ASSTT. ENGINEER (PIA) IWMP P.S. OSIAN

DETAILED PROJECT REPORT

OF

JODHPUR-XXV (IWMP)

(UNDER INTEGRATED WATERSHED MANAGEMENT PROGRAMME)

BLOCK: OSIAN DISTRICT : JODHPUR

AGRO CLIMATIC ZONE- 1A

TOTAL GEOGRAPHICAL AREA – 6685Hac.

TOTAL EFFECTIVE AREA- 5000 Hac.

TOTAL COST- 851.85 Lacs.

COST FROM PROJECT FUND- 750.00Lacs

COST FROM CONVERGENCE FUND- 101.85Lacs

SUBMITTED BY

ASTT. ENGINEER, WDSC

PANCHAYAT SAMITI -OSIAN

JODHPUR, (RAJASTHAN)

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INTRODUCTION

CHAPTER - I INTRODUCTION

Location.

Cherai (Jodhpur-25): Project is located in OSIAN Block of JODHPUR district. The project area is between the latitudes 26 37'19 TO 26 43'59N & longitudes 72 38'19 TO 72 4511' E . It is at a distance 24 km from its Block head quarters and 65 kms from the district head quqrters. there are 5 habitations in the Project area and other details are given belove.

General features of watershed

S. No	Name of Project (as per GOI)	Cherai (Jodhpur - 25)
(a)	Name of atchment	Cherai,Mahadev Nagar,Arjun Dev Nagar,Daukion ka Bas,Bada Bas
(b)	Name of watershed area (Local name	cherai
(c)	Project Area	6685.19 Hact.
(d)	Net Treatable Area	5000 Hact.
(e)	Cost of Project	750000
(f)	Cost / Hectare	15000
(g)	Year of Sanction	2010-11
(h)	Watershed Code	Desert
(i)	No. of Gram Panchayat in Project Are	1
(j)	No. of villages in Project Area	5
(k)	Type of Project	Desert
(l)	Elevation (metres)	–
(m)	Major streams	–
(n)	Slope range (%)	1 to 4 %

Macro/	Name of Gram Panchyat	Name of Villages	Census code of villages	Area (Hact.)
	cherai	cherai		1151
		mahadev nagar		1068
		arjundev nagar		1456
		bada bas		376
		daukion ka bas		949

The watershed falls in Agroclimatic Zone **IA .** The Soil texture is **Sandy to lomy sandy soil.** The average rainfall is **266** cm. The temperatures in the area are in the range between 43.4 centigrade during summer and 26.3 centigrade during winter. The major Crops in the **area are Bajara, Wheat,Moong, Moth, mustared ground nut, Gowar, Jeera,Lahsun, Oil sheed,Custor**. 60% land is under Cultivation, 32% land fallow, 3% land is wasteland, 5% land is irrigated through Deep tube well of 110 No. of Household are small and marginal farmers (16.36% household). Average land holding in the area is 266.99 hact. 45% area is single cropped area and 15 % is double cropped . The main soures of irrigation is Deep tube well. The averrage annual rainfall (5 years) in the area is 266 mm. The Major festivals in the village are Holy, Deepawali,Id & Rakshabandhan.At present this village is having 06 population with Communities like Jat, Rajpoot, Meghwal.

Climatic and Hydrological information

1	**Average Annual Rainfall (mm)**			
S.No.	Year	Average Annual Rainfall (mm)		
1	2001	324		
2	2002	94		
3	2003	484.5		
4	2004	192		
5	2005	260		
6	2006	209.5		
7	2007	200		
8	2008	270		
9	2009	138		
10	2010	435		
2	**Average Monthly Rainfall (mm)**			
	Month	**Rainfall (mm)**		
i	June	35.42		
ii	July	101.22		
iii	August	92.22		
iv	Septamber	29.39		
3	**Maximum rainfall intensity (mm)**			
	Duration	**Rainfall (mm)**		
i	15 minute duration	63		
ii	30 minute duration	52		
iii	60 minute duration	48		
4	**Temperature (Degree C)**			
	Season	**Max.**	**Min.**	
i	Summer Season	43.4	26.4	
ii	Winter Season	26.3	9.6	
iii	Rainy Season	35.5	15.5	
5	**Potential Evaporation Transpiration (PET) (mm/day)**			
	Season	**PET**		
i	Summer Season	15		
ii	Winter Season	3.8		
iii	Rainy Season	8.8		
	Total PET	27.6		
6				
	Time of retun of maximum flood	5 year	10 years	In- Year
	Periodicity of Drought in village area	3 time in 5 year	7 time in 10 year	Alternate year

Other Development Schemes in the Project area

S.No.	Scheme	Name of the deprtment	Key interventions under the Scheme	Targated Beneficiaries	Provisions under the Scheme
1	IAY	Rural development	Avas	BPL	Construction of Avas
2	MGNREGA	Rural development	Providing employment	All section	Basic Infrastructure Development
3	SFC	Rural development	Providing employment	Village Level	Community work
4	TFC	Rural development	Providing employment	Village Level	Community work
5	SGSY	Rural development	Lively Hood	BPL	Providing Loan

Details of infrastructure in the Project areas

Parameters		Status			
i	No. of villages connected to the main road by an all weather road	mahadev nagar,arjun dev nagar,daukion ka bas,ba			
ii	No. of villages provided with electrisity	5			
iii	No. of households without access to drinking water	Nil			
iv	No. of educational institutions :	P	S	HS	VI
	Primary(P)/Secondary(S),HigherSecondary(HS)/vocational institution (VI)	6	2	1	Nil
V	No. of villages with access to Primary Health Centre	cherai,			
vi	No. of villages with access to Veterinary Dispensary	cherai			
vii	No. of villages with access to Post office	cherai			
viii	No. of villages with access to Banks	1			
ix	No. of villages with access to Markets/Mandis	Nil			
x	No. of villages with access to Agro-industries	Nil			
xi	Total quantity of surplus milk				
xii	No. of milk collection centres	U	S	PA	O
	(e.g. Union(U)/Society(S)/Private agency(PA)/Others(O)	Nil	Nil	Nil	Nil

xiii	No. of villages with access to Anganwadi Centre		5
xiv	Any other facilities with no. of village (please specify)		–
xv	Nearest KVK		Jodhpur (Mandore)
xvi	Cooperative socity		cherai
xvii	NGOs		Nil
xviii	Credit institutions		Nil
	(i) Bank		Nil
	(ii) Cooperative Society		cherai
xix	Agro Service Centre's		Osian

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

DWDU Detail

1	2	3
S.No.	**Particulars**	**Details of DWDU**
1	PM ,DWDU	Ex. En. Watershed Jodhpur
2	Address with contact No. website	Near RTO office, Jodhpur 0291-2544171
3	Telephone	0291-2544171
4	Fax	0291-2570746
5	E-mail	pm.dwdu.jodhpur@gmail.com

SLNA Detail

1	2	3
S.No.	**Particulars**	**Details of SLNA**
1	Member Secretary	Post-CEO
2	Designation and Address	Director Watershed development and soil Coservation
3	Telephone	0141-2227858
4	Fax	0141-2227189
5	E-mail	dir_wdsc@dataone.in

PIA Particulars

1	2	3
S.No.	**Particulars**	**Details of P.I.A.**
1	Name of PIA	Jagdish Choudhary (A.En.)
2	Designation	A. En.

3	Address with Contact No. website	…..
4	Telephone	9414875132
5	Fax	…….
6	E-mail	iwmp.osian@gmail.com

WDT Particulars

1	2	3	4	5	6	7	8
S.No.	**Name of WDT member**	**M/F**	**Age**	**Quqlification**	**Experience in watershed(Yrs)**	**Description of professional training**	**Role/Function**
1	praveen khoja	M	22	dip.Civil	1	Engineering work	Engg. Work
2	virendra singh	M	24	Diploma in veterinar	–	Veterinary work	Veter. Work
3	hemleta choudhary	F	28	B.A.B.Ed.	1	Social Scientist	Social work
4	chandram gurjar	M	26	M sc (Ag)	1	Agriculture Scientist	Agricultue work

Scheme :- **IWMP**

Panchayat Samiti **Osian**

Watershed :- **cherai(Jodhpur - 25)**

District : **Jodhpur**

Details of Watershed Committees (WC) cherai

S. No.	Name of WC's	Date of Gram Sabha for WCD	Date of Registration asvaSocity(dd/mm/yyyy)	Designation	Name	M/F	Name of UG/SHG	Sc/ST/OBC/General	Landless/MF/SF/BF	Educational qualification	Khasra No.
1	cherai Jodhpur-25	22/02/2011	N.A.	Pesident	**Ramu Ram s/o Bhikha Ram**	**M**	**UG**	**OBC**	**MF**	VIII	
2				Secretary	**Padma Ram/Pabu Ram**	**M**	**UG**	**OBC**	**SF**	XII	
3				Member	**Mangi Lal / Ratna Ram**	**M**	**UG**	**Sc**	**MF**	VIII	
4				Member	**Bhanwar Lal / Hamira Ram**	**M**	**UG**	**St**	**MF**	V	
5				Member	**Imrat Lal / sukh Dev**	**M**	**UG**	**GEN**	**SF**	Saksar	
6				Member	**Barju Devi w/o Pancha Ram**	**F**	**SSG**	**OBC**	**MF**	XI	
7				Member	**Puspa w/o Bhupendra**	**F**		**Sc**	**Land Less**	B.A.	
8				Member	**Surja Ram / Sona Ram**	**M**		**OBC**	**Land Less**	Saksar	
9				Member	**Mangi Devi w/o Babu Lal**	**F**		**OBC**	**Land Less**	Saksar	
10				Member	**Kishor Singh / Amar singh**	**M**	**UG**	**GEN**	**MF**	VIII	
11				Member	**Thakar Ram / Chata Ram**	**M**	**UG**	**Sc**	**MF**	V	
12				Member	**Inder Devi w/o Girdhari Ram**	**F**		**OBC**	**SF**	Saksar	
13				Member	**Mohan Ram / Rama Ram**	**M**	**UG**	**OBC**	**MF**	V	
14				Member	**Naga Ram / Hira Ram**	**M**	**UG**	**OBC**	**MF**	Saksar	
15				Member	**Natthu Devi w/o Budha Ram**	**F**	**SSG**	**OBC**	**MF**	Illitrate	
16				Member	**Ram Lal / Moola Ram**	**M**	**UG**	**OBC**	**MF**	VIII	

17				Member	**Hava Devi w/o Kumbha Ram**	**F**	**SSG**	**OBC**	**MF**	Illitrate	
18				Member	**Bhanwarsingh / Swaroop**	**M**		**GEN**	**SF**	Saksar	
19				Member	**Birdi Devi w/o Pema Ram**	**F**		**OBC**	**MF**	Illitrate	
20				Member	**Pabhu Ram / Gokal Ram**	**M**	**UG**	**St**	**MF**	XII	
21				Member	**Papu Ram / Amana Ram**	**M**	**UG**	**OBC**	**MF**	V	
22				Member	**Shanti w/ Moola Ram**	**F**		**Sc**	**MF**	Illitrate	
23				Member	**Narayan Puri / Tulach Puri**	**M**	**UG**	**OBC**	**Land Less**	Illitrate	
24				Member	**Khetu / Ana Ram**	**M**	**UG**	**OBC**	**MF**	Illitrate	
25				Member	**Ramu Ram / Naval Ram**	**M**		**OBC**	**MF**	XII	
26				Member	**Puspa Kanwar w/o Girdharisingh**	**F**		**GEN**	**MF**	III	
27				Member	**Poona Ram / Deepa Ram**	**M**	**UG**	**OBC**	**MF**	Illitrate	
28				Member	**Tulcha Ram / Uda Ram**	**M**	**UG**	**OBC**	**MF**	Saksar	
29				Member	**Mohansingh / Hamir singh**	**M**	**UG**	**GEN**	**MF**	VIII	
30				Member	**Umed singh / Simarth singh**	**M**	**UG**	**GEN**	**MF**	V	
31				Member	**Guddi Devi w/o Pokar Ram**	**F**		**Sc**	**MF**	Saksar	
32				J.En.	**Shri Jagdish Choudhary**	**M**		**OBC**		M.Tech.	

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 150 hact. Land is arable wasteland and 1600 hact. is fallow can be brought under cultivation. 88.99 hact. is only irrigated and with efforts this can be increased to 500 .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 improvedpackage 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,vegitables,green housees,Agro forestry,fodder crops) and diversification in Livelihoods (Agriculture, Animal husbandry, self employment) 38300 Quantal fodder scarcity can be met out through Pasture development. Improved animal Husbandry practices can increase the productivity of livstock. 45 no. of persons migrate due to Lack of Employment 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.

CHEPTER-II

Sosio economic

FEATURE,

PROBLEMS AND

SCOPE

CHEPTER-II Sosio economic Features, Problems and Scope

Tabe 2.1 Population & Household Details :

Total Population				
Male	**Female**	**Total**	**SC**	**ST**
4854	**4308**	**9162**	**1375**	**240**

Household Details						
BPL household	**Land less**	**Small Farmer**	**Marginal Farmer**	**Total household**	**SC household**	**ST household**
268	**60**	**574**	**628**	**1462**	**275**	**48**

Table 2.2 Development indicators

S.No.	Development Indicators	State	Project Area
1	Per capita income (Rs.)	17260	8850
2	Poverty Ratio	0.22	0.33
3	Literacy (%)	60.40%	45%
4	Sex Ratio	921	887
5	Infant mortality Ratio		4/1000
6	Maternal mortality Ratio		12/1000

Table indicates poor socio economic conditions

Table 2.3 Land Use

Land Use	**Total area in Hact.**				
	Private	**Panchayat**	**Government**	**Community**	**Total**
Agriculture Land	**4570**	–	–	–	**4570**
Temporary follow	**800**	–	–	–	**800**
permanent follow	**230**	–	–	–	**230**
Cultivated Rainfed	**4070**	–	–	–	**4070**
Cultivated Irrigated	**500**	–	–	–	**500**
Net Sown area	**4570**	–	–	–	**4570**
Net area sown more than once	**500**	–	–	–	**500**
Forest Land	_		–	–	**0**
Waste Land	_	–		–	
Pastures Land	_		**200**	–	**200**
Others	_	–	**100**	–	**100**
Total		–	–	–	**5000**

The project area has ...800.. Hact. Of cultivable wasteland .230.. Hact. Of fallow land (Total ...1030 Hact.) can be brought under cultivation if some irrigation source can be provided through Construction of WHS like Khadin, Tanka, Farm pond etc. and also through demnstration of rainfed varieties of crops. Construction of WHS can also increase in area under irrigation which is only .....1030. Hact. (...20.6.... %). and Pasture development will be taken up on these land.

Pasture development the land use table shows that there is 200.. Hectare pasture land (4. %) This emphasizes the need for taking up pastureland development works through sowing of promising species of grasses and plantation

Table 2.4.a Agriculture and horticulture status and fuel availability.

Cropping Status												
S.No.	Season	Crop sown	Reinfed				Irrigated				Total	
			Varieties	Area (Hact)	Production (Tone)	Productivity(qt./ha.)	Varieties	Area (Hact)	Production (Tone)	Productivity(qt./ha.)	Area (Hact)	Production (Tone)
1	Kharif	Bajara	WCC75 RSB2 RJ 171	1471	882.6	6		0	0	0	1471	882.6
		Moong	K851 RMG 62 SML 668 G-8	30	6	2		0	0	0	30	6
		Moth	RMO 40 RMO435	664	199.2	3		0	0	0	664	199.2
		Till	RT 127 RT 125 RT 46	4	0.8	2		0	0	0	4	0.8
		Gowar	RGC 936 RGC 986 RGC1003 HG 563 M 83	258	77.4	3		3	0.9	3	261	78.3
		Mongphali	M 13 GG 20 GG 10 M 335	67	26.8	4		177	70.8	4	244	97.6
		Caster	GCH 4 RHC 8 Jayoti Mayco 6	0	0	0		39	19.5	5	39	19.5
		Chilly	NP 46A Mathania Long Jawar 218	0	0	0		0	0	0	0	0
		Gajar	Pusa Kesar Nentis Pusa Mandakani (S-5)	0	0	0		0	0	0	0	0

2	Rabi	Wheat	LOC 1 RJ 3077 HD 2329 RJ 1282	0	0	0	LOC 1 RJ 3077 HD 2329 RJ 1282	0	0	18	5.6	10.08
		Mustered	Bio 902 RH 819 RN 505 T.59 (Varuna)	0	0	0	Bio 902 RH 819 RN 505 T.59 (Varuna)	0	0	12	40.1	48.12
		Jeera	RS-1 RZ-19 RZ-209	0	0	0	RS-1 RZ-19 RZ-209	31		4	31	124
		Lahsoon	Ymuna White G-1,2 (G-50) Gujrat	0	0	0	Ymuna White G-1,2 (G-50) Gujrat	0	0	0	0	0
3	Zaid	Rayda		251	75.3	3		0	0	0	251	75.3
		Taramira		5	1	2		0	0	0	5	1
				0	0	0		0	0	0	0	0
	Total			**3600**	**1269**			**500**	**91.2**		**4100**	**1360.3**

Table 2.4.b Abstract of cropped Area (hact.)	
Area under Single crop	4070
Area under Double crop	500
Area under Multiple crop	Nil

****Write for each crops :** The farmers are using **WCC 75. RJ 171** varieties of Bajra, where as varieties like **MH169, RHB 121** can increase the production.

Crop Rotation ** will vary from project to project

Fallow	–	Moth
Bajra	–	Jeera
Gawar	–	Lahsun
Fallow	–	Caster
Fallow	–	Groundnut
Ground nut	–	Wheet
Fallow	–	Moong
Cluster Bean	–	Fallow
Fallow	–	Tarameera
Till	–	Fallow
Caster	–	Caster
Moth	–	Fallow

The table 2.41(a) shows that only .500. hact. Is (10. %) is double crouped area. Also the crop rotation shows that fallow lands are there. This indicates that there is scope for change in crop rotation in fields where there are fallow lands through Soil and Water conservation measures, crop demonstration and diversification in agriculture.

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

Table 2.4.c Productivity Gap Analysis (The table can also be given in bar chart form)

S.No.	Name of the crop	India	Htghest Average in Rajasthan	District	Project Area
1	Bajra	802	655	750	650
2	Moong	317	159	320	305
3	Moth	144	122	270	325
4	Weath	2619	2762	2150	655
5	Till	310	149	270	240
6	Gawar	510	525	515	450

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

The reasons for this variation are :-

1 The farmers are using vaing varieties WCC 75 of Bajara R1 171 whereas the recommended varities like **MH169, RHB 121** provided 7 qt./hact. Yield(write for all crops)

2 Lack of Availibility of good quality seeds of desired crop and variety in adequate quantities and time to the farmers.

3 Availability of water for cultivation (15 % is irrigated)

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

Table 2.5 Existing area under horticulture/Vegitables/Floriculture(hact.)

Activity	Area	Species	Varieties	Recommended varieties	Production
Horticulture	–	–	–	–	–
	–	–	–	–	–
	–	–	–	–	–
Vegitable	–	–	–	–	–
	–	–	–	–	–
	–	–	–	–	–
	–	–	–	–	–
Floriculture	–	–	–	–	–
	–	–	–	–	–
	–	–	–	–	–
Medicinal Plants	–	–	–	–	–

Table 2.6 Land holding Pattern in project area

S.No.	Type of Farmer	Total House Holds	Land holding(hact.) irrigation source wise			Land holding (hact.) Social group wise				
			Irrigated(source)	Rainfed	Total	General	SC	ST	OBC	BPL
i	Large farmer	260	175	1445	1620	560	40	-	900	20
ii	Smal farmer	574	180	1020	1200	400	60	150	440	50
iii	Marginal farmer	628	90	1585	1675	570	80	200	780	45
iv	Landless person	60	0	0	0	8	15	17	12	8
v	No. of BPL house hold	268	45	260	305	95	75	35	85	15
vi	Total	1390	490	4310	4800	1633	95	402	2217	138

...2875 hact. Land holding belong to small and marginal farmers who own .62.91.% of total cultivated area 4570. Hact. Horticulture/vegetables could be more economical to small & 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/ vegitables 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, Issabgol, Ashwagandha, Khus, Mehandi etc.

Agro forestry plantation:-

To increase the income of farmers and also for shelter belt plantation as wind velocity is hight 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 wich adequate seed production would be initiated in watershed areas with the assistance of private sector and agriculture department technologies.

Sprinklers and pipelines :-

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

Establishment of Green House :-

For growing off season vegitables 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/ Contry. The procurement of planting material from distant places causes damage to the planting material and often results in untimely supply. Hence nursery development activity in area.

Innovative hi - tech/ 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 plantations, vegitables, green houses and in nurseries for rational use of irrigation higher yields and quality produce.

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

S.No.	Description of animal	Population in No.	Yield (Milk/Mutton/Wool)	Equ. Cow unit	Dry matter requirement per year (7 kg/animal)	Total requirement in M.T.
1	Cows			lit/day		
	Indigenous	2045	2180	4	5598187.5	5598.1875
	Hybrid			_		0
2	Buffaloes	315	1890	6	1149750	1149.75
3	Goat	3100	3100	1	2828750	2828.75
4	Sheep	1100	550	0.5	2750	2.75
5	Camel	15		_	136875	136.875
6	Poultry	107		NA	11716.5	11.7165
7	Piggery	_		NA		0
	TOTAL	6682			&	9728.029

9728.029. Tone per year

In spite of 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 - Bardigo Castration
- Artificial insemination - HF Tharparkar
- Distribution of superior Breeding bulls for use in cattle and Buffalo

Cattle-Tharparkar,Gir,Ratthi
Baffalo-Murrah,

- Breeding distribution crossbred rams (Chokala,Marwari)

Besides breed improvement other animal husbandry practices like batter 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 are proposed.

Table 2.8 Existing area under fodder (hact.)

S.No.	Item	Unit	Area/Quantity
1	**Existing Cultivable area under Fodder**	**Hact.**	**1500**
2	**Production of Green fodder**	**Tone/year**	**2550**
3	**Production of Dry fodder**	**Tone/year**	**3950**
4	**Area under Pastures**	**Hact.**	**Nil**
5	**Production of fodder**	**Tone/year**	**Nil**
6	**Existing area under Fuel wood**	**Hact.**	**Nil**
7	**Supplementary feed**	**Kgs / day**	**315**
8	**Silage Pits**	**No.**	**nil**
9	**Availability of fodder**	**Tones**	**6815**
10	**Deficiency / excess of fodder**	**Tones**	**2913.029**

Thev table above shows there is fodder deficiency (Requirement is 9728.029 tone and availability 6815 tones)

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 producttivity of fodder crops
- Development of pastures
- And reduction in large number of livestock production through replacement by few but productive animals.

