Government of Rajasthan

Department of Watershed Development & Soil Conservation

District Watershed Development Unit, Baran

Detailed Project Report

IWMP VI (2010-11) Chanchoda

Block: Chhabra District :- Baran Project Area :- 5242 ha.

Project Cost :- Rs. 629.04 Lacs

Prem Prakash Marmit
Assistant Engineer
Panchayat Samiti, Chhabra

S. K. Verma
Executive Engineer (L.R.)
cum
Project Manager, WCDC, Baran

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Chapter - I

Introduction

CHAPTER – I

INTRODUC\TION

Location.

IWMP-VI Chanchora Project is located in Chhabra Block, of Baran district. The project area is between the latitudes $23^0 32^{|}$'0" to $25^0$43'0"& $76^0$43'0" to $76^0$56'0" longitudes. It is at a distance of 4 km from Chhabra Block head quarters and 65 Kms from the district BARAN head quarters. There are 31 no. of habitations in the Project area and other details are given below.

General features of watershed

S.No.	Name of Project(as per GOI)	Baran(IWMP) VI /10-11
(a)	Name of Catchment	Anderi
(b)	Name of watershed area(local name)	Baran VI
(c)	Project Area	5387. ha
(d)	Net treatable Area	5242 ha
(e)	Cost of Project	629.04 lacs
(f)	Cost/hectare	0.12
(g)	Year of Sanction	2010-11
(h)	Watershed Code	09120504, 09120505, 09120507, 09120521, 09120522, 09120523, 09120524, 09120526, 09120530, 09120531, 09120532, 09120533, 0921001, 0921002, 0921003
(i)	No. of Gram Panchayats in project area	9
(j)	No. of villages in project area	31
(k)	Type of Project	other
(l)	Elevation (metres)	251 m
(m)	Major streams	Andheri River
(n)	Slope range (%)	0-10%

Macro/micro	Name of Gram Panchayat	Name of Villages Covered	Census code of villages	Area
09120504, 09120505, 09120507, 09120521, 09120522, 09120523, 09120524, 09120526, 09120530, 09120531 09120532	Nipania	Nipani	*03949600*	78.6
		Kolukheri	*03945400*	141.8
	Chanchora	Dehri	*03945700*	138.5
		Nimthur	*03945500*	239.9

09120530, 09120531,09120532, 09120533, 0921001, 0921002, 0921003,		Udpuriya	03945900	184.94
		Chanchora	03945800	254.2
	Jharkheri	Khejara	03949000	123.3
		Barodiye	03945600	183.2
		Bhanwar	03951600	18.8
	Ghatakheri	Mavasadola	03951000	69.0
		Govindpura	03950800	231.77
		Semala	03950900	419.4
		Kherkhera Meena	03951100	83.14
		Ghatakheri	03950700	401.23
	Pachpada	Noor Pura(Nayagaon)	03954100	122.3
		Hafispura	*03951500*	126.7
		Dangpura	*03954300*	87.4
	Pali	Hinglot	*03954600*	215.22
		Lapkana	*03953900*	56.4
		Mandukheri	*039540000*	48.5
	Semali	Morela	*03954200*	256.43
		Moreli	*03954400*	226.4
		Barbatkheri	*03951200*	271.69
	Hanyaheri	Chandpura	*03954800*	55.8
		Afzalpura	*03954700*	85.1
	Mundkya	Mundkya	*03950200*	139.1
		Kundi	*03950000*	163.4
		Patana	*03950100*	224.36
		Kherkhera Nathuram	*03950500*	156.3
		Usufpura	*03956600*	157.78
		Ameenpura	*03948700*	262.3

The watershed falls in South Eastern humid plane zone-V Agro climatic zone. The soil texture is Clay loam The average rainfall is 848 mm. The temperatures in the area are in the range between 31-48 centigrade during summer and 6-30 centigrade during winter The major crops in the area are Soya bean, Wheat, Mustard, Garlic, 76.70 % land is under cultivation 7 % land fallow,7.8_% land is

wasteland. 47% land is irrigated through tube wells Land 1038 No of households are BPL (0% households) are landless household (% households) and 256 household are small and marginal farmers (_6_%household) .Average land holding in the area is below 2.0 ha. 66_% area is single cropped area and 47_% is double cropped. The main sources of irrigation are tube wells. The average annual rainfall (5 years) in the area is 874mm. The Major streams in the Watershed are Parvati. The major festivals in the village are Diwali, Holi, Nahan, Raksha Bandhan & Eid etc. At present these villages having14396 population with Communities like Hindu and muslims.

Climatic and Hydrological information

1	**Average Annual Rainfall(mm)**	**848 mm**		
	Year	Rainfall(mm)		
1	2002	435		
2	2003	987		
3	2004	944		
4	2005	864		
5	2006	878		
6	2007	749		
7	2008	938		
8	2009	654		
9	2010	529		
10	2011	1500		
2	**Avg Monthly rainfall (last ten years)**			
	Month	Rainfall(mm)		
i)	June	265		
ii)	July	166		
iii)	August	263		
iv)	September	154		
3	**Maximum rainfall intensity (mm)**			
	Duration	rainfall intensity(mm)		
	i) 15 minute duration	62 mm		
	ii) 30 minute duration	74 mm		
	iii) 60 minute duration	86 mm		
4	**Temperature (Degree C)**			
	Season		Max	Min
	i) Summer Season		45.60	21.60
	ii) Winter Season		28.60	2.60
	iii) Rainy Season		35.6	21.4
5	**Potential Evaporation Transpiration (PET) (mm/day)**			
	Season		PET	
	i) Summer		6.52	
	ii) Winter		2.36	
	iii) Rainy		4.17	
6	Runoff			
	i) Peak Rate (cum/hr)		410	
	ii) Total run off volume of rainy season (ha.m.)			
	iii) Time of return of maximum flood	5 years	10 years	In-Year 2001-02 & 2006-07 (5 Years)
	iv)Periodicity of Drought in village area	10 Years		
7	Sediment Production Rate(SPR)(ha-m/100sq km/year			

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	Management of Village Secretariat	Gram panchayat Zilla Parishad	Sort-out the problem in our area under this scheme	More than 14 dept. & villagers	To take Benefit of all villagers under this scheme
2	Mother & Child Health Day	Health & I.C.D.S	Awareness about the vaccination time to time for good health	Girls (0 to 6 / 15 to 45 yrs.) / Pregnant Women	Vaccination every Thursday
3	Mid-day-Meal	Panchayati Raj Yojna	Awareness about the education	Children's (1 to 8) of schools	Mid-day-Meal under Provision
4	Pension Yojna	Samajik Kalyan Dept.	Old age Male & Female / Hand./ Widow / Help through Pension Yojna	Old age Male & Female / Hand./ Widow / Pensioner	Old age Fe male (upto 54 yrs)- Rs 500/- (54 to 70 yrs) Rs.1500/- Male Rs. 400/- &(54 to 75 yrs) Rs. 1500/- H.P. Rs.500/- Widow Rs.500/-
5	Pannadhya Jeevan Yojna	Panchayati Raj Yojna	Support in economic condition after death	Compensation to BPL Family	Support to dependent BPL family
6	Gopal Yojna	Animal Dept	Awareness about the animal policy	Natural/ Accidental policy	Help through the Gopal Yojna
7	Janani Suraksha Yojna	Hospital and Health Dept.	Support to pregnant lady through Janani Suraksha Yojna	Pregnancy of Rural & Urban womens	In Pregnancy - Rural – 5Kg Ghee / Rs. 1500 Urban women's 5Kg Ghee / Rs. 1400
8	MGNREGA	Central Govt.	To generate employment	100 days Employment	Provides 100 days guaranteed employee to every enrolled rural family
9	TSC	Zilla Parishad	Awareness about the health and sanitation	Toilet construction for BPL Family	Toilet construction for BPL Family
10	SGSY	Zilla Parishad	To generate employment in BPL families	Employment opportunity & Loan facility to 130 group of BPL Family	Bank Loans & Subsidies are provided to BPL selected family to improvement of resources as per their technical scheme & requirements
11	MP-MLA Vikas Yojana	State Govt. Policy	Village Development	100 Lacs. rupee for development work	Development work (costing not more than 10 lacs upto 2 crores
12	Indira Gandhi Awas Yojna	Zilla Parishad	Provide construction of house to BPL families	60% reservation in housing board for SC BPL & 40% for other BPL Family	Provide construction of house to BPL families having no Pakka house in rural areas
13	Mada Yojana	Zilla Parishad	Capital subsidy for membership of cooperative societies, electric connection, hand pump and higher education for girls	100% compensation in employment to SC, BPL Family (Meena & Bhil)	Subsidy is provided to poor persons of the ST community to uplift their economically development
14	Dang	Zila Parishad			

Details of infrastructure in the project areas

Parameters		Status			
(i)	No. of villages connected to the main road by an all-weather road	16			
(ii)	No. of villages provided with electricity	31			
(iii)	No. of households without access to drinking water	NIL			
(iv)	No. of educational institutions : Primary(P)/ Secondary(S)/ Higher Secondary(HS)/ vocational institution(VI)	(P) 27	(S) 4	(HS) 0	(VI) 0
(v)	No. of villages with access to Primary Health Centre	3			
(vi)	No. of villages with access to Veterinary Dispensary	0			
(vii)	No. of villages with access to Post Office	4			
(viii)	No. of villages with access to Banks	0			
(ix)	No. of villages with access to Markets/ mandis	0			
(x)	No. of villages with access to Agro-industries	0			
(xi)	Total quantity of surplus milk				
(xii)	No. of milk collection centers (e.g. Union(U)/ Society(S)/ Private agency(PA)/ others (O))	(U) -	(S) -	(PA) -	(O) 2
(xiii)	No. of villages with access to Anganwadi Centre	22			
(xiv)	Any other facilities with no. of villages (please specify)	-			
(xv)	Nearest KVK	Anta			
(xvi)	cooperative society	chhabra.			
(xvii)	NGOs GSS	.			
(xviii)	Credit institutions	.			
	(i) Bank	0			
	(ii) Cooperative Society	9			
(xix)	Agro Service Centre's	-	-		

Institutional arrangements (SLNA,DWDU,PIA,WDT,WC,Secretary)

SLNA Details-:

- Member secretary Post :- CEO
- Designation & Address :- Director of watershed development & Soil Conservation
- Telephone No. :- 0141 - 2227189
- Fax No. :- 0141 - 2227858
- E - Mail : - dir_ wdsc @ dataone.in.

DWDU Details

1	2	3
S.No	**Particulars**	**Details of DWDU**
1.	PM ,DWDU	Mr S. K. Verma
2.	Address with contact no., website	Zila Parishad Baran, 9414185832
3.	Telephone	07453-230057
4.	Fax	07453230120
5.	E-mail	dwdubaran@gmail.com

PIA particulars

1	2	3
S.No	**Particulars**	**Details of PIA**
6.	Name of PIA	P.P Marmit
7.	Designation	Assistant Engineer
8.	Address with contact no., website	Panchayat Samiti Chipabarod, 94144-41842
9.	Telephone	Nil
10.	Fax	Nil
11.	E-mail	Nil

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	Salim Khan	M	32	Diploma in Mechanical, Diploma in Computer PGDCA,	1 Year's	-	Design , execution, supervision of soil and moisture conservation works.
2	Naresh Sharma	M	33	12^{TH} Agriculture	5 years	-	Increase in production through demonstration in field.
3	Santosh Verma	M	32	M.A (Sociology)	5 years	-	Increase in income of villager through SHG Training, linkage to bank, facilitate loan facility and revolving fund.

Details of Watershed Committees (WC)

Gram Panchayat-: Mundkya

S. N.	Name of WCs	Date of Registration as a Society (dd/mm/yyyy	Designation	Name	M/F	SC/ST/OBC/Generaly	UG/SHG	Educational qualification
1.	Mundkya		President	Sh Jagdish Singh Aheer	M	OBC	UG	Primary
			Secretary	Sh Giriraj Aheer	M	OBC	UG	Graduate
			Member	Sh Ramcharan Gurjar	M	OBC	UG	Primary
			Member	Sh Jamana Lal Meghwal	M	SC	UG	Primary
			Member	Sh Shyambabu Aheer	M	OBC	UG	Upper Primary
			Member	Sh Phoolchand Mehar	M	SC	UG	Primary
			Member	Sh Bhagwan Singh	M	General	UG	Primary
			Member	Sh Janki Lal Meena	M	ST	UG	Primary
			Member	Smt Gora Bai Gurjar	F	OBC	SHG	Literate
			Member	Smt Rambharoshi Bairwa	F	SC	SHG	Literate
			Member	Smt Birdhi bai Lodha	F	SC	SHG	Literate
			Member	Smt Kamlesh Bai Meena	F	ST	SHG	Literate

Gram Panchayat-: Hanyahedi

S. No	Name of WCs	Date of Registration as a Society (dd/mm/yyyy	Designation	Name	M/F	SC/ST/ OBC/ General	UG/SHG	Educational qualification
2.	Hanyahedi		President	Smt Sardar Bai Lodha	F	OBC	SHG	Primary
			Secretary	Sh Ramnaresh Meena	M	ST	UG	Graduate
			Member	Smt Dakha Bai Meena	F	ST	SHG	Literate
			Member	Smt Bhuli Bai Meena	F	ST	SHG	Literate
			Member	Smt Sarbati Bai Meena	F	ST	SHG	Liiterate
			Member	Sh Mangal Singh	M	General	UG	Upper Primary
			Member	Sh Santosh Kumar Meena	M	ST	UG	Primary
			Member	Sh Diwan Singh Meena	M	ST	UG	Secondary
			Member	Sh Badri Lal Meena	M	ST	UG	Primary
			Member	Sh Mukesh Kumar Nath	M	OBC	UG	Upper Primary
			Member	Sh Rajendra Kumar Meena	M	ST	UG	Primary

Gram Panchayat:- Semli

S.N.	Name of WCs	Date of Registration as a Society (dd/mm/yyyy	Designation	Name	M/F	SC/ST/OBC/ Generaly	UG/SHG	Educational qualification
3.	Semli		President	Sh Suresh Kumar Gurjar	M	OBC	UG	Upper Primary
			Secretary	Sh Dhanraj Meena	M	ST	UG	Post Graduate
			Member	Sh Ratan Lal Meena	M	ST	UG	Primary
			Member	Smt Gayatri Bai Meena	F	ST	SHG	Primary
			Member	Smt Manju Bai Bairwa	F	SC	SHG	Literate
			Member	Smt Shanti Bai Gurjar	F	OBC	SHG	Literate
			Member	Sh Mangi Lal Gurjar	M	OBC	UG	Primary
			Member	Sh Ramdayal Meena	M	ST	UG	Primary
			Member	Smt Laxmi Bai Meena	F	ST	SHG	Literate
			Member	Sh Gabbar Singh Banjara	M	OBC	UG	Primary
			Member	Sh Hariram Meena	M	ST	UG	Literate

Gram Panchayat:- Jharkhedi

S. N.	Name of WCs	Date of Registration as a Society (dd/mm/yyyy	Designation	Name	M/F	SC/ST/OBC /Generaly	UG/SHG	Educational qualification
3.	Jharkhedi		President	Sh Amar Lal	M	SC	UG	Primary
			Secretary	Sh Komal	M	OBC	UG	Post Graduate
			Member	Sh Laddu Lal Sen	M	OBC	UG	Sr. Secondary
			Member	Sh Man Singh Meena	M	ST	UG	Primary
			Member	Sh Mangi Lal Meena	M	ST	UG	Primary
			Member	Sh Babu Lal Malav	M	OBC	UG	Primary
			Member	Sh Mathura Lal Gadri	M	OBC	UG	Primary
			Member	Smt Badam Bai Meena	F	ST	SHG	Literate
			Member	Smt Basanti Bai Mehar	F	SC	SHG	Literate
			Member	Smt Kamala Bai Malav	F	OBC	SHG	Literate
			Member	Smt Savitri Bai Meena	F	ST	SHG	Literate

Gram Panchayat:- Nipaniyan

S. N.	Name of WCs	Date of Registration as a Society (dd/mm/yyyy	Designation	Name	M/F	SC/ST/OBC/Generaly	UG/SHG	Educational qualification
3.	Nipanian		President	Smt Jadiya Bai Meena	F	St	SHG	Primary
			Secretary	Sh Hari Singh Kachi	M	OBC	UG	Graduate
			Member	Smt Kedari Bai Meena	F	ST	SHG	Literate
			Member	Smt Chandrakala Bairwa	F	SC	SHG	Literate
			Member	Sh Jamana Lal Meena	M	ST	UG	Primary
			Member	Sh Ramcharan Meena	M	ST	UG	Upper Primary
			Member	Smt Chinta Bai	F	OBC	SHG	Literate
			Member	Sh Roop Lal Kumawat	M	OBC	UG	Upper Primary
			Member	Sh Murad Khan	M	General	UG	Upper Primary
			Member	Smt Badri Bai Meena	F	ST	SHG	Literate
			Member	Sh Chouthmal Nagar	M	OBC	UG	Secondary

Gram Panchayat :Pachpada

S. N.	Name of WCs	Date of Registration as a Society (dd/mm/yyyy	Designation	Name	M/F	SC/ST/OBC/Generaly	UG/SHG	Educational qualification
3.	Pachpada		President	Smt Bhuri Bai Meena	F	ST	SHG	Primary
			Secretary	Sh Hemraj Meena	M	ST	UG	Graduate
			Member	Smt Shanti Bai Meena	F	ST	SHG	Literate
			Member	Sh Banshi Lal Meena	M	ST	UG	Literate
			Member	Sh Laddu Lal Bairwa	M	SC	UG	Primary
			Member	Ku. Mewa Bai Bairwa	F	SC	SHG	Literate
			Member	Smt Badam Bai Bairwa	F	SC	SHG	Literate
			Member	Sh Roopchand Bairwa	M	SC	UG	Primary
			Member	Sh Panna Lal Bairwa	M	SC	UG	Literate
			Member	Sh Laxmi Narayan Meena	M	ST	UG	Primary
			Member	Sh Kalyan Meena	M	ST	UG	Literate

Gram Panchayat:Chanchoda

S. N.	Name of WCs	Date of Registration as a Society (dd/mm/yyyy	Designation	Name	M/F	SC/ST/OBC/Generaly	UG/SHG	Educational qualification
3.	Chanchoda		President	Sh Nandkishor Gadri	M	OBC	UG	Primary
			Secretary	Sh Chhoga Lal Meena	M	ST	UG	Post Graduate
			Member	Sh Mangi Lal Meena	M	ST	UG	Primary
			Member	Sh Tulsiram Malav	M	OBC	UG	Upper Primary
			Member	Smt Kailashi Bai Meena	F	ST	SHG	Literate
			Member	Smt Sharda Bai Yadav	F	OBC	SHG	Literate
			Member	Sh Pappu Lal Meena	M	ST	UG	Graduate
			Member	Smt Santra Bai Banjara	F	SC	SHG	Literate
			Member	Sh Bhanwar Lal Banjara	M	OBC	UG	Literate
			Member	Sh Jafar Mohhamad Khan	M	General	UG	Primary
			Member	Smt Geeta Bai Meena	F	ST	SHG	Literate

Gram Panchayat:Pali

S. N.	Name of WCs	Date of Registration as a Society (dd/mm/yyyy	Designation	Name	M/F	SC/ST/OBC/Generaly	UG/SHG	Educational qualification
3.	Pali		President	Smt Kanti Bai Meena	M	ST	SHG	Primary
			Secretary	Sh Ramnaresh Meena	M	ST	UG	Graduate
			Member	Sh Dhuli Lal Bairwa	M	SC	UG	Literate
			Member	Sh Ramswaroop Meena	M	ST	UG	Primary
			Member	Smt Savitri Bai Meena	F	ST	SHG	Literate
			Member	Smt Badam Bai Meena	F	ST	SHG	Primary
			Member	Smt Kela Bai Goud	F	General	SHG	Primary
			Member	Smt Bhulya Bai Sen	F	OBC	SHG	Upper Primary
			Member	Sh Morpal Gurjar	M	OBC	UG	Upper Primary
			Member	Sh Giraj Brahman	M	General	UG	Secondary
			Member	Sh Charan Singh Gurjar	M	OBC	UG	Secondary

Gram Panchayat:Ghatakheri

S. N.	Name of WCs	Date of Registration as a Society (dd/mm/yyyy	Designation	Name	M/F	SC/ST/OBC/Generaly	UG/SHG	Educational qualification
3.	Ghatakheri		President	Sh Jeevan Lal Lodha	M	OBC	UG	Primary
			Secretary	Sh Ramnarayan Lodha	M	OBC	UG	Post Graduate
			Member	Smt Munni Bai Sen	F	OBC	SHG	Primary
			Member	Smt Mewa Bai Bheel	F	ST	SHG	Primary
			Member	Smt Kamlesh Bai	F	ST	SHG	Primary
			Member	Smt Guddi Bai Meena	F	ST	SHG	Literate
			Member	Sh Ramprasad Dhobi	M	SC	UG	Primary
			Member	Sh Shyam Lal Mehar	M	SC	UG	Primary
			Member	Sh Sitaram Meena	M	ST	UG	Primary
			Member	Sh Ramnarayan Brahman	M	General	UG	Literate
			Member	Sh Ramkaran Meena	M	ST	UG	Secondary
			Member	Sh Ramkaran Meena	M	ST	UG	Primary

Problems and scope of improvement in the project area

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. 408 ha land is arable wasteland and 195 ha is fallow can be brought under cultivation.

1822 ha is only irrigated and with efforts this can be increased to2040 . 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, green houses ,Agro forestry, fodder crops)and diversification in Livelihoods(Agriculture, Animal husbandry, self employment)

2130 Quintal fodder scarcity can be met out through Pasture development .Improved animal Husbandry practices can increase the productivity of livestock. 33 no of persons migrate due to unemployment. 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.

Mention specific problem of the area in land degradation, water , Agriculture and in Animal Husbandry

Chapter - II

Basic Feature

CHAPTER – II

Basic Features: Socio economic and Infrastructure

Table 2.1 Population:

Total Population					Household Details				
Male	**Female**	**Total**	**SC**	**ST**	**BPL hous hold**	**Total hh**	**L. Less**	**Small Farmer**	**M. Farmer**
7887	6509	**14396**	2987	4890	1095	2594	627	508	1077

Table 2.2 Development indicators

S. No.	Development Indicators	State	Project Area
1	Per capita income (Rs.)	16260	13104
2	Poverty ratio	0.22	0.18
3	Literacy (%)	0.604	0.42
4	Sex Ratio	921	928
5	infant mortality rate		0.5
6	maternal mortality ratio		0.5
7	employment		

The table indicates poor socio economic conditions.

Table 2.3 Land Use

Land Use	Total area in Ha.				
	Private	Panchayat	Government	Community	Total
Agriculture Land	4056	0	0	0	4056
Temporary fallow	210	0	0	0	210
Permanent Fallow	195	0	0	0	195
Cultivated Rainfed	2039	0	0	0	2039
Cultivated irrigated	1822	0	0	0	1822
Net Sown Area	3861	0	0	0	3861
Net Area sown more than once	1710	0	0	0	1710
Forest Land	0	0	1103	0	1103
Waste Land	408	0	0	0	408
Pastures	0	509	0	0	509
Others	0	0	1605	0	1605

The project area has 408 ha of cultivable wasteland and 195 ha of fallow land (total 603 ha)

Table 2.4 Cropping Status

1	2	3	4				5				6	
S. No.	Season	Crop sown	Rain fed				Irrigated				Total	
			Varieties	Area (ha)	Production (Ton)	Productivity (kg/ha)	Varieties	Area (ha)	Production (Ton)	Productivity (kg/ha)	Area(ha)	Production(Ton)
1	Kharif	Soya bean	Gs335, 9305	961	1345 T	1400 Kg/ha					961	18458
		Maize	Desi, ganga2	910	1274 T	1400 Kg/ha					910	1630
		Tille		168	68 T	402 Kg/ha					168	188
2	Rabi	Wheat					Lok1,	980	3234 T	3300 Kg/ha	980	4920
		Corrinder					desi	81	98T	1217 Kg/ha	81	4640
		Mustard					Pusa bold rs30	711	960 T	1350 Kg/ha	711	2936
		Gram					desi	50	60 T	1198 Kg/ha	50	948
3	Zaid											
	Total			2039	2687			1822	4352		3861	23720

Table 2.5 Abstract of cropped Area(ha)	
Area under Single crop	2578
Area under Double crop	1822
Area under Multiple crop	0

can be brought under cultivation if some irrigation source can be provided through Construction of WHS like Anicut, Tanka, 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 47%

1822 ha. (20 % of the project area II)is under wastelands and can be brought under vegetative cover, with reasonable effort .Activities like Earthen check dams, Loose stone check dam , Pakka check dam, V-ditches, staggered trenches ,WHS (Johad)Afforestation of wastelands and Pasture development will be taken up on these lands

Pasture development the land use table that there is 533 Ha hectare pasture land(10.16%)This emphasizes the need for taking up pastureland development works through sowing of promising species of grasses and plantation .

Table 2.4a Agriculture and Horticulture status and fuel availability.

The farmers are using Desi , Maize varieties of Bajra, wheras varieties like Ganga-2 , Navjot can increase the production.

**Write for each crop

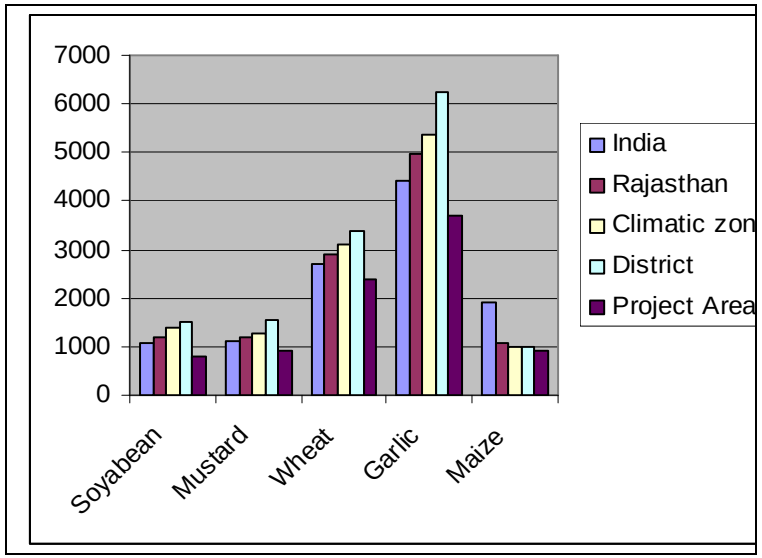
Crop Rotation

Soyabean	-	Wheat
Maize	-	Mustard
Fallow	-	Mustard
Soyabean	-	Wheat

Soyabean	-	Garlic
Soyabean	-	Wheat
Fallow	-	Mustard

Above given information shows that only 1822 ha is (47%) 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.b Productivity Gap Analysis



name of the crop	Productivity kg/ha				
	India	Highest Average in Rajasthan	Highest Average of Agro climatic zone	District	Project Area
Soybean	1063	1208	1373	1493	1400
Mustard	1095	1194	1273	1551	1350
Wheat	2708	2912	3113	3392	3300
Garlic	4400	5000	5300	6250	4200
Maize	1912	1086	986	986	1400

Analysis of the table indicate above that is higher than the productivity of state & agro climate zone but these is huge gap between Productivity of district & project area.

The reasons for this variation are:-

- The farmers are using Sathi varieties of Maize, whereas varieties like Ganga – 2, Ganga- 5, Ageti – 76 can increase the production.
- The farmers are using mostly JS 335 varieties of Soybean, whereas varieties like JS 93-05, JS 95-60, Soya 1 can increase the production.
- The farmers are using mostly Lok-1 varieties of Wheat, whereas varieties like Raj 3765, Raj 3077 can increase the production..
- The farmers are using mostly Varuna (T-59) varieties of Mustard, whereas varieties like Pusa Bold, Vasundhara, RH - 30 & Bio 902 can increase the production.
- Lack of availability of good quality seeds of desired crop & Variety in adequate quantises & time to the farmers.

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 2.6 Existing area under horticulture (ha)

Source/ Name of report	Year of reference	Area already under horticulture
PRA	2010	3.50 ha

Note: Area under Horticulture is about 3.50 ha. Floriculture & Medicinal plants are not grown in Watershed Area.

Table 2.7 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	582	1566	247	1813	826	112	328	407	-
(ii) Small farmer	508	138	274	412	102	46	80	-	-
(iii) Marginal farmer	1077	118	1502	1620	524	205-	-288	603	-
(iv) Landless person	627	-	-	-	-	-	-	-	-
(V)No. of BPL households	1095	-	211	211	-	-	-	-	211
Total	3889	1822	-	4056	1452	1452	696	1010	211

40-% land holdings belong to small and marginal farmers who own 52-% 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 ,Medicinal and Aromatic Crops, floriculture: As discussed earlier . Horticulture/vegetables could be more economical to Small and marginal farmers with irrigation source. Also the project area has good potential for medicinal & aromatic crops like Sonamukhi, Isabgol, Ashwagandha, Khus, Mehandi etc.

Agro forestry plantation: 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.

Production and distribution of quality seed – There is need to ensure that good quality seed is available for cultivators for which adequate seed production would be initiated in watershed areas with the assistance of private sector and agriculture department technologies such as drip irrigation

Sprinklers drip and pipelines along with efficient water management practices for crop production to be emphasized with adequate financial support and convergence/private partnership.

Establishment of Green House - For growing off season vegetables seedlings and other horticultural crops under controlled atmospheric conditions of green house.

Establishment of nurseries: Most of the planting material is procured from other parts of the State/ country, especially UP. The procurement of planting material from distant places causes damage to the planting material and often results in untimely supply.

Innovative hitech/ export oriented activities : innovative hi-tech/ export oriented projects like mushroom cultivation, floriculture, etc which are in negligible existence at present, can be implemented by individual farmers / private companies.

Drip irrigation Drip irrigation will be promoted in all horticulture plantation ,vegetables,green houses and in nurseries for rational use of irrigation higher yields and quality produce.

Table 2.8 Livestock Status - animals/milk production / average yield.

S. No.	Description of animals		Population (No.)	Yield(milk/mutton/ Wool)	Equ. cow units	Dry matter requirement per year (7Kg per animal.)	Total requirement in M.T.
1	Cows	Indigenous	855	1.3-2.0	855	5985	2184.5
		Hybrid	0	4.0			
2	Buffaloes		**1322**	2.4-3	**1322**	9254	3377.7
3	Goat &		**757**	0.4	**75**	525	191.6
4	Sheep		**6**	0	**1**	7	2.5
5	Camel		**0**	-	-		-
6	Poultry		**110**		**0**		
7	Piggery		**0**				
	Total		**2195**		**2253**		5756.3

In spite of the large number of livestock, production is less hence increase in productivity across all species, is a major challenge. To reduce production of unproductive cattle and improve the productivity by improving the breeds by breeding management following activities will be taken up

- Castration
- Artificial insemination
- Distribution of superior Breeding bulls for use in Cattle and Buffalo
- Breeding distribution crossbred rams

Besides breed improvement other animal husbandry practices like better health, hygiene and feeding practices can increase productivity of livestock. Hence Activities like Animal health camps ,Urea-Molasses treatment demonstration ,demonstration of improved methods of conservation and utilization of Forage crops

Table 2.9 Existing area under fodder (ha)

S.No	Item	Unit	Area/Quantity
1	Existing area under Fodder		
	- Green fodder	Ha	7.00 Ha-252 T
	- Dry fodder	Tonns/ Year	2868 T/ya
2	Existing area under Fuel wood	Ha	28 Ha
3	Supplementary feed	Kgs/ day	1500 Kgs
4	Silage Pits	No	0
5	Availability of fodder	quintals	31200 qtl
6	Deficiency/excess of fodder	quintals	26363qtl

The table above shows there is fodder deficiency (Requirement is 57563and availability 31200 qtl)

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 2.10 Agriculture implements

1	2	3
S. No	**Implements**	**Nos.**
1	Tractor	96
2	Sprayers-manual/ power	185
3	Cultivators/Harrows	86
4	Seed drill	96
5	Any Other	0

Farm mechanization and seed banks : It may be seen that 4% land holdings belong to small and marginal farmers who own only 13% 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 these farmers

Table 2.11 NREGA Status - No. of Card Holder, activities taken so far , employment status.

