

DETAILED PROJECT REPORT

OF

JODHPUR-XIV (IWMP)

(UNDER INTEGRATED WATERSHED MANAGEMENT PROGRAMME)

BLOCK: OSIAN DISTRICT : JODHPUR

AGRO CLIMATIC ZONE- 1A

TOTAL GEOGRAPHICAL AREA – 3780 Hac.

TOTAL EFFECTIVE AREA- 3061 Hac.

TOTAL COST- 576.13 Lacs.

COST FROM PROJECT FUND- 459.15Lacs

COST FROM CONVERGENCE FUND- 116.98Lacs



SUBMITTED BY

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JODHPUR, (RAJASTHAN)

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• **CHAPTER – I INTRODUCTION**

Location.

JALU-GAGADI (JODHPUR XIV) Project is located in **OSIAN** Block, of **JODHPUR** district. The project area is between the latitudes **26⁰30 TO 27⁰35'N** & longitudes **72⁰43' TO 72⁰49' E**. It is at a distance of **45** km from its Block head quarters and **60** Kms from the district head quarters. There are 4 no. of habitations in the Project area and other details are given below.

General features of watershed

S.No.	Name of Project(as per GOI)	Jelu-Gagadi (Jodhpur XIV)
(a)	Name of Catchment	37/1-5, 38/1-3, 39/1-8
(b)	Name of watershed area(local name)	Jelu – Gagadi
©	Project Area	3780 Ha
(d)	Net treatable Area	3061
e)	Cost of Project	459.15 Lac
f)	Cost/hectare	15000
g)	Year of Sanction	2009-10
h)	Watershed Code	37/1-5, 38/1-3, 39/1-8
i)	No. of Gram Panchayats in project area	1 (Jelu-Gagadi)
j)	No. of villages in project area	2
k)	Type of Project	Desert/other
l)	Elevation (metres)	
m)	Major streams	3, Near Sujan Nath Than, Khaklai Nala, Bijariya
n)	Slope range (%)	0 to 5%

Macro/micro	Name of Gram Panchayat	Name of Villages Covered	Census code of villages	Area in Ha.total(efft.)
38/1, 2, 3,39/1 to 8	Jelu Gagadi	Jelu	1940300	2006
37/1, 2, 3,4,5		Bijariya Bawadi	1940200	1055
Total				3061

The watershed falls in Agroclimatic Zone IA.The soil texture is **Shallow/Gravelly** The average rainfall is **225.95** 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, Mustard, Ground Nut, Gowar, Jeera, Lahsun, Caster** **41.77** % land is under cultivation **5.59**% land fallow, **44.89** land is wasteland. **11.64**% land is irrigated through **Deep tube well of 29** No of

households are BPL(3.74% households) 2 are landless households(0.35% households) and 530 household are small and marginal farmers(94.30% household) .Average land holding in the area is 3.38 ha. 30.13% (1139 Ha.) area is single cropped area and 11.64% is double cropped. The main source of irrigation is **Deep tube well** The average annual rainfall (5 years) in the area is 296.25 mm. The Major streams in the Watershed are **Near Sujan Nath Than, Khaklai Nala, Bijariya.** The major festivals in the village are **Holy, Deepawali, & Rakshabandhan.** At present this village is having **2340 + 1678 = 4018** population with Communities like **Jat, Rajput, Meghwal, Brahaman and Bheel, Harijan, Mali, Kumhar, Suthar.**

Climatic and Hydrological information

1	Average Annual Rainfall (mm)		
	Year	Average Annual Rainfall(mm)	
1	2001	324	
2	2002	94	
3	2003	483	
4	2004	192	
5	2005	260	
6	2006	209.5	
7	2007	200	
8	2008	267	
9	2009	139	
10	2010	435	
2	Average Monthly rainfall (last ten years)		
	Month	Rainfall(mm)	
i)	June	35.42	
ii)	July	101.22	
iii)	August	92.22	
iv)	September	29.39	
3	Maximum rainfall intensity (mm)		
	Duration	rainfall intensity(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		15	
	ii) Winter		3.8	
	iii) Rainy		8.8	
6	Total PET =		27.6	
	iii) Time of return of maximum flood	5 years	10 years	In-Year
	iv) Periodicity of Drought in village area	3 times in 5 year	7 times in 10 year	Alternate year

Other Development Schemes in the project area

S.No	Scheme	Name of the department	Key interventions under the Scheme	Targeted Beneficiaries	Provisions under the Scheme
1	IAY	Panchaytira j & Rural development	Avas	BPL	Construction of Avas
2	MGNREG A	Panchaytira j & Rural development	Providing employment – All section		Basic Infrastructure Developers
3	SFC	Panchaytira j & Rural development	Providing employment village level community work	Village Level	Community work
4	TFC	Panchaytira j & Rural development	Providing employment village level community work	Village Level	Community work
5	SGSY	Panchaytira j & 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	2			
(ii)	No. of villages provided with electricity	2			
(iii)	No. of households without access to drinking water	-NIL-			
(iv)	No. of educational institutions :	(P)	(S)	(HS)	(VI)
	Primary(P)/ Secondary(S)/ Higher Secondary(HS)/ vocational institution(VI)	4	1	-	-
(v)	No. of villages with access to Primary Health Centre	1 (Gagadi)			
(vi)	No. of villages with access to Veterinary Dispensary	1 – (Tinwari)			
(vii)	No. of villages with access to Post Office	1 – (Tinwari)			
(viii)	No. of villages with access to Banks	1(SBI Gagadi)			
(ix)	No. of villages with access to Markets/ mandis	Jodhpur			
(x)	No. of villages with access to Agro-industries	Jodhpur			
(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))	-	-	-	-
(xiii)	No. of villages with access to Anganwadi Centre	2			
(xiv)	Any other facilities with no. of villages (please specify)	-			
(xv)	Nearest KVK	Jodhpur (Mandore)			
(xvi)	cooperative society	1			
(xvii)	NGOs	Gravis			
(xviii)	Credit institutions				
	(i) Bank	SBI-Gagadi			
	(ii) Cooperative Society	GSS-Gagadi			
(xix)	Agro Service Centre's	GSS-Gagadi			

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

SLNA Details

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

DWDU:

1	2	3
S.No	Particulars	Details of DWDU
1.	PM ,DWDU	X. 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

PIA particulars

1	2	3
S.No	Particulars	Details of PIA
1.	Name of PIA	Praveen Kumar Jain (A. En.)
2.	Designation	A.En.
3.	Address with contact no., website	-
4.	Telephone	9928882445
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	Qualification	Experience in watershed(Yrs)	Description of professional training	Role/ Function
1	Shiv Kumar Choudhary	M	38	B.E. Agri.	NIL	Agricultural Engineering	Engineering Work
2	Kishanlal Choudhary	M	24	Vetenary Dep. Science	NIL	Vetenary Dept.	Vetenary work
3	Archana Mathur	F	28	B.A. Sociology	NIL	Social Scientist	Social Work
4	Vacant					Ag.Science	

Details of Watershed Committees (WC)

S.N .	Name of WCs	Date of Gram Sabha for WC	Date of Registration as a Society (dd/mm/yyyy)	Designation	Name	M/F	SC/ST/OBC/General	Landless/MF/SF/BF	Name of UG/SHG	Educational qualification
1	Jelu-	7/6/2010		President	Ugamo W/o Mishri Lal Meghwal	F	SC	SF	UG	Lit.
2	Gagadi			Secretary	Moolaram S/o Bhuraram	M	OBC	-	UG	B.A.
3	(Jodhp			Member	Guman Singh S/o Mesu Singh	M	GEN.	MF	UG	V
4	ur XIV)			Member	Kanwarlal S/o Dharma Ram	M	OBC	MF	UG	B.A.
5				Member	Kishna Ram S/o Gunesha Ram	M	SC	MF	UG	XII
6				Member	Deep Singh S/o Bhur Singh	M	GEN.	MF	UG	V
7			359/	Member	Dhapu W/o Hamira Ram Bheel	F	ST	-	UG	Illiterate
8			06.01.11	Member	Ummed Singh S/o Kishor Singh	M	GEN.	MF	UG	Literate
9				Member	Kadar Khan S/o Abdu Khan	M	OBC	SF	UG	Literate
10				Member	Mohani S/o Choatham	F	OBC	MF	UG	Literate
11				Member	Bhawara Ram S/o Rajuram	M	OBC	LF	UG	V
12				Member	Bhagwana Ram S/o Ghamandaram	M	OBC	MF	UG	X
13				Member	Sagu Devi W/o Mangi Lal SHG	F	OBC	MF	SHG	Illiterate
14				Dept.	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. **106** ha land is arable wasteland and **210** ha is fallow can be brought under cultivation.

440 ha is only irrigated and with efforts this can be increased to **650**. The productivity gap of major crops in the area as compared with district and with areas in the same agro climatic zones indicate potential to increase the productivity. The demonstration of improved package of practices, improved varieties, increased irrigation facilities and soil conservation measures under the project can bridge this gap. Due to small land holdings in the area focus of the project would be on diversification in agriculture (horticulture, vegetables, green houses, Agro forestry, fodder crops)and diversification in Livelihoods(Agriculture, Animal husbandry, self employment)

30000 Quintal fodder scarcity can be met out through Pasture development .Improved animal Husbandry practices can increase the productivity of livestock. **42** 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.

CHAPTER – II Socio economic Features, Problems and Scope

Table 2.1 Population & Household Details:

Total Population				
Male	Female	Total	SC	ST
2063	1955	4018	547	86

Household Details						
BPL household	L. Less	Small Farmer	M. Farmer	Total household	SC household	ST household
29	2	90	440	562	84	5

Table 2.2 Development indicators

S. No.	Development Indicators	State	Project Area
1	Per capita income (Rs.)	16260	22000
2	Poverty ratio	0.22	-
3	Literacy (%)	0.604	56%
4	Sex Ratio	921	875
5	infant mortality rate	-	62/1000
6	maternal mortality ratio	-	4/1000

The table indicates poor socio economic conditions.

Table 2.3 Land Use

Land Use	Total area in Ha.				
	Private	-	-	-	Total
Agriculture Land	1895	-	-	-	1895
Temporary fallow	50	-	-	-	-
Permanent Fallow	110	-	-	-	-
Cultivated Rainfed	1139	-	-	-	-
Cultivated irrigated	440	-	-	-	-
Net Sown Area	1579	-	-	-	-
Net Area sown more than once	440	-	-	-	-
Forest Land	-	-	-	-	-
Waste Land	106	-	1591	-	1697
Pastures	-	67	-	-	67
Others	-	-	8	219	227
Total	-	-	-	-	3780

The project area has 106 ha of cultivable wasteland . 210 ha of fallow land (total 316 ha) can be brought under cultivation if some irrigation source can be provided through Construction of WHS like Khadin, Tanka, Farm ponds etc. and also through demonstration of rainfed varieties of crops. Construction of WHS can also increase in area under irrigation which is only 16.64% 440 ha. (42 % of the project area) 3780 is under wastelands and can be brought under vegetative cover, with reasonable effort .Activities like Earthen check dams, Vegetative filter strip,

V-ditches, staggered trenches, WHS (Johad) Afforestation of wastelands and Pasture development will be taken up on these lands

Pasture development the land use table shows that there is 66.85 hectare pasture land (1.76 %) 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	Rainfed				Irrigated				Total	
			Varieties	Area (ha)	Production (Ton)	Productivity (qt./ha)	Varieties	Area (ha)	Production (Ton)	Productivity (qt./ha)	Area (ha)	Production (Ton)
1	Khari f	Bajara	WCC75 RSB2 RJ171	379	227.4	6					376	227.4
		Moonga	K851 RMG 62 SML 668 G-8	18	5.4	3					18	5.4
		Moth	RMO 40 RMO 435	107	32.1	3					107	32.1
		Til	RT 127 RT 125 RT 46	13	3.9	3					13	3.9
		Gowar	RGC 936 RGC 986 RGC 1003 HG 563 M 83	59	23.6	4					59	23.6
		Moongphali	M13 GG 20 GG 10 M 335					301	541.8	18	301	541.8
		Caster	GCH 4 RHC 8 Jyoti Mayco 6					52	20.8	4	52	20.8
		Chilly	NP 46A Mathani a Long Jawar 218					13	15.6	12	13	15.6
		Gajar	Pusa Kesar Nentis Pusa Mandakani (S-5)					15	18.0	12	15	18.0
2	Rabi	Wheat	LOC 1 RJ 3077 HD 2329 RJ 1482					279	502.2	18	279	502.2
		Mustard	Bio 902 RH 819 RN 505 T. 59 (Varuna)					79	94.8	12	79	94.8
		Jeera	RS-1 RZ-19 RZ-209					20	12.0	6	20	12.0

		Lahsoon	Ymuna White G-1, 2 (G-50) Gujrat					74	900.0	55	74	900.0
3	Zaid											
	Total											2365.5

Table 2.4.b Abstract of cropped Area(ha)

Area under Single crop	1455
Area under Double crop	440
Area under Multiple crop	-

****Write for each crop:** The farmers are using R1171 ,RSB2 varieties of Bajra, whereas varieties like RHB90 ,RHB121 can increase the production.

Crop Rotation** will vary from project to project

Bajra	-	Wheat - Jeera
Bajra	-	Fallow
Moong	-	Mustered
Moong	-	Fallow
Fallow	-	Jeera
Fallow	-	Isabgoal
Fallow	-	Lucern
Cluster Bean	-	Fallow
Fallow	-	Tarameera
Til	-	Fallow
Caster	-	Caster
Moth	-	Fallow

The table 2.4a shows that only 440 ha is (11.64%) is double cropped area. Also the crop rotation shows that fallow lands are there. This indicates that there is scope for change in crop rotation in fields where there are fallow lands through Soil and Water conservation measures, crop demonstration and diversification in agriculture.

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

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

Name of the crop	Productivity kg/ha			
	India	Highest Average in Rajasthan	District	Project Area
Bajara	802	655	750	600
Moong	317	159	320	300
Moth	144	122	270	300
Wheat	2619	2762	2150	1800
TIL	310	149	270	260
Gowar	510	525	515	400

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

The reasons for this variation are

- The farmers are using varieties WCC 75 of Bajra R1 171 whereas the recommended varieties like RHB90, RHB121 provide 7 qt./ha yield
- Lack of Availability of good quality seeds of desired crop and variety in adequate quantities and time to the farmers.
- Availability of water for cultivation(11.64% is irrigated table 2.4a)

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

Activity	Area	Species	Varieties	Recommended varieties	Production
Horticulture	NIL				
Vegetables	Nil	-NIL-			
Floriculture	Nil				
Medicinal Plants	Nil				

Table 2.6 Land holding Pattern in project area

Type of Farmer	Total Households	Land holding (ha) irrigation source wise			Land holding (ha) Social group wise				
		Irrigated (source)	Rainfed	Total	General	SC	ST	OBC	BPL
(i) Large farmer	30	112	326.98	438.98	59.89	8.53	28.81	341.69	15.03
(ii) Small farmer	90	180	496.51	676.51	128.46	71.94		476.11	14.89
(iii) Marginal farmer	440	148	631.61	779.61	246.86	109.67		423.08	32.88
(iv) Landless person	2	-	-	-	-	-	-	-	-
(V) No. of BPL households		-	-	-	-	-	-	-	-
Total	562	440	1455	1895	435.21	190.14	26.81	1240.8	62.80

1215.61 ha land holdings belong to small and marginal farmers who own 76.98% of total cultivated area. 1579 Horticulture/vegetables could be more economical to Small and marginal farmers with irrigation source. For large farmers with no irrigation facility Horticulture/vegetables will be promoted in a part of land with farm pond/Tanka construction.

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

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

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

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

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

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 vegetables seedlings and other horticultural crops under controlled atmospheric conditions of green house.

Establishment of nurseries: Most of the planting material is procured from other parts of the State/ country. 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, vegetables, green houses and in nurseries for rational use of irrigation higher yields and quality produce.

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

S.No	Description of animals	Population in No.	Yield(milk/mutton/ Wool)	Equ. cow units	Dry matter requirement per year (7Kg per animal.) qt.	Total requirement in M.T.
1	Cows	538	1856	-	13746	1374.6
	Indigenous	526	1736	-	-	-
	Hybrid	12	120	-	-	-
2	Buffaloes	250	856	-	6388	638.8
3	Goat	3236	2003	population /2	82679	8267.9
4	Sheep	2484	7452	population /2	63466	6346.6
5	Camel	9	-	-	230	2.3
6	Poultry	-	-	NA	-	-
7	Piggery	-	-	NA	-	-
	Total	6805	14023	-	166509	1 6650.9

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

- Castration – Bardigo Castration
- Artificial insemination – HF Tharparkar
- Distribution of superior Breeding bulls for use in Cattle and Buffalo
- Breeding distribution crossbred rams (Chokala, Marwari)

Cattle - Tharparkar, Gir, Ratthi

Buffalo – Murrah,

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

Table 2.8 Existing area under fodder (ha)

S.No	Item	Unit	Area/Quantity
1	Existing Cultivable area under Fodder	Ha	579
2	Production of Green fodder	Tonns/year	8685
3	Production of Dry fodder	Tonns/ Year	4965
4	Area under Pastures	Ha	67
5	Production of fodder	Tonns/year	13650
6	Existing area under Fuel wood	Ha	-
7	Supplementary feed	Kgs/ day	8600
8	Silage Pits	No	120
9	Availability of fodder	Tones	13650
10	Deficiency/excess of fodder	Tones	3000

The table above shows there is fodder deficiency (Requirement is 16650 and availability 13650)

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

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

Table 2.9 Agriculture implements

1	2	3
S. No	Implements	Nos.
1	Tractor	121
2	Sprayers-manual/ power	60
3	Cultivators/Harrows	240
4	Seed drill	35
5	Any Other Trolley	121

Farm mechanization and seed banks: As discussed earlier ----% land holdings belong to small and marginal farmers who own only 13% of total cultivated area so owning of big farm implements by individual farmers is not economical so SHG would be promoted to buy farm implements and rent to farmer

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

Sr. no.	Name of village	Total No .of job cards	Employment Status	Activity taken up so far
1	Jelu	360	330	Road construction
2	Bijaria bawdi	170	150	Civil Works

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)
Jelu	27	9-12	Labour truck driver shop	320	Labour, Truck Driver, Shop,	3.2
Bijaria Bawdi	15	Permanent	Agriculture	320	Agriculture	

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
cultivators	560	28
Dairying	-	-
Poultry	-	-
Piggery	-	-
Landless Agri. Labourers	2	0.56

Table 2.12(b) Major activities (Off Farm)

Name of activity	Households/individuals	Average annual income from the/Lacs
Artisans	-	-
Carpenter	18	3.4
Blacksmith	-	-
Leather Craft	-	-
Porter	-	-
Mason	40	9.6
Others specify (Cycle Repair ,STD,Craft etc)	35	8.4

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	Krishna	10	-	10 x 50 = 500	43500	-	-	-
2	Aip kash	10	-	10 x 50 = 500	12500	-	-	-
3	Jai Gurudev	12	-	12 x 100 =1200	8400	-	-	-
4	Dr. Ambedkar	10	-	10 x 100 = 1000	2000	-	-	-
5	Ma Ambey	10	-	10 x 100 = 1000	5000	-	-	-
6	Ma Jasma	10	-	10 x 100 = 1000	5000	-	-	-
7	Payal	11	-	11 x 20 = 220	8140	-	-	-
8	Devpura	10	-	10 x 20 = 200	14600	-	-	-

The table indicates existence 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 availability(days)
i)	Dug wells	2	-	2	-	-
ii)	Shallow tube wells	-	-	-	-	-
iii)	Pumping sets	-	-	-	-	-
iv)	Deep Tube Wells	57	440ft.	-	440 Ha.	12 Month
	Total	59	-	-	-	-

Table 2.15 Availability of drinking water

S.No	Name of the village	Drinking water requirement Ltrs/day	Present availability of drinking water Ltrs/day	No. of drinking water sources available	No. functional	No. requires repairs	No. defunct
1	Jelu-	260395	230395	6	6	-	-

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. spec)
Wheat	6.6kg/ha/mm	2.5	-
Maize	5.5kg/ha/mm	2.5	-
Vegetable	22.22kg/ha/mm	10.	-

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

Table 2.17 Slope details.

Slope of Watershed		
S.No.	Slope percentage	Area in hectares
1	0 to 3%	2623
2	3 to 5%	1157

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 ha.(cum.) use Stranges table	Total Runoff (cum.)
3780	average	204.33	772393
	Total		772393

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

S.No.	Name	No.	Storage Capacity (cum)	Area irrigated (ha)
i)	Major Irrigation Project	-	-	-
ii)	Medium Irrigation Project	-	-	-
iii)	Form Ponds/Tanks	20	205650	-
iv)	Anicuts	-	-	-
	Total	-	205650	-

Table 2.18 c) Balance available runoff (cum)

Total run off(cum.)	Net tapped Runoff(cum)	Balance Run off	Available for Harvesting (0.75*
1	2	3	4
772393	205650	566743	425057

The water budgeting indicates potential for water harvesting in the area

Table 2.19 Soil details

Soil Profile		
S.No.	Major Soil Classes	Area in hectares
1	Sandy to Loamy sand soils	3780
Soil Depth :		
B	Depth (Cms.)	Area in hectares
1	0.00 to 7.50	
2	7.50 to 45.00	3780
3	> 45.00	

C	Soil fertility Status	Kg/ha	Recommended
	N	0.07 to 0.18%	-
	P	3.5 to 10.8 kg/ha	-
	K	170 to 255 kg./ha.	-
	Micronutrients	PPM	-
			-

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

Table 2.20 Erosion details

Erosion status in project Area					
Cause	Type of erosion	Area affected (ha)	Run off(mm/ year)	Average soil loss (Tonnes/ ha/ year)	
Water erosion					
a	Sheet	2470	250	3425	
b	Rill	970	250	1732	
c	Gully	270	250	1705	
Sub-Total				6862	
Wind erosion		70		95	
Total for project				6957	

The need is:

- To check land degradation
- To reduce excessive biotic pressure by containing the number and increase of livestock
- To check cultivation on sloping lands without adequate precautions of soil and water conservation measures
- To discourage cultivation along susceptible nallah beds
- To check Faulty agriculture techniques
- To check Uncontrolled grazing and developed cattle tracks
- To check Deforestation of steep slopes
- To check erosive velocity of runoff, store Runoff, to arrest silt carried by runoff and to recharge Ground Water structures like Earthen check dams, gully plugs, Bank Stabilisation, Loose stone check Dams, Gabions, Earthen embankment (Nadi) and Anicuts would be taken up.

CHAPTER - III Proposed Development Plan: 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, Group meetings, door to door campaign, slogans and wall writings etc. were carried out in all the habitations of _____jelu gagadi_ Micro Watershed. A series of meetings were conducted with GP members, community and discussed about the implementation of IWMP programme. User groups were also formed.

Grama 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 on which Grama Sabha approved EPA
1	Jelu-Gagadi	7/6/2010

1	4	5	6	7	8	9	10	11
S. No.	Names of village	Amount earmarked for EPA (lakh)	Entry Point Activities planned	Estimated cost	Expenditure incurred	Balance	Expected outcome	Actual outcome
	Jelu		1.Installation of Solar light DGSC item No. 12	3.06	3.06			Villagers are very happy
			2.Drinking water activities	9.17		9.17		
	Binjaria Bawdi		1.Installation of Solar light DGSC item No. 6	1.53	1.53			
			2.Drinking water activities	4.61		4.61		
		18.37		18.37	4.59	13.78		

S.no	Name of the village/Habitation	Date on which PRA conducted
1	Jelu	1/12/2010 to 28/12/2010
2	Bijaria-Bawadi	01/01/2010 to 17/12/2010

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

Transact walk were carried out involving the community for Social mapping, Resource mapping. Detailed discussions and deliberations with all the primary stakeholders were carried out.

Socio-economic survey was carried out during 15/7/2010 to 21/11/2010 (dates) period covering all the households and primary data on demography, Land holdings, Employment 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 database depicting present conditions of land (terrain), water and vegetation with respect to watershed under different ownerships at village level

Various thematic layers provided by SRSAC are :

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

Based on GIS thematic layers, Field visits , PRA and analysis of benchmark data (as discussed in chapter 2) final Treatment plan on revenue map for implementation has been framed. Thus each intervention identified has been marked on revenue map (map enclosednDPR as annexure-----).The GIS based intervention map.

कार्यालय ग्राम पंचायत ओसियां

पंचायत समिति - ओसियां, जिला - जोधपुर

क्रमांक

दिनांक.....18/4/11

ग्राम सभा (दिनांक) 4/4/2011

प्रक. 10 उपरिष्ठित ग्राम बाहियों को I.W.M.P
प्रोजना में विस्तारित प्रयोजना प्रतिकेसु पल ग्रहण
सफिली डी.पी.ए. (पल ग्रहण क्षेत्र नेक्य सेट अप प्रक. 10)
श्री D.P.R पर कट पुनर्निर्माण प्रक. पर
विचार विमर्श कट इलाका डायग्रेसीव शीपा
ज्या इन्फो क्लरिफिकेशन - 210.25 लाख (40.60 + 169.65)
का अनुमोदन शीपा जया

-sd
उपस्थित ग्राम बाह

सत्य प्र

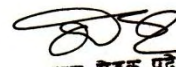
रुक्मिणी

ਕਾਮਲੀਨ ਅਤੇ ਪਿ.ਯੂ.ਸੀ. ਦੇ ਠੇਕੇ

ਸੰਖਿਆ: 15.4.21

ਦਿਨਾ 15.4.21

ਪਿ.ਯੂ.ਸੀ. ਦੇ ਠੇਕੇ - ਠੇਕੇਦਾਰਾਂ ਨੂੰ ਠੇਕੇ ਦਾ ਵੱਧ ਮੁੱਲ ਦਿੱਤਾ ਜਿਸ ਵਿੱਚ
ਪਿਯੋਜਨਾ ਖਰੀਦ (COP) ਦੀ ਵਰਤੋਂ ਨੂੰ ਠੇਕੇਦਾਰਾਂ ਨੂੰ ਦਿੱਤਾ ਜਿਸ ਵਿੱਚ
ਸਰਕਾਰੀ ਮਿਲੀਟਰੀ ਠੇਕੇ 304-32 ਲਾਗੂ ਕੀਤੇ 64.17 ਕੀਲੋਗ੍ਰਾਮ
ਠੇਕੇ ਦੇ ਨਾਲ 240.15 ਪਿਯੋਜਨਾ ਦੇ ਠੇਕੇ ਵਿੱਚ ਦਿੱਤਾ ਜਾਂਦਾ ਹੈ।


ਗਰਾਮ ਸੇਵਕ ਪਦਮ ਸਚਿਵ
ਗਾਮ ਪੰਚਾਇਤ ਠੇਕੇਦਾਰ

कार्यालय पंचायत समिति ओसियां

क्रमांक :- पसओ/जिपजो/11-12/ ५५१

दिनांक :- 28/4/11

प्रेषित :-

मुख्य कार्यकारी अधिकारी

जिला परिषद जोधपुर

विषय :- प्रस्ताव भिजवाने बाबत।

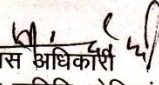
उपरोक्त विषयान्तर्गत निवेदन है कि ग्राम पंचायत जेलू गगाडी, नेवरा रोड़ पंचायत समिति ओसियां की डी.पी.आर. आज दिनांक 28.04.2011 की साधरण सभा के प्रस्ताव सं० 11(1) के द्वारा अनुमोदन कर आवश्यक कार्यवाही हेतु प्रस्तुत है।

(1). नेवरा रोड़ - (जोधपुर xvi)

परियोजना मय आई.डब्ल्यू.एम.पी. -	452.85
नरेगा डवटेल -	127.97
	<u>580.82</u>

(2). जेलू गगाडी -(जोधपुर xiv)

परियोजना मय आई.डब्ल्यू.एम.पी. -	459.15
नरेगा डवटेल -	116.98
	<u>576.13</u>


विकास अधिकारी
पंचायत समिति ओसियां

विकास एवं उत्पादन समिति की विशेष बैठक का कार्यवाही विवरण
जिला परिषद जोधपुर दिनांक 29.04.11

आज दिनांक 29.04.11 को श्री भागीरथ बेनिवाल की अध्यक्षता में उत्पादन समिति जिला परिषद जोधपुर में बैठक का आयोजन किया गया इस बैठक में निम्न लिखित सदस्य एवं अधिकारीगण उपस्थित हुये :-

1. श्री शिवाराम भील, सदस्य
2. श्रीमति भागू देवी विश्‍नोई, सदस्य
3. श्रीमति अणककंवर, सदस्य
4. श्री सुरेश नवल, आर.ए.एस., अति.मु.कार्य.अधिकारी जिला परिषद, जोधपुर।
5. श्री बजवीर सिंह चौधरी, अधिशाषी अभियंता, (भू-संसाधन) एवं पदेन परियोजना प्रबन्धक जिला परिषद, जोधपुर।
6. श्री नरेन्द्र सिंह ए.पी.ओ. (एल.आर.) जिला परिषद, जोधपुर।
7. श्री सुरेश सिंह सिंघल, कृषि अनुसंधान अधिकारी, पावटा, जोधपुर।
8. श्री पीराराम चौधरी, सहायक कृषि अधिकारी, परियोजना प्रबन्धक, जोधपुर।
9. श्री जगदीश चौधरी, कनिष्ठ अभियंता, पंचायत समिति, औसिया।

प्रस्ताव संख्या 1

सर्वप्रथम अध्यक्ष महोदय ने गत बैठक की कार्यवाही विवरण से समस्त सदस्यों को अवगत कराया जिनमें समस्त सदस्यों ने अनुमोदन की अनुशंसा की।

प्रस्ताव संख्या 2

श्री परियोजना प्रबन्धक डी.डब्ल्यू.डी.यू. जोधपुर में अवगत कराया कि आई.डब्ल्यू.एम.पी. के तहत जोधपुर जिले में स्वीकृत 20 परियोजनाओं में से 6 परियोजनाओं की डी.पी.आर. पूर्ण की जाकर उत्पादन समिति जिला परिषद, जोधपुर को अनुशंसा हेतु प्राप्त हुई जिनका विवरण निम्नानुसार है-

क्र. सं.	पंचायत समिति का नाम	परियोजना का नाम	क्षेत्रफल (हेक्टेअर)	आई.डब्ल्यू.एम.पी. लागत (लाखों में)	क-नर-जे-रा लागत (लाखों में)	कुल लागत (लाखों में)
1.	प. रा. गण्डौर	जोधपुर-VI पीथावास	4970	745.50	180.85	926.05
2.	प. रा. शेरगढ़	जोधपुर-XI जाटी भाण्डू सोइन्तरा	8234	948	391.40	1339.04
3.	प. रा. औसिया	जोधपुर-XIV जेतुगगाड़ी	3780	459.15	116.98	576.13
4.	प. रा. औसिया	जोधपुर-XVI नेवरा रोड़	3694	452.85	127.97	580.82
5.	प. रा. नावड़ी	जोधपुर-XV लयेड़ा कला	8489	466.02	131.12	597.32
6.	प. रा. लूणी	जोधपुर-XVIII पीथावास	6000	900	48	948

