funds received to Watershed Development Fund (WDF)	114
7.3	Cost : Benefit Analysis (NPV, BC Ratio and IRR)	114
8	**Convergence**	
8.1	Gram Panchayat wise proposed convergence	115
9	**Phasing of the works**	
9.1	Physical Phasing	117
9.2	Financial Phasing	120
10	**Consolidation and post-project management**	
10.1	Activity of consolidation and post project management phase	123
10.2	Adoption of eco-friendly conservation measures	123
10.3	Participation of local community in development and management	123
10.4	Institutionalization for post project management	124
10.4.1	Watershed level committee	124
10.4.2	User Group (UGs) and Self Help Groups (SHGs)	124
***Note**	*Design, Estimate and plan maps are given separately in soft copy to SLNA*	

FOREWORD

The declining per capita land and fresh water availability coupled with soil erosion and land degradation in India are posing serious threat to environmental, food, social and economic security. Land and water go together and their development cannot be considered independent of each other for sustainability of rainfed areas. Conservation and management of rainwater holds key for sustainable agriculture in rainfed areas. It has also been amply demonstrated in India and elsewhere that it is impossible to envisage or implement sustainable solutions for land and water resource development and management without active and full participation of local community. Development of land and water together with sustainable production system when confined to small natural drainage unit such as watershed leads to sustainable development. Watershed Management (WSM) has, therefore, emerged as a new paradigm for planning, development and management of land, water and biomass resources with a focus on social and institutional aspects apart from bio-physical aspects fol1owing a participatory "bottom-up" approach. A large number of projects for productivity enhancement are being implemented on the watershed approach.

Soil and water conservation including micro-scale water resource development is the foundation of any watershed development programme supported by number of other protection, production and livelihood support interventions. This is so, because water is the most crucial input and acts as a catalyst to bring in ecological, social and economical revolution. Sustainable production depends considerably upon proper development, conservation, management and use of watershed resources at micro-level. Watershed management becomes increasingly important as a system approach to improve livelihood of people while conserving and regenerating their natural resources. The role and Importance of community participation in ensuring the success and satiability of watershed management is now widely accepted.

Two-thirds of the country's agriculture is rainfed. Only one-third of the 142 m ha of cultivated in India is irrigated. The green revolution in the irrigated areas, induced by modern agricultural technologies, by-and large by-passed the rainfed regions. Agriculture in these regions is characterized by low levels of productivity and low input usage; food grain yields in rainfed areas are half those in irrigated regions. Dependence of rainfall makes crop production considerably instable in rainfed areas, which are home to the bulk of the rural poor. The Government of India has accorded highest priority to the holistic and sustainable developed of rainfed areas through the integrated watershed development approach. The key attributes of the watershed approach are conservation of the rain water and optimization of soil and water resources in a sustainable and cost effective mode. Improved moisture management increases the productivity of improved seeds and fertilizers, so conservation and productivity enhancing measures become complementary. Under rainfed conditions choice of technologies are going to vary from location to location due to high degree of complexity and diversity in situations. This applies to the technologies for development of natural resources as well as for enhancement of productivity of different commodities in agriculture and allied sectors. While carrying out participatory planning exercises, the watershed development team (WDT) may orient community members about different scientific and indigenous technological options available with them through IEC and training courses etc. and leave the final choice to them. Keeping these things in mind, the DPR of Raibareli IWMP-V watershed has been prepared.

MESSAGE

Deen Dayal Upadhaya, State Institute of Rural Development, Uttar Pradesh has been commissioned by State Level Nodal Agency, IWMP to prepare proposed DPRs for 55 identified watershed in the State. Integrated Watershed Management Programme (IWMP); a centrally sponsored programme is aimed towards sustainable regeneration of ecological balance and suitable agricultural and allied production interventions by properly managing and harvesting rain water and thereby increasing production and productivity, providing equitable opportunities and economic upliftment to all section of society in project area. The cost of project is estimated at Rs. 12000.00 per ha. The project will be implemented on watershed basis having an area of about 5000 ha in duration of 5-7 years. There are various components of the project to achieve the set objectives. It is pertinent that a detailed project report (DPR) has been prepared with all the details of plan, design, cost, execution and arrangement for management and evaluation.

Deen Dayal Upadhaya, State Institute of Rural Development, Uttar Pradesh has prepared this DPR after comprehensive grand study and survey and using available scientific data. I am sure the DPR, if implemented as per the designed interventions, will not only restore ecological balance but will be of immense help for the farmers and agricultural sector to improve their quality of life.

I wish all success to all concern specially those who earn the livelihood from agriculture and allied activities.

Sri. N. S. Ravi (IAS)

Director General

ACKNOWLEDGEMENT

We would first like to extend our thanks to the Chief Executive Officer (CEO) of State Level Nodal Agency (SLNA), IWMP for awarding the assignment of preparation of detailed project report (DPR) of 55 watersheds to DDU SIRD, Lucknow. We extend our heartiest gratitude to Sri N.S. Ravi, I.A.S., Director General, DDU SIRD, Lucknow for assigning the assignment to us and providing all necessary logistic support. We are thankful Sri K. P. Tripathi, former Principal Scientist, Soil & Water Conservation Engg., ICAR-IISWC (formerly known as CSWCRTC), Dehradun for their valuable suggestions and guidance during the process of DPR preparation.

We are very grateful to Dr. Ashok Kumar, Assistant Director, Soil Conservation and Water Management; Sri S. G. Sahoo and Sri R K Srivastav Senior Instructor Agricultural Engineering for helping in the process of DPR preparation. We are thankful to all the farmers of the watershed who cooperated during the PRA/data collection and gave their valuable suggestions.

Dr. Vardani

Additional Director

Executive summary

Executive Summary of DPR of Khiron Watershed, Raebareli District, Uttar Pradesh

The Khiron watershed having an area of 5248.74 ha. is situated in the district of Raebreli (UP). It has been designated as IWMP-V watershed which has nine micro watersheds (code: 2B3B6h3d, 2B3B6h3e, 2B3B6h3f, 2B3B6h3g, 2B3B6h3h , 2B3B6h3j , 2B3B6h4a , 2B3B6h4b , 2B3B6h4c). It includes 44 villages of 30 village panchayats.

The total geographical area of Khiron watershed is 5248.74 ha. About 93% area of the watershed is under cultivation. Forest land is about 5% area of the watershed. The remaining area of about 2% is under orchard, habitation and other uses.

The topography of the watershed, as a whole, is fairly compact tract of gently undulating land. The elevation varies from about 111 meter (min.) amsl to 131 meter (max.) amsl in the extreme south east, on the banks of the Ganga. The district comprises a flat gently undulating tract and is characterized by six physiographic tracts namely Ganga Khadars, Ganga Recent Alluviums, Ganga Flats, Sai uplands Sai low lands and Sai flats.

The soils are light in texture. Light brown sandy loam to sandy, generally, poor in water holding capacity and organic matter, moderately alkaline. Soils of the watershed are deficient in organic matter and soil nutrients. 75% of the area has loamy soil and 25% has silty soil.

The climate of Raebareli district is almost dry. Khiron watershed has a warm-humid sub-tropical climate with cool, dry winters from December to February and dry, hot summers from April to June. Annual rainfall is about 662.6 m.m. which is mainly during the period of July to September. Paddy is the main Kharif crop and Wheat is the main Rabi crop in the district. Sugarcane and potato are the main cash crops of the district.

The watershed has average water table of 14.50 m. There are about 58 defunct wells, which are no longer functioning in the Khiron watershed. Excessive ground water abstraction in some areas has resulted in alarming depletion of ground water level which results in defunct wells. There are also 42 tube wells. There are also few lakes. There are about 128 tube-wells with an average depth of 12 m. there are some open dug up ponds with an area of about 0.25 ha. Sai River is the major drainage system of the watershed.

About 61% people in the watershed are literate. 69% male and 51% female are literate. In comparison, females are less educated in number than males. Mass education should be spread by establishing more primary and secondary schools. It must be made both compulsory and free for the females and the males as well, so to improve the economic condition of the watershed. The economic condition of the people is not very encouraging as about 63% family of the watershed is landless, hence their livelihood depends upon the occasional employment they get in agriculture sector or they migrate to the nearby city for day to day labour work, agriculture should be modernized, to get more benefit and profit in the agricultural sector. Females of the watershed are mostly engaged in flower gardening (nursery) and kitchen gardening, as there is a high growth of and vegetables, flowers like different varieties of rose, gladiolus, marigold etc, and vegetables like red and green chilly cultivation and spices, Aonla and Ber orchards in sodic lands, inter-cropping of turmeric as well as ginger and there are also established mango and other orchards.

About 37% of people are schedule cast and only few (less than 0.10%) belong to schedule tribe. About 10% families are below poverty line. More than 60% family still use fire wood for cooking the meal and only less than 6% use LPG. About 58% families of the watershed are land less and about 12% families are below poverty line. There are 1211 craftsman, 1907 tailors and 404 artisans in the watershed. People of the watershed migrate to the city and other areas for search of work mostly as unskilled/semi-skilled and skilled work. On an average people migrate for 6 months a year. Cutting and tailoring are having vast potentialities for rural people of the watershed.

It appears that people are most skilled in dairy farming and live stock. Milk production and the procurement of milk and its processing also provide substantial employment to the people of the watershed. Poultry farming is also practiced in the watershed. There are 295 tractors each with one harrow and one cultivator, 44 leveler, 149 plough, 89 harrow and 3 seed drill in the watershed. The number of tractor and bullock is less in comparison to the cultivated land of the watershed.

The crop productivity is low due to low organic matter in the soil. Chemical fertilizers are given to the crop without soil analysis thus, creating imbalance in the soil nutrients. FYM and organic fertilizer are not in practice due to absence of sufficient raw material as the soil is light to medium in texture. There are four major farming systems in the watershed based on nature of soil and degree of assured irrigation. (a) Pure cropping (b) Mixed farming (iii) Agri-horti and (iv) Agri-Silvi. The major crops of this district are paddy, wheat, sorghum, pigeon pea, gram, pea and mustard.

Total cost of the project works out to be Rs 8.07 crores. Out of this Rs. 2.74 crores is proposed to be met from convergence under MGNREGA and Rs. 9.18 lakhs Horticulture Dept. (NHM) etc. The amount of Rs. 5.10 crores will be met out from IWMP. The benefit: cost ratio is estimated at 1.35:1.About Rs 14.48 lakhs is expected to be collected from farmers as their contribution for watershed development fund.

Chapter 1: Introduction and background

1.1 Background of IWMP

National Rainfed Area Authority (NRAA) framed common guidelines (2008) for watershed programmes to all ministries/departments. The provisions in the common guidelines and the observations of the Parthasarthy committee have necessitated modifications in the watershed schemes of the Department of Land Resources. Accordingly, Drought Prone Areas Programme (DPAP), Desert Development Programme (DDP) and Integrated Wastelands Development Programme (IWDP) of the Department of Land Resources have been integrated and consolidated into a single modified programme called Integrated Watershed Management Programme (IWMP). This guideline was further amended in 2011. This consolidation is for optimum use of resources, sustainable outcomes and integrated planning.

1.2 Vision

The watershed management program in the country has been conceptuatized as rainwater management program in the rain fed areas of the country, which constitutes roughly 60% of the total net cultivated land of about 144 mha of the country. It is observed that though the rainfed land is about 60% of the total cultivated land of the country but its contribution to the total food production of the country is less than 40%. As the monsoon in India is unpredictable and drought and floods are observed at periodical interval hence, rainwater management is considered as focal point to the solution of the problem of uncertainty of rainfall under rainfed condition. The Indo-Gangetic plain of the country has numerous perennial rivers but still rainfall is the main source of irrigation and domestic need of the people. Presently exploitation of groundwater has been at faster rate than its recharge. Therefore rainwater management does not only aims to create surface irrigation potential but also aims to augment groundwater. Under such vision the IWMP has been designed.

1.3 State of Uttar Pradesh

Uttar Pradesh is situated in northern part of India. Its geographical area is about 243290 sq km. It accounts for 6.88 percent of total geographical area of the country. The population of the state is about 200 million as per census of 2011, which accountes for 16.49 percent of the total population of India. This is most populous state of India and ranks fifth in population. The highest density of population is also found in this region. On account of highest density of population, the per capita availability of land is very low in comparison to other states. The state is divided into 4 divisions, namely Western (30 districts), Eastern (28 districts), Central (10 districts) and Bundelkhand (7 districts). At present state have 75 districts, 327 tehsils, 822 blocks and 107452 revenue villages. The state is also dividend into 9 agro climatic zones, 1. Tarai Region; 2. Western Plain Region; 3. Central Western Region; 4. South Western Region; 5. Central Plain Region; 6. Bundelkhand Region; 7. North Eastern Plain Region; 8. Eastern Plain Region and 9 Vindhyachal Region. The flood and drought are common phenomena of this region.

The state has more than 32 large and small rivers, of them, the Ganges, Yamuna, Sarayu, Betwa and Ghaghara are larger rivers of the state. Lucknow is the capital of Uttar Pradesh. Agricultural and services industries are most important activities of the state economy. About 68.54 percent land of the total geographical area of the state is under cultivation (2012-13). The percentage of net area sown in Uttar Pradesh has been decreasing continuously due to fast expansion of industrialization and urbanization in the state.

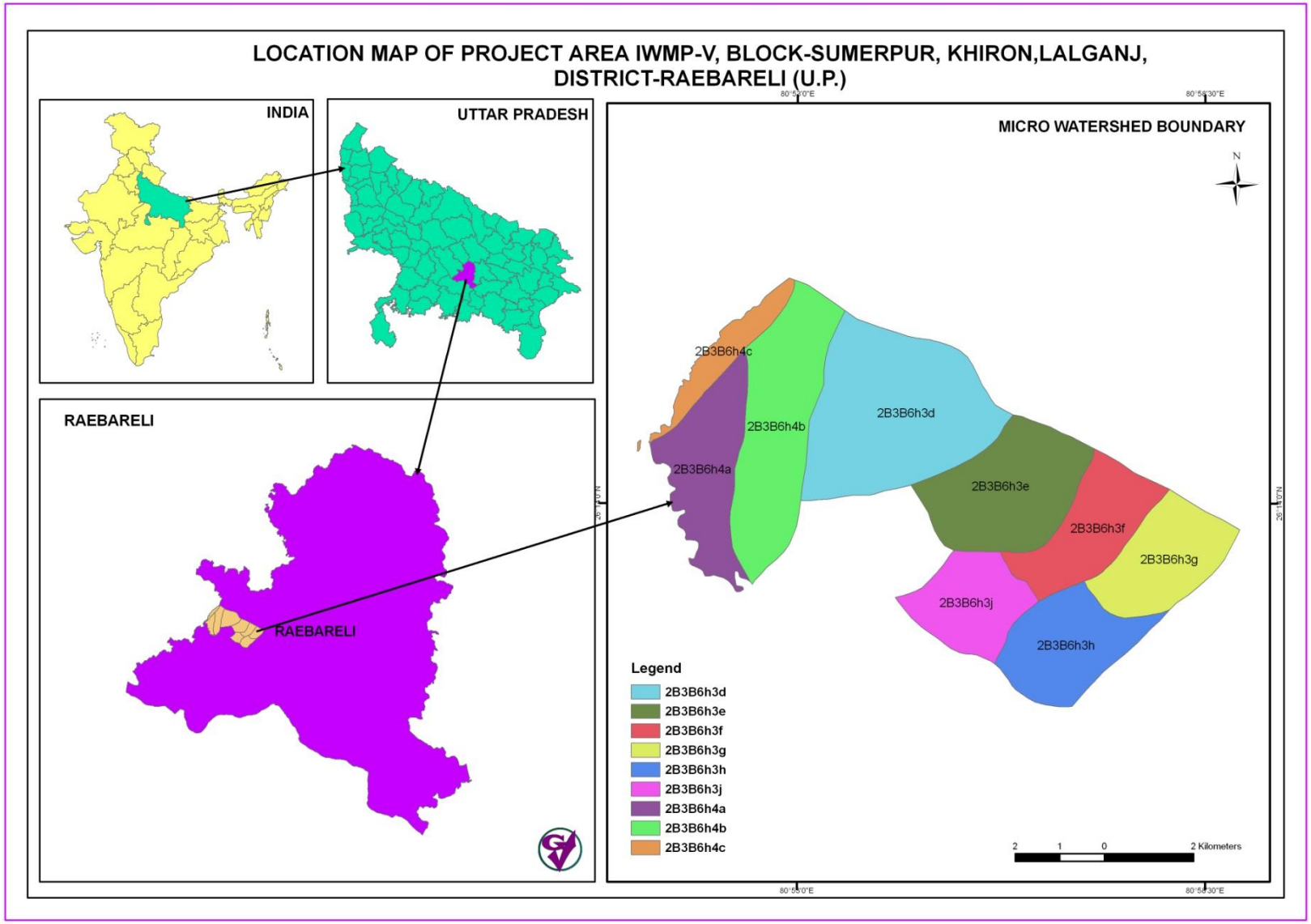
1.4 Raebreli District

The district of Raebareli, which was created by the British in 1858, is named after its headquarters town. Tradition has it that the town was founded by the Bhars and was known as Bharauli or Barauli which in course of time got corrupted into Bareli. The prefix, Rae, is said to be a corruption of Rahi, a village 5km. west of the town. It is also said that the prefix, Rae, represents Rae, the common title of the Kayasths who were masters of the town for a considerable period of time. The area covered by the district of Raebareli lies has been known as Avadh or Subhah of Avadh. In the north it streched as far as the foothills of the Himalayas and in the south as far as the Ganga beyond which lay the Vatsa country. There is no doubt that the district has been civilised and settled life since very early times. Raebareli is a city and a municipal board in the Indian state of Uttar Pradesh. It is the administrative headquarters of Raebareli District. The town is situated at the bank of the Sai River, 82 km (51 mi), 82 km southeast of Lucknow. The soils are light in texture. Light brown sandy loam to sandy, generally structure less, poor in water holding capacity and organic matter, moderately alkaline, Soils of the watershed are deficient in organic matter and soil nutrients. 75% of the area has loamy siol and 25% has silty soil.

1.5 Khiron watershed

The Khiron watershed having in area of 5248.74 ha is situated in the district of Raebrelli (UP). It has been designated as IWMP-V watershed which has nine micro watersheds (code: 2B3B6h3d, 2B3B6h3e, 2B3B6h3f , 2B3B6h3g , 2B3B6h3h , 2B3B6h3j , 2B3B6h4a , 2B3B6h4b , 2B3B6h4c). It includes 44 villages of 30 Villages Panchayats. The location of the watershed is depicted in Fig 1.

Fig.1. Location map of Khiron watershed



Chapter 2: Objectives and Project Implementing Agency (PIA)

2.1 Major objectives

Sl. No.	Objectives
1	The main objectives of the IWMP are to restore the ecological balance by harnessing, conserving and developing degraded natural resources such as soil, vegetative cover and water.
2	Prevention of soil, run-off; rain water harvesting and recharging of the ground water table.
3	Regeneration of natural vegetation
4	Introduction of multi-cropping and diverse agro-based activities, which help to provide sustainable livelihoods to the people residing in the watershed area.
5	Promote development of cost effective and proven technologies to support watershed management

2.2 Project Implementing Agency (PIA)

Name of the PIA organization	Office of Bhoomi Sanrakshan Adhikari, Land Development and Water Resource, Raebareli.	
Postal address of the PIA organization	Kothi Veerpal Singh apposite RDA Complex Raebareli 229001	
Name of the head of the PIA organization	M.A. Khan, Bhoomi Sanrakshan Adhikari	
Name of the Principal Investigator (PI) i.e. Leader of the IWMP project identified by the PIA	M.A. Khan	
Designation of PI	B.S.A.	
Mobile no of the PI	+91-9670205310	
Names of the Watershed Development Team (WDT) with their educational qualification and mobile number	Sl. No.	Name, qualification and mobile number
	1	Ramakant Shukla, Pg(Economics)with Agriculture Agriculture
	2	Jitandra Pratap Singh, B.Sc. Agriculture
	3	Anil Kumar Mishra, B.Sc Agriculture
	4	Arun Kumar Panday, B.Sc Agriculture
	5	Mukesh Kumar Yadav, Ag. Diploma
	6	Smt. Sweta Singh, B.A. Social sciance
	7	Smt. Shushma Devi, M.A. Social sciance
Names and designation of members of Watershed Cell and Data Centre (WCDC)	1	Ashok Kumar , T.E.
	2	Shashank Shahu, D.E.O.
	3	Anil Kumar Shukla, J.E.
	4	Teju Singh Yadav, J.E.
Year of commencement of the project	2011-2012	
Year of completion of the project	2015-2016	
Budget of the project	510.00	

Chapter 3: Present scenario of the watershed

3.1 General Profile of the watershed

Sl. No.	Parameter	Information/ value
1	Name of State	U.P.
2	Name of District	Raebareli
3	Name of the Tahsil	Lalganj
4	Name of Block	Khiron
5	Name of post office with pincode	226102,
6	Watershed details	IWMP-V
i	Name of Watershed	Lacchipur , Nihastha , Chikari , Merui , Satanpur , Sambasi , Semari , Bakuliha ,Ramwapur Dubai
ii	Code of Watershed	2B3B6h3d, 2B3B6h3e, 2B3B6h3f , 2B3B6h3g , 2B3B6h3h , 2B3B6h3j , 2B3B6h4a , 2B3B6h4b , 2B3B6h4c
iii	Location of watershed	Khiron Block
iv	Agro Ecological Region	Central Plain Zone
v	Agro Climatic Zone	UP-4 Central Plain Zone
vi	Area of the watershed (ha)	5248.47
7	Major drainage system	Lone River
8	Stream order of the watershed	IIIrd
9	Highest elevation on the topo-sheet (m)	131
10	Lowest elevation on the topo-sheet (m)	111
12	Elevation difference (m)	
13	Length-Width ratio of the watershed	
a	Latitude	80°42'56.547"E 80°49'44.393"E
b	Longitude	27°3'28.636"N, 26°54'21.689"N
c	Boundaries (N, S, E, W)	27°3'28.636"N 26°54'21.689"N 80°42'56.547"E 80°49'44.393"E
14	No of Villages in the Project area.	44
15	No of Village panchayat in the Project area.	30
16	Area	Fill the table 1
i	Total geographical area of the watershed (ha)	5248.74
ii	Arable land (ha)	4857.75
iii	Treatable area	
a	Single cropped area (ha)	
b	Double cropped area (ha)	
iv	Gras land/Pasture land (ha)	
v	Social forest/Community forest (ha)	275.95
vi	Area under fruit trees (ha)	
vi	Area under miscellaneous use (ha)	
17	Infrastructure/amenities	
i	Distance of metalled road from village/watershed (km)	2-3
ii	Distance of nearest railway station (km)	3-4
iii	Distance of nearest market (km)	1-2

Sl. No.	Parameter	Information/ value
iv	Distance of Taluk/Tahsil/block (km)	18
v	Distance of district headquarter (km)	45-50
vi	Distance of nearest school	
a	Primary (km)	0 - 1
b	Senior (km)	2 - 3
c	College (km)	4 - 7
vii	Distance of nearest P.H.C. (km)	2-3
viii	Distance of nearest Veterinary Hospital (km)	2.5
ix	Distance of nearest post office (km)	1-2
x	Distance of nearest bank (km)	2-3
xi	Distance of nearest ration shop (km)	1 – 1.5
xii	Distance of nearest police station (km)	2-3
xiii	Distance of nearest panchayat bhawan (km)	1 – 1.5
xiv	Distance of nearest Community/ recreation centre (km)	
xv	Is any cooperative activity functioning in the village	no
a	Electricity	Yes/no
b	Source of domestic water supply	Yes/no
c	Treated water through tap	Yes/no
d	Untreated water through tap	Yes/no
xvi	Shallow dug up well	Yes/no
xvii	Hand pump	Yes/no
a	Any other (please specify)	Yes/no
b	Source of irrigation	Yes/no
c	Canal	Yes/no
d	Tube well	Yes/no
e	Open well	Yes/no
xxiii	Open dug up ponds	Yes/no
a	Any other (please specify)	
b	Types of cattle	Yes/no
c	Buffalo	Yes/no
d	Bullock	Yes/no
e	Cows	Yes/no
xix	Goats	Yes/no
a	Sheep	Yes/no
b	Pig	Yes/no
c	Horse	Yes/no
d	Poultry	Yes/no
e	Others (Please specify)	Yes/no
f	Source of water for cattle	
g	Hand pump through manger (naad)	Yes/no
h	Open well through manger (naad)	Yes/no
i	Open dug up pond	Yes/no
xx	Trough	Yes/no

3.2 Village wise landuse of the watershed

Sl. No	Villages			Micro-Watershed			Area details				
	Name of Village	Area (ha)	Name of Gram Panchayat	Name	Code	Area (ha)	Agricultural Land (hac)	Agricultural Plantation (hac)	Scrub Land (hac)	waterbody (hac)	Other (hac)
1	Deo Gaon	146.30	Deo Gaon	Lakshipur	2B3B6h3d	1295.45	109.46	6.10	8.45	15.60	6.70
2	Ketanpur	45.07	Deo Gaon				40.89	0.02	0.00	2.52	1.63
3	Haripur Nihastha	24.92	Haripur Nihastha				12.84	0.00	12.07	0.01	0.00
4	Shyampur	207.39	Haripur Nihastha				124.89	0.00	80.16	0.54	1.81
5	Kalupur	65.69	Kalupur				58.71	0.11	0.30	5.05	1.52
6	Majhgawa	77.04	Kalupur				70.60	0.00	0.00	0.90	5.55
7	Misira Khera	61.47	Kalupur				54.94	3.31	0.00	1.16	2.05
8	Kesauli	40.96	Kesauli				35.76	0.00	0.00	0.79	4.41
9	Udwatpur	53.66	Khanpur Khunti				44.40	2.82	0.00	0.00	6.44
10	Khero	0.03	Khero				0.00	0.00	0.00	0.00	0.03
11	Lakshipur	289.77	Lakshipur				219.37	5.03	55.54	2.62	7.20
12	Devali	3.51	Manpur				3.51	0.00	0.00	0.00	0.00
13	Kishun Khera	14.30	Mirjapur				9.08	2.66	0.01	0.00	2.55
14	Ramvapur Dubai	9.70	Ramvapur Dubai				9.36	0.00	0.00	0.00	0.34
15	Sewanpura	35.36	Sewanpura				32.89	0.00	0.00	0.00	2.47
16	Khandepur	110.67	Surajpur Guman Khera				92.83	6.80	0.29	0.00	10.76
17	Surajpur Khera	109.59	Surajpur Khera				99.51	0.00	3.71	1.88	4.49
	Total	**1295.45**					**1019.06**	**26.85**	**160.53**	**31.06**	**57.96**
18	Banai Mau	114.78	Banai Mau	Nihastha Khas	2B3B6h3e	787.99	101.56	0.00	0.00	2.32	10.90
19	Sehra Mao	2.84	Banai Mau				2.34	0.00	0.00	0.00	0.50
20	Haripur Nihastha	28.07	Haripur Nihastha				21.87	0.00	5.73	0.47	0.00
21	Chikhari	42.25	Jagatpur Ram				41.98	0.00	0.00	0.00	0.27

Sl. No	Villages			Micro-Watershed			Area details				
	Name of Village	Area (ha)	Name of Gram Panchayat	Name	Code	Area (ha)	Agricultural Land (hac)	Agricultural Plantation (hac)	Scrub Land (hac)	waterbody (hac)	Other (hac)
			Garhi								
22	Jagatpur Ram Garhi	174.08	Jagatpur Ram Garhi				151.44	0.00	16.12	1.44	5.07
23	Nihastha Khas	226.93	Nihastha				145.87	0.00	77.51	2.21	1.34
24	Sewanpura	178.44	Sewanpura				126.38	0.00	41.73	3.14	7.17
25	Surajpur Khera	20.61	Surajpur Khera				14.87	0.00	5.74	0.00	0.00
	Total	**787.99**					**606.31**	**0.00**	**146.85**	**9.57**	**25.25**
26	Sehra Mao	31.51	Banai Mau	**Chikhari**	**2B3B6h3f**	**522.79**	27.76	0.00	0.00	0.00	3.74
27	Chikhari	122.87	Jagatpur Ram Garhi				86.11	0.00	20.84	0.00	15.92
28	Jagatpur Ram Garhi	86.10	Jagatpur Ram Garhi				31.86	0.00	29.46	3.46	21.32
29	Nihastha Khas	4.31	Nihastha				4.31	0.00	0.00	0.00	0.00
30	Bari	111.54	Raipur				75.25	0.00	2.74	1.36	32.18
31	Raipur	57.08	Raipur				48.81	0.00	0.00	2.17	6.10
32	Satanpur	65.34	Satanpur				32.58	0.00	18.07	1.35	13.35
33	Fattesarai	34.68	Savsi				21.14	0.00	13.54	0.00	0.00
34	Ranipur	9.36	Ugabhad				7.48	0.00	1.80	0.00	0.08
	Total	**522.79**					**335.31**	**0.00**	**86.45**	**8.34**	**92.69**
35	Ekauni	38.85	Ekauni	**Merui**	**2B3B6h3g**	**537.01**	33.81	0.00	0.00	0.00	5.03
36	korara	57.26	Ekauni				56.12	0.00	0.00	0.00	1.14
37	Merui	221.32	Merui				192.97	0.00	0.93	8.80	18.62
38	Bari	79.45	Raipur				71.60	0.00	0.00	0.00	7.85
39	Raipur	35.06	Raipur				32.74	0.00	0.00	0.00	2.32
40	Ranipur	52.27	Ugabhad				49.44	0.00	0.08	0.00	2.75
41	Ugabhad	52.80	Ugabhad				52.19	0.00	0.00	0.61	0.00
	Total	**537.01**					**488.88**	**0.00**	**1.01**	**9.42**	**37.71**
42	Maduri	27.17	Maduri	**Satanpur**	**2B3B6h3h**	**571.93**	26.82	0.00	0.00	0.00	0.35
43	Mubarakpur	58.93	Maduri				53.72	0.00	0.00	0.00	5.21

Sl. No	Villages			Micro-Watershed			Area details				
	Name of Village	Area (ha)	Name of Gram Panchayat	Name	Code	Area (ha)	Agricultural Land (hac)	Agricultural Plantation (hac)	Scrub Land (hac)	waterbody (hac)	Other (hac)
44	Khanpur Khapara	3.55	Matehana				3.55	0.00	0.00	0.00	0.00
45	Satanpur	279.56	Satanpur				263.35	0.00	0.00	2.13	14.08
46	Fattesarai	2.63	Savsi				2.63	0.00	0.00	0.00	0.00
47	Ranipur	122.00	Ugabhad				115.12	0.00	0.02	0.95	5.91
48	Ugabhad	78.09	Ugabhad				72.67	0.00	0.00	2.61	2.81
	Total	**571.93**					**537.86**	**0.00**	**0.02**	**5.69**	**28.36**
49	Gahiri	28.54	Gahiri	**Savsi**	**2B3B6h3j**	**463.38**	23.24	5.30	0.00	0.00	0.00
50	Jagatpur Ram Garhi	3.74	Jagatpur Ram Garhi				3.28	0.00	0.47	0.00	0.00
51	Matehna	27.78	Matehana				21.45	3.97	0.00	0.00	2.36
52	Nihastha Khas	95.35	Nihastha				88.09	0.00	0.00	0.25	7.01
53	Rampur Nihastha	58.61	Nihastha				54.97	0.71	0.00	0.00	2.93
54	Satanpur	47.65	Satanpur				46.73	0.00	0.00	0.00	0.92
55	Fattesarai	28.84	Savsi				27.09	0.00	1.75	0.00	0.00
56	Savsi	172.88	Savsi				163.95	0.77	0.00	0.00	8.16
	Total	**463.38**					**428.79**	**10.74**	**2.22**	**0.25**	**21.38**
57	Bakuliha	271.39	Bakuliha	**Semri**	**2B3B6h4a**	**602.79**	253.02	0.00	0.00	3.16	15.20
58	Ramvapur Dubai	1.85	Ramvapur Dubai				1.71	0.00	0.14	0.00	0.00
59	Deopur	2.49	Sakatpur				2.40	0.00	0.00	0.00	0.09
60	Semri	327.06	Semri				287.51	15.78	1.70	1.15	20.92
	Total	**602.79**					**544.64**	**15.78**	**1.84**	**4.32**	**36.21**
61	Bakuliha	197.36	Bakuliha	**Ramvapur Dubai**	**2B3B6h4b**	**928.20**	178.38	4.48	0.00	1.95	12.55
62	Baswan Khera	31.91	Chak Gajraj				29.28	1.59	0.00	0.00	1.05
63	Chak Gajraj	19.22	Chak Gajraj				17.15	0.00	0.00	0.98	1.10
64	Chakpher Shah	44.63	Chak Gajraj				27.60	0.00	13.54	0.00	3.48
65	Ketanpur	11.69	Deo Gaon				10.96	0.00	0.00	0.22	0.52
66	Udwatpur	0.00	Khanpur				0.00	0.00	0.00	0.00	0.00

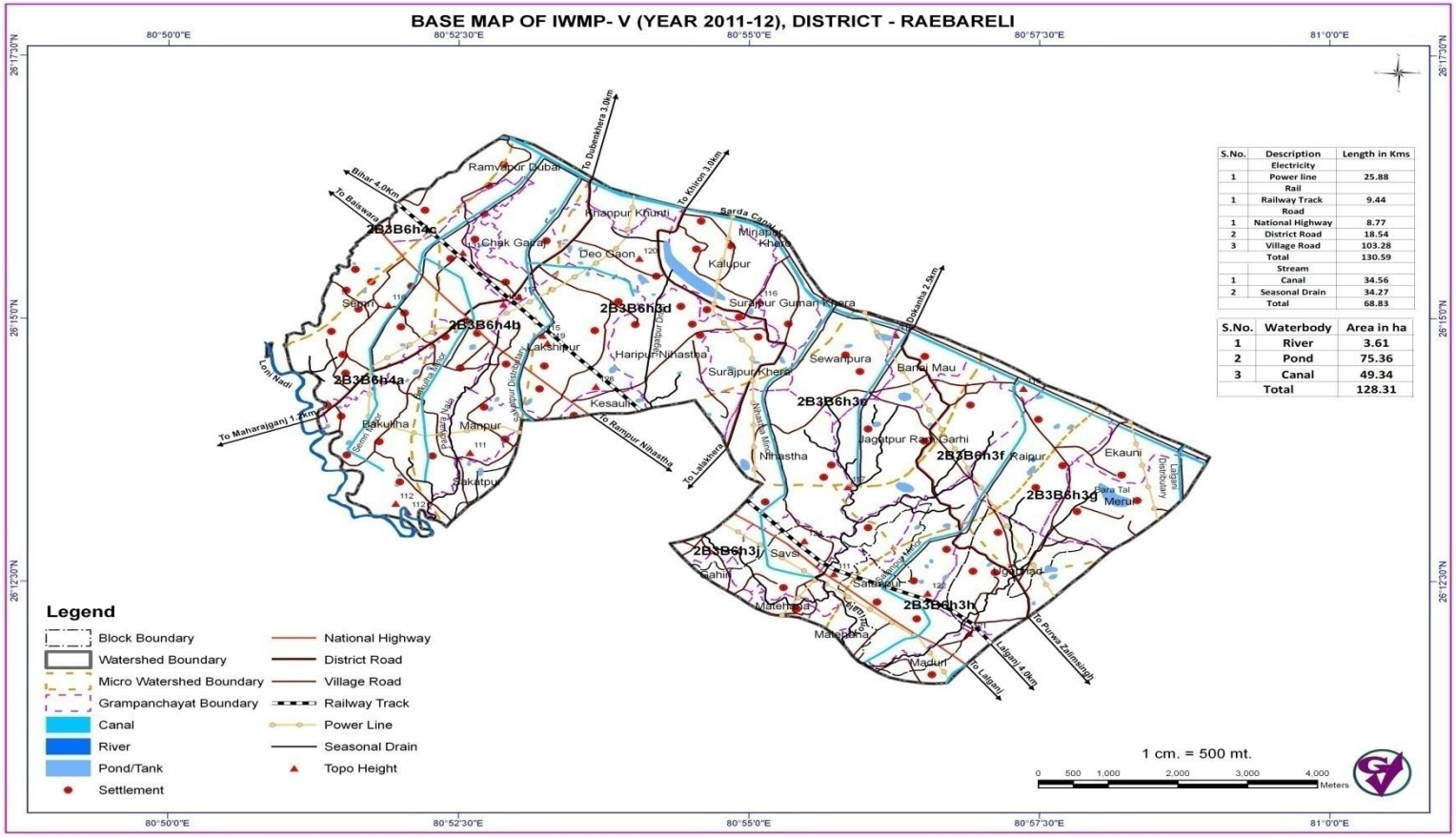
Sl. No	Villages			Micro-Watershed			Area details				
	Name of Village	Area (ha)	Name of Gram Panchayat	Name	Code	Area (ha)	Agricultural Land (hac)	Agricultural Plantation (hac)	Scrub Land (hac)	waterbody (hac)	Other (hac)
			Khunti								
67	Lakshipur	119.77	Lakshipur				104.99	0.00	7.98	0.48	6.32
68	Devali	96.20	Manpur				92.45	0.00	0.00	0.52	3.23
69	Ramvapur Dubai	206.50	Ramvapur Dubai				177.86	13.95	1.78	0.24	12.66
70	Deopur	73.81	Sakatpur				70.79	0.00	0.00	1.38	1.64
71	Semri	127.10	Semri				89.66	0.00	29.87	0.10	7.48
	Total	**928.20**					**799.12**	**20.02**	**53.18**	**5.87**	**50.01**
72	Baswan Khera	0.51	Chak Gajraj	**Ramvapur Dubai**	**2B3B6h4c**	**219.35**	0.51	0.00	0.00	0.00	0.00
73	Ramvapur Dubai	124.30	Ramvapur Dubai				86.86	0.00	35.38	0.00	2.05
74	Semri	94.54	Semri				78.53	0.00	6.94	0.86	8.21
	Total	**219.35**					**165.91**	**0.00**	**42.33**	**0.86**	**10.26**
	Grand Total	**5928.91**					**4925.89**	**73.40**	**494.42**	**75.37**	**359.83**

3.3 Watershed maps

Various watershed maps viz. base map, slope map, drainage map, land capability class map, land use map etc required for planning of suitable soil and water conservation measures are given below:

3.3.1 Base Map

The Base map of Khiron watershed is given below:

