# **DETAILED PROJECT REPORT**

### LOWER WAH SOHRA INTEGRATED WATERSHED MANAGEMENT PROJECT

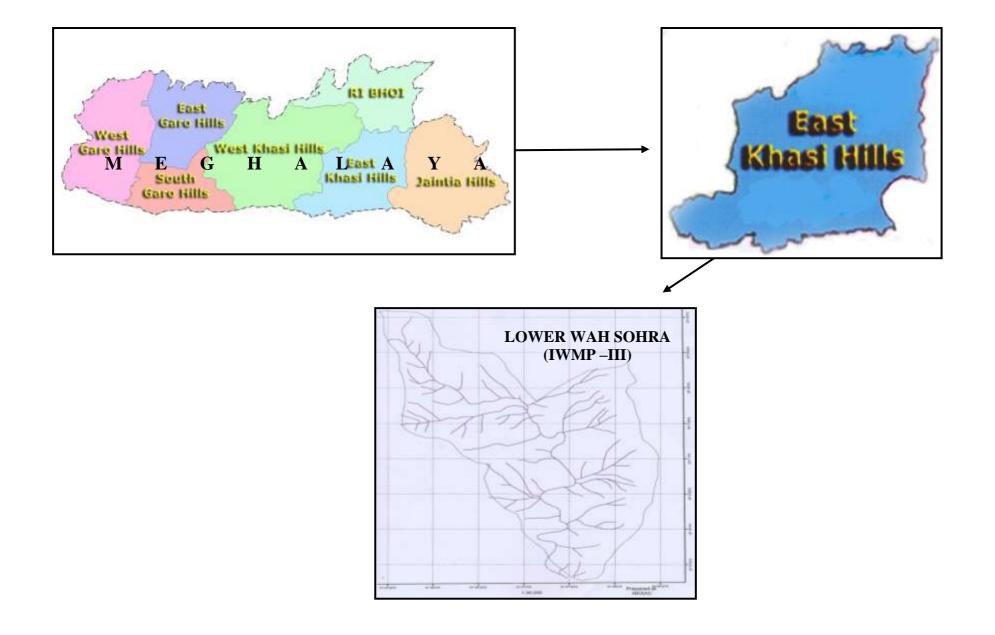
 $\mathbf{IWMP}-\mathbf{III}$ 

2009 - 2010

### LAITKROH KHATARSHNONG C & RD BLOCK

EAST KAHSI HILLS DISTRICT

MEGHALAYA



### **SUMMARY**

Name of the Sate	:	Meghalaya
Name of the District	:	East Khasi Hills District
Name of the C&RD Block	:	Laitkroh Khatarshnong
Name of the Villages	:	(i) Sohkynduh (ii) Mawskhen
		(iii) Rymmai (iv) Mawbawein (v) Pdang (vi) Dewiong (vii) Dewsaw
Name of the Project	:	East Khasi Hills – IWMP – III
Total Geographical Area	:	1770 На
Total Treatment Area	:	1000 Ha
Total Project Cost	:	150 lakhs
Project Duration	:	5 Years
Project Implementing Agency	:	Soil & Water Conservation Territorial Division, Shillong.

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# CHAPTER I INTRODUCTION AND BACKGROUND

### **CHAPTER I**

### **INTRODUCTION AND BACKGROUND**

#### 1.1 Project Background:

The Lower Wah Sohra (IWMP-III) project is located in Laitkroh C&RD Block, East Khasi Hills District of Meghalaya. Consisting of a single microwatershed, the project area is drained by the Wah Sohra River and its tributaries flowing in a north to south direction. The total area is 1770 Ha. with 1000 to be treated under the Integrated Watershed Management Programme (IWMP).

The Project area is located at a distance of about 35 km from Sohra the Civil Sub-Divisional Head Quarter and about 75 km from Shillong the District Headquarter and also the State Capital. A total of seven villages are covered under the project. These are –

1 Sohkynduh 2 Mawskhen 3 Rymmai 4 Mawbawein 5 Pdang 6 Dewiong 7 Dewsaw

#### **1.2 Micro-watershed Information:**

The micro-watershed code is 3C1C1a2b as codified by the North East Space Application Centre (NESAC). The total area of the micro-watershed is 1770 Ha., with 1000 hectares to be treated under the Integrated Watershed Management Programme (IWMP).

#### **1.3 Need and Scope for Watershed Development:**

The micro-watershed 3C1C1a2b falls under the High Priority category as per the prioritization of watersheds by the North East Space Application Centre (NESAC). Located on the slopes of the deep gorges of the Sohra Plateau the 7 villages do not have any road connectivity. The farmers are all marginal and 146 households are below the poverty line, which is 62.9% of the total households. Jhum cultivation is practiced by most of the inhabitants of these villages on the slopes.

Even though the area receives ample rainfall during the monsoons, there is acute shortage of water during the dry seasons and the villagers have to travel long distances for fetching water even for domestic use.

### 1.4 Other developmental projects/schemes running in the Project Area:

The other developmental projects/schemes undertaken in the Project Area are:-

#### i. MGNREGS

ii. Border Area Development Programme (BADP)

iii. Total Sanitation Campaign (TSC)

iv. Swarnjayanti Gram Swarozgar Yojana (SGSY)

v. Indira Awas Yojana (IAY)

# CHAPTER II

# **BASIC INFORMATION OF THE PROJECT AREA**

### CHAPTER II BASIC INFORMATION OF THE PROJECT AREA

#### 2.1 Location:

The Project area is located within the area of 12 Raij or 12 Sordar popularly known as Khatarshnong under Laitkroh C&RD Block of Sohra Civil Sub-Division, East Khasi Hills District. It is situated at a distance of about 35 km from Sohra the Civil Sub-Divisional Head Quarter and about 75 km from Shillong the District Headquarter which is also the State Capital. The geographical location is between 91<sup>0</sup> 45' to 91<sup>0</sup> 48' 30"E Longitude and 25<sup>0</sup> 15' to 25<sup>0</sup> 15' 30"N Latitude. There are 7 villages within the Watershed which are as follows –

- 1. Sohkynduh
- 2. Mawskhen
- 3. Rymmai
- 4. Mawbawein
- 5. Pdang
- 6. Dewiong
- 7. Dewsaw

At present, these seven villages are not yet connected to any motorable road.

#### 2.2 Physiography:

The physiography of the micro-watershed is highly undulating. The altitude ranges from a minimum of 300m to a high of 1300m above mean sea level. In the lower reaches (valley lands) the slope ranges from 25% to 35%, however, in the middle and upper reaches it is greater than 45 %, and can reach up to 180%.

#### Table 2.1: Physiographic details

Elevation (metres)	Slope Range (%)	Order of watershed Sub/Micro-watershed	Major streams	Topography
300 m to 1100 m	25% to 180 %	Micro Watershed	Wah Sohra	Strongly Sloping

- **2.3 Drainage:** The major stream draining the micro-watershed is the Wah Sohra which is a 4<sup>th</sup> order stream flowing in a north-south direction. The slopes of the micro-watershed are dissected by numerous small tributaries flowing to the Wah Sohra.
- 2.4 Soil: Soil Texture is gravelly on the sloping lands and clayey to sandy clay on the low lying areas. Soil depth varies from very shallow to deep. Soils are permeable and generally acidic in nature. Owing to highly undulating land form and absence of good vegetation cover, the area is exposed to erosion hazards. The soil nutrient status in the area shows a general trend of low phosphorous content.

#### 2 7 8 9 3 5 1 4 6 Names Names Types Area Run-off (mm/ Average soil loss (Tonnes/ S1. Names of of of Cause affected of State ha/ year) No. year) erosion District Projects (ha) Water erosion: Sheet 750 2500-4000 40.90 a East Rill 350 2500-4000 30.00 b East Khasi Gully 200 2500-4000 30.00 Meghalaya Khasi Hills с 1 IWMP Hills Sub total Ш Wind erosion Nil Nil Nil

#### Table 2.2: Details of soil erosion in the project areas:

**2.5 Climate:** The area in the foothills or low lying areas and mid-slopes are hot in summer and remain warm throughout the winter. The area on the higher reaches is warm during summer and cold during winter. The average annual rainfall is 9000mm.

1	2	3	4	5	6	7		8	9																
S1.	Name of	Name of the Agro-		Names of	Names of	Major soil types		Average annual rainfall in mm	Major crops																
No.	State	climatic zone	ha)	the districts	the Projects			(preceding 5 years' average)	a) Name	b) Area (ha)															
									Betel nut	120															
							Moderate shallow, excessively			Betel leaf	30														
			drained, fine – loamy soil on														drained, fine – loamy soil on moderately steep side slopes of hills			Oranges	50				
		Southern East Khaci having loamy surfaces with severe			Bay leaf	20																			
1	Meghalaya	Slopes and	1000 Ha		Hills –	Hills –	Hills –	Hills –	Hills –	Hills –	Hills –	Hills –	Hills –	Hills –	Hills –	Hills –	Hills –	Hills –	Hills –	erosion hazard and strong stoniness associated with moderately	1770 На	9000 mm	9000 mm	Broom stick	560
		Valley																		Shallow, excessively drained,			Black pepper	20	
						loamy skeletal soils on gently sloping hill tops with very severe			Litchi	20															
						erosion hazard and slight stoniness			Banana	15															
					Pineapple	51																			
								Total		886 Ha															

#### Table 2.3: Agro-climatic zones of the project areas, soil types, average rainfall and major crops.

**2.6 Agriculture:** Agriculture is the primary occupation of the people of the area. The people mostly practice jhum. The jhum plots vary from 0.5 to 1.0 Ha, and are cultivated for 3-4 years. The principal agricultural crops grown of the jhum fields are potato, sweet potato, millet, maize, yam and vegetables. Fruit crops are well suited in the lower reaches which include Prunus nepalensis, Elaegnus latifolia, orange, pineapple, jackfruit, litchi. The slopes of the Lower Wah Sohra are also very suitable for betel nut, betel leaf, black pepper, broomstick, which contribute to the income of the people.

Crops	Area (ha)	Average Yield (Qtl) per ha.	<b>Total Production (Qtl.)</b>
Potato	400	50	20000
Millet	125	10	1250
Soyabean	100	10	1000
Yam	250	18	4500
Ginger	250	60	5000
Tapioca	250	40	10000
Betel nut	350	9	3150
Betel leaf	350	25	8750
Black Pepper	50	6	300
Oranges	200	40	8000
Bay Leaf	300	20	6000

#### Table 2.4: Crop yield and production

- 2.7 Natural Vegetation: The tree species common to the watershed area includes *Quercus* spp. *Castanopsis* spp. *Toona ciliata, Albizia* spp. *Aporosa* spp. *Bahunia variegata Duabanga* spp. and *Ficus* spp. However, due to jhum cultivation the forest cover of the area has reduced considerably.
- **2.8 Socio-Economic Profile:** Economically, the area is perhaps the most backward in the district. The main reason is due to the absence of road communication, primitive way of agricultural practices like jhumming and the difficult terrain of the area.

*Demographic Status*: The total households in the watershed project is 222 with a total population of 1064, of which 543 are male and 521 are female. The detail of the household in each of the villages in the watershed project is as follows:

1.	Sohkynduh	-	113 Nos
2.	Mawskhen	-	12 Nos
3.	Rymmai	-	32 Nos
4.	Mawbawein	-	26 Nos
5.	Pdang	-	12 Nos
6.	Dewiong-Dewsaw	-	27 Nos
			222 Nos

#### Infrastructure facilities :

- 2.1.1 *Roads:* All the villages within the Project Area are not connected by road. The Project area depends entirely on the kutcha road connected either to Laitryngew or Mawjrong.
- 2.1.2 *School:* there are only 5 L.P Schools within the Project Area run either by the Mission or by the Government.
- 2.1.3 *Electricity* : Connections have been provided but some villages are yet to have electricity.
- 2.1.4 *Health* : One Community Health Centre at Khrang in under construction and the local population have to either depends on facilities available at Sohra or Shillong.
- 2.1.5 *Water Supply* : Drinking water supply have been provided by the PHE Deptt. Except Pdang village. However, during lean season the entire population have to depend on springs available in the area as the supply is not sufficient to meet the daily requirement.
- 2.1.6 *Market* : There is a weekly market held once in a week at Khrang. However, the main market where the people sell their produce is at Sohra and also at Shillong.

### Table 2.5: Infrastructure Status.

1	2		3	4				
Name of District	Name of Project		Parameters:	Status				
East Khasi Hills	East Khasi Hills – IWMP III	(i)	No. of villages connected to the main road by an all-weather road.	All villages are at 1 hr to 3 hrs walking from the motorable junction				
		(ii)	No. of village provided with electricity	5 nos. electr	ified and 2	without ele	ectricity	
		(iii)	No. of households without access to drinking water	40 nos.				
		(iv)	No. of educational institutions:	(P)	(S)	(HS)	(VI)	
			Primary (P)/ Secondary (S)/ Higher Secondary (HS)/ Vocational institution (VI)	5 Nos.	-	-	-	
		(v)	No. of village with access to Primary Health Centre	Nil				
		(vi)	No. of village with access Veterinary Dispensary	Nil				
		(vii)	No. of village with access Post Office	Nil				
		(viii)	No. of village with access Banks	Nil				
		(ix)	No. of village with access Markets/ mandis	Nil				
		(x)	No. of village with access Agro-Industries	Nil				
		(xi)	Total quantity of surplus milk	Nil				
		(xii)	No. of milk collection centres	(U)	(S)	(PA)	(0)	
		(e.g. Union (U)/ Society (S)/ Private agency (PA)/ Others (O))		Nil	Nil	Nil	Nil	
		(xiii)	No. of villages with access to Aganwadi Centres	1 No.				
		(xiv)	Any other facilities with no. of villages (please specify)	Nil				

2.9 Livestock: there are only 3 kinds of livestock farming being farmed in the area viz. Piggery, Poultry and Bee-Keeping or Apiculture.

Type of Animal	Population
Piggery	55
Poultry	1100
Apiculture in unit	100
	1255

 Table 2.6: Existing livestock population

2.10 Land ownership: There are primarily two types of land holding system, namely private lands (Ri Kynti i.e. individually owned land) and community lands (Ri Kur i.e. clan land and Ri Raid i.e. village community land).

### Table 2.7: Land Holding:

1	2	3	4	5	6			
Name of Name of the		Types of Farmer	No. of	No. of BPL	Land holding (ha)			
District	Project	<b>71</b>	households	households	Irrigated	Rainfed	Total	
		(i) Large	-	-				
East	East Khasi	(ii) Small	-	-				
Khasi	Hills –	(iii) Marginal	209	123	-	886 Ha	886 Ha	
Hills	IIS IWMP III	IWMP III	(iv) Landless	23	23	-	-	-
		Sub - Total	232	146		886 Ha	886 Ha	

1	2	3	4			5				
Name of the	CPR		Total Area (ha) Area owned/ In possession of				Area available for treatment (ha)			
District	Projects	Particulars	Pvt. Person	Govt. (specify deptt.)	PRI	Any other (Community)	Pvt. Person	Govt. (specify deptt.)	PRI	Any other (Community)
East Khasi	East Khasi Hills –	(i) Wasteland/ degraded land	-	-		778.0 Ha	-	-	-	670 Ha
Hills	IWMP III	(ii) Pastures	-	-	-	-	-	-	-	-
		(iii) Private Agriculture land	886 Ha	-	-	-	330 Ha			
		(iv) Village woodlot	-	-	-	-				
		(v) Forest	-	-	-	46 Ha				
		(vi) Village Ponds/ Tanks	-	-	-	-				
		(vii) Community Buildings	-	5 nos.	-	4 Nos.				
		(viii) Weekly Markets	-	-	-	Cherrapunjee				
		(ix) Permanent Markets	-	-	-	Cherrapunjee				
		(x) Temples/ Places of worship	-	-	-	Church- 1 no				
		(xi) Others (Pl. specify)		-	-	60 Ha				
		Total	886 Ha	-	-	884 Ha	330 Ha	-	-	670 Ha

### Table 2.5: Common Property Resources in the Project Area

2.11 Land use and land cover : As per the land use land cover map generated by NESAC, Meghalaya from Satellite Image taken during 2005 – 2006 (LISS

– III, Image) the Watershed area has been broadly classified into the following land uses.

a)	Built-up Area	=	18.80 Ha
b)	Water bodies-River/Stream-Perennial	=	41.08 Ha
c)	Agricultural land-crop land-kharif crop	=	2.80 Ha
d)	Tree clad Area-close	=	778.2 Ha
e)	Tree clad Area-open	=	882.8 Ha
f)	Wastelands-barren Rocky/Stony waste	=	<u>46.32 Ha</u>
	Total	=	1770 Ha

2.12 Problems of the Area : The primary problems of the area is jhumming. Majority of the population depends on Jhum Cultivation for their livelihood. Vast tracks of abandoned Jhum areas are converted to Broomstick cultivation areas which has further degraded the capability of the land. Mention may also be made here that the land use categorized as Tree-clad Area-open in the land used land cover map generated using Satellite Images of 2005 – 2006 are actually Broom-stick cultivation areas. In other words, unscientific method of cultivation has not only reduced the Jhum cycle, low crop yield but had adversely affected the ecological balance within the area. Road communication is another infrastructural problems that the area is facing where large volume crops like pineapple, jackfruits etc do not find their way into the market which has resulted in poor socio-economic status of the people. However, to control or to overcome the said problems an innovative approach has been formulated and documented in the Action Plan or the Treatment Plan the Detailed Project Report. The method of identification of the problems is through the Participatory Rural Appraisal Exercises conducted in all the villages within the Watershed.

# **CHAPTER III**

## **PROJECT PLANNING & INSTITUTION BUILDING**

### **CHAPTER III**

### **PROJECT PLANNING & INSTITUTION BUILDING**

#### **3.1 Scientific Planning**

- i) <u>Base Line Survey</u>: To establish a benchmark for assessing the impact of any intervention (pre-project & post project) a baseline survey is essential. The baseline survey included household census & socio-economic survey by using structured and semi –structured questionnaires, bio-physical survey to identify and assess the status of natural resources in the project area.
- ii) <u>Participatory Rural Appraisal</u>: To further obtain information on the project area, the people, resources, various PRA techniques like resource mapping, social mapping, seasonal calendars, matrix ranking, Venn diagrams were used.
- iii) <u>GIS & Remote Sensing</u>: To facilitate the process of prioritization and planning Geographic Information System was use. The land use and land cover (LULC) maps were prepared by the North Eastern Space Application Centre (NESAC) using the LISS III images (2006). The activities were located on the field by using GPS and accordingly transferred to the maps on GIS platform.

#### Table 3.1: Details of Scientific Planning and Inputs in IWMP projects:

1	2	2
Sl.No.	Scientific criteria/ inputs used	No. of projects in which scientific criteria were used
А.	Planning	
	Cluster approach	3
	Whether technical back-stopping for the project has been arranged? If yes, mention the	Yes,
	name of the Institute.	NESAC, Nongsder
	Baseline survey	Yes
	Hydro-geological survey	No
	Contour mapping	No
	Participatory Net Planning (PNP)	No

1	2	2
	Remote sensing data-especially soil/ crop/ run-off cover	Yes
	Ridge to Valley treatment	Yes
	Online IT connectivity between	
	(1) Project and DRDA cell/ZP	Yes
	(2) DRDA and SLNA	Yes
	(3) SLNA and DoLR	Yes
	Availability of GIS layers	
	1. Cadastral map	Yes
	2. Village boundaries	No
	3. Drainage	Yes
	4. Soil (Soil nutrient status)	Yes
	5. Land use	Yes
	6. Ground water status	No
	7. Watershed boundaries	Yes
	8. Activity	Yes
	Crop simulation models <sup>#</sup>	No
	Integrated coupled analyzer/ near infrared visible spectroscopy/ medium spectroscopy	No
	for high speed soil nutrient analysis	
	Normalized difference vegetation index (NDVI)#	Yes
	Weather Stations	No
В.	Inputs	
	1. Bio-pesticides	No
	2. Organic manures	Yes
	3. Vermi-compost	Yes
	4. Bio-fertilizer	Yes
	5. Water saving devices	Yes
	6. Mechanized tools/ implements	No
	7. Bio-fencing	Yes
	8. Nutrient budgeting	Yes
	9. Automatic water level recorders & sediment samplers	Yes
	Any other (please specify)	-

#### **3.2 Project Implementing Agency:**

The PIA is the Soil & Water Conservation Territorial Division, Shillong, East Khasi Hills District of Meghalaya. The Project Manager will be the Divisional Soil and Water Conservation Officer and will be assisted by an Asst. Soil & Water Conservation Officer along with WDT members in which expertise is drawn from the relevant fields for achieving smooth and successful implementation of the project.

1	2			3
Names of Districts	Names of projects			Details of PIA
		(i)	Type of organization#	Government
		(ii)	Name of organization	Soil & Water Conservation (T) Division, Shillong
	East Khasi Hills –	(iii)	Designation & Address	Divisional Soil & Water Conservation Officer,
East Khasi Hills	IWMP III			Polo, Shillong
		(iv)	Telephone	0364 - 2591085
		(v)	Fax	Do
		(vi)	E-mail	Shgt.001@gmail.com

### **3.3 Institution Building**

#### i) Watershed Committee (WC)

The Watershed Committee of the Lower Wah Sohra, IWMP III was constituted with the active involvement of the villagers with strong support of the Traditional Institutions (Village Durbar/Council). The Lower Wah Sohra Watershed Committee has been registered under the Society Registration Act 1860.