उपरोक्त परियोजनाओं को बैठक में अध्यक्ष महोदय एवं समस्त सदस्यों ने परियोजनाओं की अनुशंसा की।

प्रस्ताव संख्या 3

परियोजना प्रबन्धक, डी.डब्ल्यू.डी.यू. जोधपुर ने अवगत कराया कि भारत सरकार को वर्ष 11-12 की पंचायत समिति की वरीयता सूची के आधार पर एवं जिले को आवंटित लक्ष्य के अनुसार 20 परियोजनाओं निम्नानुसार राज्य सरकार को भिजवाई गयी है।

पंचायत समिति, बिलाड़ा की लाम्बा, पंचायत समिति बाप की सुरपुरा, अनोप नगर व जाम्बा, पंचायत समिति फलोदी की पीलवा, भोजासर व श्री लक्ष्मण नगर, पंचायत समिति गोपालगढ़ की नाइसर व ख्यारपुरा,

पंचायत समिति लूणी की काकेलाव बिरामी, पंचायत समिति मण्डोर की केरु प. प. पंचायत समिति बालेसर की बेलवा व बावरली, पंचायत समिति शेरगढ़ की सुवालिया चाबा व भोमसागर चाबा औरिया की मौसर, भीकमकौर । एवं मालूंगा बावडी की कजुनउकलां व बिराई।

उक्त परियोजनाओं एवं वरीयता सूची का अध्यक्ष महोदय एवं समस्त सदस्यों ने अनुमोदन की।

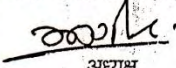
प्रस्ताव संख्या 4

आई.डब्ल्यू.एम.पी. योजना में स्वीकृत जलग्रहण परियोजनाओं में कगेटी गठन के समय सम्बंधित जिला परिषद सदस्य को विशेष रूप से आमंत्रित करने हेतु समस्त सदस्यों ने प्रस्ताव रखा जिसे सर्वसम्मति से पारित किया गया।

प्रस्ताव संख्या 5

आई.डब्ल्यू.एम.पी. योजना में जिले में स्वीकृत जलग्रहण परियोजनाओं में आयोजित की जाने वाली समस्त ग्राम सभा के बारे में समय समय पर जिला परिषद की विकास एवं उत्पादन समिति को आवश्यक रूप से अवगत कराने का प्रस्ताव रखा जिसे सर्वसम्मति से पारित किया गया।

अन्त में अध्यक्ष महोदय ने सधन्यवाद से बैठक समाप्त की।



अध्यक्ष
विकास एवं उत्पादन समिति
जिला परिषद जोधपुर

अतिरिक्त मुख्य कार्यकारी अधिकारी
जिला परिषद जोधपुर

क्रमांक 888 - 900

दिनांक 3.5.2011

- 1- जिला प्रमुख महोदय, जोधपुर।
- 2- सदस्य विकास एवं उत्पादन स्थायी समिति श्री.....
- 3- अति.मुख्य कार्यकारी अधिकारी जिला परिषद जोधपुर।
- 4- उप निदेशक महिला एवं बाल विकास विभाग जोधपुर।
- 5- उप निदेशक सामाजिक न्याय एवं अधिकारिता विभाग जोधपुर।
- 6- उप निदेशक कृषि विभाग जोधपुर।
- 7- परियोजना अधिकारी जल संरक्षण जिला परिषद जोधपुर
- 8- गार्ड फाईल


अतिरिक्त मुख्य कार्यकारी अधिकारी
जिला परिषद जोधपुर

कार्यालय, परियोजना प्रबन्धक, जिला जलग्रहण विकास ब्यूरो, जोधपुर
क्रमांक :- ~~888~~ F() / DWDP / DPR (9-10) 786-805 दिनांक :- 2.6.11

② AEM (PIA - IOWMP) (तमल) फाईल - OSIAM को भेजकर

CHAPTER –III

Proposed Development plan

STATE: **RAJASTHAN**
 DISTRICT: **JODHPUR**
 UNIT COST: **RS. 15000/- Hac.**
 GEOGRAPHICAL AREA: **3780 Hac.**
 EFFECTIVE AREA: **3061Ha.**
 NAME OF THE BLOCK: **Osian**
 (I) ARABLE LAND: **1895 Hac.**
 (II) NON ARABLE LAND: **1885Hac.**

NAME OF WATERSHED: **Jodhpur-XIV (IWMP)**

Cost from
IWMP
project :-
459.15
Lakh

CATEGORY OF WATERSHED: **DESERT AREA**
 TOTAL: **6530.00 Hac.**

Cost from convergence:- 116.98 Total cost 576.13

S.No.	Activity	Unit	Unit cost	Quantity	Total cost	Cost from project	Cost from convergence	Beneficiary contribution
A I	Administration cost	10%		-	45.92	45.92	-	-
II	Monitoring	1%		-	4.59	4.59	-	-
III	Evaluation	1%		-	4.59	4.59	-	-
IV	Preparatory Phase (Entry Point Activity)	4%		-	18.37	18.37	-	-
V	Institution And Capacity Building	5%		-	22.96	22.96	-	-
VI	Preparation of Detailed Project Report (DPR)	1%		-	4.59	4.59	-	-
	Total	22%		-	101.02	101.02	0	-
B	Watershed Development Works (NRM)	60%						
I	<u>Arable Land Conservation Measures</u>							
1	Earthen Bund	No.	0.09/0.10	1320	121.00	99.00	22	-
2	Gully Control Structure (Loose Stone Chack Dam)	No.	0.2	40	8.00	8.00	-	-
3	Water Harvesting Tanka	No.	0.76/0.85	189	152.55	68.40	84.15	-
4	Wasteweir	No.	0.5	40	20.00	20.00	-	-
	Total			-	301.55	195.40	106.15	-
II	<u>Non Arable Land Conservation Measures</u>							

1	Ditch Cum Bund /Barbed wire Fencing	Mt.		3500	4.97	4.97	-	-
2	Contour Furrow in Pasture Land	Hac.	0.09	35	3.15	3.15	-	-
3	Contour Furrow in Non Arable Land	Hac.	0.09	105	9.45	9.45	-	-
4	Earthen Bund	No.	0.1	51	5.10	5.10	-	-
5	Gully Control Structure L.S.C.D)	No	0.10/0.20	50	7.50	7.50	-	-
6	Waste weir	No	0.76	6	4.56	4.56	-	-
	Total			-	34.73	25.28	9.45	-
III	<u>Drainage Line Treatment</u>							
(1)	Dug-out /shunken pond	No.	2.00	5	10.00	10.00	-	-
(2)	L.S.C.D	No.	0.10/0.20	152	22.80	22.80	-	-
(3)	MMS (i)	No.	2.00	5	10	10.00	0	-
	(ii)	No.	4.00	3	12	12.00	-	-
	Total				54.80	54.80	-	-
	Total Watershed Development Works	-			391.08	275.48	115.6	-
C	Production System and Micro Enterprises							
I	Arable Land Production System	15%						
(1)	Crop/Fodder Demonstration			1124	13.15	13.15	-	-
(2)	Agro Forestry	No.		10000	1.90	1.90	-	-
(3)	Dry land Horticulture(Unit)	No.		115	7.70	7.70	-	-
(4)	Homestead Kitchen Garden	No.		150	0.45	0.45	-	-
(5)	Organic Farming						-	-
	i Compost Pit	No.	0.018	150	2.70	2.70	-	-
	ii Vermi Compost Unit	No.	0.022	150	3.30	3.30	-	-
(6)	Household Production System (For Marginal Farmer and landless Labour) & micro enterprises				17.32	17.32	-	-
	Total	-			46.52	46.52	-	-
II	Non Arable Land Production System							
(1)	Plantation in Pasture land and Along DLT. line	No.		14000	8.00	8.00	-	-
(2)	Over seeding in Pasture land	Hac.		35	0.46	0.46	-	-
(3)	Over seeding in Non Arable land	Hac		105	1.38	1.38	0.00	1.38

CHAPTER -IV

ACTIVITY WISE ABSTRACT OF COST

STATE: RAJASTHAN
 DISTRICT: JODHPUR
 NAME OF THE BLOCK: Osian
 NAME OF WATERSHED: Jodhpur-XIV (IWMP)
 UNIT COST: RS. 15000/- Hac.
 GEOGRAPHICAL AREA: 3780 Hac.
 (I) ARABLE LAND: 1895 Hac.
 (II) NON ARABLE LAND: 1885 Hac.

CATEGORY OF WATERSHED: DESERT AREA
 TOTAL: 6530.00 Hac.
 Cost from IWMP project :- 459.15 Lakh

S.No.	Activity	Unit	Quantity	Unit cost	Total cost	Cost from project	Cost from convergence	Beneficiary contribution
					116.98	576.13		
A I	Administration cost	10%	-		45.92	45.92	-	-
II	Monitoring	1%	-		4.59	4.59	-	-
III	Evaluation	1%	-		4.59	4.59	-	-
IV	Preparatory Phase (Entry Point Activity)	4%	-		18.37	18.37	-	-
V	Institution And Capacity Building	5%	-		22.96	22.96	-	-
VI	Preparation of Detailed Project Report (DPR)	1%	-		4.59	4.59	-	-
	Total	22%	-		101.02	101.02	0	-
B	Watershed Development Works (NRM)	60%						
I	<u>Arable Land Conservation Measures</u>							
1	Earthen Bund	No.	1320	0.09	121.00	99.00	22.00	-
2	Gully Control Structure (Loose Stone Check Dam)	No.	40	0.2	8.00	8.00	-	-
3	Water Harvesting Tanka	No.	189	0.76/0.85	152.55	68.40	84.15	-
4	Wasteweir	No.	40	0.5	20.00	20.00	-	-
	Total		-		301.55	195.40	106.15	-
II	Non Arable Land Conservation Measures							
1	Ditch Cum Bund /Barbed wire Fencing	Mt.	3500		4.97	4.97	-	-
2	Contour Furrow in Pasture Land	Hac.	35	0.09	3.15	3.15	-	-
3	Contour Furrow in Non Arable Land	Hac.		0.09	9.45		9.45	-
4	Earthen Bund	No.	51	0.1	5.10	5.10	-	-
5	Gully Control Structure L.S.C.D)	No	50	0.10/0.20	7.50	7.50	-	-
6	Waste weir	No	6	0.76	4.56	4.56	-	-

	Total			-		34.73	25.28	9.45	-
III	Drainage Line Treatment								
(1)	Dug-out /shunken pond	No.		5	2.00	10.00	10.00	-	-
(2)	L.S.C.D	No.		152	0.10/0.20	22.80	22.80	-	-
(3)	MMS (i)	No.		5	2.00	10	10.00	0	-
	(ii)	No.		3	4.00	12	12.00	-	-
	Total					54.80	54.80		
	Total Watershed Development Works					391.08	275.48	115.6	
C	Production System and Micro Enterprises								
I	Arable Land Production System		15%						
(1)	Crop/Fodder Demonstration			1124		13.15	13.15	-	-
(2)	Agro Forestry	No.		10000		1.90	1.90	-	-
(3)	Dry land Horticulture(Unit)	No.		115		7.70	7.70	-	-
(4)	Homestead Kitchen Garden	No.		150		0.45	0.45	-	-
(5)	Organic Farming								
	i Compost Pit	No.		150	0.018	2.70	2.70	-	-
	ii Vermi Compost Unit	No.		150	0.022	3.30	3.30	-	-
(6)	Household Production System (For Marginal Farmer and landless Labour) & micro enterprises					17.32	17.32	-	-
	Total					46.52	46.52		
II	Non Arable Land Production System								
(1)	Plantation in Pasture land and Along DLT. line	No.		14000		8.00	8.00	-	-
(2)	Over seeding in Pasture land	Hac.		35		0.46	0.46	-	-
(3)	Over seeding in Non Arable land	Hac		105		1.38	0.00	1.38	-
	Total					9.84	8.46	1.38	
III	Live Stock Management								
(1)	Animal Health Camps	No.		36	0.15	5.40	5.40	0	-
(2)	Mangers Distribution	No.		300	0.005	1.50	1.50	0	-
3	Cattlecare and fodder storage center	No.		1	5.00	5.00	5.00	0	-
4	Bull Distribution	No.		4	0.50	2.00	2.00	-	-
	Total					13.90	13.90	0	
	Total Production System					70.26	68.88	1.38	
E.	Consolidation		3%			13.77	13.77	0.00	

Grand Total		-	-	576.13	459.15	116.98	-

CHAPTER -V

5.1 CONSOLIDATED ANNUAL ACTION PLAN

STATE: **RAJASTHAN**
UNIT COST: **RS. 15000/- Hac.**

DISTRICT: **Jodhpur**

NAME OF THE BLOCK: **Osian**

NAME OF WATERSHED: **Jelu-gagadi (Jodhpur XIV)IWMP**

CATEGORY OF WATERSHED: **DESERT AREA**

TOTAL: 3061 Hac.

GEOGRAPHICAL AREA: **3780 Hac.**

(I) ARABLE LAND: **1895 Hac.**

(II) NON ARABLE LAND: **1885 Hac.**

Cost from project fund

459.15

Cost from convergence

116.98 Lakh

576.13 Lakh

S.No	Activity	Unit	Quantity	Unit cost	Total cost	I st Year		II nd Year		III rd year		IV th Year		V th year		VI th year		VII th year	
						Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
A I	Administration cost	10 %	-		45.92	-	0.00	-	0.00	-	9.18	-	9.18	-	9.18	-	18.38	-	-
II	Monitoring	1 %	-		4.59	-	0.46	-	0.92	-	0.92	-	0.92	-	0.92	-	0.46	-	-
III	Evaluation	1 %	-		4.59	-	-	-	0.92	-	0.92	-	0.92	-	0.92	-	0.91	-	-
IV	Preparatory Phase (Entry Point Activity)	4 %	-		18.37	-	18.3	-	-	-	-	-	-	-	-	-	-	-	-
V	Institution And Capacity Building	5 %	-		22.96	-	4.59	-	4.59	-	4.59	-	4.59	-	2.29	-	2.31	-	-
VI	Preparation of Detailed Project Report (DPR)	1 %	-		4.59	-	4.59	-	-	-	-	-	-	-	0.00	-	-	-	-
	Total	22 %	-		101.02	-	28.0	1	6.43	0	15.6	0	61	0	3.31	0	2.06	2	0
B	Watershed Development Works (NRM)	60 %																	
I	Arable Land Conservation Measures	-																	
1	Earthen Bund	No.	1320	0.09/0.10	121.00	-	-	200	18	300	28	400	37	320	29	100	9	-	-
2	Gully Control Structure (L.C. D.M)	No.	40	0.20	8.00	-	-	10	2	10	2	10	2	10	2	-	-	-	-
3	Water Harvesting Tanka	No.	189	0.76/0.85	152.55	-	-	20	15.2	40	32.2	40	32.2	50	40.7	10	32.25	-	-

4	Wastewater	No.	40	0.50	20.00	-	-	-	-	10.00	5.00	10.00	10.00	5.00	10.00	5.00	
	Total		-		301.55	0	0	0	35.2		67.2		76.2		76.7		46.25
II	Non Arable Land Conservation Measures																
1	Ditch Cum Bund/ barbed wire Fencing	Mt.	3500		4.97	-	-	-		2000	2.84	1500	2.13	-	-	-	-
2	Contour Furrow in Pasture Land	Hac.	35	0.09	3.15	-	-	-	20.00	1.80	15.00	1.35	-	-	-	-	-
3	Contour Furrow in Non Arable Land	Hac.	105	0.09	9.45	-	-	-	-	-	55.00	4.95	50.00	4.50	-	-	-
4	Earthen Bund	No.	51	0.10	5.10	-	-	-	10	1	10	1	10	1	21	2.1	
5	Gully Control Structure (L.S.C.D)	No	50	0.10/0.20	7.50	-	-	10.00	10.00	1.50	10.00	1.50	10.00	1.50	10.00	10.00	1.50
6	Tanka	No	6	0.76	4.56	-	-	-	2.00	1.52	2.00	1.52	2.00	1.52	-	-	-
	Total		-		34.73	-	0	-	1.5		8.66		12.45		8.52		3.6
III	Drainage Line Treatment																
(1)	Dug-out/shunken pond	No.	10	1.00	10.00	-	-	-	4.00	4.00	4.00	4.00	2.00	2.00	2.00	-	-
2	L.S.C.D.	No.	152	0.10/0.20	22.80	-	-	20.00	3.00	6.00	40.00	6.00	27.00	4.05	25.00	3.75	
3	MMS (i)	No.	5	2.00	10.00	-	-	-	1	2.00	2	4.00	1	2.00	1	2.00	
	(ii)	No.	3	4.00	12.00	-	-	-	1	4.00	1	4.00	1	4.00	1	4.00	
	Total		-		54.80	0.00	0.00	3.00		16.00		18.00		12.05		5.75	
	Total Watershed Development Works		-		391.08	0.00	0.00	39.70		91.86		106.65		97.27		55.60	0.0
C	Production System and Micro Enterprises																
I	Arable Land Production System		-														
(1)	Crop/Fodder Demonstration	No.	1124	0.012	13.15	-	0	300	3.55	300	3.55	300	3.55	214	2.5		
(2)	Agro Forestry	No.	10000		1.90	-	0	3000	0.57	3000	0.57	4000	0.76	-	0	0	0
(3)	Dry land Horticulture(Unit)	No.	115	0.067	7.70	-	0	20	1.34	40	2.68	40	2.68	15	1	0	0
(4)	Homestead Kitchen Garden	No.	150	0.003	0.45	-	0			50	0.15	50	0.15	50	0.15		
(5)	Organic Farming																
	i Compost Pit	No.	150	0.018	2.70					100	1.8	50	0.9	-	0	-	0
	ii Vermi Compost Unit	No.	150	0.022	3.30	-	0			50	1.1	50	1.1	50	1.1		
(6)	Household Production System (For Marginal Farmer and landless Labour) & Micro enterprises	No.			17.32				5		5		5		2.32		

CHAPTER -V

5.2 ANNUAL ACTION PLAN THROUGH PROJECT FUND

STATE: RAJASTHAN
UNIT COST: RS. 15000/- Hac.

DISTRICT: Jodhpur

NAME OF THE BLOCK: Osian

NAME OF WATERSHED: Jelu-gagadi (Jodhpur XIV)IWMP

CATEGORY OF WATERSHED: DESERT AREA

GEOGRAPHICAL AREA: 3780 Hac.

(I) ARABLE LAND: 1895 Hac.

(II) NON ARABLE LAND: 1166 Hac.

TOTAL: 3061 Hac.

3061
459.1

5

S.No	Activity	Unit	Quantity	Unit cost	Total cost	I st Year		II nd Year		III rd year		IV th Year		V th year		VI th year		VII th year		
						Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.
A	I Administration cost	10 %	-		45.92	-	4.59	-	9.18	-	9.18	-	9.18	-	9.18	-	9.18	-	4.60	
	II Monitoring	1 %	-		4.59	-	0.46	-	0.92	-	0.92	-	0.92	-	0.92	-	0.92	-	0.46	
	III Evaluation	1 %	-		4.59	-	-	-	0.92	-	0.92	-	0.92	-	0.92	-	0.92	-	0.91	
	IV Preparatory Phase (Entry Point Activity)	4 %	-		18.37	-	18.3	-	-	-	-	-	-	-	-	-	-	-	-	
	V Institution And Capacity Building	5 %	-		22.96	-	4.59	-	4.59	-	4.59	-	4.59	-	2.29	-	2.31	-	2.31	
	VI Preparation of Detailed Project Report (DPR)	1 %	-		4.59	-	4.59	-	-	-	-	-	-	-	0.00	-	0.00	-	-	
	Total	22 %	-		101.01	-	32.6	0	15.6	1	15.6	0	61	0	3.31	1	0	0	28	0
B	Watershed Development Works (NRM)	60 %																		
I	Arable Land Conservation Measures	-																		
1	Earthen Bund	No.	1100	0.09	99.00	-	-	200	18	200	18	300	27	300	27	100	9			
2	Gully Control Structure (L.C. D.M)	No.	40	0.20	8.00	-	-	10	2	10	2	10	2	10	2	-	-			
3	Water Harvesting Tanka	No.	90	0.76	68.40	-	-	20	15.2	20	15.2	20	15.2	20	15.2	10	10	7.6		
4	Wasteweir	No.	40	0.50	20.00	-	-	-	5.00	10.00	5.00	10.00	5.00	10.00	5.00	10.00	5.00			
	Total		-		195.40	0	0	35.2	40.2	49.2	49.2	150	2.13	-	49.2	21.6				
II	Non Arable Land Conservation Measures	-																		
1	Ditch Cum Bund/ barbed wire Fencing	Mt.	3500		4.97	-	-	2000	2.84	2000	2.84	1500	2.13	-	-	-	-			

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	134.15	137.20	Due to Increase in Number of Deep Tube wells
2	Ground water structures repaired/ rejuvenated	No.	-		
3	Quality of drinking water	Description	Satisfied		
4	Availability of drinking water	Description	12 Month		
5	Change in irrigated Area	Ha	440	920	
6	Change in cropping/ land use pattern	Description			
7	Area under agricultural crop	Ha	1579	1805	
	i Area under single crop	Ha	1139	975	
	ii Area under double crop	Ha	440	920	
	iii Area under multiple crop	Ha	-		
8	Change in cultivated Area	Ha			
9	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 Bajra	ton	22.74	26.50	
	Production of Wheat	ton	50.22	64.25	
	Production of Gram	ton	-	-	
	Production of Mustard	ton	9.48	12.70	
11	Area under vegetation	Ha			
12	Area under horticulture	Ha			
13	Area under fuel	Ha			
14	Area under Fodder	Ha			
15	Fodder production	Q	13650	17620	
16	Milk production	Litres/day	4715	5000	
17	SHGs Active	No.	8		
18	No. of livelihoods	No.	6805		
19	Income	Rs.in la			
20	Migration	No.			
21	SHG Federations formed	No.			

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

TECHNICAL REPORT

NAME OF WORK	Construction of Water Harvesting structure
Panchayat	Jelu gagadi
District	Jodhpur
Name of Scheme	IWMP
Name of Village	Jelu, binjaria-bawdi
Panchayat Samiti	Osian

This project is taken in IWMP Scheme. The proposed anicut will not only reduce velocity of the runoff but also prevent the gullies from further soil erosion at the same time it will be very much fruitful in recharging of downstream wells as well as it will increase the moisture content of the soil. So as to improve its productivity the water retained behind the structure can also be used for irrigation, and drinking water for animals. The cross section and L-section have been surveyed by dumpy level and catchment area has been taken from G.T. sheet / Revenue map.

Basic Data of Project

	=	
1 Catch ment Area	=	60 Ha.
2 Maxmium Rain fall intency	=	5 Cm./hr.
3 General nature of catchment Area		
a. Agricultural land	=	10 Ha.
b. Nonarable land Land	=	50 Ha.
4 Height of crest above G.L.	=	0.9 M.
5 Flood lift	=	0.4 M.
6 Free board	=	0.2 M.
7 Top width of Head wall	=	0.8 M.
8 Bottom width of Head wall	=	1.80 M.
9 Width of concrete Bed	=	2.10 M.
10 Length of crest	=	10 M.
11 Percentage slope of land	=	2.00
12 No. of well benifited	=	4
13 No of farmer benifited	=	
a. S.C.	=	7
b. S.T.	=	0
c. Others	=	33
Total	=	40

14 Area to be benifited	=	
a. S.C.	=	
b. S.T.	=	20
c. Others	=	0
Total	=	110
15	=	
a. a)Raito of concrete at bed	=	
(Cement : Sand :Aggregate)(1:4:8)	=	
b. b) Raito of Masonary fondation & Super structure	=	
Cement Mortar(1:6)	=	
c. c) Raito of plastering and flush pointing of 25 mm.	=	
Cement Mortar(1:6)	=	
d Raito of Kharanja in cement mortar	=	
16 Cost of Project	=	200000.00
a. Labour component	=	74150
b. Material component	=	118167
c. Contingency	=	7682

Rates are as per GKN 2011

Jodhpur wef 1.1.2011

The Estimate are here with submitted for technical approval an necessary action

Prepared By

Recommended By

J.En.

A.En.

Name of work Construction of WHS

Catch ment Area	60 Ha.
Maxmium Rain fall intency	5 Cm/hr
General nature of catchment Area	
Agricultural land	10
Non arable land Land	50
Height of crest above G.L.	0.9
Length of crest	10
Percentage slope of land	2.00
No. of well benifited	4
No of farmer benifited	40
S.C.	7
S.T.	
Others	33
Total	40
Area to be benifited	
S.C.	20
S.T.	0
Others	110
Total	130
GKN 2011 Jodhpur	

Desgin calculation of WHS

A

Name of work-: Construction of WHS

I	Available crest length	10 M		
ii	Total catchment Area	60 Ha.	As per G.T.Sheet	
iii	Peak Runoff Rate			
a)	By Rational Method		Use when catchment is <1300Ha.	
	$Q_p = 0.0276 CIA$		Q=Run off in m3/sec.	
			C= Coefficient of runoff	0.5
K	$= L^{3/2}/H^{1/2}$		I= Intensity of rain fall in cm/hr.	5
K	$= 3535.5$		A= Catchment Area in Ha.	60
Tc	$= 0.0195K^{0.77}$		L=Maxmium length of travel by runoff water in m.	500
Tc	$= 10.53$		H= Difference in elevation between most remote point and and outlet point in meter	10
		$Q_p = 0.0276 \times 0.50 \times 5 \times 60$		
	$Q_p = 4.14$			

b) By weir formula

$$Q = 1.71Lh^{3/2}$$

$$4.14 = 1.71 \times 10 h^{3/2}$$

$$h = 0.39$$

Say h= 0.4

3 Free Board

hw= Wave height in meter

$$F_b = 1.5h_w$$

$$1.5 \times 0.014(D_f)^{1/2}$$

$$F_b = 0.23$$

Say Fb= 0.2

Df= Fetch length in meter 120 Meter.

