GOVERNMENT OF RAJASTHAN
RURAL DEVELOPMENT & PANCHAYATI RAJ DEPARTMENT
(WATERSHED DEVELOPMENT & SOIL CONSERVATION)

NAME OF PROJECT :	**Pali IWMP 26/11-12**
EFFECTIVE AREA OF PROJECT :	**6249 ha**
COST /HA –	**Rs. 15,000/-**
COST OF PROJECT :	**Rs. 937.35 lakhs**
BLOCK :	**Sumerpur**
DISTRICT:	**Pali**

PIA –
RUDTES, Pali

PROJECT MANAGER, WCDC
W.D. & S.C., DISTRICT -Pali

CERTIFICATE

Certified that the undersigned have proposed the appropriate and need based activities required in the watershed project area with active participation of beneficiaries along with consultation of Watershed Committees (WCs). Approval of watershed project plan and DPR has been obtained from WC, Gram Sabha. The plan and DPR document of **Pali IWMP 26/11-12** project, at P.S. **Sumerpur** District **Pali** is technically sound, viable and appropriate for implementation during the period **2011-12 to- 2015-16.**

We recommend that this plan be sanctioned and put to implementation.

Signature Chairman/	Signature Secretary WC	Signature WDT members 1 2 3 4	Signature Junior Engineer	Signature PIA	Signature Project Manager, WCDC Distt.Pali

Detail of Project

1. Name of Project : Pali IWMP 26/11-12
   Sanction No. & date of Project : F18 (I-88) Part – II/DWDSC/IWMP-VI /237-257
   Dated: 23-04-2012
2. Macro & Micro Nos : 5/2, 3, 4, 5P, 6P, 7, 8, 9P, 10 P
   6/1, 2, 3, 4, 5
3. Deviation from Project Sanctioned : Nil

Items	As per Project Sanctioned	As proposed in DPR
Project Area	6249 ha	6249 ha
Macro/Micro No	5/2, 3, 4, 5P, 6P, 7, 8, 9P, 10 P 6/1, 2, 3, 4, 5	5/2, 3, 4, 5P, 6P, 7, 8, 9P, 10 P 6/1, 2, 3, 4, 5
Name of Gram Panchayats	Sindru, Netra, Pomava, Bankli, Khivandi	Sindru, Netra, Pomava, Bankli, Khivandi
Name of Villages	Sindru, Khindara, Netra, Parakhiya, Rojada, Mordoo, Bankli, Khivandi	Sindru, Khindara, Netra, Parakhiya, Rojada, Mordoo, Bankli, Khivandi
Project Cost (Rs in Lakhs)	Rs. 937.35	Rs. 937.35

Table of Contents

List of Tables

CHAPTER – I
INTRODUCTION

1.1. Location

The Pali IWMP 26/11-12 Project is located in Sumerpur Block, of Pali district. The project area is between 25^0 9' to 25^0 16' North latitudes and 73^0 12' to 73^0 21' East longitudes. It is at a distance of 7-15 km from its Block head quarters and 80 Kms from the district head quarters. There are nine no. of habitations in the Project area and other details are given in Table 1.1.

Table 1.1: General features of watershed

S.No.	Name of Project(as per GOI)	Pali IWMP 26/11-12
(a)	Name of Catchment	Jawai
(b)	Name of watershed area(local name)	Bankli-Khindra Watershed
(c)	Project Area	7000.81 ha
(d)	Net treatable Area	6249.00 ha
e)	Cost of Project	937.35 ha
f)	Cost/hectare	Rs. 15,000/-
g)	Year of Sanction	2012
h)	Watershed Code	06705, 06706
i)	No. of Gram Panchayats in project area	5
j)	No. of villages in project area	8
k)	Type of Project	other
l)	Elevation (metres)	270 m (average)
m)	Major streams	Drainage-17 (Khindra Ganv) – 10.16 Km Drainage 14 (Khiwandi) – 5.80 Km Drainage 19 (Netra) – 5.68 Km Drainage 3 (Rojda) – 4.44 Km
n)	Slope range (%)	1% -10%

The project consists of various microwatersheds ranging from 5/2 to 5/10 and 6/1 to 6/5 having a total area of 7000.81 ha of which treatable area is 6249 ha. Table 1.2 provides the microwatershed-wise list.

Table 1.2. Details of Microwatersheds

Macro/Micro	GP	Village	Census Code	Total area	Treatable area
5/2	Sindru	Khindra Gaon	02471900	569.94	565
		Sindru	02471800		
5/3	Sindru	Khindra Gaon	02471900	282.52	260
		Sindru	02471800		
5/4	Sindru	Khindra Gaon	02471900	386.6	355
5/5 P	Sindru	Khindra Gaon	02471900	782.81	469
	Netra	Parakhiya	02473700		
5/6 P	Sindru	Sindru	02471800	259.72	135
5/7	Sindru	Khindra Gaon	02471900	167.41	158
5/8	Sindru	Sindru	02471800	136.19	80
5/9 P	Netra	Netra	02472000	653.42	550
	Sindru	Khindra Gaon	02471900		
	Sindru	Sindru	02471800		
5/10 P	Sindru	Khindra Gaon	02471900	546.85	495
	Netra	Netra	02472000		
	Sindru	Sindru	02471800		
6/1	Khiwandi	Khiwandi	02471700	1536.17	1528
	Netra	Rojda	02472100		
6/2	Bankli	Bankli	02471600	755.45	755
	Khiwandi	Khiwandi	02471700		
6/3	Bankli	Bankli	02471600	301.45	295
	Pomawa	Mordoo	02472200		
6/4	Khiwandi	Khiwandi	02471700	162.49	154
6/5	Pomava	Mordoo	02471000	459.79	450
				7000.81	**6249**

The treatable area of the watershed project IWMP 26/11-12 has eight villages of five Gram Panchayats as given in Table 1.3.

Table 1.3: Village-wise break up of area in the watershed

Sr No.	Village	Census Code	GP	Treatable Area (in ha)
1	Bankali	02471600	Bankali	618
2	Khiwandi	02471700	Khiwandi	1219
3	Mordoo	02472200	Pomava	515
4	Netra	02472000	Netra	230
5	Parakhiya	02473700	Netra	329
6	Rojda	02472100	Netra	830
7	Khindara	02471900	Sindru	1673
8	Sindru	02471800	Sindru	835
			Total	6249

1.2. Salient Features of the Watershed

The watershed falls in Agroclimatic Zone of 'Transitional Plain of Luni Basin'. The soil texture is sandy loam. The average rainfall is 538 cm. The temperatures in the area are in the range between 4^0 centigrade during summer and 47^0 centigrade during winter. The major crops in the area are Bajra, Mustard, Wheat, Guar, and mung; 60.6% land is under cultivation, 5% land fallow, 28% land is wasteland. 25% land is irrigated through well or canal.

511 No of households are BPL (16% households) 1733 are landless households (56% households) and 1347 household are small and marginal farmers(43% household) .Average land holding in the area is 1.07 ha. 69% of net cropped area is single cropped area and 26% is double cropped. The main source of irrigation is well and a part is through the canal.

The major streams in the Watershed are Drainage-17 (Khindra Ganv) – 10.16 Km, Drainage 14 (Khiwandi) – 5.80 Km, Drainage 19 (Netra) – 5.68 Km, and Drainage 3 (Rojda) – 4.44 Km. The major festivals in the village are Deepavali, Holi, Mahashivaratri – various castes based fairs such as Bhilon Ka Mela, Meghwalon ka mela, Prajapat mela, Hiragar ka mela. At present these villages under the watershed are having a population of 18,907 with Communities like Rajput (General), Rebari (OBC) Meghwal (SC), Meena (ST), and Jain, Rajpurohit (General) and Prajapat (OBC).

Table 1.4 describes the details of rainfall, temperature, evapo-transpiration, and run-off of the project area.

Table 1.4. Climatic and Hydrological information

1	**Average Annual Rainfall(mm)**	
	Year	Average Annual Rainfall(mm)
1	2001	683
2	2002	286
3	2003	756
4	2004	366
5	2005	417
6	2006	1068.5
7	2007	660
8	2008	264
9	2009	374
10	2010	510
2	**Average Monthly rainfall (last ten years) 538.45**	
	Month	Rainfall(mm)
i)	June	65
ii)	July	135

iii)	August	235		
iv)	September	75		
3	**Maximum rainfall intensity (mm)**			
	Duration	rainfall intensity(mm)		
	i) 15 minute duration	28		
	ii) 30 minute duration	45		
	iii) 60 minute duration	75		
4	**Temperature (Degree C)**			
	Season		Max	Min
	i) Summer Season		47	22
	ii) Winter Season		28	4
	iii) Rainy Season		33	21
5	**Potential Evaporation Transpiration (PET) (mm/day)**			
	Season		PET	
	i) Summer		10	
	ii) Winter		2.2	
	iii) Rainy		4.4	
6	**Runoff**			
	i) Peak Rate (cum/hr)		1111.3	
	ii) Total run off volume of rainy season (ha.m.)		418.1	
	iii) Time of return of maximum flood		**10 years**	
	iv)Periodicity of Drought in village area		**3 years**	

There are some development programmes already going on in the area such as Mahatma Gandhi National Rural Employment Gurantee Scheme (MGNREGS) and National Rural Livelihood Mission (NRLM) related activities (Table 1.5). However, these programmes do not consider the natural boundary of the area as a unit of development which is essential for any sustainable natural resource management effort. Hence the watershed project will be an important milestone in the development efforts of the area.

Table 1.5: Other Development Schemes in the project area

S.No	SCheme	Name of the department	Key interventions under the SCheme	Targeted Beneficiaries	Provisions under the Scheme
1	MGNREGA	Panchayat Samiti	earthwork	BPL	Employment to poor
2	NRLM	Panchayat Samiti	SHG and livelihoods	BPL and other poors	Livelihood promotion

In terms of infrastructure the area can be considered to be poor to moderate as given in Table 1.6 below.

Table 1.6: Details of infrastructure in the project areas

Parameters		Status			
(i)	No. of villages connected to the main road by an all-weather road	8			
(ii)	No. of villages provided with electricity	8			
(iii)	No. of households without access to drinking water	2500			
(iv)	No. of educational institutions :	(P)	(S)	(HS)	(VI)
	Primary(P)/ Secondary(S)/ Higher Secondary(HS)/ vocational institution(VI)	23	4	1	
(v)	No. of villages with access to Primary Health Centre	5			
(vi)	No. of villages with access to Veterinary Dispensary	2			
(vii)	No. of villages with access to Post Office	4			
(viii)	No. of villages with access to Banks	8 (2 bank branches)			
(ix)	No. of villages with access to Markets/ mandis	8 (Sumerpur Mandi)			
(x)	No. of villages with access to Agro-industries	0			
(xi)	Total quantity of surplus milk	1596 lr/day			
(xii)	No. of milk collection centres	(U)	(S)	(PA)	(O)
	(e.g. Union(U)/ Society(S)/ Private agency(PA)/ others (O))		5	1	
(xiii)	No. of villages with access to Anganwadi Centre	8 (17 centres)			
(xiv)	Any other facilities with no. of villages (please specify)	-			
(xv)	Nearest KVK	Pali (80 Km)			
(xvi)	cooperative society	Primary Agriculture Coop Society – 5			
(xvii)	NGOs	1 (RUDTES)			
(xviii)	Credit institutions				
	(i) Bank	2 branches of Marwar Grameen Bank (Khiwandi, Bankli)			
	(ii) Cooperative Society	Khiwandi, Bankli, and Mordu			
(xix)	Agro Service Centre's	-			

It can be observed that the project area has only one milk collection centre and only two villages have proper access to veterinary dispensary. In terms of human health, only five villages have access to PHC. Further, the Krishi Vigyan Kendra located in Pali is about 80 Km which makes the area quite remote and the farmers are not able to access the regual advancements in the field of agriculture.

Sumerpur has a Mandi, hence it is a good market for agricultural commodities but as the area does not have agro processing industries farmers do not get the benefit of value additions.

1.3. Institutional arrangements (SLNA,WCDC,PIA,WDT,WC, Secretary)

The institutional arrangement of the project is devised as per the recommendations of the common guidelines. At district level the WCDC is there to guide and monitor the implementation of watershed project (Table 1.7). The Project Implementaing Agency (PIA) for IWMP 26/11-12 is RUDTES which has appointed a Project Officer to look into the day to day implementionn (Table 1.8).

Table 1. 7: WCDC Details

1	2	3
S.No	**Particulars**	**Details of WCDC**
1.	PM ,WCDC	Mr.G.S.Ranawat, Project Manager
2.	Address with contact no., website	Zila Parishad ,Pali
3.	Telephone	02932-221682
4.	Fax	02932-252809
5.	E-mail	dwdu.pali@gmail.com

Table 1.8: PIA particulars

1	2	3
S.No	**Particulars**	**Details of PIA**
6.	Name of PIA	Gajendra Singh
7.	Designation	Project Officer
8.	Address with contact no., website	Rural Development & Technical Education Society, Behind Police Station, Adarsh Colony, Sumerpur-75
9.	Telephone	02933258093
10	Fax	02933258093
11	E-mail	rudtes@rediff.com

Further there is a Watershed Development Team (WDT), that comprises four members – Agriculture Spoecialist, Civil Engineer, Livestock Specialist and a Social Scientist as detailed out in Table 1.9. The role of WDT will be to provide technical support, and guidance to the Watershed Committee in implementing the watershed project

Table 1.9: WDT Particulars:

1	2	3	4	5	6	7	8
S.No	Name of WDT member	M/F	Age	Qualification	Experience in watershed (Yrs)	Description of professional training	Role/ Function
1	Mahipat Singh	M	38	Diploma in Civil Engg	7 years	IWDP – 15 days	Technical design, technical guidance to WC
2	Devkrishan Salvi	M	33	B SC. (Ag)	3 years	Livelihoods – 7 days	Agriculture related support
3	Yogendra Pal Singh	M	23	BA (Sociology)	1 year		Social Scientist
4	Ved Prakash	M	28	B. SC. (CBZ), Diploma in Veterinary SCience	1 years	CAZRI – 2 days	Livestock expert

As the project includes five Gram Panchayats, Watershed Committees (WC) have been formed in each Gram Panchayat. Thus there are 5 WCs as detailed out in the Table 1.10. Each WC includes 10 members from which one member has been designated as chairperson. Each WC is represented by all sections of society including women, SC, ST and the committees are also represented by members of Selh help groups and users groups. The formation of the committee has been approved by the Gram Sabha and each of the committee is also represented by a PRI member.

Table 1.10: Details of Watershed Committees (WC)

S. N.	Name of WCs	Date of Gram Sabha for WC	Designation	Name	M/F	SC/ST/OBC/ General	Landless/MF/SF/ BF	Name of UG/SHG	Educational qualification
1	जल ग्रहण समिति पराखिया	09-10-2012	अध्यक्ष	श्री मति गेहरी देवी w/o पेमा राम देवासी	F	OBC	BF	other	5 वी
			सचिव	श्री गिरधारी सिह s/o जवाहर सिह राजपुरोहित	M	GENERAL	BF	other	10 वी
			सदस्य	श्री मगला राम s/o हसा मेघवाल	M	SC	SF	UG	10 वी
			सदस्य	श्री दलपत सिह s/o जोर सिह राणावत	M	GENERAL	BF	UG	8 वी
			सदस्य	श्री गमा राम s/o चतरा देवासी	M	OBC	MF	other	6 टी
			सदस्य	श्री गिरधारी सिह s/o खीम सिह राजपुरोहित	M	GENERAL	MF	UG	8 वी
			सदस्य	श्री मति गगा बाई w/o धना जी मेघवाल	F	SC	SF	SHG	9 वी
			सदस्य	श्री मति दरीया बाई w/o साकला रामजी मेघवाल	F	SC	MF	UG	10 वी
			सदस्य	श्री नारायण सिह s/o मोड सिह राजपुरोहित	M	GENERAL	MF	UG	10 वी
			सदस्य	श्री माणका राम s/o नेती जी देवासी	M	OBC	Landless	UG	10 वी
			WDT	श्री देव कृष्ण s/o सोहन लाल सालवी	M	SC	-	other	B.SC

S. N.	Name of WCs	Date of Gram Sabha for WC	Designation	Name	M/F	SC/ST/OBC/ General	Landless/MF/SF/ BF	Name of UG/SHG	Educational qualification
2	जल ग्रहण समिति मोरडु	19-11-2012	अध्यक्ष	श्री मति कन्या देवी पूरोहित w/o सोहन सिह राजपूरोहित	F	GENERAL	BF	other	5 वी
			सचिव	श्री हरनाथ सिह s/o लक्षमण सिह राजपुत	M	GENERAL	BF	other	B.A
			सदस्य	श्री हडमत सिह s/o राम सिह राजपुत	M	GENERAL	MF	UG	10 वी
			सदस्य	श्री मति कमला देवी w/o गुलाब राम घाची	F	OBC	SF	SHG	8 वी
			सदस्य	श्री मति दाडमी कॅवर w/o चुना सिह राजपुत	F	GENERAL	Landless	SHG	6 टी
			सदस्य	श्री वागा राम s/o नरसा राम मेघवाल	M	SC	SF	UG	8 वी
			सदस्य	श्री माना राम s/o देवा राम देवासी	M	OBC	Landless	UG	9 वी
			सदस्य	श्री रूप सिह s/o धर्म सिह राजपुत	M	GENERAL	SF	UG	10 वी
			सदस्य	श्री बिसन सिह s/o जय सिह राजपुत	M	GENERAL	SF	UG	10 वी
			सदस्य	श्री सोहन लाल s/o रूपा राम घाची	M	OBC	SF	other	10 वी
			w.d.t	श्री देव कृष्ण s/o सोहन लाल सालवी	M	SC	-	other	B.SC

S. N.	Name of WCs	Date of Gram Sabha for WC	Designation	Name	M/F	SC/ST/OBC/ General	Landless/MF/SF/ BF	Name of UG/SHG	Educational qualification
3	जल ग्रहण समिति बांकली	08-10-2012	अध्यक्ष	श्री मति चमनी देवी w/o तुलसा राम मेघवाल	F	SC	SF	other	5 वी
			सचिव	श्री किशना राम s/o गुलाब राम कुमावत	M	OBC	MF	other	B.A
			सदस्य	श्री किरण सिह s/o अमर सिह राजपुत	M	GENERAL	MF	UG	10 वी
			सदस्य	श्री भेरू लाल छीपा s/o जोधा राम	M	OBC	Landless	UG	8 वी
			सदस्य	श्री वचपा राम s/o नगा जी मेघवाल	M	SC	SF	UG	6 टी
			सदस्य	श्री निरजंन सिह s/o नरपत सिह राजपुत	M	GENERAL	BF	UG	8टी
			सदस्य	श्री महिपाल सिह s/o ईश्वर सिह राजपुत	M	GENERAL	BF	UG	9 वी
			सदस्य	श्री नरेन्द्र कुमार s/o छगन लाल रावत	M	OBC	Landless	other	10 वी
			सदस्य	श्रीमति सुन्दर देवी w/o भेरा राम ढोली	F	SC	SF	SHG	7 वी
			सदस्य	श्रीमति नेनु देवी w/o बंशी लाल मीणा	F	ST	SF	SHG	8वी
			w.d.t	श्री योगेन्द्र पाल सिह s/o शेतान सिह राजपुत	M	GENERAL	-	other	B.A

S. N.	Name of WCs	Date of Gram Sabha for WC	Designation	Name	M/F	SC/ST/OBC/ General	Landless/MF/SF/ BF	Name of UG/SHG	Educational qualification
4	जल ग्रहण समिति खिवादी	10-02-2013	अध्यक्ष	श्री रतन चन्द गाधी s/o खीमराज गाघी	M	GENERAL	Landless	other	10 वी
			सचिव	श्री बहादुर सिह s/o राम सिह देवडा	M	GENERAL	BF	other	12 वी
			सदस्य	श्री शान्ति लाल s/o दाना जी घोची	M	OBC	BF	UG	10 वी
			सदस्य	श्री भगा राम s/o मकवा जी मीणा	M	S.T	MF	UG	8 वी
			सदस्य	श्री लक्षमण राम s/o जेणराम मेघवाल	M	SC	SF	UG	6 टी
			सदस्य	श्री महेन्द्र सिह s/o हरि सिह राजपुत	M	GENERAL	SF	UG	8 वी
			सदस्य	श्री रूप ंसिह राजपुत s/o प्रेम सिह राजपुत	M	GENERAL	MF	UG	9 वी
			सदस्य	श्री मति त्रिशला देवी w/o सोहन लाल सुथार	F	OBC	Landless	SHG	10 वी
			सदस्य	श्री कान्ति लाल s/o कुपा राम घोची	M	OBC	BF	UG	10 वी
			सदस्य	श्री भोपाल सिहs/o जीवन सिह राजपुत	M	GENERAL	MF	UG	10 वी
			w.d.t	श्री योगेन्द्र पाले s/o शेतान सिह राजपुत	M	GENERAL	-	other	B.A

S. N.	Name of WCs	Date of Gram Sabha for WC	Designation	Name	M/F	SC/ST/OBC/ General	Landless/MF/SF/ BF	Name of UG/SHG	Educational qualification
5	जल ग्रहण समिति सिन्दरू	09-10-2012	अध्यक्ष	सुश्री हवन D/o चिमना जी मीणा	F	S.T	Landless	other	B.A
			सचिव	श्री विक्रम सिह s/o डुगर सिह राठोड	M	GENERAL	BF	other	10 वी
			सदस्य	श्री शैतान सिह s/o लादु सिह राणावत	M	GENERAL	BF	UG	10 वी
			सदस्य	श्री जौरा राम s/o पुरा राम कुमावत	M	OBC	BF	UG	8 वी
			सदस्य	श्री अम्रत लाल w/o देवा सुथार	M	OBC	SF	UG	6 टी
			सदस्य	श्री भगवा राम w/o रघुनाथ देवासी	M	OBC	SF	UG	8 वी
			सदस्य	श्री शेर सिह s/o बलवन्तसिह राठोड	M	GENERAL	BF	UG	5 वी
			सदस्य	श्री देवी सिह s/o लोभ सिह राठोड	M	GENERAL	MF	UG	10 वी
			सदस्य	श्रीमति राजी W/o चुना ाराम मेघवाल	F	S.C	MF	SHG	5 वी
			सदस्य	श्री मति निमा बाई W/o जयन्ती लाल लोहार	F	OBC	Landless	UG	5 वी
			w.d.t	श्री देव कृष्ण s/o सोहन लाल सालवी	M	SC	-	other	B.SC

1.4. Problems and Scope of improvement in the project area

The major problems of the areas that can be addressed in the watershed development project are as follows:

- Lack of proper soil and water conservation measures that leads to wastage of runoff which is quite precious as rainfall is only about 500-600 mm and it occurs for a very short duration only.
- Soil erosion is quite high because the area is surrounded by steep hills and the runoff velocity is very high. Further, as mentioned earlier, there is no proper soil conservation measures.
- There is an increasing trend of going for deep borewells that is leading ot depletion of ground water. In the absence of proper water recharge – this may lead to drastic situation.
- More than half of the households are landless – and there is no proper livelihood for such people hence many people migrate.
- Lack of sufficient irrigation is the main concern
- Lack of fodder and lack of proper animal health care leads to low milk production

The socio economic conditions of the area can be improved through increased production which can be achieved through expansion in cultivated area and productivity enhancement. 625 ha land is arable wasteland and 55 ha is fallow can be brought under cultivation.

Total 880 ha is only irrigated and with efforts this can be increased to 1250 ha. The productivity gap of major crops in the area as compared with district and with areas in the same agro climatic zones indicate potential to increase the productivity. The demonstration of improved package of practices, improved varieties, increased irrigation facilities and soil conservation measures under the project can bridge this gap. Due to small land holdings in the area focus of the project would be on diversification in agriculture (horticulture, vegetables, Agro forestry, fodder crops)and diversification in Livelihoods(Agriculture, Animal husbandry, self employment)

58670 Quintal fodder Scarcity can be met out through Pasture development .Improved animal Husbandry practices can increase the productivity of livestock.1226 no of persons migrate due to lack of employment in the area; this migration can be checked through creation of employment opportunities in the project area through increase in production and diversification in agriculture and Livelihoods as mentioned above.

1.5. Base Line Survey Format for IWMP MIS website

Project Name: IWMP 26-11/12

Total Geographical Area of Project (Lakh Hectares): 0.7001

Treatable Area

Wasteland (Lakh Hectares)	**0.06249**	**Rainfed Agricultural Land (Lakh Hectares)**	**0.0247**
Total Cropped Area (Lakh Hectares)	**0.0335**	**Net Sown Area (Lakh Hactares)**	**0.0335**
Total no. of Water Storage Structure	**42**	**Total no. of Water Extracting Units**	**55**
Total storage capacity of water storage structures (cubic meters)	**90,000**		

No. of Household

SC	**657**	**ST**	**255**
Others	**2199**		
Total Population of the project Area	**18907**	**No. of Household of Landless people**	**1733**
Total no. of BPL Household	**511**		
No. of person-days of Seasonal Migration	**257,460**	**No. of Marginal Farmer's Household**	**715**

Depth of Ground Water (meters) below Ground level

Pre- monsoon	**25**	**Post-monsoon**	**20**

CHAPTER – II
Socio economic Features, Problems and Scope

2.1. Demography

The project area has a population of 18907 having a sex ration of 919 females per 1000 male population. Literacy rate is about 55%. The details of population and the development indicators are given in Table 2.1 and 2.2.

Table 2.1 Population & Household Details:

Total Population				
Male	**Female**	**Total**	**SC**	**ST**
9850	9057	18907	3945	1532

Household Details						
BPL household	**L. Less**	**Small Farmer**	**M. Farmer**	**Total household**	**SC household**	**ST household**
511	1733	250	669	3111	657	255

Table 2.2 Development indicators

S. No.	Development Indicators	State	Project Area
1	Per capita income (Rs.)	47,506	25,000
2	Poverty ratio	24.8%	45%
3	Literacy (%)	66.11%	55%
4	Sex Ratio	928	919
5	infant mortality rate	55	63
6	Maternal mortality ratio	388	395

The above table indicates poor socio economic conditions.

2.2. Landuse

The project area has 1490 ha of cultivable wasteland . 55 ha of fallow land (total 1545 ha) can be brought under cultivation if some irrigation source can be provided through Construction of WHS like Nadi, Farm ponds etc. and also through demonstration of rainfed varieties of crops. Construction of WHS can also increase in area under irrigation which is only 880 ha. (14 % of the project area) is under wastelands and can be brought under vegetative cover, with reasonable effort. Activities like earthen check dams, countour/field bunds, WHS (Johad), afforestation of wastelands and Pasture development will be taken up on these lands.

Table 2.3 Land Use

Land Use	Total area in Ha.				
	Private	Panchayat	Government	Community	Total
Agriculture Land	3350	-	-	-	3350
Temporary fallow	-	-	-	-	-
Permanent Fallow	55	-	-	-	55
Cultivated Rainfed	2470	-	-	-	2470
Cultivated irrigated	880	-	-	-	880
Net Sown Area	3350	-	-	-	3350
Net Area sown more than once	880	-	-	-	880
Forest Land	-	-	-	-	
Waste Land	-	1490	-	-	1490
Pastures	-	-	625	-	625
Others	-	-	-	729	729
Total	3405	1490	625	729	6249

Source: Revenue records

The land use table shows that there is 625 hectare pasture land (10%). This emphasizes the need for taking up pastureland development works through sowing of promising species of grasses and plantation

2.3. Situation of Agriculture and Allied Activities

The cropping pattern, crop-wise area, production and yield of the project area is given in Table 2.4.a. It can be observed that wheat, mustard, guar and mung are the major crops cultivated in the area. Other crops of the area include bajra, jwar, jaw, jeera and til. Bajra and Rizka are also cultivated for fodder purpose.

