OFFICE OF THE ASSTT. ENGINEER (PIA) IWMP
P.S. BAITU

DETAIL PROJECT REPORT
BARMER (IWMP)-I
YEAR 2009-10

(UNDER INTEGRATED WATERSHED MANAGEMENT PROGRAMME)

BLOCK: BAITU DISTRICT: BARMER

AGRO CLIMATIC ZONE- 14

TOTAL GEOGRAPHICAL AREA – 5143 HAC.

TOTAL COST- 771.45 LACS.

UNIT COST- 15,000/HAC.

SUBMITTED BY
PROJECT MANAGER
DISTRICT WATERSHED DEVELOPMENT UNIT
BARMER, (RAJASTHAN)

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CHAPTER – I

INTRODUCTION

Location.

Barmer (IWMP)-I project is located in Baitu Block, of Barmer district. The project area is between the latitudes 25°51'57" to 25°52'13" E & longitudes 71°36'53" to 71°45'57" N It is at a distance of 10 km from its Block head quarters and 50 Kms from the district head quarters. There are seven number of habitations & sevral Dhanies are in the Project area and other details are given below.

General features of watershed:-

S.No.	Name of Project(as per GOI)	Barmer-I
(a)	Name of Catchment	cluster
(b)	Name of watershed area(local name)	Baitu Bhimji
©	Project Area	5143
(d)	Net treatable Area	5143
(e)	Cost of Project	771.45
(f)	Cost/hectare	15000
(g)	Year of Sanction	2009-2010
(h)	Watershed Code	Cluster
(i)	No. of Gram Panchayats in project area	4
(j)	No. of villages in project area	7
(k)	Type of Project	Desert
(l)	Elevation (metres)	152-159
(m)	Major streams	0
(n)	Slope range (%)	2% to 5%

Villagewise area covered in watershed:-

macro/micro	Name of Gram Panchayat	Name of Villages Covered	Census code of villages	Area
Cluster	1. Baitu Bhimji	1. Baniya Dhora	02129200	777
		2. Baitu Bhimji	02128800	839
Cluster	2. Baitu Bhopji	1. Beradon Ki Dhani	02130600	691
Cluster	3.N. D. K. D.	1. Panoni Joniyon Ki Dhani	02129400	775
		2. Danoni Meghwalon Ki Dhani	02129500	720
Cluster	4. Madhasar	1. Darjion Ki Dhani	02130200	504
		2. Rojiya Nada	02129200	837

Micro wise village area covered :-

The watershed falls in Agroclimatic Zone Dry Arid Hot.The soil texture is Sandy to sandy loam. The average rainfall is 30.3 cm . The temperatures in the area are in the range between 28º to 48º centigrade during summer and 7º to 32º centigrade during winter. The major crops in the area are Bajara , Moong, Moth,Til,Guar and 74% land is under cultivation 4% land fallow, 4% land is wasteland.

401 no of households are BPL (23.29% households) 20 are landless households (1.16% households) and 134 household are small and marginal farmers 7.82% (household) .Average land holding in the area is 3 ha.100% area is single cropped area. The average annual rainfall (10 years) in the area is 303.3 mm. The major festivals in the village are Holi,Diwali,Akha Teej & Idd. At present this villages is having 6848 population with Communities like jat,Meghwal,dewasi,Suthar.

Climatic and Hydrological information:-

1	**Average Annual Rainfall(mm)**		
	Year	Average Annual Rainfall(mm)	
1	2001	238 mm	
2	2002	56 mm	
3	2003	702 mm	
4	2004	200 mm	
5	2005	66 mm	
6	2006	666 mm	
7	2007	200 mm	
8	2008	306 mm	
9	2009	163 mm	
10	2010	435 mm	
2	**Average Monthly rainfall (last ten years)**		
	Month	Rainfall(mm)	
i)	June	27 mm	
ii)	July	107 mm	
iii)	August	118 mm	
iv)	September	29 mm	
3	**Maximum rainfall intensity (mm)**		
	Duration	rainfall intensity(mm)	
	i) 15 minute duration	6	
	ii) 30 minute duration	18	
	iii) 60 minute duration	24	
4	**Temperature (Degree C)**		
	Season	Max	Min
	i) Summer Season	48	28
	ii) Winter Season	32	7
	iii) Rainy Season	38	16
5	**Potential Evaporation Transpiration (PET) (mm/day)**		
	Season	PET	
	i) Summer	0.15	
	ii) Winter	0.01	
	iii) Rainy	0.01	

6	Runoff			
	i) Peak Rate (cum/hr)		260	
	ii) Total run off volume of rainy season (ha.m.)		0.012	
	iii) Time of return of maximum flood	5 years Nill	10 years Nill	In-Year 25 Year
	iv)Periodicity of Drought in village area	Once in 2 Year		

Other Development Schemes in the project area:-

S.No	Scheme	Name of the departme nt	Key interventions under the Scheme	Targeted Beneficiari es	Provisions under the Scheme
1	MGNREGS	RD	Construction of Tanka, beri , Gravel Road, Nadi etc	SC,ST,BPL & Others	100 DAYS Gurranted employment
2	BRGF	RD	Construction of Anganwadi ,School building,subcenter,Comm unity center etc	Commonut y work	Gap filling for infrastructure properly use
3	TFC	RD	Construction of tanka for drinking water, pipelines,Toilets etc	Common work	Drinking water & sinitation
4	SFC	RD	Construction of tanka for drinking water, pipelines,Toilets etc	Common work	Drinking water & sinitation
5	IAY	RD	Construction of Houses	BPL families	Provide House for poor people
6	ANGANWA DI	ICDS	Development for women &Childern	women &Childern	Development for women &Childern
7	TSC	RD	Construction of Toilets	BPL families	Sanitation

Details of infrastructure in the project areas :-

Parameters		Status			
(i)	No. of villages connected to the main road by an all-weather road	7			
(ii)	No. of villages provided with electricity	5			
(iii)	No. of households without access to drinking water	714			
(iv)	No. of educational institutions : Primary(P)/ Secondary(S)/ Higher Secondary(HS)/ vocational institution(VI)	(P) 10	(S) 4	(HS) 2	(VI) 0
(v)	No. of villages with access to Primary Health Centre	2			
(vi)	No. of villages with access to Veterinary Dispensary	1			
(vii)	No. of villages with access to Post Office	0			
(viii)	No. of villages with access to Banks	1			
(ix)	No. of villages with access to Markets/ mandis	0			
(x)	No. of villages with access to Agro-industries	0			
(xi)	Total quantity of surplus milk	0			
(xii)	No. of milk collection centres (e.g. Union(U)/ Society(S)/ Private agency(PA)/ others (O))	(U) 0	(S) 0	(PA) 0	(O) Self Ownership
(xiii)	No. of villages with access to Anganwadi Centre	5			
(xiv)	Any other facilities with no. of villages (please specify)	Mobile tower,Internet.			
(xv)	Nearest KVK		Barmer		
(xvi)	cooperative society		Baitu		
(xvii	NGOs		Sure sansthan		

)				
(xviii)	Credit institutions			
	(i) Bank		3	
	(ii) Cooperative Society		2	
(xix)	Agro Service Centre's		0	

INSTITUTIONAL ARANGEMENT (SLNA,DWDU,PIA,WDT,WC, SECRETARY

DWDU Details

1	2	3
S.No	Particulars	Details of DWDU
1.	PM ,DWDU	Tej Singh Choudhary
2.	Address with contact no., website	Zila Parishad (RDC)-Barmer +919414289496
3.	Telephone	02982220292
4.	Fax	02982-222041
5.	E-mail	dwdubarmer@gmail.com

PIA particulars

1	2	3
S.No	Particulars	Details of PIA
6.	Name of PIA	Goverdhan Singh
7.	Designation	Assistant Engineer
8.	Address with contact no., website	WD & SC .Panchayat Samiti Baitu +919414384744
9.	Telephone	02982-241218
10.	Fax	02982-241314
11.	E-mail	pia.baitu@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	Mahendra Kumar Khoja	M	22	B.Tech (Elect)	1 year	RGTPP, KVK, IGPRS	WDT (Engg)
2	-	-	-	-	-	-	WDT (Vet)
3	Nirma Meena	F	28	BA(Socio)	18 months	CAZRI ,KVK, NABARD	WDT (Social)
4	-	-	-	-	-	-	WDT (AGG)

Details of Watershed Committees (WC)

S.No.	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	Baitu Bhimji	09/06/ 2010	23/07/2010	President	Hira Ram	M	OBC	SF	SHG	Primary
				Secretary	Khema Raj	M	OBC	MF	UG	B.A, B.Ed.
				Member	Lach Ram	M	SC	BF	SHG	Secondary
				Member	Madharam	M	OBC	MF	UG	5th
				Member	Gena Ram	M	OBC	MF	UG	secondary
				Member	Rekha Ram	F	OBC	Landless	SHG	Illiterate
				Member	Gero	M	OBC	MF	UG	Illiterate
				Member	Chanani	M	OBC	SF	SHG	Illiterate
				Member	Vishana Ram	M	OBC	BF	UG	8th
				Member	Mirgon	F	OBC	SF	SHG	Illiterate

S.No.	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
2	Baitu Bhopji	08/06/2010	18/08/2010	Chairman	Ganga Ram	M	OBC	BF	UG	Upper Primary
				Secretary	Jasu	F	OBC	SF	SHG	B.A.
				Member	Padmi	M	OBC	MF	UG	Primary
				Member	Kharta Ram	M	OBC	BF	SHG	Illiterate
				Member	Khesha	M	OBC	Landless	UG	Illiterate
				Member	Mohan Lal	M	OBC	BF	SHG	Secondary
				Member	Keku	M	SC	SF	UG	Primary
				Member	Jamna	M	OBC	BF	SHG	Illiterate
				Member	Pana Ram	F	OBC	BF	UG	Illiterate
				Member	Nenu	M	OBC	MF	UG	Illiterate
				Member	Sagar Ram	F	SC	SF	SHG	Illiterate
				Member	Dharma	M	OBC	BF	SHG	Secondary

S.No.	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
3.	Madhsar	08/06/2010	27/08/2010	President	Nand Ram	M	OBC	BF	SHG	Primary
				Secretary	Mula Ram	M	OBC	BF	UG	Secondary
				Member	Kishna Ram	M	OBC	SF	UG	Primary
				Member	Mal Ram	M	OBC	MF	UG	5th
				Member	Mumal Devi	F	OBC	Landless	UG	Illiterate
				Member	Bala Ram	M	OBC	BF	SHG	Primary
				Member	Shanti Devi	F	OBC	MF	SHG	Illiterate
				Member	Joga Ram	M	OBC	SF	UG	Illiterate
				Member	Pani Devi	F	OBC	BF	SHG	Illiterate
				Member	Ladhu Ram	M	OBC	SF	SHG	Illiterate
				Member	Dala Ram	M	OBC	SF	UG	Illiterate
S.No.	Name of WCs	Date of Gram Sabha for WC	Date of Registration as a Society	Designation	Name	M/F	SC/ST/ OBC/General	Landless/MF/SF/ BF	Name of UG/SHG	Educational qualification

			(dd/mm/yyyy							
4.	N.D.K.D	09/06/2010	23/07/2010	President	Dungara Ram	M	OBC	BF	SHG	B.A.
				Secretary	Lakhsmansingh	M	OBC	MF	UG	Sr. Secondary
				Member	Bharmal	M	SC	SF	SHG	Primary
				Member	Dipa Ram	M	OBC	MF	SHG	Primary
				Member	Wali	F	ST	BF	UG	Illiterate
				Member	Dhapu	F	OBC	LS	UG	Illiterate
				Member	Himtha Ram	M	OBC	MF	SHG	literate
				Member	*Sona Ram*	M	OBC	SF	SHG	Secondary
				Member	*Sugni*	F	OBC	SF	UG	Illiterate
				Member	Gehro	F	OBC	SF	SHG	Illiterate

CHAPTER – II

Socio economic Features, Problems and Scope

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 118 ha land is arable wasteland and 3299 ha is fallow can be brought under cultivation. 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) 1039185 Quintal fodder scarcity can be met out through Pasture development .Improved animal Husbandry practices can increase the productivity of livestock. There are 1790 persons migrate due to lack of job& 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.

The wind erosion is the main problem in the watershed area.Here the wind velocity reaches upto more than 50 m/sec.As the soil of watershed area is mainly sandy therefore soil erosion occurs mainly due to wind leadind to land degradation.Here in watershed area due to scanty rainfall runoff is less resulting in lesser soil erosion.Agriculture in the watershed area is totally rainfed although there are some tube wells because people use this water for drinking purpose only.Here in watershed area animal population is fairly good but the need of breed improvement,vaccination medicinal camps are the key works to be loked into.The runoff of the area harvest in khet talai /Farm pond and horticulture plantation made to uplift income per household.People have large livestock holding but there are problem of drinking water and fodder.To solve the drinking water existing nadi/traditional rain water harvesting structures Tankas are to be constructed and renovated. Also to met deficiency of fodder about 70ha of pasture development can be done in the project area.

Natural Resource Management :

The watershed area located in western Rajasthan desert . The ground water depth is **250** meter. Ground water mostly contains florid and is saline. The water is not potable for drinking. The people has to travel 4-5 KM for drinking water. There is no run off due to desert area. . As per need and suggestions given by the beneficiaries/ public representative, the tanka , agor improvement of existing tnka have been proposed to drinking water.

While socially surveying the area, it was realized that various water harvesting structures mostly Tanka , talai, have been constructed in the area for storing the water. But due to non availability of pucca agore , outlets/ waste weirs the water was released by cutting the banks. The main problem of the area is availability of stored water. For further development, it has been planned that all the structures will be provided with waste weirs, so that the water can be stored up to the design level without any fear. At the present time no new talai/ ponds have been proposed.

During the rainy season it was found that the rain water from the higher areas flows down and spread in the lower area and damaging the fields. As per need and suggestions given by the beneficiaries/ public representative, the diversion channels have been proposed to convey water to nearby ponds. This will certainly solve the problems of the area and sufficient water will also be stored for live stock will help in recharging the nearby wells.

The agriculture land of the area is affected by sheet erosion and forming the rills/ gullies. The problem can be solved by bunding the fields. Therefore to protect the land, the main thrust is given on khadin with proper outlets.

The agriculture land of the area is affected by wind erosion. The problem can be solved by vegetation , plantation on sand dunes. Therefore to protect the land, the main thrust is given on sand dune stabilization.

Agriculture and Horticulture Productivity :

In the watershed area the production of Agriculture and Horticulture Plants are not to that extent due to lack of improved variety and techniques. The Agriculture production of different crops grown in Kharif/ Rabi seasons of the proposed watershed area is shown in Table 13. The production will be increased by introduction of new varieties of different crop. The existing horticulture area is shown above.

Live Stock –gap of fodder Availability :

The existing fodder area in the villages of proposed area is shown above. The availability of fodder in the proposed watershed area is less. To meet the requirement, the farmers of the area have to purchase from other places. The fodder area has to be increased to reduce the demand.

Livelihood and Micro enterprises :

The people of the area are dependent on Agriculture. In the proposed area the landless families are fully dependent on work. After introduction of NREGA, these families are getting job in the area. But it is not to the extent to increase the livelihood. For development of their livelihood, the various meetings were organized to know their interest and skills. According to social survey conducted in different villages of the project area, different individual and group works/ activities like Kasidakari , Ker-sagari Udhyog,Bhjan Mandal, Carpentry, Mobile Repairing, Motor Cycle Repairing, Compute Hardware/ Software work and

Compost Pit/ Vermi compost were identified. According to their interest homogeneous groups have been made. The main thrust was given for land less persons.

Table 2.1 Population & Household Details:-

S.No.	Name of Village	Total Population	BPL	SC	ST	S.F	M.F	Land Less
1	Baniya Dhora	713	46	0	0	83	92	45
2	Baitu Bhimji	562	84	0	0	52	68	23
3	Beradon Ki Dhani	525	47	441	0	56	37	27
4	Panoni Joniyon Ki Dhani	489	36	390	0	47	28	23
5	Danoni Meghwalon Ki Dhani	428	56	232	0	65	32	24
6	Darjion Ki Dhani	473	31	291	0	45	55	26
7	Rojiya Nada	816	51	0	0	65	47	32
	Total	**4006**	**351**	**954**	**0**	**413**	**359**	**220**

Total Population				
Male	**Female**	**Total**	**SC**	**ST**
2212	1794	4006	954	0

Household Details						
BPL household	**L. Less**	**Small Farmer**	**M. Farmer**	**Total household**	**SC household**	**ST household**
351	220	413	359	863	212	0

Table 2.2 Development indicators

S. No.	Development Indicators	State	Project Area
1	Per capita income (Rs.)	33731	24212/yr
2	Poverty ratio (%)	22.80	24.40
3	Literacy (%)	60.4	52.49
4	Sex Ratio Per 1000 male	921	979
5	Infant mortality rate Per 1000	63	76
6	Maternal mortality ratio Per 100000	388	652

S.no.	Particular	Before project	After Development

I. (i) (ii)	Water Lavel in m Open Well Borwells	58 118		52 113	
II (i)	Crop grown area(Hac.)	3412		4205	
(ii)	Crop wise area & yield	Area (ha)	Yield(Qtl/ha)	Area (ha)	Yield(kg/ha)
	Kharif Bajra Moong. Guar Moth	 2612 413 326 361	 1.15 0.75 1.72 1.45	 2800 450 340 380	 5.25 3.05 2.95 1.95
III	Certified Seed (Cultivators No.)	0		1500	
IV	Bio- Fertilizer	0		500	
V	Fodder Production	Qtls/ Hac.		Qtls/ Hac.	
	Lucern/ Barseem Bajra	 0		 5.00	
VI	Horticulture :-	Plants No.		Plants No.	
	Ber Citrus Aonla	0 0 0		10000 1000 3000	
VII	Agroforestry:-	Plants No.	Plant /hac.	Plants No.	Plant /hac.
	Arable land Pasture land	22000 120000	8.00 120	53000 200000	20 200
VIII (i)	Animal Husbandry:- Cross Breed				
	Cow Buffalo	0 0		200 2	
(ii)	Average milk yield/ Lts.	Lts/ Day		Lts/ Day	
	Cow Buffalo	5.00 8.00		7.50 10.00	
IX	Social And Financial				
(i)	Average Income/ household	35000		75000	
	Self help group	3		30	

The table indicates poor socio economic conditions.