(B) STRUCTURAL DESGIN

1 Head wall

a)	Height of Head wall H=	0.9	
b)	Top width(Tw) =	$h + (P-1)^{1/2}$	P= Sp.ht. Of masonry 2.3
	Tw=	0.35	
	Top width=	0.8	
©	Bottom width Bw	$Tw + 0.8H$	
	Bw=	1.52	
	So Bottom Width=	1.80 Meter	

2 Head wall extension

- a) Length= $H+h+1+F_b$
 $0.9 + 0.4 + 1 + = 2.30 \text{ Meter}$
 say Length of Right side wall = 3 Meter
 say Length of left side wall = 3.0 Meter
- b) Height of Head Extensionwall = $H+h+F_b$
 $0.9 + 0.4 + 0.2 = 1.5 \text{ Meter}$
- c) Top width = 0.6 Meter
- d) Bottom Width= $0.5(H+h) = 0.5(0.9 + 0.4) = 0.65 \text{ Meter}$

3 Side wall

- a) Length= $1.75H+0.75h+0.45 = 2.33$
 But as per site condition= 2.7 Meter
- b) Height:
 At H.W.End= $H+h+F_b = 0.9 + 0.4 + 0.2 = 1.5 \text{ Meter}$
 At W.W.End= $h+f_b = 0.4 + 0.2 = 0.6 \text{ Meter}$
- c) Top width= 0.6 Meter
- d) Bottom width=
 At H.W.End= $0.6+0.4(H+h) = 1.1 \text{ Meter}$
 At W.W.End= $0.6+0.4(1.5h) = 0.8 \text{ Meter}$
 But taken as= 1.0 Meter

4 Wing wall

- a) Height $h+F_b = 0.4 + 0.2 = 0.6 \text{ Meter}$
- b) Length= $2.25h = 2.25 \times 0.4 = 0.90 \text{ Meter Say } 1.00 \text{ M}$
- c) Top width = 0.6 Meter
 Bottom width of wing wall = 0.6 Meter

5 Apron

- a) Length= 10 Meter
- b) Width= $H+h+F_b = 0.9 + 0.4 + 0.2 = 1.5 \text{ Meter}$
- c) Thickness = 0.6 Meter

6 Toe wall

- a) Length= 10 Meter
- b) Width= 0.3 Meter
- c) Height= 0.3 Meter

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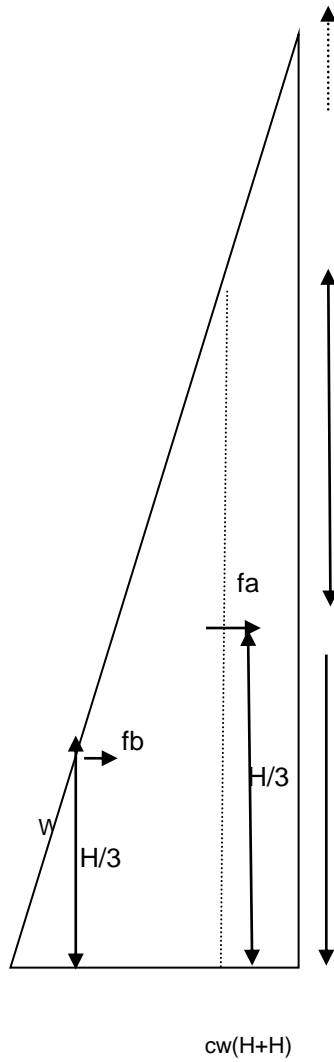
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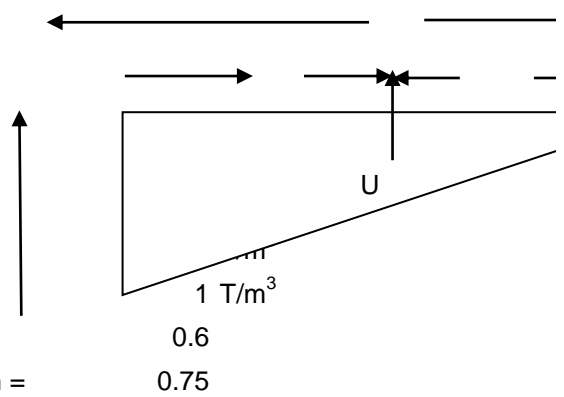
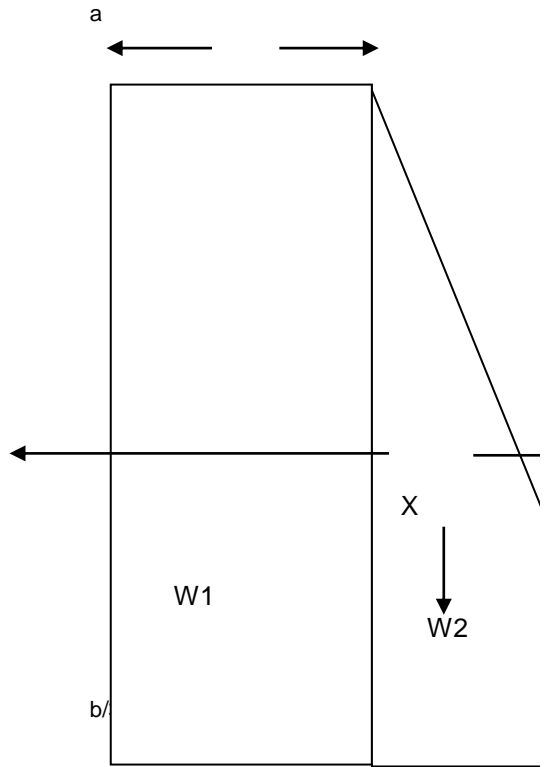
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C= Coefficient of runoff			0.5
I= Intensity of rain fall in cm/hr.			5
A= Catchment Area in Ha.			60
L=Maxmium length of travel by runoff water in m.			500
H= Difference in elevation between most remote point and and outlet point in meter			10
h= Head over the crest in mtr.		0.39	0.4
Df= Fetch length in meter			120
Fb =Free board	10	0.23	0.2
Top width Tw=		0.80	0.8
Height of cerst		0.9	0.9
Bottom Width of Head wall Bw		1.52	1.80
Lenth of Head wall extension Left=		2.30	3
Lenth of Head wall extension Right=			3.0
Length of side wall=		2.33	2.65
Bottom Width of Side wall		1.12	1
		0.8	
Length of wing wall		0.90	1

FREE BODY DIAGRAM



- a= 0.8
- b= 1.80
- H= 0.9
- h= 0.4



Specific Wt. Of masonry P=
 Specific Wt. of water w=
 Coefficient of uplift pressure c=
 coefficient of friction at bed surface and creep length =

Weight of Dam:-

Weight of Dam:-

$$W_1 = aHP = 1.656 \text{ T}$$

$$W_2 = \frac{b-a}{2} HP = 1.035 \text{ T}$$

$$W = W_1 + W_2 = 1.656 + 1.035 = 2.691 \text{ T}$$

Water pressure

$$\text{At Depth } h = P_1 = wh = 1 \times 0.4 = 0.4 \text{ T/m}^2$$

$$\text{At Depth } H+h = P_2 = w(H+h) = 1(0.90 + 0.4) = 1.3 \text{ T/m}^2$$

Force acting due to water pressure i.e. Net horizontal

$$\text{Water force } P = \frac{P_1 + P_2}{2} H = 0.765 \text{ T/m}^2$$

$$\text{Horizontal water pressure at depth } h = F_a = wHh = 0.36 \text{ T}$$

$$\text{At depth } H+h = F_b = \frac{P_2 - P_1}{2} H = 0.405 \text{ T}$$

$$\text{Force due to water column at crest } F_3 = wha = 0.32 \text{ T}$$

$$\text{Up lift pressure } U = \frac{1}{2} cwb (H+h) = 0.702 \text{ T}$$

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STABILITY CHECKS1 Safety against over turning

$$\text{Over turning moment } M_o = F_a \frac{H}{2} + F_b \frac{H}{3} + u \frac{2}{3} b$$

$$0.36 \frac{0.9}{2} + 0.405 \frac{0.9}{3} + 0.7 \frac{2}{3} \cdot 1.80$$

$$M_o = 1.126$$

$$\text{Restoring Moment } M_r = W_1 (b-a/2) + W_2 (b-a)/3 + F_3 (b-a/2)$$

$$M_r =$$

$$M_r = 2.318 + 0.690 + 0.448 = 3.46$$

$$\text{Factor of safety } \frac{M_r}{M_o} = \frac{3.456}{1.126} = 3.07 > 1.5 \text{ Hence}$$

Structure is safe against over turning

2 Safety against Rupture from tension

$$\text{Net Vertical Pressure } V = W_1 + W_2 + F_3 - U$$

$$1.656 + 1.035 + 0.32 - 0.702 = 2.309$$

Position of resultant where it cut the base

$$X = \frac{\text{Excess moment}(M_r - M_o)}{\text{Net vertical force}} = \frac{3.456 - 1.126}{2.309} = 1.01$$

TRUE

3 Safety against crusing

$$\text{Eccentricity } e = b/2 - X$$

$$-0.11$$

Crusting stress at the toe of theHead wall

$$P_c = \frac{V}{b} (1 + \frac{6e}{b})$$

$$P_c = 0.81537$$

$P_c \ll 20$ Hence it is safe

4 Safety against sliding

$$\text{Net vertical Force } V = 2.309 \text{ T}$$

$$\text{Restoring force} = uV = 0.70 \times 2.309 \quad (u=0.65 \text{ to } 0.75)$$

$$1.6163 \text{ T}$$

$$\text{Sliding force Net horizontal force} = F_a + F_b$$

$$0.36 + 0.405 = 0.765 \text{ T}$$

$$\text{Factor of safety} = \frac{\text{Restoring force}}{\text{Sliding force}} = \frac{1.616}{0.765} = 2.113 > 1.3 \text{ Hence}$$

Hence it is safe

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A.En.

DETAILED ESTIMATE OF WHS**NAME OF WORK** Construction of Water Harvesting structure**Name of Village** Jelu, binjaria-bawdi**Name of Scheme** IWMP**General features of anicut:-**

Height of crest=	0.9 M.				
Length of Crest	10 M.				
Depth of foundation for H.W. =	2.0 M.	Length of wing wall=	1.0 M.		
Bottom width of H.W. =	1.8 M.	Height of Wing wall=	0.6 M.		
Top of H.W =	0.8 M.	Bottom width of Wing wall=	0.6 M.		
Length of H.W.Ext =	3.0 M.	Depth of foundation for Wing wall =	0.9 M.		
Height of H.W.Ext. at H.W. =	1.5 M.	Height of Toewall=	0.30 M.		
Top Width of H.W.Ext.=	0.6 M.	Top & Bottom width of Toe wall=	0.30 M.		
Bottom width for H.W.Ext.	0.7 M.	Depth of foundation for Toe wall =	0.9 M.		
Depth of foundation for H.W.Ext.:	1.2 M.	Thickness of Apron=	0.6 M.		
Length of side wall=	2.7 M.	Width of Apron =	1.5 M.		
Bottom Width of S.W.	1.00 M.	Berm for H.W Ext.	2.0 M.		
Height of side wall at W.W.End=	0.60 M.				
Depth of foundation for side wall	1.2 M.				

S.No.	Item	No	L	B	H	Quantity
1	Dag belling 5cm. To 7.5cm deep(As per item no. page of W.D.& S.C. BSR of Jodhpur circle					
						Total
2	Cutting and clearing of ordinary jungle including bushes shrubs and disposal as per instruction of engineer incharge					
			0	X	0.0	= 0 Sqm.

S.No.	Item	No	L	B	H	Quantity	
3	Benching of the base and depositing the excavated material for bund for bund canal dressing etc. all components					Total Cum.	
4	Earth work excavation for bund in hard dry or moist soil including laying in layer of 15cm. Breaking of clods dressing to require profile with manual compaction including initial lift up to 1.5 m and lead up to 30M.					Total Cum	
5	Earth work excavation for foundation in dry or moist soil including ramming of bottom scrapping of sides dipodal of soil initial lift up to 1.5 m and lead up to 30M.						
	H.W.	1	X	10	X	2.1 X 2.0 =	42.00 Cum.
	H.W.Ext Left	1	X	3.0	X	0.7 X 3.2 =	6.24 Cum.
	H.W.Ext Right	1	X	3.0	X	0.7 X 1.2 =	2.34 Cum.
	S.W.	2	X	2.7	X	1.20 X 3.2 =	20.35 Cum.
	W.W.	2	X	1.0	X	0.6 X 0.90 =	1.08 Cum.
	Apron	1	X	10	X	1.5 X 0.60 =	9.00 Cum.
	T.W.	1	X	10	X	0.30 X 0.9 =	2.70 Cum.
						Total	83.71 Cum.
1	Excavation in Hard soil					60%	50.23 Cum.
2	Disintegrated rock					30%	25.11 Cum.
3	Ordinary rock					10%	8.37 Cum.
	Extra Lift of excavated soil from foundation above 1.5 M.					70% of total soil	58.60 Cum

S.No.	Item		No	L	B	H		Quantity	
6	Providing and laying of cement concrete well mixed in cement mortar 1:3:6 laying in position complete excluding curing with maximum size of aggregate up to 50 mm. etc. complete using	H.W.	1	X	10.0	X	2.1	X	0.3 = 6.30 Cum.
		H.W.Ext	1	X	3	X	0.7	X	0.3 = 0.59 Cum.
			1	X	3	X	0.7	X	0.3 = 0.59 Cum.
		S.W.	2	X	2.65	X	0.65	X	0.3 = 1.03 Cum.
		W.W.	2	X	1	X	0.6	X	0.3 = 0.36 Cum.
		Apron	1	X	10.0	X	1.5	X	0.3 = 4.50 Cum.
		T.W.	1	X	10.0	X	0.30	X	0.3 = 0.90 Cum.
		Total							14.26 Cum.
7	In Foundation Stone masonry cement sand mortar(1:6) for above 30 cm. Thick wall	H.W.	1	X	10.0	X	1.8	X	1.7 = 30.60 Cum.
		H.W.Ext	1	X	3.0	X	0.7	X	0.9 = 1.76 Cum.
		H.W.Ext	1	X	3.0	X	0.7	X	0.9 = 1.76 Cum.
		S.W.	2	X	2.7	X	0.65	X	0.9 = 3.10 Cum.
		W.W.	4	X	1.0	X	0.6	X	0.6 = 1.44 Cum.
		T.W.	1	X	10.0	X	0.15	X	0.6 = 0.90 Cum.
		Total							39.55 Cum.
8	In super structure Stone masonry above 30 cm. Thick in cement sand mortar(1:6)	H.W.	1	X	10.0	X	1.3	X	0.9 = 11.70 Cum.
		H.W.Ext	1	X	3.0	X	0.63	X	1.5 = 2.81 Cum.
		H.W.Ext	1	X	3.0	X	0.63	X	1.5 = 2.81 Cum.
		S.W.	2	X	2.7	X	0.8	X	1.05 = 4.45 Cum.
		W.W.	2	X	1.0	X	0.6	X	0.6 = 0.72 Cum.
		T.W.	1	X	10.0	X	0.30	X	0.30 = 0.90 Cum.
		Total							23.40 Cum.

S.No.	Item		No	L	B	H	Quantity
9	Stone Kharanja in cement mortar 1:6 for bed and floor including cpaction etc. complete apron	Apron	1	X 10.0	X 1.5	X 0.30	4.50 Cum.
						Total	4.50 Cum.
10	Providing and laying of cement concrete well mixed in cement mortar 1:2:4 laying in position complete excluding curing with maximum size of aggregate up to 20 mm. etc. complete	H.W.	1	X 10.0	X 0.8	X 0.05 =	0.40 Cum.
		H.W.Ext	1	X 3.0	X 0.6	X 0.05 =	0.09 Cum.
			1	X 3.0	X 0.6	X 0.05 =	0.09 Cum.
		S.W.	2	X 2.7	X 0.6	X 0.05 =	0.16 Cum.
		W.W.	2	X 1.0	X 0.6	X 0.05 =	0.06 Cum.
		T.W.	1	X 10.0	X 0.30	X 0.05 =	0.15 Cum.
		Apron	1	X 10.0	X 1.50	X 0.1 =	1.50 Cum.
						Total	2.45 Cum.
11	Flush pointing in cement motar (1:3)	H.W.	1	X 10.0	X 1.35	=	13.45 Sqm.
						Total	13.45 Sqm.
12	20 m.m thick plastering on new surface in cement mortar (1:4)	H.W.	1	X 10.0	X 0.9	=	9.00 Sqm.
		H.W.Ext.	1	X 3.0	X 1.5	=	4.50 Sqm.
		H.W.Ext.	1	X 3.0	X 1.5	=	4.50 Sqm.
		S.S	2	X 2.7	X 1.5	=	7.95 Sqm.
		W.W.	2	X 1.0	X 0.6	=	1.20 Sqm.
		T.W.	2	X 10.0	X 0.3	=	6.00 Sqm.
						Total =	33.15 Sqm.
	E/W in excavation for embakement		2	X 18	X 4.25	X 2	306.00 cum
13	Dry stone pitching of Hammer dressed witch packing of voids of small stone including all lifts in require profile (23 cm depth)			10.0	X 10.00	X 0.23	23.00 Cum

Height of crest=	0.9
Thickness of C.C. in (1:4:8)	0.3 M.
Length of Crest	10 M.
Depth of foundation for H.W. =	2.0 M
Bottom width of H.W. =	1.8 M
Top of H.W =	0.8 M
Length of H.W.Ext =	3.0 M
Height of H.W.Ext. at H.W. =	1.5 M
Top Width of H.W.Ext.=	0.6 M
Bottom width for H.W.Ext.	0.7 M
Depth of foundation for H.W.Ext.=	1.2 M
Length of side wall=	2.7 M
Bottom Width of S.W.	1.0 M
Height of side wall at W.W.End=	0.6 M
Depth of foundation for side wall =	1.2 M
Length of wing wall=	1.0 M
Height of Wing wall=	0.6 M
Bottom width of Wing wall=	0.6 M
Depth of foundation for Wing wall =	0.9 M
Height of Toewall=	0.30 M
Top & Bottom width of Toe wall=	0.3 M
Depth of foundation for Toe wall =	0.9 M
Thickness of Apron=	0.6 M
Width of Apron =	1.5 M
Embankment L	18 m

Height of Wing wall=			0.6 M
BW	7 TW	1.5	4.25 m
H			2 m

Height of Wing wall= 0.6 M

Height of Wing wall= 0.6 M

Abstract of Cost of WHS

Construction of Water Harvesting structure

NAME OF WORK

Name of Village

Name of Scheme

Jelu, Binjaria -bawdi

IWMP

S.No.	Item	Quantity	Unit	Lab.rate	L.Amount	Rate	Amount
1	Dag belling 5cm. To 7.5cm deep(As per item no. page of W.D.&	0.00	Cum.			0.38	0
2	Cutting and clearing of ordinary jungle including bushes shrubs and disposal as per instruction of	0	Sqm.			0.70	0
3	Benching of the base and depositing the excavated material for bund for bund canal	0	Cum.				0
4	Earth work excavation for bund in hard dry or moist soil including laying in layer of 15cm. Breaking	0	Cum.			92.00	0
5	Earth work excavation for foundation in dry or moist soil including ramming of bottom Excavation in Hard soil Disintegrated rock Ordinary rock	83.71 50.23 25.11 8.37	Cum. Cum. Cum. Cum.				0 4620.9024 3365.2224 1490.0736
6	Extra Lift of excavated soil from foundation above 1.5 M.	58.60	Cum.	10.80	632.863	10.80	632.86272
7	Providing and laying of cement concrete well mixed in cement mortar 1:3:6 laying in position complete excluding curing with	14.26	Cum.	320.1	4565.75	1894.0	27015.069
8	In Foundation Stone masonry cement sand mortar(1:6) for	39.55	Cum.	419.8	16603.3	1503.00	59444.402
9	In super structure Stone masonry above 30 cm. Thick in cement sand mortar(1:6)	23.40	Cum.	554.8	12980.7	1641.00	38394.477

10	Stone Kharanja in cement mortar 1:6 for bed and floor including compaction etc. complete apron	4.50	Cum.	419.8	1889.1	1503.0	6763.5
11	Providing and laying of cement concrete well mixed in cement mortar 1:2:4 laying in position complete excluding curing with	2.45	Cum.	247.1	605.148	2324.0	5691.476
12	Flush pointing in cement mortar (1:2)	13.45	Sqm.	39.8	535.454	48.00	645.77395
13	20 m.m thick plastering on new surface in cement mortar (1:4)	33.15	Sqm.	25.7	851.955	133.00	4408.95
14	E/W for Embankment	306.00	Cum.	85	26010	85.00	26010
15	Dry stone pitching of Hammer dressed with packing of voids of small stone including all lifts in require profile (23 cm depth)	23.00	Cum.	174.8		590.00	13570
					74150.4	Total	192052.71

TOTAL

192053

Contingency %

7682

Say total Cost

199735

200000.00

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A.En.

Material Statement

NAME OF WORK

Construction of Water Harvesting structure

Name of Village

Name of Scheme

IWMP

S.No.	ITEM	Quantity Cum / Sqm	Cement Becs	Sand Cum	Aggrigate Cum	Stone Cum
1	Cement Concrete (1:4:8)	14.26	45.64	6.42	12.84	-
2	Plaster in C.C. (1:4)	33.15	5.62	0.80	-	-
3	Massonary in Cement sand mortar 1:6	62.95	88.13	18.88	-	62.95
4	Pointing in Cement	13.45	0.55	0.06	-	-
5	Stone Kharanja in cement mortar (1:6)	4.50	6.3	1.35	-	4.5
6	Cement concrete coping(1:2:4)	2.45	14.30	1.00	2.01	-
7	Dry Stone Pitching	23.00	-	-	-	23.00
	TOTAL		160.55	28.51	14.85	90.45
	Say Bags or		161 8.05	MT.		

1 Cement 8.05 MT.

2 Sand 28.51 Cum.

3 Stones 90.45 Cum.

4 Aggregates 14.85 Cum.

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A.En.

TYPICAL PLAN AND SECTION OF WHS

Construction of Water Harvesting structure
Jelu, binjaria-bawdi

IWMP

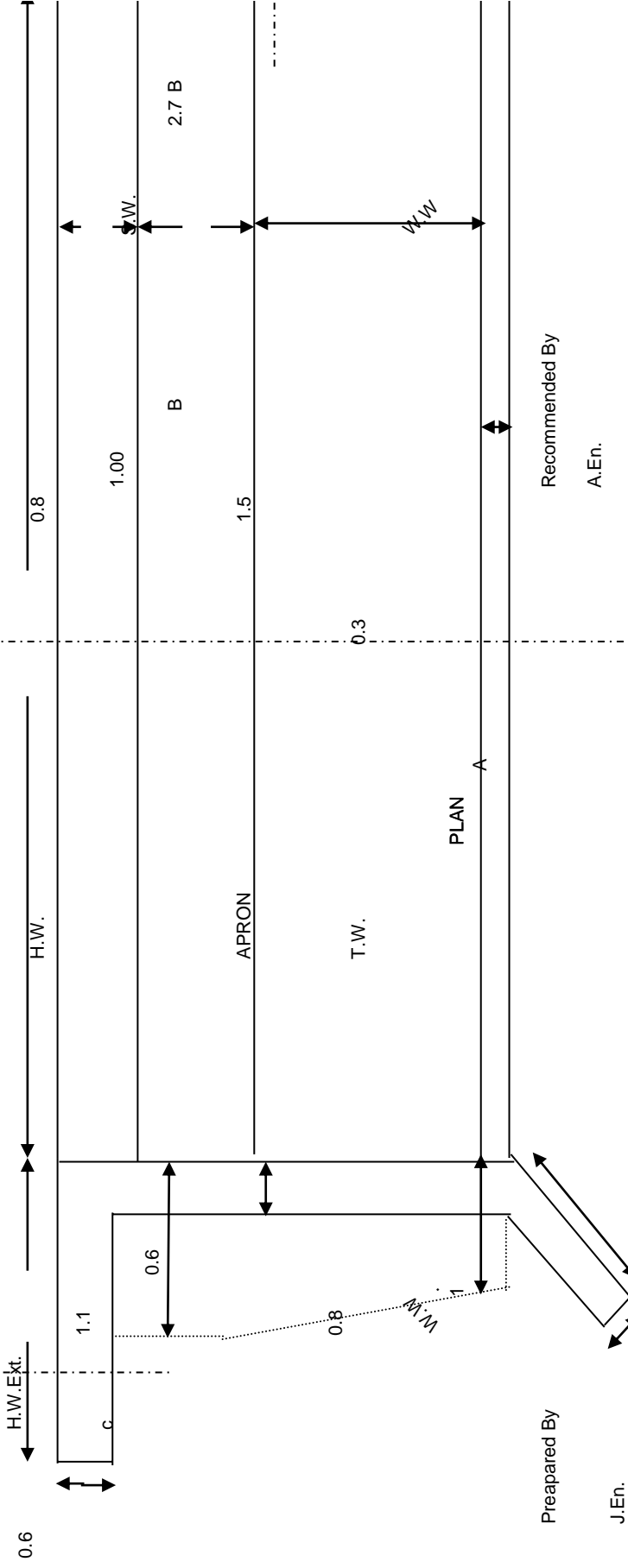
NAME OF WORK
Name of Village

Name of Scheme

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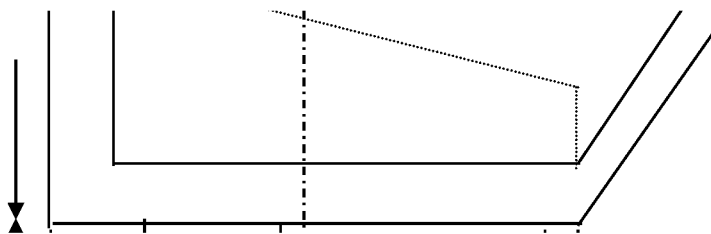
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TECHNICAL REPORT

NAME OF WORK	Construction of Water Harvesting structure
Panchayat	Jelu Gagadi
District	Jodhpur
Name of Scheme	IWMP
Name of Village	Jelu ,Binjaria Bawdi
Panchayat Samiti	Osian

This project is taken in IWMP Scheme. The proposed anicut will not only reduce velocity of the runoff but also prevent the gullies from further soil erosion at the same time it will be very much fruitful in recharging of downstream wells as well as it will increase the moisture content of the soil. So as to improve its productivity the water retained behind the structure can also be used for irrigation, and drinking water for animals. The cross section and L-section have been surveyed by dumpy level and catchment area has been taken from G.T. sheet / Revenue map.

Basic Data of Project

	=	
1 Catch ment Area	=	200 Ha.
2 Maxmium Rain fall intency	=	3 Cm./hr.
3 General nature of catchment Area		
a. Agricultural land	=	120 Ha.
b. Nonarable land Land	=	80 Ha.
4 Height of crest above G.L.	=	1.2 M.
5 Flood lift	=	0.4 M.
6 Free board	=	0.2 M.
7 Top width of Head wall	=	0.8 M.
8 Bottom width of Head wall	=	2.40 M.
9 Width of concrete Bed	=	2.70 M.
10 Length of crest	=	16 M.
11 Percentage slope of land	=	8.00
12 No. of well benifited	=	12
13 No of farmer benifited	=	
a. S.C.	=	25
b. S.T.	=	0
c. Others	=	45
Total	=	70

14 Area to be benifited	=	
a. S.C.	=	
b. S.T.	=	25
c. Others	=	0
Total	=	125
15	=	
a. a)Raito of concrete at bed	=	
(Cement : Sand :Aggregate)(1:4:8)	=	
b. b) Raito of Masonary fondation & Super structure	=	
Cement Mortar(1:6)	=	
c. c) Raito of plastering and flush pointing of 25 mm.	=	
Cement Mortar(1:6)	=	
d Raito of Kharanja in cement mortar	=	
16 Cost of Project	=	400000.00
a. Labour component	=	142463
b. Material component	=	242191
c. Contingency	=	15347

Rates are as per GKN 2011

Jodhpur wef 1.1.2011

The Estimate are here with submitted for technical approval an necessary action

Prepared By

Recommended By

J.En.

A.En.

Name of work Construction of WHS

Catch ment Area	200 Ha.
Maxmium Rain fall intency	3 Cm/hr
General nature of catchment Area	
Agricultural land	120
Non arable land Land	80
Height of crest above G.L.	1.2
Length of crest	16
Percentage slope of land	8.00
No. of well benifited	12
No of farmer benifited	70
S.C.	25
S.T.	
Others	45
Total	70
Area to be benifited	
S.C.	25
S.T.	0
Others	125
Total	150
GKN 2011 Jodhpur	

Desgin calculation of WHS

A

Name of work-: Construction of WHS

- I Available crest length 16 M
 ii Total catchment Area 200 Ha. As per G.T.Sheet
 iii Peak Runoff Rate
- a) By Rational Method Use when catchment is <1300Ha.
 $Q_p = 0.0276 CIA$ $Q = \text{Run off in m}^3/\text{sec.}$
- $C = \text{Coefficient of runoff}$ 0.5
 $K = L^{3/2}/H^{1/2}$ $L = \text{Intensity of rain fall in cm/hr.}$ 3
 $K = 3535.5$ $A = \text{Catchment Area in Ha.}$ 200
 $T_c = 0.0195K^{0.77}$ $L = \text{Maxmium length of travel by runoff water in m.}$ 1000
 $T_c = 10.53$ $H = \text{Difference in elevation between most remote point and outlet point in meter}$ 80
- $Q_p = 0.0276 \times 0.50 \times 3 \times 200$
 $Q_p = 8.28$

b) By weir formula

$$Q = 1.71Lh^{3/2}$$

$$8.28 = 1.71 \times 16 h^{3/2}$$

$$h = 0.45$$

Say $h = 0.4$

3 Free Board

hw= Wave height in meter

$$F_b = 1.5h_w$$

$$F_b = 1.5 \times 0.014(D_f)^{1/2}$$

Df= Fetch length in meter 120 Meter.

$$F_b = 0.23$$

Say $F_b = 0.2$

(B) STRUCTURAL DESGIN

1 Head wall

- a) Height of Head wall H= 1.2
 b) Top width(Tw) = $h + (P-1)^{1/2}$ $P = \text{Sp.ht. Of masonry}$ 2.3
 $Tw = 0.35$
 Top width= 0.8
 © Bottom width Bw $Tw + 0.8H$
 $Bw = 1.76$
 So Bottom Width= 2.40 Meter

2 Head wall extension

- a) Length= $H+h+1+F_b$
 $1.2 + 0.4 + 1 + = 2.60 \text{ Meter}$
 say Length of Right side wall = 5 Meter
 say Length of left side wall = 8.0 Meter
- b) Height of Head Extensionwall = $H+h+F_b$
 $1.2 + 0.4 + 0.2 = 1.8 \text{ Meter}$
- c) Top width = 0.6 Meter
- d) Bottom Width= $0.5(H+h) = 0.5(1.2 + 0.4) = 0.80 \text{ Meter}$

3 Side wall

- a) Length= $1.75H+0.75h+0.45 = 2.85$
 But as per site condition= 2.7 Meter
- b) Height:
 At H.W.End= $H+h+F_b = 1.2 + 0.4 + 0.2 = 1.8 \text{ Meter}$
 At W.W.End= $h+f_b = 0.4 + 0.2 = 0.6 \text{ Meter}$
- c) Top width= 0.6 Meter
- d) Bottom width=
 At H.W.End= $0.6+0.4(H+h) = 1.2 \text{ Meter}$
 At W.W.End= $0.6+0.4(1.5h) = 0.8 \text{ Meter}$
 But taken as= 1.0 Meter

4 Wing wall

- a) Height $h+F_b = 0.4 + 0.2 = 0.6 \text{ Meter}$
- b) Length= $2.25h = 2.25 \times 0.4 = 0.90 \text{ Meter Say } 2.00 \text{ M}$
- c) Top width = 0.6 Meter
 Bottom width of wing wall = 0.6 Meter

5 Apron

- a) Length= 16 Meter
- b) Width= $H+h+F_b = 1.2 + 0.4 + 0.2 = 1.8 \text{ Meter}$
- c) Thickness = 0.6 Meter

6 Toe wall

- a) Length= 16 Meter
- b) Width= 0.3 Meter
- c) Height= 0.3 Meter

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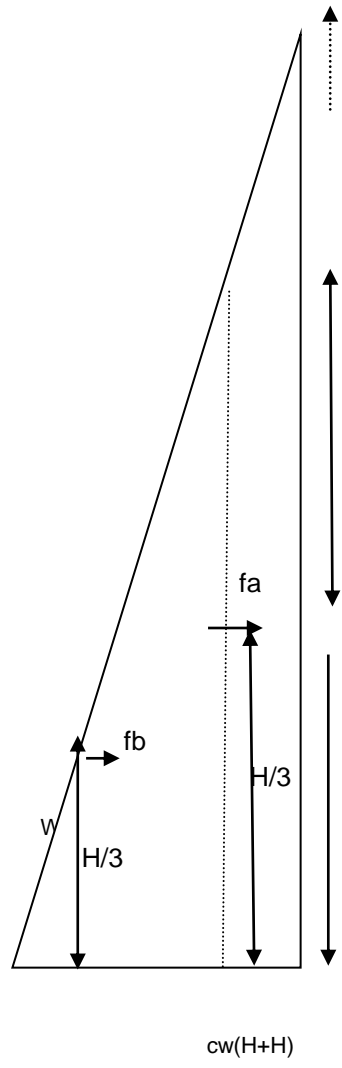
Recommended By

J.En.