#### Table 3.2: Details of Watershed Committees (WC):

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Names of the Districts	Names of projects	Names of WCs	Date of Registration as a Society (dd/mm/ yyyy)	Designa tion	M/F	SC	ST	SF	MF	LF	Land-less	UG	SHG	GP	Any other	Educa- tional ualify- cation	Function/s assigned#
				President	М	-	ST							1		Cl – X	A to I
East Khasi	East Khasi	Lower		Secretary	М	-	ST								1	B.E	A to I
Hills	Hills	Wah	02/03/2010	Member	10 M	-	ST				1	1	2	6		Cl – VI	Do
District	District – IWMP – III	Sohra		Member	4 F	-	ST					3	1			to M.A	Do
	1			Member													

- A. PNP and PRA
- C. Maintenance of Accounts
- E. Supervision of construction activities
- G. Verification & Measurement
- I. Social Audit

- B. Planning
- D. Signing of cheques and making payments
- F. Cost Estimation
- H. Record of labour employed
- J. Any other (please specify).

### ii) Self Help Group

Awareness programmes were organized in the villages to inform and sensitize the people on the essence of organizing themselves in to homogenous groups for uplifting their livelihood especially for the women and the landless. Discussions were held at length with the WDT on the scope and procedure of group formation, availing credit, grading of the groups and so on.

1	2		3				4				5			6	
Names	Nomosof		l no. of reg	istered S	SHGs	No. o	of mer	nbers				C/ST in egory		o. of B ch cate	PL in egory
of the Districts	Names of projects	With only Men	With only Women	With both	Total	Categories	М	F	Total	М	F	Total	М	F	Total
East	EVII					(i) Landless									
East Khasi	EKH. IWMP			1 no	1 No	(ii) SF									
Hills	III	-	-	l no	I NO	(iii) MF	7	5	12	7	5	12	NA	NA	NA
11115	111					(iv) LF									

#### Table 3.3: Details of Self Help Groups (SHGs) in the project areas:

### iii) User Group

To manage the assets created and ensure their sustainability User Groups will be formed. The people have been sensitized on the importance of ensuring that the assets created are sustainably used and the essentiality of having User Groups for maintenance and operation of their assets.

#### Table 3.4: User Group Details

1	2			3			4				5			6	
Names of	Names of		Total	no. of Ugs		No.	of mei	nbers			SC/S	T in each ory		of BPL i categor	
Districts	Projects	Men	Wom en	Both	Total	Categories	М	F	Total	М	F	Total	М	F	Total
						(i)Landless									
						(ii) SF									
						(iii) MF									
						(iv) LF									
Total		Nil	Nil	Nil	Nil				Nil			Nil			Nil

# CHAPTER IV PROJECT ACTIVITIES

### CHAPTER IV PROJECT ACTIVITIES

### 4.1 Preparatory Phase:

### i) Entry Point Activities (EPA)

(Financial – Rs. in lakh)

1	2	3	4	5	6	7	8	9	10	11
Sl. No.	State	District	Names of Project	Amount earmarked for EPA	Entry Point Activities planned	Estimated cost	Expenditure incurred	Balance	Expected outcome	Actual outcome
1	Megh alaya	East Khasi Hills	East Khasi Hills – IWMP III	6.0 Lakhs	Construction of Ropeway Construction of Godown	4.00 2.00	6.0	-	N.A	N.A

### ii) Other activities of Preparatory Phase:

1	2	3	4	5	6	7	8	9	10	11	12	13
District	Name of Projects	Initiation of village level institution	Capacity building	IEC activi ties	Baseline survey	Hydro - geolog ical survey	Identifyin g technical support agencies	Resour ce agree- ments	Preparat ion of DPR	Evaluatio n of DPR	Any other (please specify)	Cost incurred (Rs. In lakh)
East Khasi Hills	East Khasi Hills – IWMP III	1 no. W/C 6 nos. Sub Watershed Committee at each benefiting village	3 nos.	2 nos.	Participatory Rural Appraisals	N.A	Done	Done	Done	Done	Entry Point Activity	15.0

### 4.2 Watershed Works Phase:

### 4.2.1 Activities related to surface water resources in the project areas:

1	2	3	4	5		6								7					]
						Pre Proj	ect						Propo	sed Projec	t				
s	N	Name						Augm		/ repair of actures	fexisting	Cor	nstruction	of new str	uctures		Tota	l target	
5 1. N 0	Nam e of State s	of Distri cts	Name of Projects	Type of structures	No	Area irriga ted (ha)	Stora ge capac ity	No	Area to be treate d (ha)	Storag e capaci ty	Estimat ed cost (in lakhs)	No	Area to be treated (ha)	Storage capacit y (per unit)	Estimate d cost (in lakhs)	No	Area to be treated (ha)	Storag e capaci ty (m <sup>3</sup> )	Estima ted cost
1				(i) Tank	-	-	-	6 Nos.	-	20 m <sup>3</sup>	3.0	7 nos.	-	25 m <sup>3</sup>	7.00	7 nos.	-	175	7.00
				(ii) Pond	-	-	-	-	-	-	-	5 nos.	80.66 Ha	3000 m <sup>3</sup>	7.50	5 nos.	80.66 Ha	15000	7.50
				(iii) Lake	-	-	-	-	-	-	-	-	-	-	-	-		-	-
		East	East Khasi	(iv) Check Dam	-	-	-	-	-	-	-	19 nos	260 На	3000 m <sup>3</sup>	13.30	19 nos.	260 На	57000	13.30
	Meg hala ya	Khas i	Hills – IWMP III	(v) Percolatio n Tank	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	ju	Hills		(vi) Channel	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
				(vii) Any others (please specify)															
			Total					6 nos.	-	20 m <sup>3</sup>	3.0	31 nos	340.66 На	6025 m <sup>3</sup>	27.80	31 nos.	340.66 На	72175	27.80

						8					9	10
				Ach	nievement	due to proj	ect	•				
Augm		repair of actures	existing	Co	nstruction	of new stru	ictures	Тс	otal achievem	ient	Change in storage capacity (col 8-6)	Change in irrigated area (ha) Col. (8- 6)
No	Area irrigate d (ha)	Storage capacity	Expenditu re incurred (in lakhs)	No	Area irrigated (ha)	Storage capacity	Expenditur e incurred (in lakhs)	Area irrigated (ha)	Storage capacity	Estimated incurred		-
6 Nos	-	$20 \text{ m}^3$	3.0	7 nos.	-	$25 \text{ m}^3$	7.00	-	$175 \text{ m}^3$	7.00	$175 \text{ m}^3$	
-	-	-	-	5 nos.	80.66 Ha	$3000 \text{ m}^3$	7.50	80.66 Ha	$15000 \text{ m}^3$	7.50	$15000 \text{ m}^3$	80.66 Ha
-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	10					57000 m <sup>3</sup>	13.30	57000 m <sup>3</sup>	260 Ha
6 Nos.	-	20 m <sup>3</sup>	3.0	31 nos.	340.66 На	6025 m <sup>3</sup>	27.80	340.66 Ha	72175 m <sup>3</sup>	27.80	72175 m <sup>3</sup>	340.66 Ha

### 4.2.2 Activities related to recharging ground water resources in the project areas:

1	2	3	4	5		6					7								8				9
					Pre	-project				Propo	osed targ	et	-				Achi	eveme	nt due to j	project			
S. No	Names of	Names of	of	Type of structures	No.	Area irrigated	exist	entation/ r ting recha structures	rging			of new ructures	Total	target		entation/ re sting rechar structures			struction of arging stru		Total ach	ievement	Change in irrigated area (Col. 8-
	No. States Districts p	projects			(ha)	No.	Area to be irrigated (ha)	Estimat ed cost	No.	Area to be irrigate d (ha)	Estimate	Area to be irrigated (ha)	Estimate	No.	Area irrigated (ha)	Expen di-ture incurre d	No	Area irri- gated (ha)	Expen di-ture incurre d	gated	Expendi -ture incurred	6) (ha)	
				(i)Open wells																			
				(ii)Bore wells				-					-										
			(iii)Any others (Pl. specify)		Nil		Nil			Nil		Nil			Nil			Nil		Nil			
				Total for the project																			

### 4.2.3 Activities executed by User Groups in the Project Areas.

	2				3			
		Ma	jor activities o	f the UGs –	Fargets			
Names of	Names of		Structure/ act	tivity propos	ed	No. of UGs	Estimate	Amount of WDF
Districts	Projects	Sl. No.	Туре	No.#	Treatment (ha)	involved	d Cost	to be collected (Rs.)
East Khasi Hills	East Khasi Hills – IWMP III	1. 2.	Rural Godown Cable Taxiing	2 unit 2 unit	-	2 nos. 2 nos.	4.0 7.0	0.20 0.35

4.2.4 Activities executed by User Groups in the Project Areas:

				4	Ļ										
	Major activities of the UGs – Achievements														
	Structure/ activity     No. of UGs     Expenditure     No. of mandays     Amount of WDF       S1.     Type     No. #     Treated     involved     incurred (Rs.)     SC     ST     F     collected (Rs.)														
Sl. No.	Туре	No.#	Treated Area (ha.)	involved	incurred (Rs.)	SC	ST	F	collected (Rs.)						
	Rural														
1.	Godown	2 Nos	-	2 Nos	4.0	-	1600	-	0.20						
2.	Cable	2 Nos	-	2 Nos	7.0	-	2800	-	0.35						
	Taxiing														

### 4.2.5 Activities related to livelihoods by Self Help Groups (SHGs) in the project areas:

1	2	3										
		Major activities of the SHGs										
Names of the Districts	Names of projects	Name of activity	No. of SHGs involved	Average annual income from activity per SHG								
		1. Tailoring	2 nos.	60,000								
	East Khasi Hills –	2. Basket Making	6 nos.	1,20,000								
East Khasi Hills	IWMP III	3. Stabilized Mud Block	2 nos.	1,10,000								
		4. Piggery Farming	2 nos.	85,000								
		5. Vermi Composting	2 nos.	60,000								
		6. Fruit Processing	1 no.	1,00,000								
		7. Canes & Handicraft	2 nos.	1,20,000								

### 4.2.6 Activities related to livelihoods by Self Help Groups (SHGs) in the project areas:

4		-	5		6	7		8		9	10	
No. of SHGs given training	Total as	sistance re (Amoun	ceived by t t in Rs.)	he SHG	Total annual	Total			SHGs d as	Total Amount of	No. of	
	Loan from revolving fund	Training	Material	Others (pl. specify)	Income generated (Rs.)	annual Savings (Rs.)	Ι	II	III	loan sanctioned by the bank(s)	No. of SHGs federated	

### 4.2.7 Other activities of watershed works phase:

1	2	3		4	1	5		6		7		8		9		10		11		12		13
District	Names of projects	Ridge area treatment		Drainage line treatment		Nursery raising		Land development		Crop demonstra tions		Pasture development		Veterinary services		Fishery development		Non- conventional energy		Any other (please specify)		Total cost incurred (Rs. In lakhs)
		(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	
ЕКН	IWMP -III	659.34 На	51.60	26 На	23.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	75.0

### 4.2.8 Details of engineering structures in watershed works:

1	2	3		4		5			6			8												
			Тур	e of treatmo	ent	Type of land			Executing agency			J	Farge	t		Achievement								
District 1	Project	Name of structures	(i) Ridge area (R)	(ii) Drainage line (D)	(iii) Land Dev. (L)	(i) Pri- vate	Com-		(i) UG (ii)SHG (iii) Others (pl. specify)	No. of units (No./ cum./ rmt)	Estimate cost (Rs. lakh)		Rs. in (h)	month & year of completion	No. of units (No./ cu.m./ rmt)	Expendit incurre (Rs. in la M W O			tion		Actual month & year of completion (mm/yyyy)			
		Staggered trenching																						
		Loose boulder Contour bund	R	-	-	Pri- vate	-	-	Benefi- ciary	200 На				3 yrs	-	-	-	-	-	-	-			
		Graded bunding																						
		Bench terracing																	1					
		Earthern checks dams																						
		Masonary stop dams																						
		Gully plug																						
		Gabion structures																						
		Underground dykes																	1					
		Field bunds																	$\top$					
		Any others (pl. specify)																						

Contd.

### **4.2.9** Details of engineering structures in watershed works.

							9	9														
	Outcomes																					
	Area	Water le	evel (m)	Production (quintal)		Income (Rs.)			Ma	andays g	enerated			No. of beneficiaries								
Reduction in	treated#		1							Out												
run off (cu.m)	(ha)	Pre- project	Post project	Pre- project	Post project	Pre- project	Post project	SC	ST	Others (Men)	Women	Total	SC	ST	Others	Women	Total					
Na	209.34	Na	-	Na	-	Na	-	-	6280	3480	2800	6280	-	220	120	100	220					

1	2	3		4			5		6			7				8	
			Туре	e of treat	ment	T	ype of	land	Executing agency		-	Farget				Achievemen	t
Dist rict	Pro ject	Name of structure/ work	(i) Ridge area (R)	(ii) Draina ge line (D)		(i) Priv ate	(ii) Com muni ty	(iii) Other s (pl. speci fy)	(i) UG (ii)SHG (iii) Others (pl. specify)	Area (ha)	No. of plants	Estimat ed cost (Rs. in lakh)	Expecte d month & year of comple- tion (mm/ yyyy)	Area (ha)	No. of plant s	Expendi- ture incurred (Rs. in lakh)	Actual month & year of comple-tion (mm/ yyyy)
		Afforestation															
		Regeneration				$\checkmark$				100 ha		3.60	3 yrs	-	-	-	-
		Agro-forestry					$\checkmark$			100 ha		10.10	3yrs	-	-	-	-
		Fuel wood															
		Fodder															
		Agro- Horticulture				$\checkmark$				200 ha		17.20	3 yrs	-	-	-	-
		Pasture dev.															
		Nursery raising															
		Others (Coffee)				$\checkmark$				50 ha		5.00	3 yrs	-	-	-	-

# in case two or more activities are executed over same area, the figures in area treated should be accounted only once and should reflect only the actual watershed area treated.

## 4.2.11 Details of vegetative structures in watershed works: Phase – II (contd.):

							9							
							Outcon	nes						
Reduction in	Produ		Inco	ome			Mandays g	enerated			1	No. of bene	eficiaries	
run off	(quir	ntal)	(Rs	s.)		S								
(cu.m)	Pre- project	Post project	Pre- project	Post project	SC	T	Others	Women	Total	SC	ST	Others	Women	Total

1	2	3		4		5		6	-	7
				Type of	fland	Executing agency		Target	Achiev	vement
District	Project	Name of activity@	(i) Priv ate	(ii) Commu nity	(iii) Others (landless)	(i) UG (ii)SHG (iii) Others (pl. specify)	Estimate d cost (Rs. in lakh)	Expected month & year of completion (mm/yyyy)	Expendi- ture incurred (Rs. in lakh)	Actual month & year of completion (mm/yyyy)
		Tailoring – 10 units	-	-	10 units	SHG's	0.80	3 yrs.		
	-	Carpentry/ Agri- implements/ Basket making etc – 110 nos.			110 units	SHG's Individual	5.50	3 yrs.		
	Lower	Bee keeping			250 units	Do	2.50	3 yrs.		
East	Wah	Backyard poultry			6 units	Do	1.20	3 yrs.		
Khasi	Sohra	Stabilized Mud Block			6 units	SHG's	1.20	3 yrs.		
		Piggery Farming			6 units	SHG's	1.20	3 yrs.		
Hills	IWMP	Vermi-Composting			6 units	SHG's	1.50	3 yrs.		
	III	Kitchen gardening			240 units	Individual	15.00	3 yrs.		
	III	Fruit processing			3 units	SHG's	1.20	3 yrs.		
		Others (Rural godown,			1 units	UG's	2.00	1 yrs.		
		Cableway taxiing			1 units	UG's	3.00	1 yrs.		
		Canes & handicrafts.			7 units	SHG's	1.40	3 yrs.		

(Contd.)

\* from column no. 2, no. of States; from column no. 3, no. of Districts; from column no. 4, total no. of Projects; from column no. 5, activity-wise totals, from column no. 6, type-wise totals, from column no. 7, agency-wise totals, from column no. 8, total estimated cost, from column no. 9, total expenditure incurred, structure-wise no. of completed works, from column no. 10, item-wise totals, for the entire country may be indicated at the end of the table

@The activities given in this column are merely indicative and States are free to choose any other activity suited to the project area.

### 4.2.13 Details of allied / other activities:

					8						
				Outo	comes						
Income (Rs.)				Mandays g	enerated			l	No. of bene	eficiaries	
Pre-project	Post project	SC	S T	Others	Women	Total	SC	ST	Others	Women	Total

# 4.3 Consolidation and withdrawal phase

Details of activities in the CPRs in the project areas:

1	2	3	4	5		6					7				
						Tar	get			A	chievemen	ıt			
Names of the Districts	Names of projects	Name(s) of the villages	CPR particula rs	Activity proposed	Target area under the activity	expenditure	Expected no. of beneficia-	Estimated contri- bution to	Area treated under the	Expenditu re incurred	Actual no. of benefici-		o. of inday	s	WDF collecte
	projects		15		(ha)	(Rs.)	ries	WDF (Rs.)	activity (ha)	(Rs.)	aries	SC	ST	F	d (Rs.)
		Sohkynduh	D/Water		-	0.50									
		Mawskhen	Cable car		-	0.50									
		Rymmai	Do		-	0.50									
		Mawbawein	D/Water		-	0.50									
		Pdang	Do		-	0.50									
		Dewiong	Do		-	0.50									
		Dewsaw	Do		-										

# CHAPTER V

# **PROJECT PHASING & BUDGETING**

# CHAPTER V PROJECT PHASING & BUDGETING

#### ACTION PLAN OF LOWER WAH SOHRA WATERSHED UNDER IWMP - III, TERRITORIAL DIVISION : SHILLONG

Name of District: East Khasi Hills Name of C&RD Block: Laitkroh Khatarshnong. No. of villages – 7 nos. Project Area – 1000 Ha.

SI.	Activities	I <sup>st</sup> Y	ear	II <sup>nd</sup> Yea	ar	III <sup>rd</sup> Ye	ar	IV <sup>th</sup> Yea	r	V <sup>th</sup> V	/ear	То	tal
No	Activities	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
1	2	3	4	5	6	7	8	9	10	11	12	13	14
I	ADMINISTRATIVE COST	0%	0	2%	3	5%	7.5	3%	4.5	0%	0	10%	15
i.	Honorarium of WDT Members @ Rs. 5000/ month – 1 no.	0	0	12 months	0.6	12 months	0.6	12 months	0.6	0	0	4 yrs	1.8
ii.	Hon <sup>rm</sup> of Watershed Volunteers @ Rs. 2500/- month – 2 nos.	0	0	12 months	0.6	12 months	0.6	12 months	0.6	0	0	4 yrs	1.8
iii.	Hon <sup>rm</sup> WCO's @ Rs. 750/ month.	0	0	12 months	0.09	12 months	0.09	12 months	0.09	0	0	4 yrs	0.27
iv.	Hon <sup>rm</sup> WCM @ Rs. 100/members/ month for 25 nos.	0	0	12 months	0.3	12 months	0.3	12 months	0.3	0	0	4 yrs	0.9
v	Hon <sup>rm</sup> Office assistance @ Rs. 3000/- month.	0	0	12 months	0.36	12 months	0.36	12 months	0.36	0	0	4 yrs	1.08
vi	Hon <sup>rm</sup> Chartered Accountant	0	0	-	0.15	-	0.15	-	0.15	0	0	2.9 yrs	0.45
vii	TA/DA of Field Asstt	0	0	6 months	0.3	12 months	0.6	6 months	0.6	0	0	3.3 yrs	1.5
viii	Hiring charges of office building @ 1000	0	0	12 months		12 months	0.12	12 months	0.12	0	0	4 yrs	0.24
ix.	Hiring charges of vehicle	0	0	6 months	0.3	12 months	0.6	-	0.6	0	0	2 yrs	1.5
x	Office expenses, POL, Stationeries, printing of SHG's books, pamphlets, tea, snacks etc, cost of camera.	0	0	-	0.3	-	4.08	-	1.08	0	0	-	5.46
	Total of I:	0%	0	2%	3	5%	7.5	3%	4.5	0%	0	10%	15
П	MONITORING	0.0%	0	0.2%	0.3	0.5%	0.75	0.3%	0.45	0.0%	0	1%	1.5
Ш	EVALUATION	0.0%	0	0.3%	0.45	0.5%	0.75	0.2%	0.3	0.0%	0	1%	1.5

SI.	Activities	I <sup>st</sup> Y	'ear	ll <sup>nd</sup> Ye	ar	III <sup>rd</sup> Y	ear	IV <sup>th</sup> Ye	ar	V <sup>th</sup>	Year	То	tal
No	Activities	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
1	2	3	4	5	6	7	8	9	10	11	12	13	14
Α.	Entry Point Activities:			-	-	-	-	-	-	-	-		
i.	Construction of Rope way	1 unit	4	0	0	0	0	0	0	0	0	1 unit	4
ii.	Construction of Godown	1 unit	2	0	0	0	0	0	0	0	0	1 unit	2
	Sub Total of A:	4%	6	0%	0	0%	0	0%	0	0%	0	4%	6
В.	Institution & Capacity Building												
i.	Awareness Campaign & Capacity building	2 nos	0.3			0	0			0	0	2 no	0.3
ii.	Exposure visits – off. Campus			1 Nos.	0.5	0	0	1 no.	0.5	0	0	2 no	1
iii.	Capacity building of SHG's/ UG's.			5 nos.	1.3	4 nos.	1	3 no.	0.75	0	0	12 nos.	3.05
iv.	Capacity building of WC Members.	4 nos.	0.6	4 nos.	1.2	1no.	0.25	1 no.	0.25	0	0	10 nos.	2.3
٧.	Capacity of WDT/WV	4 nos.	0.6			1 no.	0.25			0	0	5 nos.	0.85
	Sub Total of B:	1%	1.5	2%	3	1%	1.5	1%	1.5	0%	0	5%	7.5
C.	Detailed Project Report:											1%	1.5
i.	Cost of Resources Inventories works	-	0.25	0	0	0	0	0	0	0	0	0	0.25
ii.	Cost of PRA Exercises	-	0.5	0	0	0	0	0	0	0	0	0	0.5
iii.	Cost of Land use Survey works	-	0.25	0	0	0	0	0	0	0	0	0	0.25
iv.	Cost of formulating	-	0.5	0	0	0	0	0	0	0	0	0	0.5
	Sub Total of C:	1%	1.5	0	0		0		0		0	1%	1.5
	Total of IV:	6%	9	2%	3	1%	1.5	1%	1.5		0	10%	15