Table 2.4 .a Cropping Status

Sr No	Season	Crop sown	Rainfed				Irrigated				Total	
			varieties	Area in ha	Production (tonnes)	Yield Kg/ha	Varieties	Area in ha	Production (tonnes)	Productivity Kg/ha	Area in ha	Production (tonnes)
1	Kharif	Mung	G-4 K851	546	600	1100	_	_	_	_	546	600
		Guar	RJC 1003, RJC 986	715	500	700	_	_	_	_	715	500
		Castor seed	G-4, G-5, G-7	249	225	900	G-4, G-5, G-7	66	75	1100	315	300
		Jwar	Local	85	382	4500	_	_	_	_	85	382
		Bajra	Raj 171	176	633	360	_	_	_	_	176	360
		Til	RT 46, 27, 103	533	186	350	_	_	_	_	533	186
2	Rabi	Wheat	_	_	_	_	Lok1 RJ 1482 RJ 3077	431	991	2300	431	991
		Jaw	_	_	_	_	RD 103 RD 2035 RD 2052	60	1680	2800	60	1680
		Mustard	_	_	_	_	Bio 902 Pusa Bold	846	1015	1200	846	1015
		Jira	_	_	_	_	Local	126	82	650	126	82
3	Zaid	Jwar	_	_	_	_						
		Rizka	_	_	_	_	Local	20	90	4500	20	90
		Bajra	_	_	_	_	Local	25	100	4000	20	90

As the table 2.4.b shows the total cropped area is 3320 ha of which 2400 ha comes under single crop.

Table 2.4.b Abstract of cropped Area(ha)	
Area under Single crop	2400
Area under Double crop	880
Area under Multiple crop	45

Crop Rotation

Crop rotation of the area is as follows:

Bajra	-	Wheat
Bajra	-	Fallow
Moong	-	Mustardd
Moong	-	Fallow
Fallow	-	Jeera
Til	-	Fallow
Castor	-	Castor

The table 2.4.b shows that only 880 ha is (26% of net cropped area) is double cropped area. Also the crop rotation shows that fallow lands are there. This indicates that there is SCope for change in crop rotation in fields where there are fallow lands through Soil and Water conservation measures, crop demonstration and diversification in agriculture.

Soil and Water conservation measures besides putting fallow lands under cultivation can change the area under single cropping to double and multiple cropping.

Table 2.4.c Productivity Gap Analysis

Name of the crop	Productivity kg/ha				
	India	Highest Average in Rajasthan	Highest Average of Agro climatic zone	District	Project Area
Bajra	1156	1800	1137	1137	1100
Wheat	3140	3422	2700	2700	2300
Mustard	1188	1234	1166	1166	1200
Guar*	501	1010	770	770	700
Castor	1323	1211	1243	1243	1000
Til	467	614	350	350	350

* Guarseed

Analysis of the above table indicate that besides national gap there is wide gap in productivity within state and even within same agro climatic zones.

The reasons for this variation are

- The farmers are using varieties Lok1 of wheat whereas the recommended varieties like RAJ 3765 provide 35-40q/Ha yield .
- The farmers are using varieties RCG 986 of Guar. whereas the recommended varieties like RCG 936 provide 14-15 q/Ha yield .
- The farmers are using varieties K851 of Moong .whereas the recommended varieties like SML 668 provide 15-18 Q/Ha.yield .
- The farmers are using varieties RT 46 and 27of TIL . whereas the recommended varieties like TC 25 provide 6-7 q/Ha yield
- The farmers are using varieties Pusha Bold Mustard whereas the recommended varieties like Pusa Jai Kishan provide 20-25 q/Ha. yield .

- Lack of Availability of good quality seeds of desired crop and variety in adequate quantities and time to the farmers.
- Availability of water for cultivation(14% is irrigated)

The productivity gap and reasons of it indicate potential to increase the productivity through crop demonstration. Crop demonstrations would be carried out on improved crops/ varieties, improved agronomic practices. INM, IPM, Mixed cropping, distribution of fodder seed mini kit. Demonstration of improved methods and economics of fodder crops cultivation and also distribution foundation seeds of Forage Crops for further multiplication, introduction of fodder crops in the existing crop rotations.

Table 2.5 Existing area under horticulture/Vegetables/Floriculture (ha)

Activity	Area	Species	Varieties	Recommended varieties	Production
Horticulture	20	Lemon	local	Barhmasi,pramalini	1500 kg
Vegetables	15	Tomato	local	PusaRubi,PusaGorv	5000 kg
------do-----	10	Chilli	local	RCH-1,mathaniya long	2000 kg
------do-----	12	onion	local	PusaRed ,Udaipur-101,Nasic red	2500 kg
------do-----	10	lauki	local	PusaNavin,PusaMegdut	2000 kg
Floriculture	Nil	-	-	-	-
Medicinal Plants	nil	-	-	-	-

Table 2.6 Land holding Pattern in project area

Type of Farmer	Total Households	Land holding (ha) irrigation source wise			Land holding (ha)Social group wise				
		Irrigated (source)	Rainfed	Total	General	SC	ST	OBC	BPL
(i)Large farmer	475	664.32	1980.32	2644.64	2315.68	44	15.20	269.76	58.56
(ii) Small farmer	250	141.28	231.84	373.12	167.36	46.56	19.68	139.52	36.48
(iii) Marginal farmer	669	75.04	281.28	356.32	92.64	83.04	44.64	136.0	68.00
(iv) Landless person	1733	-	-	0	-	-	-	-	-
(V)No. of BPL households	511	41.28	121.76	163.04	-	-	-	-	-
Total		880.64	2493.44	3374.08	-	-	-	-	-

In all 65% land holdings belong to small and marginal farmers who own 25% of total cultivated area. Horticulture/vegetables could be more economical to Small and Marginal farmers with irrigation source. For Large farmers with no irrigation facility Horticulture/vegetables will be promoted in a part of land with farm pond/Tanka construction.

The following activities will be more beneficial for small land holdings and for diversification and income for large farmers.

Horticulture plantation: As discussed earlier . Horticulture/vegetables could be more economical to Small and marginal farmers with irrigation source..

Plantation of agro-forestry species: To increase the income of farmers and also for shelter belt plantation as wind velocity is high in the project area.

Setting of Vermi Compost Units - Keeping in view the side effect of residues of chemicals and fertilizers on human health the emphasis would be on cultivation of organic produce through motivating farmers and providing assistance for production of organic input, vermi compost.

Sprinklers and pipelines for efficient water management practices emphasis on demonstration of sprinklers with adequate financial support and convergence/private partnership.

Table 2.7 Livestock Status - animals/milk production / average yield.

S.No.	DeSCriptio n of animals	Population in No.	Yield(milk/mutton/ Wool)	Equ. cow units	Dry matter requirement per year (7Kg per animal.)	Total requirement in M.T.
1	Cows	1098		-	-	-
	Indigenous	1044	2.50 lr/day	1044	2667420	2667
	Crossbreed	54	8.33 lr/day	54	137970	138
2	Buffaloes	1371	3.95 lr/day	1371	3502905	3503
3	Goat	5085	0.80 lr/day	2544	6499920	6500
4	Sheep	3197	0.35 lr/day	1598	4082890	4083
5	Camel	41	-	41	104755	105
6	Poultry	57	-	NA	-	-
7	Piggery	0	-	NA	-	-
	Total	14792		6652	16995860	16,996

In spite of the large number of livestock, production is less hence increase in productivity across all species, is a major challenge. To enhance production of unproductive cattle and improve the productivity following activities will be taken up:-

,Demonstration of improved methods of conservation and utilization of Forage crops are proposed.

Table 2.8 Existing area under fodder (ha)

S.No	Item	Unit	Area/Quantity
1	Existing Cultivable area under Fodder	Ha	168
2	Production of Green fodder	Tonns/year	6720
3	Production of Dry fodder	Tonns/ Year	2908
4	Area under Pastures	Ha	300
5	Production of fodder	Tonns/year	1500
6	Existing area under Fuel wood	Ha	150
7	Supplementary feed	Kgs/ day	5
8	Silage Pits	No	0
9	Availability of fodder	quintals	111200
10	Deficiency/excess of fodder	quintals	169960-111200= 58,760

The table above shows there is fodder deficiency (Requirement is 16996 tonnes and availability is 11120 tonnes)

To minimize the large and expanding gap between feed and fodder resource availability and demand there is need for

- Increase in area under fodder crops
- Increase in productivity of fodder crops
- Development of pastures
- And reduction in large number of livestock production through replacement by few but productive animals
-

Table 2.9 Agriculture implements

S. No	Implements	Nos.
1	Tractor	151
2	Sprayers-manual/ power	225
3	Cultivators	129
4	Seed drill	108
5	Disc plough	72
6	Harrow	52
7	Thresher	35
8	seaver	40

Farm mechanization and seed banks: As discussed earlier 65% land holdings belong to small and marginal farmers who own only 25% of total cultivated area so owning of big farm implements by individual farmers is not economical. So SHG would be promoted to buy farm implements and rent to farmer.

2.4. Employment and Migration

Table 2.10: NREGA Status - No. of Card Holder, activities far, employment status.

Sr. no.	Name of village	Total No .of job cards	Employment Status	Activity taken up so far
1	Bankali	973	40-80 days per family on an average	Nadi Road Plantation
2	Khiwandi	744		-do-
3	Mordoo	88		-do-
4	Netra	209		-do-
5	Parakhiya	305		-do-
6	Rojda	422		-do-
7	Khindara	283		-do-
8	Sindru	427		-do-

Table 2.11 Migration Details

Name of village	No. of persons migrating	No. of days per year of migration	Major reason(s) for migrating	Distance of destination of migration from the village (km)	Occupation during migration	Income from such occupation (Rs. in lakh)
Bankali	350	6-8 months	Lack of employment opportunity, low rainfall	Mumbai (600) Pune (650) Gujarat (200) AP (1000)	Working in garment shop, hotels, Hardware, Jwellers, Marble shops	Rs. 5-10,000 per month for labourers Rs. 15-25,000 for businesses
Khiwandi	390	6-8 months	-do-	-do-	-do-	-do-
Mordoo	30	6-8 months	-do-	-do-	-do-	-do-
Netra	100	6-8 months	-do-	-do-	-do-	-do-
Parakhiya	110	6-8 months	-do-	-do-	-do-	-do-
Rojda	65	6-8 months	-do-	-do-	-do-	-do-
Khindara	56	6-8 months	-do-	-do-	-do-	-do-
Sindru	125	6-8 months	-do-	-do-	-do-	-do-
	1226					

The migration can be check by creation of employment opportunities, enhancing farm level economy, increases the income of the people engaged in animal husbandry by dairy, poultry and marketing and value addition. (As discussed earlier) and diversification in livelihoods .

2.5. Livelihood Sources –onfarm and off farm

The existing livelihoods activities are given below

Table 2.12 (a) Major activities (On Farm)

Name of activity	No of House holds	Average annual income from the source in Rs.	Remarks (primary occupation)
Cultivators	1346	30,000	1280
Dairying*	902	5,000	45
Goatry/Sheepery**	216	6000	85
Landless Agri. Labourers	1270	15000	1255
Others	470	-	446

* Dairying is the secondary activity of 95% of the 902 households. Those whose primary income comes from Dairying their income ranges from Rs. 15,000 to Rs. 20,000

** only 85 households have goatery/sheepery as the major income source; their income ranges from Rs. 20,000 to 60,000 per annum from this activities

Table 2.12(b) Major activities (Off Farm)		
Name of activity	Households/individuals	Average annual income from the
Artisans	25	15,000
Carpenter	32	30,000
Blacksmith	8	22,000
Leather Craft	17	19,000
Porter	5	16,000
Mason	56	45,000
Others specify (Cycle Repair ,STD, Craft etc)	125 (pan shop, kirana, cycle repair, agri-inputs, ration, mobile repair/recharge)	50,000
Others		

The efforts for increase in income through off farm activities will be made under livelihood component through assistance to SHG or individuals

2.6. Self help Groups

Table 2.13(a) Status of Existing SHG

S. No	Name of SHG	Village	Mem-bers	Activity involved	Monthly income	Fund available	Assistance available	Training received
1	नव दुर्गा स्वय सहायता समुह	बांकली	10	घरेलु आईटम बनाना	200	3674	-	3
2	अम्बिका स्वय सहायता समुह	बांकली	10	घरेलु आईटम बनाना	500	3608	-	3
3	सरस्वती स्वय सहायता समुह	बांकली	10	साबुन बनाना	500	3634	-	3
4	गाय़त्री स्वय सहायता समुह	बांकली	10	कसीदा	200	1400	-	0
5	जय अम्बे स्वय सहायता समुह	सिन्दरू	10	सिलाई	500	3000	-	2
6	साई बाबा स्वय सहायता समुह	सिन्दरू	10	सिलाई	500	3000	-	2
7	राधा स्वय सहायता समुह	सिन्दरू	10	सिलाई	200	1000	-	0
8	पुजा स्वय सहायता समुह	रोंजडा	10	सिलाई	500	2500	-	0
9	भवानी स्वय सहायता समुह	रोंजडा	10	सिलाई	500	3500	-	0
10	सरस्वती स्वय सहायता समुह	ऩेतरा	10	सिलाई	500	3000	-	0
11	किरण स्वय	मोरडु	12	सिलाई	500	6080	-	0

	सहायता समुह							
12	हनुमान स्वय सहायता समुह	खिवादी	10	घरेलु आईटम बनाना	1000	3000	-	0
13	श्री अर्बुदा स्वय सहायता समुह	खिवादी	10	कसीदा	500	3500	-	0
14	श्री खेतला स्वय सहायता समुह	खिवादी	10	घरेलु आईटम बनाना	500	2500	-	2

The table indicates existence of number of groups in the area also these need to be strengthened through trainings and financial assistance

2.7. Technical Features

Table 2.14 Ground Water

S.No	Source	No.	Functional depth	Dry	Area irrigated	Water availability(days)
i)	Dug wells	45	60-80 feet	35	-	60-90 days
ii)	Shallow tube wells	25	150 feet	12	-	90-120 days
iii)	Pumping sets	30	300-400 feet	5	-	180-240 days
iv)	Deep Tube Wells	16	300-400 feet	2	15 ha	180-240 days
	Total	86		54		

Table 2.15 Availability of drinking water

S.No	Name of the village	Drinking water requirement Ltrs/day	Present availability of drinking water Ltrs/day	No. of drinking water sources available	No. functional	No. requires repairs	No. defun
1	Bankli	11762	5045	12	8	2	2
2	Khiwandi	13398	6038	10	7	1	2
3	Mordu	1358	725	5	3	1	1
4	Netra	6172	4178	6	4	2	0
5	Parakhiya	3217	2925	5	4	1	0
6	Rojra	3315	2234	5	3	1	1
7	Khindara	4018	3005	5	4	0	1
8	Sindru	4170	3521	5	4	1	0

Note: 1)There are various suggestions on the daily drinking water requirement; generally for a healthy person it ranges from 2 to 5 liters per day. The British Dietary Association suggests a minimum daily water requirement for drinking is taken to be 1.8 lr/day/person; while the US reference is 2.7-3.7 liters. This calculation is based on 2.5 litres per day.

2) The present availability is calculated for average season. In dry season the availability comes down by about 20-30%.

Table 2.16 Water Use efficiency				
Name of major crop	Area (Hectare)			
	through water saving devices(Drip/Sprinklers)	through water conserving agronomic practices#	Any other (pl. specify)	Total
Wheat	nil	nil	nil	nil

Note: this information is for the existing practices

#The tables above indicate need for judicious use of available Water.

#Encouraging optimum use of water through installation of sprinklers on every operational wells

Table 2.17 Slope details.

Slope of Watershed		
S.No.	Slope percentage	Area in hectares
1	0 to 3%	5604
2	3 to 8%	433
3	8 to 25%	212
4	> 25%	0

As most of the area has slope less than 3% construction of contour bunds can solve the problem of water erosion in agriculture fields and protect washing of top soil and manures/fertilisers.

2.8. Water Budgeting

To propose the total number of water harvesting structure, it is required to undertake water budgeting of the watershed. This includes an estimation of the total run-off available and of this how much water is stored in the existing structure. As per the norms, maximum of 65 per cent of balance available run-off can be stored and rest 35 per cent should be allowed to flow in the drainage line as surface flow.

Good Catchment – Normally a funnel shaped catchment in hilly terrain with less vegetation.

Average Catchment – Catchment in the plains where there is no dense growth of vegetation.

Bad Catchment – Catchment with dense growth of vegetation & highly permeable top soil & sub soil.

Using Strange's table at 538 mm rainfall annually the available rainfall comes to as given in Table 2.18.(538mm approximately equal to 21 inches that produces a runoff of 7.855 Mcft/sq.mile in Good catchment, 5.891 Mcft /sq mile in average catchment, and 3.927 Mcft/sq.mile in bad catchment; 1 square mile = 258.9988 ha; 1Mcft=28317 cum)

Table 2.18 Water Budgeting

Total runoff available

Type of Catchment	Area in ha.	Yield of runoff from catchment per ha.(cum.) use Stranges table	Total Runoff in lakh cum
Good	721	858	6.18
Average	4034	644	25.98
Bad	2245	429	9.63
Total	7000		41.81

Runoff trapped in existing structures

S.No.	Name	No.	Storage Capacity (cum)
i)	WHS(earthen)	6	15,000
ii)	Khadin/Talab	-	-
iii)	Farm Ponds	24	24,000
iv)	Tanka	-	-
v)	Anicuts	12	12,000
	Total	42	51,000

Runoff to beTrapped in proposed structures:

S.No.	Name	No.	Storage Capacity (cum)
i)	Khadin	51	51,000
ii)	Nadi (WHS in non arable land with surplus/corewall)	31	77,500
iii)	Farm Ponds	-	-
iv)	Tanka	-	-
v)	Anicuts	15	22,500
	Total		151,000

Runoff trapped in existing & proposed structures =0.51 lakh-+1.51 lakh-= 2.02 lakhcum. Runoff trapped = total runoff trapped x100/Total available runoff=4.83%. To be noted that there are insitu moisture conservation measures such as staggered contour trenches, vegetative contour hedge, field bunding etc. This will definitely help moisture retention in the area. .

Height of all the structures proposed is between 0.5 metre to 2.0 metre. There is no structures whose water impounding height is more than 2 metre.

2.9. Soil Profile and Erosion

Table 2.19 Soil details

	Soil Profile	
S.No.	Major Soil Classes	Area in hectares
1	Sandy loam	6400 ha
2	Gravelly	600 ha

	Soil Depth :	
B	Depth (Cms.)	Area in hectares
1	0.00 to 7.50	3250 ha
2	7.50 to 45.00	1840 ha
3	> 45.00	1059 ha

C	Soil fertility Status	Kg/ha	Recommended
	N	10-15	80
	P	21-60	55
	K	270-410	45
	Micronutrients	7.16-9.13 PPM	
	Zinc	0.4	0.8
	Fe	0.4	0.5
	Cu	0.2	0.25
	Mg	0.2	0.22

The analysis of table shows need to improve and maintain soil fertility. Soil health card to every farmer every crop season will be provided, which will include the recommendation for Application micro nutrient and fertilizers

Table 2.20 Erosion details

Erosion status in project Area					
Cause	Type of erosion	Area affected (ha)	Run off(mm/ year)	Average soil loss (Tonnes/ ha/ year)	
Water erosion					
Well formed plain area with low erosion (privatel land with bunds)	slight	3000		0-5 Mg/ha/year*	7500
1-3% slope without soil conservation measures	Sheet	1880		5-10	14100
More than 3% slope	Rill	906		10-15	11325
More than 5% slope area near drainage lines	Gully	463		20-40	11575
Sub-Total		6249		44500 tonnes	
Wind erosion				0	
Total for project				44500 tonnes i.e.7.12 t/ha/year	

*80 Mg=35.7 tonne; 1Mg=0.44625 tonnes

The need is:

- To check land degradation
- To reduce excessive biotic pressure by containing the number and increase of livestock
- To check cultivation on sloping lands without adequate precautions of soil and water conservation measures
- To discourage cultivation along susceptible nallah beds
- To check faulty cropping techniques

- To check Uncontrolled grazing and developed cattle tracks
- To check Deforestation of steep slopes
- To check erosive velocity of runoff, store Runoff, to arrest silt carried by runoff
- to recharge Ground Water structures life Earthen check dams, gully plugs, Bank Stabilisation, Loose stone check Dams, Earthen embankment (Nadi/khadin) and would be taken up.
- To undertake field bunding, vegetative contour hedge etc.

CHAPTER - III Proposed Development Plan:

3.1. Preparatory phase activities Capacity Building Trainings and EPA

Preparatory activities are important to a watershed project. The project is based on people's participation and it is required that people are taken into confidence before the project operationalises. Further, the watershed project includes a number of complicated and technical activities which requires detail measurement and estimatin, site selection etc. Further as per the requirement of guidelines the detailed project report has to be prepared and passed in gram sabha. Hence the importance of this part makes sense.

Initially, meetings with people in different groups, door to door contacts were made and village meeting was called. Group meetings, door to door campaign, slogans and wall writings etc. were carried out in all the eight habitations of Pali IWMP 26/11-12 Micro Watershed. A series of meetings were conducted with GP members, community and discussed about the implementation of IWMP programme. User groups and self help groups have been identified and they are going to take a concrete shape in future activities.

Grama Sabhas were conducted for approval of EPA (Village), for selecting the watershed committee and approval of DPR.

Table 3.1. Gram Sabha Approval of EPA

S.no	Name of the Gram Panchayat	Date on which Grama Sabha approved EPA
1	Bankali	08-10-2012
2	Khiwandi	10-02-2013
3	Pomava	19-11-2012
4	Netra	09-10-2012
5	Sindru	09-10-2012

As power cut and insuffincient electricity is a major problem in the area it was suggested that the villages have solar lights in appropriate points. Hence as a measure for entry point activity it was included in the plan. This created a lot of good will in the area and the WDT members that their rapport building effort materialised.

Table 3.2. EPA activities

1	4	5	6	7	8	9	10	11
S. No.	Names of village	Amount earmarked for EPA	Entry Point Activities planned	Estimated cost	Expenditure incurred	Balance	Expected outcome	Actual outcome
1	Bankali	3.708	3.708	3.708	0.96	2.748	Rapport building with people and solving an immediate problem	Immediate problem of street light solved. Rapport building started
2	Khiwandi	7.314	7.314	7.314	1.68	5.634		
3	Mordoo	3.090	3.090	3.090	0.72	2.370		
4	Netra	1.380	1.380	1.380	0.48	0.90		
5	Parakhiya	1.974	1.974	1.974	0.48	1.494		
6	Rojda	4.980	4.980	4.980	1.20	3.780		
7	Khindara	10.038	10.038	10.038	2.40	7.638		
8	Sindru	5.010	5.010	5.010	1.20	3.810		
	Total	**37.494**	**37.494**	**37.494**	**9.12**	**28.374**		

Figure 3.1: Solar Light Installed in Netra as Part of EPA

Further, PRA exercises were carried out in the villages. This included participatory resource mapping, social mapping, transect walk, matrix ranking etc. Detailed discussions and deliberations with all the primary stakeholders were carried out. The PRA exercise was carried out in all the villages on the dates shown below:

Table 3.3. PRA Exercises

S.no	Name of the village/Habitation	Date on which PRA conducted
1	Bankali	5.10.12
2	Khiwandi	25.9.12
3	Mordoo	22.9.12
4	Netra	12.4.13
5	Parakhiya	13.9.12
6	Rojda	15.4.13
7	Khindara	11.9.12
8	Sindru	18.4.13

Socio-economic survey was carried out during 3.9.12 to 31.10.12 period covering all the households and primary data on demography, Land holdings, Employment status, Community activities etc. was collected as mentioned in chapter 2. The socio-economic survey was conducted with 100 per cent of the households of the village and the format included various aspects such as number of family members (age-sex wise), literacy, landholding, number of animals, income, production etc.

Figure 3.2. PRA Exercise Going on in Mordu village, GP. Pomawa

Photographs of PRA Exercises

Social Mapping GP: Pomawa, Village Mordu

Group Discussion in Mordu village (Pomawa GP)

GP: Khiwandi, village Khiwandi

GP: Khiwandi, village Khiwandi

GP: Bankali

GP: Bankali

Village: Parakhiya

Village: Parakhiya

Photographs of EPA

3.2. Institutional and Capacity Building Activities

Table 3.4.- List of approved Training Institutes[@] for Capacity Building in the project area

1	2	3	4	5	6	7	8
S. No.	Name of Stakeholders	Name of the Training Institute	Full Address with contact no., website & e-mail	Name & Designation of the Head of Institute	Type of Institute[#]	Area(s) of speciali-zation[$]	Accredita-tion details
1	PIAs	HCM-RIPA	JLN Marg, Jaipur	DG	Government	watershed management, leadership	-
2	WDTs	KVK, Pali	Pali	Training Organizer	Autonomous (under CAZRI)	Technical – soil cons, agri, AH	-
3	UGs	RUDTES	Pali	Director	NGO	SHG, community orgn	-
4	SHGs	RUDTEs	Pali	Director	NGO	SHG, community orgn	-
5	WCs	RUDTES	Pali	Director	NGO	SHG, community orgn	-
6	GPs	RUDTES	Pali	Director	NGO	SHG, community orgn	-
7	Community	RUDTES	Pali	Director	NGO	SHG, community orgn	-
8	PM/SLNA	HCM-RIPA	JLN Marg, Jaipur	DG	Government	watershed management, leadership	-

Central govt. Dept./ State govt. Dept./ Autonomous Body/ Research Institutes/ Universities/ Others (pl. specify)

$ Capacity Building/ Agriculture/ Horticulture/ Animal Husbandry/ PiSCiculture/ Remote Sensing/ Water conservation/ Ground water/ Forestry/ livelihoods/ entrepreneurship development/ others (pl. specify)

@ The training institutes must fulfill the conditions mentioned in the operations guidelines.

Table 3.5- Capacity Building activities in the project (PHYSICAL & FINANCIAL) *4% OF TOTAL PROJECT COST.

1	2	3	5						6						7					
S. No.	Project Stakeholders	Total no. of persons	No. of persons to be trained during project period						No. of Training to be organized during project period						No. of person days to be trained during project period					
			I year	II year	III year	IV year	V year	Total	I year	II year	III year	IV year	V year	Total	I year	II year	III year	IV year	V year	Total
1	PIAs	1	1					1	1					1	15					15
2	WDTs	4		4				4		1				1		28				28
3	UGs	2500	500	1000	1000			2500	10	20	40	30		100		1000	2000	2000		5000
4	SHGs	1500	500	500	500			1500	10	10	10			30		1500	1500	1500		4500
5	WCs	50	25	25				50	1	1				2		45	45			90
6	GPs	8		8				8		1				1		24				24
7	Community	2500	500	500	1000	500		2500	5	5	10	5		25	500	500	1000	500		2500
8	EXPOSURE TOUR (INTER STATE)	200		200				200		4				4		1000				1000
9	EXPOSURE TOUR (INTRA STATE)	500		200	300			500		4	6			10		1000				`1000
10	PM/SLNA	2		2				2		1				1		5				5
11	TOTAL PHYSICAL	9765	2026	2939	4800	2500		9765	32	52	76	40		198	515	5102	4545	4000		13162
12	TOTAL FINANCIAL																			

Table 3.6-Information, Education & Communication (IEC) activities in the project area (1% of total Project cost.)