Table 2.3 Land Use

S.No	Present land use	Area in Hact.

1	**Total geographical area**	5143
i	Non arable land	1844
ii	Arable land	3299
2	**Non arable land**	
i	Forest land	0.00
ii	Panchayat & pasture land	317
iii	Govt. waste land	215
iv	Area not available for development (Habitation, roads, mines, rails etc.	154
3	**Arable land**	
i	Irrigated	0
ii	Un irrigated	3299
	Total arable land	3299
4	**Land available for treatment**	
i	Non arable land	1844
ii	Arable land	3299
	Total	5143

The project area has 118 ha of cultivable wasteland . 3200 ha of fallow land (total 3299 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. 215 ha area 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 150 hectare pasture land (3%)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

Kharif season: (2010- 2011)

S.No	Village	Bajra	Moong	Guar	Til	Moth	Total
1	Baniya Dhora	530	35	42	16	32	675
2	Baitu Bhimji	526	20	18	9	22	601
3	Beradon Ki Dhani	352	70	65	31	38	496
4	PJKD	470	18	12	65	29	465
5	DMKD	398	52	32	13	8	505
6	Darjion Ki Dhani	401	22	21	8	7	445
7	Rojiya Nada	402	21	32	13	26	520
	Total	**2612**	**412**	**326**	**361**	**261**	**3299**

Table 2.4.b Abstract of cropped Area(ha)

Area under Single crop	3299
Area under Double crop	0
Area under Multiple crop	0

The farmers are using Indigenous varieties of Bajra, whereas varieties like –Hybrid can increase the production. Crop of Bajra: The farmers are using Indigenous varieties of Bajra, whereas varieties like HHB-67,ICMH-356,RHB-30,RHB-131,HHB-67,CZP-9802 can increase the production of Bajra.Crop of Guar: The farmers are using Indigenous varieties of Guar, where as varieties like RGC-936,RGC-1002,RGC-1003,RGM-112 can increase the production of Guar.

Crop of Moong: The farmers are using Indigenous varieties of Moong, where as varieties like RMG-62, K-851 can increase the production of Moong.Crop of Moth: The farmers are using Indigenous varieties of Moth, where as varieties like RMO-40, RMO-257,RMO-435 can increase the production of Moth.

Crop Rotation will vary from project to project

Bajra - Guar
Guar - Moong
Moong - Moth
Moong - Fallow

The table shows that only 25 ha is (0.50%) 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	Highest Average of Agro climatic zone	District	Project Area
Bajra	738	645	525	173	125
Moong	410	338	305	107	78
Moth	315	198	195	194	151
Guar	465	305	295	207	170

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 desi of Bajra moong monthwhereas the recommended varieties like Bajra-Kamdhenu, SR11(Gaveri) Moth- RMO40 ,RMO256 Moong-RMG268,SML268,IPM02-3, Guar-KS277,HFG119,HFG156 etc. Lack of Availability of good quality seeds of desired crop and variety in adequate quantities and time to the farmers. 267341 cum runoff/water availability for cultivation.

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

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

Activity	Area	Species	Varieties	Recommended varieties	Production
Horticulture	NIL	NIL	NIL	NIL	NIL
Vegetables	NIL	NIL	NIL	NIL	NIL
Floriculture	NIL	NIL	NIL	NIL	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	77	-	1357	1357	20	*168*	20	921	78
(ii) Small farmer	1157	-	2893	2893	126	*438*	44	1592	52
(iii) Marginal farmer	57	-	728	728	18	*39*	8	422	41
(iv) Landless person	20	-	-	-	-	-	-	-	-
Total	1712	-	4924	4924	164	645	72	2935	171

There are 56% land holdings belong to small and marginal farmers who own 53 % of total cultivated area. Horticulture/vegetables could be more economical to Small

and marginal farmers with irrigation source. For large farmers with no irrigation facility Horticulture/vegetables will be promoted in a part of land with farm pond/Tanka construction. The following activities will be more beneficial for small land holdings and for diversification and income for large farmers.

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

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 FODDER REQUIREMENT &AVAILABILITY IS AS CALCULATED BELOW

REQUIREMENT

S.No	Animals	No's	Equ. cow units	Average Dry matter requirement per day	Dry matter requirement per year (Kg.)	Total requirement in M.T.
1	Cows	637	637	7 Kg.	1883035	1883.035
2	Buffaloes	16	14	7 Kg.	35770	35.770
4	Goat	6602	4801	7 Kg.	14313110	14313.11
5	Sheep	392	392	7 Kg.	746060	746.06
6	Camel	84	84	7 Kg.	189070	189.07
	Total	7731	4771	-	17167045	17167.045

FODDER AVAILABILITY

S.No.	Name of Crop	Area in Hac.	Coo production M.T./Hac.	Fodder Availability
A.	(In Watershed Area) Kharif Crop ;-			
1.	Bajra	2412	0.50	100600
2.	Moong	243	0.20	48.60
3.	Guar	227	0.40	90.80
B.	Culturable vaste land & pasture land	1050	2.00	2100.00
D.	(Out of watershed village Area)			
1.	Bajra	2600	0.50	1261.50
2.	Moong	500	0.20	102.40
3.	Guar	450	0.40	185.80
	Total	**-**	**-**	**4575.10**

The table above shows there is fodder deficiency (Requirement is 17167.045 tons-and availability is 4575.10 tons/yr.)

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

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

Table 2.9 Agriculture implements

S. No	Implements	Nos.
1	Tractor	40
2	Sprayers-manual/ power	40
3	Cultivators/Harrows	80
4	Seed drill	40
5	Any Other	40

Farm mechanization and seed banks: - As discussed earlier 61 % land holdings belong to small and marginal farmers who own only 53 % 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.

S.No	Name of Village	No. of Card Holders	Employment	Activity taken so far
1	Baniya Dhora	139	113	1.Excavation of Talab / Nadi 2.Constraction of Gravel Road 3.Constraction of Tanka
2	Baitu Bhimji	136	116	1.Excavation of Talab / Nadi 2.Constraction of Gravel Road 3. Constraction of Tanka
3	Beradon Ki Dhani	117	97	1.Excavation of Talab / Nadi 2.Constraction of Gravel Road 3. Constraction of Tanka
4	PJKD	230	210	1.Excavation of Talab / Nadi 2.Constraction of Gravel Road 3. Constraction of Tanka
5	DMKD	168	148	1.Excavation of Talab / Nadi 2.Constraction of Gravel Road 3. Constraction of Tanka
6	Darjion Ki Dhani	111	91	1.Excavation of Talab / Nadi 2.Constraction of Gravel Road 3. Constraction of Tanka
7	Rojiya Nada	184	164	1.Excavation of Talab / Nadi 2.Constraction of Gravel Road 3. Constraction of Tanka
	Total	1185	835	-

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)
Baniya Dhora	210	218	Scarcity of labour&fodder	-	-	0.30
Baitu Bhimji	225	201	Scarcity of labour&fodder	300	Labour	0.30
Beradon Ki Dhani	215	212	Scarcity of labour&fodder	300	Labour	0.30
PJKD	309	216	Scarcity of labour&fodder	300	Labour	0.30
DMKD	265	218	Scarcity of labour&fodder	300	Labour	0.30
Darjion Ki Dhani	321	205	Scarcity of labour&fodder	300	Labour	0.30
Rojiya Nada	362	212	Scarcity of labour&fodder	300	Labour	0.30

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
Soap	7	60000
Goat /sheep rearing	475	36000
Sangari	55	24000

Table 2.12(b) Major activities (Off Farm)

Name of activity	Households/individuals	Average annual income from the
Artisans	27	45000
Carpenter	42	45000
Blacksmith	18	72000
Leather Craft	52	55000
Porter	-	-
Mason	40	144000
Kashidakari(handicraft)	455	18000
Others specify (Cycle Repair ,STD,Craft etc)	CR-5,KIRANA-25,VEG-10,ATA CHAKI-5,TV REP-4	60000

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	Navli	10	Embrodary Handicraft	-	1400	-	-	N
2	Kamla	10	Embrodary Handicraft	-	1600	-	-	N
3	Lakhmi	10	Embrodary Handicraft	-	1800	-	-	N

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

Technical Features

Table 2.14 Ground Water

S.No	Source	No.	Functional depth	Dry	Area irrigated	Water availability(days)
(i)	Open wells	-	-	-	-	-
(ii)	Shallow tube wells	-	-	-	-	Round the year
(iii)	Pumping sets	3	-	-	-	8 month
(iv)	Deep Tube Wells	-	-	-	-	-
	Total	3	-	-	-	-

The table indicates ground water very deep and also need to recharge by construction of anicut and other water harvesting structures.

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
1	Baniya Dhora	9200	5000	10	8	3
2	Baitu Bhimji	8400	4600	8	6	2
3	Beradon Ki Dhani	9600	5300	7	5	2
4	PJKD	9438	5200	6	4	2
5	DMKD	8200	5700	8	6	2
6	Darjion Ki Dhani	7600	4000	5	4	2
7	Rojiya Nada	8400	4200	7	6	2

Table 2.16 Water Use efficiency

Name of major crop	Area (Hectare)			
	through water saving devices(Drip/Sprinklers)	through water conserving agronomic practices#	Any other (pl. specify)	Total
Bajara	0	340	-	340

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%	5143

2	3 to 8%	-
3	8 to 25%	-
4	> 25%	-

The 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
-	Good	-	
-	Average	-	
5143	bed	3.10	305970
5143	Total		305970

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	0	0	0
ii)	Farm Ponds/Tanks	100	5000	0
iii)	Nadi	7	17500	0
	Total	107	22500	0

Table 2.18 (c) Balance available runoff (cum)

Total run off	Net tapped Runoff	Balance Run off	Available for Harvesting (0.75*
1	2	3	4
305970	22500	283470	212602

The water budgeting indicates potential for water harvesting in the area. Following Strutures are to be constructed in watershed area to harvesting available runoff.

S. No.	Name of Structure	No. of structure			Capacity of Structure	Total water Harvested
		IWMP	NREGA	Total		
1	Nadi	4	0	4	4	5550
2	Tanka	364	244	608	200	16000
3	Agor	122	0	334	114	1002
Total		590	244	122		265952

Table 2.19 Soil details /Soil Profile

A	Major Soil Classes	Area in hectares	
1	sandy	5143	
2	Sandy loam	-	
3	Rocky	-	
	Soil Depth :1.20m		
B.	Depth (Cms.)	Area in hectares	
1	0.00 to 7.50	5143	
2	7.50 to 45.00	-	
3	> 45.00	-	
C	Soil fertility Status	Kg/ha	Recommended
	N	60	120
	P	12	80
	K	1.50	40
	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	-	-	-	-
b	Rill	-	-	-	-
c	Gully	-	-	-	-
Sub-Total					-
Wind erosion		5143		5.6	
Total for project		5143		5.6	

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 life Earthen check dams, gully plugs, Bank Stabilisation, Loose stone check Dams, Gabions, Earthen embankment (Nadi) and Anicuts would be taken up.

CHAPTER - III

Proposed Development Plan

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 Group meetings, door to door campaign, slogans and wall writings etc. were carried out in all the habitations of Barmer-VI 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	Baitu Bhimji	15/08/2010
2	Baitu Bhopji	27/07/2010
3	Madhasar	21/08/2010
4	N.D.K.D.	14/08/2010

1	4	5	6	7	8	9	10	11
S. No.	Names of village	Amount earmarked for EPA	Entry Point Activities planned	Estimated cost	Expenditure incurred	Balance	Expected outcome	Actual outcome
1	Panoni Janion Ki Dhani	4.65	Water Tank, solar lights.	4.65	4.65	-	Drinking water for 125 Family & Light facility	Drinking water for 125 Family & Light facilit
2	Danoni Meghwalo Ki Dhani	4.32	Tanka on common place, solar lights	4.32	4.32	-	Drinking water for 80Family & Light facilit	Drinking water for 80Family & Light facilit
3	Baniya Dhora	4.662	Tanka on common place, solar lights	4.662	4.662	-	Drinking water for 45Family & Light facilit	Drinking water for 45Family & Light facilit
4	Baitu Bhimji	503.4	Tanka on common place, GLR &solar lights	503.4	503.4	-	Drinking water for 120Family & Light facilit	Drinking water for 120Family & Light facilit

5	Berdon Ki Dhani	4.146	Tanka on common place, GLR &solar lights	4.146	4.146	-	Drinking water for 110Family & Light facilit	Drinking water for 110Family & Light facilit
6	Darjion ki Dhani	3.024	Tanka on common place, GLR &solar lights	3.024	3.024	-	Drinking water for 108Family & Light facilit	Drinking water for 108Family & Light facilit
7	Rojiya Nada	502.2	Tanka on common place, GLR &solar lights	502.2	502.2	-	Drinking water for 122Family & Light facilit	Drinking water for 122Family & Light facilit

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

S.no	Name of the village/Habitation	Date on which PRA conducted
1	Panoni Janion Ki Dhani	18/01/2011
2	Danoni Meghwalo Ki Dhani	19/01/2011
3	Baniya Dhora	10/01/2011
4	Baitu Bhimji	12/01/2011
5	Berdon Ki Dhani	04/01/2011
6	Darjion ki Dhani	06/01/2011
7	Rojiya Nada	07/01/2011

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 6/10/2010 to 28/02/2011 (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 enclosed in DPR as annexure.The GIS based intervention map,PRA based intervention map are annexed.

Proposed Development Plan

GP 1: Baitu Bhimji						Area : 1616.0 Ha.	Cost : 242.400 Lacs		
(A)	**Preparatory phase activities capacity building trainings & EPA**								
Activity	**Unit**	**Unit Cost**		**Quantity**		**Total Cost**	**Cost from Project Fund**	**Convergence Fund**	**Beneficiary Contribution**
		IWMP	**Other Deptt.**	**IWMP**	**Other Deptt.**				
Admn.		10%	0.00	1	0.00	24.24	24.24	0.00	0
Monitoring		1%	0.00	1	0.00	2.42	2.42	0.00	0
Evaluation		1%	0.00	1	0.00	2.42	2.42	0.00	0
EPA		4%	0.00	1	0.00	9.70	9.70	0.00	0
I & CB		5%	0.00	1	0.00	12.12	12.12	0.00	0
DPR		1%	0.00	1	0.00	2.42	2.42	0.00	0
Total (A)		**22%**				**53.33**	**53.33**	**0.00**	**0**
(B)	**Natural resource management (60%)**								
Conservation measures for arable land(private land)									5-10% towards WDF
Farm Pond/Khet Talai	Nos	180000	750000	0	0	0.00	0.00	0.00	
Khadeen	Nos	519000	500000	0	0	0.00	0.00	0.00	
Rennovation of existing Tanka	Nos	50000		20	0	10.00	10.00	0.00	
Vegetative Barriers	Mtr	61		1505	0	0.92	0.92	0.00	
Earthen Bunding	No.	192000		0	0	0.00	0.00	0.00	
Construction of Tanka	Nos	155000	110000	77	68	194.15	119.35	74.80	
Conservation measures for non arable land									

Afforestation (Silvi Pasture)	Ani cut	106000.0		5.00		5.300	5.300	0.00	0
Sand Dune Stabilisation	Ha	117000.0		5.00		5.85	5.85	0.00	0
Road Side Plantation	Mtr	981.0		410.00		4.02	4.02	0.00	0
Nalla Bank Stabilisation	Mtr	981.0		0.00		0.00	0.00	0.00	0
Loose Stone Check Dam	Nos	25000.0		0		0.00	0.00	0.00	0
Rennovation of Tanka	Nos	50000		0		0.00	0.00	0.00	0
Renovation of nadi	Nos	1604000	535000	0	0	0.00	0.00	0.00	0
V-Ditch	Ha.	4800.00		0.00		0.000	0.000	0.00	0
Drainage line treatment									
Anicut Type-A	Nos	586000		0		0.00	0.00	0.00	0
Anicut Type-B	Nos	838000		0		0.00	0.00	0.00	0
Anicut Type-C	Nos	973000		0		0.00	0.00	0.00	0
Anicut Type-D	Nos	1806000		0		0.00	0.00	0.00	0
Total (B)				**2022**	**68**	**220.2**	**145.44**	**74.80**	
(C)	**Production System and micro enterprise(15%)**								
Production measures for arable land									
Horticulture plantation		15 % of Project Cost		1	1	40.30	36.36	3.944	20-40% towards project cost
Sprinklers and Drip irrigation									
Floriculture									
Vegetables									
Medicinal plants									
Vermi compost									
Crop Demonstration									
Micro Enterprise									0
Dairy									0
poultry									0
Local Artisans/crafts									0
Food Processing									0
Other									
Total (C)						**40.30**	**36.36**	**3.94**	0
(D) Consolidation	3%					7.27	7.27	0.00	0
Grand Total						**321.14**	**242.40**	**78.74**	

Proposed Development Plan

GP 2: N.D.K.D				Area :	1495.0	Ha.	Cost :	224.250	Lacs
(A)	**Preparatory phase activities capacity building trainings & EPA**								
Activity	**Unit**	**Unit Cost**	**Quantity**	**Total**	**Cost**	**Convergen**	**Benefici**		