NREGA Status

Sr. no.	Name of village	Total No .of job cards	Employment Status	Activity taken up so far
1	KOLHUKHERI	71	0	Talai & Pasture dev ,gravel road, madebandi
2	NIPANI	99	0	Talai & Pasture dev ,gravel road, madebandi
3	NEETHUR	130	0	Talai & Pasture dev ,gravel road, madebandi
4	DEHRI	162	68	Talai & Pasture dev ,gravel road, madebandi
5	CHACHODA	281	85	Talai & Pasture dev ,gravel road, madebandi
6	UDPURIA	24	0	Talai & Pasture dev ,gravel road, madebandi
7	BARODIA	108	48	Talai & Pasture dev ,gravel road, madebandi

8	KHEJRA	134	65	Talai & Pasture dev ,gravel road, madebandi
9	BHAWER	127	32	Talai & Pasture dev ,gravel road, madebandi
10	GHATAKHERI	352	140	Talai & Pasture dev ,gravel road, madebandi
11	GOVINDPURA	138	22	Talai & Pasture dev ,gravel road, madebandi
12	SEMLA	208	141	Talai & Pasture dev ,gravel road, madebandi
14	MAWASADOLA	93	1	Talai & Pasture dev ,gravel road, madebandi
15	KHERKHERA MEENA	80	0	Talai & Pasture dev ,gravel road, madebandi
16	HAFEEZPURA	29	0	Talai & Pasture dev ,gravel road, madebandi
17	NOORPURA	30	0	Talai & Pasture dev ,gravel road, madebandi
18	DANGPURA	55	27	Talai & Pasture dev ,gravel road, madebandi
19	LAPAKNA	13	0	Talai & Pasture dev ,gravel road, madebandi
20	MANDUKHERI	10	0	Talai & Pasture dev ,gravel road, madebandi
21	HINGLOT	172	56	Talai & Pasture dev ,gravel road, madebandi
22	BARBATKHERI	126	91	Talai & Pasture dev ,gravel road, madebandi
23	MORELLA	139	0	Talai & Pasture dev ,gravel road, madebandi
24	MORELLI			Talai & Pasture dev ,gravel road, madebandi
25	AFZALPURA	21	0	Talai & Pasture dev ,gravel road, madebandi
26	CHANDPURA	67	0	Talai & Pasture dev ,gravel road, madebandi
27	KUNDI	330	162	Talai & Pasture dev ,gravel road, madebandi
28	PATNA	157	125	Talai & Pasture dev ,gravel road,

				madebandi
29	MUNDKIYA	251	155	Talai & Pasture dev ,gravel road, madebandi
30	AMEENPURA	79	0	Talai & Pasture dev ,gravel road, madebandi
31	KHERKHERA NATHURAM	47	0	Talai & Pasture dev ,gravel road, madebandi

Table 2.12 a 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) (Per Person / Year)
KOLHUKHERI	8	90	Seasonal/ Better livelihood	30-40	Other livelihood	0.25
NIPANI	5	60	Seasonal	30-40	Other livelihood	0.20
NEETHUR	12	90	Seasonal	30-40	Other livelihood	0.20
DEHRI	16	90	Seasonal	30-40	Other livelihood	0.25
CHACHORA	8	60	Seasonal	30-40	Other livelihood	0.25
UDPURIA	20	50	Seasonal	70-80	Agriculture, other livelihood	0.20
BADODIA	4	90	Seasonal	30-40	Other livelihood	0.25
KHEJRA	6	90	Seasonal	50-60	Other livelihood	0.25
BHANWER	2	60	Seasonal	30-40	other livelihood	0.20
GHATAKHERI	54	60	Seasonal	30-50	Agriculture, other livelihood	0.30
GOVINDPURA	4	50	Seasonal	40-50	Other livelihood	0.20
SEMLA	8	90	Seasonal	40-50	Agriculture, other livelihood	0.25
MAWASADOLA	2	50	Seasonal	40-50	Other livelihood	0.20

KHERKHERA MEENA	6	50	Seasonal	40-50	Agriculture, other livelihood	0.30
HAFEEZPURA	4	60	Seasonal	30-40	Other livelihood	0.20
NOORPURA	6	50	Seasonal	40-50	Other livelihood	0.25
DANGPURA	10	40	Seasonal	30-40	Other livelihood	0.15
LAPAKNA	2	40	Seasonal	30-40	Other livelihood	0.20
MANDUKHERI	4	40	Seasonal	30-40	Other livelihood	0.20
HINGLOT	12	60	Seasonal	50-60	Agriculture, Other livelihood	0.25
BARBATKHERI	5	50	Seasonal	40-50	Other livelihood	0.20
MORELLA	14	60	Seasonal	40-50	Agriculture, Other livelihood	0.20
MORELLI	9	60	Seasonal	40-50	Other livelihood	0.25
AFZALPURA	0	0	-	0	-	0
CHANDPURA	2	60	Seasonal	70-80	Other livelihood	0.15
KUNDI	6	50	Seasonal	30-40	Other livelihood	0.30
PATNA	4	60	Seasonal	30-40	Other livelihood	0.20
MUNDKIYA	7	60	Seasonal	30-40	Other livelihood	0.20
AMEENPURA	2	40	Seasonal	40-50	Other livelihood	0.25
KHERKHERA NATHURAM	5	60	Seasonal	40-50	Other livelihood	0.25

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,poltry and marketing and value addition. (as discussed earlier) and diversification in livelihoods .

The existing livelihoods Village are given below

Table 2.12 (b) Major activities (On Farm)		
Name of activity	No of House holds	Average annual income from the
cultivators	3889	15000
Dairying	18	4000
Poultry	32	500
Piggery		
Landless Agri. Labourers	627	10000

Table 2.12©Major activities (Off Farm)		
Name of activity	**Households/individuals**	**Average income (per day)**
Artisans	6	150-200 per day
Carpenter	4	180-200 per day
Blacksmith	2	100-150 per day
Leather Craft	-	-
Earthen Porter	4	100-150 per day
Mason	40	200-250 per day
Others specify (Cycle Repair ,STD,Craft etc)	4	100-150 per day

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

Table 2.13(a) *Status of Existing SHG*

S.N.	Village	G/P	Name of SHG	Members	Activity involved	Monthly income	Fund available	Assis-tance available	Source of Assistance	Training received
1	**Chachora**	**Chachora**	Maya	10	Animal husbandry	1000	12000	300000	bank	3 day
2			Laxmi	10	Animal husbandry	1000	12000	300000	bank	One day
3			Sarsvati	10	Animal husbandry	1000	8000	-	-	One day
4			Sarda	13	Animal husbandry	1300	7800		-	One day
5			Krishana	14	Tailoring	1400	7000	-	-	3 day
6			Vijay	13	Animal husbandry	1300	6500	-	-	One day
7	***Dehari***		Nasim	10	Animal husbandry	500	6000	-	-	One day
8			Ganga	10	Animal husbandry	500	600	-	-	One day
9	**Kolukheri**	**Nipaniya**	Gayatree	10	Donapatal	500	6500	-	-	3 day
10	***Gatakheri***	**Gatakheri**	Sita	11	Animal husbandry	1100	5500	-	-	3 day
11			Radha	10	Animal husbandry	1000	6000	-		3 day
12			Kisan Vikash Klub	10	Milk Deyari	1000	14000	300000	bank	3 day
13			ShariRam	10	Animal husbandry	1000	6000	-	-	One day
14			Amn	10	Animal husbandry	1000	8000	-	-	One day
15			Koshalya mata	12	Donapatal	1200	9600	-	-	One day
16			Syam	10	Animal husbandry	1000	6000	-	-	One day
17			Shari ganesh	12	Animal husbandry	600	3600	-	-	3 day
18	***Govindpura***		Jyoti	10	Animal husbandry	500	3000	-	-	One day
19	***Mavasadola***		Ekta	10	Animal husbandry	500	3000	-	-	One day
20	***Semala***		Meena	10	Animal husbandry	1000	7000	-	-	One day
21	**Hinglot**	**Pali**	Manisha	10	Animal husbandry	500	4000	-	-	One day

22			Rajeshvari	10	Animal husbandry	500	3500	-	-	One day
23			Lavkush	10	Animal husbandry	500	3500	-	-	One day
24			Smarti	10	Animal husbandry	500	3000	-	-	One day
25			Svati	10	Animal husbandry	500	3500	-	-	One day
26	**Barbatkheri**	**Semali**	Mahila Sangtan	10	Animal husbandry	500	3000	-	-	One day
27			Ujala	10	Animal husbandry	500	4000	-	-	One day
28			Shama	10	Animal husbandry	500	4000	-	-	One day
29			Gayatree	10	Animal husbandry	500	3500	-	-	One day
30			Sunder	10	Animal husbandry	500	3000	-	-	One day
31			Shama ii	10	Animal husbandry	500	3000	-	-	One day
32			Gayatree ii	10	Animal husbandry	500	3000	-	-	One day
33			Shari ganesh	10	Animal husbandry	500	3500	-	-	One day
34	**Morela**		Ramraj	10	Animal husbandry	500	3500	-	-	One day
35			Jasoda	12	Animal husbandry	1200	4800	-	-	3 day
36			Parvati	14	Tailoring	1400	7000	-	-	3 day
37	***Moreli***		Ghandhi	10	Animal husbandry	500	3500	-	-	One day
38			Krishana	10	Animal husbandry	500	4000	-	-	One day
39	***Bhawar***	**Jharkheri**	Sarsvati	10	Tailoring	1000	5000	-	-	3 day
40	***Khejara***		Radhika	10	Animal husbandry	500	3000	-	-	One day
41	**Kundi**	**Mundkiya**	Laxmi	10	Animal husbandry	1000	4000	-	-	One day
42			Durga	10	Animal husbandry	1000	4000	-	-	One day
43	**Chandpura**	**Haniyaheri**	Bhavana	10	Tailoring	500	3500	-	-	One day
	Total			451		33000		-	-	

II. Technical Features

Table 2.14 Ground Water

S.No	Source	No.	Functional depth	Dry	Area irrigated	Water availability(days)
i)	Dug wells	478	35-50	210	-	-
ii)	Shallow tube wells	250	150-200 ft	80	245 ha	4-6 months
iii)	Pumping sets	106	150-200	60	-	-
iv)	Deep Tube Wells	325	300 - 450 ft	135	1577 ha	6-9 months
	Total	1159		485	1822 ha	

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. defunct
1	KOLHUKHERI	5925	6200	6	4	2	0
2	NIPANI	16620	17000	15	12	2	1
3	NEETHUR	8505	9100	12	8	2	2
4	DEHRI	9975	10500	11	8	2	1
5	CHACHODA	33570	34000	30	22	7	1
6	UDPURIA	1350	1500	8	4	2	2
7	BARODIA	6450	7000	10	7	2	1
8	KHEJRA	6930	7200	11	8	2	1
9	BHAWER	7590	8000	12	9	1	2
10	GHATAKHERI	16110	16500	16	13	2	1
11	GOVINDPURA	7020	7050	12	9	1	2
12	SEMLA	9900	10000	11	8	2	1
13	MAWASADOLA	4170	4500	8	6	1	1
14	KHERKHERA MEENA	3960	4200	7	6	1	0
15	HAFEEZPURA	1800	2000	8	6	1	1
16	NOORPURA	3795	4000	9	7	1	1
17	DANGPURA	2625	2750	8	6	1	1
18	LAPAKNA	915	1000	6	5	1	0
19	MANDUKHERI	840	900	6	6	0	0
20	HINGLOT	7785	8000	12	9	2	1
21	BARBATKHERI	6870	7200	11	10	0	1
22	MORELLA	7995	8200	12	9	2	1
23	MORELLI	8340	8500	13	10	1	2
24	AFZALPURA	907	950	6	4	2	0
25	CHANDPURA	4455	5000	13	8	2	1
26	KUNDI	16620	17000	17	13	3	1
27	PATNA	7545	8000	13	10	1	2
28	MUNDKIYA	14400	15000	15	11	2	2
29	AMEENPURA	1065	1120	9	7	1	1
30	KHERKHERA NATHURAM	3405	3500	9	8	1	0
31	YUSUFPURA	5430	5500	11	9	1	1

Table 2.16Water Use efficiency

Name of major crop	Area (Hectare)			
	through water saving devices(Drip/Sprinklers)	through water conserving agronomic practices#	Any other (pl. specify)	Total
Soyabean	Nil	86	Nil	86
Wheat	5 ha	156	Nil	156
coriander	Nil	118	Nil	118

- 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	Map slope range	Area in hectares
1	0 to 3%	0 to 1%	1458
2	3 to 8%	1 to 3%	2751
3	8 to 25%	3 to 5%	820
4	> 25%	5 to 10 %	213
5		>10 %	

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

2.22 WATER BUDGETING

Macro/Micro No. 09120504, 09120505, 09120507, 09120521, 09120522, 09120523, 09120524, 09120526, 09120530, 09120531, 09120532, 09120533, 0921001, 0921002, 0921003

(A) Area (Calculated from revenue record) 6345

1. Good Catchment where runoff is maximum & infiltration is minimum like hillocks, plateanu etc.1900
2. Average catchment-cultivated land, forest land with vegetation.3300
3. Bad catchment where runoff is minimum & infiltration is maximum e.g. Sandy soil1145

(B) AVERAGE ANNUAL DATA (AVAILABLE AT TEHSIL)

Propotion of estimated Runoff of rainfall : To be worked out from strange's Table

2.22a Percentage of runoff to rainfall from strange's table.

Type of W/S	Area of W/S	Factor Cum/ha	Expected Yeild Cum
Good	1900	2357.7	4479630
Average	3300	2016.91	6655803
Bad	1145	1344.6	153950
Total	6345		12675000

2.22b

STORAGE OF RUNOFF BY EXISTING STRUCTURES

S.No.	Name of Structure	No./Area	Storage Capacity (Cum)
1	Tank/Talab/Nadi	39	132600
2	Anicut/WHS/Khadan	5	67500
3	Local Dipression Pond etc.	0	0
Total	38	200100	

2.22c STORAGE OF RUNOFF BY PROPOSED STRUCTURES

S.No.	Name of Structure	No./Area	Storage Capacity (Cum)
1	Nadi/ Talab/CHECK DAM	33	311850
2	Anicut(MMS)	5	17500
Total	329350		

Total Runoff trapped = Existing Strs +Proposed Strs.=200100+329350=529450

% Runoff trapped =529450/12675000*100=4.17%

Table 2.23 Soil details

Soil Profile

S.No.	Major Soil Classes	Area in hectares
1	Black Cotton	5242 ha
	Soil Depth :	
B	Depth (Cms.)	Area in hectares
1	0.00 to 7.50	4852 Ha
2	7.50 to 45.00	370Ha
3	> 45.00	20 Ha

C	Soil fertility Status	Kg/ha	Recommended
	N	7 (Low)	55
	P	13 (Medium)	45
	K	31 (High)	-
	Micronutrients	Below 0.4 PPM	10 PPM

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 2.25 Erosion details

9	**Erosion status in project Area**					
	Cause	Type of erosion	Area affected (ha)	Run off(mm/ year)	Average soil loss (Tonnes/ ha/ year)	
	Water erosion					
	a	Sheet	3528			
	b	Rill	1229	450	37	
	c	Gully	485			
	Sub-Total					
	Wind erosion			NA		
	Total for project					

- To check land degradation
- To reduce excessive biotic pressure by containing the number and increase of livestock especially goat and sheep as they pose a serious threat to the fragile ecology of this region.
- To check cultivation on sloping lands without adequate precautions of soil and water conservation measures
- To discourage cultivation along susceptible nallah beds
- To discourage cultivation of erosion permitting crops
- Intensive cropping without replenishment
- To check Faulty agriculture techniques
- To check Uncontrolled grazing and developed cattle tracks
- To check Deforestation of steep slopes
- To check soil and water pollution from injudicious use of chemical fertilizers
- To check erosive velocity of runoff, store Runoff, to arrest silt carried by runoff and to recharge Ground Water structures life Earthen check dams, gully plugs, Bank Stabilisation, Loose stone check Dams, Gabions, Earthen embankment (Nadi) and Anicuts would be taken up.

Chapter III

Proposed Development Plan

CHAPTER - III **Proposed Development Plan :** The Activities are indicative addition /deletion in activates will be as per local condition

A) Preparatory phase activities Capacity Building Trainings and EPA

The IEC activities like Kalajathas, Group meetings, door to door campaign, slogans and wall writings etc. were carried out in all the habitations of Chhabra Micro Watershed. A series of meetings were conducted with GP members, VOs and discussed about the implementation of IWMP programme. User groups were also formed.

Gramasabha was conducted on 25-27April 2011 at Nipania Chachora Jharkheri Ghatakher Pachpara Pali Samli, Hanyaheri Mundkiya Gram Panchayats for selecting the watershed committees.

S.no	Name of the Gram Panchayat	Date on which Gramasabha approved EPA
1	Nipania	27.04.2011
2	Chachora	25.04.2011
3	Jharkheri	27.04.2011
4	Ghatakheri	25.04.2011
5	Pachpara	27.04.2011
6	Pali	26.04.2011
7	Samli	25.04.2011
8	Hanyaheri	26.04.2011
9	Mundkiya	26.04.2011

Entry Point Activities-:

Solarlighting work nos.25 has been taken in villages neemthur, kolukheri, barodiya, ghatakheri, hafizpura, lapkana, semli, mundkiya.

Watertank work taken in watershed area villages 6 no.

The PRA exercise was carried out in all the villages on the dates shown below:

S.no	Name of the village/Habitation	Date on which PRA conducted
1	Kolukhera	31/10/2011
2	Nipaniya	21/10/2011
3	Neemthur	20/10/2011
4	Dehri	20/10/2011
5	Chachora	22/10/2011
6	Udpuriya	09/11/2011
7	Barodiya	03/11/2011
8	Khejra	02/11/2011
9	Bhanwar	01/11/2011
10	Ghatakheri	04/11/2011
11	Govindpura	12/10/2011
12	Semla	15/10/2011
13	Mawasa dola	11/11/2011
14	Kherkhera meena	13/10/2011
15	Hafizpura	14/10/2011
16	Dangpura	14/10/2011
17	Noorpura	15/10/2011
18	Lapakna	15/10/2011
19	Mandukheri	17/10/2011
20	Hinglot	16/10/2011
21	Barbatkheri	18/10/2011
22	Morella	19/10/2011
23	Morelli	21/10/2011
24	Afzalpura	22/10/2011
25	Chandpura	23/10/2011
26	Kundi	24/10/2011
2	Patna	25/10/2011
28	Mundkiya	26/10/2011
29	Ameenpura	27/10/2011
30	Kherkhera meena	28/10/2011
31	Yusufpura	29/10/2011

Transect walk were carried out involving the community for Social mapping, Resource mapping. Detailed discussions and deliberations with all the primary stakeholders were carried out Socio-economic survey was carried out during 1.9.11 to 31.10.11 period covering all the households and primary data on demography, Land holdings, Employment status, Community activities etc. was collected as mentioned in chapter 2.

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 waterbodies, falling in the project area.
- Base maps (transport network, village/boundaries, 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------)

Chapter III Proposed Development Plan

Gram panchyat Mundkiya

AREA 1103.25 **UNIT COST 12000** **COST Rs 132.39 lacs**

S.No.	Activities	Unit	Qty	Unit Cost in Rs	Total Cost Lacs	Cost From Project Fund Lac	Convergnce Fund Lacs	Beneficiary Contribution Lacs
A	**Preparatory Phase 22%**							
1	Administration 10%				13.24	13.24		
2	Monitoring 1%				1.32	1.32		
3	Evaluation 1%				1.32	1.32		
4	EPA 4%				5.30	5.30		
5	I &CB 5%				6.62	6.62		
6	DPR 1%				1.32	1.32		
	Total				**29.12**	29.12		
B	**NATURAL RESOURSE MANAGEMENT 56%**							
	Water and Soil Conservation Measures at Arable land					0.00		
1	Vegetative contour Bund	M	6367	98	6.24	6.24		0.62
2	Waste weir	Nos.	40	28000	11.20	11.20		1.12
3	Vegetative contour Bund with waste weir on SC/ST/BPL Farmer land through MGNREGA	Nos.	22	30000	6.60	0.00	6.60	0.00
4	LSCD	Nos.	4	10500	0.42	0.42		0.04
5	Bank Stabilization or Peripheral Bund	M	800	154	1.23	1.23		0.12
6	Farm Pond	Nos.	10	118000	11.80	11.80		0.00
7	ecd 30m	Nos.	15	18000	2.70	2.70		0.00

	Exp. On Arable Land Management				**40.19**	**33.59**	**6.60**	
	Water and Soil Conservation Measures at Non Arable land					0.00		
1	Pasture Development					0.00		
2	DCB	M	1300	100	1.30	1.30		0.07
3	CVH	Nos.	10	5100	0.51	0.51		0.03
4	Loose Stone Check Dam	Nos.	10	10500	1.05	1.05		0.05
5	Planation	Nos.	4000	95	3.80	3.80		0.19
	Talai	Nos.	1	345000	3.45	3.45		0.17
	Exp. On Non Arable Land Management				**10.11**	**10.11**		**0.51**
	Water and Soil Conservation Measures at Drainage Line treatment					0.00		
1	Run off Management Structure 40m ecd	Nos.	10	30000	3.00	3.00		0.30
2	Run off Management Structure 30 m ecd	Nos.	14	18000	2.52	2.52		0.25
3	Run off Management Structure ecd with ww	Nos.	3	158000	4.74	4.74		0.47
4	Anicut /CHECKDAM 8m	Nos.	4	316000	12.64	12.64		1.26
5	Anicut /CHECKDAM 10m	Nos.	0	342000	0.00	0.00		0.00
7	Loose Stone Check Dam	Nos.	0	0	0.00	0.00		0.00
8	Gabion Structure	Nos.		0	0.00	0.00		0.00
9	Anicut	Nos.	1	754000	7.54	7.54		0.75
	Exp. On Drainage line Management				30.44	30.44		3.04
	Exp. On Natural Resourse Management				**80.74**	**74.14**	**6.60**	**3.55**
C	**Farm Production Systems 10%**							
	Agriculture Improvement Activities							
1	**Crop Demonstration**							
	Kharif							
a	Soyabean- Maize	Nos.	80	3888	3.11	3.11		0.31
b	Green Manure	Nos.	20	1596	0.32	0.32		0.03
c	Mini kit	Nos.	40	1541	0.62	0.62		0.06

d	Fodder Demonstration (Jwar Chari)	Nos.	40	496	0.20	0.20		0.02
	Rabi	Nos.						
a	Mustard	Nos.	40	2118	0.85	0.85		0.08
b	Wheat	Nos.	70	3586	2.51	2.51		0.25
c	Kusum	Nos.		1822	0.00	0.00		0.00
d	Fodder Demonstration (Barseem)	Nos.	10	756	0.08	0.08		0.01
e	Mini kit	Nos.	50	1386	0.69	0.69		0.07
2	Horticulture Plants	Nos.	1000	117	1.17	1.17		0.12
3	Agro Forestry	Nos.	**400**	25	0.10	0.10		0.01
4	Vermi Compost	Nos.	8	3745	0.30	0.30		0.03
5	Nepsek sprayer	Nos.						
	ST/SC	Nos.	0	1080	0.00	0.00		0.00
	Others	Nos.	4	960	0.04	0.04		0.00
6	Rotary Duster (Manuallly operated)	Nos.						
	ST/SC	Nos.		900	0.00	0.00		0.00
	Others	Nos.		800	0.00	0.00		0.00
7	MB Plow Tractor Operated	Nos.						
	ST/SC	Nos.		11250	0.00	0.00		0.00
	Others	Nos.	1	10000	0.10	0.10		0.01
8	Bund Former Tractor Operated	Nos.						
	ST/SC	Nos.	2	3150	0.06	0.06		0.01
	Others	Nos.	4	2800	0.11	0.11		0.01
9	Chaff Cutter (manually operated)	Nos.						
	ST/SC	Nos.	2	3150	0.06	0.06		0.01
	Others	Nos.	5	2800	0.14	0.14		0.01
10	HDPE Pipelines	Nos.						
	ST/SC	Nos.	1	24120	0.24	0.24		0.02
	Others	Nos.	4	24120	0.96	0.96		0.10
11	Sprinkler system	Nos.						
	ST/SC	Nos.		13500	0.00	0.00		0.00
	Others	Nos.		12000	0.00	0.00		0.00
	Total	Nos.			11.66	11.66	0.00	1.16
	2. Live stock Development	Nos.						

		Nos.			1.58	1.58	0.00	0.15
	Exp. On Farm production System				13.24	13.24	0.00	1.31
D	**Livelihood Support through Micro Enterprises 9%**							
	Financial assistance toSHG ,Individual ,Fedration				11.92	11.92	0.00	1.19
E	**Consolidation Phase 3%**							
1	Documentation on asset created with sucuss stories				0.85	0.85		
2	Management of NRM works through Gram panchayat/ UG's				1.5	1.5		
3	Enhancement of Success FPS activities				0.82	0.82		
4	Capacity Building of asset responsible UG's and Exit Protocol				0.8	0.8		
	Total				3.97	3.97		
	Grand Total	Nos.			138.99	132.39	6.60	13.24
	Say	Nos.						

Gram panchyat Hanyaheri

AREA 140.42 **UNIT COST 12000** **COST Rs 16.85 lacs**

S.No.	Activities	Unit	Qty	Unit Cost in Rs	Total Cost Lacs	Cost From Project Fund Lac	Convergnce Fund Lacs	Beneficiary Contribution Lacs
A	**Preparatory Phase 22%**							
1	Administration 10%				1.69	1.69		
2	Monitoring 1%				0.17	0.17		
3	Evaluation 1%				0.17	0.17		
4	EPA 4%				0.67	0.67		
5	I &CB 5%				0.84	0.84		
6	DPR 1%				0.17	0.17		
	Total				**3.71**	3.71		
B	**NATURAL RESOURSE MANAGEMENT 56%**							
	Water and Soil Conservation Measures at Arable land					0.00		
1	Vegetative contour Bund	M	440	98	0.43	0.43		0.04
2	Waste weir	Nos.	8	28000	2.24	2.24		0.22
3	Vegetative contour Bund with waste weir on SC/ST/BPL Farmer land through MGNREGA	Nos.	20	30000	6.00	0.00	6.00	0.00
4	LSCD	Nos.	10	10500	1.05	1.05		0.11
5	Bank Stabilization or Peripheral Bund	M	200	159	0.32	0.32		0.03
6	Farm Pond	Nos.	1	50000	0.50	0.00	0.50	0.05
7	ecd 30m	Nos.	4	18000	0.72	0.72	0.00	0.00
	Exp. On Arable Land Management				**11.26**	**4.76**	**6.50**	
	Water and Soil Conservation Measures at Non Arable land					0.00		

1	Pasture Development					0.00		
2	DCB	M	0	100	0.00	0.00		0.00
3	CVH	Nos.	0	5100	0.00	0.00		0.00
4	Loose Stone Check Dam	Nos.	4	10500	0.42	0.42		0.02
5	Planation	Nos.	0	95	0.00	0.00		0.00
	Talai	Nos.	0	345000	0.00	0.00		0.00
	Exp. On Non Arable Land Management				**0.42**	**0.42**		**0.02**
	Water and Soil Conservation Measures at Drainage Line treatment					0.00		
1	Run off Management Structure 40m ecd	Nos.	8	30000	2.40	2.40		0.24
2	Run off Management Structure 30 m ecd	Nos.	8	18000	1.44	1.44		0.14
3	Run off Management Structure ecd with ww	Nos.	0	158000	0.00	0.00		0.00
4	Anicut /CHECKDAM 8m	Nos.	0	316000	0.00	0.00		0.00
5	Anicut /CHECKDAM 10m	Nos.	0	342000	0.00	0.00		0.00
7	Loose Stone Check Dam	Nos.	4	10500	0.42	0.42		0.04
8	Anicut	Nos.		0	0.00	0.00		0.00
9	Anicut 15m	Nos.	0	754000	0.00	0.00		0.00
	Exp. On Drainage line Management				4.26	4.26		0.43
	Exp. On Natural Resourse Management				**15.94**	**9.44**	**6.50**	**0.45**
C	**Farm Production Systems 10%**							
	Agriculture Improvement Activities							
1	**Crop Demonstration**							
	Kharif							
a	Soyabean- Maize	Nos.	6	3888	0.23	0.23		0.02
b	Green Manure	Nos.	0	1596	0.00	0.00		0.00
c	Mini kit	Nos.	10	1541	0.15	0.15		0.02
d	Fodder Demonstration (Jwar Chari)	Nos.	10	496	0.05	0.05		0.00
	Rabi	Nos.						
a	Mustard	Nos.	0	2118	0.00	0.00		0.00

b	Wheat	Nos.	10	3586	0.36	0.36		0.04
c	Kusum	Nos.		1822	0.00	0.00		0.00
d	Fodder Demonstration (Barseem)	Nos.	0	756	0.00	0.00		0.00
e	Mini kit	Nos.	10	1386	0.14	0.14		0.01
2	Horticulture Plants	Nos.	0	117	0.00	0.00		0.00
3	Agro Forestry	Nos.	**50**	25	0.01	0.01		0.00
4	Vermi Compost	Nos.	2	3745	0.07	0.07		0.01
5	Nepsek sprayer	Nos.						
	ST/SC	Nos.	0	1080	0.00	0.00		0.00
	Others	Nos.	0	960	0.00	0.00		0.00
6	Rotary Duster (Manuallly operated)	Nos.						
	ST/SC	Nos.		900	0.00	0.00		0.00
	Others	Nos.		800	0.00	0.00		0.00
7	MB Plow Tractor Operated	Nos.						
	ST/SC	Nos.	1	11250	0.11	0.11		0.01
	Others	Nos.	0	10000	0.00	0.00		0.00
8	Bund Former Tractor Operated	Nos.						
	ST/SC	Nos.	0	3150	0.00	0.00		0.00
	Others	Nos.	0	2800	0.00	0.00		0.00
9	Chaff Cutter (manually operated)	Nos.						
	ST/SC	Nos.	2	3150	0.06	0.06		0.01
	Others	Nos.	0	2800	0.00	0.00		0.00
10	HDPE Pipelines	Nos.						
	ST/SC	Nos.	0	24120	0.00	0.00		0.00
	Others	Nos.	0	24120	0.00	0.00		0.00
11	Sprinkler system	Nos.						
	ST/SC	Nos.		13500	0.00	0.00		0.00
	Others	Nos.		12000	0.00	0.00		0.00
	Total	Nos.			1.20	1.20	0.00	0.12
	2. Live stock Development	Nos.						
1	Breed Improvement	Nos.	1	35000	0.35	0.35		0.04
2	Distribution of Mangers	Nos.	7	500	0.04	0.04		0.00