Table 2.9 Agriculture Imlements :-

1	2	3
S.No.	**Implements**	**Nos.**
1	Tractor	105
2	Sprayers-manual / power	180
3	Cultivators / Harrows	93
4	Seed drill	15
5	Any other trolley	105

Table 2.10 NREGA Status - No. of job card Holder, activities taken so far, employment status. :-

S.No.	Name of village	Total No. of Job card	Employment Status	Activity taken up so far
1	Cherai	525	410	Road&Nadi
	Mahadev Nagar	244	204	Road&Nadi
	Arjun Dev Nagar	296	206	Road&Nadi
	Daukiyon ka Bas	239	197	Road&Nadi
	Badabas	153	125	Road&Nadi

Table 2.11 Migration Details :-

Name of village	No. of persons migrating	No. of days per year of migration	Major reason(s) for migrating	Distance of destination of migration from the village (km)	Occupation during migration	Income from such occupation (Rs. In lakh)
Cherai	**150**	**210-240**	**Unemployment**	**64**	**Building construction**	**27.00**
Mahadev Nagar	**45**	**210-240**	**Unemployment**	**64**	**Building construction**	**8.10**
Arjun Dev Nagar	**50**	**210-240**	**Unemployment**	**64**	**Building construction**	**9.00**

Daukiyon ka Bas	**120**	**210-240**	**Unemployment**	**64**	**Building construction**	**21.60**
Badabas	**145**	**210-240**	**Unemployment**	**64**	**Building construction**	**26.10**

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

The existing livelihoods Village are given below :-

Table 2.12 (a) Major activities (On Farm)

Name of activity	No. of House holds	Average annual income from the / Lacs
Cultivators	1462	565.58 lacs
Dairying	5	36
Poultry	107	2
Piggery	Nil	Nil
Landless Agri. Labourers	35	7.5 lacs

Table 2.12 (b) Major activities (On Farm)

Name of activity	No. of House holds/individuals	Average annual income from the / Lacs
Artisans	25	8
Carpenter	112	25
Black smith	30	7
Leather Craft	20	2
Porter	28	2
Mason	60	5
Others specify(Cycle Repair, STD, Craft etc)	15	2

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.No.	Name of SHG	Members	Activity involved	Monthly income	Fund available	Assistance available	Source of assistance	Training received
1	Daukion mahila bachat S H G	11		1100	6600			
2	Karma bai mahila S H G	12		1200	7200			
3	Maharaja surajmal S H G	10		1000	6000			

4	SARITA S H G	11		1100	6600			
5	Pratibha mahila S H G	10		1000	5000			
6	CH. Charansingh S H G	12		1200	6000			
7	Shree Bhomiyaji	10		1000	2000			
8	Pabuji	10		1000	2000			

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

II. Technical Features

Table 2.14 Ground Water :-

S.No.	Source	No.	Functional depth	Dry	Area irrigated	Water availablity(days)
i	Dug walls	13	125'	13	Nil	_
ii	Shallow tube wells	Nil	Nil	–	–	_
iii	Pumping sets	Nil	Nil	–	–	_
iv	Deep tube wells	174	700'	–	500hact	12 Month

Table 2.15 Availability of drinking water :-

S.No.	Name of the village	Drinking water requirement Lts/day	Present availibility of drinking ltrs/day	No. of drinking water sources available	No. functional	No. requires repaires	No. defunctional
	Cherai	124766	62383	3 T.W.	Dry	Nil	3
	Mahadev Nagar	62382	31191	1 T.W.	Dry	Nil	1
	Arjun Dev Nagar	93574	46787	1T.W.	Dry	Nil	1
	Daukiyon ka Bas	62382	31191	2 T.W.	Dry	Nil	2
	Badabas	55570	27785	2 T.W.	Dry	Nil	2
		398674					

Table 2.16 Water use efficiency :-

Name of Major Crop	Area (Hectare)		
	Through water saving devices (Sprinklers)	Through water conserving agronomic practices	Any other (pl specify)
Wheat	6.6/kg/ha/mm	2.5	
Maize	5.5/kg/ha/mm	2.5	
Vegitable	22.22/kg/ha/mm	10	

- The table above indicate need for judicious use of available Water.
- Encouraging optimum use of water through installation of sprinklers on every operational wells.

Table 2.17 Slope details :-

Slope of Watershed		
S. No.	Slope percentage	Area in hectares
1	0 to 3 %	5000
2	3 to 8 %	Nil

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.

Table 2.18 Water Budgeting :-

Table 2.18(a) Total available runoff (cum) use Stranges table :-

Area	Type of Catchment	Yield of runoff from catchment per hect. (cum.) use Stranges table	Total Runoff(cum.)
	Average	93.27	623527.7

Table 2.18(b) Details of already stored runoff (Surface Water structures :-

S.No.	Name	No.	Storage Capacity (cum)	Area irrigated (hect.)
i	Major irrigation Project	Nil	–	Nil
ii	Medium irrigation Project	Nil	–	Nil
iii	Farm Pond / Tanks (Nadi)	32	37505	Nil
iv	Anicuts	Nil	–	Nil
	Tatal	Nil	–	Nil

Table 2.18(c) Details of Proposed structure for Surface Waterstorage :-

S.No.	Name	No.	Storage Capacity (cum)	Area irrigated (hect.)
i	Major irrigation Project	Nil	–	Nil
ii	Medium irrigation Project	Nil	–	Nil
iii	Farm Pond / Tanks (Nadi)	275	5500	Nil
iv	Anicuts	Nil	–	Nil
	Total		5500	Nil

Table 2.18(d) Balance available runoff (cum) :-

Total rinoff (cum)	Net tapped Runoff (cum)	Balnce Runoff (cum)	Percentage of water stored w.r.t total runoff
1	2	3	4
623527.7	43005	580522.7	6.90

The water budgeting indicates potential for water harvesting in the area.

The need is :-

- To check land degration
- To reduce excessive biotic pressure by containing the number and increase of livestock
- To check cultivation on sloping lands without adequate precautions of soil and water conservation measures
- To discourage cultivation along susceptible nallah beds
- To check faulty agriculture techniques
- To check uncontrolled grazing and developedcattle tracks
- To check Deforestation of steep slopes
- Tocheck 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 stabilistion, Loose stone check dams, Gabions, Earthen embankment (Nadi) and Anicuts would be taken up.

Table 2. 19 Soil details

A	Soil Prifile	
S.No.	Major Soil Classes	Area in hectares
1	Sandy to loamy sand soils	5000
2		
B	**Soil Depth**	
	Depth (Cms)	Area in hectares
1	0.00 to 7.50	5000
2	7.5 to 45.00	5000
3	>45.00	5000

C	Soil fertility Status	Kg/hect.	Recommended
	N	0.52 to 0.22	
	P	2.7 to 15.55	
	K	16.00 to 28.00	
	Micronutrients	PPM	
	Iron	4.8 to 9.5	
	MN	63.8 to 13.5	
	CU	0.85 to 1.9	
	Zn	0.8 to 2.2	

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

Table 2.20 Erosion details :-

Erosion status in Project Area					
Cause	**Type of erosion**	**Area affected (hect.)**	**Runoff**	**Average soil loss**	
Water erosion					
a	Sheet	2510	250	2.1	
b	Rill	940	250	1.8	
c	Gully				
Sub Total					
Wind erosion		100		4.5	

CHAPTER = III

Proposed Development Plan

CHAPTER = III **Proposed Development Plan:** The Activities are indicative addition/deletion in activities will be as per local conditions.

(A) Preparatory phase activities Capacity Building Trainings and EPA

The IEC activities like Kalajathas, Groupmeetings, door to door compaogn, slogans, and wall writings etc. were carried out in all the habitations of Jakhan watershed. A seriese of meetings were conducted with GP members, community and discussed about the implementation of IWMP programme. User groups were also formed.

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

S.No.	Name of the Gram Panchayat	Date of which Gram Shabha approved EPA
1	Cherai	22/02/2011 & 25/12/11

S.No.	Name of Village	Amount earmarked for EPA Lakh	Entry Point Activities planned	Estimated cost in lac.	Expenditure incurred	Balance	Expected outcome	Actual outcome
1	2	3	4	5	6	7	8	9
1	Cherai, Badabas, Mahadev nagar, Arjundev nagar & Daukiyon ka bas	30	1.Instalation of Solar light DGSC item No. 27	7.50	6.85	0.65		Villagers are very happy
			2.Drinking water activities	22.50	22.5	0.00		
			–	–	–	–	–	
	Total w/s		–	30.00	29.35	0.65		

S.No.	Name of the village/ Habitation	Date on which PRA conducted
1	Cherai	05 -03-2011 to 20-04-2011
2	Badabas	21 -04-2011 to 20-06-2011
3	Arjundev nagar	21 -06-2011 to 20-08-2011
4	Mahadev nagar	21 -08-2011 to 20-10-2011
5	Daukiyon ka bas	21 -10-2011 to31-12-2011

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

Transprot work 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 05 -03- 2011 to 31- 12-2011 period covering all the households and primary data on demography, Land holdings, Employmeng status, Community activities etc. was collected as mentioned in chapter 2.

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

Various thematic layers provided by SRSAC are:-

- Delineation of Macro/Micro watershed boundaries
- Degitised Khasra maps of the villages falling in project area
- Network of Drainage lines, existing water bodies, falling in the project area.
- Base maps (transport network, villade / boundaries, and settlements)
- Land Use/Land cover map.
- Contours at 1 metre 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 annexture.8.2.). The GIS based intervention map, PRA based intervention map are annexed as.8.1

CHAPTER III

CONSOLIDATED DEVELOPMENT PLAN (PROJECT & OTHER SCHEME

	STATE : RAJASTHAN	**GEOGRAPHICAL AREA: 6685 Hact.**			
	DISTRICT: JODHPUR	**EFFECTIVE AREA : 5000 Hact.**			
	NAME OF THE BLOCK: OSIAN	**(i) ARABLE LAND**	**4470**		
	NAME OF WATERSHED:Jodhpur -25 (IWMP)	**(ii) NON ARABLE LAND: 530 Hact.**			
	CATEGORY OF WATERSHED: Desert Area	**COST FROM IWMP PROJECT: 750 lac**			750
		COST FROM CONVERGENCE:			101.85
		Consolidated			851.85
		Total Cost in Lakh:			851.85

S.No.	Activitiy	Unit	Total Target		GP-Cherai	
			Phy.	Fin.	Phy.	Fin.
A I	Administration cost	10%		75.00		75.00
II	Monitoring	1%		7.50		7.50
III	Evaluation	1%		7.50		7.50
IV	Preparatory Phase (Entry Point Activity)	4%		30.00		30.00
V	Institution and Capacity Building	5%		37.50		37.50
VI	Preparation of Detailed Project Report (DPR)	1%		7.50		7.50
	Total	22%		165.00		165.00
B	**Watershed Development Works (NRM)**	56%				
I	**Arable Land Conservation Measures**					
1	Earthen Bund	Hact	1605	176.55	1605	176.55
2	Gully Control Structure (L.S.C.D.)	No.	24	2.40	24	2.40
3	Water Harvesting Tanka	No.	250	249.25	250	249.25
4	Wasteweir	No.	20	10.00	20	10.00
5	Percolation tank		25	25.00	25	25.00
6	Diggi /Hauge		10	5.00	10	5.00
	Total			468.20		468.20
II	**Non Arable Land Conservation Measures**					
1	Ditch Cum Bund Fencing	Mt	4500	13.80	4500	13.80
2	Contour Furrow in Pasture Land	Hact	100	12.25	100	12.25
3	Contour Furrow in Non Arable Land	Hact	100	12.25	100	12.25
4	Earthen Bund	No.	150	5.00	150	5.00
5	Tanka	No.	8	8.00	8	8.00
	Total			51.30		51.30
	Total Watershed Development Works			519.50		519.50
C	**Production System and Micro Enterprises**	19%				
I	Arable Land Production System					
1	Crop/Fooder Demonstration	No.	300	15.00		15.00
2	Agro Forestry	No.	16000	3.00		3.00
3	Dry land Horticulture	No.	20	6.00		6.00
4	Homestead Kitchen Garden	No.	300	3.00		3.00
5	Organic Farming					
	i Compost Pit	No.	200	4.00		4.00
	ii Vermi Compost Unit	No.	20	2.00		2.00
6	Household Production System (For Marginal Farmer and landless Labour) Micro enterprises					
	I Small Live Stock - Goat and sheep Rearing	No.	20	6.00		6.00
	ii Service sector Carpentry, Tailoring, Blacksmith, Repair shop for Cycle /Two	No.	20	1.00		1.00

	Total			40.00		40.00
II	**Non Arable Land Production System**					
1	Plantation in Pasture land and along DLT.	No.	9275	10.85	9275	10.85
2	Over seeding in Pasture Land	Hact	100	2.35	100	2.35
3	Over seeding in Non Arable Land	Hact		0.00		2.35
	Total			15.55		15.55
III	**Live Stock Management**					
1	Animal Health Camps	No.	20	4.80	20	4.80
2	Mangers Distribution	No.	500	5.00	500	5.00
3	Cattlecare and Fodder storage centre	No.	2	10.00	2	10.00
4	Bull Distribution	No.	4	2.00	4	2.00
	Total			21.80		21.80
	Total Production System			75.00		75.00
D	**Livelyhood**					
	Revolving fund to SHG (>60% of 9%)	No.	163	40.75		40.75
	Revolving fund to Enterperising Individual	No.	27	6.75	27	6.75
	Grant in aid to federation of SHG (30% of 9%)	No.	10	20.00	10	20.00
	Total			67.50		67.50
E	**Consolidation**	3%		22.50		22.50
	Grand Total			851.85		851.85

CHAPTER III

PROPPOSED DEVELOPMENT PLAN THROUGH PROJECT FUND

STATE : RAJASTHAN
DISTRICT: JODHPUR
NAME OF THE BLOCK: OSIAN
NAME OF WATERSHED:Jodhpur -25 (IWMP)
CATEGORY OF WATERSHED: Desert Area

UNIT COST: Rs. 15000/- Per Hact.
GEOGRAPHICAL AREA: 6685 Hact.
EFFECTIVE AREA : 5000 Hact.
(i) ARABLE LAND : 4470 Hact.
(ii) NON ARABLE LAND : 530 Hact.
COST FROM IWMP PROJECT: 750.00

Total Cost in Lakh: 750 Lakh

S.No.	Activitiy	Unit	Total Target		GP-Cherai	
			Phy.	Fin.	Phy.	Fin.
A I	Administration cost	10%		75.00		75.00
II	Monitoring	1%		7.50		7.50
III	Evaluation	1%		7.50		7.50
IV	Preparatory Phase (Entry Point Activity)	4%		30.00		30.00
V	Institution and Capacity Building	5%		37.50		37.50
VI	Preparation of Detailed Project Report (DPR)	1%		7.50		7.50
	Total	22%		**165.00**		**165.00**
B	**Watershed Development Works (NRM)**	56%				
I	**Arable Land Conservation Measures**					
1	Earthen Bund	No.	1305	143.55	1305	143.55
2	Gully Control Structure	No.	24	2.40	24	2.40
3	Water Harvesting Tanka	No.	200	200.00	200	200.00
4	Wasteweir	No.	20	10.00	20	10.00
5	Percolation tank	No.	25	25.00	25	25.00
6	Diggi /Hauje					
	Total			**380.95**		**380.95**
II	**Non Arable Land Conservation Measures**					
1	Ditch Cum Bund /Barbed wire Fencing	Mt	4500	13.80	4500	13.80
2	Contour Furrow in Pasture Land	Hact	100	12.25	100	12.25
3	Contour Furrow in Non Arable Land	Hact				
4	E.C.D.	No.	50	5.00	50	5.00
5	Tanka	No.	8	8.00	8	8.00
	Total			**39.05**		**39.05**
	Total Watershed Development Works			420.0		420.0
C	**Production System and Micro Enterprises**	10%				
I	Arable Land Production System					
1	Crop/Fooder Demonstration	No.	300	15.00	300	15.00
2	Agro Forestry	No.	16000	3.00	16000	3.00
3	Dry land Horticulture (Unit)	No.	20	6.00	20	6.00
4	Homestead Kitchen Garden/Manger/Grain storage bin	No.	300	3.00	300	3.00
5	Organic Farming					
	i Compost Pit	No.	200	4.00	200	4.00
	ii Vermi Compost Unit	No.	20	2.00	20	2.00
6	Household Production System (For Marginal Farmer and landless Labour) Micro enterprises					
	I Small Live Stock - Goat and sheep Rearing	No.	20	6.00	20	6.00
	ii Service sector Carpentry, Tailoring, Blacksmith, Repair shop for Cycle /Two	No.	20	1.00	20	1.00

	Total			**40.00**		**40.00**
II	**Non Arable Land Production System**					
1	Plantation in Pasture land and along DLT.	No.	9275	10.85	9275	10.85
2	Over seeding in Pasture Land	Hact	100	2.35	100	2.35
3	Over seeding in Non Arable Land	Hact				
	Total			**13.20**		**13.20**
III	**Live Stock Management**					
1	Animal Health Camps	No.	20	4.80	20	4.80
2	Mangers Distribution	No.	500	5.00	500	5.00
3	Cattlecare and Fodder storage centre	No.	2	10.00	2	10.00
4	Bull Distribution	No.	4	2.00	4	2.00
	Total			**21.80**		**21.80**
	Total Production System			75.00		75.00
D	**Livelyhood**	9%		67.50		67.50
	Revolving fund to SHG (>60% of 9%)	No.	163	40.75	163	40.75
	Revolving fund to Enterperising Individual	No.	27	6.75	27	6.75
	Grant in aid to federation of SHG (30% of 9%)	No.	10	20.00	10	20.00
	Total			67.50		67.50
E	**Consolidation**	3%		**22.50**		**22.50**
	Grand Total			**750.0**		**750.0**

CHAPTER III

PROPPOSED DEVELOPMENT PLAN THROUGH CONVERGENCE

STATE : RAJASTHAN

DISTRICT: JODHPUR

NAME OF THE BLOCK: OSIAN

NAME OF WATERSHED:Jodhpur -25 (IWMP)

CATEGORY OF WATERSHED: Desert Area

GEOGRAPHICAL AREA: 6685.19 Hact.

EFFECTIVE AREA : 5000 Hact.

(i) ARABLE LAND : 4470Hact.

(ii) NON ARABLE LAND : 530Hact.

COST FROM CONVERGENCE: 101.85

Lakh

S.No.	Activitiy	Unit	Total Target		GP-cherai	
			Phy.	Fin.	Phy.	Fin.
A I	Administration cost	10%	–	0		0
II	Monitoring	1%	–	0		0
III	Evaluation	1%	–	0		0
IV	Preparatory Phase (Entry Point Activity)	4%	–	0		0
V	Institution and Capacity Building	5%	–	0		0
VI	Preparation of Detailed Project Report (DPR)	1%	–	0		0
	Total	22%	–	0		0
B	**Watershed Development Works (NRM)**	56%				
I	**Arable Land Conservation Measures**					
1	Earthen Bund	Hact	300	33.00	300	33
2	Gully Control Structure (Loose. Stone. Check. Dam.)	No.				
3	Water Harvesting Tanka	No.	50	49.25	50	49.25
4	Wasteweir	No.				
5	Percolation tank					
6	Diggi/ Hauje	No.	10	5	10	5
	Total			87.25		87.25
II	**Non Arable Land Conservation Measures**					
1	Ditch Cum Bund Fencing	Mt				
2	Contour Furrow in Pasture Land	Hact				
3	Contour Furrow in Non Arable Land	Hact	100	12.25	100	12.25
4	Earthen Bund	No.				
5	Tanka					
	Total			12.25		12.25
	Total Watershed Development Works			99.50		99.5
C	**Production System and Micro Enterprises**					
I	**Arable Land Production System**	19%				
1	Crop/Fooder Demonstration					
2	Agro Forestry	No.				
3	Dry land Horticulture (Unit)	No.				
4	Homestead Kitchen Garden	No.				
5	Organic Farming					
	i Compost Pit	No.				
	ii Vermi Compost Unit	No.				
6	Household Production System (For Marginal Farmer and landless Labour) Micro enterprises					
	I Small Live Stock - Goat and sheep Rearing	No.				
	ii Service sector Carpentry, Tailoring, Blacksmith, Repair shop for Cycle /Two	No.				
	Total					
II	**Non Arable Land Production System**					

1	Plantation in Pasture land and along DLT.	No.				
2	Over seeding in Pasture Land	Hact				
3	Over seeding in Non Arable Land	Hact	100	2.35	100	2.35
	Total			2.35		2.35
III	**Live Stock Management**					
1	Fodder Demonstration	No.				
2	Mangers Distribution	No.				
3	Animal Health Camps	No.				
4	Bull distribution					
	Total					
	Total Production System					
D	**Livelyhood**	9%				
	Revolving fund to SHG (>60% of 9%)	No.				
	Revolving fund to Enterperising Individual(10% of 9%)	No.				
	Grant in aid to federation of SHG (30% of 9%)	No.				
	Total					
E	**Consolidation**					
	Grand Total			101.85		101.85

CHAPTER IV

ACTIVITY WISE TOTAL ABSTRACT COST

CHAPTER IV

ACTIVITY WISE TOTAL ABSTRACT COST

STATE : RAJASTHAN

DISTRICT: JODHPUR — **GEOGRAPHICAL AREA: 6685 Hact.**

NAME OF THE BLOCK: OSIAN — **EFFECTIVE AREA : 5000 Hact.**

NAME OF WATERSHED:Jodhpur -25 (IWMP) — **(i) ARABLE LAND : 4470 Hact.**

CATEGORY OF WATERSHED: Desert Area — **(ii) NON ARABLE LAND : 530 Hact.**

COST FROM IWMP PROJECT : 750.00 Lacs

COST FROM CONVERGENCE : Total Cost :