		IWMP	Other Deptt.	IWMP	Other Deptt.	Cost	from Project Fund	ce Fund	ary Contribution
Admn.		10%	0.00	1	0.00	22.43	22.43	0.00	0
Monitoring		1%	0.00	1	0.00	2.24	2.24	0.00	0
Evaluation		1%	0.00	1	0.00	2.24	2.24	0.00	0
EPA		4%	0.00	1	0.00	8.97	8.97	0.00	0
I & CB		5%	0.00	1	0.00	11.21	11.21	0.00	0
DPR		1%	0.00	1	0.00	2.24	2.24	0.00	0
Total (A)		**22%**				**49.34**	**49.34**	**0.00**	**0**
(B)	**Natural resource management (60%)**								
Conservation measures for arable land(private land)									5-10% towards WDF
Farm Pond/Khet Talai	Nos	180000	750000	0	0	0.00	0.00	0.00	
Khadeen	Nos	519000	500000	0	0	0.00	0.00	0.00	
Rennovation of existing Tanka	Nos	50000	0	20		10.00	10.00	0.00	
Vegetative Barriers	Mtr	61	0	1980		1.21	1.21	0.00	
Earthen Bunding	No.	192000	0	0		0.00	0.00	0.00	
Construction of Tanka	Nos	155000	110000	61	48	147.35	94.55	52.80	
Conservation measures for non arable land									
Afforestation (Silvi Pasture)	Ha	106000	0	4.00		4.24	4.24	0.00	0
Sand Dune Stabilisation	Ha	117000	0	4.00		4.68	4.68	0.00	0
Road Side Plantation	Mtr	981	0	390.60		3.83	3.83	0.00	0
Nalla Bank Stabilisation	Mtr	981	0	0.00		0.00	0.00	0.00	0
Loose Stone Check Dam	Nos	25000	0	0		0.00	0.00	0.00	0
Rennovation of Tanka	Nos	50000	0	0		0.00	0.00	0.00	0
Renovation of nadi	Nos	160400	535000	1	1	21.39	16.04	5.35	0
V-Ditch	Anicut	4800	0	0		0.00	0.00	0.00	0
Drainage line treatment									
Anicut Type-A	Nos	586000	0	0		0.00	0.00	0.00	0
Anicut Type-B	Nos	838000	0	0		0.00	0.00	0.00	0
Anicut Type-C	Nos	973000	0	0		0.00	0.00	0.00	0
Anicut Type-D	Nos	1806000	0	0		0.00	0.00	0.00	0
Total (B)				**2461**	**49**	**192.700**	**134.550**	**58.15**	
(C)	**Production System and micro enterprise(15%)**								
Production measures for arable land									20-40% towards project cost
Horticulture plantation		15 % of Project Cost		1	1	37.03	33.64	3.395	
Sprinklers and Drip irrigation									
Floriculture									

Vegetables									
Medicinal plants									
Vermi compost									
Crop Demonstration									
Micro Enterprise									0
Dairy									0
poultry									0
Local Artisans/crafts									0
Food Processing									0
Other									
Total (C)						**37.03**	**33.64**	**3.40**	0
(D) Consolidation	3%					6.73	6.73	0.00	0
Grand Total						**285.79**	**224.25**	**61.55**	

Proposed Development Plan

GP3 : Madhasar						Area : 1341.0 Ha.		Cost : 201.150 Lacs	
(A)	**Preparatory phase activities capacity building trainings & EPA**								
Activity	**Unit**	**Unit Cost**		**Quantity**		**Total Cost**	**Cost from Project Fund**	**Convergence Fund**	**Beneficiary Contribution**
		IWMP	**Other Dept.**	**IWMP**	**Other Deptt.**				
Admn.		10%	0.00	1	0.00	20.12	20.12	0.00	0
Monitoring		1%	0.00	1	0.00	2.01	2.01	0.00	0
Evaluation		1%	0.00	1	0.00	2.01	2.01	0.00	0
EPA		4%	0.00	1	0.00	8.05	8.05	0.00	0
I & CB		5%	0.00	1	0.00	10.06	10.06	0.00	0
DPR		1%	0.00	1	0.00	2.01	2.01	0.00	0
Total (A)		**22%**				**44.25**	**44.25**	**0.00**	**0**
(B)	**Natural resource management (60%)**								
Conservation measures for arable land(private land)									5-10% towards WDF
Farm Pond/Khet Talai	Nos	180000	750000	0	0	0.00	0.00	0.00	
Khadeen	Nos	519000	500000	0	0	0.00	0.00	0.00	
Rennovation of existing Tanka	Nos	50000		24	0	12.00	12.00	0.00	
Vegetative Barriers	Mtr	61		2200	0	1.34	1.34	0.00	
Earthen Bunding	No.	192000		0	0	0.00	0.00	0.00	
Construction of Tanka	Nos	155000	110000	61	48	147.35	94.55	52.80	
Conservation measures for non arable land									
Afforestation (Silvi Pasture)	Anicut	106000.0		4.00		4.240	4.240	0.00	0
Sand Dune Stabilisation	Ha	117000.0		4.00		4.68	4.68	0.00	0
Road Side Plantation	Mtr	981.0		395.30		3.88	3.88	0.00	0

Nalla Bank Stabilisation	Mtr	981.0		0.00		0.00	0.00	0.00	0
Loose Stone Check Dam	Nos	25000.0		0		0.00	0.00	0.00	0
Rennovation of Tanka	Nos	50000		0		0.00	0.00	0.00	0
Renovation of nadi	Nos	160400	535000		1	5.35	0.00	5.35	0
V-Ditch	Ha.	4800.00		0.00		0.000	0.000	0.00	0
Drainage line treatment									
Anicut Type-A	Nos	586000		0		0.00	0.00	0.00	0
Anicut Type-B	Nos	838000		0		0.00	0.00	0.00	0
Anicut Type-C	Nos	973000		0		0.00	0.00	0.00	0
Anicut Type-D	Nos	1806000		0		0.00	0.00	0.00	0
Total (B)				**2688**	**49**	**178.8**	**120.69**	**58.15**	
(C)	**Production System and micro enterprise(15%)**								
Production measures for arable land									20-40% towards project cost
Horticulture plantation		15 % of Project Cost		1	1	34.12	30.17	3.944	
Sprinklers and Drip irrigation									
Floriculture									
Vegetables									
Medicinal plants									
Vermi compost									
Crop Demonstration									
Micro Enterprise									0
Dairy									0
poultry									0
Local Artisans/crafts									0
Food Processing									0
Other									
Total (C)						**34.12**	**30.17**	**3.94**	0
(D) Consolidation	3%					6.03	6.03	0.00	0
Grand Total						**263.24**	**201.15**	**62.09**	

Proposed Development Plan

GP 4: Baitu Bhopji				Area :	691.0	Ha.	Cost :	103.650	Lacs
(A)	**Preparatory phase activities capacity building trainings & EPA**								
Activity	**Unit**	**Unit Cost**		**Quantity**		**Total Cost**	**Cost from Project Fund**	**Convergence Fund**	**Beneficiary Contribution**
		IWMP	**Other Deptt.**	**IWMP**	**Other Deptt.**				
Admn.		10%	0.00	1	0.00	10.37	10.37	0.00	0
Monitoring		1%	0.00	1	0.00	1.04	1.04	0.00	0
Evaluation		1%	0.00	1	0.00	1.04	1.04	0.00	0

EPA		4%	0.00	1	0.00	4.15	4.15	0.00	0
I & CB		5%	0.00	1	0.00	5.18	5.18	0.00	0
DPR		1%	0.00	1	0.00	1.04	1.04	0.00	0
Total (A)		**22%**				**22.80**	**22.80**	**0.00**	**0**
(B)	**Natural resource management (60%)**								
Conservation measures for arable land(private land)									
Farm Pond/Khet Talai	Nos	180000	750000	0	0	0.00	0.00	0.00	5-10% towards WDF
Khadeen	Nos	519000	500000	0	0	0.00	0.00	0.00	
Rennovation of existing Tanka	Nos	50000	0	14		7.00	7.00	0.00	
Vegetative Barriers	Mtr	61	0	1000		0.61	0.61	0.00	
Earthen Bunding	No.	192000	0	0		0.00	0.00	0.00	
Construction of Tanka	Nos	155000	110000	31	26	76.65	48.05	28.60	
Conservation measures for non arable land									
Afforestation (Silvi Pasture)	Ha	106000	0	2.00		2.12	2.12	0.00	0
Sand Dune Stabilisation	Ha	117000	0	2.00		2.34	2.34	0.00	0
Road Side Plantation	Mtr	981	0	211.00		2.07	2.07	0.00	0
Nalla Bank Stabilisation	Mtr	981	0	0.00		0.00	0.00	0.00	0
Loose Stone Check Dam	Nos	25000	0	0		0.00	0.00	0.00	0
Rennovation of Tanka	Nos	50000	0	0		0.00	0.00	0.00	0
Renovation of nadi	Nos	1604000	535000	0	0	0.00	0.00	0.00	0
V-Ditch	Anicut	4800	0	0		0.00	0.00	0.00	0
Drainage line treatment									
Anicut Type-A	Nos	586000	0	0		0.00	0.00	0.00	0
Anicut Type-B	Nos	838000	0	0		0.00	0.00	0.00	0
Anicut Type-C	Nos	973000	0	0		0.00	0.00	0.00	0
Anicut Type-D	Nos	1806000	0	0		0.00	0.00	0.00	0
Total (B)				**1260**	**26**	**90.790**	**62.190**	**28.60**	
(C)	**Production System and micro enterprise(15%)**								
Production measures for arable land									
Horticulture plantation		15 % of Project Cost		1	1	18.94	15.55	3.395	20-40% towards project cost
Sprinklers and Drip irrigation									
Floriculture									
Vegetables									
Medicinal plants									
Vermi compost									
Crop Demonstration									
Micro Enterprise									0

Dairy									0
poultry									0
Local Artisans/crafts									0
Food Processing									0
Other									
Total (C)						**18.94**	**15.55**	**3.40**	0
(D) Consolidation	3%					3.11	3.11	0.00	0
Grand Total						**135.64**	**103.65**	**32.00**	

Proposed Development Plan

Consolidated

GP : Bhimji,Bhopji, N.D.K.D,Madhasar	Area :	5143.0	Ha.	Cost :	771.450	Lacs

(A)	**Preparatory phase activities capacity building trainings & EPA**								
Activity	**Unit**	**Unit Cost**		**Quantity**		**Total Cost**	**Cost from Project Fund**	**Convergence Fund**	**Beneficiary Contribution**
		IWMP	**Other Dept t.**	**IWMP**	**Other Deptt.**				
Admn.		10%	0.00	1	0.00	77.15	77.15	0.00	0
Monitoring		1%	0.00	1	0.00	7.71	7.71	0.00	0
Evaluation		1%	0.00	1	0.00	7.71	7.71	0.00	0
EPA		4%	0.00	1	0.00	30.86	30.86	0.00	0
I & CB		5%	0.00	1	0.00	38.57	38.57	0.00	0
DPR		1%	0.00	1	0.00	7.71	7.71	0.00	0
Total (A)		**22%**				**169.72**	**169.72**	**0.00**	**0**
(B)	**Natural resource management (60%)**								
Conservation measures for arable land(private land)									5-10% towards WDF
Farm Pond/Khet Talai	Nos	180000	750000	0	0	0	0.00	0.00	
Khadeen	Nos	519000	500000	0	0	0	0.00	0.00	
Rennovation of existing Tanka	Nos	50000	0	78	0	39	39.00	0.00	
Vegetative Barriers	Mtr	61	0	6685	0	4	4.08	0.00	
Earthen Bunding	No.	192000	0	0	0	0	0.00	0.00	
Construction of Tanka	Nos	155000	110000	230	190	566	356.50	209.00	
Conservation measures for non arable land									
Afforestation (Silvi Pasture)	Ha	106000	0	15	0	16	15.90	0.00	0
Sand Dune Stabilisation	Ha	117000	0	15	0	18	17.55	0.00	0
Road Side Plantation	Mtr	981	0	1407	0	14	13.80	0.00	0
Nalla Bank Stabilisation	Mtr	981	0	0	0	0	0.00	0.00	0
Loose Stone Check Dam	Nos	25000	0	0	0	0	0.00	0.00	0
Rennovation of Tanka	Nos	50000	0	0	0	0	0.00	0.00	0

Renovation of nadi	Nos	1604000	535000	1	2	27	16.04	10.70	0
V-Ditch	Ha.	4800	0	0	0	0	0.00	0.00	0
Drainage line treatment									
Anicut Type-A	Nos	586000	0	0	0	0	0.00	0.00	0
Anicut Type-B	Nos	838000	0	0	0	0	0.00	0.00	0
Anicut Type-C	Nos	973000	0	0	0	0	0.00	0.00	0
Anicut Type-D	Nos	1806000	0	0	0	0	0.00	0.00	0
Total (B)				**8431**	**192**	**682.570**	**462.870**	**219.70**	
(C)	**Production System and micro enterprise(15%)**								
Production measures for arable land									
Horticulture plantation		15 % of Project Cost		1	1	123.06	115.72	7.34	20-40% towards project cost
Sprinklers and Drip irrigation									
Floriculture									
Vegetables									
Medicinal plants									
Vermi compost									
Crop Demonstration									
Micro Enterprise									0
Dairy									0
poultry									0
Local Artisans/crafts									0
Food Processing									0
Other									
Total (C)						**123.06**	**115.72**	**7.34**	0
(D) Consolidation	3%					23.14	23.14	0.00	0
Grand Total						**998.49**	**771.45**	**227.04**	

CHAPTER - I V

Activity wise Total Abstract of cost

GP 1: Baitu Bhimji	Area :	1616.0	Ha.	Cost :	242.400	Lacs	**Rs. In Lacs.**

Sr.No.	**Activity**	**Unit**	**Quantity**		**Unit cost**		**Total cost**	**Cost from Project Fund**	**Convergence Fund**	**Beneficiary Contribution***
			IWMP	**Other Schemes**	**IWMP**	**Other Schemes**				
A	**Basic Activities**		1	0	22%	0	53.33	53.33	0	0
B	**Conservation measures for areable land (private land)**									
1	Farm Pond/Khet Talai	Nos	0	0	180000	750000	0.00	0.00	0.00	0.00
2	Khadeen	Nos	0	0	519000	500000	0.00	0.00	0.00	0.00

3	Rennovation of existing Tanka	Nos	20	0	50000		10.00	10.00	0.00	0.90
4	Vegetative Barriers	Mtr	1505	0	61		0.92	0.92	0.00	0.10
5	Earthen Bunding	No.	0	0	192000		0.00	0.00	0.00	0.00
6	Construction of Tanka	Nos	77	68	155000	110000	194.15	119.35	74.80	10.10
C	**Conservation measures for non areable land**									
1	Afforestation (Silvi Pasture)	Ha	5.00		106000		5.30	5.30	0.00	0.00
2	Sand Dune Stabilisation	Ha	5.00		117000		5.85	5.85	0.00	0.00
3	Road Side Plantation	Mtr	410.00		981.0		4.02	4.02	0.00	0.00
4	Nalla Bank Stabilisation	Mtr	0.00		981.0		0.00	0.00	0.00	0.00
5	Loose Stone Check Dam	Nos	0		25000.0		0.00	0.00	0.00	0.00
6	Rennovation of Tanka	Nos	0		50000		0.00	0.00	0.00	0.00
7	Renovation of nadi	Nos		0	160400	535000	0.00	0.00	0.00	0.00
8	V-Ditch	Ha.	0.00		4800.00		0.00	0.00	0.00	0.00
D	**Drainage line treatment**									
1	Anicut Type-A	Nos	0		586000		0.00	0.00	0.00	0.00
2	Anicut Type-B	Nos	0		838000		0.00	0.00	0.00	0.00
3	Anicut Type-C	Nos	0		973000		0.00	0.00	0.00	0.00
4	Anicut Type-D	Nos	0		180600		0.00	0.00	0.00	0.00
E	**Production System and micro enterprise**		15% of Project Cost	As per Convergence Plan (Ag+Ani)	15%	As per Convergence Plan (Ag+Ani)	40.30	36.36	3.94	0.00
F	**Consolidation**		3% of Project Cost	0	3%	0	7.27	7.27	0.00	0.00
	Total						**321.14**	**242.40**	**78.74**	**11.10**

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

Activity wise Total Abstract of cost

GP 2: N.D.K.D			Area :	1495.0	Ha.	Cost :	224.250	Lacs	

Sr.No.	**Activity**	**Unit**	**Quantity**		**Unit cost**		**Total cost**	**Cost from Project Fund**	**Convergence Fund**	**Beneficiary Contribution***
			IWMP	**Other Schemes**	**IWMP**	**Other Schemes**				
A	**Basic Activities**		1	0	22%		49.34	49.34	0	0
B	**Conservation measures for areable land (private land)**									
1	Farm Pond/Khet Talai	Nos	0	0	180000	750000	0.00	0.00	0.00	0.00
2	Khadeen	Nos	0	0	519000	500000	0.00	0.00	0.00	0.00

3	Rennovation of existing Tanka	Nos	20		50000	0	10.00	10.00	0.00	0.90
4	Vegetative Barriers	Mtr	1980		61	0	1.21	1.21	0.00	0.10
5	Earthen Bunding	No.	0		192000	0	0.00	0.00	0.00	0.00
6	Construction of Tanka	Nos	61	48	155000	110000	147.35	94.55	52.80	8.00
C	**Conservation measures for non areable land**									
1	Afforestation (Silvi Pasture)	Ha	4.00		106000	0	4.24	4.24	0.00	0.00
2	Sand Dune Stabilisation	Ha	4.00		117000	0	4.68	4.68	0.00	0.00
3	Road Side Plantation	Mtr	390.60		981	0	3.83	3.83	0.00	0.00
4	Nalla Bank Stabilisation	Mtr	0.00		981	0	0.00	0.00	0.00	0.00
5	Loose Stone Check Dam	Nos	0		25000	0	0.00	0.00	0.00	0.00
6	Rennovation of Tanka	Nos	0		50000	0	0.00	0.00	0.00	0.00
7	Renovation of nadi	Nos	1	1	160400	535000	21.39	16.04	5.35	0.00
8	V-Ditch	Ha.	0		4800	0	0.00	0.00	0.00	0.00
D	**Drainage line treatment**									
1	Anicut Type-A	Nos	0		586000	0	0.00	0.00	0.00	0.00
2	Anicut Type-B	Nos	0		838000	0	0.00	0.00	0.00	0.00
3	Anicut Type-C	Nos	0		973000	0	0.00	0.00	0.00	0.00
4	Anicut Type-D	Nos	0		1806000	0	0.00	0.00	0.00	0.00
E	**Production System and micro enterprise**		15% of Project Cost	As per Convergence Plan (Ag+Ani)	15%	As per Convergence Plan (Ag+Ani)	37.03	33.64	3.395	0.00
F	**Consolidation**		3% of Project Cost	0	3%	0	6.73	6.73	0.00	0.00
	Total						**285.79**	**224.25**	**61.55**	**9.00**