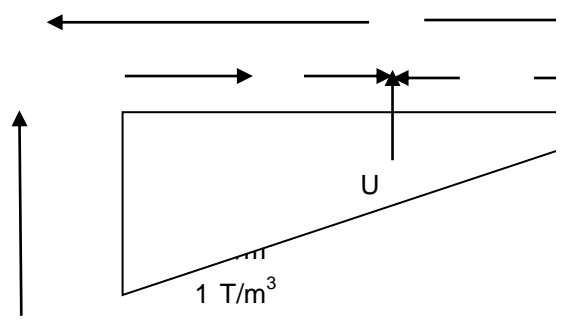
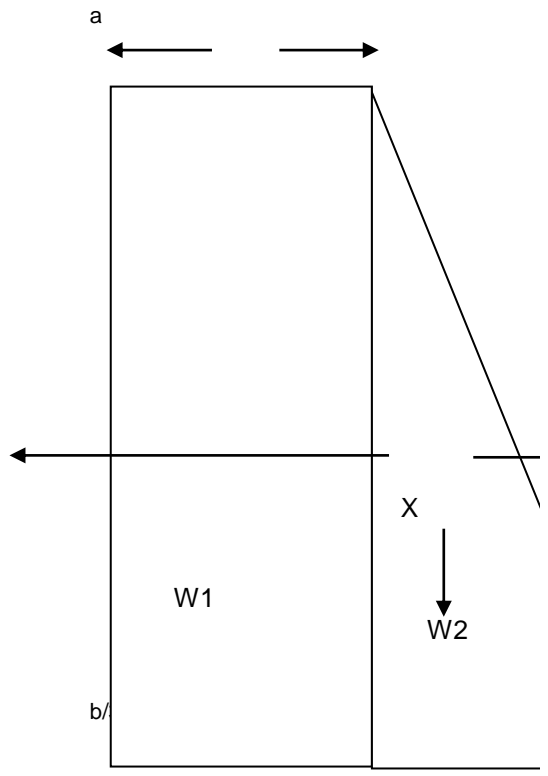
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C= Coefficient of runoff		0.5
I= Intensity of rain fall in cm/hr.		3
A= Catchment Area in Ha.		200
L=Maximum length of travel by runoff water in m.		1000
H= Difference in elevation between most remote point and outlet point in meter		80
h= Head over the crest in mtr.	0.45	0.4
Df= Fetch length in meter		120
Fb =Free board	0.23	0.2
Top width Tw=	0.80	0.8
Height of cerst	1.2	1.2
Bottom Width of Head wall Bw	1.76	2.40
Lenth of Head wall extension Left=	2.60	5
Lenth of Head wall extension Right=		8.0
Length of side wall=	2.85	2.65
Bottom Width of Side wall	1.24	1
	0.8	
Length of wing wall	0.90	2

FREE BODY DIAGRAM



- a= 0.8
- b= 2.40
- H= 1.2
- h= 0.4



Specific Wt. Of masonry P=
 Specific Wt. of water w=
 Coefficient of uplift pressure c=
 coefficient of friction at bed surface and creep length =

Weight of Dam:-

Weight of Dam:-

$$W_1 = aHP = 2.208 \text{ T}$$

$$W_2 = \frac{b-a}{2} HP = 2.208 \text{ T}$$

$$W = W_1 + W_2 = 2.208 + 2.208 = 4.416 \text{ T}$$

Water pressure

$$\text{At Depth } h = P_1 = wh = 1 \times 0.4 = 0.4 \text{ T/m}^2$$

$$\text{At Depth } H+h = P_2 = w(H+h) = 1(1.20 + 0.4) = 1.6 \text{ T/m}^2$$

Force acting due to water pressure i.e. Net horizontal

$$\text{Water force } P = \frac{P_1 + P_2}{2} H = 1.2 \text{ T/m}^2$$

$$\text{Horizontal water pressure at depth } h = Fa = wHh = 0.48 \text{ T}$$

$$\text{At depth } H+h = Fb = \frac{P_2 - P_1}{2} H = 0.72 \text{ T}$$

$$\text{Force due to water column at crest } F_3 = wha = 0.32 \text{ T}$$

$$\text{Up lift pressure } U = \frac{1}{2} cwb (H+h) = 1.152 \text{ T}$$

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STABILITY CHECKS1 Safety against over turning

$$\text{Over turning moment } M_o = F_a \frac{H}{2} + F_b \frac{H}{3} + u \frac{2}{3} b$$

$$0.48 \frac{1.2}{2} + 0.720 \frac{1.2}{3} + 1.15 \frac{2}{3} \times 2.40$$

$$M_o = 2.419$$

$$\text{Restoring Moment } M_r = W_1 (b-a/2) + W_2 (b-a)/3 + F_3 (b-a/2)$$

$$M_r =$$

$$M_r = 4.416 + 2.355 + 0.640 = 7.41$$

$$\text{Factor of safety } \frac{M_r}{M_o} = \frac{7.411}{2.419} = 3.063 > 1.5 \text{ Hence}$$

Structure is safe against over turning

2 Safety against Rupture from tension

$$\text{Net Vertical Pressure } V = W_1 + W_2 + F_3 - U$$

$$2.208 + 2.208 + 0.32 - 1.152 = 3.584$$

Position of resultant where it cut the base

$$X = \frac{\text{Excess moment}(M_r - M_o)}{\text{Net vertical force}} = \frac{7.411 - 2.419}{3.584} = 1.39$$

TRUE

3 Safety against crusing

$$\text{Eccentricity } e = b/2 - X$$

$$-0.19$$

Crusting stress at the toe of theHead wall

$$P_c = \frac{V}{b} (1 - 6e/b)$$

$$P_c = 0.773333$$

$P_c \ll 20$ Hence it is safe

4 Safety against sliding

$$\text{Net vertical Force } V = 3.584 \text{ T}$$

$$\text{Restoring force} = uV = 0.70 \times 3.584 \quad (u=0.65 \text{ to } 0.75)$$

$$2.5088 \text{ T}$$

$$\text{Sliding force Net horizontal force} = F_a + F_b$$

$$0.48 + 0.72 = 1.2 \text{ T}$$

$$\text{Factor of safety} = \frac{\text{Restoring force}}{\text{Sliding force}} = \frac{2.509}{1.2} = 2.091 > 1.3 \text{ Hence}$$

Hence it is safe

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A.En.

DETAILED ESTIMATE OF WHS

NAME OF WATERSHED: JELU-GAGADI (JODHPUR XIV)

NAME OF WORK Construction of Water Harvesting structure**Name of Village****Name of Scheme** IWMP**General features of anicut:-**

Height of crest=	1.2 M.				
Length of Crest	16 M.				
Depth of foundation for H.W. =	2.0 M.	Length of wing wall=	2.0 M.		
Bottom width of H.W. =	2.4 M.	Height of Wing wall=	0.6 M.		
Top of H.W =	0.8 M.	Bottom width of Wing wall=	0.6 M.		
Length of H.W.Ext =	5.0 M.	Depth of foundation for Wing wall =	0.9 M.		
Height of H.W.Ext. at H.W. =	1.8 M.	Height of Toewall=	0.30 M.		
Top Width of H.W.Ext.=	0.6 M.	Top & Bottom width of Toe wall=	0.30 M.		
Bottom width for H.W.Ext.	0.8 M.	Depth of foundation for Toe wall =	0.9 M.		
Depth of foundation for H.W.Ext.:	1.2 M.	Thickness of Apron=	0.6 M.		
Length of side wall=	2.7 M.	Width of Apron =	1.8 M.		
Bottom Width of S.W.	1.00 M.	Berm for H.W Ext.	2.0 M.		
Height of side wall at W.W.End=	0.60 M.				
Depth of foundation for side wall	1.2 M.				

S.No.	Item	No	L	B	H	Quantity
1	Dag belling 5cm. To 7.5cm deep(As per item no. page of W.D.& S.C. BSR of Jodhpur circle					
						Total
2	Cutting and clearing of ordinary jungle including bushes shrubs and disposal as per instruction of engineer incharge					
			0	X	0.0	= 0 Sqm.

S.No.	Item	No	L	B	H	Quantity
3	Benching of the base and depositing the excavated material for bund for bund canal dressing etc. all components					Total Cum.
4	Earth work excavation for bund in hard dry or moist soil including laying in layer of 15cm. Breaking of clods dressing to require profile with manual compaction including initial lift up to 1.5 m and lead up to 30M.					Total Cum
5	Earth work excavation for foundation in dry or moist soil including ramming of bottom scrapping of sides dipodal of soil initial lift up to 1.5 m and lead up to 30M.					
	H.W.	1	X 16	X 2.7	X 2.0	= 86.40 Cum.
	H.W.Ext Left	1	X 5.0	X 0.8	X 3.2	= 12.80 Cum.
	H.W.Ext Right	1	X 8.0	X 0.8	X 1.2	= 7.68 Cum.
	S.W.	2	X 2.7	X 1.20	X 3.2	= 20.35 Cum.
	W.W.	2	X 2.0	X 0.6	X 0.90	= 2.16 Cum.
	Apron	1	X 16	X 1.8	X 0.60	= 17.28 Cum.
	T.W.	1	X 16	X 0.30	X 0.9	= 4.32 Cum.
						Total 150.99 Cum.
1	Execavation in Hard soil				30%	45.30 Cum.
2	Execavation in ordinary murrum				40%	45.30 Cum.
3	Execavation in compacted murrum				30%	60.40 Cum.
	Extra Lift of execavcated soil from foundation abiove 1.5 M.				70% of total soil	105.69 Cum

S.No.	Item		No	L	B	H		Quantity		
6	Providing and laying of cement concrete well mixed in cement mortar 1:3:6 laying in position complete excluding curing with maximum size of aggregate up to 50 mm. etc. complete using	H.W.	1	X	16.0	X	2.7	X	0.3 =	12.96 Cum.
		H.W.Ext	1	X	5	X	0.8	X	0.3 =	1.20 Cum.
			1	X	8	X	0.8	X	0.3 =	1.92 Cum.
		S.W.	2	X	2.65	X	0.80	X	0.3 =	1.27 Cum.
		W.W.	2	X	2	X	0.6	X	0.3 =	0.72 Cum.
		Apron	1	X	16.0	X	1.8	X	0.3 =	8.64 Cum.
		T.W.	1	X	16.0	X	0.30	X	0.3 =	1.44 Cum.
		Total								28.15 Cum.
7	In Foundation Stone masonry cement sand mortar(1:6) for above 30 cm. Thick wall	H.W.	1	X	16.0	X	2.4	X	1.7 =	65.28 Cum.
		H.W.Ext	1	X	5.0	X	0.8	X	0.9 =	3.60 Cum.
		H.W.Ext	1	X	8.0	X	0.8	X	0.9 =	5.76 Cum.
		S.W.	2	X	2.7	X	0.80	X	0.9 =	3.82 Cum.
		W.W.	4	X	2.0	X	0.6	X	0.6 =	2.88 Cum.
		T.W.	1	X	16.0	X	0.15	X	0.6 =	1.44 Cum.
		Total								82.78 Cum.
8	In super structure Stone masonry above 30 cm. Thick in cement sand mortar(1:6)	H.W.	1	X	16.0	X	1.6	X	1.2 =	30.72 Cum.
		H.W.Ext	1	X	5.0	X	0.7	X	1.8 =	6.30 Cum.
		H.W.Ext	1	X	8.0	X	0.7	X	1.8 =	10.08 Cum.
		S.W.	2	X	2.7	X	0.8	X	1.20 =	5.09 Cum.
		W.W.	2	X	2.0	X	0.6	X	0.6 =	1.44 Cum.
		T.W.	1	X	16.0	X	0.30	X	0.30 =	1.44 Cum.
		Total								55.07 Cum.

S.No.	Item		No	L	B	H	Quantity
9	Stone Kharanja in cement mortar 1:6 for bed and floor including cpaction etc. complete apron	Apron	1	X 16.0	X 1.8	X 0.30	8.64 Cum.
						Total	8.64 Cum.
10	Providing and laying of cement concrete well mixed in cement mortar 1:2:4 laying in position complete excluding curing with maximum size of aggregate up to 20 mm. etc. complete	H.W.	1	X 16.0	X 0.8	X 0.05 =	0.64 Cum.
		H.W.Ext	1	X 5.0	X 0.6	X 0.05 =	0.15 Cum.
			1	X 8.0	X 0.6	X 0.05 =	0.24 Cum.
		S.W.	2	X 2.7	X 0.6	X 0.05 =	0.16 Cum.
		W.W.	2	X 2.0	X 0.6	X 0.05 =	0.12 Cum.
		T.W.	1	X 16.0	X 0.30	X 0.05 =	0.24 Cum.
		Apron	1	X 16.0	X 1.80	X 0.1 =	2.88 Cum.
						Total	4.43 Cum.
11	Flush pointing in cement motar (1:3)	H.W.	1	X 16.0	X 2	=	32.00 Sqm.
						Total	32.00 Sqm.
12	20 m.m thick plastering on new surface in cement mortar (1:4)	H.W.	1	X 16.0	X 1.2	=	19.20 Sqm.
		H.W.Ext.	1	X 5.0	X 1.8	=	9.00 Sqm.
		H.W.Ext.	1	X 8.0	X 1.8	=	14.40 Sqm.
		S.S	2	X 2.7	X 1.8	=	9.54 Sqm.
		W.W.	2	X 2.0	X 0.6	=	2.40 Sqm.
		T.W.	2	X 16.0	X 0.3	=	9.60 Sqm.
						Total =	64.14 Sqm.
	E/W in excavation for embakement		2	X 21	X 5	X 2.15	451.50 cum
13	Dry stone pitching of Hammer dressed witch packing of voids of small stone including all lifts in require profile (23 cm depth)			16.0	X 10.00	X 0.23	36.80 Cum

Height of crest=	1.2
Thickness of C.C. in (1:4:8)	0.3 M.
Length of Crest	16 M.
Depth of foundation for H.W. =	2.0 M
Bottom width of H.W. =	2.4 M
Top of H.W =	0.8 M
Length of H.W.Ext =	5.0 M
Height of H.W.Ext. at H.W. =	1.8 M
Top Width of H.W.Ext.=	0.6 M
Bottom width for H.W.Ext.	0.8 M
Depth of foundation for H.W.Ext.=	1.2 M
Length of side wall=	2.7 M
Bottom Width of S.W.	1.0 M
Height of side wall at W.W.End=	0.6 M
Depth of foundation for side wall =	1.2 M
Length of wing wall=	2.0 M
Height of Wing wall=	0.6 M
Bottom width of Wing wall=	0.6 M
Depth of foundation for Wing wall =	0.9 M
Height of Toewall=	0.30 M
Top & Bottom width of Toe wall=	0.3 M
Depth of foundation for Toe wall =	0.9 M
Thickness of Apron=	0.6 M
Width of Apron =	1.8 M
Embankment L	21 m

Height of Wing wall=			0.6 M
BW	8 TW	2	5 m
H			2.15 m

Height of Wing wall=

0.6 M

Height of Wing wall=

0.6 M

Abstract of Cost of Anicut

Construction of Water Harvesting structure

NAME OF WORK

Name of Village

Name of Scheme

0

IWMP

S.No.	Item	Quantity	Unit	Lab.rate	L.Amount	Rate	Amount
1	Dag belling 5cm. To 7.5cm deep(As per item no. page of W.D.&	0.00	Cum.			0.38	0
2	Cutting and clearing of ordinary jungle including bushes shrubs and disposal as per instruction of	0	Sqm.			0.70	0
3	Benching of the base and depositing the excavated material for bund for bund canal	0	Cum.				0
4	Earth work excavation for bund in hard dry or moist soil including laying in layer of 15cm. Breaking	0	Cum.			92.00	0
5	Earth work excavation for foundation in dry or moist soil including ramming of bottom Excavation in Hard soil Disintegrated rock Ordinary rock	150.99 45.30 45.30 60.40	Cum. Cum. Cum. Cum.				0 4167.3792 6069.8784 10750.63
6	Extra Lift of excavated soil from foundation above 1.5 M.	105.69	Cum.	10.80	1141.5	10.80	1141.4995
7	Providing and laying of cement concrete well mixed in cement mortar 1:3:6 laying in position complete excluding curing with	28.15	Cum.	320.1	9011.46	1894.0	53319.888
8	In Foundation Stone masonry cement sand mortar(1:6) for	82.78	Cum.	419.8	34749.4	1503.00	124412.33
9	In super structure Stone masonry above 30 cm. Thick in cement sand mortar(1:6)	55.07	Cum.	554.8	30551.7	1641.00	90366.588

10	Stone Kharanja in cement mortar 1:6 for bed and floor including compaction etc. complete apron	8.64	Cum.	419.8	3627.07	1503.0	12985.92
11	Providing and laying of cement concrete well mixed in cement mortar 1:2:4 laying in position complete excluding curing with	4.43	Cum.	247.1	1094.41	2324.0	10292.996
12	Flush pointing in cement mortar (1:2)	32.00	Sqm.	39.8	1273.6	48.00	1536
13	20 m.m thick plastering on new surface in cement mortar (1:4)	64.14	Sqm.	25.7	1648.4	133.00	8530.62
14	E/W for Embankment	451.50	Cum.	85	38377.5	85.00	38377.5
15	Dry stone pitching of Hammer dressed with packing of voids of small stone including all lifts in require profile (23 cm depth)	36.80	Cum.	174.8		590.00	21712
					142463	Total	383663.23

TOTAL

383663

Contingency %

15347

Say total Cost

399010

400000.00

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A.En.

Material Statement

NAME OF WORK

Construction of Water Harvesting structure

Name of Village

Jelu, Binjaria -bawdi

Name of Scheme

IWMP

S.No.	ITEM	Quantity Cum / Sqm	Cement Becs	Sand Cum	Aggrigate Cum	Stone Cum
1	Cement Concrete (1:4:8)	28.15	90.09	12.67	25.34	-
2	Plaster in C.C. (1:4)	64.14	10.88	1.54	-	-
3	Massonary in Cement sand mortar 1:6	137.84	192.98	41.35	-	137.84
4	Pointing in Cement	32.00	1.32	0.13	-	-
5	Stone Kharanja in cement mortar (1:6)	8.64	12.096	2.592	-	8.64
6	Cement concrete coping(1:2:4)	4.43	25.87	1.82	3.63	-
7	Dry Stone Pitching	36.80	-	-	-	36.80
	TOTAL		333.23	60.10	28.97	183.28
	Say Bags or		334 16.70	MT.		

1 Cement 16.7 MT.

2 Sand 60.10 Cum.

3 Stones 183.28 Cum.

4 Aggregates 28.97 Cum.

Prepared By

Recommended By

J.En.

A.En.

TYPICAL PLAN AND SECTION OF ANICUT

Construction of Water Harvesting structure
 Jelu ,Binjaria Bawdi

IWMP

NAME OF WORK
 Name of Village

Name of Scheme

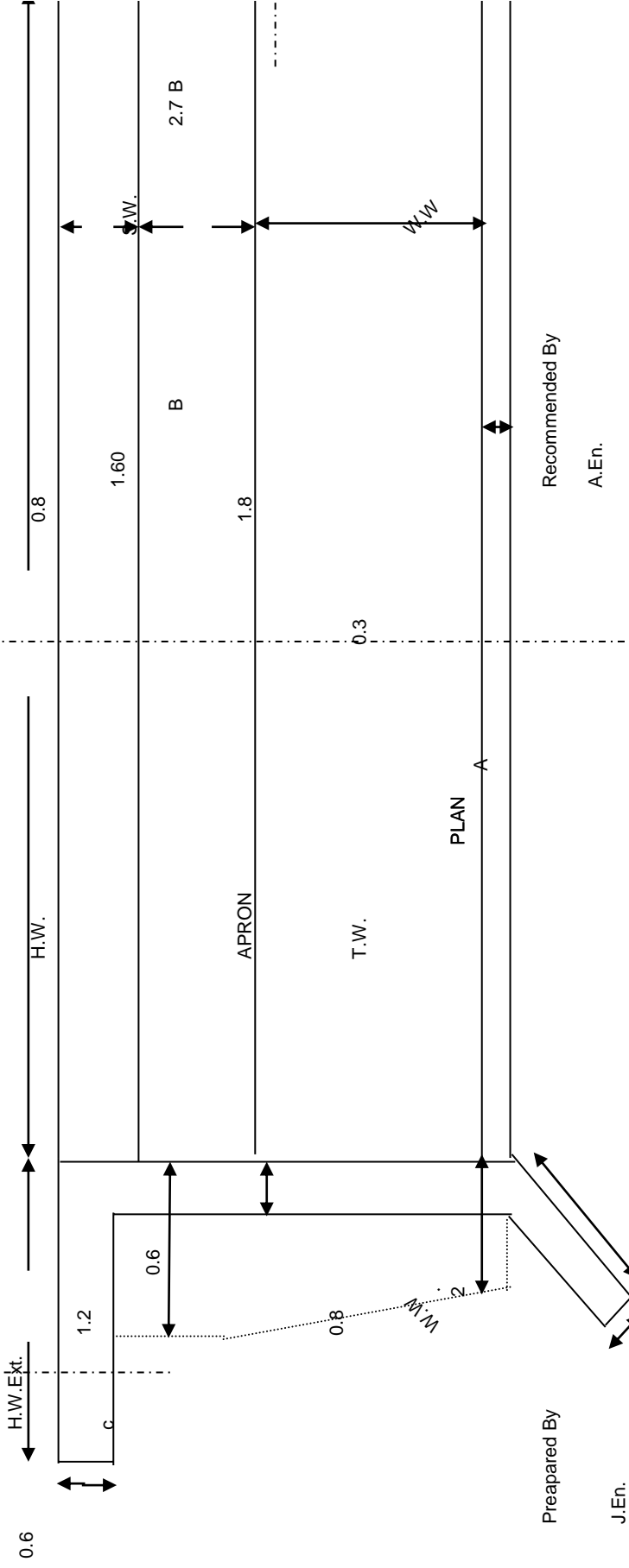
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16.0

C

5

5

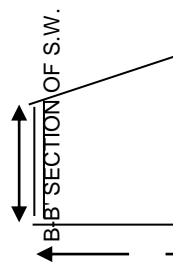
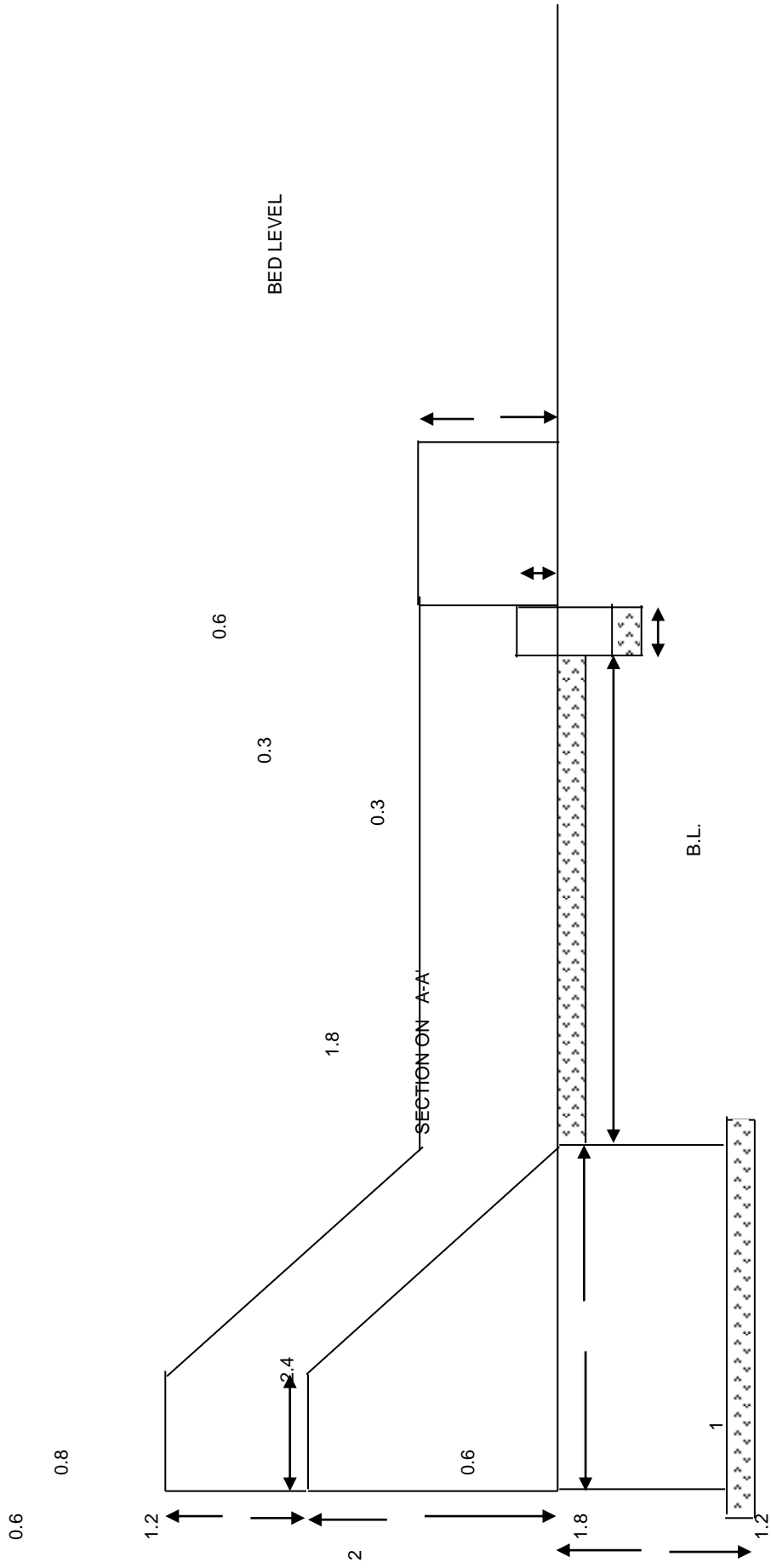


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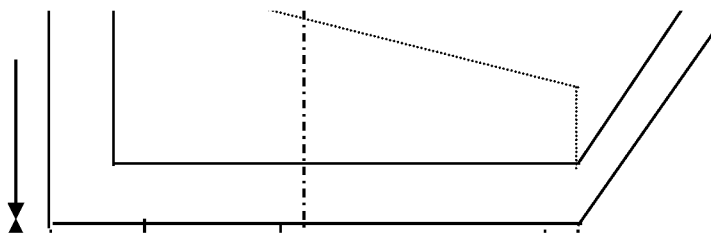
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DESIGN OF BUND IN ARABLE LAND TYPE-I

Name of Water Shed : Jelu-Gagadi (Jodhpur XIV) IWMP Name of P.S. Osian

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

$$0.305(0.8 x \quad 1+ \quad 1.0)$$

V.I = 0.549 Vertical interval 0.8
 X = Rain Fall Factor 1
 Y = Factor due to soil infiltration & Crop cover 1
 S = Percent slope 1

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

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

$$\text{Total Height of Bund} = 0.50 + 0.30 = 0.80 \text{ Cms}$$

$$\text{Top width of Bund} = 0.35 \text{ Cms.}$$

$$\text{Bottom width of Bund} = 2.75$$

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

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

$$X \text{ Section} = 1.24 \text{ Sqmt.}$$

DESIGN OF EARTHEN BUND TYPE-II

Name of Water Shed : Jelu-Gagadi (Jodhpur XIV) IWMP Name of P.S. Osian

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

$$0.305 (0.8 \times 2 + 1.0)$$

$$V.I = 0.793$$

V.I Vertical interval

X= Rain Fall Factor

Y= Factor due to soil infiltration & Crop cover

S= Percent slope

0.8

1

2

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

$$H_e = 0.723 \text{ Say } 0.75 \text{ Cm.}$$

He Depth of impounding

Re 24Hour rainfall excess in Cms. for 10 year recurrence interval

45.62

1.037

$$\text{Total Height of Bund} = 0.75 + 0.45 = 1.20 \text{ Cms}$$

$$\text{Top width of Bund} = 0.6 \text{ Cms.}$$

$$\text{Bottom width of Bund} = 4.20$$

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

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

X Section= 2.88 Sqmt.

DESIGN OF EARTHEN BUND TYPE -III

Name of Water Shed : Jodhpur XIV (IWMP)

Name of Block: Osian

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

$$0.305(0.8 \times 3+ 1.)$$

$$V.I = .946$$

V.I Vertical interval

X= Rain Fall Factor

Y= Factor due to soil infiltration & Crop cover

S= Percent slope

0.8

1

3

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

$$He = .946 \quad \text{Say} \quad 0.95\text{Cm.}$$

He Depth of impounding

Re 24Hour rainfall excess in Cms. for 10 year recurrence interval

45.62

0.95

$$\text{Total Height of Bund} = 0.95 + 0.55 = 1.50 \text{ ms}$$

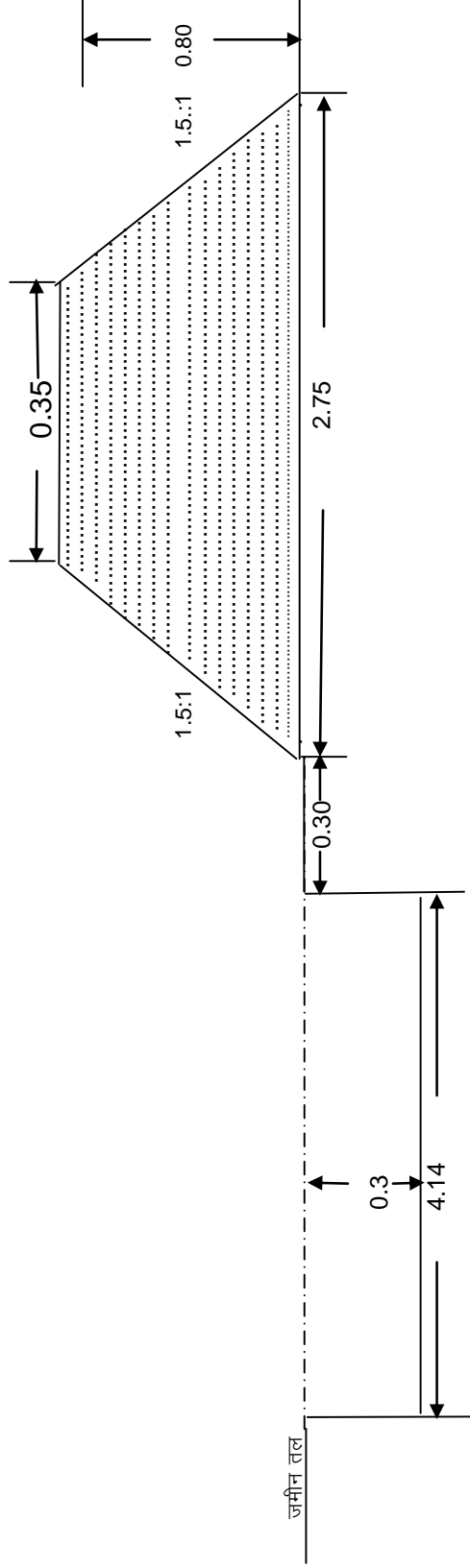
$$\text{Top width of Bund} = 0.75 \text{ ms.}$$

$$\text{Bottom width of Bund} = 5.25$$

$$\text{Cross section of bund} = \frac{(\text{Top width of Bund} + \text{Bottom width of Bund}) \times \text{Height}}{2} \quad \text{X Section} = \frac{(0.75 + 5.25) \times 1.50}{2}$$

$$\text{X Section} = 4.50 \text{ sqmt.} \quad \text{Say} \quad 4.50 \text{ sqmt.}$$

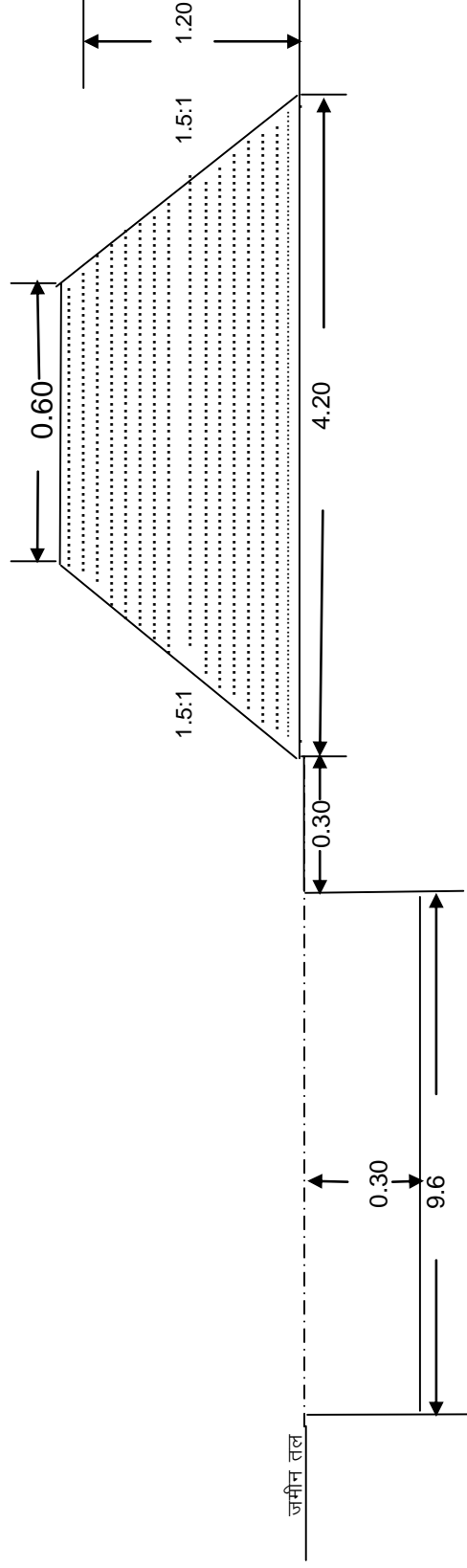
CROSS SECTION OF EARTHAN BUND TYPE I



(All Measurement in Meter)

$$\begin{aligned} \text{Cross Sec.} &= \frac{(2.75+0.35) \times 0.80}{2} \\ &= 1.24 \text{ Sqm} \end{aligned}$$

CROSS SECTION OF EARTHAN BUND TYPE - II

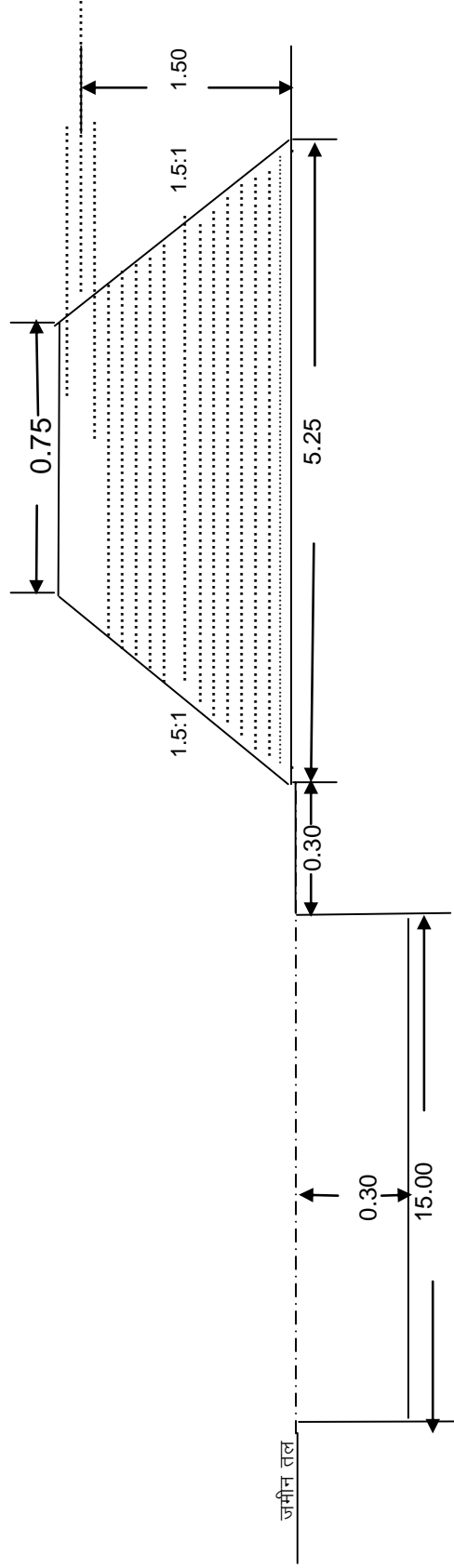


All Measurement in Meter)

$$\text{Cross Sec.} = \frac{((4.20+0.60)) \times 1.20}{2} = 2.88 \text{ Say } 2.88 \text{ sqmt.}$$

Cross Sec.= 2.88 sqmt.