3	Animal health kit to Cattle Rearer	Nos.	12	445	0.05	0.05		0.01
4	Animal health camps	Nos.	1	5000	0.05	0.05		0.01
	Total	Nos.			0.49	0.49	0.00	0.06
	Exp. On Farm production System				1.69	1.69		
D	**Livelihood Support through Micro Enterprises 9%**							
	Financial assistance toSHG ,Individual ,Fedration				1.51	1.51	0.00	0.15
E	**Consolidation Phase 3%**							
1	Documentation on asset created with sucuss stories				0.1	**0.1**		
2	Management of NRM works through Gram panchayat/ UG's				0.2	**0.2**		
3	Enhancement of Success FPS activities				0.1	**0.1**		
4	Capacity Building of asset responsible UG's and Exit Protocol				0.1	**0.1**		
	Total				0.50	**0.5**		
	Grand Total	Nos.			23.35	16.85	6.50	1.68

Chapter III Proposed Development Plan

Gram panchyat Semli

AREA 764.51 **UNIT COST 12000** **COST Rs 91.74 lacs**

S.No.	Activities	Unit	Qty	Unit Cost in Rs	Total Cost Lacs	Cost From Project Fund Lac	Convergnce Fund Lacs	Beneficiary Contribution Lacs
A	**Preparatory Phase 22%**							
1	Administration 10%				9.17	9.17		
2	Monitoring 1%				0.92	0.92		
3	Evaluation 1%				0.92	0.92		
4	EPA 4%				3.67	3.67		
5	I &CB 5%				4.59	4.59		
6	DPR 1%				0.91	0.91		
	Total				**20.18**	20.18		
B	**NATURAL RESOURSE MANAGEMENT 56%**							
	Water and Soil Conservation Measures at Arable land					0.00		
1	Vegetative contour Bund	M	1160	98	1.14	1.14		0.11
2	Waste weir	Nos.	12	28000	3.36	3.36		0.34
3	Vegetative contour Bund with waste weir on SC/ST/BPL Farmer land through MGNREGA	Nos.	10	30000	3.00	0.00	3.00	0.00
4	LSCD	Nos.	10	10500	1.05	1.05		0.11
5	Bank Stabilization or Peripheral Bund	M	200	154	0.31	0.31		0.03
6	Farm Pond	Nos.	1	50000	0.50	0.00	0.50	0.05
7	ecd 30m	Nos.	12	18000	2.16	2.16		0.00

	Exp. On Arable Land Management				**11.51**	**8.01**	**3.50**	
	Water and Soil Conservation Measures at Non Arable land					0.00		
1	Pasture Development					0.00		
2	DCB	M	0	100	0.00	0.00		0.00
3	CVH	Nos.	0	5100	0.00	0.00		0.00
4	Loose Stone Check Dam	Nos.	8	10500	0.84	0.84		0.04
5	Planation	Nos.	0	95	0.00	0.00		0.00
	Talai	Nos.	1	345000	3.45	3.45		0.17
	Exp. On Non Arable Land Management				**4.29**	**4.29**		**0.21**
	Water and Soil Conservation Measures at Drainage Line treatment					0.00		
1	Run off Management Structure 40m ecd	Nos.	30	30000	9.00	9.00		0.90
2	Run off Management Structure 30 m ecd	Nos.	15	18000	2.70	2.70		0.27
3	Run off Management Structure ecd with ww	Nos.	0	158000	0.00	0.00		0.00
4	Anicut /CHECKDAM 8m	Nos.	4	316000	12.64	12.64		1.26
5	Anicut /CHECKDAM 10m	Nos.	4	342000	13.68	13.68		1.37
7	Loose Stone Check Dam	Nos.	10	10500	1.05	1.05		0.11
8	Anicut	Nos.		0	0.00	0.00		0.00
9	Anicut 15m	Nos.	0	754000	0.00	0.00		0.00
	Exp. On Drainage line Management				39.07	39.07		3.91
	Exp. On Natural Resourse Management				**54.87**	**51.37**	**3.50**	**4.12**
C	**Farm Production Systems 10%**							
	Agriculture Improvement Activities							
1	**Crop Demonstration**							
	Kharif							
a	Soyabean- Maize	Nos.	60	3888	2.33	2.33		0.23
b	Green Manure	Nos.	20	1596	0.32	0.32		0.03
c	Mini kit	Nos.	40	1541	0.62	0.62		0.06

d	Fodder Demonstration (Jwar Chari)	Nos.	30	496	0.15	0.15		0.01
	Rabi	Nos.						
a	Mustard	Nos.	30	2118	0.64	0.64		0.06
b	Wheat	Nos.	60	3586	2.15	2.15		0.22
c	Kusum	Nos.		1822	0.00	0.00		0.00
d	Fodder Demonstration (Barseem)	Nos.	20	756	0.15	0.15		0.02
e	Mini kit	Nos.	44	1386	0.61	0.61		0.06
2	Horticulture Plants	Nos.	0	117	0.00	0.00		0.00
3	Agro Forestry	Nos.	**200**	25	0.05	0.05		0.01
4	Vermi Compost	Nos.	5	3745	0.19	0.19		0.02
5	Nepsek sprayer	Nos.						
	ST/SC	Nos.	0	1080	0.00	0.00		0.00
	Others	Nos.	0	960	0.00	0.00		0.00
6	Rotary Duster (Manuallly operated)	Nos.						
	ST/SC	Nos.		900	0.00	0.00		0.00
	Others	Nos.		800	0.00	0.00		0.00
7	MB Plow Tractor Operated	Nos.						
	ST/SC	Nos.	1	11250	0.11	0.11		0.01
	Others	Nos.	0	10000	0.00	0.00		0.00
8	Bund Former Tractor Operated	Nos.						
	ST/SC	Nos.	2	3150	0.06	0.06		0.01
	Others	Nos.	0	2800	0.00	0.00		0.00
9	Chaff Cutter (manually operated)	Nos.						
	ST/SC	Nos.	2	3150	0.06	0.06		0.01
	Others	Nos.	4	2800	0.11	0.11		0.01
10	HDPE Pipelines	Nos.						
	ST/SC	Nos.	2	24120	0.48	0.48		0.05
	Others	Nos.	2	24120	0.48	0.48		0.05
11	Sprinkler system	Nos.						
	ST/SC	Nos.		13500	0.00	0.00		0.00
	Others	Nos.		12000	0.00	0.00		0.00
	Total	Nos.			8.52	8.52	0.00	0.86
	2. Live stock Development	Nos.						

1	Breed Improvement	Nos.	1	35000	0.35	0.35		0.04
2	Distribution of Mangers	Nos.	5	500	0.03	0.03		0.00
3	Animal health kit to Cattle Rearer	Nos.	40	445	0.18	0.18		0.02
4	Animal health camps	Nos.	2	5000	0.10	0.10		0.01
	Total	Nos.			0.65	0.65	0.00	0.07
	Exp. On Farm production System				9.17	9.17		
D	**Livelihood Support through Micro Enterprises 9%**							
	Financial assistance toSHG ,Individual ,Fedration				8.26	8.26	0.00	0.83
E	**Consolidation Phase 3%**							
1	Documentation on asset created with sucuss stories				0.51	**0.51**		
2	Management of NRM works through Gram panchayat/ UG's				0.9	**0.9**		
3	Enhancement of Success FPS activities				0.45	**0.45**		
4	Capacity Building of asset responsible UG's and Exit Protocol				0.9	**0.9**		
	Total				2.76	**2.76**		
	Grand Total	Nos.			95.24	91.74	3.50	9.17

Chapter III Proposed Development Plan

Gram panchyat Jharkheri

AREA 325.27 **UNIT COST 12000** **COST Rs 39.03 lacs**

S.No.	Activities	Unit	Qty	Unit Cost in Rs	Total Cost Lacs	Cost From Project Fund Lac	Convergnce Fund Lacs	Beneficiary Contribution Lacs
A	**Preparatory Phase 22%**							
1	Administration 10%				3.90	3.90		
2	Monitoring 1%				0.39	0.39		
3	Evaluation 1%				0.39	0.39		
4	EPA 4%				1.56	1.56		
5	I &CB 5%				1.96	1.96		
6	DPR 1%				0.39	0.39		
	Total				**8.59**	8.59		
B	**NATURAL RESOURSE MANAGEMENT 56%**							
	Water and Soil Conservation Measures at Arable land					0.00		
1	Vegetative contour Bund	M	2220	98	2.18	2.18		0.22
2	Waste weir	Nos.	12	28000	3.36	3.36		0.34
3	Vegetative contour Bund with waste weir on SC/ST/BPL Farmer land through MGNREGA	Nos.	18	30000	5.40	0.00	5.40	0.00
4	LSCD	Nos.	5	10500	0.53	0.53		0.05
5	Bank Stabilization or Peripheral Bund	M	200	154	0.31	0.31		0.03
6	Farm Pond	Nos.	2	50000	1.00	0.00	1.00	0.10

7	ecd 30m	Nos.	10	18000	1.80	1.80	0.00	0.00
	Exp. On Arable Land Management				**14.57**	**8.17**	**6.40**	
	Water and Soil Conservation Measures at Non Arable land					0.00		
1	Pasture Development					0.00		
2	DCB	M	0	100	0.00	0.00		0.00
3	CVH	Nos.	0	5100	0.00	0.00		0.00
4	Loose Stone Check Dam	Nos.	4	10500	0.42	0.42		0.02
5	Planation	Nos.	0	95	0.00	0.00		0.00
	Talai	Nos.	0	345000	0.00	0.00		0.00
	Exp. On Non Arable Land Management				**0.42**	**0.42**		**0.02**
	Water and Soil Conservation Measures at Drainage Line treatment					0.00		
1	Run off Management Structure 40m ecd	Nos.	7	30000	2.10	2.10		0.21
2	Run off Management Structure 30 m ecd	Nos.	8	18000	1.44	1.44		0.14
3	Run off Management Structure ecd with ww	Nos.	0	158000	0.00	0.00		0.00
4	Anicut /CHECKDAM 8m	Nos.	2	316000	6.32	6.32		0.63
5	Anicut /CHECKDAM 10m	Nos.	1	342000	3.42	3.42		0.34
7	Loose Stone Check Dam	Nos.	0	10500	0.00	0.00		0.00
8	Anicut	Nos.		0	0.00	0.00		0.00
9	Anicut 15m	Nos.	0	754000	0.00	0.00		0.00
	Exp. On Drainage line Management				13.28	13.28		1.33
	Exp. On Natural Resourse Management				**28.27**	**21.87**	**6.40**	**1.35**
C	**Farm Production Systems 10%**							
	Agriculture Improvement Activities							
1	**Crop Demonstration**							
	Kharif							
a	Soyabean- Maize	Nos.	20	3888	0.78	0.78		0.08
b	Green Manure	Nos.	10	1596	0.16	0.16		0.02

c	Mini kit	Nos.	20	1541	0.31	0.31		0.03
d	Fodder Demonstration (Jwar Chari)	Nos.	10	496	0.05	0.05		0.00
	Rabi	Nos.						
a	Mustard	Nos.	20	2118	0.42	0.42		0.04
b	Wheat	Nos.	24	3586	0.86	0.86		0.09
c	Kusum	Nos.		1822	0.00	0.00		0.00
d	Fodder Demonstration (Barseem)	Nos.	10	756	0.08	0.08		0.01
e	Mini kit	Nos.	20	1386	0.28	0.28		0.03
2	Horticulture Plants	Nos.	0	117	0.00	0.00		0.00
3	Agro Forestry	Nos.	**200**	25	0.05	0.05		0.01
4	Vermi Compost	Nos.	2	3745	0.07	0.07		0.01
5	Nepsek sprayer	Nos.						
	ST/SC	Nos.	0	1080	0.00	0.00		0.00
	Others	Nos.	0	960	0.00	0.00		0.00
6	Rotary Duster (Manuallly operated)	Nos.						
	ST/SC	Nos.		900	0.00	0.00		0.00
	Others	Nos.		800	0.00	0.00		0.00
7	MB Plow Tractor Operated	Nos.						
	ST/SC	Nos.		11250	0.00	0.00		0.00
	Others	Nos.	0	10000	0.00	0.00		0.00
8	Bund Former Tractor Operated	Nos.						
	ST/SC	Nos.	1	3150	0.03	0.03		0.00
	Others	Nos.	1	2800	0.03	0.03		0.00
9	Chaff Cutter (manually operated)	Nos.						
	ST/SC	Nos.	2	3150	0.06	0.06		0.01
	Others	Nos.	2	2800	0.06	0.06		0.01
10	HDPE Pipelines	Nos.						
	ST/SC	Nos.	0	24120	0.00	0.00		0.00
	Others	Nos.	0	24120	0.00	0.00		0.00
11	Sprinkler system	Nos.						
	ST/SC	Nos.		13500	0.00	0.00		0.00
	Others	Nos.		12000	0.00	0.00		0.00
	Total	Nos.			3.24	3.24	0.00	0.34

	2. Live stock Development	Nos.						
1	Breed Improvement	Nos.	1	35000	0.35	0.35		0.04
2	Distribution of Mangers	Nos.	5	500	0.03	0.03		0.00
3	Animal health kit to Cattle Rearer	Nos.	20	445	0.09	0.09		0.01
4	Animal health camps	Nos.	4	5000	0.20	0.20		0.02
	Total	Nos.			0.66	0.66	0.00	0.07
	Exp. On Farm production System				3.90	3.90	0.00	
D	**Livelihood Support through Micro Enterprises 9%**							
	Financial assistance toSHG ,Individual ,Fedration				3.50	3.50	0.00	0.35
E	**Consolidation Phase 3%**							
1	Documentation on asset created with sucuss stories				0.2	0.2		
2	Management of NRM works through Gram panchayat/ UG's				0.27	0.27		
3	Enhancement of Success FPS activities				0.3	0.3		
4	Capacity Building of asset responsible UG's and Exit Protocol				0.4	0.4		
	Total				1.17	1.17		
	Grand Total	Nos.			45.43	39.03	6.40	3.90
	Say	Nos.						

Chapter III Proposed Development Plan

Gram panchyat Nipaniya

AREA 220.02 **UNIT COST 12000** **COST Rs 26.4024 lacs**

S.No.	Activities	Unit	Qty	Unit Cost in Rs	Total Cost Lacs	Cost From Project Fund Lac	Convergnce Fund Lacs	Beneficiary Contribution Lacs
A	**Preparatory Phase 22%**							
1	Administration 10%				2.64	2.64		
2	Monitoring 1%				0.26	0.26		
3	Evaluation 1%				0.26	0.26		
4	EPA 4%				1.06	1.06		
5	I &CB 5%				1.33	1.33		
6	DPR 1%				0.26	0.26		
	Total				**5.81**	5.81		
B	**NATURAL RESOURSE MANAGEMENT 56%**							
	Water and Soil Conservation Measures at Arable land					0.00		
1	Vegetative contour Bund	M	1450	98	1.42	1.42		0.14
2	Waste weir	Nos.	4	28000	1.12	1.12		0.11
3	Vegetative contour Bund with waste weir on SC/ST/BPL Farmer land through MGNREGA	Nos.	22	30000	6.60	0.00	6.60	0.00
4	LSCD	Nos.	4	10500	0.42	0.42		0.04
5	Bank Stabilization or Peripheral Bund	M	100	154	0.15	0.15		0.02
6	Farm Pond	Nos.	0	118000	0.00	0.00		0.00

7	ecd 30m	Nos.	4	18000	0.72	0.72		0.00
	Exp. On Arable Land Management				**10.44**	**3.84**	**6.60**	**0.31**
	Water and Soil Conservation Measures at Non Arable land					0.00		
1	Pasture Development					0.00		
2	DCB	M		100	0.00	0.00		0.00
3	CVH	Nos.		5100	0.00	0.00		0.00
4	Loose Stone Check Dam	Nos.	5	10500	0.53	0.53		0.03
5	Planation	Nos.		95	0.00	0.00		0.00
	Talai	Nos.	0	345000	0.00	0.00		0.00
	Exp. On Non Arable Land Management				**0.53**	**0.53**		**0.03**
	Water and Soil Conservation Measures at Drainage Line treatment					0.00		
1	Run off Management Structure 40m ecd	Nos.	6	30000	1.80	1.80		0.18
2	Run off Management Structure 30 m ecd	Nos.	6	18000	1.08	1.08		0.11
3	Run off Management Structure ecd with ww	Nos.	0	158000	0.00	0.00		0.00
4	Anicut /CHECKDAM 8m	Nos.	0	316000	0.00	0.00		0.00
5	Anicut /CHECKDAM 10m	Nos.	0	342000	0.00	0.00		0.00
7	Loose Stone Check Dam	Nos.	0	0	0.00	0.00		0.00
8	Gabion Structure	Nos.		0	0.00	0.00		0.00
9	Anicut	Nos.	1	755000	7.55	7.55		0.76
	Exp. On Drainage line Management				10.43	10.43		1.04
	Exp. On Natural Resourse Management				**21.39**	**14.79**	**6.60**	**1.38**
C	**Farm Production Systems 10%**							
	Agriculture Improvement Activities							
1	**Crop Demonstration**							
	Kharif							
a	Soyabean- Maize	Nos.	22	3888	0.86	0.86		0.09
b	Green Manure	Nos.	2	1596	0.03	0.03		0.00

c	Mini kit	Nos.	10	1541	0.15	0.15		0.02
d	Fodder Demonstration (Jwar Chari)	Nos.	5	496	0.02	0.02		0.00
	Rabi	Nos.						
a	Mustard	Nos.	10	2118	0.21	0.21		0.02
b	Wheat	Nos.	10	3586	0.36	0.36		0.04
c	Kusum	Nos.		1822	0.00	0.00		0.00
d	Fodder Demonstration (Barseem)	Nos.	10	756	0.08	0.08		0.01
e	Mini kit	Nos.	10	1386	0.14	0.14		0.01
2	Horticulture Plants	Nos.	0	117	0.00	0.00		0.00
3	Agro Forestry	Nos.	**100**	25	0.03	0.03		0.00
4	Vermi Compost	Nos.	2	3745	0.07	0.07		0.01
5	Nepsek sprayer	Nos.						
	ST/SC	Nos.	0	1080	0.00	0.00		0.00
	Others	Nos.	0	960	0.00	0.00		0.00
6	Rotary Duster (Manuallly operated)	Nos.						
	ST/SC	Nos.		900	0.00	0.00		0.00
	Others	Nos.		800	0.00	0.00		0.00
7	MB Plow Tractor Operated	Nos.						
	ST/SC	Nos.		11250	0.00	0.00		0.00
	Others	Nos.		10000	0.00	0.00		0.00
8	Bund Former Tractor Operated	Nos.						
	ST/SC	Nos.	2	3150	0.06	0.06		0.01
	Others	Nos.		2800	0.00	0.00		0.00
9	Chaff Cutter (manually operated)	Nos.						
	ST/SC	Nos.	2	3150	0.06	0.06		0.01
	Others	Nos.		2800	0.00	0.00		0.00
10	HDPE Pipelines	Nos.						
	ST/SC	Nos.	1	24120	0.24	0.24		0.02
	Others	Nos.	0	24120	0.00	0.00		0.00
11	Sprinkler system	Nos.						
	ST/SC	Nos.		13500	0.00	0.00		0.00
	Others	Nos.		12000	0.00	0.00		0.00
	Total	Nos.			2.32	2.32	0.00	0.24

	2. Live stock Development	Nos.						
1	Breed Improvement	Nos.	0	35000	0.00	0.00		0.00
2	Distribution of Mangers	Nos.	10	500	0.05	0.05		0.01
3	Animal health kit to Cattle Rearer	Nos.	38	445	0.17	0.17		0.02
4	Animal health camps	Nos.	2	5000	0.10	0.10		0.01
	Total	Nos.			0.32	0.32	0.00	0.04
	Exp. On Farm production System				2.64	2.64	0.00	0.28
D	**Livelihood Support through Micro Enterprises 9%**							
	Financial assistance toSHG ,Individual ,Fedration				2.37	2.37	0.00	0.24
E	**Consolidation Phase 3%**							
1	Documentation on asset created with sucuss stories				0.19	0.19		
2	Management of NRM works through Gram panchayat/ UG's				0.2	0.2		
3	Enhancement of Success FPS activities				0.2	0.2		
4	Capacity Building of asset responsible UG's and Exit Protocol				0.2	0.2		
	Total				0.79	0.79		
	Grand Total	Nos.			33.00	26.40	6.60	2.64
	Say	Nos.						

Chapter III Proposed Development Plan

Gram panchyat Pachpada

AREA 346.32 **UNIT COST 12000** **COST Rs 41.56 lacs**

S.No.	Activities	Unit	Qty	Unit Cost in Rs	Total Cost Lacs	Cost From Project Fund Lac	Convergnce Fund Lacs	Beneficiary Contribution Lacs
A	**Preparatory Phase 22%**							
1	Administration 10%				4.16	4.16		
2	Monitoring 1%				0.41	0.41		
3	Evaluation 1%				0.41	0.41		
4	EPA 4%				1.66	1.66		
5	I &CB 5%				2.08	2.08		
6	DPR 1%				0.42	0.42		
	Total				**9.14**	9.14		
B	**NATURAL RESOURSE MANAGEMENT 56%**							
	Water and Soil Conservation Measures at Arable land					0.00		
1	Vegetative contour Bund	M	1270	98	1.24	1.24		0.12
2	Waste weir	Nos.	20	28000	5.60	5.60		0.56
3	Vegetative contour Bund with waste weir on SC/ST/BPL Farmer land through MGNREGA	Nos.	15	30000	4.50	0.00	4.50	0.00
4	LSCD	Nos.	10	10500	1.05	1.05		0.11
5	Bank Stabilization or Peripheral Bund	M	200	154	0.31	0.31		0.03
6	Farm Pond	Nos.	2	50000	1.00	0.00	1.00	0.10
7	ecd 30m	Nos.	20	18000	3.60	3.60	0.00	0.00

	Exp. On Arable Land Management				**17.30**	**11.80**	**5.50**	
	Water and Soil Conservation Measures at Non Arable land					0.00		
1	Pasture Development					0.00		
2	DCB	M	0	100	0.00	0.00		0.00
3	CVH	Nos.	0	5100	0.00	0.00		0.00
4	Loose Stone Check Dam	Nos.	10	10500	1.05	1.05		0.05
5	Planation	Nos.	0	95	0.00	0.00		0.00
	Talai	Nos.	0	345000	0.00	0.00		0.00
	Exp. On Non Arable Land Management				**1.05**	**1.05**		**0.05**
	Water and Soil Conservation Measures at Drainage Line treatment					0.00		
1	Run off Management Structure 40m ecd	Nos.	8	30000	2.40	2.40		0.24
2	Run off Management Structure 30 m ecd	Nos.	8	18000	1.44	1.44		0.14
3	Run off Management Structure ecd with ww	Nos.	0	158000	0.00	0.00		0.00
4	Anicut /CHECKDAM 8m	Nos.	1	316000	3.16	3.16		0.32
5	Anicut /CHECKDAM 10m	Nos.	1	342000	3.42	3.42		0.34
7	Loose Stone Check Dam	Nos.	0	10500	0.00	0.00		0.00
8	Anicut	Nos.		0	0.00	0.00		0.00
9	Anicut 15m	Nos.	0	754000	0.00	0.00		0.00
	Exp. On Drainage line Management				10.42	10.42		1.04
	Exp. On Natural Resourse Management				**28.77**	**23.27**	**5.50**	**1.09**
C	**Farm Production Systems 10%**							
	Agriculture Improvement Activities							
1	**Crop Demonstration**							
	Kharif							
a	Soyabean- Maize	Nos.	25	3888	0.97	0.97		0.10
b	Green Manure	Nos.	10	1596	0.16	0.16		0.02
c	Mini kit	Nos.	20	1541	0.31	0.31		0.03

d	Fodder Demonstration (Jwar Chari)	Nos.	10	496	0.05	0.05		0.00
	Rabi	Nos.						
a	Mustard	Nos.	20	2118	0.42	0.42		0.04
b	Wheat	Nos.	25	3586	0.90	0.90		0.09
c	Kusum	Nos.		1822	0.00	0.00		0.00
d	Fodder Demonstration (Barseem)	Nos.	13	756	0.10	0.10		0.01
e	Mini kit	Nos.	20	1386	0.28	0.28		0.03
2	Horticulture Plants	Nos.	0	117	0.00	0.00		0.00
3	Agro Forestry	Nos.	**200**	25	0.05	0.05		0.01
4	Vermi Compost	Nos.	2	3745	0.07	0.07		0.01
5	Nepsek sprayer	Nos.						
	ST/SC	Nos.	0	1080	0.00	0.00		0.00
	Others	Nos.	0	960	0.00	0.00		0.00
6	Rotary Duster (Manuallly operated)	Nos.						
	ST/SC	Nos.		900	0.00	0.00		0.00
	Others	Nos.		800	0.00	0.00		0.00
7	MB Plow Tractor Operated	Nos.						
	ST/SC	Nos.		11250	0.00	0.00		0.00
	Others	Nos.	0	10000	0.00	0.00		0.00
8	Bund Former Tractor Operated	Nos.						
	ST/SC	Nos.	1	3150	0.03	0.03		0.00
	Others	Nos.	1	2800	0.03	0.03		0.00
9	Chaff Cutter (manually operated)	Nos.						
	ST/SC	Nos.	2	3150	0.06	0.06		0.01
	Others	Nos.	2	2800	0.06	0.06		0.01
10	HDPE Pipelines	Nos.						
	ST/SC	Nos.	0	24120	0.00	0.00		0.00
	Others	Nos.	0	24120	0.00	0.00		0.00
11	Sprinkler system	Nos.						
	ST/SC	Nos.		13500	0.00	0.00		0.00
	Others	Nos.		12000	0.00	0.00		0.00
	Total	Nos.			3.49	3.49	0.00	0.36
	2. Live stock Development	Nos.						

1	Breed Improvement	Nos.	1	35000	0.35	0.35		0.04
2	Distribution of Mangers	Nos.	5	500	0.03	0.03		0.00
3	Animal health kit to Cattle Rearer	Nos.	20	445	0.09	0.09		0.01
4	Animal health camps	Nos.	4	5000	0.20	0.20		0.02
	Total	Nos.			0.66	0.66	0.00	0.07
	Exp. On Farm production System				4.15	4.15	0.00	
D	**Livelihood Support through Micro Enterprises 9%**							
	Financial assistance toSHG ,Individual ,Fedration				3.75	3.75	0.00	0.38
E	**Consolidation Phase 3%**							
1	Documentation on asset created with sucuss stories				0.25	0.25		
2	Management of NRM works through Gram panchayat/ UG's				0.3	0.3		
3	Enhancement of Success FPS activities				0.3	0.3		
4	Capacity Building of asset responsible UG's and Exit Protocol				0.4	0.4		
	Total				1.25	1.25		
	Grand Total	Nos.			47.06	41.56	5.50	4.16
	Say	Nos.						

Chapter III Proposed Development Plan

Gram panchyat Chachoda

AREA 817.55 **UNIT COST 12000** **COST Rs 98.106 lacs**

S.No.	Activities	Unit	Qty	Unit Cost in Rs	Total Cost Lacs	Cost From Project Fund Lac	Convergnce Fund Lacs	Beneficiary Contribution Lacs
A	**Preparatory Phase 22%**							
1	Administration 10%				9.81	9.81		
2	Monitoring 1%				0.98	0.98		
3	Evaluation 1%				0.98	0.98		
4	EPA 4%				3.92	3.92		
5	I &CB 5%				4.91	4.91		
6	DPR 1%				0.98	0.98		
	Total				**21.58**	21.58		
B	**NATURAL RESOURSE MANAGEMENT 56%**							
	Water and Soil Conservation Measures at Arable land					0.00		
1	Vegetative contour Bund	M	3010	98	2.95	2.95		0.29
2	Waste weir	Nos.	30	28000	8.40	8.40		0.84
3	Vegetative contour Bund with waste weir on SC/ST/BPL Farmer land through MGNREGA	Nos.	18	150000	27.00	0.00	27.00	0.00
4	LSCD	Nos.	20	10500	2.10	2.10		0.21
5	Bank Stabilization or Peripheral Bund	M	1100	154	1.69	1.69		0.17
6	Farm Pond	Nos.	1	118000	1.18	1.18		0.00

7	ecd 30m	Nos.	20	18000	3.60	3.60		0.00
	Exp. On Arable Land Management				**46.92**	**19.92**	**27.00**	**1.51**
	Water and Soil Conservation Measures at Non Arable land					0.00		
1	Pasture Development					0.00		
2	DCB	M		100	0.00	0.00		0.00
3	CVH	Nos.		5100	0.00	0.00		0.00
4	Loose Stone Check Dam	Nos.	5	10500	0.53	0.53		0.03
5	Planation	Nos.		95	0.00	0.00		0.00
	Talai	Nos.	1	345000	3.45	3.45		0.17
	Exp. On Non Arable Land Management				**3.98**	**3.98**		**0.20**
	Water and Soil Conservation Measures at Drainage Line treatment					0.00		
1	Run off Management Structure 40m ecd	Nos.	12	30000	3.60	3.60		0.36
2	Run off Management Structure 30 m ecd	Nos.	8	18000	1.44	1.44		0.14
3	Run off Management Structure ecd with ww	Nos.	1	158000	1.58	1.58		0.16
4	Anicut /CHECKDAM 8m	Nos.	3	316000	9.48	9.48		0.95
5	Anicut /CHECKDAM 10m	Nos.	2	342000	6.84	6.84		0.68
7	Loose Stone Check Dam	Nos.	0	0	0.00	0.00		0.00
8	Gabion Structure	Nos.		0	0.00	0.00		0.00
9	Anicut	Nos.	1	809000	8.09	8.09		0.81
	Exp. On Drainage line Management				31.03	31.03		3.10
	Exp. On Natural Resourse Management				**81.93**	**54.93**	**27.00**	**4.81**
C	**Farm Production Systems 10%**							
	Agriculture Improvement Activities							
1	**Crop Demonstration**							
	Kharif							
a	Soyabean- Maize	Nos.	60	3888	2.33	2.33		0.23
b	Green Manure	Nos.	2	1596	0.03	0.03		0.00

c	Mini kit	Nos.	40	1541	0.62	0.62		0.06
d	Fodder Demonstration (Jwar Chari)	Nos.	20	496	0.10	0.10		0.01
	Rabi	Nos.						
a	Mustard	Nos.	40	2118	0.85	0.85		0.08
b	Wheat	Nos.	50	3586	1.79	1.79		0.18
c	Kusum	Nos.		1822	0.00	0.00		0.00
d	Fodder Demonstration (Barseem)	Nos.	20	756	0.15	0.15		0.02
e	Mini kit	Nos.	40	1386	0.55	0.55		0.06
2	Horticulture Plants	Nos.	500	117	0.59	0.59		0.06
3	Agro Forestry	Nos.	**200**	25	0.05	0.05		0.01
4	Vermi Compost	Nos.	10	3745	0.37	0.37		0.04
5	Nepsek sprayer	Nos.						
	ST/SC	Nos.	3	1080	0.03	0.03		0.00
	Others	Nos.	4	960	0.04	0.04		0.00
6	Rotary Duster (Manuallly operated)	Nos.						
	ST/SC	Nos.		900	0.00	0.00		0.00
	Others	Nos.		800	0.00	0.00		0.00
7	MB Plow Tractor Operated	Nos.						
	ST/SC	Nos.		11250	0.00	0.00		0.00
	Others	Nos.		10000	0.00	0.00		0.00
8	Bund Former Tractor Operated	Nos.						
	ST/SC	Nos.	5	3150	0.16	0.16		0.02
	Others	Nos.		2800	0.00	0.00		0.00
9	Chaff Cutter (manually operated)	Nos.						
	ST/SC	Nos.	2	3150	0.06	0.06		0.01
	Others	Nos.		2800	0.00	0.00		0.00
10	HDPE Pipelines	Nos.						
	ST/SC	Nos.	2	24120	0.48	0.48		0.05
	Others	Nos.	2	24120	0.48	0.48		0.05
11	Sprinkler system	Nos.						
	ST/SC	Nos.		13500	0.00	0.00		0.00
	Others	Nos.		12000	0.00	0.00		0.00
	Total	Nos.			8.69	8.69	0.00	0.88

	2. Live stock Development	Nos.						
1	Breed Improvement	Nos.	1	35000	0.35	0.35		0.04
2	Distribution of Mangers	Nos.		500	0.00	0.00		0.00
3	Animal health kit to Cattle Rearer	Nos.	60	445	0.27	0.27		0.03
4	Animal health camps	Nos.	10	5000	0.50	0.50		0.05
	Total	Nos.			1.12	1.12	0.00	0.12
	Exp. On Farm production System				9.81	9.81	0.00	1.00
D	**Livelihood Support through Micro Enterprises 9%**							
	Financial assistance toSHG ,Individual ,Fedration				8.85	8.85	0.00	0.89
E	**Consolidation Phase 3%**							
1	Documentation on asset created with sucuss stories				0.5	0.5		
2	Management of NRM works through Gram panchayat/ UG's				0.84	0.84		
3	Enhancement of Success FPS activities				0.8	0.8		
4	Capacity Building of asset responsible UG's and Exit Protocol				0.8	0.8		
	Total				2.94	2.94		
	Grand Total	Nos.			125.10	98.10	27.00	9.81
	Say	Nos.						

