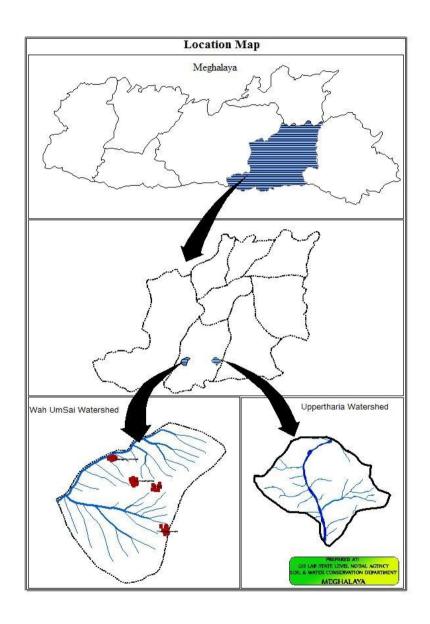
# DETAILED PROJECT REPORT OF INTEGRATED WATERSHED MANAGEMENT PROGRAMME (IWMP PROJECT VI -2010-11) UPPER THARIA AND WAH UMSAI MICRO WATERSHEDS UNDER SHELLA BHOLAGANJ C & RD BLOCK EAST KHASI HILLS DISTRICT MEGHALAYA





#### **SUMMARY**

Name of the Sate : Meghalaya

Name of the District : East Khasi Hills District

Name of the C&RD Block : Shella Bholaganj

Name of the Villages:

UPPER THARIA MICRO WATERSHED:(i) Mawsiangei (ii) Suktia (iii) Tyrngei (iv) Nongla

WAH UMSAI MICRO WATERSHED: (i) Tyrna (ii) Mawshamok (iii) Lumsohphie (iv) Nongthymmai

Name of the Project : East Khasi Hills – IWMP – VI

Total Geographical Area : 1464 Ha

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 Upper Tharia and Wah Umsai Micro Watersheds (IWMP-VI) project are located in Shella Bholaganj C&RD Block, East Khasi Hills District of Meghalaya. Consisting of a two micro-watersheds, the project area is drained by the Tharia River and its tributaries flowing in a north to south direction and Wah Umsai flowing from the north to the south west direction. The total area is 1464 Ha with 1000 to be treated under the Integrated Watershed Management Programme (IWMP).

The Project area is located at a distance of about 80 km from Shillong the District Headquarter and also the State Capital. A total of eight villages are covered under the project. These are –

#### **UPPER THARIA MICRO -WATERSHED**

- 1. Mawsiangei
  - 2. Suktia
  - 3. Tyrngei
  - 4. Nongla

#### WAH UMSAI MICRO- WATERSHED

- Tyrna
- 2 Mawshamok
- 3 Nongthymmai
- 4 Lumsohphie

#### 1.2 Micro-watershed Information:

The micro-watershed code is 3C1C1ab for Upper Tharia watershed and 3CB5b2m for Wah Umsai Watershed as codified by the North East Space Application Centre (NESAC). The total area of the micro-watershed is 1464 Ha, with 1000 hectares to be treated under the Integrated Watershed Management Programme (IWMP).

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

Upper Tharia (3C1C1ab) and Wah Umsai (3CB5b2m) Micro watershed 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 4 villages do not have any road connectivity. The farmers are all marginal and 279 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. 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 Shella Bholaganj C&RD Block of Sohra Civil Sub-Division, East Khasi Hills District. It is situated at a distance of about 75 km from Shillong the District Headquarter which is also the State Capital. The geographical location of Wah Umsai Watershed is between N 91°39.16' to 91°42.45' Longitude and E 25°13.03' to 25°14.53' Latitude and for Upper Tharia watershed is N 91°45.44' and E 25°11.52' to 25°14.42' Longitude and N. There are 8 villages under two Watersheds which are as follows –

#### UPPER THARIA WATERSHED

- 1 Mawsiangei
- 2 Suktia
- 3 Tyrngei
- 4 Nongla

#### WAH UMSAI WATERSHED

- 5 Tyrna
- 6 Mawshamok
- 7 Nongthymmai
- 8 Lumsohphie

At present two 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 (feet)	Slope Range (%)	Major streams	Topography	
800 ft to 2800 ft	8% to 80%	Micro Watershed	Upper Tharia	Strongly Sloping
499 ft to 3600 ft	14% to 70%	Micro Watershed	Wah Umsai	Strongly Sloping

- **2.3 Drainage:** The major stream draining the micro-watershed is the UpperTharia and Wah Umsai flowing in a north-south direction. The slopes of the micro-watershed are dissected by numerous small tributaries flowing to the Upper Tharia and Wah Umsai.
- **2.4 Soil:** Soil Texture is coarse on the sloping lands. 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.

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

1	2	3	4	5	6	7	8	9								
Sl. No.	Names of State	Names of District	Names of Projects	Cause	Types of erosion	Area affected (ha)	Run-off (mm/ year)	Average soil loss (Tonnes/ ha/ year)								
					W	ater erosio	n:									
			East	a	Sheet	750	2500-4000									
		East	Khasi	b	Rill	350	2500-4000	10 to 15								
1	Meghalaya	Khasi									Khasi Hills –	С	Gully	200	2500-4000	
		Hills	Hills IWMP VI	Sub total		1464										
				Wind	erosion	Nil	Nil	Nil								

**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.

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

1	2	3	4	5	6	7		8	9																						
Sl.	Name of	Name of the Agro-	Area (in	Area (in	Area (in				Area (in		Area (in	Area (in	Area (in		Area (in	Area (in		Area (in	Area (in	Area (in	Names of		Major soil types		Average annual rainfall in mm	Major cro	pps				
No.	State	climatic zone				the districts	the Projects	e Projects a)Type b) Area (ha)		(preceding 5 years' average)	a) Name	b) Area (ha)																			
									Betel nut	100																					
				Moderate shallow, excessively drained, fine – loamy soil on	Moderate shallow, excessively		Betel leaf	50																							
																moderately steep side slopes of hills			Oranges	40											
1	Machalana	Southern Slopes	1000 Ha	East Khasi	East Khasi Hills – IWMP – VI  Basi Cast Khasi Hills – IWMP – VI  Basi Cast Khasi Hills – IWMP – VI  Basi Cast Khasi Having loamy surfaces with severe erosion hazard and strong stoniness associated with moderately Shallow, excessively drained, loamy skeletal soils on gently sloping hill tops with very severe erosion hazard and slight stoniness	1464	0000	Bay leaf	100																						
1	Meghalaya	and Valley	1000 Ha	Hills																							•	На	9000 mm	Broom stick	30
		vaney																					Black pepper	40							
									Banana	5																					
						Crosson nazara and singlic stollinoss			Pineapple	10																					
								Total		375 Ha																					

**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 millet, maize, yam and vegetables. Fruit crops are well suited in the lower reaches which include Lemon, orange, pineapple, jackfruit and litchi. The slopes of the Upper Tharia and Wah Umsai are also very suitable for betel nut, betel leaf, black pepper, broomstick, which contribute to the income of the people.

Table 2.4: Crop yield and production

Crops	Area (ha)	Average Yield (Qtl) per ha.	Total Production (Qtl.)
Yam	50	15	750
Ginger	20	50	1000
Tapioca	30	40	1200
Betel nut	100	9	900
Betel leaf	50	9	450
Black Pepper	40	6	240
Oranges	40	40	8000
Bay Leaf	100	20	2000

- **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.

<u>Demographic Status</u>: The total households of both the watersheds in the watershed project is 453 with a total population of 2118, of which 1071 are male and 1047 are female. The detail of the household in each of the villages in the watershed project is as follows:

#### UPPER THARIA MICRO - WATERSHED

1.	Mawsiangei	- 74
2.	Suktia	- 77
3.	Tyrngei	- 31
4.	Nongla	- 46
		228

#### WAH UMSAI MICRO -WATERSHED

	1. Tyrna		- 144
	2. Mawshamok		- 23
	3. Nongthymmai		- 43
4.	Lumsohphie	-	15
	•		225

#### *Infrastructure facilities*:

- 2.1.1 *Roads:* Few villages within the Project Area are connected by road. The Project area depends entirely on the kutcha road connected either to Sohra or Pynursla.
- 2.1.2 *School:* there are only 9 L.P Schools and 2 U.P Schools within the Project Area run either by the Mission or by the Government.
  - 2.1.3 *Electricity*: Connections have been provided to all the eight villages.
- 2.1.4 *Health*: There is only one Health Centre at Tyrna Village but for the other villages they had to rush to Pynursla, Sohra or Shillong for treatment.

- 2.1.5 *Water Supply*: Drinking water supply have been provided by the PHE Deptt but not upto the mark. 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 Sohra and Pynursla. However, the main market where the people sell their produces is at Shillong.

**Table 2.5: Infrastructure Status.** 

1	2		3		4		
Name of District	Name of Project		Parameters:		Statu	ıs	
East Khasi Hills	East Khasi Hills – IWMP VI	(i)	No. of villages connected to the main road by an all-weather road.	are at 1	connected b hr to 2 hrs v motorable j	valking fro	
		(ii)	No. of village provided with electricity		8 nos. elec	etrified	
		(iii)	No. of households without access to drinking water		100 no	os.	
		(iv)	No. of educational institutions:	(P)	(S)	(HS)	(VI)
			Primary (P)/ Secondary (S)/ Higher Secondary (HS)/ Vocational institution (VI)	11 Nos.	-	-	-
		(v)	No. of village with access to Primary Health Centre		Nil		
		(vi)	·				
		(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)	(O)
			(e.g. Union (U)/ Society (S)/ Private agency (PA)/ Others (O))	Nil	Nil	Nil	Nil
		(xiii)	No. of villages with access to Aganwadi Centres	4 Nos			
		(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.

**Table 2.6: Existing livestock population** 

Type of Animal	Population
Piggery	284
Poultry	2317
	2601

**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	J 1	households	households	Irrigated	Rainfed	Total						
		(i) Large	-	-									
Fast	l l	(ii) Small	39	-	-	97 Ha	97 ha						
Khasi		Hills –						(iii) Marginal	297	115	1	356 Ha	35 Ha
Hills			(iv) Landless	82	36	-	-	-					
		Sub - Total	418	151		453 Ha	453 Ha						

Table 2.5: Common Property Resources in the Project Area

1	2	3		4	1				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	349 ha	-		-	349 Ha	-	-	-
Hills	IWMP VI	(ii) Pastures	ı	-	-	-	-	-	-	-
		(iii) Private Agriculture land	375 Ha	-	-	-	327 Ha			
		(iv) Village woodlot	-	-	-	-				
		(v) Forest	-	-	-	740 Ha				300 ha
		(vi) Village Ponds/ Tanks	-	-	-	-				
		(vii) Community Buildings	-	-	-	-				
		(viii) Weekly Markets	-	-	-	Pynursla/ Sohra				
		(ix) Permanent Markets	-	-	-	Pynursla /Sohra				
		(x) Temples/ Places of worship	-	-	-	Church- 1 no				
		(xi) Others (Pl. specify)	_	-	-	-	24ha			
		Total	724 Ha	-	-	740 ha	700 Ha	-	-	300 Ha-

**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 = 12 Ha

b) Water bodies-River/Stream-Perennial = 27 Ha

c) Tree clad Area-close = 1076 Ha

d) Tree clad Area-open = <u>349 Ha</u>

Total = 1464 Ha

2.12 Problems of the Area: The primary problem 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 problem 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, and Venn diagrams were used.
- iii) GIS & Remote Sensing: 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 GIS Lab State Level Nodal Agency, Soil & Water Conservation Department, Meghalaya 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
Α.	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	
	Cadastral map	No
	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	No
	6. Mechanized tools/ implements	No
	7. Bio-fencing	Yes
	8. Nutrient budgeting	Yes
	9. Automatic water level recorders & sediment samplers	No
	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 VI	Polo, Shillong
	1 *** *** *** *** *** *** *** *** *** *	(iv) Telephone 0364 – 2591085
		(v) Fax Do
		(vi) E-mail shg(T) <u>Divn@yahoo.com</u>

#### 3.3 Institution Building

#### i) Watershed Committee (WC)

The Watershed Committees of the Upper Tharia and Wah Umsai, IWMP VI was constituted with the active involvement of the villagers with strong support of the Traditional Institutions (Village Durbar/Council). The Upper Tharia and Wah Umsai Watershed Committees have been registered under the Society Registration Act 1860.