Sr. No.	Activity	Executive Agency	Allocation (1% of project cost)	Allocation in lakhs (yearwise)						Expected outcomes
				I	II	III	IV	V	Total	
1	मॉडल रुफटॉप वाटर हार्वेटिग स्ट्रक्चर्स (पंचायत समितिए राजीव गॉधी सेवा केन्द्र या अन्य पंचायत समिति स्तरीय नजदीकी सरकारी भवन)।	2	1.00			1.00			1.00	2 model Rooftop water harvesting created in common area
2	डीस्पले बोर्ड/प्लेगक्सी बोर्ड/	8	0.80				0.80		0.80	Display boards in all 8 villages
3	वॉल पेन्टिंग–जलग्रहण गतिविधियों, लक्ष्यो व प्राप्ति आदि को दर्षाती हुई	5	0.40		0.40				0.40	Wall painting in all 8 villages in public places
4	जलग्रहण विकास संबंधी मुद्रित पम्पलेटस/लिफ लेटस /चार्ट/ पोस्टर/आदि।	10	0.50		0.50				0.50	Information reaches to literate people
5	नारा लेखन	8	0.80		0.80				0.80	Information on watershed reaches
6	सफलता की कहानीयों की वीडियों ग्राफी/फोटोग्राफी/ लघु फिल्म एवं कृषको से साक्षातकार / वार्ता	4	1.60					1.60	1.60	4 documentaries prepared and circulated 100 copies each

7	निबन्ध व वाद–विवाद प्रतियोगिता	8	0.40					0.40	0.40	Awareness among students
8	नुक्कड़ नाटक	10	0.625			0.625			0.625	General awareness in village
9	कटपुतली प्रदर्षन	10	0.50		0.50				0.50	General awareness in village
10	रात्रि गोष्ठी	10	0.50		0.50				0.50	General awareness in village
11	भू संरक्षण सप्ताह	5	0.50			0.50			0.50	General awareness in village
12	चेतना रैली	5	0.25			0.25			0.25	General awareness in village
13	कृषक दिवस का आयोजन एवं क्षेत्र भ्रमण दिवस का आयोजन इत्यादि	5	1.50				1.50		1.50	General awareness in village
	कुल		**9.375**		**2.7**	**2.375**	**2.3**	**2.0**	**9.375**	

WAPCOS was assigned the work of preparing various thematic layers using Cartosat-1 and LISS-3 imageries for Creation, development and management of geo-spatial database depicting present conditions of land (terrain), water and vegetation with respect to watershed under different ownerships at village level

Various thematic layers provided by WAPCOS are :

- Delineation of Macro/Micro watershed boundaries.
- Digitised Khasara maps of the villages falling in project area.
- Network of Drainage lines, existing water bodies, falling in the project area.
- Base maps (transport network, village/boundaries, and settlements).
- Land Use / Land cover map.
- Contours at 1 meter interval, slope map

Based on GIS thematic layers, Field visits , PRA and analysis of benchmark data (as diSCussed in chapter 2) final Treatment plan on revenue map for implementation has been framed. Thus each intervention identified has been marked on revenue map (map enclosed in DPR as Annexure I).The GIS based intervention map, PRA based intervention map are annexed as Annexure II.

3.3. Livelihood Action Plan (LAP):

An awareness programme has been undertaken at Gram Sabha for communication & sensitization of the target beneficiaries. Livelihood Action Plan is a pre requisite for availing the funds under the livelihood component. LAP has been prepared by the PIA in consultation with WDT, WC & the members of SHG,SC/ST, women, landless/ assetless households. Details of funds available & their utilisation is as under :

(i) Total project cost Rs.937.5 Lacs.

(ii) Funds available under livelihood component is 9% of total project cost= Rs.84.36-Lacs.

(a) Seed money for SHGs as revolving fund = Rs.51.00 Lacs.
(minimum 60% of livelihood component)

- No. Of SHG to be formed 226 Nos.
- No of persons (members) in SHGs 1200 Nos.

(b) Seed money for enterprising individuals = Rs 8.25Lacs
(maximum 10% of livelihood component)

-- No of persons identified as enterprising individuals: 33 Nos.

Table 3.7: Livelihood Activities

S.	Item	Numbers	Revolving fund/Seed money (in lakhs)	% of LAP
1	SHG			
a	Existing	14	3.50	
b	New	212	53.00	
	Sub Total	226	56.50	67%
2	Enterprising individuals	33	8.25	9.8%
3	Enterprising SHG/Federations of SHG	11	19.61	23.2%
	Total		84.36 lakhs	

Proposed Activities (On Farm)*

Name of activity*	No of SHGs	Revolving fund
Dairying	40	10.00
Goatry	40	10.00
Nursery	6	1.50
Total	**86**	**21.50**

Proposed Major activities (Off Farm)**

Name of activity*	No of SHGs	Revolving fund
Artisans	16	4.00
Carpenter	16	4.00
Blacksmith	8	2.00
Leather Craft	8	2.00
Potter	8	2.00
Mason	8	2.00
Agro processing	8	2.00
Sewing / Knitting	36	9.00
Tea Stall	8	2.00
General Store	10	2.50
Mobile repair	4	1.00
Mechanic / MiSC. shop	6	1.50
Total	140	35.00

Table 3.8: List of persons & Proposed Activities. (10% of (9%)

S. No.	Name of G.P.	Name of Person	Category SC /ST /Others	Education	Activity Proposed	Project fund Revolving	Contribution
1	बांकली	पीराराम पिता गांगाजी मेघवाल	SC	10वीं	किराणा दुकान	25000	2500
2	बांकली	नारायण लाल पिता ओटाजी मेघवाल	SC	5वीं	धिसाई मशीन	25000	2500
3	बांकली	हरकु पत्नि मोहन लाल मेघवाल	SC	साक्षर	सब्जी दुकान	25000	2500
4	बांकली	छगन लाल पिता खसाजी मेघवाल	SC	10वीं	रंगाई पुताई	25000	2500
5	पोमावा मोरडू	सुजाराम पिता वागााराम मेघवाल	SC	8वी	आटा चक्की	25000	2500
6	पोमावा मोरडू	रामलाल पिता समाजी मेघवाल	SC	साक्षर	किराणा दुकान	25000	2500
7	पोमावा मोरडू	छगन लाल पिता आदाजी मेघवाल	SC	8वी	किराणा दुकान	25000	2500
8	खिवांदी	कांतिलाल पिता सोनाजी भील	ST	8वीं	किराणा दुकान	25000	2500
9	खिवांदी	दिनेश कुमार पिता भगाजी हिरागर	SC	12वीं	किराणा दुकान	25000	2500
10	खिवांदी	लक्ष्मण कुमार पिता जेठाराम मेघवाल	SC	10वी	चाय क दुकान	25000	2500
11	खिवांदी	मांगीलाल पिता चेलाराम मेघवाल	SC	8वी	सब्जी दुकान	25000	2500
12	खिवांदी	गोविंद पिता भगाराम मीणा	ST	8वी	किराणा दुकान	25000	2500
13	खिवांदी	लक्ष्मण राम पिता रताराम मेधवाल	sc	10वीं	जूतो की दुकान	25000	2500
14	सिंदरू	बसंत कुमार पिता चिमनाराम मीणा	ST	8वी	किराणा दुकान	25000	2500
15	सिंदरू	भीखाराम पिता घीसाराम मीणा	ST	9वीं	सब्जी की दुकान	25000	2500
16	सिंदरू	नारायण लाल पिता खुमाराम मेघवाल	SC	10वी	बिजली का कार्य	25000	2500
17	सिंदरू खिंदारा	कालुराम पिता पूनाराम मेघवाल	SC	8वीं	किराणा दुकान	25000	2500
18	सिंदरू खिंदारा	कानाराम पिता पकाराम मेघवाल	SC	5वी	पंचर की दुकान	25000	2500

19	सिंदरू खिंदारा	मोहन लाल पिता रूपाजी मेघवाल	SC	5वीं	सब्जी की दुकान	25000	2500
20	सिंदरू खिंदारा	गणेशाराम पिता मेघवाल	SC	5वी	घिसाई मशीन	25000	2500
21	नेतरा	रमेश कुमार पिता वीराराम मेघवाल	sc	9वीं	किराणा दुकान	25000	2500
22	नेतरा	विशना राम पिता नरसा राम मेधवाल	SC	8वी	सब्जी की दुकान	25000	2500
23	नेतरा	हन्सा राम पिता दल्ला जी मेधवाल	SC	साक्षर	सब्जी की दुकान	25000	2500
24	नेतरा पराखिंया	सरूपा राम पिता गला जी मेधवाल	SC	8वी	किराणा दुकान	25000	2500
25	नेतरा पराखिंया	कस्तुरा राम पिता वगता जी मेधवाल	SC	8वी	फर्नीचर दुकान	25000	2500
26	नेतरा पराखिंया	सोहन राम पिता चतरा जी मेधवाल	SC	9वी	लाईट डेकोरेशन	25000	2500
27	नेतरा पराखिंया	समाराम पिता केशा जी मेधवाल	SC	8वी	पशु पालन	25000	2500
28	नेतरा रोजडा	हन्सा राम पिता छोगा जी मीणा	ST	7वी	रंगाई पुताई	25000	2500
29	नेतरा रोजडा	बाबू लाल पिता जेठा जी मेधवाल	SC	6टी	रंगाई पुताई	25000	2500
30	नेतरा रोजडा	ईदा राम पिता दल्ला राम सरगरा	SC	अनपढ	खेती	25000	2500
31	नेतरा रोजडा	वेलाराम पिता खिमा जी सरगरा	SC	5वी	रंगाई पुताई	25000	2500
32	नेतरा रोजडा	रत्ता राम पिता द्यन्ना जी मेधवाल	SC	6टी	रंगाई पुताई	25000	2500
33	नेतरा रोजडा	गज्जा राम पिता रधा राम मेधवाल	SC	साक्षर	खेती	25000	2500
						825,000	

(c) Funds for Enterprising SHG/F ederations of SHG

(Maximum 30 % of livelihood activities)= Rs.-19.61 Lacs

The funding for major livelihood activities will enable the enterprising SHGs/SHG federation to avail a composite loan for undertaking major livelihood activities or to upscale activities as recommended by the WC & approved by WCDC in consultation with line departments.

Grant in aid can be made up to Rs. 2. 00 lacs or 50% of the project cost whichever is higher. Rest of the amount would be provided from Banks.

The federations will be formed after the SHG formation and development is completed and hence as of now the list cannot be provided.

3.4. Production Plan:

An awareness programme has been undertaken at Gram Sabha for communication & sensitization of the target beneficiaries. Production System & micro enterprises Action Plan is pre-requisite for availing the funds under the Production System & micro enterprises component. Production plan has been prepared by the PIA in consultation with WDT, WC & the members of Users Group. Details of funds available & their utilisation is as under :

(iii) Total project cost Rs.937.35 Lacs.

(iv) Funds available under Production System & Micro enterprises component is 10% of total project cost= Rs 93.73Lacs.

Table 3.9. Proposed Activities for production system

	Name of activity*	No. of house holds	Cost of activity	WDF
A	**Production System**			
1	Horticulture	70	21.00 lakhs	4.2 lakhs
2	Sprinkler and Drip Irrigation	60	18.00 lakhs	3.6 lakhs
B	**Others**			
1	Crop Demontration	461	23.03 lakhs	4.6 lakhs
2	Vermicomposst	98	14.70	2.94 lakhs
3	**Veterinary services** Vaccination and health camps	68	17.00	3.4 lakhs

Horticulture plantation will be undertaken in private land – the farmers who are interested will be benefited in this activity. Each farmer will be provided support up to 1.0 ha of land.

For efficient and modern cropping system high temperature area like Sumerpur, sprinklers and drip irrigation systemsl will be provided. Support will be provided up to an extent of Rs. 30,000/- to a farmer or per ha whichever is higher.

Crop demonstration for integrated pest management /nutrient management and hybrid seed for various crops will be made in farmers land. While doing this various scientific methods of cultivation will also be promoted through film shows etc. During the exposure trips as detailed out in the capacity building plan farmers will be taken on visit to such plots where advanced cropping systems are followed.

In all these activities preference will be given to SC/ST/and marginal and small farmers.

Vermicomposting will be promoted through construction of compost pits.

For promotion of better animal husbandry practices the following activities will be undertaken:

- Health camps and vaccination camps will be organized where free of Cost Vaccination in IWMP area Livestock for H.S., B.Q., F.M.D., PPR, ETV and Sheep Pox will be provided
- Regular visits will be made by the livestock expert of the WDT of RUDTES to the project area
- In convergence with the line department (Veterinary), various facilities such as AI, health check up will be facilitated.
- Regular awareness on better hygienic measures and better feeding will be provided.

3.5 ACTION PLAN :

The GP-wise action plan has been prepared as given in the following tables.

Proposed Development Plan

(A)	Preparatory phase activities				618	92.7				1219	182.85				515	77.25		
			GP1 (Bankali)						GP2 (Khiwandi)					GP3 (Pomava)				
Activity	Unit	Unit Cost	Quantity	Total Cost	Cost from Project Fund	Convergence Fund	Beneficiary Contribution	Quantity	Total Cost	Cost from Project Fund	Convergence Fund	Beneficiary Contribution	Quantity	Total Cost	Cost from Project Fund	Convergence Fund	Beneficiary Contribution
Admn. (PIA)		7%		6.49	6.49	0	0		12.80	12.80	0	0		5.41	5.41	0	0
Admin (WC)		3%		2.78	2.78	0	0		5.49	5.49	0	0		2.32	2.32	0	0
Monitoring		1%		0.93	0.93	0	0		1.83	1.83	0	0		0.77	0.77	0	0
Evaluation		1%		0.93	0.93	0	0		1.83	1.83	0	0		0.77	0.77	0	0
EPA		4%		3.71	3.71	0	0		7.31	7.31	0	0		3.09	3.09	0	0
I & CB		5%		4.64	4.64	0	0		9.14	9.14	0	0		3.86	3.86	0	0
DPR		1%		0.93	0.93	0	0		1.83	1.83	0	0		0.77	0.77	0	0
Total (A)				**20.39**	**20.39**	**0.00**	**0.00**		**40.23**	**40.23**	**0.00**	**0.00**		**17.00**	**17.00**	**0.00**	**0.00**
(B)	**Natural resource management (56%)**																
Conservation measures for arable land(private land)																	
Field Bunding	ha	0.09	45	3.93	3.06	0.87	0.61	80	6.98	6.11	0.87	1.22	35	3.06	2.62	0.44	0.52
Peurtorico Terrace	ha	0.07	10	0.75	0.37	0.37	0.07	12	0.89	0.75	0.15	0.15	0	0.00	0.00	0.00	0.00
Khadin	No.	0.92	5	4.58	2.75	1.83	0.55	20	18.32	14.66	3.66	2.93	12	10.99	7.33	3.66	1.47
Gully control structure in arable land	No.	0.04	14	0.56	0.56	0.00	0.11	27	1.08	0.80	0.28	0.16	12	0.48	0.36	0.12	0.07
Conservation measures for non arable land																	
Pasture Development	ha	0.44	25	11.03	8.82	2.21	0.00	30	13.23	13.23	0.00	0.00	25	11.03	8.82	2.21	0.00
Contour vegetative hedge	ha	0.11	20	2.14	1.61	0.54	0.00	40	4.28	3.21	1.07	0.00	20	2.14	1.61	0.54	0.00
WHS with surplus	No.	3.98	3	11.94	7.96	3.98	0.00	3	11.94	7.96	3.98	0.00	2	7.96	7.96	0.00	0.00
WHS with corewall	No.	4.40	1	4.40	4.40	0.00	0.00	2	8.79	4.40	4.40	0.00	2	8.79	4.40	4.40	0.00
Anicut	No.	5.77	2	11.54	11.54	0.00	0.00	3	17.31	17.31	0.00	0.00	1	5.77	0.00	5.77	0.00
Gully control structure in non-arable land	No.	0.06	15	0.87	0.64	0.23	0.00	18	1.04	0.92	0.12	0.00	8	0.46	0.40	0.06	0.00

Staggerred Contour Trenches	ha	0.08	20	1.53	1.53	0.00	0.00	40	3.06	2.75	0.31	0.00	20	1.53	0.77	0.77	0.00
Drainage line treatment																	
Concrete Check Dam	No.	0.65	14	9.10	3.90	5.20	0.00	35	22.75	20.15	2.60	0.00	10	6.50	4.55	1.95	0.00
LSCD-1	No.	0.16	20	3.20	0.80	2.40	0.00	20	3.20	2.40	0.80	0.00	12	1.92	0.32	1.60	0.00
LSCD-2	No.	0.12	14	1.71	0.49	1.22	0.00	28	3.42	0.98	2.44	0.00	12	1.46	0.61	0.85	0.00
LSCD-3	No.	0.06	8	0.51	0.32	0.19	0.00	12	0.77	0.64	0.13	0.00	5	0.32	0.26	0.06	0.00
Bank Stabilisation/ Peripheral Bunds	RMT	0.04	100	4.10	3.18	0.92	0.00	200	8.20	6.13	2.07	0.00	150	6.15	3.27	2.88	0.00
Total (B)				**71.87**	**51.91**	**19.96**	**1.35**		**125.27**	**102.40**	**22.87**	**4.46**		**68.56**	**43.26**	**25.30**	**1.35**
(C)	**Production System (10%)**																
Production measures for arable land																	
Horticulture plantation	ha	0.30	8	2.40	2.04	0.36	0.41	14	4.08	4.08	0.00	0.82	7	1.95	1.95	0.00	0.39
Sprinkler and Drip Irrigation	No.	0.30	6	3.60	1.80	1.80	0.36	10	6.00	3.00	3.00	0.60	5	3.00	1.50	1.50	0.30
Vaccination and health camp	No.	0.25	9	2.25	1.75	0.50	0.35	17	4.25	3.25	1.00	0.65	7	1.75	1.50	0.25	0.30
Vermi compost	No.	0.15	12	1.80	1.20	0.60	0.24	25	3.75	3.15	0.60	0.63	10	1.50	1.05	0.45	0.21
Crop Demonstration	ha	0.05	60	3.00	2.48	0.52	0.50	110	5.50	4.80	0.70	0.96	40	2.00	1.73	0.28	0.35
Total Production System				**13.05**	**9.27**	**3.78**	**1.85**		**1.85**	**18.28**	**5.30**	**3.66**		**3.66**	**7.73**	**2.48**	**2.06**
(D)	**Livelihood System 9 %**																
Revolving Fund to SHG (minmun 60 % amt.)	No.	0.25	24	6.00	6.00	0.00	0.00	44	11.00	11.00	0.00	0.00	18	4.50	4.50	0.00	0.00
Revolving Fund to enterprising individual (maximum 10 % amount)	No.	0.25	3	0.75	0.75	0.00	0.00	6	1.50	1.50	0.00	0.00	3	0.75	0.75	0.00	0.00
Grant in aid to enterprising SHG or Federation of SHG individual (maximum 30 % amount)	No.	2.00	1	3.19	1.59	1.59	0.00	2	7.91	3.96	3.96	0.00	1	3.41	1.70	1.70	0.00

Total Livelihood				**9.94**	**8.34**	**1.59**	**0.00**		**20.41**	**16.46**	**3.96**	**0.00**		**8.66**	**6.95**	**1.70**	**0.00**
Total (D)																	
(E)	**Consolidation 3%**			2.78	2.78				5.49	5.49				2.32	2.32		
Grand Total				**118.03**	**92.70**	**25.34**	**3.20**		**214.97**	**182.85**	**32.13**	**8.12**		**106.73**	**77.25**	**29.48**	**3.61**

Signatures
Project Manager, WCDC, distt. Pali

(A)	Preparatory phase activities						1389	208.35				2508	376.2				
			GP4 (Netra)					GP5 (Sindru)					Total				
Activity	Unit	Unit Cost	Quantity	Total Cost	Cost from Project Fund	Convergence Fund	Beneficiary Contribution	Quantity	Total Cost	Cost from Project Fund	Convergence Fund	Beneficiary Contribution	Quantity	Total Cost	Cost from Project Fund	Convergence Fund	Beneficiary Contribution
Admn. (PIA)		7%		14.58	14.58	0	0		26.33	26.33	0	0		65.61	65.61	0	0
Admin (WC)		3%		6.25	6.25	0	0		11.29	11.29	0	0		28.12	28.12	0	0
Monitoring		1%		2.08	2.08	0	0		3.76	3.76	0	0		9.37	9.37	0	0
Evaluation		1%		2.08	2.08	0	0		3.76	3.76	0	0		9.37	9.37	0	0
EPA		4%		8.33	8.33	0	0		15.05	15.05	0	0		37.49	37.49	0	0
I & CB		5%		10.42	10.42	0	0		18.81	18.81	0	0		46.87	46.87	0	0
DPR		1%		2.08	2.08	0	0		3.76	3.76	0	0		9.37	9.37	0	0
Total (A)				**45.84**	**45.84**	**0.00**	**0.00**		**82.76**	**82.76**	**0.00**	**0.00**		**206.22**	**206.22**	**0.00**	**0.00**
(B)	**Natural resource management (56%)**																
Conservation measures for arable land(private land)																	
Field Bunding	ha	0.09	89	7.77	6.11	1.66	1.22	175	15.28	12.66	0.90	2.53	424	37.02	30.56	6.46	6.11
Peurtorico Terrace	ha	0.07	25	1.86	1.49	0.37	0.30	20	1.49	0.75	0.50	0.15	67	4.99	3.35	1.64	0.67
Khadin	No.	0.92	6	5.50	3.66	1.83	0.73	25	22.90	18.32	0.00	3.66	68	62.29	46.72	15.57	9.34
Gully control structure in arable land	No.	0.04	31	1.24	1.00	0.24	0.20	56	2.24	1.80	0.11	0.36	140	5.60	4.52	1.08	0.90
Conservation measures for non arable land																	
Pasture Development	ha	0.44	20	8.82	8.82	0.00	0.00	20	8.82	8.82	0.00	0.00	120	52.92	48.51	4.41	0.00
Contour vegetative hedge	ha	0.11	40	4.28	3.21	1.07	0.00	75	8.03	5.35	2.68	0.00	195	20.87	14.98	5.89	0.00
WHS with surplus	No.	3.98	3	11.94	11.94	0.00	0.00	7	27.86	27.86	0.00	0.00	18	71.64	63.68	7.96	0.00
WHS with corewall	No.	4.40	4	17.59	17.59	0.00	0.00	8	35.18	35.18	0.00	0.00	17	74.75	65.96	8.79	0.00
Anicut	No.	5.77	4	23.08	23.08	0.00	0.00	7	40.39	34.62	5.77	0.00	17	98.09	86.55	11.54	0.00
Gully control structure in non-arable land	No.	0.06	20	1.16	1.04	0.12	0.00	40	2.31	2.14	0.17	0.00	101	5.84	5.14	0.69	0.00
Staggerred Contour Trenches	ha	0.08	50	3.83	3.83	0.00	0.00	80	6.12	5.58	0.54	0.00	210	16.07	14.46	1.61	0.00

Drainage line treatment																	
Concrete Check Dam	No.	0.65	35	22.75	22.75	0.00	0.00	58	37.70	36.40	1.30	0.00	152	98.80	87.75	11.05	0.00
LSCD-1	No.	0.16	25	4.00	3.20	0.80	0.00	48	7.68	5.28	2.40	0.00	125	20.00	12.00	8.00	0.00
LSCD-2	No.	0.12	30	3.66	1.22	2.44	0.00	56	6.83	1.46	5.37	0.00	140	17.08	4.76	12.32	0.00
LSCD-3	No.	0.06	15	0.96	0.64	0.32	0.00	25	1.60	1.22	0.38	0.00	65	4.16	3.07	1.09	0.00
Bank Stabilisation/Peripheral Bunds	RMT	0.04	200	8.20	7.10	1.10	0.00	400	16.40	13.24	3.16	0.00	1050	43.05	32.91	10.14	0.00
Total (B)				**126.63**	**116.68**	**9.95**	**0.98**		**240.82**	**210.67**	**23.28**	**6.70**		**633.15**	**524.92**	**108.24**	**6.81**
(C)	**Production System (10%)**																
Production measures for arable land																	
Horticulture plantation	ha	0.30	16	4.77	4.77	0.00	0.95	30	9.00	8.16	0.84	1.63	74	22.20	21.00	1.20	4.20
Sprinkler and Drip Irrigation	No.	0.30	12	7.20	3.60	3.60	0.72	27	8.10	8.10	0.00	1.62	60	36.00	18.00	18.00	3.60
Vaccination and health camp	No.	0.25	20	5.00	3.75	1.25	0.75	35	8.75	6.75	2.00	1.35	88	22.00	17.00	5.00	3.40
Vermi compost	No.	0.15	28	4.20	3.30	0.90	0.66	50	7.50	6.00	1.50	1.20	125	18.75	14.70	4.05	2.94
Crop Demonstration	ha	0.05	120	6.00	5.41	0.59	1.08	200	10.00	8.61	1.39	1.72	530	26.50	23.03	3.47	4.61
Total Production System				**27.17**	**20.83**	**6.34**	**4.17**		**4.17**	**37.62**	**5.73**	**7.52**		**125.45**	**93.73**	**31.72**	**18.75**
(D)	**Livelihood System 9 %**																
Revolving Fund to SHG (minmun 60 % amt.)	No.	0.25	50	12.50	12.50	0.00	0.00	90	22.50	22.50	0.00	0.00	226	56.50	56.50	0.00	0.00
Revolving Fund to enterprising individual (maximum 10 % amount)	No.	0.25	7	1.75	1.75	0.00	0.00	14	3.50	3.50	0.00	0.00	33	8.25	8.25	0.00	0.00
Grant in aid to enterprising SHG or Federation of SHG individual (maximum 30 % amount)	No.	2.00	3	9.00	4.50	4.50	0.00	4	15.72	7.86	7.86	0.00	11	39.23	19.61	19.61	0.00

Total Livelihood				**23.25**	**18.75**	**4.50**	**0.00**		**41.72**	**33.86**	**7.86**	**0.00**		**103.98**	**84.36**	**19.61**	**0.00**
Total (D)																	
(E)	**Consolidation 3%**			6.25	6.25				11.29	11.29				28.121	28.121	0.00	
Grand Total				**229.14**	**208.35**	**20.79**	**6.62**		**419.94**	**376.20**	**36.86**	**14.23**		**1096.92**	**937.35**	**159.57**	**35.77**