Chapter III Proposed Development Plan

Gram panchyat Pali

AREA 320.15 **UNIT COST 12000** **COST Rs 38.42 lacs**

S.No.	Activities	Unit	Qty	Unit Cost in Rs	Total Cost Lacs	Cost From Project Fund Lac	Convergnce Fund Lacs	Beneficiary Contribution Lacs
A	**Preparatory Phase 22%**							
1	Administration 10%				3.84	3.84		
2	Monitoring 1%				0.38	0.38		
3	Evaluation 1%				0.38	0.38		
4	EPA 4%				1.54	1.54		
5	I &CB 5%				1.92	1.92		
6	DPR 1%				0.38	0.38		
	Total				**8.44**	8.44		
B	**NATURAL RESOURSE MANAGEMENT 56%**							
	Water and Soil Conservation Measures at Arable land					0.00		
1	Vegetative contour Bund	M	1160	98	1.14	1.14		0.11
2	Waste weir	Nos.	12	28000	3.36	3.36		0.34
3	Vegetative contour Bund with waste weir on SC/ST/BPL Farmer land through MGNREGA	Nos.	25	3000	0.75	0.00	0.75	0.00
4	LSCD	Nos.	10	10500	1.05	1.05		0.11
5	Bank Stabilization or Peripheral Bund	M	200	154	0.31	0.31		0.03
6	Farm Pond	Nos.	2	50000	1.00	0.00	1.00	0.10

7	ecd 30m	Nos.	12	18000	2.16	2.16		0.00
	Exp. On Arable Land Management				**9.76**	**8.01**	**1.75**	
	Water and Soil Conservation Measures at Non Arable land					0.00		
1	Pasture Development					0.00		
2	DCB	M	0	100	0.00	0.00		0.00
3	CVH	Nos.	0	5100	0.00	0.00		0.00
4	Loose Stone Check Dam	Nos.	8	10500	0.84	0.84		0.04
5	Planation	Nos.	0	95	0.00	0.00		0.00
	Talai	Nos.	1	345000	3.45	3.45		0.17
	Exp. On Non Arable Land Management				**4.29**	**4.29**		**0.21**
	Water and Soil Conservation Measures at Drainage Line treatment					0.00		
1	Run off Management Structure 40m ecd	Nos.	10	30000	3.00	3.00		0.30
2	Run off Management Structure 30 m ecd	Nos.	12	18000	2.16	2.16		0.22
3	Run off Management Structure ecd with ww	Nos.	0	158000	0.00	0.00		0.00
4	Anicut /CHECKDAM 8m	Nos.	0	316000	0.00	0.00		0.00
5	Anicut /CHECKDAM 10m	Nos.	1	342000	3.42	3.42		0.34
7	Loose Stone Check Dam	Nos.	6	10500	0.63	0.63		0.06
8	Anicut	Nos.		0	0.00	0.00		0.00
9	Anicut 15m	Nos.	0	754000	0.00	0.00		0.00
	Exp. On Drainage line Management				9.21	9.21		0.92
	Exp. On Natural Resourse Management				**23.26**	**21.51**	**1.75**	**1.13**
C	**Farm Production Systems 10%**							
	Agriculture Improvement Activities							
1	**Crop Demonstration**							
	Kharif							
a	Soyabean- Maize	Nos.	25	3888	0.97	0.97		0.10
b	Green Manure	Nos.	10	1596	0.16	0.16		0.02

c	Mini kit	Nos.	20	1541	0.31	0.31		0.03
d	Fodder Demonstration (Jwar Chari)	Nos.	10	496	0.05	0.05		0.00
	Rabi	Nos.						
a	Mustard	Nos.	19	2118	0.40	0.40		0.04
b	Wheat	Nos.	25	3586	0.90	0.90		0.09
c	Kusum	Nos.		1822	0.00	0.00		0.00
d	Fodder Demonstration (Barseem)	Nos.	13	756	0.10	0.10		0.01
e	Mini kit	Nos.	10	1386	0.14	0.14		0.01
2	Horticulture Plants	Nos.	0	117	0.00	0.00		0.00
3	Agro Forestry	Nos.	**200**	25	0.05	0.05		0.01
4	Vermi Compost	Nos.	2	3745	0.07	0.07		0.01
5	Nepsek sprayer	Nos.						
	ST/SC	Nos.	0	1080	0.00	0.00		0.00
	Others	Nos.	0	960	0.00	0.00		0.00
6	Rotary Duster (Manuallly operated)	Nos.						
	ST/SC	Nos.		900	0.00	0.00		0.00
	Others	Nos.		800	0.00	0.00		0.00
7	MB Plow Tractor Operated	Nos.						
	ST/SC	Nos.	1	11250	0.11	0.11		0.01
	Others	Nos.	0	10000	0.00	0.00		0.00
8	Bund Former Tractor Operated	Nos.						
	ST/SC	Nos.	1	3150	0.03	0.03		0.00
	Others	Nos.	0	2800	0.00	0.00		0.00
9	Chaff Cutter (manually operated)	Nos.						
	ST/SC	Nos.	1	3150	0.03	0.03		0.00
	Others	Nos.	0	2800	0.00	0.00		0.00
10	HDPE Pipelines	Nos.						
	ST/SC	Nos.	0	24120	0.00	0.00		0.00
	Others	Nos.	0	24120	0.00	0.00		0.00
11	Sprinkler system	Nos.						
	ST/SC	Nos.		13500	0.00	0.00		0.00
	Others	Nos.		12000	0.00	0.00		0.00
	Total	Nos.			3.33	3.33	0.00	0.33

	2. Live stock Development	Nos.						
1	Breed Improvement	Nos.	1	35000	0.35	0.35		0.04
2	Distribution of Mangers	Nos.	5	500	0.03	0.03		0.00
3	Animal health kit to Cattle Rearer	Nos.	20	445	0.09	0.09		0.01
4	Animal health camps	Nos.	1	5000	0.05	0.05		0.01
	Total	Nos.			0.51	0.51	0.00	0.06
	Exp. On Farm production System				3.84	3.84		
D	**Livelihood Support through Micro Enterprises 9%**							
	Financial assistance toSHG ,Individual ,Fedration				3.46	3.46	0.00	0.35
E	**Consolidation Phase 3%**							
1	Documentation on asset created with sucuss stories				0.25	**0.25**		
2	Management of NRM works through Gram panchayat/ UG's				0.3	**0.3**		
3	Enhancement of Success FPS activities				0.25	**0.25**		
4	Capacity Building of asset responsible UG's and Exit Protocol				0.4	**0.35**		
	Total				1.15	**1.15**		
	Grand Total	Nos.			40.16	38.41	38.41	3.84
	Say	Nos.						

Chapter III Proposed Development Plan

Gram panchyat Ghatakheri

AREA 1204.51 **UNIT COST 12000** **COST Rs 144.54 lacs**

S.No.	Activities	Unit	Qty	Unit Cost in Rs	Total Cost Lacs	Cost From Project Fund Lac	Convergnce Fund Lacs	Beneficiary Contribution Lacs
A	**Preparatory Phase 22%**							
1	Administration 10%				14.45	14.45		
2	Monitoring 1%				1.45	1.45		
3	Evaluation 1%				1.45	1.45		
4	EPA 4%				5.78	5.78		
5	I &CB 5%				7.23	7.23		
6	DPR 1%				1.45	1.45		
	Total				**31.81**	31.81		
B	**NATURAL RESOURSE MANAGEMENT 56%**							
	Water and Soil Conservation Measures at Arable land					0.00		
1	Vegetative contour Bund	M	8000	98	7.84	7.84		0.78
2	Waste weir	Nos.	40	28000	11.20	11.20		1.12
3	Vegetative contour Bund with waste weir on SC/ST/BPL Farmer land through MGNREGA	Nos.	18	30000	5.40	0.00	5.40	0.00
4	LSCD	Nos.	5	10500	0.53	0.53		0.05
5	Bank Stabilization or Peripheral Bund	M	900	154	1.39	1.39		0.14
6	Farm Pond	Nos.	2	118000	2.36	2.36		0.00
7	ecd 30m	Nos.	20	18000	3.60	3.60		0.00

	Exp. On Arable Land Management				**32.31**	**26.91**	**5.40**	
	Water and Soil Conservation Measures at Non Arable land					0.00		
1	Pasture Development					0.00		
2	DCB	M	1300	100	1.30	1.30		0.07
3	CVH	Nos.	10	5100	0.51	0.51		0.03
4	Loose Stone Check Dam	Nos.	10	10500	1.05	1.05		0.05
5	Planation	Nos.	4000	95	3.80	3.80		0.19
	Talai	Nos.	1	345000	3.45	3.45		0.17
	Exp. On Non Arable Land Management				**10.11**	**10.11**		**0.51**
	Water and Soil Conservation Measures at Drainage Line treatment					0.00		
1	Run off Management Structure 40m ecd	Nos.	18	30000	5.40	5.40		0.54
2	Run off Management Structure 30 m ecd	Nos.	20	18000	3.60	3.60		0.36
3	Run off Management Structure ecd with ww	Nos.	2	158000	3.16	3.16		0.32
4	Anicut /CHECKDAM 8m	Nos.	3	316000	9.48	9.48		0.95
5	Anicut /CHECKDAM 10m	Nos.	2	342000	6.84	6.84		0.68
7	Loose Stone Check Dam	Nos.	0	0	0.00	0.00		0.00
8	Anicut	Nos.		0	0.00	0.00		0.00
9	Anicut 12m	Nos.	2	772000	15.44	15.44		1.54
	Exp. On Drainage line Management				43.92	43.92		4.39
	Exp. On Natural Resourse Management				**86.34**	**80.94**	**5.40**	**4.90**
C	**Farm Production Systems 10%**							
	Agriculture Improvement Activities							
1	**Crop Demonstration**							
	Kharif							
a	Soyabean- Maize	Nos.	80	3888	3.11	3.11		0.31
b	Green Manure	Nos.	20	1596	0.32	0.32		0.03
c	Mini kit	Nos.	60	1541	0.92	0.92		0.09

d	Fodder Demonstration (Jwar Chari)	Nos.	32	496	0.16	0.16		0.02
	Rabi	Nos.						
a	Mustard	Nos.	40	2118	0.85	0.85		0.08
b	Wheat	Nos.	80	3586	2.87	2.87		0.29
c	Kusum	Nos.		1822	0.00	0.00		0.00
d	Fodder Demonstration (Barseem)	Nos.	20	756	0.15	0.15		0.02
e	Mini kit	Nos.	50	1386	0.69	0.69		0.07
2	Horticulture Plants	Nos.	1000	117	1.17	1.17		0.12
3	Agro Forestry	Nos.	**400**	25	0.10	0.10		0.01
4	Vermi Compost	Nos.	12	3745	0.45	0.45		0.04
5	Nepsek sprayer	Nos.						
	ST/SC	Nos.	0	1080	0.00	0.00		0.00
	Others	Nos.	4	960	0.04	0.04		0.00
6	Rotary Duster (Manuallly operated)	Nos.						
	ST/SC	Nos.		900	0.00	0.00		0.00
	Others	Nos.		800	0.00	0.00		0.00
7	MB Plow Tractor Operated	Nos.						
	ST/SC	Nos.		11250	0.00	0.00		0.00
	Others	Nos.	1	10000	0.10	0.10		0.01
8	Bund Former Tractor Operated	Nos.						
	ST/SC	Nos.	4	3150	0.13	0.13		0.01
	Others	Nos.	4	2800	0.11	0.11		0.01
9	Chaff Cutter (manually operated)	Nos.						
	ST/SC	Nos.	4	3150	0.13	0.13		0.01
	Others	Nos.	5	2800	0.14	0.14		0.01
10	HDPE Pipelines	Nos.						
	ST/SC	Nos.	2	24120	0.48	0.48		0.05
	Others	Nos.	4	24120	0.96	0.96		0.10
11	Sprinkler system	Nos.						
	ST/SC	Nos.		13500	0.00	0.00		0.00
	Others	Nos.		12000	0.00	0.00		0.00
	Total	Nos.			12.88	12.88	0.00	1.28
	2. Live stock Development	Nos.						

1	Breed Improvement	Nos.	2	35000	0.70	0.70		0.07
2	Distribution of Mangers	Nos.	24	500	0.12	0.12		0.01
3	Animal health kit to Cattle Rearer	Nos.	78	445	0.35	0.35		0.03
4	Animal health camps	Nos.	8	5000	0.40	0.40		0.04
	Total	Nos.			1.57	1.57	0.00	0.15
	Exp. On Farm production System				14.45	14.45	0.00	
D	**Livelihood Support through Micro Enterprises 9%**							
	Financial assistance toSHG ,Individual ,Fedration				13.00	13.00	0.00	1.30
E	**Consolidation Phase 3%**							
1	Documentation on asset created with sucuss stories				0.9	0.9		
2	Management of NRM works through Gram panchayat/ UG's				1.5	1.5		
3	Enhancement of Success FPS activities				0.94	0.94		
4	Capacity Building of asset responsible UG's and Exit Protocol				1.0	1		
	Total				4.34	4.34		
	Grand Total	Nos.			149.94	144.54	5.40	14.45
	Say	Nos.						

Chapter IV

Activitywise Total Project Cost

Chapter IV Proposed Development Plan

Gram panchyat Total

AREA 5242 **UNIT COST 12000** **COST Rs 629.04lacs**

S.No.	Activities	Unit	Qty	Unit Cost in Rs	Total Cost Lacs	Cost From Project Fund Lac	Convergnce Fund Lacs	Beneficiary Contribution Lacs
A	**Preparatory Phase 22%**							
1	Administration 10%				62.90	62.90		
2	Monitoring 1%				6.29	6.29		
3	Evaluation 1%				6.29	6.29		
4	EPA 4%				25.17	25.17		
5	I &CB 5%				31.45	31.45		
6	DPR 1%				6.29	6.29		
	Total				138.39	138.39		
B	**NATURAL RESOURSE MANAGEMENT 56%**							
	Water and Soil Conservation Measures at Arable land					0.00		
1	Vegetative contour Bund	M	25077	98	24.58	24.58	0.00	2.46
2	Waste weir	Nos.	178	28000	49.84	49.84	0.00	4.98
3	Vegetative contour Bund with waste weir on SC/ST/BPL Farmer land through MGNREGA	Nos.	168	150000	65.25	0.00	65.25	0.00
4	LSCD	Nos.	78	10500	8.19	8.19	0.00	0.82
5	Bank Stabilization or Peripheral Bund	M	3900	154	6.02	6.02	0.00	0.60
6	Farm Pond	Nos.	21	118000	19.34	15.34	4.00	0.40
7	ecd 30m	Nos.	117	18000	21.06	21.06	0.00	0.00

	Exp. On Arable Land Management		0		194.27	125.02	69.25	9.26
			0					
	Water and Soil Conservation Measures at Non Arable land							
1	Pasture Development							
2	DCB	M	2600	100	2.60	2.60		0.13
3	CVH	Nos.	20	5100	1.02	1.02		0.05
4	Loose Stone Check Dam	Nos.	64	10500	6.72	6.72		0.34
5	Planation	Nos.	8000	95	7.60	7.60		0.38
	Talai	Nos.	5	345000	17.25	17.25		0.86
	Exp. On Non Arable Land Management				35.19	**35.19**		**1.76**
					0.00			
	Water and Soil Conservation Measures at Drainage Line treatment				0.00	0.00		
1	Run off Management Structure 40m ecd	Nos.	109	30000	32.70	32.70		3.27
2	Run off Management Structure 30 m ecd	Nos.	99	18000	17.82	17.82		1.78
3	Run off Management Structure ecd with ww	Nos.	6	158000	9.48	9.48		0.95
4	Anicut /CHECKDAM 8m	Nos.	17	316000	53.72	53.72		5.37
5	Anicut /CHECKDAM 10m	Nos.	11	342000	37.62	37.62		3.76
7	Loose Stone Check Dam	Nos.	20	10500	2.10	2.10		0.21
8	Anicut	Nos.	0	0	0.00	0.00		0.00
9	Anicut 15m	Nos.	5	754000	38.62	38.62		3.86
	Exp. On Drainage line Management				192.06	192.06		19.21
					0.00			
	Exp. On Natural Resourse Management				421.52	**352.27**	**69.25**	**30.23**
C	**Farm Production Systems 10%**							
	Agriculture Improvement Activities		!					
1	Crop Demonstration							
	Kharif							
a	Soyabean- Maize	Nos.	378	3888	15	15		1
b	Green Manure	Nos.	94	1596	1.50	1.50		0.15
c	Mini kit	Nos.	260	1541	4.01	4.01		0.40

d	Fodder Demonstration (Jwar Chari)	Nos.	167	496	0.83	0.83		0.08
	Rabi	Nos.	0					
a	Mustard	Nos.	219	2118	4.64	4.64		0.46
b	Wheat	Nos.	354	3586	12.69	12.69		1.27
c	Kusum	Nos.	0	1822	0.00	0.00		0.00
d	Fodder Demonstration (Barseem)	Nos.	116	756	0.88	0.88		0.09
e	Mini kit	Nos.	254	1386	3.52	3.52		0.35
2	Horticulture Plants	Nos.	2500	117	2.93	2.93		0.29
3	Agro Forestry	Nos.	1950	25	0.49	0.49		0.05
4	Vermi Compost	Nos.	45	3745	1.69	1.69		0.17
5	Nepsek sprayer	Nos.	0					
	ST/SC	Nos.	3	1080	0.03	0.03		0.00
	Others	Nos.	12	960	0.12	0.12		0.01
6	Rotary Duster (Manuallly operated)	Nos.	0					
	ST/SC	Nos.	0	900	0.00	0.00		0.00
	Others	Nos.	0	800	0.00	0.00		0.00
7	MB Plow Tractor Operated	Nos.	0					
	ST/SC	Nos.	3	11250	0.34	0.34		0.03
	Others	Nos.	2	10000	0.20	0.20		0.02
8	Bund Former Tractor Operated	Nos.	0					
	ST/SC	Nos.	18	3150	0.57	0.57		0.06
	Others	Nos.	10	2800	0.28	0.28		0.03
9	Chaff Cutter (manually operated)	Nos.	0					
	ST/SC	Nos.	19	3150	0.60	0.60		0.06
	Others	Nos.	18	2800	0.50	0.50		0.05
10	HDPE Pipelines	Nos.	0					
	ST/SC	Nos.	8	24120	1.93	1.93		0.19
	Others	Nos.	12	24120	2.89	2.89		0.29
11	Sprinkler system	Nos.	0					
	ST/SC	Nos.	0	13500	0.00	0.00		0.00
	Others	Nos.	0	12000	0.00	0.00		0.00
	Total	Nos.	0		55.32	55.32	0.00	5.52
	2. Live stock Development	Nos.						

1	Breed Improvement	Nos.	10	35000	3.50	3.50		0.35
2	Distribution of Mangers	Nos.	85	500	0.45	0.45		0.05
3	Animal health kit to Cattle Rearer	Nos.	366	445	1.63	1.63		0.16
4	Animal health camps	Nos.	40	5000	2.00	2.00		0.20
	Total	Nos.	0		7.58	7.58	0.00	0.76
	Exp. On Farm production System				62.90	62.90	0.00	6.28
D	**Livelihood Support through Micro Enterprises 9%**							
	Financial assistance toSHG ,Individual ,Fedration				56.61	56.61	0.00	5.67
E	**Consolidation Phase 3%**							
1	Documentation on asset created with sucuss stories				3.75	3.75		
2	Management of NRM works through Gram panchayat/ UG's				6.01	6.01		
3	Enhancement of Success FPS activities				4.16	4.16		
4	Capacity Building of asset responsible UG's and Exit Protocol				4.95	4.95		
	Total				18.87	18.87	0	0
	Grand Total	Nos.			698.29	629.04	69.25	42.18

Chapter V

Annual Action Plan

ANNUAL ACTION PLAN PHYSICAL & FINANCIAL OF IWMP - VI PANCHAYAT SAMITI, CHHABRA

Chapter - V ANNUAL ACTION PLAN (THROUGH PROJECT FUND)

AREA 5242 Ha **COST 629.04**

Activities	Unit	Qty	Unit Cost in Rs	Total Cost Lacs	I year		II year		III year		IV year		V year		VI year		VII year		Total	
Preparatory Phase 22%					**Phy**	**Fin**	**Phy**	**Fin**	**Phy**	**Fin**	**Phy**	**Fin**	**Phy**	**Fin**	**Phy**	**Fin**	**Phy**	**Fin**	**Phy**	**Fin**
Administration 10%				62.90	0	0.00	0	0.00	--	0.00	--	0.00	--	0.00	--	0.00	--	5.03	--	5.03
Monitoring 1%				6.29	0	0.00	0	0.00	--	0.00	--	0.00	--	0.00	--	0.00	--	0.00	--	0.00
Evaluation 1%				6.29	0	0.00	0	0.00	--	0.00	--	0.00	--	0.00	--	0.00	--	0.00	--	0.00
EPA 4%				25.17	0	0.00	0	0.00	--	0.00	--	0.00	--	0.00	--	0.00	--	0.00	--	0.00
I &CB 5%				31.45	0	0.00	0	0.00	--	0.00	--	0.00	--	0.00	--	3.15	--	0.00	--	3.15
DPR 1%				6.29	0	0.00	0	0.00	--	0.00	--	0.00	--	0.00	--	0.00	--	0.00	--	0.00
Total				**138.39**		0.00		0.00		0.00		0.00		0.00		3.15	0	5.03		8.18
NATURAL RESOURSE MANAGEMENT 56%																				
Water and Soil Conservation Measures at Arable land																				
Vegetative contour Bund	M	25077	98	24.58	0	0	0	0	5000	4.90	5000	4.90	8000	7.84	7077	6.94	0	0.00	25077	24.58
Waste weir	Nos.	178	28000	49.84	0	0	0	0	50	14.00	50	14.00	50	14.00	28	7.84	0	0.00	178	49.84
LSCD	Nos.	78	10500	8.19	0	0	0	0	20	2.10	15	1.58	15	1.58	28	2.94		0		8.19
Bank Stabilization or Peripheral Bund	M	3900	154	6.02	0	0	0	0	1000	1.54	1000	1.54	1000	1.54	900	1.39	0	0.00	3900	6.01
Farm Pond	Nos.	13	118000	15.34	0	0	0	0	4	4.72	4	4.72	5	5.90	0	0.00	0	0.00	13	15.34
ecd 30m	Nos.	117	18000	21.06	0	0	0	0	25	4.50	25	4.50	25	4.50	42	7.56	0	0		21.06
Exp. On Arable Land Management		0		125.02	0.00	0.00	0.00	0.00	6099	31.76	6094	31.24	9095	35.36	8075	26.66	0	0.00	29168	125.01
Water and Soil Conservation Measures at Non Arable land																				
Pasture Development																				

DCB	M	2600	100	2.60	0	0	0	0	1000	1.00	1600	1.60	0	0.00	0	0.00	0	0.00	2600	2.60
CVH	Nos.	20	5100	1.02	0	0	0	0	10	0.51	10	0.51	0	0.00	0	0.00	0	0.00	20	1.02
Loose Stone Check Dam	Nos.	64	10500	6.72	0	0	0	0	5	0.53	15	1.58	25	2.63	19	2.00	0	0	0	6.72
Planation	Nos.	8000	95	7.60	0	0	0	0	2000	1.90	2000	1.90	2000	1.90	2000	1.90	0	0	0	7.60
Talai	Nos.	5	345000	17.25	0	0	0	0	2	6.90	2	6.90	1	3.45	0	0.00	0	0.00	5	17.25
Exp. On Non Arable Land Management		0		35.19	0.00	0.00	0.00	0.00	3017	10.84	3627	12.49	2026	7.98	2019	3.90	0	0.00	2625	35.19
		0																		
Water and Soil Conservation Measures at Drainage Line treatment																				
Run off Management Structure 40m ecd	Nos.	109	30000	32.70	0	0	0	0	30	9.00	40	12.00	39	11.70	0	0.00	0	0.00	109	32.70
Run off Management Structure 30 m ecd	Nos.	99	18000	17.82	0	0	0	0	30	5.40	30	5.40	39	7.02	0	0.00	0	0.00	99	17.82
Run off Management Structure ecd with ww	Nos.	6	158000	9.48	0	0	0	0	2	3.16	2	3.16	2	3.16	0	0.00	0	0	6	9.48
Anicut /CHECKDAM 8m	Nos.	17	316000	53.72	0	0	0	0	3	9.48	3	9.48	11	34.76	0	0.00	0	0	17	53.72
Anicut /CHECKDAM 10m	Nos.	11	342000	37.62	0	0	0	0	3	10.26	3	10.26	5	17.10	0	0.00	0	0	11	37.62
Loose Stone Check Dam	Nos.	20	10500	2.10	0	0	0	0	0	0.00	10	1.05	10	1.05	0	0.00	0	0	20	2.10
Gabion Structure	Nos.	0	0	0.00	0	0	0	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0	0	0.00
Anicut	Nos.	5		38.62	0	0	0	0	1	10.00	2	10.00	2	18.62	0	0.00	0	0	5	38.62
Exp. On Drainage line Management		0		192.06	0	0	0	0	0	47.30	0	51.35	0	93.41	0	0.00		0.00		192.06
		0		0.00																
Exp. On Natural Resourse Management		0		352.27	0.00	0.00	0.00	0.00	0	89.90	0	95.07	0	136.74	0	30.56	0	0.00	0	352.26
Farm Production Systems 10%																				
Agriculture Improvement Activities																				
Crop Demonstration																				
Kharif																				
Soyabean- Maize	Nos.	378	3888	14.70	0	0	0	0	40	1.56	100	3.89	100	3.89	138	5.37	0	0.00	378	14.70
Green Manure	Nos.	94	1596	1.50	0	0	0	0	20	0.32	20	0.32	20	0.32	34	0.54	0	0	94	1.50
Mini kit	Nos.	260	1541	4.01	0	0	0	0	100	1.54	100	1.54	20	0.31	40	0.62	0	0	260	4.01
Fodder Demonstration (Jwar Chari)	Nos.	167	496	0.83	0	0	0	0	30	0.15	30	0.15	60	0.30	47	0.23	0	0	167	0.83
Rabi	Nos.	0		0.00																
Mustard	Nos.	219	2118	4.64	0	0	0	0	40	0.85	40	0.85	40	0.85	99	2.10	0	0	219	4.64
Wheat	Nos.	354	3586	12.69	0	0	0	0	80	2.87	80	2.87	80	2.87	114	4.09	0	0	354	12.69
Kusum	Nos.	0	1822	0.00	0	0	0	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0	0	0.00

Fodder Demonstration (Barseem)	Nos.	116	756	0.88	0	0	0	0	40	0.30	40	0.30	20	0.15	16	0.12	0	0	116	0.88
Mini kit	Nos.	254	1386	3.52	0	0	0	0	50	0.69	50	0.69	80	1.11	74	1.03	0	0	254	3.52
Horticulture Plants	Nos.	2500	117	2.93	0	0	0	0	500	0.59	500	0.59	1000	1.17	500	0.59	0	0	2500	2.93
Agro Forestry	Nos.	1950	25	0.49	0	0	0	0	500	0.13	500	0.13	500	0.13	450	0.11	0	0	1950	0.49
Vermi Compost	Nos.	45	3745	1.69	0	0	0	0	5	0.19	5	0.19	5	0.19	30	1.12	0	0	45	1.69
Nepsek sprayer	Nos.	0		0.00						0.00										
ST/SC	Nos.	3	1080	0.03	0	0	0	0	1	0.01	1	0.01	1	0.01	0	0.00	0	0	3	0.03
Others	Nos.	12	960	0.12	0	0	0	0	10	0.10	2	0.02	0	0.00	0	0.00	0	0	12	0.12
Rotary Duster (Manuallly operated)	Nos.	0		0.00						0.00			.							
ST/SC	Nos.	0	900	0.00	0	0	0	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0	0	0.00
Others	Nos.	0	800	0.00	0	0	0	0	0	0.00	0	0.00	0	0.00	0	0.00	0	0	0	0.00
MB Plow Tractor Operated	Nos.	0		0.00																
ST/SC	Nos.	3	11250	0.34	0	0	0	0	0	0.00	3	0.34	0	0.00	0	0.00	0	0	3	0.34
Others	Nos.	2	10000	0.20	0	0	0	0	0	0.00	2	0.20	0	0.00	0	0.00	0	0	2	0.20
Bund Former Tractor Operated	Nos.	0		0.00																
ST/SC	Nos.	18	3150	0.57	0.00	0.00	0.00	0.00	3	0.09	5	0.16	10	0.32	0	0.00	0	0.00	18	0.57
Others	Nos.	10	2800	0.28	0.00	0.00	0.00	0.00	0	0.00	8	0.22	2	0.06	0	0.00	0	0.00	10	0.28
Chaff Cutter (manually operated)	Nos.	0		0.00																
ST/SC	Nos.	19	3150	0.60	0.00	0.00	0.00	0.00	0	0.00	10	0.32	9	0.28	0	0.00	0	0.00	19	0.60
Others	Nos.	18	2800	0.50	0.00	0.00	0.00	0.00	0	0.00	10	0.28	8	0.22	0	0.00	0	0.00	18	0.50
HDPE Pipelines	Nos.	0		0.00																
ST/SC	Nos.	8	24120	1.93	0.00	0.00	0.00	0.00	0	0.00	2	0.48	6	1.45	0	0.00	0	0.00	8	1.93
Others	Nos.	12	24120	2.89	0.00	0.00	0.00	0.00	0	0.00	6	1.45	6	1.45	0	0.00	0	0.00	12	2.89
Sprinkler system	Nos.	0		0.00																
ST/SC	Nos.	0	13500	0.00	0.00	0.00	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Others	Nos.	0	12000	0.00	0.00	0.00	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Total	Nos.	0		55.32	0.00	0.00	0.00	0.00	0	9.37	0	14.98	0	15.05	0	15.91	0	0.00	0	55.32
2. Live stock Development	Nos.																			
Breed Improvement	Nos.	10	35000	3.50	0.00	0.00	0.00	0.00	0	0.00	5	1.75	5	1.75	0	0.00	0	0.00	10	3.50
Distribution of Mangers	Nos.	85	500	0.45	0.00	0.00	0.00	0.00	0	0.00	50	0.25	37	0.19	-2	-0.01	0	0.00	85	0.43
Animal health kit to Cattle Rearer	Nos.	366	445	1.63	0.00	0.00	0.00	0.00	90	0.40	90	0.40	90	0.40	96	0.43	0	0.00	366	1.63
Animal health camps	Nos.	40	5000	2.00	0.00	0.00	0.00	0.00	10	0.50	10	0.50	10	0.50	10	0.50	0	0.00	40	2.00
Total	Nos.	0		7.58	0.00	0.00	0.00	0.00	100	0.90	155	2.90	142	2.84	104	0.92	0	0.00	501	7.55

Exp. On Farm production System		0		62.90	0.00	0.00	0.00	0.00	100	10.27	155	17.88	142	17.89	104	16.83	0	0.00	501	62.90
Livelihood Support through Micro Enterprises 9%		0																		
		0																		
Financial assistance toSHG ,Individual ,Fedration		0		56.61	0.00	0.00	0.00	0.00	34	12.00	72	21.50	52	16.50	27	6.61	0	0.00	185	56.61
Consolidation Phase 3%																				
Documentation on asset created with sucuss stories		19	20000	3.75	0.00	0.00	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	19	3.75	19	3.75
Management of NRM works through Gram panchayat/ UG's		30	20000	6.01	0.00	0.00	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	30	6.02	30	6.02
Enhancement of Success FPS activities		153	3000	4.16	0.00	0.00	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	153	4.16	153	4.16
Capacity Building of asset responsible UG's and Exit Protocol		10	50000	4.95	0.00	0.00	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	10	4.95	10	4.95
Total		0		18.87	0.00	0.00	0.00	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	18.88	0	18.88
Grand Total	Nos.			629.04	0.00	0.00	0.00	0.00	134	112.17	227	134.45	194	171.13	131	57.14	0	23.91	686	498.83
Say	Nos.																			