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

Activity wise Total Abstract of cost

Consolidated

GP 3: Madhasar				Area :	1341.0	Ha.	Cost :	201.15	Lacs	**Rs. In Lacs.**
Sr.No.	**Activity**	**Unit**	**Quantity**		**Unit cost**		**Total cost**	**Cost from Project Fund**	**Convergence Fund**	**Beneficiary Contribution***
			IWMP	**Other Schemes**	**IWMP**	**Other Schemes**				
A	**Basic Activities**		1	0	22%	0	44.25	44.25	0	0
B	**Conservation measures for areable land (private land)**									
1	Farm Pond/Khet Talai	Nos	0	0	180000	750000	0.00	0.00	0.00	0.00
2	Khadeen	Nos	0	0	519000	500000	0.00	0.00	0.00	0.00

3	Rennovation of existing Tanka	Nos	24	0	50000	0	12.00	12.00	0.00	1.00
4	Vegetative Barriers	Mtr	2200	0	61	0	1.34	1.34	0.00	0.10
5	Earthen Bunding	No.	0	0	192000	0	0.00	0.00	0.00	0.00
6	Construction of Tanka	Nos	61	48	155000	110000	147.35	94.55	52.80	8.00
C	**Conservation measures for non areable land**									
1	Afforestation (Silvi Pasture)	Ha	4.00	0	106000	0	4.24	4.24	0.00	0.00
2	Sand Dune Stabilisation	Ha	4.00	0	117000	0	4.68	4.68	0.00	0.00
3	Road Side Plantation	Mtr	395	0	981	0	3.88	3.88	0.00	0.00
4	Nalla Bank Stabilisation	Mtr	0	0	981	0	0.00	0.00	0.00	0.00
5	Loose Stone Check Dam	Nos	0	0	25000	0	0.00	0.00	0.00	0.00
6	Rennovation of Tanka	Nos	0	0	50000	0	0.00	0.00	0.00	0.00
7	Renovation of nadi	Nos	0	1	160400	535000	5.35	0.00	5.35	0.00
8	V-Ditch	Ha.	0.00	0	4800	0	0.00	0.00	0.00	0.00
D	**Drainage line treatment**									
1	Anicut Type-A	Nos	0	0	586000	0	0.00	0.00	0.00	0.00
2	Anicut Type-B	Nos	0	0	838000	0	0.00	0.00	0.00	0.00
3	Anicut Type-C	Nos	0	0	973000	0	0.00	0.00	0.00	0.00
4	Anicut Type-D	Nos	0	0	1806000	0	0.00	0.00	0.00	0.00
E	**Production System and micro enterprise**		15% of Project Cost	As per Convergence Plan (Ag+Ani)	15%	As per Convergence Plan (Ag+Ani)	34.12	30.17	3.94	0.00
F	**Consolidation**		3% of Project Cost	0	3%	0	6.03	6.03	0.00	0.00
	Total						**263.24**	**201.15**	**62.09**	**9.10**

CHAPTER - I V

Activity wise Total Abstract of cost

GP : Baitu Bhopji			Area :	691.0	Ha.	Cost :	103.650	Lacs	**Rs. In Lacs.**

Sr.No.	**Activity**	**Unit**	**Quantity**		**Unit cost**		**Total cost**	**Cost from Project Fund**	**Convergence Fund**	**Beneficiary Contribution***
			IWMP	**Other Schemes**	**IWMP**	**Other Schemes**				
A	**Basic Activities**		1	0	22%	0	22.80	22.80	0	0
B	**Conservation measures for areable land (private land)**									
1	Farm Pond/Khet Talai	Nos	0	0	180000	750000	0.00	0.00	0.00	0.00
2	Khadeen	Nos	0	0	519000	500000	0.00	0.00	0.00	0.00
3	Rennovation of existing Tanka	Nos	14	0	50000		7.00	7.00	0.00	0.60

4	Vegetative Barriers	Mtr	1000	0	61		0.61	0.61	0.00	0.10
5	Earthen Bunding	No.	0	0	192000		0.00	0.00	0.00	0.00
6	Construction of Tanka	Nos	31	26	155000	110000	76.65	48.05	28.60	4.10
C	**Conservation measures for non areable land**									
1	Afforestation (Silvi Pasture)	Ha	2.00		106000		2.12	2.12	0.00	0.00
2	Sand Dune Stabilisation	Ha	2.00		117000		2.34	2.34	0.00	0.00
3	Road Side Plantation	Mtr	211.00		981.0		2.07	2.07	0.00	0.00
4	Nalla Bank Stabilisation	Mtr	0.00		981.0		0.00	0.00	0.00	0.00
5	Loose Stone Check Dam	Nos	0		25000.0		0.00	0.00	0.00	0.00
6	Rennovation of Tanka	Nos	0		50000		0.00	0.00	0.00	0.00
7	Renovation of nadi	Nos		0	160400	535000	0.00	0.00	0.00	0.00
8	V-Ditch	Ha.	0.00		4800.00		0.00	0.00	0.00	0.00
D	**Drainage line treatment**									
1	Anicut Type-A	Nos	0		586000		0.00	0.00	0.00	0.00
2	Anicut Type-B	Nos	0		838000		0.00	0.00	0.00	0.00
3	Anicut Type-C	Nos	0		973000		0.00	0.00	0.00	0.00
4	Anicut Type-D	Nos	0		1806000		0.00	0.00	0.00	0.00
E	**Production System and micro enterprise**		15% of Project Cost	As per Convergence Plan (Ag+Ani)	15%	As per Convergence Plan (Ag+Ani)	19.49	15.55	3.94	0.00
F	**Consolidation**		3% of Project Cost	0	3%	0	3.11	3.11	0.00	0.00
	Total						**136.19**	**103.65**	**32.54**	**4.80**

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

Activity wise Total Abstract of cost

GP : Bhimji,Bhopji, N.D.K.D,Madhasar			Area :	5143.0	Ha.		Cost :	771.450	Lacs	
Sr.No.	**Activity**	**Unit**	**Quantity**		**Unit cost**		**Total cost**	**Cost from Project Fund**	**Convergence Fund**	**Beneficiary Contribution***
			IWMP	**Other Schemes**	**IWMP**	**Other Schemes**				
A	**Basic Activities**		1	0	22%		169.72	169.72	0	0
B	**Conservation measures for areable land (private land)**									
1	Farm Pond/Khet Talai	Nos	0	0	180000	750000	0.00	0.00	0.00	0.00
2	Khadeen	Nos	0	0	519000	500000	0.00	0.00	0.00	0.00
3	Rennovation of existing Tanka	Nos	78	0	50000	0	39.00	39.00	0.00	3.30

4	Vegetative Barriers	Mtr	6685	0	61	0	4.08	4.08	0.00	0.30
5	Earthen Bunding	No.	0	0	192000	0	0.00	0.00	0.00	0.00
6	Construction of Tanka	Nos	230	190	155000	110000	565.50	356.50	209.00	30.30
C	**Conservation measures for non areable land**									
1	Afforestation (Silvi Pasture)	Ha	15	0	106000	0	15.90	15.90	0.00	0.00
2	Sand Dune Stabilisation	Ha	15	0	117000	0	17.55	17.55	0.00	0.00
3	Road Side Plantation	Mtr	1407	0	981	0	13.80	13.80	0.00	0.00
4	Nalla Bank Stabilisation	Mtr	0	0	981	0	0.00	0.00	0.00	0.00
5	Loose Stone Check Dam	Nos	0	0	25000	0	0.00	0.00	0.00	0.00
6	Rennovation of Tanka	Nos	0	0	50000	0	0.00	0.00	0.00	0.00
7	Renovation of nadi	Nos	1	2	160400	535000	26.74	16.04	10.70	0.00
8	V-Ditch	Ha.	0	0	4800	0	0.00	0.00	0.00	0.00
D	**Drainage line treatment**									
1	Anicut Type-A	Nos	0	0	586000	0	0.00	0.00	0.00	0.00
2	Anicut Type-B	Nos	0	0	838000	0	0.00	0.00	0.00	0.00
3	Anicut Type-C	Nos	0	0	973000	0	0.00	0.00	0.00	0.00
4	Anicut Type-D	Nos	0	0	180600	0	0.00	0.00	0.00	0.00
E	**Production System and micro enterprise**		15% of Project Cost	As per Convergence Plan (Ag+Ani)	15%	As per Convergence Plan (Ag+Ani)	131	116	15	0.00
F	**Consolidation**		3% of Project Cost	0	3%	0	23	23	0	0.00
	Total						**1006.38**	**771.45**	**234.93**	**33.90**

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

CHAPTER-V

Name of the Project	BARMER(IWMP)-I				Macro/Micro		Micro		Geographical Area	1616.0	Ha
G.P.		Baitu Bhimji			Scheme		IWMP		Effective Area	1616	Ha
Block		Barmer			Date of Sanction		30.01.2009		Total Arable land	1324	Ha
District.		BARMER			Date of Appoval of the work plan				1. Irrigated	0	Ha
Village Covered		2	NO.						2. Unirrigated	1324	Ha
Project outlay		242.40	LAC		No. of SHG's formed		4	NO.	Total Nonarable land	292	Ha
Total Area		1616.0	Hactare		No. of UG's formed		2	NO.	1. Pasture	56	Ha
No. of WC's formed		1	NO.						2. Govt. / waste /OTHER LAND	236	Ha

YEARWISE WORK PLAN OF WATERSHED COMMITTEE BAITU BHIMJI

S. N.	NAME OF ACTIVITY	Unit	QTY.	Unit cost	AMOUNT	2009-10 FIRST YEAR		2010-11 SECOND YEAR		2011-12 THIRD YEAR		2012-13 FOURTH YEAR		2013-14 FIFTH YEAR		2014-15 SIXTH YEAR		2015-16 SEVENTH YEAR		TOTAL	
						PHY	FIN	PHY	FIN	PHY	FIN	PHY	FIN	PHY	FIN	PHY	FIN	PHY	FIN	PHY	FIN
I.	**Administration**			**10%**	**24.24**				4.848		4.848		4.848		4.848		4.848			**10%**	**24.240**
II	**Monitoring**			**1%**	**2.424**				0.485		0.485		0.485		0.485		0.485			**1%**	**2.424**
III	**Evaluation**			**1%**	**2.424**								1.212						1.212	**1%**	**2.424**
IV	**Entry point activity**			**4%**	**9.696**			42	9.696											**4%**	**9.696**
V	**Inst. & Capacity Building**			**5%**	**12.120**				4.242		3.636		3.030		0.606		0.606			**5%**	**12.120**
VI	**DPR Preparation**			**1%**	**2.424**	**1**	**1.454**	**1**	**0.970**											**1%**	**2.424**
	TOTAL (A)			**22%**	**53.328**		**1.454**		**20.240**		**8.969**		**9.575**		**5.939**		**5.939**		**1.212**		**53.328**
	W/S WORK PHASE																				
VII	**NRM**		**60%**	**145.44**			**0.000**		**0.000**		**18.180**		**72.720**		**54.540**		**0.000**		**0.000**		**145.440**
1	**Conservation measures for areable land (private land)**																				
(i)	Farm Pond/Khet Talai	Nos	0	180000	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	**0**	**0.000**
(ii)	Khadeen	Nos	0	519000	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	**0**	**0.000**

(iii)	Rennovation of existing Tanka	Nos	20	50000	10.000	0	0.000	0	0.000	3	1.250	10	5.000	8	3.750	0	0.000	0	0.000	**20**	**10.000**
(iv)	Vegetative Barriers	Mtr	1505	61	0.918	0	0.000	0	0.000	188	0.115	753	0.459	564	0.344	0	0.000	0	0.000	**1505**	**0.918**
(v)	Earthen Bunding	No.	0	192000	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	**0**	**0.000**
(vi)	Construction of Tanka	Nos	77	155000	119.350	0	0.000	0	0.000	10	14.919	39	59.675	29	44.756	0	0.000	0	0.000	**77**	**119.350**
2	**Conservation measures for non areable land**																				
(i)	Afforestation (Silvi Pasture)	Ha	5.00	106000.0	5.300	0	0.000	0	0.000	1	0.663	3	2.650	2	1.988	0	0.000	0	0.000	**5**	**5.300**
(ii)	Sand Dune Stabilisation	Ha	5.00	117000.0	5.850	0	0.000	0	0.000	1	0.731	3	2.925	2	2.194	0	0.000	0	0.000	**5**	**5.850**
(iii)	Road Side Plantation	Mtr	410.00	981.0	4.022	0	0.000	0	0.000	51	0.503	205	2.011	154	1.508	0	0.000	0	0.000	**410**	**4.022**
(iv)	Nalla Bank Stabilisation	Mtr	0.00	981.0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	**0**	**0.000**
(v)	Loose Stone Check Dam	Nos	0	25000.0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	**0**	**0.000**
(vi)	Rennovation of Tanka	Nos	0	50000	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	**0**	**0.000**
(vii)	Renovation of nadi	Nos		1604000	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	**0**	**0.000**
(viii)	V-Ditch	Ha.	0.00	4800.00	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	**0**	**0.000**
3	**Drainage line treatment**																				
(i)	Anicut Type-A	Nos	0	586000	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	**0**	**0.000**
(ii)	Anicut Type-B	Nos	0	838000	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	**0**	**0.000**
(iii)	Anicut Type-C	Nos	0	973000	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	**0**	**0.000**
(iv)	Anicut Type-D	Nos	0	1806000	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	**0**	**0.000**
	TOTAL (B)		**2022**	**0.000**	**145.44**			**0**	**0.000**	**253**	**18.180**	**1011**	**72.720**	**758**	**54.540**	**0**	**0.000**		**0.000**	**2022**	**145.440**
VIII	**Production System and micro enterprise**			**15%**	**36.3600**		0.000		0.000		7.272		7.272		7.272		7.272		7.272	**15%**	**36.360**
X	**CONSOLIDATION PHASE**			**3%**	**7.272**		**0.000**		0.000		**0.000**		**0.000**		**0.000**		**4.363**		**2.909**	**3%**	**7.272**
	GRAND TOTAL				**242.40**		**1.45**		**20.24**		**34.42**		**89.57**		**67.75**		**17.57**		**11.39**		**242.40**

CHAPTER-V

Name of the Project		**BARMER(IWMP)-I**		**Macro/Micro**	Micro		**Geographical Area**	1495.0	Ha

G.P.		N.D.K.D.			Scheme		IWMP		Effective Area	1495	Ha
Block		Baitu			Date of Sanction		30.01.2009		Total Arable land	1203	Ha
District.		BARMER			Date of Appoval of the work plan				1. Irrigated	0	Ha
Village Covered		2	NO.						2. Unirrigated	1203	Ha
Project outlay		224.25	LAC		No. of SHG's formed		4	NO.	Total Nonarable land	292	Ha
Total Area		1495.0	Hactare		No. of UG's formed		2	NO.	1. Pasture	56	Ha
No. of WC's formed		1	NO.						2. Govt. / waste /OTHER LAND	236	Ha

YEARWISE WORK PLAN OF WATERSHED COMMITTEE N.D.K.D

S. N.	NAME OF ACTIVITY	Unit	QTY.	Unit cost	AMOUNT	2009-10 FIRST YEAR		2010-11 SECOND YEAR		2011-12 THIRD YEAR		2012-13 FOURTH YEAR		2013-14 FIFTH YEAR		2014-15 SIXTH YEAR		2015-16 SEVENTH YEAR		TOTAL	
						PHY	FIN	PHY	FIN	PHY	FIN	PHY	FIN	PHY	FIN	PHY	FIN	PHY	FIN	PHY	FIN
I.	**Administration**			**10%**	**22.425**				4.485		4.485		4.485		4.485		4.485			**10%**	**22.425**
II	**Monitoring**			**1%**	**2.243**				0.449		0.449		0.449		0.449		0.449			**1%**	**2.243**
III	**Evaluation**			**1%**	**2.243**								1.121						1.121	**1%**	**2.243**
IV	**Entry point activity**			**4%**	**8.970**			42	8.970											**4%**	**8.970**
V	**Inst. & Capacity Building**			**5%**	**11.213**				3.924		3.364		2.803		0.561		0.561			**5%**	**11.213**
VI	**DPR Preparation**			**1%**	**2.243**	**1**	**1.346**	**1**	**0.897**											**1%**	**2.243**
	TOTAL (A)			**22%**	**49.335**		**1.346**		**18.725**		**8.297**		**8.858**		**5.494**		**5.494**		**1.121**		**49.335**
	W/S WORK PHASE																				
VII	**NRM**		**60%**	**134.55**			**0.000**		**0.000**		**16.819**		**67.275**		**50.456**		**0.000**		**0.000**		**134.550**
1	**Conservation measures for areable land (private land)**																				
(i)	Farm Pond/Khet Talai	Nos	0	180000	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	**0**	**0.000**
(ii)	Khadeen	Nos	0	519000	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	**0**	**0.000**
(iii)	Rennovation of existing Tanka	Nos	20	50000	10.000	0	0.000	0	0.000	3	1.250	10	5.000	8	3.750	0	0.000	0	0.000	**20**	**10.000**
(iv)	Vegetative Barriers	Mtr	1980	61	1.208	0	0.000	0	0.000	248	0.151	990	0.604	743	0.453	0	0.000	0	0.000	**1980**	**1.208**