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

**(A)** 

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	Educational 23ualifycation	Function/s assigned#
				President	M	-	ST							1		Cl – X	A to I
East Khasi	East Khasi	T.T	11 <sup>th</sup> March	Secretary	M	-	ST								1	B.A	A to I
Hills	Hills District –	Upper Tharia	2010	Member	10 M	-	ST				1	1	2	6		Cl - VI	Do
District	IWMP – III	Папа		Member	2 F	-	ST									to B.A	Do
	TWWII — III			Member													
							<b>(B)</b>										
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	Educational 23ualifycation	Function/s assigned#
				President	M	-	ST							1		Cl – X	A to I
East Khasi	East Khasi	W/ala	11 <sup>th</sup> March	Secretary	M	-	ST								1	B.A	A to I
Hills	Hills District –	Wah Umsai	2010	Member	12 M	-	ST					2	5	5		Cl - VI	Do
District	IWMP – III	Uiiisai		Member	Nil	-	ST									to B.A	Do
	1 ( ) III			Member													

D.

A. PNP and PRA

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

- B. Planning
- 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.

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

1	2			3			4				5			6	
		Tot	tal no. of re	gistered	SHGs	No.	of mer	nbers				C/ST in egory			PL in egory
Name of the Distric	Names of projects	ith on ly M en	With only Women	With both	Total	Categories	M	F	Total	M	F	Total	M	F	Total
East Khas Hills	EKH. IWMP VI -UPPER THARIA	-	-	2 nos	2 Nos	(i) Landless (ii) SF (iii) MF (iv) LF	15	10	25	15	10	25	NA	NA	NA

1	2			3			4				5			6	
Nomes		Total r	no. of re	gistered	SHGs	No. o	of mer	nbers				C/ST in egory			PL in egory
Names of the Districts	Names of projects	With only Men	With only Wo men	With both	Total	Categories	M	F	Total	M	F	Total	M	F	Total
East Khasi Hills	EKH. IWMP VI WAHUM SAI	1	-	2 nos	2 Nos	(i) Landless (ii) SF (iii) MF (iv) LF	15	10	25	15	10	25	NA	NA	NA

#### 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 me	nbers			SC/S'	T in each ory		of BPL i	
Districts	Projects	Men	Wom en	Both	Total	Categories	M	F	Total	M	F	Total	M	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. N o.	State	Distri ct	Names of Project	Amount earmarked for EPA	Entry Point Activities planned	Estimated cost	Expenditure incurred	Balance	Expected outcome	Actual outcome
1	Meghalaya	East Khasi Hills	East Khasi Hills – IWMP VI	6.0 Lakhs	Construction of Check Dam	6.00	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 VI	2 nos W/C	4 nos.	4 nos.	Participatory Rural Appraisals	N.A	Done	Done	Done	Done	-	1.50

#### **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				
						Area	Stora	Augm		repair of ctures	existing	Cor	nstruction	of new str	uctures		Tota	l target	
S 1.	Nam e of	Name of	Name of Projects	Type of structures	No	irriga ted (ha)	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 (m³)	Estima ted cost
N o	State s	Distri cts		(i) Check Dam	ı	-	1	ı	1	-	1	24 nos	60 ha	3000 m <sup>3</sup>	12.4	24 nos	60 ha	1	12.4
				(ii)Water harvesting	-	-	-	-	-	-	1	13 nos	140 ha	3000 m <sup>3</sup>	12.04	13 Nos	140 Ha	1	12.04
			Total		-	-	-	-	-	-	-	37 Nos	200На	-	24.44	37 nos	200 ha	•	24.44

						8					9	10
				Acł	nievement	due to pro	ject					
Augn		repair of actures	existing	Co	nstruction	of new stru	ıctures	Тс	otal achieven	nent	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	apacity (in lakhs) (ha) capacity incurred sourced (apacity) incurred sourced (ba) (apacity) incurred (ba) (ba) (apacity) incurred (ba) (ba) (ba) (ba) (ba) (ba) (ba) (ba)					-
-	-	-	-	24 nos	60 ha	3000m <sup>3</sup>	12.4	60 ha	3000m <sup>3</sup>	12.4	3000m <sup>3</sup>	60 ha
-	-	-	-	13 nos	40 ha	5000m <sup>3</sup>	12.04	40 ha	5000m <sup>3</sup>	12.04	5000m <sup>3</sup>	40 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	sed targ	et					Achi	eveme	nt due to p	project			
S. No	Names of States	of	Names of	1 ype of	No.	Area irrigated	exist	entation/ r ing recha structures	rging		struction arging st	of new ructures	Total	target		nentation/ re sting rechar structures	ging		struction o		Total achi	ievement	Change in irrigated area (Col. 8-
		Districts	projects			(ha)	No.		Estimat ed cost		Area to be irrigate d (ha)	Estimate d cost	Area to be irrigated (ha)	Estimate	No.	irrigated	Expen di-ture incurre d	No	gated	Expen di-ture incurre d	gated	Expendi -ture incurred	()
				(i)Open wells																			
				(ii)Bore wells		Nil		Nil			Nil		Nil			Nil			Nil		Nil		
				(iii)Any others (Pl. specify)																			
				Total for the project																			

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

	2				3			
		Ma	jor activities o	of the UGs –	Targets			
Names of	Names of		Structure/ ac	tivity propos	sed	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	IWMP VI Upper	1.	Piggery	60 units	-	60 nos.	4.80	0.24
Hills	tharia & Wah	2.	Poultry	60 units	-	60 nos.	4.80	0.24
	Umsai							

#### **4.2.4** Activities executed by User Groups in the Project Areas:

	4														
	Major activities of the UGs – Achievements														
	Structu	re/ activ	ity	No. of UGs	Expenditure	N	lo. of man	days	Amount of WDF						
Sl. No.	Туре	No.#	Treated Area (ha.)	involved	incurred (Rs.)	SC	ST	F	collected (Rs.)						
1.	Water harvesting structures	8		8 nos	6.00		3600	2000	0.30						

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

1	2	3									
		Majo	or activities of the SH	IGs							
Names of the Districts	Names of projects	Names of projects  Name of activity  No. of SHGs involved									
		1. Tailoring									
East Khasi Hills	East Khasi Hills –	2. Basket Making									
Last Khasi IIIlis	IWMP VI	3. Stabilized Mud Block									
		4. Piggery Farming	8 nos.	2.40							
		5. Canes & Handicraft	5 nos.	2.50							

#### 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	Total a	received by tount in Rs.)	he SHG	Total annual	Total			SHGs d as	Total Amount of	
SHGs given training	Loan from revolving fund	Material	Others (pl. specify)	Income generated	annual Savings (Rs.)	I	II	III	loan sanctioned by the bank(s)	No. of SHGs

#### **4.2.7** Other activities of watershed works phase:

1	2	3		2	1	5		6 7			8		9		10		11		12		13	
District	Names of projects	Ridge treatn		Draina treat			rsery		and opment	Cro demoi tior	ıstra	Past develo	ture pment	Veteri servi		Fish develo	•	Non- conventi- energ	onal	Any others (Off Farm services)		Total cost incurred (Rs. In lakhs)
		(a)	(b)	(a)	(b)	(a )	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	-	1	(a)	(b)	ruinis)
EKH	IWMP VI	300 ha	15.90	372 ha	32.36	-	-	327.33 ha	26.74	44	1.1 0	-	-	138	15. 00	4	1.20	-	-	96	17.20	109.50

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

1	2	3		4		5 6 7								8						
			Тур	e of treatm	ent	7	Γype of I	land	Executing agency			t	Achievement							
District	Project		(i) Ridge area (R)	(ii) Drainage line (D)	(iii) Land Dev. (L)	(i) Private	(ii) Com- munity	(iii) Others (pl. specify)	(i) UG (ii)SHG (iii) Others (pl. specify)	No. of units (No./ cum./ rmt)	cost (	mated (Rs. in kh)	of completion	No. of units (No./ cu.m./ rmt)	i (R	ncu s. ir	irre 1 la	ure d kh)	Status of comple-	Actual month & year of completion (mm/yyyy)
		Staggered trenching								·										
		Loose boulder Contour bund	R	-	-	P	-	-	Benefi- ciary	67.33 Ha			3 yrs	-	-	-	-	-	-	-
		Half moon terrace	R	-	-	P	-	-	- do-	60 ha			3 yrs							
		Water harvesting		D		P	-	-	-do-	140 ha			3 yrs							
		checks dams		D		P	-		-do-	80 ha			3 yrs							
		Protection wall		D		P			-do-	152 ha			3 yrs							
		Gully plug																		
		Gabion structures																		
		Underground dykes																		
		Field bunds																		
		Any others (pl. specify)																		

Contd.

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

	9																
	Outcomes																
Paduation in	Area	Area Water level (n			luction intal)	Income (Rs.)  Mandays generated  No. of benefici							iciaries				
Reduction in run off (cu.m)	treated# (ha)	Pre-	Pre- Post		Pre- Post		Pre- Post		ST	Others	Women	Total	SC	ST	Others	Women	Total
	(III)	project	project	project	project	project	project	SC	51	(Men)	n) women Total SC ST Others wo		vv omen	Total			
Na	699 Ha	Na	-	Na	-	Na	-	-	24600	14760	9840	24600	-	205	134	71	205

#### 4.2.10 Details of activities connected with vegetative cover in watershed works:

1	2	3		4			5		6			7				8	
			Type of treatment			Type of land			Executing agency	Target						Achievement	
Dist rict	Pro ject	Name of structure/ work		(ii) Draina ge line (D)		(i) Priv ate	(ii) Com muni ty	is (b)	(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	Expenditure incurred (Rs. in lakh)	Actual month & year of comple-tion (mm/ yyyy)
		Afforestation					<b>✓</b>			100 Ha		9.70	3 Yrs				
		Regeneration												-	-	ı	-
		Improvement of existing forest					<b>✓</b>			200 ha		6.20	3yrs	ı	-	-	-
		Fuel wood															
		Fodder															
		Agro- Horticulture				✓				200 ha		17.2	3 yrs	-	-	-	-

<sup>#</sup> 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						
Dadaatian in	Produ	iction	Inco	ome			Mandays g	enerated			1	No. of bene	eficiaries	
Reduction in run off	(quii	ntal)	(R	s.)		S								
(cu.m)	Pre-	Post	Pre-	Post	SC	Т	Others	Women	Total	SC	ST	Others	Women	Total
(cu.iii)	project	project	project	project		1								
i														

#### 4.2.12 Details of allied / other activities:

1	2	3		4		5		6	7	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 – 40 units	-	-	40 units	Individual	3.20	3 yrs.		
	nasi Hills Tharia	Carpentry/ Agri- implements/ Basket making etc – 110 nos.			14 units	Individual	0.70	3 yrs.		
& Wal	n Umsai	Piggery Farming			8 units	SHG's	2.40	3 yrs.		
Wate	rsheds	Poultry farming			10 units	SHG's	3.00	3 yrs.		
		Kitchen gardening			44 units	Individual	1.10	3 yrs.		
IXA	IP VI	Hollow block making			8 units	Individual	0.40	3 yrs.		
1 44 14	11 41	Canes & handicrafts.			10 units	SHG's	2.50	3 yrs.		
		Grocery shop			8 Units	SHG's	2.40	3 yrs.		
	•	Pigerry/poultry			120 units	Individual	9.60	3 Yrs		

(Contd.)