Chapter VI

Expected Outcomes

EXPECTED OUT COMES

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	60-100	50-85	
2	Ground water structures repaired/ rejuvenated	No.	10	45	
3	Quality of drinking water	Description	Good	Good	
4	Availability of drinking water	Description	8 Months	12 Months	Availability only for 240 days & try to meet out the demand
5	Change in irrigated Area	Ha	1822	1974	
6	Change in cropping/ land use pattern	Description	Single Crop will be double crop & also try to make under multiple cropping		
7	Area under agricultural crop	Ha	3889	4056	
	I Area under single crop	Ha	2578	1820	
	Ii Area under double crop	Ha	1822	2210	
	Iii Area under multiple crop	Ha	-	-	
8	Change in cultivated Area	Ha	-	147	
9 yield of major crops of area	Yield of Soyabean	q/ha	14.0	15.0	
	Yield of Wheat	q/ha	33.00	38.00	
	Yield of Gram	q/ha	11.50	12.0	
	Yield of Mustard	q/ha	13.50	15.00	
10 production of major crops of area	Production of Maize	ton	1345	1365	
	Production of Wheat	ton	3234	3724.00	
	Production of Gram	ton	500	600	
	Production of Mustard	ton	960	107	
11	Area under vegetation	Ha	-	62.00	
12	Area under horticulture	Ha	3.5	10	
13	Area under fuel	Ha	28	110	
14	Area under Fodder	Ha	7	55	
15	Fodder production	Q	2520	3250	
16	Milk production	Litres/day	4030	4550.00	
17	SHGs Active	No.	43	100	
18	No. of livelihoods	No.	320	450.00	
19	Income	Rs. In Lac	105.89	120.00	
20	Migration	No.	247	150	
21	SHG Federations formed	No.	0.00	10.00	

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.
- The execution of the Women's Empowerment Pedagogy is regularly monitored by the District and State level Implementing Agencies

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

Designs and Estimates

CHAPTER VII

Technical designs and estimates for proposed activities.
For Estimates GKN of the districts should be used. For Production System activities, rates of Agriculture/Horticulture/Animal Husbandry should be used.

Estimate

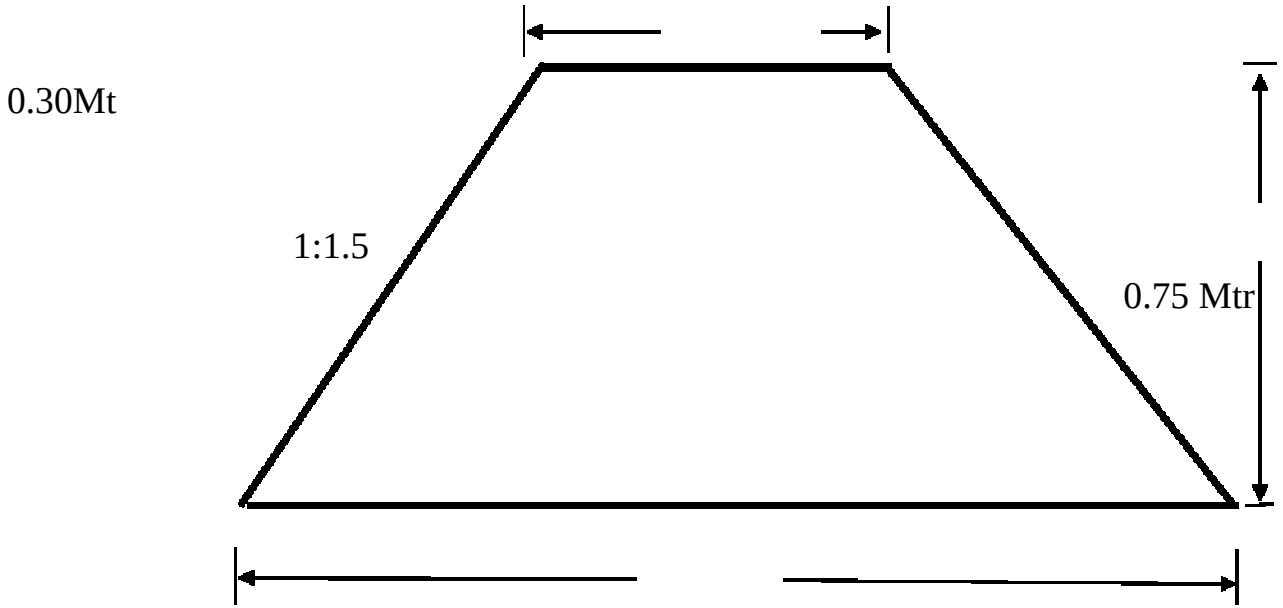
IWMP VI

Name of Work - Construction of Madebandi on Arable Land

S.No	Particulars	No	Length	Width, m	Height, m	Quantity	Unit	Rate	Amount Rs
1	Dag Belling 5 Cm to 7.5 Cm	2	100.00			200.00	Prm.	0.25	50.00
2	Eathwork excavetion in hard Soil with compation in 15 Cm layers etc.	1	100.00	1.43	0.75	106.88	Cum.	85.00	9084.38
3	Seeding of Ratan Jot on the Bund	3	100.00	0.00	0.00	300.00	Prm.	0.60	180.00
4	sowing of Grass seed like stylo Hameta grass	3	100.00	0.00	0.00	300.00	Prm.	0.60	180.00
5	Cost of Ratan Jot Seed (0.2 Kg/100 Mtr.)	0	0.00	0.00	0.00	0.60	Pkg.	30.00	18.00
6	Cost of Stylo Hameta Seed	0	0.00	0.00	0.00	0.60	Pkg.	32.00	19.20
				Sub Total					**9531.58**
7	Contigency 3%								**285.95**
				Total					**9817.52**
				Say Rupees					**9800.00**

Rs. 98 Per Mtr

Name of Work - Construction of Madebandi on Arable Land



2.55 Mtr

X Sectional Digram

Estimate

Name of Work - Construction of Waste Weir at Agriculture Land/Non arable land/DLT

Length of headwall **5 mtr** **IWMP VI**

S.No	Particulars	No	Length	Width, m	Height/depth m	Quantity	Unit	Rate *	Amount Rs
1	E/W in Excavation in foundation in had Soil								
	H/w	1	5.00	0.60	0.90	2.70			
	H .W.EXt	2	1.50	0.60	0.90	1.62			
	S. W.	2	1.60	0.60	0.90	1.73			
	Appron	1	5.00	0.60	0.90	2.70			
	Toe wall	1	5.00	1.00	0.70	3.50			
						12.25	**Pcum.**	92.00	1126.82
2	P/L C.C (1:4:8) with 40 MM. Grit including curiing etc comp								
	H/w	1	5.00	0.60	0.15	0.45			
	H.W. Ext	2	1.50	0.60	0.15	0.27			
	S. W.	2	1.60	0.60	0.15	0.29			
	Appron	1	5.00	0.60	0.15	0.45			
	Toe wall	1	5.00	1.00	0.15	0.75			
						2.21	**Pcum.**	2008.00	4433.66
3	RR stone Mensory in CM 1:6 for foundation & Plinth								
	H/w	1	5.00	0.60	0.75	2.25			
	H .W.Ext	2	1.50	0.60	0.75	1.35			
	S.w.	2	1.60	0.60	0.75	1.44			
	Toe wall	1	5.00	0.60	0.75	2.25			
						0.00			
						7.29	**Pcum.**	1611.00	11744.19

4	RR stone Mensory in Super structure CM (1:6)								
	H/w	1	5.00	0.60	0.30	0.90			
	H.W. Ext	2	1.50	0.45	0.50	0.68			
	S.w.	2	1.60	0.45	0.58	0.47			
						2.05	**Pcum.**	1611.00	3302.55
5	RR Stone Kharanja with C M(1:6)								
	Appron	1	5.00	3.00		15.00	PSqm.	267.00	4005.00
6	50 MM thick Cement Concret 1:2:4 mixed with 12 MM aggregate size in coping								
	H/w	1	5.00	0.60		3.00			
	H.W. Ext	2	1.50	0.45		1.35			
	S.w.	2	1.60	0.45		1.44			
	Toe wall	1	5.00	0.60		3.00			
						8.79	PSqm.	206.00	1810.74
7	pointing work in 1:3 c.m.								
	HW	1	5.00		0.45	**2.25**			
	SW	2	1.68		0.63	**2.12**			
						4.37	psqm	49.00	213.97
8	20 MM thick Cement plaster in CM (1:4)								
	H/w	1	5.00		0.30	1.50			
	H.W. Ext	2	1.50		0.50	1.50			
	TW	1	5.00		0.30	1.50			
						4.50	PSqm.	104.00	468.00
								Total	27104.93
9	Contigency 3%								813.15
								G.Total	27918.08
									Say Rs.28000

Estimate

Name of Work - Construction of L.S.C.D under DLT/Arable/Non arable land

Length **5 mtr** **IWMP VI**

S.No	Particulars	No	Length	Width, m	Height/depth mtr	Quantity	Unit	Rate *	Amount Rs
1	E/W in Excavation in foundation in had Soil								
		1	5.00	1.00	0.30	1.50			
						1.50	**Pcum.**	92.00	138.00
2	Dry stone Masonary for check dams in foundation	1	5.00	1.00	0.30	1.50			
						3.00	**Pcum.**	883.00	2649.00
3	Dry stone Masonary for check dams in Super structure								
		1	5.00	(.90+.40)/2	0.90	2.93			
						2.93	**Pcum.**	883.00	2582.78
4	Planting of ipomia in 2 rows at 15 cm interval								
		2	5.00			10.00			
						10.00	**Prm.**	4.50	45.00
5	Cutting and tranportation of ipomia cuttings					130.00	L.s		100.00
6	Dry stone Kharanja D|S	1	5.00	2.00		20.00	PSqm.	235.00	4700.00
									10214.78
7	contigency 3%								306.44
								G.Total	10521.22
								Say	10500.00

Estimate

IWMP VI

Name of Work - Construction of Bank Stablization of Existing Nala

S.No	Particulars	No	Length	Width, m	Height, m	Quantity	Unit	Rate *	Amount Rs
1	Dag Belling 5 Cm to 7.5 Cm	2	100.00			200.00	Prm.	0.25	50.00
2	Eathwork excavetion in hard Soil with compation in 15 Cm layers etc.	1	100.00	1.95	0.90	175.50	Pcum.	85.00	14917.50
3	Seeding of Ratan Jot on the Bund	3	100.00	0.00	0.00	300.00	Prm.	0.60	180.00
4	sowing of seeds like stylo Hameta&ratan jot etc.in three row.	3	100.00	0.00	0.00	300.00	Prm.	0.60	180.00
5	Cost of Ratan Jot Seed (0.2 Kg/100 Mtr.)	0	0.00	0.00	0.00	0.60	PKg.	30.00	18.00
6	Cost of Stylo Hameta Seed	0	0.00	0.00	0.00	0.60	PKg.	32.00	19.20
				Sub Total					**15364.70**
				Say					15400.00

Rs 154/m.

Abstract of Cost and Detailed Estimate (Model)

Name of work : **Construction of farm pond**

Assumption

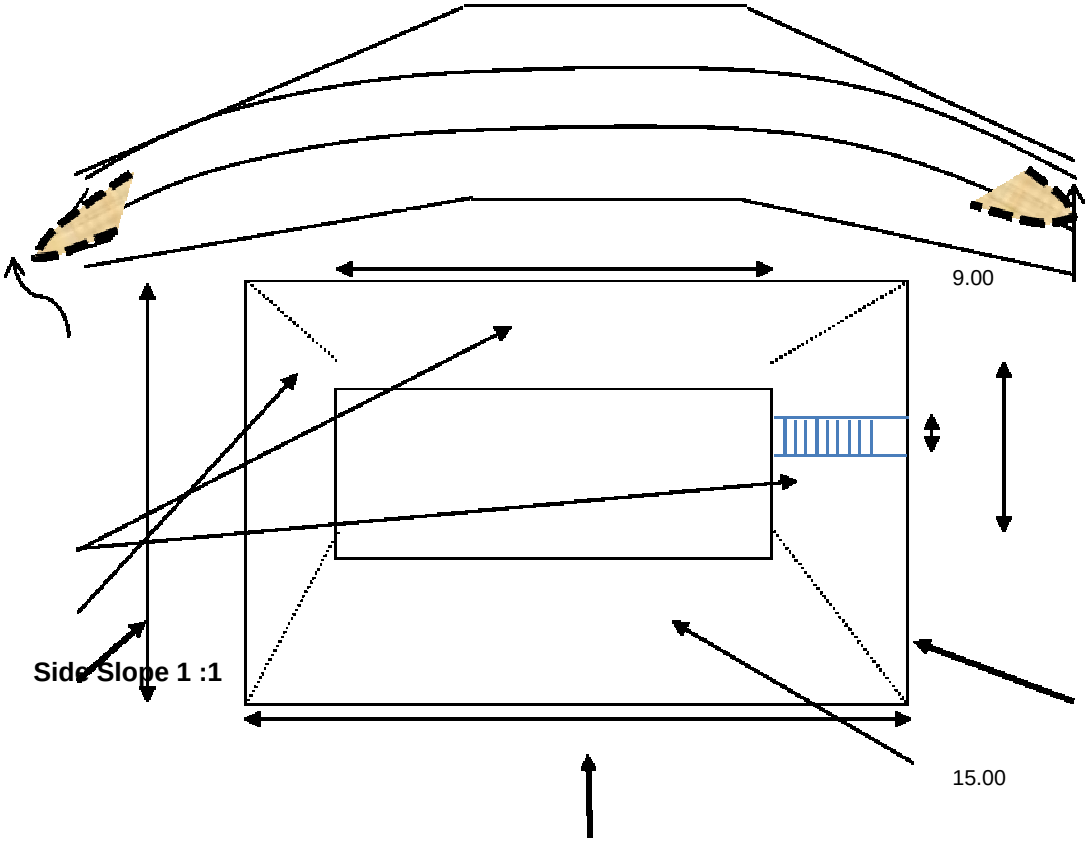
Top	15.00		15.00	m
Bottom	9.00	x	4.50	m
Depth	3.00	m		

i.e. 5.37 Lac litre

S.No.	Item	NO.	L	B	H	Qty	Unit	Rate	Amount
1	Cutting of top soil upto 15 cm depth and disposal of sil upto lead 50m and lift 1.5m								
		1	15.00	15		225.00			
						225.00	sqm	5.20	1170.00 #REF!
2	Dag beiling 2-5 cm deep								
		4	15.00			60.00			
		2	9.00			18.00			
		2	4.50			9.00			
						87.00	M	0.25	21.75
3	Earth work for bund in hard soil including 50m lead and 1.5m lift								
	Pond	1/6 x (15 x 15+4(12 x 9.75)+9 x 4.5) x 3				366.75			
	Steps	(3/0.3)	x 1.5 x 0.3 x 0.3/2			0.68			
						367.43			
a	Hard soil		50%			183.71	M^3	85.00	15615.56
b	Disintregated rock		40%			146.97	M^3	134.00	19693.98
c	Ordinary rock		10%			36.74	M^3	178.00	6540.17
4	Add extra lift 1.5 m								
	1/6 x (12 x 9.75+4(10.5 x 7.125)+9 x 4.5 x 3					228.38	M^3	11.00	2512.13
5	Excavation of earth in foundation								

	At side of Bund for safe Disposal of Exess Water	2	4.00	0.45	0.45	1.62	m^3		
	At slpoes in pond	2	9.00	0.45	0.45	3.65	m^3		
	-- " " --	2	4.50	0.45	0.45	1.82	m^3		
						7.09	m^3		
a	hard soil					1.62	m^3	92.00	149.04
b	Disintegrated rock					5.47	m^3	134.00	732.65
6	Random rubble masonary in foundation in cement sand mortar 1:6 including curing etc								
	(Qty. as per item no. 5)					7.09	M^3	1611.00	11417.96
7	23 cm thick dry stone pitching								
	Over side of Bund for safe Disposal of Exess Water	2	4.00	3.00		24.00	M^2		
	Over side slopes in pond	1	12.00	4.24		50.88	M^2		
	-- " " --	1	12.00	8.08		96.96	M^2		
	-- " " --	2	9.75	4.24		82.68	M^2		
	Ded. For steps	-1	1.50	4.24		-6.36	M^2		
	Treads	10	1.50	0.30		4.50	M^2		
	Risers	10	1.50	0.30		4.50	M^3		
						257.16	M^2	235.00	60432.60
									118285.83
								Total	**118285.83**
								Say	**118000.00**

Storage Capacity	
Farm pond	367.00 m^3
Bund	121.00 m^3
Total	**488.00 m^3**



X- section of FARM POND

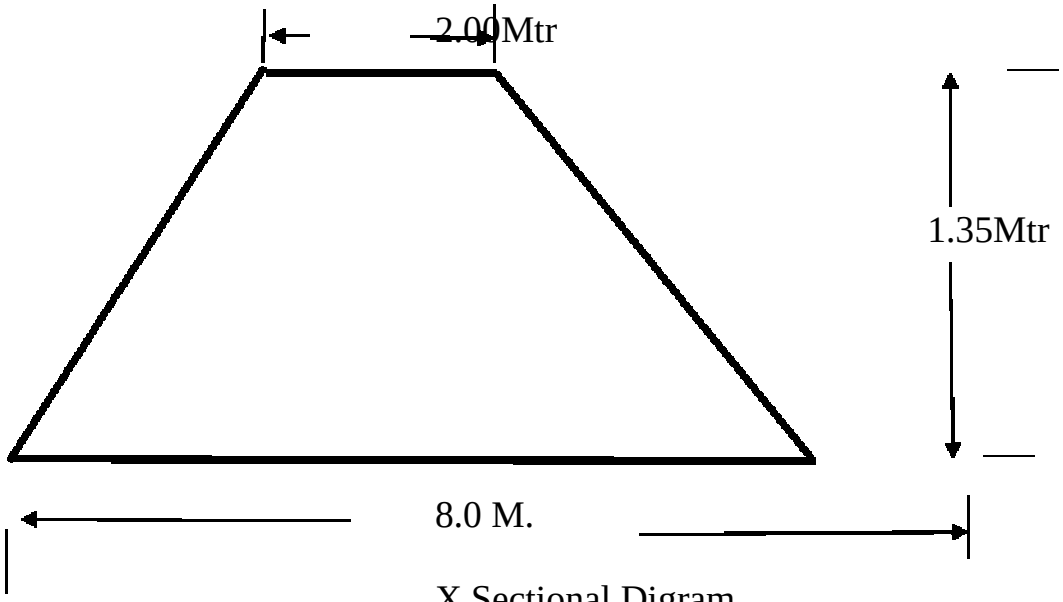
Estimate

Name of Work - Construction of Earthen Checkdame Cost per 30 mtr length

IWMP -VI

S.No	Particulars	No	Length	Width, m	Height, m	Quantity	Unit	Rate	Amount Rs
1	Dag Belling 5 Cm to 7.5 Cm	2	30.00			60.00	Prm.	0.25	15.00
2	Eathwork excavetion in hard Soil with compation in 15 Cm layer etc.	1	30.00	(8+2.0)/2	1.35	202.50	Cum.	85.00	17212.50
3	Seeding of Ratan Jot on the Bund	3	30.00	0.00	0.00	90.00	Prm.	0.60	54.00
4	Overseding of Grass stylo Hameta	3	30.00	0.00	0.00	90.00	Prm.	0.60	54.00
5	Cost of Ratan Jot Seed (0.2 Kg/100 Mtr.)	0	0.00	0.00	0.00	0.60	Pkg.	30.00	18.00
6	Cost of Stylo Hameta Seed	0	0.00	0.00	0.00	0.60	Pkg.	32.00	19.20
				Sub Total					**17372.70**
7	Conntigency 3%								**521.18**
				Total					**17893.88**
				Say Rs					**18000.00**

Name of Work - Construction of Earthen Checkdame



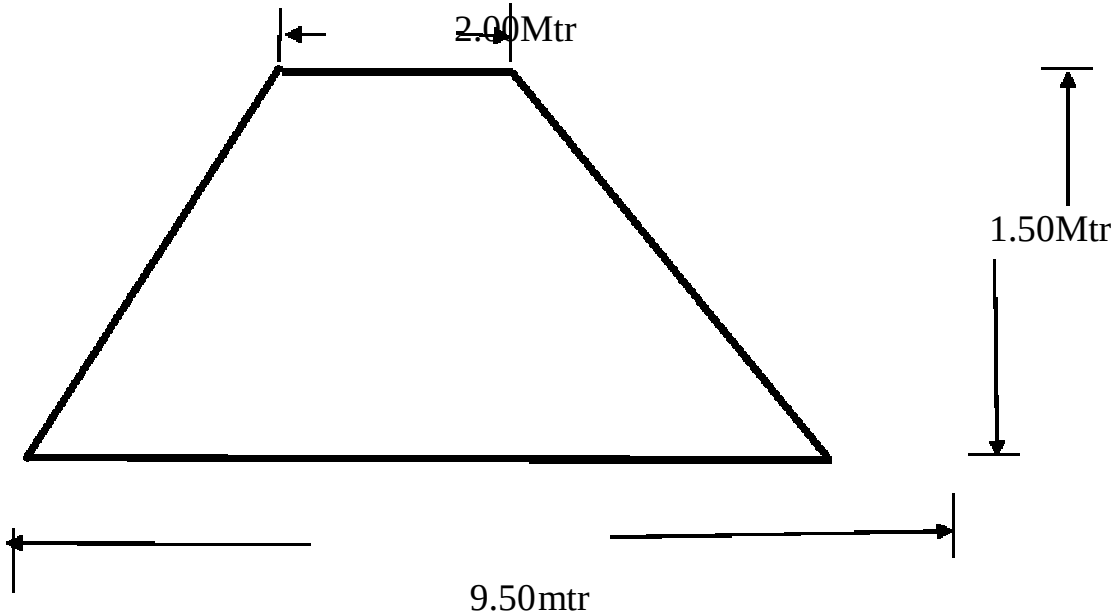
X Sectional Digram

Estimate

Name of Work - Construction of Earthen Checkdame **IWMP -VI**

S.No	Particulars	No	Length	Width, m	Height, m	Quantity	Unit	Rate	Amount Rs
1	Dag Belling 5 Cm to 7.5 Cm	2	40.00			80.00	Prm.	0.25	20.00
2	Eathwork excavetion in hard Soil with compation in 15 Cm layer etc.	1	40.00	(9.5+2.0)/2	1.50	345.00	Cum.	85.00	29325.00
3	Seeding of Ratan Jot on the Bund	3	40.00	0.00	0.00	120.00	Prm.	0.60	72.00
4	Overseding of Grass stylo Hameta	3	40.00	0.00	0.00	120.00	Prm.	0.60	72.00
5	Cost of Ratan Jot Seed (0.2 Kg/100 Mtr.)	0	0.00	0.00	0.00	0.60	Pkg.	30.00	18.00
6	Cost of Stylo Hameta Seed	0	0.00	0.00	0.00	0.60	Pkg.	32.00	19.20
				Sub Total					**29526.20**
7	Conntigency 3%								**885.79**
				Total					**30411.99**
				Say RS					**30000.00**

Name of Work - Construction of Earthen Checkdame



X Sectional Digram

ESTIMATE

Name of work :Construction Earthen Bund with wasteweir **IWMP -VI**

A Earthwork in excavation in hard soil for bund with initial lead&lift

Length 75 TW 2

S. No.	ITEM	Detail					Unit	RATE	Amount
		Length	Top Width	Bottom width	Ht/Depth	Qty			
1	Excavation of earth	75	2.50	10.00	1.50	703.13	cum	85.00	59765.63
2	Lift (50%)	1				351.56	cum	11.00	3867.19
3	Lead (50%)	1				175.78	cum	33.75	5932.62
	Sub Total								69565.43
	Contigency 3%								**2086.96**
	Total								**71652.39**

B Construction of west weir at side

S. No.	ITEM	Detail					Qty.	Unit	RATE	Amount
			No.	L	B	Ht/Depth				
1	Excavation of earth	Head wall	1	5.00	0.60	0.90	2.00			
		Sidewall	2	4.50	0.60	0.90	4.86			
		Wingwall	2*2	3.00	0.60	0.90	6.48			
		Toewall	1	5.00	0.60	0.90	2.70			
		Apron	1	5.00	3.00	0.75	11.25			
							27.29	cum	92.00	2510.68
2	CC 1:4:8	Headwall	1	5.00	0.90	0.15	0.68			
		Sidewall	2	4.50	0.60	0.15	0.81			
		Wingwall	2*2	3.00	0.60	0.15	1.08			
		Toewall	1	5.00	0.60	0.15	0.45			
		Apron	1	5.00	3.00	0.15	2.25			
							5.27	cum	2008.00	10572.12
3	RRMasonary 1:6 CM forin foundfation	Headwall	1	5.00	0.90	0.75	3.38			
		Sidewall	2	4.50	0.60	0.75	4.05			

	foundfation	Wingwall	2*2	3.00	0.60	0.75	5.40			
		Toewall	1	5.00	0.60	0.60	1.80			
		Toewall	1	5.00	0.45	0.45	1.01			
							15.64	cum	1611.00	25192.01
4	RRMasonary 1:6 CM for super structure	Headwall	1	5.00	0.75	0.60	2.25			
		Sidewall	2	4.50	(0.60+0.45)/2	1.80	8.51			
		Wingwall	2*2	3.00	(0.60+0.45)/2	1.80	11.34			
							22.095	cum	1611.00	35595.05
5	Khuranja		1	5.00	3.00		15.00	Sqm	267.00	4005.00
6	Coping		1*5*0.60+1*5*0.45+2*4.5*0.45+2*2*3*0.45				14.70	Sqm	206.00	3028.20
7	Pointing		1*5*0.60+2*4.5*1.80+2*2*3*1.80				40.80	Sqm	49.00	1999.20
8	Plaster		1*5*0.6+1*5*0.30				4.50	Sqm	149.00	670.50
	Total									83572.76
	Contigency 3%									2507.18
	TOTAL B									86079.94
	Grand Total									157732.33
								Say		158000.00

Estimate

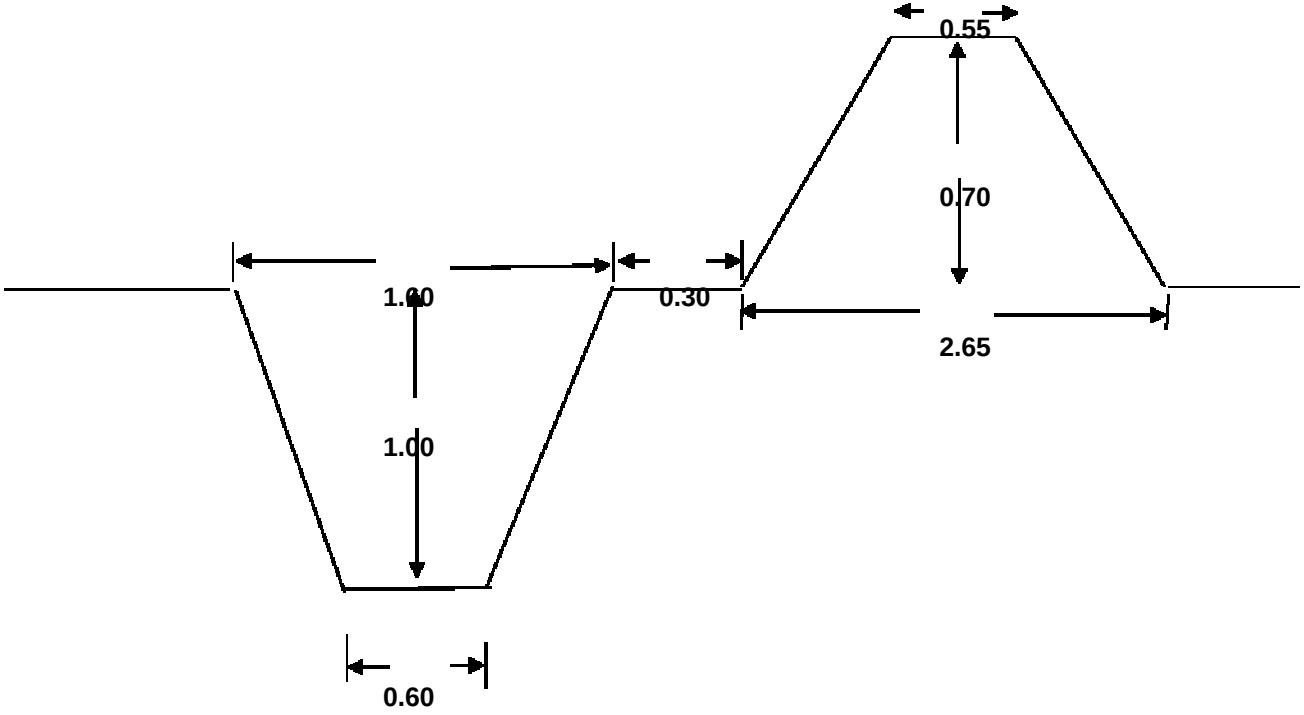
Name of Work - Construction of Ditch cum bund fencing **IWMP VI**

S.No	Particulars	No	Length	Width, m	Height, m	Quantity	Unit	Rate *	Amount Rs
1	Dag Belling 5 Cm to 7.5 Cm	2	100.00			200.00	Prm.	0.25	50.00
2	Eathwork excavetion in hard Soil with compation in 15 Cm layers etc.	1	100.00	1.10	1.00	110.00	Pcum.	85.00	9350.00
3	Seeding of Ratan Jot on the Bund	3	100.00	0.00	0.00	300.00	Prm.	0.60	180.00
4	sowing of seeds like stylo Hameta&ratan jot etc.in three row.	3	100.00	0.00	0.00	300.00	Prm.	0.60	180.00
5	Cost of Ratan Jot Seed (0.2 Kg/100 Mtr.)	0	0.00	0.00	0.00	0.60	PKg.	30.00	18.00
6	Cost of Stylo Hameta Seed	0	0.00	0.00	0.00	0.60	PKg.	32.00	19.20
				Sub Total					**9797.20**
				Say					10000.00

Rs. 100 per m.