(v)	Earthen Bunding	No.	0	192000	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	**0.000**
(vi)	Construction of Tanka	Nos	61	155000	94.550	0	0.000	0	0.000	8	11.819	31	47.275	23	35.456	0	0.000	0	0.000	**94.550**
2	**Conservation measures for non areable land**																			
(i)	Afforestation (Silvi Pasture)	Ha	4.00	106000	4.240	0	0.000	0	0.000	1	0.530	2	2.120	2	1.590	0	0.000	0	0.000	**4.240**
(ii)	Sand Dune Stabilisation	Ha	4.00	117000	4.680	0	0.000	0	0.000	1	0.585	2	2.340	2	1.755	0	0.000	0	0.000	**4.680**
(iii)	Road Side Plantation	Mtr	390.60	981	3.832	0	0.000	0	0.000	49	0.479	195	1.916	146	1.437	0	0.000	0	0.000	**3.832**
(iv)	Nalla Bank Stabilisation	Mtr	0.00	981	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	**0.000**
(v)	Loose Stone Check Dam	Nos	0	25000	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	**0.000**
(vi)	Rennovation of Tanka	Nos	0	50000	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	**0.000**
(vii)	Renovation of nadi	Nos	1	1604000	16.040	0	0.000	0	0.000	0	2.005	1	8.020	0	6.015	0	0.000	0	0.000	**16.040**
(viii)	V-Ditch	Ha.	0	4800	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	**0.000**
3	**Drainage line treatment**																			
(i)	Anicut Type-A	Nos	0	586000	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	**0.000**
(ii)	Anicut Type-B	Nos	0	838000	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	**0.000**
(iii)	Anicut Type-C	Nos	0	973000	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	**0.000**
(iv)	Anicut Type-D	Nos	0	1806000	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	**0.000**
TOTAL (B)			**2461**	**0.000**	**134.55**			**0**	**0.000**	**308**	**16.819**	**1230**	**67.275**	**923**	**50.456**	**0**	**0.000**		**0.000**	**2461**	**134.550**
VIII	**Production System and micro enterprise**			**15%**	**33.6375**		0.000		0.000		6.728		6.728		6.728		6.728		6.728	**15%**	**33.638**
X	**CONSOLIDATION PHASE**			**3%**	**6.728**		**0.000**		0.000		**0.000**		**0.000**		**0.000**		**4.037**		**2.691**	**3%**	**6.728**
	GRAND TOTAL				**224.25**		**1.35**		**18.72**		**31.84**		**82.86**		**62.68**		**16.26**		**10.54**		**224.25**

CHAPTER-V

Name of the Project		**BARMER(IWMP)-I**		**Macro/Micro**	Micro	**Geographical Area**	1341.0 Ha
G.P.		**Madhasar**		**Scheme**	IWMP	**Effective Area**	1341 Ha
Block		**Baitu**		**Date of Sanction**	30.01.2009	**Total Arable land**	**1134** Ha

District.	BARMER		Date of Appoval of the work plan		1. Irrigated	0	Ha
Village Covered	2	NO.			2. Unirrigated	1134	Ha
Project outlay	201.15	LAC	No. of SHG's formed	4	NO.	Total Nonarable land	207	Ha
Total Area	1341.0	Hactare	No. of UG's formed	2	NO.	1. Pasture	51	Ha
No. of WC's formed	1	NO.			2. Govt. / waste /OTHER LAND	156	Ha

YEARWISE WORK PLAN OF WATERSHED COMMITTEE MADHASAR

S. N.	NAME OF ACTIVITY	Unit	QTY.	Unit cost	AMOUNT	2009-10 FIRST YEAR		2010-11 SECOND YEAR		2011-12 THIRD YEAR		2012-13 FOURTH YEAR		2013-14 FIFTH YEAR		2014-15 SIXTH YEAR		2015-16 SEVENTH YEAR		TOTAL	
						PHY	FIN	PHY	FIN	PHY	FIN	PHY	FIN	PHY	FIN	PHY	FIN	PHY	FIN	PHY	FIN
I.	**Administration**			**10%**	**20.115**				4.023		4.023		4.023		4.023		4.023			**10%**	**20.115**
II	**Monitoring**			**1%**	**2.012**				0.402		0.402		0.402		0.402		0.402			**1%**	**2.012**
III	**Evaluation**			**1%**	**2.012**								1.006						1.006	**1%**	**2.012**
IV	**Entry point activity**			**4%**	**8.046**			42	8.046											**4%**	**8.046**
V	**Inst. & Capacity Building**			**5%**	**10.058**				3.520		3.017		2.514		0.503		0.503			**5%**	**10.058**
VI	**DPR Preparation**			**1%**	**2.012**	**1**	**1.207**	**1**	**0.805**											**1%**	**2.012**
	TOTAL (A)			**22%**	**44.253**		**1.207**		**16.796**		**7.443**		**7.945**		**4.928**		**4.928**		**1.006**		**44.253**
	W/S WORK PHASE	-																			
VII	**NRM**		**60%**	**120.69**			**0.000**		**0.000**		**15.086**		**60.345**		**45.259**		**0.000**		**0.000**		**120.690**
1	**Conservation measures for areable land (private land)**																				
(i)	Farm Pond/Khet Talai	Nos	0	180000	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	**0**	**0.000**
(ii)	Khadeen	Nos	0	519000	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	**0**	**0.000**
(iii)	Rennovation of existing Tanka	Nos	24	50000	12.000	0	0.000	0	0.000	3	1.500	12	6.000	9	4.500	0	0.000	0	0.000	**24**	**12.000**
(iv)	Vegetative Barriers	Mtr	2200	61	1.342	0	0.000	0	0.000	275	0.168	1100	0.671	825	0.503	0	0.000	0	0.000	**2200**	**1.342**
(v)	Earthen Bunding	No.	0	192000	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	**0**	**0.000**
(vi)	Construction of Tanka	Nos	61	155000	94.550	0	0.000	0	0.000	8	11.819	31	47.275	23	35.456	0	0.000	0	0.000	**61**	**94.550**

2	**Conservation measures for non areable land**																			
(i)	Afforestation (Silvi Pasture)	Ha	4.00	106000.0	4.240	0	0.000	0	0.000	1	0.530	2	2.120	2	1.590	0	0.000	0	0.000	**4**	**4.240**
(ii)	Sand Dune Stabilisation	Ha	4.00	117000.0	4.680	0	0.000	0	0.000	1	0.585	2	2.340	2	1.755	0	0.000	0	0.000	**4**	**4.680**
(iii)	Road Side Plantation	Mtr	395.30	981.0	3.878	0	0.000	0	0.000	49	0.485	198	1.939	148	1.454	0	0.000	0	0.000	**395**	**3.878**
(iv)	Nalla Bank Stabilisation	Mtr	0.00	981.0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	**0**	**0.000**
(v)	Loose Stone Check Dam	Nos	0	25000.0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	**0**	**0.000**
(vi)	Rennovation of Tanka	Nos	0	50000	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	**0**	**0.000**
(vii)	Renovation of nadi	Nos	0	1604000	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	**0**	**0.000**
(viii)	V-Ditch	Ha.	0.00	4800.00	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	**0**	**0.000**
3	**Drainage line treatment**																			
(i)	Anicut Type-A	Nos	0	586000	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	**0**	**0.000**
(ii)	Anicut Type-B	Nos	0	838000	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	**0**	**0.000**
(iii)	Anicut Type-C	Nos	0	973000	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	**0**	**0.000**
(iv)	Anicut Type-D	Nos	0	1806000	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	**0**	**0.000**
TOTAL (B)			**2688**	**0.000**	**120.69**			**0**	**0.000**	**336**	**15.086**	**1344**	**60.345**	**1008**	**45.259**	**0**	**0.000**		**0.000**	**2688**	**120.690**
VIII	**Production System and micro enterprise**			**15%**	**30.1725**		0.000		0.000		6.035		6.035		6.035		6.035		6.035	**15%**	**30.173**
X	**CONSOLIDATION PHASE**			**3%**	**6.035**		**0.000**		0.000		**0.000**		**0.000**		**0.000**		**3.621**		**2.414**	**3%**	**6.035**
	GRAND TOTAL				**201.15**		**1.21**		**16.80**		**28.56**		**74.32**		**56.22**		**14.58**		**9.45**		**201.15**

CHAPTER-V

Name of the Project	**BARMER(IWMP)-I**			**Macro/Micro**	Micro	**Geographical Area**	691.0 Ha
G.P.		**Baitu Bhopji**		**Scheme**	IWMP	**Effective Area**	691 Ha
Block		**Barmer**		**Date of Sanction**	30.01.2009	**Total Arable land**	**513** Ha
District.		BARMER		**Date of Appoval of the work plan**		**1. Irrigated**	0 Ha
Village Covered		1	NO.			**2. Unirrigated**	513 Ha

Project outlay		103.65	LAC		**No. of SHG's formed**			2	NO.		**Total Nonarable land**		**178**	Ha
Total Area		691.0	Hactare		**No. of UG's formed**			1	NO.		**1. Pasture**		22	Ha
No. of WC's formed		1	NO.								**2. Govt. / waste /OTHER LAND**		156	Ha

YEARWISE WORK PLAN OF WATERSHED COMMITTEE BAITU BHOPJI

S. N.	NAME OF ACTIVITY	Unit	QTY.	Unit cost	AMOUNT	2009-10 FIRST YEAR		2010-11 SECOND YEAR		2011-12 THIRD YEAR		2012-13 FOURTH YEAR		2013-14 FIFTH YEAR		2014-15 SIXTH YEAR		2015-16 SEVENTH YEAR		TOTAL	
						PHY	FIN	PHY	FIN	PHY	FIN	PHY	FIN	PHY	FIN	PHY	FIN	PHY	FIN	PHY	FIN
I.	**Administration**			**10%**	**10.365**				2.073		2.073		2.073		2.073		2.073			**10%**	**10.365**
II	**Monitoring**			**1%**	**1.037**				0.207		0.207		0.207		0.207		0.207			**1%**	**1.037**
III	**Evaluation**			**1%**	**1.037**								0.518						0.518	**1%**	**1.037**
IV	**Entry point activity**			**4%**	**4.146**			42	4.146											**4%**	**4.146**
V	**Inst. & Capacity Building**			**5%**	**5.183**				1.814		1.555		1.296		0.259		0.259			**5%**	**5.183**
VI	**DPR Preparation**			**1%**	**1.037**	**1**	**0.622**	**1**	**0.415**											**1%**	**1.037**
	TOTAL (A)			**22%**	**22.803**		**0.622**		**8.655**		**3.835**		**4.094**		**2.539**		**2.539**		**0.518**		**22.803**
	W/S WORK PHASE																				
VII	**NRM**		**60%**	**62.19**			**0.000**		**0.000**		**7.774**		**31.095**		**23.321**		**0.000**		**0.000**		**62.190**
1	**Conservation measures for areable land (private land)**																				
(i)	Farm Pond/Khet Talai	Nos	0	180000	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	**0**	**0.000**
(ii)	Khadeen	Nos	0	519000	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	**0**	**0.000**
(iii)	Rennovation of existing Tanka	Nos	14	50000	7.000	0	0.000	0	0.000	2	0.875	7	3.500	5	2.625	0	0.000	0	0.000	**14**	**7.000**
(iv)	Vegetative Barriers	Mtr	1000	61	0.610	0	0.000	0	0.000	125	0.076	500	0.305	375	0.229	0	0.000	0	0.000	**1000**	**0.610**
(v)	Earthen Bunding	No.	0	192000	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	**0**	**0.000**

(vi)	Construction of Tanka	Nos	31	155000	48.050	0	0.000	0	0.000	4	6.006	16	24.025	12	18.019	0	0.000	0	0.000	31	48.050
2	**Conservation measures for non areable land**																				
(i)	Afforestation (Silvi Pasture)	Ha	2.00	106000.0	2.120	0	0.000	0	0.000	0	0.265	1	1.060	1	0.795	0	0.000	0	0.000	2	2.120
(ii)	Sand Dune Stabilisation	Ha	2.00	117000.0	2.340	0	0.000	0	0.000	0	0.293	1	1.170	1	0.878	0	0.000	0	0.000	2	2.340
(iii)	Road Side Plantation	Mtr	211.00	981.0	2.070	0	0.000	0	0.000	26	0.259	106	1.035	79	0.776	0	0.000	0	0.000	211	2.070
(iv)	Nalla Bank Stabilisation	Mtr	0.00	981.0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000
(v)	Loose Stone Check Dam	Nos	0	25000.0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000
(vi)	Rennovation of Tanka	Nos	0	50000	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000
(vii)	Renovation of nadi	Nos		1604000	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000
(viii)	V-Ditch	Ha.	0.00	4800.00	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000
3	**Drainage line treatment**																				
(i)	Anicut Type-A	Nos	0	586000	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000
(ii)	Anicut Type-B	Nos	0	838000	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000
(iii)	Anicut Type-C	Nos	0	973000	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000
(iv)	Anicut Type-D	Nos	0	1806000	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000	0	0.000
TOTAL (B)			**1260**	**0.000**	**62.19**			**0**	**0.000**	**158**	**7.774**	**630**	**31.095**	**473**	**23.321**	**0**	**0.000**		**0.000**	**1260**	**62.190**
VIII	**Production System and micro enterprise**			**15%**	**15.5475**		0.000		0.000		3.110		3.110		3.110		3.110		3.110	**15%**	**15.548**
X	**CONSOLIDATION PHASE**			**3%**	**3.110**		**0.000**		0.000		**0.000**		**0.000**		**0.000**		**1.866**		**1.244**	**3%**	**3.110**
	GRAND TOTAL				**103.65**		**0.62**		**8.65**		**14.72**		**38.30**		**28.97**		**7.51**		**4.87**		**103.65**

CHAPTER-V

Consolidate

Name of the W. C.		BARMER(IWMP)-I			Macro/Micro		Micro			Geographical Area	5143	Ha
G.P.		Bhimji,Bhopji,Madhasar,N.D.K.D			Scheme		IWMP			Effective Area	5143	Ha
Block		BAITU			Date of Sanction		30.01.2009			Total Arable land	4174	Ha
District.		BARMER			Date of Appoval of the work plan					1. Irrigated	0	Ha
Village Covered		7	NO.							2. Unirrigated	4174	Ha
Project outlay		771.45	LAC		No. of SHG's formed		14	NO.		Total Nonarable land	969	Ha
Total Area		5143	Hactare		No. of UG's formed		7	NO.		1. Pasture	185	Ha
No. of WC's formed		4	NO.							2. Govt. / waste /OTHER LAND	784	Ha

YEARWISE WORK PLAN OF WATERSHED BAITU BHIMJI

S. N.	NAME OF ACTIVITY	Unit	QTY.	Unit cost	AMOUNT	2009-10 FIRST YEAR		2010-11 SECOND YEAR		2011-12 THIRD YEAR		2012-13 FOURTH YEAR		2013-14 FIFTH YEAR		2014-15 SIXTH YEAR		2015-16 SEVENTH YEAR		TOTAL	
						PHY	FIN	PHY	FIN	PHY	FIN	PHY	FIN	PHY	FIN	PHY	FIN	PHY	FIN	PHY	FIN
I.	**Administration**			**10%**	**77.145**				15.429		15.429		15.429		15.429		15.429			**10%**	**77.145**
II	**Monitoring**			**1%**	**7.715**				1.543		1.543		1.543		1.543		1.543			**1%**	**7.715**
III	**Evaluation**			**1%**	**7.715**								3.857						3.857	**1%**	**7.715**
IV	**Entry point activity**			**4%**	**30.858**			42	30.858											**4%**	**30.858**
V	**Inst. & Capacity Building**			**5%**	**38.573**				13.500		11.572		9.643		1.929		1.929			**5%**	**38.573**
VI	**DPR Preparation**			**1%**	**7.715**	**1**	**4.629**	**1**	**3.086**											**1%**	**7.715**
	TOTAL (A)			**22%**	**169.719**		**4.629**		**64.416**		**28.544**		**30.472**		**18.901**		**18.901**		**3.857**		**169.719**
	W/S WORK PHASE																				
VII	**NRM**		**60%**	**462.87**			**0.000**		**0.000**		**57.859**		**231.435**		**173.576**		**0.000**		**0.000**		**462.870**
1	**Conservation measures for areable land (private land)**																				
(i)	Farm Pond/Khet	Nos	0	180000	0.000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0.000**

	Talai																				
(ii)	Khadeen	Nos	0	519000	0.000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0.000**
(iii)	Rennovation of existing Tanka	Nos	78	50000	39.000	0	0	0	0	10	5	39	20	29	15	0	0	0	0	**78**	**39.000**
(iv)	Vegetative Barriers	Mtr	6685	61	4.078	0	0	0	0	836	1	3343	2	2507	2	0	0	0	0	**6685**	**4.078**
(v)	Earthen Bunding	No.	0	192000	0.000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0.000**
(vi)	Construction of Tanka	Nos	230	155000	356.500	0	0	0	0	29	45	115	178	86	134	0	0	0	0	**230**	**356.500**
2	**Conservation measures for non areable land**																				
(i)	Afforestation (Silvi Pasture)	Ha	15	106000.0	15.900	0	0	0	0	2	2	8	8	6	6	0	0	0	0	**15**	**15.900**
(ii)	Sand Dune Stabilisation	Ha	15	117000.0	17.550	0	0	0	0	2	2	8	9	6	7	0	0	0	0	**15**	**17.550**
(iii)	Road Side Plantation	Mtr	1407	981.0	13.802	0	0	0	0	176	2	703	7	528	5	0	0	0	0	**1407**	**13.802**
(iv)	Nalla Bank Stabilisation	Mtr	0	981.0	0.000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0.000**
(v)	Loose Stone Check Dam	Nos	0	25000.0	0.000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0.000**
(vi)	Rennovation of Tanka	Nos	0	50000	0.000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0.000**
(vii)	Renovation of nadi	Nos	1	1604000	16.040	0	0	0	0	0	2	1	8	0	6	0	0	0	0	**1**	**16.040**
(viii)	V-Ditch	Ha.	0	4800.00	0.000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0.000**
3	**Drainage line treatment**																				
(i)	Anicut Type-A	Nos	0	586000	0.000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0.000**
(ii)	Anicut Type-B	Nos	0	838000	0.000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0.000**
(iii)	Anicut Type-C	Nos	0	973000	0.000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0.000**
(iv)	Anicut Type-D	Nos	0	1806000	0.000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0.000**
TOTAL (B)			**8431**	**0.000**	**462.87**			**0**	**0.000**	**1054**	**57.859**	**4215**	**231.435**	**3162**	**173.576**	**0**	**0.000**		**0.000**	**8431**	**462.870**
VIII	**Production System and micro enterprise**			**15%**	**115.7175**		0.000		0.000		23.144		23.144		23.144		23.144		23.144	**15%**	**115.718**
X	**CONSOLIDATION PHASE**			**3%**	**23.144**		**0.000**		0.000		**0.000**		**0.000**		**0.000**		**13.886**		**9.257**	**3%**	**23.144**