<sup>\*</sup> 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

<sup>@</sup>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						
				Out	comes						
Income (Rs.)				Mandays g	enerated			1	No. of bene	eficiaries	
Pre-project	Post project	SC	S T	Others	Women	Total	SC	ST	Others	Women	Total
								262	170	92	292

## 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			Ac	chievemen	t			
Names of the Districts	Names of projects	the villages	CPR particula rs	Activity proposed	Target area under the activity	expenditure	Expected no. of beneficia-	Estimated contribution to	under the	Expenditu re incurred	Actual no. of benefici-		o. of		WDF collecte
	projects		13		(ha)	(Rs.)	ries	WDF (Rs.)	activity (ha)	(Rs.)	aries	SC	ST	F	d (Rs.)
East Khasi Hills	IWMP VI	Mawsiangei													
		Suktia													
		Nongla		Water											
		Tyrngei		harvesting		5.00		0.25							
		Tyrna		structures											
		Mawshamok													
		Nongthymmai													
		Lumsohphie													
	TOTAL	_				5.00		0.25							

# CHAPTER V PROJECT PHASING & BUDGETING

## CHAPTER V PROJECT PHASING & BUDGETING

#### ACTION PLAN OF IWMP PROJECT VI (WAH UMSAI &UPPER THARIA WATERSHED UNDER SHELLA-BHOLAGANJ CRD BLOCK)

Name of District: East Khasi Hills

No. of villages – <u>8</u> Nos.

Name of C&RD Block: Shella Bholaganj

Project Area – 1000

Ha.

Sl.	Activities	I <sup>st</sup> Ye	ar	II <sup>nd</sup> Ye	ar	III <sup>rd</sup> Ye	ear	IV <sup>th</sup> Y	ear	V <sup>th</sup> Ye	ear	To	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
Ι	MANAGEMENT COST:												
A.	Administrative cost:			3%	4.5	2%	3.0	2%	3.0	-	-	10%	15.0
i.	Honourarium of WDT Members @ Rs. 5000/month – 1 no.			12 Months	0.6	12 months	0.6	12 months	0.6	-		3 yrs	1.8
ii.	Hon <sup>rm</sup> of Watershed Volunteers @ Rs. 2500/- month – 2 nos.			12 Months	0.6	12 months	0.6	12 months	0.6	-		3 yrs	1.8
iii.	Hon <sup>rm</sup> WCO's @ Rs. 750/ month.			12 Months	0.09	12 months	0.09	12 months	0.09	-		3 yrs	0.27
iv.	Hon <sup>rm</sup> WCM @ Rs. 100/members/ month for 25 nos.			12 Months	0.30	12 months	0.3	12 months	0.3	-		3 yrs	0.9
v	Hon <sup>rm</sup> Office assistance @ Rs. 3000/- month.			12 Months	0.36	12 months	0.36	12 months	0.36	-		3 yrs	1.08
vi	Hon <sup>rm</sup> Chartered Accountant			12 Months	0.15	12 months	0.15	12 months	0.15	-		3 yrs	0.45
vii	TA/DA of Field Asstt. @ 5000/ month			6 months	0.3	12 months	0.6	12 months	0.6	-		2.5 yrs	1.5
viii	Hiring charges of office building @ 1000			-	ı	12 months	0.12	12 months	0.12	-		2 yrs	0.24
ix.	Hiring charges of vehicle @ 5000/ month			6 months	0.3	12 months	0.6	12 months	0.6	-		2.5 yrs	1.5

X	Office expenses, POL, Stationeries, printing of SHG's books, pamphlets, tea, snacks etc, cost of camera.			-	0.3	-	4.08	-	1.08	-		-	5.46
	Total of A:			2.00%	3.00	5.00%	7.50	3.00%	4.5	0.00%	0	10.00 %	15
	PREPARATORY PHASE:												
В.	Entry Point Activities:	4%	6.00	-	-	-	-	-	-	-	-	4%	6.00
i.	Construction of check dam/Water harvesting	4 Units	6.00	-	-	-	-	-	-	-	-	4 Units	6.00
	Total of B:	4 %	6.0							-	-	4%	6.00
C.	Training:	1%	1.5	2%	3.00	1%	1.5	1%	1.5	-	-	5%	7.5
i.	Awareness Campaign & Capacity building	2 nos	0.6	-		-						2 nos	0.6
ii.	Exposure visits – off. Campus			2 nos	0.6	-		1 no.	0.3	-		3 nos	0.9
iii.	Capacity building of SHG's/ UG's.	2 nos.	0.3	2 nos.	1.0	4 nos.	1.0	2 nos.	0.6	-	-	9 nos.	2.9
iv.	Capacity building of WC Members.							2 nos.	0.3			10	
1 V .	1 0	2 nos.	0.3	4 nos.	0.75	2 nos.	0.25			-	-	nos.	1.6
V.	Capacity of WDT/WV	2 nos.	0.3	4 nos.	0.65	2 nos.	0.25	2 nos.	0.3	-	-	10nos.	1.5
	Total of C:	1%	1.5	2.00%	3.00	1.00%	1.5	1%	1.5	-	-	5%	7.5
1	2	3	4	5	6	7	8	9	10	11	12	13	14
D.	Detailed Project Report:	1 %	1.50	-	-	-	-	-	-	-	-	1 %	1.50
i.	Cost of Resources Inventories works	-	0.25	-	-	-	-	-	-	-	-	-	0.25
ii.	Cost of PRA Exercises	-	0.50	-	-	-	-	-	-	-	-	=	0.50
iii.	Cost of Land use Survey works	1	0.25	-	-	-	1	-	-	-	-	-	0.25
iv.	Cost of formulating	-	0.50	-	-	-	-	-	-	-	-	-	0.50
	Total of D:	1 %	1.50	-	-	-	-	-	-	-	-	1 %	1.50
E.	Monitoring & Evaluation:			0.20%	0.3	0.50%	0.75	0.3%	0.45			1%	1.5
i.	Cost of Honorarium to evaluator.	-	-	0.30%	0.45	0.50%	0.75	0.20%	0.3	-	-	1%	1.5
ii.	Cost of printing report etc.			0.50%	0.75	1.00%	1.5	0.50%	0.75	-	-	2.00%	3
	Total of E:	6.00%	9	4.50%	6.75	7.00%	10.50	4.50%	6.75			22.00 %	33.00
	Total of I (A to E)	0.00%	9	4.50%	0.75	7.00%	10.50	4.50%	0.75			70	33.00
***	1 1												
II	PROJECT COST:	-	-			-	-	-	-	-	-	-	-
Α.	Arable Land Treatment:	-	-	-	-	-	-	-	-	-	-	-	-
i.	Loose boulder Contour Bunds @ Rs. 7500/ ha for 67.33 ha	ı		13.33 ha	0.99	53.06 Ha	3.98	0.94 Ha	0.07	-	-	67.33 ha	5.04
ii.	Agro-Horticulture Devt. Rs. 8600/ ha for 200 ha	-	-	200 ha	2.60	200 Ha(M)	9.20	200 ha (M)	5.40	-	-	200 ha	17.2

iii.	Half moon Terrace @Rs7500 for 60 Ha	-	-				4.50		-			60 Ha	4.50
	Total of A:				3.59		17.68		5.47				26.74
В.	Non- Arable Land Treatment:												
i	Non-Pine Afforestation@ Rs.10,100/ha for 100 ha	-	-	100 ha	1.70	100 ha (M)	5.50	100 ha(M)	2.50	-	-	100 ha	9.7
ii	Improvement of existing Degraded Forest @ Rs. 3600/ ha for 200 ha	-	-	200 ha	1.40	200ha ( M)	3.80	200 ha(M)	1.00	-	-	200 ha	6.2
	Total of B:	-	-	300 Ha	3.10	300 ha	9.30	300 Ha	3.50	-	-	300 Ha	15.9
C	Drainage Line Treatment:	-	-										
i.	Water Harvesting Structures as per estimate for 140 ha	-	-	8 nos	2.28	8 nos	9.76		-			16 nos	12.04
ii.	Check Dam for Water Distribution Works @Rs.32,000 benefited area: 80 Ha	-	-			20 nos	6.40					20 nos	6.40
iii.	Protection Wall @Rs.22,830 Benefited area:152 ha	-	-	10 nos	2.283	41 nos	9.36	10 nos	2.28			61 nos	13.92
	Total of C:	-	-		45.63		25.52		2.28				32.36
	Total of A + B + C	=	-		11.25		52.50		11.25				75.0
1	2	3	4	5	6	7	8	9	10	11	12	13	14
D	Livelihood Activities for landless persons:												
i.	Tailoring @ Rs. 8,000/-	-	-	10 Units	0.80			30 Units	2.40			40 Units	3.2
ii.	Carpentry/ Agri- Implements/ Basket Making etc @ Rs. 5000/-	-	-	14 units	0.70							14 Units	0.70
iii.	Hollow Block making/ Stabilized Mud block making Rs. 5000/-	-	-	-	-	-	-	8units	0.40	-	-	8 Units	0.40
iv.	Poultry/Pigerry @Rs.8000	=	-	-	-	40 Units	3.20	80 Units	6.40	-	-	120 Units	9.6
v.	Kitchen Gardening @Rs.2,500	-	-			44 Units	1.10	-	-	-	-	44 Units	1.10
	Total of D:			1 %	1.50	3 %	4.50	6 %	9.00			10%	15.00
Е.	Production System and Micro Enterprises (SHG's):												
i.	Betel nut soaking Tank @ Rs. 50,000/- as per estimate	-	-	-	=	-	-	16 Units	8.00			16 Units	8.00
ii	Pisciculture @ Rs. 30,000/ unit	-	-			4 Units	1.20					4 Units	1.20

iii	Piggery farming @ 30,000/ unit	-	-	3 units	0.90	5 Units	1.50					8Units	2.40
iv	Poultry farming @ Rs. 30,000/ unit	1	ı	2 Units	0.60	8 Units	2.40					10 Units	3.00
v	Canes & Handicrafts @ Rs.25,,000/ unit	-	1					10Units	2.50			10 Units	2.50
vi	Grocery shop @ Rs.30,000			-	-	8 Units	2.40	-	-	-	-	8Units	2.40
	Total of E:	-	-	1 %	1.5	5 %	7.50	7 %	10.50	-	-	13 %	19.50
F.	Consolidation & Exit Phase:	-	-	-	-	-	-	-	-	-	-	-	-
i.	Repairs, Maintenance of CPR's.	-	-	-	-	-	-	-	-	-	3.00	-	3.00
ii.	Improving the sustainability of various Interventions	-	-	-	-	-	-	-	-	-	2.00	-	2.00
iii.	Documentation of successful experiences & Preparation of Completion Report	-	-	-	-	-	-	-	-	-	2.50	-	2.50
·	Total of F:	•	-	•	-	-	-	-	-	-	7.50	-	7.50
	Total of II (A+B+C+D+E+F)	-	-	-	14.25	-	64.50	-	30.75	-	7.50	-	117.0
	Grand Total (I + II)	6%	9.00	14%	21.00	50%	75.00	25%	37.50	5%	7.50	100%	150

submitted:-

## VILLAGE WISE ACTION PLAN OF UPPER THARIA WATERSHED UNDER IWMP – VI, TERRITORIAL DIVISION: SHILLONG.

Name of District: East Khasi Hills Name of C&RD Block: Shella &Bholaganj No. of villages – 4 nos. Project Area – 500 Ha.