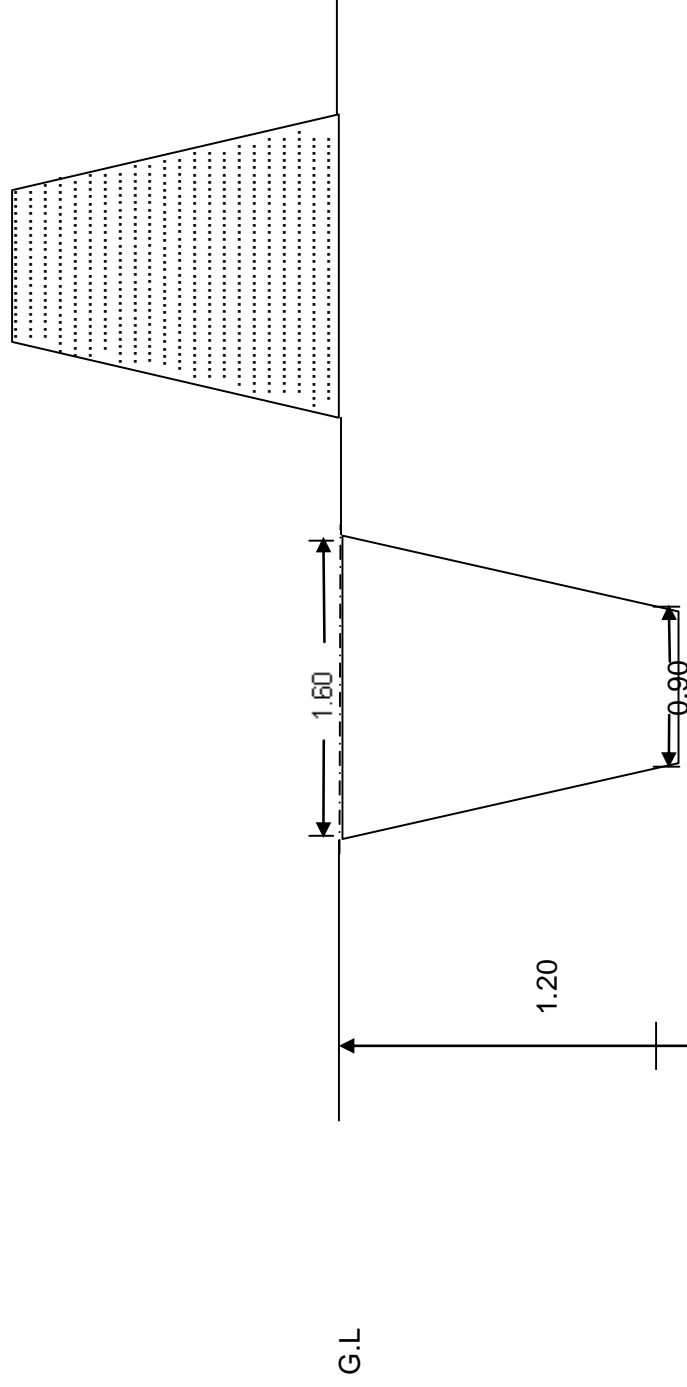
CROSS SECTION OF EARTHAN BUND TYPE - III



(All Measurement in Meter)

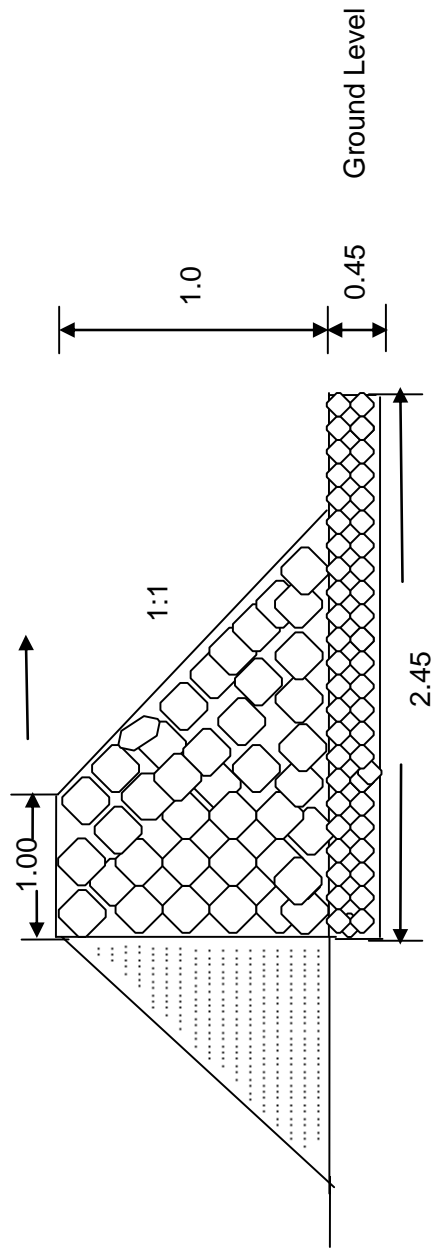
$$\begin{aligned} \text{Cross Sec.} &= ((5.25+0.75) / 2) \times 1.50 \\ &= 4.50 \text{ Sqm} \end{aligned}$$

CROSS SECTION OF DITCH CUM BUND FENCINGH



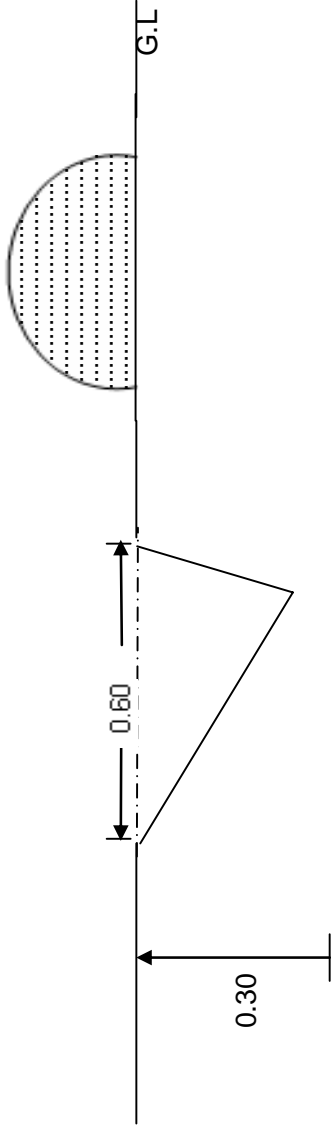
$$\begin{aligned} \text{Cross Sec.} &= \frac{(1.50+0.90)}{2} \times 1.20 \\ &= 1.44 \text{ Sqm} \end{aligned}$$

CROSS SECTION OF L.S.C.D

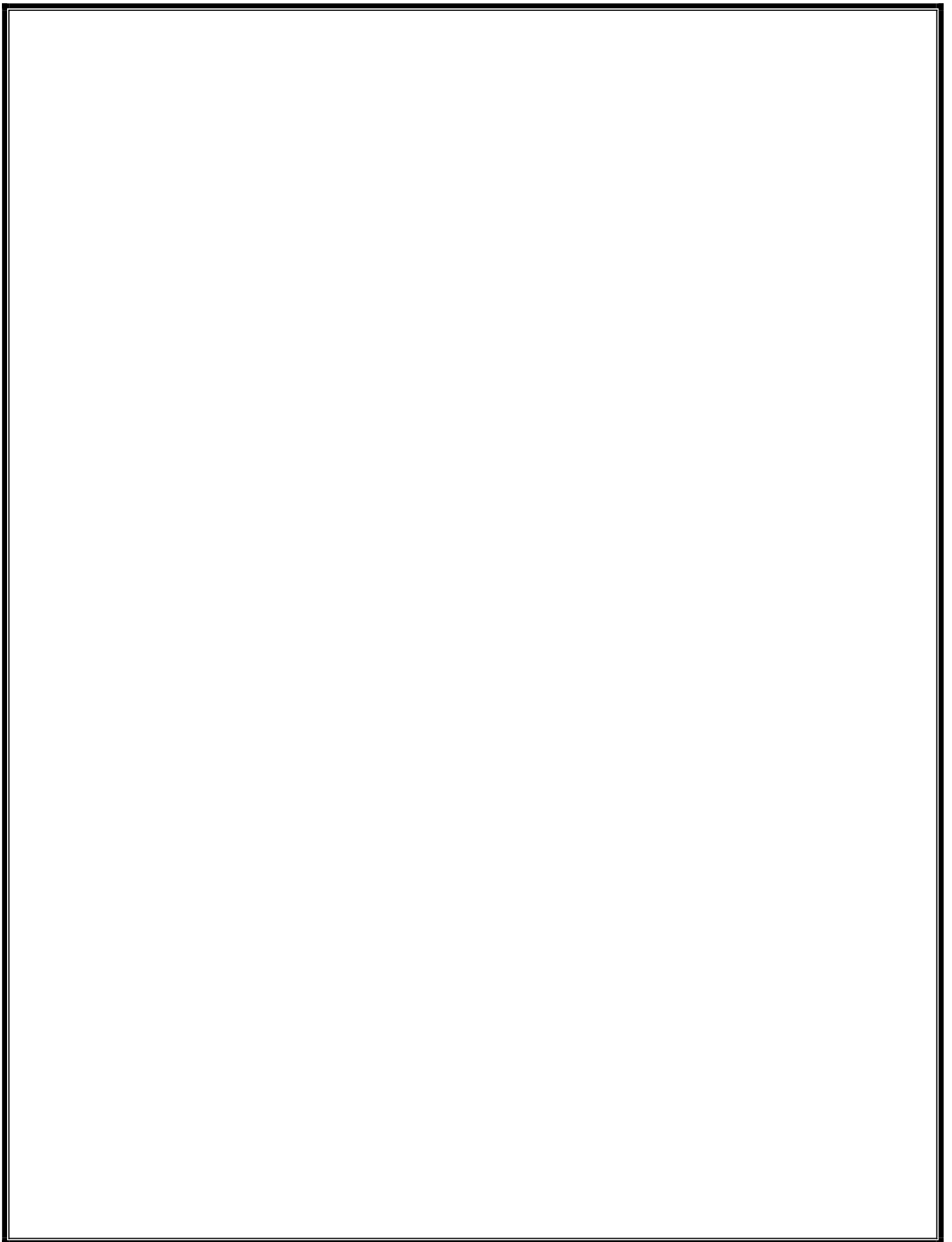


$$\begin{aligned} \text{Cross Sec.} &= ((1.00+2.00) / 2) \times 1.00 \\ &= 1.50 \text{ Sqm} \end{aligned}$$

CROSS SECTION OF CONTOUR FURROW



$$\begin{aligned} \text{Cross Sec.} &= \frac{1}{2} \times 0.60 \times 0.30 \\ &= 0.09 \text{ sqm.} \end{aligned}$$



लागत तकमीना

नाम जल ग्रहण क्षेत्र—जेलू

कार्य का नाम—चरागाह भूमि पर खाई फेंसिंग

नाम : जेलू

क्षेत्रफल: 35 हैक्टेयर 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.)	3530.00	मीटर	0.7	0.0	241.00	241.00
2	नीव, खाई परनाला में 1.5 गहराई तक मिट्टी का खुदाई करना, तल को कूटना, पानी डालना, बगल को संवारना, खुदी मिट्टीको बाहर निकालना, नीव भरने के बाद खाली स्थानों को पुनः मिट्टी से भरना तथा बची हुई मिट्टी को 50 मीटर दूरी तक निस्तारण करना। सख्त मिट्टी में। खाई हेतु	508.20	घ.मी.	9	9.00	46854.40	46854.40
3	डिबलिंग विधि से वानिकी बीज बुवाई कार्य	10500.00	मीटर	0.6	0.60	6300.00	6300.00
4	वानिकी बीजों की राशि	50.00	कि.ग्रा	-	40.00		2000.00
5							
	योग					476425.40	478425.40
	योग						478425.40
	जोडा 4: कन्टोजेन्सी						19137.02
	योग						497562.42
	लागत श्रम भाग						476425.40
	लागत सामग्री भाग						21137.02
	कुल योग						497562.42

Say **497000.00**

लागत तकमीना

नाम जल ग्रहण क्षेत्र— जलू

कार्य का नाम— कृषि भूमि पर
वेजीटेटिव कन्टूरबन्ड

1

80

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.2011)	160.00	मीटर	0.7	0.0	112.00	112.00
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 मी० उठाना तथा 50 मीटर दूरी के लिए। कठोर मिट्टी में मिट्टी की कुटाई मानव द्वारा या प्लेन रोलर द्वारा।(जि.स्त.दर.अनु.2011)	१०	घ.मी.	8	8.00	832.00	832.00
3	धामन/घास बीज बुवाई बनाये गये रिज पर दो लाईनों में (जि.स्त.दर.अनु.2011)	240.00	मीटर	0.6	0.60	144.00	144.00
4	धामन घास बीज	1.00	कि.ग्रा	-	61.50		61.50
	योग					8688.00	8749.50
	योग						8749.50
	जोडा 4: कन्टोजेन्सी						349.98
	योग						9099.48
	लागत श्रम भाग						8688.00
	लागत सामग्री भाग						411.48
	कुल योग						9099.48

Say

9000.00

विस्तृत तकमीना

नाम जल ग्रहण क्षेत्र—
गाँव का नाम :

कार्य का नाम—अकृषि भूमि पर कन्दूर फर्रो
क्षेत्रफल: 35 हैक्टर

क्र.सं.	विवरण	ल.गचौ.गग. त्र कुल मात्रा
1	ए फ्रेम लेवल से 8 से 15 मीटर क्षैतिज अन्तराल में समोच्च रेखा पर ले आउट का कार्य	35 हैक्टर / 800मी0 / हैक्टेयरत्र28000 मी0
2	डाग बेलिंग 2.5 से 5 सेमी गहराई तक (जि.स्त.दर.अनु.2010पृ.सं0 25 क.सं. 182)	28000 मी.
3	नीव, खाई परनाला में 1.5 गहराई तक मिट्टी का खुदाई करना, तल को कूटना, पानी डालना, बगल को संवारना, खुदी मिट्टीको बाहर निकालना, नीव भरने के बाद खाली स्थानों को पुनः मिट्टी से भरना तथा बची हुई मिट्टी को 50 मीटर दूरी तक निस्तारण करना। सख्त, चिकनी, कंकर, मिट्टी में। नीव हेतु (जि.स्त.दर.अनु.2010पृ.सं05 क.सं. 2ब)	28000 मीग1१2ग0१60ग0१30त्र2520
4	बीज बुवाई बनाये गये रिज पर	28000 मी.
5	बीज की मात्रा (धामण)	28000 मी. / 1 कि.ग्रा. / 100 मीटरत्र280

लागत तकमीना

नाम जल ग्रहण क्षेत्र—

कार्य का नाम—अकृषि भूमि पर कन्टूर फर्रो

गाँव का नाम :

क्षेत्रफल: 35 हैक्टर

35.00

क्र.सं.	विवरण	मात्रा	इकाई	दर		राशि	
				श्रम	कुल	श्रम	कुल
1	ए फ्रेम लेवल से 8 से 15 मीटर क्षैतिज अन्तराल में समोच्च रेखा पर ले आउट का कार्य	2800	मी.	0.5	0.5	21000.00	21000.00
2	डाग बेलिंग 2.5 से 5 सेमी गहराई तक (जि.स्त.दर.अनु.	2800	मी.	0.0	0.0	1800.00	1800.00
3	नीव, खाई परनाला में 1.5 गहराई तक मिट्टी का खुदाई करना, तल को कूटना, पानी डालना, बगल को संवारना, खुदी मिट्टीको बाहर निकालना, नीव भरने के बाद खाली स्थानों को पुनः मिट्टी से भरना तथा बची हुई मिट्टी को 50 मीटर दूरी तक निस्तारण करना। सख्त, चिकनी, कंकर, मिट्टी में। नीव हेतु (जि.स्त.दर.अनु.	2520	घ.मी.	9.00	9.00	23180.00	23180.00
4	बीज बुवाई बनाये गये रिज पर	2800	मी.	0.60	0.60	1680.00	1680.00
5	बीज की मात्रा (धामण)	28	कि.ग्रा.	-	61.50	-	1220.00
	योग					289240.00	306460.00
				8			
	योग						306460.00
	जोडा 4: कन्टोजेन्सी						9193.80
	योग						315653.80
	लागत श्रम भाग						289240.00
	लागत सामग्री भाग						26413.80
	कुल योग						315653.80
						Say	315000.00

लागत तकमीना

नाम जल ग्रहण क्षेत्र—जेलू

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 क.सं. 182)	0.00	मीटर	0.7	0.0	4900	4900
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 मी० उठाना तथा 50 मीटर दूरी के लिए। कठोर मिट्टी में मिट्टी की कुटाई मानव द्वारा या प्लेन रोलर द्वारा।(जि.स्त.दर	100.0	घ.मी.	8	8.00	8680	8680
3	धामन/घास बीज बुवाई बनाये गये रिज पर दो लाईनों में (जि.स्त.दर.अनु.2010पृ.सं020 क.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					8680.00	8741.50
	योग						8741.50
	जोडा 4: कन्टोजेन्सी						349.66
	योग						9091.16
	लागत श्रम भाग						8680.00
	लागत सामग्री भाग						411.16
	कुल योग						9091.16

Say 9000.00

लागत तकमीना

नाम जल ग्रहण क्षेत्र—जेलू

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	0.0	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 मी० 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.	8	8.00	806.25	806.25
3	धामन/घास बीज बुवाई बनाये गये रिज पर दो लाईनों में (जि.स्त.दर.अनु.)	650	मीटर	0.6	0.60	40.50	40.50
4	धामन घास बीज	1.00	कि.ग्रा	-	61.50		61.50
	योग					8678.25	8739.75
	योग						8739.75
	जोडा 4: कन्टोजेन्सी						349.59
	योग						9089.34
	लागत श्रम भाग						8678.25
	लागत सामग्री भाग						411.09
	कुल योग						9089.34

Say

9000.00

MODEL ESTIMATE

नाम जल ग्रहण क्षेत्र—

कार्य का नाम—कृषि भूमि पर वानिकी पौधारोपण
पौधो की संख्या: 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	6.8	6.8	68.00	68.00
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 कि०मी. दूरी तक के लिए	108	संख्या / 1000	-	9.21	-	999.00
5	पौधे रोपण के समय डीएपी डालना	3	कि.ग्रा.	-	10.00	-	30.00
6	दीमक नियन्त्रण हेतु एन्डोसल्फान 4: चूर्ण	10	कि.ग्रा.	-	12.00	-	120.00
7	पौधो में उर्वरक एवं कीट नाटक दवाई डालना	100	संख्या	0.21	0.21	21.00	21.00
	योग					1001.00	1789.09
	योग						1789.09
	जोडा 4: कन्टोजेन्सी						71.56
	योग						1860.65
	लागत श्रम भाग						1001.00
	लागत सामग्री भाग						859.65
	कुल योग						1860.65
						Say	1900.00

₹ 19 रु / पौधा

MODEL ESTIMATE FOR PLANTATION IN PASTURE

क्र.सं.	विवरण	मात्रा	इकाई	दर		राशि	
				श्रम	कुल	श्रम	कुल
1	अग्रिम मदा कार्य :- 45ग45ग45 सेमी. माप के गड्डे करना कठोर मिट्टी 400 गड्डे/हैक्टर	14000	संख्या	13.40	13.40	1800.00	1800.00
2	पौधे रोपण करना	14000	संख्या	3.00	3.00	42000.00	42000.00
3	पौधों की कीमत	1300	संख्या	-	5.00	-	800.00
4	पौधो को उपलब्ध पानी पिलाना 15 लीटर/पौधों पौधोरोपण के समय	14000	संख्या	1.8	1.8	25200.00	25200.00
5	पौधे रोपण के समय डीएपी डालना	420.00	कि.ग्रा.	-	10.00	-	4200.00
6	पौधों का परिवहन पौधे भराई एवं खाली कराई सहित 5 किमी दूरी तक के लिए	1300	संख्या / 1000	-	981	-	159.68
7	थावला बनाना कम से कम 50 सेमी अर्द्ध व्यास का साधारण जमीन में (जि.स्त.दर.अनु.2011	14000	संख्या	2.40	2.40	33600.00	33600.00
8	रखरखाब:- पौधों को उपलब्ध पानी पिलाना 15 लीटर। पौधों (जि.स्त.दर.अनु.2011)	140000	संख्या	1.8	1.8	252000.00	252000.00
9	पौधों की निराई गुडाई करना 15 सेमी गहराई तक एवं 45 सेमी अर्द्धव्यास तक (जि.स्त.दर.अनु.2011)	42000	संख्या	1.20	1.20	50400.00	50400.00
10	पानी का परिवहन 5 किमी दूरी तक के लिए	2100000	लीटर/	-	298	-	62643.00
11	दीमक नियन्त्रण हेतु एन्डोसल्फान 4: चूर्ण	1050	कि.ग्रा.	-	12.00	-	12600.00
12	पौधो में उर्वरक एवं कीट ना तक दवाई डालना (जि.स्त.दर.अनु.2011	21000	संख्या	0.21	0.21	4410.00	4410.00
	जबी - तूतक	8		333.00	333.00	324000.00	324000.00
	योग					595210.00	778046.68
	योग						778046.68
	जोडा 4: कन्टोजेन्सी						23341.40
	योग						801388.08
	लागत श्रम भाग						595210.00
	लागत सामग्री भाग						206178.08
	कुल योग						801388.08
						Say	800000.00

लागत तकमीना

कार्य का नाम – कम्पोस्ट पिट यूनिट

क्र.सं.	विवरण	मात्रा	इकाई	दर		राशि	
				श्रम	कुल	श्रम	कुल
1	नींव, खाई परनाला में 1.5 गहराई तक मिट्टी का खुदाई करना, तल को कूटना, पानी डालना, बगल को संवारना, खुदी मिट्टीको बाहर निकालना, नींव भरने के बाद खाली स्थानों को पुनः मिट्टी से भरना तथा बची हुई मिट्टी को 50 मीटर दूरी तक निस्तारण करना। सख्त, चिकनी,	10.8	घ.मी	2.00	2.00	9.60	9.60
2	सिंगल सुपर फास्फेट	150.00	कि.ग्रा.	-	3.60	-	540.00
3	यूरिया	30.00	कि.ग्रा.		5.00	-	150.00
4	कल्चर पैकिंट	3.00	संख्या	-	10.00	-	30.00
	योग					993.60	1713.60
	योग						1713.60
	जोडा 4: कन्टोजेन्सी						68.54
	योग						1782.14
	लागत श्रम भाग						993.60
	लागत सामग्री भाग						788.54
	कुल योग			1378			1782.14
						Say	1800.00

लागत तकमीना

कार्य का नाम— फलदार पौधों की यूनिट
यूनिट का क्षेत्रफल: 0.20 हैक्टेयर(55 पौधे/यूनिट)

क्र.सं.	विवरण	मात्रा	इकाई	दर		राशि	
				श्रम	कुल	श्रम	कुल
1	नींव, खाई परनाला में 1.5 गहराई तक मिट्टी का खुदाई करना, तल को कूटना, पानी डालना, बगल को संवारना, खुदी मिट्टीको बाहर निकालना, नींव 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.	2.00	2.00	3688	3688
2	गोबर की खाद	550	कि.ग्रा.	-	2.50	-	137.00
3	सुपरफास्फेट	20	कि.ग्रा.	-	3.50		0.00
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 4: चूर्ण)	6	कि.ग्रा.	-	12.00		2.00
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	-	85.00
9	पौधो पर लगने वाले कीड़े मकोडो के नियंत्रण हेतु मोनोक्रोटोफॉस 36 इ.सी	0.25	लीटर	-	360.00	-	9.00
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 4: कन्टोजेन्सी						255.54
	योग						6643.92
	लागत श्रम भाग						3876.38
	लागत सामग्री भाग						2767.54
	कुल योग						6643.92
						Say	6700.00

विस्तृत तकमीना

नाम जल ग्रहण क्षेत्र—
गाँव का नाम :

कार्य का नाम— फलदार पौधों की यूनिट
यूनिट का क्षेत्रफल: 0.20 हैक्टेयर (55 पौधे / यूनिट)

क्र.सं.	विवरण	ल.गचौ.गग. त्र कुल मात्रा
1	नींव, खाई परनाला में 1.5 गहराई तक मिट्टी का खुदाई करना, तल को कूटना, पानी डालना, बगल को संवारना, खुदी मिट्टीको बाहर निकालना, नींव भरने के बाद खाली स्थानों को पुनः मिट्टी से भरना तथा बची हुई मिट्टी को 50 मीटर दूरी तक निस्तारण करना। सख्त, चिकनी,	55 ग ⁰ ९० ग ⁰ ९० ग ⁰ ९० त्र 40 ^० ०९ घ.मी
2	गोबर की खाद	55 गड्डे / 10 कि.ग्रा. / गड्डा त्र 550 कि.ग्रा.
3	सुपरफास्फेट	55 गड्डे / 0 ^० 35 कि.ग्रा. / गड्डा त्र 19 ^० 25 कि.ग्रा. ल 20 कि.ग्रा.
4	पोटाश	55 गड्डे / 0 ^० 08 कि.ग्रा. / गड्डा त्र 4 ^० 4 कि.ग्रा. ल 5 ^० 00 कि.ग्रा.
5	यूरिया	55 गड्डे / 0 ^० 22 कि.ग्रा. / गड्डा त्र 12 ^० 10 कि.ग्रा. ल 12 ^० 00 कि.ग्रा.
6	दीमक की रोकथाम हेतु कीटनाशक दवाई (एन्डोसल्फान 4: चूर्ण)	55 गड्डे / 0 ^० 10 कि.ग्रा. / गड्डा त्र 5 ^० 50 कि.ग्रा. ल 6 ^० 00 कि.ग्रा.
7	पौधे रोपण करना	55
8	पौधों की कीमत	55
9	पौधो पर लगने वाले कीडे मकोडो के नियंत्रण हेतु मोनोक्रोटोफॉस 36 इ.सी	0 ^० 25 लीटर. / यूनिट
10	पौधों में उर्वरक एवं दवाई डालना	110

10 यूनिट

NAME OF WATERSHED: JELU GAGADI (JODHPUR-XIV)
DISTRICT: JODHPUR

BLOCK: OSIAN

लागत तकमीना

नाम जल ग्रहण क्षेत्र—
गाँव का नाम :

कार्य का नाम — चरागाह भूमि पर घास बीज बुवाई कार्य
क्षेत्रफल: 35 हैक्टर

क्र.सं.	विवरण	मात्रा	इकाई	दर		राशि	
				श्रम	कुल	श्रम	कुल
1	चरागाह हेतु घास बीज बुवाई कार्य 6 से 8 कि. ग्रा./ हैक्टर ट्रेक्टर द्वारा जुताई से	35.00	घ.मी	41.00	8.25	1435.00	2343.5
2	बीज की राशि (धामण)	20.00	कि.ग्रा.	-	61.50	-	1220.00
	योग					1435.00	44563.75
	योग						44563.75
	जोडा 4: कन्टोजेन्सी						1782.55
	योग						46346.30
	लागत श्रम भाग						1435.00
	लागत सामग्री भाग						44911.30
	कुल योग						46346.30
						Say	46000.00

Farm pond construction :-

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Harlaya

Amount : 43780.189

S.No	Details of work	No.	Measurements		
			Dia	B	H
1	Complete O/O	1	12.5	0	12.5
2	Hall I/I	1	10		12
5	E/W	1	122.6953	1	10.5
6	Concrete	1	122.6953	1	0.5
7	Masonry	1	36.1215	1.25	11.75
8	G.L to P.L	1			2
9	Aslat Around	2	11	1	0.5
12	Door	1	1.5	1.5	1
13	Ventilater	-2	0	1	1
16	Flooring in side Cement	1	78.525	1	1
17	Flooring on top Cement	1	122.695	1	1
	Deduction	1	1.5	1.5	1

3 साधारण/मुलायम मिट्टी में
4 सख्त, चिकनी, कंकर मिट्टी में
3.5 विघटित चट्टान

3.2004

DETAILS OF WORK AND ABSTRACT OF COST

S.no.		no	L	B	W	Qty.	Qyy.mks		Lab.rate	total rate	lab amt	total amt.
1	Earth work in excavation in foundatin lift 1.5m and lead up to 50m	0.785	13	13	11.5	1525.648						
						0						
							0					
							1525.648	43.175824	cum.	68.00	68.00	2935.956
	Extra Lift											
		First lift	1									
		Second lift	2									
		0.785	13	13	5	663.325	18.772098	cum.	8.00	8.00	150.17678	150.17678
		0.785	13	13	1.5	198.9975	5.6316293	cum.	16.00	16.00	90.106068	90.106068
2	P/L cement concrete in 1:4:8	0.785	13	13	0.5	66.3325						
						0						
						0						
						0						
						0						
						66.3325	1.87	cum.	245.00	1510.00	458.15	2823.70
3	RRSM in foundation in 1:6 cement mortar	3.14	11.25	1.25	11.75	518.8359						
						0						
						0						
						518.8359	14.68	cum.	370.80	1453.00	5443.344	21330.04
4	Lintel in cement mortar											
		2	10	1	0.5	10						
						10	0.280	cum.	944.00	3520.00	264.32	985.60
5	Jodhper stone patti roofing in 1:4 cement mortar gate	0.785	12.5	12.5	1	122.6563						
						0						
			-1	1.5	1.5	1	-2.25					
						120.4063	11.18	sqm.	215.00	605.00	2403.7	6763.90
6	P/L cement concrete in 1:2:4 50mm thick on roofing	0.785	12.5	12.5	1	122.6563						
						0						
			-1	1.5	1.5	1	-2.25					
						120.4063	11.18	sqm.	71.80	178.00	802.724	1990.04
7		0.785	10	10	1	78.5						
						0						
						78.5	7.29	sqm.	71.80	178.00	523.422	1297.62
8	25mm cement plaster in 1:6 cement mortar	3.14	10	1	12	376.8						
						0						
						376.8	35	sqm.	61.30	111.00	2145.5	3885.00
9	Flush pointing in 1:3 cement mortar	3.14	12.5	1	2	78.5						
						0						
						78.5	7.29	sqm.	36.30	45.00	264.627	328.05
10	C.R. facingin II sort											
10	P/F iron gate	1	1.5	1.5	1	2.25						

						2.25	0.2	sqm.	68.00	850.00	13.6	500.00
						0						
						0	7	MD	100	100	700	700.00
						0					0	0

16195.626 43780.189

	Quantity	Rate	Amount
Skilled labo	25.17	225	5663
Unskilled la	#REF!	100	#REF!
Water			#REF!

