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### 1.0 INTRODUCTION

#### 1.1 INTRODUCTION OF THE PROJECT AREA

The IWMP-VIII (Integrated Watershed Management Programme) was sanctioned for the Rampur Development Block in the year 2010-11 by the ministry of rural development (GOI). The project is being executed by the state government under rural development department. The DWDA is the nodal agency to execute the programme at district level. At the block level WDTM is the project field level (PIA) to coordinate with different gram panchayats at field level. There are 31 Gram Panchayats in Rampur block. The IWMP project is being started in 15 Gram Panchayat in different watershed/ catchment area. The project area is having different catchment area i.e. Manglad khad, Noglikhan, Kut khad, Sarpara gad and Ghanvi khad, which drains of the Sutluj river. There are seven watersheds in Satluj catchment area. The IWMP VIII watershed is catchment area of manglad khads kartot kuti nala having four Micro- watershed.

1. Acute shortage of drinking water.
2. The water resources for irrigation are drying day by day and existing resources have been fully utilized.
3. Problems of soil erosion.
4. The contiguity of the watershed area.
5. People awareness and participation of the watershed area for natural resource management is poor.
6. The watershed area comprises of schedule caste and schedule tribe population.
7. Productivity potential of the land is high in terms of fruit crops.
8. Whole area of the watershed is rain fed.
9. Fruit crops, cereals, Pulses and vegetables are the major crops of the watershed.
10. Animal rearing is also an integral part of the watershed.
11. Basic infrastructure of roads, electricity and communication are available.
12. Majority of people are dependent on farm land based activities.

## 1.1a Sanctioned Budgetary Provisions

Name of Project	: IWMP- VIII Rampur
Total Area	: 4570 ha
Sanctioned Amount	: 6,85,50,000

### Micro watershed/Gram panchayats under IWMP-VIII Rampur

Catchment area	Sr. No.	Gram Panchayat	No. of villages	Area (ha.)	Amount (₹)
Sutlej	1	Dhar Gaura	5	1025	1,53,75,000
	2	Racholi	6	2483	3,72,45,000
	3	Shahdhar	4	897	1,34,55,000
	4	Kunni (Tayawal)	1	165	24,75,000
<b>Total</b>			<b>16</b>	<b>4570</b>	<b>6,85,50,000</b>

## 1.1b: Budgetary Provision for the Watershed Development Area

Sr. No	Budget Component	% of the budget	Racholi	Dhar Gaura	Shahdhar	Kunni(Tayawal)	Total amount (₹)
<b>A) Administrative cost</b>							
1	Administrative cost	10%	3724500	1537500	1345500	247500	<b>68,55,000</b>
2	Monitoring	1%	372450	153750	134550	24750	<b>6,85,500</b>
3	Evaluation	1%	372450	153750	134550	24750	<b>6,85,500</b>
<b>B) Preparatory Phase</b>							
1	Entry point activities	4%	1489800	615000	538200	99000	<b>27,42,000</b>
2	Institution & capacity building	5%	1862250	768750	672750	123750	<b>34,27,500</b>
3	Detailed Project Report (DPR)	1%	372450	153750	134550	24750	<b>6,85,500</b>
<b>C) Watershed Work Phase</b>							
1	Watershed Development Works	56%	20857200	8610000	7534800	1386000	<b>3,83,88,000</b>
2	Livelihood activities for the asset less persons	9%	3352050	1383750	1210950	222750	<b>61,69,500</b>
3	Production system & micro enterprises	10%	3724500	1537500	1345500	247500	<b>68,55,000</b>
<b>D) Consolidation phase</b>							
		3%	1117350	461250	403650	74250	<b>20,56,500</b>
<b>Total</b>		<b>100</b>	<b>3,72,45,000</b>	<b>1,53,75,000</b>	<b>1,34,55,000</b>	<b>24,75,000</b>	<b>6,85,50,000</b>

### 1.1c: Component wise Physical and Financial Details (as per MIS)

Sr. No.	Name of the activities	Physical		Financial Amount (₹)			
		Name of the scheme	Numbers of works	Budget allocation %	Budget under Watershed (₹)	Convergence	Total (₹)
1.a	Administration cost			10% Project Cost	6855000	-	6855000
b	Monitoring			1%	685500	-	685500
c	Evaluation			1%	685500	-	685500
	Sub total (a+b+c)			12%	82,26,000	-	82,26,000
2.1	Preparatory Phase					-	
	Entry Point Activities					-	
a	Well		1		10000	-	10000
b	Construction Bawari		37		2024800	-	2024800
c	irrigation Tank		6		479000	-	479000
d	Crate wall		1		113200	-	113200
	Pacca Talab		1		80000	-	80000
	Total		46	4%	27,07,000	-	27,07,000
2.2	Institutional & Capacity Building		No. of training			-	
a.	Awareness		9		180000	-	180000
b.	Block level		8		350000	--	350000
c.	Institutional training		12		925000	-	925000
d.	Exposure visit		5		790000	-	790000
e.	Kissan melas		5		225000	-	225000
f.	Specialized training		6		320000	-	320000
g.	PIA, WDT members		6		288000	-	288000
h.	Expert visits/ services and Misc.		0		349500	-	349500
	Sub total		51	5%	34,27,500		34,27,500
2.3	Detailed Project Report ( DPR)			1%	685500		6,85,500
	Sub Total (2.1+2.2+2.3)			10%	68,20,000		68,20,000
3	WATERSHED WORKS PHASE						
3 A	Watershed Development Works						
3 A-1	Land Development (for productive use)						
3A-1-1	A forestation						
	For Raising of fodder plantation		39 ha		539788	-	539788
3A-2.2	Pasture development						
	For Raising of hybrid grasses		32 ha		442620	-	442620
	Sub total (3 A 1.1+2.2)		71 ha		9,82,408	-	9,82,408
3 A-2	Vegetative and Engineering structure						
	Loose Boulder		388		4886350	-	4886350
	Contour Trenching		2426		126152	-	126152
	Crate Wall		226		5004500	-	5004500
	Drainage		21		5023140	-	5023140
	Total		3061		1,50,40,142		1,50,40,142

<b>3 A-3</b>	<b>Water harvesting structure (WHS)</b>					
	Kacha talab	21		403400	-	403400
<b>C</b>	<b>Others</b>	0		0	-	0
i	Roof water	45		3783500	-	3783500
ii	Irrigation Tank	125		11868800	-	11868800
iii	Kuhal	2		437350	-	437350
iv	Bawari (drinking)	36		1549000	-	1549000
v	Tank (drinking)	24		2146500	-	2146500
vi	Pipeline (Irrigation)	9		1274000	-	1274000
vii	Pacca Dam	1		96500	-	96500
viii	Pipeline (Drinking)	3		806400	-	806400
	<b>Total</b>	<b>266</b>		<b>2,23,65,450</b>	-	<b>223,65,450</b>
	<b>Grand Total 56%</b>			<b>3,83,88,000</b>	-	<b>383,88,000</b>
<b>3.B</b>	<b>Livelihood activities for the assets less and landless person 30% grant in aid of the 9%</b>	<b>Household beneficiaries</b>			-	
	<b>Non-farm activities</b>				-	
i.	Carpentry	11		110000	-	110000
ii.	Masonry	24		240000	-	240000
iii.	Knitting	15+17 SHG		575000	-	575000
iv.	Poultry	16		80000	-	80000
v.	Khaddi	2		30000	-	30000
vi.	PHT	14SHG		420000	-	420000
vii.	Basket making	1		5000	-	5000
viii.	Prunner	1		10000	-	10000
ix.	Packing+ grading	3		15000	-	15000
x.	Black smith	1		10000	-	10000
xi.	Fruit sale centre	1		312000	-	312000
xii.	Embroidery	1		10000	-	10000
	<b>Total</b>			<b>18,17,000</b>	-	<b>18,17,000</b>
	<b>Revolving funds available</b>			<b>43,52,500</b>	-	<b>43,52,500</b>
	<b>Total</b>		<b>9%</b>	<b>61,69,500</b>	-	<b>61,69,500</b>
<b>3.C</b>	<b>Production system &amp; micro Enterprises</b>					
	Agriculture for crop seed	3876 kg		176070	-	176070
	Vermin compost	34+2SHG		290800	-	290800
	Fruit Plants	57350 no.		1788050	-	1788050
	Fodder trees	42900 no.		429000	-	429000
	Hybrid Grasses (seed)	1120 kg		134400	-	134400
	Vegetable seeds	2540.72 kg		328680	-	328680
	Vegetable collection centre	7		1248000	936000	2184000
	Dairy farming	78		1170000	-	1170000
	Nursery	9+5 SHG		270000	-	270000
	Goatry	10		100000	-	100000
	Sheep	39		390000	-	390000
	Bee- Keeping	2+1 SHG		35000	-	35000
	Poultry	3		15000	-	15000
	Drip irrigation	1		45000	-	45000
	Polyhouse	3		375000	-	375000
	Fishery	6		60000	-	60000
	<b>Total</b>		<b>10%</b>	<b>68,55,000</b>	<b>9,36,000</b>	<b>77,91,000</b>

	<b>Sub Total (3A+3B+3C)</b>		<b>75%</b>	<b>5,14,12,500</b>	<b>9,36,000</b>	<b>52348500</b>
<b>4.</b>	<b>Consolidation Phase</b>		<b>3%</b>	<b>20,56,500</b>		<b>20,56,500</b>
	<b>Grand Total</b>		<b>100%</b>	<b>6,85,50,000</b>	<b>936000</b>	<b>694,86,000</b>

**Note:**

- a) Total funds available under watershed ₹. **6,85,50,000 and convergence 9,36,000**
- b) Grant in aid proposed to the selected beneficiaries **29.46 %** under Livelihood activities for ₹ **18,17,000** and ₹ **43,52,500** kept as Revolving funds which is **70.54%** available under livelihood
- c) As per the provision provided under the Guidelines of GOI for livelihood activities **70 %** revolving funds is maximum and to be kept for support of livelihood and maximum **30 %** to be given as grant-in-aid. The funds not to be utilized under grant in aid will be treated under revolving fund

## 1.1d Methodology

### A. District level exercise

- a. Collection of data at district level
  1. DRDA and Line department
- b. Meeting with CEO (DRDA), Project Officer /DWDA.Heads of Line Departments

### B. Block level Exercise

- a. Data collection
- b. One day orientation with pradhan secretaries and panchayat sahayak at block level
- c. Meeting with line department officials of agriculture, horticulture and animal husbandry department for convergence issues.