	GRAND TOTAL				**771.45**		**4.63**		**64.42**		**109.55**		**285.05**		**215.62**		**55.93**		**36.26**	**771.45**

CHAPTER – VI

EXPECTED OUT COMES

S. No.	Item		Unit of measurement	Pre-project Status	Expected Post-project Status	Remarks
1	Status of water table (Depth to Ground water level)		Meters	-	-	
2	Ground water structures repaired/ rejuvenated		No.	nill	-	
3	Quality of drinking water		Description	Saline	Good	
4	Availability of drinking water		Description	8 Month	12 Month	
5	Change in irrigated Area		Ha	-	-	
6	Change in cropping/ land use pattern		Description			
7	Area under agricultural crop		Ha			
	I	Area under single crop	Ha	1800	2610	
	Ii	Area under double crop	Ha	-	-	
	Iii	Area under multiple crop	Ha	0	-	
8	Change in cultivated Area		Ha	3325	3550	
9	Yield of Bajra		q/ha	1.17	5.25	
	Yield of Guar		q/ha	1.74	2.95	
	Yield of Moong		q/ha	0.76	3.05	
	Yield of Moth		q/ha	1.46	1.95	
10	Production of Bajra		ton	184	8284	
	Production of Guar		ton	48	820	
	Production of Moong		ton	18	741	
	Production of Moth		ton	38	509	
11	Area under vegetation		Ha	Nil	50	
12	Area under horticulture		Ha	Nil	100	
13	Area under fuel		Ha	Nil	218	
14	Area under Fodder		Ha	Nil	50	
15	Fodder production		Q	4575.10	171670	
16	Milk production		Litres/day	1750	2800	
17	SHGs Active		No.	Nil	25	
18	No. of livelihoods		No.	45	60	
19	Income per house hold		Rs.in la	0.35	0.75	
20	Migration		No.	1790	560	
21	SHG Federations formed		No.	4	40	

Technical design and estimates for proposed activities

विस्तृत लागत अनुमान

1 कार्य का नाम – टांका निर्माण

2 पंचायत समिति – Baitu

3 योजना का नाम – IWMP (2009-10)

4 परियोजना का नाम – Barmer(IWMP)-I

भाग (अ) मात्राओं का विवरण

क्र. सं.	गतिविधी का विवरण	माप का विवरण (फीट में)				मात्रा		दर		राशि	
		घटक	लम्बाई	चौड़ाई	ऊँचाई	घन मीटर/ वर्ग मीटर		श्रम	कुल	श्रम	कुल
1	नींव खुदाई 1.5 मी. गहराई तक मिट्टी की खुदाई करना तल को कुटना, पानी डालना, बंगल को संवारना, खुदी मिट्टी को निकालना नींव भरने के बाद खाली स्थानों को पुनः मिट्टी से भरना तथा बची हुई मिट्टी को 50 मी की दूरी तक निस्तारण करना सख्त मिट्टी मे	π/4 X	4.10 X	4.10 X	4.21 =	55.61	Cum	92.00	92.00	5116	5116
	पैरापेट दीवार	π X	15.6 X	0.35 X	0.30 =	5.15	Cum	92.00	92.00	474	474
2	मिट्टी का अतिरिक्त उठान 1.5 मीटर के बाद	π/4 X	4.10 X	4.10 X	1.50 =	19.81	Cum	11.00	11.00	218	218
3	मिट्टी का अतिरिक्त उठान 3.0 मीटर के बाद	π/4 X	4.10 X	4.10 X	1.21 =	15.98	Cum	22.00	22.00	352	352
4	सीमेन्ट कांक्रीट फर्श में 40 मि. मी. नामीय माप की पत्थर गिट्टी / ईट की गिट्टी सीमेन्ट–रेत मसाला, 1 सीमेन्ट : 4 रेत : 8 गिट्टी अनुपात में मिलाकर डालना तथा कुटाई करना, तराई समेत।	π/4 X	4.10 X	4.10 X	0.25 =	3.30	Cum	323	1749	1067	5775
5	सीमेंट काक्रींट 1 सीमेंट, 3 बजरी तथा 6 गिट्टी पत्थर की 20 मि.मी. नामीय माप की नींव मे डालना	π X	3.95 X	0.15 X	3.96 =	7.37	Cum	323	2118	2382	15618
6	सेन्टरिंग–शटरिंग का कार्य वक्र सतह के लिये लगाना 4.5 मीटर ऊंचाई तक के लिए तथा हटाना आदि	π X	3.80 X	3.96	=	47.29	Sqm	64.3	112	3041	5297

7	नींव तथा कुर्सी मे पत्थर की वे रद्धा–ढ़ोका चिनाई सीमेंट–बजरी 1 : 6 मसाले मे, मय बगल की झिरी बन्द करना तथा तराई आदि।	π	X	4.15	X	0.35	X	0.45	=	2.05					
		–3	X	0.3	X	0.35	X	0.3	=	-0.09					
		–3	X	0.6	X	0.35	X	0.10	=	-0.06					
						dqy ek=k				1.90	Cum	438	1840	831	3490
8	नींव तथा कुर्सी मे पत्थर की वे रद्धा–ढ़ोका चिनाई सीमेंट–बजरी 1 : 8 मसाले मे, मय बगल की झिरी बन्द करना तथा तराई आदि।	π	X	15.6	X	0.35	X	0.75	=	12.87					
		–1	X	0.75	X	0.35	X	0.38	=	-0.10					
						dqy ek=k				12.77	Cum	438	1752	5594	22376
9	टांको (कुण्डों) के ऊपर पट्टियों की छत डालना, सीमेंट मसाला 1:3 से जोड़ भरना, 50 मिमी मोटाई में सीमेंट कंक्रीट 1:2:4 का फर्श का कार्य संपूर्ति सहित, पूर्ण कार्य	π/4	X	4.50	X	4.50			=	15.91	Sqm	171	793	2721	12617
10	50 मी. मी. मोटाई में सीमेंट कंक्रीट फर्श 1:2:4 मिश्रण जिसमें 1 सीमेंट 2 बजरी 4 पत्थर की 12 मिमी गिट्टी के साथ मिलाकर डालना, कूटना, दबाना तथा तराई आदि समेत । पत्थर की गिट्टी	π/4	X	3.80	X	3.80			=	11.35					
						dqy ek=k				11.35	Sqm	84	204	953	2315
11	सीमेंट प्लास्टर दीवार पर 1:4 अनुपात मे सीमेंट–बजरी मिलाकर जोडों को कुरेदने तथा तराई समेत। 20 मिमी	π	X	3.8	X	4.41			=	52.67					
		π	X	4.5	X	0.45			=	6.36					
		π	X	15.6	X	0.80			=	39.22					
		–3	X	0.3	X	0.30			=	-0.27					
						dqy ek=k				97.99	Sqm	44	100	4311	9799
12	पत्थर के सिरदल (लिटंल) की आपूर्ति कर, चिनाई मे उपयोग की गई मसाले मे उसे लगाना।	4	X	3.35	X	0.08	X	0.25	=	0.27					
		3	X	0.6	X	0.35	X	0.1	=	0.06					
						dqy ek=k				0.33	Cum	1921.8	5818	636	1926
13	कैचमेंट एरीये के लिये क्वेरी रबिस जिसमें 40 प्रतिशत पत्थर के स्पाल हो या कंकर या घांडला को बिछाना तथा आपूर्त्ति करना, पानी छिड़कना तथा दुरमट से कूटना।	π	X	9.875	X	5.375	X	0.14	=	23.35	Cum	89	411	2079	9599
14	` 50 मी. मी. मोटाई में सीमेंट कंक्रीट फर्श 1:2:4 मिश्रण जिसमें 1 सीमेंट 2 बजरी 4 पत्थर की 12 मिमी गिट्टी के साथ मिलाकर डालना, कूटना, दबाना तथा तराई आदि समेत । पत्थर की गिट्टी	π	X	9.875	X	5.375			=	166.82	Sqm	84	204	14013	34031
15	लोहे के ऐंगल 40X40X5mm लगाने का	16	X	1.5		@	3.5kg/m		=	84.00	Kg	9.7	52.2	815	4385

	कार्य														
16	बारबेड़ वायर आपूर्ति करना व लगाने का कार्य	π	X	15.6	X	4		=	196.11	Mt		6.30	0	1236
17	टांके में जाली लगाने का कार्य, जिसमें ऐंगल फ्रेम 25,25,3 के उपर वायरमेश 14मैशX 24गैज तथा चपटी /गोल छड़ों 10मीमी व्यास व स्पेसिंग 10 सेमी. को वैल्ड करना सीमेंट मसाला 1:4 में लगाने का सम्पूर्ण कार्य ।	3	X	0.3	X	0.3		=	0.27	Sqm	233	1071	63	289
18	ऐल्यूमिनियम का ढ़क्कन मय फ्रेम आपूर्ति करना एवं लगाने का कार्य			0.6	X	0.6		=	2.50	Kg		200	0	500
19	दरवाजा ग्रिल/ग्रेट आदि में लौहे का कार्य जिसमें सपाट, कोनिया, टी तथा नालीदार चेनल को काटना, चढ़ाना तथा लगाना			0.75	X	1.2		=	13.50	Kg	9.7	52.2	131	705
20	पत्थर के काम पर सपाट या रुल्ड टीप 1:3 अनुपात में सीमेंट बजरी मसाले में मय तराई के ।	π	X	15.95	X	0.45		=	22.56	Sqm	42	51.8	947	1168
22	ओवरफलो पाईप पीवीसी 63/3							=	5.23	Mt		60	0	314
23	इनामिल पेन्ट का लेप करना नये कार्य/पुराने कार्य पर सम सरफेस बनाना। अस्तर लेप सहित	16	X	0.27	+	2	X 1.00	=	14.22	Sqm	26.20	65.00	373	924
24	नाम पट्टिटका आपूर्ति करना व लगाना							=	1	Nos		500	0	500
25	अतिरिक्त 20 किमी से अधिक दूरी हेतू													11591
												;ksx	46114	150612
												कन्टीजेन्सी		4518
												egk;ksx	46114	155130

SAY **155000.00**

lhesUV	135	Bags	**Rate**	**Distance Km**		**Amount**
ctjh	15.75	Cum.	5.20	20	**65**	**3685**
fxV~Vh 20eh-eh-	15.08	Cum.	5.60	20	**58**	**3208**
fxV~Vh 40eh-eh-	2.97	Cum.	5.60	20	**58**	**632**
LVksu Lysc	1.40	Cum.		20		**0**
iRFkj	16.14	Cum.	5.60	20	**65**	**4066**
		Total				**11591**

DESIGN OF AGOR FOR TANKA IN BARMER DISTRICT

(For watershed projects)

Capacity of Tanka = 50000 Lit. (Aprox.)

Average rainfall of Distt. = 270mm (Annual)

Capacity of Tanka = Area of Agor x Av. Rainfall

$50.00 = \pi/4 \times (D \times D \times 0.27)$

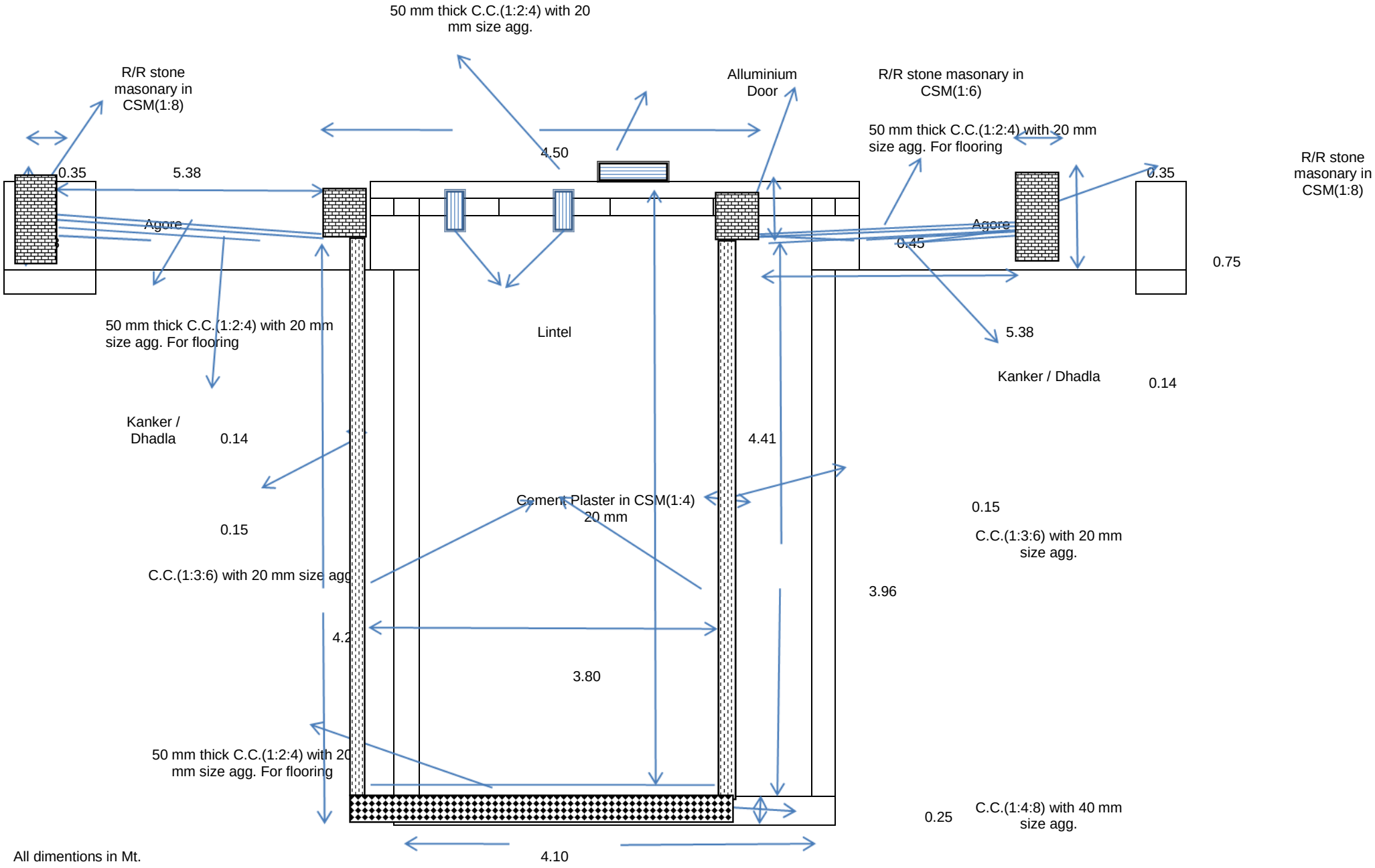
$D \times D = (50.0 \times 4) / (\pi \times 0.27)$

D = 15.359 Mtrs.

Say D = 15.40 Mtrs.

TANKA CAPACITY 50000 Litres

Vkadk fuekZ.k G.P. Village



All dimentions in Mt.

विस्तृत लागत अनुमान

1 कार्य का नाम – Renovation of old Tanka

2 पंचायत समिति – Baitu

3 योजना का नाम – IWMP (2009-10)

4 परियोजना का नाम – Barmer(IWMP)-I

भाग (अ) मात्राओं का विवरण

क्र. सं.	गतिविधी का विवरण	माप का विवरण (फीट में)									मात्रा		दर		राशि	
		घटक		लम्बाई		चौड़ाई		ऊँचाई			घन मीटर / वर्ग मीटर		श्रम	कुल	श्रम	कुल
1	नींव खुदाई 1.5 मी. गहराई तक मिट्टी की खुदाई करना तल को कुटना, पानी डालना, बंगल को संवारना, खुदी मिट्टी को निकालना नींव भरने के बाद खाली स्थानों को पुनः मिट्टी से भरना तथा बची हुई मिट्टी को 50 मी की दूरी तक निस्तारण करना सख्त मिट्टी मे															
	पैरापेट दीवार	π	X	12.25	X	0.25	X	0.30	=		2.89	Cum	92.00	92.00	266	266
2	नींव तथा कुर्सी मे पत्थर की वे रद्धा–ढ़ोका चिनाई सीमेंट–बजरी 1 : 8 मसाले मे, मय बगल की झिरी बन्द करना तथा तराई आदि।	π	X	12.25	X	0.25	X	0.60	=		5.78					
		–1	X	0.75	X	0.25	X	0.30	=		-0.06					
		कुल मात्रा									5.72	Cum	438	1752	2505	10019
3	सीमेंट प्लास्टर दीवार पर 1:6 अनुपात मे सीमेंट–बजरी मिलाकर जोडों को कुरेदने तथा तराई समेत। 20 मिमी	π	X	12.25	X	0.25			=		9.63					
		π	X	12.00	X	0.30			=		11.31					
		कुल मात्रा									20.94	Sqm	44	86	921	1801
4	कैचमेंट एरीये के लिये क्वेरी रबिस जिसमें 40 प्रतिशत पत्थर के स्पाल हो या कंकर या घांडला को बिछाना तथा आपूर्त्ति करना, पानी छिड़कना तथा दुरमट से कूटना।	π	X	7.83	X	4.175	X	0.1	=		10.27	Cum	89	411	914	4220

5	50 मी. मी. मोटाई में सीमेंट कंक्रीट फर्श 1:2:4 मिश्रण जिसमें 1 सीमेंट 2 बजरी 4 पत्थर की 12 मिमी गिट्टी के साथ मिलाकर डालना, कूटना, दबाना तथा तराई आदि समेत । पत्थर की गिट्टी	π	X	7.83	X	4.175		=	102.68	Sqm	84	204	8625	20946
6	लोहे के ऐंगल 40X40X5mm लगाने का कार्य	13	X	1.5		@	3.5kg/m	=	68.25	Kg	9.7	52.2	662	3563
7	बारबेड़ वायर आपूर्ति करना व लगाने का कार्य	π	X	12.25	X	4		=	154.00	Mt		6.30	0	970
8	ऐल्यूमिनियम का ढ़क्कन मय फ्रेम आपूर्ति करना एवं लगाने का कार्य			0.6	X	0.6		=	2.50	Kg		200	0	500
9	दरवाजा ग्रिल/ग्रेट आदि में लौहे का कार्य जिसमें सपाट, कोनिया, टी तथा नालीदार चेनल को काटना, चढ़ाना तथा लगाना			0.75	X	1.2		=	13.50	Kg	9.7	52.2	131	705
10	पत्थर के काम पर सपाट या रुल्ड टीप 1:3 अनुपात में सीमेंट बजरी मसाले में मय तराई के ।	π	X	12.5	X	0.30		=	11.79	Sqm	42	51.8	495	611
11	ओवरफलो पाईप पीवीसी 63/3							=	3.93	Mt		60	0	236
12	इनामिल पेन्ट का लेप करना नये कार्य/पुराने कार्य पर सम सरफेस बनाना। अस्तर लेप सहित	13	X	0.27	+	1	X 1.00	=	10.15	Sqm	26.20	65.00	266	660
13	नाम पट्टिका आपूर्ति करना व लगाना							=	1	Nos		500	0	500
14	अतिरिक्त 20 किमी से अधिक दूरी हेतू													3627
												;ksx	14784	48621
												कन्टीजेन्सी		1459
												egk;ksx	14784	50080

SAY **50000.00**

lhesUV	41	Bags	**Rate**	**Distance Km**		**Amount**
ctjh	4.52	Cum.	5.20	20	**65**	**1058**
fxV~Vh 20eh-eh-	4.62	Cum.	5.60	20	**58**	**983**
fxV~Vh 40eh-eh-	0.00	Cum.	5.60	20	**58**	**0**
LVksu Lysc	0.00	Cum.		20		**0**
iRFkj	6.29	Cum.	5.60	20	**65**	**1585**
			Total			**3627**

DESIGN OF AGOR FOR TANKA IN BARMER DISTRICT

(For watershed projects)

Capacity of Tanka = 30000 Lit. (Aprox.)