राशि		
श्रम	A	16195.626
सामग्री	B	27584.563
कुल	C	43780.189
Add 3% for conti. D=(C*0.03)		0
dqy ;ksx	(C+D)	43780.189

0

dz-la-	dqy lkezh vko';drk	bZdkbZ	ek=k	nj	jkf'k
1	jsr@ctjh	?k-eh-	8.19	340	2785.0114
2	fxêh iRFkj dh 40 fe-eh- ukeh; eki dh ?k-eh-		1.68	350	589.05
3	fxêh iRFkj dh 20 fe-eh- ukeh; eki dh ?k-eh-		0.89	500	443.525
4	iRFkj	?k-eh-	14.68	500	7340
5	lhesUV	fd-xzk-	40.9	210	8586.506
6	iRFkj ds fljny 15 ls-eh- eksVkbZ rd	?k-eh-	0.28	2300	644
7	iRFkj dh ifê;ka	o-eh-	13.42	285	3823.56
8	QsDVªh esa cus njokts	o-eh-	0.200	850.00	170
					24381.652
	अन्य				0
		कुल योग			24381.652

0.8177625

dz-la-	dqy lkezh vko';drk	bZdkbZ	ek=k	nj	jkf'k
1	jsr@ctjh	?k-eh-	0.67	340	227.5484
2	fxêh iRFkj dh 40 fe-eh- ukeh; eki dh ?k-eh-		0.56	350	195.65
3	fxêh iRFkj dh 20 fe-eh- ukeh; eki dh ?k-eh-		0.00	500	0
4	iRFkj	?k-eh-	0.00	500	0
5	lhesUV	fd-xzk-	5.9	210	1237.5745
6	iRFkj ds fljny 15 ls-eh- eksVkbZ rd	?k-eh-	0.00	2300	0
7	iRFkj dh ifê;ka	o-eh-	0.00	285	0
8	QsDVªh esa cus njokts	o-eh-	2785.011	850.00	2367259.7
					2368920.5
	अन्य				0
		कुल योग			2368920.5

0.1178642

			M.Rate	Actual M.	T&P	dkjhjxj @ etnwj vko';drk		
						dkjhjxj	etnwj	uh¼jk'kh½
						0	0.6	0.005
						0	#REF!	14.67978
esUV fd-xtjh ?k-ehñ iRFkj dh						dkjhjxj	etnwj	uh¼jk'kh½
160	0.45	0.9				0.1	1.63	0.0147
299.200	0.842	1.683	1265.00	1140		0.19	3.05	41.50839
esUV fd-xtjh ?k-eh iRFkj						dkjhjxj	etnwj	uh¼jk'kh½
70	0.3	1				0.71	1.4	0.0145
1027.60	4.40	14.68	1082.20	896		10.42	20.55	309.2856
esUV fd-xtjh ?k-ehFkjds fljny						dkjhjxj	etnwj	uh¼jk'kh½
		0.28	2576.00					
esUV fd-xtjh ?k-ehFkj dh ifè;ka						dkjhjxj	etnwj	uh¼jk'kh½
3.42	0.09	1.2				0.55	#REF!	0.005
38.2356	1.0062	13.416	390.00	386.964		6.15	#REF!	33.8195
esUV fd-xtjh ?k-ehñ iRFkj dh						कारीगर	मजदूर	पानी(राशी)
25.67	0.057	0.05				0.19	0.41	0.01
286.9906	0.63726	0.559	106.20	152.194		2.1242	4.5838	19.9004
सीमेन्ट कि.ग्रा	बजरी घ.मी.	गिट्टी पत्थर की				कारीगर	मजदूर	पानी(राशी)
15.6	0.022	0.045				0.15	0.23	0.0145
113.724	0.16038	0.32805	106.20	95.5		1.09	1.68	18.81549
सीमेन्ट कि.ग्रा	बजरी घ.मी.					कारीगर	मजदूर	पानी(राशी)
7.67	0.032					0.13	0.2	0.015
268.45	1.12		49.70	43.094		4.55	7.00	58.275
सीमेन्ट कि.ग्रा	बजरी घ.मी.					कारीगर	मजदूर	पानी(राशी)
1.4	0.003					0.08	0.11	0.015
10.206	0.02187		8.70	6.9		0.58	0.80	4.92075
						कारीगर	मजदूर	पानी(राशी)

	दरवाजे,			0.3	0.3	0
	#REF!	782.00	#REF!	0.1	0.1	0
		6366	#REF!	25.17	#REF!	501.20
			Total	4530.546	#REF!	501.20

C.C. 1:2:4

RR Stone Masonary 1:6
1'6" Thick

C.C. 1:4:8

DRAWING OF TANKA
12.50
10.00

1.5x1.5

Ground Level

11.75

12.5
10.50

0.5

Farm pond construction :-

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Harlaya

Amount : 92419.563

S.No	Details of work	No.	Measurements		
			Dia	B	H
1	Complete O/O	1	12.5	0	12.5
2	Hall I/I	1	10		12
5	E/W	1	122.6953	1	10.5
6	Concrete	1	122.6953	1	0.5
7	Masonry	1	36.1215	1.25	11.75
8	G.L to P.L	1		0	2
9	Aslat Around	2	11	1	0.5
12	Door	1	1.5	1.5	1
13	Ventilator	-2	0	1	1
16	Flooring in side Cement	1	78.525	1	1
17	Flooring on top Cement	1	122.695	1	1
	Deduction	1	1.5	1.5	1

3 साधारण/मुलायम मिट्टी में
4 सख्त, चिकनी, कंकर मिट्टी में
3.5 विघटित चट्टान

3.2004

B/W

DETAILS OF WORK AND ABSTRACT OF COST

S.no.		no	L	B	W	Qty.	Qyy.mks		Lab.rate	total rate	lab amt	total amt.	
1	Earth work in excavation in foundatin lift 1.5m and lead up to 50m	0.785	13	13	11.5	1525.648							
		0.785	20.5	2	2	64.37							
						0							
						0							
					1590.018	44.997495	cum.	68.00	68.00	3059.8297	3059.8297		
	Extra Lift	1	13	13	5	663.325	18.772098	cum.	8.00	8.00	150.17678	150.17678	
													First lift
													Second lift
2	P/L cement concrete in 1:4:8	0.785	13	13	1.5	198.9975	5.6316293	cum.	16.00	16.00	90.106068	90.106068	
		0.785	13	13	0.5	66.3325							
						0							
						0							
					66.3325	1.87	cum.	245.00	1510.00	458.15	2823.70		
3	P/L cement concrete in 1:6:12 under floor of catchment	3.14	25.25	12.75	0.25	252.7209	7.15	cum.	245.00	1263.00	1751.75	9030.45	
3	RRSM in foundation in 1:6 cement mortar	3.14	11.25	1.25	11.75	518.8359							
		3.14	20.5	2	2	257.48							
		3.14	20.5	1.5	2.5	241.3875							
						0							
					1017.703	28.81	cum.	370.80	1453.00	10682.748	41860.93		
4	Lintel in cement mortar												
		2	10	1	0.5	10							
						10	0.280	cum.	944.00	3520.00	264.32	985.60	
5	Jodhper stone patti roofing in 1:4 cement mortar gate	0.785	12.5	12.5	1	122.6563							
						0							
		-1	1.5	1.5	1	-2.25							
					120.4063	11.18	sqm.	215.00	605.00	2403.7	6763.90		
6	P/L cement concrete in 1:2:4 50mm thick on roofing	0.785	12.5	12.5	1	122.6563							
		-1	1.5	1.5	1	-2.25							
					120.4063	11.18	sqm.	71.80	178.00	802.724	1990.04		
7		0.785	10	10	1	78.5							
		3.14	20.5	1	1.5	96.555							
		3.14	25.25	1	12.75	1010.884							
					1185.939	110.17	sqm.	71.80	178.00	7910.206	19610.26		
8	25mm cement plaster in 1:6 cement mortar	3.14	10	1	12	376.8							
						0							
					376.8	35	sqm.	61.30	111.00	2145.5	3885.00		

9	Flush pointing in 1:3 cement mortar	3.14	12.5	1	2	78.5						
		3.14	22	1	2.5	172.7						
10	C.R. facingin II sort					78.5	7.29	sqm.	36.30	45.00	264.627	328.05
							7.29		88.00	88.00	641.52	641.52
10	P/F iron gate	1	1.5	1.5	1	2.25						
						2.25	0.2	sqm.	68.00	850.00	13.6	500.00
						0						
						0	7	MD	100	100	700	700.00
						0					0	0

31338.958 92419.563

	Quantity	Rate	Amount
Skilled labo	50.63	325	16456
Unskilled la	#REF!	100	#REF!
Water			#REF!

राशि		
श्रम	A	31338.958
सामग्री	B	61080.605
कुल	C	92419.563
Add 3% for conti. D=(C*0.03)		0
dqy ;ksx		
(C+D)		92419.563

0

dz-la-	dqy lkezh vko';drk	bZdkbZ	ek=k	nj	jkf'k
1	jsr@ctjh	?k-eh-	14.69	340	4995.8138
2	fxêh iRFkj dh 40 fe-eh- ukeh; eki dh	?k-eh-	1.68	350	589.05
3	fxêh iRFkj dh 20 fe-eh- ukeh; eki dh	?k-eh-	5.52	500	2758.325
4	iRFkj	?k-eh-	28.81	500	14405
5	lhesUV	fd-xzk-	92.8	210	19481.424
6	iRFkj ds fljny 15 ls-eh- eksVkbZ rd	?k-eh-	0.28	2300	644
7	iRFkj dh ifê;ka	o-eh-	13.42	285	3823.56
8	QsDV ^h esa cus njokts	o-eh-	0.200	850.00	170
					46867.172
	अन्य				0
		कुल योग			46867.172

1.8553737

dz-la-	dqy lkezh vko';drk	bZdkbZ	ek=k	nj	jkf'k
1	jsr@ctjh	?k-eh-	0.67	340	227.5484
2	fxêh iRFkj dh 40 fe-eh- ukeh; eki dh	?k-eh-	0.56	350	195.65
3	fxêh iRFkj dh 20 fe-eh- ukeh; eki dh	?k-eh-	0.00	500	0
4	iRFkj	?k-eh-	0.00	500	0
5	lhesUV	fd-xzk-	5.9	210	1237.5745
6	iRFkj ds fljny 15 ls-eh- eksVkbZ rd	?k-eh-	0.00	2300	0
7	iRFkj dh ifê;ka	o-eh-	0.00	285	0
8	QsDV ^h esa cus njokts	o-eh-	4995.814	850.00	4246441.7
					4248102.5
	अन्य				0
		कुल योग			4248102.5

0.1178642

			M.Rate	Actual M.	T&P	dkjhj @ etnwj vko';drk		
						dkjhj	etnwj	uh%jk'kh½
						0	0.6	0.005
						0		15.29915
æUV fd-xtjh ?k-ehêh iRFkj dh						dkjhj	etnwj	uh%jk'kh½
160	0.45	0.9				0.1	1.63	0.0147
299.200	0.842	1.683	1265.00	1140		0.19	3.05	41.50839
æUV fd-xtjh ?k-eh iRFkj						dkjhj	etnwj	uh%jk'kh½
70	0.3	1				0.71	1.4	0.0145
2016.70	8.64	28.81	1082.20	896		20.46	40.33	606.9835
æUV fd-xtjh ?k-ehFkjds fljny						dkjhj	etnwj	uh%jk'kh½
			0.28	2576.00				
æUV fd-xtjh ?k-ehFkj dh ifê;ka						dkjhj	etnwj	uh%jk'kh½
3.42	0.09	1.2				0.55	#REF!	0.005
38.2356	1.0062	13.416	390.00	386.964		6.15	#REF!	33.8195
æUV fd-xtjh ?k-ehêh iRFkj dh						कारीगर	मजदूर	पानी(राशी)
25.67	0.057	0.05				0.19	0.41	0.01
286.9906	0.63726	0.559	106.20	152.194		2.1242	4.5838	19.9004
सीमेन्ट कि.ग्रा	बजरी घ.मी.	गिट्टी पत्थर की				कारीगर	मजदूर	पानी(राशी)
15.6	0.022	0.045				0.15	0.23	0.0145
1718.652	2.42374	4.95765	106.20	95.5		16.53	25.34	284.3488
सीमेन्ट कि.ग्रा						कारीगर	मजदूर	पानी(राशी)
7.67	0.032					0.13	0.2	0.015
268.45	1.12		49.70	43.094		4.55	7.00	58.275

सीमेन्ट कि.ग्रा	बजरी घ.मी.				कारीगर	मजदूर	पानी(राशी)
1.4	0.003				0.08	0.11	0.015
10.206	0.02187	8.70	6.9		0.58	0.80	4.92075
					कारीगर	मजदूर	पानी(राशी)
	दरवाजे,				0.3	0.3	0
	0	782.00	0		0.1	0.1	0
		6366	2720.652		50.63	#REF!	1065.06
				Total	9114.12	#REF!	1065.06

C.C. 1:2:4

RR Stone Masonary 1:6

1'6" Thick

C.C. 1:4:8

DRAWING OF TANKA
12.50
10.00

1.5x1.5

Ground Level

11.75

12.5
10.50

0.5

Farm pond construction :-

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Amount : 72790.486

S.No	Details of work	No.	Measurements		
			Dia	B	H
1	Complete O/O	1	12.5	0	13
2	Hall I/I	1	10		12.5
5	E/W	1	122.6953	1	11
6	Concrete	1	122.6953	1	0.5
7	Masonry	1	36.1215	1.25	12
				0	
8	G.L to P.L	1			2
9	Aslat Around	2	11	1	0.5
12	Door	1	1.5	1.5	1
13	Ventilator	-2	0	1	1
16	Flooring in side Cement	1	78.525	1	1
17	Flooring on top Cement	1	122.695	1	1
	Deduction	1	1.5	1.5	1

3 साधारण/मुलायम मिट्टी में
4 सख्त, चिकनी, कंकर मिट्टी में
4 विघटित चट्टान

3.3528

B/W

DETAILS OF WORK AND ABSTRACT OF COST

S.no.		no	L	B	W	Qty.	Qyy.mks		Lab.rate	total rate	lab amt	total amt.	
1	Earth work in excavation in foundatin lift 1.5m and lead up to 50m	0.785	13	13	12	1591.98							
		0.785	20.5	2	2	64.37							
						0							
						0							
						1656.35	46.874705	cum.	68.00	68.00	3187.4799	3187.4799	
	Extra Lift	1	0.785	13	13	5	663.325	18.772098	cum.	8.00	8.00	150.17678	150.17678
			0.785	13	13	2	265.33	7.508839	cum.	16.00	16.00	120.14142	120.14142
			0.785	13	13	0.5	66.3325						
2	P/L cement concrete in 1:4:8												
						66.3325	1.87	cum.	245.00	1510.00	458.15	2823.70	
3	P/L cement concrete in 1:6:12 under floor of catchment					0	0	cum.	245.00	1263.00	0	0.00	
3	RRSM in foundation in 1:6 cement mortar	3.14	11.25	1.25	12	529.875							
		3.14	20.5	2	2	257.48							
		3.14	20.5	1.5	2.5	241.3875							
						0							
						1028.743	29.12	cum.	370.80	1453.00	10797.696	42311.36	
4	Lintel in cement mortar												
						10	0.280	cum.	944.00	3520.00	264.32	985.60	
5	Jodhper stone patti roofing in 1:4 cement mortar gate	0.785	12.5	12.5	1	122.6563							
						0							
		-1	1.5	1.5	1	-2.25							
					120.4063	11.18	sqm.	215.00	605.00	2403.7	6763.90		
6	P/L cement concrete in 1:2:4 50mm thick on roofing	0.785	12.5	12.5	1	122.6563							
						0							
		-1	1.5	1.5	1	-2.25							
					120.4063	11.18	sqm.	71.80	178.00	802.724	1990.04		
7		0.785	10	10	1	78.5							
						0							
		3.14	20.5	1	1.5	96.555							
					175.055	16.26	sqm.	71.80	178.00	1167.468	2894.28		
8	25mm cement plaster in 1:6 cement mortar	3.14	10	1	12.5	392.5							
						0							
						392.5	36.46	sqm.	61.30	111.00	2234.998	4047.06	

			M.Rate	Actual M.	T&P	dkjhj @ etnwj vko';drk		
						dkjhj	etnwj	uh¼jk'kh½
						0	0.6	0.005
						0		15.9374
sUV fd-xtjh ?k-ehéh iRFkj dh						dkjhj	etnwj	uh¼jk'kh½
160	0.45	0.9				0.1	1.63	0.0147
299.200	0.842	1.683	1265.00	1140		0.19	3.05	41.50839
sUV fd-xtjh ?k-eh iRFkj						dkjhj	etnwj	uh¼jk'kh½
70	0.3	1				0.71	1.4	0.0145
2038.40	8.74	29.12	1082.20	896		20.68	40.77	613.5147
sUV fd-xtjh ?k-ehFkjds fljny						dkjhj	etnwj	uh¼jk'kh½
			0.28	2576.00				
sUV fd-xtjh ?k-ehFkj dh ifé;ka						dkjhj	etnwj	uh¼jk'kh½
3.42	0.09	1.2				0.55		0.005
38.2356	1.0062	13.416	390.00	386.964		6.15	0.00	33.8195
sUV fd-xtjh ?k-ehéh iRFkj dh						कारीगर	मजदूर	पानी(राशी)
25.67	0.057	0.05				0.19	0.41	0.01
286.9906	0.63726	0.559	106.20	152.194		2.1242	4.5838	19.9004
सीमेन्ट कि.ग्रा	बजरी घ.मी.	गिट्टी पत्थर की				कारीगर	मजदूर	पानी(राशी)
15.6	0.022	0.045				0.15	0.23	0.0145
253.656	0.35772	0.7317	106.20	95.5		2.44	3.74	41.96706
सीमेन्ट कि.ग्रा	बजरी घ.मी.					कारीगर	मजदूर	पानी(राशी)
7.67	0.032					0.13	0.2	0.015
279.6482	1.16672		49.70	43.094		4.74	7.29	60.7059

सीमेन्ट कि.ग्रा	बजरी घ.मी.				कारीगर	मजदूर	पानी(राशी)
1.4	0.003				0.08	0.11	0.015
10.206	0.02187	8.70	6.9		0.58	0.80	4.92075
					कारीगर	मजदूर	पानी(राशी)
	दरवाजे,				0.3	0.3	0
	0	782.00	0		0.1	0.1	0
		6366	2720.652		36.96	60.29	832.27
				Total	6652.332	4401.433	832.27

DRAWING OF TANKA
12.50
10.00

C.C. 1:2:4

1.5x1.5

Ground Level

12.00

11.00 12.50

RR Stone Masonary 1:6
1'6" Thick

c.c.in 1:2:4

C.C. 1:4:8

0.5

DRAWING OF TANKA

12.50

10.00

1.5x1.5

C.C. 1:2:4

Ground Level

12.00

RR Stone Masonary 1:6
1'6" Thick

11.00

c.c.in 1:2:4

C.C. 1:4:8
0.5

Name of W/S :- Jelu Gagadi (Jodhpur XIV)
 Name of Village :- Jelu
 Name of work :- Tanka construction

Amount 75942

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	132.7	1	11	3 Ordinary soil
6	Concrete	1	132.7	1	0.5	4 Hard soil
7	Masonry	1	36.12	1.5	12	4 Disintegrated 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	78.5	1	1
17	Flooring on top	Cem	1	133	1	1
		Ded	1	1.5	1.5	1

DETAILS OF WORK AND ABSTRACT OF COST

S. no		no	L	B	W	Qty.	Qyy. mks		Lab. rate	total rate	lab amt	total amt.		
1	Earth work in excavation in foundatin lift 1.5m and lead up to 50m	0.785	13.5	13.5	12	1716.8								
						0								
						0								
						1716.8	48.59	cum.	92.00	92.00	4469.85	4469.847		
	Extra Lift													
		First lift	1	0.785	13.5	13.5	5	715.33	20.24	cum.	10.80	10.80	218.634	218.6338
		Second lift	2	0.785	13.5	13.5	2	286.13	8.098	cum.	21.60	21.60	174.907	174.9071
2	P/L cement concrete in 1:4:8	0.785	13.5	13.5	0.5	71.533						lne		
						0								
						0								
						0								
						71.533	2.02	cum.	320.10	1586.00	646.602	3203.72		
3	RRSM in foundation in 1:6 cement mortar	3.14	11.5	1.5	12	649.98						lne		
						0								
						649.98	18.40	cum.	419.80	1503.00	7724.32	27655.20		
4	Lintel in cement mortar											lne		
		2	10	1	0.5	10								
						10	0.280	cum.	944.00	3598.00	264.32	1007.44		
5	Jodhpur stone patti roofing in 1:4 cement mortar	0.785	13	13	1	132.67						lne		
						0								
		gat e	-1	1.5	1.5	1	-2.25							
						130.42	12.11	sqm.	218.50	609.00	2646.04	7374.99		
6	P/L cement concrete in 1:2:4 50mm thick on roofing	0.785	13	13	1	132.67						lne		
						-1	1.5	1.5	1	-2.25				
						130.42	12.11	sqm.	79.80	186.00	966.378	2252.46		
7		0.785	10	10	1	78.5								

				0						
				78.5	7.29	sqm.	79.80	186.00	581.742	1355.94

8	25mm cement plaster in 1:6 cement mortar	3.14	10	1	12.5	392.5						
						0						
						392.5	36.46	sqm.	67.90	117.00	2475.63	4265.82
9	Flush pointing in 1:3 cement mortar	3.14	13	1	2	81.64						
		3.14	22	1	2.5	172.7						
10	C.R. facing in II sort					81.64	7.58	sqm.	39.80	48.00	301.684	363.84
							7.58		93.00	93.00	704.94	704.94
10	P/F iron gate	1	1.5	1.5	1	2.25						
						2.25	0.2	sqm.			0	500.00
	Iron jali											200.00
11	Stone chap boundry in 1:4 cement mortar	3.14	33		3	310.86	28.88	sqm.	380.00	555.00	10972.8	16026.06
12	Catchment of gravel/murram	3.14	22.5	10	0.5	353.25	9.997	cum.		45	0	449.86
	Carriage						9.997	cum.		92.8	0	927.72
	Watering and compaction						9.997	cum.	37	37	369.888	369.89
13	Hand pump						1	Nos.			0	1500.00
						0					0	0

32517.7 73021.27

	Quantity	Rate	Amount
Skill	28.73	325	9336
Unsk	43.88	135	5924
Water			17258
			32518

Amt.		
Labour		
r	A	32517.73
Material	B	40503.54
Total	C	73021.27
D=(C*0.04)		2920.851
Total (C+D)		75942.12

Say Rs 76000

S. no	Material required	Unit	Qty.	Rate	Amt.
1	Sand	cum.	96	38	3632
2	40mm aggregate	cum.	1.8	400	720
3	20mm aggregate	cum.	0.9	550	513.5
4	Stone	cum.	180	55	10500
5	Cement	bag	43	220	10417
6	15cm. Thick lintel	cum.	0.28	2400	620
7	Stone slab	sqm.	14.53	300	4360
8	Door	sqm.	1.000		500
	Hand pump	Nos.	1.0	1500.00	1500
	Stone chap	sqm.	30.320	200.00	6064
					385
	Contingency				291
			Total		418

Material required for BCK repairing work					
1	Cement		100	Bag	
2	Sand		20	cum	
3	Aggt. 12mm		10	cum	
4	Aggt. 40mm		1	cum	
5	Angle iron		65	Kg.	
6	Almira G.I. sheet gate		8.5	Sqm.	
7	Hand pump		1	Nos.	
8	Syntex tank 500 Lt. capacity		1		
9	Chaina clay tile		5	Sqm.	
10	Marble		85	Sqm.	
11	Iron rod 6mm		185	Kg.	
12	Winding wire		7	Kg.	
13	Enamel paint		20	lt.	
14	Red oxide		4.00	lt.	
15	Sanitary fitting pipe,taps,flush cock etc				
16	W.C. of indian style		1.00		
17	Wash basin		1.00		
18	Iron gate		#####	Kg.	
19	Stone		10.00	cum	
20	PVC pipe 63mm		35.00	m	
21	PVC pipe 75mm		30.00	m	
22	Iron jali 14-24 guage for window		22.00	Sqm.	
23	Gate of water tanka		1.00		
24	Machinery (vibrater etc)				
25	White washing				
26	Water supply				
27	GI pipe and taps	2 inch		6	m
		1 inch		6	m
		3taps		6	nos.