Sl.			Sul	ctia	No	ngla	Maws	iangei	Tyr	ngei	То	tal
No	Activities		Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
1	2		3	4	5	6	7	8	9	10	11	12
I	WATERSHED WORKS PHASE:										-	-
A.	Arable Land Treatment:		HA		HA		HA		НА		HA	-
i.	Loose boulder Contour Bunds @ `7500/ ha for 33.60 ha	7500	8.282	0.621	8.282	0.621	8.282	0.62	8.747	0.66	33.6	2.52
ii	Agro-Horticulture Devt. `8600/ ha for 100 ha	8600	25	2.150	25	2.150	25	2.15	25	2.15	100	8.600
iii.	Half Moon Terrace @ 7500 for 30 ha	7500	7.5	0.563	7.5	0.563	7.5	0.5625	7.5	0.5625	30	2.250
	TOTAL (A)		40.782	3.334	40.782	3.33365	40.782	3.3337	41.247	3.3685	163.59	13.37
В.	Non- Arable Land Treatment:											
i.	Agro-Forestry Devt. works @ ` 10,100/ ha for 50 ha	10100	12.5	1.215	12.5	1.215	12.5	1.215	12.5	1.215	50	4.850
ii	Improvement of existing Degraded Forest @ ` 3600/ ha for 110 ha	3600	25	0.775	25	0.775	25	0.775	25	0.775	100	3.100
	TOTAL (B)		37.5	1.99	37.5	1.99	37.5	1.99	37.5	1.99	150	7.95

	D : I: II :											
С	Drainage Line Treatment:											
i.	Water Harvesting Structures-BA 70 Ha		4 Nos	1.676	3 Nos	1.448	3 Nos	1.448	3 Nos	1.448	13 Nos.	6.02
											10	
ii.	Check dam – BA 40 ha		3 nos	0.96	2 nos	0.64	2 nos	0.64	3 nos	0.96	Nos.	3.20
iii.	Protection Wall - BA 76 Ha	22830	8	1.826	7	1.598	7	1.5981	8	1.94	30	6.96
	TOTAL ©			4.462		3.686		3.686		4.344		16.18
	Total of I:			9.786		9.010		9.010		9.703	25%	37.5
	Livelihood Activities for landless											
II.	persons:(10%)		units		units		units		units		units	
i.	Tailoring @ ` 8,000/-	8000	5	0.4	5	0.4	5	0.40	5	0.4	20	1.600
	Carpentry/ Agri- Implements/ Basket											
ii.	Making etc @ ` 5000/-	5000	2	0.1	2	0.1	1	0.05	2	0.1	7	0.350
iii.	Piggery/Poultry @ `8000/ unit	8000	15	1.2	15	1.2	15	1.20	15	1.2	60	4.800
iv.	Kitchen Gardening @ `2500/-	2500	7	0.175	4	0.1	4	0.10	7	0.175	22	0.550
v	Masonry / Hollow block making @ `5,000/	5000	2	0.1			1	0.05	1	0.05	4	0.200
	Total of II.:			1.98		1.80		1.80		1.93		7.50

III.	Production System and Micro Enterprises (SHG's):											
i.	Betel nut soaking Tank @ `50,000/-	50000	2	1.00	2	1.00	2	1.00	2	1.00	8	4.000
ii	Pisciculture @ `30,000/	30000	1	0.3					1	0.3	2	0.600
iii.	Piggery farming @ `30,000/	30000	1	0.3	1	0.3	1	0.30	1	0.3	4	1.200
iv.	Poultry Farming @ ` 30,000/	30000	2	0.6	1	0.3	1	0.30	1	0.3	5	1.500
V	Grocery shop @ ` 30,000/	30000	1	0.3	1	0.3	1	0.30	1	0.3	4	1.200
vi	Canes & Handicrafts @ `25,000/ unit	25000	2	0.5	1	0.25	1	0.25	1	0.25	5	1.250
	Total of III:			3.00		2.15		2.15		2.45	7%	9.75
	Grand Total (I+II+111)			14.76		12.96		12.96		14.08	36.5%	54.75
	CONVERGENCE WITH NREGA		2	0.855	2	0.855	2	0.855	2	0.855	8	6.84
	IWMP		2	0.57	2	0.57	2	0.57	2	0.57	8	2.28

## VILLAGE WISE ACTION PLAN OF WAH UMSAI WATERSHED UNDER IWMP – VI, TERRITORIAL DIVISION: SHILLONG.

Name of District: East Khasi Hills Nameof the C &RD Block: Shella Bholaganj No. of villages – 4 nos. Project Area: 500 Ha

		Tyl	rna	Maws	hamok	Nongth	ıymmai	Lums	ohphie	To	otal
Sl. No	Activities	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin
1	2	3	4	5	6	7	8	9	10	11	12
I	WATERSHED WORKS PHASE :									-	-
Α.	Arable Land Treatment:	НА		НА		НА		НА		НА	-
i.	Loose boulder Contour Bunds @ `7500/ ha for 33.60 ha	8.282	0.621	8.282	0.621	8.282	0.62	8.747	0.66	33.6	2.52
	A cure Hauti culturus Dant \ 2000/ka far 100 ka		- 1-0							100	0.100
ii	Agro-Horticulture Devt. ` 8600/ ha for 100 ha	25	2.150	25	2.150	25	2.15	25	2.15	100	8.600
iii.	Half Moon Terrace @ 7500 for 30 ha	7.5	0.563	7.5	0.563	7.5	0.5625	7.5	0.5625	30	2.250
	TOTAL (A)	40.782	3.334	40.782	3.33365	40.782	3.3337	41.247	3.3685	163.59	13.37

В.	Non- Arable Land Treatment:										
i.	Agro-Forestry Devt. works @ ` 10,100/ ha for 50 ha	12.5	1.215	12.5	1.215	12.5	1.215	12.5	1.215	50	4.850
ii	Improvement of existing Degraded Forest @ ` 3600/ ha for 110 ha	25	0.775	25	0.775	25	0.775	25	0.775	100	3.100
	TOTAL (B)	37.5	1.99	37.5	1.99	37.5	1.99	37.5	1.99	150	7.95

C	Ducinogo Lino Tucotmonto										
C	Drainage Line Treatment:										
i.	Water Harvesting Structures-BA 70 Ha	4 Nos	1.676	3 Nos	1.448	3 Nos	1.448	3 Nos	1.448	13 Nos.	6.02
ii.	Check dam – BA 40 ha (IWMP)	3 nos	0.96	2 nos	0.64	2 nos	0.64	3 nos	0.96	10 Nos.	3.20
iii.	Protection Wall - BA 76 Ha	8	1.826	7	1.598	7	1.5981	8	1.94	30	6.96
	TOTAL ©		4.462		3.686		3.686		4.344		16.18
	Total of I:		9.786		9.010		9.010		9.703	25%	37.5
	Livelihood Activities for landless										
II.	persons:(10%)	units		units		units		units		units	
	Tailoring @ ` 8,000/-	_	0.4	~	0.4	_	0.40	_	0.4	20	1.600
i.	-	5	0.4	5	0.4	5	0.40	5	0.4	20	1.600
	Carpentry/ Agri- Implements/ Basket Making										
ii.	etc @ ` 5000/-	2	0.1	2	0.1	1	0.05	2	0.1	7	0.350
iii.	Piggery/Poultry @ `8000/ unit	15	1.2	15	1.2	15	1.20	15	1.2	60	4.800
iv.	Kitchen Gardening @ ` 2500/-	7	0.175	4	0.1	4	0.10	7	0.175	22	0.550
V	Masonry / Hollow block making @ `5,000/	2	0.1			1	0.05	1	0.05	4	0.200
	Total of II.:		1.98		1.80		1.80		1.93		7.50

III.	Production System and Micro Enterprises (SHG's):											
i.	Betel nut soaking Tank @ `50,000/-	50000	2	1.00	2	1.00	2	1.00	2	1.00	8	4.000
ii	Pisciculture @ `30,000/	30000	1	0.3					1	0.3	2	0.600
iii.	Piggery farming @ `30,000/	30000	1	0.3	1	0.3	1	0.30	1	0.3	4	1.200
iv.	Poultry Farming @ `30,000/	30000	2	0.6	1	0.3	1	0.30	1	0.3	5	1.500
V	Grocery shop @ ` 30,000/	30000	1	0.3	1	0.3	1	0.30	1	0.3	4	1.200
vi	Canes & Handicrafts @ `25,000/ unit	25000	2	0.5	1	0.25	1	0.25	1	0.25	5	1.250
	Total of III:			3.00		2.15		2.15		2.45	7%	9.75
	Grand Total (I+II+111)			14.76		12.96		12.96		14.08	36.5%	54.75
	CONVERGENCE WITH NREGA		2	0.855	2	0.855	2	0.855	2	0.855	8	6.84
	IWMP		2	0.57	2	0.57	2	0.57	2	0.57	8	2.28

## A TYPICAL FORMAT TO IDENTIFY WORKS/ACTIVITIES REQUIRED FOR INTEGRATED DEVELOPMENT OF THE OVER EXPLOITED BLOCKS AND COVERED UNDER MAHATMA GANDHI NREGA AND INTEGRATED WATERSHED MANAGEMENT PROGRAMME WITH THE SIZE OF AREA/WORK,

#### ESTIMATED COST AND THE YEAR IN WHICH PROPOSED FOR EXECUTION.

## NAME OF WATERSHED UPPER THARIA & WAH UMSAI <u>IWMP 2010 – 2011 PROJECT – VI</u> AREA OF WATERSHED <u>1464 HA</u> NAME OF VILLAGE: TYRNA,MAWSHAMOK,NONGTHYMMAI,LUMSOHPHIE, SUKTIA,MAWSIANGEI,NONGLA,TYRNGEI

#### NAME OF PANCHAYAT/BLOCK/DISTRICT SHELLA BHOLAGANJ C&RD BLOCK, EAST KHASI HILLS DISTRICT

S1	Work/Activity	Kind of	Size of	Estimated	Programme		Year	in which Prop	osed	
No		Area	Area/Work	Cost (Lakh)	Under which	2010 –	2011 –	2012 –	2013 –	2014 –
					Proposed	2011	2012	2013	2014	2015
1	2	3	4	5	6	7	8	9	10	11
(i)	Water Harvesting					-				
	• Check Dam									
	- Cultinuillage	Community		0.7125	MGNREGA		0.4275			
	<ul> <li>Suktia village</li> </ul>	Community	-	0.7123	MUNKEGA	-	0.4275			
					IWMP		0.285			
	<ul> <li>Mawsiangei village</li> </ul>	Community	-	0.7125	MGNREGA	-	0.4275			
					IWMP		0.285			
	<ul> <li>Nongla village</li> </ul>	Community	-	0.7125	MGNREGA	-	0.4275			
					IWMP		0.285			
	Tyrngei village	Community	-	0.7125	MGNREGA	-	0.4275			
					IWMP		0.285			
	Tyrna village	Community	-	0.7125	MGNREGA	-	0.4275			
					IWMP		0.285			

<ul> <li>Mawshamok village</li> </ul>	Community	-	0.7125	MGNREGA	-	0.4275		
				IWMP		0.285		
<ul> <li>Nongthymmmai</li> </ul>	Community	-	0.7125	MGNREGA	-	0.4275		
village				IWMP		0.285		
Lumsohphie village	Community	-	0.7125	MGNREGA	-	0.4275		
	j			IWMP		0.285		
TOTAL			5.70	MGNREGA	-	3.42		
				IWMP		2.28		

## TO WHOM IT MAY CONCERN

This is to certify that a decision has been taken in principle to converge the IWMP projects proposed by the Divisional Officer, Soil & Water Conservation, Shillong (T) Division, Shillong with MGNREGS.