### C. Micro watershed /Panchayat /Revenue village wise Exercise

- a. General meeting at Panchayat level with members of Panchayat Samiti, Pradhan and Ward members followed by awareness camps.
- b. Collection of revenue data from Patwari
- c. Collection of socio economic data from Panchayat Secretary
- d. Village level meeting organized, PRA exercises and transect walks
- e. Identification of beneficiary group for different activities
- f. Participatory Rural Appraisal Exercise with the local community while contacting the peoples
- g. Transit walk with the line department and local community to ascertain the position of back ward and forward linkage
- h. Selection of site with technical expert /Junior Engineer and expert of soil science to analyses soil strata for construction of Check Dam .Irrigation tank and other mega projects
- i. Selection of need based community and homogeneous Groups for involvement under livelihood activities
- j. Selection of landless/assetsless community under the watershed catchment area
- k. Selection of SC/ST community under the project.
- l. Social economical condition of the watershed community.

# GENERAL DESCRIPTION OF PROJECT AREA

## 2.0 2.1 DISTRICT

The district Shimla was formed by merging of old princely states of Belsan, Bajhi, Bushar, Darkoti, Throch, Dari, Kumarsain, Jubbal, Dartesn, Rampur etc. The name of the Shimla district was derived from goddess Shiyamali. It was summer capital of the British India. It was also the capital of East Punjab before Independence. In 15 April 1948 Shimla was merged with Himachal and was made district in 1966. In 1971 it was made capital of the Himachal Pradesh.

### 2.101 Geographical Feature

Himachal Pradesh has 12 districts and Shimla is one of them. Both state and district H.Q is situated in Shimla town. Shimla district lies in outer and lower Himalayas between 30'.45" latitude and 77' to 78'.25" longitude and altitude of district varies between 2500 to 16000 feet. The lowest and highest point being the Sunni Tehsil and Chanshal pass respectively. It is located in North East region of the state. On North side it is surrounded by Kullu and Kinnaur districts of the state, on South East and West by Sirmour district of the state and Dehradun of the Utrakhnad and North West by Rampurand Mandi of Himachal Pradesh. The hills and mountain ranges are generally aligned in the east – west directions which present a complicated pattern of relief. The predominately rough terrain, the prevalence of introducing spurs, narrow and steep side valleys throughout the district reflects the youthfulness of its topography.

### 2.102 Population

The total population of the district is 813384 (census 2012) comprising of 424486 males and 388898 females. The density of the population is 159 persons per square meter. The sex ratio is 916 female per 1000 males. The urban population is 201500 and Rural population is 611884. Shimla town is the most densely populated town in the district.

### 2.103 Rivers

The major rivers following in the district are Satluj, Pabbar, Giri, and Nogli Khad.

### 2.104 Climate

The district has temperate climate. The average annual precipitation is 1028 mm and the temperature of the district ranges from subfreezing to 40<sup>0</sup> Celsius. The average temperature during summer is between 20<sup>0</sup> C to 40<sup>0</sup>C, and between -7<sup>0</sup> C and 10<sup>0</sup> C in winter. Precipitation varies from 24 mm in November to 415 mm in July. Snowfall in the region, takes place in the month of December, has lately (over the last 15 years) been happening in January or early February every year. There are four broad seasons December wards the outset of winter which continues till the end of February, some time continuing till the month of March and it is stormy with occasional frosts. The snow and sleet fall in the upper regions while rains are confined to lower area from March



onward. Weather begins to warm up from March to June. Summer is followed by monsoon and humidity is high. Monsoon ends in mid of September and autumn begins and last till the end of November. Maximum temperature varies from 15.4<sup>0</sup> C to 30.6<sup>0</sup> C (June) and -2<sup>0</sup> C to 15<sup>0</sup> C during winter. Annual precipitation varies from 447 to 1084mm.

## 2.105 Soil

On the whole soils are young and thin deep ploughing is neither possible nor advisable. Generally the soil on the northern slope is thicker than those of southern slopes. The texture of the soil ranges from silty loam to clay loam, the colour varies from dark to brown. The organic content is higher, Nitrogen availability is from medium to high, and Potash availability is medium. The presence of Phosphorous is from low to medium. The soil reaction ranges from moderately acidic to neutral.

## 2.106 Irrigation

Most of the area is rainfed. The irrigation facilities are limited. The main sources for irrigation are kuhals and nallahs.

## 2.107 Land Classifications

**Table : 2.203 (I) Various type of lands available alongwith areas (ha)**

1	Total geographical area	492619 ha
2	Forest	119331 ha
3	Barren and unculturable land	48838
4	Land put to Non agriculture land	14556
5	Culturable waste	13668
6	Permanent pasture	9448
7	Land under miscellaneous trees, crops etc	203047

*Source: Statistical out line of HP 2012-12*

## 2.108 Agriculture

The Rabi and Kharif are the two cropping seasons of the district. The major cereal crops of the district are Wheat, Barley, maize, and among pulses Rajmash, Mash and Kulath etc. are grown in the watershed area.

### 2.108(I) Area under agriculture crops

Sr. No.	Crop	
1	Paddy	2923 ha
2	Maize	16685
3	Wheat	19758
4	Barley	4574
5	Pulses	5544
6	Others	6572

## 2.109 Horticulture

The climate of the district is very suitable for fruit crops; the apple of the Shimla district is very familiar for its quality, flavour, taste and colour in the country and world over. The main fruit crops grown in district are apple, pear, plum, almond, apricot, cherry etc.

## 2.2 Rampur BLOCK

The Rampur development block is situated at the distance of 135 km from the district Headquarter. The altitude of the Rampur block ranges from 990 m to 6000 m above mean sea level (abmsl). The geographical area of the block is 93786 sq km. The population of the block is 96931 (2001) comprising of 51042 male and 45889 females. The schedule caste population is 26329 and there are 2370 numbers of scheduled tribe. There is 31 Gram Panchayats. Rampur Block is famous for its handspun Blankets. Popularly known as "*Rampuri Chadda*". The Lavi fair of Rampur is very famous and is one of the biggest fair in India.

### 2.201 Geography

Rampur is located at 30<sup>0</sup>2"40" to 33<sup>0</sup>12"40". It has average elevation of 990 metres to 6000 meters. It is situated on National Highway NH22 (on the Hindustan-Tibet Road), a 135 km away from Shimla.

Rampur is farmers growing fruits which includes Apple, Peach, Cherry and Apricots. Local people live a happy and healthy life, enjoy their culture to the hilt. Women folk are educated and equally participate with their male counterparts, in the day to day activities.

### 2.202 Climate

The climate of the Rampur block is temperate. There is variation in climate. Different kind of flora is found in the Rampur block. The major species found in the area are Beul, Drake, Kachnar at the lower elevation, Kail, Devdar, Ban, Moru, etc, at the higher elevation. The temperature of the block ranges between subfreezing to 39<sup>0</sup> Celsius. The average annual rainfall is 774. 36 m.m.

### 2.203 Soil

The soil of the Rampur block is clay, sandy, loam and black. The productivity of the soil is very high for vegetable and fruit crops. The water retaining capacity is moderate in whole of the block. The land use pattern of the Rampur block is as under.

### 2.204 Land Classification

#### 2.204 (I) Various type of lands available alongwith areas (ha)

Sr. No.	Particulars	Area (ha)
1	Agriculture	11793
2	Irrigated	2550
3	Barren land	2990
4	Pasture land	34298
5	Fellow land	71
6	Forests land	46497
7	Horticulture land	33
8	Others	2544
9	Total geography area	100776

Source: Department of Economics and statistics

## 2.205 Agriculture /Horticulture Development

The area under major crops and pluses is as under.

### 2.205 (I) Agriculture Crops

Crops		Area (ha)
<b>A</b>	<b>Food Crops</b>	
1	Maize	1225
2	Wheat	3014
3	Barley	847
<b>B</b>	<b>Pulses</b>	
1	Black Gram, Rajmash	745
2	Gram, red gram	80
<b>C</b>	<b>Non food crops</b>	

Source: - Department of Agriculture 2007-08

### 2.206 Horticulture

The main fruits crops grown in the Rampur block is apple, plum, apricot, almond and among vegetable peas, potato, cabbage, cauliflowers, capsicum are grown.

### 2.207 Vegetables

Sr. No	Vegetables Crops	Area (ha)
	Total	
1	Peas	20
2	Potato	22
3	Other	539
	<b>Fruit</b>	
6	Apple	3888.36
7	Walnut	254.08
8	Lemon	21.11
9	Others	591.75

Source: Department of Agriculture Field Survey 2007-08

### 2.208 Animal Husbandry/Livestock Population

The animals reared by the farmers of the Rampur block are cows, sheep's, goat, horses, mules, buffaloes etc. The numbers are as under.