S.No.	Activitiy	Unit	Quantity	Unit Cost	Total Cost	Cost from Project	Cost from Convergence	Beneficiary contribution*
A I	Administration cost	10%			75.00	75.00		
II	Monitoring	1%			7.50	7.50		
III	Evaluation	1%			7.50	7.50		
IV	Preparatory Phase (Entry Point Activity)	4%			30.00	30.00		
V	Institution and Capacity Building	5%			37.50	37.50		
VI	Preparation of Detailed Project Report (DPR)	1%			7.50	7.50		
	Total	22%			165.00	165.00		
B	**Watershed Development Works (NRM)**	56%						
I	**Arable Land Conservation Measures**							
1	Earthen Bund	No.	1605		176.55	143.55	33.00	
2	Gully Control Structure (Loose. Stone. Check. Dam.)	No.	24		2.40	2.40		
3	Water Harvesting Tanka	No.	250		249.25	200.00	49.25	
4	Wasteweir	No.	20	50000/nos.	10.00	10.00		
5	Percolation tank	No.	25	1 lakh/nos.	25.00	25.00		
6	Diggi/Hauje	No.	10		5.00		5.00	
	Total				468.20	380.95	87.25	
II	**Non Arable Land Conservation Measures**							
1	Ditch Cum Bund Fencing	Mts.	4500		13.80	13.80		
2	Contour Furrow in Pasture Land	Hact.	100	1225	12.25	12.25		
3	Contour Furrow in Non Arable Land	Hact.	100	1225	12.25		12.25	
4	E.C.D.	No.	50	1000	5.00	5.00		
5	Tanka	No.	8		8.00	8.00		
	Total				51.30	39.05	12.25	
	Total Watershed Development Works				519.50	420.00	99.50	
C	**Production System and Micro Enterprises**	19%						
I	**Arable Land Production System**							
1	Crop/Fooder Demonstration	No.	300	5000	15.00	15.00		

2	Agro Forestry	No.	16000		3.00	3.00		
3	Dry land Horticulture (Unit)	No.	20	30000	6.00	6.00		
4	Homestead Kitchen Garden	No.	300	1000	3.00	3.00		
5	Organic Farming				0.00			
	i Compost Pit	No.	200	2000	4.00	4.00		
	ii Vermi Compost Unit	No.	20	10000	2.00	2.00		
6	Household Production System (For Marginal , small Farmer and landless Labour) Micro enterprises							
	Live stock-				6.00	6.00		
	Service sector Carpentry, Tailoring,Blacksmith, Cycle Repair shop				1.00	1.00		
	Total				40.00	40.00		
II	**Non Arable Land Production System**							
1	Plantation in Pasture land and along DLT line.	No.	9275		10.85	10.85		
2	Over seeding in Pasture Land	Hact.	100	2350/hac.	2.35	2.35		
3	Over seeding in Non Arable Land	Hact.	100	2350/hac.	2.35		2.35	
	Total				15.55	13.20	2.35	
III	**Live Stock Management**							
1	Animal Health Camps	No.	20	24000/camp	4.80	4.80		
2	Mangers Distribution	No.	250	2000/nos	5.00	5.00		
3	Cattlecare and fodder storage centre	No.	2	5lakh/nos	10.00	10.00		
4	Bull Distribution	No.	4	50000/nos.	2.00	2.00		
	Total				21.80	21.80		
	Total Production System				75.00	75.00		
D	**Livelyhood**				67.50	67.50		
	Revolving fund to SHG (>60% of 9%)	No.	163	25000/shg	40.75	40.75		
	Revolving fund to Enterperising Individual	No.	27	25000/ind.	6.75	6.75		
	Grant in aid to federation of SHG (30% of 9%)	No.	10	2.00 Lakh/ Fe	20.00	20.00		
	Total			67.5		67.50		
E	**Consolidation**	3%			22.50	22.50		
	Grand Total				851.85	750.00	101.85	

* Tentative and will vary during time of execution according to beneficiary

Rates will be taken prevailing at the time of execution of work

CHAPTER V

ANNUAL ACTION PLAN

CHAPTER V

ANNUAL ACTION PLAN CONSOLIDATED

STATE : RAJASTHAN

DISTRICT: JODHPUR

NAME OF THE BLOCK: OSIAN

NAME OF WATERSHED:Jodhpur -25 (IWMP)

CATEGORY OF WATERSHED: Desert Area

IRRIGATION PERCENTAGE : 10%

GEOGRAPHICAL AREA: 6685 Hact.

EFFECTIVE AREA : 5000 Hact.

(i) ARABLE LAND : 4470 Hact

(ii) NON ARABLE LAND : 530 Hact.

TOTAL

COST THROUGH CONVERGENCE FUND :

S.No.	Activitiy	Unit	Quantity	Unit cost	Total cost	I st Year		II st Year		III st Year		IV st Year		V st Year		VI st Year		VII st Year	
						Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
A I	Administration cost	10%			75.00		5.75		12.75		12.75		12.75		12.75		10		8.25
II	Monitoring	1%			7.50		0.25		0.5		0.75		1		2		2		1
III	Evaluation	1%			7.50		0.25		0.5		0.75		1		2		2		1
IV	Preparatory Phase (Entry Point Activity)	4%			30.00		5		25										
V	Institution and Capacity Building	5%			37.50		5		20		12.5								
VI	Preparation of Detailed Project Report (DPF	1%			7.50		2.5		2.5		0.5		0.5		0.5		0.5		0.5
	Total	22%			165.00		18.75		61.25		27.25		15.25		17.25		14.5		10.75
B	**Watershed Development Works (NRM)**	56%																	
I	**Arable Land Conservation Measures**																		
1	Earthen Bund	No.	1605	11000/ha	176.50		0		0	300	33	700	77	500	55	105	11.50		0
2	Gully Control Structure (Loose. Stone. Check. Dam.)	No.	24	10000/nos.	2.40		0		0	10	1	10	1	4	0.4				0
3	Water Harvesting Tanka	No.	250	1lac/nos	249.25		0		0	75	74.25	125	125	50	50				0
4	Wasteweir	No.	20	50000/nos.	10.00		0		0	5	2.5	5	2.5	5	2.5	5	2.5		0
5	Percolation tank	No.	25	1 lakh/nos.	25.00							15	15	10	10				
6	Diggi/Hauje	No.	10	50000/nos.	5.00					5	2.5	5	2.5						
	Total				468.15		0		0		113.25		223		117.9		14		0
II	**Non Arable Land Conservation Measures**																		
1	Ditch Cum Bund Fencing	Mts.	4500		13.80		0		0	2500	7.67	2000	6.13		0		0		0
2	Contour Furrow in Pasture Land	Hact.	100		12.25		0		0	50	6.25	50	6		0		0		0
3	Contour Furrow in Non Arable Land	Hact.	100		12.25		0		0	50	6.25	50	6		0		0		0
4	Earthen Bund	No.	50		5.00		0		0	20	2	30	3		0		0		0
5	Tanka	No.	8		8.00		0		0					4	4	4	4		0
	Total				51.30		0		0		22.17		21.13		4		4		0
	Total Watershed Development Works				519.45		0.00		0.00		135.42		244.13		121.90		18.00		0.00
C	**Production System and Micro Enterprise**	19%																	
I	**Arable Land Production System**																		

1	Crop/Fooder Demonstration	No.	300	5000	15.00			0		0		300	15							
2	Agro Forestry	No.	1600		3.00			0		0		800	1.5	800	1.5					
3	Dry land Horticulture (Unit)	No.	20	30000	6.00			0		5	1.5	5	1.5	10	3					
4	Homestead Kitchen Garden/Grain Storage bin	No.	300	1000	3.00			0		100	1	100	1	100	1					
5	Organic Farming																			
	i Compost Pit	No.	200	2000	4.00					50	1	50	1	50	1	50	1			
	ii Vermi Compost Unit	No.	20	10000	2.00					50	0.5	5	0.5	5	0.5	5	0.5			
6	Household Production System (For Marginal Farmer and landless Labour) Micro enterprises		40		7.00					10	2	10	2	10	1.5	10	1.5			
	Total				40.00						6		22.5		8.5		3			0
II	**Non Arable Land Production System**																			
1	Plantation in Pasture land and along DLT line.	No.	9275		10.85					7000	4.79	2275	3.56		1		0.75			0.75
2	Over seeding in Pasture Land	Hact.	100		2.35					50	1.1	50	1.25							
3	Over seeding in Non Arable Land	Hact.	100		2.35					50	1.1	50	1.25							
	Total				15.55						6.99		6.06		1		0.75			0.75
III	**Live Stock Management**																			
1	Animal Health Camps	No.	20	24000	4.80					4	0.96	4	0.96	4	0.96	4	0.96	4	0.96	
2	Mangers Distribution	No.	250	2000	5.00					50	1	50	1	50	1	50	1	50	1	
3	Cattle care and fodder storage center		2	500000	10.00							1	5	1	5					
4	Bull Distribution	No.	4	50000	2.00							2	1	2	1					
	Total				21.80						1.96		7.96		7.96		1.96			1.96
	Total Production System				77.35						14.95		36.52		17.46		5.71			2.71
D	**Livelihood**	9%																		
	Revolving fund to SHG (>60% of 9%)	No.	163	25000/no	40.75					24	6	37	9.25	44	11	44	11	14	3.5	
	Revolving fund to Enterperising Individual (10% of 9%)	No.	27	25000/no	6.75					20	5	7	1.75	0	0	0	0			
	Grant in aid to federation of SHG (30% of 9%)	No.	10	2.00lakh/	20.00					2	4	2	4	2	4	2	4	2	4	
	Total				67.50						15		15		15		15			7.5
E	**Consolidation**	3%			22.50										7.5		7.5			7.5
	Grand Total				784.30		18.75		61.25		192.62		310.90		179.11		60.71			28.46

CHAPTER V

ANNUAL ACTION PLAN THROUGH PROJECT FUND

STATE : RAJASTHAN
DISTRICT: JODHPUR
NAME OF THE BLOCK: OSIAN
NAME OF WATERSHED:Jodhpur -25 (IWMP)
CATEGORY OF WATERSHED: Desert Area
IRRIGATION PERCENTAGE : 10%

GEOGRAPHICAL AREA: 6685 Hact.
EFFECTIVE AREA : 5000 Hact.
(i) ARABLE LAND : 4470 Hact
(ii) NON ARABLE LAND : 570 Hact.
TOTAL
COST THROUGH CONVERGENCE FUND :

S.No.	Activitiy	Unit	Quantity	Unit cost	Total cost	I st Year		II st Year		III st Year		IV st Year		V st Year		VI st Year		VII st Year	
						Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
A I	Administration cost	10%			75.00		5.75		12.75		12.75		12.75		12.75		10		8.25
II	Monitoring	1%			7.50		0.25		0.5		0.75		1		2		2		1
III	Evaluation	1%			7.50		0.25		0.5		0.75		1		2		2		1
IV	Preparatory Phase (Entry Point Activity)	4%			30.00		5		25										
V	Institution and Capacity Building	5%			37.50		5		20		12.5								
VI	Preparation of Detailed Project Report (DPR)	1%			7.50		2.5		2.5		0.5		0.5		0.5		0.5		0.5
	Total	22%			165.00		18.75		61.25		27.25		15.25		17.25		14.5		10.75
B	**Watershed Development Works (NRM)**	56%																	
I	**Arable Land Conservation Measures**																		
1	Earthen Bund	No.	1305	11000/ha	143.55		0		0	200	22	500	55	500	55	105	11.55		0
2	Gully Control Structure (Loose. Stone. Check. Dam.)	No.	24	10000/no	2.40		0		0	10	1	10	1	4	0.4				0
3	Water Harvesting Tanka	No.	200	1lac/nos	200.00		0		0	50	50	100	100	50	50				0
4	Wasteweir	No.	20	50000/no	10.00		0		0	5	2.5	5	2.5	5	2.5	5	2.5		0
5	Percolation tank	No.	25	1 lakh/nos	25.00							15	15	10	10				
6	Diggi/Hauje	No.																	
	Total				380.95		0		0		75.5		173.5		117.9		14.05		0
II	**Non Arable Land Conservation Measures**																		
1	Ditch Cum Bund Fencing	Mts.	4500		13.80		0		0	2500	7.67	2000	6.13		0		0		0
2	Contour Furrow in Pasture Land	Hact.	100		12.25		0		0	50	6.25	50	6		0		0		0
3	Contour Furrow in Non Arable Land	Hact.					0		0						0		0		0
4	Earthen Bund	No.	50		5.00		0		0	20	2	30	3		0		0		0
5	Tanka	No.	8		8.00		0		0					4	4	4	4		0
	Total				39.05		0		0		15.92		15.13		4		4		0
	Total Watershed Development Works				420.00		0.00		0.00		91.42		188.63		121.90		18.05		0.00
C	**Production System and Micro Enterprises**	19%																	
I	**Arable Land Production System**																		
1	Crop/Fooder Demonstration	No.	300	5000	15.00			0		0		300	15						
2	Agro Forestry	No.	1600		3.00			0		0		800	1.5	800	1.5				
3	Dry land Horticulture (Unit)	No.	20	30000	6.00			0		5	1.5	5	1.5	10	3				

4	Homestead Kitchen Garden/Grain Storage bin	No.	300	1000	3.00			0		100	1	100	1	100	1				
5	Organic Farming																		
	i Compost Pit	No.	200	2000	4.00					50	1	50	1	50	1	50	1		
	ii Vermi Compost Unit	No.	20	10000	2.00					50	0.5	5	0.5	5	0.5	5	0.5		
6	Household Production System (For Marginal Farmer and landless Labour) Micro enterprises		40		7.00					10	2	10	2	10	1.5	10	1.5		
	Total				40.00						6		22.5		8.5		3		0
II	**Non Arable Land Production System**																		
1	Plantation in Pasture land and along DLT line.	No.	11200		10.85					7000	4.79	4200	3.56		1		0.75		0.75
2	Over seeding in Pasture Land	Hact.	100		2.35					50	1.1	50	1.25						
3	Over seeding in Non Arable Land	Hact.																	
	Total				13.20						5.89		4.81		1		0.75		0.75
III	**Live Stock Management**																		
1	Animal Health Camps	No.	20	24000	4.80					4	0.96	4	0.96	4	0.96	4	0.96	4	0.96
2	Mangers Distribution	No.	250	2000	5.00					50	1	50	1	50	1	50	1	50	1
3	Cattle care and fodder storage center		2	500000	10.00							1	5	1	5				
4	Bull Distribution	No.	4	50000	2.00							2	1	2	1				
	Total				21.80						1.96		7.96		7.96		1.96		1.96
	Total Production System				75.00						13.85		35.27		17.46		5.71		2.71
D	**Livelihood**	9%			67.50														
	Revolving fund to SHG (>60% of 9%)	No.	163	25000/n	40.75					24	6	37	9.25	44	11	44	11	14	3.5
	Revolving fund to Enterperising Individual (10% of 9%)	No.	27	25000/n	6.75					20	5	7	1.75	0	0	0	0		
	Grant in aid to federation of SHG (30% of 9%)	No.	10	2.00lakh	20.00					2	4	2	4	2	4	2	4	2	4
	Total				67.50						15		15		15		15		7.5
E	**Consolidation**	3%			22.50										7.5		7.5		7.5
	Grand Total				750.00		18.75		61.25		147.52		254.15		179.11		60.76		28.46

CHAPTER V

ANNUAL ACTION PLAN THROUGH CONVERGENCE FUND

STATE : RAJASTHAN
DISTRICT: JODHPUR
NAME OF THE BLOCK: OSIAN
NAME OF WATERSHED:Jodhpur -25 (IWMP)
CATEGORY OF WATERSHED: Desert Area
IRRIGATION PERCENTAGE : 10%

GEOGRAPHICAL AREA: 6685 Hact.
EFFECTIVE AREA : 5000 Hact.
(i) ARABLE LAND : 4470 Hact
(ii) NON ARABLE LAND : 530 Hact.
TOTAL
COST THROUGH CONVERGENCE FUND :

S.No.	Activitiy	Unit	Quantity	Unit cost	Total cost	I st Year		II st Year		III st Year		IV st Year		V st Year		VI st Year		VII st Year	
						Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
A I	Administration cost	10%																	
II	Monitoring	1%																	
III	Evaluation	1%																	
IV	Preparatory Phase (Entry Point Activity)	4%																	
V	Institution and Capacity Building	5%																	
VI	Preparation of Detailed Project Report (DPR)	1%																	
	Total	22%																	
B	**Watershed Development Works (NRM)**	56%																	
I	**Arable Land Conservation Measures**																		
1	Earthen Bund	No.	300	11000/ha	33.00		0		0	100	11	200	22		0		0.00		0
2	Gully Control Structure (Loose. Stone. Check. Dam.)	No.																	
3	Water Harvesting Tanka	No.	50		49.25		0		0	25	24.25	25	25						0
4	Wasteweir	No.																	
5	Percolation tank	No.																	
6	Diggi/Hauje	No.	10	50000/no	5.00					5	2.5	5	2.5						
	Total				87.25	0.00	0.00	0.00	0.00	130.00	37.75	230.00	49.50	0.00	0.00	0.00	0.00	0.00	0.00
II	**Non Arable Land Conservation Measures**																		
1	Ditch Cum Bund Fencing	Mts.																	
2	Contour Furrow in Pasture Land	Hact.																	
3	Contour Furrow in Non Arable Land	Hact.	100		12.25		0		0	50	6.25	50	6		0		0		0
4	Earthen Bund	No.																	
5	Tanka	No.																	
	Total				12.25		0		0		6.25		6		0		0		0
	Total Watershed Development Works				99.50		0.00		0.00		44.00		55.50		0.00		0.00		0.00
C	**Production System and Micro Enterprises**	19%																	
I	**Arable Land Production System**																		
1	Crop/Fooder Demonstration	No.																	
2	Agro Forestry	No.																	
3	Dry land Horticulture (Unit)	No.																	

4	Homestead Kitchen Garden/Grain Storage bin	No.																	
5	Organic Farming																		
	i Compost Pit	No.																	
	ii Vermi Compost Unit	No.																	
6	Household Production System (For Marginal Farmer and landless Labour) Micro enterprises																		
	Total																		
II	**Non Arable Land Production System**																		
1	Plantation in Pasture land and along DLT line.	No.																	
2	Over seeding in Pasture Land	Hact.																	
3	Over seeding in Non Arable Land	Hact.	100		2.35					50	1.1	50	1.25						
	Total				2.35						1.1		1.25		0		0		0
III	**Live Stock Management**																		
1	Animal Health Camps	No.																	
2	Mangers Distribution	No.																	
3	Cattle care and fodder storage center																		
4	Bull Distribution	No.																	
	Total				0.00						0		0		0		0		0
	Total Production System				2.35						1.1		1.25		0		0		0
D	**Livelihood**																		
	Revolving fund to SHG (>60% of 9%)	No.																	
	Revolving fund to Enterperising Individual (10% of 9%)	No.																	
	Grant in aid to federation of SHG (30% of 9%)	No.																	
	Total																		
E	**Consolidation**																		
	Grand Total				101.85		0		0		45.10		56.75		0.00		0.00		0.00

Prosed Development Plan

CHAPTER – VI EXPECTED OUT COMES

1	2		3	4	5	6
S. No.	**Item**		**Unit of measurement**	**Pre-project Status**	**Expected Post-project Status**	**Remarks**
1	Status of water table (Depth to Ground water level)		Meters	176.09	172.15	Due to Increase in Number of Deep Tube wells
2	Ground water structures repaired/ rejuvenated		No.	-		
3	Quality of drinking water		Description	Unsatisfactory	Satisfactory	Because of water storage structure
4	Availability of drinking water		Description	8 Month	12 month	
5	Change in irrigated Area		Ha	500	820	
6	Change in cropping/ land use pattern		Description	2020	1200	
7	Area under agricultural crop		Ha			
	I	Area under single crop	Ha	4070	4700	
	Ii	Area under double crop	Ha	500	820	
	Iii	Area under multiple crop	Ha	-	-	
8	Change in cultivated Area		Ha		-	
9 yield of major crops of area	Yield of Bajra		q/ha	6	7	
	Yield of Wheat		q/ha	18	21	
	Yield of Gram		q/ha	-	-	
	Yield of Mustard		q/ha	12	14	
10 production of major crops of area	Production of Bajra		ton	48.12	52.50	
	Production of Wheat		ton	10.08	15.20	
	Production of Gram		ton	-	-	
	Production of Mustard		ton	8.40	12.20	
11	Area under vegetable		Ha	-		
12	Area under horticulture		Ha	-		
13	Area under fuel		Ha	-		
14	Area under Fodder		Ha	-		
15	Fodder production		tonnes	6815	9800	
16	Milk production		Litres/day	3756	6350	
17	SHGs Active		No.	2	163	
18	No. of livelihoods		No.	-	-	
19	Income		Rs.in la	-	-	
20	Migration		No.	510	110	
21	SHG Federations formed		No.	nil	10	

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 TECHNICAL DESIGNS AND ESTIMATES

Technical designs and estimates for proposed activities. Estimates are prepared on the basis of GKN of Jodhpur district.

Scheme: IWMP
Watershed: Cherai (Jodhpur-25)

Panchayat Samiti: Osian
District: Jodhpur

DESIGN OF BUND IN ARABLE LAND

1. V. I. $=0.3(\frac{S}{3}+2)$ - Ramser Formula

   $=0.3(\frac{1}{3}+2)$

   = 0.70 m.

   V. I. = Vertical interval between two consecutive bund (m.)

   S = Land slop (%)

   H. I. = $\frac{V.I.}{S} \text{ X } 100$

   $=\frac{0.70}{1} \text{ X } 100 = 70 \text{ m.}$ (H. I. = Horizontal Interval)

2. Depth of Impounding

   $h=\sqrt{\frac{RexV.I.}{50}}$

   h = Depth of impounding

   Re = 24 hours rainfall excess (cm.) for 10 years R. I.

   = Rainfall – interception

   $H =\sqrt{\frac{20x0.70}{50}}$

   = 0.52 cm.

   Say = 50 cm.

3. Height of Bund

   H = h+Free board

= 0.50 + 0.25

= 0.75 CMS.

4. Top width of Bund

$$= \frac{H}{2} = \frac{0.75}{2} = 0.375$$

Say= 0.40 cms

The side slopes of the bunds are dependent upon the internal fractional angle of the fill material. For light red loam and sandy loam soils, the side slope for the both the sides is taken 1.5:1

5. Cross section of the Bund:

Cross section area of the bund $= \frac{\text{Top width+Bottom width}}{2}$ x height

$$= \frac{0.40+2.65}{2} \text{ x } 0.75$$

= 1.14 sqm.