Deputy Commissioner

District Programme Co-Ordinator(MGNREGS)
East Khasi Hills District
Shillong

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

Г	1	2	3	4	5	6	5	7	8	9			10				11				
	S L	Name of State	Name of Distric	Names of Project	Year of sanct	Pro dura (dd/1	ject tion mm/	Area of the project	Projec t cost (Rs. In	Names of Micro watersheds & Code nos. (as	1	Area (ha) of the projects			(		rea details				
	N o	State	ts	S	ion	From	То	s s	lakh)	per DoLR's unique codification)	Cultin						Illing within the projects)				
											Cultiv ated rainfed area	Cultiv ated irrigat ed area	Unculti wastel		Pvt. Agri. Land	For est lan d	Com m unity land	Others (pl. specify	Total area (ha)		
													a)Tempor ary fallow	b) Per manent							
	1	Meghalay a	East Khasi Hills	Upper Tharia & Wah Umsai - IWMP VI	2009 -10	2009 -10	2013 -14	1000 Ha	150 Lakhs	Upper Tharia - 3C1C1ab Wah Umsai - 3CB5b2m	375 Ha	Nil	303	46	375	740	-	-	1464 Ha		

### Fund provision for the IWMP projects from all sources:

1	2	3	3					4						5
	Nome					Funds fi	rom other s	ources i	n addition t	o IWMP	funds	ı		
Distri ct	Name of Project s	IWMP	Fund	Converge	ence funds	I	PPP	Com	nmunity		ational ance		ers (Pl. ecify)	Total
		Centra 1 Share	State Share	Name of Scheme	Amount (Lakhs)	Name of privat e sector	Financia 1 contri- bution	Nam e	Financia 1 contri- bution	Name	Financ ial contri- bution	Nam e	Financi al contri- bution	1000
East Khasi Hills	East Khasi Hills – IWMP VI	135 lakhs	15 lakhs	MNRE GS	9.174	Nil	Nil	Nil	Nil	Nil	Nil	Nil	Nil	159.17 4

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

1	2	3	4		5					6		
				Distt.	Agency's Project	Account	details		Watershee	d Committee (WC) ac	count deta	ils:
SI. 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)	Accoun t type (Saving s/ 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	Accoun t type (Saving s/ current others)	Name & Designation of authorized persons who operate the account.
1	Megha laya	East Khasi Hills	Upper Tharia & Wah Umsai - IWMP VI	State Bank of India, Polo Branch	31641746710	Saving	Shri. A.S. Kharlukhi, DS&WCO	Upper Tharia & Wah Umsai Watershed Committee	SBI,	Upper Tharia - 00890110005255 Wah Umsai- 00890110005262	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)#	Reference no. of activity/ task/ structure in DPR <sup>@</sup>	Level at which decision for convergence was taken <sup>\$</sup>
1	East Khasi Hills	East Khasi Hills – IWMP VI	* Community Rural Development Department MNREGS	18.24	Construction of Water Harvesting	-	Block Level & District Level

## 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.

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

1	2	3	4	5	6	7	8			9		
S. No		Name of the Training Institute	Full Address with contact no., website & e-mail	Name & Designati on of the Head of Institute	Type of Institute#	Area(s) of specialization\$	Accreditation details	Reference ence Year	_	No. of trainees to be trained	No. of	No. of trainees trained
1		SIRD	Nongsder	Director	State Govt.	Capacity Building	NA	-				
2	State	RRTC	Umran	Director	Don-Bosco	Agri-Horti, Animal Husbandry, Entrepreneurship	NA					
3		ICAR	Umiam	Director	Central Govt.	Do	NA					
4		VTC	Kyrdem Kulai	Director	State Govt.	Animal Husbandry	NA					
5		Fruit Garden	Shillong	Director	State Govt.	Agri-Horti, Fruit Processing	NA					

- 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>lt;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 2010–11 as on 31/03/2011 (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 aining		s utilized akhs)
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				-				
DRDA/ZP cell				-				
PIAs			25 Nos.	-				
WDTs			8 Nos.	-				
UGs			4Nos.	-	1.50	-	1.50	-
SHGs			8 Nos.	-				
WCs			9 Nos.	-				
GPs			15 Nos.	-				
Community			497 Nos.	-				
Others								
Pl. specify)								

 $Table \ 6.3: Information, Education \ \& \ Communication \ (IEC) \ activities \ for \ the \ year \ \underline{2010-11} \ as \ on \ \underline{31/03/11} \ (dd/mm/yyy)^*$ 

	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			
3.	Exposure Visits	S&WC (T) Division	-	-	
4.	Capacity Building	S&WC (T) Division	1.00	1.00	

# CHAPTER VII EXPECTED OUTCOME

## CHAPTER VII EXPECTED OUTCOME

**Table 7.1 Employment related outcomes:** 

						1	l							2		
Sl	Name of				,	Wage em	ploym	ent					Se	lf employ	ment	
No	Village		N	o. of mand	lays			No.	of benefic	ciaries			No.	of benefi	ciaries	
		SC	ST	Others	Women	Total	SC	ST	Others	Women	Total	SC	ST	Others	Women	Total
1.	Mawsiangei		100 %	5270	7920	13190		100 %	61	89	150		100 %	8	4	12
2.	Suktia		100 %	2190	4780	6970		100 %	74	69	143		100 %	6	2	8
3.	Nongla		100 %	1590	2380	3970		100 %	72	89	161		100 %	5	3	8
4.	Tyrngei		100 %	1850	2780	4630		100 %	56	93	149		100 %	4	1	5
5.	Tyrna		100%	2510	3800	6310		100 %	39	72	111		100 %	5	2	7
6.	Nongthymmai		100%	2430	1620	4050		100 %	68	93	161		100 %	4	-	4
7.	Mawshamok		100%	1265	1465	2730		100 %	6	9	15		100 %	15	9	24
8.	Lumsohphie		100%	1980	3020	5000		100 %	27	53	80		100 %			68
											356					

**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				

<sup>\*</sup> 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	2	2		3	4
Wa	iges	Trai	ning	Liv	relihoods	
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)
27765	27.76	350	0.60	60 nos.	6.0	6.60

<sup>\*</sup> 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 projects	Names of the villages	Particular of CPR	Nature of	Period of	Be		,	no. of	User Charges
Districts	projects	vinages	OLCER	right	right	SC	361 - 338 - 234 - 139 - 681 -	Others	Total	( <b>Rs.</b> )
		Mawsiangei	Community Forest	Fw	12 months	-	361	-	361	Nil
East Khasi Hills	EKH-IWMP-VI	Suktia	Community Forest	Fw	12 months	-	338	-	338	Nil
District		Nongla	Community Forest	Fw	12 months	-	234	-	234	Nil
		Tyrngei	Community Forest	Fw	12 months	-	139	1	139	Nil
		Tyrna	Community Forest	Fw	12 months	1	681	1	681	Nil
		Mawshamok	Community Forest	Fw	12 months	ı	194	ı	194	Nil
		Nongthymmai	Community Forest	Fw	12 months	-	69	-	69	Nil
		Lumsohphie	Community Forest	Fw	12 months	ı	102	ı	102	Nil
		TOTAL	·		2118		2118	-		

<sup>\*</sup> 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. 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
P	for right to	passage across the CPR
Rd	for right to c	construct a road for access to individual property
S/M	for right to	collect and sell sand and minerals
T	for right to co	ollect timber for construction of house
Wd	for right toco	llect/ use water for drinking
Wi	for right to	use water for irrigation
O	for any right	other than indicated above (please specify)

<sup>@</sup> In column no. 6, the categories given in table no. M(SP) 10, column 5 may be filled as required.

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	-	-	-	1	-
East Khasi Hills District	EKH-IWMP VI	Bore wells	-	-	-	-	-
		Others (specify) Springs					-

<sup>\*</sup> 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	Name of the		oility of drinki of monyhs in a	•	Qualit	y of drinking	water	Comments
District	project	Pre-project	Post- project	Change in availability	Pre- project	Post- project	Change in quality	Comments
East Khasi Hills District	EKH-IWMP VI	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 VI				-	-
	.,					

<sup>\*</sup> 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.

Sprinkler, Drip, PVC pipe, etc.

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

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

1	2	3				4						5						6		
					Pre-j	projec	t				Mi	d-term	1				P	ost-pro	ject	
Names of the Districts	Name of Projects	Name of crops	Ar (h		Aver Yie (Qtl)	eld per	Proc	otal luction Qtl)	Ar (h		Yi pe	erage leld r ha (tl)	Prod	otal uction (tl)	Ar (h		Yi per	rage eld ha etl)		roduction Qtl)
	J		Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.
East	EKH-	Yam	-	50	-	15	-	750		50		15		750		50		15		750
Khasi	IWMP-	Tapioca	-	30	-	40	-	1200		30		40		1200		30		40		1200
Hills	VI	Betel nut	-	100	-	9	-	900		120		9.2		1104		200		9.5		1900
District		Betel leaf	-	50	-	9	-	450	20	40	9.4	9	188	360	80	20	10	9.5	800	190
		Black Pepper	-	40	-	6	-	240	20	20	6.4	6.2	128	124	60	40	6.7	6.2	402	248
		Oranges	-	40	-	40	-	160		50		45		2250		60		50		3000
		Bay leaf	-	100	-	20		2000		110		21		2310		120		25		3000

<sup>\*</sup> 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 7.6.2 Details of Kharif crop area and yield in the project areas:

1	2	3	4	5			6							7						8		
							Pre-pr	oject					Mid-	-term					Post	-projec	t	
SI No.	Names of States	Names of the Districts	Name of Projects	Name of crops	Ar (h	rea a)	Yio	rage eld ) per a.	0	lucti		rea na)	Aver Yie per (Q	eld ha	Produ	tal action (tl)	Arc (ha		Yi pe	rage eld r ha (tl)	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	-	-	-	-	-	-	20	40	9.50	9	190	260	80	20	9.5	9.2	760	184
		Hills District	VI	Black Pepper	-	-	-	-	-	-	20	20	6.4	6.2	128	124	60	40	6.7	6.2	402	248

<sup>\*</sup> 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	7					8			
							Pre-pr	oject					Mid-	term					Post-p	roject	t	
Sl No.	Names of States	Names of the Districts	Name of Projects	Name of crops	Ar (h		Yio	rage eld ) per a.	To Prod o (Q	lucti n		rea na)	Aver Yie per (Q	eld ha	Tot Produ n (Q	uctio	Arc (ha		Aver Yie per (Qt	eld ha	To Produ (Q	ıction
					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	-	-	-	-	-	-	20	40	9.5	9.2	368	112 0	80	20	9.8	9. 5	784	190
		Hills District	VI																			
		District																				

<sup>\*</sup> 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	area under fod	der (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 VI	5 yrs	NA	NA	NA	nil	nil	nil

<sup>\*</sup> 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		
	Name of project	Duration of Project	Existing area tree cover (ha)			Achievement (ha)		
District			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 VI	5 yrs	LULC Map	2010 - 11	340 Ha	200 На	200 На	200 На

<sup>\*</sup> 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 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 VI	5 yrs			80 ha	200 Ha	200 Ha	200 Ha

<sup>\*</sup> 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	rea under fo	dder (ha)	Ac	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 VI				340 Ha	200 Ha	200 На	200 На

<sup>\*</sup> 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:**

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.):

1	2	3		4			5			6		7
		Type of Animal		Pre-proj	ect		Mid-ter	m		Post-proj	ect	Remarks
Names of the	Nome of	Type of Animal	No.	Yield	Income	No.	Yield	Income	No.	Yield	Income	Kemarks
Names of the Districts	Name of Projects	Piggery	284	-	1.40	340	-	1.75	468	-	2.10	
Districts	Frojects	Poultry	2317	-	3.47	2896	-	4.34	3476	-	5.20	
							-					
	Total for all projects		2601	-	4.87	3236	ı	6.09	3944		7.30	

<sup>\*</sup> 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.

Table 7.7.2 Details of other livelihoods created for landless people:

1	2	3	4		5 Sources of funding (Rs.)						7					8				
			Fund requir	Sour	ces of f	unding (	(Rs.)	Actual	No	of be	neficiar	ries tra	ained	No. of beneficiaries taking up activity						
Distric t	Proj ect	Name of activity	ed for the activit y (Rs.)	Project Fund	Bene fi - ciary	Other s (pl. specif y)	Total	Expenditur e incurred on activity (Rs.)	SC	ST	Othe rs	Wo men	Total	SC	ST	Oth ers	Wome n	Total		
		Tailoring	10000/	8000	2000	-	10000	10000		120	80	40	120		40	20	20	40		
East Khasi Hills	EK H- IW	Hollow block making	6000	5000	1000		6000	6000		15	15	-	15		8	8		8		
District	MP VI	Kitchen - gardening	3000	2500	500		3000	3000		85	-	85	85		44		44	44		
	''	Carpentry	6000	5000	1000		6000	6000		25	25	-	25		14	14		14		
		Poultry/pigg erry	10000	8000	2000		10000	10000		180	100	80	180		120	80	40	120		
		Piggerry/po ultry farming	35000	30000	5000		35000	35000		-do-	do	do	do		18	-	-	18		
		Canes and handicrafts	30000	25000	5000		30000	30000		12	7	5	12		5	1	-	5		
		Grocery shop	35000	30000	5000		35000	35000		10	6	4	10		8	ı	-	8		

(Contd.)