#### 2.208 (I) Livestock population

Sr. No.	Live stock name	Population
1	Cows	40337
2	Bullock	-
3	Sheep	38585
4	Horses	48
5	Mules	208
6	Buffaloes	918

Source: - Animal husbandry Distt. Shimla

## WATERSHED AREA

### 2.1 Socio economic profile of IWMP-VIII Shimla

- Total number of Panchayat : 4
- Total number of families : 1896
- Total population of the Panchayat : 9550 (Male=4859 and Female=4691)
- General families : 1054(male 2681 female 2556)
- Schedule caste families : 807 (male 2112 female 2072 )
- ST Families : 35(male 66 female 63)

#### 2.101: Demographic profile of different Panchayats

Name of Panchayat	General Families				SC Families				ST Families				Grand Total
	No of families	Male	Female	Total	No of families	Male	Female	Total	No of families	Male	Female	Total	
Dhar Gaura	269	655	491	1146	213	567	540	1107	21	34	33	67	2320
Racholi	312	724	784	1508	307	804	808	1612	13	28	27	55	3175
Shahdhar	450	1241	1234	2475	287	741	724	1465	1	4	3	7	3947
Kunni	23	61	47	108	0	0	0	0	0	0	0	0	108
<b>Total</b>	<b>1054</b>	<b>2681</b>	<b>2556</b>	<b>5237</b>	<b>807</b>	<b>2112</b>	<b>2072</b>	<b>4184</b>	<b>35</b>	<b>66</b>	<b>63</b>	<b>129</b>	<b>9550</b>

Source: Gram Panchayat

#### 2.201a: Detail of BPL and Antodaya families under different castes

Name of panchayat	Antodaya				BPL				Grand Total		
	General	SC	OBC	Total	General	SC	OBC	Total	Antodaya	BPL	Total
Dhar Gaura	16	14	0	30	63	57	0	120	30	120	150
Racholi	25	46	0	71	15	22	0	37	71	37	108
Shahdhar	45	87	0	132	40	66	0	106	132	106	238
Kunni	0	0	0	0	5	0	0	5	0	5	5
<b>Total</b>	<b>86</b>			<b>233</b>	<b>123</b>	<b>145</b>		<b>268</b>	<b>233</b>	<b>268</b>	<b>501</b>

Source: Gram Panchayat

#### 2.301 The land use pattern of IWMP-VIII

Name of Panchayat	Total land	Un Irrigated land	Irrigated land	Agri.+Horti.+Veg.	Fellow	Barren	Pasture	Ghasni	Forest	Other
Dhar Gaura	1025	391	0	391	102	0	41	4	436	51
Racholi	2483	276	6	276	0	0	786	13	1325	77
Shahdhar	897	347	4	343	0	47	256	4	203	45
Kunni	165	0	21	21	0	137	0	2	0	10
<b>Total</b>	<b>4570</b>	<b>1014</b>	<b>31</b>	<b>1031</b>	<b>102</b>	<b>184</b>	<b>1083</b>	<b>23</b>	<b>1964</b>	<b>183</b>

Source: Patwar Circle

#### 2.302 Status of Livestock

The animal rearing is the integrated part of farming system in the watershed area. The major animals are cows (local and improved), sheep, goats, bullocks etc. The peoples are facing acute problem and shortage of fodder and drinking water for their animals during the stress period. The details of livestock reared by the people in the watershed area are as under:

**2.302a Livestock population including Number of milch and dry cows (Local and improved) and Buffaloes**

Name of Panchayat	Local cow			Improved cow			Bullock	Calf	Goat	sheep	GrandTotal
	Milch	Dry	Total	Milch	Dry	Total					
Dhar Gaura	56	25	81	470	55	525	66	163	39	285	1159
Racholi	181	49	230	446	74	520	80	210	241	456	1737
Shahdhar	69	30	99	370	72	442	23	159	205	420	1348
Kunni	8	2	10	30	5	35	4	10	12	25	90
	<b>314</b>	<b>106</b>	<b>420</b>	<b>1316</b>	<b>206</b>	<b>1522</b>	<b>173</b>	<b>542</b>	<b>497</b>	<b>1186</b>	<b>4334</b>

*Source: Household Survey*

### 3.0 SWOT ANALYSES

A critical analysis of strengths, weaknesses, opportunities and threats (SWOT) of any region is a good analysis for developing strategies /programmes as it provides valuable insights on potentials, constraints, opportunities and threats based on the primary, secondary and technical data a detailed analysis of SWOT is carried out

#### 3.1 Strengths of the watershed area

- Road infrastructure is available.
- Area is suitable for seasonal and offseason vegetable crops.
- Sheep and goat rearing wool production shepherd community.
- Area is also suitable for fruit crop production.
- Nearest market is available at Rampur, Shimla and Dhali.
- People are well versed with animal husbandry.
- Farmers are innovative and ready to adopt new technologies.
- Scope of growing Medicinal and Aromatic Plants (MAP)

#### 3.2 Weaknesses

- Area is rainfed.
- Massive Soil erosion in the cropped area.
- Unconsolidated land holding
- Scarcity of fodder.
- The pasture land/ grazing land are shrinking due to encroachment by the local people.
- Sharp slope of the cultivated area is causing soil erosion.
- Sufficient water services in the watershed area but still unexploited.

#### 3.3 Opportunities

- Introduction of organic farming
- Training to the farmers on vegetable, horticulture management, floriculture and mushroom production etc. through specialized institutions.
- Installation of vegetable collection centre at ward/panchayat level
- Introduction of crossbred animals
- Cultivation of low volume high value crops.
- New plantation of fruit crops that is apple, pear, cherry and walnut etc.
- Introduction of Pashmina Goat Runpus.

#### 3.4 Threats

- Available land for agriculture is declining if S.M.C practices are not adopted.
- Soil erosion in the sloppy lands.
- Wild animal/stay cattle are the major threat of the area.
- Deforestation and degradation of land
- Declining of the traditional artisans.
- Less interest of the community to maintain the natural resources.

## 4.0 ENTRY POINT ACTIVITIES

Entry point activities play a very important role in the rural area to orient the local community members towards thrift and credit activities of the project. Success of government initiated program largely depends upon the preference given to the entry point activities suggested under the program. Main objective of entry point activities is to increase social mobilization and people participation and collectiveness in various developmental activities initiated by the government. The money earmarked for entry point activities is 4 per cent of total budget outlay and the amount provided under this component play a indispensable role of community involvement in different activities. Proposed for project implementation. The entry point activity attracts the people participation of local community for social mobilization under one platform.

Need base and priority driven entry point activities suggested by farmers during PRA and transit walk exercise are as given below.

### 4.1 Entry point activities suggested at different locations of watershed

Name of Panchayat	Activity	No. of structure	Amount (₹)	Purpose
Dhar Gaura	Bawari	11	500000	Drinking water provided to the beneficiaries
	Pacca Talab	1	80000	Supplementary irrigation provided to the beneficiaries
Rachali	Bawari	15	1074800	Drinking water provided to the beneficiaries
	Irrigation Tank	5	415000	Supplementary irrigation provided to the beneficiaries
Shahdhar	Well	1	10000	Drinking of the beneficiaries
	Bawari	11	415000	Drinking of the beneficiaries
	Crate Wall	1	113200	Check To soil erosion
Kunni	Irrigation Tank	1	99000	Supplementary irrigation provided to the beneficiaries
<b>Total</b>		<b>46</b>	<b>27,07,000</b>	

## 5.0 CAPACITY BUILDING

To implement watershed activities more effectively skill development and capacity building at the various level ie. Panchayat /micro watershed level, block level and district level is prerequisite condition before initiating the implementation of the project. The activities proposed are given below:

### 5.1 Modules

#### 5.1a Awareness Camps

- Will be organized at Panchayat level

#### 5.1b Training:

Training will be organized at

- Block level
- DRDA level
- Institutional level

#### 5.1c Exposure Visits:

- Exposure visits will be conducted at University/ Institutions /Field

#### 5.1d Special Trainings will be organized in the professional institutes

#### 5.101 Activities with number of participants

##### 5.101a: Target groups and location of program

Target group	No. of participants	Activity	Location	Duration (days)	No. of training	Budget (₹)
Member of Gram Shabha Panchayat secretaries and progressive farmers	All	Awareness camps on watershed management	Panchayat level	1	9	180000
PRI, Pradhan ward members & Secretary	10 person	Training and exposure visit on watershed management	Block level/ Institutional/ University	3-7	8	350000
Self Help Groups, User	10 person	Agriculture and Horticulture	Institutional/ university (State/Outsi	3-7	12	925000



Groups and Beneficiary groups			de State)			
Self Help Groups User Groups WDT, PIA and exposure visit	1 to 2 ward/Panchayat (max.)15 person	Exposure visit professional institutional field	State /Outside State	3-4	5	790000
Self Help Groups, User Groups exposure visit	1 to 2 / ward/ panchayat (max.)15 person	Kissan Melas/ Pradashanis	State/Outside State	3-4	5	225000
Self Help Groups, User Groups exposure visit	3 to 4/ activity/ panchayat (max.)15 person	Specialized trainings (masonry, carpentry, dairy farming and vermin composting etc.	Professional Institutes/ University	5-7	6	320000
PIAs, WDTs members	5-8 person	Project implementation and management trainings, report writing and accounts maintenance	Professional institutes/ University (State Outside State)	3	6	288000
Miscellaneous/ Expert visit		Expert visits/services and Misc.	Professional institutes/ University (State Outside State)			349500
<b>Total</b>					<b>51</b>	<b>34,27,500</b>

The capacity building of farmers and youth in the watershed areas can also be done under the micro enterprises and livelihood through Industrial Training Institute (ITI) occupation/trades as well as other entrepreneurs programme which provide self-employment or wage employment within the watershed areas.

## 6.0 Land Development for Sub activity

Land Development is a basic tool for raising of fuel and fodder plantation and Hybrid grasses for sowing healthy species and land for this purpose have been selected during peoples participatory appraisal exercise with the local community. The land comprises of hill steep slopes having mixed layers of soil, facing acute problems of massive soil erosion during rainy season. During the field visit the interaction was made with the local people and farmers, it was observed that soil erosion is increasing at a faster rate, due to the degradation of land. On the suggestion of soil science expert some vegetative measure supported with the fuel plantation of fodder species /Hybrid grasses are recommended to check the soil erosion.

### 6.1 Land Development and sub activity (Plantation of fodder trees and improved Seeds of grasses in wards

Name of the Scheme	Area to be treated	Unit cost per	Amount (₹)
Land Development for sub activity	71 ha	13840	9,82,408

### 6.2 Budget form Production system and micro enterprises

Name of Panchayat	Fodder Trees				Grasses			
	Area (ha.)	No. of Plants @ 1100 /hac	Unit cost per ha ₹	Budget ₹ @ 11000 /hac	Area (ha.)	Quantity of seeds (kg) @ 35kg /hac	Rate per Kg(₹)	Budget ₹
Dhar Gaura	8	8800	10	88000	7	245	120	29400
Racholi	13	14300	10	143000	9	315	120	37800
Shahdhar	15	16500	10	165000	14	490	120	58800
Kunni	3	3300	10	33000	2	70	120	8400
<b>Total</b>	<b>39</b>	<b>42900</b>		<b>429000</b>	<b>32</b>	<b>1120</b>		<b>1,34,400</b>

Note: Target for 4<sup>th</sup> year

### 6.2 (a): Variety and rates of fodder species and hybrid grasses Budget form Production system and micro enterprises

Activity /Item	Breed	Area	Rate per ha. (₹)	Total cost (₹)	Beneficiaries share @ 10% cash or kind used as WDF
Fodder	Beul, Chimu, Robinia, morus	39	11000	429000	42900
Grasses	Napier , Steria and orchard grasses	32	4200	134400	13440
<b>Total</b>		<b>71</b>		<b>5,63,400</b>	<b>56340</b>

## 7.0 Vegetative and Engineering structure

In situ-soil conservation under watershed treatment area comprises of hill steep slopes having mixed layers of soil, facing acute problems of massive soil erosion during rainy season. During the field visit the interaction was made with the local people and farmers, it was observed that soil erosion is increasing at a faster rate, due to the following reasons

- Deforestation in the watershed areas
- Construction of roads and dumping of debris along Nala side
- Cutting of bushes and hedges by local people for fuel and fodder purpose
- Lack of physical and bio logical structures, which facilitate water conservation
- Excessive use of cultivated land for Veg. purpose.