Area	**Length**	**Unit cost**	**Amt.**
10Ha	1300m	100	130000
15Ha	1600m	100	160000
20Ha	1800m	100	180000

Name of Work - Construction of Ditch cum bund fencing



ESTIMATE

Plantation of Forestry Plants in Pasture Land

IWMP VI

1 400 no per ha

Sr No	Item	No	Unit	Rate	Amount
2	Excavation of Pits (Size 45*45*45 cm) Hard Soil	400	No	6.8	2720
3	Cost of Fertilizer (Single super Phasphat / Vermi compost) 200 gm/pit	80	Kg	4	320
4	Cost of Plant (Market Rate)	400	No	4	1600
5	Plantation of Plant	400	No	3.00	1200
6	Transportation of Plants 20 Kms	400	No	1.710	684
7	Loading of Plants	0	No	0.00	0
8	Construction of Thavla Minimum half dia 50 cm (12 times)	4800	No	1.80	8640
9	watering of Plants (24 times)	9600	No	1.80	17280
10	Cost of Insectiside / Pasticide (2 ml / palnt)	400	No	0.45	180
11	Cost of Chemical Fertilizers for Pits (4 times)	1600	No	0.19	304
12	Nirai Gudai Work (12 times)	4800	No	1.20	5760
Total					**38688.00**
Say					**39000.00**

Cost per plant Rs.95

Area	Cost
10ha	390000
15Ha	585000
20Ha	780000

ESTIMATE

Plantation of Horticulture Plants

1 240 no per ha (Spaceing 8*8 mtr)

Sr No	Item	No	Unit	Rate	Amount
1	Dagbelling work for pits	240	RM	0.25	60
2	Excavation of Pits (Size 60*60*60 cm) Hard Soil	51.84	Pcum	92	4769.28
3	Cost of Fertilizer (Single super Phasphat / Vermi compost)200gm/pit	48	Kg	4	192
4	Cost of Plant (Market Rate)	240	No	25	6000
5	Plantation of Plant	240	No	3.00	720
6	Transportation of Plants 20 Kms	240	No	1.710	410.4
7	Loading of Plants	0	No	0.00	0
8	Construction of Thavla Minimum half dia 50 cm (12 times)	2880	No	1.80	5184
9	watering of Plants (24 times)	5760	No	1.80	10368
10	Cost of Insectiside / Pasticide (2 ml / palnt)	240	No	0.45	108
11	Cost of Chemical Fertilizers for Pits (4 times)	960	No	0.19	182.4
12	Nirai Gudai Work (8 times)	1920	No	1.20	2304
Total					**30298.08**
Say					**30000.00**

Cost per plant -Rs.117

Contribution for sc\st 20%

Contribution for others 40 %

Estimate

Name of Work - Construction of (CVH) **IWMP VI**

S.No	Particulars	No	Length	Width, m	Height, m	Quantity	Unit	Rate *	Amount Rs
1	Eathwork excavetion in hard Soil with compation in 15 Cm layers etc.	1	800.00	0.30	0.20	48.00	Pcum.	85.00	4080.00
2	Overseeding of Grass stylo Hameta	2	800.00	0.00	0.00	1600.00	Prm.	0.60	960.00
3	Cost of Stylo Hameta Seed	0	0.00	0.00	0.00	2.00	PKg.	32.00	64.00
				Sub Total					**5104.00**
				Say					5100.00

Area	Cost
10 Ha	51000
15 Ha	76500
20 Ha	102000

Abstract of cost and detailed Estimate (Model)

Name of Work - Construction of Check Dam (WHS)

Length of headwall **8** **mtr**

S.No	Particulars	No	Length		Height/depth m	Quantity	Unit	Rate *	Amount Rs
1	E/W in Excavation in foundation in hard Soil								
	H/w	1	8.00	1.50	1.50	18.00			
	H.W. Ext	2	5.00	1.50	1.50	22.50			
	S.W.	2	3.50	1.20	1.50	12.60			
	Wing wall	2	2.00	1.00	1.50	6.00			
	Appron	1	8.00	3.50	0.60	16.80			
	Toe wall	1	8.00	0.60	0.90	4.32			
						80.22	**Pcum.**	92.00	7380.24
2	P/L C.C (1:4:8) with 40 MM. Grit including curiing etc comp								
	H/w	1	8.00	1.50	0.30	3.60			
	H.W. Ext	2	5.00	1.50	0.30	4.50			
	S. W.	2	3.50	1.20	0.30	2.52			
	Wing wall	2	3.00	1.50	0.30	2.70			
	Appron	1	8.00	3.50	0.20	5.60			
	Toe wall	1	8.00	0.60	0.15	0.72			
						19.64	**Pcum.**	2008.00	39437.12
4	RR stone Masonary in CM 1:6 for foundation & Plinth								
	H/w	1	8.00	1.50	1.20	14.40			
	H .W.Ext	2	5.00	1.50	1.20	18.00			
	S.w.	2	3.50	1.20	1.20	10.08			
	Wing wall	2	3.00	1.50	1.20	10.80			

	Toe wall	1	8.00	0.60	0.75	3.60			
						56.88	**Pcum.**	1611.00	91633.68
5	RR stone Mensory in Super structure CM (1:6)								
	H/w	1	8.00	(1.50+0.8)/2	1.50	13.80			
	H.W. Ext	2	5.00	(1.5+.60)/2	2.50	26.25			
	S.w.	2	3.50	(1.2+.60)/2	(3+1.5)/2	14.18			
	Wing wall	2	3.00	(1.50+.60)/2	1.50	9.45			
	Toe wall	1	8.00	0.45	0.30	1.08			
						64.76	**Pcum.**	1611.00	104320.31
6	RR Stone Kharanja with C M (1:6)								
	Appron	1	8.00	5.00		40.00	Psqm.	267.00	10680.00
7	75 MM thick Cement Concret 1:2:4 mixed with 12 MM aggregate size in coping								
	H/w	1	8.00	0.80	0.075	0.48			
	H.W. Ext	2	5.00	0.60	0.075	0.45			
	S.w.	2	3.50	0.60	0.075	0.32			
	Wing wall	2	3.00	0.60	0.075	0.27			
	Toe wall	1	8.00	0.45	0.075	0.27			
						1.79	**Pcum.**	2774.00	4951.59
8	25 MM thick Cement plaster in CM (1:4)								
	H/w	2	8.00		1.50	24.00			
	H.W. Ext	4	5.00		2.50	50.00			
	S.w.	4	3.50		(2.5+1)/2	24.50			
	Wing wall	4	3.00		1.00	12.00			
	Toe wall	2	8.00		0.30	4.80			
						115.30	**Psqm**	149.00	17179.70

9	E/w for bund in dry or moist including laying in 15 cm layers, breacking of clods, dressing and compaction etc in hard soil								
	RHS	1	20.00	(8.5+1)/2	2.50	237.50			
	LHS	1	18.00	(8.5+1)/2	2.50	213.75			
						451.25	**Pcum.**	85.00	38356.25
10	Add for Extra Lift 50%					225.63	**Pcum.**	11.00	2481.88
								G.Total	316420.76
								Say	316000.00

Abstract of cost and detailed Estimate (Model)

Name of Work - Construction of Check Dam (WHS)

Length of headwall **10** **mtr**

S.No	Particulars	No	Length		Height/depth m	Quantity	Unit	Rate *	Amount Rs
1	E/W in Excavation in foundation in hard Soil								
	H/w	1	10.00	1.50	1.50	22.50			
	H.W. Ext	2	5.00	1.50	1.50	22.50			
	S.W.	2	3.50	1.20	1.50	12.60			
	Wing wall	2	2.00	1.00	1.50	6.00			
	Appron	1	10.00	3.50	0.60	21.00			
	Toe wall	1	10.00	0.60	0.90	5.40			
						90.00	**Pcum.**	92.00	8280.00
2	P/L C.C (1:4:8) with 40 MM. Grit including curiing etc comp								
	H/w	1	10.00	1.50	0.30	4.50			
	H.W. Ext	2	5.00	1.50	0.30	4.50			
	S. W.	2	3.50	1.20	0.30	2.52			
	Wing wall	2	3.00	1.50	0.30	2.70			
	Appron	1	10.00	3.50	0.20	7.00			
	Toe wall	1	10.00	0.60	0.15	0.90			
						22.12	**Pcum.**	2008.00	44416.96
4	RR stone Masonary in CM 1:6 for foundation & Plinth								
	H/w	1	10.00	1.50	1.20	18.00			
	H .W.Ext	2	5.00	1.50	1.20	18.00			
	S.w.	2	3.50	1.20	1.20	10.08			
	Wing wall	2	3.00	1.50	1.20	10.80			

	Toe wall	1	10.00	0.60	0.75	4.50			
						61.38	**Pcum.**	1611.00	98883.18
5	RR stone Mensory in Super structure CM (1:6)								
	H/w	1	10.00	(1.50+0.8)/2	1.50	17.25			
	H.W. Ext	2	5.00	(1.5+.60)/2	2.50	26.25			
	S.w.	2	3.50	(1.2+.60)/2	(3+1.5)/2	14.18			
	Wing wall	2	3.00	(1.50+.60)/2	1.50	9.45			
	Toe wall	1	10.00	0.45	0.30	1.35			
						68.48	**Pcum.**	1611.00	110313.23
6	RR Stone Kharanja with C M (1:6)								
	Appron	1	10.00	5.00		50.00	Psqm.	267.00	13350.00
7	75 MM thick Cement Concret 1:2:4 mixed with 12 MM aggregate size in coping								
	H/w	1	10.00	0.80	0.075	0.60			
	H.W. Ext	2	5.00	0.60	0.075	0.45			
	S.w.	2	3.50	0.60	0.075	0.32			
	Wing wall	2	3.00	0.60	0.075	0.27			
	Toe wall	1	10.00	0.45	0.075	0.34			
						1.97	**Pcum.**	2774.00	5471.72
8	25 MM thick Cement plaster in CM (1:4)								
	H/w	2	10.00		1.50	30.00			
	H.W. Ext	4	5.00		2.50	50.00			
	S.w.	4	3.50		(2.5+1)/2	24.50			
	Wing wall	4	3.00		1.00	12.00			
	Toe wall	2	10.00		0.30	6.00			
						122.50	**Psqm**	149.00	18252.50

9	E/w for bund in dry or moist including laying in 15 cm layers, breacking of clods, dressing and compaction etc in hard soil								
	RHS	1	20.00	(8.5+1)/2	2.50	237.50			
	LHS	1	20.00	(8.5+1)/2	2.50	237.50			
						475.00	**Pcum.**	85.00	40375.00
10	Add for Extra Lift 50%					237.50	**Pcum.**	11.00	2612.50
								G.Total	341955.08
								Say	342000.00

Abstract of Cost and Detailed Estimate (Model)

4.4 Name of work :Construction of new talai with wasteweir

Earthwork in excavation in hard soil for bund

A Length 100 TW 2

S. No.	ITEM	Detail					Unit	RATE	Amount
		Length	Top Width	Bottom width	Ht/Depth	Qty			
1	Excavation of earth for bund	100	2.00	11.00	3.00	1950.00	cum	85.00	165750.00
2	Extra lift 1.5m (50%)	=	1950.00	x	0.50	975.00	cum	11.00	10725.00
3	Extra lead 50m (25%)	=	1950.00	x	0.25	487.50	cum	34.00	16575.00
	Total								193050.00
	Total A								193050.00

B Construction of waste weir

S. No.	ITEM	Detail					Qty.	Unit	RATE	Amount
			No.	L	B	Ht/Depth				
1	Excavation of earth for foundation in hard soil	Head wall	1	10.00	0.90	2.00	18.00			
		Sidewall	2	4.50	0.60	2.00	10.80			
		Wingwall	4	3.00	0.60	1.20	8.64			
		Toewall	1	10.00	0.60	0.90	5.40			
		Apron	1	10.00	3.00	0.75	22.50			
							65.34	cum	92.00	6011.28
2	Cement concrete in 1:3:6 in foundation including curing etc.	Headwall	1	10.00	0.90	0.15	1.35			
		Sidewall	2	4.50	0.60	0.15	0.81			
		Wingwall	4	3.00	0.60	0.15	1.08			
		Toewall	1	10.00	0.60	0.15	0.90			
		Apron	1	10.00	3.00	0.15	4.50			
							8.64	cum	2339.00	20208.96
3	RR masonary in foundation cement sand mortar 1:6	Headwall	1	10.00	0.90	1.85	16.65			
		Sidewall	2	4.50	0.60	1.85	9.99			

			Toewall	3.00	0.60	1.05	7.56			
			Toewall	10.00	0.60	0.60	3.60			
				10.00	0.45	0.45	2.03			
							39.83	cum	1611.00	64158.08

4	RR masonary in superstructure cement sand mortar 1:6	Headwall	1	20.00	(0.9+.60)/2	0.60	9.00			
		Sidewall	2	4.50	(0.60+0.45)/2	1.80	8.51			
		Wingwall	4	3.00	(0.60+0.45)/2	1.80	11.34			
							28.845	cum	1611.00	46469.30
5	Stone khuranja 23 cm thick		1	10.00	3.00		30.00	Sqm	267.00	8010.00
6	Coping 50mm thick in 1:2:4		1*8*0.60+1*8*0.45+2*4.5*0.45+2*2*3*0.45				17.85	Sqm	206.00	3677.10
7	Pointing in 1:3 cm		1*8*0.60+2*4.5*1.80+2*2*3*1.80				42.60	Sqm	49.00	2087.40
8	Cement plaster in CM 1:4 25mm thick		1*8*0.6+1*8*0.30				7.20	Sqm	149.00	1072.80
	Total									151694.91
	TOTAL A+B									344744.91
	Grand Total									344744.91
								Say		**345000**

PANCHAYAT SAMITI CHHABRA

Name of Work — Construction of Anicut Aminpura

	BASIC DATA					
1	Available Crest Length	L		15	Meter	
2	Total Catchment Area	A		500	Hect.	
3	Cofficient of Rational Formula	C		0.30		
4	Cofficient of Discharge for broad crested weir	c		1.71		
5	Unit weight of masonary	s		2.3	Tonnes \ cum	
6	Maximum allowable compressive stress in masonary			10	Kg \ sq.cm	
7	Maximum allowable tensile stress in masonary			1	Kg \ sq.cm	
8	N S L			100	M	
9	Height of the Head Wall			1.4	M	
10	Depth of Foundation			1.5	M	
11	Length of Head Wall Extension Left			3.5	M	
12	Length of Head wall extenssion Right			3.5	M	

(A) Hydrologic Design

Peak rate of runoff (discharge)

The Maximum probable Discharge (Q) has been calculated using Dicken formula as under:--

$Q = CA^{3/4}$

C 11.4 Coefficient

A 5 Sq. Km

Q = 38.118 Cumecs

(B) Hydraulic Design

(i) Head over the crest

$Q = c \times L \times h^{3/2}$

$h^{3/2} = Q / (c \times L)$ 1.49 meter

So h = 1.30 meter

Say h = 1.40 meter

(ii) Free board

$F = 1.5\ h_w$, Where h_w is the height of wave $h_w = 0.014\ (D_f)^{1/2}$

Putting D_f = 700.00 meter

h_w = 0.37

so F= 0.56 meter

Or 0.60 meter

(C) Structural Design

N S L (Bed Level)			=	100.00	meter
Ht of structure above N S L (h) =			=	1.35	meter
Depth of foundation			=	1.50	meter
Width of foundation bed			=	2.80	meter
Depth of Concrete in foundation			=	0.30	meter
Height of Head wall		(h)	=	1.35	meter
	F T L		=	101.35	meter
	M W L		=	102.75	meter
	T B L		=	102.75	meter
Total height =T.B.L. - N.S.L. =			=	2.75	meter
Length of Bund			=	48	meter
Height of Bund			=	1.2	meter
Top Width of Bund		(h/3)+1.5	=	1.9	meter
Bottom Width of Bund		(5 x h)+ Tw	=	7.9	meter

(i) Top width of head wall

$Tw = h / (s - c)^{1/2}$

putting h= 1.40 meter

Specific gravity of the material s= 2.3 for stone masonry in cement mortar

(for partly pervious &permeable foundation bed) c = 1.00

we get,	Tw =	1.23	meter
Or	Tw =	1.30	meter
d = h + Fb		2.00	

(ii) Bottom width of head wall Bw = Tw + (H x 0 .8) $(H+h) / (s-c)^{1/2}$

Bw =	2.41	Mtr.
Width of Concerete bed (= Bw +0 .30)	2.71	Mtr.
Or	2.80	Mtr.

(iii) Length of head wall extension = H +d+1

= 4.35 Mtr.

(iv) Height of head wall extention = H +d

= 3.35 Mtr.

(v) Bottom width of head wall extension 0.5(H+h)

= 1.38 Mtr.

1.40

1. HEAD WALL EXTENSION				
(a) Length (as per site condition)	Right side		3.50	meter
	Left side		3.50	meter
(b) Height above crest level =H+fb	Right side		2.00	meter
	Left side		2.00	meter
(c) Top width			0.60	meter
(d) Bottom width			1.94	meter
		or	2.00	meter
2. SIDE WALL				
(a) Length = (Bw of Hw + Appron width + 0.45) - 2.1			3.40	meter
		or	3.40	meter
(b) Top width (minimum)			0.60	meter
(c) Bottom width				
(at H. W. E. junction) =0.60+((H+d)x0.40) =		=	1.94	meter
(at wing wall junction) =0.60 + (0.40 x 1.5 H) =			1.44	meter
(d) Height of side wall				

(at H. W. E. junction) = H + d			=	3.35	meter
(at wing wall junction) = 1.5 x h			=	3.00	meter
3. WING WALL					
(a) Length = 2.25 x h			=	4.50	meter
(b) Top width (minimum)			=	0.60	meter
(c) Bottom width = 0.60 + (0.4 x (1.5 x h))			=	1.80	meter
(d) Height of wing wall =1.5 h =			=	3.00	meter
4. APRON					
Length = crest length			=	15.00	meter
Width = H + d			=	3.35	meter
Thickness of Apron = (0.30 m c.c.(1:4:8) +0.23 m RR stone khuranja in CM 1:6			=	0.60	meter
5. TOE WALL					
Length = crest length			=	15.00	meter
Width			=	0.45	meter
Height (above top of Apron)			=	0.30	meter
6. Depth of foundation = $1.50*0.473(Q/f)^{.33}$		OR Say	=	0	meter
			=	0.00	meter
Q = Discharge Cum / Sec	0				
f = silt factor constant	1.2				

	But as per site condition taken as	1.50	Mtr.			

CHECKS FOR AGAINST OVER TURNING , RUPTURE FROM TENSION , SLIDING & CRUSHING

	H =	1.35	meter
	h =	1.40	meter
	Tw =	1.30	meter
	Bw =	2.41	Kg \cum
Specific weight of masonary	s =	2300.00	Kg \cum
Specific weight of water	w =	1000.00	Kg \cum
Coefficient of uplift	c =	0.50	
Coefficient of friction	f =	0.75	

Weight of structure $W = W_1 + W_2$

$W_1 = s \times Tw \times H$	=	4036.50	Kg
$W_2 = s \times H(Bw - Tw) / 2$	=	1726.24	Kg
$W = W_1 + W_2$	=	5762.74	Kg

Water pressure at depth H = P1

$P_1 = w \times h$ = 1400.00 Kg \ sqm

Water pressure at depth $(H+h)=P_2$

$P_2 = w \times (H + h)$ = 2750.00 Kg \ sqm

Net Horizontal water force =

$(P_1 + P_2) / 2 \times H$ = 2801.25 Kg \ sqm

Force due to water at the crest

F3 = w x h x Tw = 1820.00 Kg/m

Up lift pressure U1=c x w x (h+H)= 1375.00 Kg/sqm

Up lift Force =U = U1 x Bw / 2 = 1658.19 Kg/m

1. Safty against Over turning

Taking moment of all the forces about the toe of the Structure

Restoring Moment, $RM = W_1 x(Bw- Tw/2)+W_2 x (Bw - Tw) x 2 / 3 +F_3 (Bw - Tw/2)$

RM = 11598

Over turning Moment, $OM=F_a x H/2 + F_b x H/3 + U x2 Bw/3$

Where $F_a = P_1 x H$ = 1890

$F_b = (P_2- P_1)/2 x H$ = 911.25

OM = 4352

RM / OM = 2.66

It is more than 1.30, so the structure is safe against overturning.

2. Safty against tension at the base

The excess moment , $E_m=(RM - OM)$ 7246

Total Vertical Force, $V = W + F_3 - U$= 5924.55

X represents the position of the resultant force from top of the structure.

X = Excess moment / Total vertical force

X = 1.22

Which is more than Bw / 3 = 0.80 of the structure ,

& less than 2Bw/3= 1.61

i.e. Resultant is passing through the middle 1 / 3 of the base so there is no chance of developing any tension in maonary. Hence the structure is safe against Rupture from Tension.

3. Safty against Compression (Crushing)

Ecentricity e = Bw / 2-X

where x =(RM-OM)/ V 1.22

so e = -0.02

$F_{max} = V(1+6e/Bw)/A$ = 2351.77

In order to avoid crushing of the masonary at the base F_{max}. is maximum compressive stress acting normal to the base of the structure. It is less than the Max.allowable compressive stress for the masonary 20000 Kg / sqm. Hence Safe against Crushing.

4. Safty against sliding

Total Vertical Force, V =W+F3-U=	5924.55
Resisting forces, P = f V + C_hA =	4444.38
Sliding forces = Fa + Fb =	2801.25
Factor of safety for sliding = Restoring force / Sliding force P/V=	1.59

It is more than 1.3, so the structure is safe against Sliding.

PANCHAYAT SAMITI CHHABRA

Name of Work — Construction of Anicut

DETAILED ESTIMATE

S.	Particular	No.	Length	Width	H / D	Qty.	unit
1	Excavation for foundation						
	Head wall (over flow sec.)	1	15.00	2.80	1.80	75.60	cu.m
	Head wall Ext						
	(a) Right side from U \ S	1	3.50	2.00	3.60	25.20	
	(b) Left side from U \ S	1	3.50	2.00	3.60	25.20	
	Side wall	2	6.50	1.80	3.60	84.24	,,
	Wing wall	2	3.00	1.80	3.60	38.88	,,
	Toe wall	1	15.00	0.90	0.60	8.10	,,
	Apron	1	15.00	3.35	0.60	30.15	,,
					Total Qty.	**287.37**	**cu.m**
	Hard soil	38.34	%			**110.18**	cu.m
	Disintegrated Rock	0	%			0.00	cu.m
	Ordinary Rock	61.66	%			**177.19**	cu.m
2	C .C . (1 : 3 : 6) with 20 mm stone crusher broken aggregate in foundation						
	Head wall (over flow sec.)	1	15.00	2.80	0.30	12.60	cu.m
	Head wall Exe.Foundation						
	(a) Right side from U \ S	1	3.50	2.00	0.30	2.10	
	(b) Left side from U \ S	1	3.50	2.00	0.30	2.10	
	Side wall	2	6.50	1.80	0.30	7.02	,,
	Wing wall	2	3.00	1.80	0.30	3.24	,,
	Toe wall	1	15.00	0.90	0.30	4.05	,,

	Apron	1	15.00	3.35	0.30	15.08	
				Total Qty. Item - 2 =		**46.19**	**cu.m**
3 A	R.R.Stone Masonery in cement sand mortar (1:6) in foundation for W.H.S						
	Head wall (over flow sec.)	1	15.00	2.80	1.50	63.00	cu.m
	Head wall Exe.						
	(a) Right side from U \ S	1	3.50	2.00	1.50	10.50	
	(b) Left side from U \ S	1	3.50	2.00	1.50	10.50	
	Side wall	2	6.50	1.80	1.50	35.10	,,
	Wing wall	2	3.00	1.80	1.50	16.20	,,
	Toe wall	1	15.00	0.90	0.30	4.05	,,
				Total Item-- 3 A =		**139.35**	**cu.m**
3 B	R.R.S.M. (1:6) for super structure above NSL						
	Head wall (over flow sec.)	1	15.00	2.05	1.35	41.51	cu.m
	Head wall Exe.						
	(a) Right side from U \ S	1	3.50	1.95	3.00	20.48	,,
	(b) Left side from U \ S	1	3.50	1.95	3.00	20.48	
	Side wall	2	10.20	1.80	2.63	96.39	,,
	Wing wall	2	3.00	1.80	2.03	21.87	,,
	Toe wall	1	15.00	0.45	0.30	2.03	,,
				Total Item - 3 B =		**202.75**	**cu.m**
				Total Item - 3 A + 3 B =		**342.10**	**cu.m**
4	RR stone khuranja in CM 1:6 of 23cm	1	15.00	3.35		**50.25**	**Sqm**
5	C . C . Coping in C.M. 1 : 2 : 4						
	Headwall Crest						
	Head wall (Nonover flow sec.)U\S	1	15.00	1.30		19.50	cu.m
	(a) Right side from U \ S	1	3.50	0.6		2.10	,,
	(b) Left side from U \ S	1	3.50	0.6		2.10	,,

	Side wall	2	10.20	0.6		12.24	,,
	Wing wall	2	3.00	0.6		3.60	,,
	Toe wall	1	15.00	0.45		6.75	,,
				Total Item :- 5 =		**46.29**	**cu.m**
6	25 Cement Plaster in C.M. (1:4)						
	Head wall (over flow sec.) U \ S	1	15.00		1.35	20.25	sq.m
	Toe wall ((2 x height) + Top)	1	15.00		0.30	4.50	,,
				Total Item:-- 6 =		**24.75**	**sq.m**
7	Flush or ruled poinding in CM 1:3						
	Head wall (over flow sec.) U \ S	1	15.00	1.75		26.23	sq.m
	Side wall	2	10.20	2.63		53.55	,,
	Wing wall	2	3.00	2.03		12.15	,,
				Total Item:-- 7 =		**91.93**	**sq.m**
8	Earth work for bunds including laying in 15 cm layers broken of loads etc complete						
	a) In Hard Soil	0	40	3.5	1	0	
	b) In Ordinary Soil	0	0	0	0	0	
				Total Item :- 8 =		**0.00**	**cu.m**
9	15-30 cm thick single stone pitching hammer dressed including all leads etc complete	0	12	1.2	0.23	0	
				Total Item :- 9 =		0	
10	Drilling of holes 35 mm dia for anchor rods up to 1.5 m depth	**0**	**1.50**			**0.00**	**m**
				Total Item :-10 =		**0.00**	
11	Fixing of anchor bars in near cement grout including cost of cement and curing complete	**0**	**1.50**			**0.00**	**m**
				Total Item :- 11 =		**0.00**	

12	Supply of TOR steel anchor bars of required diameter length and shape at site of work complete			**L.S**		**0**	**Kg**
				Total Item :- 12 =		**0**	

PANCHAYAT SAMITI CHHABRA

Name of Work — Construction of Anicut

Abstract of Cost

S.No.	Particular	Qty	Unit	Complete Item		Labour Charges(Unskilled)		Labour Charges(skilled)		Material Charges
				Rate	Amount	Rate	Amount	Rate	Amount	
1	Excavation for foundation & trench for irrigation works									
	Hard soil	110.18	Cum	92.00	10136.34	92.00	10136.34	0.00	0.00	0.00
	Disintegrated Rock	0.00	Cum	134.00	0.00	134.00	0.00	0.00	0.00	0.00
	Ordinary Rock	177.19	Cum	178.00	31540.24	178.00	31540.24	0.00	0.00	0.00
2	Cement Concrete (1 :3 : 6) with 20 mm size stone broken gritt for W.H.S	46.19	Cum	2339.00	108026.72	287.50	13278.19	30.00	1385.55	93362.98
3	R.R.Stone Masonary in cement sand mortar (1:6) for W.H.S	342.10	Cum	1611.00	551119.07	162.00	55419.80	180.00	61577.55	434121.73
4	RR stone khuranja in CM 1:6 of 23cm	50.25	Sqm	267.00	13416.75	43.20	2170.80	60.00	3015.00	8230.95
5	50 mm thick Cement Concreet Coping in 1 : 2 : 4 with stone crusher broken gritt 12 mm size including curring etc complete	46.29	Sqm	204.00	9443.16	31.00	1434.99	45.00	2083.05	5925.12
6	25 MM thick Cement sand Plaster in C.M. (1:4) including curing etc complete	24.75	Sqm	149.00	3687.75	25.65	634.84	39.00	965.25	2087.66
7	Flush or ruled poinding in CM 1:3	91.93	Sqm	49.00	4504.78	13.80	1268.69	24.00	2206.42	1029.66
8	Earth work for bunds including laying in 15 cm layers breaking of clods etc complete								0.00	0.00
	a) In Hard Soil	0.00	Cum	85.00	0.00	85.00	0.00	0.00	0.00	0.00
	b) In Ordinary Soil			77.00		77.00	0.00	0.00	0.00	0.00

9	15-30 cm thick single stone pitching hammer dressed including all leads etc complete	0.00	Cum	0.00	0.00	50.00	0.00	66.00	0.00	0.00
10	Drilling of holes 35 mm dia for anchor rods up to 1.5 m depth	0.00	m	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	Fixing of anchor bars in near cement grout including cost of cement and curing complete	0.00	m	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	Supply of TOR steel anchor bars of required diameter length and shape at site of work complete	0.00	Kg	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total				731874.81		115883.89		71232.82	544758.10
	Add 3% charges for contengencies				21956.24					21956.24
	Grand Total				**753831.06**		**0.00**		**0.00**	**21956.24**

say Rs. 7.54 Lacs

Requirement of Material

S.No.	Particular	Qty	Unit	Cement in Bags		Sand in Cum		Stone Cum		Aggregate 20 mm		Aggregate 12 mm		Iron TOR Bars	
				Per Unit	Qty.	Per Unit	Qty.	Per Unit	Qty.	Per Unit	Qty.	Per Unit	Qty.	Per Unit	Qty.
1	Cement Concrete (1 : 3 : 6) with 20 mm size stone gritt for W.H.S	46.19	cum	4.05	187.05	0.43	19.86	0.00	0.00	0.86	39.72	0.00	0.00	0.00	0.00
2	R.R.Stone Masonary in cement sand mortar (1:6) for W.H.S	342.10	cum	1.40	477.23	0.30	102.63	1.10	376.31	0.00	0.00	0.00	0.00	0.00	0.00
3	25 MM thick Cement sand Plaster in C.M. (1:4) including curing etc complete	24.75	sqm	0.22	5.54	0.03	0.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	RR stone khuranja in CM 1:6 of 23cm	50.25	sqm	0.21	10.55	0.05	2.26	0.25	12.71	0.00	0.00	0.00	0.00	0.00	0.00
5	Cement Concreet Coping in C.C. 1 : 2 : 4 with stone crusher broken gritt 12 mm size including curring etc complete	46.29	cum	0.31	14.44	0.02	1.02	0.00	0.00	0.00	0.00	0.05	2.08	0.00	0.00
6	Flush or ruled poinding in CM 1:3	91.93	sqm	0.03	2.57	0.003	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	15-30 cm thick single stone pitching hammer dressed including all leads etc complete	0.00	cum		0.00		0.00	1.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	Fixing of anchor bars in near cement grout including cost of cement and curing complete														
9	Supply of TOR steel anchor bars of required diameter length and shape at site of work complete														0.00
	Total				697.39		126.84		389.02		39.72		2.08		0.00

Cement (Begs)	Sand (cum)	Stone (cum)	Agg. 20 mm (cum)	Agg. 12 mm (cum)	TOR Bars Kgs
697	126.84	389.02	39.72	2.08	0

PANCHAYAT SAMITI CHHABRA

Name of Work: Construction of Anicut Ghatakheri

	BASIC DATA					
1	Available Crest Length	L		15	Meter	
2	Total Catchment Area	A		500	Hect.	
3	Cofficient of Rational Formula	C		0.30		
4	Cofficient of Discharge for broad crested weir	c		1.71		
5	Unit weight of masonary	s		2.3	Tonnes \ cum	
6	Maximum allowable compressive stress in masonary			10	Kg \ sq.cm	
7	Maximum allowable tensile stress in masonary			1	Kg \ sq.cm	
8	N S L			100	M	
9	Height of the Head Wall			1.4	M	
10	Depth of Foundation			1.5	M	
11	Length of Head Wall Extension Left			3.5	M	
12	Length of Head wall extenssion Right			3.5	M	

(A) Hydrologic Design

Peak rate of runoff (discharge)

The Maximum probable Discharge (Q) has been calculated using Dicken formula as under:--

$Q = CA^{3/4}$

C 11.4 Coefficient

A 5 Sq. Km

Q = 38.118 Cumecs

(B) Hydraulic Design

(i) Head over the crest

$Q = c \times L \times h^{3/2}$

$h^{3/2} = Q / (c \times L)$ 1.49 meter

So h = 1.30 meter

Say h = 1.40 meter

(ii) Free board

F = 1.5 h_w , Where h_w is the height of wave $h_w = 0.014 (D_f)^{1/2}$

Putting D_f = 700.00 meter

h_w = 0.37

so F= 0.56 meter

Or 0.60 meter

(C) Structural Design

N S L (Bed Level)			=	100.00	meter
Ht of structure above N S L (h) =			=	1.35	meter
Depth of foundation			=	1.50	meter
Width of foundation bed			=	2.80	meter
Depth of Concrete in foundation			=	0.30	meter
Height of Head wall		(h)	=	1.35	meter
	F T L		=	101.35	meter
	M W L		=	102.75	meter
	T B L		=	102.75	meter
Total height =T.B.L. - N.S.L. =			=	2.75	meter
Length of Bund			=	48	meter
Height of Bund			=	1.2	meter
Top Width of Bund		(h/3)+1.5	=	1.9	meter
Bottom Width of Bund		(5 x h)+ Tw	=	7.9	meter

(i) Top width of head wall

$Tw = h / (s - c)^{1/2}$

putting h= 1.40 meter

Specific gravity of the material s= 2.3 for stone masonry in cement mortar

(for partly pervious &permeable foundation bed) c = 1.00

we get, Tw = 1.23 meter

Or Tw = 1.30 meter

d = h + Fb	2.00	

(ii) Bottom width of head wall Bw = Tw + (H x 0 .8) $(H+h) / (s-c)^{1/2}$

Bw = 2.41 Mtr.