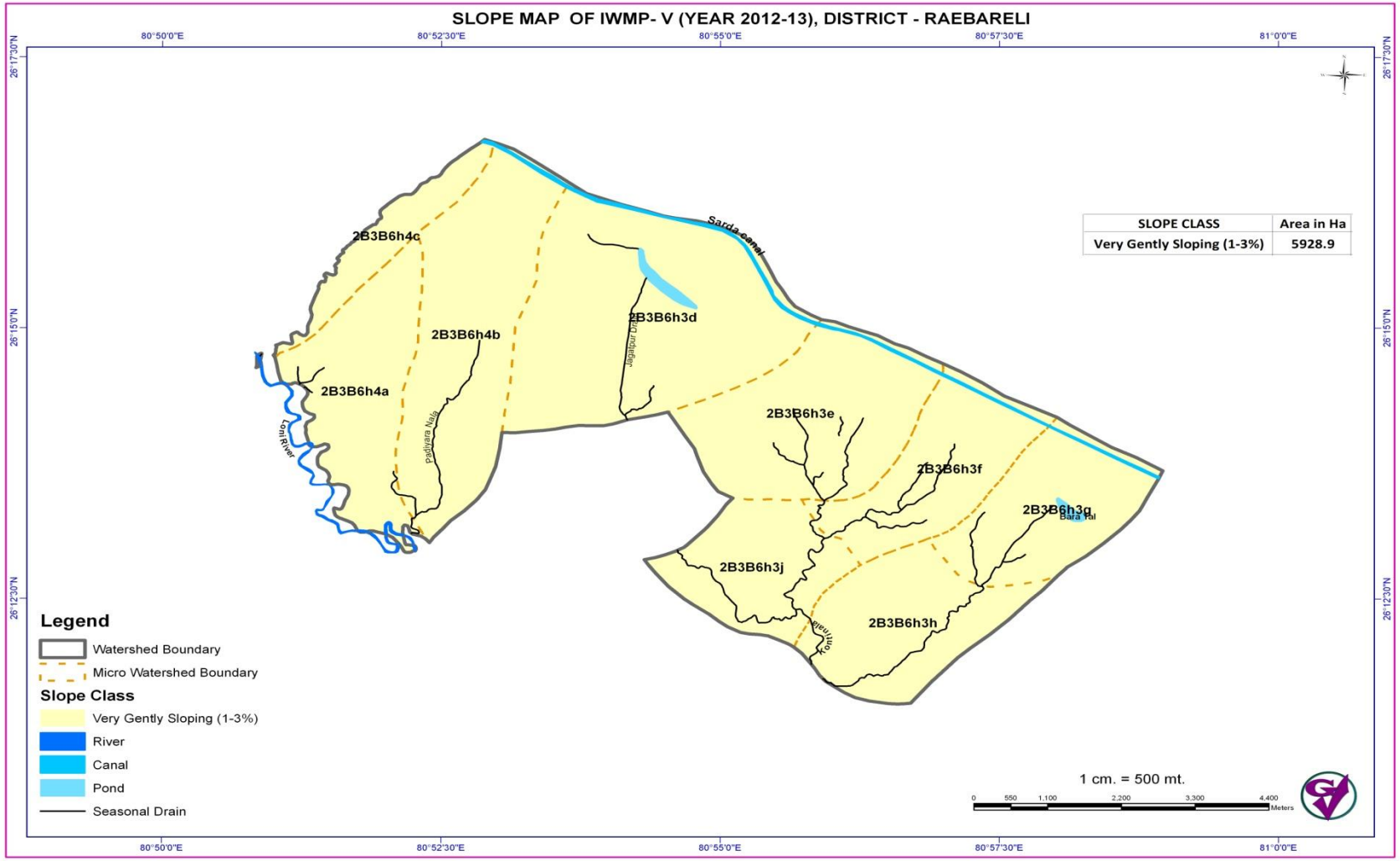


S.No.	Description	Length in Kms
	Electricity	
1	Power line	25.88
	Rail	
1	Railway Track	9.44
	Road	
1	National Highway	8.77
2	District Road	18.54
3	Village Road	103.28
	Total	130.59
	Stream	
1	Canal	34.56
2	Seasonal Drain	34.27
	Total	68.83

S.No.	Waterbody	Area in ha
1	River	3.61
2	Pond	75.36
3	Canal	49.34
	Total	128.31

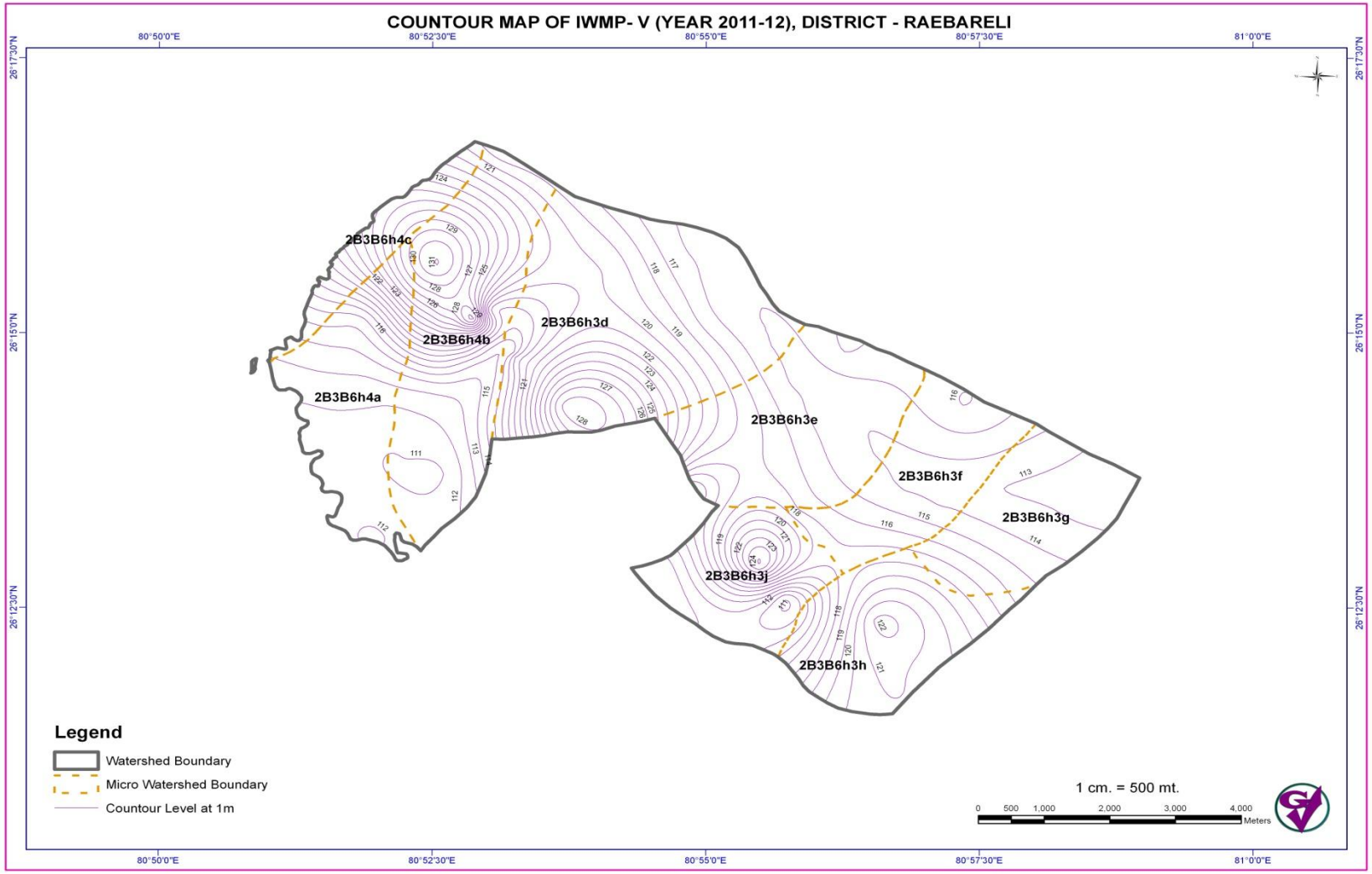
3.3.2 Slope Map

The slope map of the watershed is given below. It is observed that general land slope of the watershed is 1-3%.



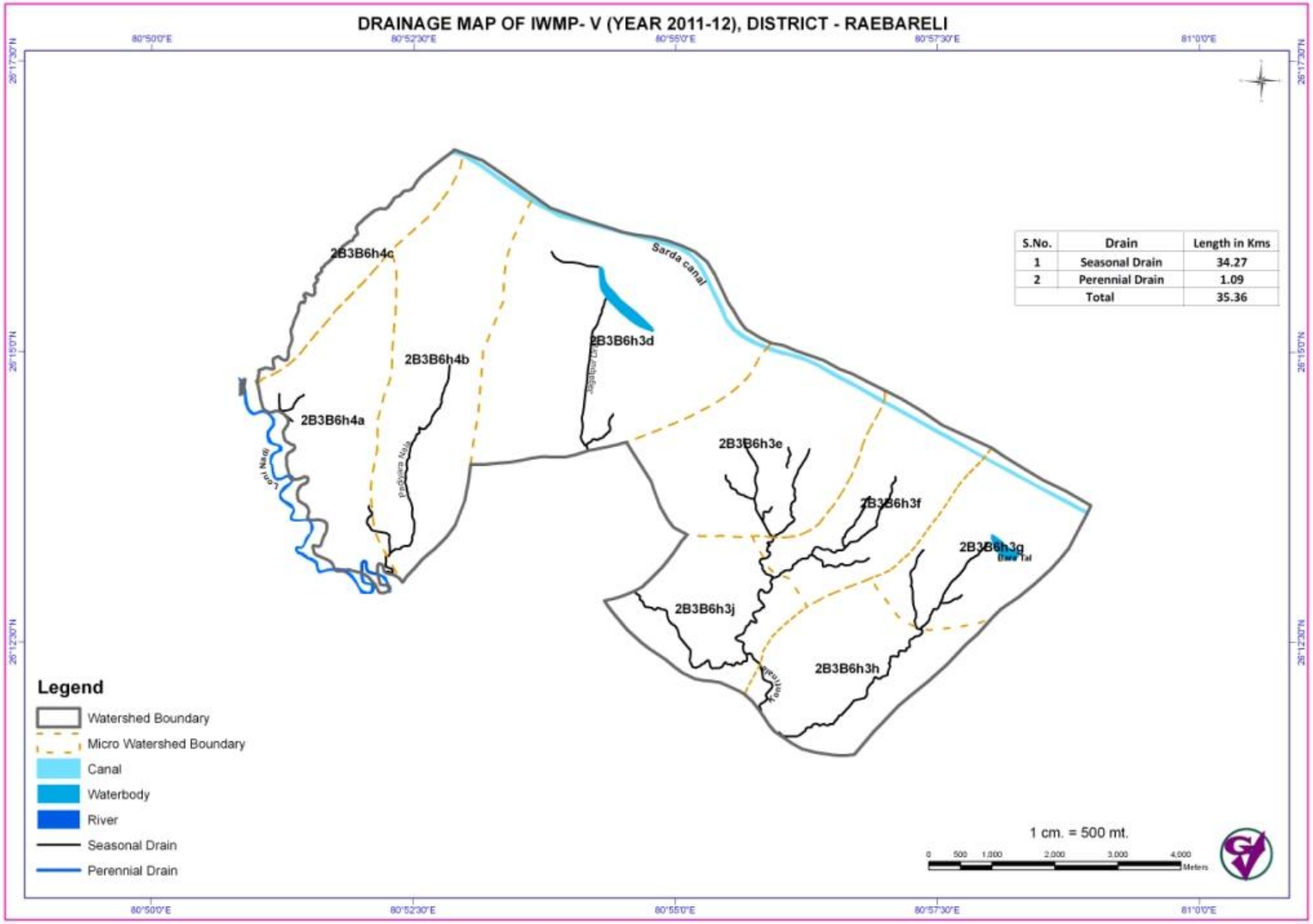
3.3.3 Contour Map

The lowest elevation of the watershed is 111 m amsl and the highest elevation is 131 m amsl. The runoff water of the watershed drains in to River Gomti.



3.3.4 Drainage Map

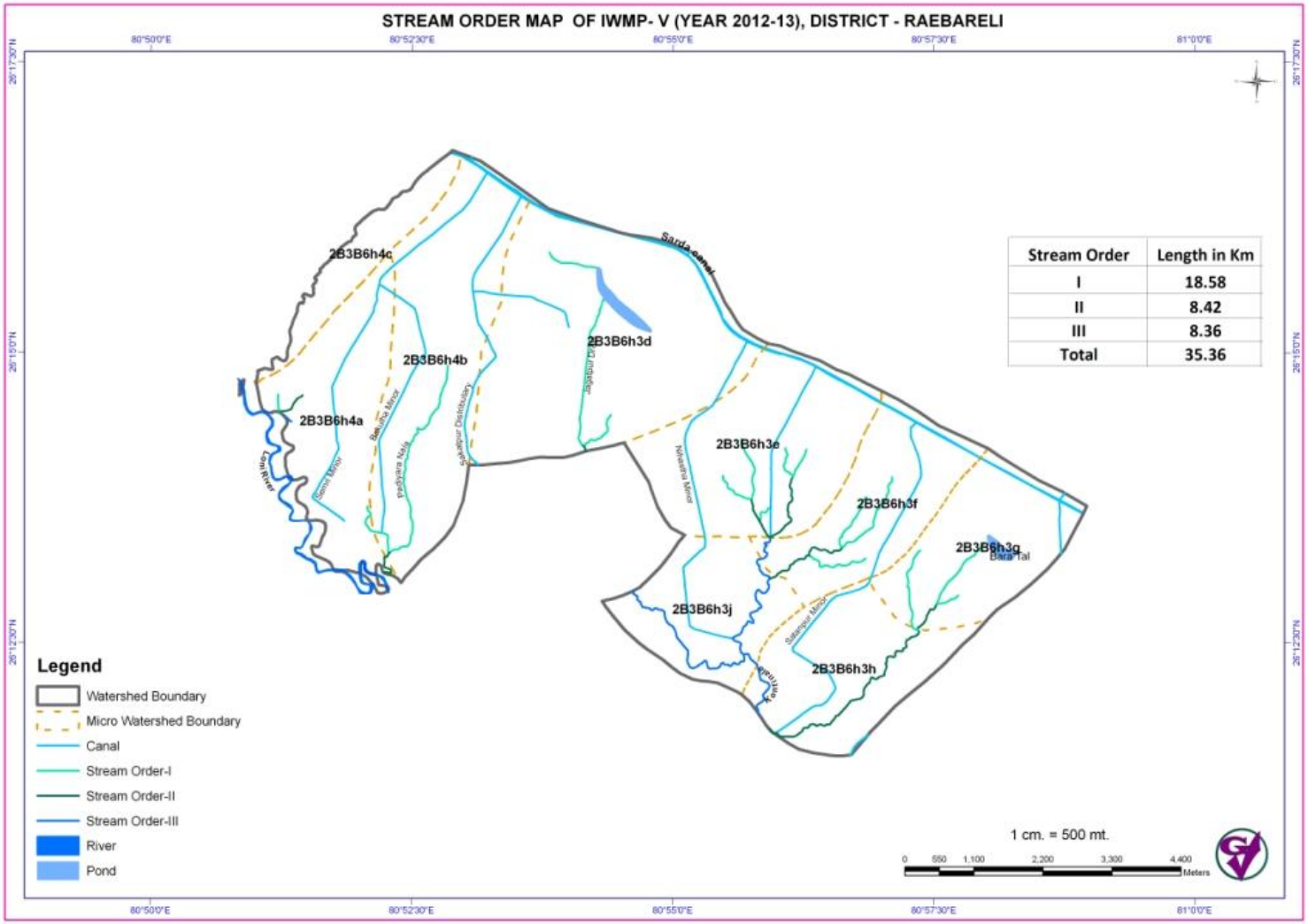
The Khiron watershed is III[rd] order watershed. The total length of seasonal stream is 20.41 kms.



S.No.	Drain	Length in Kms
1	Seasonal Drain	34.27
2	Perennial Drain	1.09
	Total	35.36

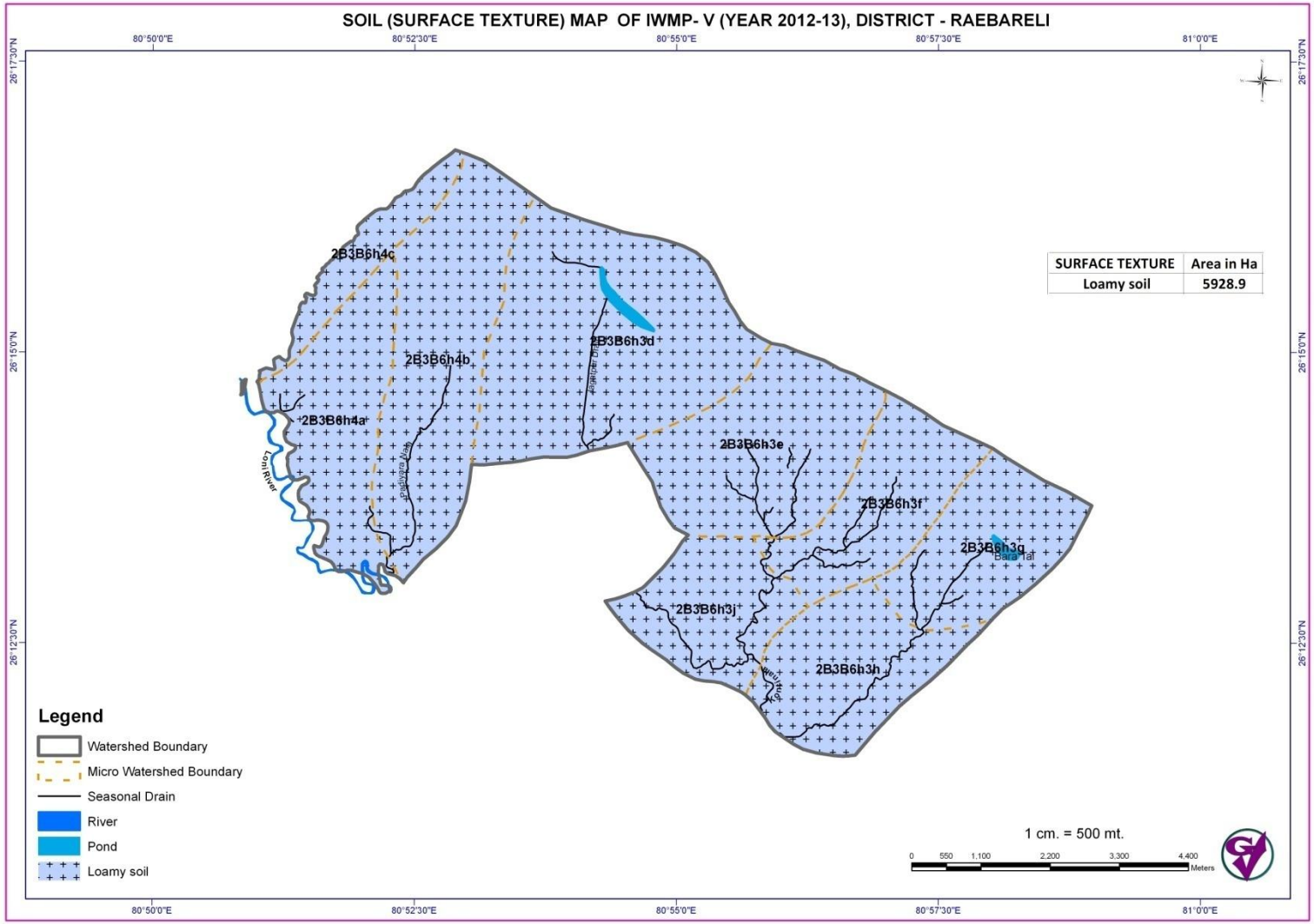
3.3.5 Stream order map

The Khiron watershed is II[nd] order stream watershed. The stream order map of the watershed is given below:



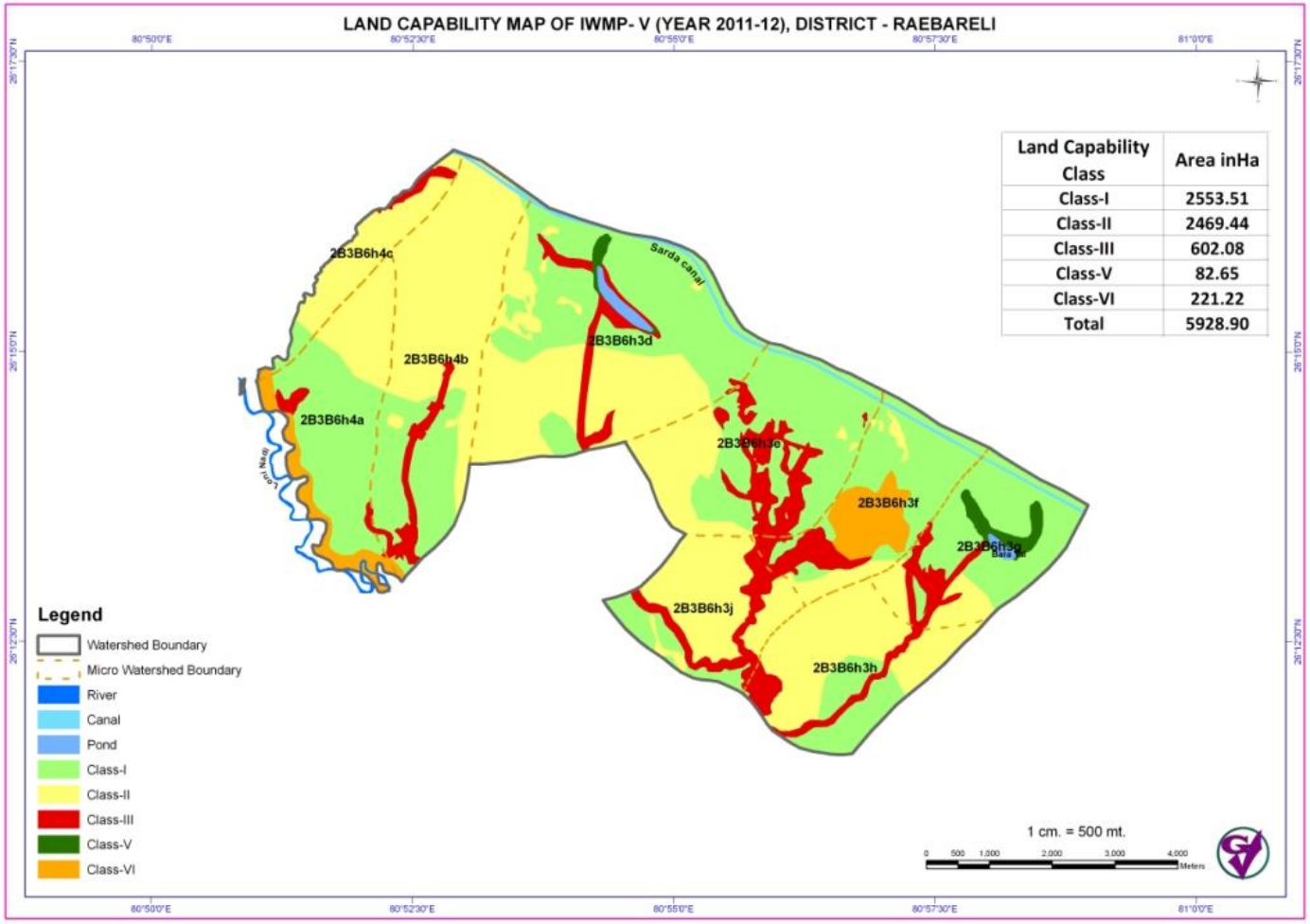
3.3.6 Soil map

The soil map is given below. The soils are light to medium in texture. Soils of the watershed are loamy and silty.



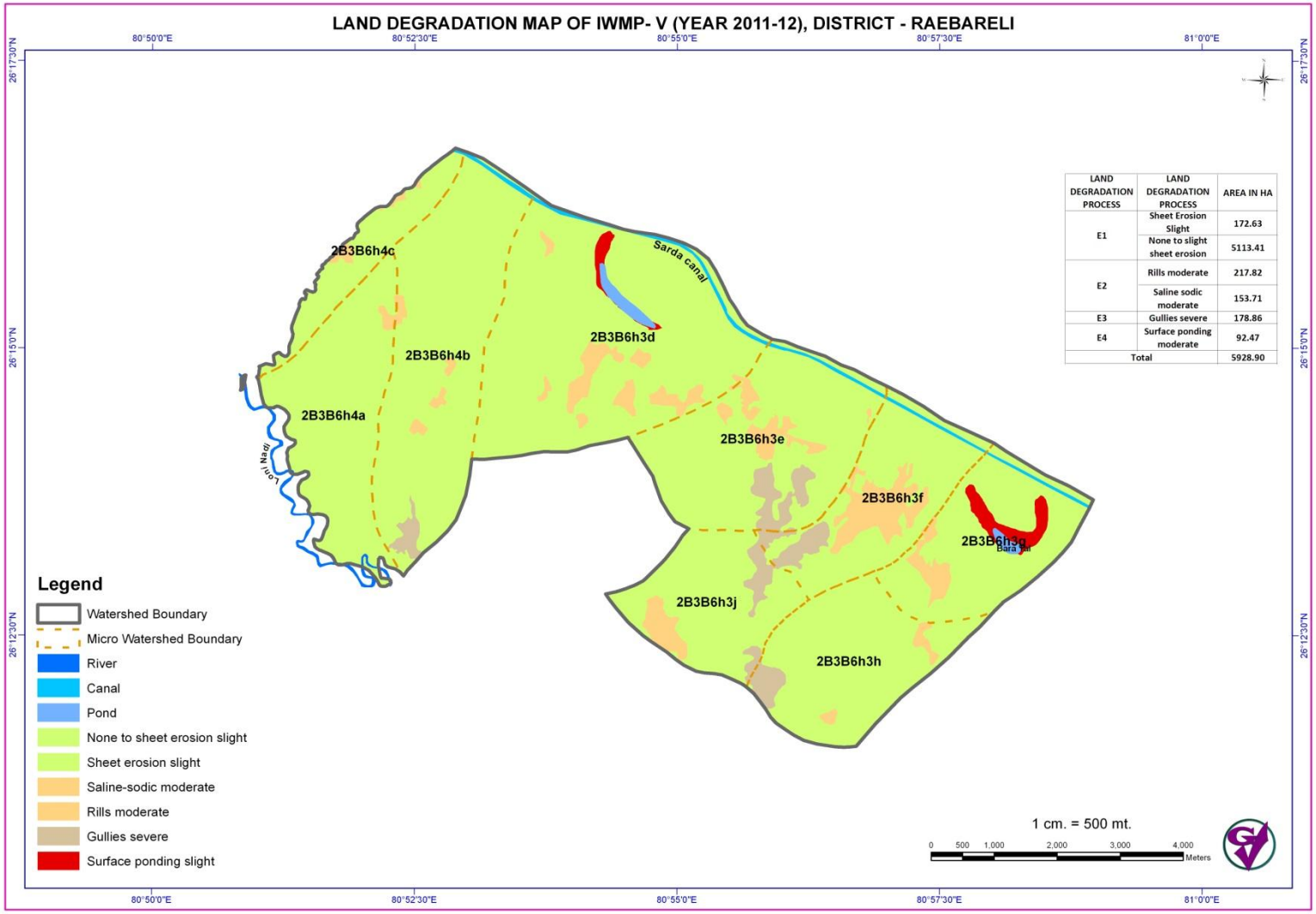
3.3.7 Land Capability Class

The class I land occupies about 7416.63 ha of watershed area followed by 159.42 ha under class II land, 840.33 ha under class III and about 889.81 ha under class IV. The land capability class map and gram Panchayat wise land under various classes is given below:



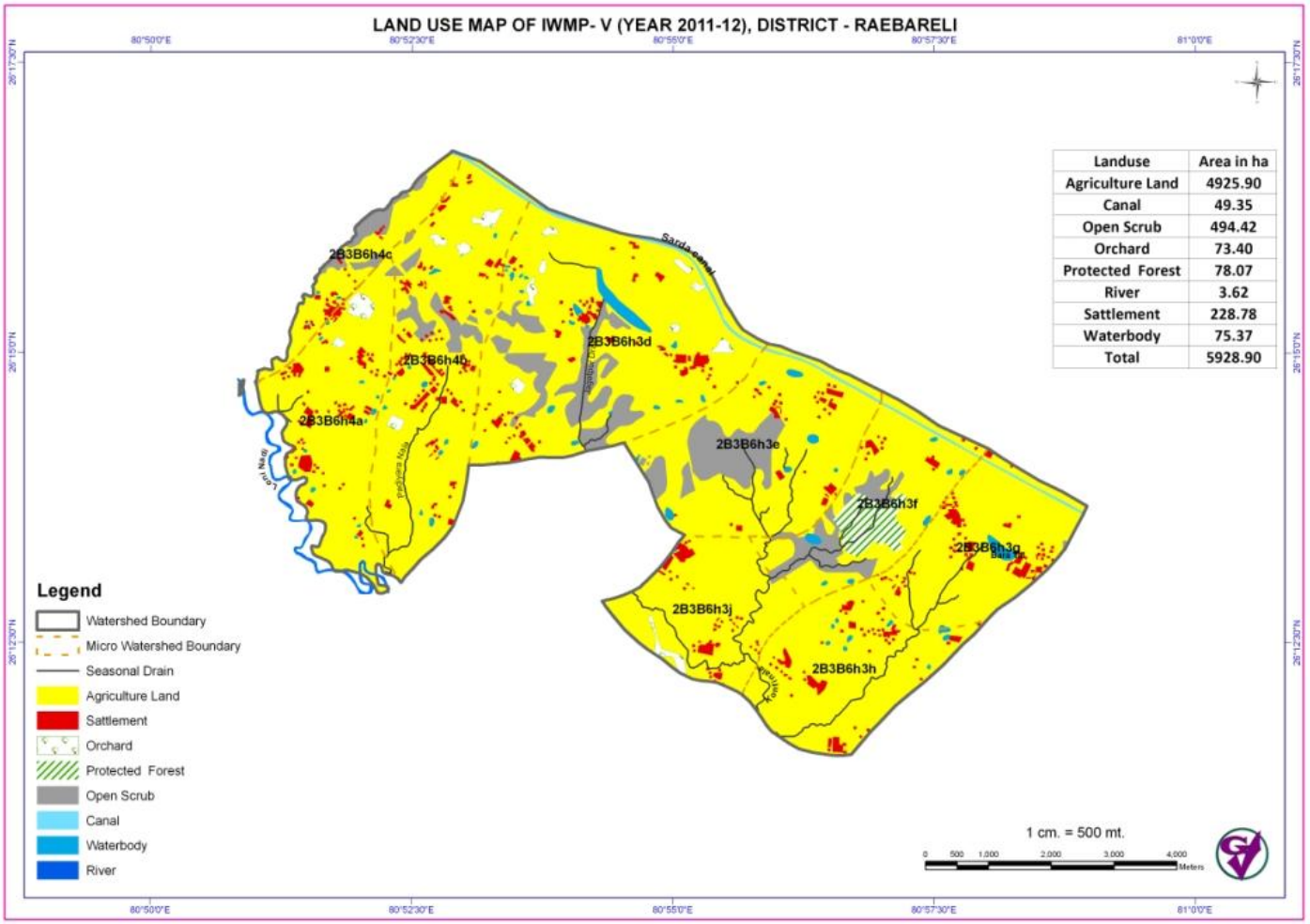
3.3.8 Land degradation

The soil erosion in the cultivated land is not a serious problem in the watershed at about 328.16 ha area is subjected to E_1 erosion. The E_4 erosion is observed in about 218.96 ha area which is along the streams. The soil degradation map is given below:



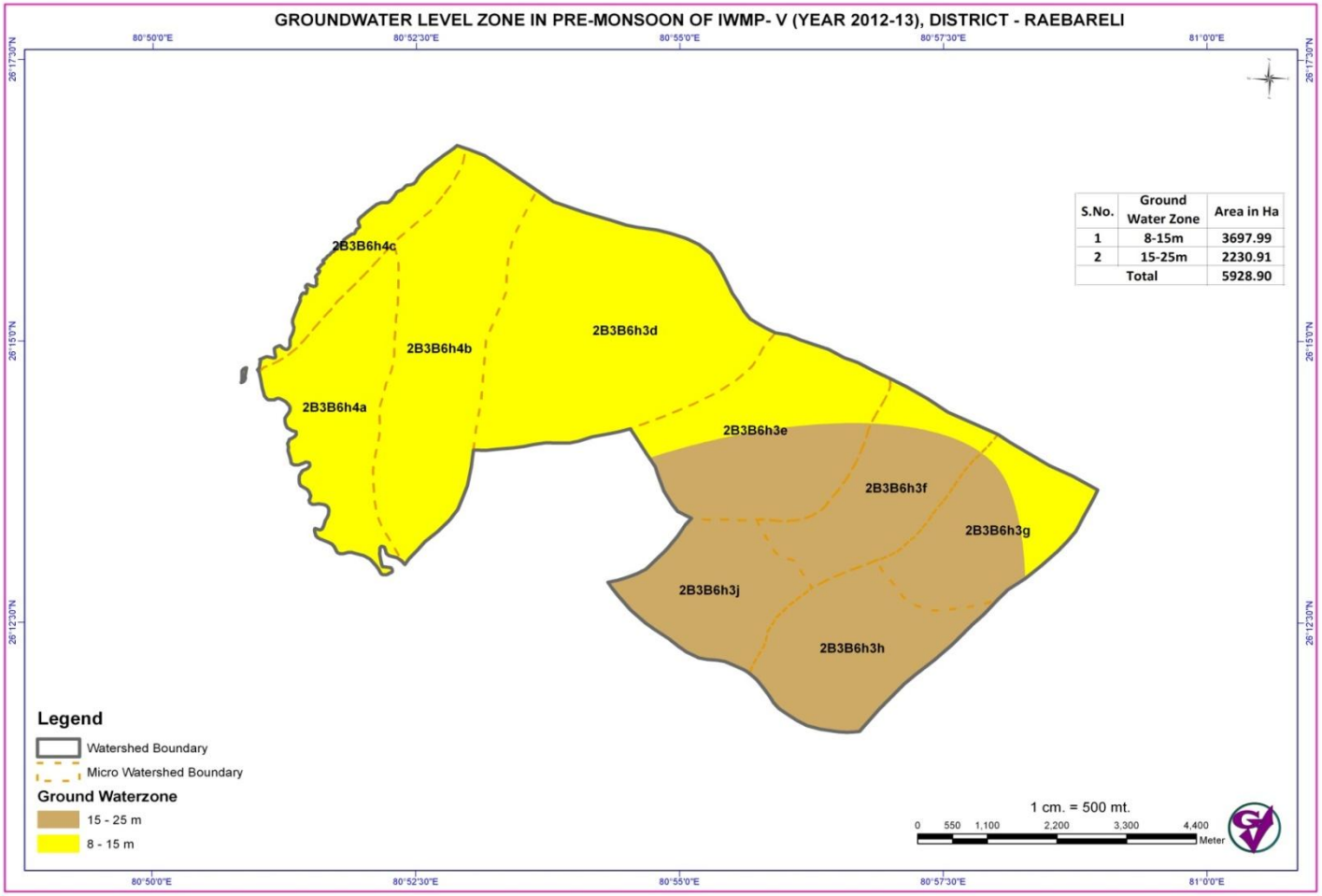
3.3.9 Landuse

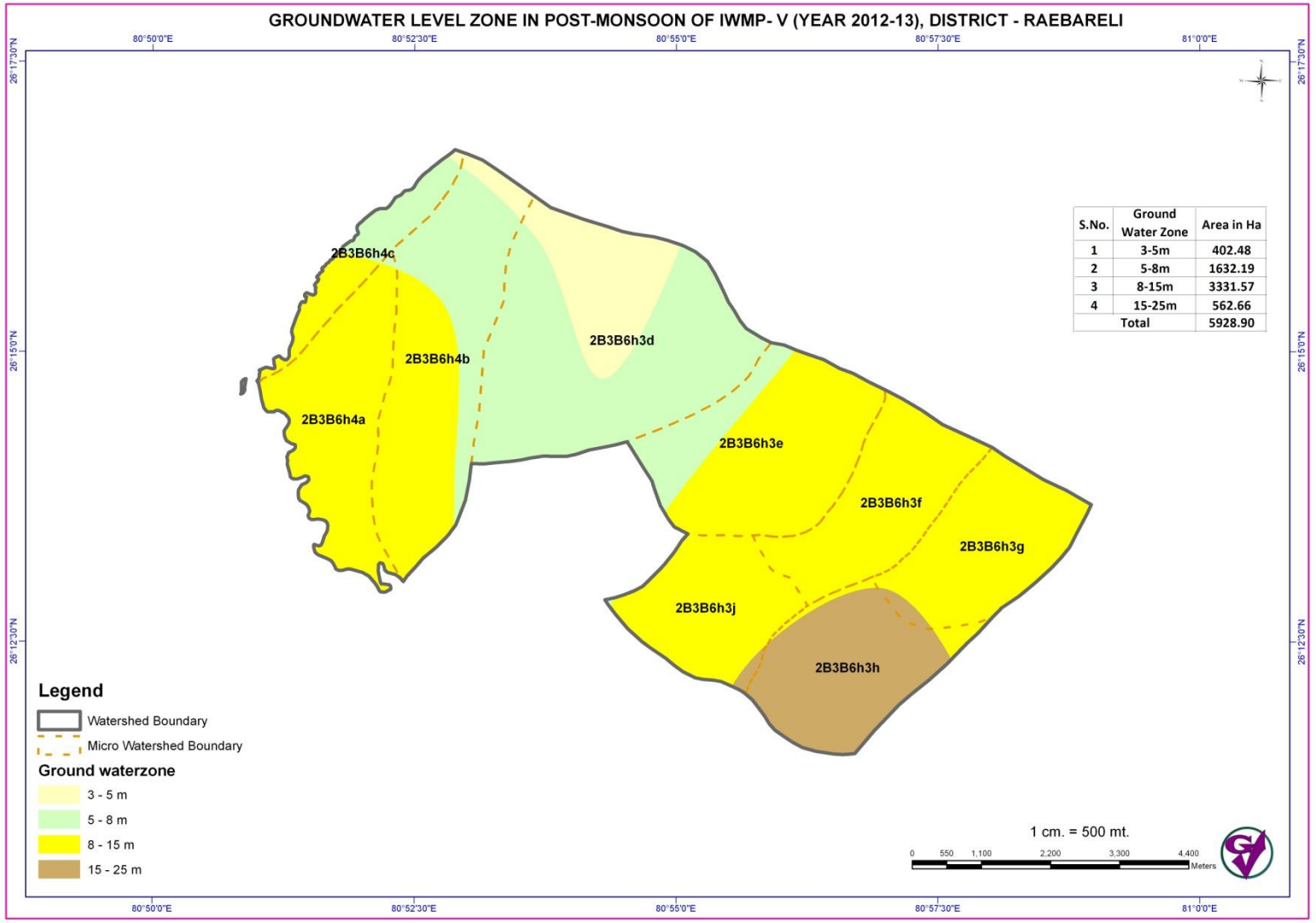
The total area of Khiron watershed is 5248.74 ha. About 93% area of the land is under cultivation. Forest land is about 5%. The remaining area of about 2% is under orchard, habitation and other uses. The land use map is given below:



3.3.10 Ground water level map

About 29.03 ha area of the watershed has a ground water depth of about 5-8 m and 2297.38 ha have a depth of about 8 to 15 m. This is pre-monsoon status. During post monsoon season about 1558.93 ha area has ground water table of 5 to 8 m. The pre and post monsoon ground water maps are given below:




GROUNDWATER LEVEL ZONE IN POST-MONSOON OF IWMP- V (YEAR 2012-13), DISTRICT - RAEBARELI
80°50'0"E
80°52'30"E
80°55'0"E
80°57'30"E
81°0'0"E
26°17'30"N
26°15'0"N
26°12'30"N
2B3B6h4c
2B3B6h4b
2B3B6h4a
2B3B6h3d
2B3B6h3e
2B3B6h3f
2B3B6h3g
2B3B6h3j
2B3B6h3h
S.No. | Ground Water Zone | Area in Ha
1 | 3-5m | 402.48
2 | 5-8m | 1632.19
3 | 8-15m | 3331.57
4 | 15-25m | 562.66
Total | | 5928.90
Legend
Watershed Boundary
Micro Watershed Boundary
Ground waterzone
3 - 5 m
5 - 8 m
8 - 15 m
15 - 25 m
1 cm. = 500 mt.
0 550 1,100 2,200 3,300 4,400
Meters

3.4 Climate

Climate of the watershed is warm subtropical climate with very cold and dry winters from December to Mid February and dry, hot summers from April to Mid June. The rainy season is from mid-June to mid-September when it gets an average rainfall of 662.60 mm mostly from the south-west monsoon winds. During extreme winter, the maximum temperature is around 12°C and the minimum is between 3 - 4°C. Fog is quite common from late December to late January. Summers can be quite hot with temperatures rising to the 24.08 to 37.45°C.