Material required for W/S Nevera road

1	Cement		194	Bag		
2	Sand		33	cum		
3	Aggt. 12mm		35	cum		
4	Aggt. 40mm		2	cum		
5	Angle iron		227	Kg.		
6	Almira G.I. sheet gate		8.5	Sqm.		
7	Hand pump		1	Nos.		
8	Syntex tank 500 Lt. capacity		1			
9	Chaina clay tile		5	Sqm.		
10	Marble		85	Sqm.		
11	Iron rod		1111	Kg.		
12	Winding wire		32	Kg.		
13	Enamel paint		25	lt.		
14	Red oxide		4.00	lt.		
15	Sanitary fitting pipe,taps,flush					
16	W.C. of indian style		1.00			
17	Wash basin		1.00			
18	Iron gate		#####	Kg.		
19	Stone		10.00	cum		
20	PVC pipe 63mm		#####	m		
21	PVC pipe 75mm		30.00	m		
22	Iron jali 14-24 guage for window		22.00	Sqm.		
23	Gate of water tanka		1.00			
24	GI pipe and taps	2 inch	6	m		
		1 inch	6	m		
		3taps	6	nos.		
25	Machinery (vibrater etc)					
26	White washing					
27	Water supply					

			M.Rate	Actual M.	T&P	dkjhxj @ etnwj vko':drk		
						dkjhxj	etnwj	uh¼jk'kh½
						0	0.6	0.005
						0		22.34924
əsUV fd-xtjh ?k-ehêh iRFkj dh						dkjhxj	etnwj	uh¼jk'kh½
160	0.45	0.9				0.1	1.63	0.0147
323.200	0.909	1.818	1265.90	1235		0.20	3.29	47.09468
əsUV fd-xtjh ?k-eh iRFkj						dkjhxj	etnwj	uh¼jk'kh½
70	0.3	1				0.71	1.4	0.0145
1288.00	5.52	18.40	1083.20	997		13.06	25.76	401.0004
əsUV fd-xtjh ?k-ehFkjds fljny						dkjhxj	etnwj	uh¼jk'kh½
		0.28	2654.00					
əsUV fd-xtjh ?k-ehFkj dh ifê;ka						dkjhxj	etnwj	uh¼jk'kh½
3.42	0.09	1.2				0.55		0.005
41.4162	1.0899	14.532	390.50	409.248		6.66	0.00	36.87495
əsUV fd-xtjh ?k-ehêh iRFkj dh						कारीगर	मजदूर	पानी(राशी)
25.67	0.057	0.05				0.19	0.41	0.01
310.8637	0.69027	0.6055	106.20	162.108		2.3009	4.9651	22.5246
सीमेन्ट कि.ग्रा बजरी घ.मी. गिट्टी पत्थर की						कारीगर	मजदूर	पानी(राशी)
15.6	0.022	0.045				0.15	0.23	0.0145

113.724	0.16038	0.32805	106.20	101.75		1.09	1.68	19.66113
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सीमेन्ट कि.ग्रा	बजरी घ.मी.				कारीगर	मजदूर	पानी(राशी)
7.67	0.032				0.13	0.2	0.015
279.6482	1.16672	49.10	45.908		4.74	7.29	63.9873
सीमेन्ट कि.ग्रा	बजरी घ.मी.				कारीगर	मजदूर	पानी(राशी)
1.4	0.003				0.08	0.11	0.015
10.612	0.02274	8.20	7.3		0.61	0.83	5.4576
					कारीगर	मजदूर	पानी(राशी)
	दरवाजे,				0.3	0.3	0
	0	0.00	0		0.1	0.1	0
		5663.3	2958.314		28.73	43.88	618.95
				Total	5170.878	3203.255	618.95

DRAWING OF TANKA

13.00
10.00

C.C. 1:2:4

1.5x1.5



Ground Level

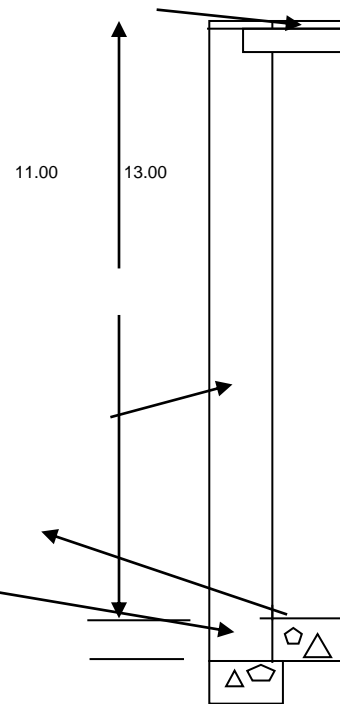
12.00

RR Stone Masonary 1:6
1'6" Thick

c.c.in 1:2:4

C.C. 1:4:8

0.5



DRAWING OF TANKA

13.00

10.00

C.C. 1:2:4

1.5x1.5

Ground Level

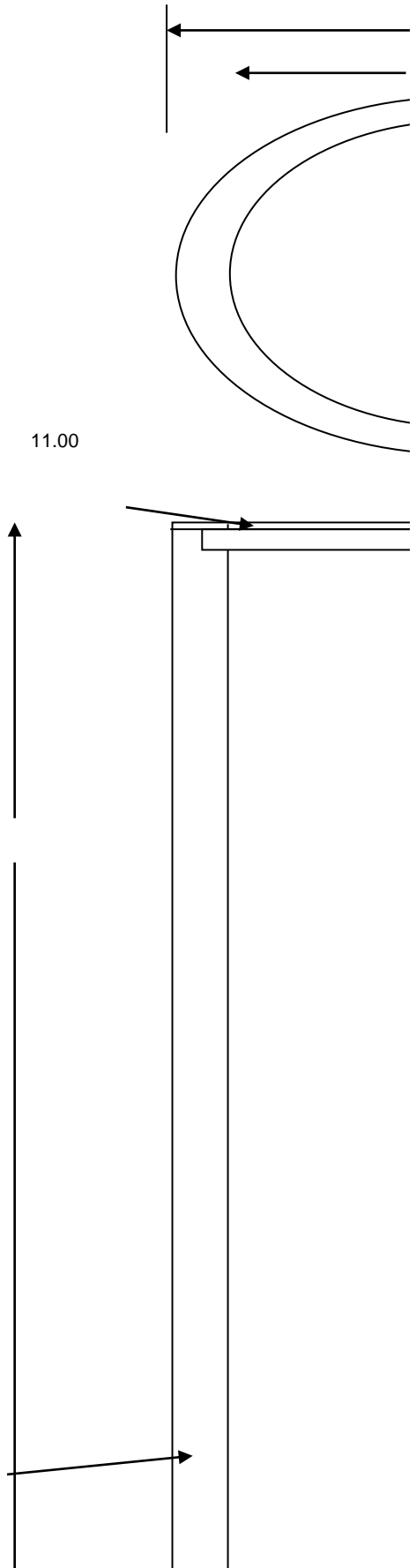
12.00

13

RR Stone Masonary 1:6
1'6" Thick

c.c.in 1:2:4

C.C. 1:4:8
0.5



Name of W/S :- Jelu Gagadi (Jodhpur XIV)
 Name of Village :- Jelu
 Name of work :- Tanka construction for NREGS

--	--

Amount 84709.9

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	132.7	1	11	3 Ordinary soil
6	Concrete	1	132.7	1	0.5	4 Hard soil
7	Masonry	1	36.12	1.5	12	4 Disintegrated 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	Ventilator		-2	0	1	1
16	Flooring in side	Cem	1	78.5	1	1
17	Flooring on top	Cem	1	133	1	1
		Dedl	1	1.5	1.5	1

DETAILS OF WORK AND ABSTRACT OF COST

S. no		no	L	B	W	Qty.	Qyy. mks		Lab. rate	total rate	lab amt	total amt.		
1	Earth work in excavation in foundatin lift 1.5m and lead up to 50m	0.785	13.5	13.5	12	1716.8								
						0								
						0								
						1716.8	48.59	cum.	92.00	92.00	4469.85	4469.847		
	Extra Lift													
		First lift	1	0.785	13.5	13.5	5	715.331	20.24	cum.	10.80	10.80	218.634	218.6338
		Second lift	2	0.785	13.5	13.5	2	286.133	8.098	cum.	21.60	21.60	174.907	174.9071
2	P/L cement concrete in 1:4:8	0.785	13.5	13.5	0.5	71.5331								
						0								
						0								
						0								
						71.5331	2.02	cum.	320.10	1586.00	646.602	3203.72		
3	RRSM in foundation in 1:6 cement mortar	3.14	11.5	1.5	12	649.98								
						0								
						649.98	18.40	cum.	419.80	1503.00	7724.32	27655.20		
4	Lintel in cement mortar	2	10	1	0.5	10								
						10	0.280	cum.	944.00	3598.00	264.32	1007.44		
5	Jodhpur stone patti roofing in 1:4 cement mortar	0.785	13	13	1	132.665								
						0								
		gate	-1	1.5	1.5	1	-2.25							
						130.415	12.11	sqm.	218.50	609.00	2646.04	7374.99		
6	P/L cement concrete in 1:2:4 50mm thick on roofing	0.785	13	13	1	132.665								
						-1	1.5	1.5	1	-2.25				
						130.415	12.11	sqm.	79.80	186.00	966.378	2252.46		
7		0.785	10	10	1	78.5								

						0						
						78.5	7.29	sqm.	79.80	186.00	581.742	1355.94
8	25mm cement plaster in 1:6 cement mortar	3.14	10	1	12.5	392.5						
						0						
						392.5	36.46	sqm.	67.90	117.00	2475.63	4265.82
9	Flush pointing in 1:3 cement mortar	3.14	13	1	2	81.64						
		3.14	22	1	2.5	172.7						
						81.64	7.58	sqm.	39.80	48.00	301.684	363.84
10	C.R. facing II sort						7.58		93.00	93.00	704.94	704.94
10	P/F iron gate	1	1.5	1.5	1	2.25						
						2.25	0.2	sqm.			0	500.00
	Iron jali											200.00
11	Stone chap boundry in 1:4 cement mortar	3.14	33		3	310.86	28.88	sqm.	380.00	555.00	10972.8	16026.06
12	Catchment of gravel/murum	3.14	22.5	10	0.5	353.25	9.997	cum.		45	0	449.86
	Carriage						9.997	cum.		92.8	0	927.72
	Watering and compaction						9.997	cum.	37	37	369.888	369.89
13	Hand pump						1	Nos.			0	1500.00
						0					0	0
											32517.7	73021.27
14	Change in labour cost in NREGS										40948.3	81451.79
	Total											

	Quantity	Rate	Amount
Skilled	40.00	325	13000
Unskilled	80.00	119	9520
Water			18428
			40948

Amt.	
Labour	
	A 40948.25
Material	B 40503.54
Total	C 81451.79
D=(C*0.04)	3258.072
Total (C+D)	84709.86
Say Rs	85000

S. no.	Material required	Unit	Qty.	Rate	Amt.
1	Sand	cum.	96	36	3633
2	40mm aggregate	cum.	1.8	400	28
3	20mm aggregate	cum.	0.9	550	511.5
4	Stone	cum.	180	55	1058
5	Cement	bag	43	220	10406
6	15cm. Thick lintel	cum.	0.28	2400	62
7	Stone slab	sqm.	14.53	300	4359
8	Door	sqm.	1.000		500
	Hand pump	Nos.	1.0	1500.00	1500
	Stone chap	sqm.	30.320	200.00	6064
					383
	Contingency				3258
			Total		42211

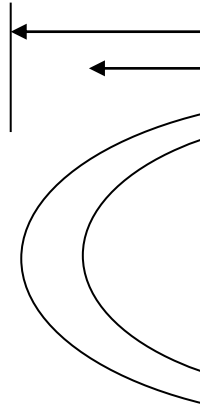
Material required for BCK repairing work					
1	Cement		100	Bag	
2	Sand		20	cum	
3	Aggt. 12mm		10	cum	
4	Aggt. 40mm		1	cum	
5	Angle iron		65	Kg.	
6	Almira G.I. sheet gate		8.5	Sqm.	
7	Hand pump		1	Nos.	
8	Syntex tank 500 Lt. capacity		1		
9	Chaina clay tile		5	Sqm.	
10	Marble		85	Sqm.	
11	Iron rod 6mm		185	Kg.	
12	Winding wire		7	Kg.	
13	Enamel paint		20	lt.	
14	Red oxide		4.00	lt.	
15	Sanitary fitting pipe,taps,flush cock etc				
16	W.C. of indian style		1.00		
17	Wash basin		1.00		
18	Iron gate		#####	Kg.	
19	Stone		10.00	cum	
20	PVC pipe 63mm		35.00	m	
21	PVC pipe 75mm		30.00	m	
22	Iron jali 14-24 guage for window		22.00	Sqm.	
23	Gate of water tanka		1.00		
24	Machinery (vibrater etc)				
25	White washing				
26	Water supply				
27	GI pipe and taps	2 inch	6	m	
		1 inch	6	m	
		3taps	6	nos.	

Material required for W/S Nevera road

1	Cement		194	Bag		
2	Sand		33	cum		
3	Aggt. 12mm		35	cum		
4	Aggt. 40mm		2	cum		
5	Angle iron		227	Kg.		
6	Almira G.I. sheet gate		8.5	Sqm.		
7	Hand pump		1	Nos.		
8	Syntex tank 500 Lt. capacity		1			
9	Chaina clay tile		5	Sqm.		
10	Marble		85	Sqm.		
11	Iron rod		1111	Kg.		
12	Winding wire		32	Kg.		
13	Enamel paint		25	lt.		
14	Red oxide		4.00	lt.		
15	Sanitary fitting pipe,taps,flush					
16	W.C. of indian style		1.00			
17	Wash basin		1.00			
18	Iron gate		#####	Kg.		
19	Stone		10.00	cum		
20	PVC pipe 63mm		#####	m		
21	PVC pipe 75mm		30.00	m		
22	Iron jali 14-24 guage for window		22.00	Sqm.		
23	Gate of water tanka		1.00			
24	GI pipe and taps	2 inch		6 m		
		1 inch		6 m		
		3taps		6 nos.		
25	Machinery (vibrater etc)					
26	White washing					
27	Water supply					

DRAWING OF TANKA

13.00
10.00



C.C. 1:2:4

1.5x1.5

Ground Level

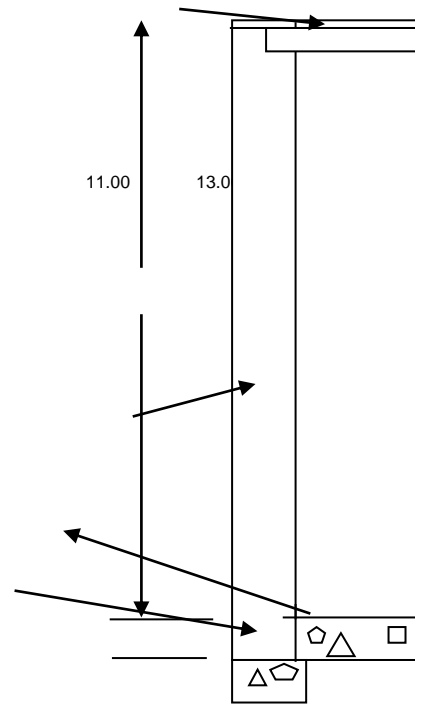
12.00

RR Stone Masonary 1:6
1'6" Thick

c.c.in 1:2:4

C.C. 1:4:8

0.5



DRAWING OF TANKA

13.00

10.00

C.C. 1:2:4

1.5x1.5

Ground Level

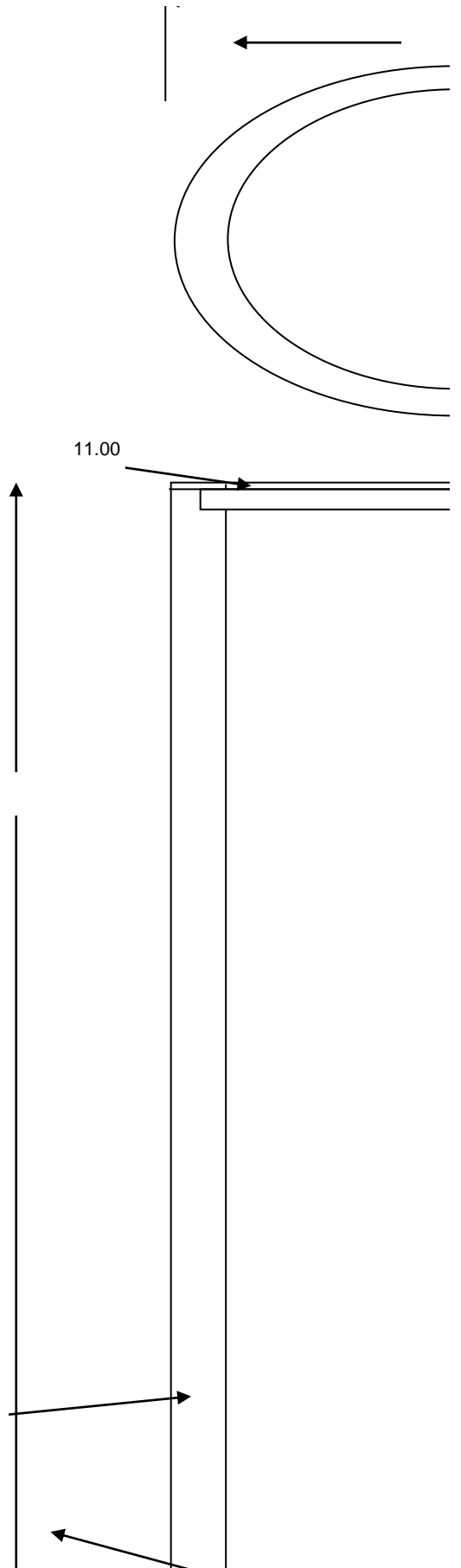
12.00

13 ←

RR Stone Masonary 1:6
1'6" Thick

c.c.in 1:2:4

C.C. 1:4:8
0.5



Inter Field WHS at Lower Reaches of Field (Details)

षि भूमि पर कार्य तकमीना

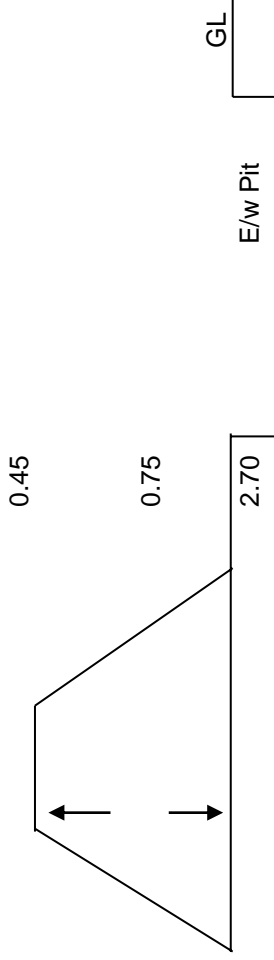
जलग्रहण क्षेत्र का नाम :- खेतरली'पाली- आइ डबलु एम पी- 6

पंचायत समिति - बाली

कुल लम्बाई

1

क्र.सं.	कार्य विवरण	नाप	मात्रा
1	डाग बेलिंग देना	1.00 X 1 =	1 र.मी.
2	बंड हेतु मिट्टी का कार्य (सुखी या गीली) 15 सेमी परत में डालना ढेलों को तोड़ना, घास-पात तथा कंकर बीनकर अलग करना तथा मिट्टी की ड्रेसिंग करना कठोर मिट्टी में	1 X(2.0 + 0.45) / 2.00 X 0.5 =	1.18 घ.मी.
3	धामण घास के बीज की बुवाई बंड पर	1.00 X 5.00 =	5 न0



Inter Field WHS at Lower Reaches of Field (Abst.)

कृषि भूमि पर लागत तकमीना

जलग्रहण क्षेत्र का नाम :- खेतरली'पाली- आइ डबल्लु एम पी- 6

पंचायत समिति - बाली

कुल लम्बाई

1

क्र.सं.	कार्य विवरण	मात्रा	दर	इकाई	राशि
1	डाग बेलिंग देना	1.000	0.250	र.मी.	0.25
2	बंड हेतू मिट्टी का कार्य (सुखी या गीली) 15 सेमी परत में डालना ढेलों को तोडना, घास-पात तथा कंकर बीनकर अलग करना तथा मिट्टी की ड्रेसिंग करना कठोर मिट्टी में	1.18	68000	घ.मी.	8.33
3	धामण घास के बीज की बुवाई बंड पर	5.000	0.240	र.मी.	1.20
TOTAL					8.8
G. TOTAL					81.775

Beanch Terracing For Slope More Than 8% Cultivable Land

षि भूमि पर कार्य तकमीना

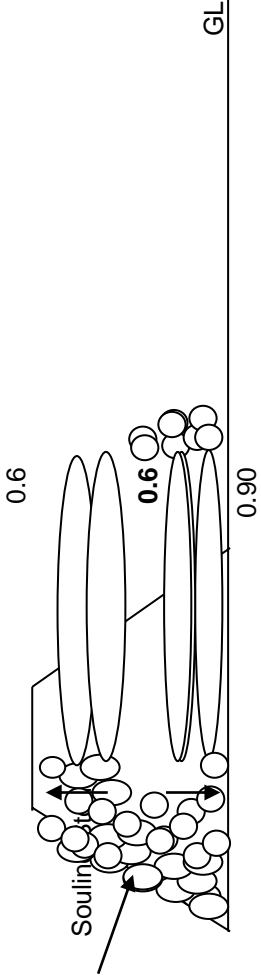
जलग्रहण क्षेत्र का नाम :- खेतरली'पाली- आइ डबल्लु एम पी- 6

पंचायत समिति - बाली

कुल लम्बाई

1

क्र.सं.	कार्य विवरण	नाप	मात्रा
1	सुखे पत्थरों से मेडबंदी का कार्य अधिक ढलान कृषि योग्य भूमि हेतु।	1 ः; 0 ^m 60 . 0 ^m 90 छू ए 2 ^m 00 ः	0 ^m 450 ः 0 ^m 450 घ.मी.



Beanch Terracing For Slope More Than 8% Cultivable Land

षि भूमि पर लागत तकमीना

जलग्रहण क्षेत्र का नाम :- खेतरली'पाली- आइ डबलु एम पी- 6

पंचायत समिति - बाली

कुल लम्बाई

2500

क्र.सं.	कार्य विवरण	मात्रा	दर श्रम	कुल दर	इकाई	श्रम राशि	कुल राशि
1	सुखे पथरों से मेडबंदी का कार्य अधिक ढलान कृषि योग्य भूमि हेतु।	0*450	239*00	749*00	घ.मी.	107*55	337*05
					TOTAL		337.05
					G. TOTAL		842625

Note : 272 Hect. & 60 Mtr./Hect.

अकृषि भूमि पर घास बीज बुवाई का लागत तकमीना

जलग्रहण क्षेत्र का नाम :- खेतरली'पाली- आइ डबलु एम पी- 6

पंचायत समिति - बाली

प्रभावी

क्षेत्रफल

1

क्र.सं.	कार्य विवरण	मात्रा	दर	प्रति	राशि
1	चारागाह हेतु घास बीज बुवाई का कार्य 6 से 8 किलो प्रति हैक्टर ट्रेक्टर द्वारा जुताई सहित	200	2000	हैक्टर	208.80
योग					208.80

अकृषि भूमि पर वेजिटेटिव ट्रेच का कार्य तकमीना

जलग्रहण क्षेत्र का नाम :- खेतरली'पाली- आइ डबलु एम पी- 6

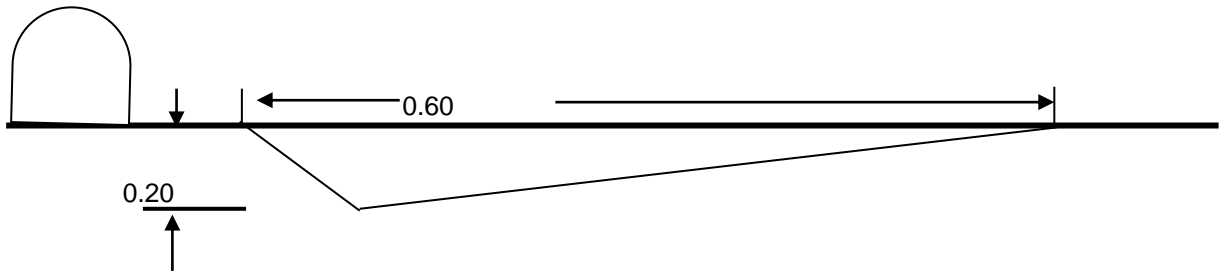
पंचायत समिति - बाली

प्रभावी क्षेत्रफल 1

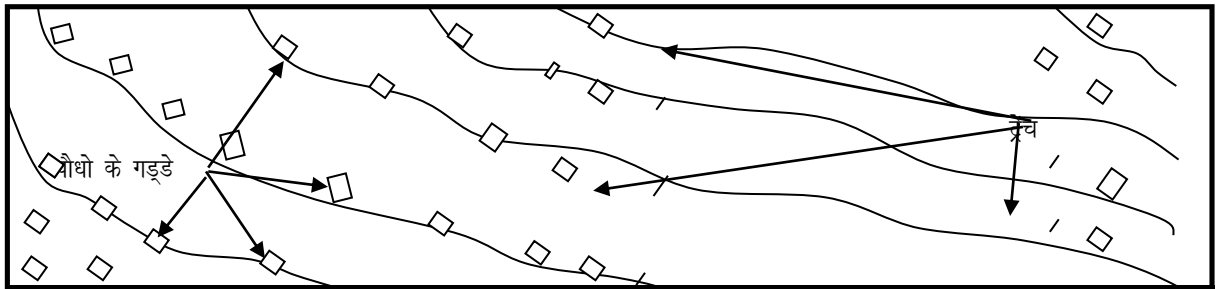
क्र.सं.	कार्य विवरण	नाप	मात्रा	
1	डॉग बेलिंग देना 2.50 से 5.00 सेमी गहरी		1.000	मी.
2	कन्टूर ट्रेच हेतू खुदाई का कार्य सख्त मिट्टी में	$1 \times 0.45 \times 0.45 =$	0.203	मी.
3	धामण घास बीज की आपूर्ति	$1 \times 0.001 =$	0.001	किलो
4	धामण घास बीज की बुवाई बनाये गये रिज पर		1.000	मी.



ट्रेंच का क्रॉस - सेक्शन



ट्रेंच का ले-आउट



अकृषि भूमि पर वेजिटेटिव ट्रेच का लागत तकमीना

जलग्रहण क्षेत्र का नाम :- खेतरली'पाली- आइ डबलु एम पी- 6

पंचायत समिति - बाली

प्रभावी

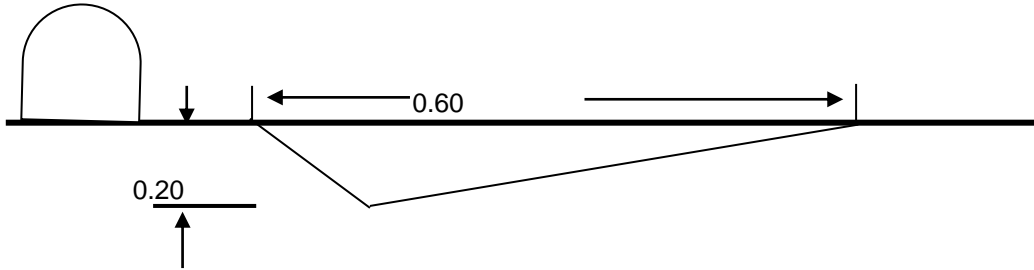
क्षेत्रफल

1

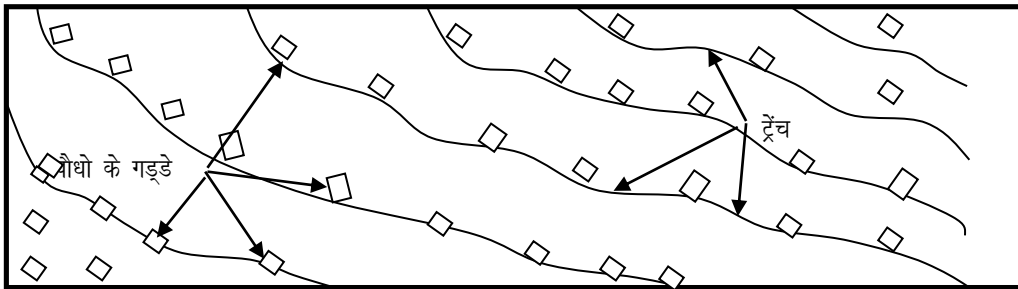
क्र.सं.	कार्य विवरण	मात्रा	दर	प्रति	राशि
1	डॉग बेलिंग देना 2.50 से 5.00 सेमी गहरी	1.000	0.340	मी.	0.340
2	कन्टूर ट्रेच हेतू खुदाई का कार्य सख्त मिट्टी में	0.203	9.000	घ.मी.	1830
3	धामण घास बीज की आपूर्ति	0.001	40.000	किलो	0.040
4	धामण घास बीज की बुवाई बनाये गये रिज पर	1.000	0.600	प्रति मी.	0.600
	योग				19610
	कुल लम्बाई	Length =Eff. Area X 225 M(per Hact)=			225.000
	धामण घास की मात्रा	Length X .001 Kg=			0.225 Kg.
	कुल लागत	Length X 19610			4412.25

प्रति र.मी. लागत रु Kg.
प्रति हैक्टर लागत रु
कुल लागत रु

ट्रेंच का क्रॉस - सेक्शन



ट्रेंच का ले-आउट



Loose stone checkdam (L.S.C.D)

Name of watershed: JELU GAGADI (Jodhpur-XIV)

Block:Osian

District: Jodhpur

No.

1

Length

9.000

क्र.सं.	कार्य विवरण	नाप						मात्रा		
1	डाग बेलिंग देना	1	X	2.00	X	9000	=	18000	18000 मी.	
2	नीव ट्रेजेज में मिट्टी खुदाई का कार्य सख्त मिट्टी में	1	X	900	X	2.40	X	0.45	=	920
		1	X	900	X	1.50	X	0.30	=	4.050
		1	X	2.00	X	1.00	X	0.60	X	1.35
									=	1.620
										15.39
3	सुखे पत्थर की चुनाई का कार्य 3 मी. की उचाई तक मुख्य दिवार एवं नीव हेतु मुख्य दिवार प्रथम चरण मुख्य दिवार द्वितीय चरण	1	X	900	X	2.40	X	0.45	=	920
		1	X	900	X	1.50	X	0.30	=	4.050
		1	X	900	X	(2.4 + 0.6)/2	X	0.3	=	10.125
		1	X	2.00	X	1.00	X	0.60	X	1.35
									=	1.620
										25.515
										25.515 घ.मी.

Loose stone checkdam (L.S.C.D)

Name of watershed: JELU GAGADI (Jodhpur-XIV)

Block:Osian

District: Jodhpur

L

क्र.सं.	कार्य विवरण	मात्रा	श्रम दर	कुल दर	प्रति	श्रम राशि	कुल राशि
1	डॉग बेलिंग देना	18000	0.00	0.00	घ.मी.	12.600	12.600
2	नीव ट्रेजेज में मिट्टी खुदाई का कार्य सख्त मिट्टी में	15.39	2.000	2.000	घ.मी.	1415.9	1415.9
3	सुखे पत्थर की चुनाई का कार्य 3 मी. की उचाई तक मुख्य दिवार एवं नीव हेतु	25.515	28.100	01.000	घ.मी.	24.327	18.015
	Total						1914.49
	contingency 4%						772.5798
	Grand total						20003
						Say	20000.000

Loose stone checkdam (L.S.C.D)
Name of watershed: JELU GAGADI (Jodhpur-XIV)

Block:Osian

District: Jodhpur

No.

1

Length

4.000

क्र.सं.	कार्य विवरण	नाप					मात्रा
1	डाग बेलिंग देना	1	X	2.00	X	4.000 =	800
2	नीव ट्रेंचेज में मिट्टी खुदाई का कार्य सख्त मिट्टी में	1	X	4.00	X	0.45 =	4.320
		1	X	4.00	X	0.30 =	1.80
		1	X	2.00	X	1.35 =	1.620
							770 घ.मी.
3	सुखे पत्थर की चुनाई का कार्य 3 मी. की उचाई तक मुख्य दिवार एवं नीव हेतु मुख्य दिवार प्रथम चरण मुख्य दिवार द्वितीय चरण	1	X	4.00	X	0.45 =	4.320
		1	X	4.00	X	0.30 =	1.80
		1	X	4.00	X	0.5 =	4.500
		1	X	2.00	X	1.35 =	1.620
							12.240 घ.मी.