<sup>\*</sup> 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		1	11		12
No of porc	one omployed		]	Impact of livelih	oods programi	ne	
_	ons employed in the activity	Annual increase in income due		ration eneficiaries)	_	of backward- linkages	Any other information
Total	Grand Total (8+9)	to activity (Rs.)	Pre-project	Post-project	Pre-project	Post-project	(pl. Specify)
							-
							-

Table 7.7.4 Details of other livelihoods created for farmers:

1	2	3	4			5		6			7				8	
			Fund required	Sour		nding (Rs khs	.) in	Actual Expenditure	No.	of far	mers t	rained	No. of farmers tal up activity			O
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 Khasi Hills District	EKH- IWMP VI	i) Betelnut soaking	10.00	8.00	2.00	-	10.00	10.00	80	-	-	80	80	-	-	80
		ii) Piggery	9.00	7.50	1.50	-	9.00	9.00		68		68		68		68
		iii)Poultry	9.00	7.50	1.50	-	9.00	9.00		70		70		70		70
		iii)Piscicult ure	1.50	1.20	0.30	-	1.50	1.50	4			4		4		4

<sup>\*</sup> 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 7.7.5 Details of other livelihoods created for farmers \* (contd.)** 

	9	10			11		12
No of nove	ana amplayad			Impact of livelih	oods programn	ne	
	ons employed 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. Specify)
			·				

### **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 VI	(ii) Seed supply system	-	-	-
		(iii) Fertilizer supply system	-	-	-
		(iv) Pesticide supply system	-	-	-
		(v) Credit institutions	-	4	4
		(vi) Water supply	4	8	12
		(vii) Extension services	-	2	2
		(viii) Nurseries	-	-	-
		(ix) Tools/machinery suppliers	-	-	-
		(x) Price Support system	-	-	-
		(xi) Labour	-	-	-
		(xii) Any other (please specify)	-	-	-
		(A) Forward linkages		-	-
		(i) Harvesting/threshing machinery	-	-	-
		(ii) Storage (including cold storage)	-	-	-
		(iii) Road network	-	-	-
		(iv) Transport facilities	4	2	6
		(v) Markets / Mandis	-	1 no.	1 no.
		(vi) Agro and other Industries	1	-	-
		(vii) Milk and other collection centres	-	-	-
		(viii) Labour	-	-	-
		(ix) Any other (please specify)	-	-	-

<sup>\*</sup> 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	
		Gre	ound 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		40	100 ha	
		ii	Area under double crop		90 ha	200 ha	
		iii	Area under multiple crop		-	-	
			Net increase in crop production area				
			Increase in area under vegetation		-	200 ha	
			Increase in area under horticulture		-	200 ha	
			Increase in area under fuel & fodder		-		
			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		-	4 nos.	
			Resource use agreements		-	-	
			WDF collection & management		-	2 nos	
			Summary of lessons learnt		May be attached as	s a separate fi	le

Table 7.10 Cost effectiveness of structures/ activities\*

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 VI	Upper Tharia & Wah Umsai	As per Treatment Plan	117.0 lakhs	161.34	117.0	-	1.379	1

<sup>\*</sup> 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

### BENEFIT COST RATIO

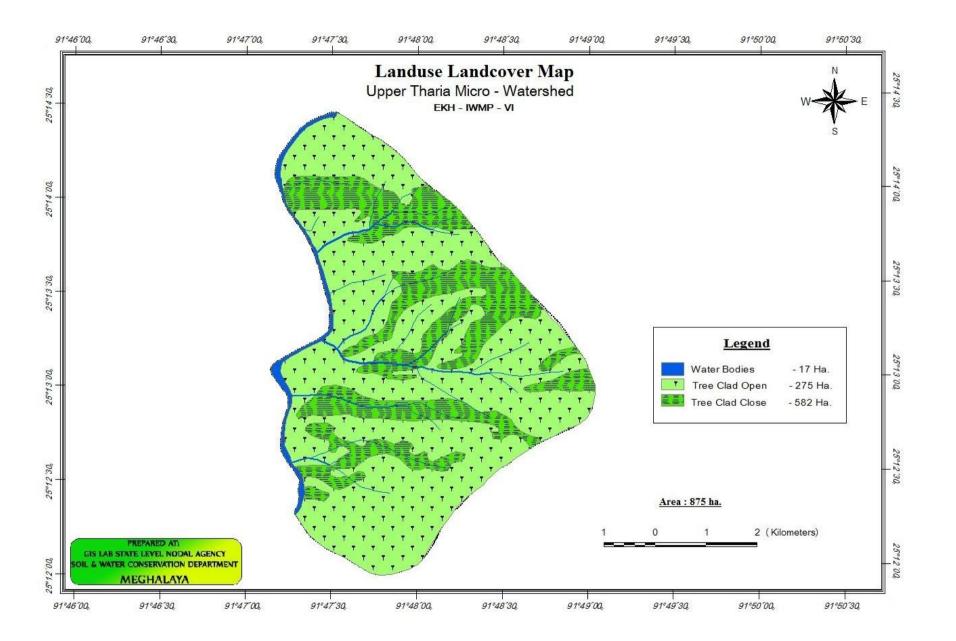
YEAR	TOTAL PROJECT COST	COST TO BE BORNE BY FARMERS	TOTAL COSTS	TOTAL BENEFITS	DISCOUNT FACTOR	DISCOUNTED COSTS	DISCOUNTED BENEFITS	REMARKS
1	9		9		0.870	7.830	0.000	
2	21	363.896	384.896	506.238	0.756	290.981	382.716	
3	75	414.045	489.045	562.416	0.658	321.792	370.070	
4	37.5	467.49	504.9855	629.91	0.572	288.852	360.310	
5	7.5	525.116	532.616	748.448	0.497	264.710	371.979	
6		591.58	591.578	853.02	0.432	255.562	368.506	
7		591.58	591.578	860.22	0.376	222.433	323.444	
8		591.578	591.578	872.224	0.327	193.446	285.217	
9		591.578	591.578	896.224	0.284	168.008	254.528	
10		591.578	591.578	908.224	0.247	146.120	224.331	
11		591.578	591.578	908.224	0.215	127.189	195.268	
12		591.578	591.578	908.224	0.187	110.625	169.838	
	150		6061.5885	8653.382		2397.548	3306.207	

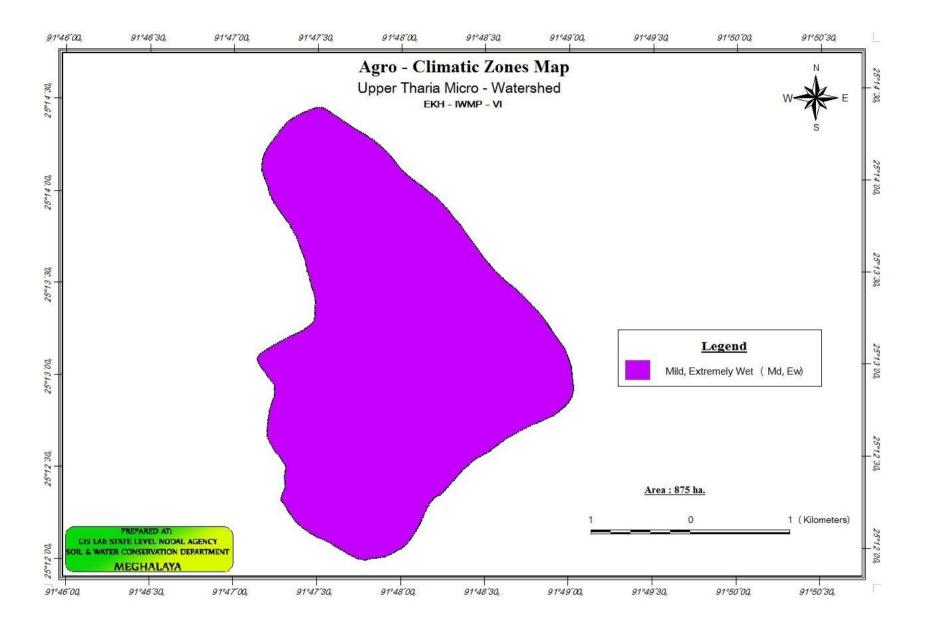
Benefit Cost Ratio = <u>Discounted Benefits</u> Discounted Costs