### 7.1 Structures proposed to check massive soil erosion, the following interventions are recommendation and PIA can planning according

- Construction of check dams from top to bottom to minimize the high runoff water during raining season.
- Construction of Gabion Structures to sloppy land sliding area.
- Construction of Continue Contour / trenches to check soil erosion.
- Proper bunding on the cultivated lands by planting grasses and fodder tree
- Biological/vegetative engineering measures along the slope land
- Construction of Gully plugging
- Construction of Loose boarder check dam
- Loose Boulder to check high runoff and stop flooding of fertile soil
- Bank stabilization proposed to be constructed where the massive soil is flooding

### 7.2 Various structures are proposed to be constructed at different location for checking soil erosion

#### 7.2a: Structure with number of beneficiaries

Activity	Size (m)	No. Of Units	Total No. of Structures	Unit cost (₹)	Total Amount (₹)	watershed Budget (₹)
Loose Boulder	6x1.5x1.8	9	9	18500	166500	166500
	4.6x1.25x1.8	9	9	12000	108000	108000
	3x1.25x1.5	4	4	8000	32000	32000
	3.6x1.5x1.5	12	12	8000	96000	96000
	2x1.25x1.5	15	15	4300	64500	64500
	3.8x1.25x1.7	5	5	9300	46500	46500
	4x1.5x1.8	11	11	12400	136400	136400
	5.3x1.25x1.7	16	16	13000	208000	208000
	3x1.25x1.6	6	6	6900	41400	41400
	4x1.25x1.5	2	2	8500	17000	17000
	3.5x1.25x1.6	6	6	9000	54000	54000
	3.5x1.3x1.8	69	69	10200	703800	703800
	4.5x1.5x1.7	27	27	14000	378000	378000
	5x1.25x1.6	11	11	13000	143000	143000
	6x1.25x1.8	7	7	17300	121100	121100
	4.5x1.5x1.5	14	14	11300	158200	158200
	4.2x1.5x1.8	9	9	14500	130500	130500
2.9x1.25x1.5	5	5	6900	34500	34500	

	5x1.25x1.8	1	1	17300	17300	17300
	3.2x1x1.5	1	1	5450	5450	5450
	5x1.5x1.9	47	47	17600	827200	827200
	2.7x1.5x1.75	75	75	8800	660000	660000
	6x1.5x2	17	17	22000	374000	374000
	5.5x1.5x2	14	14	19500	273000	273000
	3x1.5x1.5	10	10	9000	90000	90000
<b>Total</b>		<b>402</b>			<b>48,86,350</b>	<b>48,86,350</b>
<b>Crate Wall</b>	9.6x1.25x1.25	12	3	8300	99600	99600
	6x1.5x1.5	75	25	8500	637500	637500
	7.5x1.5x1.5	32	12	8800	281600	281600
	4x1.5x1.5	72	36	8500	612000	612000
	7.5x1.5x1.25	3	1	8500	25500	25500
	7.2x1.25x1.25	57	19	8300	473100	473100
	10x1.2x1.5	5	1	8300	41500	41500
	8x1.5x1.5	36	9	8500	306000	306000
	5x1.5x1.5	42	21	8800	369600	369600
	4.8x1.25x1.25	58	29	8300	481400	481400
	8x1.25x1.25	8	2	8300	66400	66400
	6x1.25x1.25	6	2	8300	49800	49800
	14x1.25x1.25	7	1	8300	58100	58100
	8x1.25x1.5	4	1	8500	34000	34000
	8x1.25x1.5	12	3	8300	99600	99600
	6x1.25x1.5	39	16	8300	323700	323700
		9		8500	76500	76500
	4x1.25x1.5	44	22	8300	365200	365200
	12.5x1.5x1.5	15	3	8800	132000	132000
	12x1.5x1.5	12	6	8500	102000	102000
	12x1.25x1.5	18	7	8300	149400	149400
	10x1.5x1.5	20	5	8500	170000	170000
	2x1.5x1.5	1	1	8500	8500	8500
	10x1.25x1.5	5	1	8300	41500	41500
<b>Total</b>		<b>592</b>	<b>226</b>		<b>50,04,500</b>	<b>50,04,500</b>
<b>Contour Trenching</b>		2426			126152	126152
<b>Total</b>		<b>2426</b>			<b>126152</b>	<b>126152</b>
<b>Drainage</b>	260	2	2		314000	314000
	390	4	4		942000	942000
	500 mtr	4	4		1183500	1183500
	300 mtr	2	2		352000	352000
	150 mtr	2	2		176900	176900
	400 mtr	4	4		961200	961200
	575 mtr	2	2		693040	693040
	655	1	1		400500	400500
<b>Total</b>			<b>21</b>		<b>5023140</b>	<b>5023140</b>
<b>Grand Total</b>					<b>1,50,40,142</b>	<b>150,40,142</b>

*Note: Target for 4<sup>th</sup> year*

Soil conservation work includes formation of Loose Boulders and other suitable structure to be constructed to conserve the fertile soil and to protect from high runoff. In this micro watershed total 308 Loose Boulder, 226 Crate wall 2426 Contour trenching and 21 Drainage will be constructed which will benefit all families.

**Vegetative Measure:** Various types of trees (Robinia, kenth), Shrubs (Berbris, Ruses) and grasses (Chrysopogon falues, Cynodon dactylon, Napier etc.) can be grown in the areas prone to soil erosion. Fodder grasses like Napier grass can be used on farm bunds. For demonstration in each panchayat about 10,000 cuttings could be planted/ distributed to farmers.

### Outcome

- To minimize the impact of rainfall
- To reduce high velocity of soil erosion
- To improve moisture retention conditions of the area
- To improve soil properties, etc.
- To improve fertility of cultivated soil

## 8.0 WATER HARVESTING

The main sources of irrigation in the gram Panchayat are Percolation tank, roof water, Check Dam, irrigation tanks and water schemes. The most of the cultivated area is rainfed. The existing water resources are drying due to climatic change and deletion of water. The watershed community /people face acute problem of water during stress period, specifically for the irrigation of vegetable crops etc.

### 8.1 (a) Existing and proposed water harvesting structures with storage capacity

Name of structure	No. of structure	Capacity in (m <sup>3</sup> )					Project intervention		No. of beneficiaries benefited
		Existing structure (m <sup>3</sup> )	Repairable No.	(m <sup>3</sup> )	New structure (m <sup>3</sup> )	(m <sup>3</sup> )	Capacity of Existing	New	
Kacha talab	14	576	0	0	21	1735	576	1735	Entire catchment area
Roof water	0	0	0	0	45	480	0	480	
Tanks	21	222	2	51	126	2456	222	2456	
Kuhals	2	0	0	0	2	0	0	0	
Pipe line	0	0	0	0	9	0	0	0	
<b>Total</b>	<b>37</b>	<b>798</b>	<b>2</b>	<b>51</b>	<b>203</b>	<b>4671</b>	<b>798</b>		

### 8.1 (b) Storage capacity and cost of new water harvesting structures under watershed programme and convergence.

Name of Scheme	Watershed				
	No.	Capacity (m <sup>3</sup> )	Unit Cost ₹	Size (mt)	Budget allocated from project ₹
<b>Kacha Talab/ farm pond</b>	3	283	24000	9x7x1.5	72000
	5	600	31100	10x8x1.5	155500
	8	672	17300	8x6x1.5	138400
	5	180	7500	6x4x1.5	37500
	<b>Total</b>	<b>21</b>			
<b>Roof water</b>	2	20	93000	2.5x2x2	186000
	5	45	88000	2.5x2x1.8	440000
	15	187.5	80000	2.5x2.5x2	1200000
	6	75	84000	2.5x2.5x2	504000
	17	153	85500	2.5x2x1.8	1453500
	<b>Total</b>	<b>45</b>			
<b>Kuhal</b>	2	0	0	0	437350
<b>Pipe line</b>	9	0	0	10300 mtr	1274000
<b>Check Dam</b>	1	253		7.5x2.25x1.5	96500
<b>Total</b>					<b>1807850</b>
<b>Irrigation tank</b>	10	145	78000	3.3x2.2x2	780000
	7	136	88500	3.6x2.7x2	619500
	11	257	97000	3.9x3x2	1067000
	5	181	126000	4.8x4.2x1.8	630000
	6	144	105000	4x3x2	630000
	18	270	87000	3x2.5x2	1566000
	17	333	98400	3.50x2.8x2	1672800
	7	184	121000	4.2x3.3x1.9	847000
	23	391	89500	3.5x2.7x1.8	2058500
	3	54	900000	3x2x2	270000

	3	44	93000	3.2x2.4x1.9	279000
	3	79	117000	4.2x3.3x1.9	351000
	11	187	93000	3.5x2.7x1.8	1023000
<b>Total</b>	<b>124</b>				<b>11793800</b>
<b>Grand</b>	<b>201</b>				<b>1,77,88,550</b>

*Note: Details as in annexure*

**8.1 (c) Storage capacity and cost of old water harvesting structures under watershed programme and convergence.**

Name of Scheme	Watershed				
	No.	Capacity (m <sup>3</sup> )	Unit Cost ₹	Size (mt)	Budget allocated from project ₹
Irrigation Tank	1	11	35000	2.50x2.4x1.8	35000
	1	40	40000	8x2.50x2	40000
<b>Total</b>	<b>2</b>				<b>75,000</b>

**8.1(d) Total Storage Capacity of Existing and New structures**

Scheme	New structures(m <sup>3</sup> )	Existing structures (m <sup>3</sup> )	Total capacity(m <sup>3</sup> )
Watershed	4924	798	5722
Convergence	-	-	-
<b>Total</b>	<b>4924</b>	<b>798</b>	<b>5722</b>

**8.1(e) Budget**

Scheme	New structures (₹)	Existing structures (₹)	Total (₹)
Watershed	1,77,88,550	75000	1,77,88,550
Convergence	-	-	-
<b>Total</b>	<b>1,77,88,550</b>	<b>75000</b>	<b>1,77,88,550</b>

**8.1(f) Total storage capacity and cost through watershed and convergence programme**

Particulars	Capacity (m <sup>3</sup> )	Cost (₹)
Watershed	5722	17863550
Convergence	-	-
<b>Total</b>	<b>5722</b>	<b>1,78,63,550</b>

## 8.01 DRINKING WATER

The Watershed area falls in the rainfed area. Water resources are very limited which has been tapped fully by the local people for drinking and irrigation purposes. In earlier days there were water bodies (Bawaries) from which the people used to take water for drinking purpose. During the field visit and interaction with the local people and transit walk of the watershed area source some of fact regarding drinking water comes up.