Average rainfall of Distt. = 270mm (Annual)

Capacity of Tanka = Area of Agor x Av. Rainfall

$30.00 = \pi/4 \times (D \times D \times 0.27)$

$D \times D = (30.0 \times 4) / (\pi \times 0.27)$

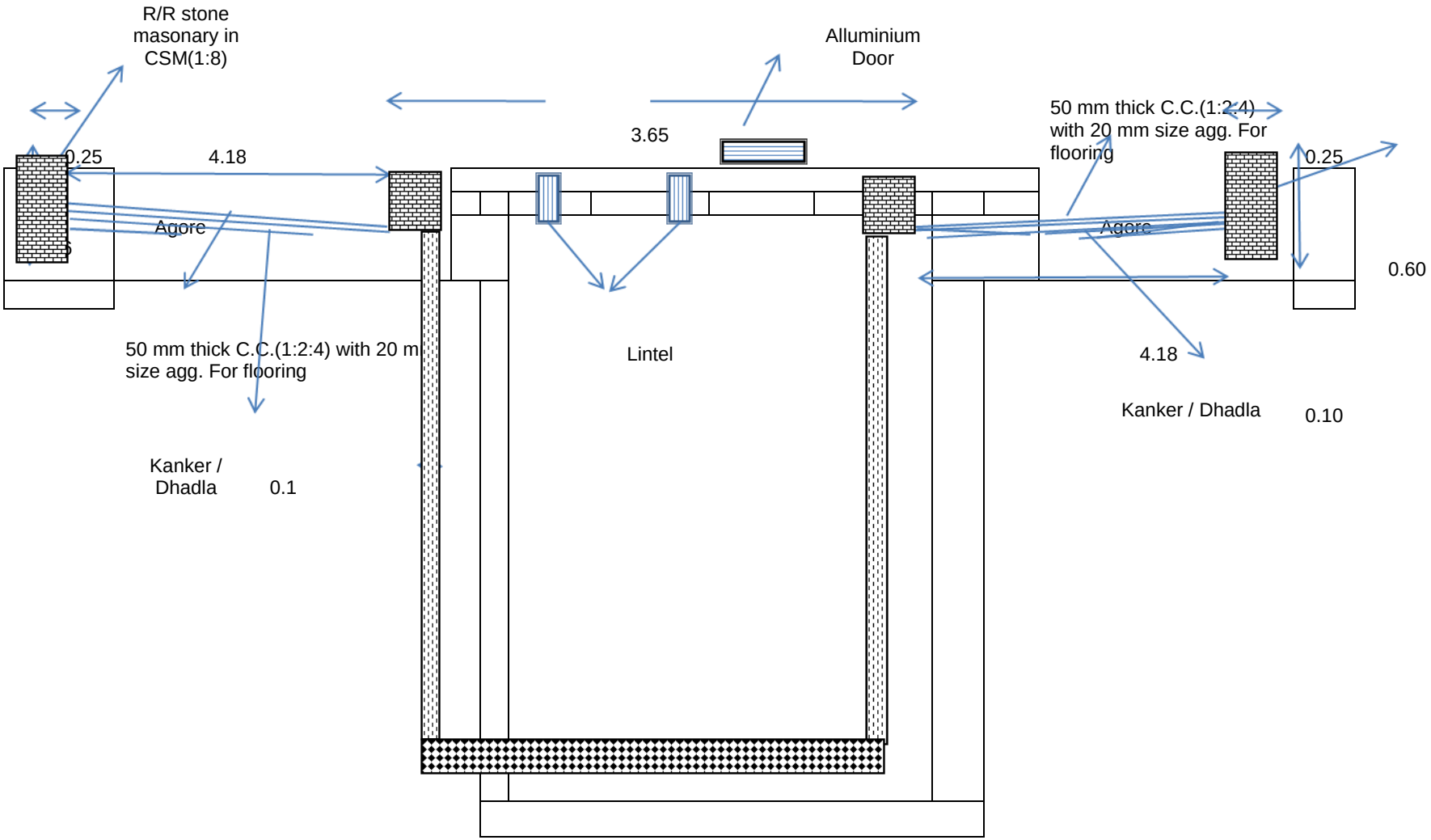
D = 11.897 Mtrs.

Say D = 12.00 Mtrs.

30000 Litres

TANKA CAPACITY

Renovation of old Tanka G.P. Village



All dimentions in Mt.

MODEL ESTIMATE

Nameof work :- Renovation of Talab (Nadi)

Name of scheme :- IWMP

Name of Watershed Project : **Barmer(IWMP)-I** **Name of Panchayat Samiti :Baitu** **Baitu**

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DETAILS OF MEASUREMENTS AND ABSTRACT OF COST

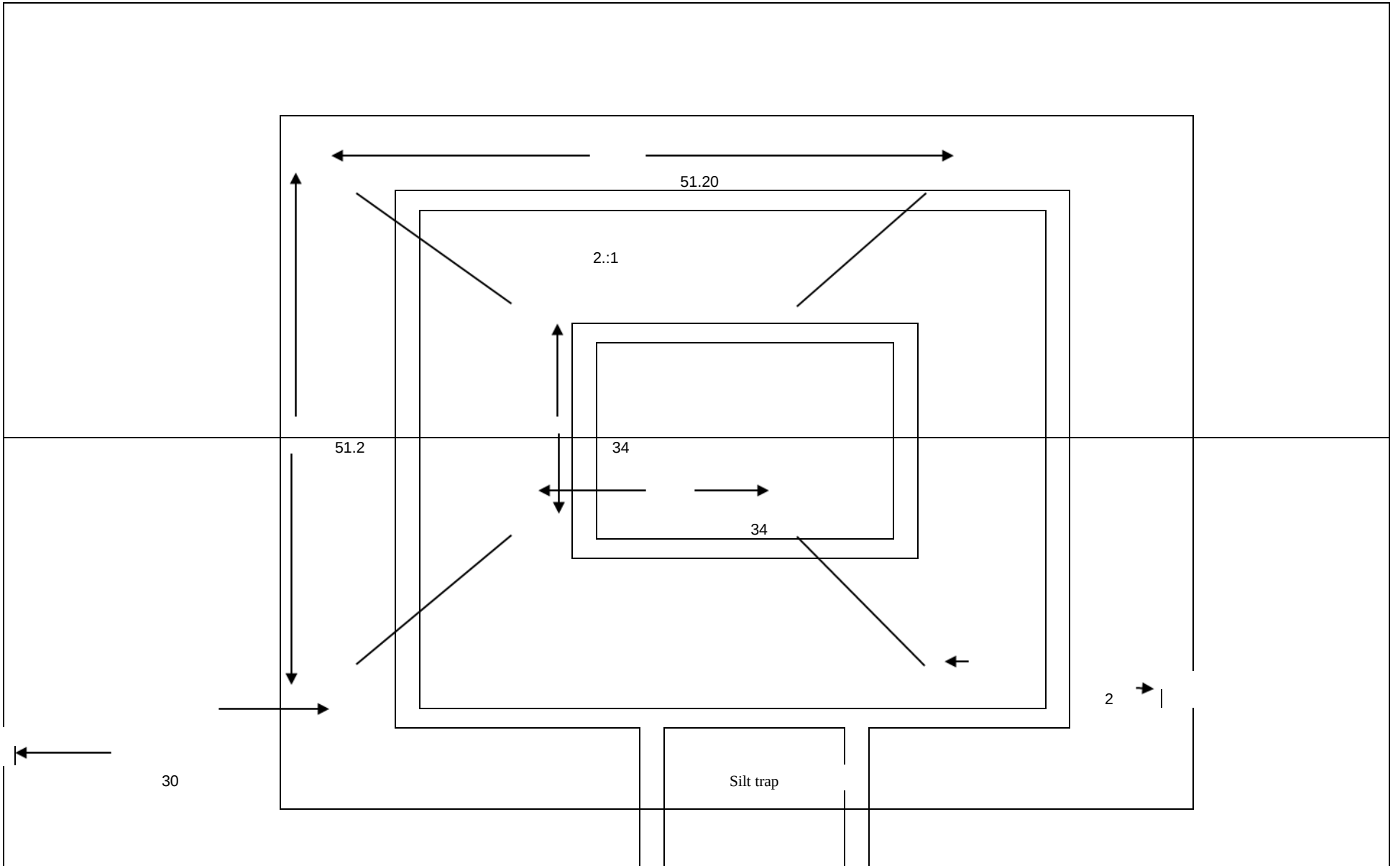
S. No.	ITEMS	No.	L	W	D	QTY.	Unit	RATE	AMOUNT
1	Earth work in excavation over areas (exceeding 30 Cm. In depth, 1.5 Mtr. in width as well as 10 Sqm. on plan) including disposal of excavated earth lead up to 50 M and lift up to 1.5 Mtr. disposed earth to be leveled and neatly dressed:All kinds of soil.								
	Pond	1	42.00	42.00	2.05	3616.20	Cum		
	Wall	4	50.60	0.60	0.90	109.30	Cum		
	Weir	4	2.00	0.60	0.90	4.32	Cum		
	Weir	2	7.00	0.60	0.90	7.56	Cum		
						3737.38	Cum	92.00	343838.59
2	Add extra for every additional lift of 1.5 Mtr. or part thereof : In all kind of soils.	1	30.25	30.25	1.55	1418.35	Cum	11.00	15601.82
3	Add extra for lead including loading, unloading beyond 50 Mtr. With additional 150 Mtr. lead.	Qty. sameas per above item No.1				1418.35	Cum	33.75	47869.21

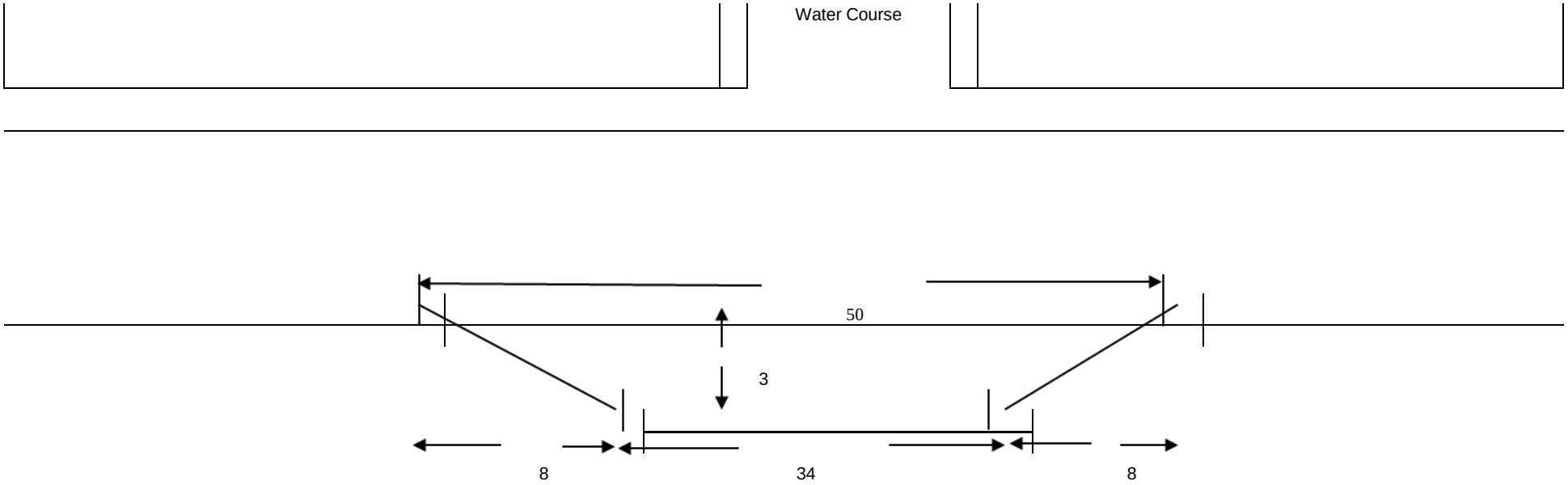
4	Providing and laying in position cement concrete including curing compaction etc. of specified grade excluding the cost of centering and shuttering =All up to plinth level 1:4:8 (1Cement :4 Course Sand :8 Graded stone aggregate 40 mm nominal size								
	For side slope	4	42.00	8.60	0.100	144.48	Cum		
	Bottom	1	34.00	34.00	0.15	86.70	Cum		
	Top	2	50.00	0.30	0.10	3.00	Cum		
		2	50.60	0.30	0.10	3.04	Cum		
						237.22	Cum	1749.00	414890.78
5	Providing and laying in position cement concrete including curing compaction etc. of specified grade excluding the cost of centering and shuttering =All up to plinth level 1:3:6 (1Cement :3 Course Sand :6 Graded stone aggregate 20 mm nominal size								
	For side slope	4	42.00	8.60	0.075	108.36	Cum		
	Bottom	1	34.00	34.00	0.100	115.60	Cum		
	Top	2	50.00	0.30	0.050	1.50	Cum		
		2	50.60	0.30	0.050	1.52	Cum		
						226.98	Cum	2118.00	480739.40
6	Providing and laying in position cement concrete including curing compaction etc. of specified grade excluding the cost of centering and shuttering =All up to plinth level 1:5:10 (1Cement :5 Course Sand :10Graded stone aggregate 40 mm nominal size								
	Wall	4	50.60	0.60	0.15	18.22	Cum		
	Weir	4	2.00	0.60	0.15	0.72	Cum		
	Weir	2	7.00	0.60	0.15	1.26	Cum		
						20.20	Cum	1566.00	31626.94

7	Random Rubble stone masonary for foundation and plinth in Cement Sand Mortar above 30 Cm. thick wall in : Cement Mortar 1:6 (1-Cement:6-Sand).								
	Wall	4	50.60	0.45	0.30	27.32	Cum		
	Wall	4	50.60	0.30	1.05	63.76	Cum		
	Weir	4	2.00	0.45	0.30	1.08	Cum		
	Weir	4	2.00	0.30	0.60	1.44	Cum		
	Weir	2	7.00	0.45	0.30	1.89	Cum		
	Weir	2	7.00	0.30	0.60	2.52	Cum		
	Deduct	2	5.80	0.30	0.60	-2.09	Cum		
	Deduct	2	7.60	0.30	0.33	-1.50	Cum		
						94.42	Cum	1840.00	173727.65
8	Supply and fixing lintels	2	7.60	0.30	0.33	1.50	Cum	5817.60	8754.32
	Plaster on new surface on walls in cement sand mortar 1:6 including racking of joint etc. complete fine finished: 20mm thick.								
9	Pointing on stone masonary in cement sand mortar 1:3 (1-Cement:3-Sand) :	8	50.60	0.60		242.88	Sqm		
	Deduct	4	5.80	0.60		-13.92	Sqm		
						228.96	Sqm	51.80	11860.13
10	Cement concrete flooring grade 1:2:4 (1-Cement:2-Coarse sand:4-graded stone aggregate) rounding off edges etc. but excluding the cost of nosing of steps etc. complete : 50 mm thick with 20 mm thick nominal size aggregate.	4	50.60	0.30		60.72	Sqm	204.00	12386.88

11	Providing and laying two coats of black rubberized water proof coating after cleaning the existing surface with wire brush, surface should be free from dust, loose particle, oil and grease etc. Apply 1st coat over surface or RCC/Stone slab/Lime terrace/and MS Tanks etc. and apply 2nd coat after drying completely 1st coat (drying period 8 hours) complete in all respects (as per manufacturer's specification).					2600.80	Sqm.	53.00	
12	Structural steel work in single section fixed without connecting plate including cutting, hoisting, fixing in position and applying a priming coat of approved steel primer all complete above plinth level up to 4.5 mtr. Height in joist flats, tees, angles and chhanels. Angle 40x40x5mm with drillling holes 3 nos per angle	40	0.90	wt. @3.5kg/m		126.00	Kg	52.20	6577.20
13	Supply and fixing galvanized barbed wire instead of black barbed wire for each wire line.	4	50.60	3.00		607.20	Mtr.	6.30	3825.36
14	Supply and fixing Direction and place identification sign board made out of 2mm thick M.S. sheet framed to angle iron 40x40x5mm and two vertical posts of angle iron of size 65x65x6mm 3meter long with hold fasts, stove enameled paint reflective letter symbol complete of size 120x75 cm.					1	No.	5000.00	5000.00
15	Supply and fixing angle iron gate with enameled paint complete of size 120x90cm.	1	0.90	1.20	wt. @14kg/ sqm	15.12	Kg	52.20	789.26
16	Contigency								46724.63
	GRAND TOTAL								1604212.17
								Say Rs.	**160400.00**