Signatures
Project Manager, WCDC, distt. Pali

CHAPTER -IV
Abstract of Costs

Activity wise Total Abstract of cost

Activity	Unit	Qty	Unit cost	Total cost	Cost from Project Fund				Convergence Fund	Beneficiary Contribution *
					Quantity	Labour	material	Total		
Prepratory Phase activities										
Administration (PIA)				65.61		0.00	65.61	65.61	0.00	0.00
Administration (WC)				28.12		0.00	28.12	28.12	0.00	0.00
Monitoring				9.37		0.00	9.37	9.37	0.00	0.00
Evaluation				9.37		0.00	9.37	9.37	0.00	0.00
EPA				37.49		9.37	28.12	37.49	0.00	0.00
I&CB				46.87		0.00	46.87	46.87	0.00	0.00
DPR				9.37		0.00	9.37	9.37	0.00	0.00
sub-total				**206.22**		**9.37**	**196.84**	**206.22**	**0.00**	**0.00**
Natural Resource Management										
(Arable land)										
Field Bunding	ha	424	0.0873	37.02	350	20.73	9.82	30.56	6.46	6.11
Peurtorico Terrace	ha	67	0.0745	4.99	45	3.17	0.18	3.35	1.64	0.67
Khadin	No.	68	0.916	62.29	51	44.93	1.79	46.72	15.57	9.34
Gully Control Str in arable land	No.	140	0.04	5.60	113	4.18	0.34	4.52	1.08	0.90
(Non-arable land)					0	0.00	0.00			
Pasture Development	ha	120	0.441	52.92	110	28.56	19.95	48.51	4.41	0.00
Contour vegetative hedge	ha	195	0.107	20.87	140	13.59	1.39	14.98	5.89	0.00
WHS with surplus	No.	18	3.98	71.64	16	36.48	27.20	63.68	7.96	0.00
WHS with corewall	No.	17	4.397	74.75	15	41.97	23.99	65.96	8.79	0.00
Anicut	No.	17	5.77	98.09	15	28.50	58.05	86.55	11.54	0.00
Gully control structure in non-arable land	No.	101	0.0578	5.84	89	4.80	0.35	5.14	0.69	0.00
Staggerred Contour Trenches	ha	210	0.0765	16.07	189	12.29	2.17	14.46	1.61	0.00
Drainage line treatment						0.00	0.00			
Concrete Check Dam	No.	152	0.65	98.80	135	28.89	58.86	87.75	11.05	0.00
LSCD-1	No.	125	0.16	20.00	75	10.89	1.11	12.00	8.00	0.00
LSCD-2	No.	140	0.122	17.08	39	4.16	0.59	4.76	12.32	0.00
LSCD-3	No.	65	0.064	4.16	48	2.49	0.59	3.07	1.09	0.00
Bank Stabilistion/Peripheral	RMT	1050	0.041	43.05	803	10.49	22.42	32.91	10.14	0.00
sub-total				**633.15**		**296.12**	**228.79**	**524.92**	**108.24**	**17.03**
Production measures for arable land										
Horticulture plantation	ha	74	0.30	22.20	70	15.05	5.95	21.00	1.20	4.20
Sprinkler and Drip Irrigation	No.	60	0.3	36.00	60	1.80	16.20	18.00	18.00	3.60
Vaccination and health camp	No.	88	0.25	22.00	68	6.80	10.20	17.00	5.00	3.40
Vermi compost	No.	125	0.15	18.75	98	5.88	8.82	14.70	4.05	2.94

Crop Demonstration	ha	530	0.05	26.50	461	2.30	20.73	23.03	3.47	4.61
sub-total				**125.45**		**31.83**	**61.90**	**93.73**	**31.72**	**18.75**
Livelihood Systems										
Revloling fund to SHG	No.	226	0.25	56.50	226	56.50	0.00	56.50	0.00	0.00
Revolving fund to enterprising individuals	No.	33	0.25	8.25	33	8.25	0.00	8.25	0.00	0.00
Grant in Aid to SHG/Federation	No.	11	2.00	19.61	11	19.61	0.00	19.61	19.61	0.00
sub-total				**84.36**		**84.36**	**0.00**	**84.36**	**19.61**	**0.00**
Consolidation Phase				**28.12**		**22.50**	**5.62**	**28.12**	**0.00**	**0.00**
Total				**1077.30**		**444.18**	**493.16**	**937.35**	**159.57**	**35.77**

Signature
Project Manager, WCDC
Distt. Pali

CHAPTER – V (A)
Proposed Action Plan through Project Fund (All 5 GPs)

PROJECT NAME : **IWMP- 26/11-12** BLOCK: **SUMERPUR** DISTRICT :**PALI**
COST OF PROJECT : **937.35** Lacs Area 6249 ha

(A)	**Preparatory phase activities capacity building trainings & EPA (22%)**															
					1st year		**2nd year**		**3rd year**		**4th year**		**5th year**		**Total**	
Activity	**Unit**	**Quantity**	**Unit Cost**	**Total cost**	**Phy**	**Fin**	**Phy**	**Fin**	**Phy**	**Fin**	**Phy**	**Fin**	**Phy**	**Fin**	**Phy**	**Fin**
Admn. (PIA)	7%			65.61		13.12		13.12		13.12		13.12		13.12		65.61
Admin (WC)	3%			28.12		5.62		5.62		5.62		5.62		5.62		28.12
Monitoring (SLNA)	0.2%			1.87		0.37		0.37		0.37		0.37		0.37		1.87
Monitoring (WCDC)	0.2%			1.87		0.37		0.37		0.37		0.37		0.37		1.87
Monitoring (PIA)	0.6%			5.62		1.12		1.12		1.12		1.12		1.12		5.62
Evaluation (SLNA)	1%			9.37						4.69				4.69		9.37
EPA	4%			37.49		37.49										37.49
I & CB (SLNA)	0.05%			0.47		0.47										0.47
I & CB (WCDC)	1.30%			12.19		3.28		3.75		1.87		1.87		1.41		12.19
I & CB (PIA)	3.65%			34.21		10.31		10.31		10.31				3.28		34.21
DPR	1%			9.37		9.37										9.37
Total (A) 22%	**22%**			**206.22**		**81.55**		**34.68**		**37.49**		**22.50**		**30.00**		**206.22**
(B)	**Natural resource management(56%)**															
Conservation measures for arable land(private land)																
Field Bunding	ha	350	0.0873	30.56	0	0	0	0.00	126	11.00	158	13.79	66	5.7618	350	30.56
Peurtorico Terrace	ha	45	0.0745	3.35	0	0	0	0.00	33	2.46	12	0.89	0	0	45	3.35
Khadin	Number	51	0.916	46.72	0	0	0	0.00	15	13.74	31	28.40	5	4.58	51	46.72
Gully control structure in arable land	number	113	0.04	4.52	0	0	14	0.56	49	1.96	45	1.80	5	0.2	113	4.52
Conservation measures for non arable land																
Pasture Development	ha	110	0.441	48.51	0	0	0	0.00	100	44.10	10	4.41	0	0	110	48.51
Contour vegetative hedge	ha	140	0.107	14.98	0	0	0	0.00	85	9.10	55	5.89	0	0	140	14.98
WHS with surplus	Number	16	3.98	63.68	0	0	0	0.00	6	23.88	10	39.80	0	0	16	63.68
WHS with corewall	Number	15	4.397	65.96	0	0	0	0.00	8	35.18	7	30.78	0	0	15	65.96
Anicut	Number	15	5.77	86.55	0	0	0	0.00	6	34.62	9	51.93	0	0	15	86.55
Gully control structure in non-arable land	Number	89	0.0578	5.14	0	0	0	0.00	29	1.68	60	3.47	0	0	89	5.14

Staggerred Contour Trenches	ha	189	0.0765	14.46	0	0	0	0.00	80	6.12	94	7.19	15	1.1475	189	14.46
Drainage line treatment																
Concrete Check Dam	Number	135	0.65	87.75	0	0	0	0.00	45	29.25	70	45.50	20	13	135	87.75
LSCD-1	Number	75	0.16	12.00	0	0	0	0.00	39	6.24	32	5.12	4	0.64	75	12.00
LSCD-2	Number	39	0.122	4.76	0	0	0	0.00	26	3.17	13	1.59	0	0	39	4.76
LSCD-3	Number	48	0.064	3.07	0	0	0	0.00	17	1.09	31	1.98	0	0	48	3.07
Bank Stabilisation/Peripheral Bunds	RMT	802.8	0.041	32.91	0	0	0	0.00	323.1	13.25	429.7	17.62	50	2.05	8 02.8	32.91
Total (B)				**524.92**		**0**		**0.56**		**236.82**		**260.15**		**27.379**		**524.92**
(C)	**Production System (10%)**															
Production measures for arable land																
Horticulture plantation	ha	70	0.3	21.00	0	0	0	0.00	30.2	9.06	39.8	11.94	0	0	70	21.00
Sprinkler and Drip Irrigation	Number	60	0.3	18.00	0	0	0	0.00	28	8.40	32	9.60	0	0	60	18.00
Vaccination and health camp	Number	68	0.25	17.00	0	0	0	0.00	25	6.25	43	10.75	0	0	68	17.00
Vermi compost	Number	98	0.15	14.70	0	0	0	0.00	44	6.60	54	8.10	0	0	98	14.70
Crop Demonstration	ha	460.6	0.05	23.03	0	0	0	0.00	177.6	8.88	233	11.65	50	2.5	460.60	23.03
Livelihood System (9%)																
Revolving Fund to SHG (minmun 60 % amt.)	Number	226	0.25	56.50	0	0	108	0.00	118	29.50	108	27.00	0	0	334	56.50
Revolving Fund to enterprising individual (maximum 10 % amount)	Number	33	0.25	8.25	0	0	0	0.00	11	2.75	22	5.50	0	0	33	8.25
Grant in aid to enterprising SHG or Federation of SHG individual (maximum 30 % amount)	Number	11	2.00	19.613	0	0	0	0.00	0	0.00	6	11.30	5	8.317	11	19.61
Total (C)				178.09		0		0		71.44		95.84		10.817		178.09
(D) Consolidation				28.12										28.12		28.12
Grand Total				**937.35**		**81.55**		**35.24**		**345.76**		**378.49**		**96.31**		**937.35**

Signatures
Project Manager, WCDC

Annual Action Plan (Through Convergence)

(A)	Preparatory phase activities capacity building trainings & EPA															
					1st year		2nd year		3rd year		4th year		5th year		Total	
Activity	**Unit**	**Quantity**	**Unit Cost**	**Total cost**	**Phy**	**Fin**	**Phy**	**Fin**	**Phy**	**Fin**	**Phy**	**Fin**	**Phy**	**Fin**	**Phy**	**Fin**
Admn. (PIA)	7%			65.61												0.00
Admin (WC)	3%			28.12												0.00
Monitoring	1%			9.37												0.00
Evaluation	1%			9.37												0.00
EPA	4%			37.49												0.00
I & CB	5%			46.87												0.00
DPR	1%			9.37												0.00
Total (A)				**206.22**		**0.00**		**0.00**		**0.00**		**0.00**		**0.00**		**0.00**
(B)	**Natural resource management(56%)**															
Conservation measures for arable land																
Field Bunding	ha	424	0.0873	37.02			0	0.00	34	2.97	40	3.49			74	6.46
Peurtorico Terrace	ha	67	0.0745	4.99			0	0.00	11	0.82	11	0.82			22	1.64
Khadin	Number	68	0.916	62.29			0	0.00	6	5.50	11	10.08			17	15.57
Gully control structure in arable land	number	140	0.04	5.60			0	0.00	5	0.20	12	0.48	10	0.4	27	1.08
Conservation measures for non arable land																
Pasture Development	ha	120	0.441	52.92					10	4.41					10	4.41
Contour vegetative hedge	ha	195	0.107	20.87					25	2.68	30	3.21			55	5.89
WHS with surplus	Number	18	3.98	71.64					1	3.98	1	3.98			2	7.96
WHS with corewall	Number	17	4.397	74.75					1	4.40	1	4.40		0	2	8.79
Anicut	Number	17	5.77	98.09					1	5.77	1	5.77	0	0	2	11.54
Gully control structure in non-arable land	Number	101	0.0578	5.84					3	0.17	7	0.40	2	0.12	12	0.69
Staggerred Contour Trenches	ha	210	0.0765	16.07			0		10	0.77	11	0.84			21	1.61
Drainage line treatment																
Concrete Check Dam	Number	152	0.65	98.80					10	6.50	7	4.55			17	11.05
LSCD-1	Number	125	0.16	20.00					14	2.24	12	1.92	24	3.84	50	8.00

LSCD-2	Number	140	0.122	17.08			0	0	40	4.88	61	7.44			101	12.32
LSCD-3	Number	65	0.064	4.16					7	0.45	10	0.64			17	1.09
Bank Stabilisation/Peripheral Bunds	RMT	1050	0.041	43.05					100	4.10	100	4.10	47.2	1.94	247	10.14
Total (B)				**633.15**		**0.00**		**0.00**		**49.82**		**52.12**		**6.29**		**108.24**
(C)	**Production System (10%)**															
Production measures for arable land																
Horticulture plantation	ha	74	0.3	22.20					2	0.6	2	0.6		0.00	4	1.20
Sprinkler and Drip Irrigation	Number	60	0.3	36.00	0	0	0	0	28	8.4	32	9.6	0	0	0	18.00
Vaccination and health camp	Number	88	0.25	22.00			0	0.00	8	2.00	4	1.00	8	2.00	20	5.00
Vermi compost	Number	125	0.15	18.75					15	2.25	12	1.8			27	4.05
Crop Demonstration	ha	530.0	0.05	26.50					39.4	1.97	30	1.5			69.40	3.47
Total Production System				**125.45**		**0.00**		**0.00**		**15.22**		**14.50**		**2.00**		**31.72**
Livelihood System 9%																
Revolving Fund to SHG (minmun 60 % amt.)	Number	226	0.25	56.50											0	0.00
Revolving Fund to enterprising individual (maximum 10 % amount)	Number	33	0.25	8.25											0	0.00
Grant in aid to enterprising SHG or Federation l (maximum 30 % amount)	Number	11	2	39.23	0	0	0	0	0	0	6	11.296	5	8.317	0	19.61
Total Livelihood System				**103.98**		**0.00**		**0.00**		**0.00**		**11.30**		**8.32**		**19.61**
(D) Consolidation 3%				**28.12**												
Grand Total				**1096.92**		**0.00**		**0.00**		**65.04**		**77.92**		**16.61**		**159.57**

Signatures
Project Manager, WCDC, Dist: Pali

CHAPTER – V (B)
GP-wise Proposed Project fund (GP-1: Bankali)

GP **Bankali**
COST OF PROJECT : **92.7** Lacs Area 618 ha

(A)	Preparatory phase activities capacity building trainings & EPA (22%)															
					1st year		2nd year		3rd year		4th year		5th year		Total	
Activity	**Unit**	**Quantity**	**Unit Cost**	**Total cost**	**Phy**	**Fin**	**Phy**	**Fin**	**Phy**	**Fin**	**Phy**	**Fin**	**Phy**	**Fin**	**Phy**	**Fin**
Admn. (PIA)	7%			6.49		1.30		1.30		1.30		1.30		1.30		6.49
Admin (WC)	3%			2.78		0.56		0.56		0.56		0.56		0.56		2.78
Monitoring (SLNA)	0.2%			0.19		0.04		0.04		0.04		0.04		0.04		0.19
Monitoring (WCDC)	0.2%			0.19		0.04		0.04		0.04		0.04		0.04		0.19
Monitoring (PIA)	0.6%			0.56		0.11		0.11		0.11		0.11		0.11		0.56
Evaluation (SLNA)	1%			0.93						0.46				0.46		0.93
EPA	4%			3.71		3.71										3.71
I & CB (SLNA)	0.05%			0.05		0.05										0.05
I & CB (WCDC)	1.30%			1.21		0.32		0.37		0.19		0.19		0.14		1.21
I & CB (PIA)	3.65%			3.38		1.02		1.02		1.02				0.32		3.38
DPR	1%			0.93		0.93										0.93
Total (A) 22%	**22%**			**20.39**		**8.06**		**3.43**		**3.71**		**2.22**		**2.97**		**20.39**
(B)	**Natural resource management(56%)**															
Conservation measures for arable land(private land)																
Field Bunding	ha	35	0.0873	3.06			0	0.00	15	1.31	20	1.75			35	3.06
Peurtorico Terrace	ha	5	0.0745	0.37			0	0.00	3	0.22	2	0.15			5	0.37
Khadin	Number	3	0.916	2.75			0	0.00	1	0.92	2	1.83			3	2.75
Gully control structure in arable land	number	14	0.04	0.56			0	0.00	5	0.20	4	0.16	5	0.20	14	0.56
Conservation measures for non arable land																
Pasture Development	ha	20	0.441	8.82				0.00	10	4.41	10	4.41			20	8.82
Contour vegetative hedge	ha	15	0.107	1.605			0	0.00	10	1.07	5	0.54			15	1.61
WHS with surplus	Number	2	3.98	7.96			0	0.00	1	3.98	1	3.98			2	7.96
WHS with corewall	Number	1	4.397	4.397				0.00	1	4.40	0	0.00			1	4.40
Anicut	Number	2	5.77	11.54			0	0.00	1	5.77	1	5.77			2	11.54
Gully control structure in non-arable land	Number	11	0.0578	0.6358			0	0.00	5	0.29	6	0.35			11	0.64
Staggerred Contour Trenches	ha	20	0.0765	1.53			0	0.00	10	0.77	10	0.77			20	1.53

Drainage line treatment																
Concrete Check Dam	Number	6	0.65	3.9			0	0.00	2	1.30	4	2.60			6	3.90
LSCD-1	Number	5	0.16	0.8			0	0.00	2	0.32	3	0.48	0	0	5	0.80
LSCD-2	Number	4	0.122	0.488			0	0.00	2	0.24	2	0.24			4	0.49
LSCD-3	Number	5	0.064	0.32			0	0.00	0	0.00	5	0.32			5	0.32
Bank Stabilisation/Peripheral Bunds	RMT	77.5	0.041	3.1775			0	0.00	27.5	1.13	50	2.05		0	77.5	3.18
Total (B)				**51.91**		**0.00**		**0.00**		**26.32**		**25.39**		**0.20**		**51.91**
(C)	**Production System (10%)**															
Production measures for arable land																
Horticulture plantation	ha	6.8	0.3	2.04			0	0.00	4	1.20	2.8	0.84			6.8	2.04
Sprinkler and Drip Irrigation	Number	6	0.3	1.80					3	0.90	3	0.90			6	1.80
Vaccination and health camp	Number	7	0.25	1.75			0	0.00	3	0.75	4	1.00			7	1.75
Vermi compost	Number	8	0.15	1.20			0	0.00	4	0.60	4	0.60			8	1.20
Crop Demonstration	ha	49.6	0.05	2.48				0.00	24.6	1.23	25	1.25			49.60	2.48
Livelihood System (9%)																
Revolving Fund to SHG (minmun 60 % amt.)	Number	24	0.25	6.00					12	3.00	12	3.00			24	6.00
Revolving Fund to enterprising individual (maximum 10 % amount)	Number	3	0.25	0.75					1	0.25	2	0.50			3	0.75
Grant in aid to enterprising SHG or Federation of SHG individual (maximum 30 % amount)	Number	1	2.00	1.59							1	1.59			1	1.59
Total (C)				17.61		0		0.00		7.93		9.68		0		17.61
(D) Consolidation				2.78										2.78		2.78
Grand Total				**92.70**		**8.06**		**3.43**		**37.96**		**37.30**		**5.95**		**92.70**

GP-wise Proposed Project fund (GP-2: Khiwandi)

COST OF PROJECT : **182.85** Lacs

GP:**Khiwandi** area 1219 ha

(A)	Preparatory phase activities capacity building trainings & EPA (22%)															
					1st year		2nd year		3rd year		4th year		5th year		Total	
Activity	**Unit**	**Quantity**	**Unit Cost**	**Total cost**	**Phy**	**Fin**	**Phy**	**Fin**	**Phy**	**Fin**	**Phy**	**Fin**	**Phy**	**Fin**	**Phy**	**Fin**
Admn. (PIA)	7%			12.80		2.56		2.56		2.56		2.56		2.56		12.80
Admin (WC)	3%			5.49		1.10		1.10		1.10		1.10		1.10		5.49
Monitoring (SLNA)	0.2%			0.37		0.07		0.07		0.07		0.07		0.07		0.37
Monitoring (WCDC)	0.2%			0.37		0.07		0.07		0.07		0.07		0.07		0.37
Monitoring (PIA)	0.6%			1.10		0.22		0.22		0.22		0.22		0.22		1.10
Evaluation (SLNA)	1%			1.83						0.91				0.91		1.83
EPA	4%			7.31		7.31										7.31
I & CB (SLNA)	0.05%			0.09		0.09										0.09
I & CB (WCDC)	1.30%			2.38		0.64		0.73		0.37		0.37		0.27		2.38
I & CB (PIA)	3.65%			6.67		2.01		2.01		2.01				0.64		6.67
DPR	1%			1.83		1.83										1.83
Total (A) 22%	**22%**			**40.23**		**15.91**		**6.77**		**7.31**		**4.39**		**5.85**		**40.23**
(B)	**Natural resource management(56%)**															
Conservation measures for arable land(private land)																
Field Bunding	ha	70	0.0873	6.11			0	0.00	21	1.83	28	2.44	21	1.83	70	6.11
Peurtorico Terrace	ha	10	0.0745	0.75			0	0.00	10	0.75	0	0.00			10	0.75
Khadin	Number	16	0.916	14.66			0	0.00	5	4.58	11	10.08			16	14.66
Gully control structure in arable land	number	20	0.04	0.80					9	0.36	11	0.44			20	0.80
Conservation measures for non arable land																
Pasture Development	ha	30	0.441	13.23			0	0.00	30	13.23					30	13.23
Contour vegetative hedge	ha	30	0.107	3.21			0	0.00	20	2.14	10	1.07			30	3.21
WHS with surplus	Number	2	3.98	7.96			0	0.00	1	3.98	1	3.98			2	7.96
WHS with corewall	Number	1	4.397	4.40			0	0.00	1	4.40	0	0.00			1	4.40
Anicut	Number	3	5.77	17.31			0	0.00	2	11.54	1	5.77			3	17.31
Gully control structure in non-arable land	Number	16	0.0578	0.92			0	0.00	5	0.29	11	0.64			16	0.92
Staggerred Contour Trenches	ha	36	0.0765	2.75			0	0.00	15	1.15	21	1.61			36	2.75
Drainage line treatment		0														
Concrete Check Dam	Number	31	0.65	20.15			0	0.00	10	6.50	11	7.15	10	6.50	31	20.15
LSCD-1	Number	15	0.16	2.40			0	0.00	8	1.28	7	1.12		0	15	2.40

LSCD-2	Number	8	0.122	0.98				0.00	5	0.61	3	0.37			8	0.98
LSCD-3	Number	10	0.064	0.64			0	0.00	5	0.32	5	0.32			10	0.64
Bank Stabilisation/Peripheral Bunds	RMT	149.6	0.041	6.13			0	0.00	49.6	2.03	50	2.05	50	2.05	149.6	6.13
Total (B)				**102.40**		**0**		**0.00**		**54.99**		**37.03**		**10.38**		**102.40**
(C)	**Production System (10%)**															
Production measures for arable land																
Horticulture plantation	ha	13.6	0.3	4.08			0	0.00	5	1.50	8.6	2.58			13.6	4.08
Sprinkler and Drip Irrigation	Number	10	0.3	3.00			0	0.00	5	1.50	5	1.50			10	3.00
Vaccination and health camp	Number	13	0.25	3.25			0	0.00	4	1.00	9	2.25			13	3.25
Vermi compost	Number	21	0.15	3.15			0	0.00	10	1.50	11	1.65			21	3.15
Crop Demonstration	ha	96	0.05	4.80					48	2.40	48	2.40			96.0	4.800
Livelihood System (9%)																
Revolving Fund to SHG (minmun 60 % amt.)	Number	44	0.25	11.00					22	5.50	22	5.50			44	11.00
Revolving Fund to enterprising individual (maximum 10 % amount)	Number	6	0.25	1.50					3	0.75	3	0.75			6	1.50
Grant in aid to enterprising SHG or Federation of SHG individual (maximum 30 % amount)	Number	2	2.00	3.96							1	2.00	1	1.96	2	3.96
Total (C)				34.74		0.00		0.00		14.15		18.63		1.96		34.74
(D) Consolidation				5.49										5.49		5.49
Grand Total				**182.85**		**15.91**		**6.77**		**76.45**		**60.05**		**23.68**		**182.85**

GP-wise Proposed Project fund (GP-3: Pomawa)

GP: Pomawa
COST OF PROJECT :**77.25** Lacs area: 515 ha

(A)	Preparatory phase activities capacity building trainings & EPA (22%)															
					1st year		2nd year		3rd year		4th year		5th year		Total	
Activity	**Unit**	**Quantity**	**Unit Cost**	**Total cost**	**Phy**	**Fin**	**Phy**	**Fin**	**Phy**	**Fin**	**Phy**	**Fin**	**Phy**	**Fin**	**Phy**	**Fin**
Admn. (PIA)	7%			5.41		1.08		1.08		1.08		1.08		1.08		5.41
Admin (WC)	3%			2.32		0.46		0.46		0.46		0.46		0.46		2.32
Monitoring (SLNA)	0.2%			0.15		0.03		0.03		0.03		0.03		0.03		0.15
Monitoring (WCDC)	0.2%			0.15		0.03		0.03		0.03		0.03		0.03		0.15
Monitoring (PIA)	0.6%			0.46		0.09		0.09		0.09		0.09		0.09		0.46
Evaluation (SLNA)	1%			0.77						0.39				0.39		0.77
EPA	4%			3.09		3.09										3.09
I & CB (SLNA)	0.05%			0.04		0.04										0.04
I & CB (WCDC)	1.30%			1.00		0.27		0.31		0.15		0.15		0.12		1.00
I & CB (PIA)	3.65%			2.82		0.85		0.85		0.85				0.27		2.82
DPR	1%			0.77		0.77										0.77
Total (A) 22%	**22%**			**17.00**		**6.72**		**2.86**		**3.09**		**1.85**		**2.47**		**17.00**
(B)	**Natural resource management(56%)**															
Conservation measures for arable land(private land)																
Field Bunding	ha	30	0.0873	2.62			0	0.00	10	0.87	20	1.75			30	2.62
Peurtorico Terrace	ha	0	0.0745	0.00			0	0.00	0	0.00	0	0.00			0	0.00
Khadin	Number	8	0.916	7.33			0	0.00	3	2.75	5	4.58			8	7.33
Gully control structure in arable land	number	9	0.04	0.36			0	0.00	4	0.16	5	0.20			9	0.36
Conservation measures for non arable land																
Pasture Development	ha	20	0.441	8.82				0.00	20	8.82					20	8.82
Contour vegetative hedge	ha	15	0.107	1.61					10	1.07	5	0.54			15	1.61
WHS with surplus	Number	2	3.98	7.96			0	0.00	1	3.98	1	3.98			2	7.96
WHS with corewall	Number	1	4.397	4.40				0.00	0	0.00	1	4.40			1	4.40
Anicut	Number	0	5.77	0.00			0	0.00	0	0.00	0	0.00			0	0.00
Gully control structure in non-arable land	Number	7	0.0578	0.40			0	0.00	2	0.12	5	0.29			7	0.40
Staggerred Contour Trenches	ha	10	0.0765	0.77				0.00	10	0.77		0.00			10	0.77
Drainage line treatment		0														