Month	Rainfall (mm)	Temperature (0^c)		Humidity (%)	Sunshine hrs	Wind speed (Km/hr)	Open Pan evaporation (mm/day)
		Max	Min				
Jul	205	45	33	83	13	7.9	-
Aug	240	37	30	83	13	7.2	-
Sep	144	33	30	80	12	5.4	-
Oct	0	27	24	70	11	3.2	-
Nov	0	25	17	70	10	3.2	-
Dec	0	20.5	5.5	70	10	4.6	-
Jan	22.1	22	5.5	75	10	7.2	-
Feb	0	25	18	66	11	7.2	-
Mar	0	31	22	50	12	8.6	-
Apr	0	38	30	44	13	9.3	-
May	0	45	37	52	14	9.3	-
Jun	51.5	45	37	70	14	9.3	-
Total/ Average	**662.60**	**37.45**	**24.08**				
Distance of nearest meteorological station / observation points (km)							80
Longitude of meteorological station / observation points							80°53´5.15´´
Latitude of meteorological station / observation points							26°45´44.49´´
Altitude of meteorological station / observation points							125m
Average annual rainfall of at least 10 years (mm)							865.2
Highest one day rainfall during the past 10 years (mm)							190mm
Highest rainfall intensity of one hour duration in the last 10 years (mm/hr)							160mm
Highest annual rainfall during the last 10 years (mm)							-
Lowest annual rainfall during the last 10 years (mm)							-
Note:	1. It will be better if long term (minimum 15 years or maximum 30 years) Standard Meteorological Week (SMW) basis climatological parameters are collected for preparing DPR. 2. If SMW basis information is not available then it may be collected on monthly basis for a minimum 15 years or maximum of 30 years. 3. **Possible sources:** IMD						

3.5 Natural calamities

Natural calamities of the watershed for the past 10 years are given below:

Table: 6.Village wise natural calamities of the watershed for the past 10 years

Name of Micro Watershed	Code of Micro Watershed	Type of calamities	Very severe/ Severe/mild	Years in which affected	Farm family affected	% of crop area affected	% of livestock mortality
Lacchipur	2B3B6h3d	Flood	40%	2013	30%	50%	5%
Nihastha	2B3B6h3e						
Chikari	2B3B6h3f						
Merui	2B3B6h3g						
Satanpur	2B3B6h3h						
Sambasi	2B3B6h3j						
Semari	2B3B6h4a						
Bakuliha	2B3B6h4b						
Ramwapur Dubai	2B3B6h4c						

3.6 Physiography, Geomorphology and Soils

3.6.1 Physiography of the watershed

The physiography of the watershed, as a whole, is fairly compact tract of gently undulating land. The elevation varies from about 111 meter (min.) amsl. to 120 meter (max.) amsl. in the extreme south east, on the banks of the Ganga. The district comprises a flat gently undulating tract and is characterized by six physiographic tracts namely Ganga khadars, Ganga Recent Alluviums, Ganga flats, Sai uplands Sai low lands and Sai flats.

3.6.2 Geomorphology

The Terrain of the watershed is a part of Ganga Plain. Geomorphologically, it is differentiated into lowland and upland. Watershed has mostly silty to loamy soil, and had relict fluvial features, such as tals (ponds) and paleochannels. On both the sides of the Sai River it is topped by sand. The lowland is separated by the 5-10 m high bluffs from upland. Two levels of Terraces are present along Ganga River. The lower one is the depositional type, and the higher Terrace is erosional or non-depositional type. Along Sai river only erosional terrace is developed.

3.6.3 Soils

Alluvium is the geotechnical province of Raebareli. It has cumulative high permeability, low bearing capacity and 1-2 kg/cm² compressive strength and shows foundation characteristics suitable for construction of engineering structures of low unit load. The soils are light in texture. Light brown sandy loam to sandy, generally structure less, poor in water holding capacity and organic matter, moderately alkaline. Soils of the watershed are deficient in organic matter and soil nutrients. 75% of the area has loamy soil and 25% has silty soil. Waterlogging (during monsoon) in low lying areas, rill and gully erosion in sandy areas long Sai nadi and Soil erosion are major Natural Hazards affecting upland.

Microwatershed wise soil details									
Sl. No	**Name of Microwatershed**	**Area (ha)**	**Soil depth1**	**Soil texture2**	**Alkaline (yes/no)**	**Fertility (yes/no)**	**Flood (yes/no)**	**Status of macro nutrients3**	**Status of micro nutrients3**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
1	Lacchipur (2B3B6h3d)	872.84	>90 cm		Yes	Low	Nill	Organic Carbon and Nitrogen Deficient	Zn Deficient
2	Nihastha (2B3B6h3e)	547.31	>90 cm		No	Medium	Nill		
3	Chikari (2B3B6h3f)	357.88	>90 cm		Yes	Low	Nill	Organic Carbon and Nitrogen Deficient	Zn Deficient
4	Merui (2B3B6h3g)	365.85	>90 cm		No	Medium	Nill		
5	Satanpur (2B3B6h3h)	418.27	>90 cm		Yes	Low	Nill	Organic Carbon and Nitrogen Deficient	Zn Deficient
6	Sambasi (2B3B6h3j)	327.47	>90 cm		No	Medium	Nill		
	Semari (2B3B6h4a)	477.94	>90 cm		No	Medium	Nill		
	Bakuliha 2B3B6h4b	660.90	>90 cm		Yes	Low	Nill	Organic Carbon and Nitrogen Deficient	Zn Deficient
	Ramwapur Dubai 2B3B6h4c	221.56	>90 cm		No	Medium	Nill		
Total		**4250.00**							
	1-For Soil depth: < 15 cm ; >15 cm < 45 cm; >45 cm < 90 cm; > 90 cm 2-For soil texture: Silty (Si); sandy (S); Clay (C) or write combination of these 3-For fertility status; Low(L);Medium(M);High(H)								

3.7 Hydrology

Sai Nadi, Tals and Canals (Sharda canal System) constitute the surface water resource in the District. The watershed has average water table of 7.50 m. There are about 58 defunct wells, which are no longer functioning in the Khiron watershed. Excessive ground water abstraction in some areas has resulted in alarming depletion of ground water level which results in defunct wells. There are also 42 wells. There are also few lakes. There are about 128 tube-wells with an average depth of 12 m. there are some open dug up ponds with an area of about 0.25 ha. Sai River is the major drainage system of the watershed.

Sl. No.	Name of water source	Capacity/number	Remarks
1	**Canal**		
a	Type	Lined/unlined	**Unlined**
b	Discharge (cubic meter per second)		
c	Flow months	**2 Months**	
d	Maintenance	Cleaned/silted/full of vegetation	**Cleaned**
2	**Open dug up well**		
a	Average water table (m)	**7.5**	
b	Total number	**58**	
c	Number of functioning wells	**Null**	
d	Number of defunct wells	**58**	
e	Diameter of the well (give range), m	**2 m**	
f	Number of lined wells	**58**	
g	Number of unlined wells	**Nill**	
h	Whether well has parapet wall	Yes/no/some have	**Yes**
i	Whether used for ground water recharge	Yes/no/some have	**No**
j	Main purpose		
i	Drinking water	√	**Abandoned**
ii	Irrigation	√	**Abandoned**
iii	For cattle	√	**Abandoned**
3	**Tube well**		
i	Number of tube wells installed	**42**	**Private**
ii	Number of functional tube wells	**128**	
iii	Number of defunct tube wells		
iv	Average depth (give range), m	**12**	
v	Diameter (give range), cm		
Vi	Average discharge (cubic meter per second)		
Vii	Average working hours per year (hrs)	**400 hrs**	**Depends on Rainfall & Electricity**
4	**Open dug up ponds**		
I	Number of open dug up ponds		
Ii	Number of ponds used for irrigation		
Iii	Average depth of open dug up ponds (give range also), m	**2**	
Iv	Average size (give range), ha	**0.25**	

3.8 Human population

Total population is 69893. Out of these about 70% belong to general category and 29% are schedule caste and 1% belongs to Schedule tribe. Village wise population is given below:

Sr.No.	Name of Villages	Name of Gram Panchayat	Male			Female			Total			Total Population
			SC	ST	General	SC	ST	General	SC	ST	General	
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Bakuliha	Bakuliha	523	8	1732	480	6	1495	1003	14	3227	4244
2	Banai Mau	Banai Mau	156	0	268	183	0	249	339	0	517	856
3	Bari	Raipur	85	0	329	83	0	282	168	0	611	779
4	Baswan Khera	Chak Gajraj	0	0	368	0	0	357	0	0	725	725
5	Chak Gajraj	Chak Gajraj	0	0	226	0	0	203	0	0	429	429
6	Chakpher Shah	Chak Gajraj	187	0	74	162	0	68	349	0	142	491
7	Chikhari	Jagatpur Ram Garhi	122	0	128	141	0	164	263	0	292	555
8	Deo Gaon	Deo Gaon	242	0	415	214	0	362	456	0	777	1233
9	Deopur	Sakatpur	249	0	646	233	0	609	482	0	1255	1737
10	Devali	Manpur	115	0	163	82	0	157	197	0	320	517
11	Ekauni	Ekauni	307	0	453	312	0	394	619	0	847	1466
12	Fattesarai	Savsi	7	0	144	7	0	137	14	0	281	295
13	Gahiri	Gahiri	662	1	1590	682	0	1594	1344	1	3184	4529
14	Haripur Nihastha	Haripur Nihastha	10	0	341	13	0	358	23	0	699	722
15	korara	Ekauni	73	0	60	73	0	52	146	0	112	258
16	Jagatpur Ram Garhi	Jagatpur Ram Garhi	100	0	505	103	0	460	203	0	965	1168
17	Kalupur	Kalupur	0	0	236	0	0	234	0	0	470	470
18	Kesauli	Kesauli	446	0	464	389	0	443	835	0	907	1742
19	Ketanpur	Deo Gaon	27	0	153	29	0	136	56	0	289	345
20	Khandepur	Surajpur Guman Khera	28	0	315	23	0	281	51	0	596	647
21	Khanpur Khapara	Matehana	99	0	422	120	0	417	219	0	839	1058

Sr.No.	Name of Villages	Name of Gram Panchayat	Male			Female			Total			Total Population
			SC	ST	General	SC	ST	General	SC	ST	General	
1	2	3	4	5	6	7	8	9	10	11	12	13
22	Khero	Khero	1620	0	3516	1480	0	3339	3100	0	6855	9955
23	Kishun Khera	Mirjapur	337	0	285	332	0	251	669	0	536	1205
24	Lakshipur	Lakshipur	280	91	938	264	79	872	544	170	1810	2524
25	Maduri	Maduri	163	0	834	160	0	771	323	0	1605	1928
26	Majhgawa	Kalupur	400	0	502	374	0	506	774	0	1008	1782
27	Matehna	Matehana	229	3	306	264	2	334	493	5	640	1138
28	Merui	Merui	425	0	1012	431	0	987	856	0	1999	2855
29	Misira Khera	Kalupur	120	0	70	103	0	61	223	0	131	354
30	Mubarakpur	Maduri	308	0	374	278	0	366	586	0	740	1326
31	Nihastha Khas	Nihastha	597	0	797	505	0	698	1102	0	1495	2597
32	Raipur	Raipur	284	0	721	272	0	704	556	0	1425	1981
33	Rampur Nihastha	Nihastha	70	1	200	69	0	168	139	1	368	508
34	Ramvapur Dubai	Ramvapur Dubai	440	0	926	382	0	789	822	0	1715	2537
35	Ranipur	Ugabhad	299	0	457	282	0	380	581	0	837	1418
36	Savsi	Savsi	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
37	Satanpur	Satanpur	305	0	1729	336	0	1532	641	0	3261	3902
38	Sehra Mao	Banai Mau	94	0	360	86	0	300	180	0	660	840
39	Semri	Semri	179	6	538	154	8	523	333	14	1061	1408
40	Sewanpura	Sewanpura	639	0	962	585	0	904	1224	0	1866	3090
41	Shyampur	Haripur Nihastha	59	0	245	48	0	241	107	0	486	593
42	Surajpur Khera	Surajpur Khera	252	0	397	201	0	356	453	0	753	1206
43	Udwatpur	Khanpur Khunti	96	0	335	93	0	323	189	0	658	847
44	Ugabhad	Ugabhad	212	5	614	212	0	590	424	5	1204	1633
	Total		**10846**	**115**	**25150**	**10240**	**95**	**23447**	**21086**	**210**	**48597**	**69893**
	Gender Ratio					**944 : 1000**	**826 : 1000**	**932 :1000**	**922:1000**			

Source: Population Census 2011

3.9 Educational classification

About 62% people in the watershed are literate. 72% male and 52% female are literate. Village wise literacy is provided in the following table.

Sr.No.	Name of Villages	Name of Gram Panchayat	Male		Female		Total		Total Population
			Literate	Illiterate	Literate	Illiterate	Literate	Illiterate	
1	2	3	4	5	6	7	8	9	10
1	Bakuliha	Bakuliha	1698	565	1157	824	2855	1389	4244
2	Banai Mau	Banai Mau	308	116	250	182	558	298	856
3	Bari	Raipur	345	69	226	139	571	208	779
4	Baswan Khera	Chak Gajraj	279	89	176	181	455	270	725
5	Chak Gajraj	Chak Gajraj	166	60	101	102	267	162	429
6	Chakpher Shah	Chak Gajraj	221	40	133	97	354	137	491
7	Chikhari	Jagatpur Ram Garhi	146	104	113	192	259	296	555
8	Deo Gaon	Deo Gaon	439	218	303	273	742	491	1233
9	Deopur	Sakatpur	688	207	441	401	1129	608	1737
10	Devali	Manpur	222	56	152	87	374	143	517
11	Ekauni	Ekauni	461	299	306	400	767	699	1466
12	Fattesarai	Savsi	105	46	64	80	169	126	295
13	Gahiri	Gahiri	1620	633	1230	1046	2850	1679	4529
14	Haripur Nihastha	Haripur Nihastha	267	84	223	148	490	232	722
15	korara	Ekauni	98	35	64	61	162	96	258
16	Jagatpur Ram Garhi	Jagatpur Ram Garhi	509	96	319	244	828	340	1168
17	Kalupur	Kalupur	187	49	136	98	323	147	470
18	Kesauli	Kesauli	678	232	423	409	1101	641	1742
19	Ketanpur	Deo Gaon	133	47	101	64	234	111	345
20	Khandepur	Surajpur Guman Khera	281	62	195	109	476	171	647
21	Khanpur Khapara	Matehana	424	97	315	222	739	319	1058
22	Khero	Khero	3631	1505	2600	2219	6231	3724	9955
23	Kishun Khera	Mirjapur	348	274	203	380	551	654	1205
24	Lakshipur	Lakshipur	880	429	624	591	1504	1020	2524
25	Maduri	Maduri	743	254	478	453	1221	707	1928
26	Majhgawa	Kalupur	559	343	405	475	964	818	1782
27	Matehna	Matehana	387	151	333	267	720	418	1138
28	Merui	Merui	932	505	639	779	1571	1284	2855
29	Misira Khera	Kalupur	141	49	70	94	211	143	354
30	Mubarakpur	Maduri	492	190	304	340	796	530	1326
31	Nihastha Khas	Nihastha	1090	304	817	386	1907	690	2597
32	Raipur	Raipur	622	383	394	582	1016	965	1981
33	Rampur Nihastha	Nihastha	224	47	171	66	395	113	508
34	Ramvapur	Ramvapur	1100	266	682	489	1782	755	2537

Sr.No.	Name of Villages	Name of Gram Panchayat	Male		Female		Total		Total Population
			Literate	Illiterate	Literate	Illiterate	Literate	Illiterate	
1	2	3	4	5	6	7	8	9	10
	Dubai	Dubai							
35	Ranipur	Ugabhad	607	149	351	311	958	460	1418
36	Savsi	Savsi	NA	NA	NA	NA	NA	NA	NA
37	Satanpur	Satanpur	1466	568	907	961	2373	1529	3902
38	Sehra Mao	Banai Mau	358	96	194	192	552	288	840
39	Semri	Semri	552	171	403	282	955	453	1408
40	Sewanpura	Sewanpura	1039	562	717	772	1756	1334	3090
41	Shyampur	Haripur Nihastha	240	64	171	118	411	182	593
42	Surajpur Khera	Surajpur Khera	494	155	336	221	830	376	1206
43	Udwatpur	Khanpur Khunti	368	63	245	171	613	234	847
44	Ugabhad	Ugabhad	581	250	429	373	1010	623	1633
	Total		**26129**	**9982**	**17901**	**15881**	**44030**	**25863**	**69893**

Source: Population Census, 2011

3.10 Socio-economic aspects

The Socio-economic condition of the people is not very encouraging as about 25% family of the watershed is landless, hence their livelihood depends upon the occasional employment they get in agriculture sector or they migrate to the nearby city for day to day labour work, agriculture should be modernized, to get more benefit and profit in the agricultural sector. Females of the watershed are mostly engaged in flower gardening (nursery) and kitchen gardening, as there is a high growth of and vegetables, flowers like different varieties of rose, gladiolus, marigold etc, and vegetables like red and green chilly cultivation and spices, Aonla and Ber orchards in sodic lands, inter-cropping of turmeric as well as ginger and there are also established mango and other orchards.

About 37% of people are schedule cast and only few (less than 0.10%) belong to schedule tribe. About 10% families are below poverty line. More than 60% family still use fire wood for cooking the meal and only less than 6% use LPG. About 58% families of the watershed are land less and about 7% families are below poverty line.

3.11 Details of farming community, land less families and families below poverty line

About 63% families of the watershed are land less and about 12% families are below below poverty line. Gram Panchayat wise details are given below:

Sr.No.	Name of Villages	Name of Gram Panchayat	Landless families	Farmer families	Total families	Number of BPL families
1	2	3	4	5	6	7
1	Bakuliha	Bakuliha	261	507	768	69
2	Banai Mau	Banai Mau	61	118	179	16
3	Bari	Raipur	49	94	143	13
4	Baswan Khera	Chak Gajraj	48	92	140	13
5	Chak Gajraj	Chak Gajraj	23	45	68	6
6	Chakpher Shah	Chak Gajraj	33	64	97	9
7	Chikhari	Jagatpur Ram Garhi	39	77	116	10
8	Deo Gaon	Deo Gaon	72	140	212	19
9	Deopur	Sakatpur	103	199	302	27
10	Devali	Manpur	23	46	69	6
11	Ekauni	Ekauni	87	169	256	23
12	Fattesarai	Savsi	20	40	60	5
13	Gahiri	Gahiri	284	552	836	75
14	Haripur Nihastha	Haripur Nihastha	49	94	143	13
15	korara	Ekauni	16	30	46	4
16	Jagatpur Ram Garhi	Jagatpur Ram Garhi	79	152	231	21
17	Kalupur	Kalupur	32	62	94	8
18	Kesauli	Kesauli	108	211	319	29
19	Ketanpur	Deo Gaon	22	44	66	6
20	Khandepur	Surajpur Guman Khera	45	87	132	12
21	Khanpur Khapara	Matehana	69	134	203	18
22	Khero	Khero	583	1131	1714	154
23	Kishun Khera	Mirjapur	83	160	243	22
24	Lakshipur	Lakshipur	156	302	458	41
25	Maduri	Maduri	133	259	392	35
26	Majhgawa	Kalupur	115	223	338	30
27	Matehna	Matehana	73	141	214	19
28	Merui	Merui	188	364	552	50
29	Misira Khera	Kalupur	21	40	61	5
30	Mubarakpur	Maduri	88	172	260	23
31	Nihastha Khas	Nihastha	166	321	487	44
32	Raipur	Raipur	121	236	357	32
33	Rampur Nihastha	Nihastha	34	65	99	9
34	Ramvapur Dubai	Ramvapur Dubai	145	280	425	38
35	Ranipur	Ugabhad	97	187	284	26
36	Savsi	Savsi	NA	NA	NA	NA
37	Satanpur	Satanpur	230	446	676	61
38	Sehra Mao	Banai Mau	57	110	167	15
39	Semri	Semri	84	162	246	22

Sr.No.	Name of Villages	Name of Gram Panchayat	Landless families	Farmer families	Total families	Number of BPL families
1	**2**	**3**	**4**	**5**	**6**	**7**
40	Sewanpura	Sewanpura	180	349	529	48
41	Shyampur	Haripur Nihastha	40	79	119	11
42	Surajpur Khera	Surajpur Khera	72	139	211	19
43	Udwatpur	Khanpur Khunti	46	90	136	12
44	Ugabhad	Ugabhad	111	214	325	29
	Total		**4346**	**8427**	**12773**	**1147**

Source: Land Revenue Record, BSA, RAIBARELY & PRA

3.12 Details about social categories of families

About 29% families are scheduled cast and 70% are general category families. Village wise details about social categories of farmers are given below:

Sr.No.	Name of Villages	Name of Gram Panchayat	No. of SC families	No. of ST families	No. of General category families	Total families
1	**2**	**3**	**4**	**5**	**6**	**7**
1	Bakuliha	Bakuliha	182	3	583	768
2	Banai Mau	Banai Mau	71	0	108	179
3	Bari	Raipur	31	0	112	143
4	Baswan Khera	Chak Gajraj	0	0	140	140
5	Chak Gajraj	Chak Gajraj	0	0	68	68
6	Chakpher Shah	Chak Gajraj	69	0	28	97
7	Chikhari	Jagatpur Ram Garhi	55	0	61	116
8	Deo Gaon	Deo Gaon	78	0	134	212
9	Deopur	Sakatpur	84	0	218	302
10	Devali	Manpur	26	0	43	69
11	Ekauni	Ekauni	108	0	148	256
12	Fattesarai	Savsi	3	0	57	60
13	Gahiri	Gahiri	248	0	588	836
14	Haripur Nihastha	Haripur Nihastha	5	0	138	143
15	korara	Ekauni	0		0	
16	Jagatpur Ram Garhi	Jagatpur Ram Garhi	40	0	191	231
17	Kalupur	Kalupur	0	0	94	94
18	Kesauli	Kesauli	153	0	166	319
19	Ketanpur	Deo Gaon	11	0	55	66
20	Khandepur	Surajpur Guman Khera	10	0	122	132
21	Khanpur Khapara	Matehana	42	0	161	203
22	Khero	Khero	534	0	1180	1714
23	Kishun Khera	Mirjapur	135	0	108	243
24	Lakshipur	Lakshipur	99	31	328	458
25	Maduri	Maduri	66	0	326	392
26	Majhgawa	Kalupur	147	0	191	338

Sr.No.	Name of Villages	Name of Gram Panchayat	No. of SC families	No. of ST families	No. of General category families	Total families
1	**2**	**3**	**4**	**5**	**6**	**7**
27	Matehna	Matehana	93	1	120	214
28	Merui	Merui	166	0	386	552
29	Misira Khera	Kalupur	38	0	23	61
30	Mubarakpur	Maduri	115	0	145	260
31	Nihastha Khas	Nihastha	0		0	
32	Raipur	Raipur	100	0	257	357
33	Rampur Nihastha	Nihastha	27	0	72	99
34	Ramvapur Dubai	Ramvapur Dubai	138	0	287	425
35	Ranipur	Ugabhad	116	0	168	284
36	Savsi	Savsi	NA	NA	NA	NA
37	Satanpur	Satanpur	111	0	565	676
38	Sehra Mao	Banai Mau	36	0	131	167
39	Semri	Semri	58	2	186	246
40	Sewanpura	Sewanpura	210	0	319	529
41	Shyampur	Haripur Nihastha	21	0	98	119
42	Surajpur Khera	Surajpur Khera	79	0	132	211
43	Udwatpur	Khanpur Khunti	30	0	106	136
44	Ugabhad	Ugabhad	84	1	240	325
	Total		**3619**	**38**	**8583**	**12240**

Source: Land Revenue Record,, Raibarely & PRA

3.13 Details about social categories of farmers based on gender

About 25% farmers of scheduled cast are women headed whereas about 22% farmers under general category are women headed. Village wise details are given in the following table:

Sr. No.	Name Of Villages	Name Of Gram Panchayat	Number of SC Families		Number of ST Families		Number of Gen. category Families		Total families		Total Familieis
			Man headed	Women headed	Man headed	Women headed	Man headed	Women headed	Man headed	Women headed	
1	2	3	4	5	6	7	8	9	10	11	12
1	Bakuliha	Bakuliha	153	29	3	0	478	105	634	134	768
2	Banai Mau	Banai Mau	60	11	0	0	89	19	149	30	179
3	Bari	Raipur	26	5	0	0	92	20	118	25	143
4	Baswan Khera	Chak Gajraj	0	0	0	0	115	25	115	25	140
5	Chak Gajraj	Chak Gajraj	0	0	0	0	56	12	56	12	68
6	Chakpher Shah	Chak Gajraj	58	11	0	0	23	5	81	16	97
7	Chikhari	Jagatpur Ram Garhi	46	9	0	0	50	11	96	20	116
8	Deo Gaon	Deo Gaon	66	12	0	0	110	24	176	36	212
9	Deopur	Sakatpur	71	13	0	0	179	39	250	52	302
10	Devali	Manpur	22	4	0	0	35	8	57	12	69
11	Ekauni	Ekauni	91	17	0	0	121	27	212	44	256
12	Fattesarai	Savsi	3	0	0	0	47	10	50	10	60
13	Gahiri	Gahiri	208	40	0	0	482	106	690	146	836
14	Haripur Nihastha	Haripur Nihastha	4	1	0	0	113	25	117	26	143
15	korara	Ekauni	0	0			0	0	0	0	0
16	Jagatpur Ram Garhi	Jagatpur Ram Garhi	34	6	0	0	157	34	191	40	231
17	Kalupur	Kalupur	0	0	0	0	77	17	77	17	94
18	Kesauli	Kesauli	129	24	0	0	136	30	265	54	319
19	Ketanpur	Deo Gaon	9	2	0	0	45	10	54	12	66
20	Khandepur	Surajpur Guman Khera	8	2	0	0	100	22	108	24	132
21	Khanpur Khapara	Matehana	35	7	0	0	132	29	167	36	203

Sr. No.	Name Of Villages	Name Of Gram Panchayat	Number of SC Families		Number of ST Families		Number of Gen. category Families		Total families		Total Familieis
			Man headed	Women headed	Man headed	Women headed	Man headed	Women headed	Man headed	Women headed	
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
22	Khero	Khero	449	85	0	0	968	212	1417	297	1714
23	Kishun Khera	Mirjapur	113	22	0	0	89	19	202	41	243
24	Lakshipur	Lakshipur	83	16	31	0	269	59	383	75	458
25	Maduri	Maduri	55	11	0	0	267	59	322	70	392
26	Majhgawa	Kalupur	123	24	0	0	157	34	280	58	338
27	Matehna	Matehana	78	15	1	0	98	22	177	37	214
28	Merui	Merui	139	27	0	0	317	69	456	96	552
29	Misira Khera	Kalupur	32	6	0	0	19	4	51	10	61
30	Mubarakpur	Maduri	97	18	0	0	119	26	216	44	260
31	Nihastha Khas	Nihastha	0	0			0	0	0	0	0
32	Raipur	Raipur	84	16	0	0	211	46	295	62	357
33	Rampur Nihastha	Nihastha	23	4	0	0	59	13	82	17	99
34	Ramvapur Dubai	Ramvapur Dubai	116	22	0	0	235	52	351	74	425
35	Ranipur	Ugabhad	97	19	0	0	138	30	235	49	284
36	Savsi	Savsi	NA	NA	NA	NA	NA	NA	NA	NA	NA
37	Satanpur	Satanpur	93	18	0	0	463	102	556	120	676
38	Sehra Mao	Banai Mau	30	6	0	0	107	24	137	30	167
39	Semri	Semri	49	9	2	0	153	33	204	42	246
40	Sewanpura	Sewanpura	176	34	0	0	262	57	438	91	529
41	Shyampur	Haripur Nihastha	18	3	0	0	80	18	98	21	119
42	Surajpur Khera	Surajpur Khera	66	13	0	0	108	24	174	37	211
43	Udwatpur	Khanpur Khunti	25	5	0	0	87	19	112	24	136
44	Ugabhad	Ugabhad	71	13	1	0	197	43	269	56	325
	Total		**3040**	**579**	**38**	**0**	**7040**	**1543**	**10118**	**2122**	**12240**

Source: PRA & Gram Panchayat

3.14 Details about occupation

Sr. No.	Name Of Villages	Name Of Gram Panchayat	Cultivator	Employed			Self Employed	Total Workforce	Total population
				AgriLabour	Non AgriLabour	Salaried			
1	2	3	4	5	6	7	8	9	10
1	Bakuliha	Bakuliha	77	290	211	645	93	1316	4244
2	Banai Mau	Banai Mau	16	58	42	130	19	265	856
3	Bari	Raipur	14	53	39	118	17	241	779
4	Baswan Khera	Chak Gajraj	13	50	36	110	16	225	725
5	Chak Gajraj	Chak Gajraj	8	29	21	65	10	133	429
6	Chakpher Shah	Chak Gajraj	9	33	24	74	12	152	491
7	Chikhari	Jagatpur Ram Garhi	10	38	28	84	12	172	555
8	Deo Gaon	Deo Gaon	22	84	61	187	28	382	1233
9	Deopur	Sakatpur	32	118	86	264	38	538	1737
10	Devali	Manpur	9	35	26	78	12	160	517
11	Ekauni	Ekauni	27	100	73	222	32	454	1466
12	Fattesarai	Savsi	5	20	15	45	6	91	295
13	Gahiri	Gahiri	83	309	225	688	99	1404	4529
14	Haripur Nihastha	Haripur Nihastha	13	49	36	110	16	224	722
15	korara	Ekauni	5	18	13	39	5	80	258
16	Jagatpur Ram Garhi	Jagatpur Ram Garhi	21	80	58	177	26	362	1168
17	Kalupur	Kalupur	9	32	23	72	10	146	470
18	Kesauli	Kesauli	32	119	86	265	38	540	1742
19	Ketanpur	Deo Gaon	6	24	17	52	8	107	345
20	Khandepur	Surajpur Guman Khera	12	44	32	98	15	201	647
21	Khanpur Khapara	Matehana	19	72	52	161	24	328	1058
22	Khero	Khero	181	679	494	1512	220	3086	9955
23	Kishun Khera	Mirjapur	22	82	60	183	27	374	1205

Sr. No.	Name Of Villages	Name Of Gram Panchayat	Cultivator	Employed			Self Employed	Total Workforce	Total population
				AgriLabour	Non AgriLabour	Salaried			
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
24	Lakshipur	Lakshipur	46	172	125	383	56	782	2524
25	Maduri	Maduri	35	132	96	293	42	598	1928
26	Majhgawa	Kalupur	32	121	88	270	41	552	1782
27	Matehna	Matehana	21	78	56	173	25	353	1138
28	Merui	Merui	52	195	142	434	62	885	2855
29	Misira Khera	Kalupur	6	24	18	54	8	110	354
30	Mubarakpur	Maduri	24	90	66	201	30	411	1326
31	Nihastha Khas	Nihastha	47	177	129	394	58	805	2597
32	Raipur	Raipur	36	135	98	301	44	614	**1981**
33	Rampur Nihastha	Nihastha	9	35	25	77	11	157	508
34	Ramvapur Dubai	Ramvapur Dubai	46	173	126	385	56	786	2537
35	Ranipur	Ugabhad	26	97	70	216	31	440	1418
36	Savsi	Savsi	NA	NA	NA	NA	NA	NA	NA
37	Satanpur	Satanpur	71	266	194	593	86	1210	3902
38	Sehra Mao	Banai Mau	15	57	42	127	19	260	840
39	Semri	Semri	26	96	70	214	30	436	1408
40	Sewanpura	Sewanpura	56	211	153	469	69	958	3090
41	Shyampur	Haripur Nihastha	11	40	29	90	14	184	593
42	Surajpur Khera	Surajpur Khera	22	82	60	183	27	374	1206
43	Udwatpur	Khanpur Khunti	15	58	42	129	19	263	847
44	Ugabhad	Ugabhad	30	111	81	248	36	506	1633
	Total		**1271**	**4766**	**3468**	**10613**	**1547**	**21665**	**69893**

Source: Population Census, 2011

3.15 Details about land holding

About 87% farmers of watershed have landholding less then 1ha and about 3 % farmers have land holding above 3 ha.

Sr.No.	Name of Villages	Name of Gram Panchayat	Farmers with < 1 ha land	Farmers with >1 ha<2 ha land	Farmers with > 2 ha land	Total farmers
1	2	3	4	5	6	7
1	Bakuliha	Bakuliha	451	46	10	507
2	Banai Mau	Banai Mau	105	11	2	118
3	Bari	Raipur	84	8	2	94
4	Baswan Khera	Chak Gajraj	82	8	2	92
5	Chak Gajraj	Chak Gajraj	40	4	1	45
6	Chakpher Shah	Chak Gajraj	57	6	1	64
7	Chikhari	Jagatpur Ram Garhi	69	7	1	77
8	Deo Gaon	Deo Gaon	125	13	2	140
9	Deopur	Sakatpur	177	18	4	199
10	Devali	Manpur	41	4	1	46
11	Ekauni	Ekauni	150	15	4	169
12	Fattesarai	Savsi	36	4	0	40
13	Gahiri	Gahiri	491	50	11	552
14	Haripur Nihastha	Haripur Nihastha	84	8	2	94
15	korara	Ekauni	27	3	0	30
16	Jagatpur Ram Garhi	Jagatpur Ram Garhi	135	14	3	152
17	Kalupur	Kalupur	55	6	1	62
18	Kesauli	Kesauli	188	19	4	211
19	Ketanpur	Deo Gaon	39	4	1	44
20	Khandepur	Surajpur Guman Khera	77	8	2	87
21	Khanpur Khapara	Matehana	119	12	3	134
22	Khero	Khero	1007	102	22	1131
23	Kishun Khera	Mirjapur	142	14	4	160
24	Lakshipur	Lakshipur	269	27	6	302
25	Maduri	Maduri	231	23	5	259
26	Majhgawa	Kalupur	198	20	5	223
27	Matehna	Matehana	125	13	3	141
28	Merui	Merui	324	33	7	364
29	Misira Khera	Kalupur	36	4	0	40
30	Mubarakpur	Maduri	153	15	4	172
31	Nihastha Khas	Nihastha	286	29	6	321
32	Raipur	Raipur	210	21	5	236
33	Rampur Nihastha	Nihastha	58	6	1	65
34	Ramvapur Dubai	Ramvapur Dubai	249	25	6	280
35	Ranipur	Ugabhad	166	17	4	187
36	Savsi	Savsi	NA	NA	NA	NA
37	Satanpur	Satanpur	397	40	9	446
38	Sehra Mao	Banai Mau	98	10	2	110

Sr.No.	Name of Villages	Name of Gram Panchayat	Farmers with < 1 ha land	Farmers with >1 ha<2 ha land	Farmers with > 2 ha land	Total farmers
1	**2**	**3**	**4**	**5**	**6**	**7**
39	Semri	Semri	144	15	3	162
40	Sewanpura	Sewanpura	311	31	7	349
41	Shyampur	Haripur Nihastha	70	7	2	79
42	Surajpur Khera	Surajpur Khera	124	13	2	139
43	Udwatpur	Khanpur Khunti	80	8	2	90
44	Ugabhad	Ugabhad	190	19	5	214
	Total		**7500**	**760**	**167**	**8427**

Source: Land revenue record, Raibarelyy & PRA

3.16 Details about livelihood activities

There are 416 craftsman, 498 artisans and 633 Other in the watershed.