1	2	3	4	5	6	7	8	9	10	11	12	13	14
V	WATERSHED WORKS PHASE :				-	-	-	-	-	-	-	-	-
Α.	Watershed Development Works	0%	0	7.5%	11.25	35.0%	52.5	8%	11.25	0%	0	50%	75
1	Arable Land Treatment:												
i.	Loose boulder Contour Bunds @ Rs. 7500/ ha for 209.34 ha	0	0	80 ha	6	129.34	9.70			0	0	200 Ha	15.7
iii.	Agro-Horticulture Devt. Rs. 8600/ ha for 200 ha	0	0	173	2.25	200	9.55	200	5.4	0	0	200 ha	17.2
2	Non- Arable Land Treatment:												0
i.	Agro-Forestry Devt. works @ Rs. 10,100/ ha for 100 ha	0	0			100 ha	7.2	100 ha	2.9	0	0	100 ha	10.1
ii	Improvement of existing Degraded Forest @ Rs. 3600/ ha for 100 ha	0	0			100 ha	2.6	100 ha	1	0	0	100 ha	3.6
iii.	Coffee Devt. works for 50 ha @ Rs. 10,000/ ha	0	0			50 ha	4	50 ha	1	0	0	50 ha	5
3	Drainage Line Treatment:												0
i.	Water Harvesting Structures @ 1,50,000 – 80.66 ha	0	0	2 Nos.	3	3	4.5	-	0	0	0	5 Nos.	7.5
ii.	Water Distribution Works – 260 ha	0	0	0		18 nos	12.35	1 no.	0.95	0	0	19 Nos.	13.3
iii.	Footbridges	0	0			2 Nos.	2.6	0	0	0	0	2 Nos.	2.6
	Sub Total of A :	0%	0	7.5%	11.25	35.0%	52.5	7.5%	11.25	0%	0	50.0%	75
В.	Livelihood Activities for landless persons:	0%	0	1%	1.5	3%	4.5	6%	9	0%	0	10%	15
i.	Tailoring @ Rs. 8,000/-	0	0	0	0	5 units	0.4	5 units	0.4	0	0	10 units	0.8
ii.	Carpentry/ Agri- Implements/ Basket Making/Piggery/ Poultry etc @ Rs. 5000/-	0	0	30	1.5	40 units	2	40 units	2	0	0	110 units	5.5
iii.	Hollow Block making/ Stabilized Mud block making Rs. 20,000/-	0	0	0	0	3 units	0.6	3 units	0.6	0	0	6 units	1.2
iv.	Vermi-Composting @ Rs. 25,000/-	0	0	0	0	2 units	0.5	4	1	0	0	6 units	1.5
v.	Kitchen Gardening @ Rs. 2500/-	0	0	0	0	40 units	1	200 units	5	0	0	240 units	6
	Sub Total of B:	0%	0	1%	1.5	3%	4.50	6%	9	0%	0	10.0%	15

C.	Production System and Micro Enterprises (SHG's):	0%	0	1%	1.5	5%	7.5	7%	10.5	0%	0	13%	19.5
i.	Betel nut soaking Tank @ Rs. 1,00,000/-	0	0	1	1	3 units	3	3 units	3	0	0	7 units	7
ii	Fruit Processing unit @ Rs. 40,000/ unit	0	0	0	0	1 unit	0.4	2 unit	0.8	0	0	3 unit	1.2
iii	Rural godown/ cold storage	0	0	0	0	l unit	2	0	0	0	0	1 unit	2
iv	Cableway taxing @ Rs. 3,00,000/ unit	0	0	0	0	0	0	1	3	0	0	1 unit	3
v	Apiculture @ Rs. 1000/ unit	0	0	50 units	0.5	90 units	0.9	110 units	1.1	0	0	250 units	2.5
vi	Piggery @ 20,000/ unit	0	0	0	0	2 units	0.4	4 units	0.8	0	0	6 units	1.2
vii	Poultry @ Rs. 20,000/ unit	0	0	0	0	2 units	0.4	4 units	0.8	0	0	6 units	1.2
viii	Canes & Handicrafts @ Rs. 20,000/ unit	0	0	0	0	2 units	0.4	5 units	1	0	0	7 units	1.4
	Sub Total of C :	0%	0	1.00%	1.5	5.00%	7.5	7.00%	10.5	0.00%	0	13%	19.5
	Total of V:	0	0		14.25		64.5		30.75		0		109.5
VI	Consolidation Phase:	0%	0	0%	0	0%	0	0%	0	5%	7.5	5%	7.5
i.	Repairs, Maintenance of CPR's.	0	0	0	0	0	0	0	0	0	3	-	3
ii.	Improving the sustainability of various Interventions	0	0	0	0	0	0	0	0	0	2	-	2
iii.	Documentation of successful experiences & Preparation of Completion Report	0	0	0	0	0	0	0	0	0	2.5	-	2.5
	Sub Total of VI:	0	0	0	0	0	0	0	0	5%	7.5	-	7.5
	Total of I,II,III,IV,V,VI	6%	9	14%	21	50%	75	25%	37.5	5%	7.5	100%	150

Approved by:

for they commission

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#### VILLAGE WISE ACTION PLAN OF LOWER WAH SOHRA WATERSHED UNDER IWMP – III, TERRITORIAL DIVISION : SHILLONG.

### Name of District: East Khasi Hills Name of C&RD Block: Laitkroh Khatarshnong.

No. of villages – 7 nos. Project Area – 1000 Ha.

Sl.	Activities	Sohkyndu	ih 53%	Rymmai	13.8%	Dewion 12	-	Mawba 11.2		Mawskhe	en 5.2%	Pdang	4.84%	Tota	1
No		Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Ι	WATERSHED WORKS PHASE :													-	-
A.	Arable Land Treatment:													-	-
i.	Loose boulder Contour Bunds @ Rs. 7500/ ha for 200 ha	111 ha	8.325	29 ha	2.175	25 ha	1.875	23 ha	1.725	11 ha	0.825	10.34. ha	0.7755	209.34 ha	15.70
iii.	Agro-Horticulture Devt. Rs. 8600/ ha for 200 ha	106 ha	9.116	28 ha	2.408	24 ha	2.064	22 ha	1.892	10 ha	0.860	10 ha	0.860	200 ha	17.20
В.	Non- Arable Land Treatment:														
i.	Agro-Forestry Devt. works @ Rs. 10,100/ ha for 100 ha	53 ha	5.353	14 ha	1.414	12 ha	1.212	11 ha	1.111	5 ha	0.505	5 ha	0.505	100 ha	10.1
ii	Improvement of existing Degraded Forest @ Rs. 3600/ ha for 100 ha	53 ha	1.908	14 ha	0.504	12 ha	0.432	11 ha	0.396	5 ha	0.180	5 ha	0.180	100 ha	3.6
iii.	Coffee Devt. works for 50 ha @ Rs. 10,000/ ha	26 ha	2.600	7 ha	0.70	6 ha	0.60	5 ha	0.50	3 ha	0.300	3 ha	0.300	50 ha	5.0
С	Drainage Line Treatment:														
i.	Water Harvesting Structures @ 1,50,000 – 80.66 ha	2 nos	3.0	1 no	1.50	-	-	1 no	1.50	-	-	1 no	1.50	5 Nos.	7.50
ii.	Water Distribution Works @ 70,000 – 260 ha	10 nos	7.0	2 nos	1.40	2 nos	1.40	2 nos	1.40	2 no	1.40	1 nos	0.70	19 Nos.	13.30
iii.	Footbridges	-		1 no	1.30	-	-	1 no	1.30	-	-	-	-	2 Nos.	2.60
	Total of I:		37.30		11.40		7.58		9.82		4.07		4.82	50%	75.00

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
II.	Livelihood Activities for landless persons:														
i.	Tailoring @ Rs. 8,000/-	5 units	0.40	1 unit	0.08	1 unit	0.08	1 unit	0.08	1 unit	0.08	1 unit	0.08	10 units	0.80
ii.	Carpentry/ Agri- Implements/ Basket Making etc @ Rs. 5000/-	58 units	2.90	15 units	0.75	13 units	0.65	12 units	0.60	6 units	0.30	6 units	0.30	110 units	5.50
iii.	Hollow Block making/ Stabilized Mud block making Rs. 20,000/-	1 unit	0.20	1 unit	0.20	1 unit	0.20	1 unit	0.20	1 unit	0.20	1 unit	0.20	6 units	1.20
iv.	Vermi-Composting @ Rs. 25,000/-	1 unit	0.25	1 unit	0.25	1 unit	0.25	1 unit	0.25	1 unit	0.25	1 unit	0.25	6 units	1.50
v.	Kitchen Gardening @ Rs. 2500/-	127 units	3.175	33 units	0.825	29 units	0.725	27 units	0.675	12 units	0.30	12 units	0.30	240 units	15.0
	Total of II.:		6.93		2.11		1.91		1.81		1.13		1.13	10 %	15.0
III.	Production System and Micro Enterprises (SHG's):														
i.	Betel nut soaking Tank @ Rs. 1,00,000/-	3 units	3.0	2 units	2.0	-	-	1 unit	1.0	1 units	1.0	-	-	7 units	7.00
ii	Fruit Processing unit @ Rs. 40,000/ unit	1 unit	0.40	1 unit	0.40	1 unit	0.40	-	-	-	-	-	-	3 unit	1.20
iii	Rural godown/ cold storage	1 unit	2.0	-	-	-	-	-	-	-	-	-	-	1 unit	2.00
iv	Cableway taxing @ Rs. 3,00,000/ unit	-	-	-	-	1 unit	3.00	-	-	-	-	-	-	1 unit	3.00
v	Apiculture @ Rs. 1000/ unit	132 units	1.32	34 units	0.34	30 units	0.30	28 units	0.28	13 units	0.13	13 units	0.13	250 units	2.50
vi	Piggery @ 20,000/ unit	1 unit	0.20	1 unit	0.20	1 unit	0.20	1 unit	0.20	1 unit	0.20	1 unit	0.20	6 units	1.20
vii	Poultry @ Rs. 20,000/ unit	1 unit	0.20	1 unit	0.20	1 unit	0.20	1 unit	0.20	1 unit	0.20	1 unit	0.20	6 units	1.20
viii	Canes & Handicrafts @ Rs. 20,000/ unit	2 units	0.40	1 unit	0.20	1 unit	0.20	1 unit	0.20	1 unit	0.20	1 unit	0.20	7 units	1.40
	Total of III:		7.52		3.34		4.30		1.88		1.73		0.73	13 %	19.50
	Grand Total		51.75		16.85		13.79		13.51		6.93		6.68	73 %	109.50

## Details of the types of areas covered under the IWMP Programme:

1	2	3	4	5	6	5	7	8	9			10				11		
S L	Name of State	Name of Distric	Names of	Year of sanct	Pro dura (dd/r yyy	ntion mm/	Area of the	Project cost (Rs. In	Names of Micro watersheds & Code nos. (as	A	Area (ha) c	of the projec	ts			ea details	(ha) projects)	
N O	State	ts	Projects	ion	From	То	projects	lakh)	per DoLR's unique codification)						(iuning	within the	projects)	
										Cultiva Cultiva ted ted Uncultivated rainfed irrigate area d area a) b) Pe				Pvt. Agri. Land	Forest land	Comm unity land	Others (pl. specify)	Total area (ha)
												a) Tempora ry fallow	b) Per manent					
1	Meghalaya	East Khasi Hills	East Khasi Hills – IWMP III	2009 -10	2009- 10	2013 -14	1000 Ha	150 Lakhs	Wah Sohra (Lower Reaches) – 3C1B5g2a	885.8 Ha	Nil	778	46.40	885.8	778	46.4	59.8	1770 Ha

# Fund provision for the IWMP projects from all sources:

1	2	3	;					4						5
	N					Funds	from other s	ources in	n addition to	IWMP f	unds	ſ		
Distri ct	Name of Project s	IWMP	Fund		Convergence funds		PPP		Community		utional	Others (Pl. specify)		Total
		Central Share	State Share	Name of Scheme	Amount (Lakhs)	Name of private sector	Financial contri- bution	Name	Financial contri- bution	Name	Financi al contri- bution	Nam e	Financia l contri- bution	
East Khasi Hills	East Khasi Hills – IWMP III	135 lakhs	15 lakhs	NREGS	28.99	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	178.99

### Details of Project Fund Accounts of Distt. Agency and Watershed Committees:

1	2	3	4	5						6			
				Distt.	Agency's Proj	ect Account	details	Watershed Committee (WC) account details:					
Sl. No.	Names of States	Name of Districts	Names of Projects	Name of the Bank and Branch where project account has been opened	Account Number (to be obtained confiden- tially)	Account type (Savings/ Current/ Others)	Name & Designatio n of authorized persons who operate the account.	Name of Watershed Committee	Name of the Bank and Branch where project account has been opened	Account number (to be obtained confiden- tially	Account type (Savings/ current others)	Name & Designation of authorized persons who operate the account.	
1	Megha laya	East Khasi Hills	East Khasi Hills – IWMP III	State Bank of India, Polo Branch	309841852 05	Saving	Shri G. Kharmujai , DS&WCO	Lower Wah Sohra, Watershed Committee	SBI, Laitryngew	3109408 5021	Saving	Chairman W.C, Secretary W.C, Project Leader / WDT	

## **Details of Convergence of IWMP with other Schemes:**

	1	2	3	4	5	6	7
Sl. No.	District	Names of projects	Names of Departments with Schemes converging with IWMP	Fund made available to IWMP due to convergence (Rs. in lakh)	Name of activity/task/structure undertaken with converged funds (a) Structures (b) livelihoods (c ) Any other (pl. specify) <sup>#</sup>	Reference no. of activity/ task/ structure in DPR <sup>@</sup>	Level at which decision for convergence was taken <sup>\$</sup>
1	East Khasi	East Khasi Hills –	* Community Rural Development Department NREGS	28.99	Construction of footpath	-	Block Level & District
2	Hills	IWMP III	* PHE Department TSC	n.a	Construction of Low cost sanitary unit	-	Level

### Note:

(i) Sohkynduh:	Wages – 11.20;	Labour – 7.46;	Construction of Footpath.
(ii) Mawbawein	Wages – 1.80;	Labour – 1.20;	Construction of Footpath.
(iii) Rymmai-Mawskhen	Wages – 4.40;	Labour – 2.93;	Construction of Footpath.



D. O. No

#### TO WHOM IT MAY CONCERN

This is to certify that centrally sponsored schemes like NREGS, BRGF, RKVY, NRHS and Total sanitation campaign etc can be converged with Watershed Projects/Programmes within East Khasi Hills District.

Duted Shillong, The 22<sup>nd</sup> September,2009.

11/1

(J.Lyngdoh, ) Deputy Commissioner, East Khasi Hills District, Shillong, Public-Private Partnership in the IWMP projects: NIL

1	2	3		4			5	6	7	8	9
		Name of	Туре	Type of agreement signed		Financial contribution					
District	Name of project	Private Sector Partner Agency	a)MoU	b)Contract	<ul><li>c) Any other</li><li>(pl. specify)</li></ul>	IWMP	Private sector	Partnership Interventions	Expected Outcomes	Actual Outcomes	Comments

\* from Column no. 2, total no. of States implementing the programme, from Column no. 3, total no. of Districts; from Column no. 4, total no. of projects under PPP; from Column no. 5, total no. of private companies/ agencies, from column no. 7, total amounts may be mentioned at the end of the table for the entire country.

# CHAPTER VI CAPACITY BUILDING

# CHAPTER VI CAPACITY BUILDING

Capacity Building is a process to systematically upgrade the skill of individuals or groups for achieving a specific target. Capacity building in the project has been planned for all the stake holders involved i.e. State Level, District Level, Project Level and Village Level. The relevant details pertaining to Capacity Building has been shown below.

1	2	3	4	5	6	7	8			9		
S. No	State	Name of the Training Institute	Full Address with contact no., website & e-mail	Name & Designati on of the Head of Institute	Type of Institute <sup>#</sup>	Area(s) of specialization <sup>\$</sup>	Accre- ditation details	Refer- ence Year	No. of trainings assigned	Performan No. of trainees to be trained	ce No. of trainings conducted	No. of trainees trained
1		NIRD (NER)	Guwahati	Director	Central Govt.	Remote Sensing, Rural Devt.	NA	-				
2		SIRD	Nongsder	Director	State Govt.	Capacity Building	NA	-				
3	alaya	RRTC	Umran	Director	Don-Bosco	Agri-Horti, Animal Husbandry, Entrepreneurship	NA					
4	Meghalaya	ICAR	Umiam	Director	Central Govt.	Do	NA					
5	1	VTC	Kyrdem Kulai	Director	State Govt.	Animal Husbandry	NA					
6		Fruit Garden	Shillong	Director	State Govt.	Agri-Horti, Fruit Processing	NA					

#### Table 6.1: List of approved Training Institutes for Capacity Building:

• From Column no. 2, total no. of States implementing the programme, from Column no. 3, no. of training institutes, from column No. 9, total no. of category-wise trainings and trainees may be given at the end of the table for the entire country

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

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

<sup>@</sup> The training institutes must fulfill the conditions mentioned in the operations guidelines.

- (i) Technical experts in fields required by IWMP
- (ii) Past experiences
- (iii) Annual Turnover
- (iv) Receives funds either from the Central or State Government
- (v) Publications
- (vi) Not blacklisted by any Govt. organizations
- (vii) Audited accounts
- (viii) Organizational structure

### Table 6.2: Capacity Building activities for the year <u>2009 – 10</u> as on <u>31/03/2010</u> (dd/mm/yyyy)\*

1	2	3	4	5		6		7	
Project	Total no.	No. of persons	No. of persons to be trained	No. of persons trained during		f funding for Jining	Funds utilized (Lakhs)		
Stakeholders	of persons	trained so far	during current financial year	current financial year	a) DoLR	b) Any other (Pl. specify)	a) DoLR	b) Any other (Pl. specify)	
SLNA			400 Nos.	-					
DRDA/ZP cell			25 Nos.	-					
PIAs			25 Nos.	-					
WDTs			120 Nos.	-					
UGs			20 Nos.	-	1.50	-	1.50	-	
SHGs			30 Nos.	-					
WCs			16 Nos.	-					
GPs			15 Nos.	-					
Community			250 Nos.	-	1				
Others									
Pl. specify)									

	1	2	3	4	5
	Activity	Executing agency	Estimated expenditure (Rs.)	Expenditure incurred (Rs.)	Outcome (may quantity, wherever possible)
1.	Awareness	S&WC (T) Division	0.50	0.50	
2.	PRA Exercises	S&WC (T) Division	0.50	0.50	
3.	Exposure Visits	S&WC (T) Division	0.30	0.30	
4.	Capacity Building	S&WC (T) Division	2.20	2.20	

 Table 6.3: Information, Education & Communication (IEC) activities for the year 09-10 as on 31/03/10 (dd/mm/yyy)\*

CHAPTER VII EXPECTED OUTCOME

# CHAPTER VII EXPECTED OUTCOME

## Table 7.1 Employment related outcomes:

				1 Wage compleximent										2		
Sl	Name of					Wage em	ploym	ent					Se	lf employ	ment	
No	Village	No. of mandays						No. of beneficiaries					No.	of benefi	ciaries	
		SC	ST	Others	Women	Total	SC	ST	Others	Women	Total	SC	ST	Others	Women	Total
1.	Rymmai		100 %	7500	7000	14500		100 %	91	71	162		100 %	8	4	12
2.	Mawskhen		100 %	7800	6200	14000		100 %	82	76	158		100 %	6	2	8
3.	Mawbaweiñ		100 %	7000	6500	13500		100 %	80	58	138		100 %	5	3	8
4.	Pdang		100 %	4800	4700	9500		100 %	27	34	61		100 %	4	1	5
5.	Dewiong		100 %	5500	5000	10500		100 %	55	45	100		100 %	5	2	7
6.	Dewsaw		100 %	3300	3200	6500		100 %	12	16	28		100 %	4	-	4
7.	Sohkynduh		100 %	9300	8700	18000		100 %	254	270	524		100 %	15	9	24
						86500					1171					68

#### Table 7.2 Migration Details:

1	2	3	4	5	6	7	8	9	1	0
Names of the Districts	Names of Projects	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)	identify majo	d migration or activities of esponsible (b) Livelihoods
				N	Ι	L				

\* From column no. 2, total number of States; from column no. 3, total no. of Districts; from column no. 4, total no. of projects; from column no. 5, total no. of villages; from column no. 6, total no. of persons migrating; from column no. 7, average no. of days for annual migration; from column no. 9, average distance of migration from the village and form column no. 11, average income from occupation during migration, for the entire country may be given at the end of the Table.

Table 7.3 Economic benefits accrued to women:

1	1	2	2		3	4
Wa	iges	Trai	ning	Liv	velihoods	
Woman days	Amount (Rs. in lakh)	No. of women participants	Amount (Rs. in lakh)	No. of women beneficiaries	Value of assistance provided (Rs. in lakh)	Total (Rs. in lakh)
41300	41.30	350	0.60	60 nos.	6.0	6.60

\* from Column no. 2, total no. of States implementing the programme, from Column no. 3 to 6, category-wise totals, may be mentioned at the end of the table for the entire country.