Concrete Check Dam	Number	7	0.65	4.55			0	0.00	3	1.95	4	2.60			7	4.55
LSCD-1	Number	2	0.16	0.32			0	0.00	1	0.16	1	0.16	0	0.00	2	0.32
LSCD-2	Number	5	0.122	0.61			0	0.00	3	0.37	2	0.24			5	0.61
LSCD-3	Number	4	0.064	0.26			0	0.00	0	0.00	4	0.26			4	0.26
Bank Stabilisation/Peripheral Bunds	RMT	79.7	0.041	3.27			0	0.00	50	2.05	29.7	1.22		0.00	79.7	3.27
Total (B)				**43.26**		**0**		**0.00**		**23.06**		**20.20**		**0.00**		**43.26**
(C)	**Production System (10%)**															
Production measures for arable land																
Horticulture plantation	ha	6.5	0.3	1.95			0	0.00	4	1.20	2.5	0.75			6.5	1.95
Sprinkler and Drip Irrigation	Number	5	0.3	1.50			0	0.00	2	0.60	3	0.90			5	1.50
Vaccination and health camp	Number	6	0.25	1.50			0	0.00	4	1.00	2	0.50			6	1.50
Vermi compost	Number	7	0.15	1.05			0	0.00	3	0.45	4	0.60			7	1.05
Crop Demonstration	ha	34.5	0.05	1.73				0.00	14.5	0.73	20	1.00			34.5	1.73
Livelihood System (9%)																
Revolving Fund to SHG (minmun 60 % amt.)	Number	18	0.25	4.50				0.00	8	2.00	10	2.50			18	4.50
Revolving Fund to enterprising individual (maximum 10 % amount)	Number	3	0.25	0.75					1	0.25	2	0.50			3	0.75
Grant in aid to enterprising SHG or Federation of SHG individual (maximum 30 % amount)	Number	1	2.00	1.70							1	1.70			1	1.70
Total (C)				14.68		0.00		0.00		6.23		8.45		0		14.68
(D) Consolidation				2.32										2.32		2.32
Grand Total				**77.25**		**6.72**		**2.86**		**32.37**		**30.51**		**4.79**		**77.25**

GP-wise Proposed Project fund (GP-4: Netra)

GP: **Netra**
COST OF PROJECT :**208.35** Lacs area 1389 ha

(A)	Preparatory phase activities capacity building trainings & EPA (22%)															
					1st year		2nd year		3rd year		4th year		5th year		Total	
Activity	**Unit**	**Quantity**	**Unit Cost**	**Total cost**	**Phy**	**Fin**	**Phy**	**Fin**	**Phy**	**Fin**	**Phy**	**Fin**	**Phy**	**Fin**	**Phy**	**Fin**
Admn. (PIA)	7%			14.58		2.92		2.92		2.92		2.92		2.92		14.58
Admin (WC)	3%			6.25		1.25		1.25		1.25		1.25		1.25		6.25
Monitoring (SLNA)	0.2%			0.42		0.08		0.08		0.08		0.08		0.08		0.42
Monitoring (WCDC)	0.2%			0.42		0.08		0.08		0.08		0.08		0.08		0.42
Monitoring (PIA)	0.6%			1.25		0.25		0.25		0.25		0.25		0.25		1.25
Evaluation (SLNA)	1%			2.08						1.04				1.04		2.08
EPA	4%			8.33		8.33										8.33
I & CB (SLNA)	0.05%			0.10		0.10										0.10
I & CB (WCDC)	1.30%			2.71		0.73		0.83		0.42		0.42		0.31		2.71
I & CB (PIA)	3.65%			7.60		2.29		2.29		2.29				0.73		7.60
DPR	1%			2.08		2.08										2.08
Total (A) 22%	**22%**			**45.84**		**18.13**		**7.71**		**8.33**		**5.00**		**6.67**		**45.84**
(B)	**Natural resource management(56%)**															
Conservation measures for arable land(private land)																
Field Bunding	ha	70	0.0873	6.11			0	0.00	30	2.62	40	3.49			70	6.11
Peurtorico Terrace	ha	20	0.0745	1.49			0	0.00	10	0.75	10	0.75			20	1.49
Khadin	Number	4	0.916	3.66			0	0.00	1	0.92	3	2.75			4	3.66
Gully control structure in arable land	number	25	0.04	1.00			14	0.56	11	0.44					25	1.00
Conservation measures for non arable land																
Pasture Development	ha	20	0.441	8.82				0.00	20	8.82					20	8.82

Contour vegetative hedge	ha	30	0.107	3.21			0	0.00	20	2.14	10	1.07			30	3.21
WHS with surplus	Number	3	3.98	11.94				0.00	1	3.98	2	7.96			3	11.94
WHS with corewall	Number	4	4.397	17.59			0	0.00	2	8.79	2	8.79			4	17.59
Anicut	Number	4	5.77	23.08			0	0.00	1	5.77	3	17.31			4	23.08
Gully control structure in non-arable land	Number	18	0.0578	1.04			0	0.00	7	0.40	11	0.64			18	1.04
Staggerred Contour Trenches	ha	50	0.0765	3.83			0	0.00	20	1.53	15	1.15	15	1.15	50	3.83
Drainage line treatment		0														
Concrete Check Dam	Number	35	0.65	22.75			0	0.00	10	6.50	15	9.75	10	6.50	35	22.75
LSCD-1	Number	20	0.16	3.20			0	0.00	8	1.28	8	1.28	4	0.64	20	3.20
LSCD-2	Number	10	0.122	1.22			0	0.00	6	0.73	4	0.49			10	1.22
LSCD-3	Number	10	0.064	0.64			0	0.00	3	0.19	7	0.45			10	0.64
Bank Stabilisation/Peripheral Bunds	RMT	173.1	0.041	7.10			0	0.00	73.1	3.00	100	4.10	0	0.00	173.1	7.10
Total (B)				**116.68**		**0.00**		**0.56**		**47.86**		**59.97**		**8.29**		**116.68**
(C)	**Production System (10%)**															
Production measures for arable land																
Horticulture plantation	ha	15.9	0.3	4.77			0	0.00	5	1.50	10.9	3.27			15.9	4.77
Sprinkler and Drip Irrigation	Number	12	0.3	3.60				0.00	6	1.80	6	1.80			12	3.60
Vaccination and health camp	Number	15	0.25	3.75			0	0.00	5	1.25	10	2.50			15	3.75
Vermi compost	Number	22	0.15	3.30			0	0.00	11	1.65	11	1.65			22	3.30
Crop Demonstration	ha	108.25	0.05	5.41				0.00	58.25	2.91	50	2.50			108.25	5.41
Livelihood System (9%)																

Revolving Fund to SHG (minmun 60 % amt.)	Number	50	0.25	12.50			0	0.00	30	7.50	20	5.00			50	12.50
Revolving Fund to enterprising individual (maximum 10 % amount)	Number	7	0.25	1.75					2	0.50	5	1.25			7	1.75
Grant in aid to enterprising SHG or Federation of SHG individual (maximum 30 % amount)	Number	3	2.00	4.50							1	2.00	2	2.50	3	4.50
Total (C)				39.58		0		0		17.1125		19.97		2.50		39.58
(D) Consolidation				6.25										6.25		6.25
Grand Total				**208.35**		**18.13**		**8.27**		**73.31**		**84.94**		**23.71**		**208.35**

GP-wise Proposed Project fund (GP-5: Sindru)

GP: **Sindru**

COST OF PROJECT :**376.2** Lacs; area 2508 ha

(A)	Preparatory phase activities capacity building trainings & EPA (22%)															
					1st year		2nd year		3rd year		4th year		5th year		Total	
Activity	**Unit**	**Quantity**	**Unit Cost**	**Total cost**	**Phy**	**Fin**	**Phy**	**Fin**	**Phy**	**Fin**	**Phy**	**Fin**	**Phy**	**Fin**	**Phy**	**Fin**
Admn. (PIA)	7%			26.33		5.27		5.27		5.27		5.27		5.27		26.33
Admin (WC)	3%			11.29		2.26		2.26		2.26		2.26		2.26		11.29
Monitoring (SLNA)	0.2%			0.75		0.15		0.15		0.15		0.15		0.15		0.75
Monitoring (WCDC)	0.2%			0.75		0.15		0.15		0.15		0.15		0.15		0.75
Monitoring (PIA)	0.6%			2.26		0.45		0.45		0.45		0.45		0.45		2.26
Evaluation (SLNA)	1%			3.76						1.88				1.88		3.76
EPA	4%			15.05		15.05										15.05
I & CB (SLNA)	0.05%			0.19		0.19										0.19
I & CB (WCDC)	1.30%			4.89		1.32		1.50		0.75		0.75		0.56		4.89
I & CB (PIA)	3.65%			13.73		4.14		4.14		4.14				1.32		13.73
DPR	1%			3.76		3.76										3.76
Total (A) 22%	**22%**			**82.76**		**32.73**		**13.92**		**15.05**		**9.03**		**12.04**		**82.76**
(B)	**Natural resource management(56%)**															
Conservation measures for arable land(private land)																
Field Bunding	ha	145	0.0873	12.66			0	0.00	50	4.37	50	4.37	45	3.93	145	12.66
Peurtorico Terrace	ha	10	0.0745	0.75			0	0.00	10	0.75	0	0.00			10	0.75
Khadin	Number	20	0.916	18.32			0	0.00	5	4.58	10	9.16	5	4.58	20	18.32
Gully control structure in arable land	number	45	0.04	1.80			0	0.00	20	0.80	25	1.00			45	1.80
Conservation measures for non arable land																
Pasture Development	ha	20	0.441	8.82			0	0.00	20	8.82					20	8.82
Contour vegetative hedge	ha	50	0.107	5.35			0	0.00	25	2.68	25	2.68			50	5.35
WHS with surplus	Number	7	3.98	27.86				0.00	2	7.96	5	19.90			7	27.86
WHS with corewall	Number	8	4.397	35.18			0	0.00	4	17.59	4	17.59			8	35.18
Anicut	Number	6	5.77	34.62			0	0.00	2	11.54	4	23.08			6	34.62
Gully control structure in non-arable land	Number	37	0.0578	2.14			0	0.00	10	0.58	27	1.56			37	2.14
Staggerred Contour Trenches	ha	73	0.0765	5.58			0	0.00	25	1.91	48	3.67			73	5.58

Drainage line treatment		0														
Concrete Check Dam	Number	56	0.65	36.40			0	0.00	20	13.00	36	23.40			56	36.40
LSCD-1	Number	33	0.16	5.28			0	0.00	20	3.20	13	2.08		0.00	33	5.28
LSCD-2	Number	12	0.122	1.46			0	0.00	10	1.22	2	0.24			12	1.46
LSCD-3	Number	19	0.064	1.22			0	0.00	9	0.58	10	0.64			19	1.22
Bank Stabilisation/ Peripheral Bunds	RMT	322.9	0.041	13.24			0	0.00	122.9	5.04	200	8.20	0	0.00	322.9	13.24
Total (B)				**210.67**		**0**		**0.00**		**84.60**		**117.56**		**8.51**		**210.67**
(C)	**Production System (10%)**															
606.2																
Horticulture plantation	ha	27.2	0.3	8.16			0	0.00	12.2	3.66	15	4.50			27.2	8.16
Sprinkler and Drip Irrigation	Number	27	0.3	8.10				0.00	12	3.60	15	4.50			27	8.10
Vaccination and health camp	Number	27	0.25	6.75			0	0.00	9	2.25	18	4.50			27	6.75
Vermi compost	Number	40	0.15	6.00			0	0.00	16	2.40	24	3.60			40	6.00
Crop Demonstration	ha	172.25	0.05	8.61				0.00	32.25	1.61	90	4.50	50	2.50	172.25	8.61
Livelihood System (9%)																
Revolving Fund to SHG (minmun 60 % amt.)	Number	90	0.25	22.50			0	0.00	46	11.50	44	11.00			90	22.500
Revolving Fund to enterprising individual (maximum 10 % amount)	Number	14	0.25	3.50					4	1.00	10	2.50			14	3.500
Grant in aid to enterprising SHG or Federation of SHG individual (maximum 30 % amount)	Number	4	2.00	7.86					0		2	4.00	2	3.86	4	7.858
Total (C)				71.48		0.00		0		26.02		39.1		6.36		71.4805
(D) Consolidation				11.29										11.29		11.2860
Grand Total				**376.20**		**32.73**		**13.92**		**125.67**		**165.69**		**38.19**		**376.20**

CHAPTER – VI EXPECTED OUT COMES

1	2	3	4	5	6
S. No.	**Item**	**Unit of measurement**	**Pre-project Status**	**Expected Post-project Status**	**Remarks**
1	Status of water table (Depth to Ground water level)	Meters	20-30	15-20	
2	Ground water structures repaired/ rejuvenated	No.	5	47	
3	Quality of drinking water	Description	saline	Potable	
4	Availability of drinking water	Description	6-9 months	12 months	
5	Change in irrigated Area	Ha		370	
6	Change in cropping/ land use pattern	Description	Staple crops	Cash crops	
7	Area under agricultural crop				
	I Area under single crop	Ha	2400	2250	
	Ii Area under double crop	Ha	880	1250	
	Iii Area under multiple crop	Ha	75	225	
8	Change in cultivated Area	Ha		295	
9 yield of major crops of area	Yield of Wheat	q/ha	23	30	
	Yield of Mustard	q/ha	12	15	
	Yield of Mung	q/ha	11	15	
	Yield of Guar	q/ha	11	15	
10 production of major crops of area	Production of Wheat	Ton	991	1200	
	Production of Mustard	Ton	1015	1400	
	Production of Mung	Ton	600	800	
	Production of Guar	Ton	786	950	
11	Area under vegetation	Ha	185	400	
12	Area under horticulture	Ha	40	114	
13	Area under fuel	Ha	145	200	
14	Area under Fodder	Ha	468	600	
15	Fodder production	Q	111200	180000	
16	Milk production	Litres/day	3391	6000	
17	SHGs Active	No.	14	226	
18	No. of enterprising individuals	No.	125	158	
19	Income	Rs.in lakh	0.25	0.40	
20	Migration	No.	1225	800	
21	SHG Federations formed	No.	0	11	

Critical Assumption

- No severe droughts/ unexpected floods/ natural disasters
- Adequate funds are allocated for the same and released on time.
- There is no significant pest/ disease attack, and if so, then it will have been contained before irreversible damage is done.
- Adverse market conditions do not persist long.
- Sound macro-economic and growth conditions continue and the benefits are widely distributed particularly in the rural areas.
- Facilitating agencies and resource providers have the required competent staff so that timely and appropriate technical advice and services are provided to farmers whenever required.
- The Capacity Building Plan is implemented, monitored and modified to address evolving needs and feedback from participants.

Means of Verification of indicators

- Baseline surveys like household income ,expenditure, health and nutrition etc at the beginning, mid-term and end of the project period
- Annual participatory assessment by communities during project period.
- Regular project monitoring reports prepared by project monitoring teams/ agencies.
- Membership and other Records, Minutes of Meetings maintained by the SHGs, WCs/ Individual beneficiaries/project-related village and local bodies/PRIs.
- External review missions
- Data maintained by Government department (Revenue, Agriculture, Groundwater, Irrigation, Animal Husbandry

CHAPTER VII
TECHNICAL DESIGNS AND ESTIMATES

Estimates

Technical designs and estimates for proposed activities is given in the following pages.

- For Estimates GKN of the districts has been used.
- For Production System activities, rates provided by the Watershed Department has been used; in some cases rates of Agriculture/Horticulture/ Animal Husbandry has been used.
- For Livelihood activities, wherever possible project norms provided by the Department has been used; otherwise (if not available) than cost norms of NABARD, NRLM etc has been used

परियोजना क्रियान्वयन एजेन्सी :रूरल डवलपमेन्ट एण्ड टेक्निकल एजुकेशन सोसायटी, राजसमन्द

योजना – पाली / आई.डब्ल्यू.एम.पी.–26 / 2011–12

पंचायत समिति : सुमेरपुर; जिः पाली

Field Bunding

कार्य का नाम : **निजी बारानी खतों में बन्डिंग निर्माण (टाईप–1)**

लम्बाई (मी प्रति है) :– 70

Design of Vegetative Bund

Average Slope of Land %	S = 1
Soil Type	Loamy Sand/Clay/black Cotton Soil
Side Slope of Bund	1.5 : 1
Slope of Seepage Line	5 : 1
Maximum 24 Hrs rainfall for 10 year of recurrence interval	20 cm
Infiltration Capacity	0.4
Spacing of Contour vegetative bunds	

Vertical Interval V.I.

1. C.E. Ramsar 's Formula = 0.305(S X+Y) X = Rainfall Factor for Scanty rainfall region = 0.80

V.I. = 0.305(S x 0.8+1) Y = Soil infiltration & Vegetative cover factor = 1.0
(for Below average, Low coverage area)

= 0.55 So V.I. considered = 0.55 m

Horizontal Interval H.I.

H.I. = V.I./S x 100
= 0.55 x 100/1.0
= 55.00
Say = 55.00 m

Note

1 20 % deviation in V.I. To accommodate field boundaries
2 25 % extra spacing for soil having high infiltration and permeability
3 15 % less spacing for soils having low infiltration and unfavourable crops

Depth of impounding

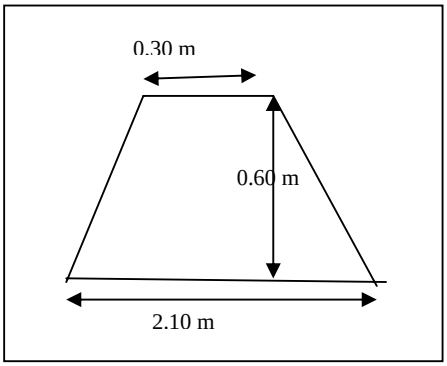
h = (Re x V.I. / 50)1/2 Re = 24 Hrs rainfall exess in cm for 10 yrs recurrence interval
Or h = (12 x 0.55 / 50)1/2 = rainfall - infiltration interception
= 0.36 = 20 - 8 (40 % of 20 cm)
Say 0.30 m = 12 cm

Height of bunds

Height of impounding + depth of flow over wasteweir + free board
= 0.30 + 0.15 + 0.15
= 0.60 m

Cross Section of bund

Top width= Ht of bund / 2= 0.60 / 2 =0.30 m
Bottom width=0.30 + 2 (1.50 x 0.60)= 2.10 m
Cross section= (0.30 + 2.10)/2 x 0.60= 0.72 m2



Note :
Lateral Bunds at interval of around 100 m
Side Bunds / hooks at both the ends
Stone Pitching at the end be provided for safe disposal of exess water

परियोजना अधिकारी
पी.आई.ए. – रूड्स,
राजसमन्द

सिविल इन्जिनियर
पी.आई.ए. – रूड्स, राजसमन्द

	अनुप्रस्थ काट :– 0.72 वर्ग मी.						
क्र. स.	कार्य विवरण	इकाई	मात्रा	दर		राशि	
				श्रम	कुल	श्रम	कुल
1	डागबेलिग 2.5 से 5 से.मी. गहरी।	रनिंग मीटर	140	0.58	0.58	81.12	81.12
2	मिट्टी का कार्य बन्ध में सुखी या गीली 15 से.मी. परत में डालना, ढेलों को तोड़ना, घास, पत्ता तथा कंकर बीनकर अलग करना मिट्टी की दरेसी करना तथा शीप फूट रोलर से मिट्टी दबाना 1.5 मी. उठान तथा 50 मी. दूरी के लिए।	घन मीटर					
	70.00 2.40 0.30		50.4	93.21	95	4697.78	4788
3	घास/लिम्यूम बीज तय सीड ट्रीटमेन्ट नोचिगं द्वारा दो पंक्ति में	मीटर	140	0.57	0.57	79.8	79.8
4	आपूर्ति घास बीज						
	अ. धामण	कि.ग्रा.	0.7	0	125	0	88
	ब. स्टेलों हामेटा	कि.ग्रा.	0.7	0	125	0	88
5	सुखे पत्थर की चिनाई स्थानीय उपलब्ध तथा खोदकर निकाले पत्थर से TW of pitching						
	2 3.60 0.30 0.30	घन मीटर	0.65	374	374	243.1	243.1
6	15 से 30 से.मी. मोटे, हथोड़े से तरासे हुए एकुल पत्थरकी पिचिगि समस्त उठान के साथ, आपूर्ति के साथ।						
	HW 1 3.00 2.20 0.30	घन मीटर	1.98				
	Side 0.90 2.50 0.30	घन मीटर	1.35				
		घन मीटर	3.33	246.35	933	820.35	3106.89
					योग	5922.15	8474.91
					जोडे 3ः कन्टिनजेन्सी		254.25
					कुल योग		**8729.16**
					लागत श्रम मद में		5922.15
					लागत सामग्री मद में		2807.01
					कुल योग प्रति हेक्ट.		**8729.16**
							0.0873

परियोजना अधिकारी
पी.आई.ए. – रूड्स,
राजसमन्द

सिविल इन्जिनियर
पी.आई.ए. – रूड्स, राजसमन्द

परियोजना क्रियान्वयन एजेन्सी :रूरल डवलपमेन्ट एण्ड टेक्निकल एजुकेशन सोसायटी, राजसमन्द (राज.)

योजना – पाली/आई.डब्ल्यू.एम.पी.–26/2011–12

पंचायत समिति : सुमेरपुर; जिः पाली

Perto Reuco Terrace

कार्य का नाम : **निजी बारानी खतों में प्यूरोटोरेकोटेरेस (PRT) निर्माण**

कार्य का स्थान : कृषकों की कृषि भूमि लम्बाई (मी प्रति है) :– 70

क्र. स.	कार्य विवरण	इकाई	मात्रा	दर		राशि	
				श्रम	कुल	श्रम	कुल
1	डागबेलिग 2.5 से 5 से.मी. गहरी।	रनिंग मीटर	140	0.58	0.58	81.12	81.12
2	सुखे पत्थर की चिनाई स्थानीय उपलब्ध तथा खोदकर निकाले पत्थर से	घन मीटर					
	70.00 0.45 0.45		14.18	374	374	5303.32	5303.32
3	पथर का परिवहन सर पर 200 मीटर तक	मीटर	14.18	66.3	66.3	939.8	939.8
4	नींव, खाई, परनाला में 1.5 गहराई तक मिट्टी की खुदाई करना, तल को कुटना, पानी डालना, बगल को संवारना, खुदी मिट्टी को बाहर निकालना, नींव भरने के बाद खाली स्थानों को पुनः मिट्टी से भरना तथा बची हुई मिट्टी को 50 मीटर की दूरी तक निस्तारण करना।						
	अ. सख्त मिट्टी						
	0.50 70.00 0.45 0.45	घन मीटर	7.09	91.8	91.8	650.86	650.86
5	घास/लिम्यूम बीज तय सीड ट्रीटमेन्ट नोचिगं द्वारा दो पंक्ति में	मीटर	140	0.754	0.754	105.56	105.56
6	आपूर्ति घास बीज						
	अ. धामण	कि.ग्रा.	0.7	0	125	0	88
	ब. स्टेलों हामेटा	कि.ग्रा.	0.7	0	125	0	88
					योग	7054.9	7230.9
					जोडे 3ः कन्टिनजेन्सी		216.93
					कुल योग		**7447.83**
					लागत श्रम मद में		7054.9
					लागत सामग्री मद में		392.93
					कुल योग प्रति हेक्ट.		**7448**
							0.0745

परियोजना अधिकारी
पी.आई.ए. – रूड्स,
राजसमन्द

सिविल इन्जिनियर
पी.आई.ए. – रूड्स, राजसमन्द

परियोजना क्रियान्वयन एजेन्सी :रूरल डवलपमेन्ट एण्ड टेक्निकल एजुकेशन सोसायटी, राजसमन्द (राज.)

योजना – पाली/आई.डब्ल्यू.एम.पी.–26/2011–12

पंचायत समिति : सुमेरपुर; जिः पाली

Khadin

कार्य का नाम :

क्र. स.	विवरण	मप				मात्रा	इकाई	दर		राशि	
		सं.	ल.	चौ.	उ.			श्रम	कुल	श्रम	कुल
1	नींव, खाई, परनाला में सख्त मिट्टी में 1.5 गहराई तक मिट्टी की खुदाई करना, तल को कुटना, पानी डालना, बगल को संवारना, खुदी मिट्टी को बाहर निकालना, नींव भरने के बाद खाली स्थानों को पुनः मिट्टी से भरना तथा बची हुई मिट्टी को 50 मीटर की दूरी तक निस्तारण करना।										
		1	180	(1.00+5.00)/2	1.5	945	m3	93.21	95	88083.45	89,775
									जोडे 2% कन्टिनजेन्सी		1,795.50
									कुल योग		**91,570.50**
									लागत श्रम मद में		88083.45
									लागत सामग्री मद में		3,487.05
									कुल दर		0.916

परियोजना अधिकारी
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पी.आई.ए. – रूड्स, राजसमन्द

परियोजना क्रियान्वयन एजेन्सी :रूरल डवलपमेन्ट एण्ड टेक्निकल एजुकेशन सोसायटी, राजसमन्द

योजना – पाली / आई.डब्ल्यू.एम.पी.–26 / 2011–12

पंचायत समिति : सुमेरपुर; जिः पाली

Gully Control Structure in Arable Land

कार्य का नाम : **कृषि भूमि में गली कन्ट्रोल स्ट्रक्चर**

पंचायत समिति : सुमेरपुर

Assumptions :

1. Width of Nalla : 5.00 m
2. Depth of Nallah : 1.20 m
3. Flow over crest + free board : 0.60 m
4. Approx. Catchment Area : 30.0 Ha
5. Wier section may vary as per Catchment area and specific site conditions.

क्र.स.	विवरण	माप				मात्रा	इकाई	छर		राशि	
		सं.	ल.	चौ.	उ.			श्रम	कुल	श्रम	कुल
1	नींव, खाई, परनाला में 1.5 गहराई तक मिट्टी की खुदाई करना, तल को कुटना, पानी डालना, बगल को संवारना, खुदी मिट्टी को बाहर निकालना, नींव भरने के बाद खाली स्थानों को पुनः मिट्टी से भरना तथा बची हुई मिट्टी को 50 मीटर की दूरी तक निस्तारण करना।										
	HW	1	5	1.75	0.3	2.63					
	SW	2	1.75	0.4	0.3	0.42					
	SW (Berm)	2	1.75	0.4	1.2	1.68					
	Pitching TW	2	0.4	0.3	0.3	0.07					
						4.8	घन मीटर	91.8	91.8	440.64	440.64
2	सुखे पत्थर की चिनाई स्थानीय उपलब्ध तथा खोदकर निकाले पत्थर से										
	Foundation	1	5	1.75	0.3	2.63					
		2	1.75	0.4	0.3	0.42					
		2	0.4	0.3	0.3	0.07					
	S/s HW Step 1	1	5	1.3	0.3	1.95					
	HW Step 2	1	5	0.85	0.3	1.28					
	HW Step 3	1	5	0.4	0.3	0.6					
	SW strgt.	2	0.4	0.4	1.2	0.38					
	SW slope	2	1.35	0.4	0.9	0.97					
						8.3	घन मीटर	374	374	3104.2	3104.2
3	सुखे पत्थरों की पिचिंग कार्य मय आपूर्ति 15 से 30 से.मी. उंचाई में लगाना										
	पिचिंग	2	0.4	1.5		1.2	वर्ग मीटर	148.8	312	178.56	374.4
									योग	3723.4	3919.24
									जोडे 3: कन्टिनजेन्सी		117.5772
									कुल योग		4036.82
									लागत श्रम मद में		3723.4
									लागत सामग्री मद में		313.42
									कुल लागत		**4037**

परियोजना अधिकारी
पी.आई.ए. – रूड्स,
राजसमन्द

सिविल इन्जिनियर
पी.आई.ए. – रूड्स, राजसमन्द

परियोजना क्रियान्वयन एजेन्सी :रूरल डवलपमेन्ट एण्ड टेक्निकल एजुकेशन सोसायटी, राजसमन्द (राज.)