Scheme: IWMP
Watershed: Cherai (Jodhpur-25)

Panchayat Samiti: Osian
District: Jodhpur

DESIGN OF WASTE WEIR

Calculation of peak rate of runoff

$Q = \frac{CIA}{36}$ (Rational formula)

$= \frac{0.3x5x23}{36}$ = 0.96 m^3

$Q = 1.71\ Lh^{3/8}$

or

$L = \frac{Q}{1.71\ h^{3/8}}$

Where L = Length of crest in mt.

h = depth of flow over the crest in mt.

$L = \frac{0.96}{1.71x0.3^{3/8}}$ = 3.55 m

DESIGN OF BUND IN ARABLE LAND TYPE-I

Name of Water Shed Cherai (Jodhpur -25) IWMP Name of P.S. Osian

$$V.I = 0.305\,(XS+Y)$$

$$V.I = 0.305(\ 0.8 \times\ 1+\ 1.0) = 0.549$$

V.I	Vertical interval	
X=	Rain Fall Factor	0.8
Y=	Factor due to soil infiltration & Crop cover	1
S=	Percent slope	1

$$He = \frac{(Rex\ VI)^{1/2}}{(50)^{1/2}}$$

He= 0.549 Say 0.50 Cm.

He	Depth of impounding	
Re	24Hour rainfall excess in Cms. for 10 year recurrence interval	45.62
V.I	Vertical interval	0.549

Total Height of Bund= 0.50 + 0.30 = 0.80 Cms
Top width of Bund = 0.35 Cms.
Bottom width of Bund = 2.75

$$\text{Cross section of bund} = \frac{(\text{Top width of Bund} + \text{Bottom width of Bund})}{2} \times \text{Height}$$

$$\text{X Section} = \frac{(\ 0.35+ 2.75)}{2} \times .8$$

X Section= 1.24 Sqmt.

DESIGN OF EARTHEN BUND TYPE-II

Name of Water Shed : Cherai (Jodhpur -25) IWMP Name of P.S. Osian

$$V.I = 0.305 (XS+Y)$$

$$V.I = 0.305(0.8 \times 2 + 1.0)$$

$$V.I = 0.793$$

V.I	Vertical interval	
X=	Rain Fall Factor	0.8
Y=	Factor due to soil infiltration & Crop cover	1
S=	Percent slope	2

$$He = \frac{(Rex\ VI)^{1/2}}{(50)^{1/2}}$$

He= 0.723 Say 0.75 Cm.

He	Depth of impounding	
Re	24Hour rainfall excess in Cms. for 10 year recurrence interval	45.62
V.I	Vertical interval	1.037

Total Height of Bund= 0.75 + 0.45 = 1.20 Cms
Top width of Bund = 0.6 Cms.
Bottom width of Bund = 4.20

$$\text{Cross section of bund} = \frac{(\text{Top width of Bund} + \text{Bottom width of Bund})}{2} \times \text{Height}$$

$$\text{X Section} = \frac{(0.6 + 4.20)}{2} \times 1.20$$

X Section= 2.88 Sqmt.

DESIGN OF EARTHEN BUND TYPE -III

Name of Water Shed : Jodhpur -25 (IWMP) Name of Block: Osian

V.I = 0.305 (XS+Y)

V.I = 0.305(0.8 x 3+ 1.)
.946

V.I	Vertical interval	
X=	Rain Fall Factor	0.8
Y=	Factor due to soil infiltration & Crop cover	1
S=	Percent slope	3

$$He = \frac{(Rex\ VI)^{1/2}}{(50)^{1/2}}$$

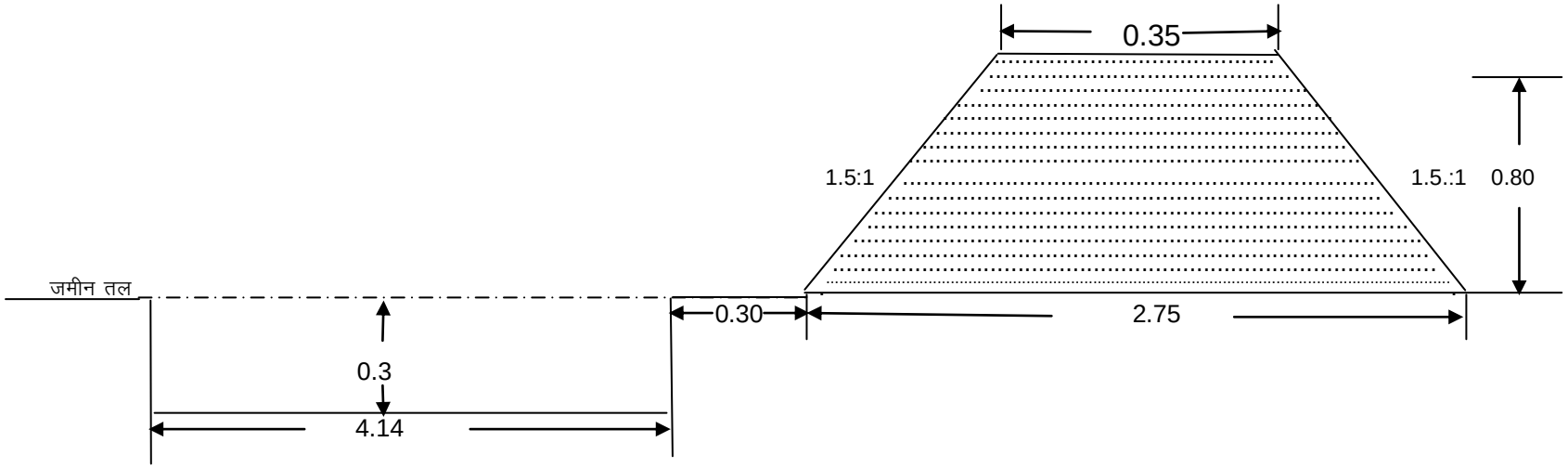
He= .946 Say 0.95Cm.

He	Depth of impounding	
Re	24Hour rainfall excess in Cms. for 10 year recurrence interval	45.62
V.I	Vertical interval	0.95

Total Height of Bund= 0.95 + 0.55 = 1.50 ms
Top width of Bund = 0.75 ms.
Bottom width of Bund = 5.25

Cross section of bund = (Top width of Bund +Bottom width of Bund) x Height/ 2 X Section= (0.75+ 5.25)x 1.50
2
X Section= 4.50 sqmt. Say 4.50 sqmt.

CROSS SECTION OF EARTHAN BUND TYPE I

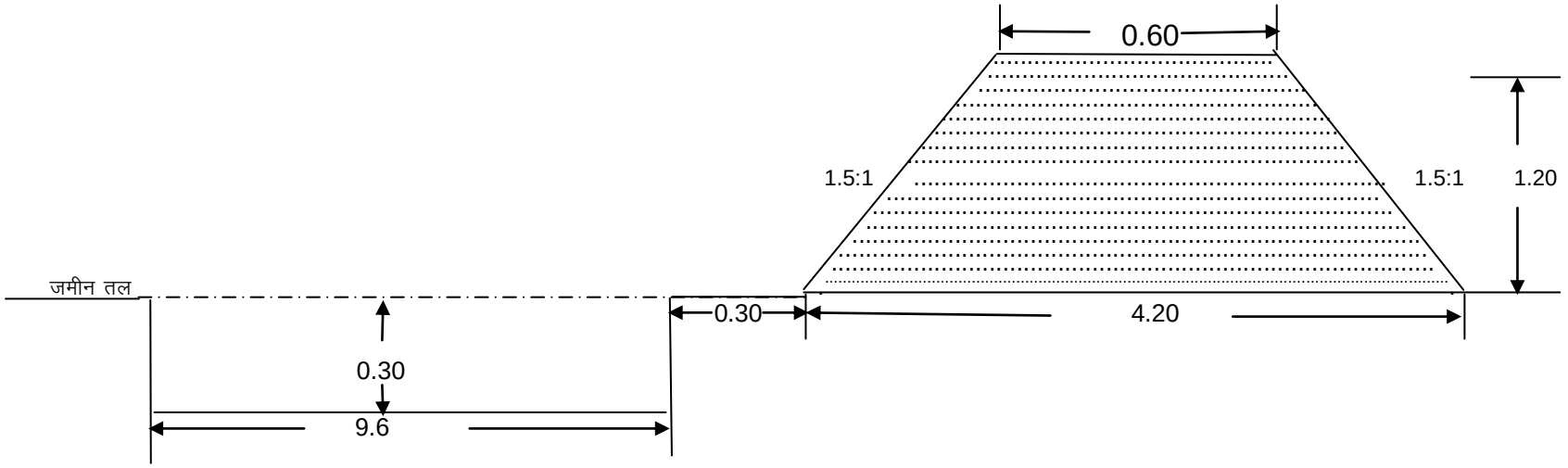


(All Measurement in Meter)

Cross Sec.= $\frac{((2.75+0.35))x0.80}{2}$

= 1.24 Sqm

CROSS SECTION OF EARTHAN BUND TYPE - II

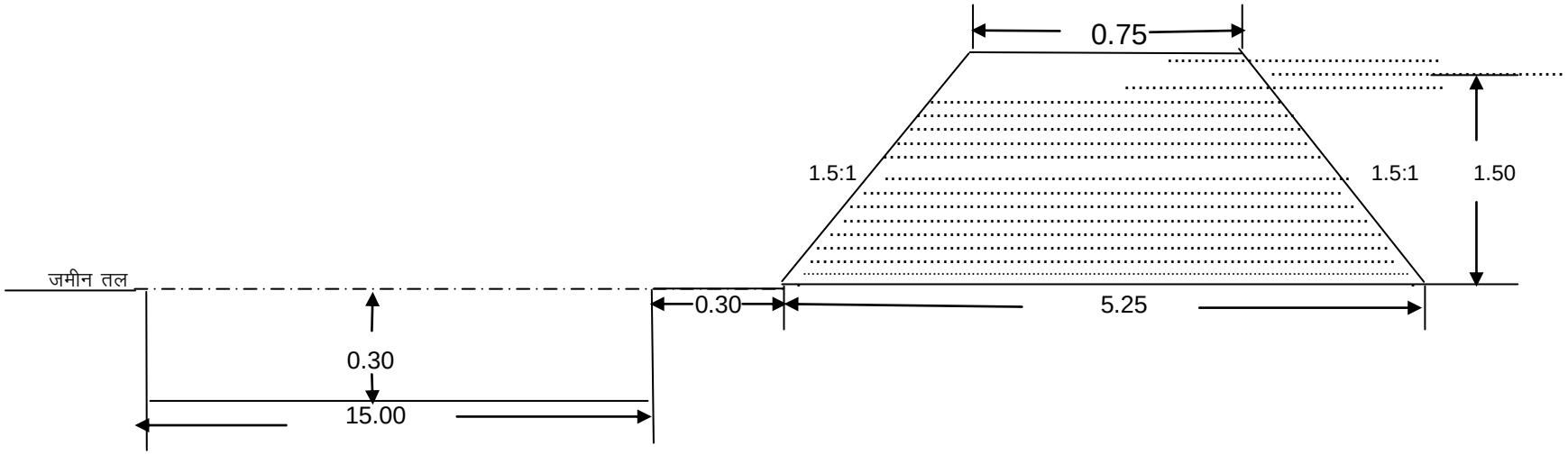


All Measurement in Meter)

Cross Sec.= $\frac{((4.20+0.60))}{2}$x1.20= 2.88 Say 2.88 sqmt.

Cross Sec.= 2.88 sqmt.

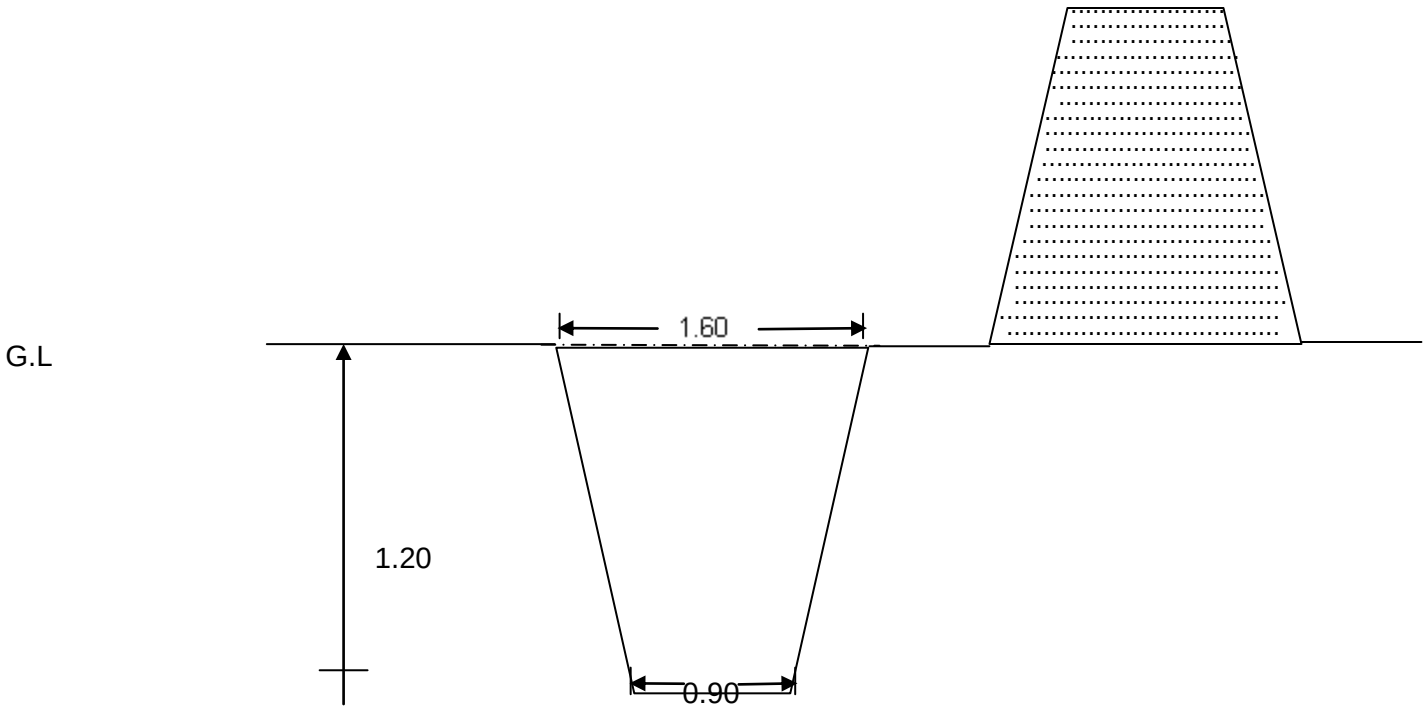
CROSS SECTION OF EARTHAN BUND TYPE - III



(All Measurement in Meter)

Cross Sec.= ((5.25+0.75) /2)x1.50
= 4.50 Sqm

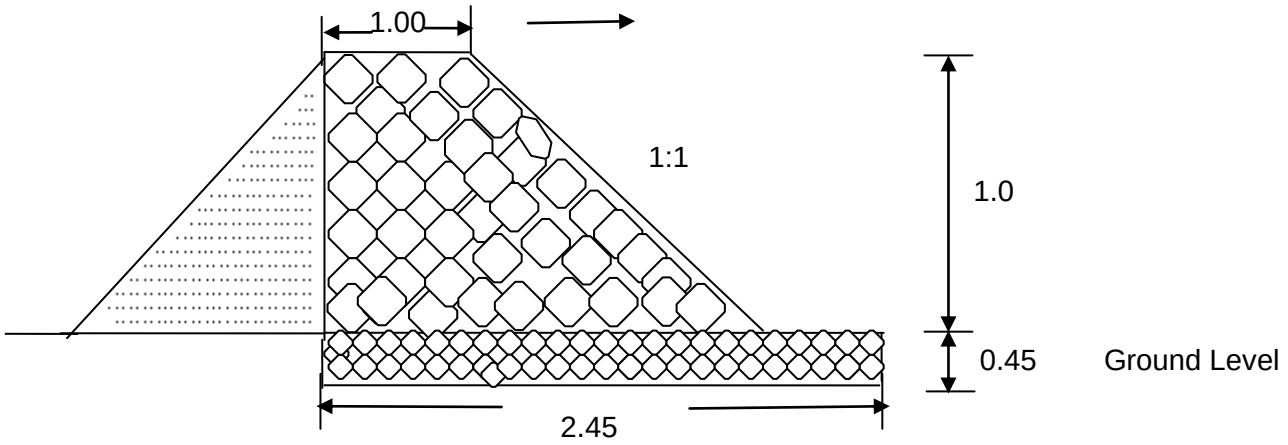
CROSS SECTION OF DITCH CUM BUND FENCINGH



Cross Sec.= $\frac{((1.50+0.0.90)}{2}$)x1.20

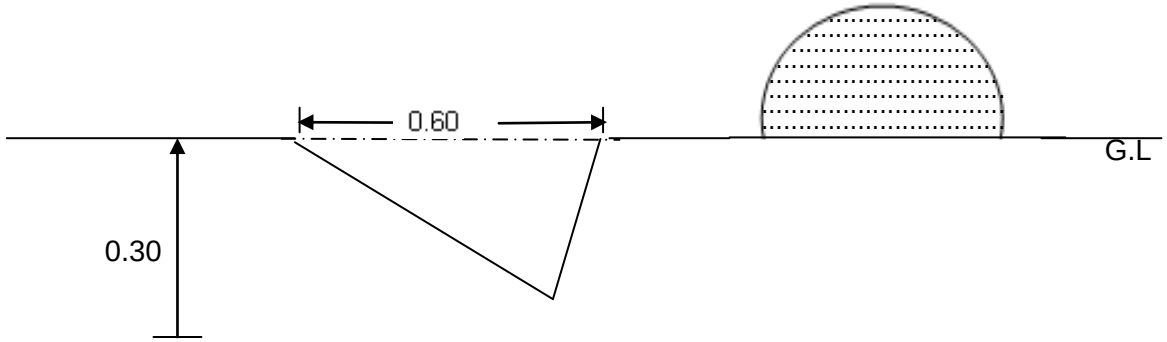
= 1.44 Sqm

CROSS SECTION OF L.S.C.D



Cross Sec.= ((1.00+2.00) /2)x1.00
= 1.50 Sqm

CROSS SECTION OF CONTOUR FURROW



Cross Sec.= 1/2x0.60x0.30

= 0.09 sqm.

लागत तकमीना

नाम जल ग्रहण क्षेत्र–चेराई

कार्य का नाम– कृषि भूमि पर
वेजीटेटिव बन्ड

1.00 35.00

क्र.सं.	विवरण	मात्रा	इकाई	दर		राशि	
				श्रम	कुल	श्रम	कुल
1	डाग बेलिंग 2.5 से 5 सेमी गहराई तक (जि.स्त. दर.अनु.2010पृ.सं025 क्र.सं. 182)	70.00	मीटर	0.7	0.70	49.00	49.00
2	मिट्टी का कार्य बन्ध में (सूखी या गीली) 15 सेमी परत में डालना, ढेलों को तोडना, घास–पात तथा कंकर बीनकर अलग करना तथा मिट्टी की दरेसी करना 1.5 मी0 उठाना तथा 50 मीटर दूरी के लिए। कठोर मिट्टी में मिट्टी की कुटाई मानव द्वारा या प्लेन रोलर द्वारा ।(जि.स्त.दर	100.80	घ.मी.	100	100.00	10080.00	10080.00
3	धामन/घास बीज बुवाई बनाये गये रिज पर दो लाईनों में (जि.स्त.दर.अनु.2010पृ.सं020 क्र.सं. 129)	105.00	मीटर	0.6	0.60	63.00	63.00
4	धामन घास बीज	1.00	कि.ग्रा	-	61.50		61.50
	योग					**10192.00**	**10253.50**
	योग						**10253.50**
	जोडा 4: कन्टोजेन्सी						**410.14**
	योग						**10663.64**
	लागत श्रम भाग						**10192.00**
	लागत सामग्री भाग						**471.64**
	कुल योग						**10663.64**

Say 11000.00

लागत तकमीना

नाम जल ग्रहण क्षेत्र–चेराई

कार्य का नाम– कृषि भूमि पर
वेजीटेटिव बन्ड

1.00 22.50

क्र.सं.	विवरण	मात्रा	इकाई	दर		राशि	
				श्रम	कुल	श्रम	कुल
1	डाग बेलिंग 2.5 से 5 सेमी गहराई तक (जि.स्त. दर.अनु.	45.00	मीटर	0.7	0.70	31.50	31.50
2	मिट्टी का कार्य बन्ध में (सूखी या गीली) 15 सेमी परत में डालना, ढेलों को तोडना, घास–पात तथा कंकर बीनकर अलग करना तथा मिट्टी की दरेसी करना 1.5 मी0 उठाना तथा 50 मीटर दूरी के लिए। कठोर मिट्टी में मिट्टी की कुटाई मानव द्वारा या प्लेन रोलर द्वारा ।(जि.स्त.दर	101.25	घ.मी.	85	100.00	8606.25	10125.00
3	धामन/घास बीज बुवाई बनाये गये रिज पर दो लाईनों में (जि.स्त.दर.अनु.)	67.50	मीटर	0.6	0.60	40.50	40.50
4	धामन घास बीज	1.00	कि.ग्रा	-	61.50		61.50
	योग					**8678.25**	**10258.50**
	योग						**10258.50**
	जोडा 4: कन्टोजेन्सी						**410.34**
	योग						**10668.84**
	लागत श्रम भाग						**8678.25**
	लागत सामग्री भाग						**1990.59**
	कुल योग						**10668.84**
						Say	**11000.00**