Sr. No.	Name of Village	Name of Gram Panchayat	Occupation			
			Craftsman	Artisans	Others	Total
1	**2**	**3**	**4**	**5**	**6**	**7**
1	Bakuliha	Bakuliha	25	30	38	93
2	Banai Mau	Banai Mau	5	6	8	19
3	Bari	Raipur	5	5	7	17
4	Baswan Khera	Chak Gajraj	4	5	7	16
5	Chak Gajraj	Chak Gajraj	3	3	4	10
6	Chakpher Shah	Chak Gajraj	3	4	5	12
7	Chikhari	Jagatpur Ram Garhi	3	4	5	12
8	Deo Gaon	Deo Gaon	8	9	11	28
9	Deopur	Sakatpur	10	12	16	38
10	Devali	Manpur	3	4	5	12
11	Ekauni	Ekauni	9	10	13	32
12	Fattesarai	Savsi	2	2	2	6
13	Gahiri	Gahiri	27	32	40	99
14	Haripur Nihastha	Haripur Nihastha	4	5	7	16
15	korara	Ekauni	1	2	2	5
16	Jagatpur Ram Garhi	Jagatpur Ram Garhi	7	8	11	26
17	Kalupur	Kalupur	3	3	4	10
18	Kesauli	Kesauli	10	12	16	38
19	Ketanpur	Deo Gaon	2	3	3	8
20	Khandepur	Surajpur Guman Khera	4	5	6	15
21	Khanpur Khapara	Matehana	6	8	10	24
22	Khero	Khero	59	70	91	220
23	Kishun Khera	Mirjapur	7	9	11	27
24	Lakshipur	Lakshipur	15	18	23	56
25	Maduri	Maduri	11	13	18	42
26	Majhgawa	Kalupur	11	13	17	41
27	Matehna	Matehana	7	8	10	25

Sr. No.	Name of Village	Name of Gram Panchayat	Occupation			
			Craftsman	Artisans	Others	Total
1	2	3	4	5	6	7
28	Merui	Merui	17	20	25	62
29	Misira Khera	Kalupur	2	3	3	8
30	Mubarakpur	Maduri	8	10	12	30
31	Nihastha Khas	Nihastha	16	19	23	58
32	Raipur	Raipur	12	14	18	44
33	Rampur Nihastha	Nihastha	3	4	4	11
34	Ramvapur Dubai	Ramvapur Dubai	15	18	23	56
35	Ranipur	Ugabhad	8	10	13	31
36	Savsi	Savsi	NA	NA	NA	NA
37	Satanpur	Satanpur	23	28	35	86
38	Sehra Mao	Banai Mau	5	6	8	19
39	Semri	Semri	8	10	12	30
40	Sewanpura	Sewanpura	19	22	28	69
41	Shyampur	Haripur Nihastha	4	4	6	14
42	Surajpur Khera	Surajpur Khera	7	9	11	27
43	Udwatpur	Khanpur Khunti	5	6	8	19
44	Ugabhad	Ugabhad	10	12	14	36
	Total		**416**	**498**	**633**	**1547**

Source: PRA & Gram Panchayats.

3.17 Details about fuel used for cooking meal

Majority of the farmers (more then 60%) still use fire wood for cooking their meal. Only less than 6% has LPG. About 20% people use kerosene oil as fuel for cooking their meal. Gram Panchayat wise fuel used for cooking meal is given in the following table.

Sr. No.	Name of Village	Name of Gram Panchayat	Cooking gas (% of families)	Fire wood (% of families)	Cow dung Cake (% of families)	Kerosene (% of families)
1	2	3	4	5	6	7
1	Bakuliha	Bakuliha	4%	75%	18%	3%
2	Banai Mau	Banai Mau	7%	75%	11%	7%
3	Bari	Raipur	5%	69%	20%	6%
4	Baswan Khera	Chak Gajraj	5%	55%	36%	4%
5	Chak Gajraj	Chak Gajraj	6%	62%	27%	5%
6	Chakpher Shah	Chak Gajraj	7%	77%	10%	6%
7	Chikhari	Jagatpur Ram Garhi	5%	66%	19%	10%
8	Deo Gaon	Deo Gaon	9%	80%	9%	2%
9	Deopur	Sakatpur	6%	72%	12%	10%
10	Devali	Manpur	4%	60%	34%	2%
11	Ekauni	Ekauni	4%	65%	25%	6%
12	Fattesarai	Savsi	6%	62%	27%	5%
13	Gahiri	Gahiri	5%	72%	19%	4%
14	Haripur Nihastha	Haripur Nihastha	7%	67%	18%	8%
15	korara	Ekauni	4%	60%	34%	2%

Sr. No.	Name of Village	Name of Gram Panchayat	Cooking gas (% of families)	Fire wood (% of families)	Cow dung Cake (% of families)	Kerosene (% of families)
1	2	3	4	5	6	7
16	Jagatpur Ram Garhi	Jagatpur Ram Garhi	4%	79%	13%	4%
17	Kalupur	Kalupur	10%	70%	15%	5%
18	Kesauli	Kesauli	8%	54%	31%	7%
19	Ketanpur	Deo Gaon	9%	65%	18%	8%
20	Khandepur	Surajpur Guman Khera	8%	75%	12%	5%
21	Khanpur Khapara	Matehana	5%	76%	11%	8%
22	Khero	Khero	7%	65%	19%	9%
23	Kishun Khera	Mirjapur	8%	62%	24%	6%
24	Lakshipur	Lakshipur	6%	72%	12%	10%
25	Maduri	Maduri	9%	65%	18%	8%
26	Majhgawa	Kalupur	6%	75%	13%	6%
27	Matehna	Matehana	7%	65%	19%	9%
28	Merui	Merui	8%	62%	24%	6%
29	Misira Khera	Kalupur	6%	68%	18%	8%
30	Mubarakpur	Maduri	8%	79%	9%	4%
31	Nihastha Khas	Nihastha	7%	65%	19%	9%
32	Raipur	Raipur	5%	66%	19%	10%
33	Rampur Nihastha	Nihastha	9%	80%	9%	2%
34	Ramvapur Dubai	Ramvapur Dubai	6%	72%	12%	10%
35	Ranipur	Ugabhad	4%	60%	34%	2%
36	Savsi	Savsi	NA	NA	NA	NA
37	Satanpur	Satanpur	10%	70%	15%	5%
38	Sehra Mao	Banai Mau	8%	54%	31%	7%
39	Semri	Semri	9%	65%	18%	8%
40	Sewanpura	Sewanpura	9%	80%	9%	2%
41	Shyampur	Haripur Nihastha	6%	72%	12%	10%
42	Surajpur Khera	Surajpur Khera	4%	60%	34%	2%
43	Udwatpur	Khanpur Khunti	5%	66%	19%	10%
44	Ugabhad	Ugabhad	9%	80%	9%	2%

Note: Partially using LPG. *Source: PRA & Gram Panchayats.*

3.18 Details of migration

People of the watershed migrate to the city and other areas for search of work mostly as unskilled/semi-skilled and skilled. On an average people migrate for 6 months or a year. Village wise migration of people for work is given in the following table:

S.N.	Name of Village	Name of Gram Panchayat	Out migration	
			Number with months	for which work
1	2	3	4	5
1	Bakuliha	Bakuliha	28, 6 month	Labour, Mason
2	Banai Mau	Banai Mau	12, 6 month	Labour, Mason
3	Bari	Raipur	22, 6 month	Labour, Mason
4	Baswan Khera	Chak Gajraj	44, 6 month	Labour, Mason
5	Chak Gajraj	Chak Gajraj	17, 6 month	Labour, Mason
6	Chakpher Shah	Chak Gajraj	18, 6 month	Labour, Mason
7	Chikhari	Jagatpur Ram Garhi	17, 6 month	Labour, Mason
8	Deo Gaon	Deo Gaon	11, 6 month	Labour, Mason
9	Deopur	Sakatpur	15, 6 month	Labour, Mason
10	Devali	Manpur	10, 6 month	Labour, Mason
11	Ekauni	Ekauni	11, 6 month	Labour, Mason
12	Fattesarai	Savsi	14, 6 month	Labour, Mason
13	Gahiri	Gahiri	23, 6 month	Labour, Mason
14	Haripur Nihastha	Haripur Nihastha	18, 6 month	Labour, Mason
15	korara	Ekauni	55, 6 month	
16	Jagatpur Ram Garhi	Jagatpur Ram Garhi	18, 6 month	Labour, Mason
17	Kalupur	Kalupur	10, 6 month	Labour, Mason
18	Kesauli	Kesauli	23, 6 month	Labour, Mason
19	Ketanpur	Deo Gaon	33, 6 month	Labour, Mason
20	Khandepur	Surajpur Guman Khera	17, 6 month	Labour, Mason
21	Khanpur Khapara	Matehana	14, 6 month	Labour, Mason
22	Khero	Khero	23, 6 month	Labour, Mason
23	Kishun Khera	Mirjapur	54, 6 month	Labour, Mason
24	Lakshipur	Lakshipur	42, 6 month	Labour, Mason
25	Maduri	Maduri	30, 6 month	Labour, Mason
26	Majhgawa	Kalupur	28, 6 month	Labour, Mason
27	Matehna	Matehana	50, 6 month	Labour, Mason
28	Merui	Merui	29, 6 month	Labour, Mason
29	Misira Khera	Kalupur	28, 6 month	Labour, Mason
30	Mubarakpur	Maduri	42, 6 month	Labour, Mason
31	Nihastha Khas	Nihastha	35, 6 month	Labour, Mason
32	Raipur	Raipur	28, 6 month	Labour, Mason
33	Rampur Nihastha	Nihastha	20, 6 month	Labour, Mason
34	Ramvapur Dubai	Ramvapur Dubai	21, 6 month	Labour, Mason
35	Ranipur	Ugabhad	26, 6 month	Labour, Mason
36	Savsi	Savsi	0	0
37	Satanpur	Satanpur	19, 6 month	Labour, Mason
38	Sehra Mao	Banai Mau	20, 6 month	Labour, Mason
39	Semri	Semri	24, 6 month	Labour, Mason
40	Sewanpura	Sewanpura	18 6 month	Labour, Mason
41	Shyampur	Haripur Nihastha	20, 6 month	Labour, Mason

S.N.	Name of Village	Name of Gram Panchayat	Out migration	
			Number with months	for which work
1	2	3	4	5
42	Surajpur Khera	Surajpur Khera	28, 6 month	Labour, Mason
43	Udwatpur	Khanpur Khunti	26 6 month	Labour, Mason
44	Ugabhad	Ugabhad	30, 6 month	Labour, Mason

3.19 PRA (Participatory Rural Appraisal)

Participatory rural appraisal (PRA) is an approach used by people to gather information on various aspects from the community in an organized manner without the use of any structured questionnaire. The approach aims to incorporate the knowledge and opinions of rural people in the planning and management of development of projects and programmes. The details of PRA conducted in the watershed along with few photographs are given in the following table:

3.20 List of agencies/projects/schemes presently working in the watershed

The information is given in following table. There are about 5 agencies undertaking welfare activity in watershed.

Agencies/projects/schemes presently working in the watershed			
Sl. No.	Name of the agencies/projects/ schemes	Sponsoring Agency	Main activity
1	MGNREGA	MORD	Rojgar Scheme
2	ATMA(agriculture)	MOA(agriculture)	Crop Production, Tool Implement Distribution
3	Horticulture Mission	MOA(agriculture)	Floriculture ,Vegetable and Plantation
4	SGSY /NRLM	MoRD	Self Employment
5	Regional Fund	State Government	Rural Development

3.21 People institution

3.21.1 Details of list of SHGs formed

The village wise details of SHG formed in the watershed are given in following table. These SHG are mostly in the sector of live stock or handicraft.

S.N.	Name of Gram Panchayat	Total no of SHGs formed	Type of SHG		
			Live stock based	Handi-craft	Other (Please specify)
1.	Deogaon	5		3	1 (Tea Stall)
2.	Manpur	3			1 (Tea Stall)
3.	Haripur Nihastha	6		1	2 (Tea Stall)
4.	Kalupur	5		2	4 (Tea Stall), 2 (Salon)
5.	Surajpur gumankhera	6		2	2 (Pan Shop)
6.	Lakshipur	12		2	
7.	Ramwapur dubai	11			2 (Tea Stall)
8.	Khanpur khunti	2		1	2 (Salon)
9.	Khiron				
10.	Sewanpur	6			2 (Tea Stall),1 (Salon)
11.	Mirjapur				2 (Tea Stall),1 (Salon)

S.N.	Name of Gram Panchayat	Total no of SHGs formed	Type of SHG		
			Live stock based	Handi-craft	Other (Please specify)
12.	Banai Mau	8			1 (Salon),1 (Tea Stal)
13.	Jagatpur Ramgari	17		2	
14.	Nihastha	5		2	
15.	Rampur	19		1	2 (Tea Stal),1 (Salon)
16.	Satanpur				1 (Tea Stal)
17.	Raipur	2		1	
18.	Ekauni	1		3	
19.	Uga Bhad	10		2	2 (Pan Shop)
20.	Merui	1			2 (Tea Stall),1 (Salon)
21.	Sembasi	1		2	1 (Pan Shop)
22.	Matehna	5		3	1 (Salon)
23.	Maduri	1		2	
24.	Gahiri	15		2	2 (Tea StLl), 2 (Salon)
25.	Bakuliha				
26.	Bhitari	2		1	
27.	Sakatpur	15		1	2 (Tea Stall) , 1 (Salon)
28.	Semri	1			
29.	Chak Gajraj	1		2	2 (Tea Stall), 1 (Sallon)
	Total	**160**		**35**	

3.22. List of UGs formed

S.N.	Details of Ugs						
	Name of Villages	Total no of Ugs formed	Total no of Ugs registered	Total no of Ugs having bank account	Type of Ugs		
					Water Utilization	Plantation raised	Other (Please specify)
1.	Deogaon	8			121	3	1
2.	Manpur	4				2	
3.	Haripur Nihastha	7			104	6	2
4.	Kalupur	6			80	3	
5.	Surajpur gumankhera	8			97	1	
6.	Lakshipur	11			155	4	2
7.	Ramwapur dubai	9			130	2	1
8.	Khanpur khunti	4			53		
9.	Khiron	1			11		
10.	Sewanpur	5			78	1	
11.	Mirjapur	1			12		
12.	Banai Mau	7			100	1	
13.	Jagatpur Ramgari	13			410	7	3
14.	Nihastha	5			130	2	1
15.	Rampur	17			250	5	1
16.	Satanpur	1			10		
17.	Raipur	2			20	1	
18.	Ekauni	3			32	1	
19.	Uga Bhad	4			56	2	1
20.	Merui	7			195	4	2
21.	Sembasi	2			22	1	
22.	Matehna	7			85	6	2
23.	Maduri	1			12	1	
24.	Gahiri	3			34	1	
25.	Bakuliha	12			265	5	4
26.	Bhitari	1			10		
27.	Sakatpur	2			20	1	

S.N.	Details of Ugs						
	Name of Villages	Total no of Ugs formed	Total no of Ugs registered	Total no of Ugs having bank account	Type of Ugs		
					Water Utilization	Plantation raised	Other (Please specify)
28.	Semri	14			215	8	2
29.	Chak Gajraj	4			36	1	
	Total	**167**			**2743**	**69**	**22**

3.23 List of members of the Watershed Committee (WC)

The details of member of watershed committee are given below.

Details of WC						
S.No.	Name of Villages	Name of the member	Fathers/Husband's name	Category	Mobile number	Remarks
1	2	3	4	5	6	7
1	Ramwapur Dubai	Mukesh Tiwari	Om Prakash Tiwari	Chairman	9956748806	
		Ajay Kumar	Ayodhya Prashad	Secretary	8874874339	
		Rajkishor	Ganga Prashad	LF		
		Ramprakash	Salikram	MF		
		Ayodhya Prashad	Binda Prashad	SF		
		Ganga Prashad	Binda Prashad	SF		
		Sunil Kumar	VishwaPrashad	UG		
		Dhunni Lal	Jagannath	SHG		
		Manoj Kumar	Prayag Manohar	UG		
		Kamlesh kumar	Manohar	SHG		
2	Semari	Namrata Singh	Shailendra Singh	Chairman	9984038544	
		Sarvesh	Girja Shankar	Secretary		
		Ramsewak	Pancham	UG		
		Ramnarayan	Badlu	UG		
		Govardhan	Debi	UG		
		Shamsher Bahadur	Rambahadur	LL		
		Bhola	Maiku	SHG		
		Durga	Bachau	SHG		
		Indra	Taramani	SHG		
		Kamlesh Kumar	Lalli Prashad	WDT		
3	Jagatpur Ramgarhi	Ajay kumar	Rajaram	Chairman	9451537710	
		Ritesh	Ganesh Singh	Secretary	9838097242	
		Ramsanehi	Ramsharan	UG		
		Ajay Singh	Rajaram	UG		
		Urmila devi	Yashpal	LL		
		Shivkumar	Baldev	SHG		
		Kalavati	Ramsumer	SHG		
		Neelam	Vimlesh	SHG		
		Balkrishna	Mahadev	SHG		
		Kamlesh Kumar	Lalliprashad	WDT		
4	fatehsarai (Sambasi)	Rameshwar	Sitaram	Chairman		
		Sundar	Sitaram	Secretary		
		Brijmohan	Vichari	LF		
		Guptar Singh	Shree ram	MF		
		Shivkaran	Jagatpal	SF		

Details of WC						
S.No.	**Name of Villages**	**Name of the member**	**Fathers/Husband's name**	**Category**	**Mobile number**	**Remarks**
1	**2**	**3**	**4**	**5**	**6**	**7**
		Ramkumar	Shreekrishna	SHG		
		Rajkumar	Shree Krishna	SHG		
		Ramdulare	Ramashankar	UG		
		Putani	Shivmangal	UG		
		Ramkumar	Babulal	SHG		
5	Merui	Rambali Yadav		Chairman		
		Binda Prashad	Asharam	Secretary		
		Shyamadevi	Mahaveer	SHG		
		Ramesh	Ramdas	UG		
		Vimla Singh	Bhuwneshwar Singh	LF		
		Bhanu Pratap Singh	Bhagwan Baksha Singh	LF		
		Jai Shankar	Ramsumer	LL		
		Ramsajeevan	Chadranath	SHG		
		Chotelal	Nandlal	UG		
		Bashudev	Ramkishun	SHG		
6	Ekauni	Rakesh Kumar Singh	Ramlakhan Singh	Chairman		
		Madhuvendra Singh	Arjun Singh	Secretary		
		Pushpa Devi	Ramkishun	SHG		
		Radhika	Motilala	SHG		
		Ramkaran	Shivcharan	SHG		
		Vijay Bahadur	Mahaveer	UG		
		Devendra Bahadur	Arjun Singh	UG		
		Kalvati	Raghudayal	LL		
		Ramsundar Singh	Bhagauti Singh	UG		
		Shiv Harsh	Ramavtar	UG		
7	Raipur	Sury Pratap Singh	Pradeep Pratap Singh	Chairman	9839187751	
		Harsh Bahadur Singh	Dalpratap Singh	Secretary	9415876032	
		Sheetal Karan Singh	Narendra Bahadur Singh	LF		
		Balkaran Singh	Rampayaare Singh	UG		
		Kaliprashad	Mahaveer	MF		
		Asha singh	Rajbaksha Singh	SHG		
		Maharanideen	Nankai	SHG		
		Shanti	Jagelal	LL		
		Krishna Kumar	Awadesh Singh	LL		
		Sarvesh Singh	Sundar Singh	UG		
8	Ugabad	Rajeev Singh	Shivkaran Singh	Chairman	9792797034	
		Shivkumar Yadav	Ramlal	Secretary	9912564874	
		Ramsaneshi	Jagannath	LF		
		Birendra Pal	Ramlakhan	MF		
		Bishunath Yadav	Bindadeen Yadav	SF		
		Rani	Baijanath	LL		

Details of WC						
S.No.	**Name of Villages**	**Name of the member**	**Fathers/Husband's name**	**Category**	**Mobile number**	**Remarks**
1	**2**	**3**	**4**	**5**	**6**	**7**
		Mahadev	Sukhlal	SHG		
		Shivnandan		SHG		
		Raghunandan	Satyanarayan	UG		
		Vijay	Rambhajan Trivedi	UG		
9	Bakuliha	Ganesha devi	Nandkishor trivedi	Chairman	941080003	
		Birendr kumar	Kishan lal	Secretary	8423844477	
		Brmha Prashad	Jagali prashad	SHG		
		Ramesh	Brijlal	SHG		
		Nity Nand	Shankar lal	UG		
		Pradeep kumar	Ramesh 46handra	UG		
		Arun kumar	Jagdish	UG		
		Dayadevi	Ashok kumar	LL		
		Mahesha	Premlal	SHG		
		Chandresh kumar	Ramdulare	WDT		
10	SATANPUR	Ramlakhan	Radheylal	Chairman		
		Sushil Kumar	Ramkishor	Secretary		
		Ashok singh	Jagatpal	LL		
		Hariprashad	Shivbahadur	LL		
		Gurja Singh	Raghuraj Singh	SHG		
		Gudhana	Ramfal	SHG		
		Ramchandra	Maheshpal	UG		
		Sohan Shukla	Haripratap	UG		
		Bhupendra Singh	Rampratap Singh	UG		
		Rajesh kumar		WDT		
11	Mubarakpur (Maduri)	Sushila	Ramshankar	Chairman		
		Sandeep	Anchal Bihari	Secretary		
		Chandra Dutt	Raghuveer Tiwari	UG		
		Suman Shukla	Harishankar Shukla	UG		
		Sunita Kushwaha	Sunil kushwaha	SHG		
		Santram	Shivnath	LL		
		Jainarayan	Raghunath	LF		
		Dinesh kumar	Jageshwar Kushwaha	SF		
		Satish Kumar	Shyamlal	UG		
		Rajesh Kumar		WDT		
12	Ranipur	Rajeev Singh	Shivkaran Singh	Chairman		
		Virendra Singh	Jagdev Singh	Secretary		
		Shivkumar	Ramlal	UG		
		Laximina	Ramprakash	UG		
		foolmati	Ramkhelawan	SHG		
		Ramavati	Rambahadur	SHG		
		Putan	Batole	SHG		
		Bachan	Mahadev	LL		
		Manjudevi	Deshraj	LL		
		Rajesh kumar		WDT		

Details of WC						
S.No.	**Name of Villages**	**Name of the member**	**Fathers/Husband's name**	**Category**	**Mobile number**	**Remarks**
1	**2**	**3**	**4**	**5**	**6**	**7**
13	DEOPUR	Ramshree	Ramsudhar	Chairman	9452446973	
		Birendra kumar	Kishan lal	Secretary	7945676954	
		Ashadevi	Vishesar prashad	SHG		
		Baleshwar	Binda	UG		
		Rammanohar	Laxman	UG		
		Rakesh kumar	Shivkumar	LL		
		Beenadevi	Rajendra kumar	SHG		
		Guddidevi	Raju	SHG		
		Asha devi	Santosh kumar	SHG		
		Chandresh	Ramdulare	WDT		
14	CHAK GAJRAJ (BASAWANKHERA)	Ram naresh	Late tede prashad	Chairman	9451768116	
		Birendra kumar	Kishan lal	Secretary	8423844477	
		Krishna bihari	Kakenath	UG		
		Rajbahadur	Ramdas	SHG		
		Shivcharan	Gayadeen	SHG		
		Dayaram	Bachan	UG		
		Umashankar	Mahadev	UG		
		Rambabu	Baiju	LL		
		Manorama	Santosh kumar	SHG		
		Chandresh kumar	Late ramdulare	WDT		
15	Manpur (Deoli)	puspa singh	surendra vikram singh	Chairman	8423844477	
		birendra kumar	kishan lal	Secretary		
		narendra singh	pratap bahadur	ug		
		shrawan kumar	ram aashare	ll		
		madan pal singh	abhilash	lf		
		rani	dharmendra	shg		
		anil	sukhram	ug		
		manish	manbahadur	ug		
		devendra singh	manbahadur	lf		
		chandresh kumar	late ramdulare	wdt	8923960833	
16	kalupur	chote lal	nanku	Chairman	8171972166	
		balgovind	bhikari	Secretary	8738073710	
		jagdev	sheetal	sf		
		ramsajeevan	rambaran	ll		
		rampratap	ramkishun	ug		
		rambahadur	kalideen	ug		
		jiyalal	babulal	ll		
		shrawan kumar	mayaram	shg		
		Harkesh singh		WDT		
17	Ugabad(Matehna)	Rajeev Singh	Shivkaran Singh	Chairman	9792797034	
		Shivkumar Yadav	Ramlal	Secretary	9912564874	
		Ramsaneshi	Jagannath	LF		
		Birendra Pal	Ramlakhan	MF		

Details of WC						
S.No.	**Name of Villages**	**Name of the member**	**Fathers/Husband's name**	**Category**	**Mobile number**	**Remarks**
1	**2**	**3**	**4**	**5**	**6**	**7**
		Bishunath Yadav	Bindadeen Yadav	SF		
		Rani	Baijanath	LL		
		Mahadev	Sukhlal	SHG		
		Shivnandan		SHG		
		Raghunandan	Satyanarayan	UG		
		Vijay	Rambhajan Trivedi	UG		
18	DEOPUR (sakatpur)	Ramshree	Ramsudhar	Chairman	9452446973	
		Birendra kumar	Kishan lal	Secretary	7945676954	
		Ashadevi	Vishesar prashad	SHG		
		Baleshwar	Binda	UG		
		Rammanohar	Laxman	UG		
		Rakesh kumar	Shivkumar	LL		
		Beenadevi	Rajendra kumar	SHG		
		Guddidevi	Raju	SHG		
		Asha devi	Santosh kumar	SHG		
		Chandresh	Ramdulare	WDT		
19	haripur(Nihastha)	shambhu singh	rambahadur	Chairman	9565172446	
		Amlesh vikram singh	Krishna pal singh	Secretary		
		satana devi	bhagwandeen	shg		
		ajit singh	shyamlal	lf		
		awadesh singh	satya narayan	sf		
		ramesh kumar	rajaram	sf		
		mahendra	deshpati singh	sf		
		shyamsundar	Adhin	sf		
		Gendavati	shivkaran	shg		
		Krishna pal	Shankar	ug		
20	surajpur gumankhera	bindeswar Singh	Shivnarayan	Chairman		
		Rohit kumar	Hindpal	Secretary		
		Birendra singh	rambaran singh	sf		
		narendra kumar	sudarshan	sf		
		brijmohan Singh	harnaam singh	lf		
		jaswant singh	patipal singh	lf		
		shailendra singh	ram singh	sf		
		siya dulari	prahlad	shg		
21	Banaimau	Ramlakhan	Rampadarath	chairman	9839738043	
		Harinarayan tiwari	Bhagauti	secretary		
		asish	gopi	ll		
		bhola	ramkahli	ug		
		sonu	brijmoahan	sf		
		nahankadevi	chedu	shg		
		birendra kumar	chhanga lal	ug		
		harishchandra	satyanarayan	sf		
		shree krishna	baiju	lf		

Details of WC						
S.No.	**Name of Villages**	**Name of the member**	**Fathers/Husband's name**	**Category**	**Mobile number**	**Remarks**
1	**2**	**3**	**4**	**5**	**6**	**7**
22	deogaon	awadesh singh	ramsharan singh	chairman		
		durgesh bahadur singh	rambaksha singh	secretary		
		brijendra bahadur singh	budhha singh	**lf**		
		ramlal	cheetu	**sf**		
		dost mohammad	islam baksha	**ug**		
		nanhkau	bhagwandin	**sf**		
		santosh kumar	bhagwandin	**sf**		
		jan mohammad	imam baksha	**sf**		
		sehjad	bali	**ug**		
23	Lachhipur	Arun kumar singh	Rampratap singh	chairman	9919177109	
		Ranidevi	Shivshankar	secretary	8174922157	
		Chaturmukh	Gangaprashad	sf		
		Sheetaldin	sukhlal	sf		
		umashankar	kamal kishor	sf		
		raghvendra singh	rudra pratap	lf		
		ramlakhan	shiv singh	ug		
		jugul kishor	ramshankar	ug		
		ravishankar	kamal	ll		
		harkesh singh	Late Ranjit singh	WDT		
24	Nihastha	Bhagwandeen	kuir	chairman	9336007801	
		vinay kumar	sehdev singh	secretary	7080189221	
		ramnaresh	bahadur	sf		
		ramendra yadav	rameshwar	sf		
		ramkumar	panchi	ll		
		sitara	raghunath	shg		
		amita singh	ravichandra	shg		
		ramkumar	rameshwar	ug		
		mohit	lallan	sf		
		Harkesh singh	Late Ranjit singh	WDT		
25	Gahiri	Shivlal	Raghunandan	chairman	9984945966	
		Shivsahai	binda	secretary	8009078863	
		shivdulari	ramchandra	shg		
		ramkumar	bindadeen	MF		
		ramkumar	kailash	sf		
		shiv mohan	ramlal	sf		
		rameshwar	raghudin	ug		
		lallu	ramgulam	ll		
		govardhan	bachanu	SF		
		Harkesh singh	Late Ranjit singh	WDT		
26	kishunkhera	Arvind kumar	ramdas	chairman	9984526758	
		rajendra bahadur	laxmi narayan	secretary	9451868853	
		Lajjavati	Rajbahadur	shg		
		Rajesh	Ramratan	lf		
		ganochar	laxman	sf		
		pramod kumar	suresh kumar	sf		

Details of WC						
S.No.	**Name of Villages**	**Name of the member**	**Fathers/Husband's name**	**Category**	**Mobile number**	**Remarks**
1	**2**	**3**	**4**	**5**	**6**	**7**
		karbendra	sinnam	mf		
		dharmendra	rajkishor	sf		
		chhedilal	ramshankar	sf		
		seban	mahadev	ll		
27	Khanpur Khusti	Shivsaran	Girjashankar	Chairman	9198896626	
		Kamlesh Kumar	Ramkumar	Secretary	8869987170	
		Raghunath	Ramadhen	Smal Farmer		
		Dayaram	Pouran	Margenal farmer		
		Goverdhan	Raghunath	Landles		
		Parmeswar	Mangal	SHG		
		Reshma	W/O Vinodh Kumar	SHG		
		Shiya Dulari	W/O girjashanker	UG		
		Ramashre	Gajodhar	UG		
		Mahesh	Dayaram	UG		
28	Shewanpur	Yogenra singh	Ramkumar singh	Chairman		
		Ramakant	Babulal	Secretary		
		Harinath	Ramkumar	SF		
		Chandra kishor	Rampyaare	SF		
		Shivbahadur	Mahadev	LF		
		Rajesh	Mahanand	SF		
		Ramnaresh	Mahanand	SF		
		Ghaseete	Sukhlal	UG		
		Jaswant	Girdhari	UG		
		Shaanti devi	Mahadev	SHG		

3.24 Gram Panchayat wise area under different crops

Gram panchayat wise area (ha) under various crops of different season															
Sl. No.	**Name of Gram panchayat**	**Total area**	**Paddy**	**Pulses**	**Kharif**	**Wheat**	**Pulses**	**Oilseed**	**Maiz**	**Rabi**	**Zaid puls**	**Zaid oilseed**	**Zaid vegetable**	**Zaid**	**Total sown area**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
1	Bakuliha	310.63	60.72	40.48	101.19	67.46	50.6	40.48	43.85	202.39	13.49	16.87	3.37	33.73	337.31
2	Banai Mau	71.3	11.58	7.72	19.3	12.87	9.65	7.72	8.36	38.6	2.57	3.22	0.64	6.43	64.34
3	Banaimau	10.28	1.67	1.11	2.78	1.85	1.39	1.11	1.21	5.56	0.37	0.46	0.09	0.93	9.27
4	Bhitari	0.01	0	0	0	0	0	0	0	0.01	0	0	0	0	0.01
5	Chak Gajraj	141.84	3.93	2.62	6.56	4.37	3.28	2.62	2.84	13.12	0.87	1.09	0.22	2.19	21.86
6	Chikhari	30.29	4.92	3.28	8.2	5.47	4.1	3.28	3.55	16.4	1.09	1.37	0.27	2.73	27.33
7	Deogaon	68.96	0.86	0.58	1.44	0.96	0.72	0.58	0.62	2.88	0.19	0.24	0.05	0.48	4.8
8	Deogaon	104.87	17.03	11.35	28.39	18.92	14.19	11.35	12.3	56.77	3.78	4.73	0.95	9.46	94.62
9	Ekauni	12.24	1.99	1.33	3.32	2.21	1.66	1.33	1.44	6.63	0.44	0.55	0.11	1.11	11.05
10	Gahiri	20.46	3.32	2.22	5.54	3.69	2.77	2.22	2.4	11.08	0.74	0.92	0.18	1.85	18.46
11	Haripur Nihastha	20.12	3.27	2.18	5.45	3.63	2.72	2.18	2.36	10.9	0.73	0.91	0.18	1.82	18.16
12	Haripur Nihastha	3.26	0.53	0.35	0.88	0.59	0.44	0.35	0.38	1.76	0.12	0.15	0.03	0.29	2.94
13	Jagatpur Ramgari	212.93	34.59	23.06	57.65	38.43	28.82	23.06	24.98	115.29	7.69	9.61	1.92	19.22	192.15
14	Kalupur	47.09	7.65	5.1	12.75	8.5	6.38	5.1	5.53	25.5	1.7	2.13	0.43	4.25	42.5
15	Khanpur khunti	34.69	5.63	3.76	9.39	6.26	4.7	3.76	4.07	18.78	1.25	1.57	0.31	3.13	31.3
16	Khiron	0.02	0	0	0.01	0	0	0	0	0.01	0	0	0	0	0.02
17	Lacchipur	8.38	13.51	9	22.51	15.01	11.26	9	9.76	45.02	3	3.75	0.75	7.5	75.04
18	Lakshipur	207.72	33.86	22.58	56.44	37.63	28.22	22.58	24.46	112.88	7.53	9.41	1.88	18.81	188.13
19	Maduri	21.99	3.57	2.38	5.96	3.97	2.98	2.38	2.58	11.91	0.79	0.99	0.2	1.99	19.85
20	Manpur	55.43	12.68	8.45	21.13	14.08	10.56	8.45	9.15	42.25	2.82	3.52	0.7	7.04	70.42
21	Matehna	6.9	1.12	0.75	1.87	1.25	0.93	0.75	0.81	3.74	0.25	0.31	0.06	0.62	6.23
22	Mathena	19.91	3.23	2.16	5.39	3.59	2.69	2.16	2.33	10.78	0.72	0.9	0.18	1.8	17.96
23	Merui	158.03	25.67	17.11	42.78	28.52	21.39	17.11	18.54	85.56	5.7	7.13	1.43	14.26	142.6

Gram panchayat wise area (ha) under various crops of different season															
Sl. No.	**Name of Gram panchayat**	**Total area**	**Paddy**	**Pulses**	**Kharif**	**Wheat**	**Pulses**	**Oilseed**	**Maiz**	**Rabi**	**Zaid puls**	**Zaid oilseed**	**Zaid vegetable**	**Zaid**	**Total sown area**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**
24	Mirjapur	7.73	1.25	0.84	2.09	1.39	1.05	0.84	0.91	4.18	0.28	0.35	0.07	0.7	6.97
25	Nihastha	229.62	37.29	24.86	62.16	41.44	31.08	24.86	26.93	124.31	8.29	10.36	2.07	20.72	207.19
26	Nihastha	4.49	0.73	0.49	1.22	0.81	0.61	0.49	0.53	2.43	0.16	0.2	0.04	0.41	4.05
27	Raipur	56.95	9.25	6.17	15.42	10.28	7.71	6.17	6.68	30.84	2.06	2.57	0.51	5.14	51.4
28	Rampur	111.33	18.08	12.05	30.14	20.09	15.07	12.05	13.06	60.27	4.02	5.02	1	10.05	100.45
29	Ramwapur Dubai	203.47	42.37	28.25	70.62	47.08	35.31	28.25	30.6	141.24	9.42	11.77	2.35	23.54	235.4
30	Ramwapur dubai	6.82	1.11	0.74	1.85	1.23	0.92	0.74	0.8	3.69	0.25	0.31	0.06	0.62	6.15
31	Sakatpur	34.05	8.65	5.76	14.41	9.61	7.21	5.76	6.25	28.82	1.92	2.4	0.48	4.8	48.04
32	Satanpur	236.56	38.43	25.62	64.05	42.7	32.02	25.62	27.75	128.09	8.54	10.67	2.13	21.35	213.49
33	Satanpur	46.84	7.61	5.07	12.68	8.45	6.34	5.07	5.49	25.36	1.69	2.11	0.42	4.23	42.26
34	Sembasi	21.6	3.54	2.36	5.9	3.94	2.95	2.36	2.56	11.81	0.79	0.98	0.2	1.97	19.68
35	Semri	503.5	72.86	48.58	121.44	80.96	60.72	48.58	52.62	242.88	16.19	20.24	4.05	40.48	404.8
36	Sewanpur	145.13	23.57	15.71	39.29	26.19	19.64	15.71	17.02	78.57	5.24	6.55	1.31	13.1	130.95
37	Surajpur Guman Khera	14.77	2.4	1.6	4	2.67	2	1.6	1.73	8	0.53	0.67	0.13	1.33	13.33
38	Surajpur gumankhera	65.47	10.63	7.09	17.72	11.81	8.86	7.09	7.68	35.44	2.36	2.95	0.59	5.91	59.07
39	Uga Bhad	93.82	15.24	10.16	25.4	16.93	12.7	10.16	11.01	50.8	3.39	4.23	0.85	8.47	84.67
	Total	**3349.5**	**544.34**	**362.92**	**907.32**	**604.84**	**453.64**	**362.92**	**393.14**	**1814.55**	**120.97**	**151.21**	**30.21**	**302.46**	**3024.25**

3.25 Existing Engineering Works

The details of existing engineering works are given below. Field bunding and contour bunding are mostly noticed in the area.