Renovation of Talab (Nadi)
NAME OF WATERSHED PROJECT:- BARMER (IWMP) –I





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

Model Estimate of Sand Dune Stabilisation

Name of Watershed Project : Barmer(IWMP)-I **Name of Panchayat Samiti : Baitu**

Afforestation Platation - 20 Ha

1. Plantation Unit
2. Plantation - 400 Per Ha
3. Plantaion Distance - 5 m X 5 m
4. Model Calculation - Per ha
5. Periferi Lenth - m 2140
6. Periferi Lenth (Mt. per Ha) 107
7. Labour Rate- 135 Per day
8. Toatl -Five Yr

Advance work & 0 Year 20 Ha

S.NO.	Work Particulars	Unit	Qty	Labour	Total	Labour	Total
1	**Survey of the area by chain and compass, demarcation, layout and lien cutting and making kachhi muddis**	Ha	20	89.60	89.60	1792	1792
2	**Fencing of area by 1.50 m angle iron post with four line barbed wire fencing including interlencing.**	RM	2140	55.89	93.15	119605	199341
3	**Digging of pits of size (0.50+0.40)/2m x (0.50+0.40)/2m x 0.45m including alignment**	NO.	8000	3.70	3.7	29600	29600
4	**Purchase of insecticides & organic manure**	Per Plant	8000	0.00	1.53	0	12240
5	**Collection & purchase of sewan/dhaman Grass seed or local species of trees seed 6 Kg Per ha**	Kg	120	0.00	75	0	9000
6	**Mulching on shifting sand dunes usig locally available material against the wind direction in parallel lines (including cutting and trasnport of local shrubs upto a distance of 500 meters). Height of mulching should not be less than 30cms.**	RM	40000	5.48	5.48	219200	219200
7	**Construction of cattle guard hut**	No.	1	10000	20000	10000	20000
8	**Plantation Board**	No.	1	1000	5000	1000	5000
9	**Plantation Gate**	No.	1	1500	6000	1500	6000
10	**Construction of water storage tank**	No.	4	15000	40000	60000	160000
11	**Extra exp.**						1400
	;ksx%&					442697	663573

Forest Platation-First year 20 Ha

12	**Purchase of Plants**	No.	8000	0	8.00	0	64000
13	**Transportation of plants from nursery to plantation site by camel cart**	N0.	8000	0	2.52	0	20160
14	**Plantation of plants with treatment, organic manure, primary irrigation, making of thawala & local transportation**	No.	8000	0	15.28	0	122240
15	**Watering 15 Litre per plant eight times in a year.**	No.	8000	22.16	45.68	177280	365440
16	**One Hoeing and weeding after rain and 8 times hoeing after watering**	No.	8000	14.24	14.24	113920	113920

17	**Prepairing of seed balls in ratio (1:1:2:2) mixing of 1 Kg seed, manure, sandy soil, loamy soil. Total materil 36Kg per ha.**	Kg	120	24.04	24.04	2884.8	2884.8
18	**Sowing of seed balls by dibbling method/tractor**	Ha	20	456	869	9120	17380
19	**Prooning of 10 percent Plants upto 1/3 ht.**	No.	800	1.2	1.2	960	960
20	**Watch & ward**	Month	12	4050	4050	48600	48600
21	**Extra exp.**						1400
	Total					352765	756985

Forest Platation- Second year 20 Ha

22	**Purchase of 20 % Plants for replacement**	No.	1600	0	8.00	0	12800
23	**Transportation of plants from nursery to plantation site by camel cart**	N0.	1600	0	2.52	0	4032
24	**Plantation of 20 % plants with treatment, organic manure, primary irrigation, making of thawala & local transportation**	No.	1600	0	15.28	0	24448
25	**Watering 15 Litre per plant eight times in a year.**	N0.	1600	22.16	45.68	35456	73088
26	**One Hoeing and weeding after rain and 8 times hoeing after watering**	No.	1600	14.24	14.24	22784	22784
27	**Collection & purchase of sewan/dhaman Grass seed or local species of trees seed 2 Kg Per ha**	Kg	40	0	75	0	3000
28	**Prepairing of seed balls in ratio (1:1:2:2) mixing of 1 Kg seed, manure, sandy soil, loamy soil. Total materil 12 Kg per ha.**	Kg	40	24.04	24.04	961.6	961.6
29	**Sowing of seed balls by dibbling method/tractor**	Ha	6.67	456	869	3040	5793.333
30	**Prooning of 70 percent Plants upto 1/3 ht.**	No.	1120	1.2	1.2	1344	1344
31	**Watch & ward**	Month	12	4050	4050	48600	48600
32	**Extra exp.**						1400
	Total					112186	198251

Forest Platation- Third year 20 Ha

33	**Watering 15 Litre per plant six times in a year.**	N0.	8000	16.62	34.26	132960	274080
34	**One Hoeing and weeding after rain and 6 times hoeing after watering**	No.	8000	11.28	11.28	90240	90240
35	**Prooning of 20 percent Plants upto 1/3 ht.**	No.	1600	1.2	1.2	1920	1920
36	**Watch & ward**	Month	12	4050	4050	48600	48600
37	**Extra exp.**						1400
	Total					273720	416240

Forest Platation- Fourth year 20 Ha

38	**Watering 15 Litre per plant four times in a year.**	N0.	8000	11.08	22.84	88640	182720
39	**One Hoeing and weeding after rain and 4 times hoeing after watering**	No.	8000	8.32	8.32	66560	66560
40	**Watch & ward**	Month	12	4050	4050	48600	48600
41	**Extra exp.**						1400
	Total					203800	299280
	Grant Total					1385167	2334329
						Say	**2334000**
						Cost per Ha.	**117000**

Model Estimate of Silvi Pasture (Afforestation)

Name of Watershed Project : Barmer(IWMP)-I **Name of Panchayat Samiti : Baitu**

Afforestation Platation - 20 Ha

1. Plantation Unit
2. Plantation - 400 Per Ha
3. Plantaion Distance - 5 m X 5 m
4. Model Calculation - Per ha
5. Periferi Lenth - m 2140
6. Periferi Lenth (Mt. per Ha) 107
7. Labour Rate- 135 Per day
8. Toatl -Five Yr

Advance work & 0 Year 20 Ha

S.NO.	Work Particulars	Unit	Qty	Labour	Total	Labour	Total
1	**Survey of the area by chain and compass, demarcation, layout and lien cutting and making kachhi muddis**	Ha	20	89.60	89.60	1792	1792
2	**Fencing of area by 1.50 m angle iron post with four line barbed wire fencing including interlencing.**	RM	2140	55.89	93.15	119605	199341
3	**Digging of pits of size (0.50+0.40)/2m x (0.50+0.40)/2m x 0.45m including alignment**	NO.	8000	3.70	3.7	29600	29600
4	**Purchase of insecticides & organic manure**	Per Plant	8000	0.00	1.53	0	12240
5	**Collection & purchase of sewan/dhaman Grass seed or local species of trees seed 6 Kg Per ha**	Kg	120	0.00	75	0	9000
6	**Construction of cattle guard hut**	No.	1	10000	20000	10000	20000
7	**Plantation Board**	No.	1	1000	5000	1000	5000
8	**Plantation Gate**	No.	1	1500	6000	1500	6000
9	**Construction of water storage tank**	No.	4	15000	40000	60000	160000
10	**Extra exp.**						1400
	;ksx%&					223497	444373

Forest Platation-First year 20 Ha

11	**Purchase of Plants**	No.	8000	0	8.00	0	64000
12	**Transportation of plants from nursery to plantation site by camel cart**	N0.	8000	0	2.52	0	20160

13	**Plantation of plants with treatment, organic manure, primary irrigation, making of thawala & local transportation**	No.	8000	0	15.28	0	122240
14	**Watering 15 Litre per plant eight times in a year.**	No.	8000	22.16	45.68	177280	365440
15	**One Hoeing and weeding after rain and 8 times hoeing after watering**	No.	8000	14.24	14.24	113920	113920
16	**Prepairing of seed balls in ratio (1:1:2:2) mixing of 1 Kg seed, manure, sandy soil, loamy soil. Total materil 36Kg per ha.**	Kg	120	24.04	24.04	2884.8	2884.8
17	**Sowing of seed balls by dibbling method/tractor**	Ha	20	456	869	9120	17380
18	**Prunning of 10 percent Plants upto 1/3 ht.**	No.	800	1.2	1.2	960	960
19	**Watch & ward**	Month	12	4050	4050	48600	48600
20	**Extra exp.**						1400
Total						352765	756985

Forest Platation- Second year

20 Ha

21	**Purchase of 20 % Plants for replacement**	No.	1600	0	8.00	0	12800
22	**Transportation of plants from nursery to plantation site by camel cart**	N0.	1600	0	2.52	0	4032
23	**Plantation of 20 % plants with treatment, organic manure, primary irrigation, making of thawala & local transportation**	No.	1600	0	15.28	0	24448
24	**Watering 15 Litre per plant eight times in a year.**	N0.	1600	22.16	45.68	35456	73088
25	**One Hoeing and weeding after rain and 8 times hoeing after watering**	No.	1600	14.24	14.24	22784	22784
26	**Collection & purchase of sewan/dhaman Grass seed or local species of trees seed 2 Kg Per ha**	Kg	40	0	75	0	3000
27	**Prepairing of seed balls in ratio (1:1:2:2) mixing of 1 Kg seed, manure, sandy soil, loamy soil. Total materil 12 Kg per ha.**	Kg	40	24.04	24.04	961.6	961.6
28	**Sowing of seed balls by dibbling method/tractor**	Ha	6.67	456	869	3040	5793.333
29	**Prunning of 70 percent Plants upto 1/3 ht.**	No.	1120	1.2	1.2	1344	1344
30	**Watch & ward**	Month	12	4050	4050	48600	48600
31	**Extra exp.**						1400
Total						112186	198251

Forest Platation- Third year

20 Ha

32	**Watering 15 Litre per plant six times in a year.**	N0.	8000	16.62	34.26	132960	274080
33	**One Hoeing and weeding after rain and 6 times hoeing after watering**	No.	8000	11.28	11.28	90240	90240
34	**Prunning of 20 percent Plants upto 1/3 ht.**	No.	1600	1.2	1.2	1920	1920
35	**Watch & ward**	Month	12	4050	4050	48600	48600
36	**Extra exp.**						1400

	Total					273720	416240

Forest Platation- Fourth year 20 Ha

37	**Watering 15 Litre per plant four times in a year.**	N0.	8000	11.08	22.84	88640	182720
38	**One Hoeing and weeding after rain and 4 times hoeing after watering**	No.	8000	8.32	8.32	66560	66560
39	**Watch & ward**	Month	12	4050	4050	48600	48600
40	**Extra exp.**						1400
	Total					203800	299280
	Grant Total					1165967	2115129
						Say	**2115000**
						Cost per Ha.	**106000**

Model Estimate of Nala Bank Stabilisation/Roadside Plantation

Name of Watershed Project : Barmer(IWMP)-I Name of Panchayat Samiti : Baitu

Platation - 2000 Meter (Both Side of Road/Nalla)

1. Plantation Unit - Three line plants
2. Plantation - Out sides two rows 400 kantedar plants & middleside one row 100 chhayadar plants
3. Plantaion Distance - Kantedar plant to plant 5 m, Row 3 m & chhayadar 10m, Row 3 m
4. Model Calculation - Per 1000 meter of road/nalla.
5. Periferi Lenth - m 4050
7. Labor Rate- 135 Per day
8. Toatl -Five Yr

Advance work & 0 Year 1000 Plants

S.NO.	Work Particulars	Unit	Qty	Labour	Total	Labour	Total
1	**Survey of the area by chain and compass, demarcation, layout and lien cutting and making kachhi muddis**	Ha.	2.50	89.60	89.60	224	224
2	**Fencing of area by 1.50 m angle iron post with four line barbed wire fencing including interlencing.**	RM	4050	55.89	93.15	226355	377258
3	**Digging of pits of size (0.50+0.40)/2m x (0.50+0.40)/2m x 0.45m including alignment**	NO.	1000	3.70	3.7	3700	3700
4	**Purchase of insecticides & organic manure**	Kg	1000	0.00	1.53	0	1530
5	**Construction of cattle guard hut**	No.	1	10000	20000	10000	20000
6	**Plantation Board**	No.	1	1000	5000	1000	5000
7	**Plantation Gate**	No.	1	1500	6000	1500	6000
8	**Construction of water storage tank**	No.	2	15000	40000	30000	80000
9	**Extra exp.**						1000

	;ksx%&					272779	494711.5

Forest Platation- First year 1000 Ha

10	**Purchase of Plants**	No.	1000	0	10.00	0	10000
11	**Transportation of plants from nursery to plantation site by camel cart**	N0.	1000	0	2.52	0	2520
12	**Plantation of plants with treatment, organic manure, primary irrigation, making of thawala & local transportation**	No.	1000	0	15.28	0	15280
13	**Watering 15 Litre per plant eight times in a year. Kantedar**	No.	800	22.16	45.68	17728	36544
14	**Watering 15 Litre per plant twelve times in a year. chhayadar**	No.	200	33.24	68.52	6648	13704
15	**One Hoeing and weeding after rain and 8 times hoeing after watering kantedar**	No.	800	14.24	14.24	11392	11392
16	**One Hoeing and weeding after rain and 12 times hoeing after watering chhayadar**		200	20.16	20.16	4032	4032
17	**Prunning of 10 percent Plants upto 1/3 ht.**	No.	100	1.2	1.2	120	120
18	**Watch & ward**	Month	12	4050	4050	48600	48600
19	**Extra exp.**						1000
Total						88520	143192

Forest Platation- Second year 1000 Ha

20	**Purchase of 10 % Plants for replacement**	No.	100	0	10.00	0	1000
21	**Transportation of plants from nursery to plantation site by camel cart**	N0.	100	0	2.52	0	252
22	**Plantation of 10 % plants with treatment, organic manure, primary irrigation, making of thawala & local transportation**	No.	100	0	15.28	0	1528
23	**Watering 15 Litre per plant eight times in a year. Kantedar**	No.	800	22.16	45.68	17728	36544
24	**Watering 15 Litre per plant ten times in a year. chhayadar**	No.	200	27.7	57.10	5540	11420
25	**One Hoeing and weeding after rain and 8 times hoeing after watering kantedar**	No.	800	14.24	14.24	11392	11392
26	**One Hoeing and weeding after rain and 10 times hoeing after watering chhayadar**		200	17.2	17.2	3440	3440
27	**Prunning of 70 percent Plants upto 1/3 ht.**	No.	700	1.2	1.2	840	840
28	**Watch & ward**	Month	12	4050	4050	48600	48600
29	**Extra exp.**						1000
Total						87540	116016

Forest Platation- Third year 1000 Ha

30	**Watering 15 Litre per plant four times in a year. Kantedar**	No.	800	22.16	45.68	17728	36544
31	**Watering 15 Litre per plant ten times in a year. chhayadar**	No.	200	27.7	57.1	5540	11420
32	**One Hoeing and weeding after rain and 4 times hoeing after watering kantedar**	No.	800	14.24	14.24	11392	11392
33	**One Hoeing and weeding after rain and 10 times hoeing after watering chhayadar**		200	17.2	17.2	3440	3440
34	**Prunning of 70 percent Plants upto 1/3 ht.**	No.	700	1.2	1.2	840	840
35	**Watch & ward**	Month	12	4050	4050	48600	48600
36	**Extra exp.**						1000
Total						87540	113236

Forest Platation- Fourth year 1000 Ha

37	**Watering 15 Litre per plant four times in a year. Kantedar**	No.	800	14.24	14.24	11392	11392
38	**Watering 15 Litre per plant ten times in a year. chhayadar**	No.	200	17.2	17.2	3440	3440
39	**One Hoeing and weeding after rain and 4 times hoeing after watering kantedar**	No.	700	1.2	1.2	840	840
40	**One Hoeing and weeding after rain and 10 times hoeing after watering chhayadar**		12	4050	4050	48600	48600
41	**Prunning of 70 percent Plants upto 1/3 ht.**	No.	200	1.2	1.2	240	240
42	**Watch & ward**	Month	12	4050	4050	48600	48600
43	**Extra exp.**						1000
Total						113112	114112
Grand Total						649491	981268
						Say	**981000**
				Cost per mtr of road/nalla			**981**

Model Estimate of Vegetative Barrier

Name of work: Vegetative Barrier

Name of Panchayat Samiti : Baitu

Name of watershed project: Barmer (IWMP) -I

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S. NO.	Particular	UNIT	Qty	Rate	Amount

				Labour	Total	Labour	Total
1	Cutting and clearing at ordinary jungl including bushes,shurbs grasses on field boundry.						
	100 1 X .00 X 1.00	Sq.Mtr.	100.00	3.70	3.70	370	370
2	Transportation of thor sticks from nursery to plantation site by vehical including cost of thor stick.						
	@ 4 sticks per Mtr.	No.	400		11	0	4400
3	Loading of planting sticks from beds to vehiclae or unloading of planting sticks from vehicle	No.	400	0.31	0.31	124	124
4	Planting of thor sticks in plain or undulating fields.	No.	400	2.50	2.50	1000	1000
5	Contigency 3 percent						177
	Total					370	6071
			Labour				400
			Material				5700
			Total				6100

Material

	Thor sticks	400	Nos.

Cost per running Mtr. 61

One Day Skill Development Training at Madhasar

PRA Excersize Executed at Baitu Bhimji

CHAPTER - VIII Enclosures -

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

i. Map of IWMP Barmer-I Project (Watershed Boundary demarcation in cadastral & Topo Sheet)

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

k. Treatment map (Indicate proposed works)

l. Cadastral Map on watershed boundary

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

n. Land Use Land Cover map

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

p. High resolution, latest Remote Sensing Satellite data

Documents of Agreements:-

q. Proceedings of gram sabha for EPA approval

r. Proceedings of gram sabha Resolution for committee constitution

s. Proceedings of gram sabha for DPR approval

t. DPR approval by district v. Watershed Committee Registration certificate

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