Width of Concerete bed (= Bw +0 .30) 2.71 Mtr.

Or 2.80 Mtr.

(iii) Length of head wall extension = H +d+1

= 4.35 Mtr.

(iv) Height of head wall extention = H +d

= 3.35 Mtr.

(v) Bottom width of head wall extension 0.5(H+h)

= 1.38 Mtr.

1.40

1. HEAD WALL EXTENSION				
(a) Length (as per site condition)	Right side		3.50	meter
	Left side		3.50	meter
(b) Height above crest level =H+fb	Right side		2.00	meter
	Left side		2.00	meter
(c) Top width			0.60	meter
(d) Bottom width			1.94	meter
		or	2.00	meter
2. SIDE WALL				
(a) Length = (Bw of Hw + Appron width + 0.45) - 2.1			3.40	meter
		or	3.40	meter
(b) Top width (minimum)			0.60	meter
(c) Bottom width				
(at H. W. E. junction) =0.60+((H+d)x0.40) =		=	1.94	meter
(at wing wall junction) =0.60 + (0.40 x 1.5 H) =			1.44	meter
(d) Height of side wall				
(at H. W. E. junction) = H + d		=	3.35	meter
(at wing wall junction) = 1.5 x h		=	3.00	meter
3. WING WALL				
(a) Length = 2.25 x h		=	4.50	meter

(b) Top width (minimum)			=	0.60	meter
(c) Bottom width = 0.60 + (0.4 x (1.5 x h))			=	1.80	meter
(d) Height of wing wall =1.5 h =			=	3.00	meter
4. APRON					
Length = crest length			=	15.00	meter
Width = H + d			=	3.35	meter
Thickness of Apron =			=	0.60	meter
(0.30 m c.c.(1:4:8)					
+0.23 m RR stone khuranja in CM 1:6					
5. TOE WALL					
Length = crest length			=	15.00	meter
Width			=	0.45	meter
Height (above top of Apron)			=	0.30	meter
6. Depth of foundation = 1.50*0.473(Q/f)$^{.33}$		OR Say	=	0	meter
			=	0.00	meter
Q = Discharge Cum / Sec	0				
f = silt factor constant	1.2				
But as per site condition taken as	1.50	Mtr.			

CHECKS FOR AGAINST OVER TURNING , RUPTURE FROM TENSION , SLIDING & CRUSHING

	H =	1.35	meter
	h =	1.40	meter
	Tw =	1.30	meter
	Bw =	2.41	Kg \cum
Specific weight of masonary	s =	2300.00	Kg \cum
Specific weight of water	w =	1000.00	Kg \cum
Coefficient of uplift	c =	0.50	
Coefficient of friction	f =	0.75	

Weight of structure $W = W_1 + W_2$

$W_1 = s \times Tw \times H$ = 4036.50 Kg

$W_2 = s \times H(Bw - Tw) / 2$ = 1726.24 Kg

$W = W_1 + W_2$ = 5762.74 Kg

Water pressure at depth H = P1

$P_1 = w \times h$ = 1400.00 Kg \ sqm

Water pressure at depth $(H+h)=P_2$

$P_2 = w \times (H + h)$ = 2750.00 Kg \ sqm

Net Horizontal water force =

$(P_1 + P_2) / 2 \times H$ = 2801.25 Kg \ sqm

Force due to water at the crest

F3 = w x h x Tw = 1820.00 Kg/m

Up lift pressure U1=c x w x (h+H)= 1375.00 Kg/sqm

Up lift Force =U = U1 x Bw / 2 = 1658.19 Kg/m

1. Safty against Over turning

Taking moment of all the forces about the toe of the Structure

Restoring Moment, $RM = W_1 \times (Bw - Tw/2) + W_2 \times (Bw - Tw) \times 2 / 3 + F_3 (Bw - Tw/2)$

RM = 11598

Over turning Moment, $OM = F_a \times H/2 + F_b \times H/3 + U \times 2 \, Bw/3$

Where $F_a = P_1 \times H$ = 1890

$F_b = (P_2 - P_1)/2 \times H$ = 911.25

OM = 4352

RM / OM = 2.66

It is more than 1.30, so the structure is safe against overturning.

2. Safty against tension at the base

The excess moment , E_m=(RM - OM) 7246

Total Vertical Force, V = W + F_3 - U= 5924.55

X represents the position of the resultant force from top of the structure.

X = Excess moment / Total vertical force

X = 1.22

Which is more than Bw / 3 = 0.80 of the structure ,

& less than 2Bw/3= 1.61

i.e. Resultant is passing through the middle 1 / 3 of the base so there is no chance of developing any tension in maonary. Hence the structure is safe against Rupture from Tension.

3. Safty against Compression (Crushing)

Ecentricity e = Bw / 2-X

where x =(RM-OM)/ V 1.22

so e = -0.02

F_{max} = V(1+6e/Bw)/A = 2351.77

In order to avoid crushing of the masonary at the base F_{max}. is maximum compressive stress acting normal to the base of the structure. It is less than the Max.allowable compressive stress for the masonary 20000 Kg / sqm. Hence Safe against Crushing.

4. Safty against sliding

Total Vertical Force, V =W+F3-U= 5924.55

Resisting forces, P = f V + C_hA = 4444.38

Sliding forces = Fa + Fb = 2801.25

Factor of safety for sliding

= Restoring force / Sliding force P/V= 1.59

It is more than 1.3, so the structure is safe against Sliding.

PANCHAYAT SAMITI CHHABRA

Name of Work — Construction of Anicut

DETAILED ESTIMATE

S.	Particular	No.	Length	Width	H / D	Qty.	unit
1	Excavation for foundation						
	Head wall (over flow sec.)	1	15.00	2.80	1.50	63.00	cu.m
	Head wall Ext						
	(a) Right side from U \ S	1	3.50	2.00	3.60	25.20	
	(b) Left side from U \ S	1	3.50	2.00	3.60	25.20	
	Side wall	2	6.50	1.80	3.60	84.24	,,
	Wing wall	2	3.00	1.80	3.60	38.88	,,
	Toe wall	1	15.00	0.90	0.60	8.10	,,
	Apron	1	15.00	3.35	0.60	30.15	,,
					Total Qty.	**274.77**	**cu.m**
	Hard soil	38.34	%			**105.35**	cu.m
	Disintegrated Rock	0	%			0.00	cu.m
	Ordinary Rock	61.66	%			**169.42**	cu.m
2	C .C . (1 : 3 : 6) with 20 mm stone crusher broken aggregate in foundation						
	Head wall (over flow sec.)	1	15.00	2.80	0.30	12.60	cu.m
	Head wall Exe.Foundation						
	(a) Right side from U \ S	1	3.50	2.00	0.30	2.10	
	(b) Left side from U \ S	1	3.50	2.00	0.30	2.10	
	Side wall	2	6.50	1.80	0.30	7.02	,,
	Wing wall	2	3.00	1.80	0.30	3.24	,,
	Toe wall	1	15.00	0.90	0.30	4.05	,,
	Apron	1	15.00	3.35	0.30	15.08	
					Total Qty. Item - 2 =	**46.19**	**cu.m**

3 A	R.R.Stone Masonery in cement sand mortar (1:6) in foundation for W.H.S						
	Head wall (over flow sec.)	1	15.00	2.80	1.20	50.40	cu.m
	Head wall Exe.						
	(a) Right side from U \ S	1	3.50	2.00	1.20	8.40	
	(b) Left side from U \ S	1	3.50	2.00	1.20	8.40	
	Side wall	2	6.50	1.80	1.20	28.08	,,
	Wing wall	2	3.00	1.80	1.20	12.96	,,
	Toe wall	1	15.00	0.90	0.30	4.05	,,
				Total Item-- 3 A =		**112.29**	**cu.m**
3 B	R.R.S.M. (1:6) for super structure above NSL						
	Head wall (over flow sec.)	1	15.00	2.05	1.35	41.51	cu.m
	Head wall Exe.						
	(a) Right side from U \ S	1	3.50	1.95	3.00	20.48	,,
	(b) Left side from U \ S	1	3.50	1.95	3.00	20.48	
	Side wall	2	10.20	1.80	2.63	96.39	,,
	Wing wall	2	3.00	1.80	2.03	21.87	,,
	Toe wall	1	15.00	0.45	0.30	2.03	,,
				Total Item - 3 B =		**202.75**	**cu.m**
				Total Item - 3 A + 3 B =		**315.04**	**cu.m**
4	RR stone khuranja in CM 1:6 of 23cm	1	15.00	3.35		**50.25**	**Sqm**
5	C . C . Coping in C.M. 1 : 2 : 4						
	Headwall Crest						
	Head wall (Nonover flow sec.)U\S	1	15.00	1.30		19.50	cu.m
	(a) Right side from U \ S	1	3.50	0.6		2.10	,,
	(b) Left side from U \ S	1	3.50	0.6		2.10	,,
	Side wall	2	10.20	0.6		12.24	,,
	Wing wall	2	3.00	0.6		3.60	,,
	Toe wall	1	15.00	0.45		6.75	,,

				Total Item :- 5 =		**46.29**	**cu.m**
6	25 Cement Plaster in C.M. (1:4)						
	Head wall (over flow sec.) U \ S	1	15.00		1.35	20.25	sq.m
	Toe wall ((2 x height) + Top)	1	15.00		0.30	4.50	,,
				Total Item:-- 6 =		**24.75**	**sq.m**
7	Flush or ruled poinding in CM 1:3						
	Head wall (over flow sec.) U \ S	1	15.00	1.75		26.23	sq.m
	Side wall	2	10.20	2.63		53.55	,,
	Wing wall	2	3.00	2.03		12.15	,,
				Total Item:-- 7 =		**91.93**	**sq.m**
8	Earth work for bunds including laying in 15 cm layers broken of loads etc complete						
	a) In Hard Soil	0	40	3.5	1	0	
	b) In Ordinary Soil	0	0	0	0	0	
				Total Item :- 8 =		**0.00**	**cu.m**
9	15-30 cm thick single stone pitching hammer dressed including all leads etc complete	0	12	1.2	0.23	0	
				Total Item :- 9 =		0	
10	Drilling of holes 35 mm dia for anchor rods up to 1.5 m depth	**0**	**1.50**			**0.00**	**m**
				Total Item :-10 =		**0.00**	
11	Fixing of anchor bars in near cement grout including cost of cement and curing complete	**0**	**1.50**			**0.00**	**m**
				Total Item :- 11 =		**0.00**	
12	Supply of TOR steel anchor bars of required diameter length and shape at site of work complete			**L.S**		**0**	**Kg**
				Total Item :- 12 =		**0**	

PANCHAYAT SAMITI CHHABRA

Name of Work — Construction of Anicut

Abstract of Cost

S.No.	Particular	Qty	Unit	Complete Item		Labour Charges(Unskilled)		Labour Charges(skilled)		Material Charges
				Rate	Amount	Rate	Amount	Rate	Amount	
1	Excavation for foundation & trench for irrigation works									
	Hard soil	105.35	Cum	92.00	9691.91	92.00	9691.91	0.00	0.00	0.00
	Disintegrated Rock	0.00	Cum	134.00	0.00	134.00	0.00	0.00	0.00	0.00
	Ordinary Rock	169.42	Cum	178.00	30157.33	178.00	30157.33	0.00	0.00	0.00
2	Cement Concrete (1 :3 : 6) with 20 mm size stone broken gritt for W.H.S	46.19	Cum	2339.00	108026.72	287.50	13278.19	30.00	1385.55	93362.98
3	R.R.Stone Masonary in cement sand mortar (1:6) for W.H.S	315.04	Cum	1611.00	507525.41	162.00	51036.08	180.00	56706.75	399782.59
4	RR stone khuranja in CM 1:6 of 23cm	50.25	Sqm	267.00	13416.75	43.20	2170.80	60.00	3015.00	8230.95
5	50 mm thick Cement Concreet Coping in 1 : 2 : 4 with stone crusher broken gritt 12 mm size including curring etc complete	46.29	Sqm	204.00	9443.16	31.00	1434.99	45.00	2083.05	5925.12
6	25 MM thick Cement sand Plaster in C.M. (1:4) including curing etc complete	24.75	Sqm	149.00	3687.75	25.65	634.84	39.00	965.25	2087.66
7	Flush or ruled poinding in CM 1:3	91.93	Sqm	49.00	4504.78	13.80	1268.69	24.00	2206.42	1029.66
8	Earth work for bunds including laying in 15 cm layers breaking of clods etc complete								0.00	0.00
	a) In Hard Soil	0.00	Cum	85.00	0.00	85.00	0.00	0.00	0.00	0.00
	b) In Ordinary Soil			77.00		77.00	0.00	0.00	0.00	0.00

9	15-30 cm thick single stone pitching hammer dressed including all leads etc complete	0.00	Cum	0.00	0.00	50.00	0.00	66.00	0.00	0.00
10	Drilling of holes 35 mm dia for anchor rods up to 1.5 m depth	0.00	m	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11	Fixing of anchor bars in near cement grout including cost of cement and curing complete	0.00	m	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	Supply of TOR steel anchor bars of required diameter length and shape at site of work complete	0.00	Kg	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Total				686453.80		109672.82		66362.02	510418.96
	Add 3% charges for contengencies				20593.61					20593.61
	Grand Total				**707047.42**		**0.00**		**0.00**	**20593.61**

say Rs. 7.07 Lacs

Requirement of Material

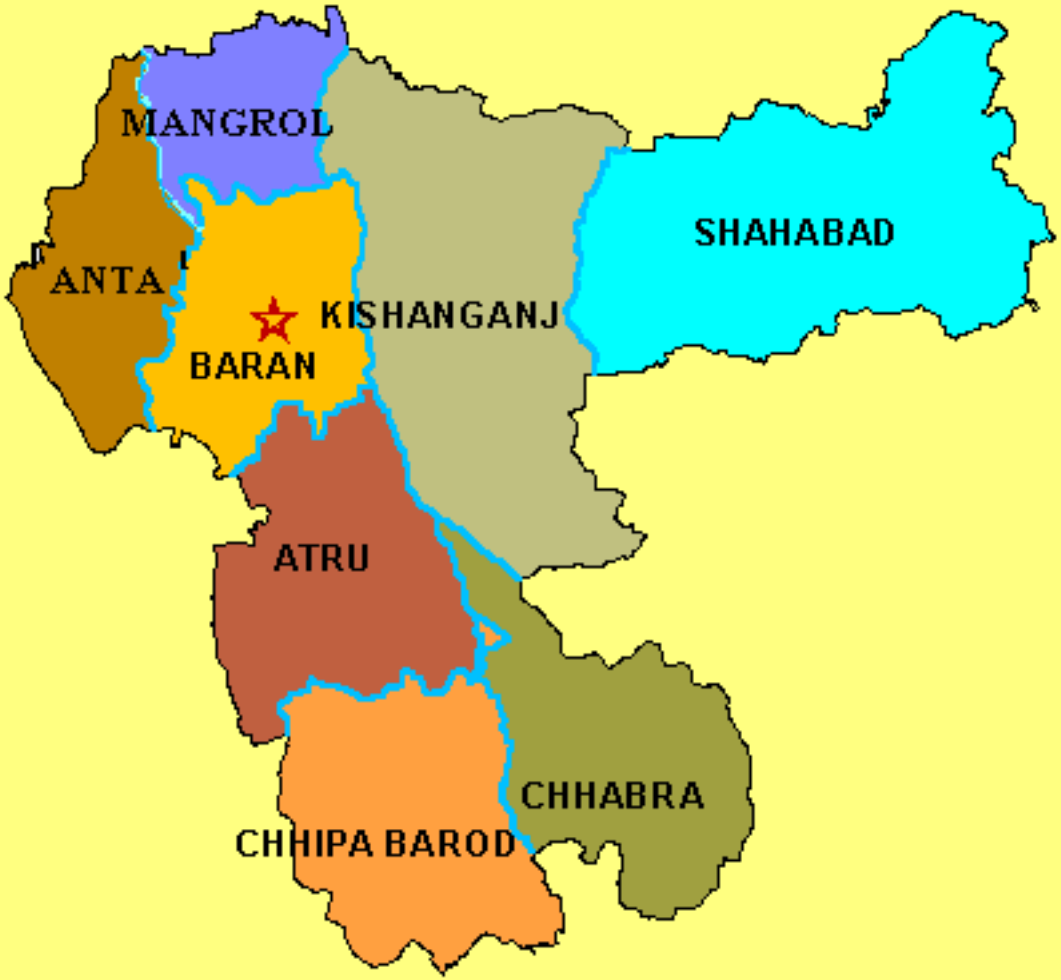
S.No.	Particular	Qty	Unit	Cement in Bags		Sand in Cum		Stone Cum		Aggregate 20 mm		Aggregate 12 mm		Iron TOR Bars	
				Per Unit	Qty.	Per Unit	Qty.	Per Unit	Qty.	Per Unit	Qty.	Per Unit	Qty.	Per Unit	Qty.
1	Cement Concrete (1 : 3 : 6) with 20 mm size stone gritt for W.H.S	46.19	cum	4.05	187.05	0.43	19.86	0.00	0.00	0.86	39.72	0.00	0.00	0.00	0.00
2	R.R.Stone Masonary in cement sand mortar (1:6) for W.H.S	315.04	cum	1.40	439.48	0.30	94.51	1.10	346.54	0.00	0.00	0.00	0.00	0.00	0.00
3	25 MM thick Cement sand Plaster in C.M. (1:4) including curing etc complete	24.75	sqm	0.22	5.54	0.03	0.79	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	RR stone khuranja in CM 1:6 of 23cm	50.25	sqm	0.21	10.55	0.05	2.26	0.25	12.71	0.00	0.00	0.00	0.00	0.00	0.00
5	Cement Concreet Coping in C.C. 1 : 2 : 4 with stone crusher broken gritt 12 mm size including curring etc complete	46.29	cum	0.31	14.44	0.02	1.02	0.00	0.00	0.00	0.00	0.05	2.08	0.00	0.00
6	Flush or ruled poinding in CM 1:3	91.93	sqm	0.03	2.57	0.003	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	15-30 cm thick single stone pitching hammer dressed including all leads etc complete	0.00	cum		0.00		0.00	1.20	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	Fixing of anchor bars in near cement grout including cost of cement and curing complete														
9	Supply of TOR steel anchor bars of required diameter length and shape at site of work complete														0.00
	Total				659.64		118.72		359.25		39.72		2.08		0.00

Cement (Begs)	Sand (cum)	Stone (cum)	Agg. 20 mm (cum)	Agg. 12 mm (cum)	TOR Bars Kgs
660	118.72	359.25	39.72	2.08	0

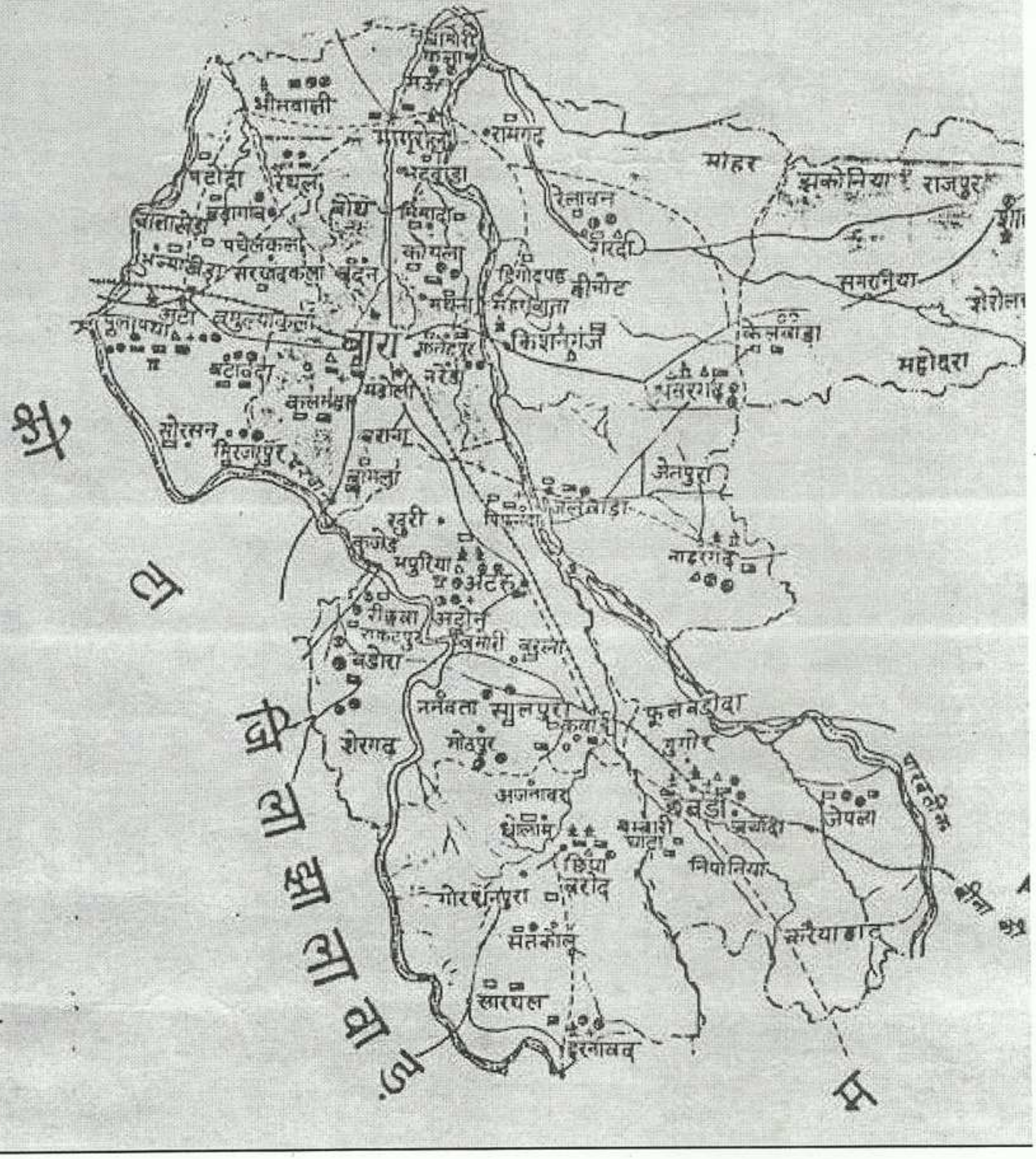
CHAPTER-VIII

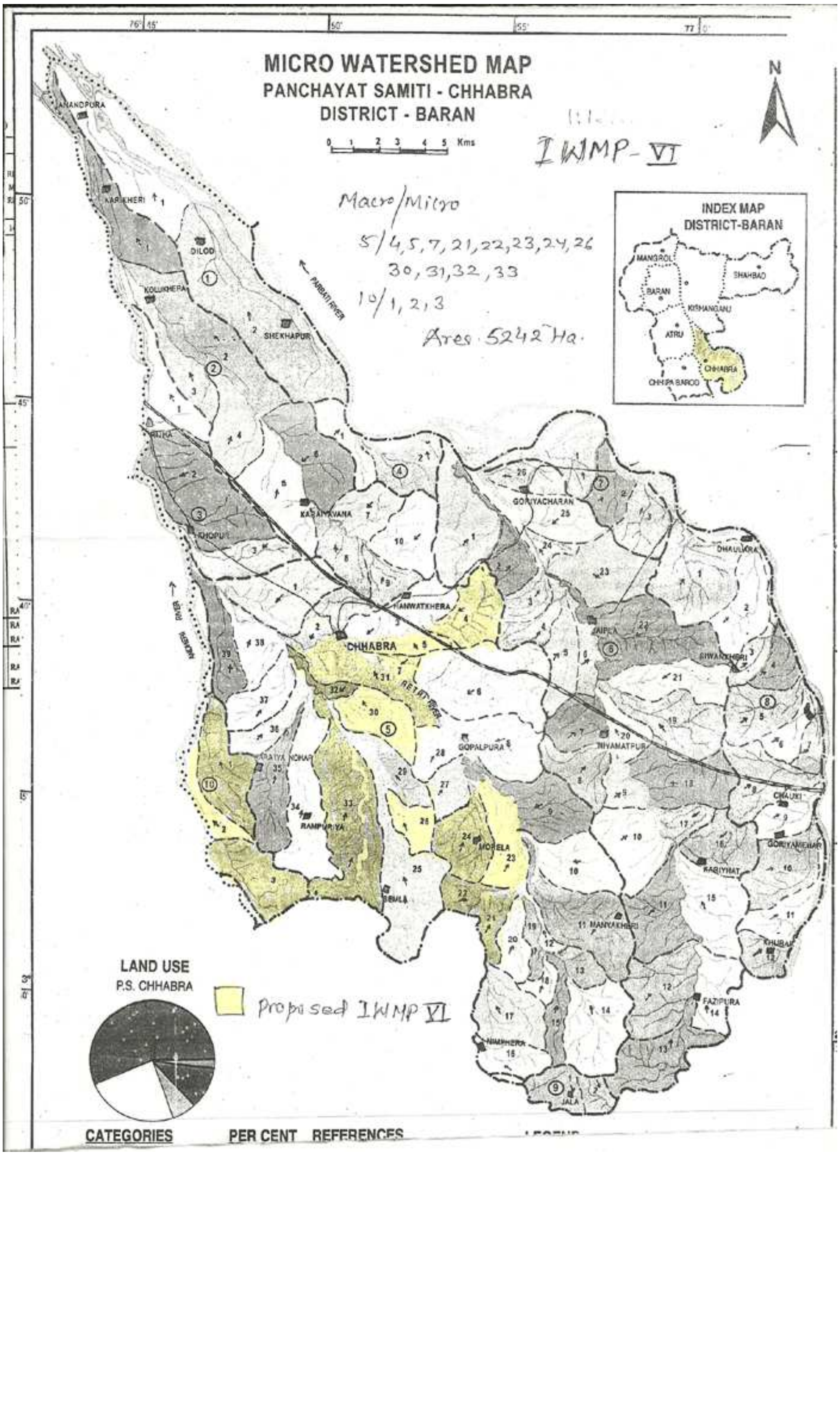
ENCLOSURES

Tehsils of Baran District



Baran District





MICRO WATERSHED MAP
PANCHAYAT SAMITI - CHHABRA
DISTRICT - BARAN
0 1 2 3 4 5 Kms
N
IWMP- VI
Macro/Micro
5/4,5,7,21,22,23,24,26
30,31,32,33
10/1,2,3
Area 5242 Ha.
INDEX MAP
DISTRICT-BARAN
MANGROL
SHAHBAD
BARAN
KISHANGANJ
ATRU
CHHABRA
CHHIPA BAROD
PARBATI RIVER
DILOD
KOLUKHERA
SHEKHAPUR
GORIYACHARAN
DHAULKA
KARANYAVANA
HANWATKHERA
CHHABRA
GOPALPURA
NIYAMATPUR
CHAUKI
GORIYAKHEDA
KABIYHAT
MORELA
RAMPURIYA
MANYAKHERI
KHURAI
FAZIPURA
NIMKHERA
JALA
LAND USE
P.S. CHHABRA
Proposed IWMP VI
CATEGORIES
PER CENT
REFERENCES

CHAPTER - VIII

Enclosures -

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

b. Map of Chhabra IWMP Project (Watershed Boundary demarcation in cadastral & Topo Sheet)