MODEL ESTIMATE

नाम जल ग्रहण क्षेत्र– चेराई

कार्य का नाम–कृषि भूमि पर वानिकी पौधारोपण

पौधो की संख्याः 100

क्र.सं.	विवरण	मात्रा	इकाई	दर		राशि	
				श्रम	कुल	श्रम	कुल
1	45ग45ग45 सेमी. माप के गड्डे करना कठोर मिट्टी 400 गड्डे/हैक्टर (जि.स्त.दर.अनु.	100	संख्या	6.80	6.80	680.00	680.00
2	पौधे रोपण करना (जि.स्त.दर.अनु.2011	100	संख्या	3.00	3.00	300.00	300.00
3	पौधों की कीमत	108	संख्या	-	5.00	-	540.00
4	पौधों का परिवहन पौधे भराई एवं खाली कराई सहित 5 कि0मी. दूरी तक के लिए	108	संख्या /1000	-	908.21		98.09
5	पौधे रोपण के समय डीएपी डालना	3	कि.ग्रा.	-	10.00	-	30.00
6	दीमक नियन्त्रण हेतु एन्डोंसल्फान 4ः चूर्ण	10	कि.ग्रा.	-	12.00	-	120.00
7	पौधो में उर्वरक एवं कीट नाशक दवाई डालना	100	संख्या	0.21	0.21	21.00	21.00
	योग					**1001.00**	**1789.09**
	योग						**1789.09**
	जोडा 4ः कन्टोजेन्सी						**71.56**
	योग						**1860.65**
	लागत श्राम भाग						**1001.00**
	लागत सामग्री भाग						**859.65**
	कुल योग						**1860.65**
						Say	**1900.00**

Say 19 रू / पौधा

लागत तकमीना

कार्य का नाम – कम्पोस्ट पिट यूनिट

क्र.सं.	विवरण	मात्रा	इकाई	दर		राशि	
				श्रम	कुल	श्रम	कुल
1	नीव, खाई परनाला में 1.5 गहराई तक मिटट्री का खुदाई करना, तल को कूटना, पानी डालना,बगल को संवारना,खुदी मिट्टीको बाहर निकालना, नीवं भरने के बाद खाली स्थानों को पुनः मिट्टी से भरना तथा बची हुई मिट्टी को 50 मीटर दूरी तक निस्तारण करना। सख्त,चिकनी,	10.80	घ.मी	100.00	100.00	1080.00	1080.00
2	सिंगल सुपर फास्फेट	150.00	कि.ग्रा.	-	4.00	-	600.00
3	यूरिया	30.00	कि.ग्रा.		6.00	-	180.00
4	कल्चर पैकिंट	3.00	संख्या	-	10.00	-	30.00
	योग					**1080.00**	**1890.00**
	योग						**1890.00**
	जोडा 4: कन्टोजेन्सी						**75.60**
	योग						**1965.60**
	लागत श्रम भाग						**1080.00**
	लागत सामग्री भाग						**885.60**
	कुल योग			137.778			**1965.60**
						Say	**2000.00**

लागत तकमीना

कार्य का नाम– फलदार पौधों की यूनिट

यूनिट का क्षैत्रफलः 0.20 हैक्टेयर(55 पौधे/यूनिट)

क्र.सं.	विवरण	मात्रा	इकाई	दर		राशि	
				श्रम	कुल	श्रम	कुल
1	नीव, खाई परनाला में 1.5 गहराई तक मिटट्ी का खुदाई करना, तल को कूटना, पानी डालना,बगल को संवारना,खुदी मिट्टीको बाहर निकालना, नीवं भरने के बाद खाली स्थानों को पुनः मिट्टी से भरना तथा बची हुई मिट्टी को 50 मीटर दूरी तक निस्तारण करना। सख्त,चिकनी,	40.09	घ.मी.	92.00	92.00	3688.28	3688.28
2	गोबर की खाद	550	कि.ग्रा.	-	2.50	-	1375.00
3	सुपरफास्फेट	20	कि.ग्रा.	-	3.50		70.00
4	पोटाश	5.00	कि.ग्रा.	-	4.00	-	20.00
5	यूरिया	12	कि.ग्रा.	-	5.00	-	60.00
6	दीमक की रोकथाम हेतु कीटनाशक दवाई (एन्डोसल्फान 4ः चूर्ण)	6	कि.ग्रा.	-	12.00		72.00
7	पौधे रोपण करना (जि.स्त.दर.अनु.2011)	55	संख्या	3.00	3.00	165.00	165.00
8	पौधों की कीमत	55	संख्या	-	15.00	-	825.00
9	पौधो पर लगने वाले कीडे मकोडो के नियंन्त्रण हेतु मोनोक्रोटोफॉस 36 इ.सी	0.25	लीटर	-	360.00	-	90.00
10	पौधों में उर्वरक एवं दवाई डालना (जि.स्त.दर.अनु.2011)	110	संख्या	0.21	0.21	23.10	23.10
	योग					**3876.38**	**6388.38**
	योग						**6388.38**
	जोडा 4ः कन्टोजेन्सी						**255.54**
	योग						**6643.92**
	लागत श्रम भाग						**3876.38**
	लागत सामग्री भाग						**2767.54**
	कुल योग						**6643.92**
						Say	**6700.00**

<u>विस्तृत तकमीना</u>

नाम जल ग्रहण क्षेत्र– चेराई

कार्य का नाम– फलदार पौधों की यूनिट

यूनिट का क्षैत्रफलः 0.20हैक्टेयर(55 पौधे/यूनिट)

क्र.सं.	विवरण	ल.गचौ.गग. = कुल मात्रा
1	नीव, खाई परनाला में 1.5 गहराई तक मिटट्ी का खुदाई करना, तल को कूटना, पानी डालना,बगल को संवारना,खुदी मिट्टीको बाहर निकालना, नीवं भरने के बाद खाली स्थानों को पुनः मिट्टी से भरना तथा बची हुई मिट्टी को 50 मीटर दूरी तक निस्तारण करना। सख्त,चिकनी,	55x0.90x0.90x0.90= 40.09 घ.मी
2	गोबर की खाद	55 गडड्े / 10 कि.ग्रा./गड्डा =550 कि.ग्रा.
3	सुपरफास्फेट	55 गडड्े / 0.35 कि.ग्रा./गड्डा =19.25 कि.ग्रा. say 20 कि.ग्रा.
4	पोटाश	55 गडड्े / 0.08 कि.ग्रा./गड्डा =4.4 कि.ग्रा. say 5.00 कि.ग्रा.
5	यूरिया	55 गडड्े / 0.22 कि.ग्रा./गड्डा=12.10 कि.ग्रा. say 12.00 कि.ग्रा.
6	दीमक की रोकथाम हेतु कीटनाशक दवाई (एन्डोसल्फान 4ः चूर्ण)	55 गडड्े / 0.10 कि.ग्रा./गड्डा =5.50 कि.ग्रा. say 6.00 कि.ग्रा.
7	पौधे रोपण करना	55
8	पौधों की कीमत	55
9	पौधो पर लगने वाले कीडे मकोडो के नियंन्त्रण हेतु मोनोक्रोटोफॉस 36 इ.सी	0.25 लीटर./यूनिट
10	ikS/kksa essa moZjd ,oa nokbZ Mkyuk	110

10 यूनिट

Scheme: IWMP
Watershed:Cherai (Jodhpur-25)

Panchayat Samiti: OSIAN
District: Jodhpur

DITCH CUM BUND

DETAILED ESTIMATE AND ABSTRACT OF COST

Name Of Work: Construction Of Ditch Cum bund (DCB)

क.सं.	कार्य विवरण	मात्रा	दर	प्रति	राशि
1	बण्ड का ले आउट	2x1=2.00	0.70	Met.	1.40
2	जगंल की सफाई, भारी झाड़ियों तथा 30 से.मी. लपेट तक के पोधों को काटने समेत।	2.0x1.0=2.00	1.70	Sqm.	3.40
4	नींव व ट्रेंचेच मे मिट्टी की खुदाई का कार्य, खुदी हुई मिट्टी का निस्तारण तथा समतल करना। सख्त मिट्टी में/ककंर मिली मिट्टी में	$1 \times \frac{1.50 + 0.9 \times 1.20}{2} = 1.44$	92.00	Cum.	132.50

TOTAL	**137.30**
Add 4% Contigency	5.49
G. TOTAL	142.79
Say Rs.	**143.00**
	Per Met.

DCB Work in 1400.00 Meter (10 Ha)=1400.00x143.00= 200200.00

Cost Per Ha.=200200.00/10 =20020.00

Say Rs.=20000.00

(Rupees Twenty Thousand only)

Note: Rate has been taken from the BSR issued by Zila Parishad Jodhpur on 8/4/2011.

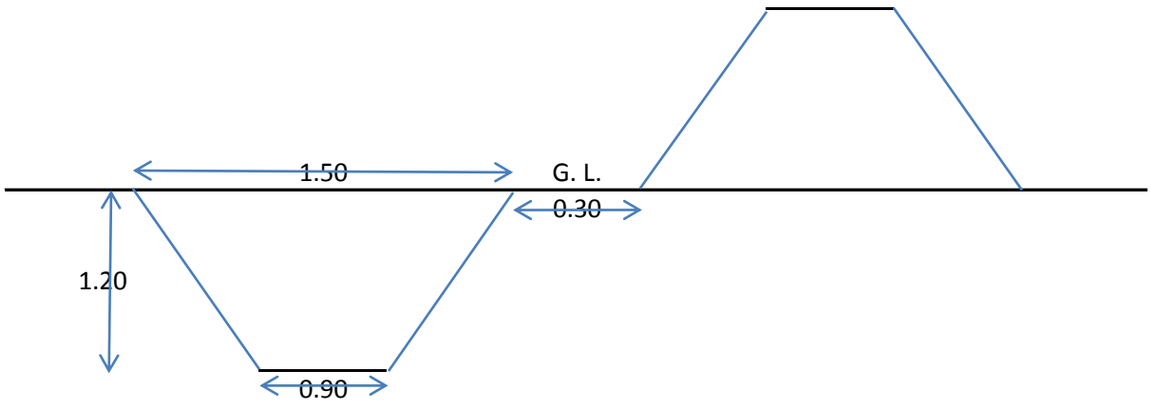
W. D. T. (Technical)
I. W. M. P.
P. S. Osian

A. En. & P. I. A.
I. W. M. P.
P. S. Osian

Scheme: IWMP
Watershed:Cherai (Jodhpur-25)

Panchayat Samiti: Osian
District: Jodhpur

Name Of Work: Construction Of Ditch Cum Bund (DCB)



X-Section Of Ditch Cum bund (DCB)

All Dimentions are in Meter
Not in Scale

W. D. T. (Technical)
I. W. M. P.
P. S.Osian

A. En. & P. I. A.
I. W. M. P.
P. S. Osian

Scheme: IWMP

Panchayat Samiti: Osian

Watershed: …Cherai (Jodhpur-25)

Didtrict: Jodhpur

Gram Panchayat: …Cherai

DETAILS OF WORK AND ABSTRACT OF COST

कार्य का नाम :–पतथर की पêी से कांटेदार फेंसिंग का कार्य .....

L 3280

क्र.सं.	कार्य का विवरण	सं.	विशेष विवरण			मात्रा		ईकाई	दर		राशि	
			ल.	चौ.	ऊं/ग.	फीट	कुल मी.		श्रम	कुल	श्रम	कुल
1	कॉटेदार लोहे के तारे से फेन्सिग -180 सेमी उंचाई की फेन्सिग पत्थर की पêी की 3 मीटर दूरी से व 45 सेमी जमीन में सीमेन्ट कंकरीट 1:2:4 (30x 45x 60 सेमी) साथ में 6 लाईन व 2 डायोगनल लाईन में काला कॉटेवाला तार दो पोस्ट के बीच फिट व फिक्स करना जी.आई. स्टेपल तार से (मिटट्ी के खुदाई का कार्य सम्मलित)	1	3280			3280						
						3280	1000	RM	15.20	231.00	15196	230941
											15196	230941

राशि		
श्रम	A	15196
सामग्री	B	215745
कुल	C	230941
Add 4% for conti. D=(C*.04)		9238
कुल C+D		240178
	Say	**240178**

4500 m **1080803**

सामग्री की आवश्यकता

कार्य का नाम :–पतथर की पêी से कांटेदार फेंसिंग का कार्य .....

क्र.सं.	कुल सामग्री आवश्यकता	ईकाई	मात्रा	दर	राशि
1	सीमेन्ट	बेग	167.0	260	43420.00
2	बजरी	घन मी.	14.00	400	5600
3	एग्रीटग 12 मिमी	घन मी.	27.00	425	11475.00
4	पत्थर की पêी	वर्ग. मी.	226.00	300	67800.00
5	कांटेदार तार	कि.ग्रा.	1085.00	50	54250.00
6	पानी व अन्य				33200.00
			कुल योग		215745

Note:-Rate has been taken from the BSR issued by Zila Parisad Jodhpurb on 01/4/2012 .

Scheme: IWMP

Watershed: Cherai (Jodhpur-25)

Gram Panchayat: Cherai

Panchayat Samiti: Osian

Didtrict: Jodhpur

DETAILS OF WORK AND ABSTRACT OF COST

कार्य का नाम :– एंगल आयरन से कांटेदार फेंसिंग का कार्य .....

L 3280

क्र.सं.	कार्य का विवरण	सं.	विशेष विवरण			मात्रा		ईकाई	दर		राशि	
			ल.	चौ.	ऊं/ग.	फीट	कुल मी.		श्रम	कुल	श्रम	कुल
1	कॉटेदार लोहे के तारे से फेन्सिग -180 सेमी उंचाई की फेन्सिग लोहे के पोस्ट 50x 50 x 6 मिमि के 3 मीटर दूरी से व 45 सेमी जमीन में सीमेन्ट कंकरीट 1:2:4 (30x 30x 60 सेमी) कोरनर व प्रत्येक 10 वां पोस्ट को 50x 50x 6 लोहे के पोस्ट से सपोर्ट किया हुआ साथ में 6 लाईन व 2 डायोगनल लाईन में काला कॉटेवाला तार दो पोस्ट के बीच फिट व फिक्स करना जी.आई. स्टेपल तार से (मिटट्री के खुदाई का कार्य सम्मलित)	1	3280			3280						
						3280	1000	RM	24.30	360.00	24294	359908
											24294	359908

राशि		
श्रम	A	24294
सामग्री	B	335614
कुल	C	359908
Add 4% for conti. D=(C*.04)		14396
कुल C+D		374304
	Say	**374304**
4500m		**1684369**

सामग्री की आवश्यकता

कार्य का नाम :–एंगल आयरन से कांटेदार फेंसिंग का कार्य .....

क्र.सं.	कुल सामग्री आवश्यकता	ईकाई	मात्रा	दर	राशि
1	सीमेन्ट	बेग	167.0	260	43420.00
2	बजरी	घन मी.	14.00	400	5600
3	एग्रीटग 12 मिमी	घन मी.	27.00	425	11475.00
4	एंगल आयरन	कि.ग्रा.	4764.00	43	204852.00
5	कांटेदार तार	कि.ग्रा.	1085.00	50	54250.00
6	पानी व अन्य				16017.00
			कुल योग		335614

Note:-Rate has been taken from the BSR issued by Zila Parisad Jodhpurb on 1/4/2012 .

Name of W/S :- Cherai (Jodhpur-25)

Name of work :- Tanka construction

Amount : 100024

S. No	Details of work	No.	Measurements Dia	B	H		
1	Complete O/O	1	13	0	13		
2	Hall I/I	1	10		12.5		
5	E/W	1	132.71	1	11	6	Ordinary soil
6	Concrete	1	132.71	1	0.5	5	Hard soil
7	Masonary	1	36.122	1.5	12.5	0	Disintigrated rock
				0			
8	G.L to P.L	1			2		
9	Aslat Arou	2	11	1	0.5		
12	Door	1	1.5	1.5	1		
13	Ventilater	-2	0	1	1		
16	Flooring in side Cem	1	78.525	1	1		
17	Flooring on top Cem	1	132.71	1	1		
	Dedu	1	1.5	1.5	1		

DETAILS OF WORK AND ABSTRACT OF COST

S. no		no	L	B	W	Qty.	Qyy.m ks		Lab.rat e	total rate	lab amt	total amt.
	Earth work in excavation in	0.785	13.5	13.5	6	858.398						
1	foundatin lift 1.5m and lead up to 50m	0.785	13.5	13.5	5	715.3313	20.244	cum	100	100	2024.39	2024.3874
		0.785	13.5	13.5	0	0	0		134	134	0	0
	Extra Lift											
	First lift 1	0.785	13.5	13.5	5	715.3313	20.244	cum.	11.80	11.80	238.878	238.87772
	Second lift 2	0.785	13.5	13.5		0	0	cum.	23.60	23.60	0	0
2	P/L cement concrete in 1:4:8	0.785	13.5	13.5	0.5	71.53313						0
						0						0
						0						0
						0						0
						0						0
						71.53313	2.02	cum.	358.10	1891.00	723.362	3819.82
3	RRSM in foundation in 1:6	3.14	11.75	1.5	12.5	691.7813						0
	cement mortar					0						0
												0
						0						0
						691.7813	19.58	cum.	525.30	2019.00	10285.4	39532.02
4	Lintel in cement mortar											0
		2	10	1	0.5	10						0
						10	0.280	cum.	1326.70	4304.00	371.476	1205.12
5	Jodhper stone patti roofing in 1:4 cement mortar	0.785	13	13	1	132.665						0
						0						0
	gat e	-1	1.5	1.5	1	-2.25						0
						130.415	12.11	sqm.	299.70	825.00	3629.37	9990.75
6	P/L cement concrete in 1:2:4	0.785	13	13	1	132.665						0
	50mm thick on rooffing	-1	1.5	1.5	1	-2.25						0
						130.415	12.11	sqm.	101.30	230.00	1226.74	2785.3
7		0.785	10	10	1	78.5						0
												0
						0						0
						78.5	7.29	sqm.	101.30	230.00	738.477	1676.7

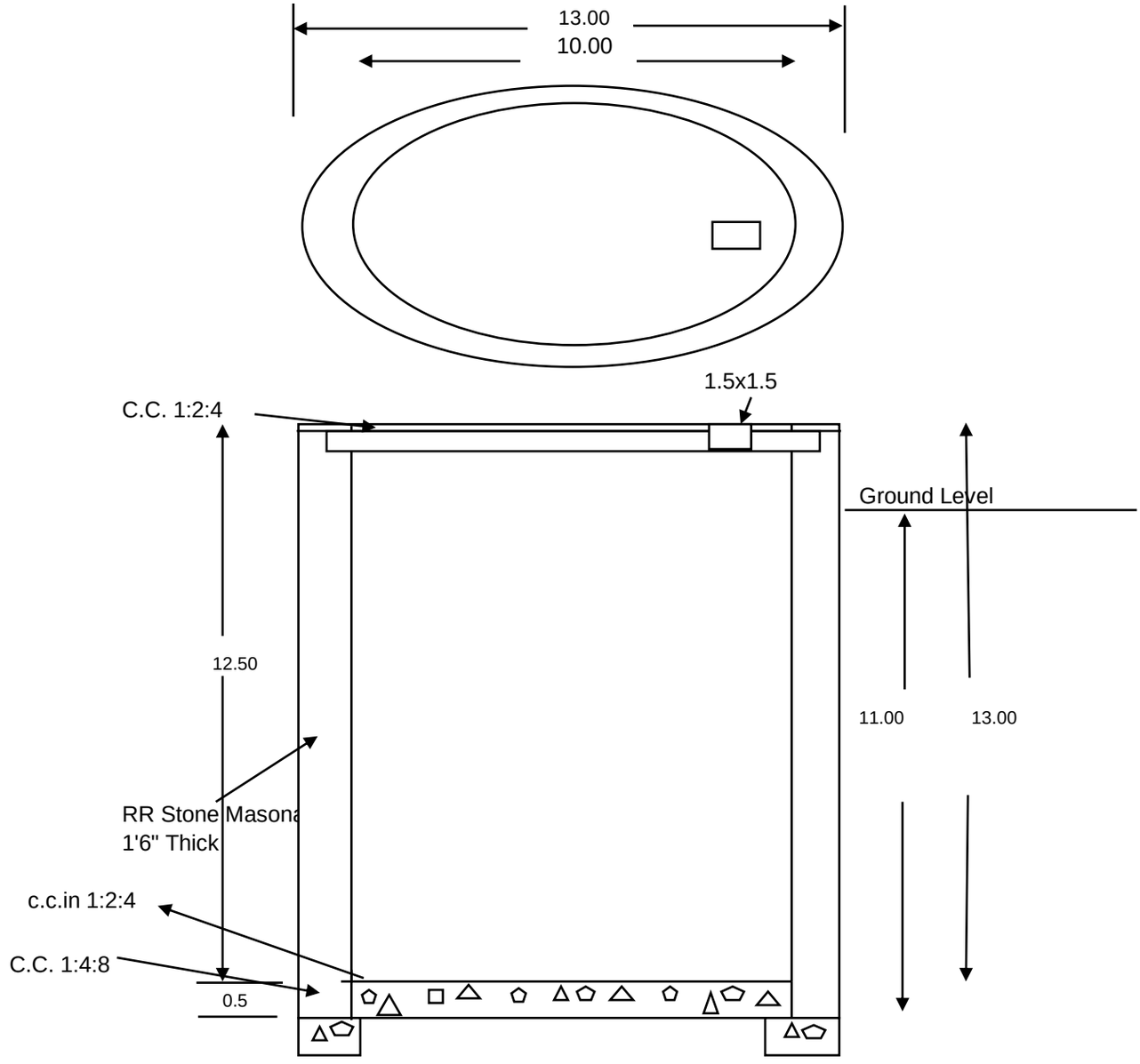
8	25mm cement plaster in 1:6 cement mortar	3.14	10	1	12.5	392.5					0	0
											0	0
						392.5	36.46	sqm.	86.40	147.00	3150.14	5359.62
9	Flush pointing in 1:3 cement mortar	3.14	13	1	2	81.64						0
						0						0
						81.64	7.58	sqm.	45.80	56.00	347.164	424.48
10	C.R. facingin II sort						7.58		93.00	93.00	704.94	704.94
												0
10	Providing and fixing of gate	1	1.5	1.5	1	2.25						0
												0
						2.25		sqm.			0	0
11		0	31	1	1.5	0	0	cum.	320.00	792.00	0	500
12	Catchment of gravel/murrum	3.14	38	13	0.5	2001.75	56.65	cum.		45	0	2549.2286
	Transportation lead 3km						56.65	cum.	45.9	95.8		5427.0245
							56.65	cum.	37	37	2096.03	2096.0324
13	Stone chap Boundry	3.14	38.25	1	4	480.42	44.626	sqm.	69.6	355	3105.98	15842.31
14	Supply and fixing of Hand pump						1	Nos.			0	1500.00
15	Signe board and photographs					0					0	500
											28642.3	96176.607

	Quantity	Rate	Amount
Skille	46.00	400	18400
Unsk	106.00	135	14310
Water			
			32710