#### Table 7.4 Details of rights conferred in the CPRs of the project areas:

1	2	3	4	5	6			7		8
Names of the Districts	Names of the	Names of the	Particular of CPR	Nature of	Period of	Be		y details (1 milies)	no. of	User Charges
Districts	projects	villages	OUCPK	right	right	SC	St	Others	Total	( <b>Rs.</b> )
		Sohkynduh	<b>Community Forest</b>	Fw	6 months	-	524	-	524	Nil
East Khasi Hills	EKH-IWMP-III	Mawkhen	Community Forest	Fw	6 months	-	50	-	50	Nil
District		Rymmai	Community Forest	Fw	6 months	-	149	-	149	Nil
		Mawbaweiñ	Community Forest	Fw	6 months	-	140	-	140	Nil
		Pdang	Community Forest	Fw	6 months	-	62	-	62	Nil
		Dewiong-Dewsaw	Community Forest	Fw	6 months	-	131	-	131	Nil

\* From column no. 2, no. of States; from column no. 3, no. of Districts; from column no. 4, no. of projects; from column no. 5, no. of villages; from column nos. 9 & 10, particular-wise totals for the entire country may be given at the end of the table.
@ In column no. 6, the categories given in table no. M(SP) 10, column 5 may be filled as required.

# In column no. 7, only the letter assigned to each type, as given below, needs to be typed.

F	for right to	fishing [culture, harvest and sale]
Fw	for right to	collect firewood for domestic purposes
G	for right to	grazing for cattle and
MFP	for right to	collect and sell minor forest produces
Р	for right to	passage across the CPR
Rd	for right to	construct a road for access to individual property
S/M	for right to	collect and sell sand and minerals
Т	for right to	collect timber for construction of house
Wd	for right to	collect/ use water for drinking
Wi	for right to	use water for irrigation
0	for any right o	ther than indicated above (please specify)

#### Table 7.5 Water related outcomes:

Table 7.5.1 Details of average ground water table depth in the project areas of the Country: State-wise * (in	metres)

1	2	3	4	5	6	7	8
Names of Districts	Names of Projects	Sources	Pre-Project level	Mid-term project level	Post-Project level	Increase/decrease (Col. 8 – Col. 6)	Remarks
		Open wells	-	-	-	-	-
East Khasi Hills District	EKH-IWMP III	Bore wells	-	-	-	-	-
		Others (specify) Springs	very poor poor	poor	Good	Increased	-

\* From column no. 2, total number of States; from column no. 3, total no. of Districts; from column no. 4, total no. of projects, from column nos. 6 to 9, the average measurements, category-wise, for the entire country may be given at the end of the table. The data must be based on the average of the Ground Water Table collected by PIA with the help of concerned technical expert in the same sample of 10 % of selected wells and bore wells in the villages in the watershed project area during pre-project, mid-term and post-project periods.

#### Table 7.5.2 Status of Drinking water:

1	2		3			4		5
District	Nome of the music of		oility of drinki of monyhs in a	0	Qualit	ty of drinking	, water	Commonto
District	Name of the project	Pre-project	Post- project	Change in availability	Pre- project	Post- project	Change in quality	Comments
East Khasi Hills District	EKH-IWMP III	Insufficient	Sufficient	10 – 12 months	Moderate	Improved	Improved	-

\* From column no. 2, total number of States implementing the programme, from column no. 3, total no. of Districts; from column no. 4, category-wise no. of projects, from column no. 5, average no. of months may be given at the end of the table for the entire country.

#### Table 7.5.3 Water Use efficiency:

1	2	3		4		
				Water savings in	cu.m.	
District	Name of the project	Name of major crop	through water saving devices <sup>\$</sup>	through water conserving agronomic practices <sup>#</sup>	Any other (pl specify)	Total
East Khasi Hills District	EKH-IWMP III	Betel leaf	PVC pipes	Vermi-compost, mulching	-	-
		Black Pepper				

\* From column no. 2, total number of States implementing the programme, from column no. 3, total no. of Districts; from column no. 4, total no. of projects, from column no. 6, practice-wise totals may be mentioned at the end of the table for the entire country.

<sup>\$</sup> Sprinkler, Drip, PVC pipe, etc.

<sup>#</sup> Vermi-compost, organic manuring, Mulching, Check basin, Alternate furrow, Ridges & furrow & other scientific practices.

### Table 7.6: Vegetation/ crop related outcomes:

Table 7.6.1 Details of Karif crop area and yield in the project areas:

1	2	3				4						5						6		
					Pre-j	orojec	t				Mi	d-term	l				Р	ost-pro	oject	
Names of the Districts	Name of Projects	Name of crops	Ar (h		Aver Yie (Qtl) ha	per	Proc	'otal luction Qtl)	Ar (h		Yi per	erage ield r ha Qtl)	Prod	otal uction (tl)	Ar (h		Yie per	Average Yield Total per ha (Qtl)		roduction Qtl)
			Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.
		Potato	-	400	-	20	-	8000	100	400	22	22	2200	8800	200	400	25	25	5000	10000
East	EKH-	Millet	-	125	-	10	-	1250	50	125	12	12	600	1500	125	125	15	15	1875	1875
Khasi	IWMP	Soyabean	-	100	-	15	-	1500	100	100	17	17	1700	1700	200	100	18	18	3600	1800
Hills	III	Yam	-	250	-	18	-	4500	25	250	19	19	475	4750	50	250	20	20	1000	5000
District		Ginger	-	250	-	20	-	5000	25	250	21	21	525	5250	50	250	22	22	1100	5500
		Tapioca	-	250	-	20	-	5000	25	250	25	25	625	6250	50	250	30	30	1500	7500
		Betel nut	-	350	-	15	-	5250	25	350	17	17	425	5950	50	350	20	20	1000	7000
		Betel leaf	-	350	-	25	-	8750	25	350	27	27	675	9450	50	350	35	35	1750	12250
		Black Pepper	-	50	-	6	-	250	50	50	60	60	300	300	50	50	75	75	1125	375
		Oranges	-	200	-	60	-	12000	100	200	65	65	6500	13000	200	200	75	75	15000	15000

\* From column no. 2, total number of States; from column no. 3, total no. of Districts; from column no. 4, total no. of projects, from column no. 5, total no. of crops; from column no. 6 to 8, the totals for the area, average yield per ha and total production, category-wise, for the entire country may be given at the end of the Table.

Irri. - Irrigated Rf - Rainfed

1	2	3	4	5			6						,	7					8	8		
							Pre-pi	roject					Mid	term					Post-p	orojec	t	
Sl No.	Names of States	Names of the Districts	Name of Projects	Name of crops	Ar (h		Yi	rage eld ) per a.	To Proc 0 (Q	n		rea a)	Aver Yie per (Q	eld ha	To Produ (Q	iction	Ar (h		Aver Yie per (Qt	eld ha	To Produ (Q	iction
					Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.
	Meghalaya	East Khasi	EKH- IWMP	Betel leaf	-	-	-	-	-	-	120	-	28	-	3360	-	150	-	30	-	4500	-
		Hills District	III	Black Pepper	-	-	-	-	-	-	60	-	65	-	340	-	100	-	8	-	800	-
			Total for the District																			

Table 7.6.2 Details of Rabi crop area and yield in the project areas:

\* From column no. 2, total number of States; from column no. 3, total no. of Districts; from column no. 4, total no. of projects, from column no. 5, total no. of crops; from column no. 6 to 8, the totals for the area, average yield per ha and total production, category-wise, for the entire country may be given at the end of the Table.

Irri. – Irrigated Rf – Rainfed

Table 7.6.3 Details of Zaid crop area and yield in the project areas of the Country: State-wise:

1	2	3	4	5			6						7	1					8	6			
							Pre-pi	roject					Mid-	term					Post-p	rojec	t		
Sl No.	Names of States	Names of the Districts	Name of Projects	Name of crops		rea a)	Yi	rage eld ) per a.	To Proc Q	lucti n		rea 1a)	Aver Yie per (Q	eld ha	Tot Produ n (Qt	ıctio	Are (ha		Aver Yie per (Q	eld ha	To Produ (Q	iction	
					Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	
	Meghalaya	East Khasi	EKH- IWMP	Betel leaf	-	-	-	-	-	-	60 Ha	-	27	-	1620	-	120	-	29	-	3480	-	
		Hills	III																				
		District																					
			Total																				
			for the																				
			District																				

\* From column no. 2, total number of States; from column no. 3, total no. of Districts; from column no. 4, total no. of projects, from column no. 5, total no. of crops; from column no. 6 to 8, the totals for the area, average yield per ha and total production, category-wise, for the entire country may be given at the end of the Table.

Irri. – Irrigated Rf – Rainfed

Table 7.6.4 Increase/ Decrease in area under fodder:

1	2	3		4			5	
			Existing	g area under fod	lder (ha)		Achievement (ha)	
District	Name of project	Duration of Project	Source/Name of report	Year of reference	Area already under fodder	Area under fodder proposed to be covered through IWMP	Area under fodder actually covered through IWMP	Change in area under fodder
East Khasi Hills District	EKH-IWMP III	5 yrs	NA	NA	NA	nil	nil	nil

\* From column no. 2, total number of States implementing the programme, from column no. 3, total no. of Districts; from column no. 4, total no. of projects, from column nos. 6 & 7, total area in ha may be given at the end of the table for the entire country.

### Table 7.6.5 Increase/ Decrease in Forest/vegetation cover:

1	2	3		4			5	
			Exist	ing area tree co	over (ha)		Achievement (ha)	
District	Name of project	Duration of Project	Source/Name of report	Year of reference	Area already under forest/vegetative cover	Forest/vegetative cover area proposed to be covered under IWMP	Forest/vegetative cover area actually covered under IWMP	Change in forest/vegetative cover area
East Khasi Hills District	EKH-IWMP III	5 yrs	Statistical Report, Meghalaya	2006 - 07	255 Ha	150 Ha	150 Ha	150 Ha

\* From column no. 2, total number of States implementing the programme, from column no. 3, total no. of Districts; from column no. 4, total no. of projects, from column nos. 6 & 7, total area in ha may be given at the end of the table for the entire country.

#### Table 7.6.6 Increase/ Decrease in area under horticulture:

1	2	3		4			5	
			Existing ar	ea under hortic	ulture (ha)		Achievement (ha)	
District	Name of project	Duration of Project	Source/Name of report	Year of reference	Area already under horticulture	Area under horticulture proposed to be covered through IWMP	Area under horticulture actually covered through IWMP	Change in area under horticulture
East Khasi Hills District	EKH-IWMP III	5 yrs				200 Ha	200 Ha	200 Ha

\* From column no. 2, total number of States implementing the programme, from column no. 3, total no. of Districts; from column no. 4, total no. of projects, from column nos. 6 & 7, total area in ha may be given at the end of the table for the entire country.

#### Table 7.6.7 Increase/ Decrease in area under fuel-wood:

1	2	3		4			5	
			Existing a	area under fo	odder (ha)	A	chievement (ha)	
District	Name of project	Duration of Project	Source/Name of report	Year of reference	Area already under fuel- wood	Area under fuel- wood proposed to be covered under IWMP	Area under fuel- wood actually covered under IWMP	Change in area under fuel-wood
East Khasi Hills District	EKH-IWMP III	5 yrs				100 Ha	100 Ha	100 Ha

\* From column no. 2, total number of States implementing the programme, from column no. 3, total no. of Districts; from column no. 4, total no. of projects, from column nos. 6 & 7, total area in ha may be given at the end of the table for the entire country.

### Table 7.7 Livelihood related outcomes:

1	2	3		4			5			6		7
Names of the	Name of	Two of Animal		Pre-proj	ect		Mid-ter	·m	]	Post-proj	ject	Remarks
Districts	Projects	Type of Animal	No.	Yield	Income	No.	Yield	Income	No.	Yield	Income	Kemarks
		Milch- animals	nil	nil	nil	nil	nil	nil	nil	nil	nil	
East Khasi	EKH-	Piggery	55	-	3.3	125	-	8.75	250	-	20.00	
Hills District	IWMP III	Poultry	1100	-	3.85	1500	-	5.25	2500	-	10.00	
		Apiculture in unit	100	-	0.40	300	-	2.40	1000	-	10.00	
	Total for all projects		1255	-	7.55	1925	-	16.40	3750	-	40.00	
Total for all Districts												

Table 7.7.1 Details of livestock in the project areas (for fluids please mention in litres, for solids please mention in kgs. and income in Rs.):

\* From column no. 2, total number of States; from column no. 3, total no. of Districts; from column no. 4, total no. of projects, from column nos. 5 to 8, the total nos. of animals and the average yield and incomes, category-wise, for the entire country may be given at the end of the Table.

1	2	3	4			5		6			7					8		
Distric	Proj	Name of	Fund required	Sou	irces of f	unding (F	Rs.)	Actual Expenditur	No	. of be	neficiar	ies traiı	ned	No.	of bei	neficia activ	ries takiı ity	ng up
t	ect	activity	for the activity (Rs.)	Project Fund	Benefi -ciary	Others (pl. specify)	Total	e incurred on activity (Rs.)	SC	ST	Othe rs	Wome n	Tot al	SC	ST	Oth ers	Wome n	Total
		Tailoring	10000/-	8000/-	2000/-	-	10000/-	10000/-	-	10	-	10	10	-	10	-	10	10
East Khasi	EK H-	Basket - making	8000/-	5000/-	3000/-	-	8000/-	8000/-	-	110	50	60	11 0	-	110	50	60	110
Hills District	IW MP III	Stabilized Mud - making	35000/-	20000/-	15000/-	-	35000/-	35000/-	-	6	6	-	6	-	6	6	-	6
		Vermi - compos - ting	30000/-	25000/-	5000/-	-	30000/-	30000/-	-	6	-	6	6	-	6	-	6	6
		Kitchen - gardening	5000/-	2500/-	2500/-	-	5000/-	5000/-	-	240	100	140	24 0	-	240	100	140	240

Table 7.7.2 Details of other livelihoods created for landless people:

(Contd.)

\* From column no. 2, total number of States; from column no. 3, total no. of Districts; from column no. 4, total no. of projects, from column no. 5, total no. of activities; from column no. 6, total funds required for the activity, from column no. 7 to 12, category-wise totals, from column no. 13, category-wise totals, for the entire country may be given at the end of the Table.

Table 7.7.3 Details of other livelihoods created for landless people:

	9	10		-	11		12
No of nors	ons employed			Impact of livelih	noods programn	ne	
-	in the activity	Annual increase in income due to	0	ration eneficiaries)	-	of backward- linkages	Any other information
Total	Grand Total (8+9)	activity (Rs.)	Pre-project	Post-project	Pre-project	Post-project	(pl. Specify)
(i) 5	13	30,000	-	-	-	25	-
(ii) 50	160	50,000	-	-	-	-	-
(iii) 10	16	45,000	-	-	-	-	-
(iv) 10	16	25,000	-	-	-	-	-
(v) 60	300	20,000	-	-	-	-	-

Table 7.7.4 Details of other livelihoods created for farmers:

1	2	3	4		4	5		6			7				8	
			Fund required	Sour		nding (Rs khs	.) in	Actual Expenditure	No.	of farı	mers t	rained	No		rmers activit	taking y
District	Project	Name of activity	for the activity (Rs.) in lakhs	Project Fund	Benefi -ciary	Others (pl. specify)	Total	incurred on activity (Rs.)	SF	MF	LF	Total	SF	MF	LF	Total
East	EKH-	i) Betelnut soaking	1.50	1.0	0.50	-	1.50	1.50	-	-	-	7	-	-	-	7
Khasi Hills	IWMP III	ii) Fruit processing	1.0	0.8	0.20	-	1.00	1.00	-	-	-	3	-	-	-	3
District		iii) Rural Godown	2.5	2.0	0.50	-	2.50	2.50	-	-	-	15	-	-	-	15
		iv) Ropeway	4.0	3.0	1.00	-	4.00	4.00	-	-	-	15	-	-	-	15

\* From column no. 2, total number of States; from column no. 3, total no. of Districts; from column no. 4, total no. of projects, from column no. 5, total no. of activities; from column no. 6, total funds required for the activity, from column no. 7 to 12, category-wise totals, from column no. 13, category-wise totals, for the entire country may be given at the end of the Table.

	9	10		-	11		12
No of pors	ons employed			Impact of livelih	loods programn	ne	
-	in the activity	Annual increase in income due to	0	ration eneficiaries)	-	of backward- linkages	Any other information (pl. Specify)
Total	Grand Total (8+9)	activity (Rs.)	Pre-project	Post-project	Pre-project	Post-project	(pr. specny)
(i) 203	210	50,000	-	-	-	200	-
(ii) 147	150	40,000	-	-	-	-	-
(iii) 200	215	25,000	_	-	-	-	-
(iv) 200	215	60,000	-	-	-	-	-

Table 7.7.5 Details of other livelihoods created for farmers * (contd.)
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#### **Table 7.8 Marketing related outcomes:**

#### **Backward-Forward linkages \***

1	2	3	4	5	6
District	Project	Type of Marketing Facility	Pre-project (no.)	During the project (no.)	Post- project (no.)
		(A) Backward linkages			
East Khasi	EKH-	(i) Seed certification	-	-	-
Hills District	IWMP III	(ii) Seed supply system	-	-	-
		(iii) Fertilizer supply system	-	-	-
		(iv) Pesticide supply system	-	-	-
		(v) Credit institutions	-	4	10
		(vi) Water supply	-	-	2
		(vii) Extension services	-	20	30
		(viii) Nurseries	-	-	1 no.
		(ix) Tools/machinery suppliers	-	2	2
		(x) Price Support system	-	-	-
		(xi) Labour	-	4000	6000
		(xii) Any other (please specify)	-	-	-
		(A) Forward linkages		-	-
		(i) Harvesting/threshing machinery	-	-	-
		(ii) Storage (including cold storage)	-	1 no.	1 no.
		(iii) Road network	-	-	-
		(iv) Transport facilities	-	2 nos.	2 nos.
		(v) Markets / Mandis	-	1 no.	1 no.
		(vi) Agro and other Industries	-	120 nos.	150 nos.
		(vii) Milk and other collection centres	-	-	-
		(viii) Labour	-	6000	8000
		(ix) Any other (please specify)	-	-	-

\* from column no. 2, total no. of States implementing the programme, from column no. 3, total no. of Districts; from column no. 4, total no. of projects; from column no. 6, 7 & 8, category-wise totals may be given at the end of the table for the entire country.

#### Table 7.9 Abstract of outcomes:

1	2	3	4	5	6	7
Sl. No.	State	Item	Unit	Pre-project Status	Post- project Status	Remarks
		Status of water table		Very poor - poor	Good	
		Ground water structures repaired/ rejuvenated		-	6 nos.	
		Quality of drinking water		Moderate potable	Improved	
		Availability of drinking water		Insufficient	Sufficient	
		Increase in irrigation potential		-	18 nos.	
		Change in cropping/ land use pattern		-	-	
		Area under agricultural crop				
		i Area under single crop		-	-	
		ii Area under double crop		400 ha	600 ha	
		iii Area under multiple crop		250 ha	400 ha	
		Net increase in crop production area				
		Increase in area under vegetation		-	150 ha	
		Increase in area under horticulture		-	200 ha	
		Increase in area under fuel & fodder		-	100 ha	
		Increase in milk production		-	-	
		No. of SHGs		2 nos.	10 nos.	
		Increase in no. of livelihoods		-	12 nos.	
		Increase in income		-	45,000	
		Migration		-	-	
		No. of school going children		120 nos.	350 nos.	
		SHG Federations formed		-	-	
		Credit linkage with banks		-	15 nos.	
		Resource use agreements		-	7 nos.	
		WDF collection & management		-	1 no.	
		Summary of lessons learnt	May be	e attached as a separat	e file	

1	2	3	4	5	6	7	8	9	10
District	Name of project	Name of WC	Name of structure/ activity	Estimated cost (Rs.)	Expected quantifiable benefits (Rs.)	Expenditure incurred (Rs.)	Actual quantifiable benefit (Rs.)	Benefit: Cost ratio <sup>#</sup>	IRR
East Khasi Hills District	EKH- IWMP III	Lower Wah Sohra	As per Treatment Plan	117.0 lakhs	175.50 lakhs	117.0 lakhs	146.25 lakhs	1.25	1.4

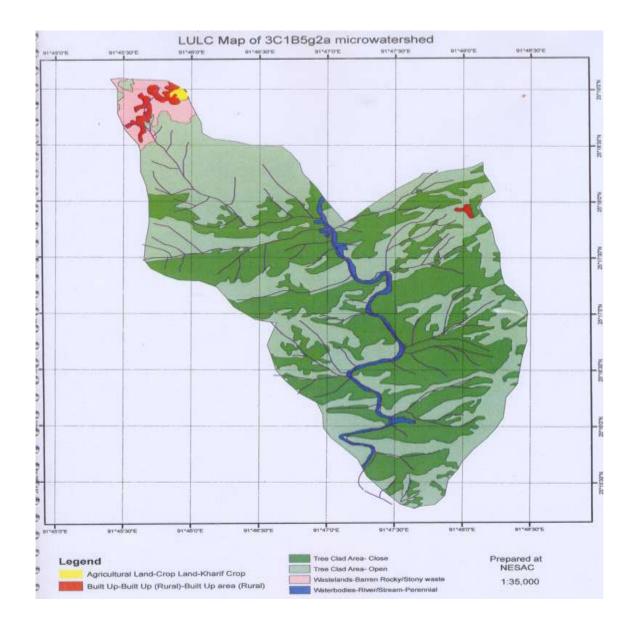
Table 7.10 Cost effectiveness of structures/ activities\*

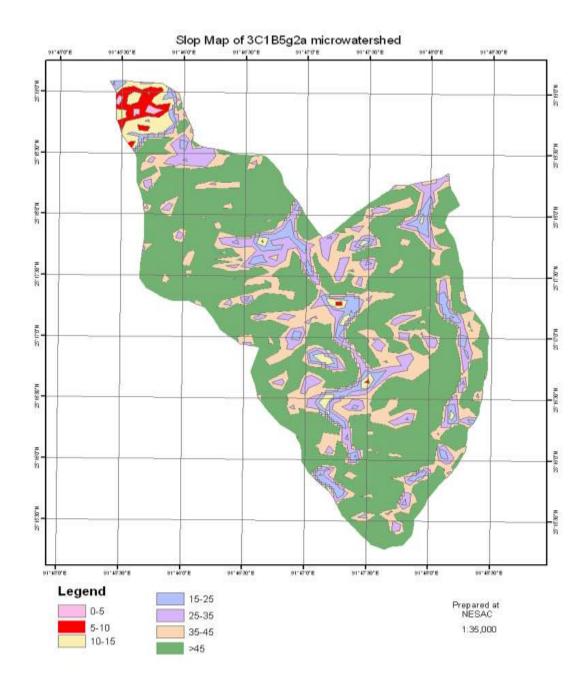
\* from column no. 2, total no. of States implementing the programme, from column no. 3, total no. of Districts; from Column no. 4, no. of projects, from column no. 5, no. of WCs, from column no. 6, no. of structures/ activities, from column no. 7 to 10, category-wise# totals, may be mentioned at the end of the table for the entire country.