योजना – पाली/आई.डब्ल्यू.एम.पी.–26/2011–12

पंचायत समिति : सुमेरपुर; जिः पाली

Pasture Development

कार्य का नाम : **चारागाह विकास कार्य**

DCB C.S.

TW	2.10	m
BW	0.60	m
Depth	1.00	m
Length Per Hect	100	m
Cross Section of DCB	1.35	m2

CVH

Per Hect	800.00	m
Width	0.75	m
Depth	0.30	m
Seeding	8	m

क्र. स.	कार्य विवरण					मात्रा	इकाई	दर		राशि	
								श्रम	कुल	श्रम	कुल
फैसिंग कार्य (100 रनिंग मीटर प्रति हैक्टर)											
1	2.5 से 5 सेमी. गहराई का डागबेलिंग कार्य।										
	2		100			200.0	m	0.58	0.58	116.00	116.00
2	बन्ध बनाने हेतु मिट्टी का कार्य (1.575 वर्गमीटर क्रास सेक्शन										
	1	100		(2.1+0.6)/2		1.00	135.0	m3			
	(अ) साधरण मिट्टी में	40%				44.00	m3	93.21	95.00	4101.24	4180.00
	(ब) मुर्रम में										
	(स)कठोर मिट्टीं	60%				66.00	m3	102.75	104.00	6781.50	6864.00
3	घास /जंगलाती बीज की नोचिंग/डिबलिंग कर बुवाई करना।					300	m	0.07	7.00	21.00	2100.00
4	गैप फिलिग 20 प्रतिशत जोड़ने पर (आईटम संख्या 3)									4.20	420.00
सी.वी.एच. कार्य (800 रनिंग मीटर प्रति हैक्टर)											
5	कन्टुर लाईन का ले आउट देना 8 से 15 मी. के अन्तराल पर डमपीलेवल द्वारा	1	800			800.0	m	1.410	1.410	1128.00	1128.00
6	2.5 से 5 सेमी. गहराई का डागबेलिंग कार्य।	2	800			1600.0	m	0.58	0.58	928.00	928.00
7	नींव, खाई, परनाला में 1.5 गहराई तक मिट्टी की खुदाई करना, तल को कुटना, पानी डालना, बगल को संवारना, खुदी मिट्टी को बाहर निकालना, नींव भरने के बाद खाली स्थानों को पुनः मिट्टी से भरना तथा बची हुई मिट्टी को 50 मीटर की दूरी तक निस्तारण करना।										
		0.5	800	0.75	0.30	90.0	m3				
	(अ) सख्त मिट्टी में	50%				45.00	m3	111.72	113.00	5027.40	5085.00
	(ब) विघटित चट्टान में	50%				45.00	m3	134.06	135.60	6032.70	6075.00
8	बनाई गई रिज पर 3 लाईनों में वानिकी बीच बुवाई नोचिंग द्वारा	3	800			2400	M	0.730	0.730	1752.00	1752.00
9	वानिकी बीज सप्लाई		5			5	Kg	0.00	125.00	0.00	625.00
घास बीजारोपण (ओवरसीडिंग) (80 प्रतिशत क्षेत्र)											
10	ट्रेक्टर कल्टीवेटर द्वारा जुताई एवं घास का छिडकाव घास की मात्रा 6 से 8 किलो प्रति है. (बीज लागत अति.)										
				0.8		0.8	Hac	83.0	1088.4	66.40	870.72
11	घास बीज सप्लाई करना।			8		8	Kg	0.00	125.00	0.00	1000.00
12	चारागाह की चौकीदारी का कार्य (2 x 135/- x 30 day x 12 month x 3 yr. /25Hac.)										11664.00
									योग	25958.44	42807.72
									जोडे 3: कन्टिनजेन्सी		1284.23
									कुल योग		**44091.95**
									लागत श्रम मद में		25958.44
									लागत सामग्री मद में		18133.51
									कुल लागत प्रति 100 मीटर		**44092**

0.441

परियोजना अधिकारी
पी.आई.ए. – रूड्स,
राजसमन्द

सिविल इन्जिनियर
पी.आई.ए. – रूड्स, राजसमन्द

परियोजना क्रियान्वयन एजेन्सी :रूरल डवलपमेन्ट एण्ड टेक्निकल एजुकेशन सोसायटी, राजसमन्द (राज.)

योजना – पाली/आई.डब्ल्यू.एम.पी.–26/2011–12

पंचायत समिति : सुमेरपुर; जिः पाली

Contour Vegetative Hedge

कार्य का नाम : **खुले क्षेत्र में सी.वी.एच. कार्य**

पंचायत समिति : सुमेरपुर

CVH

Per Hect 800.00 m

Width 0.60 m

Depth 0.20 m

Seeding 8 m

क्र. स.	कार्य विवरण					मात्रा	इकाई	दर		राशि	
								श्रम	कुल	श्रम	कुल
सी.वी.एच. कार्य (800 रनिंग मीटर प्रति हैक्टर)											
1	कन्टुर लाईन का ले आउट देना 8 से 15 मी. के अन्तराल पर डमपीलेवल द्वारा										
		1	800			800.0	M	1.410	1.410	1128.00	1128.00
2	2.5 से 5.0 सेमी. गहराई का डागबेलिंग कार्य।										
		2	800			1600.0	M	0.58	0.58	928.00	928.00
3	नींव, खाई, परनाला में 1.5 गहराई तक मिट्टी की खुदाई करना, तल को कुटना, पानी डालना, बगल को संवारना, खुदी मिट्टी को बाहर निकालना, नींव भरने के बाद खाली स्थानों को पुनः मिट्टी से भरना तथा बची हुई मिट्टी को 50 मीटर की दूरी तक निस्तारण करना।										
		0.5	800	0.60	0.20	48.0	m3				
	(अ) सख्त मिट्टी में		50%			24.00	m3	111.72	113.00	2681.28	2712.00
	(ब) विघटित चट्टान में		50%			24.00	m3	134.06	135.00	3217.44	3240.00
4	बनाई गई रिज पर 3 लाईनों में वानिकी बीच बुवाई नोचिंग द्वारा										
		3	800			2400	M	0.73	0.73	1752.00	1752.00
5	वानिकी बीज सप्लाई										
						5	Kg	0.00	125.00	0.00	625.00
									योग	9706.72	10385.00
									जोडे 3: कन्टिनजेन्सी		311.55
									कुल योग		**10696.55**
									लागत श्रम मद में		9706.72
									लागत सामग्री मद में		989.83
									कुल लागत प्रति 100 मीटर		**10697**

0.107

परियोजना अधिकारी
पी.आई.ए. – रूड्स,
राजसमन्द

सिविल इन्जिनियर
पी.आई.ए. – रूड्स, राजसमन्द

WHS with Concrete Outlet (Surplus)

क.स.	विवरण	मप				मात्रा	इकाई	छर		राशि	
		स.	ल.	चौ.	उ.			श्रम	कुल	श्रम	कुल
1	मिट्टी का कार्य बन्ध में सुखी या गीली 15 से.मी. परत में डालना, ढेलों को तोड़ना, घास, पत्ता तथा कंकर बीनकर अलग करना मिट्टी की दरेसी करना तथा शीप फूट रोलर से मिट्टी दबाना 1.5 मी. उठान तथा 50 मी. दूरी के लिए।										
		1	80	12+2/2	2.4	1344					
		1	25	10+2/2	1.8+1.2/2	225					
	Ttotal					1569	घन मीटर	93.21	95	146246.49	149055
2	नींव, खाई, परनाला में 1.5 गहराई तक मिट्टी की खुदाई करना, तल को कुटना, पानी डालना, बगल को संवारना, खुदी मिट्टी को बाहर निकालना, नींव भरने के बाद खाली स्थानों को पुनः मिट्टी से भरना तथा बची हुई मिट्टी को 50 मीटर की दूरी तक निस्तारण करना।										
	H.W	1	10.5	2.4	1.2	30.24					
	S.W	2	3.2	0.8	1.00	5.12					
	WW	4	3.5	0.8	0.9	10.80					
	TW	1	10.5	1.2	0.6	7.56					
		1	10.5	2.5	0.5	13.13					
	Total					66.13	घन मीटर	91.8	93	6070.73	6150.09
3	सीमेन्ट कंक्रीट नींव या फर्श में 20 मि. मी. नाभीय माप की पत्थर गिट्टी /ईंट गिट्टी, सीमेन्ट रेत मसाला में 1 सीमेन्ट : 3 रेत 6 गिट्टी अनुपात में मिलाकर डालना तथा कुटाई करना, तराई समेत। श्रमिक मिश्रित।										
	HW	1	10.5	2.4	0.15	3.78					
	SW(L+R)	2	3.2	0.8	0.15	0.77					
	WW(L+R)	4	3.5	0.8	0.15	1.68					
	TW	1	10.5	1.20	0.10	1.26					
	Total					7.49	घन मीटर	403.08	2491	3019.07	18657.59
4	नींव तथा कुर्सी में पत्थर की वे रद्धा–ढ़ोका सीमेंट–बजरी 1: 6 मसाले में, मय बगल की झिरी बन्द करना तथा तराई आदि।										
	HW	1	10.5	2.3	1.05	25.36					
	SW(L+R)	2	3.2	0.7	0.85	3.81					
	WW	4	3.5	0.7	0.75	7.35					
	TW	1	10.5	1.1	0.4	4.62					
	Total					41.14	घन मीटर	583.85	2008.00	24019.59	82609.12

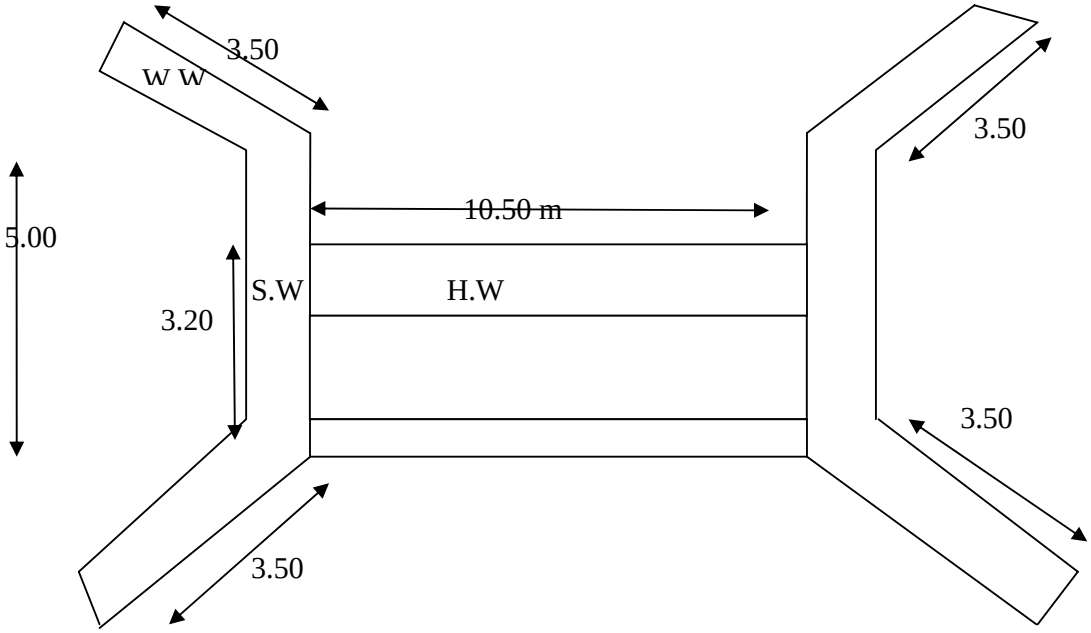
5	अधिरचना चिनाई में पत्थर की वे रद्धा–ढ़ोका सीमेंट–बजरी 1: 6 मसाले में, मय बगल की झिरी बन्द करना तथा तराई आदि।										
	HW	1	10.5	2.20+0.90/2	1	16.28					
	SW(L+R)	2	3.2	0.6	2.5	9.6					
	WW(L+R)	4	3.5	0.6	2.5+1.20/2	15.54					
	TW	1	10.5	0.50	0.5	3.94					
	Total					45.36	घन मीटर	780.85	2205.00	35419.36	100018.80
6	सुखे पत्थरों का खरंजा कार्य23 से. मी. उंचाई में	1	10.5	2.5		26.25	वर्ग मीटर	148.80	312	3906	8190.00
7	सीमेन्ट प्लास्टर 1 : 6 मसाले में 25 मिमी.।										
	HW	1	10.5	1.00		10.5					
	HW	1	10.5	1.6		16.80					
	SW(L+R)	2	3.2	1.5		9.60					
	WW(L+R)	4	3.5	2.5+1-2/2		25.90					
	SW(L+R)	2	3.2	0.6		3.84					
	WW(L+R)	4	3	0.6		7.20					
	TW	1	10.5	0.5		5.25					
	TW	1	10.5	0.75		7.88					
	Total					86.97	वर्ग मीटर	95.89	157	8339.55	13654.29
8	सीमेंट कंक्रीट 1 : 2 : 4 मिश्रण जिसमें 1 सीमेंट 2 बजरी 4 पत्थर की या ईंट की 12 मी. नाभीय गिट्टी के साथ मिलाकर डालना, कूटना, दबाना तथा तराई आदि समेत।										
	HW	1	10.5	0.90	0.05	0.473					
	TW	1	10.50	0.50	0.05	0.263					
	Apron	1	10.5	2.50	0.07	1.84					
	Total					2.58	घन मीटर	405.53	3006	1046.27	7725.42
Total										228067	386060.31
											जोडे 3: कन्टिनजेन्सी 11581.81
											कुल योग 397642ण्12
											लागत श्रम मद में 228067.
											लागत सामग्री मद में 169575.12
											कुल लागत 397642

परियोजना अधिकारी
पी.आई.ए. – रूड्स,
राजसमन्द

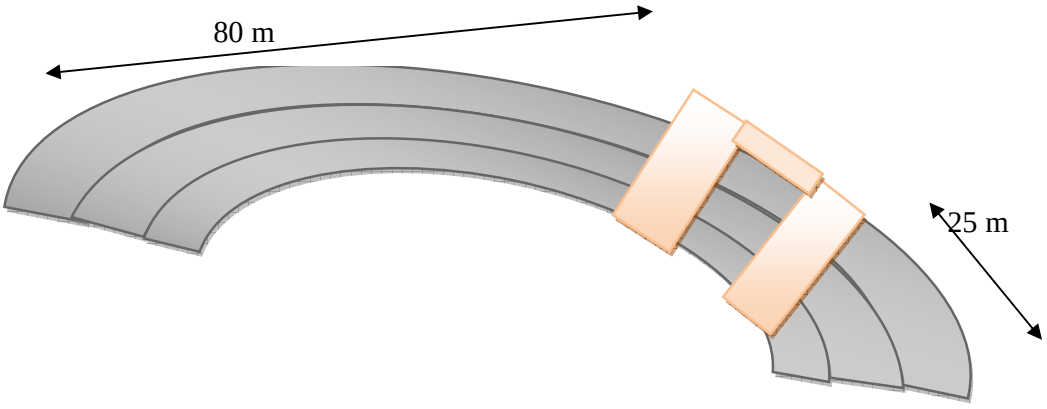
सिविल इन्जिनियर
पी.आई.ए. – रूड्स, राजसमन्द

WHS with Concrete Outlet (Surplus)

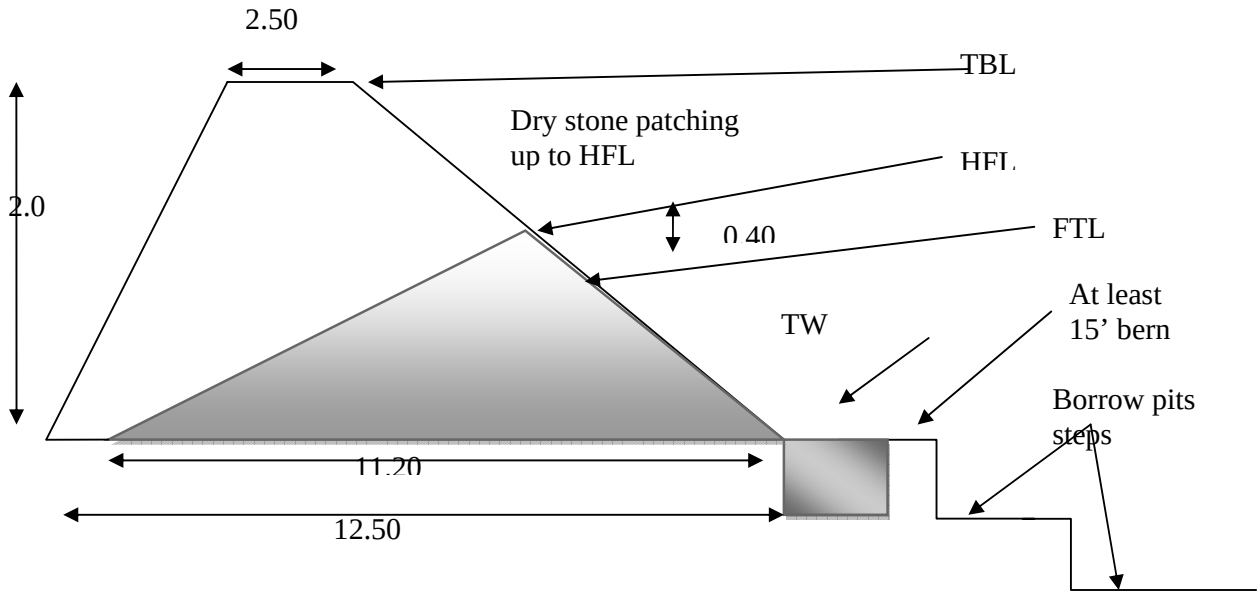
Plan of Surplus



Layout of Bund



Cross Section of Bund



परियोजना क्रियान्वयन एजेन्सी :रूरल डवलपमेन्ट एण्ड टेक्निकल एजुकेशन सोसायटी, राजसमन्द (राज.)

योजना – पाली/आई.डब्ल्यू.एम.पी.–26/2011–12

पंचायत समिति : सुमेरपुर; जिः पाली

Water Harvesting Structure with Core Wall

कार्य का नाम : **नई नाडी निर्माण मय पक्की कोरवाल**

पंचायत समिति : सुमेरपुर .

Assumptions

1	Length of Bund	200.00 eh	7	Side Slope U / S 3 : 1	
2	Top Width of Bund	2.50 eh	8	Side Slope D /S 2 : 1	
3	Max. Height of Bund	2.00 eh	9	Pitching upto ht. of HFL	2.65
4	Max. Bottom Width	12.50 eh	10	Submergence Height	1.00
5	Average Bottom Width	10.00 eh	11	Approx. Capacity 10000 cum	
6	Approx. Earthwork	5000.00 घन मी			

क्र. स.	कार्य विवरण					मात्रा	इकाई	दर		राशि	
								श्रम	कुल	श्रम	कुल
1	2.5 से 5.0 सेमी. गहराई का डागबेलिंग कार्य।										
		2	200.00			400.00	M	0.58	0.58	232.00	232.00
2	जंगल की सफाई, भारी झाड़ियों तथा 30 सेमी. लपेट तक के पौधों को काटने समेत।										
		3	200.00	10.00		6000.00	m2	2.10	2.10	12600.00	12600.00
3	बन्धके आधार की कठोर मिट्टी में बेचिंग एवं ड्रेसिंग आदि 30 मी. प्रारम्भिक लीड व 1.5 मी. उठान सहित।										
		1/2	200.00	10.00	0.15	150.00	m3	91.80	93.00	13770.00	13950.00
4	मिट्टी का कार्य बन्ध में (सूखी या गीली), 15 सेमी. परत में डालना, ढेलों को तोड़ना, घास–पात तथा कंकर बीनकर अलग करना तथा मिट्टी की दरेसी करना तथा शीप फूट रोलर से मिट्टी दबाना, 1.5 मी. उठान तथा 50 मी. दूरी के लिए।										
	Total Qty.	1	200.00	10.0+2.5/2	1.50	1875.00	m3				
	(अ)साधारण मिट्टी में		100%			1875.00	m3	93.21	95.00	174768.75	178125.00
	(ब) मुर्रम		0%			0.00	m3	0.00	0.00	0.00	0.00
5	जोड़िये अतिरिक्त उठान (लिफ्ट)										
		30 % of item 4				562.50	m3	13.00	13.00	7312.00	7312.00
6	जोड़िये 50 मीटर अतिरिक्त दूरी तक फेंकने के लिए (extra lead)										
		30 % of item 2				562.50	m3	41.50	41.50	23343.75	23343.75
7	नींव तथा कुर्सी मे पत्थर की वे बेरद्धा–ढोका चिनाई बिना मसालें में 1 : 8										
	Toe Wall	1	200.00	0.45	0.45	40.50	m3	583.85	1917.00	23645.93	77638.50
8	सुखे पत्थरों की पिचिंग का कार्य 23 सेमी पत्थर से										
	U/s slope	1	200.00	2.65	0.23	121.90	m3	246.35	933	30030.07	113732.70
									योग	285702.5	426933.95
									जोडे 3: कन्टिनजेन्सी		12808.02
									कुल योग		**439741.97**
									लागत श्रम मद में		285702.5
									लागत सामग्री मद में		153882.95
									कुल लागत		**439742**

4.397

नोटः–1. नई नाड़ी/तालाब/मिट्टी के जल संरक्षण ढांचों का निर्माण मौके के कैचमेन्ट क्षैत्र, पानी की आवक एवं साइट की स्थिति के अनुसार सर्वे कर तकनीकि दृष्टि से डिजाइन कर करें।

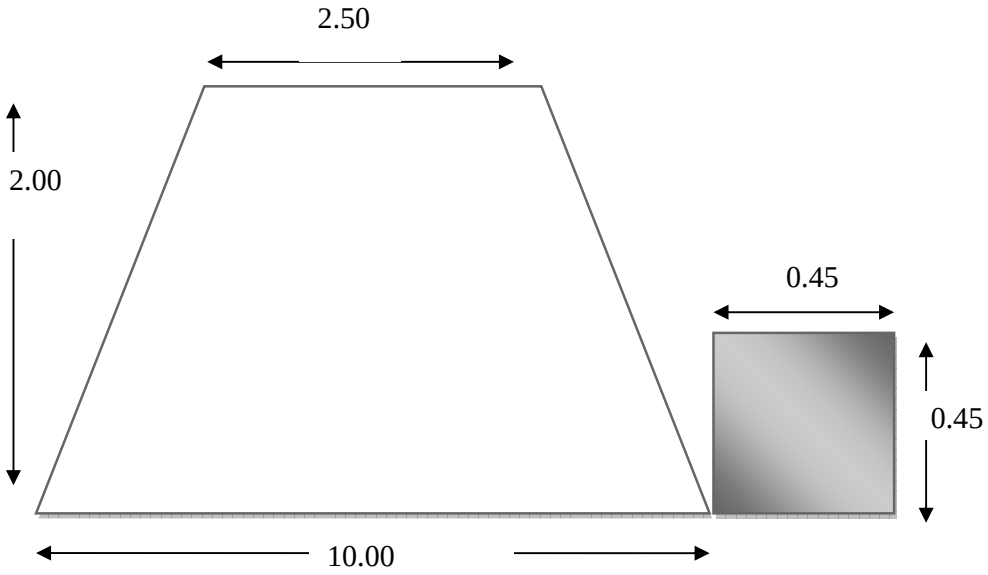
2. साइट की स्थिति के अनुसार उपयुक्त वेस्ट वियर निर्माण की राशि डिजाइन कर अतिरिक्त जोड़े।

परियोजना अधिकारी
पी.आई.ए. – रूड्स,
राजसमन्द

सिविल इन्जिनियर
पी.आई.ए. – रूड्स, राजसमन्द

Cross section of Bund

WHS with core wall



परियोजना क्रियान्वयन एजेन्सी :रूरल डवलपमेन्ट एण्ड टेक्निकल एजुकेशन सोसायटी, राजसमन्द (राज.)