		28642.3	96176.607
Amt.			
Labour	A	28642.329	
Material	B	67534.278	
Total	C	96176.607	
D=(C*0.04)		3847.0643	
Total	(C+D)	100023.67	

S. no.	Material requried	Unit	Qty.	Rate	Amt.	
1	Sand	cum.	12.91	400	5165.2	5165
2	40mm aggregate	cum.	1.82	425	772.65	772
3	20mm aggregate	cum.	0.93	580	541.459	541
4	Stone	cum.	19.58	650	12727	12727
5	Cement	bag	54.0	260	14040	14040
6	15cm. Thick lintel	cum.	0.28	2700	756	756
7	Stone slab	sqm	14.53	340	4940.88	4940
8	Door	sqm.	1.000		500	500
	Hand pump	Nos.	1.0	1500.00	1500	1500
	Water transportation	No.	10.000	290.00	2900	2900
	signe board and Photographa				500	500
					44343.2	
	Stone chap		44.6	130	5801.41	5800
	Supply of murrum				7976.25	7976
			Total		58120.9	58117

DRAWING OF TANKA



NAME OF WATERSHED: Cherai (Jodhpur-25)

DISTRICT: JODHPUR **BLOCK: OSIAN**

लागत तकमीना

कार्य का नाम :– होज निर्माण।

क्र.सं.	कार्य का विवरण	सं.	विशेष विवरण			मात्रा		ईकाई	दर			राशि		
			ल.	चौ.	ऊं/ग.	फीट	कुल मी.		अकुशल	कुल श्रम	कुल	अकुशल	कुल श्रम	कुल
1	नींव, खाई तथा नाला आदि के लिए 1.5 मी. गहराई तक मिट्टी की खुदाई करना, तल को कुटना, पानी डालना बगल को संवारना, खुदी मिट्टी को बाहर निकालना नीवं भरने के बाद खाली स्थानों को पुनः मिट्टी से भरना तथा बची हुई मिट्टी को 50 मीटर की दूरी तक निस्तारण करना	1	150	3	3	1350.00								
		1	40	30	0.66	792.00								
						0.00								
						0.00								
						0.00								
						0.00								
				योग		2142.00	60.62	घ.मी.	83.70	92.00	92.00	5073.89	5577.04	5577.04
2	सीमेंट काक्रींट नींव में 40 मि.मी. नामीय माप की पत्थर की गिट्टी सीमेंट रेत मसाला 1सीमेंट : 4 रेत : 8 गिट्टी अनुपात मे मिलाकर, डालना तथा कुटाई करना, तराई समेत।	1	150	3	0.5	225.00								
		1	40	30	0.66	792.00								
						0.00								
						0.00								
				योग		1017.00	28.78	घ.मी.	287.60	327.60	1756.00	8277.13	9428.33	50537.68
3	नींव तथा कुर्सी मे पत्थर की वे रद्धा–ढ़ोका चिनाई सीमेंट–बजरी 1 : 8 मसाले मे, मय बगल की झिरी बन्द करना तथा तराई आदि।	1	150	2.5	2.5	937.50								
						0.00								
						0.00								
				योग		937.50	26.53	घ.मी.	189.00	473.00	1704.00	5014.17	12548.69	45207.12
4	सीमेंट प्लास्टर दीवार पर 1:4 अनुपात मे सीमेंट–बजरी मिलाकर कर जोडों को कुरेदने तथा तराई सहित 25 मि.मी. में।	1	140	_	6	840.00								
		1	152	1		152.00								
						0.00								
				योग		992.00	92.19	व.मी.	25.70	77.70	153.00	2369.37	7163.42	14105.58
5	पत्थर की चुनाई अधिरचना में सीमेन्ट मसाला 1:6 में (2.5+1.5)/2	1	150	2	6	1800.00								

	मसाला 1:6 में (2.5+1.5)/2					0.00								
				योग		1800.00	51.02	घ.मी.	236.30	628.30	1862.00	12056.12	32056.12	95000
6	50 मी. मी. मोटाई में सीमेंट कंक्रीट 1:2:4 मिश्रण जिसमें 1 सीमेंट 2 बजरी 4 पत्थर की या ईंट की 12 . मी. नाभीय गिट्टी के साथ मिलाकर डालना, कूटना, दबाना तथा तराई आदि समेत ।कोपिंग व फर्स	1	30	40	_	1200.00								
		2	30	1.5	_	90.00								
		2	43	1.5	_	129.00								
						0.00	0.00							
						0.00								
				योग		1419.00	131.88	व.मी.	31.10	91.10	191.00	4101.38	12014.02	25188.57
7	मिट्टी का कार्य बन्ध मे (सूखी या गीली), 15 से.मी. परत मे डालना, ढेलों को तोड़ना, घास–पात तथा कंकर बीनकर अलग करना तथा मिट्टी की दरेसी करना, 1.5 मी उठान तथा 50 मी. दूरी के लिए।	2	38	2.5	6	1140.00								
		2	48	2.5	6	1440.00								
						0.00								
						0.00								
						0.00								
						0.00								
						2580.00	73.13	घ.मी.	73.70	75.80	77.00	5389.63	5543.2	5630.95
												42282	**84331**	**241247**

अकुशल श्रम राशि **0.84 लाख**

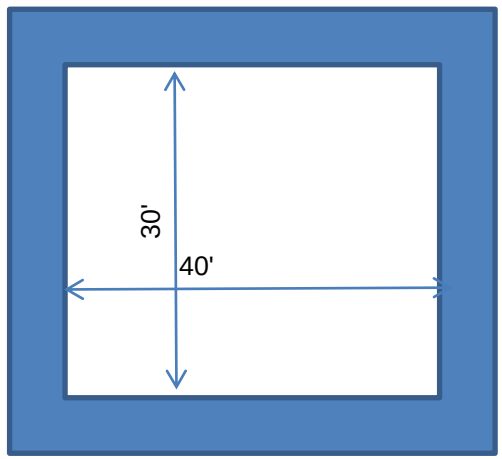
कुल योग **42282** **84331** **241247**

श्रम **33.47 %**
सामग्री **66.53 %**

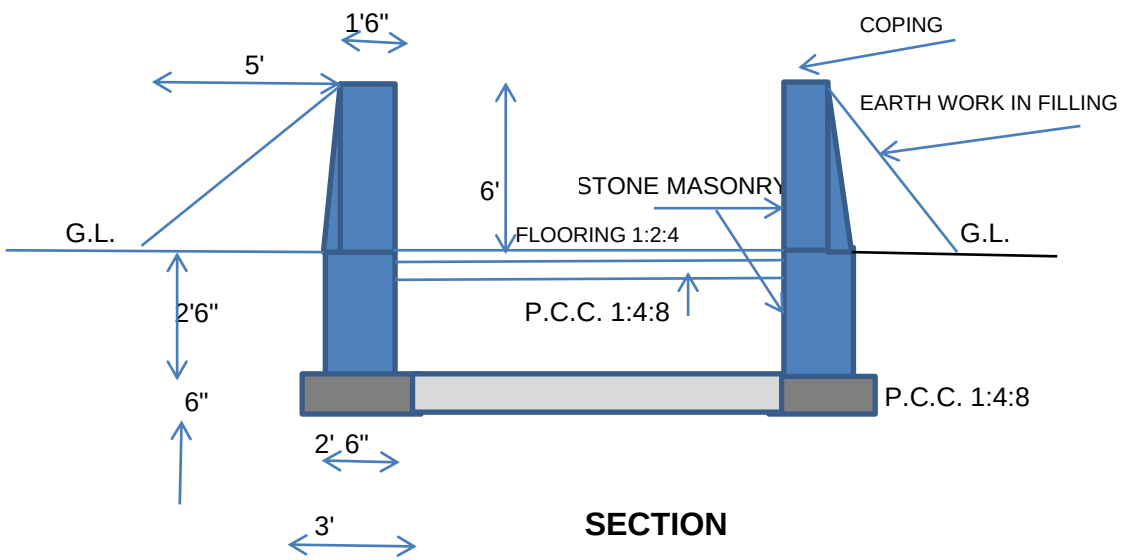
श्रम	**0.84**
सामग्री	**1.67**
योग	**2.51**

राशि			
श्रम	अकुशल	(a)	42282
	कुल श्रम	(b)	84331
सामग्री		(c)	156916
कुल	(a+b+c)	(d)	241247
जोडे 4% contingency के	4% of(d)	(e)	9650
कुल योग	(d+e)	(f)	**250897**

CAPACITY :---- **2505965** लीटर



PLAN FOR HAUSE



SECTION

Scheme: IWMP
Watershed:Cherai (Jodhpur-25)

Panchayat Samiti: Osian
District: Jodhpur

GULLY PLUGGING

DETAILED ESTIMATE AND ABSTRACT OF COST

Name Of Work: Construction Of Gully Plugging

क.सं.	कार्य विवरण	मात्रा	दर	प्रति	राशि
1	बण्ड का ले आउट	2x15=30.00	0.70	Met.	21.00
2	जगंल की सफाई, साधारण वनस्पति तथा झाड़ियों को काटने सहित।	15x5.10=76.50	1.40	Sqm.	107.10
4	मिट्टी का कार्य बन्ध मे (सूखी या गीली), 15 से. मी. परत मे डालना, ढेलों को तोड़ना, घास–पात तथा कंकर बीनकर अलग करना तथा मिट्टी की दरेसी करना, 1.5 मी उठान तथा 50 मी. दूरी के लिए। कठोर मिटृटी	$2 \times \frac{5.10 + 0.6 \times 1.50}{2} \times 15 = 64.13$	100.00	Cum.	6413.00
5	15 से 23 से.मी. मोटे, हथोडे से तरासे हुए एकल पत्थर की पिचिंग समस्त उठान के साथ, आपूर्त्ति के साथ।	15x2.10x0.23=7.24	670.00	Cum.	4850.80
				TOTAL	**11391.90**
				Add 4% Contigency	455.68
				G. TOTAL	11847.58
				Say Rs.	**11850.00**

(Rupees Ten Thousand Five Hundred only)

Labour	6803.00
Material	3570.00
Contigency	427.00
Total	10800.00

Note: Rate has been taken from the BSR issued by Zila Parishad Jodhpur on1/4/2012.

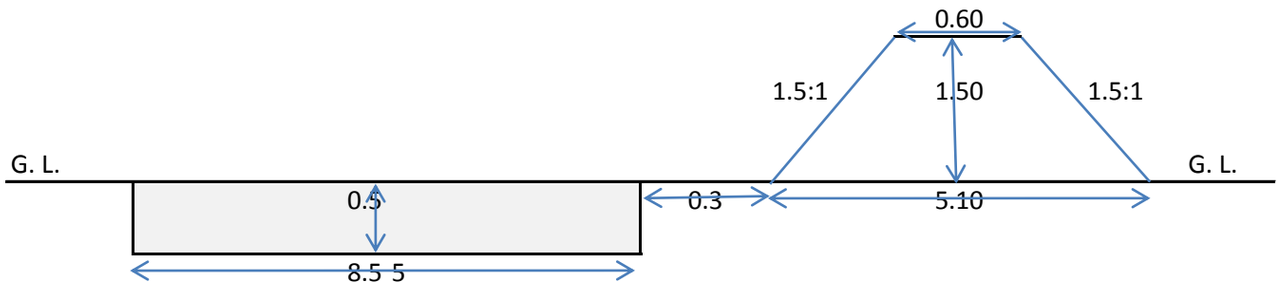
W. D. T. (Technical)
I. W. M. P.
P. S. Osian

A. En. & P. I. A.
I. W. M. P.
P. S. Osian

Scheme: IWMP
Watershed:Cherai (Jodhpur-25)

Panchayat Samiti:Osian
District: Jodhpur

Name Of Work: Construction Of Gully Plugging



X-Section Of Gully Plugging

All Dimentions are in Meter
Not in Scale

W. D. T. (Technical)
I. W. M. P.
P. S. Osian

A. En. & P. I. A.
I. W. M. P.
P. S. Osian

Scheme: IWMP Panchayat Samiti: OSIAN
Watershed: Cherai (Jodhpur-25) District: Jodhpur

PASTURE DEVELOPMENT

DETAILED ESTIMATE AND ABSTRACT OF COST

Name Of Work: Pasture Development Works in Arable land

क.सं.	कार्य विवरण	प्रति	मात्रा	दर	राशि
1	सेवण/धामण घास का बीज एकत्रित/खरीद करना (7 किलो प्रति हेक्टेयर)	Kg.	7	160.00	1120.00
2	7 किलो घास का बीज, खाद, रेत व चिकनी मिट्टी का मिश्रण 1:1:2:2 में बनाकर गोलिया तैयार करना (कुल सामग्री 42 किलो)	Kg.	7	27.84	194.88
3	फरोस पर ड्रिब्लिंग द्वारा घास बीज की गोलियां की बुवाई करना	Kg.	7.00	135.00	945.00
				TOTAL	2259.88
				Add 4 % Contigency	90.40
				G. TOTAL	2350.28
				Say Rs.	**2350.00**
					Per Hact..

Say Rs.=2350.00 per Hact.

(Rupees Two Thousand Three hundred Fifty only)

Labour	1369.00
Material	891.00
Contigency	90.40
Total	2350.40

Note: Rate has been taken from the BSR issued by Zila Parishad Jodhpur on 8/4/2012.

W. D. T. (Technical)
I. W. M. P.
P. S. Osian

A. En. & P. I. A.
I. W. M. P.
P. S. Osian

Scheme: IWMP Panchayat Samiti: OSIAN
Watershed:Cherai (Jodhpur-25) District: Jodhpur

PLANTATION
DETAILED ESTIMATE AND ABSTRACT OF COST

Name Of Work: Plantation Works in Non Arable land
(A) I st Year

क.सं.	कार्य विवरण	प्रति	मात्रा	दर	राशि
1	45 x 45 x 45 सेमी माप के गड्डे करना कठोर मिट्टी कंकर / मुरम मिट्टी (बी.एस.आर. आइटम नं. 2 ब व स)	Nos.	300 200	6.80 13.40	2040.00 2680.00
2	पौधा रोपित करना (ब) सामान्य जमीन में पथरीली जमीन (बी.एस.आर. आइटम नं. 113 ब व स)	Nos.	300 200	3.60 3.00	1080.00 600.00
3	पौधों की निराई गुडाई करना 15 सेमी गहराई तक तथा 45 सेमी अर्द्धव्यास तक (बी.एस.आर. आइटम नं. 116)	Nos.	2x500= 1000	1.20	1200.00
4	पौधों को कीटनाषक देना मय कीटनाषक की कीमत (बाजार दर के अनुसार)	Nos.	500.00	2.00	1000.00
5	थांवला बनाना, कम से कम 50 सेमी अर्द्धव्यास का पथरीली जमीन अन्य जमीन (बी.एस.आर. आइटम नं. 117 अ व ब)	Nos.	200 300	2.40 1.80	480.00 540.00
6	पौधों को पानी पिलाना 15 लीटर प्रति पौधा (वर्ष मे 12 बार) 500X6=3000 (बी.एस.आर. आइटम नं. 115)	Nos.	6000.00	1.80	10800.00
7	पौधे की लागत मय परिवहन (बाजार दर के अनुसार)	Nos.	500.00	20.00	10000.00
8	पौधों का परिवहन नर्सरी से वृक्षारोपण स्थल तक (लोडिंग व अनलोडिंग सहित) 1 कि.मी. ऊँट गाडी द्वारा	Nos.	500.00	1.00	500.00
9	पानी की लागत मय परिवहन 5 कि.मी. तक 15 ली X 3000 = 45000 ली. (बी.एस.आर. आइटम नं. 108)	Liter	45000.00	42.2/1000	1899.00
10	पाले व लू से बचाव हेतु झोंपे बनाना	Nos.	100.00	3.62	362.00
11	100 पौघो के पुर्निंग करना (माडल एस्टीमेट वन विभाग)	Nos.	100.00	0.96	96.00
12	पौधो की देखभाल व सुरक्षा	Nos.	500.00	LS	5300.00
				TOTAL(A)	**38557.00**

Scheme: IWMP
Watershed:Cherai (Jodhpur-25)

Panchayat Samiti: OSIAN
District: Jodhpur

DETAILED ESTIMATE AND ABSTRACT OF COST

Name Of Work: Plantation Works in Non Arable land

(B) II nd Year

क.सं.	कार्य विवरण	प्रति	मात्रा	दर	राशि
1	100 पौधो का केजुयल्टी रिपलेसमेंट करना	Nos.	100.00	1.35	135.00
2	पौधे की लागत मय परिवहन (बाजार दर के अनुसार)	Nos.	100.00	20.00	2000.00
3	पौधो का परिवहन नर्सरी से वृक्षरोपण स्थल तक (लोडिंग व अनलोडिंग सहित)	Nos.	100.00	1.00	100.00
4	पौधों की निराई गुडाई करना 15 सेमी गहराई तक तथा 45 सेमी अर्द्धव्यास तक 2X500=1000 (बी.एस.आर. आइटम नं. 116)	Nos.	1000.00	1.20	1200.00
5	पौधों को पानी पिलाना 15 लीटर प्रति पौधा (वर्ष मे 6 बार) 500 X 3 =1500 (बी.एस.आर. आइटम नं. 115)	Nos.	3000.00	1.80	5400.00
6	पानी की लागत मय परिवहन 5 कि.मी. तक 15 ली X 1500 = 22500 yh- (बी.एस.आर. आइटम नं. 108)	Nos.	22500.0	37.4/100	841.50
7	100 पौधों के लिए पाले/लू से सुरक्षा हेतु झोंपे बनाना	Nos.	100.0	3.62	362.00
8	100 पौधों की पुर्निंग करना	Nos.	100.0	0.96	96.00
9	पौधो की देखभाल व सुरक्षा	Nos.	500.0	LS	5300.00
				TOTAL(B)	**15434.50**

Scheme: IWMP
Watershed: Jakhan (Jodhpur-26)

Panchayat Samiti: OSIAN
District: Jodhpur

DETAILED ESTIMATE AND ABSTRACT OF COST

Name Of Work: Plantation Works in Non Arable land

(C) III rd Year

क.सं.	कार्य विवरण	प्रति	मात्रा	दर	राशि
1	पौधों को पानी पिलाना 15 लीटर प्रति पौधा (वर्ष मे 2 बार) 500 X 2 =1000 (बी.एस.आर. आइटम नं. 115)	Nos.	1000.00	1.80	1800.00
2	पानी की लागत मय परिवहन 5 कि.मी. तक 15 ली X 1000 = 15000 yh- (बी.एस.आर. आइटम नं. 108)	Nos.	15000.0	37.4/100	561.00
3	पौधों की निराई गुडाई करना 15 सेमी गहराई तक तथा 45 सेमी अर्द्धव्यास तक 1X500=1000 (बी.एस.आर. आइटम नं. 116)	Nos.	500.00	1.20	600.00
4	200 पौधों की पुर्निंग करना	Nos.	200.0	0.96	192.00
5	पौधो की देखभाल व सुरक्षा	Nos.	500.0	LS	5300.00
				TOTAL(C)	**8453.00**

Scheme: IWMP Panchayat Samiti: OSIAN

Watershed:Cherai (Jodhpur-56) District: Jodhpur

DETAILED ESTIMATE AND ABSTRACT OF COST

Name Of Work: Plantation Works in Non Arable land

(D) **IV th Year**

क.सं.	कार्य विवरण	प्रति	मात्रा	दर	राशि
1	पौधो की देखभाल व सुरक्षा	Nos.	500.0	LS	5300.00
				TOTAL(D)	5300.00

Total Cost Per Ha. (A+B+C)=38457+15434.5+8453+5300=56229.50

	67744.50
Add 4% Contigency	2709.78
G. TOTAL	70454.28
Say Rs.	**70500.00**
	Per Ha.

(Rupees Forty Eight Thousand Five hundred only)

Labour	45500.00
Material	22290.00
Contigency	2710.00
Total	**70500.00**

Note: Rate has been taken from the BSR issued by Zila Parishad Jodhpur on 1/4/2012.