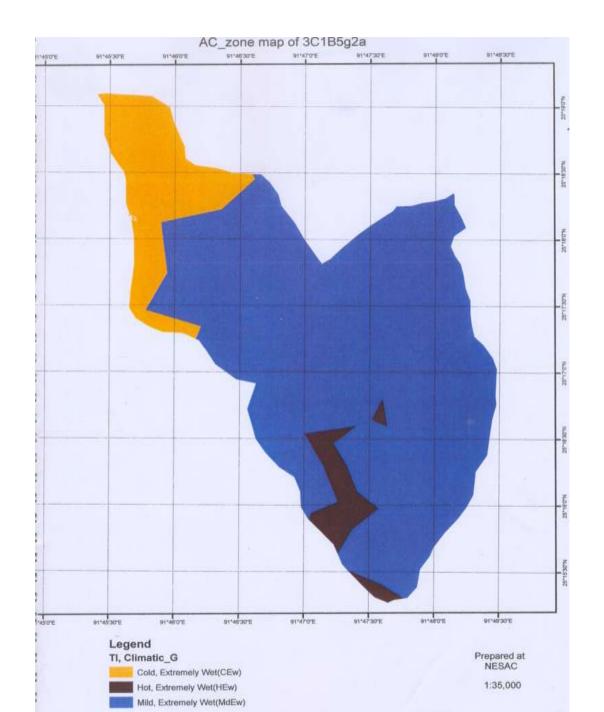
<sup>#</sup> B:C ratio more than 1 – cost effective

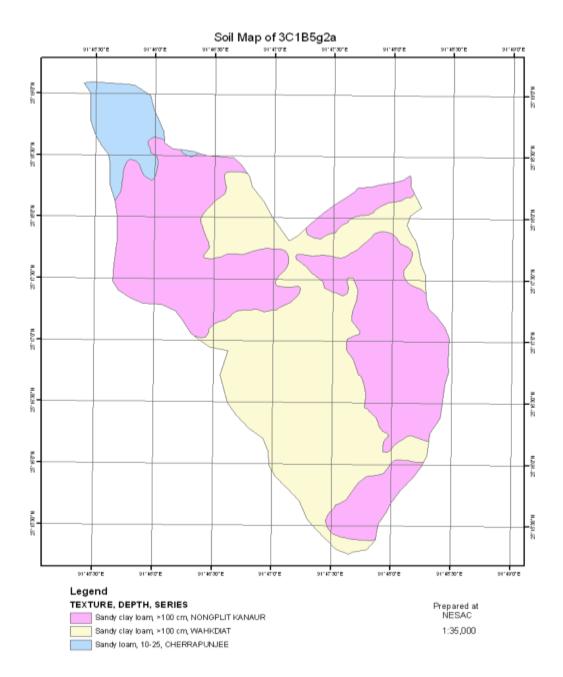
less than 1 – Not cost effective

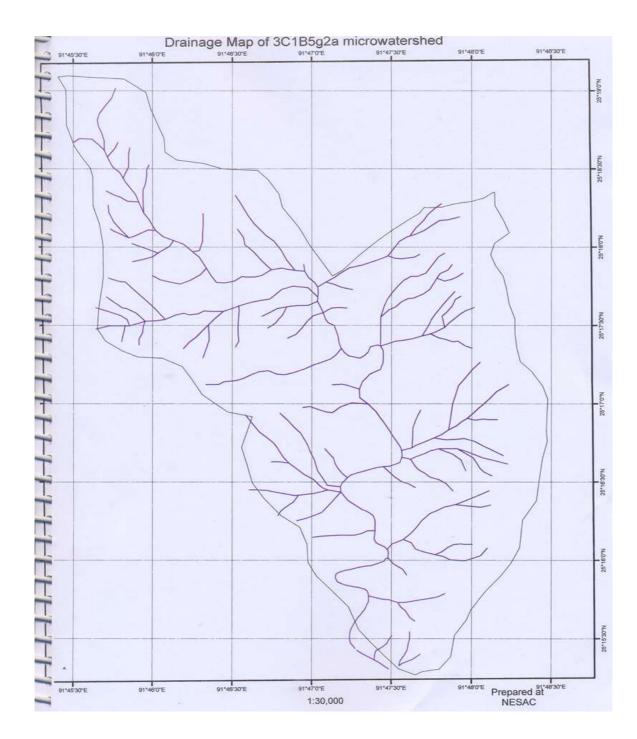
ANNEXURE I MAPS

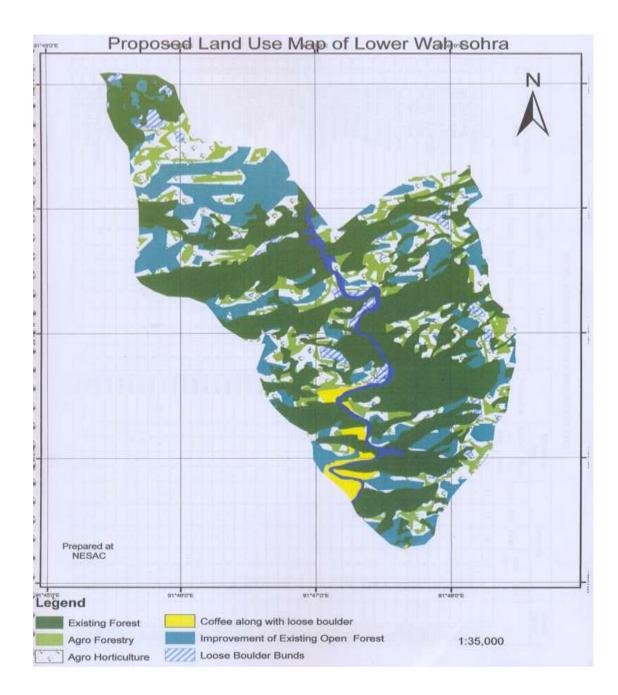


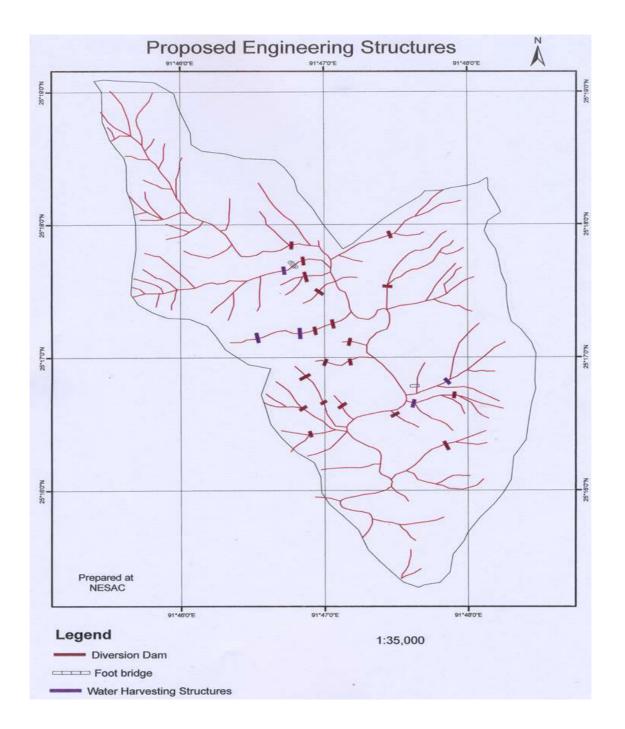












## **ANNEXURE II**

### SOCIO-ECONOMIC SURVEY DETAILS

#### SOCIO – ECONOMIC DATA OF SOHKYNDUH VILLAGE

CI			Populatio	n		Literacy		Question	Agricultu	re Area			Livesto	ck		Annual Income
Sl. No.	Name of the Head of the Family	Mal e	Femal e	Total	Literate	Illiterat e	Tota l	Occupatio n	Settled (in acre)	Jhum (in acre)	Co w	Pig	Goa t	Poul try	Hor se	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Smt. Violet Khonglam	4	3	7	4	3	7	Farmer	2	1	-	-	-	15	-	18,000
2	Smt. Sied Ksing	0	3	3	0	3	3	Farmer	1⁄2	1⁄2	-	-	-	0	-	15,000
3	Smt. Trait Dkhar	2	4	6	2	4	6	Farmer	1⁄2	1⁄2	-	-	-	0	-	16,000
4	Shri Morning Khonglam	2	4	6	3	3	6	Farmer	-	-	-	-	-	0	-	18,000
5	Shri Starwell Khonglam	1	0	1	1	0	1	Farmer	1	1⁄2	-	-	-	0	-	12,000
6	Smt. Tuk Dkhar	4	3	7	2	5	7	Farmer	3	2	-	-	-	8	-	21,500
7	Shri Shroi Tham	2	3	5	4	1	5	Farmer	4	2	-	-	-	15	-	19,000
8	Shri Kpham Pohnang	2	1	3	1	2	3	Farmer	1	1	-	-	-	4	-	16,500
9	Shri Ping Khongsdier	5	2	7	3	4	7	Farmer	1 1/2	1	-	-	-	6	-	21,000
10	Shri local Khongsit	3	3	6	2	4	6	Farmer	1 1/2	1	-	-	-	2	-	18,500
11	Smt Bisi Khongsdir	4	5	9	4	5	9	Farmer	5	3	-	-	-	10	-	26,000
12	Shri On Shabong	1	0	1	1	0	1	Farmer	2	1	-	-	-	0	-	14,000
13	Shri Kroi Shrieh	2	1	3	1	2	3	Farmer	1 1/2	1 1/2	-	-	-	8	-	17,500
14	Shri Stai Pararian	4	1	5	0	5	5	Farmer	2	1	-	-	-	4	-	18,000
15	Smt. Similian Khongsdier	3	3	6	2	4	6	Farmer	2	1	-	-	-	2	-	19,500
16	Smt. Civil Khongsdier	2	2	4	0	4	4	Farmer	1/2	1/2	-	-	-	4	-	12,000
17	Thomal Dkhar	3	2	5	2	3	5	Farmer	2 1/2	1 1/2	-	-	-	6	-	21,500
18	Shaina Dkhar	0	4	4	1	3	4	Farmer	2	1 1/2	-	-	-	10	-	15,500
19	Brilian Khongsdir	1	1	2	2	0	2	Farmer	5	2	-	-	-	6	-	10,000
20	Rita Dkahr	4	2	6	3	36		Farmer	2	1	-	-	-	4	-	19,000
21	Dondur Dkhar	0	1	1	0	1	1	Farmer	1⁄2	1⁄2	-	-	-	2	-	5,000
22	Dhiat Khongshei	1	4	5	4	1	5	Farmer	2	1	-	-	-	5	-	18,500
23	Merial Shrieh	2	4	6	3	3	6	Farmer	2	1⁄2	-	-	-	3	-	19,000
24	Medin Pararian	3	3	6	2	4	6	Farmer	3	1	-	-	-	4	-	18,000
25	Krui Shrieh	2	2	4	1	3	4	Farmer	2	1	-	-	-	5	-	15,000
26	Mening Khonglam	3	5	8	3	5	8	Farmer	6	2	-	-	-	4	-	20,000
27	Balansi Khongsdier	4	3	7	3	4	7	Farmer	2	1	-	-	-	10	-	19,500
28	Kwian Dkhar	3	3	6	1	5	6	Farmer	2	1	-	-	-	5	-	19,000
29	Norai Dkhar	1	1	2	0	2	2	Farmer	2	1/2	-	-	-	4	-	12,000
30	Mythian Khongshei	5	5	10	1	9	10	Farmer	2	1	-	-	-	5	-	10,000
31	Smt. Almora Shrieh	2	2	4	1	3	4	Farmer	3	1 1/2	-	-	-	8	-	16,000
32	Smt. Sianti Mawpat	5	3	8	0	8	8	Farmer	1 1/2	1	-	-	-	11	-	24,000
33	Smt. Drimlet Khonglam	4	3	7	3	4	7	Farmer	2 1/2	1 1/2	-	-	-	14	-	20,000

34	Shri It Khongshei	1	2	3	1	2	3	Farmer	1 1/2	1	-	-	-	6	-	18,000
35	Smt. Blied Dkhar	4	4	8	4	4	8	Farmer	2	1	-	-	-	12	-	26,000
36	Shri Mythen Khongsdier	1	0	1	0	1	1	Farmer	1/2	1/2	-	-	-	0	-	4,500
37	Shri Shuid Mawpat	1	0	1	0	1	1	Farmer	2	1	-	-	-	0	-	14,000
38	Shri Joman Shrieh	4	2	6	2	4	6	Farmer	1	1/2	-	-	-	2	-	16,500
39	Shri Kdit Pohneng	3	3	6	2	4	6	Farmer	3	1 1/2	-	-	-	12	-	21,500
40	Smt Kordalin Shrieh	1	1	2	1	1	2	Farmer	1 1/2	1	-	-	-	4	-	9,000
41	Smt. Plian Shrieh	3	2	5	1	4	5	Farmer	2	1	-	-	-	10	-	18,000
42	Smt. Shoresibon Ksing	3	2	5	3	2	5	Farmer	1	1⁄2	-	-	-	4	-	17,500
43	Smt. Kjoi Ksing	1	1	2	0	2	2	Farmer	2	1	-	-	-	12	-	15,000
44	Smt. Dwink Dkhar	5	3	8	2	6	8	Farmer	3	2	-	-	-	8	-	26,200
45	Shri Borming Dkhar	1	1	2	1	1	2	Farmer	1	1/2	-	-	-	0	-	9,500
46	Smt. Swun Pohneng	2	3	5	1	4	5	Farmer	1	1/2	-	-	-	6	-	12,800
47	Smt. Dkiar Pohneng	0	2	2	0	2	2	Farmer	2	1	-	-	-	3	-	6,000
48	Smt. Prina Pohneng	6	3	9	2	7	9	Farmer	3	1 1/2	-	-	-	8	-	26,500
49	Smt. Sbunlang Pohneng	4	2	6	2	4	6	Farmer	1	1/2	-	-	-	4	-	12,000
50	Shri Thiem Pohneng	3	4	7	3	4	7	Farmer	5	2	-	-	-	11	-	34,000
51	Shri Kyrdan Pohneng	3	2	5	0	5	5	Farmer	2	1	-	-	-	6	-	21,000
52	Shri Jlain Pararain	1	1	2	2	0	2	Farmer	1 1/2	1	-	-	-	4	-	8,500
53	Smt Shngeil Pohneng	3	2	5	2	3	5	Farmer	3	1 1/2	-	-	-	8	-	20,000
54	Smt. Shmir Dkhar	3	4	7	1	6	7	Farmer	2 1/2	1 1/2	-	-	-	9	-	27,500
55	Smt. Nylla Shrieh	4	4	8	1	7	8	Farmer	2 1/2	1 1/2	-	-	-	9	-	19,000
56	Shri Rimor Dkhar	3	4	7	1	6	7	Farmer	1	1⁄2	-	-	-	6	-	16,500
57	Smt. Bitingeit Khongsit	0	4	4	0	4	4	Farmer	1	1⁄2	-	-	-	12	-	16,500
58	Smt. Iak Dkhar	2	4	6	1	5	6	Farmer	1/2	1⁄2	-	-	-	13	-	17,400
59	Smt Tkiel Khonglam	0	1	1	0	1	1	Farmer	1	1⁄2	-	-	-	6	-	4,900
60	Smt. Thait Kraih	1	5	6	6	0	6	Farmer	3	2	-	-	-	8	-	70,000
61	Smt. Shan Khyriem	3	5	8	3	5	8	Farmer	1 1/2	1	-	-	-	6	-	20,000
62	Shri Hamlet Pohneng	1	1	2	2	0	2	Farmer	2	1	-	-	-	11	-	8,500
63	Smt. Sher Khongriah	3	4	7	3	4	7	Farmer	8	5	-	-	-	6	-	39,000
64	Smt. Prister Shrieh	1	1	2	1	1	2	Farmer	3	1	-	-	-	4	-	26,000
65	Shri Brian Shrieh	7	3	10	3	7	10	Farmer	4	2	-	-	-	12	-	35,000
66	Smt. Prona Tham	3	3	6	0	6	6	Farmer	2	1	-	-	-	4	-	15,500
67	Smt. Liti Khongsit	4	3	7	1	6	7	Farmer	3	2	-	-	-	14	-	29,500
68	Shri Ior Shrieh	2	3	5	2	3	5	Farmer	2	1	-	-	-	8	-	24,000
69	Shri Sngin Mawpat	3	4	7	0	7	7	Farmer	1	1	-	-	-	11	-	18,000
70	Shri Jruin Khongsit	1	0	1	0	1	1	Farmer	3	2	-	-	-	4	-	16,500
71	Shri Bawa Shrieh	1	0	1	1	0	1	Farmer	1	1⁄2	-	-	-	9	-	8,500
72	Smt. Itina Khongsit	2	2	4	0	4	4	Farmer	3 1/2	2	-	-	-	12	-	16,500
73	Shri Numtil Tham	2	5	7	1	6	7	Farmer	1	1	-	-	-	16	-	19,500

74	Smt. Thel Tham	8	4	12	2	10	12	Farmer	2	1	-	-	-	15	-	24,500
75	Smt Phlud Shrieh	1	1	2	0	2	2	Farmer	1	1	-	-	-	4	-	14,200
76	Smt Brina Khongsit	1	3	4	1	3	4	Farmer	2	1	-	-	-	6	-	17,500
77	Smt. Riolin Khongsit	2	3	5	0	5	5	Farmer	2	1 1/2	-	-	-	4	-	16,500
78	Smt. Tilet Khonglam	0	1	1	1	0	1	Farmer	2	4	-	-	-	0	-	16,000
79	Shri Dellin Tham	6	2	8	1	7	8	Farmer	1	1	-	-	-	11	-	21,500
80	Shri Pai Riahtam	3	3	6	2	4	6	Farmer	2	1	-	-	-	16	-	36,500
81	Smt. Maldalin Tham	0	1	1	0	1	1	Farmer	1	1	-	-	-	0	-	7,000
82	Smt. Bat Kshiar	4	2	6	5	1	6	Farmer	5	3	-	-	-	14	-	39,800
83	Smt. Phira Dkhar	3	5	8	3	5	8	Farmer	2	2	-	-	-	8	-	24,300
84	Smt. Stok Dkhar	4	1	5	2	3	5	Farmer	2	1	-	-	-	6	-	19,400
85	Smt. Krial Shriew	0	2	2	0	2	2	Farmer	1	5	-	-	-	9	-	21,000
86	Smt Threm Shrieh	3	2	5	1	4	5	Farmer	1⁄2	1	-	-	-	3	-	17,500
87	Smt. Bian Khonglam	4	3	7	2	5	7	Farmer	1	2	-	-	-	8	-	21,000
88	Smt. Thriang Khongsit	3	3	6	0	6	6	Farmer	1⁄2	1	-	-	-	0	-	14,500
89	Smt. Khrik Khongsit	3	3	6	4	2	6	Farmer	2	1	-	-	-	9	-	24,200
90	Smt. Kursimerry Khongsit	3	1	4	0	4	4	Farmer	1⁄2	1⁄2	-	-	-	2	-	6,000
91	Smt. Balsi Shrieh	1	1	2	0	2	2	Farmer	1⁄2	1⁄2	-	-	-	8	-	5,600
92	Smt. Shira Khongsit	0	1	1	0	1	1	Farmer	2	1	-	-	-	6	-	9,800
93	Shri Ol Pohneng	1	0	1	0	1	1	Farmer	1⁄2	1⁄2	-	-	-	0	-	6,800
94	Shri Telsinang Khongsit	2	2	4	0	4	4	Farmer	1	1	-	-	-	4	-	13,500
95	Smt. Duri Khongsit	1	2	3	1	2	3	Farmer	3	1	-	-	-	12	-	19,500
96	Shri Pria Khongsit	4	3	7	2	5	7	Farmer	1	1	-	-	-	9	-	24,500
97	Smt. Bum Tham	1	3	4	1	3	4	Farmer	1⁄2	1⁄2	-	-	-	0	-	16,000
98	Shri Hud Shrieh	2	2	4	0	4	4	Farmer	1⁄2	1⁄2	-	-	-	6	-	9,000
99	Smt. Pherbon Shrieh	1	5	6	1	5	6	Farmer	1	1	-	-	-	18	-	17,500
100	Shri Spin Khongsdier	6	4	10	3	7	10	Farmer	1	1 1/2	-	-	-	13	-	21,800
101	Shri Spier Khongsit	4	2	6	2	4	6	Farmer	1/2	1	-	-	-	8	-	20,000
102	Shri Wai Pararain	1	0	1	1	0	1	Farmer	1	2	-	-	-	0	-	9,500
103	Shri Talot Lynnong	1	0	1	1	0	1	Farmer	0	0	-	-	-	0	-	4,500
104	Shri Korai Dkhar	1	0	1	1	0	1	Farmer	2	1	-	-	-	0	-	8,900
105	Shri Tiw Khongsit	2	0	2	2	0	2	Farmer	1⁄2	1⁄2	-	-	-	0	-	12,000
106	Shri Hotingster Khongsdier	1	3	4	1	3	4	Farmer	1⁄2	1⁄2	-	-	-	3	-	16,000
107	Smt. Sngur Shrieh	2	4	6	0	6	6	Farmer	1	1	-	-	-	9	-	19,500
108	Smt. Kri Shrieh	0	2	2	1	1	2	Farmer	1⁄2	1⁄2	-	-	-	8	-	10,000
109	Smt. Stol Dkhar	1	0	1	1	0	1	Farmer	1⁄2	1⁄2	-	-	-	0	-	4,900
110	Shri Phainal Dkhar	1	2	3	1	2	3	Farmer	1⁄2	1	-	-	-	0	-	8,500
111	Smt. Kordor Shrieh	0	2	2	2	0	2	Farmer	2	1	-	-	-	0	-	14,500
	111 Houses	261	264	525 No	s. of popula	tion.										