- Dried up of the water bawaries due to the climate change.
- Heavy pressure on the existing water bodies due to increase in population.
- Less care of maintenance of water bodies, which is due to the habit of tap water provided at door step provided by the IPH department, lifted from Giri River.
- Less percolation for the existing Bawaries due to less range and drying up of Johar at the watershed area
- Presently people take the water through taps, which is provided in alternative days.

## 8.02 Availability of water in the panchayat

### 8.02(a): Availability of water before and project interventions

Sr. No.	Particulars	Capacity (lt)	
		Present	After Project intervention
1	Total supply of water per day	523800	2087800
2	Total House holds	1896	1896
3	Total population	9643	9643
4	Water Available per house hold per day	246	1101
5	Per capita Availability	54	216

## 8.03 Status of Drinking water in different wards of Panchayat

### 8.03 (a) Existing Structure of water bodies availability on daily and monthly basis

Panchayat	Name of Structure								Availability of water per day from the source	No. of months water available during the year
	Tap/ WST		Hand pump		Bawaries		No.	Well		
	No.	Capacity	No.	Capacity	No.	Capacity				
Dhar Gaura	7	58000	2	1500	45	38200	0	0	68390	8month/year
Racholi	14	149000	4	3000	24	11300	8	5100	114310	8month/year
Shahdhar	18	218000	4	3100	30	24600	0	0	175560	8month/year
Kunni	2	10000	0	0	4	2000	0	0	8400	8month/year
<b>Total</b>	<b>41</b>	<b>435000</b>	<b>10</b>	<b>7600</b>	<b>103</b>	<b>76100</b>	<b>8</b>	<b>5100</b>	<b>366660</b>	

#### 8.04 Construction/Proposed of Drinking water Structure with number and dimensions.

Name of Schemes	No. of schemes	Size (mt)	Unit Cost ₹	Estimated Budget (₹)
Bawaries	4	4.9x4.45x2.1	47000	188000
	13	4.9x4.45x2.1	45000	585000
	12	4.49x4.41x1.6	40000	480000
	2	4.9x4.41x2.1	48000	96000
	4	4.9x4.41x2.1	45000	180000
<b>Total</b>	<b>35</b>			<b>15,29,000</b>
<b>Tank</b>	3	2.8x2.4x2	108000	324000
	3	2.5x2.5x2	102500	307500
	5	2.5x2x2	95000	475000
	13	2.4x2x1.8	80000	1040000
<b>Total</b>	<b>24</b>			<b>21,46,500</b>
<b>Pipe Line</b>	2	580 mtr		460800
	1	872 mtr		345600
<b>Total</b>	<b>3</b>			<b>8,06,400</b>
<b>Grand total</b>	<b>62</b>			<b>44,81,900</b>
<b>Repair Bawari</b>	1	3.8x3.5x2	20000	20,000
<b>Grand Total</b>				<b>45,01,900</b>

#### 8.05 Storage capacity and availability of water from existing structures

Sr. No.	Source Collecting structure	No.	Present capacity (lt.) Storage Capacity	No. of months water available during the year
1	WST/Tap	41	435000	8 months
2	Handpump	10	7600	
3	Bawaries	103	76100	
4	Well	8	5100	
	<b>Total</b>	<b>162</b>	<b>523800</b>	

#### 8.06 Proposed activities for increase in the water capacity/ availability through renovation/new construction of structure

##### 8.06(a) Size, location, capacity of structures with beneficiaries

Structure	capacity (lt)		
	Old	New	After intervention (lt)
WST/Taps	435000	214000	649000
Handpump	7600	0	7600
Bawari	76100	1350000	1426100
Well	5100	0	5100
<b>Total</b>	<b>523800</b>	<b>1564000</b>	<b>2087800</b>

#### 8.07 Critical Gaps to be covered (item/activity)

- 1) Regular Supply of drinking water
- 2) Cleanness and colorization of water
- 3) Proper drainage of the catchment area to the pound/Johar
- 4) To sensitization of the community for judicious use of water sources



- 5) After project intervention the fresh and hygienic drinking water will be available to the local community
- 6) Sufficient amount of water can be provided to the beneficiaries within the stress period
- 7) The supplement irrigation facility will provided to the local community
- 8) The livestock will get the water at the door step during stress period
- 9) The water cycle of the project area will improve
- 10) Local hedges and bushes to be planted catchment of the water bodies
- 11) The tradition custom may be revived through worship the specific water bodies to maintain sacredness of the bodies for example the coming up of newly bride groom during local festival which will establish sentimental relation on sustainable basis for the generation to come.

## 9.0 CONVERGENCES

The linkage of the IWMP-VIII, with the other development programme is also one of the important components. The possibilities of identifying different activities under the IWMP and their association with other activities of different line departments can be explore through convergence. This is the best tool to derive support from different line departments to share their experiences with the farmers and providing funds for the scheme works

The following activities can be converged from one head to another:

- Developmental activities like roads and irrigation facilities can be converged with PMGSY, PWD, IPH and MNREGA programs
- Employment Generation with MNREGA program run by Rural Development Department
- Water harvesting strictures like Irrigation tank and Roof water harvesting structure can be constructed under MNREGA. The PIA should prepared shelf with the association of Gram Panchayats and submit the same to BDO for taking financial and administrated approval from Deputy Commission –Cum –CEO DRDA.
- **Line Department Involvement**
- To improve productivity, distribution of improved seeds, fertilizers, insecticides and pesticides can be procured from Agriculture and Horticulture department. Fruit Plants can be purchase from Dr YS Parmar University of Horticulture and Forestry Nauni, Solan and Horticulture Department. In case the fruits plants as per requirement is not available with these institutions NOC may obtained and purchase can be affected from Registered Nursery owners within the state. Similarly the Fuel and fodder plants can be procured from Forest department in case the stock of these plants as per requirement are not available then obtained NOC and effect the purchase from registered nursery owner of the State Govt.
- Construction of poly houses and vegetable Collection Centers at watershed level can be constructed under the Horticulture Technology Mission run by Department of Horticulture
- Income generating activities and micro-enterprises with rural employment program, Prime Minster Employment Generation Program. Self–Employment Schemes etc.
- Dairy development and sheep-goats rearing for the resource less people under **Dudh Ganga Pariyojana** run by the **Animal Husbandry Department**

### P 9.091 Activity/ work to be taken other programme/scheme

Sr. No.	Activity /work	No.	Programme /scheme for convergence	Agency/ Deptt	Budget contribution(₹)		
					Watershed	Convergence	Total
1	Vegetable collection centre	3	HTM	Horticulture	0	936000	936000
<b>Total</b>		<b>3</b>			<b>0</b>	<b>9,36,000</b>	<b>9,36,000</b>

## 10.0 LIVELIHOOD ACTIVITY

Income generating activity reported in the watershed areas are carpentry, masonry, and weavers, embroidery, black smith poultry, sheep and goats rearing, pattal and basket making etc. These income generating activities can transform the rural poor, if they have given more opportunities in the form of trainings, equipments and machine etc. cutting and tailoring, pickle making, jam, jelly, candy and juices making can be other options for rural women to improve their socio-economic conditions.

The skills of local artisans can be improved by providing more opportunities at their door steps. Keeping in view the above mentioned facts, the following activities will be taken up under watershed program for innovative farmers. The provision for training programme for the tradition rural artisan has been provided with in training budget to develop their capacity building.

### 10.101 Income enhancement and employment generation through different income generating activities

#### 10.101a Number of households with activities and income, The list of beneficiaries selected during the PRA exercise attached.

Sr. No.	Activity	Existing household	No. of	Proposed household to be covered under project	No. of
1	Carpentry	11		11	
2	Masonry	3		24	
3	Knitting	-		15+17 SHG	
4	Poultry	3		16	
5	Khaddi	-		2	
6	PHT	-		14 SHG	
7	Basket making	1		1	
8	Prunner	-		1	
9	Packing+ grading	-		3	
10	Black smith	1		1	
11	Fruit sale centre	-		1	
12	Embroidery	-		1	

## 10.102 Livelihood Plan For Landless/Asset less (9% Budget)

As per the provision provided in the common Guideline for livelihood, 2008

Livelihood budget (9%): ₹ 61,69,500

- I. Revolving funds (SHG/Individuals) (70.54%): ₹ 43,52,500
- II. Grant –in – aid (SHGs/SHG Federations) (29.46%): ₹ 18,17,000

Need based planning under livelihood activities for landless /assetless beneficiaries of Project Area

Sr. No	Activity	No. of Beneficiaries	Category	Watershed Project funds ₹
				Grant in aid ₹
1.	Carpentry	11	Gen/BPL	110000
2.	Masonry	24	Gen/BPL	240000
3.	Knitting	15+17 SHG	Gen/BPL	575000
4.	Poultry	16	Gen/BPL	80000
5.	Khaddi	2	Gen/BPL	30000
6.	PHT	14 SHG	Gen/BPL	420000
7.	Basket making	1	Gen/BPL	5000
8.	Prunner	1	Gen/BPL	10000
9.	Packing+grading	3	Gen/BPL	15000
	Black smith	1	Gen/BPL	10000
	Fruit sale centre	1	Gen/BPL	312000
	Embroidery	1	Gen/BPL	10000
<b>Total</b>				<b>18,17,000</b>

**Note: "It is preferred that trainings should be given before providing funds under revolving funds."**

## 11.0 PRODUCTION SYSTEM & MICRO ENTERPRISES

The land resource is the primary and major source of livelihood activities in the watershed area. These natural resources can be used properly by adopting integrated farming system to get more return per unit space per unit time. Area is suitable for the cultivation of apple, pear, pomegranate and walnut. These fruits plants can be integrated with agriculture and animal's husbandry to increase the productivity of land. The shortage of fodder leads farmers to rear only local breeds of animals that are too for self consumption of milk and farm yard manure. This shortage of fodder can be overcome by introducing multipurpose tree species. Other option of livelihood is the revival of rural artisans and for this best options with the rural artisans are carpenter, masonry, weaving, crafting and shoe making. The rural poor can earn good amount of money from these professions. These are some of important income generating activities need to be introduced in the watershed area. There is a dire need to aware, motivate and trained the local poor artisans. These artisans should be provided with equipments to earn their livelihood and to improve their socio economic conditions.