योजना – पाली/आई.डब्ल्यू.एम.पी.–26/2011–12

पंचायत समिति : सुमेरपुर; जिः पाली

ANICUT

कार्य का नाम :- एनिकट निर्माण कार्य पंचायत समिमि – सुमेरपुर

Assumptions:
1 Width of Nalla 15.30m
2 Depth of Nallah 3m
3 Flow over crest +free board 1m
4 Approx. Catchment Area 20km
5 Wier section may vare as per Catchment area and specifie site

Conditions -;

क्र. स.	विवरण	मप				मात्रा	इकाई	दर		राशि	
		सं.	ल.	चौ.	उ.			श्रम	कुल	श्रम	कुल
1.	नींव, खाई, परनाला में सख्त मिट्टी में 1.5 गहराई तक मिट्टी की खुदाई करना, तल को कुटना, पानी डालना, बगल को संवारना, खुदी मिट्टी को बाहर निकालना, नींव भरने के बाद खाली स्थानों को पुनः मिट्टी से भरना तथा बची हुई मिट्टी को 50 मीटर की दूरी तक निस्तारण करना।										
	HW	1	15.3	3.5	1.8	96.39					
	HWE(L)A	1	2.5	1.2	1.80+1.20/2	4.5					
	B	1	1.9	1.2	1.20+80/2	2.28					
	HWE(R)A	1	1.5	1.2	1.80+1/2	2.52					
	B	1	2.2	1.2	1+.70	2.24					
	SW(L)	1	6.7	0.8	1.2	6.43					
	SW{R}	1	6.7	0.8	1.2	6.43					
	WW(L)	1	2.2	0.8	0.6	1.06					
	WW{R}	1	2.2	0.8	0.6	1.06					
	TW	1	15.3	1.2	0.6	11.02					
	APRON	1	15.3	3.4	0.6	31.21					
					योग	165.14	घन मीटर	111.72	113	18449.4	18660.82
2	सीमेन्ट कंक्रीट 1 सीमेन्ट : 3 रेत 6 गिट्टी पत्थर की 20 मिमी नापीय माप की नीव मे डालना एनीकट के लिए										
	HW	1	15.3	3.5	0.3	16.07					
	HWE(L)	1	2.5	1.2	0.3	0.9					
		1	1.9	1.2	0.2	0.46					
	HWE{R}	1	1.5	1.2	0.3	0.54					
		1	2.2	1.2	0.2	0.53					
	SW(L)	1	2.5	0.8	0.9	0.6					
.		1	4.2	0.8	0.2	0.67					
	SW{R}	1	2.5	0.8	0.3	0.6					
		1	4.2	0.8	0.2	0.67					
	WW	2	2.2	0.8	0.2	0.35					
	TW	1	15.3	0.8	0.15	1.47					
	APRON	1	15.3	3.4	0.1	5.2					
					योग	28.06	घन मीटर	403.08	2491	11310.4	69897.46
3.	नींव तथा कुर्सी में पत्थर की वे रद्धा–ढ़ोका सीमेंट–बजरी 1: 6 मसाले में, मय बगल की झिरी बन्द करना तथा तराई आदि।										
	HW	1	15.3	3.4	1.5		78.03				

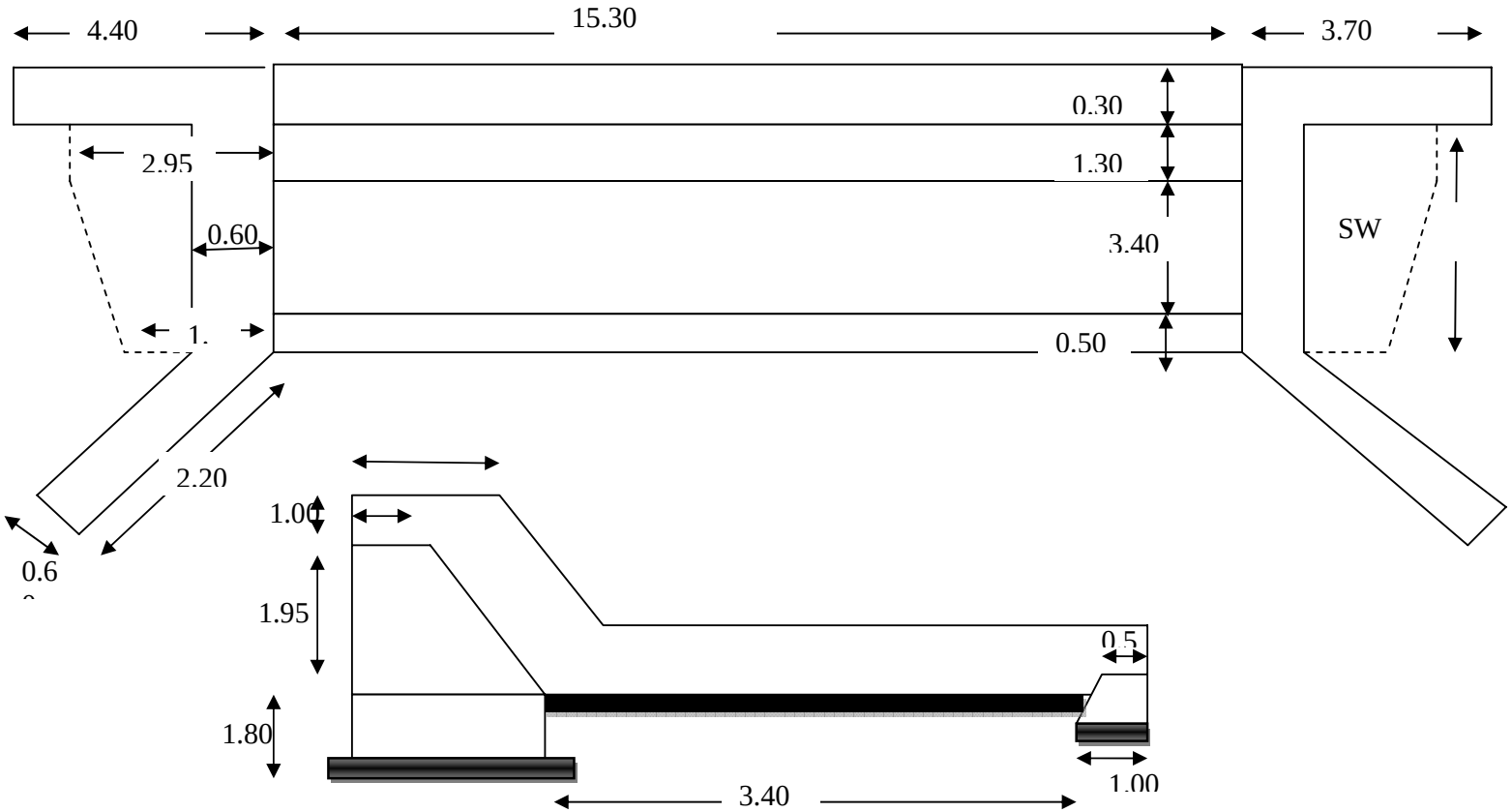
	HWE(L)	1	2.5	1.1	1.5+.9/2	3.3					
		1	1.9	1.1	.9+.5/2	1.46					
	HWE(R)	1	1.5	1.1	1.5+.8/2	1.9					
		1	2.2	1.1	.8+.5/2	1.57					
	SW(L)	1	2.5	0.7	0.9	1.58					
		1	4.2	0.7	0.9	2.65					
	SW(R)	1	2.5	0.7	0.9	1.57					
		1	4.20	0.70	0.9	2.65					
	WW(L)	1	2.20	0.70	0.4	0.62					
	(R)	1	2.20	0.70	0.4	0.62					
	TW	1	15.30	1.10	0.45	7.57					
					योग	103.52	घन मीटर	583.85	2008	60440.2	207868.16
	पत्थर की अधिरचना चुनायी 1 : 6 सीमेन्ट बजरी मसाले मे										
	HW	1	15.3	0.90+3.10/2	1.95	59.67					
	HWE(L)A	1	2.5	0.9	2.95+2.10/2	5.68					
	B	1	1.9	0.9	2.10+1.50+0.40/3	2.28					
	HWE®A	1	1.5	0.9	2.95+1.80/2	3.21					
	B	1	2.2	0.9	1.80+1.20+0.30/3	2.18					
	SW(L)	1	2.2	0.6	2.95	3.89					
	B	1	4	0.6	2.95+1.20/2	3.78					
	SW(R)A	1	2.2	0.6	2.95	3.89					
	B	1	4	0.6	2.95+1.20/2	3.78					
	WW(L)	1	2.2	0.6	1.2	1.58					
	WW(R)	1	2.2	0.6	1.2	1.58					
	TW	1	15.3	50+1.00/2	0.5	5.74					
					योग	97.26	घन मीटर	780.85	2205.00	75945.5	214458.30
5	बेरद्वा पत्थर का 23 से मी उचाई मे खडजा लगाना तथा मिटी से भरना तथा खंडजे का होदा मे से निकली अतिरिक्त मिटी का 50 मी तक निस्तारण करना अ सुखे पत्थर मे										
	APRON	1	15-3	3-4		52.02	वर्ग मीटर	148.80	312.00	7740.58	16230.24
6.	सीमेन्ट प्लास्टर दीवार पर 1 : 6 अनुपात मे सीमेन्ट –बजरी मीलाकर जोडो को कुरेदने तथा तराई समेत 25 मि मी मसाले में										
	HW	1	15.3	1.95		29.84					
	HWE(L)	1	2.5	2.95+2.10/2		6.31					
		1	2.5	1.50+1.20/2		3.38					
		1	1.9	2.10+1.50+0.40/3		2.53					
		1	1.9	1.20+0.40/2		1.52					
		1	1	0.9		0.9					
	HWE(R)	1	1.5	2.95+1.80/2		3.56					
		1	1.5	1.60+1.40/2		2.25					
	B	1	2.2	1.80+1.30+0.3/3		2.49					
		1	2.2	1.40+0.30/2		1.87					
		1	1	0.9		0.9					
	SW(L)A	1	2.2	2.95+1.00/2		4.35					
		1	2.2	1.20+1.60/2		3.08					
		1	4	2.95+1.20/2		8.3					
		1	4	1.60+0.80/2		4.8					

		1	2.2	2.95+1.00/2		4.35					
	B	1	2.2	1.20+1.60/2		3.08					
		1	4	2.95+1.20/2		8.3					
		1	4	1.60+0.80/2		4.8					
	WW	2	2.2	1.2		5.28					
		1	1.2	0.6		0.72					
	TW	1	15.3	0.5		7.65					
		1	15.3	0.75		11.48					
					योग	121.4	वर्गमीटर	95.89	157	11673.6	19113.18
7	सीमेन्ट कंक्रीट 1 : 2 : 4 मिश्रण जिसमें 1 सीमेंट 2 बजरी 4 पथ्तर की या ईंट की 12मी. नाभीय गिट्टी के साथ मिलाकर डालना, कूटना, दबाना तथा तराई आदि समेत।										
	HW	1	15.3	0.9	0.05	0.69					
	HWE(L)A	1	2.5	0.9	0.05	0.11					
	B	1	1.9	0.9	0.05	0.09					
	HWE®A	1	1.5	0.9	0.05	0.07					
	B	1	2.2	0.9	0.05	0.1					
	SW(L)A	1	2.2	0.6	0.05	0.06					
	B	1	3.48	0.6	0.05	0.1					
	SW®A	1	2.2	0.6	0.05	0.07					
	B	1	3.48	0.6	0.05	0.1					
	WW(L)	1	2.2	0.6	0.05	0.07					
	B	1	2.2	0.6	0.05	0.07					
	TW	1	15.3	0.6	0.05	0.38					
	APRON	1	15.3	3.4	0.07	3.64					
					योग	5.55	घन मीटर	405.53	3006	2250.69	16683.3
8	पत्थर के काम पर सपाट या रूल्ड दीप 1 : 3 अनुपात में सीमेंट बजरी मसाले में मय तराई के।										
		1	15.3	2.5		38.25	वर्गमीटर	56.6	68.9	2164.95	2635.425
									योग	189975	565546.89
										जोडे 2% कन्टिनजेन्स	11310.94
										कुल योग	576857.83
										लागत श्रम मद में	189975
										लागत सामग्री मद में	386882.83
										कुल लागत	576858

परियोजना अधिकारी
पी.आई.ए. – रूड्स,
राजसमन्द

सिविल इन्जिनियर
पी.आई.ए. – रूड्स, राजसमन्द

Anicut


4.40
15.30
3.70
0.30
1.30
2.95
0.60
3.40
SW
0.50
2.20
0.6
1.00
1.95
0.5
1.80
1.00
3.40

परियोजना क्रियान्वयन एजेन्सी :रूरल डवलपमेन्ट एण्ड टेक्निकल एजुकेशन सोसायटी, राजसमन्द (राज.)

योजना – पाली/आई.डब्ल्यू.एम.पी.–26/2011–12

पंचायत समिति : सुमेरपुर; जिः पाली

Gully Control Structure in Non-Arable Land

कार्य का नाम : **अकृषि भूमि में गली कन्ट्रोल स्ट्रक्चर**

Assumptions :

1. Width of Nalla : 8.00 m
2. Depth of Nallah : 1.35 m
3. Flow over crest + free board : 0.60 m
4. Approx. Catchment Area : 30.0 Ha
5. Wier section may vary as per Catchment area and specific site conditions.

क्र.स.	विवरण	माप				मात्रा	इकाई	दर		राशि	
		सं.	ल.	चौ.	उ.			श्रम	कुल	श्रम	कुल
1	नींव, खाई, परनाला में 1.5 गहराई तक मिट्टी की खुदाई करना, तल को कुटना, पानी डालना, बगल को संवारना, खुदी मिट्टी को बाहर निकालना, नींव भरने के बाद खाली स्थानों को पुनः मिट्टी से भरना तथा बची हुई मिट्टी को 50 मीटर की दूरी तक निस्तारण करना।										
	HW	1	8.00	1.75	0.30	4.20					
	SW	2	1.75	0.40	0.30	0.42					
	SW (Berm)	2	1.75	0.40	1.35	1.89					
	Pitching TW	2	0.40	0.30	0.30	0.07					
						6.58	घन मीटर	91.80	93.00	604.4	611.94
2	सुखे पत्थर की चिनाई स्थानीय उपलब्ध तथा खोदकर निकाले पत्थर से										
	Foundation	1	8.00	1.75	0.30	4.20					
		2	1.75	0.40	0.30	0.42					
		2	0.40	0.30	0.30	0.07					
	S/s HW Step 1	1	8.00	1.30	0.30	3.12					
	HW Step 2	1	8.00	0.85	0.30	2.04					
	HW Step 3	1	8.00	0.40	0.30	0.96					
	SW strgt.	2	0.40	0.40	1.35	0.43					
	SW slope	2	1.35	0.40	0.98	1.05					
						12.29	घन मीटर	374.00	374.00	4596.46	4596.46
3	सुखे पत्थरों का खरंजा कार्य23 से.मी. उंचाई में										
	खरंजा	2	1.65	0.40		1.32					
						1.32	वर्गमीटर	148.80	312	196.42	411.84
									योग	5397.28	5620.24
									जोडे 3: कन्टिनजेन्सी		168.61
									कुल योग		**5788.85**
									लागत श्रम मद में		5397.28
									लागत सामग्री मद में		391.57
									कुल लागत		5789

0.0578

परियोजना अधिकारी
पी.आई.ए. – रूड्स,
राजसमन्द

सिविल इन्जिनियर
पी.आई.ए. – रूड्स, राजसमन्द

परियोजना क्रियान्वयन एजेन्सी :रूरल डवलपमेन्ट एण्ड टेक्निकल एजुकेशन सोसायटी, राजसमन्द (राज.)

योजना – पाली/आई.डब्ल्यू.एम.पी.–26/2011–12

पंचायत समिति : सुमेरपुर; जिः पाली

Concrete Check Dam

	Item of work	L	B	H	Volume	Unit	Amount	
1	नींव, खाई, परनाला में 1.5 गहराई तक मिट्टी की खुदाई करना, तल को कुटना, पानी डालना, बगल को संवारना, खुदी मिट्टी को बाहर निकालना, नींव भरने के बाद खाली स्थानों को पुनः मिट्टी से भरना तथा बची हुई मिट्टी को 50 मीटर की दूरी तक निस्तारण करना।	12.5	1.5	1.00	18.75	घन मीटर		
	L/C						111.72	2094.75
	T/C						113	2118.75
2	नींव तथा कुर्सी में पत्थर की वे रद्धा–ढ़ोका सीमेंट–बजरी 1: 6 मसाले में, मय बगल की झिरी बन्द करना तथा तराई आदि।	12.5	1.5	1	18.75			
		12.5	1.20+0.60	0.9	10.13			
				Total	28.88	घन मीटर		
	L/C						283.85	16861.59
	T/C						2008	57991.04
3	सीमेंट कंक्रीट 1 : 2 : 4 मिश्रण जिसमें 1 सीमेंट 2 बजरी 4 पत्थर की या ईंट की 12 मी. नाभीय गिट्टी के साथ मिलाकर डालना, कूटना, दबाना तथा तराई आदि समेत।							
		12.5	0.6	0.05	0.38	घन मीटर		
	L/C						405.53	154.10
	T/C						3006	1142.28
4	सीमेन्ट प्लास्टर 1 : 6 मसाले में 20 मिमी.|							
		12.5	0.9		11.25			
		12.5	1.05		13.125			
			total		24.38	वर्गमीटर		
	L/C						95.89	2337.80
	T/C						157	3827.66
							total labour	21448.24
							Total Material	43631.49
							total cost	65079.73
							Rounded off	65000/-

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Loose Stone Check Dam (LSCD)-1

कार्य का नाम : **सुखे पत्थर के चेक डेम निर्माण (15m x 0.90)**

Assumptions :

1. Width of Nalla : 15.00 m
2. Depth of Nallah : 1.50 m
3. Flow over crest + free board : 0.60 m
4. Approx. Catchment Area : 30.0 Ha
5. Wier section may vary as per Catchment area and specific site conditions.

Loose Boulder Check Dam-1

क्र.स.	विवरण	मप				मात्रा	इकाई	दर		राशि	
		सं.	ल.	चौ.	उ.			श्रम	कुल	श्रम	कुल
1	नींव, खाई, परनाला में 1.5 गहराई तक मिट्टी की खुदाई करना, तल को कुटना, पानी डालना, बगल को संवारना, खुदी मिट्टी को बाहर निकालना, नींव भरने के बाद खाली स्थानों को पुनः मिट्टी से भरना तथा बची हुई मिट्टी को 50 मीटर की दूरी तक निस्तारण करना।										
	HW	1	15.00	2.25	0.30	10.13					
	SW	2	2.25	0.75	0.30	1.01					
	SW (Berm)	2	2.25	0.75	1.50	5.06					
	Pitching TW	2	2.00	0.30	0.30	0.36					
	Hard Soil					16.56	घन मीटर	91.80	91.80	1520.2	1520.2
2	सुखे पत्थर की चिनाई स्थानीय उपलब्ध तथा खोदकर निकाले पत्थर से										
	Foundation	1	15.00	2.25	0.30	10.13					
		2	2.25	0.75	0.30	1.01					
		2	2.00	0.30	0.30	0.36					
	S/s HW Step 1	1	15.00	1.80	0.30	8.10					
	HW Step 2	1	15.00	1.35	0.30	6.08					
	HW Step 3	1	15.00	0.90	0.30	4.05					
	SW strgt.	2	0.90	0.75	1.50	2.03					
	SW slope	2	1.35	0.75	1.05	2.13					
						33.89	घन मीटर	374.00	374.00	12674.86	12674.86
3	सुखे पत्थरों की पिचिंग कार्य मय आपूर्ति 15 से 30 से.मी. उंचाई में लगाना।										
	पिचिंग	2	2.00	0.23	1.80	1.66					
						1.66	घन मीटर	198.30	890.20	329.18	1477.73
									योग	14524.24	15672.79
									जोडे 2: कन्टिनजेन्सी		313.46
									कुल योग		15986.23
									लागत श्रम मद में		14524.24
									लागत सामग्री मद में		1462.01
									कुल लागत		16000

(0.16 lakhs)

परियोजना अधिकारी
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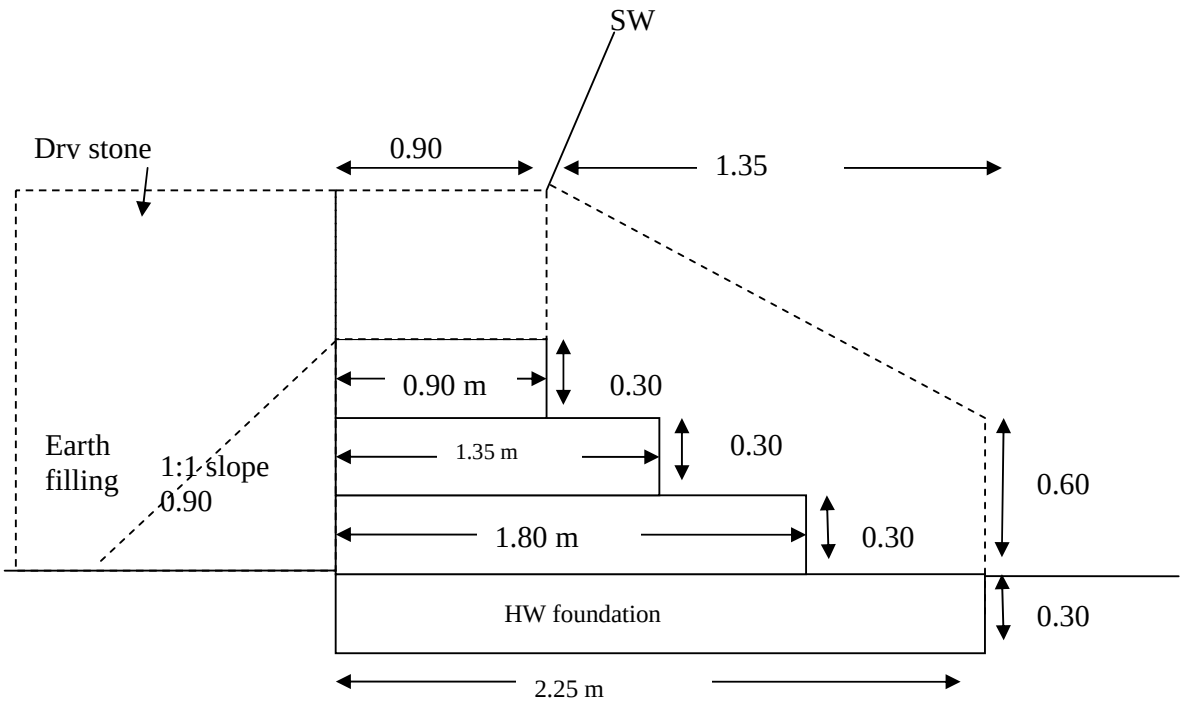
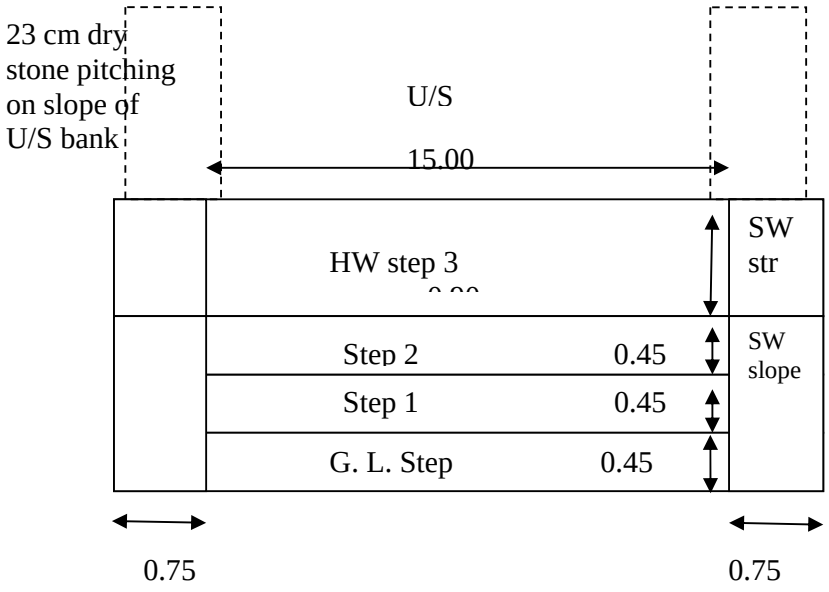
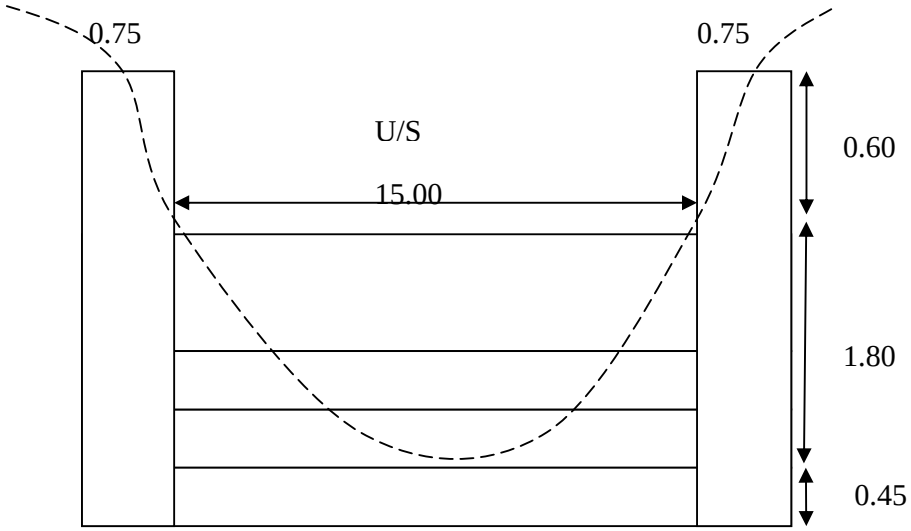
A Typical Cross Section of LSCD



Plan



Elevation



परियोजना क्रियान्वयन एजेन्सी :रूरल डवलपमेन्ट एण्ड टेक्निकल एजुकेशन सोसायटी, राजसमन्द (राज.)

योजना – पाली/आई.डब्ल्यू.एम.पी.–26/2011–12

पंचायत समिति : सुमेरपुर; जिः पाली

Loose Stone Check Dam-2

कार्य का नाम : **सुखे पत्थर के चेक डेम निर्माण (10m x 0.90)**

Assumptions :

1. Width of Nalla : 10.00 m
2. Depth of Nallah : 1.50 m
3. Flow over crest + free board : 0.60 m
4. Approx. Catchment Area : 30.0 Ha
5. Wier section may vary as per Catchment area and specific site conditions.

Loose Boulder

क्र. स.	विवरण	माप				मात्रा	इकाई	छर		राशि	
		सं.	ल.	चौ.	उ.			श्रम	कुल	श्रम	कुल
1	नींव, खाई, परनाला में 1.5 गहराई तक मिट्टी की खुदाई करना, तल को कुटना, पानी डालना, बगल को संवारना, खुदी मिट्टी को बाहर निकालना, नींव भरने के बाद खाली स्थानों को पुनः मिट्टी से भरना तथा बची हुई मिट्टी को 50 मीटर की दूरी तक निस्तारण करना।										
	HW	1	10.00	2.25	0.30	6.75					
	SW	2	2.25	0.75	0.30	1.01					
	SW (Berm)	2	2.25	0.75	1.50	5.06					
	Pitching TW	2	2.00	0.30	0.30	0.36					
						13.18	घन मीटर	91.80	93.00	1209.92	1225.74
2	सुखे पत्थर की चिनाई स्थानीय उपलब्ध तथा खोदकर निकाले पत्थर से										
	Foundation	1	10.00	2.25	0.30	6.75					
		2	2.25	0.75	0.30	1.01					
		2	2.00	0.30	0.30	0.36					
	S/s HW Step 1	1	10.00	1.80	0.30	5.40					
	HW Step 2	1	10.00	1.35	0.30	4.05					
	HW Step 3	1	10.00	0.90	0.30	2.70					
	SW strgt.	2	0.90	0.75	1.50	2.03					
	SW slope	2	1.35	0.75	1.05	2.13					
						24.43	घन मीटर	374.00	374.00	9136.82	9136.82
3	सुखे पत्थरों की पिचिंग कार्य मय आपूर्ति 15 से 30 से.मी. उंचाई में लगाना।										
	पिचिंग	2	2.00	0.23	1.80	1.66					
						1.66	घन मीटर	198.30	890.20	329.18	1477.73
									योग	10675.92	11840.29
									जोडे 3: कन्टिनजेन्सी		355.21
									कुल योग		12195.5
									लागत श्रम मद में		10675.92
									लागत सामग्री मद में		1520.37
									कुल लागत		12196

0.122

परियोजना अधिकारी
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सिविल इन्जिनियर
पी.आई.ए. – रूड्स, राजसमन्द

योजना – पाली / आई.डब्ल्यू.एम.पी.–26 / 2011–12
पंचायत समिति : सुमेरपुर; जिः पाली

Loose Stone Check Dam -3

कार्य का नाम : **सुखे पत्थर के चेक डेम निर्माण (5m x 1.3m)**

Assumptions :

1. Width of Nalla : 5.00 m
2. Depth of Nallah : 1.30 m
3. Flow over crest + free board : 0.60 m
4. Approx. Catchment Area : 30.0 Ha
5. Wier section may vary as per Catchment area and specific site conditions.