#### SOCIO – ECONOMIC DATA OF MAWBAWEIN VILLAGE UNDER KHATAR SHNONG, LAITKROH C & RD BLOCK, EAST KHASI HILLS DISTRICT, MEGHALAYA, PIN. NO – 793111.

SL	Name of the Head of the		Populatio	n		Literacy		Occupa-		ulture rea			Livesto	ock		Annual
No.	Family	Male	Female	Total	Literate	Illiterate	Total	tion	Settled	Jhum	Cow	Pig	Goat	Poul - try	Hor -se	Income
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Shri. On Shabong	3	6	9	4	5	9	Farmers		V		V		V		25,000/-
2	Shri. Sbik Ksing	1	4	5	2	3	5	Farmers		N		V		V		20,000/-
3	Shri. Phing Khongngain	7	2	9	4	5	9	Farmers		V		V		$\checkmark$		25,000/-
4	Shri. S.Starwell Khonglam	4	3	7	5	2	7	Farmers		V		V		V		25,000/-
5	Shri. Phid Khongngain	4	2	6	3	3	6	Farmers		V	11	$\checkmark$		$\checkmark$		20,000/-
6	Smti. Sied Ksing	2	2	4	2	2	4	Farmers		V		V		$\checkmark$		26,000/-
7	Smti. Khriap Khonglam	3	2	5	2	3	5	Farmers		V		V		V		20,000/-
8	Shri. Blui Shrieh	1	0	1	1	0	1	Farmers		V		V		N		15,000/-
9	Shri. Niah Khongngain	1	2	3	1 .	2	3	Farmers		V		V		V.		20,000/-
10	Smti. Biait Khongngain	1	1	2	1	1	2	Farmers		V		V		V		20,000/-
11	Smti. Wier Khongsit	4	2	6	2	4	6	Farmers		V		$\checkmark$		V		23,000/-
12	Shri. Phah Khongngain	3	1	4	1	3	4	Farmers		V		V		V		23,000/-
13	Smti. Sun Khonglam	4	3	7	3	4	7	Farmers		V	1	V		V		25,000/-
14	Smti. Riew Khonglam	4	4	8	3	5	8	Farmers		V		V		V		20,000/-
15	Smti. Bud Khongngain	2	5	7	2	5	7	Farmers		V		V		$\checkmark$	1	20,000/-
16	Smti. Kaiuk Khongngain	2	4	6	2	4	6	Farmers		V		V				25,000/-
17	Shri. Kylla Ksing	2	4	6	2	4	6	Farmers		1		V		V		26,000/-
18	Shri. Slem Khongngain	3	2	5	2	3	5	Farmers		V		1		V		24,000/-
19	Shri. Kham Khongngain	4	6	10	4	6	10	Farmers		V		V		V		26,000/-
20	Shri. Dwol Dkhar	2	1	3	1	2	3	Farmers		1		1		V		24,000/-
21	Shri. Ham Ksing	1	0	1	0	0	0	Farmers		1		1		1		15,000/-
22	Smti. Sirian khongsit	3	4	7	2	5	7	Farmers		V		1		1		23,000/-
23	Shri. Sliang Ksing	3	2	5	3	2	5	Farmers		V		V		V		26,000/-
24	Smti. Dondur Dkhar	4	2	6	2	4	6	Farmers		V		V		V		26,000/-
25	Shri. Skein Dkhar	5	2	7	2	5	7	Farmers		N		1		V		30,000/-
26	Shri. Phring Ksing	1	0	1	0	0	0	Farmers		V		V		1		20,000/-

SI.	Name of the Head of the	1	Population	1		Literacy		Occupa-	Agrice				Livesto			Annual Income
No.	Family	Male	Female	Total	Literate	Illiterate	Total	tion	Settled	Jhum	Cow	Pig	Goat	Poul - try	Hor -se	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Sdiah Lynnong	1	1	2	2	-	2 '	Cultiva tor	-	2	-	-	-	-	-	25,000/
2	Sopictor Phanbuh	3	2	5	1	4	5	-do-	-	5	-	-	1	-	-	27,000/
3	Phlik Phanbuh		2	2	-	2	2	-do-		2	-		- 52	5	-	24,000/
4	Phom Phanbuh	5	5	10	1	4	5	-do-		5	-	2	1 <u>1</u>	10	-	21,000/
5	Phri Ksing	2	4	6	2	4	6	-do-	-	6		2	4	14	-	26,000
6	Thrui Phanbuh	1	1	2	-	2	2	-do-		2	-		-	4	121	20,000
7	Rimallin Phanbuh	1	4	5	1	4	5	-do-	-	5	-	1	-	4	143	24,000
8	Jrip Phanbuh	1	1	2	1	1	2	-do-	-	2	-	1	-	-	4	25,000
9	Omissila Phanbuh	5	2	7	-	7	7	-do-		7	-	2	-	-		24,000
10	Wip Khonglam	5	1	6	1	5	6	-do-	-	6	-	-	-	-	14	20,000
11	Di Khonglam	2	2	4	-	4	4	-do-	-	4	-		-	-	-	24,000
12	Kjor Phanbuh	3	3	6	1	5	6	-do-		6		1	-	5		27,000
13	Phinda Phanbuh	2	1	3	+	3	3	-do-	-	3	-		-	- 1	-	23,000
14	Kynjut Ksing	1	2	3		3	3	-do-		3		•	-	-	-	19,000
15	Lthoin Phanbuh	2	5	7		7	7	-do-		7			-	-	-	21,000
16	Thring Phanbuh	4 .	3	6	-	6	6	-do-		6	-	•			-	24,000
17	Syun Swer	2	1	3		3	3	-do-		3			-		-	27,000

## SOCIO – ECONOMIC DATA OF RYMMAI VILLAGE UNDER LOWER WAH SOHRA WATERSHED IWMP - III

Name of the Head of the Family 2 Iom Phanbuh Trak Phanbuh ynsuklang Phanbuh .ngut Khonglam Aiej Phanbuh	Male 3 2 2 3 3	Population Female 4 3 2 2 2	Total 5 5 4	Literate 6 - 1	Illiterate 7 5	Total 8 5	Occupa- tion 9 Coltiva	Ar Settled 10	Jhum 11 5	Cow 12	Pig 13	Goat 14	Poul - try 15	Hor -se 16	17
lom Phanbuh rak Phanbuh ynsuklang Phanbuh .ngut Khonglam	3 2 2 3	3	5	-	5	1.1.1	Coltiva				13	14	15	16	and the second se
lom Phanbuh rak Phanbuh ynsuklang Phanbuh .ngut Khonglam	2 2 3	3	5	-	5	1.1.1	and the second sec	-	5						
ynsuklang Phanbuh .ngut Khonglam	3		4	1			tor	1. 20	2	-	-	12	14	-	20,000/
ynsuklang Phanbuh .ngut Khonglam	3	2			3	4	-do-	-	4	-		-	5	-	25,000/
ngut Khonglam		a ser Anna	5	-	5	5	-do-	-	5	-		-	6	-	24,000/
		4	7	4	3	7	-do-	-	7	-			-	-	22,000/
	3	2	5	1	4	5	-do-		7	-		(=)	5	-	27,000/
	3	1	4	1	3	4	-do-	-	4		-		1	-	20,000
Balning Phanbuh		2	4	1	3	4	-do-	-	4	-	1	-	7	-	24,000
Keyda Ohanbuh	2								4	_	1	-	4	-	21,000
'hwin Phanbuh	1	3	4	1	3	-1	-40-	1.52	-	-		-			27,000
Moren Khonglam	3	-	. 3	3	-	3	-do-	-	3	-	-		6	-	
	1	3	4	1	-	4	-do-	-	4	-	()=(	-	4	15	20,000
	3	3	6	1	5	6	-do-	-	6	-	-		6	-	25,000
		1	L ANS	1	6	6	-do-	-	6	-		-	7	-	20,000
Y olan Phanoun				-	1				7					1	19,000
Shrik phanbuh	4	3	7	-	7	7	-00-			-	-	-		-	21,000
liep Phanbuh	1	1	2	-	2	2	-do-	-	2	-	-	-	-	-	23,000
Bincent Phanbuh	2	/-	2	2	-	2	-do-	-	2	-	-	-		-	25,000
ri h N Si	win Phanbuh oren Khonglam om Khonglam obina Khonglam olan Phanbuh hrik phanbuh ep Phanbuh	NameIInwin Phanbuh1Ioren Khonglam3Iom Khonglam1Iobina Khonglam3Iolan Phanbuh3Iorik phanbuh4Iop Phanbuh1	Number13Inwin Phanbuh13Ioren Khonglam3-Iom Khonglam13Iobina Khonglam33Iolan Phanbuh34Inrik phanbuh43Iop Phanbuh11	Invin Phanbuh134Ioren Khonglam3-3Iom Khonglam134Iobina Khonglam336Iolan Phanbuh346Inrik phanbuh437Iop Phanbuh112	hwin Phanbuh1341oren Khonglam3-33om Khonglam1341obina Khonglam3361olan Phanbuh346-nrik phanbuh437-ep Phanbuh112-	Invin Phanbuh13413Invin Phanbuh13-33-Invin Phanbuh3-33Invin Monglam1341-Invin Khonglam33615Invin Khonglam346-6Invik phanbuh347-7Invik phanbuh112-2	Invin Phanbuh       1       3       4       1       3       4         Invin Phanbuh       1       3       4       1       3       4         Ioren Khonglam       3       -       3       3       -       3         Iom Khonglam       1       3       4       1       -       4         Iom Khonglam       1       3       4       1       -       4         Iobina Khonglam       3       3       6       1       5       6         Iolan Phanbuh       3       4       6       -       6       6         Invik phanbuh       4       3       7       -       7       7         Iop Phanbuh       1       1       2       -       2       2	Image: Second constraints       Image	hwin Phanbuh       1       3       4       1       3       4 $-$ do- $-$ horen Khonglam       3 $  3$ $3$ $ 3$ $ -$ horen Khonglam       1 $3$ $ 3$ $ 3$ $ -$ horen Khonglam       1 $3$ $4$ $1$ $ 4$ $ -$ horen Khonglam $1$ $3$ $4$ $1$ $ 4$ $ -$ obina Khonglam $3$ $3$ $6$ $1$ $5$ $6$ $ -$ olan Phanbuh $3$ $4$ $6$ $ 6$ $6$ $ -$ hrik phanbuh $4$ $3$ $7$ $ 7$ $7$ $ -$ ep Phanbuh $1$ $1$ $2$ $ 2$ $ -$	nwin Phanbuh       1       3       4       1       3       4       -do-       -       4         oren Khonglam       3       -       3       3       -       3       -do-       -       3         oom Khonglam       1       3       4       1       -       4       -do-       -       4         oom Khonglam       1       3       4       1       -       4       -do-       -       4         obina Khonglam       3       3       6       1       5       6       -do-       -       6         olan Phanbuh       3       4       6       -       6       6       -do-       -       6         olan Phanbuh       3       4       6       -       7       7       -do-       -       7         ep Phanbuh       1       1       2       -       2       2       -do-       -       2	nwin Phanbuh       1       3       4       1       3       4 $-do-$ -       4       -         oren Khonglam       3       -       3       3       -       3 $-do-$ -       4       -         om Khonglam       1       3       4       1       -       4 $-do-$ -       4       -         om Khonglam       1       3       4       1       -       4 $-do-$ -       4       -         obina Khonglam       3       3       6       1       5       6 $-do-$ -       6       -         olan Phanbuh       3       4       6       -       6       6 $-do-$ -       6       -         nrik phanbuh       4       3       7       -       7       7 $-do-$ -       7       -         ep Phanbuh       1       1       2       -       2 $-do-$ -       2       -	nwin Phanbuh       1       3       4       1       3       4 $-do$ -       4       -       1         oren Khonglam       3       -       3       3       -       3 $-do$ -       4       -       1         oren Khonglam       1       3       4       1       -       3 $-do$ -       3       -       -         om Khonglam       1       3       4       1       -       4 $-do$ -       4       -       -         obina Khonglam       3       3       6       1       5       6 $-do$ -       6       -	nwin Phanbuh       1       3       4       1       3       4 $-do-$ -       4       -       1       -         oren Khonglam       3       -       3       3       -       3 $-do-$ -       3       -	Invin Phanbuh       1       3       4       1       3       4       -do-       -       4       -       1       -       4         Ioren Khonglam       3       -       3       3       -       3       -do-       -       3       -       6         Ioren Khonglam       1       3       4       1       -       4       -do-       -       4       -       -       6         Ioren Khonglam       1       3       4       1       -       4       -do-       -       4       -       -       6         Ioren Khonglam       1       3       4       1       -       4       -do-       -       4       -       -       4         Ioren Khonglam       3       3       6       1       5       6       -do-       -       6       -       -       6       -       6       -       -       7       7       -       6       -       -       7       7       -       6       -       7       7       -       -       7       7       -       -       7       -       -       -       -       -       - <td>Invin Phanbuh       1       3       4       1       3       4       -do-       -       4       -       1       -       4       -         Invin Phanbuh       1       3       4       1       3       4       -do-       -       4       -       1       -       4       -         Invin Phanbuh       3       -       3       3       -       3       -       3       -       4       -       4       -       6       -         Invin Phanbuh       1       3       4       1       -       4       -do-       -       4       -       -       6       -       6       -       4       -       -       4       -       6       -       4       -       -       4       -       6       -       4       -       6       -       4       -       -       4       -       6       -       6       -       4       -       6       -       6       -       6       -       6       -       6       -       6       -       6       -       7       7       -       6       -       7       -       &lt;</td>	Invin Phanbuh       1       3       4       1       3       4       -do-       -       4       -       1       -       4       -         Invin Phanbuh       1       3       4       1       3       4       -do-       -       4       -       1       -       4       -         Invin Phanbuh       3       -       3       3       -       3       -       3       -       4       -       4       -       6       -         Invin Phanbuh       1       3       4       1       -       4       -do-       -       4       -       -       6       -       6       -       4       -       -       4       -       6       -       4       -       -       4       -       6       -       4       -       6       -       4       -       -       4       -       6       -       6       -       4       -       6       -       6       -       6       -       6       -       6       -       6       -       6       -       7       7       -       6       -       7       -       <

# SOCIO – ECONOMIC DATA OF RYMMAI VILLAGE UNDER LOWER WAH SOHRA WATERSHED IWMP - III

SL	Name of the Head of the		Population	1		Literacy		Occupa-	Agric				Livesto	ck		Annual Income
SL No.	Family	Male	Female	Total	Literate	Illiterate	Total	tion	Settled	Jhum	Cow	Pig	Goat	Poul - try	Hor -se	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Tholi Lynnong	3	3	6	1	5	6	Farmer	-	6	-	1	-	5		20,000/
2	Lar Shrieh	1	-	1	-	1	1	-do-		4	-		-	ш.	-	1,000/-
3	Number Khongshei	2	4	6	-	6	6	-do-	-	6	-	2	-	5	-	23,000/
4	Jingka Lynnong	2	3	5	-	5	5	-do-	-	5	-		-	4	-	25,000/
5	Bnai Phanbuh	5	3	7	1.2	7	7	-do-	2	7	-	1	-	7	-	24,000/
6	Lod Swer	1	-	1		1	1	-do-	14	I	-	1	-	1	-	22,000/
7	Iod Lynnong	4	4	8	-	1	8	-do-	-	8	-	2	-	6	-	20,000/
8	Phyrnai Ksing	3	2	5		5	5	-do-	-	5	-		-	-	-	2,600/-
9	Ribud Phanbuh	-	1	1		1	1	-do-	-	1	-		-	-	-	27,000/
10	Sain Lynnong	2	2	4	2	2	4	-do-	-	4	-	1	-	3	-	19,000/
11	Shanduwan Lynnong	3	2	5		5	5	-do-	-	5	-	2	-	1	-	21,000/
12	Skaw Lynnong	1	-	1	-	1	1	-do-	1-	1	-	-	-	-	-	26,000/

# SOCIO – ECONOMIC DATA OF MAWSHKEN VILLAGE UNDER LOWER WAH SOHRA WATERSHED IWMP - III

	ľ					Literacy		Occupa-	Agrice		-		Livesto	ck		Annual Income
SL.	Name of the Head of the Family		Population		Literate	Illiterate	Total	tion	Settled (ha)	Jhum (ha)	Cow	Pig	Goat	Poul try	Hor se	
No.	Famoy	Male	Female	Total			8	9	10	11	12	13	14	15	16	17
1	2	3	4	5	6	7		Farmer	1	1		1				15,000/
1	Blit Khongshei	2	2	4	1	3	4				-	-				18,000/
2	Phran Tding	2	2	4	1	3	4	-do-	1/2	1		-			-	
4		5	3	8	2 .	6	8	-do-	+ 2	1		1				18,000
3	Kding Khongshei	-	-				5	-do-	1	1						14,000
4	Phran Khongshei	2	2	4 .	1	4		-do-			-	1				16,000
5	Skit Rynjem	4	4	8	1	6	7		2	1	-	-			-	15,000
	Tynjuh Khongshei	2	3	5	x	4	4	-do-	1	1						
6			1	7	x	4	4	-do-	1	2		1				20,000
7	Barsha Buhphang	6	1	1	-			-do-	2	1		1				16,000
8	Wanhok Kynshah	2	2	4	4	x	4	-	- 4		-		-		-	15,000
	Rison Khongshei	3	1 3	4	x	3	3	-do-	1	1		1	-	-		
9				4	4	x	4	-do-	2	1		1			1	18,000
10	Tipar Kynshah	3	1		-	-	-	-do-	1	2						14,000
11	Rijanai Khongshei	1	2	3	x	3	3	da	-	-		1.			-	18,000
12	Duwan Kynshah	4	3 '	7	2	5	7	-do-	2	2	-	1	1 2	-	-	
1723		1.0												-		-

# SOCIO - ECONOMIC DATA OF PDANG VILLAGE UNDER

-	Name of the Head of the		Population	1		Literacy		Occupa-	Agrice				Livesto	ck		Annual Income
SI. No.	Family	Male	Female	Total	Literate	Illiterate	Total	tion	Settled	Jhum	Cow	Pig	Goat	Poul try	Hor se	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Phrien Khonglam	2	3	5	1	4	5	Farmer	1	1				7		18,000/-
2	Rila Shabong	4	1	5	2	3	5	-do-	2	1				8		16,000/-
3	Theimon Shabong	2	2	4	2	2	4	-do-	1	2				7		19,000/-
4	Pina Ksing	1	3	4	3	1	4	-do-	1	1				6		18,000/-
5	Syik Ksing	1	1	2	1	1	2	-do-	1	11/2				10	_	16,000/-
6	Jrep Ksing	2	i	3	1	2	3	-do-	1	1				2		20,000/-
7	Krih Ksing	3	2	5	2	3	5	-do-	2	1				2		17,000/-
8	Lngui Ksing	2	4	6	5	1	6	-do-	2	1		1		5		19,000/-
9	Jraiñ Shabong	3	2	5	1	4	5	-do-	1	2				4		20,000/-
10	Lhier Ksing	2	2	4	1	3	4	-do-	1	11/2		1		x		20,000/-
_	Phah Ksing	1	4	5	2	3	5	-do-	11/2	1		1	1 1	x		18,000/-
11	Lhui Ksing	6	2	8	4	4	8	-do-	2	1		3		2		22,000/-
12		2	5	7	3	4	7	-do-	1	1				12		20,000/-
13	Ai Shabong	3	4	7	2	5	7	-do-	1	2		1		X		17,000/-
14	Rola Khonglam	3	5	8	4	4	8	-do-	11/2	1		2		25		21,000/-
15	Bet Ksing	4	3	7	2	5	7	-do-	2	1	-	1.		8		20,000/-
16	Phom Khonglam	6	3	0	2	7	9	-do-	2	1		x		5		21,000/-
17	Dinsi Khonglam	_	3	6	3	3	6	-do-	1	2		2		8		20,000/-
18	Thwei Shabong	3	2	3	2		3	-do-	1/2	1		1		3		18,000/-
19	Thri Khonglam	2	1	4	2	2	4	-do-	2	1		1		5		16,000/-
20	Tngenlang Ksing	3	1.		2	3	4	-do-	2	2		1		4		17,000/-
21	Bian Shabong	1	3	4	1	2	2	-do-	1	1	-	x		2		18,000/-
22	lan K. Rymmai	1		2	1	1		-do-	1	2		x	1	4		19,000/-
23	Romila Lynnong	2	2	4	2	2	4		1				-	2		21,000/-
24	Kjiel Khongsit	4	4	8	3	5	8	-do-	1 IV	1	-	X	-	3		15,000/-
25	Rimen Khonglam	1	1	2	1	1	2	-do-	1/2		-	X	-	4		18,000/-
26	Ngien Mawkhiew	3	4	7	2	5	7	-do-	2	2	-	X	-	4		20,000/-
27	Phiet Buhphang	2	2	4	2	2	4	-do-	1	1	-	X	-	4		20,000/-

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### SOCIO - ECONOMIC DATA OF DEWIONG - DEWSAW VILLAGE UNDER

**ANNEXURE III** 

**COST ESTIMATES** 

#### <u>COST NORMS FOR LOOSE BOULDER BUNDS (IWMP)</u> (Rate as per PWD, SOR for R&B 2008 – 2009)

#### A. SPECIFICATIONS & COSTS OF LOOSE BOULDER BUNDS

Top Width	=	0.4 m
Bottom Wid	th =	1.0 m
Height	=	0.9 m
Length	=	10 m

1/3.11 Providing dry stone masonry walls etc....