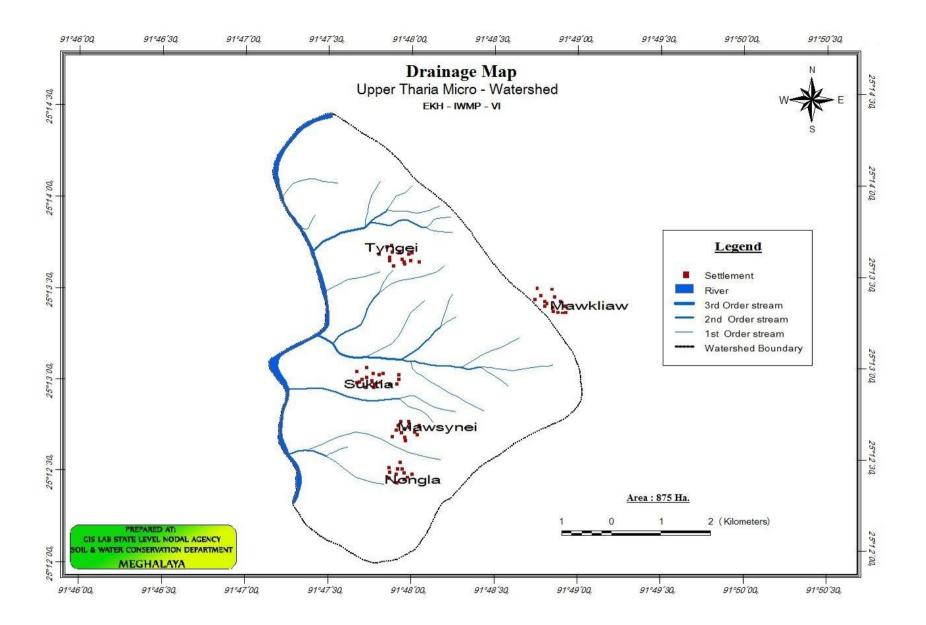
= <u>1.379</u>

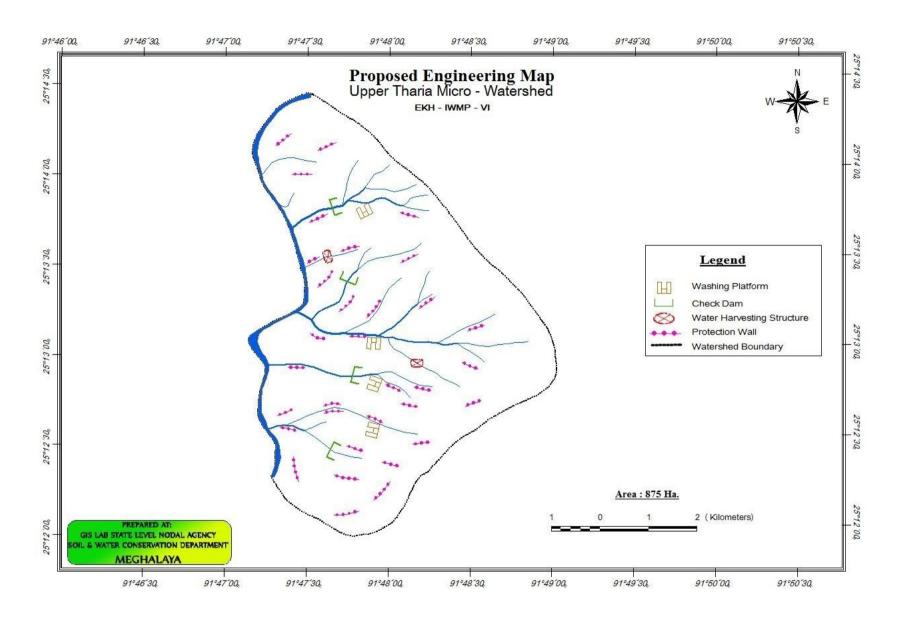
**B.C. Ratio** = 1:1.379

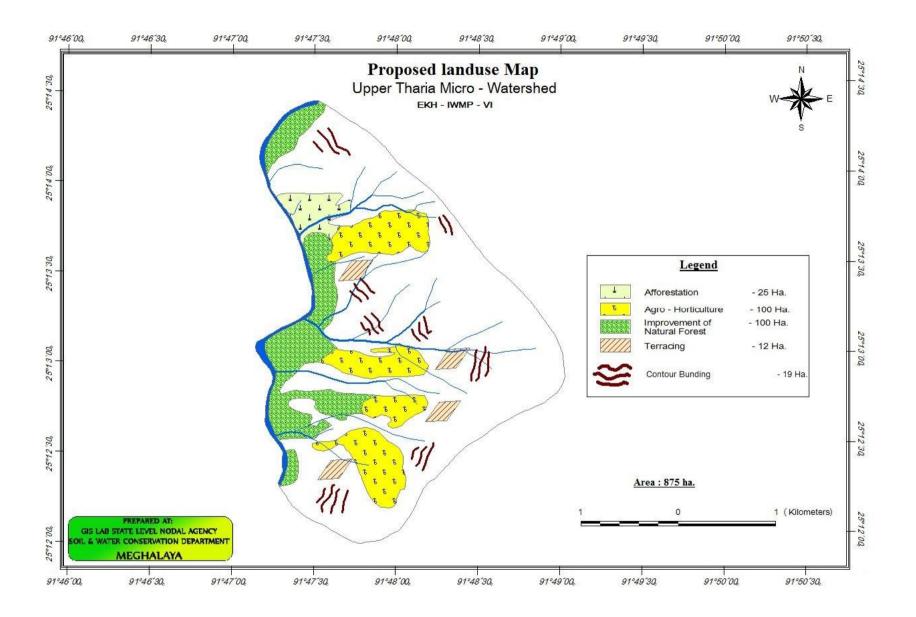
# ANNEXURE I MAPS

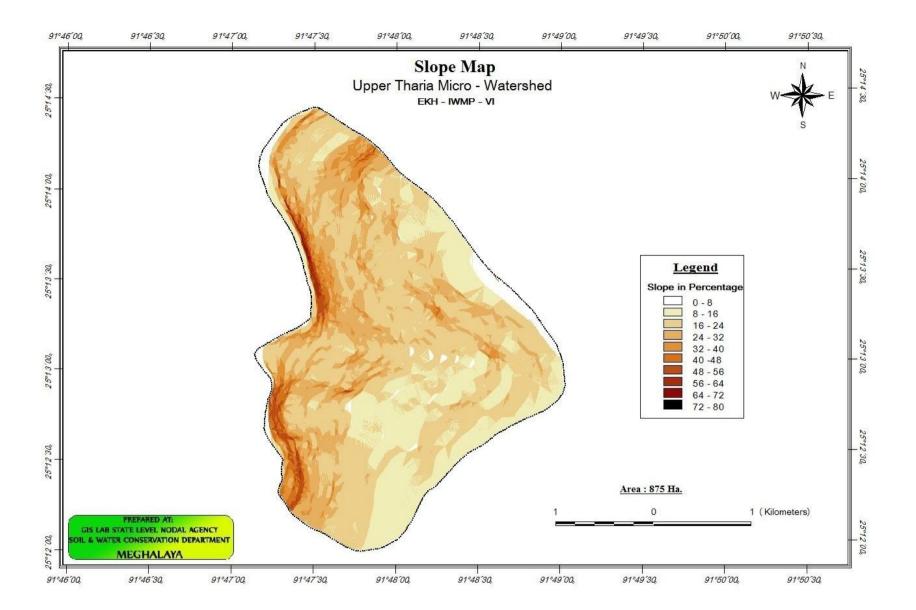


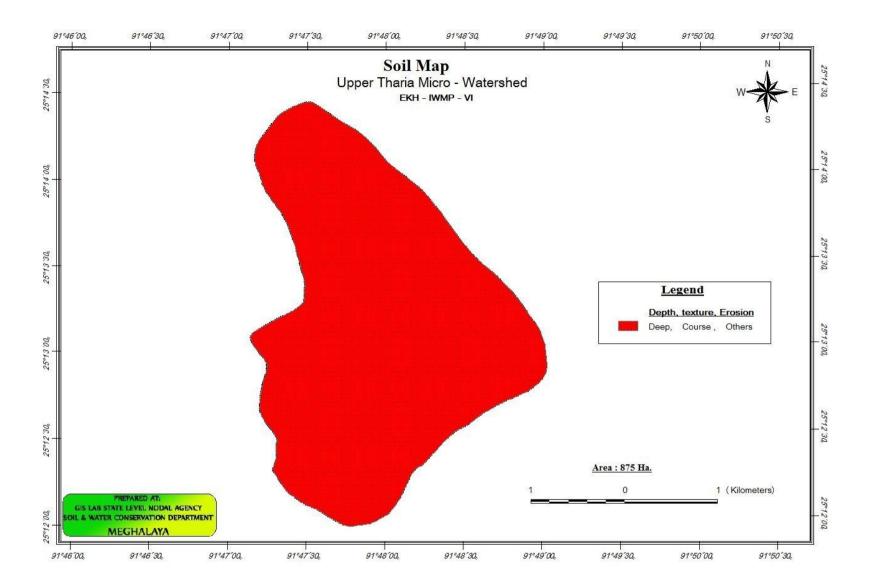


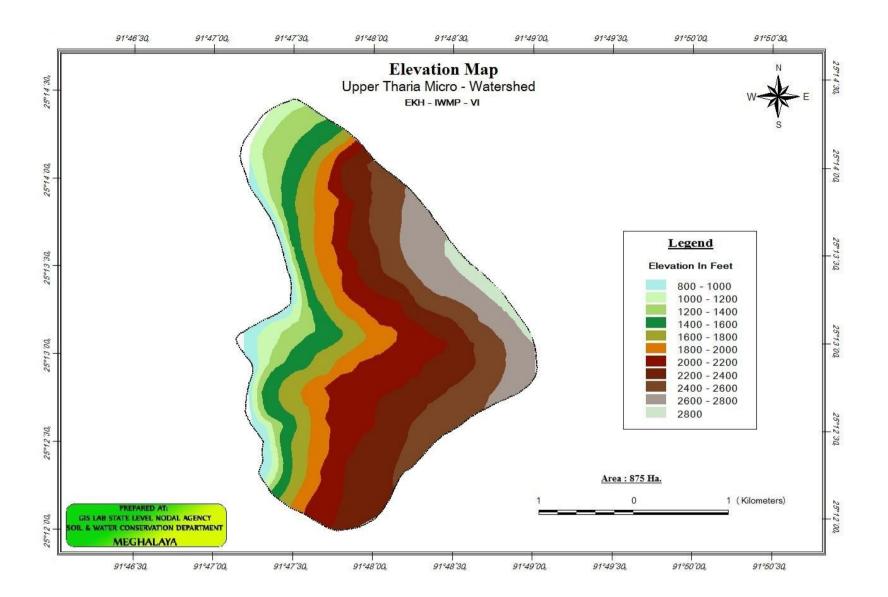


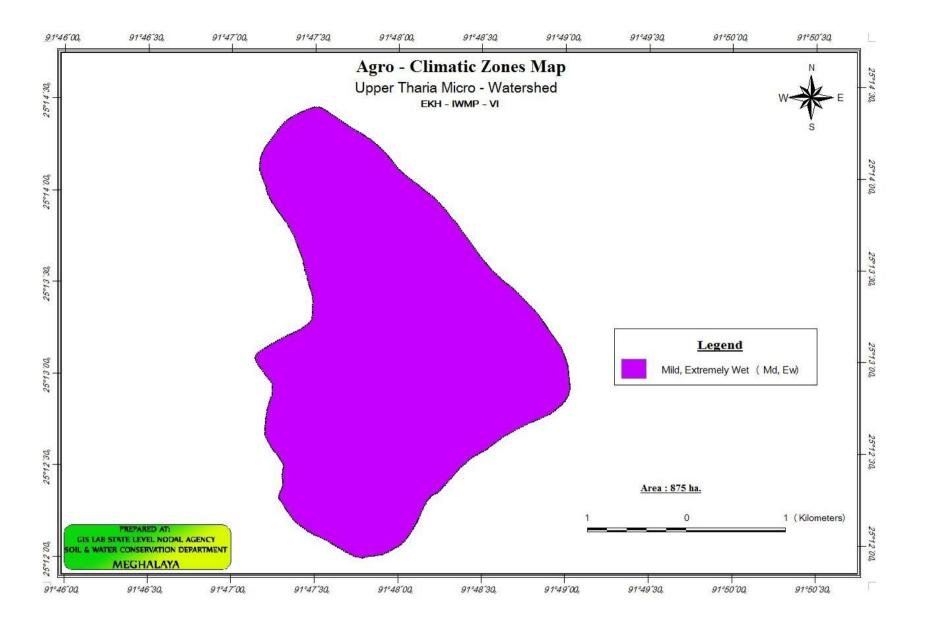


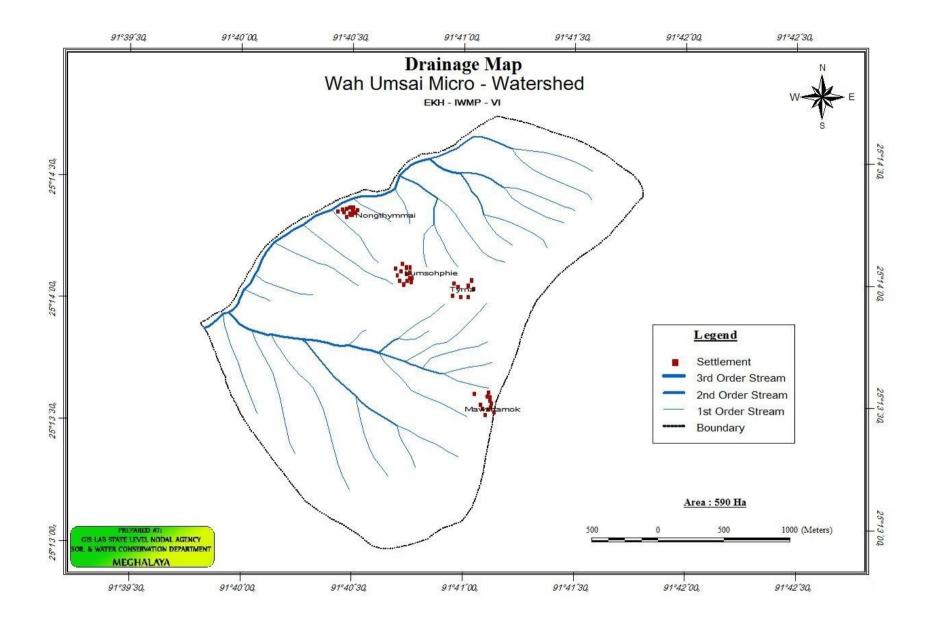


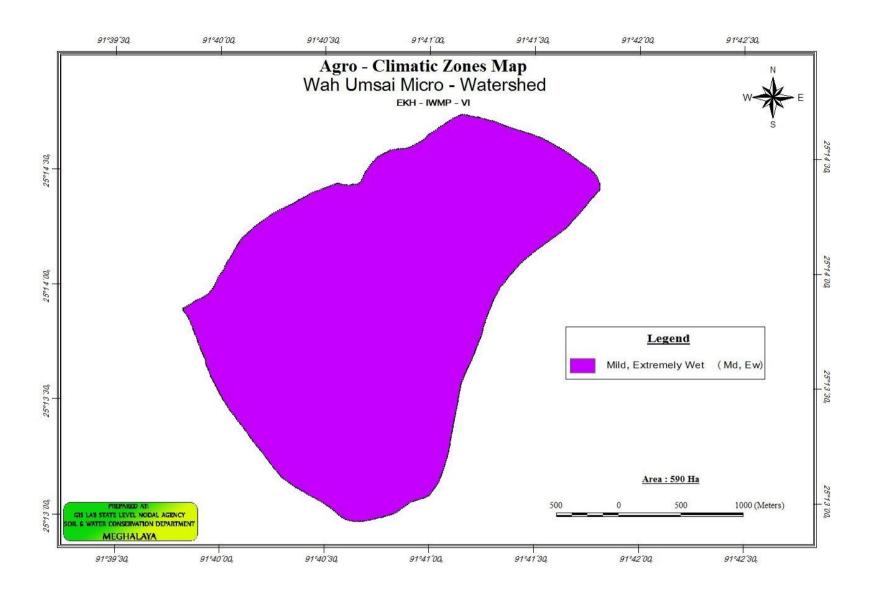


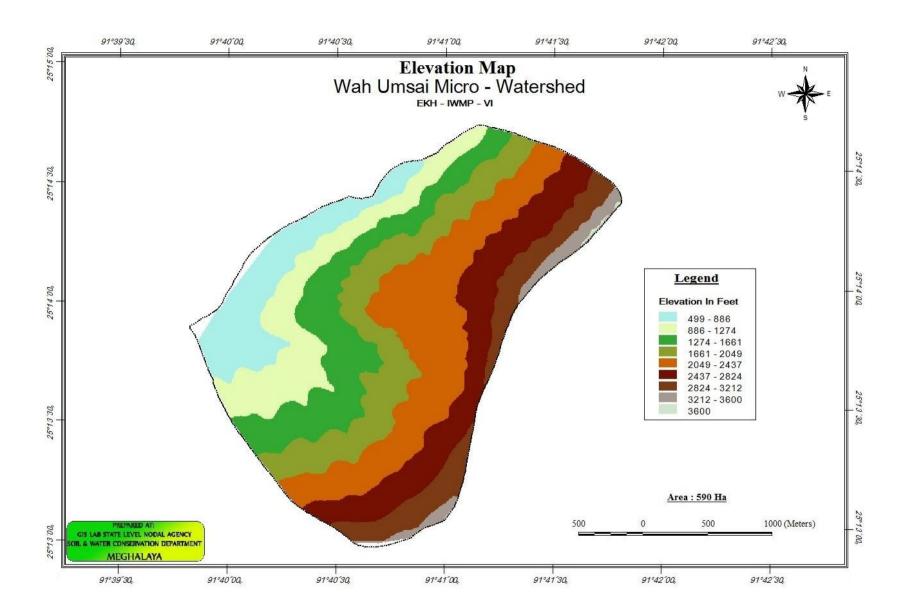


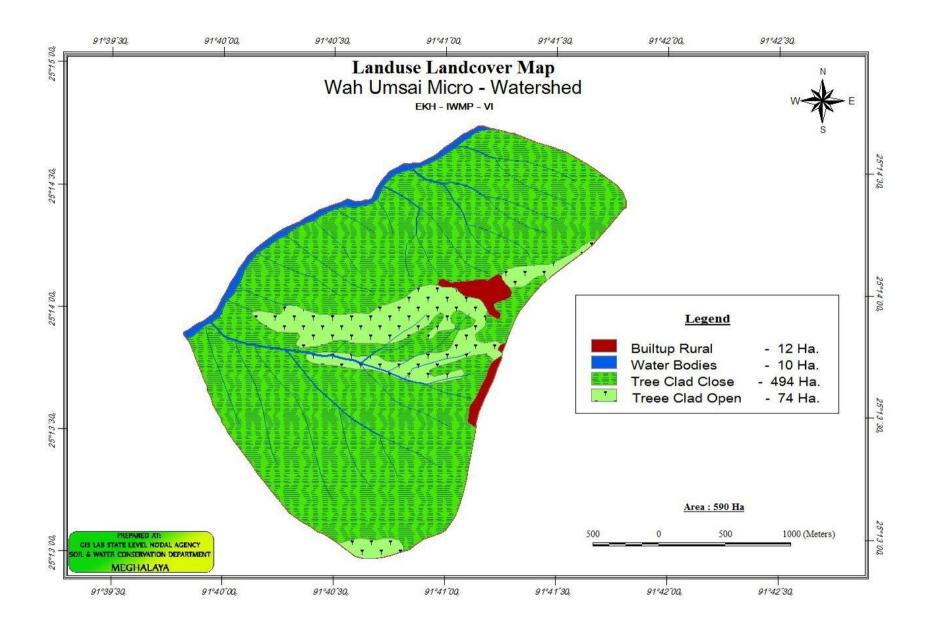


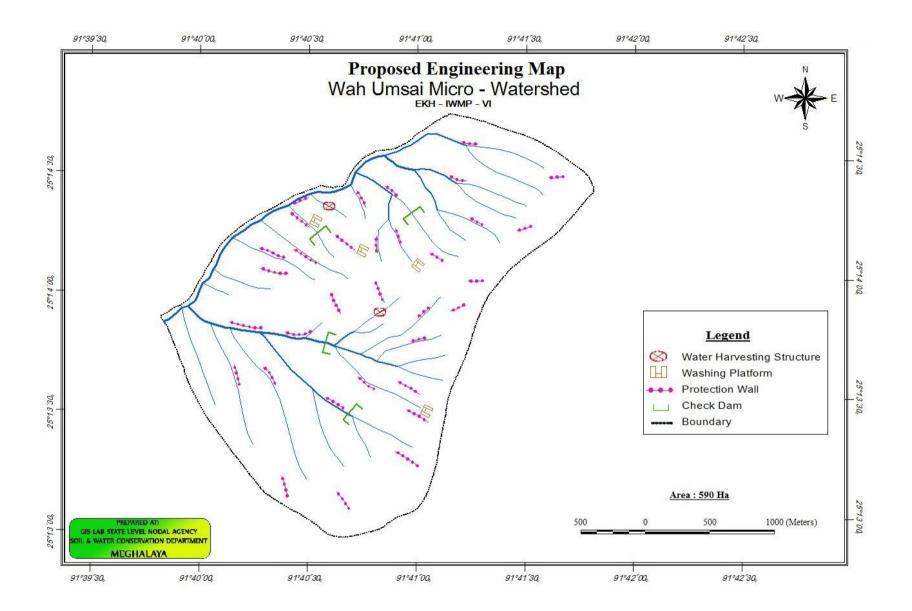


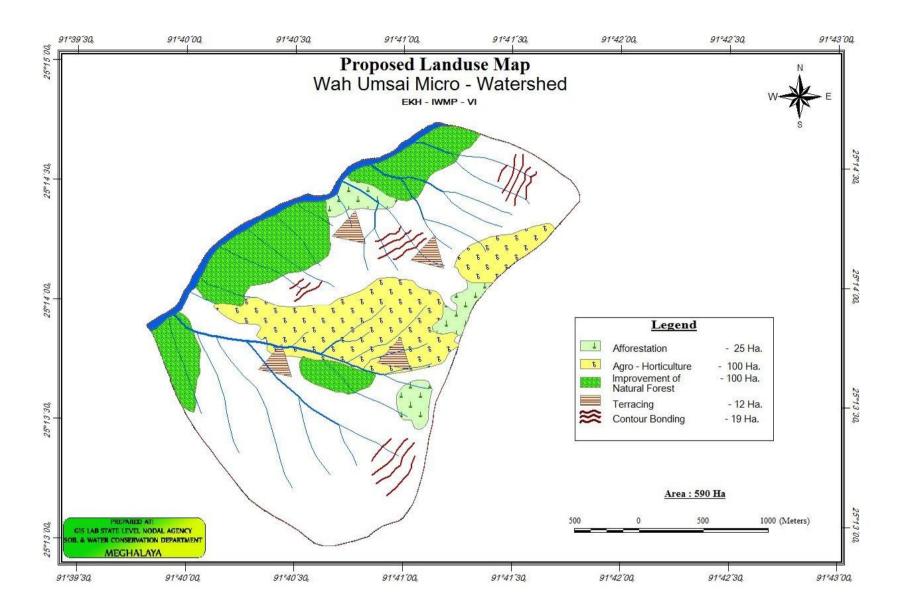


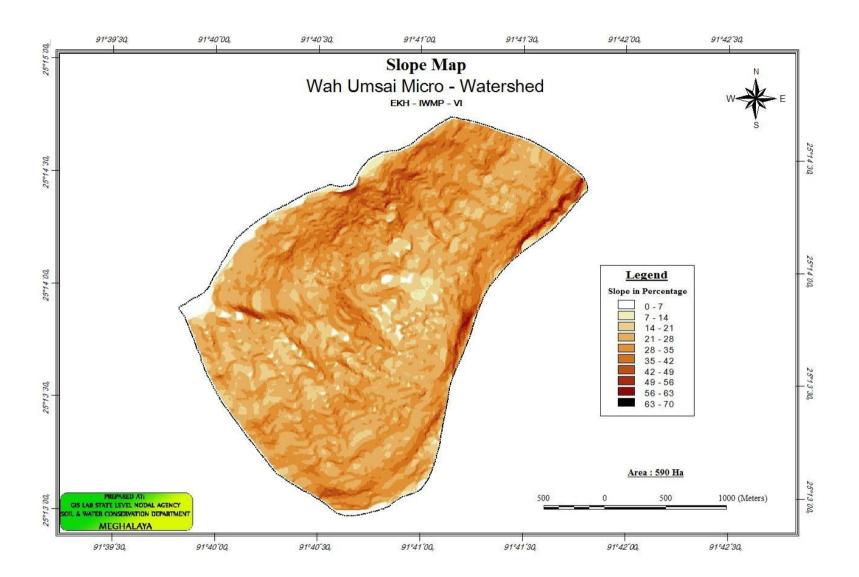












## **ANNEXURE II**

**SOCIO-ECONOMIC SURVEY DETAILS** 

## SOCIO ECONOMIC DATA OF MAWSIANGEI VILLAGE UNDER UPPER THARIA WATERSHED

			Populatio	on	]	Literacy	ý	Occupat ion	_	ulture ea			Livest	ock		Annua 1 Incom e