W. D. T. (Technical)
I. W. M. P.
P. S. OSIAN

A. En. & P. I. A.
I. W. M. P.
P. S. Osian

DETAILS OF WORK AND ABSTRACT OF COST

कार्य का नाम :– पशु संवर्धन केन्द्र

क.सं.	कार्य का विवरण		सं.	विशेष विवरण			मात्रा		ईकाई	दर		राशि	
				ल.	चौ.	ऊं/ग.	फीट	कुल मी.		श्रम	कुल	श्रम	कुल
1	नींव, खाई तथा नाला आदि के लिए 1.5 मी. गहराई तक मिट्टी की खुदाई करना, तल को कुटना, पानी डालना बगल को संवारना, खुदी मिट्टी को बाहर निकालना नीवं भरने के बाद खाली स्थानों को पुनः मिट्टी से भरना तथा बची हुई मिट्टी को 50 मीटर की दूरी तक निस्तारण करना	L/W	2	34.5	3	3	621						
		S/W	3	13.25	3	3	357.75						
		Compound wall	1	51.75	2	1.5	155.25						
		Compound wall	1	17.25	2	1.5	51.75						
		Compound wall	2	28.25	2	1.5	169.5						
		U/G water Tank	1	13.5	13.5	8	1458						
	सख्त मिट्टी में				Total		2813.25	79.61	cum.	100.00	100.00	7961.5	7961.5
2	सीमेन्ट कांक्रीट नींव या फर्श में 40 मि. मी. नामीय माप की पत्थर गिट्टी / ईट की गिट्टी सीमेन्ट–रेत मसाला, 1 सीमेन्ट : 5 रेत : 10 गिट्टी अनुपात में मिलाकर डालना तथा कुटाई करना, तराई समेत। पत्थर की गिट्टी के साथा।	L/W	1	34.5	3	0.5	51.75						
		S/W	3	13.25	3	0.5	59.625						
		Compound wall	1	51.75	2	0.5	51.75						
		Compound wall	1	17.25	2	0.5	17.25						
		Compound wall	2	28.25	2	0.5	56.5						
		U/G water Tank	1	13.5	13.5	0.5	91.125						
		Ramp	1	32.75	10	0.33	108.075						
					Total		436.075	12.34	cum.	358.10	1704.00	4419.28	21028.9
3	नींव तथा कुर्सी में पत्थर की वे रद्धा–ढोका चिनाई, चूना–बजरी 1:3 मसाले मे 30 से.मी. से अधिक मोटाई में बगल की झिरी बन्द करना. मय तराई	Building I st.	1	110.5	2.5	1	276.25						
		Building II st.	1	110.5	2	1	221						

	के।नींव तथा कुर्सी मे पत्थर की वे रद्धा–ढ़ोका सीमेंट–बजरी 1 : 6 मसाले मे, मय बगल की झिरी बन्द करना तथा तराई आदि।नींव तथा कुर्सी मे , मय बगल की झिरी बन्द करना तथा तराई आदि।	Building III st.	1	110.5	1.5	1	165.75						
		Building Iv st.	1	110.5	1.25	1.5	207.188						
		Compound wall	1	147.25	1.5	1	220.875						
		Ramp	2	10	1.25	1.5	37.5						
		U/G water Tank	1	45	1.25	11	618.75						
		Foder Pan	1	25	1.25	1.25	39.0625						
					Total		1786.38	50.55	cum.	525.30	2019.00	26556.2	102069
4	पत्थर के दासे की आपूर्ति कर, चिनाई मे उपयोग की गई मसाले मे उसे लगाना।		1	110.5	1.25	0.5	69.0625						
							0						
					Total		69.0625	1.95	cum.	1326.70	4304.00	2592.99	8412.03
5	अधिरचना में सीमेंट मसाला 1:6 मे पत्थर की चुनाई का कार्य	Building	1	110.5	1.25	14	1933.75						
		Compound wall	1	127.25	1.25	4	636.25						
	उप योग						2570	72.73	cum.				
	कटोतियां	खिड़की	2	6	1.25	4	60						
		दरवाजा	1	4	1.25	7	35						
		वेन्ट	10	2	1.25	1	25						
		सामने का ओपनिंग	1	20	1.25	14	350						
		लिन्टल	10	3	1.25	0.5	18.75						
		लिन्टल	1	5	1.25	0.5	3.125						
		लिन्टल	2	7	1.25	0.5	8.75						
		गेट	1	8	1.25	4	40						
	उप योग						540.625	15.30	cum.				
	शेष						2029.38	57.43	cum.	698.30	2195.00	40104.3	126062
6	पत्थर के वर्गाकार या आयताकार खम्बों को चूना मसाले 1:3 में अधिरचना मे।		2	1.25	1.5	14	52.5						
							0						
					Total		52.5	1.49	cum.	1029.30	2608.00	1529.28	3874.84

7	पत्थर के सिरदल (लिटंल) की आपूर्ति कर, चिनाई मे उपयोग की गई मसाले मे उसे लगाना।													
			लिटंल		1	49	1.25	0.5	30.625					
					6	7	1	0.5	21					
			पाट											
		योग					Total		51.625	1.46	cum.	1326.70	4304.00	1938.29	6288.09
8	40 मि.मी. मोटाई के पत्थर के छज्जे,सीमेंट मसाले मे 1:4 मे लगाना तथा आपूर्त्ति करना, दीवार तथा छज्जे के जोड़ पर सीमेंट काक्रींट 1:3:6 का 7.5 से. मी. का गोला बनाना, आदि।		7	3	1.25		26.25							
			2	7	1.25		17.5							
			1	5	1.25		6.25							
						Total	50	4.645	sqm	308.60	592.00	1433.45	2749.84	
9	छत और दीवारो की जोड पर कातला पत्थर के गरदाना को लगाना एव आपूर्ति का पूर्ण कार्य		1	0	1.25	1	0							
							0							
						Total	0	0	Sqm	488.60	735.00	0	0	
10	लोहे के गर्डर		0	0	0.305	1	0							
					0.305	1	0							
	350*165@ 49.5Kg/m						0	0	Kg	3.60	58.20	0	0	
			2	22	0.305	1	13.41							
					0.305	1	0							
	300*140@ 37.7Kg/m						13.41	505.60	Kg	3.60	58.20	1820.17	29426.1	
			0	0	0.305	1	0							
					0.305	1	0							
							0	0	Kg	3.60	58.20	0	0	
11	पत्थर की सिर्वान लगाने एव आपूर्ति का कार्य		0	0	0	0	0	0	Sqm	488.60	735.00	0	0	
12	अप्रुव्ड खान की पटटी की छत छत के दोनो के तरफ सिमेण्ट 1:4 से भरना	Building	1	32.75	22.5		736.875							
		Compound wall	1	12.5	12.5		156.25							
	4	तक					0							

					Total		893.125	82.97	Sqm	299.70	825.00	24866.5	68451.3
13	अधिरचना ईजारा में सीमेंट मसाला 1:6 में पत्थर की चिनाई कार्य।		2	32.75	1.25	1	81.875						
			2	15	1.25	1	37.5						
					Total		119.375	3.38	cum.	775.50	2275.00	2619.88	7685.66
14	90 मि.मी. औसत मोटाई मे सीमेंट काक्रींट दड़ जिसमे 1 भाग सीमेंट : 3 भाग बजरी तथा 6 भाग 12 मि.मी. नामीय एग्रीगेट मिलाकर आर.सी.सी. छत या पट्टी पर इस प्रकार डालना कि चाही गई दिशा मे ढ़लान 1:60 का प्राप्त किया जा सके तथा विशेष विवरण के अनुसार 6 मि.मी. व्यास की छडों को दोनो दिशा 25 से.मी. केन्द्र से केन्द्र जाल मध्य ककरीट मे डाल कर ककरीट को दबाना तथा तराई समेत।	Building	1	30.25	20		605						
		U/G water Tank	1	12.5	12.5		156.25						
					Total		761.25	70.72	sqm.	174.40	469.00	12333.6	33167.7
15	फर्श के नीचे सुखे पत्थरो का खंरजा डालना।		0	20	15	0.5	0						
			1	9	22.5	0.5	101.25						
			1	32.75	10	0.5	163.75						
					Total		265	7.50	cum.	179.10	677.00	1343.16	5077.16
16	50 मी. मी. मोटाई में सीमेंट कंक्रीट 1:2:4 मिश्रण 12 मीमी.गिट्टी के साथ मिलाकर डालना, कूटना, दबाना तथा तराई आदि समेत मय कांच पती	Fodder Pan	0	25	1.25		0						
		Fodder Room	1	9	22.5		202.5						
		U/G water Tank	1	10	10		100						
					Total		202.5	18.81	sqm.	101.30	230.00	1905.68	4326.82
17	कोपिंग का कार्य												
	C:C (1:2:4)		1	262.75	1.25		328.438	30.51	sqm.	101.30	230.00	3090.85	7017.72
	Chap		0	0	0		0	0	sqm.	488.60	826.00	0	0
18	आलमारी मे चापो का कार्य ¼pkjk Bk.k ds fy	Fodder Pan	1	25	1.25	0	31.25						
							0						
					Total		31.25	2.90	sqm.	164.40	370.00	477.274	1074.16
19	सीमेंट प्लास्टर दीवार पर 1:6 अनुपात मे सीमेंट–बजरी मिलाकर कर जोडों को करेदने तथा	Fodder Room	2	15	14		420						

	तराई सहित 20 मि.मी. में।			Fodder Room	2	9	14		252						
				Fodder Pan	1	25	3		75						
									672	62.43	sqm.				
	कटोतियां		खिड़की		0	0	0	0	0						
			दरवाजा		1	4	7		28						
			वेन्ट		0	2	1	1	0						
	उप योग								28	2.60	sqm.				
	शेष								644	59.83	sqm.	86.40	147.00	5169.1	8794.66
20	पत्थर की चुनाई पर सीमेण्ट मसाला 1:3 से टीपो का कार्य			Building	1	20	14		280						
				Building	1	32.75	14		458.5						
				Building	4	18	14		1008						
				Perapet	2	95.5	2		382						
				Compound wall	1	167.25	5		836.25						
				Building Front	2	26.5	14		742						
									3706.75	344.36	sqm.				
	कटोतियां		खिड़की		1	6	4		24						
			दरवाजा		1	4	7		28						
			वेन्ट		7	2	1		14						
	उप योग								66	6.13	sqm.				
	शेष								3640.75	338.23	sqm.	51.10	62.00	17283.3	20970
21	रदा कतार ढोका चुनाई का अतिरिक्त				1	1719.0			1719	159.70	sqm.	123.00	123.00	19642.5	19642.5
22	22 गेज की सादा एम.एस. चद्दर की बनी 0.9 मी. चौड़ी तथा 1.2 मी. ऊंची खिड़की जिसमें समस्त चौखट फ्रेम 25X25X3 मि.मी. की कोनिया लोहै का, 10 मि.मी. ग्रिल मय अर्गल, चिटकनियां 2 नग तथा पट्टियां 4 नग आपूर्ति करना।				2	6	4		48						
					0	0	0		0						
								0							

	1	0				Total		48	4.46	sqm	149	1762	665.759	7857.11
23	22 गेज की सादा एम. एस. चद्दर के दो पल्ले वाले दरवाजे, जिसमें लोहे की 40x40x3 मि.मी. के कोनिया लोहे की चौरवट तथा पल्लो में 25x25x3 मि.मी. के कोनिया लोहे; ;।दहसम प्तवदद्ध के किनारे मय अर्गल चिटकनी तथा पकड़ पट्टियों के आपूर्ति व लगान।	Fodder Room	1	4	7		28						
		Compound wall	1	8	4		32						
		U/G water Tank	1	2	2		4						
	1	0				Total		64	5.95	sqm	149	1417	887.678	8424.92
24	नए कार्य पर सफेदी का कार्य		1	4350.75			4350.75	404.18	sqm.	7.90	9.50	3193.06	3839.75	
25	नये कार्य पर इनामिल पेन्ट का लेप करना		2	112			224	20.81	sqm.	32.20	73.00	670.069	1519.1	
26	वर्षाती नाले के लिए 100 मि.मी. एस्वेस्टस सीमेंट के पाईप मय पकड पट्टी तथा जोडने मे सीमेंट मसाला 1:2 का भरना।	Water Harwesting	1	30			30						
							0							
							30	9.144	mts	22.30	59.00	203.911	539.496	
27	हेण्ड पम्प	U/G Water Tank	1				1	1	Each	0.00	2000.00	0.00	2000.0	
												182708	508260	

		Quantity	Rate	Amount
Skilled labour		255.97	400	102389
Unskilled labour		433.16	135	58476
Mate		3.98	145	577
				161442

राशि			
श्रम		A	182708
सामग्री		B	325553
कुल		C	508260

Add 2% for conti. D=(C*0.02)		10165.2
कुल योग	(C+D)	518426

Say **518426**

क.सं.	सामग्री आवश्यकता		ईकाई	मात्रा	दर	राशि	बजि
1	चूना		कि.ग्रा.	FALSE	2.5	0.00	
2	रेत/बजरी		घ.मी.	55.03	400	22010.07	1944
3	गिट्टी पत्थर की 40 मि.मी. नामीय माप की		घ.मी.	11.1	425	4720.40	392.5
4	गिट्टी पत्थर की 20 मि.मी. नामीय माप की		घ.मी.	4.91	580	2847.24	173.5
5	पत्थर		घ.मी.	124.1	650	80687.60	4386
6	सीमेन्ट		कि.ग्रा.	FALSE	260	0.00	0
7	पत्थर के सिरदल 15 से.मी. मोटाई तक		घ.मी.	3.6	2700	9682.82	126.7
8	पत्थर के रफ ड्रेस्ड़ गरदाना 75 मि.मी. मोटे		व.मी.	0.0	130	0.00	0
9	लोहै के गर्डर		कि.ग्रा.	505.6	48	24268.91	
10	पत्थर की पट्टियां		व.मी.	91.3	350	31943.96	982.4
11	सोलिंग/खंरजा पत्थर		घ.मी.	8.2	425	3506.02	291.5
12	रफ कोटा स्टोन		व.मी.	20.7	170	3517.89	222.8
13	फेक्ट्री में बनी खिडकिया		sqm	4.5	1613	7191.35	157.6
14	फेक्ट्री में बने दरवाजे		sqm	5.9	1268	7537.24	1
15	इनेमल पेन्ट		कि.ग्रा.	3.1	170	530.6448	
16	पत्थर की चापे		व.मी.	9.1	130	1188.83	98.44
17	मार्बल चिप्स		कि.ग्रा.	0.0		0	

18	ए. सी. पाइप 100 मि. मी व्यास			प्रति मीटर	9.1	22	201.168	30
							199834.1	
	पानी						125718.5	
	अन्य						10165.21	
				कुल योग			335717.9	

MODEL ESTIMATE FOR ANIMAL HEALTH CAMP

In western Rajasthan due to lack of rainfall the climate is very drastic. Due to wich the live stock of western Rajasthan face many problems related to their feed & to maintain their body immunity against climate. Due to wich they ca n face many tipes of disease due to unfaverable climate condition and mostly by the owner who can use the animals till the animal can gave milk after that he can not take care of the animals. Due this many type type of diseases like parasitic diseases it may be inner or outer, milk fever, Mtitis, Manage, tympany, Diahorria, fever, Infertility, Pyrometra, Indigestion, FMD, Hs, BQ, ETV, etc. are many types of diseases wich the animal can generally face due to wich owner can face double loss first loss of money on treatment & on effect on animal production. For this in IWMP scheeme the animal health camp can be organised in the villages which can comes under this scheme. For this one or two camps at Rs. 15,000/- each is organized. Before this first the information of the camp date can be informed to the villagers by various means like posters, banner, ghosthi & various other means. After than camp can be organised in wich free medicine can be distributed.

Besids that for the seasonal diseases & many other diseases wich can be controlled through vaccination the vaccination camp can also be organized in which vaccine for various controlled diseases like FMD,HD & BQ, ETV, Sheep pox, PPR etc. animals can be vaccinated yearly or half yearly.

Per camp cost :-	Madicine	=	21500.00
	Rent of Jeep (for two days)	=	1500.00
	Govt. Doctor or Staff	=	1000.00
		Total =	24000.00

- General Madicine:-
  - Antibiotic :- - inj. - OTC - 100 ml.
    - inj. - Enrocin - 100 ml.
  - Ointment :- - ont. - Loroxine - 100 gm.
    - ont. - Vetmox - 50 gm.
  - Cottons :- 100 gm.

Instruments :-

- Catha tor
- Trokar Canvla
- Forseps
- Teat Syphin

- Bandage :- 6"
- Syringe :- 50 ml.
- Needle :- 16"
- Mineral Mixture :- pow. = Calfos Ao3 = 1 Kg.
- Vitamin :- inj. = Vitasef

- Primary Treatment
  - P.P :- 100 gm. (5)
  - Mag sulph :- 101 gm. (20)
  - Soda by Carb :- 102 gm. (20)
  - T.T. Oil :- 100 ml (3)
  - Liq :- Notaodom (3)
  - Bolus :- Feedone/Rumtrion

- Milk Fever :- inj. - omifex - 450 ml.
  CBG - 1000 ml
- Mastitis :- Tub. - Penclastin & H - Z gm
- Mange :- inj. - avil 100 ml.
  inj. - Dexona/ 100 ml.
- Tympany :- Liq. - Afanil - 100 ml.
  Bolus - Boost nix
  Bolus - Ruwi nox
- Dishorria :- Bolus - Botrim
  Bolus - SDM
  inj. - Bi0tin 3

- Fever :- inj. - proxyvet mp.
  inj. - Oxy
  Tab. - Proxyvet mp.
- Inferility :- inj. -Lutalysis - 10 ml.
  Tab. -Cocuplus
  Bolus - Cyclomin
- Pyometra/metritis :- Surp. - Luracin - 60 ml.
  Liq. - Betadine 100 ml.
  Bolus - Furia/ Urimine/ Liton
- Indiestion :- Pow. - Soda by carb.- 100 gm.
  Pow. - Mag. Sulph - 100 gm.
  inj. - B complex (Belayle) 100 ml.
  inj. - Oxy. 100 ml.
- Deworning :- Pow.-Albedazole-30 g
  Liq.-Suprazole-1000 ml
  inj.-mect/Ivemaction-100 ml
  Bolus -Albemor 1.5 g
  Pow.- Neilverm(Sheep & Goat)
- Vaccination :-
  - **Sheep pox** = .50p/dose
  - **PPR** = 1 Rs./dose
  - **HS** = 1 Rs./dose
  - **BQ** = 1 Rs./dose
  - **FMD** = 12 Rs./dose
  - **ETV** = .50 p/dose

Model Estimate of Tool Kit

Household Production System (for Marginal farmer and Land iess labour)

Service sector- Tool Kit Specification Trade wise Detail of tools requirement in one set

1. One set of carpentry tools COST Rs. 4000/= per Kit

S.No.	Name of tools	Specfication	Quantity
1	Hand saw	Size 15"	1 No.
2	Hand saw	Size 12"	1 No.
3	Screw driver	Size 8" x 25 mm	1 No.
4	Combination pliers	Size 8" Make - Taparia	1 No.
5	Charsi with handle	Size 25 mm	1 No.
6	Charsi with handle	Size 18 mm	1 No.
7	Charsi with handle	Size 10 mm	1 No.
8	Wooden Randda	Big - Made of Sagwan	1 No.
9	Wooden Randda	Small - Made of Sagwan	1 No.
10	File half round	Make JK	1 No.
11	File regular	Make JK	1 No.
12	Tee bar carpenter frame(sikanja) for wooden	Size 4' x 2"	1 No.
13	Stone silly	size 6" - ISI Mark	1 No.
14	Basola with handle	Weight 800 gram	1 No.
15	Ball peen hammer	Weight 300 gram -Make Ambica	1 No.
16	Cross peen hammer	Weight 500 gram -Make Ambica	1 No.
17	Measurement tape	Size 10 feet- Make freeman	1 No.
18	Pincer	Size 200 mm	1 No.
19	Girmt	Size 1/2"	1 No.
20	Tri Square	Size 8"	1 No.
21	Hand operated drill	Size 1/4"	1 No.
22	Steel box for Tools	Size (22" x 11")- G.I. sheet	1 No.

2. One set of Mason tools COST Rs. 2000/= per Kit

S.No.	Name of tools	Specfication	Quantity
1	Karni	Size - Big	1 No.
2	Karni	Size - small	1 No.
3	Mashtar wooden	Size 36" Made of Sagwan	1 No.
4	Mashtar wooden	Size 24" Made of Sagwan	1 No.
5	Mashtar wooden	Size 15" Made of Sagwan	1 No.
6	Gurmala		1 No.
7	Soot		1 No.
8	Sabble	Heavy iron	1 No.
9	L shape measurement (Gunia)		1 No.
10	Level pipe (25 Foot)	5 mm	1 No.
11	Chiesal	Size 6" , 8" Make - Taparia	1 No.
12	Ball pine hammer	Weight 500 gm Make - Ambica	1 No.
13	Cross pine hammer	Weight 300 gm Make - Ambica	1 No.
14	Aluminium rib	Size 60" x 4" x 1.5"	1 No.
15	Measurement Tape	Size 10 feet Make freemans	1 No.
16	Canvas bag for above tools	Made of Heavy canvas	1 No.

3. One set of Pottery tools

COST Rs. 12000/= per Kit

S.No.	Name of tools	Specfication	Quantity
1	Clay lump beating hammer	MS pat. Size - D100 - 120mm X T5-6 mm with iron pipe handle	1 No.
2	Wooden hammer (Thapa)	Sheesam Woodv . Size - D6-7" X T1.25".handle-L6"	1 No.
3	Tasla	MS sheet. Size - 15", SWG-20	1 No.
4	Spade (Phawda)	MS sheet. Size - L 10"x w10", SWG-20.fitted with wooden Handle	1 No.
5	Kamdai	Wooden Size - 2"x1-1.25" approx. Arch shap	1 No.
6	Pindi Cement	Varius Size	3 No.
7	Decoration tools	MS (Banki, Sua, Piyali, Patti)	8 No.
8	Decoration Wheel	Size-H 16" x D 12-15". Tripod Structure. Fittedv withb double Ball Bearing.Iron sheet 5mm	1 No.
9	Manual Potter Wheel	Outer Dia-inner Plate size- D 300mm x T-20mm. T-WT-17 Kg minimum(Cast iron body). Tripod Casted iron Structure with Ball bearing . 2 nos. of outer rings made of T or steal of 12mm Dia. Cross Wooden Support Structure	1 No.

4. One set of Footwear (Mojari) tools COST Rs. 12000/= per Kit

S.No.	Name of tools	Specfication	Quantity
1	Ball pine hammer	Drop forged steel ,Induction hardened, Seasoned wood handle,WT-300 gms with wood handle, Nilon hammer(L 240mm, head size L80xD300mm)	1 No.
2	Wooden Block	Size- 18"x W4"xT4"	1 No.
3	Pincer	Size- 8"	1 No.
4	Scissors	Size- 9", Steel Body, Brass Handle	1 No.
5	Bodam/Shoeanvil	Graded CI with 3 phases,WT-4 kg. approx	1 No.
6	Cutting Blade Set (Ramp)	Steel with Wooden Handle, Size-L 150x W 30x T 6mm	1 set
7	Stitching Awl	Steel with Sheesam Wood Handle.	1 No.
8	Sharpening Stone	Size 150x50x25mm,109 no.	1 No.
9	Shoe measuring Tape	Size-2' fibre/good quality plastic material	1 No.
10	Lock Punch Set	Steel	1 No.
11	Bye let setting tool	Steel	1 No.
12	Round whole punch set	Steel, Size- L 100 Range-1 to 10	1 set (10 pcs.)
13	Design punch set	En-9 steel, Size- L100	1 set (3 pcs.)
14	Zig zag Steel Scissors	Steel, Size- 81/2". Grooves on cutting edge.	1 No.
15	Pattern cutting Knife	Steel, Size-6"	1 No.
16	PP Block	Size-L 6"x W 6" T 20mm	1 No.
17	Steel Scale	Size - 12" and 24".	1 No.
18	Leather Scraping Brush	Size-8" with wooden Handle	1 No.
19	Adhesive Brush	Size-10 mm,12mm, 25mm.	1 No.
20	Spring Driver	Steel -Size 9"	1 No.
21	Sant	Steel - H 6" WT-1 kg.	1 No.
22	Sizzeore Passing	Steel -Size 8"	1 No.
23	Thread cutter	Steel with plastic Handle, Size-L 100 mm.	1 No.
24	Number sety	Steel	1 set (10 pcs.)
25	Capsol Punch	Size (8-10-12-16)	1 set
26	Brush	Size-10 mm,12mm, 25mm.	1 No.
	Machine Tools		
27	HD Flat Bad Swing Machine	31 K. Branded Company	1 No.