### P 13.111 Income enhancement and employment generation through different income generating activities

#### P 13.111(a) Number of households with activities and income, The list of beneficiaries selected during the PRA exercise attached.

S. No	Activity	Existing No. of household	Proposed No of household
1	Agriculture for crop seed	Whole Panchayat	Whole Panchayat
2	Vermin compost	Whole Panchayat	34+ 2 SHG
3	Fruit Plants	Whole Panchayat	Whole Panchayat
4	Fodder trees	Whole Panchayat	Whole Panchayat
5	Hybrid Grasses (seed)	-	Whole Panchayat
6	Vegetable seeds	-	Whole Panchayat
7	Vegetable collection centre	-	7
8	Dairy farming	-	78
9	Nursery	-	9+5 SHG
10	Goatry	-	10
11	Sheep	-	39
12	Bee- Keeping	-	2+1 SHG
13	Poultry	-	3
14	Drip irrigation	-	1
15	Poluhouse	-	3
16	Fishery	-	6

## P 11.111(b) Production System and Micro –Enterprises (10% Budget)

Name of Watershed IWMP VIII Production budget (10%) ₹ 68,55,000

Sr. No.	Activity	Input	Category	Total Project cost( ₹)	Watershed Project funds (₹)	Convergence	Remarks
					Grant in aid (₹)		
1	Agriculture for crop seed	3876 kg	Gen/SC/BPL	176070	176070	-	
2	Vermin compost	34+2SHG	Gen/SC/BPL	290800	290800	-	
3	Fruit Plants	57350 no.	Gen/SC/BPL	1788050	1788050	-	
4	Fodder trees	42900 no.	Gen/SC/BPL	429000	429000	-	
5	Hybrid Grasses (seed)	1120 kg	Gen/SC/BPL	134400	134400	-	
6	Vegetable seeds	2540.72 kg	Gen/SC/BPL	328680	328680	-	
7	Vegetable collection centre	7	Gen/SC/BPL	2184000	1248000	936000	
8	Dairy farming	78	Gen/SC/BPL	1170000	1170000	-	
9	Nursery	9+5 SHG	Gen/SC/BPL	270000	270000	-	
10	Goatry	10	Gen/SC/BPL	100000	100000	-	
11	Sheep	39	Gen/SC/BPL	390000	390000	-	
12	Bee-Keeping	2+1 SHG	Gen/SC/BPL	35000	35000	-	
13	Poultry	3	Gen/SC/BPL	15000	15000	-	
14	Drip irrigation	1	Gen/SC/BPL	45000	45000	-	
15	Poluhouse	3	Gen/SC/BPL	375000	375000	-	
16	Fishery	6	Gen/SC/BPL	60000	60000	-	
<b>Total</b>				<b>77,91,000</b>	<b>68,55,000</b>	<b>9,36,000</b>	

*The proposal/ applications under production system and micro enterprises have been received/procured from the beneficiaries during the course of participatory Rural appraisal exercise (PRA) of watershed treatment area to undertake different activities individually / SHGs are attached and the need based planning of these project will be prepared by the PIA based on the capacity of the groups and merit and ranking of the each case. The priority and preferences of each case for financial assistance will be decided by the gram sabha.*

## 12.1 AGRICULTURE

The main stay of the farmers of watershed catchment area is agricultural crops grown such as wheat, maize, among cereal crops Rajmash and Mash among pulses. The productivity of crop was observed very low due to rainfed condition and texture and structure of soil is rough. This can be increased through supplementary irrigation facilities and adoption of latest technology for conservation of fertile soil. The ridge to valley method is to be adopted for water management

### Part 12.112(a) Prevalent Farming System under Agriculture

1. Agriculture (Maize/ pulses + Wheat/mustard)
2. Agriculture + Animal Rearing
3. Agriculture + Horticulture (fruit crops+ Vegetables) + Animal Rearing
4. Agriculture + Labour + Rural Artisans

### P 12.112(b) Present status of Agriculture Crops and Proposed interventions:

#### P 12.112(c) Cereals Crops

**Crops grown** : Maize, Wheat, Barley

**Total Productions** : 2421 qt (based on PRA exercise)

**On the demand of the farmer the following activities under Agriculture is proposed**

Status	Particulars	Maize	Wheat	Barley
<b>Existing</b>	Area under cultivation	835Bighas	975 Bighas	200 Bighas
	Production	1372 Qt	889 Qt	160 Qt
	Productivity	1.6 Q/ bighas	.91Qt/bighas	80 kg/bighas
	Variety	Local	Local	Local
	Technology	Kera method	Broad Casting	Broad Casting
<b>Proposed</b>	Increase in area	390 Bigha	429 bighas	140 bighas
	Variety	Proline, Pioneer	kalyan,S-308 Sonalika	Hybrid
	Seed Quantity required by beneficiary group	5175 Kg	21085 Kg	4080 Kg

*Source: Household survey, Regional Centre, NAEB, UHF*

#### P 13.112(d) Pulses

**Crops grown** :Rajmash, Urad, and kulth

**Total Productions** : 566.5 qt (based on PRA exercise)

Status	Particulars	Rajmash	Urad	Kulth
<b>Existing</b>	Area under cultivation	520 Bigha (Intercropping with maize)	270Bigha	70 Bigha
	Production	393 Qt.	152.5 Qt.	21 Qt.
	Productivity	75kg/ bigha	56 kg/ bigha	30 kg/ bigha
	Variety	Local	Local	Local
	Technology	Line method	Kera method	Broadcasting
<b>Proposed</b>	Increase in area	291.6 Bigha	202 Bigha	20 Bigha
	Variety	Red capsule	hybrid	hybride
	Seed Quantity required by beneficiary group	5570 Kg	2520Kg	360 Kg

*Source: Household survey, Regional Centre, NAEB, UHF*

**P 13.112(e) Requirement of improved seed under different crops**

Particulars	Quantity (kg)	Project contribution with 0% Seed replacement quantity (Kg)	Estimated Budget (₹)
<b>Cereals</b>			
Maize	5175	517.5	33450
Wheat	21055	2105.5	53900
Barley	4080	408.0	16320
<b>Pulses</b>		0	
Rajmash	5570	557.	48040
Urad	2520	252	21120
Kulth	360	36	3240
<b>Total</b>		<b>3876</b>	<b>1,76,070</b>

**Note:** Target for 3<sup>rd</sup> and 4<sup>th</sup> year

The quantity and variety of seeds for each crop has been determined by multiplying the seed rate per bighas with the total area cultivated under different crops i.e. Maize (225x4), Wheat (1404x15), Barley (340x12) and Rajmash (811.6x7) Urad (472x5) and Kulth (90 x4) number of beneficiaries (list annexure). The project intervention would be replacement of conventional varieties by improved varieties at 10 percent replacement rate each year for two years. This seed may be given as demonstration units among the beneficiaries

**P 13.112 (f) Critical Gaps in Agriculture Production**

- Lack of irrigation facilities.
- Lack of scientific agricultural practices.
- Timely unavailability of seeds, fertilizers and chemicals for insect-pest management.
- Improved seed varieties not adequately used.

**P 13.112(g) Marketing**

- Agriculture produced are not sold in the market used only for self consumption

**P 13.112(h) Project Interventions****a) Introduction of improved seed****b)**

Improved seed of maize, wheat and pulses will be introduced as demonstration units

**c) Human Resource Development (HRD)/ Capacity Building and training in Agriculture****d)**

- Training on cultivation practices of various agriculture crops.
- Training on insects & pests management.
- Training on vermin composting for organic farming
- Exposure visits and experience sharing out side state progressive farmers
- 

**e) Numbers of trainings / Exposure visits**

- Number of Trainings =3
- Number of Trainees =30 to35
- Duration = 3 days

**f) Exposure visit**

- One exposure visit of 30 to 40 farmers



**P 13.112(h) Project Impact**

a)

<b>Crops</b>	<b>Existing area</b>	<b>Addition in area</b>	<b>Total area</b>	<b>Seed requirement after project intervention (kg)</b>	<b>Amount ₹</b>
Maize	835	390	1225	517.5	33450
Wheat	975	429	1404	2105.5	53900
Barley	200	140	340	408	16320
Rajmash	520	291.6	811.6	557	48040
Urad	270	202	472	252	21120
Kulth	70	20	90	36	3240
<b>Total</b>					<b>1,76,070</b>

b) Skill development and capacity building of about 25 to 30 farmers from the Panchayat for adoption of latest technology of watershed management

c) Encouragement towards organic farming and improving fertility of soils through vermin compost

## P 13.113 HORTICULTURE

The chapter deals with the vegetable crops. among fruits Plum, apricot Pear, peach and walnut etc. are grown. Vegetable is the major cash crop. The watershed area is also cultivated with different types of vegetables. These includes cabbage, beans, capsicum, peas, cauliflower, red chilli etc. the vegetable production is the main farm activity and a good source of employment and income.