S.N.	Name of Gram Panchayat	No. Of Plots	Number/length/Area		
			Area (ha)	Field bunding with 30 cm height	Length (m)
1.	Deogaon	187	33.19	88	16366.7
2.	Manpur	71	9.9	79	5615.8
3.	Haripur Nihastha	352	75.64	99	34889.84
4.	Kalupur	422	73.57	87	36819.63
5.	Surajpur gumankhera	84	31.21	127	10661.79
6.	Lakshipur	787	249.49	129	101354.6
7.	Ramwapur dubai	297	71.85	103	30474.46
8.	Khanpur khunti	260	32.43	71	18481.64
9.	Khiron	2486	738.99	114	283593
10.	Sewanpur	150	28.21	93	13963.74
11.	Mirjapur	130	29.32	101	13122.44
12.	Banai Mau	49	8.03	76	3738.73
13.	Jagatpur Ramgari	6	1.2	90	542.48
14.	Nihastha	139	38.97	117	16258.55
15.	Rampur	741	223.21	123	90972.56
16.	Satanpur	235	77.37	127	29810.93
17.	Raipur	3	0.09	44	132.47
18.	Ekauni	1	1.99	325	325.15
19.	Uga Bhad	370	83.8	99	36668.83
20.	Merui	151	45.57	126	18993.51
21.	Sembasi	70	19.7	108	7587.18
22.	Matehna	285	85.18	116	32946.7
23.	Maduri	18	4.51	101	1813.08
24.	Gahiri	115	13.2	70	7995.94
25.	Bakuliha	81	21.93	103	8340.58
26.	Bhitari	399	104.93	106	42473.71
27.	Sakatpur	549	176.47	120	65621.5

S.N.	Name of Gram Panchayat	No. Of Plots	Number/length/Area		
			Area (ha)	Field bunding with 30 cm height	Length (m)
28.	Semri	546	145.49	109	59350.9
29.	Chak Gajraj	13	1.31	57	740.34
	Total	**8997**	**2426.75**	**3108**	**989656.8**

3.26 Details of Common Property Resources (CPR)

Details of common property are provided below. There is most used for fuel wood and fodder. There is no management followed in these areas**.** (Data not Available)

3.27 Existing package of practices of crops

Existing package of practices of crops is given in the following table.

Crop	Variety	Seed rate (Kg/ha)	Line sowing/ broadcasting	NPK Rate (Kg/ha)	FYM (Kg/ha)	Plant protection		Yield (Kg/ha)	
						Chemical	Biological	Grain	By product
Paddy	Sarju-52, Saket, Shakkar cheeni, Lalmati	50	Transplantation	50:60:0	Nil	√	Nil	2500	1500
Maize	Tarun	35	broadcasting	60:60:0	Nil	Nil	Nil	3000	1000
Bajara	Varsa	5	broadcasting	40:40:0	Nil	Nil	Nil	800	2500
Black gram	Pantu-30, T-9	20	broadcasting	20:20:0	Nil	Nil	Nil	500	500
Green gram	PDM-54, PDM-11	20	broadcasting	20:20:0	Nil	Nil	Nil	400	500
Pigeon pea	Local	20	broadcasting	20:20:0	Nil	Nil	Nil	1000	4000
Wheat	PBW-343, Lok-1, Malvia-234	150	broadcasting	60:60:0	Nil	Nil	Nil	2500	2500
Lintel	T-36	20	broadcasting	15:20:0	Nil	Nil	Nil	700	700
Mustard	Kranti, Vardan	5	broadcasting	40:40:0	Nil	√	Nil	700	1000
Pea	Arkle, P-3	75	broadcasting	30:20:0	Nil	√	Nil	1200	1500
Potato	Chipsona, Kufari Bahar, Kufari Badshah	2500	Line sowing	80:60:0	5000 Kg	√	Nil	10000	Nil
Onion	Local	5	Line sowing	60:60:0	Nil	√	Nil	5000	Nil

3.28 Existing crop rotation

Village	Existing crop rotation
Deo Gaon, Ketanpur, Dewali, Haripur Nihastha, Shyampur, Kalupur, Majhigawan, Mishra Khera, Khandepur, Surajpur Guman Khera, Lacchipur, Ramwapur Dubai, Udwatpur, Kesauli, Khiron, Sewanpur, Kisun Kheda	1. Rice-Wheat/ Urd/Moong/Maize/Bajra/Sorghum/ Toria/ Muatard 2. Rice-Vegetable 3. Vegetable-Wheat/ Urd/Moong/Maize/Bajra/Sorghum/ Toria/ Mustard
Banai Mau, Chikhari, Jagatpur Ramgari, Haripur Nihastha,Surajpur Guman Khera, Sewanpur.	
Bari, Chikhari, Fatte Sarai, Jagatpur Ramgari, Nihastha, Ranipur, Satanpur, Sehara Mau, Raipur.	
Bari, Raipur, Ekauni, Kodra, Uga Bhad, Ranipur, Merui.	
Fatte Sarai, Khanpur Khapura, Maduri, Mubarakpur, Satanpur, Uga Bhad, Ranipur.	
Fatte Sarai, Saimbasi, Gahiri, Jagatpur Ramgari, Nihastha, Rampur Nihastha, Satanpur, Matehana.	
Bakuliha, Bhitari, Deopur, Ramwapur Dubai, Semri.	
Bakuliha, Baswan Khera, Chak Gajraj, Chakpher Shah, Deopur, Dewali , Ketanpur, Lacchipur, Ramwapur Dubai, Semri.	
Baswan Khera, Ramwapur Dubai, Semri.	

3.29 Existing package of practices of orchard

Package of practices of existing orchard is provided in following table.

Crop	Species	Plants per ha	Spacing (m*m)	NPK (Kg/plant)	FYM (Kg/plant)	Plant protection		Yield	
						Chemical	Biological	(Kg/ plant)	(Kg/ha)
1	2	3	4	5	6	7	8	9	10
Mango	Dusehari, Chausa, Lucknow-Safeda, Langra, Husanara, Malika, Amarpali, Bombay Green(Malda), Jauhari	100	10*10	60-100(N), 100-250(P), 50-150 (K)	10-20	Spray gramaxone @6 ml/l, Spray glyphoset@ 10 ml/l	Weeding and hoeing	50	5000
Guava	Lucknow -49(Sardar), Lalit, Allahabad Safeda, Red Fleshed, Seedless,	196	7*7	40-120(N), 100-300(P), 40-120(K)	10-20	Spray gramaxone @6 ml/l, Spray glyphoset@ 10 ml/l	Weeding and hoeing	40	7840
Lemon	Kalmi, Deshi	-	-	-	-	-	-	-	-
Aonla	Kalmi, Deshi	-	-	-	-	-	-	-	-
Jamun	-	-	-	-	-	-	-	-	-
Ber	Deshi	-	-	-	-	-	-	-	-
Bel	Deshi	-	-	-	-	-	-	-	-
Custard apple	Deshi	-	-	-	-	-	-	-	-

3.30 Livestock population

There are about 5924 cows, 8081 buffalos, 961 bullocks, and 10605 goats, 3207 Sheep, 11503 Polutry and 848 Other in the watershed. It appears that the people are most skilled in dairy and live stock.

S.N.	Name of Gram Panchayat	Buffalo	Cow	Bullock	Goat	Sheep	Poultry	Others (please specify) (PIG)
1	2	3	4	5	6	7	8	9
1.	Bakuliha	649	377	50	923	254	990	87
2.	Banai Mau	321	214	27	450	0	460	42
3.	Banaimau	65	93	13	102	90	100	0
4.	Bhitari	637	350	45	476	297	530	54
5.	Chak Gajraj	70	18	4	96	0	40	0
6.	Chikhari	122	95	12	259	0	155	0
7.	Deogaon	191	108	23	157	78	312	28
8.	Deogaon	426	201	40	577	0		0
9.	Ekauni	337	205	33	442	0	337	0
10.	Gahiri	213	162	32	405	0	192	0
11.	Haripur Nihastha	258	213	29	325	179	215	34
12.	Haripur Nihastha	167	49	7	282	0	600	0
13.	Jagatpur Ramgari	223	233	35	283	252	141	12
14.	Kalupur	122	49	7	268	232	200	50
15.	Khanpur khunti	281	237	32	329	0	75	0
16.	Khiron	65	49	7	193	0	100	0
17.	Lacchipur	278	144	22	442	0	3200	45
18.	Lakshipur	285	232	73	369	339	343	74
19.	Maduri	335	204	28	442	0	337	0
20.	Manpur	68	16	14	92	0	35	0
21.	Matehna	270	317	46	339	50	277	26
22.	Mathena	258	213	33	325	179	215	54
23.	Merui	103	108	17	267	142	200	22
24.	Mirjapur	65	93	9	102	90	100	0
25.	Nihastha	159	155	34	181	168	100	26
26.	Nihastha	298	166	29	209	40	212	0

S.N.	Name of Gram Panchayat	Buffalo	Cow	Bullock	Goat	Sheep	Poultry	Others (please specify) (PIG)
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
27.	Raipur	116	53	5	23	0	15	16
28.	Rampur	44	27	7	25	0	25	0
29.	Ramwapur Dubai	185	150	19	242	145	187	0
30.	Ramwapur dubai	367	263	34	428	0	384	41
31.	Sakatpur	72	73	7	166	142	60	32
32.	Satanpur	179	176	52	258	0	185	50
33.	Satanpur	185	150	17	242	254	187	0
34.	Sembasi	120	73	7	120	0	150	41
35.	Semri	99	135	18	135	0	106	30
36.	Sewanpur	242	213	31	309	234	387	22
37.	Surajpur Guman Khera	57	63	8	67	0	200	0
38.	Surajpur gumankhera	99	135	40	135	0	106	30
39.	Uga Bhad	50	112	15	120	42	45	32
	Total	**8081**	**5924**	**961**	**10605**	**3207**	**11503**	**848**

3.31 Average productivity of field crop /animal

Crop	Present Yield (Kg/ha)	
	Grain	By product
Paddy	2500	2500
Maize	3000	2000
Bajra	800	2500
Black gram	500	500
Green gram	400	500
Pigeon pea	1000	4000
Wheat	2500	2500
Lintel	700	700
Mustard	700	1000
Pea	1200	1500
Potato	10000	Nil
Onion	5000	Nil
Fodder	-	80000

3.32 Animal productivity

Animal productivity is given in the following table.

Animal	Breed	Average weight (kg)	Milk yield (Litre/day)	Meat (Kg/ animal)	Egg per year	Fodder/Concentrate		
						Stall feeding / open grazing	Source of fresh fodder	Concentrate
Buffalo	210	300-350	2.50	-	-	3.5 kg fodder, 8kg Barseem, 4.6kg saeleg, 1.5kg jowar, 2kg khali, 5kg bone, 5kg salt	Farmer Field	-
Cow	180	200-250	1.50	-	-	3.5 kg fodder, 8kg Barseem, 4.6kg saeleg, 1.5kg jowar, 2kg khali, 5kg bone, 5kg salt	Farmer Field	-
Bullock	-	250-350	-	-	-	3.5 kg fodder, 8kg Barseem, 4.6kg saeleg, 1.5kg jowar, 2kg khali, 5kg bone, 5kg salt	Farmer Field	-
Goat	-	10-15	-	7 – 10	-	1 kg whole grain, 1kg pelleted grain	Farmer Field -	-
Sheep	-	-	-		-	-	-	-
Pig	-	30-35	-	25 – 30	-	-	Farmer Field -	-
Poultry	-	2-3		2 – 3	250	-	Farmer Field -	-
Duck	-	-	-	-	-	-	-	-
Fish	-	-	-	-	-	-	-	-

3.33 Existing Avenue trees in the gram panchayat

The exiting trees under various gram panchayat (per 500 km) are provided in following table.

Sl. No.	Name of Gram Panchayat	Along with River Side	Along with Perennial Stream	Along with Seasonal Stream	Along with Canal	Along Road Side	Total
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**
1	Bakuliha			6	20	45	71
2	Banai Mau	3		2	0	6	11
3	Banaimau				2	8	10
4	Bhitari		2	0	4	14	20
5	Chak Gajraj			0	0	12	12
6	Chikhari			2	0	9	11
7	Deogaon	5		1	0	28	29
8	Deogaon			1	0	35	36
9	Ekauni			0	6	20	26
10	Gahiri			0	25	10	35
11	Haripur Nihastha			4	10	15	29
12	Haripur Nihastha	8		10	0	25	43
13	Jagatpur Ramgari			4	5	18	27
14	Kalupur			5	0	6	11
15	Khanpur khunti	5		0	4	14	18
16	Khiron			7	2	0	9
17	Lacchipur			0	8	10	18
18	Lakshipur			3	5	50	58
19	Maduri	6		0	0	15	15
20	Manpur			2	0	5	7
21	Matehna			6	0	10	16
22	Mathena	4	8	5	0	18	35
23	Merui			2	0	12	14
24	Mirjapur			5	0	8	13
25	Nihastha			3	6	10	19
26	Nihastha	4		0	0	9	9
27	Raipur			5	3	11	19
28	Rampur			4	0	5	9
29	Ramwapur Dubai			3	0	8	11
30	Ramwapur dubai	5		5	7	10	27
31	Sakatpur			0	8	25	33
32	Satanpur		5	3	0	65	73
33	Satanpur			4	7	20	31
34	Sembasi			5	8	10	23
35	Semri	3		0	6	15	24
36	Sewanpur			18	0	16	34
37	Surajpur Guman Khera		4		15	8	27
38	Surajpur gumankhera			10	35	25	70
39	Uga Bhad	4	2	6	12	10	15
	Total	**24**	**21**	**131**	**198**	**640**	**998**

3.34 Existing grasses in the gram panchayat

Grasses exiting in the gram panchayat is given Below.					
Grass/herbs	**Purpose**	**Location**	**Used for open grazing**	**Cut and carry**	**Yield (Kg per year per ha)**
Doob	Animal Feed	All fields	Yes	Yes	1000
Tithali	Animal Feed	Pond side	no	Yes	500
Bhat kataiya	-	Bank of River	no	Yes	500
Motha	Animal Feed	All fields	no	Yes	800
Muraina	Animal Feed	Bank of River	no	Yes	1000
Gung	Animal Feed	Bank of River	no	Yes	1000
Bhadbhand	-	Bank of River	no	Yes	1000

3.35 Status of existing farm machinery and equipments

S.N.	Name of Gram Panchayat	Remarks (Individual/hiring basis)							
		Tractor	Plough	Harrow	Cultivator	Leveler	Sprayer	Seed drill	Thrasher
1	2	3	4	5	6	7	8	9	10
1.	Bakuliha	11	5	5	12	3	10		7
2.	Banai Mau	10	3	3	10	3	7		4
3.	Banaimau	4	2	1	2	1	3		2
4.	Bhitari	11	5	10	11	2	9		4
5.	Chak Gajraj	3	1	1	1	0	1		1
6.	Chikhari	9	1	3	9	1	2		4
7.	Deogaon	17	6	5	17	3	11	1	7
8.	Deogaon	14	10	4	14	2	20		6
9.	Ekauni	10	6	3	10	2	12		4
10.	Gahiri	12	8	4	12	2	16		5
11.	Haripur Nihastha	5	4	2	2	1	7		2
12.	Haripur Nihastha	2	1	1	1	0	1		1
13.	Jagatpur Ramgari	11	6	3	11	2	12		4
14.	Kalupur	2	1	1	1	0	1		1
15.	Khanpur khunti	9	4	3	9	1	9		4
16.	Khiron	4	1	1	2	1	2		2
17.	Lacchipur	11	4	3	11	2	8		4
18.	Lakshipur	18	25	5	18	3	50	1	7
19.	Maduri	7	4	2	7	1	7		3
20.	Manpur	5	6	2	5	1	11		2
21.	Matehna	9	7	3	9	1	15		4
22.	Mathena	11	6	3	11	2	11		4
23.	Merui	7	3	2	3	1	5		3
24.	Mirjapur	0	0	0	0	0	0		0
25.	Nihastha	21	9	6	21	3	19	1	8
26.	Nihastha	17	6	5	17	3	13		7
27.	Raipur	0	0	0	0	0	0		0
28.	Rampur	6	2	2	3	1	4		2
29.	Ramwapur Dubai	5	2	2	5	1	5		2
30.	Ramwapur dubai	13	4	4	13	2	8		5
31.	Sakatpur	0	0	0	0	0	0		0
32.	Satanpur	12	17	4	12	2	35	1	5
33.	Satanpur	2	1	1	1	0	1		1
34.	Sembasi	0	0	0	0	0	0		0
35.	Semri	5	2	2	2	1	4		2

S.N.	Name of Gram Panchayat	Remarks (Individual/hiring basis)							
		Tractor	Plough	Harrow	Cultivator	Leveler	Sprayer	Seed drill	Thrasher
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
36.	Sewanpur	8	5	2	8	1	9		3
37.	Surajpur Guman Khera	3	1	1	1	0	2		1
38.	Surajpur gumankhera	18	13	5	18	3	27	1	7
39.	Uga Bhad	15	6	8	15	4	12	1	3
	Total	**327**	**187**	**112**	**304**	**56**	**369**	**6**	**131**

3.36 Bench marking of project area

The information on soil health, water resources, land and agriculture etc is given in the following table.

Benchmarking of the Project																			
Sl. No.	**Indicator/ Sub Indicator**	**Lachipur**		**Nihasta**		**Chikari**		**Merui**		**Satanpur**		**Saimbasi**		**Semari**		**Bakuliha**		**Ramwapur Dubai**	
		Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
A	**Soil health**																		
1	Soil organic carbon	0.15	0.55	0.12	0.13	0.11	0.12	0.1	0.12	0.13	0.135	0.12	0.13	0.15	0.55	0.12	0.13	0.1	0.12
2	Available N kg/ha	250	255	234	240	243	245	245	250	250	255	270	273	250	255	234	240	245	250
3	Available P kg/ha	5	5.2	6.2	6.3	4.5	5	5.2	5.24	4.6	4.65	4.3	4.4	5	5.2	6.2	6.3	5.2	5.24
4	Available K kg/ha	138		134		140.3		143		150		145		138		134		143	
5	Soil Erosion (Silt Load G/1000ml runoff)	1.5.0	1.4	NA		NA		2.9	2.5	3.87	2.9	3.98	2.8	1.5.0	1.4	NA		2.9	2.5
B	**Runoff/water status**																		
1	Stream Flow at 0.8 d , cum / sec (current meter)	0.35	0.32	NA		NA		0.38	0.035	0.35	0.32	0.45	0.4	0.35	0.32	NA		0.38	0.035
2	Ground water level M before rainy season	10m	8m	9m	7m	8m	6m	14m	12m	12m	10m	8m	6m	10m	8m	9m	7m	14m	12m
3	Ground water level M after rainy season	11m	9m	10m	7m	7m	5m	15m	13m	13m	11m	8m	6m	11m	9m	10m	7m	15m	13m
4	Status of water body																		
4.1	Spread area in ha	-		-		-		3.745	4.5	0.114	0.5	-		-		-		3.745	4.5
4.2	Rejuvenation																		
4.3	No.of waterbody																		
C	**Water availability**																		
1	Drinking water availabity	Sufficient		Sufficient		Sufficient		Sufficient		Sufficient		Sufficient		Sufficient		Sufficient		Sufficient	
2	Soil moisture content																		
D	**Vegetation**																		
1	Tree cover%	23	30	20	30	20	30	21	30	20	30	18	25	23	30	20	30	21	30
2	Survival of number of plant	50	60	45	55	48	60	45	55	40	60	40	60	50	60	45	55	45	55
3	% family cultivating Ago forestry/Horticulture	20	25	18	23	18	23	15	20	15	20	14	20	20	25	18	23	15	20
4	Species richness(diversity)	Mango	Mango +Bel	Mango	Mango +Bel	Mango	Mango +Bel	Mango	Mango +Bel	Mango	Mango +Bel	Mango	Mango +Bel	Mango	Mango +Bel	Mango	Mango +Bel	Mango	Mango +Bel
E	**Land and agriculture**																		
1	Fallow/waste land	96.96 ha		98.04 ha		48.83 ha		37.39 ha		22.77 ha		8.09 ha		96.96 ha		98.04 ha		37.39 ha	
2	crop Diversification index	0.75	0.9	0.7	0.9	0.6	0.9	0.56	0.9	0.65	0.8	0.5	0.8	0.75	0.9	0.7	0.9	0.56	0.9

Benchmarking of the Project																			
Sl. No.	**Indicator/ Sub Indicator**	**Lachipur**		**Nihasta**		**Chikari**		**Merui**		**Satanpur**		**Saimbasi**		**Semari**		**Bakuliha**		**Ramwapur Dubai**	
		Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed	Existing	Proposed
3	Area coverage under HYV(%)	6	10	6	10	6	10	6	10	6	10	6	10	6	10	6	10	6	10
4	Irrigation (%)	221.75		516		362.93		322.92		131.64		214.47		221.75		516		322.92	
5	Area covered under micro irrigation	0	10	0	12	0	10	0	15	0	15	0	15	0	10	0	12	0	15
6	Demonstration of new technology(ha)	1	10	0.5	10	0.75	10	1.5	10	0	10	0.5	10	1	10	0.5	10	1.5	10
7	Adoption of INM/IPM/IDM	0.5		0		0.5		1		0		0		0.5		0		1	
F	**Crop productivity(grain kg/ha)**																		
1	Paddy	2500	3000	2500	3000	2500	3000	2500	3000	2500	3000	2500	3000	2500	3000	2500	3000	2500	3000
2	Maiz	3000	3600	3000	3600	3000	3600	3000	3600	3000	3600	3000	3600	3000	3600	3000	3600	3000	3600
3	Bajara	800	960	800	960	800	960	800	960	800	960	800	960	800	960	800	960	800	960
4	Black gram	500	600	500	600	500	600	500	600	500	600	500	600	500	600	500	600	500	600
5	Green gram	400	480	400	480	400	480	400	480	400	480	400	480	400	480	400	480	400	480
6		1000	1200	1000	1200	1000	1200	1000	1200	1000	1200	1000	1200	1000	1200	1000	1200	1000	1200
7	Pigeon pea	2500	3000	2500	3000	2500	3000	2500	3000	2500	3000	2500	3000	2500	3000	2500	3000	2500	3000
8	Wheat		0		0		0		0		0		0		0		0		0
9	Lintel	700	840	700	840	700	840	700	840	700	840	700	840	700	840	700	840	700	840
10	Mustard	700	840	700	840	700	840	700	840	700	840	700	840	700	840	700	840	700	840
11	Pea	1200	1440	1200	1440	1200	1440	1200	1440	1200	1440	1200	1440	1200	1440	1200	1440	1200	1440
12	Potato	10000	12000	10000	12000	10000	12000	10000	12000	10000	12000	10000	12000	10000	12000	10000	12000	10000	12000
13	Onion	5000	6000	5000	6000	5000	6000	5000	6000	5000	6000	5000	6000	5000	6000	5000	6000	5000	6000
14	fodder green	80000	10000	80000	10000	80000	10000	80000	10000	80000	10000	80000	10000	80000	10000	80000	10000	80000	10000
15	buffalow milk /Lactation	1200	1440	1200	1440	1200	1440	1200	1440	1200	1440	1200	1440	1200	1440	1200	1440	1200	1440
16	Cow milk/ Lactation	1350	1620	1350	1620	1350	1620	1350	1620	1350	1620	1350	1620	1350	1620	1350	1620	1350	1620
17	Goat milk/ Lactation	150	180	150	180	150	180	150	180	150	180	150	180	150	180	150	180	150	180

Chapter 4: The problems and need of the area

4.1 Crop productivity/soil and land degradation, soil and water conservation problems

At present, the condition of the life of the people living in villages is gloomy. The problems of the villagers are many and varied. A lower productivity of main crops in most areas of the watershed, lack of diversification in agriculture from low value to high value crops, inadequate and inefficient infrastructure for development in rural areas and lesser employment generation in the other more remunerative sectors of the economy. Unless the development process in the state addresses these basic reasons in a satisfactory manner, the growth in agriculture and for that matter, in the economy as a whole will not pick up to the desirable level nor will the burden of population on agriculture for its livelihood reduce. There are several other factors, which require immediate consideration such as the consistent increases in the number and area of uneconomic and non-viable agricultural operational holdings, inadequate and inefficient irrigation network, inadequate development of rural infrastructure, more particularly of roads and lack of proper and adequate marketing and storage facilities with little contribution from agro-processing units.

About 62% people in the watershed are literate. 72% male and 52% female are literate. In comparison, females are less educated in number than males. Mass education should be spread by establishing more primary and secondary schools. It must be made both compulsory and free for the females and the males as well, so to improve the economic condition of the watershed. The economic condition of the people is not very encouraging as about 25% family of the watershed is landless, hence their livelihood depends upon the occasional employment they get in agriculture sector or they migrate to the nearby city for day to day labour work, agriculture should be modernized, to get more benefit and profit in the agricultural sector. Vegetable and fruits preservation techniques need to be taught for the future use. Villagers should be educated regarding elementary hygiene and scientific method of cultivation, as to get healthy results of crop.

The family size in the villages ranged from six to eight with at least four children in most of the households. This holds true for all castes and religions. The high population growth rate has translated into a high rate of unemployment. The family planning programmes implemented through the public health centers (PHCs) and serviced by the ANMs are reported to be working well. However, these services need to be improved

Females of the watershed are mostly engaged in flower gardening(nursery) and kitchen gardening, as there is a high growth of and vegetables, flowers like different varieties of rose, gladiolus, marigold etc, and vegetables like red and green chilly cultivation and spices, Aonla and Ber orchards in sodic lands, inter-cropping of turmeric as well as ginger and there are also established mango and other orchards. The status of women in general is appalling in the watershed. They are the largest labour force inside and outside the family. The macro-level figures of literacy levels among the men and women show disparity. Mass education should be spread by establishing more primary and secondary schools. It must be made both compulsory and free for the females and the males as well, so to improve the economic condition of the watershed.

The watershed has average water table of 14.50 m. There are about 58 defunct wells, which are no longer functioning in the Khiron watershed. Excessive ground water abstraction in some areas has resulted in alarming depletion of ground water level which results in defunct wells. It is the major problem of the watershed. With a view to improve the ground

water potential it is necessary to artificially recharge the ground water aquifers. The tube wells that become defunct, for that the restoration is very viable, such defunct tube wells can be very easily be used for replenishment of ground water storage through artificial recharge. This technique is easy and also sustainable in the long term and can be adopted with locally available materials. This technique depends on various hydro geological conditions, which proves to be fruitful for the watershed.

Every Watershed should have a hospital or a primary health centre for providing medical aids to the villagers. Rural banking should be set up for financial assistance to the village people. A good network of roads is the first and foremost requirement for development. It not only makes it easier to transport goods and services but also saves on time as well as costs. Moreover, it facilitates the flow of information and knowledge. The construction of rural roads and programmes of village connectivity have received considerable attention in the past few years in the state.

4.2 Socio-economical problems and gaps

Income generation, economic growth and environmental security were identified as the major issues to be addressed in the watershed area. People in the village depend mostly on agriculture and it is a big gamble because weather plays a crucial role here. After months of hard work, when the crop is ready to be harvested, untimely rains just damage the yield which leads to huge losses. Agriculture being a labour intensive job, people spends so much of time in the fields yet it ends up giving negligible returns at times. The village needs to have co-operative societies and government assistance to regulate buying and selling of agricultural produce. Most of the farmers go to the nearby town to sell their products at throw away prices and later small shops from this village buy it from those traders, who sell it at much higher prices. So ironically people in the village end up paying more for their own produce. So it is becoming very important to find an alternate and steady income. As the females of the watershed are good at flower and kitchen gardening, there is a good market for such products, in nearby urbanized areas of the watershed like Lucknow and Allahabad, the products like pickle which are not readily available in the market in very good quality. There is also a great need of flowers, as these are in trend, it may be used for parties, functions, funeral purposes etc. So, if the females of watershed are encouraged , there is a easy and regular supply of such products to the nearby cities which will generate good revenues for these women Watershed should have a hospital or a primary health centre for providing medical aids to the villagers. About 25% people of watershed are landless and have a good skill for dairy and livestock production. It is observed that dairy and live stock production can be expected from the landless people. Bank loan needs to be arranged to these people for developing dairy and livestock production like goat rearing and poultry farming. A good network of roads is the first and foremost requirement for development. It not only makes it easier to transport goods and services but also saves on time as well as costs. Moreover, it facilitates the flow of information and knowledge. The construction of rural roads and programmes of village connectivity have received considerable attention in the past few years in the state. Rural banking should be set up for financial assistance to the village people. Drinking water to the SC people is also a problem therefore; hand pump needs to be installed in the area through other state/central govt. programmes under convergence. All the drains in the watershed need de-silting and cleaning so as to drain the run-off water efficiently to the Sai River. Few troughs also need to be constructed near a water source to provide fresh water to the animals.

4.2.1 Details of SWOT Analysis

Details of Strength, Weakness, Opportunities and Threats (SWOT) are given below.

Parameter	Strengths	Weaknesses	Opportunities	Threats
Community	1. Women's active involvement in farm related activities, Flower gardening and kitchen gardening. 2. Household is significant feature and women are involved in most of the operation in agriculture including subsidiary enterprises like dairy and poultry etc. 3. Most of the women farmers irrespective of their category are hard working in the farm activities and have excellent knowledge of agriculture.	1. Lack exposure of knowledge of banking and credit cooperatives. 2. Women do not have much say on policy issues of the activities. 3. Limitation of technically trained female extension workers. 4. Female workers do not impart knowledge on household activities, child care, nutrition etc. 5. Unequal wages between male and female workers. 6. Role of women in the watershed programme is not specified.	1. Making of self help groups with small savings and provision of loans by revolving fund on small enterprises related to the agriculture. 2. Awareness among the women to improve their skill and knowledge of micro-watershed based development programme. 3. Watershed development team has technical women to train women of watershed and availability of some voluntary organizations for the purpose. 4. More and more women are coming forward to carry out development work in micro- watershed. 5. Women's potential and capabilities have not been exploited due to lack of specific growth opportunities	1. Change in social functioning and relationship. 2. Male farmers may not provide opportunities to farm women for more rights.
Physical infrastructure	1. Good network of road 2. Electrified village 3. Primary and Secondary School building	1. Lack of sufficient road side plantation. 2. Insufficient electricity supply.	1. Plants are available in nearby nurseries.	1. Unauthorized forest dwelling.
Facility	1. Availability of school, Angan Wadi Centres (AWC), hospital and drinking water. 2. Fair educational status of the villagers	1. Poor animal health facilities.	1. Market opportunity due to neariness of Lucknow city.	1. Quality control and adulteration.

Parameter	Strengths	Weaknesses	Opportunities	Threats
Technology	1. Farmers know the concept of cash crops 2. Villagers know the importance of natural resource 3. Project area has number of institutions under Central/ State Govt. viz. ICAR, CSIR, SIRD, SAU's Agriculture college, and Technical university etc to backup the development programmes.	1. No significant efforts have been made to generate women specific and women friendly farm technologies. 2. Technical knowhow is low. 3. Communication gap. 4. Lack of technical personnel at block /grass root level.	1. Great desire for the use of modern techniques in agriculture. 2. Scope of new cropping pattern and irrigation methods/ soil improvement /development of cash crops and horticulture. 3. Conservation and utilization of natural resources (with particular reference to water and forest). 4. Compact areas having cheap, hardworking and labour force. 5. Adequate availability of raw material for processing industries. 6. The activity will encourage the export of fruits, vegetables which will provide better returns to the farmers as well as foreign exchange. 7. The approach will also be helpful in minimizing the post harvest losses during the handling of produce.	1. Reduced productivity in the absence of improved technology. 2. Inadequate infrastructure for quality management and quarantine. 3. Degradation of environmental issues with respect to safe/organic produce for consumers.
Livelihood	1. Market are available for skilled and unskilled labor 2. Most of the farmers are small and marginal. 3. Some households have livestock.	1. Lack of awareness regarding pre and post harvest management practices. 2. Lack of proper marketing infrastructure and strong marketing system having forward and backward linkages. 3. Prevelence of traditional cropping systems, substantial increase in area, production and productivity in major crops since last plan period.	1. Vast opportunity to attract youth towards farming sector. 2. Great opportunities in dairy, farming practices, horticulture, poultry, fruit preservation and other sectors. 3. If provided with livelihood options the income level of the households can be increased livelihood status and Quality of life.	1. Reduced productivity in the absence of improved technology. 2. Less interest in agriculture.

Parameter	Strengths	Weaknesses	Opportunities	Threats
Micro-Enterprises and production systems	1. People have the basic skills. 2. Organized microenterprise activities exists in the area 3. Natural resources for enhancing microenterprises and production are available in the watershed.	1. Lack of management skills. 2. Lack of technical support. 3. Lack of organized marketing facilities. 4. Lack of producer federation.	1. If provided good technical support and motivation, they can run the units in an organized way and income level will increase.	1. Farmers may loose interest in agriculture.
Natural Resources	1. Productive land and flora and fauna.	1. Prevalence of soil erosion. 2. No maintenance of water storage bodies.	1. If used advanced techniques like field bunding and use of organic manure, productivity may be increase. 2. Construction of water storage tank for irrigation. 3. Enhancing micro-irrigation	1. Ground water may go down
Soil	1. Availability of good agricultural lands.	1. Susceptible to erosion	1. Large tract of alluvial soil in the basin of River Gomati.	1. Development of soil sickness due over use of chemicals.
Flow of water	1. Good rain fall and perennial river is available.	1. Local catchment inflow is disturbed by the road.	1. Streams can be rejuvenated.	1. More competition for water.
Agriculture	1. Provides income and employment. 2. Has potential to increase productivity. 3. Availability of natural/ man-made resources	1. Lack of irrigation facilities. 2. Lack of organic farming practices. 3. Lack of awareness regarding innovative technique of crop production.	1. If provided with proper irrigation, considerable increase in agriculture production. 2. Increasing demand for organic products.	1. Dairy and live stock may be reduced.
Horticulture	1. Favorable climate for horticultural activities. 2. Good market facility is available for horticultural produce.	1. Unavailability of new varieties. 2. Lack of export facilities. 3. Lack of storage facilities. 4. Slow promotion of processing of horticultural produce, value addition and less availability of processing industries in the sector.	1. Availability of good land. 2. Interest of the villagers to Expand horticulture activities. 3. Increasing price level.	1. Rapid climate change
Animal	1. Favorable environment for	1. Lack of fodder availability.	1. Providing more advanced cattle	1. Animal diseases.

Parameter	Strengths	Weaknesses	Opportunities	Threats
husbandry	rearing cow and goats. 2. Many households are engaged in dairy and live stock. 3. Provides income and employment	2. Lack of advanced cattle bread. 3. Low level of milk production 4. Lack of Knowledge base regarding scientific cattle management. 5. Lack of efficient technology in the area specific and technical knowledge at various levels.	breeds can increase the milk production and enhance their subsidiary livelihood option. 2. Promotion of nursery raising and pasture development will address the lack of fodder availability. 3. Pasture development.	2. Excessive grazing on degraded and small community lands.

4.2.2 Details of gap analysis

The gap analysis is given below.

S.N	Gaps	Strategies to overcome the gap
A	**Paddy**	
1	Delayed transplanting.	Adapt SRI
2	Inadequate plant population in traditional cultivation methods.	1. Adapt 20x15 or 20x10 cm for traditional method and 30x30 or 25x25 cm for SRI method.
3	Lack SRI method	Promote SRI
4	Heavy yield losses due to delayed weeding.	1. Promoting use of butachlore/ pendime thaline/ bangiocarp one weak after transplanting. 2. Weeding with cona weeder 15-20 days after transplanting
5	Attack of insects-stem borer, plant hoppers, gandhi bug etc.	1. Timely transplanting. 2. Use of pesticide in proper time.
6	Disease incidence-Khaira disease, blast, leaf bright, false smut, brown spot.	1. Use of zinc. 2. Use of fungicide.
7	Labour crises for weeding, transplanting and harvesting.	1. Use paddy transplanter. 2. Promote mechanization.

8	No use of cona weeder.	Promote conaweeder
9	Crop damages due to flooding, water-logging and drought (erratic rainfall).	1. First irrigation 2 days after transplantation 2. Keeping moist soil condition.
10	Widespread deficiency of Zn, and Fe.	Use Zn, and Fe.
11	Imbalance crop nutrition.	Judicious use of organic matter and chemical fertilizer
12	Low percentage of seed replacement.	Promote seed replacement.
B. Wheat		
1	Considerable area under late sowing.	Timely sowing
2	Disease incidence-leaf blight, smut, ear cockle, karnal bunt, rusts.	Use of fungicide
3	Weed menace-Phalaris minor, wild oat and other weeds.	Use of isoproturone or other weedicide
4	Mostly flood irrigation.	Use of basin irrigation method
5	Lack of suitable varieties for rainfed and late sown conditions.	Sowing of late sown variety like -DBW-14, HUW-234,Triveni (K-8020,Narendra wheat—1014 and K-9423
6	Imbalance fertilizer use.	Judicious use of organic matter and chemical fertilizer
7	Mostly cereal based cropping system followed (Rice-wheat or Maize-Wheat)	Leguminous crop must be included in crop rotation
8	Less use of organic manures.	Judicious use of organic matter and chemical fertilizer.
9	Inadequate power supply for irrigation and threshing.	Use alternate resources
10	Labour shortage during harvesting	Use harvesting equipment.

Chapter 5: Recommended management programme

5.1 Arable land (rainfed/irrigated)

5.1.1 Agronomic practices

i. High yielding variety
ii. Major crops proposed/rotations/cultural operations/recommended conservation practices/proposed manures and fertilizers, green manuring
iii. Use of improved implements
iv. Plant protection measures
v. Yield and cost of cultivation of major crops
vi. Irrigation

5.1.2 Engineering measures in arable land (Class wise *i.e.* I, II. III and IV)

i. Proposed measure and its justification
ii. Specification of individual measures with plan and design calculation
iii. Drawing with plan, section, elevation may be give
iv. Estimate of the work

Note: Engineering design o f each work will include hydrological design, hydraulic design and structural design

5.2 Non Aarble land

5.2.1 Agronomic practices of Orchard and plantation

i. Type of orchard/plant with spacing, pit size, soil working and planting
ii. Fencing type
iii. Management practice
iv. Cost of raising orchard/plantation
v. Yield.

5.2.2 Engineering measures in non arable land (Class wise i.e.V,VI,VII, and VIII)

i. Proposed measure and its justification
ii. Specification of individual measures with plan and design calculation
iii. Drawing with plan, section, elevation may be give
iv. Estimate

Note: Engineering design o f each work will include hydrological design, hydraulic design and structural design

5.2.3 Diversion drain/interceptor drain/grossed waterway

i. Alignment of each drain to be shown on map
ii. Design (cross section of each)
iii. Estimate

Note: Engineering design o f each work will include hydrological design, hydraulic design and structural design

Chapter 6: Proposed interventions

6.1 Soil management and landuse

Deteriorating soil health is a serious problem in project area. Not only the organic matter is low but also imbalance of major nutrients NPK and micronutrients have telling effect on crop yields. The large part of cow dung is being used as fuel and not for farmyard manure.To improve upon the soil health and nutrient imbalances, two components are proposed:

- Improving soil health through green manuring.
- Demonstrating nutrient management through Integrated Nutrient Management (INM) system.