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

d. Resource Map (along with photos & paper drawing)

e. Treatment map (Indicate proposed works)

f. Cadastral Map

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

h. Land Use Land Cover map

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

j. High resolution, latest Remote Sensing Satellite data

Documents of Agreements:

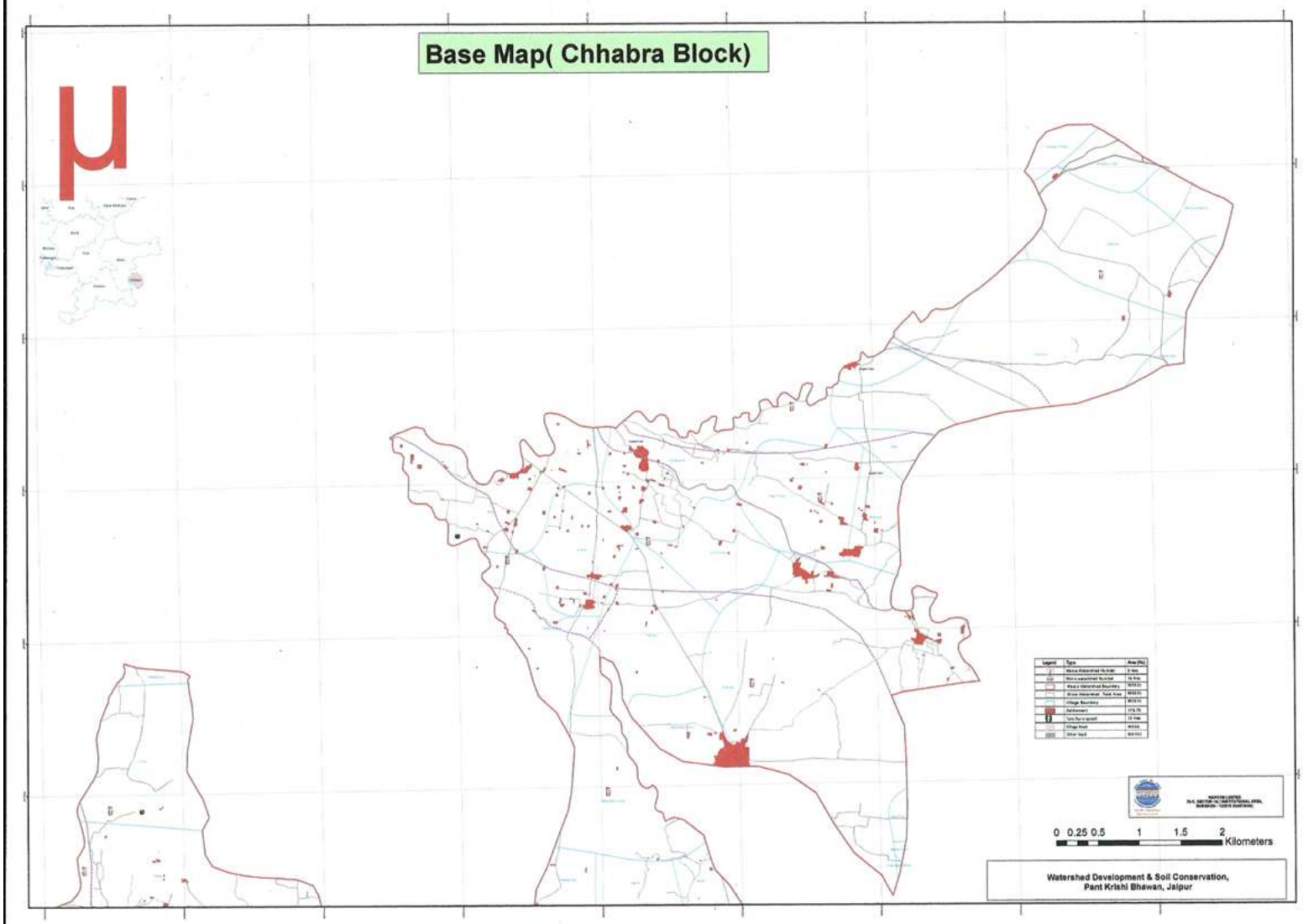
Proceedings of gram sabha Resolution for committee constitution
Proceedings of gram sabha for DPR approval
DPR approval by district
Watershed Committee Registration certificate

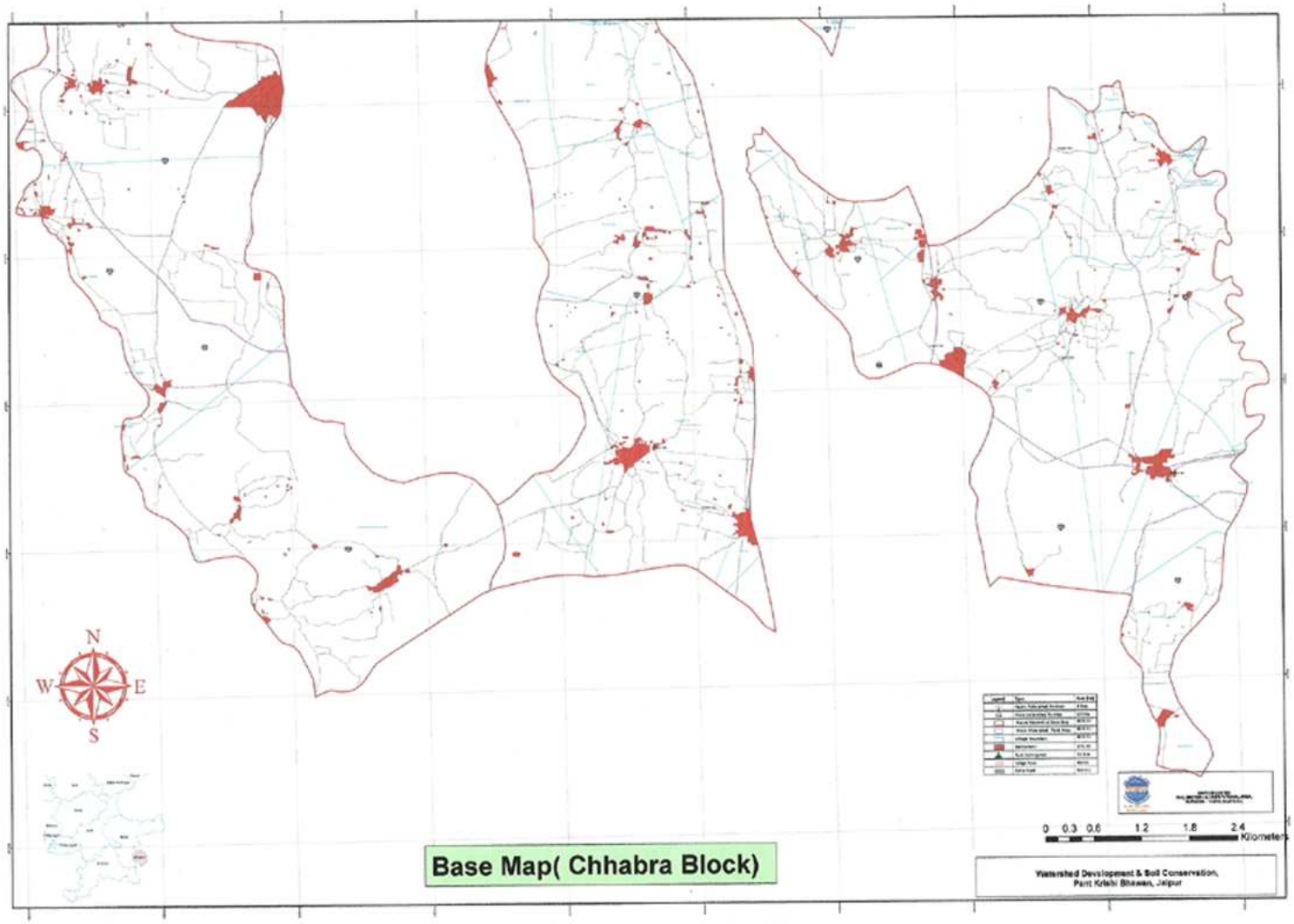
MoU – PIA – DWMA, PIA – WC(in case of NGO as PIA)

[

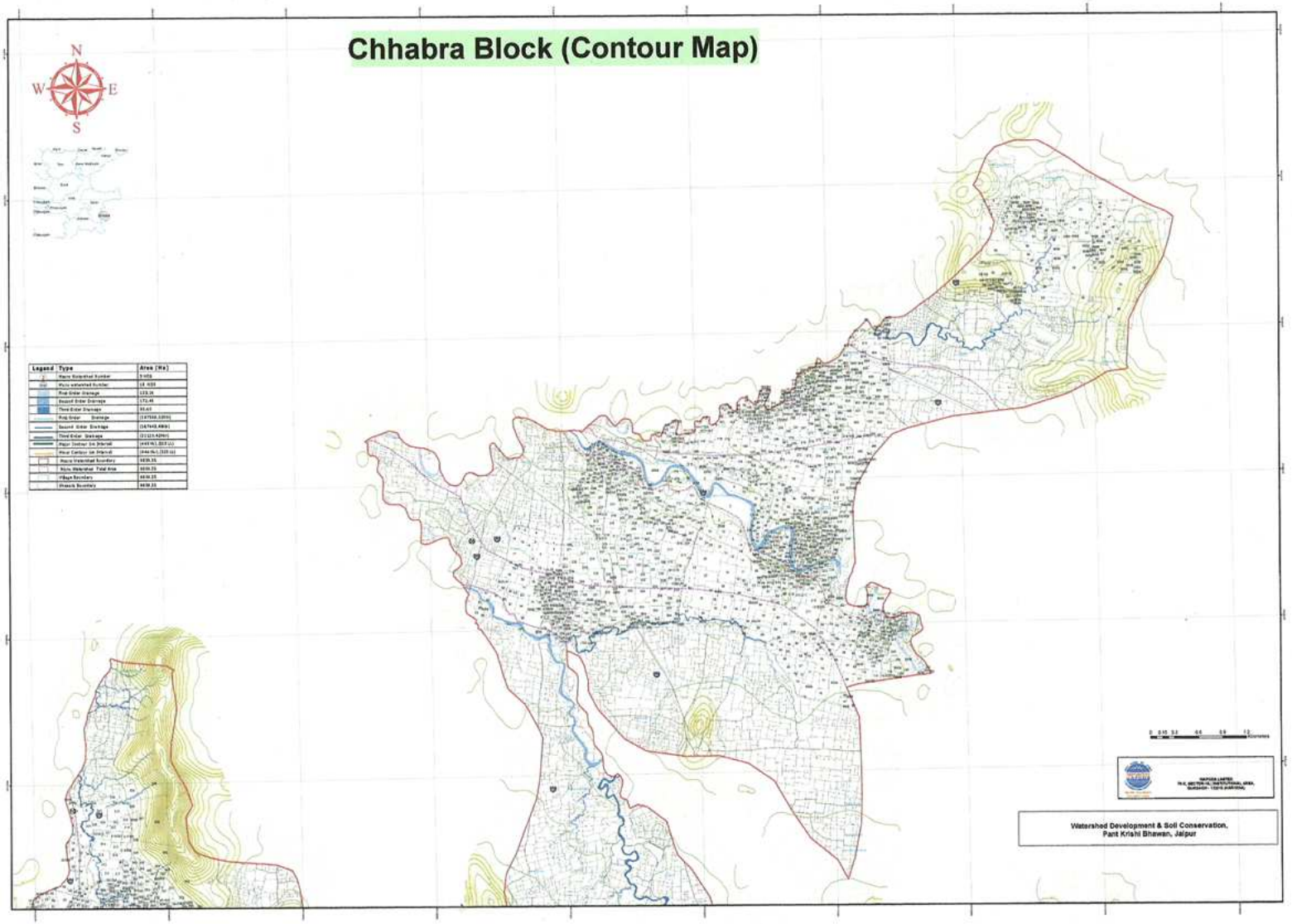
]

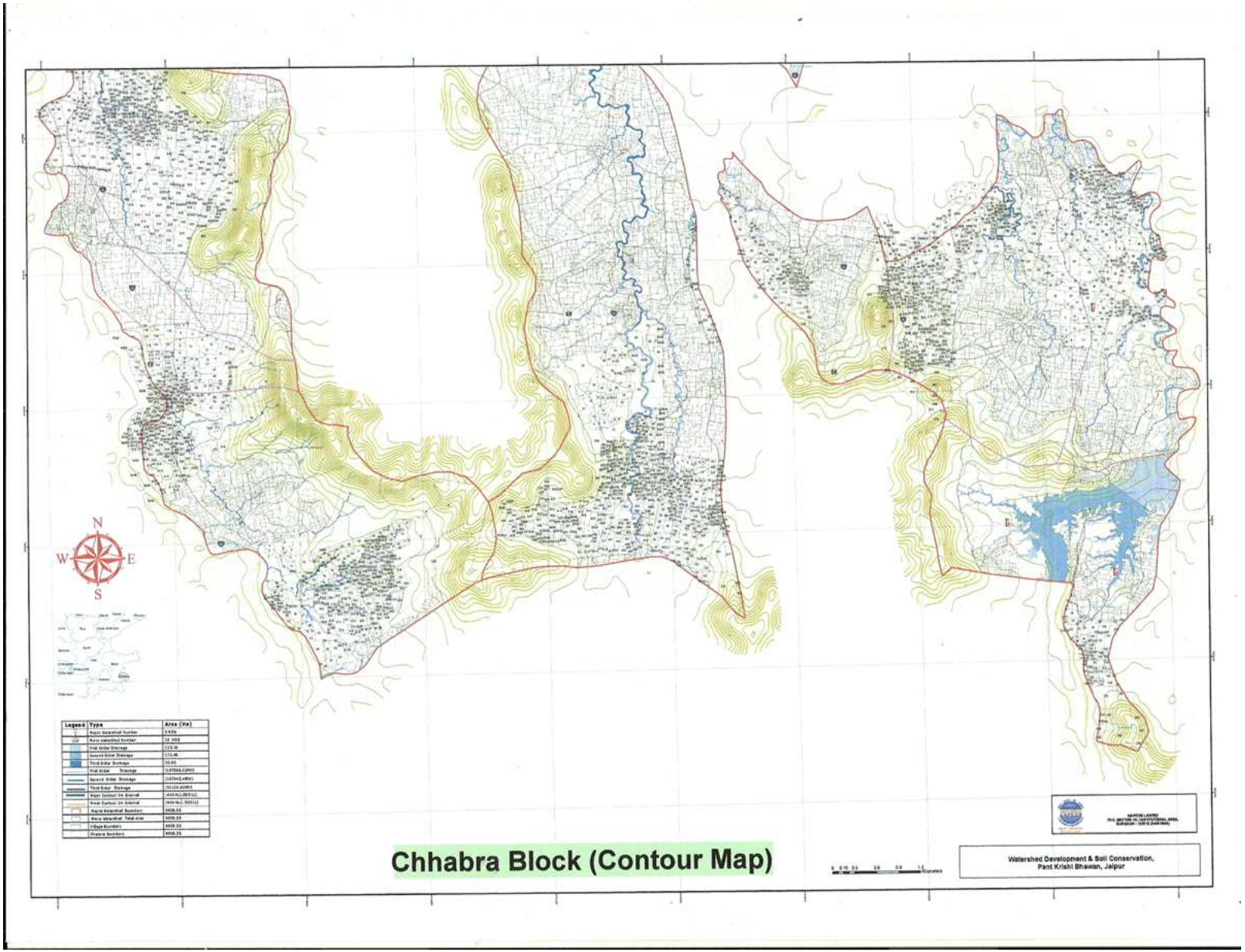
Base Map(Chhabra Block)

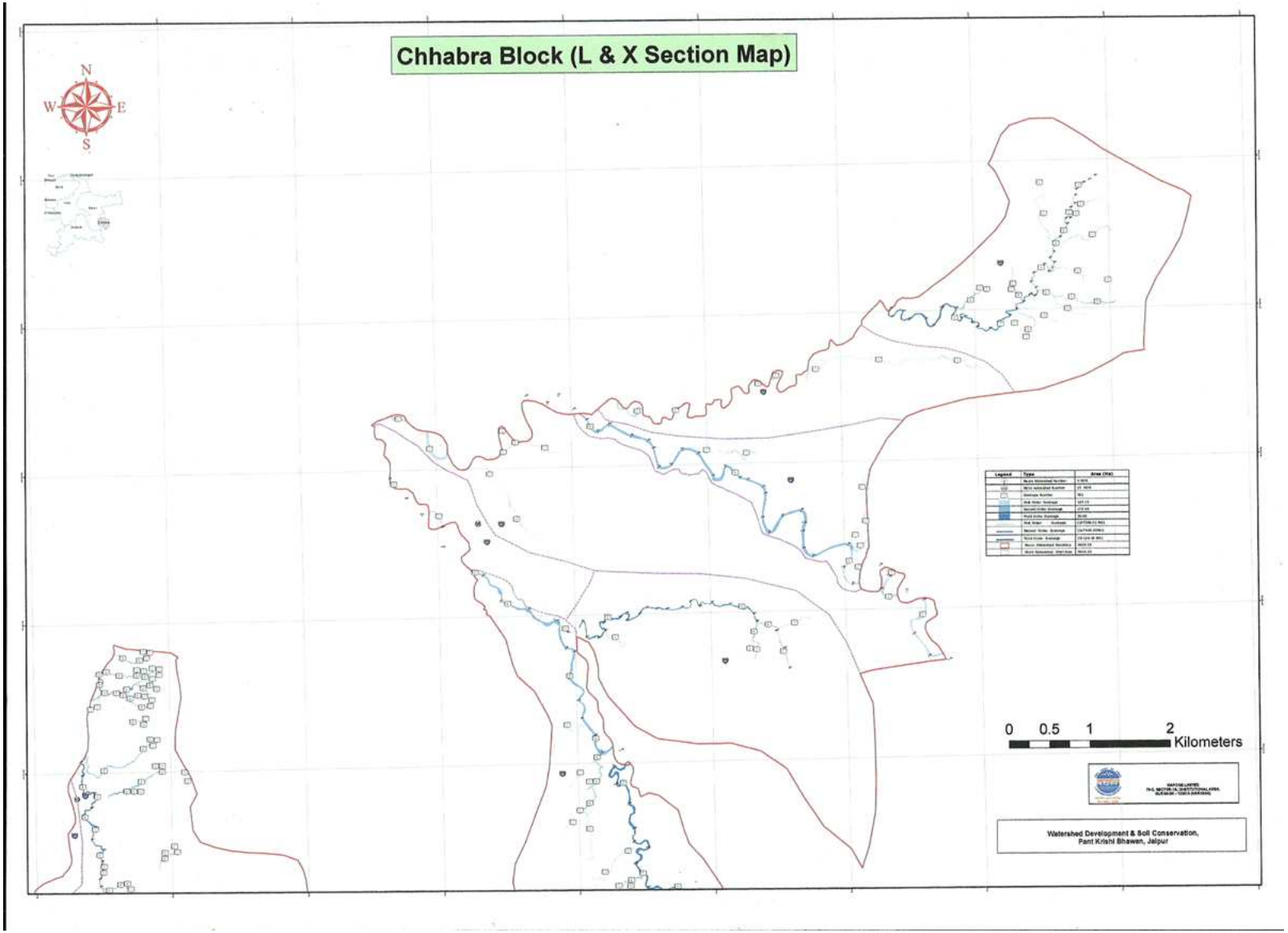



N
W
E
S
0 0.3 0.6 1.2 1.8 2.4
Kilometers
Base Map(Chhabra Block)
Watershed Development & Soil Conservation,
Pani Krishi Bhawan, Jaipur

Chhabra Block (Contour Map)




N
W
E
S
Chhabra Block (Contour Map)
Watershed Development & Soil Conservation,
Pant Krishi Bhawan, Jaipur


Chhabra Block (L & X Section Map)
N
W
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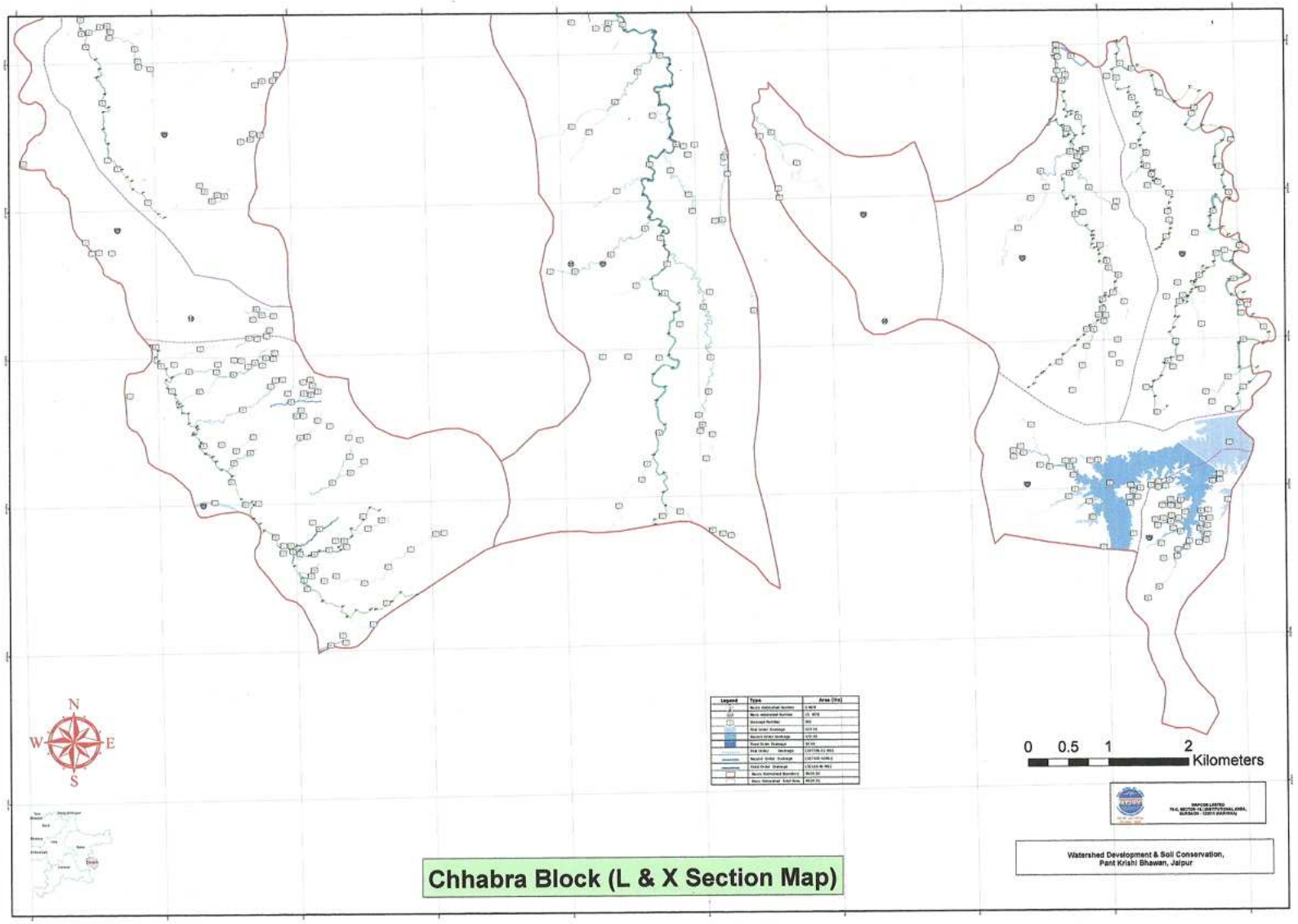
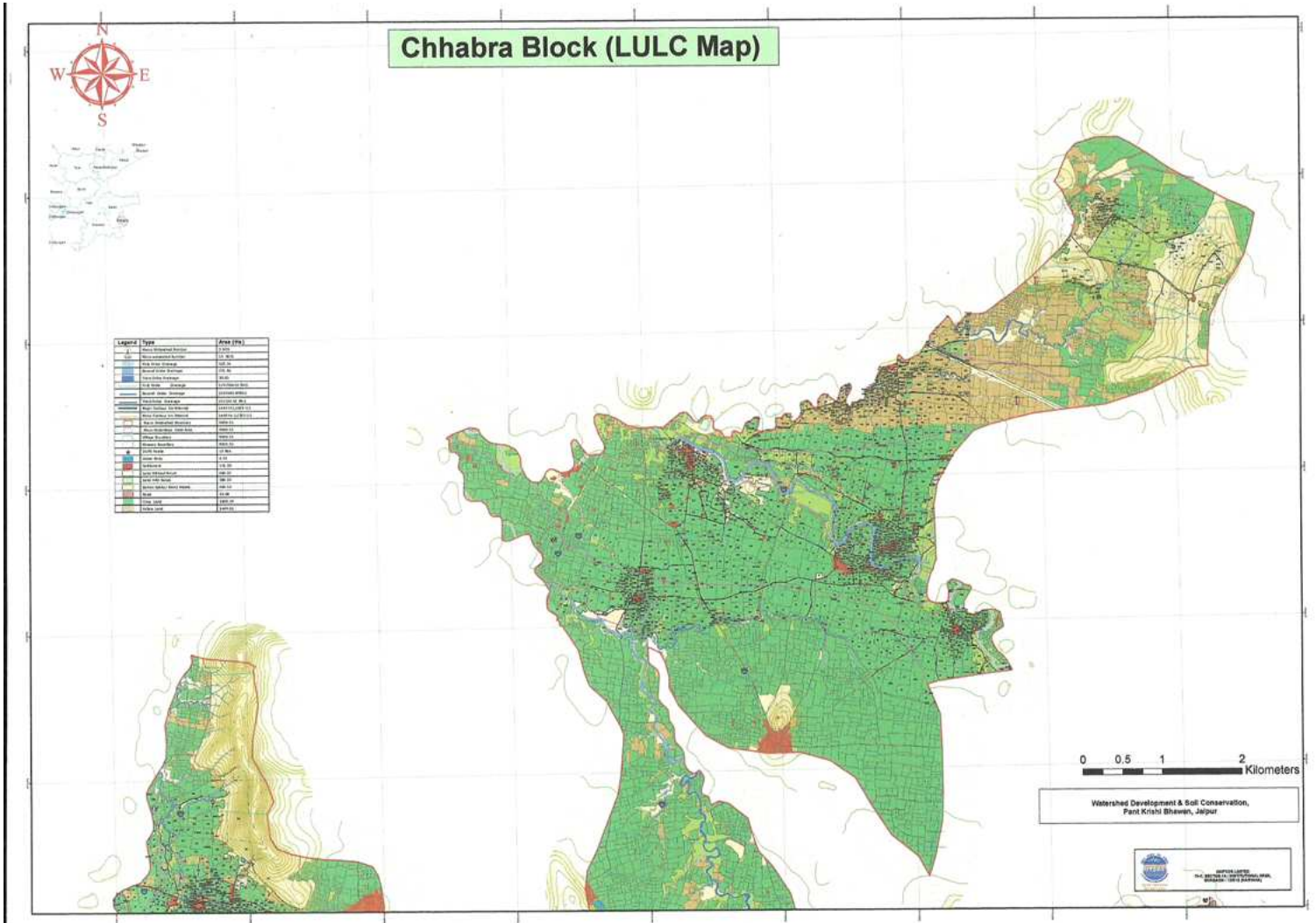
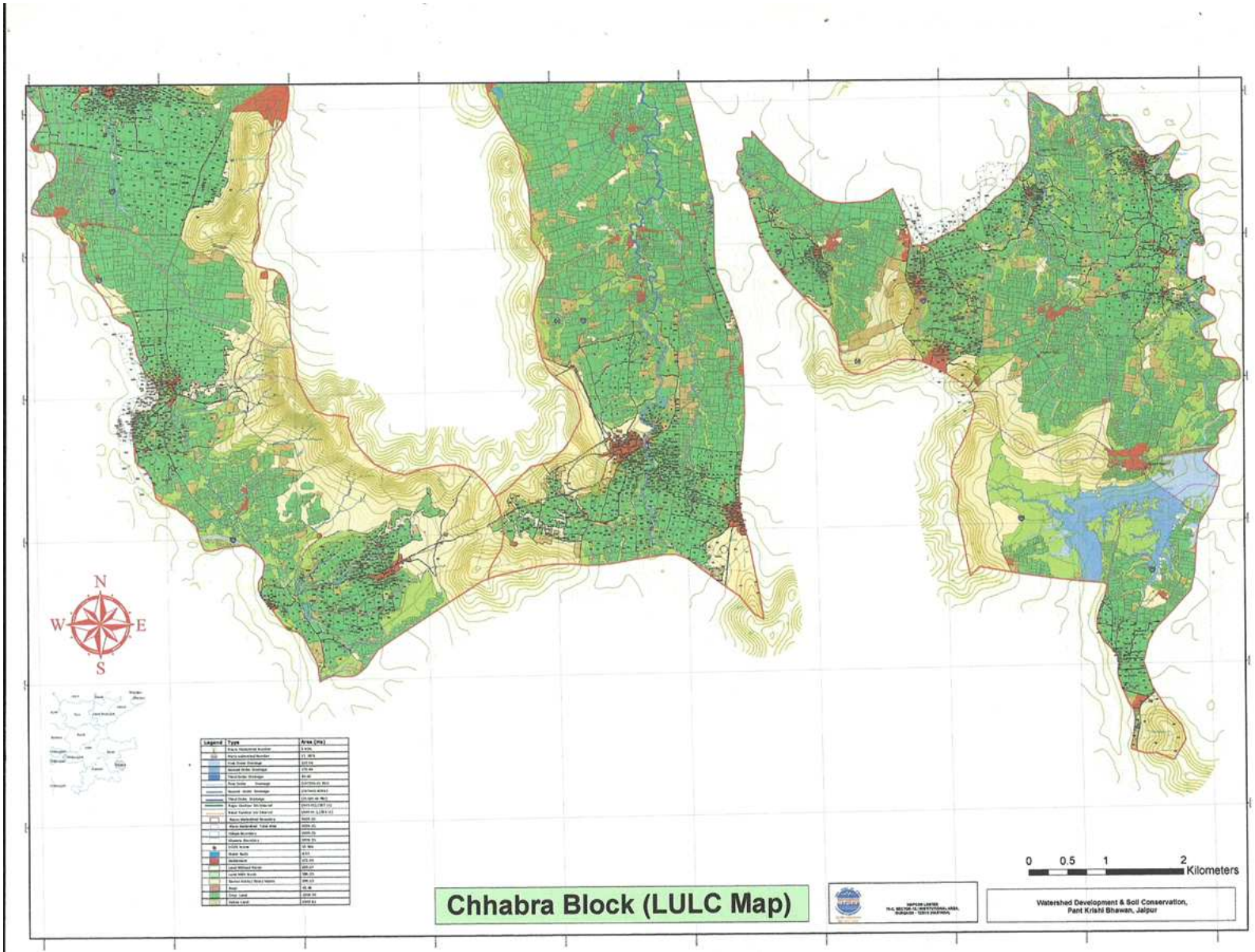
0 0.5 1 2
Kilometers
Watershed Development & Soil Conservation,
Pant Krishi Bhawan, Jaipur


N
W
E
S
0 0.5 1 2
Kilometers
Chhabra Block (L & X Section Map)
Watershed Development & Soil Conservation,
Pant Krishi Bhawan, Jaipur

Chhabra Block (LULC Map)




N
W
E
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0 0.5 1 2 Kilometers
Chhabra Block (LULC Map)
Watershed Development & Soil Conservation,
Pant Krishi Bhawan, Jaipur