 $10m \ge \frac{0.4 + 1.0}{2}m \ge 0.90 = 6.30m^3 @ Rs.1191/m^3 = Rs.7,500.00$ 

Total = Rs.7,500.00

(Rupees Seven Thousand Five Hundred) only.

#### <u>MODEL NORMS PER HECTARE FOR AGRO – HORTICULTURE WITH CITRUS FRUIT</u> (INTEGRATED WATERSHED MANAGEMENT PROGRAMME) (Rate as per PWD, SOR for R&B 2008 – 2009)

	Spacing - 8m x 6.3m				
	Plant Density - 200 Nos.				
A.	Preliminary works				
A. I.	Site clearance				
1.				D . 20	
	3 mandays @ Rs.100/- per manday	0.45	-	Rs. 30	0.00
	II. Pit digging (pit size 0.45m x 0.45m	x 0.45m)			
	200 Nos. @ Rs.5/- each		-	<u>Rs.100</u>	
		Total	-	Rs.130	00.00
B.	First year Planting				
	I. Cost of planting materials				
	200 Nos. @ Rs.10/- each			-	Rs.2000.00
	II. Cost of planting 200 Nos. @ Rs. 3/-	each		-	Rs. 600.00
	III. Weeding two times				
	20 mandays @ Rs.100/- per manday			_	<u>Rs.2000.00</u>
	20 mandays e 18.100, per manday	Total	_	Rs.460	
C.	Second year Planting	Total		13.400	0.00
C.					$D_{a} = 260.00$
	I. Refilling vacancy (10%)			-	Rs. 360.00
	II. Weeding two times				
	20 mandays @ Rs.100/- per manday			-	Rs.2000.00
	III Plant protection measures including				
	cost of chemical		-	<u>Rs.</u> 34	40.00
		Total	-	Rs.270	00.00
	Grand Total $A+B+C = Rs.1300.00 + Rs.4600$	.00 + Rs.2700.	= 00	Rs.860	00.00

(Rupees Eight thousand six hundred) only.

#### <u>MODEL NORMS PER HECTARE FOR AFFORESTATION WITH PINE/</u> <u>NON-PINE (INTEGRATED WATERSHED MANAGEMENT PROGRAMME)</u> (Rate as per PWD, SOR for R&B 2008 – 2009)

Spacing 6m x 5.5m

Plant Density – 300 Nos.

B.	Preliminary works			
J.	Jungle clearance etc. 5 mandays @ Rs.100/- per manday		-	Rs. 500.00
II.	Pit digging (pit size 0.30m x 0.30m x 0.30m 300 Nos. @ Rs.4/- each	ı) Total	-	<u>Rs. 1200.00</u> Rs. 1700.00
B.	First year Planting	1000		
I.	Cost of planting materials 300 Nos. @ Rs.8/- each		-	Rs. 2400.00
II.	Cost of planting 300 Nos. @ Rs. 2/- each		-	Rs. 600.00
III.	Weeding two times 20 mandays @ Rs.100/- per manday		-	Rs. 2000.00
IV	Fire protection measures 5 mandays @ Rs.100/- per manday	Total	-	<u>Rs. 500.00</u> Rs. 5500.00
C.	Second year Planting			
I.	Vacancy refilling (10%)		-	Rs. 400.00
II.	Weeding two times 20 mandays			

100

@ Rs.100/- per manday		-	Rs. 2000.00
III. Fire protection measures			
5 mandays @ Rs.100/- per manday		-	<u>Rs. 500.00</u>
	Total	-	Rs. 2900.00
Grand Total $A+B+C = Rs.1700.00 + Rs.55$	500.00 + Rs.2900	).00 =	Rs.10100.00

(Rupees Ten thousand one hundred) only.

#### MODEL NORMS PER HECTARE FOR IMPROVEMENT OF DEGRADED FOREST (INTEGRATED WATERSHED MANAGEMENT PROGRAMME)

#### (Rate as per PWD, SOR for R&B 2008 – 2009)

C.	Preliminary works			
K.	Site clearance 3 mandays @ Rs.100/- per manday		_	Rs. 300.00
II.	Pit digging (pit size 0.30m x 0.30m x 0.30m 100 Nos. @ Rs.4/- each	) Total	-	<u>Rs. 400.00</u> Rs. 700.00
B.	First year Planting			
I.	Cost of planting materials 100 Nos. @ Rs.8/- each		-	Rs. 800.00
II.	Cost of planting 100 Nos. @ Rs. 2/- each		-	Rs. 200.00
III.	Round Weeding around the plant four times 5 mandays @ Rs.100/- per manday		-	Rs. 500.00
IV.	Fire protection measures 4 mandays @ Rs.100/- per manday	Total	-	<u>Rs. 400.00</u> Rs.1900.00
C.	Second year Planting			
I.	Refilling vacancy (10%)		-	Rs. 100.00
III.	Round Weeding around the plant four times 5 mandays @ Rs.100/- per manday		-	Rs. 500.00

III. Fi	re protection measures		
4	nandays @ Rs.100/- per manday	-	<u>Rs. 400.00</u>
	Total	-	Rs.1000.00
Grand	Total $A+B+C = Rs.700.00 + Rs.1900.00 + Rs.1000.00$	=	Rs.3600.00

(Rupees Three thousand six hundred) only.

#### COST NORMS PER HECTARE FOR COFFEE PLANTATION (ROBUSTA) @ RS. 100/- PER MANDAY (MD)

Spacing – 5 m x 4 m Plant Density – 500 nos.

- 1. Preliminary Works:
- Cost of seedling @ Rs. 5/-- Rs. 2,500.00 i. ii. Construction of Half moon/ Box terracing including pit digging (pit size 0.45 m x 0.45 m x 0.45 m) @ Rs. 3/- each - Rs. 1,500.00 Total **Rs. 4,000.00** -2. First Year Planting: Cost of Fertilizers (45:30:45 NPK/ha) including transportation - Rs. 2,000.00 i. Cost of application of fertilizers once in June-July and September-October before mulching 2 times. ii. a. Robusta - 14 mds @ Rs.100 Rs. 1,400.00 -Plant Protection chemicals including cost of application - Rs. 600.00 iii. Total - Rs. 4,000.00 3. Second Year Maintenance: Cost of Fertilizers (60:45:60 NPK/ha) Rs. 2,000.00 i. Total - Rs. 2,000.00

#### ABSTRACT

		(Runees Ten Thousand) o
Total	-	<b>Rs. 10,000/-</b>
3. Second Year Maintenance	-	Rs. 2,000/-
2. First Year Planting	-	Rs. 4,000/-
1. Preliminary Works	-	Rs. 4,000/-

#### ESTIMATE FOR CONSTRUCTION OF WATER HARVESTING STRUCTURE

(The rate based as per M.P.W.D Schedule of rates for Roads, Bridges and E & D Works 2008 - 2009)

Name of Beneficiary -Name of Location Name of Village -

Earthwork in excavation for foundation of bridges and 1/4 (b) culverts, up to the founding level including making of cofferdam, dewatering, bailing and diversion of water. In order to keep the foundation trenches free of water. The sides of the foundation to be protected by adequate shoring, scaffolding after leveling the foundation both longitudinally and transversely as directed.

> $1 \times 25.00 \times 1.30 \times 0.70 = 22.75 \text{ m}^3$ @ Rs.152.00/m<sup>3</sup>

2/6 Earthwork in excavation for foundation of Hume Pipe Culvert, Slab drain, Retaining wall face well up to the desired founding level including dewatering bailing out of water in order to keep the foundation by adequate shoring scaffolding. The foundation is leveled both longitudinally and transversely as directed.

2 x 2.20 x 0.80 x 0.60	=	2.11 m <sup>3</sup>		
2 x 3.50 x 0.90 x 0.70	=	4.41 m <sup>3</sup>		
1 x 13.60 x 0.30 x 0.25	=	<u>1.02 m<sup>3</sup> </u>		
		7.54 m <sup>3</sup>		
@ Rs.93.00/m <sup>3</sup>				

Rs. 701.22

Rs. 3458.00

Providing cement concrete work in proportion 1:4:8 with 3/26 hard broken stone aggregates 40mm down graded, including necessary carriage of stone and sand within a distance of 200m and curing, complete as directed.

 $1 \times 25.00 \times 1.30 \times 0.10 = 3.25 \text{ m}^3$ 

105

 $2 \times 2.20 \times 0.80 \times 0.10 = 0.35 \text{ m}^{3}$   $2 \times 3.50 \times 0.90 \times 0.10 = \frac{0.63 \text{ m}^{3}}{4.32 \text{ m}^{3}}$ @ Rs.2136.00/m<sup>3</sup>

Rs. 9035.28

Rs. 17729.50

- 4/41 Providing shuttering with dressed planks not less than
- (a) 25mm thick properly joined including battens, props to the proper level and removing the same after the concrete hardened.

1 x 25.00 x 2.00	= 50.00 m <sup>2</sup>
2 x 8.00 x 0.45	= 7.20 m <sup>2</sup>
2 x 4.33 x 0.30	$= 2.60 \text{ m}^2$
2 x 0.50 x 0.30	$= 0.30 \text{ m}^2$
	60.10 m <sup>2</sup>
	@ Rs.295.00/m <sup>2</sup>

5/28 Providing C.C. work in prop 1:3:6 with hard broken stone aggregates 40mm down graded in abutment curing and return walls, including necessary carriage of stone and sand within a distance of 200m etc.

1 x	25.00	x 1.30	x 0.10	=	3.25 m <sup>3</sup>
1 x	25.00	x 2.00	x 0.15	=	7.50 m <sup>3</sup>
2 x	8.00	x 0.45	x 0.15	=	1.08 m <sup>3</sup>
1 x	9.00	x 2.00	x 0.10	=	1.80 m <sup>3</sup>
2 x	4.33	x 0.30	x 0.50	=	<u>1.30</u> m <sup>3</sup>
					14.93 m <sup>3</sup>
@ Rs.2344.00/m <sup>3</sup>					

Rs. 34995.92

6/20 Providing regular stone masonry work in returning walls, breast walls and wing walls with hammer dressed or blunt chisel dressed stones of heavy section with proper key stones each not less than 25cm X 25cm X 75cm, in cement mortar 1:6 including carriage of stone within 200m

 $1 \times 25.00 \times 0.95 \times 0.50 = 11.87 \text{ m}^3$ 

$2 \times 25.00 \times \frac{0.45 + 0.95}{2} \times 1.50$	=	26.25 m <sup>3</sup>
2 x 8.00 x 0.45 x 0.45	=	3.24 m <sup>3</sup>
2 x 2.20 x 0.80 x 0.50	=	1.76 m <sup>3</sup>
$2 \times 2.20 \times \frac{0.50 + 0.80}{2} \times 1.50$	=	4.29 m <sup>3</sup>
2 x 3.50 x 0.90 x 0.60	=	3.78 m <sup>3</sup>
$2 \times 3.50 \times \frac{0.50 + 0.90}{2} \times 1.95$	=	9.55 m <sup>3</sup>
1 x 13.60 x 0.30 x 0.45		$\frac{1.84}{62.58}$ m <sup>3</sup>
	W	Rs.1060.00/m <sup>3</sup>

Rs. 66334.10

7/24 Providing stone pitching with one-man size boulders not less than 25cm x 25cm x 30cm, including filling the interstices with spoils and carriage of stone within a distance of 200m complete as directed.

> $1 \times 9.00 \times 2.00 \times 0.25 = 4.50 \text{ m}^3$ @ Rs.512.00/m<sup>3</sup>

Rs. 2304.00

- 8/27 Providing 12mm thick cement plastering including cleaning
- (b) surface, curing and carriage of sand within 200m complete.

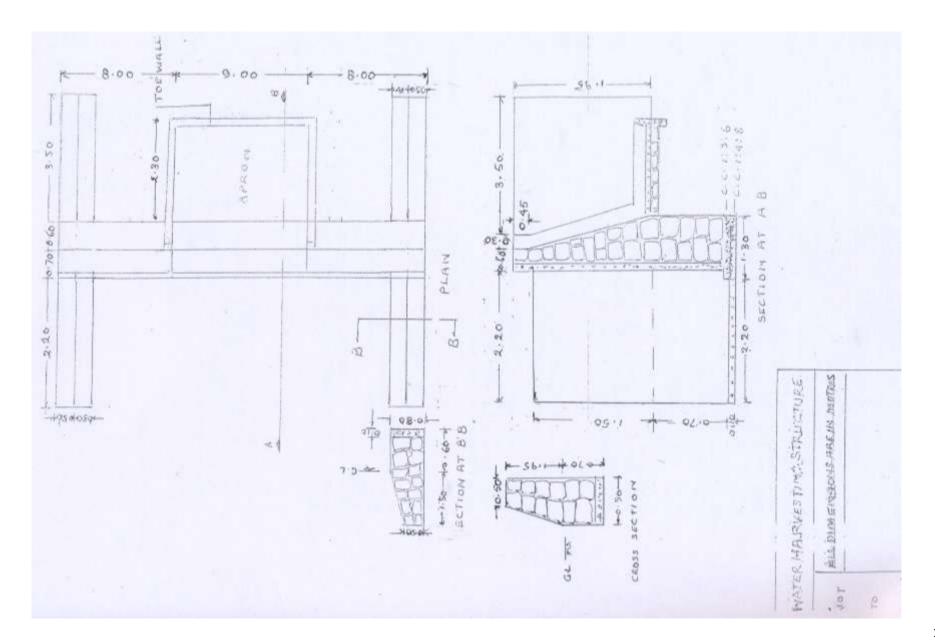
1 x	25.00 x 1.50	=	37.50 m <sup>2</sup>
1 x	25.00 x 1.68	=	39.50 m <sup>2</sup>
1 x	25.00 x 0.60	=	15.00 m <sup>2</sup>
4 x	8.00 x 0.45	=	14.40 m <sup>2</sup>
2 x	0.60 x 0.45	=	0.54 m <sup>2</sup>
1 x	9.60 x 2.30	=	22.08 m <sup>2</sup>
1 x	14.20 x 0.20	=	2.84 m <sup>2</sup>
2 x	4.33 x 1.10	=	9.53 m <sup>2</sup>
4 x	0.50 x 0.30	=	0.60 m <sup>2</sup>
2 x	2.20 x 2.00	=	8.80 m <sup>2</sup>

$$2 \times 3.50 \times 2.45 = \frac{17.15 \text{ m}^2}{167.94 \text{ m}^2}$$
  
@ Rs.92.00/m<sup>2</sup>

<u>Rs. 15450.48</u> TOTAL: Rs.150008.50

Say Rs.1,50,000.00

(Rupees One lakh fifty thousand) only.



#### ESTIMATE FOR CONSTRUCTION OF WATER DISTRIBUTION WORKS

(The rate based as per P.W.D Schedule of rates for Roads, Bridges and E & D Works 2008 - 2009)

Name of Beneficiary

Name of Location/Village -

1/4 (b) Earthwork in excavation for foundation of bridges and culverts, up to the founding level including making of cofferdam, dewatering, bailing and diversion of water. In order to keep the foundation trenches free of water. The sides of the foundation to be protected by adequate shoring, scaffolding after leveling the foundation both longitudinally and transversely as directed.

> $1 \times 15.00 \times 1.20 \times 0.50 = 9.00 \text{ m}^3$ @ Rs.152.00/m<sup>3</sup>

2/6 Earthwork in excavation for foundation of Hume Pipe Culvert, Slab drain, Retaining wall face well up to the desired founding level including dewatering bailing out of water in order to keep the foundation by adequate shoring scaffolding. The foundation is leveled both longitudinally and transversely as directed.

$$2 \times 3.20 \times 0.80 \times 0.50 = 2.56 \text{ m}^{3}$$
  

$$1 \times 9.00 \times 0.30 \times 0.20 = \frac{0.54 \text{ m}^{3}}{3.10 \text{ m}^{3}}$$
  
@ Rs.93.00/m<sup>3</sup>

Rs. 288.30

Rs. 1368.00

3/26 Providing cement concrete work in proportion 1:4:8 with hard broken stone aggregates 40mm down graded, including necessary carriage of stone and sand within a distance of 200m and curing, complete as directed.

$$\begin{array}{rcl} 1 \ x \ 15.00 \ x \ 1.20 \ x \ 0.10 & = & 1.800 \ m^3 \\ 2 \ x & 3.20 \ x \ 0.80 \ x \ 0.10 & = & \underbrace{0.512}_{2.312} \ m^3 \\ & & 2.312 \ m^3 \end{array}$$

@ Rs.2136.00/m<sup>3</sup>

Rs. 4938.43

Rs. 8850.00

4/41 Providing shuttering with dressed planks not less than(a) 25mm thick properly joined including battens, props to the proper level and removing the same after the concrete hardened.

1 x <sup>-</sup>	15.00 x 1.50	=	22.50 m <sup>2</sup>
2 x	5.00 x 0.30	=	3.00 m <sup>2</sup>
4 x	3.50 x 0.30	=	4.20 m <sup>2</sup>
2 x	0.50 x 0.30	=	<u>0.30 m<sup>2</sup></u>
			30.00 m <sup>2</sup>
		@ R:	s.295.00/m <sup>2</sup>

5/28 Providing C.C. work in prop 1:3:6 with hard broken stone aggregates 40mm down graded in abutment curing and return walls, including necessary carriage of stone and sand within a distance of 200m etc.

1 x 15.00	x 1.10 x 0.10	=	1.65 m <sup>3</sup>
1 x 15.00	x 1.40 x 0.15		3.15 m <sup>3</sup>
2 x 5.00	x 0.30 x 0.15	=	0.45 m <sup>3</sup>
1 x 5.00	x 1.70 x 0.10	=	0.85 m <sup>3</sup>
2 x 3.50	x 0.30 x 0.50	=	<u>1.05 m<sup>3</sup> </u>
			7.15 m <sup>3</sup>
		@ Rs.2344.00/m <sup>3</sup>	

Rs. 16759.60

6/20 Providing regular stone masonry work in returning walls, breast walls and wing walls with hammer dressed or blunt chisel dressed stones of heavy section with proper key stones each not less than 25cm X 25cm X 75cm, in cement mortar 1:6 including carriage of stone within 200m

1 x 15.00 x 0.95 x 0.30	=	4.275 m <sup>3</sup>
1 x 15.00 x (0.45+0.95)/2 x	=	11.550 m <sup>3</sup>
1.10		

 $2 \times 5.00 \times 0.45 \times 0.30 = 1.350 \text{ m}^{3}$   $2 \times 3.30 \times 0.80 \times 0.40 = 2.048 \text{ m}^{3}$   $2 \times 3.20 \times (0.50+0.80)/2 \times 1.40 = 5.824 \text{ m}^{3}$   $1 \times 9.00 \times 0.30 \times 0.45 = \frac{1.215}{26.262} \text{ m}^{3}$  $@ \text{Rs.1060.00/m}^{3}$ 

Rs. 27837.72

684.25

Rs.

7/25 Providing boulder or stone filling with unsized stone of one man size of 60cm with behind the apartment wing retaining walls etc.

$$1 \times 5.00 \times 1.70 \times 0.25 = 2.125 \text{ m}^3$$
  
@ Rs.322.00/m<sup>3</sup>

8/27 Providing 12mm thick cement plastering including cleaning(b) surface, curing and carriage of sand within 200m complete.

1 x 15.00 x 1.10	= 16.50 m <sup>2</sup>
1 x 15.00 x 1.20	= 18.00 m <sup>2</sup>
1 x 15.00 x 0.60	= 9.00 m <sup>2</sup>
4 x 5.00 x 0.30	$= 6.00 \text{ m}^2$
2 x 0.60 x 0.30	$= 0.36 \text{ m}^2$
2 x 3.50 x 1.10	= 7.70 m <sup>2</sup>
4 x 0.50 x 0.30	$= 0.60 \text{ m}^2$
1 x 5.60 x 1.70	= 9.52 m <sup>2</sup>
2 x 0.20 x 1.70	$= 0.68 \text{ m}^2$
1 x 5.60 x 0.50	$= 2.80 \text{ m}^2$
2 x 0.20 x 0.30	$= 0.12 \text{ m}^2$
2 x 3.20 x 1.90	$= 12.16 \text{ m}^2$
	83.44_m <sup>2</sup>
	@ Rs.92.00/m <sup>2</sup>

- Rs. 7676.48
- 9/14 Cutting roadside drain including dressing, grading and (b) (ii) removal of spoil up to 15.0m complete as directed.

@ Rs.44.00/Rm

Rs. 1403.60

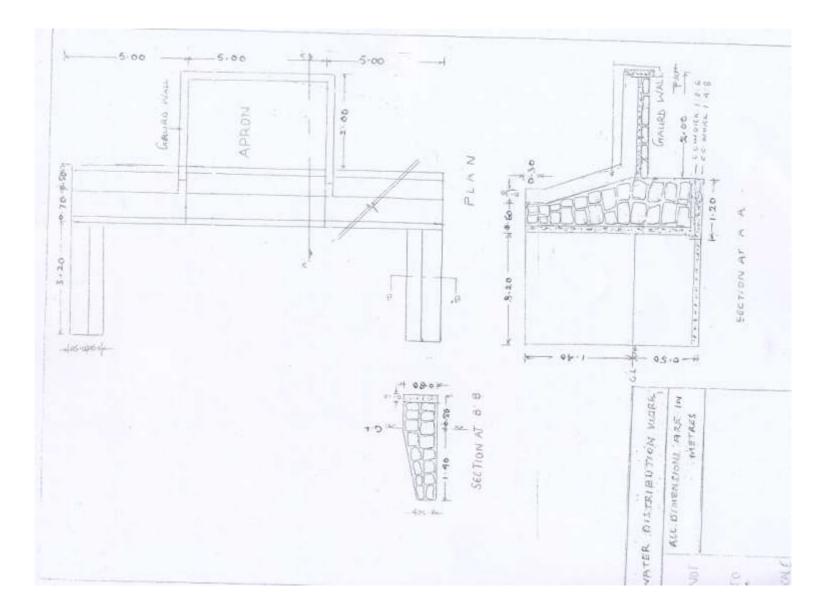
10/Sus <u>Rate based on Market rate:</u> Supplying fitting, fixing G.I.Pipes with sockets as directed complete

on L.S Basis

<u>Rs. 195.00</u> TOTAL: Rs.70001.32

Say Rs 70,000.00

(Rupees Seventy thousand) only.