### P 13.113a Prevalent Farming Practices under Horticulture

- Horticulture + vegetables
- Vegetable + Animal rearing
- Vegetable crops(Cabbage+Beans)(Capsicum+Tomato)(Cauliflower +Peas)
- Fruit crop (Lemon + Pear+ Plum + Pomegranate + Apricot )
- Agriculture + Horticulture + Animal rearing.

### P 13.113(b) Present status of horticulture crops and proposed interventions:

#### P 13.113(c) Fruits

Status	Particular	Apple	Pear	Cherry	Pomegranate	Plum	Apricot	Lemon
Existing	Area under cultivation	3648 bighas	625 bigha	-	-	90 bigha	-	-
	Present Production	130920qt	20720 qt	-	-	2250 qt	-	-
	Productivity	40 qt/bighas	30qt/bigha	-	-	25 qt/bigha	-	-
	Variety	Red Royal	Local	-	-	Local	-	-
	Technology	Indigenous	indigenous	indigenous	-	-	-	-
Proposed	Increase in area	761 bighas	381bighas	63 bighas	107 bigha	301 bigha	12 bigha	12 Bigha
	Varieties	Red chief, Top red	Hybrid	Black And Red Cherry	Ganesh ,kandhari	Senta Rosa	New casel	Kagzi nimbi
	Plants requirement	22830 Plants	15230 plant	2490 Plant	4260 plant	12060 plant	480 plant	480 plants

### P 13.113(d) Proposed fruit crop intervention in the Project Area

#### Apple

Sr. No.	Name of Panchayat	No. of household	No. of Plants	Area (bigha)	Unit cost (₹)	Amount(₹)
1	Dhar Gaura	498	7470	249	40	298800
2	Racholi	238	7140	238	40	285600
3	Shahdhar	750	7500	250	40	300000
4	Kunni- Tyawal	24	720	24	40	28800
<b>Total</b>		<b>1510</b>	<b>22830</b>	<b>761</b>		<b>9,13,200</b>

Note: Target for 3<sup>rd</sup> and 4<sup>th</sup> year

#### Pear

Sr. No.	Name of Panchayat	No. of household	No. of Plants	Area (Bigha)	Unit cost (₹)	Amount (₹)
1	Dhar Gaura	498	2490	63	25	62250
2	Racholi	238	4760	119	25	119000
3	Shahdhar	750	7500	187	20	150000
4	Kunni- Tyawal	24	480	12	25	12000
<b>Total</b>		<b>1510</b>	<b>15230</b>	<b>381</b>		<b>3,43,250</b>

Note: Target for 3<sup>rd</sup> and 4<sup>th</sup> year

Sr. No.	Name of Panchayat	No. of household	No. of Plants	Area (Bigha)	Unit cost (₹)	Amount (₹)
Plum	Racholi	402	1260	301	25	301500
Cherry	Dhar Gaura	498	2490	63	40	99600
Pomegranate	Racholi	402	4020	101	25	100500
	Kunni	24	240	6	25	6000
Apricot	Kunni	24	480	12	12	12000
Lemon	Kunni	24	480	12	12	12000
<b>Total</b>		<b>1374</b>	<b>8970</b>	<b>495</b>		<b>5,31,600</b>

Note: Target for 3<sup>rd</sup> and 4<sup>th</sup> year

#### P 13.113(e) Budget proposed for Horticulture activities

Activity /Item	Variety	No. of Plants required	Unit cost per plant ₹	Cost for 3 <sup>rd</sup> year	Cost for 4 <sup>th</sup> year	Total cost (₹)
Apple	Top Red, Royal, Red Chief	22830	40	913200	0	913200
Pear	Bartlet	15230	25	15000	193250	343250
Cherry	Black and Red cherry	2490	40	0	99600	99600
Pomegranate	Ganesh, kandhari	4260	25	0	0	106500
Plum	Senta Rosa	12060	25	0	301500	301500
Apricot	New casel	480	25	0	12000	12000
Lemon	Kagzi nimbu	480	25	12000	0	12000
<b>Total</b>				<b>9,40,200</b>	<b>6,06,350</b>	<b>17,88,050</b>

Species	Existing families	Addition families	in	Total families after project intervention
<b>Fruits</b>				
Apple	1510	1510		1510
Pear	1510	1510		1510
Cherry	0	498		498
Pomegranate	0	426		426
Plum	402	402		402
Apricot	0	24		24
Lemon	0	24		24

#### P 13.113(f) Vegetables crops

Status	Vegetable crops	Cabbage	Bean	Peas	Potato	Capsicum	Tomato
Existing	Area under cultivation	33 bighas	286 bighas	370 bighas	150 bigha	55 bigha	180 bigha
	Present Production	181.5qt	1430 qt	1870qt	300 Qt	220 qt	900 qt
	Productivity	5.5 qt/bigha	5qt/bighas	5 qt/biagha	2.5qt/bigha	4 qt/bigha	5 qt/ bigha
	Variety	Hybrid	Falguni	Azad, P-1, Linken	Local	Bhart	Hybride
	Technology	Indigenous	Indigenous	Indigenous	Indigenous	Indigenous	Indigenous
Proposed	Increase in area	20 bighas	174bighas	139 bigha	66.6 bigha	34.3 bigha	7 bigha
	Variety	Improved hybrid	Falguni	Azad, P-1, Linken	Kufri Jyoti	Bhart/ dollar	Himsona
	Total seed requirement	1600 gm	620 kg	2546 kg	2166 kg	2680 kg	5740 gm

#### P 13.113(g) Critical Gaps in Horticulture Production

- Lack of vegetable collection centre
- Lack of sufficient irrigation facilities
- Quality seedling of fruit crop.
- Lack of technical knowledge for cultural operation
- Knowledge about Post Harvesting Technology .

- Lack of value addition.
- Availability of fertilizers
- Lack of post harvesting Management
- Lack of CCA Store to improve shelf life of the produce

**P 13.113(h) Marketing**

- Vegetable produced are sold at Rampur, Sainj, Shimla, Narkanda

**P 13.113(i) Project Interventions**

- Supply of improved varieties of fruit crops seedlings.
- Vegetable collection centre.
- Training on cultural operations and on value addition.
- Farm based enterprises
- Irrigation through moisture conservation measures
- Drip irrigation Sprinkler
- Vegetable seed production area

**P 13.113(j) Community requirement of Improved Vegetable Seed in Project Area**

Crops	Seed requirement Quantity(Kg)	Project contribution with 10% seed replacement	Unit rate per kg @ (₹)	Estimated Budget(₹)
Cabbage	16000/gm	160 gm	350/10 gm	56000
Beans	920 kg	92 kg	550/kg	50700
Peas	2546 kg	254.6 kg	180/kg	45830
Potato	21666 kg	2166.6 kg	60/kg	130000
Capsicum	2680 gm	26.8 gm	650/10gm	17450
Tomato	5740 gm	574 gm	500/10 gm	28700
<b>Total</b>				<b>3,28,680</b>

Note: Target for 3<sup>rd</sup> and 4<sup>th</sup> year

The quantity and varieties of seeds for each vegetable crop has been determined by multiplying the seed rate per bigha with the total area cultivated under different crops i.e Potato (1-1.5 qt), Beans (2 kg), Peas (5 kg), cabbage(30 gm), Capsicum (20 gm) Tomato (20 gm), by number of beneficiaries (list annexure). The project intervention would be replacement of local varieties by improved varieties at 10 per cent replacement rate each year for 2 years. This seed may be given as samples among the beneficiaries for development and demonstration units

**P 13.113(k) Impact/Project Outcomes**

1. Skill development /capacity building of 40 farmers
2. Conventional Cropping pattern changed. Area under vegetable increased (134 bighas)
3. Mono crop to cash crop
4. Farming systems changed. Areas under fruit crops increased (1277 bighas)
5. Production of fruit and vegetable enhanced through supplementary irrigation facility
6. Livelihood of 40 more farming families linked with horticulture practice.

**P 13.113(l) Vegetable Collection Centre**

Panchyat	Location	No	Size(m)	Beneficiaries	Watershed	Convergence
Dhar Gaura	Dhar and koti-II	2	5x4	All WArds	0	624000
Racholi	Sanothli, Darshaj, Ropru, Sunda	4	5x4	All WArds	1248000	0
Shahdhar	Kurgu dhar	1	5x4	All WArds	0	312000
<b>Total</b>		<b>7</b>			<b>12,48,000</b>	<b>9,36,000</b>

Note: Target for 3<sup>rd</sup> and 4<sup>th</sup> year

## 11.3 ANIMAL HUSBANDRY

Animal rearing is the secondary thought for livelihood activity after Agriculture. Animals are reared by farmers mainly for milk, FYM, meat as well as for wool. Cows and buffaloes are reared for milk production which is used for self consumption. Milch animals are local as well as improved. Hence milk production is low due to non availability of green fodder and nutrient feeding to the animals.

### 11.301 Milk Production and fodder requirement

Total no. of milch cattle in the watershed area is 1630 and average production of milk per day is 2.5 lt. from buffalo's local cows and 6 lt. per day from improved cows.

#### 11.301(a) Average and Total milk production

Milch cattle	Total Milch	Average milk production lt./day	Total production (lt.)
Local cows	314	2.5	785
Cross breed cows	1316	6	7896
<b>Total</b>	<b>1630</b>		<b>8681</b>

#### 11.301 (b) Fodder availability, requirement and Deficit (tons)

Green fodder available in project area is 12163 tons whereas dry fodder available is 10298 ton. Total 22461 ton fodder is available in project area. But requirement of green fodder is 41191 ton whereas requirement of dry fodder is 13731 ton. Total fodder required is 54922 ton. Deficit of green fodder in project area is 32461 ton and that of dry fodder is 3433 tons.

#### 11.301(b-i) Fodder availability, requirement and Deficit (tons)

Available			Required			Deficit		
Green	Dry	Total	Green	Dry	Total	Green	Dry	Total
12163	10298	22461	41191	13731	54922	29028	3433	32461

**Note** - **Available Fodder**  
**Green** - 24kg/day x 30 days x 6months x Total live stock  
**Dry** - 15 kg/day x 30days x 6months x Total live stock

**Required Fodder**  
**Green** - 30kg/day x 30days x 12months x Total live stock  
**Dry** - 10kg/day x 30days x 12months x Total live stock

#### 11.301(b-ii) Gap between Demand and supply of total Fodder

Supply	22461
Demand	54922
Deficit	32461

### 11.301(c) Project interventions

- Plantation and cultivation of fodder trees and grasses
- Construction of talabs , Johars in grass land and community lands
- Training/Capacity building

a) Plantation and cultivation of fodder trees and grasses

#### Species:

Tree: Morus, Ban, Robinia , Shatoot, Beul.