Loose stone checkdam (L.S.C.D)

Name of watershed: JELU GAGADI (Jodhpur-XIV)

Block:Osian

District: Jodhpur

क्र.सं.	कार्य विवरण	मात्रा	श्रम दर	कुल दर	प्रति	श्रम राशि	कुल राशि
1	डॉग बेलिंग देना	8000	0.00	0.00	घ.मी.	5.600	5.600
2	नींव ट्रेचेज में मिट्टी खुदाई का कार्य सख्त मिट्टी में	740	2.000	2.000	घ.मी.	72.00	72.00
3	सुखे पत्थर की चुनाई का कार्य 3 मी. की उचाई तक मुख्य दिवार एवं नींव हेतु	12.240	28.000	01.000	घ.मी.	348100	88.240
Total							2920

contingency 4%

Grand total

371.9168

~~8697~~

Say 10000.000

No. 1

Length

9,000

Loose stone checkdam (L.S.C.D)
Name of watershed: JELU GAGADI (Jodhpur-XIV)

Block:Osian

District: Jodhpur

No.

1

Length

6.500

क्र.सं.	कार्य विवरण	नाप	मात्रा
1	डाग बेलिंग देना	1 X 2.00 X 6.500 =	13.000
2	नीव ट्रेंचेज में मिट्टी खुदाई का कार्य सख्त मिट्टी में	1 X 6.50 X 2.40 X 0.45 = 1 X 6.50 X 1.50 X 0.30 = 1 X 2.00 X 1.00 X 0.60 X 1.35 =	7020 2.95 11.565
3	सुखे पत्थर की चुनाई का कार्य 3 मी. की उचाई तक मुख्य दिवार एवं नीव हेतु मुख्य दिवार प्रथम चरण मुख्य दिवार द्वितीय चरण	1 X 6.50 X (2.4 + 0.6) /2 X 0.3 = 1 X 2.00 X 1.00 X 0.60 X 1.35 =	7020 2.95 7313 1.620 188
			11.565 घ.मी.
			13.000 मी.
			188 घ.मी.

Loose stone checkdam (L.S.C.D)**Name of watershed:JELU GAGADI (Jodhpur-XIV)****Block:Osian****District: Jodhpur**

क्र.सं.	कार्य विवरण	मात्रा	श्रम दर	कुल दर	प्रति	श्रम राशि	कुल राशि
1	डॉग बेलिंग देना	13.000	0.00	0.00	घ.मी.	9100	9100
2	नींव ट्रेचेज में मिट्टी खुदाई का कार्य सख्त मिट्टी में	11.565	2.000	2.000	घ.मी.	1063.0	1063.0
3	सुखे पत्थर की चुनाई का कार्य 3 मी. की उचाई तक मुख्य दिवार एवं नींव हेतु	188	28.000	01.000	घ.मी.	530.08	13233.128
Total							14306.208

contingency 4%

Grand total

572.2483

148156

Say

15000.000

Length	No.
9.000	1

सामग्री की आवश्यकता

कार्य का नाम :- पत्थर की पंथी से कांटेदार फेंसिंग का कार्य

क्र.सं.	कुल सामग्री आवश्यकता	ईकाई	मात्रा	दर	राशि
1	सीमेन्ट	बैग	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 पंथी	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 8/4/2011 .

			कुल योग	335614
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Note:-Rate has been taken from the BSR issued by Zila Parisad Jodhpurb on 8/4/2011 .

Panchayat Samiti: Osian
Didtrict: Jodhpur

ST

L 3280

दर		राशि	
श्रम	कुल	श्रम	कुल
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**

Construction of Waste Weir

NAME OF WATERSHED: JELU GAGADI(JODHPUR XIV) Amount: 49627
 SCHEME : IWMP BLOCK: OSIAN

DETAILS OF WORK AND ABSTRACT OF COST

NAME OF WATERSHED: JELU GAGADI(JODHPUR XIV) L of HW 18 Ht of SW 5 Ht of HW 2.5

क्र.सं.	कार्य का विवरण	सं.	विशेष विवरण			मात्रा		ईकाई	दर		राशि		
			ल.	चौ.	ऊं/ग.	घोटा	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 नींव भरने के बाद खाली स्थानों को पुनः मिट्टी से भरना तथा बची हुई मिट्टी को 50 मीटर की दूरी तक निस्तारण करना	2	8	3	3.25	156							
		4	3.5	3	3.25	136.5							
		1	17.5	4	3.5	245							
							0						
							0						
							0						
						537.5	15.21	cum.	92.00	92.00	1399.3	1399.3	
2	सीमेन्ट कांक्रिट नींव या फर्श में 40 मि.मी. नमीय माप की पत्थर मिट्टी/ईट मिट्टी, सीमेन्ट - रेत मसाला में 1 सीमेन्ट : 4 रेत : 8 मिट्टी अनुपात में मिलाकर डालना तथा कुटाई करना, तराई समेत।	2	8	3	0.5	24							
		4	3.5	3	0.5	21							
		1	17.5	4	0.5	35							
							0						
							0						
							80	2.26	cum.	320.10	1586.00	723.43	3584.4
3	नींव तथा कुर्सी में पत्थर की बे रद्दा-दोका सीमेन्ट-बजरी 1 : 3, 1 : 6 या 1 : 8 मसाले में, मय बगल की क्षिरी बन्द करना तथा तराई आदि।	2	8	2.5	2.75	110							
		4	3.5	2.5	2.75	96.25							
		2	17.5	3.5	3	367.5							
							0						
							573.75	16.23	cum.	419.80	1503.00	6813.4	24394
4	अधिरचना में सीमेन्ट मसाला 1:8 में पत्थर की चुनाई का कार्य	2	8	1.25	5	100							
		4	3.5	1.5	5	105							
		1	18	2.5	2.5	112.5							
	योग												
					317.5	8.98	cum.	554.80	1641.00	4982.1	14736		
5	फर्श के नीचे सुखे पत्थरों का खरजा डालना।	1	18	2.75	0.3333	16.5							
							0						
							16.5	0.46	cum.	174.80	590.00	80.408	271.4
6	कोपिंग का कार्य C:C (1:2:4)	1	18	2.75	1	49.5							
		1	18	2	1	36							
		1	30	1.5	1	45							
							130.5	12.12	sqm.	79.80	186.00	967.18	2254.3

7	पल्लर की चुनाई पर सीमेन्ट मसाला 1:3 से टीपो का कार्य	2	8	5	1	80									
		4	4	5	1	80	7.432	sqm.							
		2	18	2.5	1	90									
							250								
		2	2	2.5	1	10									
	शेष					240	22.29	sqm.	39.80	48.40	887.14	1078.8			

15852 47718

	Quantity	Rate	Amount
Skilled labour	24.00	325	7800
Unskilled labour	57.00	135	7695
Water			546
			16041

Upto plinth सीमेंट 2
सीमेंट 2

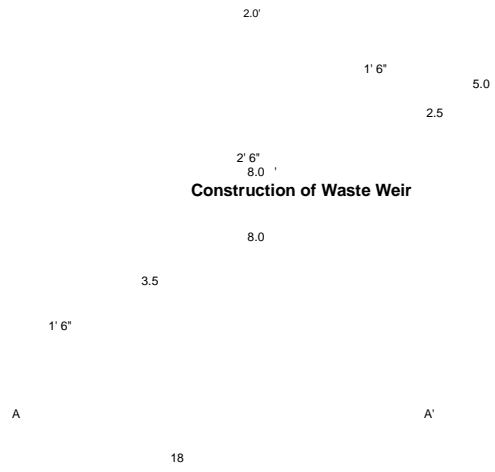
राशि		
श्रम	A	15852
सामग्री	B	31866
कुल	C	47718
Add 3% for conti. D=(C*0.04) 1908.7		
day (C+D)		49627

Say 50000

dz	कूल सामग्री आवश्यकता	इकाई	मात्रा	दर	राशि	बलि
1	चूना	कि.ग्रा.	0.0	2.25	0	
2	रेल / बलरी	घ.मी.	8.910000	380	3385.8	315
3	गिट्टी पल्लर की 40 मि.मी. नापीय माप की	घ.मी.	2.0	400	800	70.7
4	गिट्टी पल्लर की 20 मि.मी. नापीय माप की	घ.मी.	0.55	550	302.5	19.4
5	पल्लर	घ.मी.	25.2	575	14490	890
6	सीमेन्ट	कि.ग्रा.	1980.10	220	8712.44	39.6
					27690.7	
	अन्य				1908.72	
			कुल योग		29599.5	

Bag

CROSS SECTION AT A A'



2' 6"

PLAN

Construction of Waste Weir

Scheme :- IWMP
Watershed :- JELU GAGADI (JODHPUR –XIV)

Panchayat Samiti : OSIAN
District :- Jodhpur

MODEL ESTIMATE FOR ANIMAL HEALTH CAMP

In western Rajasthan due to lack of rainfall the climate is very drastic. Due to which the live-stock of western Rajasthan face many problems related to their feed & to maintain their body immunity against climate. Due to which they can face many types of diseases due to unfavorable climate conditions & mostly by the owner who can use the animals till the animal can give milk after that he cannot take care of the animals. Due to this many types of diseases like parasitic diseases it may be inner or outer, milk fever, Mastitis, Mange, tympany, Diarrhoea, fever, Infertility, Pyrometra, Indigestion, FMD, HS, BQ, ETV etc. are many types of diseases which the animal can generally face due to which owner can face double loss first loss of money on treatment & on effect on animal production. For this in IWMP scheme the animal health camp can be organized in the villages which can come 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 villages by various means like posters, banner, goshi & various other means. After that camp can be organized in which free medicine can be distributed.

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

● Per camp cost :-	Medicine	-	13300/-
	Rent of Jeep (for two days)	-	1100/-
	Govt. Doctor or Staff	-	600/-

	TOTAL	-	15000/-

- **General Medicine:-**

- Antibiotic :-
 - inj. - OTC - 100 ml.
 - inj. - Enrocin - 100 ml.
- Ointment :-
 - ont. - Loroxine - 100 g.
 - ont. - Vetmox - 50 g.
- Cottons :- 100 gm.
 - Instruments :-
 - Catha tor
 - Trokar Canvla
 - Forseps
 - Teat Syphin
- Bandage :- 6"
- Syringe :- 50 ml
- Needle :- 16"
- Mineral Mixtuse :- pow. - Calfos Ao3 - 1 Kg.
- Vitamin :- inj. - Vitasef

- **Primary Treatment :-**

- P.P. - 100 g - (5)
- Mag Sulph - 100 g - (20)
- Soda by Carb - 100 g - (20)
- T.T. Oil - 100 ml - (3)
- Liq. - Notadome
- 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 - Ruwinox

- Diaphorria :- Bolus - Botrim
Bolus - SDM
inj. - Biotin3
- Fever :- inj. - proxyvet mp.
inj. - Oxy
Tab. - Proxivet 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 g
Pow. - Mag. Sulph - 100 g
inj. - Bcomplex (Belayle) 100 ml
inj. - oxy 100 ml
- Beworning :- 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 less labour)

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

1. One set of carpentry tools

COST RS. 4000/ Kit

S.No.	Name of tools	Specification	Quantity
1	Hand saw	Size 15"	1 No
2	Hand saw	Size 12"	1 No
3	Screw driver	Size 8"x25mm	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 (shikanja) for wooden frame	Size 4'x2"	1 No
13	Stone silly	Size 6"- ISI Mark	1 No
14	Basola with handle	Weight 800 gram	1 No
15	Ball peen harmmer	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	Girmit	Size ½ "	1 No
20	Tri Square	Size 8"	1 No
21	Hand Operated drill	Size ¼ "	1 No
22	Steel box for Tools	Size(22"x11") – G.I. sheet	1 No

2. One set of Mason tools

COST RS. 2000/ Kit

S.No.	Name of tools	Specification	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	Sabbal	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/ Kit**

S.No.	Name of tools	Specification	Quantity
1	Clay lump beating hammer	MS pat. Size – D 100 – 120 mm x T5-6mm. with iron pipe handle	1
2	Wooden hammer(Thapa)	Sheesam Wood. Size – D6-7”x T1.25”. handle- L6”	1
3	Tasla	MS Sheet. Size- D15”. SWG-20	1
4	Spade (Phawda)	MS sheet. Size L 10 “x w10”. SWGT-20. fitted with Wooden Handle	1
5	Kamdai	Wooden Size- 2”x 1-1.25” approx. Arc. Shap	
6	Pindi Cement	Various Sizes	3
7	Decoration tools	MS (Banki, Sua. Piyali. Patti)	8
8	Decoration Wheel	Size- H 16” x D 12-15”. Tripod Structure. Fitted with double Ball Bearing. Iron sheet 5 mm	1
9	Manual Potter Wheel	Outer Dia- inner plate size – D- 300mm x T-20mm. T-WT- 17 kg minimum (Casted iron body). Tripod Casted Iron Structure with Ball bearing. 2 nos. of outer rings made of T or steal of 12 mm Dia. Cross Wooden Support Structure.	1
10	Electric Potter wheel	Structure dimension (25”x16”x16”) iron angle (iron angle structure 35-5) casted iron wheel dia 23”. Ball bearing -2 (6206) sealed. Shaft dia 2”. V-belt pully, WT 23-25 kg.	1

4. One set of Footwear(Mojari) Tools**COST RS. 12000/ Kit**

S.No.	Name of tools	Specification	Quantity
1	Hummer Ball Pane	Drop forged steel. Induction hardened. Seasoned wood handle. WT- 300 gms with wooden handle. Nylon hammer (L 240 mm. head size L80x D300mm)	
2	Wooden Block	Size- L 18"x W4"x T 4"	1
3	Pincer	Size – 8"	1
4	Scissors	Size- 9". Steel Body. Brass Handle	1
5	Bodam / Shoe anvil	Graded CI with 3 phases. WT – 4 kg . approx.	1
6	Cutting Blade Set (Ramp)	Steel with Wooden Handle. Size- L 150x W30X T6mm	set
7	Stitching Awl	Steel with Sheesham Wood Handle	1
8	Sharpening Stone	Size- 150x50x25mm. 109 no.	1
9	Shoe measuring Tape	Size—2' fibre/ good quality plastic material	1
10	Lock Punch Set	Steel	1
11	Eye let setting tool	Steel	1
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- 8 1/2". Grooves on cutting edge.	1
15	Pattern Cutting Knife	Steel, Size – 6"	1
16	PP Block	Size- L 6" x W 6" x T 20mm	1
17	Steel Scale	Size-12" and 24"	1
18	Leather Scraping Brush	Size- 8" with wooden Handle	1
19	Adhesive Brush	Size- 10 mm. 12 mm. 25 mm	1
20	Spring Divider	Steel- Size 9"	1
21	Sant	Steel- H 6" WT – 1 kg.	1
22	Sizzeore Passing	Steel- Size 8"	1
23	Thread Cutter	Steel with plaste handle. Size- L 100 mm	1
24	Number sety	Steel	Set of 10
25	Capsol Punch	Size (8-10-12-16)	Set
26	Brush	Size 10 mm. 12mm.25mm	1
	Machine Tools		1
27	HD Flat Bad Swing Machine	31 K. Branded Company	1

5. One set of Blacksmith Tools**COST RS. 6000/ Kit**

S.No.	Name of tools	Specification	Quantity
1	Big Hammer	Ghon – 5 kg	1
2	Hammer	Ghon – 1 kg	1
3	Hammer	Ghon – ½ kg	1
4	Anvil- chouka	Ghon – 10 kg	1
5	Chisel- 3 Nos	Ghon – 1 kg,500 kg. 750gm	1
6	Meaurement tape	3 MTR	1
7	Tringle	6”	1
8	Plie Taparia	8”	1
9	Scra drive	10” Tapana	1
10	Tin	10”	1
11	Hand operated electric hand drill	-	1
12	Sansasi- flat and round	-	1
13	Table Vice	-	1
14	Haksa Frame Poland type	-	1

6 One set of Cycle Mechanic Tools**COST RS. 6000/ Kit**

S.No.	Name of tools	Specification	Quantity
1	Hammer	500gm	60.00
2	Hammer	1 kg	100.00
3	Pliers	8” Taparia	180.00
4	Screw driver Taparia	6”-8”-12”	250.00
5	Pincer- 6”	6”	100.00
6	Nose plier-6”	6”	100
7	Alignment equipment cycle wheel		1000
8	Anivil – Chowka	5 kg	500.00
9	Screw wrench	10”	150.00
10	Hexa Frame polaud type		120.00
11	Spanner Set fix type 8 pcs	8 pcs	380.00
12	Electric hand drill machine		2000.00
13	Hand Skipper	10”	100.00
14	Solution		50.00
15	Water Pump Plier		100.00
16	Punch	6”	50.00
17	Hand Scissors	8”	120.00
18	Oil cane	250 gm	80.00

CHAPTER - VIII Enclosures -

- a. Location –District, block, village, watershed location map
- b. Map of Jelu Gagadi (Jodhpur XIV) IWMP Project (Watershed Boundary demarcation in cadastral & Topo Sheet)
- c. Counter map
- d. Cadastral Map on watershed boundary
- e. Land Use Land Cover map

Documents of Agreements:

Proceedings of gram sabha for DPR approval

DPR approval by Panchayat Samiti

DPR approval by district

Watershed Committee Registration certificate

GEOREFERENCED KHASRA MAP WITH CONTOUR

WATERSHED PROJECT - JODHPUR- XIV, JELU GAGADI, PANCHAYAT SAMITI - OSIAN

MACRO / MICRO WATERSHEDS NO. - [37/1,2,3,4,5], [38/1,2,3], [39/1,2,3,4,5,6,7,8]

SCHEME- IWMP (2009-10)

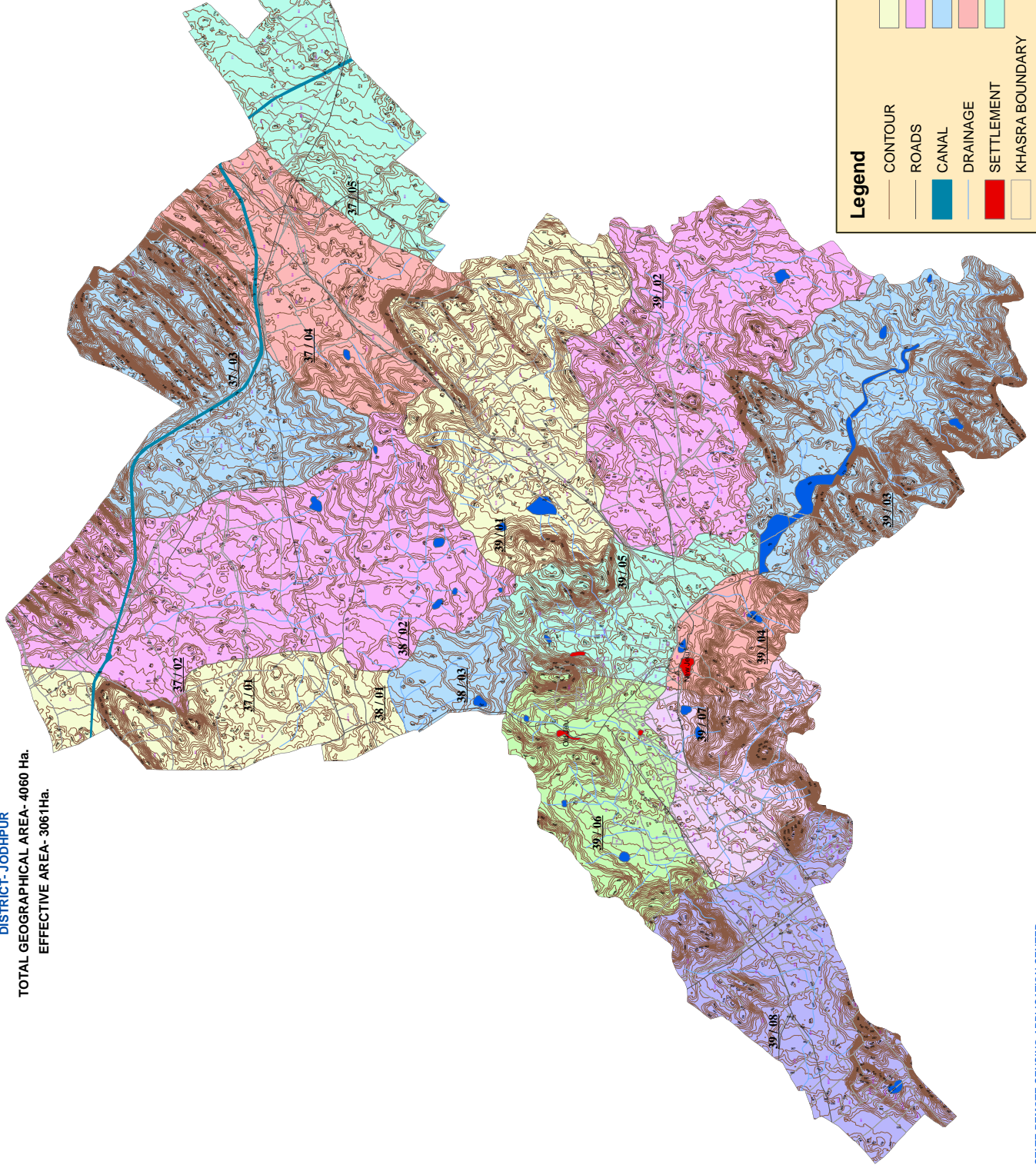
DISTRICT- JODHPUR

TOTAL GEOGRAPHICAL AREA- 4060 Ha.

EFFECTIVE AREA- 3061Ha.



SCALE 1:10,000



CARTOSAT-1(MERGE) SATELLITE IMAGE

WATERSHED PROJECT - JODHPUR- XIV, JELU GAGADI, PANCHAYAT SAMITI - OSIAN

MACRO / MICRO WATERSHEDS NO. - [37/1,2,3,4,5], [38/1,2,3], [39/1,2,3,4,5,6,7,8]

SCHEME- IWMP (2009-10)

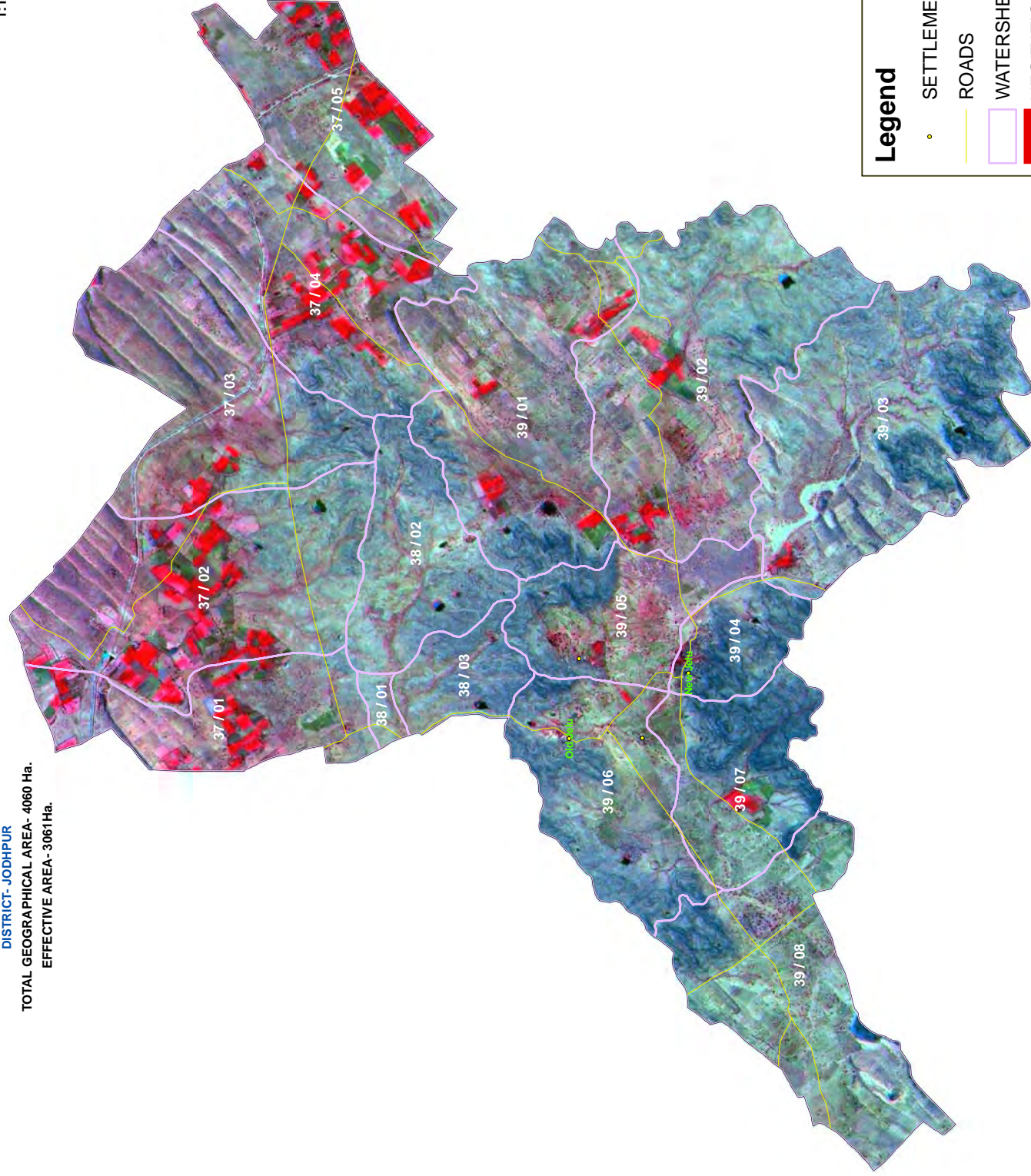
DISTRICT- JODHPUR

TOTAL GEOGRAPHICAL AREA- 4060 Ha.

EFFECTIVE AREA- 3061Ha.



1:10,000



Legend

- SETTLEMENT
- ROADS
- WATERSHED
- VEGITATION

LAND USE/ LAND COVER MAP

WATERSHED PROJECT - JODHPUR- XIV, JELU GAGADI, PANCHAYAT SAMITI - OSIAN
MACRO / MICRO WATERSHEDS NO. - [37/1,2,3,4,5], [38/1,2,3], [39/1,2,3,4,5,6,7,8]

SCHEME- IWMP (2009-10)

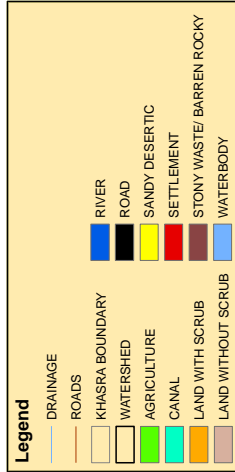
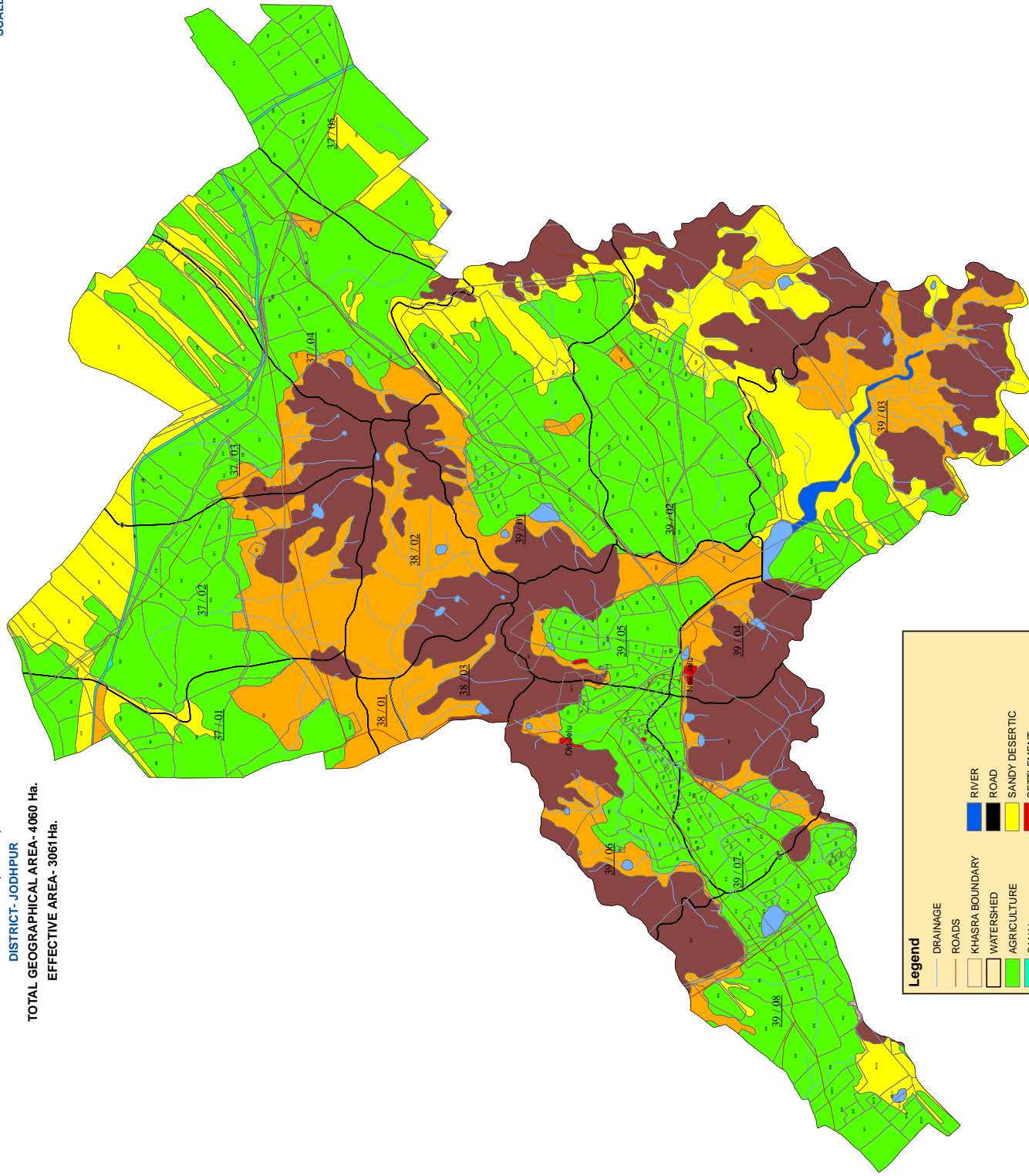
DISTRICT- JODHPUR

TOTAL GEOGRAPHICAL AREA- 4060 Ha.

EFFECTIVE AREA- 3061 Ha.



SCALE 1:10,000



SLOP MAP

WATERSHED PROJECT - JODHPUR - XIV, JELU GAGADI, PANCHAYAT SAMITI - OSIAN

MACRO / MICRO WATERSHEDS NO. - [37/1,2,3,4,5], [38/1,2,3], [39/1,2,3,4,5,6,7,8]

SCHEME- IWMP (2009-10)

DISTRICT- JODHPUR

TOTAL GEOGRAPHICAL AREA- 4060 Ha.

EFFECTIVE AREA- 3061Ha.



SCALE 1:10,000