Above two components are proposed to be run as given below:

(i) Enrichment of organic carbon content using green manuring

- Green manuring can be an important intervention to cope up with the problem.
- Green manure crops such as daincha, sunhemp, and cowpea etc not only fix nitrogen but also add organic carbon.It is proposed to provide seeds of green manure crops to selected farmers.

(ii) Establishment of Integrated Nutrient Management (INM) system

Balanced use of plant nutrients is essential for sustainable intensification of agriculture. The goal of INM is to promote balanced use of plant nutrients, so as to increase crop productivity in an efficient manner. Few demonstrations of 0.40 ha will be conducted in every gram panchayat.

6.2 Efficient use of water resources and management

Since the availability of water supply is the major constraint in the project area, there is an urgent need to promote water conservation and efficient on farm water management practices to improve the productivity per unit of water consumed. Under this programme the following components are proposed:

(i) Adoption and promotion of precision farming techniques through micro irrigation

Micro irrigation system enhances irrigation and water use efficiency. It also helps in increasing the fertilizer use efficiency. Being one of the main components of precision farming, it can be of great help for small and marginal farmers. Under capacity building module this component will be addressed.

(ii) Demonstration cum training of ridge and furrow system and SRI of paddy cultivation for increasing water use efficiency and eco-friendly cultivation

Paddy is generally cultivated in puddle fields and is transplanted in standing water. Recently a new technique "transplanting of paddy seedlings on both sides of ridges under non puddled conditions" has been reported to have given good yield with only 50 percent quantity of water use along with efficient utilization of added plant nutrients and better micro-climate which reduces the incidence of pests and diseases. Also, this method improves the soil texture and soil health, with lesser pollution of ground water. The weed problem under this technique can effectively be controlled with the use of new herbicide (s) and with no residual effects on succeeding crops. In this method, bed planter is used for preparing ridges on well-prepared field. Three to four weeks old seedlings of paddy are transplanted on both sides of ridges, keeping a distance of fifteen centimeters between the seedlings, ten centimeter above the

bottom of the furrow. Thus 33 seedlings per square meter will be maintained as in case of conventional transplanting. It is proposed to conduct demonstrations of this technology to convince the farmers that water can be saved in paddy cultivation without compromising with the yield. Similarly SRI will be useful to save water and fertilizer without compromising crop yield. Each gram panchayat will be provided a bed planter for conducting demonstrations and a total sum of Rs. 30,000.00 shall be spent on each of such trainings.

6.3 Seed and planting material

Seed is the most crucial agriculture input for improving the production and productivity of crops. Better seed replacement ratio coupled with proper seed treatment can largely contribute to improve the yield of crops per unit area. Similarly availability of high quality planting material for horticulture crops can improve their productivity. The following interventions are proposed to be taken up under this programme:

(i) Establishment of seed treatment and demonstrations units at gram panchayats level for early and high germination rate to increase crop yield

The concept of seed treatment is the use and application of biological and chemical agents that control or contain primary soil and seed borne infestation of insects and diseases which pose devastating consequences to crop production. Seed treatment ensures crop safety, leading to establishment of healthy and vigorous plants resulting in better yields. The benefits of seed treatment are as follows:

1. Increased germination
2. Ensures uniform seedling emergence.
3. Protect seeds or seedlings from early season diseases and insect pest thereby improving crop emergence and its growth.
4. Improved plant population and thus higher productivity.

Presently, 70% requirement of seed is met from the farmer's own stock which goes for sowing without seed treatment. The demonstrations and training on seed treatment will be conducted at gram panchayat level. The demonstrations will be conducted in o.25 ha area and the farmers will be trained simultaneously on the techniques of seed treatment. Component of seed demonstration unit are:

Item	Area/Number	Cost in Rs
Fungicides	0.4 ha	50
Seed treating Drums	One	1150
Operational Charges/ demonstration (Rs. 2000 /demonstration)	0.4ha	2000
Total	**-**	**3200**

(ii)Production and supply of quality seeds and planting material for improvement of seed replacement rate (SRR)

The major field and horticultural crops of the project area are wheat, potato, pulses, rice and vegetables, where replacement of seed and planting material can boost the production and productivity. This programme is required to be takenup in a project mode. Except for hybrids maize, rice and vegetable crops, the farmers can produce the certified seed/ foundation seed stage-2. It is proposed that the farmer may get his crop inspected, so

that instead of certified seed, he is able to produce foundation seed stage-2 so as to meet the desired seed replacement requirement. The government may provide foundation seed to one fifth of the farmer every year. The seed produced by these farmers will be supplied to the next group of farmers during subsequent years.

To support nutritional kitchen garden as well as production of high value crops by small and marginal farmers, special emphasis is required to be given to provide high quality vegetable seeds to the farmers.

(iii) Seed replacement

Seed is the single most critical input in production. High quality seed is likely to increase production by 10 -15 % with following additional benefits:

- Quality seed and planting material will become available to the small and marginal farmers particularly of high value crops to boost their profitability.
- The seed borne diseases and insects can be controlled at a minimum cost by seed treatment and it is expected that farmers of all strata will be benefited and their income shall be raised by 10 - 30 %.
- Proper management of insect pest and diseases by seed treatment will reduce environmental pollution.
- High quality planting material will result in better quality of horticultural and agricultural produce, thus higher returns to the farmers.

6.4 Technology dissemination

The present agriculture extension system is not designed to meet out the integrated requirement of the farmers. It is required that for reaching out every farm unit a new programme *i.e*. based on information and communication technology (ICT) be adopted. The outline of the programme is given here under:

(i) Publication and mass campaign for resource development of agri and allied sector using ICT

The publication, training and mass campaign system has a vital role in the overall development of agriculture and allied sector. According to the multidimensional needs of the farmers, the publication, awareness and mass campaign with the full support by training will provide extra and latest information to the farmers in their respective fields as and when required. Therefore, to make timely available and proper use of printing materials and electronic media related to every modern technology can be passed on very quickly up to the grass root level (learning by doing and seeing by doing) and to cover every village of the entire project area.

(ii)Farmers study tour within and outside the state for exposure and motivation towards commercialized agriculture

In order to induce competitive instinct in the minds of farmers of lesser developed areas, it is essential to expose them to well developed pockets of U.P. in first stage. These visits will strengthen the confidence of farmers in new technologies and see the practical adoption of new technologies.

Personal interaction and listening to success stories from horses mouth will change the mind set and to adjust the changes in their own package of practices. In district the progressive farmers will be included in the proposed study tour. Various agriculture segments for improvement will be selected like: fish culture by visiting East U.P; higher production of potato from success story of Kannauj/Farrukhabad/Agra, etc; better mechanization of farms of West U.P. Additionally farmers could also visit other states like: Maharashtra & Valsad (Gujarat) to see the organized mango cultivation, Nasik for grapes and onion, Stara for ginger cultivation, and Haryana/ Punjab/ Gujarat for dairy etc.

(iii) Training and demonstrations of weed management in major crop to reduce the yield loss

The association of weed with the crops is well known because weeds compete with the crops for various growth factors like light, space, nutrients, moisture etc. The competition of weeds reduces the crop yield from 15 to 25 percent depending upon the type of weed flora, its intensity and duration of competition. The introduction of dwarf genotypes with the high inputs use like fertilizers and irrigation requirements has further aggravated the weed problems. The project will consist of training and demonstrations on chemical weed control in major crops of the region.

(iv) Farmers training for seed production at *Krishi Vigyan Kendra*

KVK/ KGKs/RIRD are very prestigious units/Institution in the district, which provides latest production technology to the farmers by different ways. To provide latest information and training to the farmers, it is necessary that KVK/ KGK/RIRD are kept up to date, so that, farmers can utilize their services and advise and adopt latest techniques on their own farms.

6.5 Farm mechanization

Farm mechanization plays very vital role in timely and precision performance of different farm operations. In areas of intensive agriculture i.e. where two or more than two crops are taken in a year, use of machinery can greatly enhance the productivity by timely performance of various agricultural operations and thereby improving the input use efficiency. But, this is the most capital-intensive agricultural input. The various interventions proposed are as follows:

(i) Demonstration of farm mechanization at gram panchayat level to minimize the energy loss of human resources

Interaction with village panchayats in the project area revealed that there is need to make available farm machinery to small and marginal farmers. However, they cannot afford to purchase costly farm machinery as it will not be economical for their smallholdings. Further lack of farm machinery at small farm brings drudgery on farm women. To meet the requirement, village level cooperative societies or farmers clubs, or entrepreneur will be encouraged to purchase the machinery and made will be made available to the farmers on custom hiring basis.

6.6 Horticulture

(i) Promotion of protected cultivation of vegetable crops under low tunnels for early production of vegetables

Majority of farmers in project area are small and marginal and their holdings are uneconomical. If provided with capital support and know how, they can compliment production of cucurbits out of main season in protected structure like low tunnels. The cost of material for erection of low tunnels including plastic for one hectare is Rs. 50,000. Small and marginal farmers have very small holding and it is expected that not more than 500 sq mt areas shall be put under plastic tunnel at one time. The cost for 500 sq mt. per farm unit works uot to be Rs. 2500.00.

Objectives:

To start early crop of vegetables when the season is still cool will help off-season production of vegetables for higher profits. The productivity of vegetables is very high in the reagio which will increase cash flow to farm women. Insect – pest and disease management can be done more efficiently. Vegetable being high value crops, a better protection from weather conditions ensures crop safety and safeguards against crop failures. Higher vegetable production leads to better nutritional security. Use of low tunnels for raising nurseries of winter vegetables under protection ensures production of quality planting materials and safeguard for expensive composite seed.

(ii) Demonstration and supply of healthy nursery raising in vegetable crops

Vegetable crops including onion, cole crops, capsicum, chillies, tomato and brinjal are raised through nursery. All these crops are high value and highly productive. They suit to small and marginal farmers and especially it is the women who take care of vegetable production. Healthy nursery of these vegetables ensures the success of vegetables production venture. It is therefore proposed to train the farmers on the practices of raising healthy nursery.

Objectives

- To raise healthy nursery of the high value crops through high quality seed to ensure crop success.
- To provide quality-planting material and costly seeds i.e. hybrids.
- To boost the income of small and marginal farmers.
- To increase cash flow to farm-women through raising quality nursery of vegetables crop for own use and for sale to other farmers.

Technology

Small raised beds of 3 meter x 1 meter x 10 cm are prepared. Well rotten FYM or vermi-compost is added to each bed. The beds are drenched with formalin solution (1 part formalin and 7 part water). After doing so the beds are covered with polythene sheets and left as such for one week, so that, formalin fumes get deep in to the soil and it is sterilized properly. The covering with polythene also ensures solar sterilization of soil. After one week the polythene is removed and the soil is raked number of times for at least one week, so that, formalin fumes are completely driven out. As a check, a handful of soil is taken out from the bed and smelled to feel if there are any fumes of formalin smell left in the soil. Just in case, if the soil still smells of formalin it should be left for another two- three days and further raking

of soil may be done. Normally, it takes 2-3 weeks time to prepare the nursery bed and sterilized them for sowing of seeds. Therefore, bed preparation programme should be started at least three weeks in advance of actually planting the seeds in nursery beds. Since the vegetable seeds particularly hybrids are very costly, healthy nursery is very important. Further, it should be kept in mind that the seeds are sown in line and it should not be congested. If required low plastic tunnels can be prepared to protect valuable nursery seedlings.

The cost of raising ten nursery beds each of 1m x 3m diameter is given here under:

Hybrid/OP seeds, formalin, FYM, vermicompost, fertilizers, polythene sheets, polytunnels	Rs. 5000
Fifty man days for preparation of beds and nursery-raising for one month	Rs. 5000.
Total	**Rs. 10,000**

(iii) Development of nutritional kitchen garden/back yard garden for balanced nutrition at village level and involvement of women in horticulture.

Rural people particularly women and children suffer from lack of vitamins and minerals. Nutrition garden can play an important role to solve this problem, besides this, nutritional garden also ensure economical and nutritional security. On an average eight member family shall require 2.4 kg vegetables and 800 g fruits per day. This production can be obtained from 500 sq mt. area. Five villages from each block of the district will be selected and one kitchen garden will be laid out in each village each year. They will be provided with input and training to raise the kitchen garden. Besides seed kits of summer and winters vegetables, three fruit trees (amrapali, papaya, citrus and guava) shall also be distributed to each.

6.7 Commercial fruits

(i). Promotion of rejuvenation of senile, old and unproductive orchards of mango and guava

PRA survey reveals that quite a good percentage, about 20-35% of orchards are unproductive in the project area. Due to this, the productivity of these fruit crops in the region is quite low (6.2 tons/ha). Therefore, rejuvenation of such orchards is required on priority to increase productivity, ensure export competitiveness and to take advantage of global opportunities. The technology of rejuvenation of both mango and guava is given below:

(a) Mango: Rejuvenation of mango gives a new productive life of 20-30 years. Like other fruit crops, mango trees also witnesses decline in productivity after certain age and orchards become unviable. The technology of rejuvenation has been worked out and demonstrated by CISH, Lucknow. The technology aims at pruning of undesired branches for inducing development of umbrella like open canopy of healthy shoots which ensures better light penetration and improves flowering and fruiting potential. Pruned trees attain canopy of healthy shoots in two years time and after three years onward they start bearing fruits. The technology involves pruning of undesired branches from a height of 4-5 meters from ground

during month of December. Four to medium sized branches with outward growth are retained for basic framework of tree for the development of canopy. Other criss-cross, intermingling, dried and diseased branches are marked for complete removal, which is also done in month of December. Branches for canopy development are pruned at a distance of about 75 cm at their base.

Immediately after pruning, fungicidal paste should be applied on cut surfaces to check microbial growth. It is observed that alternate row pruning is much more acceptable to growers as there is less economic loss and the availability of better light to un-pruned adjacent rows which greatly increases their fruiting potential. Apart from this, pruned trees are to be provided intensive care of nutrition, irrigation and management of insect, pests and diseases. Five to six months after pruning, outwardly growing 8-10 healthy shoots need to be retained per branch. This operation is done during June to August. If the orchard is of inferior variety, then the branches (new shoots) can be grafted with improved variety, which is called as "top working". Total cost involved for rejuvenation per tree is Rs. 133 to 160. Pruned trees have been found to have 2-3 times higher average yield than the control plot in which pruning is not done.

(b) Guava: The unproductive old orchards which produce low-grade fruits need to be rejuvenated through heavy and systematic pruning followed by proper nutrition, irrigation and plant protection measures. Heading back of unproductive guava orchards is done in the month of May followed by judicious thinning and pruning of newly sprouted shoots in the month of October. The newly emerged shoots after October pruning are found to be very conducive for flowering and fruiting in the following season.

Assistance under National Horticulture Mission (NHM)

This activity has been adopted by NHM and assistance norms are 50% of the estimated cost of Rs. 30,000/ha subject to a maximum of Rs. 15,000/ha limited to 2 hectares per beneficiary.

(ii). Promotion of high density planting of guava fruit crops

Although India is the largest producer of guava, however yields are very poor varying from 6.2 tons/ha in mango and 11.0 ton/ha in guava. The main reason for low yields are wide spacing, low penetration of improved varieties and poor management practices. Even countries like Brazil, Mexico and Egypt harvest yields up to 9.2 tons/ha to 16.0 tons/ha in mango. It is a common practice to plant guava at a spacing of 8m × 8m between rows and between plants within rows. With the wider spacing it takes 7-10 years to fill the space between plants. Thus there is tremendous scope for increasing orchard productivity by increasing planting density. Along with high planting density, early height control and canopy management are essential to control vegetative growth and to achieve desired results. Researchers conducted at Central Institute for Subtropical Horticulture at Lucknow has revealed that a spacing of 6.0m × 3.0m is most favourable. In this case also, yields of the order of 15-16 tons/ha can be easily obtained with Allahabad Safeda variety.

6.8 Proposed intervention for livestock

The livestock sector is an important sector of agricultural economy of the state and accounts for about one fourth of the net state domestic product. The opportunities in

improving the performance of this sector are much more as compared to crop sector as the farmers are already practicing dairy and backyard poultry to supplement their income.

To increase the productivity in animal sector the major contribution rests on the genetic up-gradation of livestock. So far as dairy development is concerned, induction of additional milch animals and transforming the backyard dairy units into commercial dairy farms with minimum ten animals is required. Farmers training for better herd and milk management need to be done through latest techniques and farm practices.

(i) For year round production of green fodder to

It has been realized that seed is the most limiting factor in fodder production. The fodder crops being very shy seed setters, sufficient quality of good seed is not available. In the present situation, the berseem seed costs approximately Rs. 100 /kg and 20 kg seed is needed for one hectare. Accordingly following norms for fodder seed production and seed acquisition by the government for further distribution will be followed. Barseem seed will be distributed to registered farmers having mixed farming system @ 4 kg / farmer costing Rs 400.

(ii) Cattle shelter

Cattle shelter will be provided under MGNREGA fund.

(iii) Promotion of Goat Rearing

Goat rearing is common in almost all gram panchayat in project area.Goat is used both for milk and meat purpose by the people. During last five years 90% of meat consumption in the district comes from goat. There is a need for promoting goat rearing. To promot goat rearing goat shelter will be provided.

(iv) Dairy Training Workshop for Women

The first step will be to sell the idea of dairy farming aggressively in the target area. This will be done by holding dairy training workshops extensively in the district, so as to cover the entire area repeatedly. These will be high tech camps wherein the requisite message will be passed across the audience in a very cordial, conducive and friendly environment. Dairy training workshop will be conducted to encourage and equip with knowledge to prospective dairy farmers and 50 percent target beneficiary should be women.

6.9 Works under Production system

6.9.1 Proposed grampanchayat wise area under demonstration (ha)

Sl. No.	Name of Grampanchayat	Treatable area (ha)	Wheat SWI	Seed Treatment Demonstrations	Oil seed+ potato intercrop	Early vegetable	Paddy SRI	Arhar plantation	Maiz + transplated Legume	Millets	Green manur (Dhaincha)	Groundnut intercrop	Zaid oilseed	Off season zaid vegetable	Total area
1	2	3	4	6	7	8	9	10	11	12	13	14	15	16	17
1	Bakuliha	336.02	9	12	12.65	15.42	11.86	17	11	7.1	8	6.3	4.7	11.9	126.9
2	Banai Mau	106.90	3	4	4.02	4.9	3.77	6	4	2.3	2	2	1.5	3.8	41.3
3	Chak Gajraj	69.01	2	2	2.6	3.17	2.44	4	2	1.5	2	1.3	1	2.4	26.4
4	Deo Gaon	145.56	4	5	5.48	6.68	5.14	8	5	3.1	3	2.7	2.1	5.1	55.3
5	Ekauni	68.89	2	2	2.59	3.16	2.43	4	2	1.5	2	1.3	1	2.4	26.4
6	Gahiri	20.46	1	1	0.77	0.94	0.72	1	1	0.4	0	0.4	0.3	0.7	8.2
7	Haripur Nihastha	186.65	5	7	7.03	8.56	6.59	10	6	4	4	3.5	2.6	6.6	70.9
8	Jagatpur Ram Garhi	307.55	8	11	11.58	14.11	10.85	16	10	6.5	7	5.8	4.3	10.9	116.0
9	Kalupur	146.38	4	5	5.51	6.72	5.17	8	5	3.1	3	2.8	2.1	5.2	55.6
10	Kesauli	29.36	1	1	1.11	1.35	1.04	2	1	0.6	1	0.6	0.4	1.0	12.1
11	Khanpur Khunti	38.47	1	1	1.45	1.77	1.36	2	1	0.8	1	0.7	0.5	1.4	14.0
12	Khero	0.02	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0
13	Lakshipur	293.57	8	10	11.05	13.47	10.36	15	10	6.2	7	5.5	4.1	10.4	111.1
14	Maduri	61.72	2	2	2.32	2.83	2.18	3	2	1.3	1	1.2	0.9	2.2	22.9
15	Manpur	71.47	2	3	2.69	3.28	2.52	4	2	1.5	2	1.3	1	2.5	27.8
16	Matehana	22.45	1	1	0.85	1.03	0.79	1	1	0.5	1	0.4	0.3	0.8	9.7
17	Merui	158.65	4	6	5.97	7.28	5.6	8	5	3.4	4	3	2.2	5.6	60.1
18	Mirjapur	10.25	0	0	0.39	0.47	0.36	1	0	0.2	0	0.2	0.1	0.4	3.1
19	Nihastha	276.13	7	10	10.4	12.67	9.75	14	9	5.8	6	5.2	3.9	9.7	103.4
20	Raipur	202.95	5	7	7.64	9.31	7.16	11	7	4.3	5	3.8	2.9	7.2	77.3
21	Ramvapur Dubai	245.40	7	9	9.24	11.26	8.66	13	8	5.2	6	4.6	3.5	8.7	94.2
22	Sakatpur	54.70	1	2	2.06	2.51	1.93	3	2	1.2	1	1	0.8	1.9	20.4
23	Satanpur	281.39	8	10	10.59	12.91	9.93	15	9	6	7	5.3	4	9.9	107.6
24	Savsi	171.34	5	6	6.45	7.86	6.05	9	6	3.6	4	3.2	2.4	6.0	65.6
25	Semri	393.33	11	14	14.81	17.30	13.88	20	13	8.3	9	7.4	5.6	13.9	148.2
26	Sewanpura	153.26	4	5	5.77	7.03	5.41	8	5	3.2	4	2.9	2.2	5.4	57.9

Sl. No.	Name of Grampanchayat	Treatable area (ha)	Wheat SWI	Seed Treatment Demonstrations	Oil seed+ potato intercrop	Early vegetable	Paddy SRI	Arhar plantation	Maiz + transplated Legume	Millets	Green manur (Dhaincha)	Groundnut intercrop	Zaid oilseed	Off season zaid vegetable	Total area
1	**2**	**3**	**4**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**
27	Surajpur Guman Khera	79.33	2	3	2.99	3.64	2.8	4	3	1.7	2	1.5	1.1	2.8	30.5
28	Surajpur Khera	93.33	3	3	3.51	4.28	3.29	5	3	2	2	1.8	1.3	3.3	35.5
29	Ugabhad	225.47	6	8	8.49	10.35	7.96	12	8	4.8	5	4.2	3.2	8.0	86.0
Total		**4250.0**	**116.0**	**150.0**	**160.0**	**194.3**	**150.0**	**224.0**	**141.0**	**90.1**	**99.0**	**79.9**	**60.0**	**150.1**	**1614.4**

6.9.2 Cost of Crop production system intervention

Sl. No.	Name of Grampanchayat	Treatable area (ha)	Wheat SWI @ Rs 4000	Seed treatment demonstrations @ Rs 6400	Oilseed+ potato intercrop @ Rs 4000	Early vegetable @ Rs 1000	Paddy SRI@ Rs 2500	Arhar plantation @ Rs 2000	Maiz + transplated Legume @ Rs 2000	Millets @ Rs 1500	Green manur (Dhaincha) @ Rs 2000	Groundnut intercrop @ Rs 3000	Zaid oilseed @ Rs 1000	Off season zaid vegetable @ Rs 4000	Total in Rs
1	2	3	4	6	7	8	9	10	11	12	13	14	15	16	17
1	Bakuliha	336.02	36000	76800	50600	15420	29650	34000	22000	10650	16000	18900	4700	47600	362320
2	Banai Mau	106.90	12000	25600	16080	4900	9425	12000	8000	3450	4000	6000	1500	15200	118155
3	Chak Gajraj	69.01	8000	12800	10400	3170	6100	8000	4000	2250	4000	3900	1000	9600	73220
4	Deo Gaon	145.56	16000	32000	21920	6680	12850	16000	10000	4650	6000	8100	2100	20400	156700
5	Ekauni	68.89	8000	12800	10360	3160	6075	8000	4000	2250	4000	3900	1000	9600	73145
6	Gahiri	20.46	4000	6400	3080	940	1800	2000	2000	600	0	1200	300	2800	25120
7	Haripur Nihastha	186.65	20000	44800	28120	8560	9930	20000	12000	6000	8000	10500	2600	26400	196910
8	Jagatpur Ram Garhi	307.55	32000	70400	46320	14110	27125	32000	20000	9750	14000	17400	4300	43600	331005
9	Kalupur	146.38	16000	32000	22040	6720	12925	16000	10000	4650	6000	8400	2100	20800	157635
10	Kesauli	29.36	4000	6400	4440	1350	2600	4000	2000	900	2000	1800	400	4000	33890
11	Khanpur Khunti	38.47	4000	6400	5800	1770	3400	4000	2000	1200	2000	2100	500	5600	38770
12	Khero	0.02	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Lakshipur	293.57	32000	64000	44200	13470	25900	30000	20000	9300	14000	16500	4100	41600	315070
14	Maduri	61.72	8000	12800	9280	2830	5450	6000	4000	1950	2000	3600	900	8800	65610
15	Manpur	71.47	8000	19200	10760	3280	6300	8000	4000	2250	4000	3900	1000	10000	80690
16	Matehana	22.45	4000	6400	3400	1030	1975	2000	2000	750	2000	1200	300	3200	28255
17	Merui	158.65	16000	38400	23880	7280	14000	16000	10000	5100	8000	9000	2200	22400	172260
18	Mirjapur	10.25	0	0	1560	470	900	2000	0	300	0	600	100	1600	7530
19	Nihastha	276.13	28000	64000	41600	12670	24375	28000	18000	8700	12000	15600	3900	38800	295645
20	Raipur	202.95	20000	44800	30560	9310	17900	22000	14000	6450	10000	11400	2900	28800	218120
21	Ramvapur Dubai	245.40	28000	57600	36960	11260	21650	26000	16000	7800	12000	13800	3500	34800	269370
22	Sakatpur	54.70	4000	12800	8240	2510	4825	6000	4000	1800	2000	3000	800	7600	57575
23	Satanpur	281.39	32000	64000	42360	12910	24825	30000	18000	9000	14000	15900	4000	39600	306595
24	Savsi	171.34	20000	38400	25800	7860	15125	18000	12000	5400	8000	9600	2400	24000	186585
25	Semri	393.33	44000	89600	59240	17295	34700	40000	26000	12450	18000	22200	5600	55600	424685
26	Sewanpura	153.26	16000	32000	23080	7030	13525	16000	10000	4800	8000	8700	2200	21600	162935

Sl. No.	Name of Grampanchayat	Treatable area (ha)	Wheat SWI @ Rs 4000	Seed treatment demonstrations @ Rs 6400	Oilseed+ potato intercrop @ Rs 4000	Early vegetable @ Rs 1000	Paddy SRI@ Rs 2500	Arhar plantation @ Rs 2000	Maiz + transplated Legume @ Rs 2000	Millets @ Rs 1500	Green manur (Dhaincha) @ Rs 2000	Groundnut intercrop @ Rs 3000	Zaid oilseed @ Rs 1000	Off season zaid vegetable @ Rs 4000	Total in Rs
1	**2**	**3**	**4**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**
27	Surajpur Guman Khera	79.33	8000	19200	11960	3640	7000	8000	6000	2550	4000	4500	1100	11200	87150
28	Surajpur Khera	93.33	12000	19200	14040	4280	8225	10000	6000	3000	4000	5400	1300	13200	100645
29	Ugabhad	225.47	24000	51200	33960	10350	19900	24000	16000	7200	10000	12600	3200	32000	244410
Total		**4250**	**464000**	**960000**	**640040**	**194255**	**368455**	**448000**	**282000**	**135150**	**198000**	**239700**	**60000**	**600400**	**4590000**

6.9.3 Area under horticulture system

S. N.	Name of Grampanchayat	Treatable area (ha)	Fallow land (ha)	Present Area of Orchard (ha)	Mango Rejuvination		Guava high density		Bel/Ber/Citrus etc.		Present area under horticulture in ha	Proposed area for intervention in ha.
					Present total Area in ha	proposed area forrejuvenation in ha	Present Area in ha	proposed high density Area in ha	Present Area in ha	proposed Area in ha		
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Bakuliha	336.02	27.76	4.48	2.91	1.46	1.26	0.32	0.31	1.84	4.48	3.62
2	Banai Mau	106.90	15.14	0.00	0.00	0.76	0	0.08	0.00	0.53	0	1.37
3	Chak Gajraj	69.01	19.17	1.59	1.03	0.52	0.45	0.11	0.11	0.4	1.59	1.03
4	Deo Gaon	145.56	17.30	6.12	3.98	1.99	1.71	0.43	0.43	0.94	6.12	3.36
5	Ekauni	68.89	6.17	0.00	0.00	0.31	0	0.03	0.00	0.34	0	0.68
6	Gahiri	20.46	0.00	5.30	3.44	1.72	1.48	0.37	0.38	0.29	5.3	2.38
7	Haripur Nihastha	186.65	99.77	0.00	0.00	4.99	0	0.5	0.00	0.93	0	6.42
8	Jagatpur Ram Garhi	307.55	109.47	0.00	0.00	5.47	0	0.55	0.00	1.54	0	7.56
9	Kalupur	146.38	9.43	3.42	2.22	1.11	0.96	0.24	0.24	0.85	3.42	2.2
10	Kesauli	29.36	4.41	0.00	0.00	0.22	0	0.02	0.00	0.15	0	0.39
11	Khanpur Khunti	38.47	6.44	2.82	1.83	0.92	0.79	0.2	0.20	0.29	2.82	1.41
12	Khero	0.02	0.03	0.00	0.00	0	0	0	0.00	0	0	0
13	Lakshipur	293.57	77.04	5.03	3.27	1.64	1.41	0.35	0.35	1.64	5.03	3.63
14	Maduri	61.72	5.57	0.00	0.00	0.28	0	0.03	0.00	0.31	0	0.62
15	Manpur	71.47	3.23	0.00	0.00	0.16	0	0.02	0.00	0.36	0	0.54
16	Matehana	22.45	2.36	3.97	2.58	1.29	1.11	0.28	0.28	0.25	3.97	1.82
17	Merui	158.65	19.55	0.00	0.00	0.98	0	0.1	0.00	0.79	0	1.87
18	Mirjapur	10.25	2.56	2.66	1.73	0.87	0.74	0.19	0.19	0.15	2.66	1.21
19	Nihastha	276.13	88.80	0.71	0.46	0.23	0.2	0.05	0.05	1.41	0.71	1.69
20	Raipur	202.95	51.19	0.00	0.00	2.56	0	0.26	0.00	1.01	0	3.83
21	Ramvapur Dubai	245.40	52.36	13.95	9.07	4.54	3.91	0.98	0.97	1.71	13.95	7.23
22	Sakatpur	54.70	1.73	0.00	0.00	0.09	0	0.01	0.00	0.27	0	0.37
23	Satanpur	281.39	46.41	0.00	0.00	2.32	0	0.23	0.00	1.41	0	3.96
24	Savsi	171.34	23.45	0.77	0.50	0.25	0.22	0.06	0.05	0.88	0.77	1.19
25	Semri	393.33	75.12	15.78	10.26	5.13	4.42	1.11	1.10	2.52	15.78	8.76

S. N.	Name of Grampanchayat	Treatable area (ha)	Fallow land (ha)	Present Area of Orchard (ha)	Mango Rejuvination		Guava high density		Bel/Ber/Citrus etc.		Present area under horticulture in ha	Proposed area for intervention in ha.
					Present total Area in ha	proposed area forrejuvenation in ha	Present Area in ha	proposed high density Area in ha	Present Area in ha	proposed Area in ha		
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**
26	Sewanpura	153.26	51.38	0.00	0.00	2.57	0	0.26	0.00	0.77	0	3.6
27	Surajpur Guman Khera	79.33	11.05	6.80	4.42	2.21	1.9	0.48	0.48	0.64	6.8	3.33
28	Surajpur Khera	93.33	13.94	0.00	0.00	0.7	0	0.07	0.00	0.47	0	1.24
29	Ugabhad	225.47	13.45	0.00	0.00	0.67	0	0.07	0.00	1.13	0	1.87
Total		**4250**	**854.25**	**73.40**	**47.70**	**45.96**	**20.56**	**7.40**	**5.14**	**23.82**	**73.40**	**77.18**

6.9.4 Farm mechanization

Sl. No.	Name of Grampanchayat	Treatable area (ha)	No. of farm family	Cona weeder@2000		Dry weeder for wheat, maize etc. @2000		Multi-crop seed drills, one per panchayat @5000		Ridge and Furrow maker (Rs. 6000)		Tractor driven three ferrow Potato digger and planter @25,000/-		Manual Knapsack/foot operated sprayer.1300		Power ed Knapsack sprayer/Power OperatedTaiwan sprayer (capacity 8 - 12 lts):7000		Pusa Zero energy cool chamber (100 kg)4500		Mango harvesting device @300		Total in Rs
				NO	Amount in Rs	NO	Amount in Rs	NO	Amount in Rs	NO	Amount in Rs	NO	Amount in Rs	NO	Amount in Rs	NO	Amount in Rs	NO	Amount in Rs	NO	Amount in Rs	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	Bakuliha	336.02	507	3	6000	1	2000	2	10000	1	6000	1	25000	2	2600	1	7000	2	9000	9	2700	70300
2	Banai Mau	106.90	228	1	2000	1	2000	1	5000	0	0	0	0	1	1300	0	0	1	4500	4	1200	16000
3	Chak Gajraj	69.01	201	1	2000	0	0	1	5000	0	0	1	25000	1	1300	0	0	0	0	6	1800	35100
4	Deo Gaon	145.56	184	1	2000	1	2000	0	0	0	0	0	0	1	1300	0	0	1	4500	8	2400	12200
5	Ekauni	68.89	199	1	2000	1	2000	1	5000	0	0	0	0	1	1300	0	0	0	0	7	2100	12400
6	Gahiri	20.46	552	3	6000	1	2000	0	0	0	0	0	0	1	1300	0	0	0	0	5	1500	10800
7	Haripur Nihastha	186.65	173	1	2000	1	2000	1	5000	0	0	0	0	1	1300	0	0	1	4500	4	1200	16000
8	Jagatpur Ram Garhi	307.55	229	1	2000	0	0	1	5000	0	0	0	0	1	1300	1	7000	1	4500	3	900	20700
9	Kalupur	146.38	325	1	2000	0	0	0	0	0	0	0	0	1	1300	0	0	1	4500	8	2400	10200
10	Kesauli	29.36	211	1	2000	0	0	1	5000	0	0	0	0	1	1300	0	0	0	0	9	2700	11000
11	Khanpur Khunti	38.47	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	3000	3000
12	Khero	0.02	1131	2	4000	0	0	1	5000	0	0	0	0	1	1300	0	0	0	0	8	2400	12700
13	Lakshipur	293.57	302	1	2000	0	0	0	0	0	0	0	0	1	1300	1	7000	1	4500	4	1200	16000
14	Maduri	61.72	431	2	4000	1	2000	1	5000	1	6000	0	0	0	0	0	0	0	0	6	1800	18800
15	Manpur	71.47	46	0	0	1	2000	0	0	0	0	0	0	0	0	0	0	0	0	8	2400	4400

Sl. No.	Name of Grampanchayat	Treatable area (ha)	No. of farm family	Cona weeder@2000		Dry weeder for wheat, maize etc. @2000		Multi-crop seed drills, one per panchayat @5000		Ridge and Furrow maker (Rs. 6000)		Tractor driven three ferrow Potato digger and planter @25,000/-		Manual Knapsack/foot operated sprayer.1300		Power ed Knapsack sprayer/Power OperatedTaiwan sprayer (capacity 8 - 12 lts):7000		Pusa Zero energy cool chamber (100 kg)4500		Mango harvesting device @300		Total in Rs
				NO	Amount in Rs	NO	Amount in Rs	NO	Amount in Rs	NO	Amount in Rs	NO	Amount in Rs	NO	Amount in Rs	NO	Amount in Rs	NO	Amount in Rs	NO	Amount in Rs	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
16	Matehana	22.45	275	1	2000	1	2000	1	5000	0	0	0	0	1	1300	0	0	0	0	12	3600	13900
17	Merui	158.65	364	2	4000	1	2000	1	5000	0	0	0	0	1	1300	0	0	1	4500	14	4200	21000
18	Mirjapur	10.25	160	0	0	0	0	0	0	1	6000	0	0	0	0	0	0	0	0	15	4500	10500
19	Nihastha	276.13	386	1	2000	0	0	1	5000	0	0	0	0	0	0	1	7000	2	9000	19	5700	28700
20	Raipur	202.95	330	1	2000	0	0	0	0	0	0	0	0	1	1300	0	0	1	4500	10	3000	10800
21	Ramvapur Dubai	245.40	280	1	2000	0	0	1	5000	0	0	0	0	1	1300	1	7000	1	4500	4	1200	21000
22	Sakatpur	54.70	199	1	2000	1	2000	0	0	0	0	0	0	0	0	0	0	0	0	6	1800	5800
23	Satanpur	281.39	446	2	4000	1	2000	1	5000	0	0	0	0	1	1300	1	7000	2	9000	8	2400	30700
24	Savsi	171.34	40	0	0	1	2000	0	0	1	6000	0	0	0	0	0	0	1	4500	8	2400	14900
25	Semri	393.33	162	0	0	0	0	0	0	0	0	0	0	0	0	1	7000	2	9000	9	2700	18700
26	Sewanpura	153.26	349	2	4000	0	0	1	5000	1	6000	0	0	1	1300	0	0	1	4500	10	3000	23800
27	Surajpur Guman Khera	79.33	87	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	3600	3600
28	Surajpur Khera	93.33	139	0	0	0	0	0	0	1	6000	0	0	0	0	0	0	1	4500	4	1200	11700
29	Ugabhad	225.47	401	2	4000	1	2000	1	5000	0	0	0	0	1	1300	1	7000	1	4500	5	1500	25300
Total		**4250**	**8427**	**32**	**64000**	**14**	**28000**	**17**	**85000**	**6**	**36000**	**2**	**50000**	**20**	**26000**	**8**	**56000**	**21**	**94500**	**235**	**70500**	**510000**