Grasses: Steria, Berseem, Orchard, Napier etc.

### 11.301(c-i): Budget form Production system and micro enterprises

Name of Panchayat	Fodder Trees				Grasses			
	Area (ha.)	No. of Plants @ 1100 /hac	Unit cost per ha ₹	Budget ₹ @ 11000 /hac	Area (ha.)	Quantity of seeds (kg) @ 35kg /hac	Rate per Kg(₹)	Budget ₹
Dhar Gaura	8	8800	10	88000	7	245	120	29400
Racholi	13	14300	10	143000	9	315	120	37800
Shahdhar	15	16500	10	165000	14	490	120	58800
Kunni	3	3300	10	33000	2	70	120	8400
<b>Total</b>	<b>39</b>	<b>42900</b>		<b>429000</b>	<b>32</b>	<b>1120</b>		<b>1,34,400</b>

Note: Target for 4<sup>th</sup> year

### 11.301(c-ii) b :Variety and rates of fodder species and hybrid grasses Budget form Production system and micro enterprises

Activity /Item	Breed	Area	Rate per ha. (₹)	Total cost (₹)	Beneficiaries share @ 10% cash or kind used as WDF
Fodder	Beul, Chimu, Robinia, morus	39	11000	429000	42900
Grasses	Napier , Steria and orchard grasses	32	4200	134400	13440
<b>Total</b>		<b>71</b>		<b>5,63,400</b>	<b>56340</b>

b) Construction of talabs , Johars in grass land and community lands

c) Training and Capacity Building

- Live stock management
- Animal Health
- Artificial insemination
- Improved grasses / Fodder trees
- Exposure visits

#### Number of Training

- Four trainings with 5-7 farmers in each trainings
- Exposure visits for 5-7 farmers

**11.301(d) Project outcome/impact****11.301(d-i) Estimated production of milk after project intervention**

Milk production after project intervention will increase to 4 to 9 lt. /day and total production of milk after project intervention will be 13100 liters.

**11.301(d-ii) Milk production from cows and buffaloes after project intervention**

Sr. No.	Milch cattle	Milch No.	Milk production lt./day	Total production (lt.)
1	Local cows	314	4	1256
2	Cross breed cows	1316	9	11844
	<b>Total</b>	<b>1630</b>		<b>13100</b>

**11.301(d-iv) Total milk production before and after project intervention.**

Increase in milk production is 4455 lt. with total production of 13100 lt.

Sr. No.	Milch cattle	Production Before project (lt.)	Production After project (lt.)	Quantity of milk Increase after project (lt.)
1	Local cows	785	1256	471
2	Cross breed cows	7896	11844	3984
	<b>Total</b>	<b>8681</b>	<b>13100</b>	<b>4455</b>

## 12.0 PISCICULTURE

Fisheries can be one of the additional sources of income to the farmers of the watershed area, but due to the lack of plenty of fresh water, the people enable to take up this activity as a additional source of income. Secondly the people of the watershed area are practicing agriculture, horticulture and vegetable cultivation which is a main stay of the farmers. Hence fish cultivation cannot suggest for the watershed areas of the Rampurblock.

### 12.101a Existing and Proposed water bodies for fish culture

Existing water bodies			Proposed water bodies			Owner ship private /common	Amount
No	Size (ft)	location	No	Size (ft)	Location		
1	Nil	Nil	4	4.8x4.2x1.8	Dhar Gaura	PVT	126000
2	Nil	Nil	2	4x3x2	Shahdhar	PVT	105000
<b>Total</b>							<b>2,31,000</b>

### 12.101b Availability and requirement of fish seed /fingerlings

Panchayat	Existing families	Proposed families	Present quantity of fish	Requirement of fish seed	Breeds
Dhar Gaura	-	4	-	-	Trout
Shahdhar	-	2	-	-	Trout

### 12.102 Project Interventions

- Introducing of fisheries among more families
- Requirement of improved seed (fingerlings)
- Training on fish culture



## BASE LINE SURVEY

**PROJECT: IWMP-VIII**

Sr. No.	Particulars	
<b>A</b>	Total Geographical Area of the Project (hectares)	4570 ha
	Project Area Covering	4570 ha
<b>B</b>	<b>Treatable Area</b>	
	Wasteland (hectares)	1565 ha
	Rainfed Area Agriculture land (hectares)	1014 ha
	Total Cropped Area (hectares)	1062 ha
	Net Sown Area (hectares)	1045 ha
	Forest land (hectares)	1964 ha
	Total No. of water storage structure	203
	Total No. of water Extracting Units	63
	Total Storage capacity of water storage structure 798+4671	m3
<b>C</b>	<b>Number of household</b>	1896
	General	1054
	SC	807
	ST/OBC	35
	Total Population in the project area	9550
	No. of Household of Landless people	Nil
	Total No. of BPL Household	501
	No. of marginal Farmers Household	6685
	No. of Small Farmers Household	286
<b>D</b>	<b>Depth of Ground Water (Meter) below Ground Less</b>	
	Pre Monsoon	20 m
	Post Monsoon	15M
	No. of Person-day of seasonal Migration	Nil

### Livelihood Activities

Sr. No.	Head	Numbers	Amount (₹)
1	Carpenter	11	110000
2	Masonry	24	240000
3	Knitting	15+17 SHG	575000
4	Basket making	1	5000
5	Khaddi	2	30000
6	Post Harvesting Technology (PHT)	14 SHG	420000
7	Pruner	1	10000
8	Packing& grading	3	15000
9	Black smith	1	10000
10	Embroidery	1	10000
11	Fruit sale centre	1	312000
12	Poultry	16	80000
<b>Total</b>			<b>18,17,000</b>

## Production system and Micro-Enterprises

Sr. No	Activities	3 <sup>rd</sup> Year		4 <sup>th</sup> Year		Total Nos/ KG/ plants	Total Amount (₹)
		Nos/ kg	Amount (₹)	Nos/ kg /plants	Amount (₹)		
1	Agriculture for crop seed	3278 kg	141150	448 kg	34920	3726 kg	176070
2	Vegetable seed	-	278100	-	50580	-	328680
3	Fruit plants	30810	1075200	27020	712850	57830	1788050
4	Fodder trees	-	0	42900	429000	42900	429000
5	Hybrid grasses	-	0	1120	134400	1120	134400
6	Vegetable collection centre	2	624000	2	624000	4	1248000
7	Vermicompost	-	194400	-	96400	32+2 SHG	290800
8	Dairy farming	78	1170000	-	0	78	1170000
9	Nursery	-	80000	-	190000	9+5 SHG	270000
10	Goatry	3	30000	7	70000	10	100000
11	Sheep	6	60000	33	330000	39	390000
12	Bee-Keeping	2	10000	1SHG	25000	2+1SHG	35000
13	Poultry	3	15000	-	0	3	15000
14	Polyhouse	3	375000	-	0	3	375000
15	Fishery	-	0	-	0	6	60000
16	Drip irrigation	1	45000	6	60000	1	45000
<b>Total</b>			<b>40,97,850</b>		<b>27,57,150</b>		<b>68,55,000</b>

## Capacity Building Plan

Sr. No	Target Group	2 <sup>nd</sup> Year		3 <sup>rd</sup> year		Total No.	Total Amount (₹)
		Nos	Amount (₹)	Nos	Amount (₹)		
1	Member of Gram Shabha Panchayat secretaries and progressive farmers <b>(Awareness camps at field level)</b>	9	180000			9	180000
2	PRI, Pradhan ward members & Secretary <b>(Block level)</b>	8	350000			8	350000
3	Village level Members Mahila mandal and Youvak Mandal <b>(Institutional level)</b>	12	925000			12	925000
4	Self Help Groups, User Groups and Beneficiary groups <b>(exposure visit out side state)</b>	-	0	5	790000	5	790000
5	Self Help Groups User Groups WDT, PIA and exposure visit <b>(Kissan Melas)</b>	-	0	5	225000	5	225000
6	Self Help Groups, User Groups exposure visit <b>(Specialized training)</b>	-	0	5	320000	5	320000
7	PIAs, WDTs members/ Technical experts/ computer experts <b>(Outside state exposure visit)</b>	-	0	6	288000	6	288000
8	Miscellaneous/Technical Expert visit	-	0	6	349500	6	349500
	<b>Total</b>	-	<b>14,55,000</b>	<b>27</b>	<b>1972500</b>	<b>56</b>	<b>34,27,500</b>

## Vegetative and Engineering Structure (Sub Component)

Sr. No	Activities	4 <sup>th</sup> year		5 <sup>th</sup> year	Total amount (₹)
		Nos.	Amount (₹)		
1	Loose Boulder	402	4886350	-	4886350
2	Crate wall	226	5004500	-	5004500
3	Drainage		300000	4723140	5023140
4	Contour trenches	2426	126152	0	126152
	<b>Total</b>		<b>1,03,17,002</b>	<b>47,23,140</b>	<b>1,50,40,142</b>

## ABBREVIATION USED

BPL	:	Below Poverty Line
DPR	:	Detailed Project Report
DRDA	:	District Rural Development
GIS	:	Geographical Information System
ha	:	hectare
IPH	:	Irrigation and Public Health
IRDP	:	Integrated Rural Development Programme
IWMP	:	Integrated Watershed Management Programme
lt	:	liter
M	:	meter
MNREGA	:	Mahatma Gandhi Rural Employment Guarantee Act
NABARD	:	National Bank of Agriculture and Rural Development
NDRI	:	National Dairy Research Institute
OBC	:	Other Backward Classes
PIA	:	Project Implementing Agency
PMGSY	:	Pradhan Mantry Gramin Sadak Yojna
PWD	:	Public Work Department
SC	:	Scheduled Caste
ST	:	Scheduled Tribe
EPA	:	Entry Point Activity
SHG	:	Self Help Group
WDF	:	Watershed Development Fund