## ESTIMATE FOR CONSTRUCTION OF BETELNUT SOAKING TANK/POND

## The Rate based as per P.W.D. Schedule of rates for Roads, Bridges and E & D Works 2008 – 2009.

1/3 (d)	Earth work in excavation to the proper grade including light dressing, providing cambering and super elevation as directed and removal of spoil upto 30m lead and all lift. d) Soft or laminated rock or medium shale.
	$2 \ge 6.80 \ge 4.00 \ge 1.85 = 100.64 \text{ m}^3$
2/3 (i)	<ul> <li>@ Rs. 63.00/m<sup>3</sup> Rs. 6,340.32</li> <li>Earth work in excavation to the proper grade including light dressing, providing cambering and super elevation as directed and removal of spoil upto 30m lead and all lift.</li> <li>i) Extra for excavation in through cutting over 150 cm height at the lowest point.</li> </ul>
	Qlty vide item No. 1/3 (d) = $100.64 \text{ m}^3$ @ Rs. 13.00/m <sup>3</sup> Rs. 1,308.32
3/25	Providing boulders or stone filling with unsized stone of one man size of 60 cm with behind the abutments, wing walls, retaining walls, etc within 200 m complete
	$2 \times 1 \times 6.80 \times 4.00 \times 0.25 = 13.60 \text{ m}^3$
4/20	<ul> <li>@ Rs. 322.00/m<sup>2</sup> Rs. 4,379.20</li> <li>Providing regular stone masonry work in returning walls, breast walls and wing walls with hammer dressed or blunt chisel dressed stones of heavy section (size not less than 25cm x 25cm</li> </ul>

x 30cm), with proper key stones each not less than 25cm x 25cm x 75cm, in cement mortar 1:6 including carriage of stone within 200m and filling in trenches and providing weep holes at 1.2 to 1.5m apart (staggered), complete as directed.

$$2 x 2 x 4.00 x 1.80 x 0.40 = 11.52 m3$$
  

$$2 x 2 x 6.00 x 1.80 x 0.40 = 17.28 m3$$
  

$$= 28.80 m3$$
  
@ Rs. 1060.00/m<sup>3</sup> Rs. 30,528.00

5/41 Providing shuttering with dressed planks not less than 25mm thick properly joined including battens, props to the proper level and removing of same after the concrete hardened complete as directed.

$$2 x 2 x 3.00 x 1.80 = 21.60 m2$$
  

$$2 x 2 x 5.80 x 1.80 = 41.76 m2$$
  

$$= 63.36 m2$$
  
@ Rs. 92.00/m<sup>2</sup> Rs. 18,691.20

6/28 Providing cement concrete work in proportion 1:3:6 with hard broken stone aggregates 40mm down graded, including necessary carriage of stone and sand within a distance of 200m and curing, complete as directed

$$2 x 1 x 6.80 x 4.00 x 0.10 = 4.80 m2$$
  

$$2 x 2 x 6.00 x 1.80 x 0.10 = 4.32 m2$$
  

$$2 x 2 x 3.00 x 1.80 x 0.10 = 2.16 m2$$
  

$$= 11.28 m2$$
  
(@ Rs. 2344.00/m<sup>2</sup> Rs. 26,440.32

7/27 Providing 12mm thick cement plastering including cleaning surface, curing carriage of sand within 200m complete.

@ Rs. 92.00/ m<sup>2</sup> Rs. 12,210.24

8/ Providing filling fitting of G.I Pipe

	Rs.	105.00
Total	Rs.	1,00,002.60
Say	Rs.	1,00,000.00

(Rupees One Lakh) Only.

## ESTIMATE FOR CONSTRUCTION OF RURAL GODOWN

(The rate based as per M.P.W.D Schedule of rates for Building 2007 - 2008)

- Earthwork in excavation in foundation trenches, including 1/1.1 dressing of sides and ramming of the bottom including (b) stacking of serviceable stones, disposal and removal of excavated earth within a lead of 50m and lift of 1.50m complete.  $8.640 \text{ m}^3$ Colm 6 x 1.20 x 1.20 x 1.00 = 2.550 m<sup>3</sup> 3 x 1.00 x 1.00 x 0.85 =  $1.080 \text{ m}^3$ Plinth 2 x 4.00 x 0.30 x 0.45 = 1.620 m<sup>3</sup> 2 x 6.00 x 0.30 x 0.45 =  $0.315 \,\mathrm{m}^3$ 2 x 1.50 x 0.30 x 0.35 =  $0.630 \,\mathrm{m}^3$ 1 x 6.00 x 0.30 x 0.35 =  $0.300 \text{ m}^3$ 1 x 4.00 x 0.30 x 0.25 = 15.135 m<sup>3</sup> Rs. 1286.47 @ Rs.85.00/m Providing and laying cement concrete in proportion 1:4:8 2/2.1(b) (1-cement, 4-sand, 8-stone Aggregate of 63mm and down graded) including necessary curing complete excluding shuttering. 0.864 m<sup>3</sup> Colm 6 x 1.20 x 1.20 x 0.10 =
  - $3 \times 1.00 \times 1.20 \times 0.10 = 0.864 \text{ m}^3$   $3 \times 1.00 \times 1.00 \times 0.10 = 0.300 \text{ m}^3$   $1.164 \text{ m}^3.$ @ Rs.2351.00/m<sup>3</sup>

Rs. 2736.56

3/6.2 Providing tor steel reinforcement in R.C.C work excluding
(ii) cutting, bending, cranking and tying in position with binding wire 20 gauge, complete upto floor two level.

Net	6 x 20 x 1.20 x 0.89	=	1.282 Qtls.
	3 x 16 x 1.00 x 0.89	=	0.427 Qtls.
Colm	6 x 4 x 4.75 x 1.58	=	1.801 Qtls.
	3 x 4 x 4.55 x 0.89	=	0.486 Qtls.

T/Beam	2 x	4 x 5.70 x 0.89	=	0.406 Qtls.
	3 x	4 x 6.20 x 0.89	=	0.662 Qtls.
Lintel	6 x	4 x 1.45 x 0.62	=	0.216 Qtls.
	2 x	4 x 1.30 x 0.62	=	0.064 Qtls.
				5.344 Qtls.
			@ R	s.5373.00/Qtl.

4/6.1 Providing mild steel reinforcement for R.C.C work(ii) including cutting, bending, cranking and tying in position with binding wire 20 gauge, complete upto floor two level.

Col <sup>m</sup>	6 x 29 x 0.70 x 0.22	= 0.268 Qtls.
	3 x 28 x 0.50 x 0.22	= 0.092 Qtls.
T/Beam	2 x 36 x 0.75 x 0.22	= 0.119 Qtls.
	3 x 41 x 0.75 x 0.22	= 0.203 Qtls.
Lintel	6 x 9 x 0.45 x 0.22	= 0.053 Qtls.
	2 x 8 x 0.45 x 0.22	= <u>0.016 Qtls.</u>
		0.751 Qtls.
		@ Rs.4704.00/Qtls

Rs. 3532.70

Rs. 28713.31

5/3.5 Providing coursed random rubble stone masonary in foundation and plinth with unsized stone bonded with cement mortar of proportion 1:6.

 $\begin{array}{rcl} 2 \times 3.80 \times 0.30 \times 0.45 & = & 1.026 \ m^3 \\ 4 \times 2.80 \times 0.30 \times 0.45 & = & 1.512 \ m^3 \\ 2 \times 2.80 \times 0.30 \times 0.35 & = & 0.588 \ m^3 \\ 2 \times 1.30 \times 0.30 \times 0.35 & = & 0.273 \ m^3 \\ 1 \times 4.00 \times 0.30 \times 0.35 & = & \frac{0.420}{3.819} \ m^3 \\ \end{array}$ 

Rs. 7000.22

6/2.9 Providing shuttering including centering for flat surface
(a) such as slabs, shelves, chajja and for vertical faces such as columns, walls, ends of beams etc. with dressed plank not less than 25cm thick firmly fixed etc. complete as directed.

6 x 4 x 0.25 x 1.05	=	6.30 m <sup>2</sup>
6 x 4 x 0.20 x 3.10	=	14.88 m <sup>2</sup>
3 x 4 x 0.20 x 0.50	=	1.20 m <sup>2</sup>
3 x 4 x 0.15 x 2.90	=	5.22 m <sup>2</sup>
2 x 2 x 0.25 x 3.80	=	3.80 m <sup>2</sup>
2 x 2 x 0.20 x 1.30	=	1.04 m <sup>2</sup>
4 x 2 x 0.25 x 2.80	=	5.60 m <sup>2</sup>
2 x 2 x 0.20 x 2.80	=	2.24 m <sup>2</sup>
6 x 2 x 0.15 x 1.40	=	2.52 m <sup>2</sup>
2 x 2 x 0.15 x 1.20	=	<u>0.72 m<sup>2</sup></u>
		43.52 m <sup>2</sup>
	(	@ Rs.148.00/m <sup>2</sup>
	$6 \times 4 \times 0.20 \times 3.10$ $3 \times 4 \times 0.20 \times 0.50$ $3 \times 4 \times 0.15 \times 2.90$ $2 \times 2 \times 0.25 \times 3.80$ $2 \times 2 \times 0.20 \times 1.30$ $4 \times 2 \times 0.25 \times 2.80$ $2 \times 2 \times 0.20 \times 2.80$ $6 \times 2 \times 0.15 \times 1.40$	$6 \times 4 \times 0.20 \times 3.10 =$ $3 \times 4 \times 0.20 \times 0.50 =$ $3 \times 4 \times 0.15 \times 2.90 =$ $2 \times 2 \times 0.25 \times 3.80 =$ $2 \times 2 \times 0.20 \times 1.30 =$ $4 \times 2 \times 0.25 \times 2.80 =$ $2 \times 2 \times 0.20 \times 2.80 =$ $6 \times 2 \times 0.15 \times 1.40 =$ $2 \times 2 \times 0.15 \times 1.20 =$

7/2.4 Providing and laying cement concrete in proportion 1:2:4(i) (b) corresponding to M100 including necessary curing complete excluding shuttering.

F/Colm	6 x 1.20 x 1.20 x 0.40	$= 3.456 \text{ m}^3$	
	3 x 1.00 x 1.00 x 0.30	$= 0.900 \text{ m}^3$	
Colm	6 x 0.25 x 0.25 x 1.05	$= 0.394 \text{ m}^3$	
	6 x 0.20 x 0.20 x 3.10	$= 0.744 \text{ m}^3$	
	3 x 0.20 x 0.20 x 0.50	$= 0.060 \text{ m}^3$	
	3 x 0.15 x 0.15 x 2.80	$= 0.189 \text{ m}^3$	
	6 x 0.15 x 0.10 x 1.40	$= 0.126 \text{ m}^3$	
	2 x 0.15 x 0.10 x 1.20	$= 0.036 \text{ m}^3$	
		5.905 m <sup>3</sup>	_
		@ Rs.3247.00/m	3

Rs. 19173.53

Rs. 6440.96

8/3.9 Providing first class brick wall in required thickness in(ii) (b) cement mortar 1:6 including curing complete as directed

Wall  

$$2 \times 4.00 \times 3.10 = 24.80 \text{ m}^{2}$$

$$4 \times 3.00 \times 3.10 = 37.20 \text{ m}^{2}$$

$$2 \times 1.50 \times 1.20 = 3.60 \text{ m}^{2}$$
Less for opening (-) D  

$$2 \times 1.20 \times 2.10 = (-)5.04 \text{ m}^{2}$$

$$W \quad 4 \times 1.20 \times 1.50 = (-)7.20 \text{ m}^{2}$$

$$2 \times 1.00 \times 1.50 = (-)3.00 \text{ m}^{2}$$

$$50.36 \text{ m}^{2}$$

$$@ \text{ Rs.}384.00/\text{m}^{2}$$

Rs. 19338.24

9/7.2 Providing undressed wood work in trusses, purlins, rafters,
(b) post plates, wall plates and the like, framed, hoisted and fixed in position with nails, spikes, nuts and bolts etc.

Beam	3 x 6.50 x 0.10 x 0.075	=	0.146 m <sup>3</sup>	
	2 x 5.90 x 0.10 x 0.075	=	0.088 m <sup>3</sup>	
King post	8 x 0.65 x 0.10 x 0.10	=	0.052 m <sup>3</sup>	
Struts	16 x 1.25 x 0.075 x 0.075	=	0.113 m <sup>3</sup>	
R/rafter	16 x 2.65 x 0.10 x 0.075	=	0.318 m <sup>3</sup>	
Purlin	13 x 6.30 x 0.10 x 0.075	=	<u>0.614 m<sup>3</sup> </u>	
			1.331 m <sup>3</sup>	
@ Rs.16636.00/m				

10/1.3 Earthwork in filling available excavated earth in trenches, plinth, sides of foundation etc. in layers not exceeding 20cm thick including breaking clods consolidating each layer by ramming and watering etc.

$$1 \times 3.80 \times 5.80 \times 0.45 = 9.918 \text{ m}^{3}$$
  

$$1 \times 5.80 \times 1.30 \times 0.35 = \frac{2.639 \text{ m}^{3}}{12.557 \text{ m}^{3}}$$
  
@ Rs.42.00/m<sup>3</sup>

Rs. 527.39

Rs. 22142.51

11/4.5 Providing 100mm thick soling with approved quality of stones including ramming consolidating and filling the interstices with stone aggregates complete.

$$1 \times 3.80 \times 5.80 = 22.04 \text{ m}^{2}$$
  

$$1 \times 5.80 \times 1.30 = \frac{7.54 \text{ m}^{2}}{29.58 \text{ m}^{2}}$$
  
@ Rs.108.00/m<sup>2</sup>

12/4.7 Providing cement concrete floor 65mm thick in proportion

(ii) 1:3:6 (1-cement, 3-sand, 6-stone aggregates) to the proper level and slope including ramming and curing complete as directed.

Qty. vide item No. –  $11/4.5 = 29.58 \text{ m}^2$ @ Rs.187.00/m<sup>2</sup>

13/5.9 Providing corrugated galvanized iron sheet roofing fixed with galvanized iron J or L hooks, bolts and nuts, 8mm diameter. With bitumen and GI limpet washers or with GI limpet washers filled with white lead complete excluding the cost of purlins, rafters and trusses.

$$2 \times 6.60 \times 2.65 = 34.98 \text{ m}^{2}$$
  

$$1 \times 6.60 \times 1.75 = \frac{11.55 \text{ m}^{2}}{46.53 \text{ m}^{2}}$$
  
@ Rs.430.00/m<sup>2</sup>

14/7.1 Providing dressed and rebated wood works in frame of doors and other similar works, framed and fitted in position with nails, spikes, nuts, bolts etc as required and directed complete.

Door 
$$4 \times 2.10 \times 0.10 \times 0.075 = 0.063 \text{ m}^3$$
  
 $2 \times 1.40 \times 0.10 \times 0.075 = 0.021 \text{ m}^3$   
 $0.084 \text{ m}^3$ .  
@ Rs.16636.00/m<sup>3</sup> Rs. 1397.42

Rs. 3194.64

Rs. 5946.60

Rs. 20007.90

15/6.9 Providing steel casement windows, ventilators and clerestory windows as per IS specification (in ground floor) including fitting and fixing in position with lugs (100mm x 16mm x 3.15mm) embedded in cement concrete blocks 15cm x 10cm x 10cm of mix 1:3:6 including providing and fixing handles, bolting device, locking arrangements etc. as required complete.

$$\begin{array}{rcl} 4 \ x \ 1.20 \ x \ 1.50 & = & 7.20 \ m^2 \\ 1 \ x \ 1.00 \ x \ 1.50 & = & \underline{3.00 \ m^2} \\ & 10.20 \ m^2 \\ \hline \end{array} \\ \hline \begin{array}{r} @ \ Rs.975.00/m^2 & Rs. \ 9945.00 \\ \hline \end{array} \\ \hline \end{array} \\ \begin{array}{r} (d) \ \ Qty. \ vide \ item \ No. \ 15/6.9 = \ 10.20 \ m^2 \\ \hline \end{array} \\ \hline \begin{array}{r} @ \ Rs.308.00/m^2 & Rs. \ 456.00 \\ \hline \end{array} \end{array}$$

16/9.1 Providing and fixing glass panes, ordinary quality,(b) embedded in putty and fixed with nails etc. complete (for wooden doors and windows).

Window 
$$4 \times 1.20 \times 1.50 = 7.20 \text{ m}^2$$
  
 $2 \times 1.00 \times 1.50 = \frac{8.00 \text{ m}^2}{10.20 \text{ m}^2}$   
@ Rs.626.00/m<sup>2</sup>

Rs. 6385.20

17/4.1 Providing 12mm thick cement plaster including cleaning

(b) (ii) the surface and curing complete as directed.

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Walling -
Vide item No. 8/3.9 = 50.36 x 2
                                               100.72 m<sup>2</sup>
                                           =
                                                   24.00 m<sup>2</sup>
Flooring
                    1 x 4.00 x 6.00
                                         =
                                                    9.00 \text{ m}^2
                    1 x 1.50 x 6.00
                                          =
                                                    8.40 \text{ m}^2
                    1 x 14.00 x 0.60
                                          =
                                                    2.25 m<sup>2</sup>
                    1 x 5.00 x 0.45
                                         =
                                                    1.20 \text{ m}^2
                    2 x 4.00 x 0.15
                                         =
                                               1.20 m<sup>2</sup>
                    1 x 4.00 x 0.30
                                           =
                                                 146.77 m<sup>2</sup>
                                                  @ Rs.95.00/ m<sup>2</sup>
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Rs. 13943.15

18/5.4 Providing 3mm thick plywood ceiling fixed with 1<sup>st</sup> class local wood/pine wood beading 50mm x 12mm on wooden frames @ 120cm c/c both ways including supplying of nails etc. plywood ceiling fixed complete.

$$1 \times 6.00 \times 4.00 = 24.00 \text{ m}^2$$
  
@ Rs.198.00/m<sup>2</sup>

19/10.22 Applying ready mixed priming coat of approved brand & quality as per specifications complete as directed.

2 x 1.20 x 2.10 x 2.60	=	13.104 m <sup>2</sup>			
1 x 6.00 x 4.00					
		37.104 m <sup>2</sup>			
	@ R	s.18.00/m <sup>2</sup>	R	s.	667.87
		1 x 6.00 x 4.00 =	$2 \times 1.20 \times 2.10 \times 2.60 = 13.104 \text{ m}^{2}$ $1 \times 6.00 \times 4.00 = \frac{24.000 \text{ m}^{2}}{37.104 \text{ m}^{2}}$ @ Rs.18.00/m <sup>2</sup>	$1 \times 6.00 \times 4.00 = \frac{24.000 \text{ m}^2}{37.104 \text{ m}^2}$	$1 \times 6.00 \times 4.00 = \frac{24.000 \text{ m}^2}{37.104 \text{ m}^2}$

Window 
$$4 \ge 1.20 \ge 1.50 \ge \frac{2}{3} = 4.80 \ \text{m}^2$$
  
 $2 \ge 1.00 \ge 1.50 \ge \frac{2}{3} = \frac{2.00 \ \text{m}^2}{6.80 \ \text{m}^2}$   
@ Rs.17.00/m<sup>2</sup> Rs. 115.60

20/10.12 Painting with best quality synthetic enamel with approved make and brand including smoothening the surface by sand papering etc. & using approved putty on the surface, if necessary, complete as directed.

Door	2 x 1.20 x 2.10 x 2.60	=	13.104 m <sup>2</sup>
Window	4 x 1.20 x 1.50 x <sup>2</sup> / <sub>3</sub>	=	4.800 m <sup>2</sup>
	2 x 1.00 x 1.50 x <sup>2</sup> / <sub>3</sub>	=	2.000 m <sup>2</sup>
Ceiling	1 x 6.00 x 4.00	=	<u>24.000 m<sup>2</sup></u>
			43.904 m <sup>2</sup>
		@ R	s.77.00/m <sup>2</sup>

Rs. 3380.60

Rs. 4752.00

21/10.7 Distempering with dry distemper 2 (two) coats of required shade to give an even shade to new works including priming coat etc. Walling vide item No =  $8/3.9 = 50.36 \text{ m}^2$  $50.36 \text{ x} 2 = 100.72 \text{ m}^2$ @ Rs.33.00/ m<sup>2</sup> Rs. 3323.76 22/10.14 Roof painting with red/green paint including brushing with wire brush and cleaning complete as directed. (b) Qty. vide item No.  $13/5.9 = 46.53 \times 1\frac{1}{2} = 67.795 \text{ m}^2$ @ Rs.67.00/m<sup>2</sup> Rs. 4676.26 23/13.15 Providing drain (open surface) with bed and wall thickness of 100mm finished with cement plaster 1:3 (1) 150mm x 150mm.  $1 \times 26.15 = 26.15 \text{ Rm}$  $1 \times 24.40 = 24.40 \text{ Rm}$ 50.55 Rm @ Rs.216.00/Rm Rs. 10918.8 TOTAL : Rs.200002.69 Say Rs.2,00,000.00

(Rupees Two lakhs) only.