6.9.5 Proposed cropping intensity

Sl. No.	Name of Gram Panchayat	Geographical area, ha	Kharif, ha	Rabi, ha	Zaid, ha	Total sown area, ha	Total Net sown area (ha)	Existing cropping intensity	Proposed Net sown area (ha)	Proposed Gross sown area (ha)	Proposed cropping inensity
1	2	3	4	5	6	7	8	9	10	11	12
1	Bakuliha	468.76	117.19	159.38	23.44	300.00	218.55	137.27	251.33	378.22	150.49
2	Banai Mau	149.13	37.28	50.70	7.46	95.44	69.53	137.26	79.95	120.31	150.48
3	Chak Gajraj	96.28	24.07	32.73	4.81	61.62	44.89	137.26	51.62	77.68	150.48
4	Deo Gaon	203.07	50.77	69.04	10.15	129.96	94.68	137.26	108.88	163.85	150.49
5	Ekauni	96.11	24.03	32.68	4.81	61.51	44.81	137.26	51.53	77.54	150.48
6	Gahiri	28.54	7.13	9.70	1.43	18.26	13.31	137.22	15.3	23.02	150.46
7	Haripur Nihastha	260.38	65.10	88.53	13.02	166.64	121.4	137.27	139.61	210.09	150.48
8	Jagatpur Ram Garhi	429.04	107.26	145.87	21.45	274.58	200.04	137.26	230.04	346.18	150.49
9	Kalupur	204.20	51.05	69.43	10.21	130.69	95.21	137.26	109.49	164.77	150.49
10	Kesauli	40.96	10.24	13.93	2.05	26.22	19.1	137.26	21.96	33.04	150.46
11	Khanpur Khunti	53.66	13.42	18.24	2.68	34.34	25.02	137.26	28.77	43.29	150.47
12	Khero	0.03	0.01	0.01	0.00	0.02	0.02	108.79	0.02	0.03	150.00
13	Lakshipur	409.54	102.38	139.24	20.48	262.10	190.94	137.27	219.58	330.44	150.49
14	Maduri	86.10	21.53	29.27	4.31	55.10	40.15	137.25	46.17	69.48	150.49
15	Manpur	99.71	24.93	33.90	4.99	63.81	46.49	137.26	53.46	80.45	150.49
16	Matehana	31.32	7.83	10.65	1.57	20.05	14.61	137.21	16.8	25.28	150.48
17	Merui	221.32	55.33	75.25	11.07	141.64	103.19	137.26	118.66	178.57	150.49
18	Mirjapur	14.30	3.58	4.86	0.72	9.15	6.67	137.21	7.67	11.54	150.46
19	Nihastha	385.21	96.30	130.97	19.26	246.53	179.6	137.27	206.54	310.82	150.49
20	Raipur	283.12	70.78	96.26	14.16	181.20	132.01	137.26	151.81	228.45	150.48
21	Ramvapur Dubai	342.34	85.59	116.40	17.12	219.10	159.62	137.26	183.56	276.23	150.48
22	Sakatpur	76.31	19.08	25.94	3.82	48.84	35.58	137.26	40.91	61.56	150.48
23	Satanpur	392.55	98.14	133.47	19.63	251.23	183.03	137.26	210.48	316.75	150.49
24	Savsi	239.02	59.76	81.27	11.95	152.97	111.44	137.27	128.15	192.85	150.49
25	Semri	548.71	137.18	186.56	27.44	351.17	255.83	137.27	294.2	442.74	150.49
26	Sewanpura	213.80	53.45	72.69	10.69	136.83	99.69	137.26	114.64	172.52	150.49
27	Surajpur Guman Khera	110.67	27.67	37.63	5.53	70.83	51.61	137.24	59.35	89.31	150.48

Sl. No.	Name of Gram Panchayat	Geographical area, ha	Kharif, ha	Rabi, ha	Zaid, ha	Total sown area, ha	Total Net sown area (ha)	Existing cropping intensity	Proposed Net sown area (ha)	Proposed Gross sown area (ha)	Proposed cropping inensity
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
28	Surajpur Khera	130.20	32.55	44.27	6.51	83.33	60.71	137.26	69.81	105.05	150.48
29	Ugabhad	314.54	78.63	106.94	15.73	201.30	146.65	137.27	168.64	253.78	150.49
Total		**5928.91**	**1482.23**	**2015.83**	**296.45**	**3794.50**	**2764.38**	**Avg: 136.28**	**3178.93**	**4783.84**	**Avg: 150.46**

6.9.6 Animal production system related work (with MGNREGA convergence)

Sl. No.	Name of Grampanchayat	Treatable area	No. of villages	NADEP @4/village		Vermi pit@3/village		Cow/Buffalo shelter@ 2/village		Goat shelter @ 2/village		Poultry shelter @ 1/village		Total amount (Rs)
				Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Bakuliha	336.02	1	4	36000	3	30000	2	90000	2	80000	1	40000	276000
2	Banai Mau	106.90	2	8	72000	6	60000	4	180000	4	160000	2	80000	552000
3	Chak Gajraj	69.01	3	12	108000	9	90000	6	270000	6	240000	3	120000	828000
4	Deo Gaon	145.56	2	8	72000	6	60000	4	180000	4	160000	2	80000	552000
5	Ekauni	68.89	2	8	72000	6	60000	4	180000	4	160000	2	80000	552000
6	Gahiri	20.46	1	4	36000	3	30000	2	90000	2	80000	1	40000	276000
7	Haripur Nihastha	186.65	2	8	72000	6	60000	4	180000	4	160000	2	80000	552000
8	Jagatpur Ram Garhi	307.55	2	8	72000	6	60000	4	180000	4	160000	2	80000	552000
9	Kalupur	146.38	3	12	108000	9	90000	6	270000	6	240000	3	120000	828000
10	Kesauli	29.36	1	4	36000	3	30000	2	90000	2	80000	1	40000	276000
11	Khanpur Khunti	38.47	1	4	36000	3	30000	2	90000	2	80000	1	40000	276000
12	Khero	0.02	1	4	36000	3	30000	2	90000	2	80000	1	40000	276000
13	Lakshipur	293.57	1	4	36000	3	30000	2	90000	2	80000	1	40000	276000
14	Maduri	61.72	2	8	72000	6	60000	4	180000	4	160000	2	80000	552000
15	Manpur	71.47	1	4	36000	3	30000	2	90000	2	80000	1	40000	276000
16	Matehana	22.45	2	8	72000	6	60000	4	180000	4	160000	2	80000	552000
17	Merui	158.65	1	4	36000	3	30000	2	90000	2	80000	1	40000	276000
18	Mirjapur	10.25	1	4	36000	3	30000	2	90000	2	80000	1	40000	276000
19	Nihastha	276.13	2	8	72000	6	60000	4	180000	4	160000	2	80000	552000
20	Raipur	202.95	2	8	72000	6	60000	4	180000	4	160000	2	80000	552000
21	Ramvapur Dubai	245.40	1	4	36000	3	30000	2	90000	2	80000	1	40000	276000
22	Sakatpur	54.70	1	4	36000	3	30000	2	90000	2	80000	1	40000	276000
23	Satanpur	281.39	1	4	36000	3	30000	2	90000	2	80000	1	40000	276000
24	Savsi	171.34	2	8	72000	6	60000	4	180000	4	160000	2	80000	552000
25	Semri	393.33	1	4	36000	3	30000	2	90000	2	80000	1	40000	276000
26	Sewanpura	153.26	1	4	36000	3	30000	2	90000	2	80000	1	40000	276000
27	Surajpur Guman Khera	79.33	1	4	36000	3	30000	2	90000	2	80000	1	40000	276000

Sl. No.	Name of Grampanchayat	Treatable area	No. of villages	NADEP @4/village		Vermi pit@3/village		Cow/Buffalo shelter@ 2/village		Goat shelter @ 2/village		Poultry shelter @ 1/village		Total amount (Rs)
				Number	Amount	Number	Amount	Number	Amount	Number	Amount	Number	Amount	
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**
28	Surajpur Khera	93.33	1	4	36000	3	30000	2	90000	2	80000	1	40000	276000
29	Ugabhad	225.47	2	8	72000	6	60000	4	180000	4	160000	2	80000	552000
Total		**4250**	**44**	**176**	**1584000**	**132**	**1320000**	**88**	**3960000**	**88**	**3520000**	**44**	**1760000**	**12144000**

10 Livelihood activities

6.10.1 Non-farm based livelihood activities

Sl. No.	Name of G.P.	Number of BPL families	No of Milking animal	Non-farm based activities									
				Dairy establishment 2 per block @500,000	Poultry - Hatchery one per block @300,000	Cold storage for fruits and vegetables 2 per block @500,000	Solar based pump system @200,000	Pumpset repairing (20000)	Electrician (20000)	Plumbering (18000)	Shuttering work (18000)	Hand pump mechanic (20000)	Total cost (Rs)
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Bakuliha	69	276	0	300000	0	0	0	0	0	18000	0	318000
2	Banai Mau	31	124	0	0	0	0	20000	0	0	0	20000	40000
3	Chak Gajraj	28	112	0	0	500000	0	0	0	0	18000	0	518000
4	Deo Gaon	25	100	0	0	0	200000	20000	0	0	0	0	220000
5	Ekauni	27	108	0	0	0	0	0	0	18000	0	20000	38000
6	Gahiri	75	300	0	0	0	0	0	20000	0	0	0	20000
7	Haripur Nihastha	24	96	0	0	0	0	20000	0	0	0	0	20000
8	Jagatpur Ram Garhi	31	124	0	0	0	0	0	0	0	0	20000	20000
9	Kalupur	43	172	0	0	0	0	0	0	0	0	20000	20000
10	Kesauli	29	116	0	0	0	0	0	20000	0	18000	0	38000
11	Khanpur Khunti	12	48	0	300000	0	0	0	0	0	0	0	300000
12	Khero	154	616	0	0	0	0	0	0	0	0	20000	20000
13	Lakshipur	41	164	0	0	500000	0	0	0	0	18000	0	518000
14	Maduri	58	232	0	0	0	200000	0	0	0	0	0	200000
15	Manpur	6	24	0	0	0	0	20000	0	0	0	0	20000
16	Matehana	37	148	500000	0	0	0	0	20000	0	0	0	520000
17	Merui	50	200	0	0	0	0	0	0	18000	0	0	18000
18	Mirjapur	22	88	0	0	0	0	0	0	0	0	20000	20000
19	Nihastha	53	212	0	0	0	0	0	0	0	0	20000	20000
20	Raipur	45	180	0	300000	0	0	0	0	0	18000	0	318000
21	Ramvapur Dubai	38	152	0	0	0	0	0	0	0	0	20000	20000
22	Sakatpur	27	108	0	0	0	0	0	20000	0	0	0	20000

Sl. No.	Name of G.P.	Number of BPL families	No of Milking animal	Non-farm based activities									
				Dairy establishment 2 per block @500,000	Poultry - Hatchery one per block @300,000	Cold storage for fruits and vegetables 2 per block @500,000	Solar based pump system @200,000	Pumpset repairing (20000)	Electrician (20000)	Plumbering (18000)	Shuttering work (18000)	Hand pump mechanic (20000)	Total cost (Rs)
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**
23	Satanpur	61	244	0	0	0	200000	0	0	0	0	0	200000
24	Savsi	5	20	0	0	0	0	0	0	0	0	20000	20000
25	Semri	22	88	0	0	0	200000	0	0	0	0	0	200000
26	Sewanpura	48	192	0	0	0	0	20000	0	0	18000	0	38000
27	Surajpur Guman Khera	12	48	0	0	0	0	0	0	18000	0	20000	38000
28	Surajpur Khera	19	76	0	0	0	0	0	0	0	18000	0	18000
29	Ugabhad	55	220	0	300000	0	0	0	20000	0	0	0	320000
	Total	**1147**	**4588**	**500000**	**1200000**	**1000000**	**800000**	**100000**	**100000**	**54000**	**126000**	**200000**	**4080000**

6.10.2 Livelihood activities – On-farm based

Sl. No.	Name of G.P.	No. of BPL families	No. of Landless families	Farm based activities												Total Rs
				Low plastic tunnels Nursery @10000		Vegetable preservation unit @10000		Goat rearing (2 goat /unit) @6000		Poultry @20,000		Backyard poultry @3500		seed replacement (SRR) @4000		
				No.s	Amount (Rs)	No.s	Amount (Rs)	No.s	Amount (Rs)	No.s	Amount (Rs)	No.s	Amount (Rs)	No.s	Amount (Rs)	
1	Bakuliha	69	261	1	10000	0	0	0	0	2	40000	0	0	0	0	50000
2	Banai Mau	31	118	1	10000	0	0	0	0	0	0	1	3500	0	0	13500
3	Chak Gajraj	28	104	0	0	0	0	1	6000	1	20000	0	0	0	0	26000
4	Deo Gaon	25	94	0	0	0	0	0	0	1	20000	0	0	0	0	20000
5	Ekauni	27	103	0	0	1	10000	0	0	1	20000	0	0	1	4000	34000
6	Gahiri	75	284	1	10000	0	0	0	0	0	0	0	0	0	0	10000
7	Haripur Nihastha	24	89	0	0	0	0	0	0	1	20000	0	0	0	0	20000
8	Jagatpur Ram Garhi	31	118	1	10000	0	0	0	0	0	0	1	3500	0	0	13500
9	Kalupur	43	168	1	10000	0	0	1	6000	1	20000	0	0	0	0	36000
10	Kesauli	29	108	0	0	1	10000	0	0	1	20000	0	0	0	0	30000
11	Khanpur Khunti	12	46	0	0	0	0	0	0	0	0	1	3500	0	0	3500
12	Khero	154	583	1	10000	0	0	0	0	0	0	0	0	0	0	10000
13	Lakshipur	41	156	0	0	0	0	0	0	1	20000	0	0	0	0	20000
14	Maduri	58	221	1	10000	0	0	0	0	0	0	0	0	0	0	10000
15	Manpur	6	23	0	0	0	0	0	0	0	0	0	0	1	4000	4000
16	Matehana	37	142	0	0	0	0	1	6000	1	20000	0	0	0	0	26000
17	Merui	50	188	1	10000	0	0	0	0	0	0	0	0	0	0	10000
18	Mirjapur	22	83	0	0	0	0	0	0	1	20000	0	0	0	0	20000
19	Nihastha	53	200	1	10000	0	0	0	0	0	0	0	0	0	0	10000
20	Raipur	45	170	0	0	0	0	0	0	1	20000	0	0	0	0	20000
21	Ramvapur Dubai	38	145	1	10000	0	0	0	0	0	0	0	0	0	0	10000
22	Sakatpur	27	103	0	0	0	0	0	0	1	20000	0	0	0	0	20000
23	Satanpur	61	230	1	10000	0	0	0	0	0	0	0	0	0	0	10000
24	Savsi	5	20	0	0	0	0	0	0	0	0	1	3500	0	0	3500
25	Semri	22	84	0	0	0	0	0	0	1	20000	0	0	0	0	20000
26	Sewanpura	48	180	1	10000	1	10000	0	0	0	0	0	0	0	0	20000

Sl. No.	Name of G.P.	No. of BPL families	No. of Landless families	Farm based activities												Total Rs
				Low plastic tunnels Nursery @10000		Vegetable preservation unit @10000		Goat rearing (2 goat /unit) @6000		Poultry @20,000		Backyard poultry @3500		seed replacement (SRR) @4000		
				No.s	Amount (Rs)	No.s	Amount (Rs)	No.s	Amount (Rs)	No.s	Amount (Rs)	No.s	Amount (Rs)	No.s	Amount (Rs)	
27	Surajpur Guman Khera	12	45	0	0	0	0	0	0	0	0	0	0	1	4000	4000
28	Surajpur Khera	19	72	0	0	0	0	1	6000	0	0	0	0	0	0	6000
29	Ugabhad	55	208	1	10000	0	0	0	0	1	20000	0	0	0	0	30000
	Total	**1147**	**4346**	**13**	**130000**	**3**	**30000**	**4**	**24000**	**15**	**300000**	**4**	**14000**	**3**	**12000**	**510000**

6.11 Soil and water conservation work under NRM

6.11.1 Detail dimensions of soil and water conservation works under NRM

Sl. No.	Name of Grampanchayat	Treatable area	farmers families	no. of villages	No. of Masonary Check dam	Fodder development on field bund @250 rmtr/farmer		Contour Bunding (Rmt 100/ha)		Peripheral Bunding		Rennovation of ponds (No.s)	Renovation of FB @200mtr per farmer	Silvi Pasture (ha)
						No. of farmers	Length Rmtr	Length (mtr)	Volume cum (Length * 0.67)	Length @50mtr	Volume (cum) (Length * 1.35)			
1	2	3	4	5	6	8	9	10	11	12	13	14	15	16
1	Bakuliha	336.02	507	1	2	254	63500	600	486	150	203	1	12	4.8
2	Banai Mau	106.90	228	2	1	114	28500	200	162	50	68	0	5	1.53
3	Chak Gajraj	69.01	201	3	0	101	25250	100	81	50	68	0	5	0.99
4	Deo Gaon	145.56	184	2	1	92	23000	300	243	50	68	1	4	2.08
5	Ekauni	68.89	199	2	0	100	25000	100	81	50	68	0	5	0.98
6	Gahiri	20.46	552	1	0	276	69000	0	0	0	0	0	13	0.29
7	Haripur Nihastha	186.65	173	2	1	87	21750	400	324	100	135	1	4	2.67
8	Jagatpur Ram Garhi	307.55	229	2	2	115	28750	600	486	150	203	1	5	4.39
9	Kalupur	146.38	325	3	1	163	40750	300	243	50	68	1	8	2.09
10	Kesauli	29.36	211	1	0	106	26500	100	81	0	0	0	5	0.42
11	Khanpur Khunti	38.47	90	1	0	45	11250	100	81	0	0	0	2	0.55
12	Khero	0.02	1131	1	0	566	141500	0	0	0	0	0	26	0
13	Lakshipur	293.57	302	1	2	151	37750	600	486	150	203	1	7	4.19
14	Maduri	61.72	431	2	0	216	54000	100	81	50	68	0	10	0.88
15	Manpur	71.47	46	1	0	23	5750	100	81	50	68	0	1	1.02
16	Matehana	22.45	275	2	0	138	34500	0	0	0	0	0	6	0.32
17	Merui	158.65	364	1	1	182	45500	300	243	100	135	1	8	2.27
18	Mirjapur	10.25	160	1	0	80	20000	0	0	0	0	0	4	0.15
19	Nihastha	276.13	386	2	2	193	48250	500	405	150	203	1	9	3.94

Sl. No.	Name of Grampanchayat	Treatable area	farmers families	no. of villages	No. of Masonary Check dam	Fodder development on field bund @250 rmtr/farmer		Contour Bunding (Rmt 100/ha)		Peripheral Bunding		Rennovation of ponds (No.s)	Renovation of FB @200mtr per farmer	Silvi Pasture (ha)
						No. of farmers	Length Rmtr	Length (mtr)	Volume cum (Length * 0.67)	Length @50mtr	Volume (cum) (Length * 1.35)			
1	2	3	4	5	6	8	9	10	11	12	13	14	15	16
20	Raipur	202.95	330	2	1	165	41250	400	324	100	135	1	8	2.9
21	Ramvapur Dubai	245.40	280	1	1	140	35000	500	405	100	135	1	6	3.51
22	Sakatpur	54.70	199	1	0	100	25000	100	81	50	68	0	5	0.78
23	Satanpur	281.39	446	1	2	223	55750	500	405	150	203	1	10	4.02
24	Savsi	171.34	40	2	1	20	5000	300	243	100	135	0	1	2.45
25	Semri	393.33	162	1	2	81	20250	700	567	200	270	2	4	5.62
26	Sewanpura	153.26	349	1	1	175	43750	300	243	50	68	1	8	2.19
27	Surajpur Guman Khera	79.33	87	1	0	44	11000	200	162	50	68	0	2	1.13
28	Surajpur Khera	93.33	139	1	1	70	17500	200	162	50	68	0	3	1.33
29	Ugabhad	225.47	401	2	1	201	50250	400	324	100	135	0	9	3.22
Total		**4250**	**8427**	**44**	**23**	**4221**	**1055250**	**8000**	**6480**	**2100**	**2843**	**14**	**195**	**60.710**

6.11.2Cost of Soil and water conservation works under NRM

Sl. No.	Name of Grampanchayat	Masonary Check dam	Fodder development on field bund	Contour Bunding	Peripheral Bunding	Rennovation of pond	Renovation of FB in meter @200mtr per farmer (75% by MGNREGA)	Silvi Pasture	Grand total Rs	Cost from MGNREGA (Rs.)	IWMP (Rs.)	Renovation of FB in meter @200mtr per farmer (25% to be born by farmers)
		Cost @Rs 850,000 per dam	Cost @Rs. 5/Rmtr	Cost @ 67 m^3	Cost @ 67 m^3	Amount in Rs		cost @Rs. 20,000/ha (Rs.)				
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Bakuliha	1700000	317500	32562	13601	650000	97692	96000	2907355	557355	2350000	32568
2	Banai Mau	850000	142500	10854	4556	0	40705	30600	1079215	229215	850000	13570
3	Chak Gajraj	0	126250	5427	4556	0	40705	19800	196738	196738	0	13570
4	Deo Gaon	850000	115000	16281	4556	650000	32564	41600	1710001	210001	1500000	10856
5	Ekauni	0	125000	5427	4556	0	40705	19600	195288	195288	0	13570
6	Gahiri	0	345000	0	0	0	105833	5800	456633	456633	0	35282
7	Haripur Nihastha	850000	108750	21708	9045	650000	32564	53400	1725467	225467	1500000	10856
8	Jagatpur Ram Garhi	1700000	143750	32562	13601	650000	40705	87800	2668418	318418	2350000	13570
9	Kalupur	850000	203750	16281	4556	650000	65128	41800	1831515	331515	1500000	21712
10	Kesauli	0	132500	5427	0	0	40705	8400	187032	187032	0	13570
11	Khanpur Khunti	0	56250	5427	0	0	16282	11000	88959	88959	0	5428
12	Khero	0	707500	0	0	0	211666	0	919166	919166	0	70564
13	Lakshipur	1700000	188750	32562	13601	650000	56987	83800	2725700	375700	2350000	18998
14	Maduri	0	270000	5427	4556	0	81410	17600	378993	378993	0	27140
15	Manpur	0	28750	5427	4556	0	8141	20400	67274	67274	0	2714
16	Matehana	0	172500	0	0	0	48846	6400	227746	227746	0	16284
17	Merui	850000	227500	16281	9045	650000	65128	45400	1863354	363354	1500000	21712
18	Mirjapur	0	100000	0	0	0	32564	3000	135564	135564	0	10856
19	Nihastha	1700000	241250	27135	13601	650000	73269	78800	2784055	434055	2350000	24426
20	Raipur	850000	206250	21708	9045	650000	65128	58000	1860131	360131	1500000	21712
21	Ramvapur Dubai	850000	175000	27135	9045	650000	48846	70200	1830226	330226	1500000	16284
22	Sakatpur	0	125000	5427	4556	0	40705	15600	191288	191288	0	13570
23	Satanpur	1700000	278750	27135	13601	650000	81410	80400	2831296	481296	2350000	27140
24	Savsi	850000	25000	16281	9045	0	8141	49000	957467	107467	850000	2714
25	Semri	1700000	101250	37989	18090	1210000	32564	112400	3212293	302293	2910000	10856

Sl. No.	Name of Grampanchayat	Masonary Check dam	Fodder development on field bund	Contour Bunding	Peripheral Bunding	Rennovation of pond	Renovation of FB in meter @200mtr per farmer (75% by MGNREGA)	Silvi Pasture	Grand total Rs	Cost from MGNREGA (Rs.)	IWMP (Rs.)	Renovation of FB in meter @200mtr per farmer (25% to be born by farmers)
		Cost @Rs 850,000 per dam	Cost @Rs. 5/Rmtr	Cost @ 67 m^3	Cost @ 67 m^3	Amount in Rs		cost @Rs. 20,000/ha (Rs.)				
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**
26	Sewanpura	850000	218750	16281	4556	650000	65128	43800	1848515	348515	1500000	21712
27	Surajpur Guman Khera	0	55000	10854	4556	0	16282	22600	109292	109292	0	5428
28	Surajpur Khera	850000	87500	10854	4556	0	24423	26600	1003933	153933	850000	8142
29	Ugabhad	850000	251250	21708	9045	0	73269	64400	1269672	419672	850000	24426
Total		**19550000**	**5276250**	**434160**	**190481**	**9010000**	**1587495**	**1214200**	**37262586**	**8702586**	**28560000**	**529230**

6.12 Gram Panchayat wise proposed EPA activities

Sl. No.	Name of Grampanchayat	Treatable area (ha)	No of Total families	No. of villages	Vegetable seed packet distribution for backyard garden		New Pond in community land (approx. 0.25ha)		Abandon well rain water harvesting		EPA Fodder on field bund of BPL families		Total amout (Rs.)
					No.s	Amount @Rs150/packet*	No.s	Amount (Rs.) @275,000	No.s	Amount (Rs.) @22255	No.s	Amount in Rs @1250	
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Bakuliha	336.02	768	1	121	18150	0	0	1	22255	8	10000	50405
2	Banai Mau	106.90	346	2	55	8250	0	0	0	0	3	3750	12000
3	Chak Gajraj	69.01	305	3	48	7200	0	0	0	0	3	3750	10950
4	Deo Gaon	145.56	278	2	42	6300	1	275000	0	0	3	3750	285050
5	Ekauni	68.89	302	2	45	6750	0	0	0	0	3	3750	10500
6	Gahiri	20.46	836	1	125	18750	0	0	1	22255	7	8750	49755
7	Haripur Nihastha	186.65	262	2	39	5850	1	275000	0	0	3	3750	284600
8	Jagatpur Ram Garhi	307.55	347	2	51	7650	0	0	0	0	3	3750	11400
9	Kalupur	146.38	493	3	74	11100	0	0	0	0	5	6250	17350
10	Kesauli	29.36	319	1	48	7200	0	0	0	0	3	3750	10950
11	Khanpur Khunti	38.47	136	1	21	3150	0	0	0	0	1	1250	4400
12	Khero	0.02	1714	1	255	38250	0	0	2	44510	17	21250	104010
13	Lakshipur	293.57	458	1	69	10350	0	0	0	0	5	6250	16600
14	Maduri	61.72	652	2	97	14550	0	0	1	22255	7	8750	45555
15	Manpur	71.47	69	1	11	1650	0	0	0	0	1	1250	2900
16	Matehana	22.45	417	2	63	9450	0	0	0	0	4	5000	14450
17	Merui	158.65	552	1	91	13650	0	0	1	22255	6	7500	43405
18	Mirjapur	10.25	243	1	37	5550	0	0	0	0	2	2500	8050
19	Nihastha	276.13	586	2	88	13200	1	275000	1	22255	6	7500	317955
20	Raipur	202.95	500	2	75	11250	0	0	1	22255	5	6250	39755
21	Ramvapur Dubai	245.40	425	1	64	9600	0	0	0	0	3	3750	13350
22	Sakatpur	54.70	302	1	45	6750	1	275000	0	0	3	3750	285500
23	Satanpur	281.39	676	1	101	15150	0	0	1	22255	4	5000	42405
24	Savsi	171.34	60	2	9	1350	0	0	0	0	1	1250	2600
25	Semri	393.33	246	1	37	5550	0	0	0	0	2	2500	8050
26	Sewanpura	153.26	529	1	79	11850	0	0	0	0	5	6250	18100

Sl. No.	Name of Grampanchayat	Treatable area (ha)	No of Total families	No. of villages	Vegetable seed packet distribution for backyard garden		New Pond in community land (approx. 0.25ha)		Abandon well rain water harvesting		EPA Fodder on field bund of BPL families		Total amout (Rs.)
					No.s	Amount @Rs150/packet*	No.s	Amount (Rs.) @275,000	No.s	Amount (Rs.) @22255	No.s	Amount in Rs @1250	
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**
27	Surajpur Guman Khera	79.33	132	1	20	3000	0	0	0	0	1	1250	4250
28	Surajpur Khera	93.33	211	1	32	4800	1	275000	0	0	2	2500	282300
29	Ugabhad	225.47	609	2	91	13650	0	0	1	22255	6	7500	43405
Total			**12773**	**44**	**1933**	**289950**	**5**	**1375000**	**10**	**222550**	**122**	**152,500**	**2,040,000**

Chapter: 7 Benefit and cost

7.1 Net benefit

7.1.1 Present and proposed net benefit from cropping system

Sl. No.	Name of Gram Panchayat	Present value, Rs [1]			Proposed value, Rs. [2]			Total Value, Rs		Production cost, Rs.		Presernt profit, Rs	Propose d profit, Rs	Net profit, Rs
		Kharif	Rabi	Zaid	Kharif	Rabi	Zaid	Present	Proposed	Present [3]	Proposed [4]			
1	2	3	4	5	6	7	8	9	10	11	12	14	15	16
1	Bakuliha	4335986	6375071	2039085	5907781	9033476	2889383	12750142	17830640	11522004	14978605	1228138	2852035	1623897
2	Banai Mau	1379408	2028102	648694	1879443	2873821	919199	4056204	5672463	3665496	4765145	390708	907318	516610
3	Chak Gajraj	890560	1309365	418804	1213388	1855370	593445	2618729	3662203	2366484	3076429	252245	585774	333529
4	Deo Gaon	1878354	2761687	883334	2559257	3913310	1251684	5523375	7724251	4991344	6488747	532031	1235504	703473
5	Ekauni	888989	1307054	418065	1211248	1852096	592398	2614108	3655742	2362308	3071001	251800	584741	332941
6	Gahiri	263967	388103	124136	359655	549942	175901	776206	1085498	701439	911871	74767	173627	98860
7	Haripur Nihastha	2408528	3541187	1132659	3281619	5017862	1604978	7082374	9904459	6400175	8320227	682199	1584232	902033
8	Jagatpur Ram Garhi	3968596	5834909	1866313	5407212	8268066	2644566	11669818	16319844	10545740	13709462	1124078	2610382	1486304
9	Kalupur	1888862	2777138	888276	2573574	3935205	1258687	5554276	7767466	5019268	6525048	535008	1242418	707410
10	Kesauli	378922	557118	178196	516281	789436	252504	1114236	1558221	1006910	1308982	107326	249239	141912
11	Khanpur Khunti	496368	729795	233427	676301	1034120	330766	1459590	2041187	1318998	1714697	140592	326490	185898
12	Khero	314	462	148	428	655	210	924	1293	836	1086	88	207	118
13	Lakshipur	3788206	5569687	1781481	5161431	7892246	2524359	11139374	15578036	10066390	13086307	1072984	2491729	1418745
14	Maduri	796436	1170976	374540	1085144	1659273	530723	2341952	3275140	2116366	2751276	225586	523864	298278
15	Manpur	922316	1356053	433738	1256656	1921527	614607	2712107	3792790	2450867	3186126	261240	606664	345423
16	Matehana	289742	425999	136257	394773	603641	193076	851998	1191490	769931	1000911	82067	190579	108513
17	Merui	2047188	3009920	962732	2789294	4265057	1364191	6019840	8418542	5439988	7071985	579852	1346557	766706
18	Mirjapur	132276	194482	62205	180226	275581	88144	388963	543951	351497	456946	37466	87005	49539
19	Nihastha	3563178	5238835	1675657	4854830	7423429	2374406	10477670	14652665	9468424	12308951	1009246	2343714	1334468
20	Raipur	2618898	3850488	1231590	3568249	5456141	1745163	7700976	10769553	6959192	9046949	741784	1722604	980819
21	Ramvapur Dubai	3166670	4655860	1489191	4314588	6597354	2110184	9311721	13022126	8414783	10939218	896938	2082908	1185970
22	Sakatpur	705841	1037777	331936	961708	1470530	470353	2075554	2902591	1875629	2438317	199925	464274	264348
23	Satanpur	3631108	5338710	1707602	4947385	7564952	2419672	10677420	14932009	9648933	12543613	1028487	2388396	1359909
24	Savsi	2210942	3250682	1039740	3012408	4606216	1473312	6501364	9091936	5875130	7637669	626234	1454267	828033
25	Semri	5075561	7462447	2386886	6915452	10574287	3382217	14924894	20871956	13487275	17533458	1437619	3338498	1900879

Sl. No.	Name of Gram Panchayat	Present value, Rs [1]			Proposed value, Rs. [2]			Total Value, Rs		Production cost, Rs.		Presernt profit, Rs	Propose d profit, Rs	Net profit, Rs
		Kharif	Rabi	Zaid	Kharif	Rabi	Zaid	Present	Proposed	Present [3]	Proposed [4]			
1	2	3	4	5	6	7	8	9	10	11	12	14	15	16
26	Sewanpura	1977645	2907673	930028	2694541	4120173	1317850	5815346	8132564	5255192	6831749	560154	1300815	740660
27	Surajpur Guman Khera	1023735	1505168	481432	1394839	2132823	682189	3010335	4209851	2720369	3536480	289966	673371	383405
28	Surajpur Khera	1204352	1770723	566371	1640930	2509114	802548	3541446	4952592	3200322	4160419	341124	792173	451049
29	Ugabhad	2909449	4277677	1368228	3964124	6061468	1938779	8555354	11964371	7731272	10050654	824082	1913717	1089635
	Total	**54842397**	**80633148**	**25790751**	**74722765**	**114257171**	**36545494**	**161266296**	**225525430**	**145732561**	**189452329**	**15533735**	**36073101**	**20539366**

7.1.2 Present and proposed production and value of horticulture system

S. N.	Name of Grampanchayat	Mango Rejuvination						Guava high density						Citrus						Horti-system innovation cost in Rs	profit		
		Proposed cost @ Rs 20000/ha	Present production @ 8t/ha	Additional proposed productio n @ 15 t/ha	Total p-roposed productio n , t	Present value @ Rs 20000/t	Proposed value in Rs	Proposed cost @ Rs 63,000/ha	Present production @ 9t/ha	Additional proposed productio n @ 30t/ha	Total proposed productio n in, t	Present value @ Rs 10000/t	Proposed value in Rs	Proposed cost @ Rs 19000/ha	Present production @ 8t/ha	Additional proposed productio n @ 15 t/ha	Total p-roposed production, t	Present value @ Rs 20000/t	Proposed value in Rs		Present value in Rs	Proposed value in Rs	Profit in Rs
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1	Bakuliha	29200	23.28	21.9	45.18	465600	903600	20160	11.34	9.6	20.94	113400	209400	34960	2.48	27.6	30.08	49600	601600	84320	628600	1630280	1001680
2	Banai Mau	15200	0	11.4	11.4	0	228000	5040	0	2.4	2.4	0	24000	10070	0	7.95	7.95	0	159000	30310	0	380690	380690
3	Chak Gajraj	10400	8.24	7.8	16.04	164800	320800	6930	4.05	3.3	7.35	40500	73500	7600	0.88	6	6.88	17600	137600	24930	222900	506970	284070
4	Deo Gaon	39800	31.84	29.85	61.69	636800	1233800	27090	15.39	12.9	28.29	153900	282900	17860	3.44	14.1	17.54	68800	350800	84750	859500	1782750	923250
5	Ekauni	6200	0	4.65	4.65	0	93000	1890	0	0.9	0.9	0	9000	6460	0	5.1	5.1	0	102000	14550	0	189450	189450
6	Gahiri	34400	27.52	25.8	53.32	550400	1066400	23310	13.32	11.1	24.42	133200	244200	5510	3.04	4.35	7.39	60800	147800	63220	744400	1395180	650780
7	Haripur Nihastha	99800	0	74.85	74.85	0	1497000	31500	0	15	15	0	150000	17670	0	13.95	13.95	0	279000	14897	0	1777030	1777030
8	Jagatpur Ram Garhi	109400	0	82.05	82.05	0	1641000	34650	0	16.5	16.5	0	165000	29260	0	23.1	23.1	0	462000	17331	0	2094690	2094690
9	Kalupur	22200	17.76	16.65	34.41	355200	688200	15120	8.64	7.2	15.84	86400	158400	16150	1.92	12.75	14.67	38400	293400	53470	480000	1086530	606530
10	Kesauli	4400	0	3.3	3.3	0	66000	1260	0	0.6	0.6	0	6000	2850	0	2.25	2.25	0	45000	8510	0	108490	108490
11	Khanpur Khunti	18400	14.64	13.8	28.44	292800	568800	12600	7.11	6	13.11	71100	131100	5510	1.6	4.35	5.95	32000	119000	36510	395900	782390	386490
12	Khero	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Lakshipur	32800	26.16	24.6	50.76	523200	1015200	22050	12.69	10.5	23.19	126900	231900	31160	2.8	24.6	27.4	56000	548000	86010	706100	1709090	1002990
14	Maduri	5600	0	4.2	4.2	0	84000	1890	0	0.9	0.9	0	9000	5890	0	4.65	4.65	0	93000	13380	0	172620	172620
15	Manpur	3200	0	2.4	2.4	0	48000	1260	0	0.6	0.6	0	6000	6840	0	5.4	5.4	0	108000	11300	0	150700	150700
16	Matehana	25800	20.64	19.35	39.99	412800	799800	17640	9.99	8.4	18.39	99900	183900	4750	2.24	3.75	5.99	44800	119800	48190	557500	1055310	497810
17	Merui	1960	0	14.7	14.7	0	2940	6300	0	3	3	0	3000	1501	0	11.85	11.85	0	2370	4091	0	5200	5200