क्र.स.	विवरण	मप				मात्रा	इकाई	दर		राशि	
		सं.	ल.	चौ.	उ.			श्रम	कुल	श्रम	कुल
1	नींव, खाई, परनाला में 1.5 गहराई तक मिट्टी की खुदाई करना, तल को कुटना, पानी डालना, बगल को संवारना, खुदी मिट्टी को बाहर निकालना, नींव भरने के बाद खाली स्थानों को पुनः मिट्टी से भरना तथा बची हुई मिट्टी को 50 मीटर की दूरी तक निस्तारण करना।										
	HW	1	5.00	1.85	0.30	2.78					
	SW	2	1.85	0.75	0.30	0.83					
	SW (Berm)	2	1.85	0.75	1.30	3.61					
	Pitching TW	2	1.50	0.30	0.30	0.27					
						7.49	घन मीटर	91.80	93.00	687.58	696.57
2	सुखे पत्थर की चिनाई स्थानीय उपलब्ध तथा खोदकर निकाले पत्थर से										
	Foundation	1	5.00	1.85	0.30	2.78					
		2	1.85	0.75	0.30	0.83					
		2	1.50	0.30	0.30	0.27					
	S/s HW Step 1	1	5.00	1.40	0.30	2.10					
	HW Step 2	1	5.00	0.95	0.30	1.43					
	HW Step 3	1	5.00	0.50	0.30	0.75					
	SW strgt.	2	0.50	0.75	1.30	0.98					
	SW slope	2	1.35	0.75	0.95	1.92					
						11.06	घन मीटर	374.00	374.00	4136.44	4136.44
3	सुखे पत्थरों की पिचिंग कार्य मय आपूर्ति 15 से 30 से.मी. उंचाई में लगाना										
	पिचिंग	2	1.50	0.23	1.60	1.10					
						1.10	घन मीटर	198.3	890.20	218.13	979.22
									योग	5179.32	6206.36
									जोडे 3: कन्टिनजेन्सी		186.19
									कुल योग		**6392.55**
									लागत श्रम मद में		5179.32
									लागत सामग्री मद में		1213.23
									कुल लागत		6393

0.064

परियोजना अधिकारी
पी.आई.ए. – रूड्स,
राजसमन्द

सिविल इन्जिनियर
पी.आई.ए. – रूड्स, राजसमन्द

परियोजना क्रियान्वयन एजेन्सी :रूरल डवलपमेन्ट एण्ड टेक्निकल एजुकेशन सोसायटी, राजसमन्द

योजना – पाली/आई.डब्ल्यू.एम.पी.–26/2011–12
पंचायत समिति : सुमेरपुर; जिः पाली

Bank Stabilisation

कार्य का नाम : **नाला बैंक स्थिरीकरण (पक्का व पत्थर पिचिंग)**

प्रति 10 मीटर लम्बाई के लिये

क्र.स.	विवरण	मप				मात्रा	इकाई	दर		राशि	
		सं.	ल.	चौ.	उ.			श्रम	कुल	श्रम	कुल
1	नींव, खाई, परनाला में सख्त मिट्टी में 1.5 गहराई तक मिट्टी की खुदाई करना, तल को कुटना, पानी डालना, बगल को संवारना, खुदी मिट्टी को बाहर निकालना, नींव भरने के बाद खाली स्थानों को पुनः मिट्टी से भरना तथा बची हुई मिट्टी को 50 मीटर की दूरी तक निस्तारण करना।										
		1	10.0	1.00	0.90	9.00	m3	91.80	93.00	826.20	837.00
2	सीमेन्ट कंक्रीट नींव या फर्श में 40 मि. मी. नाभीय माप की पत्थर गिट्टी /ईंट गिट्टी, सीमेन्ट रेत मसाला में 1 सीमेन्ट : 4 रेत 8 गिट्टी अनुपात में मिलाकर डालना तथा कुटाई करना, तराई समेत। श्रमिक मिश्रित।										
		1	10.00	1.00	0.15	1.50	m3	403.08	2293.00	604.62	3439.50
3	नींव तथा कुर्सी में पत्थर की वे रद्धा–ढ़ोका सीमेंट–बजरी 1: 8 मसाले में, मय बगल की झिरी बन्द करना तथा तराई आदि।										
		1	10.00	0.90	0.75	6.75					
		1	10.00	0.675	1.20	8.10					
						14.85	m3	583.85	2008.00	8670.17	29818.80
4	सीमेन्ट प्लास्टर 1 : 6 मसाले में 20 मिमी.|										
		1	10.00		1.35	13.50	m2	56.26	103.00	759.51	1390.50
5	पत्थर के काम पर रेज्ड एण्ड कट दीप 1 : 3 अनुपात में सीमेंट बजरी मसाले में तय तराई के।										
		1	10.00		1.30	13.00	m2	56.60	68.90	735.80	895.70
6	सीमेंट कंक्रीट 1 : 2 : 4 मिश्रण जिसमें 1 सीमेंट 2 बजरी 4 पत्थर की या ईंट की 12 मी. नाभीय गिट्टी के साथ मिलाकर डालना, कूटना, दबाना तथा तराई आदि समेत।										
		1	10.0	0.45	0.075		m3				
						0.34	m2	405.53	3006.00	137.88	1022.04
7	सुखे पत्थरों की पिचिंग का कार्य 23 सेमी पत्थर से।										
		2	3.0	1.50							
						9	m2	148.80	312.00	1339.2	2808.8
									योग	13073.38	40212.34
									जोडे 2: कन्टिनजेन्सी		804.25
									कुल योग		**41016.59**
									लागत श्रम मद में		13073.38
									लागत सामग्री मद में		27943.21
									कुल दर प्रति 10 रनिंग मीटर		41017

0.410

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राजसमन्द

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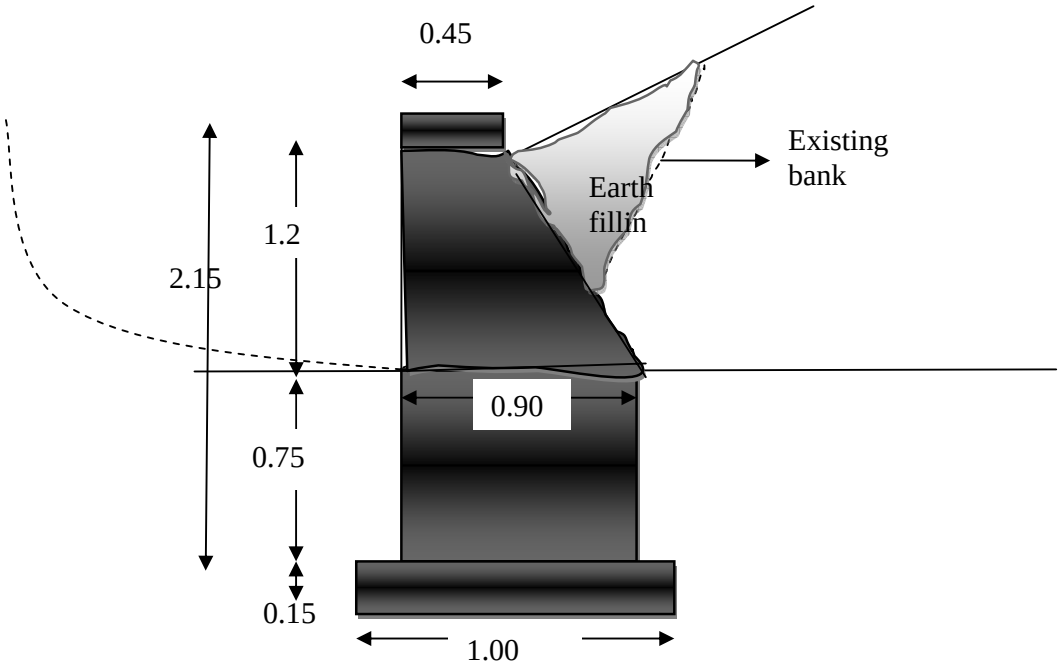
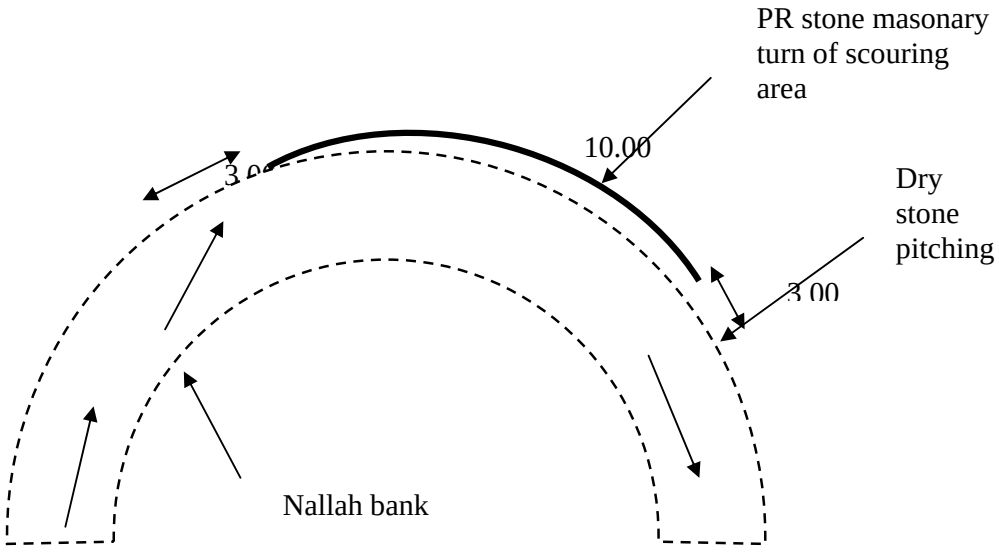
पी.आई.ए. – रूड्स, राजसमन्द

Plan and Cross section of Bank stabilisation

Bank Stabilisation



Cross Section of Face wall



परियोजना क्रियान्वयन एजेन्सी :रूरल डवलपमेन्ट एण्ड टेक्निकल एजुकेशन सोसायटी, राजसमन्द (राज.)

योजना – पाली/आई.डब्ल्यू.एम.पी.–26/2011–12

पंचायत समिति : सुमेरपुर; जिः पाली

Horticulture Plantation

Name of work :- Plantation of Horticulture Plants

Consideration:-

1. Area of Pasture land 1 Ha
1. Cross section of the pit, 1Mx1mx1m 1 cum
2. Average lend (from Nursery to Planting site) 5 km
3. Plant spacing 7.5mx7.5m
4. No. of Plants :- 176 no.
5. Gap filling :- 20 %

S.No.	ITEM	No.	L	B	H	Quantity	Rate/Unite	Amount
1	Digging of pits for plants in Ordinary murrum(G.K.N.13 item No.118.B	176	1	1	1	176	113.00	19888
2	Plants saplings for plantation in Govt.pasture area,sapling not less then 30 cm. height As per average market rate	176				176	40	7040
3	Rehanding of plants from camp site to actual planting site up to 1Km. (GKN,11item No.198(c)	176				176	0.83	146.08
4	Application of fertilizer & insecticides as (GKN,11 item No.222 Pn 33	176				176	0.78	137.28
5	Cost of fertilizer & insecticides as per market rate	176				176	3.5	616
6	Msking of thawala 15 cm depth, 45 cm radius (patharili)(GKN,11 samajik, vaniki item no.115(a) P.N.14	176				176	3.00	528
7	Planting of sapling including soaking in water, cutting &removal of polythene bags,mixing and treatment of soil,backfilling,planting and compaction of soil around The plants (GKN.11 samajik, vaniki item no.111(a) P.N.14	176				176	4.5	792
	TOTAL							29147.36
						CONTINGENCY 3%		874.42
							Total	30021.78
						say		0.30 lakh/ha

Labour Component 21208
Material component 7939.36
Estimated Amount = Rs 30021.78
Cost per plant = 165.61
Cost per Ha. = 30021.78

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पंचायत समिति : सुमेरपुर; जिः पाली

Staggered Contour Trenches

कार्य का नाम : **खुले क्षैत्र में स्ट्रेगर्ड कन्टुर ट्रेन्चेज कार्य (टाईप–1)**

Staggered Contour Trenches

1. Nos. Per Hect : 125 Nos
2. Length : 4.00 m
3. Width : 0.30 m
4. Depth : 0.30 m

क्र.स.	विवरण	माप				मात्रा	इकाई	दर		राशि	
			ल.	चौ.	उ.			श्रम	कुल	श्रम	कुल
स्टेगर्ड ट्रेंन्चेज निर्माण कार्य (125 प्रति हैक्टर)											
1	2.5 से 5.0 सेमी. गहराई का डागबेलिंग कार्य।										
	2	125	4.00	=		1000	Mtr.	0.58	0.58	580	580
2	नींव ट्रेंचेच में मिट्टी की खुदाई का कार्य, खुदी हुई मिट्टी का निस्तारण करना तथा समतल करना।										
	125	4.00	0.30	0.30		45.00	Cum				
	(अ) सख्त मिट्टी में			40%		18.00	Cum	111.72	113.00	2010.96	2034.00
	(ब) मुर्रम			0%		0.00	Cum	0.00	0.00	0.00	0.00
	(स) विघटित चट्टान			60%		27.00	Cum	134.06	135.60	3334.50	3619.62
3	जंगलाती बीज की नोचिंग/डिबलिंग कर बुवाई करना।										
	125	2	4.00			1000	Notch	0.5700	0.5700	567.70	567.70
4	जंगलाती बीच सप्लाई करना।					5	Kg		125		625.00
									Toal	6493.06	7426.32
									जोडे 3ः कन्टिनजेन्सी		222.79
									कुल योग		7649.11
									लागत श्रम मद में		6493.06
									लागत सामग्री मद में		1156.05
									कुल लागत /100 मी./हैक्ट.		**7649**

0.0765

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राजसमन्द

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पी.आई.ए. – रूड्स, राजसमन्द

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योजना – पाली/आई.डब्ल्यू.एम.पी.–26/2011–12

पंचायत समिति : सुमेरपुर; जिः पाली

Vaccination and Health Camp

S No.	Particulars	Particulars	Unit	Rate	Amount
1	Cost of vaccine	250 animals	No	50	12,500
2	Cost of medicine	250 animals	No	50	12,500
				Total	**25,000**

Or say Rs. 25,000/- (Rs. 0.25 lakhs)

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पंचायत समिति : सुमेरपुर; जिः पाली

Vermi Composting Unit

Size of Unit- 5*1.2*0.45

S No.	Particulars	Dimension					Unit	Rate	Amount
		No.	L	W	D	Qty			
1	Excavation work in all kinds of soil	1	5.1	1.3	0.3	1.989	cum	93	184.98
2	Providing & laying R.R. stone kharanja in cement mortar 1:6 in one course 23 cm	1	5.1	1.3	0.53	6.63	Sq.m.	367	2433.21
3	Cement Concrete in M 10 grade nominal mix with graded stone aggregate 20 mm	1	5.1	1.3	0.8	0.53	cum	3006	1593.18
4	Brick masonry in ratio 1:6	2	5	0.23	0.45	1.04	cum	3021	3685.62
		2	0.74	0.23	0.45	0.15			
		1	0.74	0.1	0.45	0.03			
						1.22			
5	Cement coping on brick walls in M 10 grade nominal mix with graded stone aggregate 20 mm	2	5	0.23	0.025	0.06	cum	3006	210.42
		2	0.74	0.23	0.025	0.01			
		1	0.74	0.1	0.025	0.0019			
						0.07			
6	Cement Plaster in ratio of 1:4 of 20 mm								
	Outer side	2	5	0.45		4.5			
		2	1.2	0.45		1.08			
	Inner side	4	1.77	0.45		3.186			
		4	0.74	0.45		1.332			
	Sub-total					**10.10**	**Sq.m**	**117**	**1181.70**
7	Add 10% for transportation of small quantity material, water and other equipment at the site.								928.91
8	Shed of bamboo or local material available in the area with 10 poles including fitting at the site.								1800
9	Cost of Earth worms					12	kg	100	1200
10	Cost of equipment (*Punja*)								85
11	Cost of Water can (*Jharra*)								350
12	Hand Glooves								125
13	Sieve (Chalna)								500
									14278.02
14	contingency							5%	713.09
								Total	**14991.11**

Or say Rs. 15,000/- (Rs. 0.15 lakhs)

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राजसमन्द

सिविल इन्जिनियर
पी.आई.ए. – रूड्स, राजसमन्द

CHAPTER - VIII
Enclosures

a. Location –District, block, village, watershed location map

b. Map of IWMP 26/11-12 (Watershed Boundary demarcation in cadastral & Topo Sheet)

c. PRA Map (along with photos & paper drawing)

d. Treatment map (Indicate proposed works)

e. Cadastral Map on watershed boundary

f. Information on Soils, Soil fertility, Land capability, Soil chemical problems like salinity, alkalinity

g. Land Use Land Cover map

h. Information on existing water harvesting structures & well inventory along with GPS co-ordinates.

i. High resolution, latest Remote Sensing Satellite data

Documents of Agreements:

Proceedings of gram sabha for EPA approval

Proceedings of gram sabha Resolution for committee constitution

Proceedings of gram sabha for DPR approval

Proceeding of Standing Committee of P.S. for DPR approval.

Proceeding of Standing Committee of Z.P. for DPR approval.

Assistant Engineer, PIA
WD&SC P.S.----------

Project Manager, WCDC
WD&SC.Distt.----------

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योजना – पाली/आई.डब्ल्यू.एम.पी.–26/2011–12

Treatment Map

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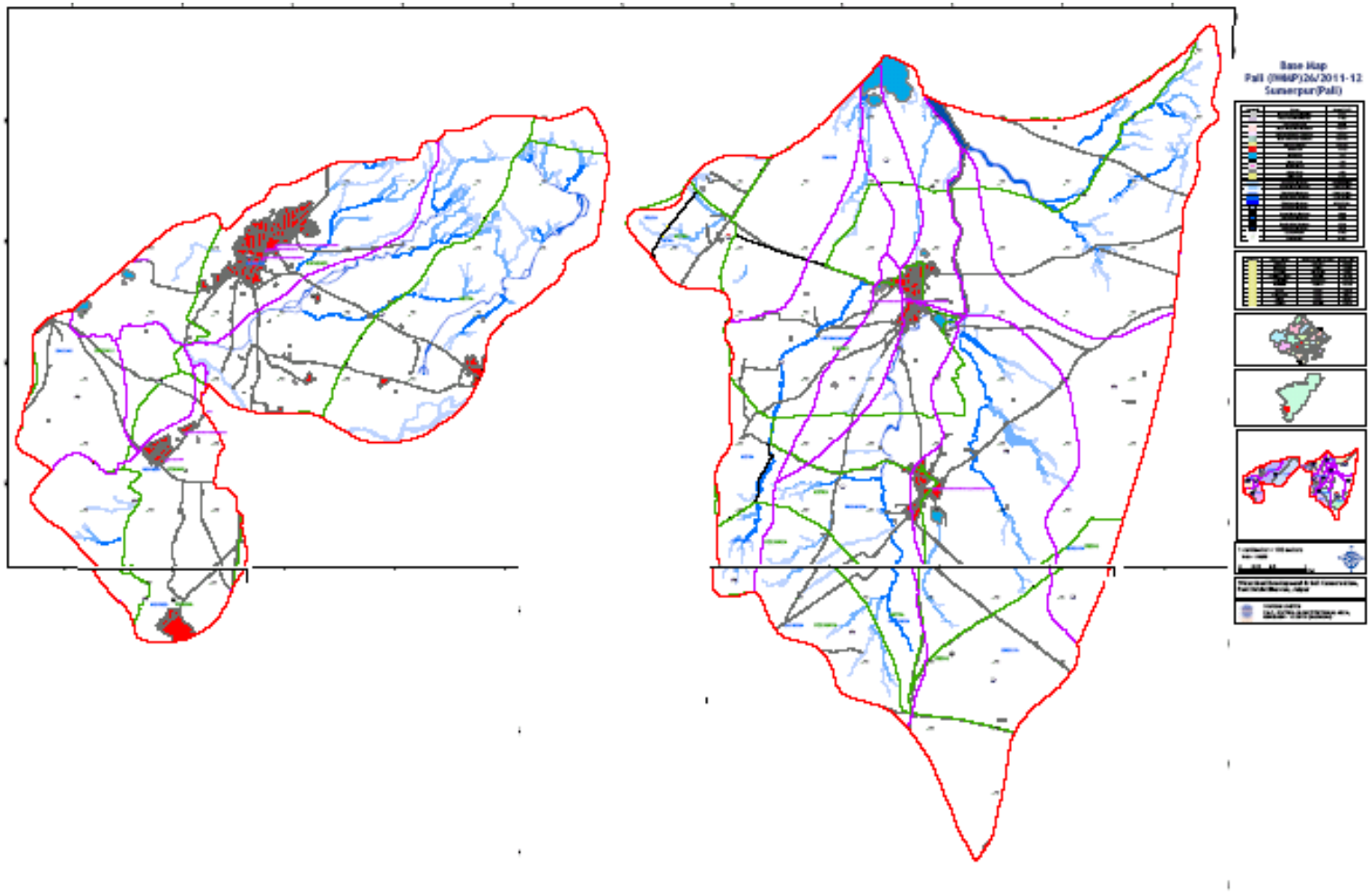
Base Map



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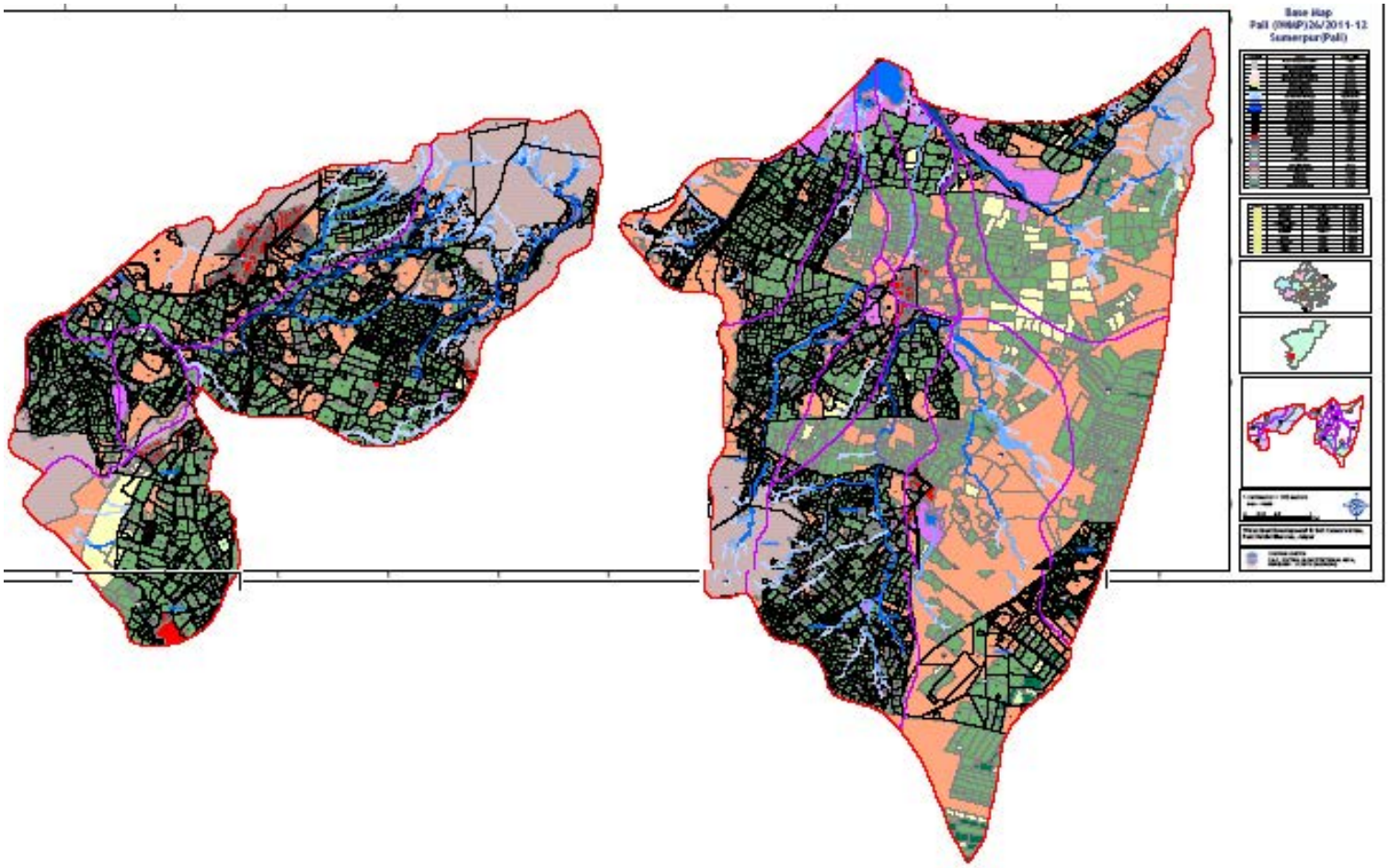
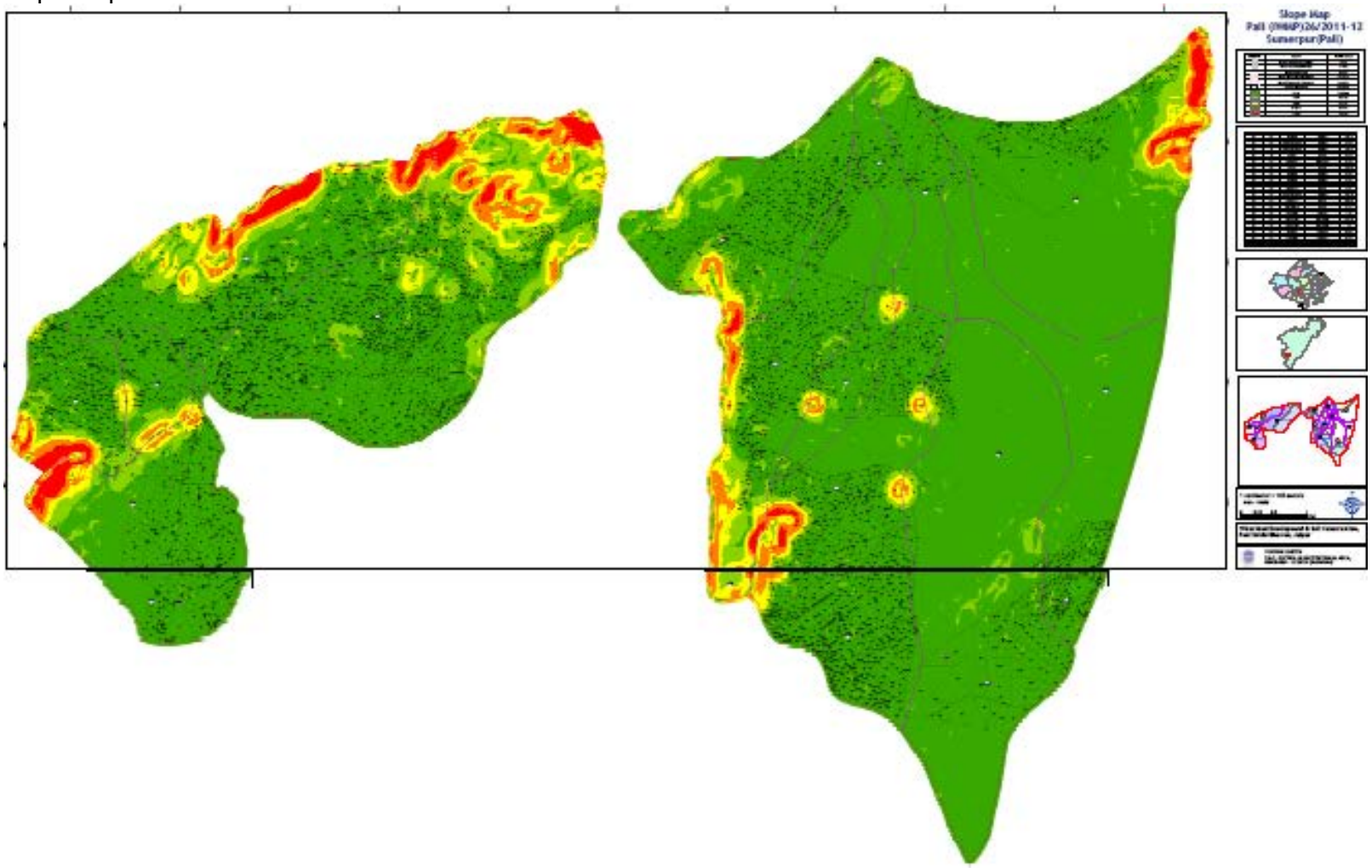
Landuse/Cadastral Map



Slope Map



Contour Map