5.One set of Blacksmith Tools COST Rs. 6000/= per Kit

S.No.	Name of tools	Specfication	Quantity
1	Big Hammer	Ghon-5 kg	1 No.
2	Hammer	Ghon-1 kg	1 No.
3	Hammer	Ghon- 1/2 kg	1 No.
4	Anvil - chouka	Ghon-10 kg	1 No.
5	Chisrl-3Nos	Ghon-1 kg, 500 kg.,750 kg.	1 No.
6	Measurement Tape	3 MTR	1 No.
7	Triangle	6"	1 No.
8	plie Taparia	8"	1 No.
9	Screw driver Taparia	10"	1 No.
10	Tin	10"	1 No.
11	Hand operated electric hand drill	–	1 No.
12	Sansasi-flat and round	–	1 No.
13	Table Vice	–	1 No.
14	Haksa Frame Poland type	–	1 No.

5.One set of Blacksmith Tools COST Rs. 6000/= per Kit

S.No.	Name of tools	Specfication	Quantity
1	Hammer	500 gm	1 No.
2	Hammer	1 kg	1 No.
3	Plies Taparia	8"	1 No.
4	Screw driver Taparia	6"-8"-12"	1 No.
5	Pincer - 6"	6"	1 No.
6	Nose plier-6"	6"	1 No.
7	Alignment equipment cycle wheel		1 No.
8	Anivil-Chowka	5 kg.	1 No.
9	Screw wrench	10"	1 No.
10	Hexa Frame poloud type		1 No.
11	Spanner Set fix type 8 pcs	8 pcs	1 No.
12	Electric hand drill machine		1 No.
13	Hand Skipper	10"	1 No.
14	Solution		
15	Water Pump Plier		1 No.
16	Punch	6"	1 No.
17	Hand Scissors	8"	1 No.
18	Oil cane	250 gm	1 No.

CHAPTER - VIII Enclosures -

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

b.Cherai IWMP Project (Watershed Boundary demarcation in cadastral & Topo Sheet)

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

d.Treatment map (Indicate proposed works)

e.Cadastral Map on watershed boundary

f.Land Use Land Cover map

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

h.High resolution, latest Remote Sensing Satellite data

8.2 **Documents of Agreements:**

Proceedings of gram sabha for EPA approval

Proceedings of gram sabha Resolution for committee constitution

Proceedings of gram sabha for DPR approval

DPR approval by district

.

GEOREFERENCED KHASRA MAP

VILLAGE- ARJUNDEV NAGAR, WATERSHED - CHERAI (IWMP)

PANCHAYAT SAMITI - OSIAN

DISTRICT- JODHPUR

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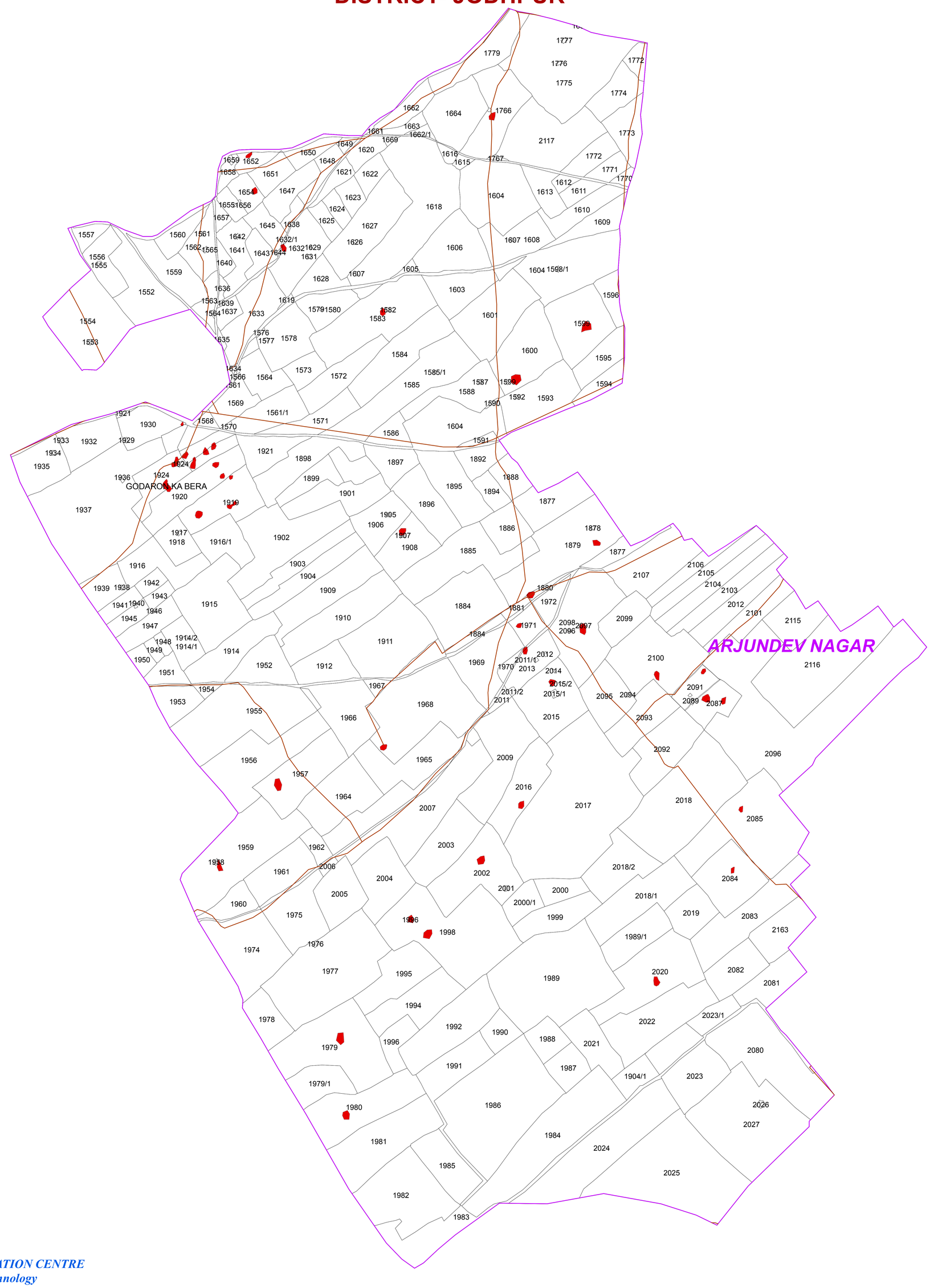

Legend

- ROAD
- VILLAGE
- KHASRA BOUNDARY
- RIVER/ WATERBODY
- SETTLEMENT
- WATERSHED OUTER

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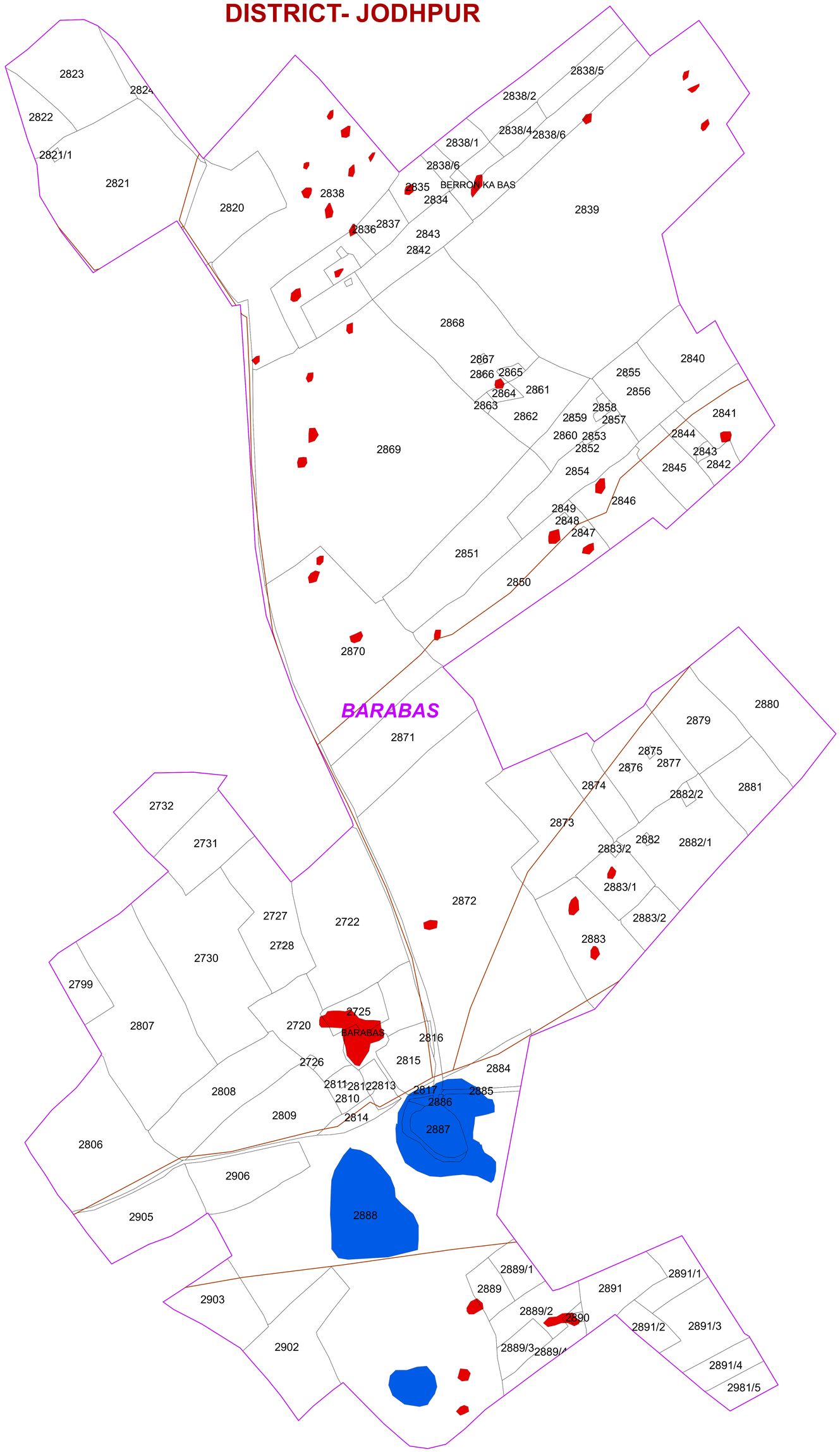
Department of Science & Technology
JODHPUR

GEOREFERENCED KHASRA MAP

VILLAGE- BARABAS, WATERSHED - CHERAI (IWMP)

PANCHAYAT SAMITI - OSIAN

DISTRICT- JODHPUR



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Department of Science & Technology
JODHPUR

GEOREFERENCED KHASRA MAP

WATERSHED - CHERAI (IWMP)

PANCHAYAT SAMITI - OSIAN

DISTRICT- JODHPUR

N

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1:12,000

BERRON KA BAS

BARABAS

CHIRAI

CHERAI

ARJUNDEV NAGAR

MAHADEV NAGAR

DAUKION KA BAS

GODARON KA BERA

RATANIYON

Legend

- ROAD
- VILLAGE
- KHASRA BOUNDARY
- RIVER/ WATERBODY
- SETTLEMENT
- WATERSHED OUTER

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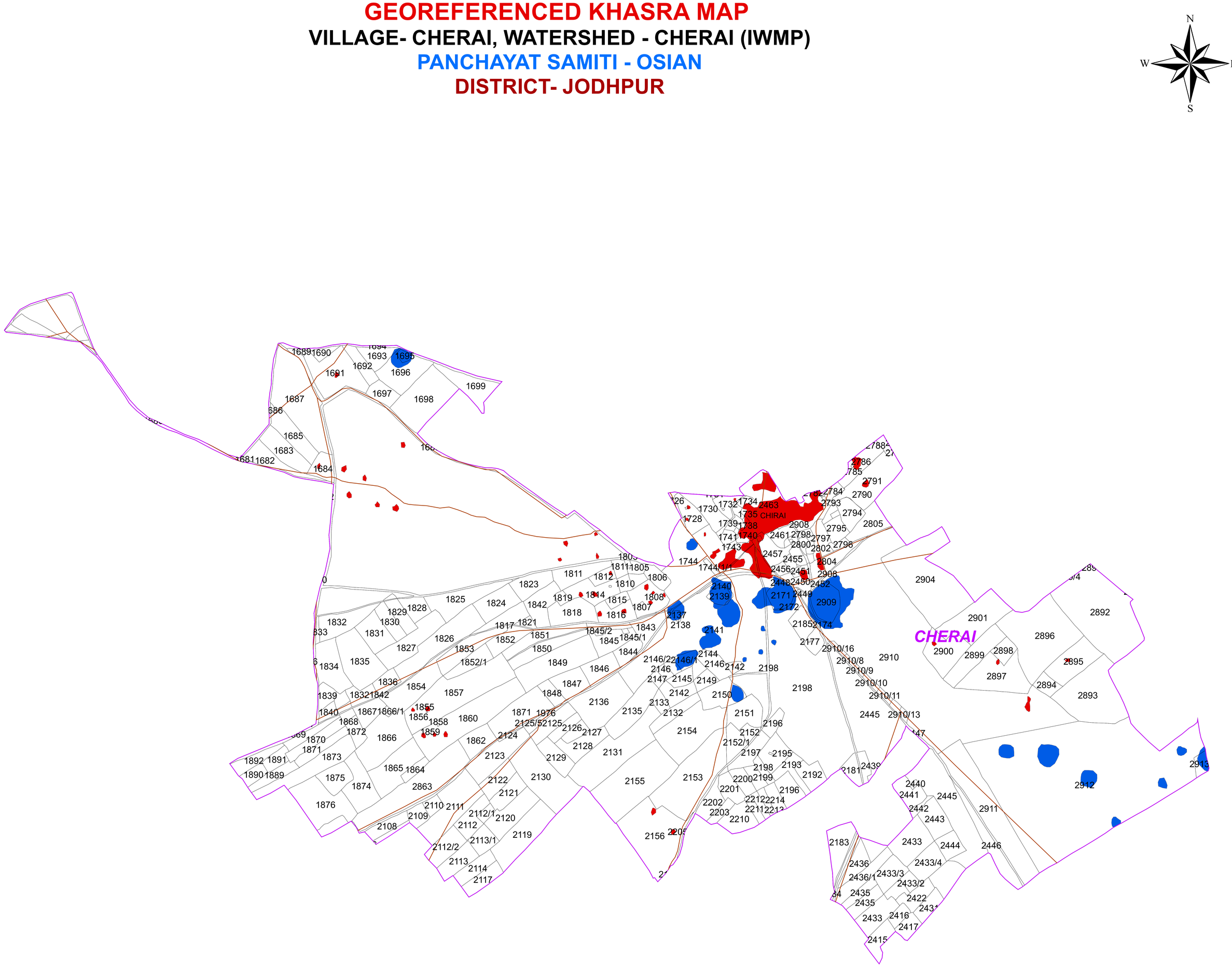
JODHPUR

GEOREFERENCED KHASRA MAP

VILLAGE- CHERAI, WATERSHED - CHERAI (IWMP)

PANCHAYAT SAMITI - OSIAN

DISTRICT- JODHPUR



Legend

- ROAD
- VILLAGE
- KHASRA BOUNDARY
- RIVER/ WATERBODY
- SETTLEMENT
- WATERSHED OUTER

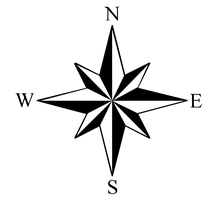
STATE REMOTE SENSING APPLICATION CENTRE
Department of Science & Technology
JODHPUR

GEOREFERENCED KHASRA MAP

VILLAGE- DAUKION KA BAS, WATERSHED - CHERAI (IWMP)

PANCHAYAT SAMITI - OSIAN

DISTRICT- JODHPUR



DAUKION KA BAS

RATANIYON KI

Legend

- ROAD
- VILLAGE
- KHASRA BOUNDARY
- RIVER/ WATERBODY
- SETTLEMENT
- WATERSHED OUTER

STATE REMOTE SENSING APPLICATION CENTRE
Department of Science & Technology
JODHPUR

LAND USE LAND COVER MAP

WATERSHED - CHERAI (IWMP)

PANCHAYAT SAMITI - OSAIN

DISTRICT- JODHPUR

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BERRON KA BAS

BARABAS

BARABAS

CHIRAI

CHERAI

GODARON KA BERA

ARJUNDEV NAGAR

MAHADEV NAGAR

DAUKION KA BAS

RATANIYON

Legend

- ROAD
- VILLAGE
- KHASRA BOUNDARY
- SETTLEMENT
- AGRICULTURE
- LAND WITH SCRUB
- LAND WITHOUT SCRUB
- SANDY DESERTIC
- SETTLEMENT
- WATERBODY

STATE REMOTE SENSING APPLICATION CENTRE
Department of Science & Technology
JODHPUR

LAND USE LAND COVER MAP

WATERSHED - CHERAI (IWMP)

PANCHAYAT SAMITI - OSAIN

DISTRICT- JODHPUR

N

W E

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1:12,000

BERRON KA BAS

BARABAS

BARABAS

CHIRAI

CHERAI

GODARON KA BERA

ARJUNDEV NAGAR

MAHADEV NAGAR

DAUKION KA BAS

RATANIYON

Legend

ROAD	LAND WITH SCRUB
VILLAGE	LAND WITHOUT SCRUB
KHASRA BOUNDARY	SANDY DESERTIC
SETTLEMENT	SETTLEMENT
AGRICULTURE	WATERBODY

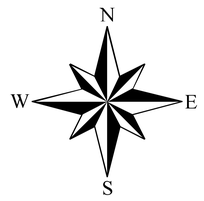
STATE REMOTE SENSING APPLICATION CENTRE
Department of Science & Technology
JODHPUR

GEOREFERENCED KHASRA MAP

VILLAGE- MAHADEV NAGAR, WATERSHED - CHERAI (IWMP)

PANCHAYAT SAMITI - OSIAN

DISTRICT- JODHPUR



MAHADEV NAGAR

Legend

- ROAD
- VILLAGE
- KHASRA BOUNDARY
- RIVER/ WATERBODY
- SETTLEMENT
- WATERSHED OUTER

STATE REMOTE SENSING APPLICATION CENTRE
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CARTOSAT-1 (LISS- III MERGE) SATELLITE IMAGE

WATERSHED - CHERAI (IWMP)

PANCHAYAT SAMITI - OSAIN

DISTRICT- JODHPUR

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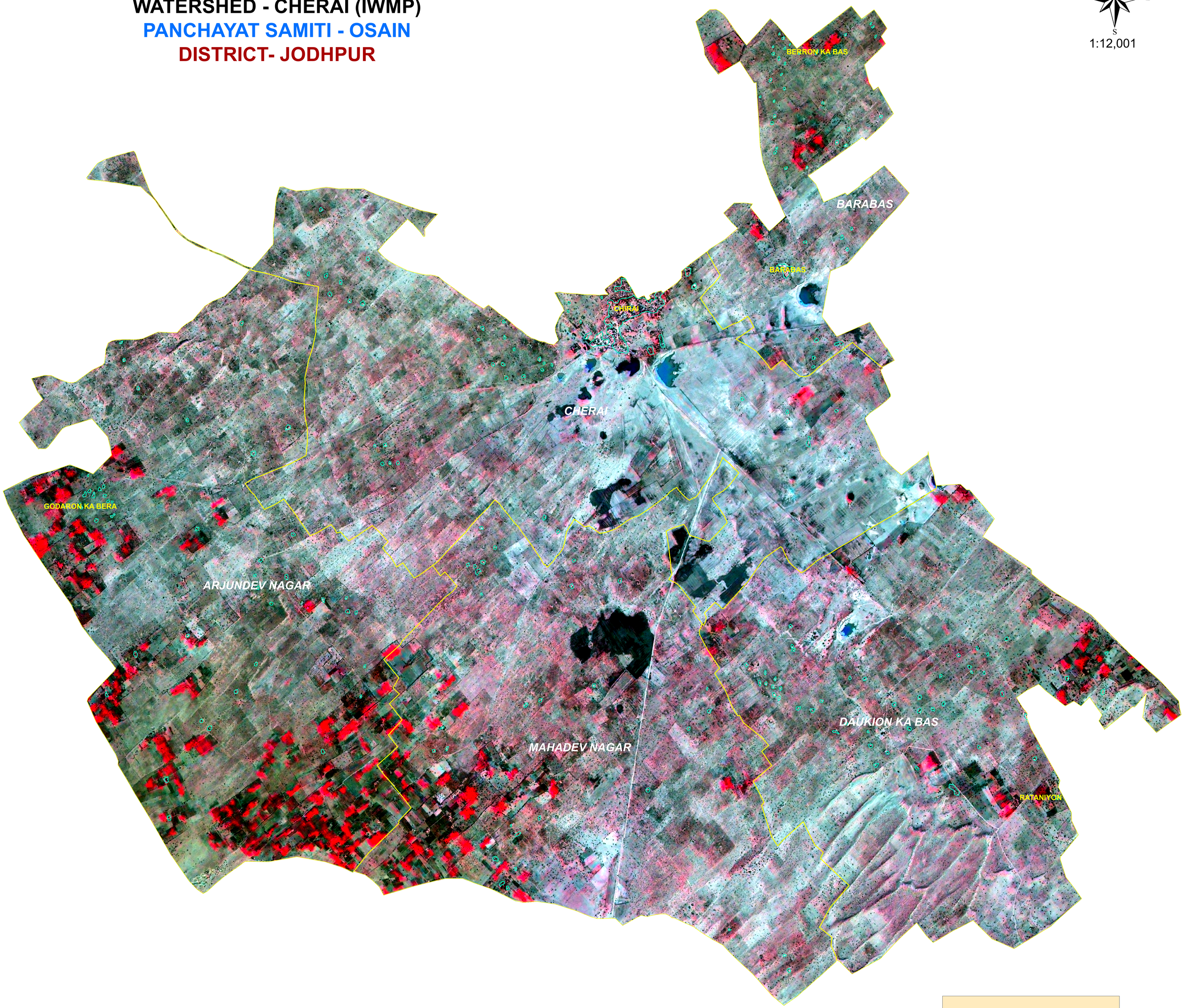

Legend

- SETTLEMENT
- VILLAGE

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