S. N.	Name of Grampanchayat	Mango Rejuvination						Guava high density						Citrus						Horti-system innovation cost in Rs	profit		
		Proposed cost @ Rs 20000/ha	Present production @ 8t/ha	Additional proposed productuion @ 15 t/ha	Total p-roposed productuion , t	Present value @ Rs 20000/t	Proposed value in Rs	Proposed cost @ Rs 63,000/ha	Present production @ 9t/ha	Additional proposed productuion @ 30t/ha	Total proposed productuion in, t	Present value @ Rs 10000/t	Proposed value in Rs	Proposed cost @ Rs 19000/ha	Present production @ 8t/ha	Additional proposed productuion @ 15 t/ha	Total p-roposed production, t	Present value @ Rs 20000/t	Proposed value in Rs		Present value in Rs	Proposed value in Rs	Profit in Rs
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
7		0					00						0	0					00	0		90	90
18	Mirjapur	17400	13.84	13.05	26.89	276800	537800	11970	6.66	5.7	12.36	66600	123600	2850	1.52	2.25	3.77	30400	75400	32220	373800	704580	330780
19	Nihastha	4600	3.68	3.45	7.13	73600	142600	3150	1.8	1.5	3.3	18000	33000	26790	0.4	21.15	21.55	8000	431000	34540	99600	572060	472460
20	Raipur	51200	0	38.4	38.4	0	768000	16380	0	7.8	7.8	0	78000	19190	0	15.15	15.15	0	303000	86770	0	106230	106230
21	Ramvapur Dubai	90800	72.56	68.1	140.66	1451200	2813200	61740	35.19	29.4	64.59	351900	645900	32490	7.76	25.65	33.41	155200	668200	185030	1958300	394270	1983970
22	Sakatpur	1800	0	1.35	1.35	0	27000	630	0	0.3	0.3	0	3000	5130	0	4.05	4.05	0	81000	7560	0	103440	103440
23	Satanpur	46400	0	34.8	34.8	0	696000	14490	0	6.9	6.9	0	69000	26790	0	21.15	21.15	0	423000	87680	0	110032	110032
24	Savsi	5000	4	3.75	7.75	80000	155000	3780	1.98	1.8	3.78	19800	37800	16720	0.4	13.2	13.6	8000	272000	25500	107800	439300	331500
25	Semri	102600	82.08	76.95	159.03	1641600	3180600	69930	39.78	33.3	73.08	397800	730800	47880	8.8	37.8	46.6	176000	932000	220410	2215400	462299	2407590
26	Sewanpura	51400	0	38.55	38.55	0	771000	16380	0	7.8	7.8	0	78000	14630	0	11.55	11.55	0	231000	82410	0	99759	99759
27	Surajpur Guman Khera	44200	35.36	33.15	68.51	707200	1370200	30240	17.1	14.4	31.5	171000	315000	12160	3.84	9.6	13.44	76800	268800	86600	955000	186740	912400
28	Surajpur Khera	14000	0	10.5	10.5	0	210000	4410	0	2.1	2.1	0	21000	8930	0	7.05	7.05	0	141000	27340	0	344660	344660
29	Ugabhad	13400	0	10.05	10.05	0	201000	4410	0	2.1	2.1	0	21000	21470	0	16.95	16.95	0	339000	39280	0	521720	521720
Total		**919200**	**381.6**	**689.4**	**1071**	**7632000**	**21420000**	**466200**	**185.04**	**222**	**407.04**	**1850400**	**4070400**	**452580**	**41.12**	**357.3**	**398.42**	**822400**	**7968400**	**1837980**	**10304800**	**3162 0820**	**21316020**

7.1.3 Production and Profit from major animal /livestock

S. N	Name of G.P.	Cow	Buffalo	Goat	Poultry	Production value in Rs				Present		Proposed		Profit in Rs		Net Benefits, Rs
						Cows @9000	Buffalo @11000	Goat @1500	Poultry @300	Total prductio n value of product	Total prductio n cost, Rs	Total productio n value of product	Total prductio n cost, Rs	Present productio n value, Rs	Propose d produtio n value, Rs	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Bakuliha	176	563	122	807	1760000	6756000	183000	242100	8941100	6258770	10729320	7510524	2682330	3218796	536466
2	Banai Mau	56	179	39	257	560000	2148000	58500	77100	2843600	1990520	3412320	2388624	853080	1023696	170616
3	Chak Gajraj	36	116	25	166	360000	1392000	37500	49800	1839300	1287510	2207160	1545012	551790	662148	110358
4	Deo Gaon	76	244	53	349	760000	2928000	79500	104700	3872200	2710540	4646640	3252648	1161660	1393992	232332
5	Ekauni	36	115	25	165	360000	1380000	37500	49500	1827000	1278900	2192400	1534680	548100	657720	109620
6	Gahiri	11	34	7	49	110000	408000	10500	14700	543200	380240	651840	456288	162960	195552	32592
7	Haripur Nihastha	98	313	68	448	980000	3756000	102000	134400	4972400	3480680	5966880	4176816	1491720	1790064	298344
8	Jagatpur Ram Garhi	162	516	112	738	1620000	6192000	168000	221400	8201400	5740980	9841680	6889176	2460420	2952504	492084
9	Kalupur	77	245	53	351	770000	2940000	79500	105300	3894800	2726360	4673760	3271632	1168440	1402128	233688
10	Kesauli	15	49	11	71	150000	588000	16500	21300	775800	543060	930960	651672	232740	279288	46548
11	Khanpur Khunti	20	64	14	92	200000	768000	21000	27600	1016600	711620	1219920	853944	304980	365976	60996
12	Khero	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Lakshipur	154	492	106	705	1540000	5904000	159000	211500	7814500	5470150	9377400	6564180	2344350	2813220	468870
14	Maduri	32	103	22	148	320000	1236000	33000	44400	1633400	1143380	1960080	1372056	490020	588024	98004
15	Manpur	38	120	26	172	380000	1440000	39000	51600	1910600	1337420	2292720	1604904	573180	687816	114636
16	Matehana	12	38	8	54	120000	456000	12000	16200	604200	422940	725040	507528	181260	217512	36252
17	Merui	83	266	58	381	830000	3192000	87000	114300	4223300	2956310	5067960	3547572	1266990	1520388	253398
18	Mirjapur	5	17	4	25	50000	204000	6000	7500	267500	187250	321000	224700	80250	96300	16050
19	Nihastha	145	463	100	663	1450000	5556000	150000	198900	7354900	5148430	8825880	6178116	2206470	2647764	441294
20	Raipur	107	340	74	487	1070000	4080000	111000	146100	5407100	3784970	6488520	4541964	1622130	1946556	324426
21	Ramvapur Dubai	129	411	89	589	1290000	4932000	133500	176700	6532200	4572540	7838640	5487048	1959660	2351592	391932
22	Sakatpur	29	92	20	131	290000	1104000	30000	39300	1463300	1024310	1755960	1229172	438990	526788	87798

S. N	Name of G.P.	Cow	Buffalo	Goat	Poultry	Production value in Rs				Present		Proposed		Profit in Rs		Net Benefits, Rs
						Cows @9000	Buffalo @11000	Goat @1500	Poultry @300	Total prduction value of product	Total prduction cost, Rs	Total production value of product	Total prduction cost, Rs	Present production value, Rs	Proposed produtio n value, Rs	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
23	Satanpur	148	472	102	676	1480000	5664000	153000	202800	7499800	5249860	8999760	6299832	2249940	2699928	449988
24	Savsi	90	287	62	411	900000	3444000	93000	123300	4560300	3192210	5472360	3830652	1368090	1641708	273618
25	Semri	207	659	143	944	2070000	7908000	214500	283200	10475700	7332990	12570840	8799588	3142710	3771252	628542
26	Sewanpura	80	257	56	368	800000	3084000	84000	110400	4078400	2854880	4894080	3425856	1223520	1468224	244704
27	Surajpur Guman Khera	42	133	29	190	420000	1596000	43500	57000	2116500	1481550	2539800	1777860	634950	761940	126990
28	Surajpur Khera	49	156	34	224	490000	1872000	51000	67200	2480200	1736140	2976240	2083368	744060	892872	148812
29	Ugabhad	118	378	82	541	1180000	4536000	123000	162300	6001300	4200910	7201560	5041092	1800390	2160468	360078
Total		**2231**	**7122**	**1544**	**10202**	**22310000**	**85464000**	**2316000**	**3060600**	**113150600**	**79205420**	**135780720**	**95046504**	**33945180**	**40734216**	**6,789,036**

7.1.4 Net Profit through Various Interventions

Sl. No.	Name of G.P.	Net Profit (Rs)				yearly system profit					
		Cropping system	Horticulture	Animal Husbandry	Livelihood activities	I	II	III	IV	V	Total profit in Rs
1	2	3	4	5	6	7	8	9	10	11	14
1	Bakuliha	1623897	1001680	536466	664900	864145	1615460	1777006	1972476	3210853	9439940
2	Banai Mau	516610	380690	170616	136300	274890	438679	482547	535628	980593	2712338
3	Chak Gajraj	333529	284070	110358	895300	177555	1090610	1199671	1331635	1775501	5574972
4	Deo Gaon	703473	923250	232332	427600	374322	839354	923290	1024851	2071084	5232900
5	Ekauni	332941	189450	109620	132200	177025	326927	359620	399178	636529	1899279
6	Gahiri	98860	650780	32592	198600	52581	256439	282083	313112	1001465	1905680
7	Haripur Nihastha	902033	1777030	298344	99200	480151	627366	690102	766014	2634965	5198597
8	Jagatpur Ram Garhi	1486304	2094690	492084	183200	791355	1053691	1159060	1286556	3535633	7826295
9	Kalupur	707410	606530	233688	160100	376439	574183	631601	701077	1391737	3675037
10	Kesauli	141912	108490	46548	160900	75384	243822	268205	297707	441922	1327041
11	Khanpur Khunti	185898	386490	60996	28700	98757	137333	151067	167684	574296	1129137
12	Khero	118	0	0	1254600	47	1254652	1380117	1531930	1715762	5882509
13	Lakshipur	1418745	1002990	468870	947800	755046	1778351	1956186	2171366	3434920	10095869
14	Maduri	298278	172620	98004	550300	158513	724664	797131	884815	1163613	3728735
15	Manpur	345423	150700	114636	4900	184024	207326	228059	253145	434222	1306776
16	Matehana	108513	497810	36252	132800	57906	196496	216146	239922	766523	1476993
17	Merui	766706	520090	253398	171600	408041	620446	682490	757564	1368562	3837103
18	Mirjapur	49539	330780	16050	61600	26236	90459	99505	110451	454485	781135
19	Nihastha	1334468	472460	441294	179000	710305	960335	1056369	1172569	1785738	5685316
20	Raipur	980819	1062230	324426	679400	522098	1253708	1379079	1530777	2776701	7462363
21	Ramvapur Dubai	1185970	1983970	391932	166400	631161	860677	946745	1050887	3160963	6650432
22	Sakatpur	264348	103440	87798	83800	140859	238744	262619	291507	429928	1363656
23	Satanpur	1359909	1100320	449988	504100	723959	1300455	1430500	1587855	2878718	7921487
24	Savsi	828033	331500	273618	8400	440660	493126	542439	602107	1005860	3084194
25	Semri	1900879	2407590	628542	42000	1011769	1154945	1270440	1410188	3987001	8834343
26	Sewanpura	740660	997590	244704	198000	394146	631560	694716	771135	1861261	4352819
27	Surajpur Guman Khera	383405	912400	126990	93700	204158	318274	350101	388612	1347646	2608791
28	Surajpur Khera	451049	344660	148812	47700	239945	311639	342803	380511	770833	2045730
29	Ugabhad	1089635	521720	360078	597400	579885	1235274	1358801	1508269	2210982	6893212
Total		**20539366**	**21316020**	**6789036**	**8810500**	**10931361**	**20834997**	**22918496**	**25439531**	**49808295**	**129932680**

7.1.5 Gram Panchayat wise cost of project under IWMP

Sl. No.	Name of Grampanchayat	Total, ha	Treatable area, ha	Administrative (10%)	EPA (4%)	TRG (5%)	DPR (1%)	Work (56%) NRM	Livelihood (9%)		Production system (10%)		ME (2%)	Consolidation (3%)	Total cost in Rs.
									Off-farm	On-farm	Farm machinary	Crop imrovement			
1	2	3	4	5	6	7	8	9	11	12	13	14	15	16	17
1	Bakuliha	468.76	336.02	403224	161290	201612	40323	2350000	318000	50000	70300	362320	80645	120968	4158682
2	Banai Mau	149.13	106.90	128280	51312	64140	12828	850000	40000	13500	16000	118155	25656	38484	1358355
3	Chak Gajraj	96.28	69.01	82812	33125	41406	8282	0	518000	26000	35100	73220	16563	24844	859352
4	Deo Gaon	203.07	145.56	174672	69869	87336	17468	1500000	220000	20000	12200	156700	34935	52402	2345582
5	Ekauni	96.11	68.89	82680	33068	41340	8267	0	38000	34000	12400	73145	16534	24801	364235
6	Gahiri	28.54	20.46	24552	9821	12276	2456	0	20000	10000	10800	25120	4911	7360	127296
7	Haripur Nihastha	260.38	186.65	223980	89592	111990	22398	1500000	20000	20000	16000	196910	44796	67194	2312860
8	Jagatpur Ram Garhi	429.04	307.55	369060	147624	184530	36906	2350000	20000	13500	20700	331005	73812	110718	3657855
9	Kalupur	204.20	146.38	175656	70263	87828	17566	1500000	20000	36000	10200	157635	35132	52697	2162977
10	Kesauli	40.96	29.36	35232	14093	17616	3524	0	38000	30000	11000	33890	7040	10570	200965
11	Khanpur Khunti	53.66	38.47	46164	18466	23082	4617	0	300000	3500	3000	38770	9233	13850	460682
12	Khero	0.03	0.02	0	0	0	0	0	20000	10000	12700	0	0	0	42700
13	Lakshipur	409.54	293.57	352284	140910	176142	35229	2350000	518000	20000	16000	315070	70457	105686	4099778
14	Maduri	86.10	61.72	74064	29626	37032	7407	0	200000	10000	18800	65610	14813	22220	479572
15	Manpur	99.71	71.47	85764	34306	42882	8577	0	20000	4000	4400	80690	17153	25730	323502
16	Matehana	31.32	22.45	26940	10776	13470	2694	0	520000	26000	13900	28255	5388	8082	655505
17	Merui	221.32	158.65	190380	76152	95190	19038	1500000	18000	10000	21000	172260	38076	57114	2197210
18	Mirjapur	14.30	10.25	12300	4920	6150	1230	0	20000	20000	10500	7530	2460	3690	88780
19	Nihastha	385.21	276.13	331356	132543	165678	33136	2350000	20000	10000	28700	295645	66272	99407	3532737
20	Raipur	283.12	202.95	243540	97416	121770	24354	1500000	318000	20000	10800	218120	48708	73062	2675770
21	Ramvapur Dubai	342.34	245.40	294480	117792	147240	29440	1500000	20000	10000	21000	269370	58896	88344	2556562
22	Sakatpur	76.31	54.70	65640	26256	32820	6564	0	20000	20000	5800	57575	13128	19692	267475
23	Satanpur	392.55	281.39	337668	135068	168834	33767	2350000	200000	10000	30700	306595	67534	101301	3741467
24	Savsi	239.02	171.34	205608	82244	102804	20560	850000	20000	3500	14900	186585	41122	61683	1589006
25	Semri	548.71	393.33	471996	188799	235998	47200	2910000	200000	20000	18700	424685	94400	141599	4753377
26	Sewanpura	213.80	153.26	183912	73565	91956	18392	1500000	38000	20000	23800	162935	36783	55174	2204517
27	Surajpur Guman	110.67	79.33	95196	38079	47598	9520	0	38000	4000	3600	87150	19040	28559	370742

Sl. No.	Name of Grampanchayat	Total, ha	Treatable area, ha	Administrative (10%)	EPA (4%)	TRG (5%)	DPR (1%)	Work (56%) NRM	Livelihood (9%)		Production system (10%)		ME (2%)	Consolidation (3%)	Total cost in Rs.
									Off-farm	On-farm	Farm machinary	Crop imroveme nt			
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**11**	**12**	**13**	**14**	**15**	**16**	**17**
	Khera														
28	Surajpur Khera	130.20	93.33	111996	44799	55998	11200	850000	18000	6000	11700	100645	22400	33599	1266337
29	Ugabhad	314.54	225.47	270564	108226	135282	27057	850000	320000	30000	25300	244410	54113	81170	2146122
	Total	**5928.91**	**4250**	**5100000**	**2040000**	**2550000**	**510000**	**28560000**	**4080000**	**510000**	**510000**	**4590000**	**1020000**	**1530000**	**51000000**

7.2 Funds received under Watershed Developemnt Fund (WDF)

Funds received for people participation to WDF		
S.N.	**Name of work**	**Rs in lakhs**
A	NRM work category	
1	Contribution from NRM work on general category	4.08
2	Contribution from NRM work on SC/ST/Small / Marginal farmers category	0.51
3	SubTotal (A) (1+2)	4.59
B	Production system	
4	Contribution from general category	8.16
5	Contribution from SC/ST/Small/Marginal farmers category	1.02
6	Sub Total (B) (4+5)	9.18
Total (A+B) (Rs. in lakhs)		**13.77**

7.3Cost: Benefit Analysis (NPV, BC Ratio and IRR)

Year	Cost	Discounted value of cost	Benefits	Discounted value of Benefits	IRR
1	**2**	**3**	**4**	**5**	**6**
0	8,376,750	8,376,750			(8,376,750)
1	27,856,628	25,324,207	10,931,361	9,937,601	(15,386,607)
2	27,815,678	22,988,164	20,834,997	17,219,006	(5,769,158)
3	9,446,633	7,097,396	22,918,496	17,219,006	10,121,610
4	7,288,239	4,977,965	25,439,531	17,375,542	12,397,577
5			49,808,295	30,927,032	30,927,032
Total	**80,783,928**	**68,764,482**	**129,932,680**	**92,678,186**	**19%**

B:C Ratio (5/3)	1.35
NPV (5-3)	23,913,704
IRR	19%

Chapter 8: Convergence

8.1 Gram Panchayat wise proposed convergence cost

Gram panchayat wise proposed Total cost of project Rs											
Sl. No.	Name of G.P.	Treatable area (ha)	IWMP	NHM	MGNREGA				By Farmers		Total cost
			Total cost from IWMP	Cost of horti-system	Cost for animal production support	Cost of rodeside ree plantation	Cost of NRM works (MGNREGA part)	Total cost from MGNREGA	Contribution for hortisystem	Cost for rennovation of FB	
1	2	3	4	5	6	7	8	9	10	11	12
1	Bakuliha	336.02	4158682	42160	276000	517153	557355	1350508	42160	32568	5626078
2	Banai Mau	106.90	1358355	15155	552000	270757	229215	1051972	15155	13570	2454207
3	Chak Gajraj	69.01	859352	12465	828000	118203	196738	1142941	12465	13570	2040793
4	Deo Gaon	145.56	2345582	42375	552000	198222	210001	960223	42375	10856	3401411
5	Ekauni	68.89	364235	7275	552000	168065	195288	915353	7275	13570	1307708
6	Gahiri	20.46	127296	31610	276000	30544	456633	763177	31610	35282	988975
7	Haripur Nihastha	186.65	2312860	74485	552000	168379	225467	945846	74485	10856	3418532
8	Jagatpur Ram Garhi	307.55	3657855	86655	552000	358353	318418	1228771	86655	13570	5073506
9	Kalupur	146.38	2162977	26735	828000	303300	331515	1462815	26735	21712	3700974
10	Kesauli	29.36	200965	4255	276000	51368	187032	514400	4255	13570	737445
11	Khanpur Khunti	38.47	460682	18255	276000	29211	88959	394170	18255	5428	896790
12	Khero	0.02	42700	0	276000	0	919166	1195166	0	70564	1308430
13	Lakshipur	293.57	4099778	43005	276000	531681	375700	1183381	43005	18998	5388167
14	Maduri	61.72	479572	6690	552000	122606	378993	1053599	6690	27140	1573691
15	Manpur	71.47	323502	5650	276000	109556	67274	452830	5650	2714	790346
16	Matehana	22.45	655505	24095	552000	54310	227746	834056	24095	16284	1554035
17	Merui	158.65	2197210	20455	276000	176833	363354	816187	20455	21712	3076019
18	Mirjapur	10.25	88780	16110	276000	5149	135564	416713	16110	10856	548569
19	Nihastha	276.13	3532737	17270	552000	383994	434055	1370049	17270	24426	4961752
20	Raipur	202.95	2675770	43385	552000	210187	360131	1122318	43385	21712	3906570
21	Ramvapur Dubai	245.40	2556562	92515	276000	329233	330226	935459	92515	16284	3693335
22	Sakatpur	54.70	267475	3780	276000	93652	191288	560940	3780	13570	849545
23	Satanpur	281.39	3741467	43840	276000	363488	481296	1120784	43840	27140	4977071
24	Savsi	171.34	1589006	12750	552000	271005	107467	930472	12750	2714	2547692

Gram panchayat wise proposed Total cost of project Rs											
Sl. No.	Name of G.P.	Treatable area (ha)	IWMP	NHM	MGNREGA				By Farmers		Total cost
			Total cost from IWMP	Cost of horti-system	Cost for animal production support	Cost of rodeside ree plantation	Cost of NRM works (MGNREGA part)	Total cost from MGNREGA	Contribution for hortisystem	Cost for rennovation of FB	
1	2	3	4	5	6	7	8	9	10	11	12
25	Semri	393.33	4753377	110205	276000	759567	302293	1337860	110205	10856	6322503
26	Sewanpura	153.26	2204517	41205	276000	241230	348515	865745	41205	21712	3174384
27	Surajpur Guman Khera	79.33	370742	43300	276000	158714	109292	544006	43300	5428	1006776
28	Surajpur Khera	93.33	1266337	13670	276000	151406	153933	581339	13670	8142	1883158
29	Ugabhad	225.47	2146122	19640	552000	393966	419672	1365638	19640	24426	3575466
Total		**4250**	**51000000**	**918990**	**12144000**	**6570132**	**8702586**	**27416718**	**918990**	**529230**	**80783928**

Chapter 9: Phasing of the works

9.1 Physical phasing

Sl. No.	Works/Activity/Year	Total	I	II	III	IV	V	Total
A	**EPA activities**							
1	Vegetable seed packat distribution for backyard garden	1933	1933	0	0	0	0	1933
2	Pond	5	0	5	0	0	0	5
3	Abandon well rain water harvesting	10	0	5	0	5	0	10
4	Fodder on field bund of BPL families	122	0	122	0	0	0	122
	Sub total		**1933**	**132**	**0**	**5**	**0**	**2070**
B	**NRM Work**							0
1	Masonary check dam on IIIrd order (IWMP)(No)	23	0	9	9	3	2	23
2	Fodder on field bund IV @250m per farmer (No.s)	4221	0	1688	1688	633	212	4221
3	Contour Bunding (cum)	6480	0	2592	2592	972	324	6480
4	Peripheral Bunding (cum)	2843	0	1137	1137	426	143	2843
5	Rennovation of pond (No.s)	14	0	6	6	2	0	14
6	No.s Renovation of FB @200mtr per farmer (75% by MGNREGA)	195	0	78	78	29	10	195
7	Silvi Pasture (ha)	60.71	0	24	24	9	3.71	60.71
8	No.s Renovation of FB @200mtr per farmer (25% by farmers)	195	0	78	78	29	10	195
	Sub total		**0**	**5612**	**5612**	**2103**	**704.7**	**14032**
C	**Production System**							
a	**Production System for crop innovation**							
1	Wheat SWI	116.0	23	35	46	12	0	116
2	Seed Treatment Demonstrations	150.0	30	45	60	15	0	150
3	Oil seed+ potato intercrop	160.0	32	48	64	16.01	0	160.01
4	Early vegetable	194.3	39	58	78	19.26	0	194.26
5	Paddy SRI	150.0	30	45	60	15	0	150
6	Arhar transplanted	224.0	45	67	90	22	0	224
7	Maiz + transplated Legume	141.0	28	42	56	15	0	141
8	Millets	90.1	18	27	36	9.1	0	90.1
9	Green manur (Dhaincha)	99.0	20	30	40	9	0	99
10	Groundnut intercrop	79.9	16	24	32	7.9	0	79.9
11	Zaid oilseed	60.0	12	18	24	6	0	60
12	Off season zaid vegetable	150.1	30	45	60	15.1	0	150.1

Sl. No.	Works/Activity/Year	Total	I	II	III	IV	V	Total
	Sub total		**323.0**	**484.0**	**646.0**	**161.4**	**0.0**	**1614.4**
b	**Production system for Farm machinary**							
1	Cona weeder@2000	32	6	10	10	3	3	32
2	Dry weeder for wheat, maize etc. @2000	14	3	4	4	1	2	14
3	Multi-crop seed drills, one per panchayat @5000	17	3	5	5	2	2	17
4	Ridge and Furrow maker (Rs. 6000)	6	1	2	2	1	0	6
5	Tractor driven three ferrow Potato digger and planter @25,000/-	2	0	1	1	0	0	2
6	Manual Knapsack/foot operated sprayer.1300	20	4	6	6	2	2	20
7	Power ed Knapsack sprayer/Power Operated Taiwan sprayer (capacity 8 - 12 lts):7000	8	2	2	2	1	1	8
8	Pusa Zero energy cool chamber (100 kg)4500	21	4	6	6	2	3	21
9	Mango harvesting device @300	235	47	71	71	24	22	235
	Sub total		**70**	**107**	**107**	**36**	**35**	**355**
c	**Work for Production Support**							
1	NADEP @4/village	176	35	53	53	18	17	176
2	Vermi pit@4/village	132	26	40	40	13	13	132
3	Cow shelter@5/village	88	18	26	26	9	9	88
4	Goat shelter @ 2/village	88	18	26	26	9	9	88
5	Poultry shelter @ 2/village	44	9	13	13	4	5	44
	Sub total		**106**	**158**	**158**	**53**	**53**	**528**
D	**Livelihhood Activities**							
a	**Farm based activities**							
1	Low plastic tunnels Nursery @10000	13	3	4	4	1	1	13
2	Vegetable preservation unit @10000	3	1	1	1	0	0	3
3	Goat rearing (2 goat /unit) @6000	4	1	1	1	0	1	4
4	Poultry @20,000	15	3	5	5	2	0	15
5	Backyard poultry @3500	4	1	1	1	0	1	4
6	Seed replacement (SRR) @4000	3	1	1	1	0	0	3
	Sub total		**10**	**13**	**13**	**3**	**3**	**42**
b	**Non-farm based activities**							
1	Dairy establishment 2 per block @500,000	1	0	0	0	0	1	1
2	Poultry - Hatchery one per block @300,000	4	1	1	1	0	1	4
3	Cold storage for fruits and vegetables 2 per block @500,000	2	0	1	1	0	0	2

Sl. No.	Works/Activity/Year	Total	I	II	III	IV	V	Total
4	Solar based pump system @200,000	4	1	1	1	0	1	4
5	Pumpset repairing (20000)	5	0	2	2	1	0	5
6	Electrician (20000)	5	1	1	2	1	0	5
7	Plumbering (18000)	3	1	1	1	0	0	3
8	Shuttering work (18000)	7	1	2	2	1	1	7
9	Hand pump mechanic (20000)	10	2	3	3	1	1	10
	Sub total		**7**	**12**	**13**	**4**	**5**	**41**
E	**Agro- horticultutre and Plantation**							
1	Mango rejuvenation ha	45.96	9	14	18	4.96	0	45.96
2	Guava high density ha	7.40	1	2	4.40	0	0	7.4
3	Bel/Ber/Citrus - high density in ha	23.82	5	7	10	1.82	0	23.82
4	Rodeside plantation (no.s)	32851	6570	9855	13140	3286	0	32851
	Sub total							
F	**Training**							
1	SLNA and line department	55	11	17	22	5	0	55
2	Watershed cum data cell	54	11	16	22	5	0	54
3	PIA	55	11	17	22	5	0	55
4	WDT	54	11	16	22	5	0	54
5	User Group	54	11	16	22	5	0	54
6	SHG	54	11	16	22	5	0	54
7	Watershed committee	55	11	17	22	5	0	55
8	Other volunteers	54	11	16	22	5	0	54
9	Watershed community and farmers	54	11	16	22	5	0	54
	Sub total		**99**	**147**	**198**	**45.14**	**0**	**489**
G	DPR		1	0	0	0	0	1
H	ME		1	1	1	1	1	5
I	Administrative		1	1	1	1	1	5
J	Consolidation (3%)		-	-	-	-	1	1

9.2 Financial phasing

Sl. No.	Activity	I	II	III	IV	V	Total
A	EPA activities						
1	Vegetable seed packat distribution for backyard garden	289950	0	0	0	0	**289,950**
2	Pond	0	1375000	0	0	0	**1,375,000**
3	Abandon well rain water harvesting	0	111275	0	111275	0	**222,550**
4	Fodder on field bund of BPL families	0	152500	0	0	0	**152,500**
	sub total	**289950**	**1638775**	**0**	**111275**	**0**	**2,040,000**
B	NRM Work						**-**
1	Masonary check dam on IIIrd order (IWMP)	0	7650000	7650000	2550000	1700000	**19,550,000**
2	Fodder on field bund IV	0	2110000	2110000	791250	265000	**5,276,250**
3	Contour Bunding	0	173664	173664	65124	21708	**434,160**
4	Peripheral Bunding	0	76179	76179	28542	9581	**190,481**
5	Rennovation of pond	0	3900000	3810000	1300000	0	**9,010,000**
6	Renovation of FB @200mtr per farmer (75% by MGNREGA)	0	634998	634998	236089	81410	**1,587,495**
7	Silvi Pasture	0	480000	480000	180000	74200	**1,214,200**
8	Renovation of FB @200mtr per farmer (25% by farmers)	0	211692	211692	78706	27140	**529,230**
	Sub total of above	**0**	**15236533**	**15146533**	**5229711**	**2179039**	**37,791,816**
C	**Production System**						
a	**Production System for crop innovation**						
1	Wheat SWI	92000	140000	184000	48000	0	**464,000**
4	Seed Treatment Demonstrations	192000	288000	384000	96000	0	**960,000**
5	Oil seed+ potato intercrop	128000	192000	256000	64040	0	**640,040**
6	Early vegetable	39000	58000	78000	19255	0	**194,255**
7	Paddy SRI	75000	112720	143345	37390	0	**368,455**
8	Arhar transplanted	90000	134000	180000	44000	0	**448,000**
9	Maiz + transplated Legume	56000	84000	112000	30000	0	**282,000**
10	Millets	27000	40500	54000	13650	0	**135,150**
11	Green manur (Dhaincha)	40000	60000	80000	18000	0	**198,000**
12	Groundnut intercrop	48000	72000	96000	23700	0	**239,700**
13	Zaid oilseed	12000	18000	24000	6000	0	**60,000**
14	Off season zaid vegetable	120000	180000	240000	60400	0	**600,400**
	Sub total	**919000**	**1379220**	**1831345**	**460435**	**0**	**4,590,000**

Sl. No.	Activity	I	II	III	IV	V	Total
b	**Production system for Farm machinary**						
1	Cona weeder@2000	12000	20000	20000	6000	6000	**64,000**
2	Dry weeder for wheat, maize etc. @2000	6000	8000	8000	2000	4000	**28,000**
3	Multi-crop seed drills, one per panchayat @5000	15000	25000	25000	10000	10000	**85,000**
4	Ridge and Furrow maker (Rs. 6000)	6000	12000	12000	6000	0	**36,000**
5	Tractor driven three ferrow Potato digger and planter @25,000/-	0	25000	25000	0	0	**50,000**
6	Manual Knapsack/foot operated sprayer.1300	5200	7800	7800	2600	2600	**26,000**
7	Power ed Knapsack sprayer/Power Operated Taiwan sprayer (capacity 8 - 12 lts):7000	14000	14000	14000	7000	7000	**56,000**
8	Pusa Zero energy cool chamber (100 kg)4500	18000	27000	27000	9000	13500	**94,500**
9	Mango harvesting device @300	14100	21300	21300	7200	6600	**70,500**
	Sub total	**90300**	**160100**	**160100**	**49800**	**49700**	**510,000**
c	Work for Production Support						
1	NADEP @4/village	315000	477000	477000	162000	153000	**1,584,000**
2	Vermi pit@4/village	260000	400000	400000	130000	130000	**1,320,000**
3	Cow shelter@5/village	810000	1170000	1170000	405000	405000	**3,960,000**
4	Goat shelter @ 2/village	720000	1040000	1040000	360000	360000	**3,520,000**
5	Poultry shelter @ 2/village	360000	520000	520000	160000	200000	**1,760,000**
6	**sub total**	**2465000**	**3607000**	**3607000**	**1217000**	**1248000**	**12,144,000**
D	**Livelihood Activities**						
a	**Farm based activities**						
1	Low plastic tunnels Nursery @10000	30000	40000	40000	10000	10000	**130,000**
2	Vegetable preservation unit @10000	10000	10000	10000	0	0	**30,000**
3	Goat rearing (2 goat /unit) @6000	6000	6000	6000	0	6000	**24,000**
4	Poultry @20,000	60000	100000	100000	40000	0	**300,000**
5	Backyard poultry @3500	3500	3500	3500	0	3500	**14,000**
6	Seed replacement (SRR) @4000	4000	4000	4000	0	0	**12,000**
	sub total	**113500**	**163500**	**163500**	**50000**	**19500**	**510,000**
b	**Non-farm based activities**						
1	Dairy establishment 2 per block @500,000	0	0	0	0	500000	**500,000**
2	Poultry - Hatchery one per block @300,000	300000	300000	300000	0	300000	**1,200,000**
3	Cold storage for fruits and vegetables 2 per block @500,000	0	500000	500000	0	0	**1,000,000**

Sl. No.	Activity	I	II	III	IV	V	Total
4	Solar based pump system @200,000	200000	200000	200000	0	200000	**800,000**
5	Pumpset repairing (20000)	0	40000	40000	20000	0	**100,000**
6	Electrician (20000)	20000	20000	40000	20000	0	**100,000**
7	Plumbering (18000)	18000	18000	18000	0	0	**54,000**
8	Shuttering work (18000)	18000	36000	36000	18000	18000	**126,000**
9	Hand pump mechanic (20000)	40000	60000	60000	20000	20000	**200,000**
	sub total	**596000**	**1174000**	**1194000**	**78000**	**1038000**	**4,080,000**
E	**Agro- horticultutre and Plantation**						
1	Mango rejuvenation ha	180000	280000	360000	99200	0	**919,200**
2	Guava high density ha	63000	126000	277200	0	0	**466,200**
3	Bel/Ber/Citrus - high density in ha	95000	133000	190000	34580	0	**452,580**
4	Rode side plantation	1314000	1971000	2628000	657132.496	0	**6,570,132**
	Total of above	**1652000**	**2510000**	**3455200**	**790912.496**	**0**	**8,408,112**
F	**Training**						
1	SLNA and line department	27500	42500	55000	12500	0	**137,500**
2	Watershed cum data cell	93500	136000	187000	42500	0	**459,000**
3	PIA	27500	42500	55000	12500	0	**137,500**
4	WDT	38500	56000	77000	18000	0	**189,500**
5	User Group	88000	128000	176000	40000	0	**432,000**
6	SHG	99000	144000	198000	45000	0	**486,000**
7	Watershed committee	71500	110500	143000	32500	0	**357,500**
8	Other volunteers	33000	48000	66000	15000	0	**162,000**
9	Watershed community and farmers	38500	56000	77000	17500	0	**189,000**
	sub total	**517000**	**763500**	**1034000**	**235500**	**0**	**2,550,000**
G	DPR	510000	0	0	0	0	**510,000**
H	ME	204000	204000	204000	204000	204000	**1,020,000**
I	Administrative	1020000	1020000	1020000	1020000	1020000	**5,100,000**
J	Consolidation (3%)	0	0	0	0	1530000	**1,530,000**
	Grand Total of A+B+C+D+E+F+G+H+I+J	**8,376,750**	**27,856,628**	**27,815,678**	**9,446,633**	**7,288,239**	**80,783,928**

Chapter 10: Consolidation and post-project management

Watershed development projects can render sustainable production through the execution of rain water management programme with appropriate combination of environmental balance, community participation and institutionalization of process. The strategic planning for the post project management is elaborated as under:

10.1 Activity of consolidation and post project management phase

SL. No.	Activity
1	Preparation of project completion report
2	Preparation of GPS based inventory of developed infrastructure
3	Documentation of success stories
4	Preparation of feed back and suggestion note for watershed commitee
5	Documentation of procedure for management and utilization of infrastructure developed under the project
6	Documentation of procedure for mainetnance of infrastructure developed under the project
7	Documemtation of utilization of of watershed development fund (WDF)
8	Documentation of quality and sustainability issues

10.2 Adoption of eco-friendly conservation measures

The conservation measures taken up in the watershed should be long lasting with sustainability. Along with engineering measures, efforts would also be made to reinforce the vegetative cover around the earthen structures, on the slopes, on bunds, and on barren lands through protection of the process of natural regeneration and by planting appropriate vegetation with combination of grass/shrubs and trees.The stream banks would also be vegetated and stabilized to create a buffer zone between land and water body. Such vegetation and physical measures helps in stabilizing streams banks, augmenting ground water recharge and improving the riparian habitat.

The diversity of watershed development measures is the key to sustainability. Combination of drainage line management, agro-horticulture and forestry measures including plantation of shallow and deep-rooted plants, fast and slow growing plants, productive and medical plants and herbs will be encouraged. The watershed development measures will ultimately help recharge the rainwater to the ground water, improve soil moisture optimally and provide tangible and intangible benefits to the community and environment as a whole.

Land use pattern will go hand in hand with carrying capacity of the watershed. Optimum use of water and increased use of organic fertilizers is the key to conserve the precious land sources. Excessive fertilization and over irrigation leads to permanent damage of soil, land and groundwater. It is important to maintain soil quality through crop management. Crop diversity, intercropping, and crop rotation help in improving the micro flora and fauna present in the soil and maintaining the healthy symbiotic subsystem relationship. Extensive use of measures like Integrated Pest Management (IPM) and Interated Pest and Nutrient Managemnt (IPNM) would be practiced.

10.3 Participation of local community in development and management

During the planning phase the local peoples' participation will be ensured and it is planned that the involvement during implementation and post project maintenance will be maintained. However, participation without empowerment does not help in achieving sustainable development. Community will be made aware of different concepts and options for their livelihood and natural resource management. Local wisdom is important in understanding rural dynamics that includes the interface between human behaviour and its economic/ecological implications. The interest among the community will be created

and maintained by adopting the measures in such a manner that they provide immediate, medium and long term benefits to the community.

10.4 Institutionalization for post project management

A dynamic institutional arrangement is necessary for project management, facilitation of benefit sharing and maintenance of the resources. This is usually achieved through formation of user groups for different resources/assets created as well as through other village level organizations. In-built system and mechanism will be developed for qualitative growth and dynamism of the organizations. The community organizations will be linked to other Government and Non Government institutes of interest. Therefore potential people's organizations would be formed in the project area viz watershed level organization and users groups.

10.4.1 Watershed level committee

Watershed level organization viz; water and watershed management committees will be established right from the beginning of the project. The overall planning, co ordination, management and maintenance are possible through this representative body. This clearly implies representation from different sections of the community – landholders and landless, men and women, thus bringing people from all section of the society, gram panchayat and other existing political or non political organizations.

10.4.2 User Groups (UGs) and Self Help Groups (SHGs)

Few other categories of institutions are formed of various groups with common areas of interest in the project area. These include, depending upon necessity, SHGs of women and men, UGs for common assets, etc. The capacities of different groups will be developed from time to time for effective functioning of the groups. A mechanism will be developed to ensure continuity, both in learning, functioning and actions that form responsibilities of such groups during the implementation project activities.