Sl.N	Name Of Them Head	Mal	Femal	Total	Lite	Illite	Tota		Settle	Jhum	Co	Pig	Goa	Poultry	Hor	
О	of Family	e	e		rate	rate	1		d		W		t		se	
1.	Shri. Baiaid	03	04	07	-	-	-	Farmer	-	-	-	-	-	10	-	30,000
	Thangkhiew															
2.	Shri. Samuel Tynthai	02	03	05	1	2	3	Farmer	-	-	-	-	-	03	-	15,000
3.	Shri. Santo Iawbor	03	04	07	-	-	-	Farmer	-	-	-	-	-	15	-	15,000
4.	Shri. Shembha Dkhar	02	02	04	-	-	ı	Farmer	-	-	-	-	-	-	-	26,000
5.	Shri. Pynwan	04	04	08	-	-	-	Daily	-	-	-	-	-	06	-	28,000
	Khongphai							earner								
6.	Shri. Trik Iawbor	01	02	03	-	-	1	Daily earner	-	-	-	-	-	-	-	28,000
7.	Clari Distanza Maisra	02	03	05		1	1	Farmer				1		10		22,000
-	Shri. Ristarwel Majaw				-	1	1		-	-	-	1	-	_	-	23,000
8.	Shri. Treilang Ryngnga	02	05	07	-	1	-	Farmer	-	-	-	1	-	03	-	25,000
9.	Shri. Siewdor	04	03	07	_	_		Farmer	_	_	_	<u> </u>	_	_	_	22,000
	Buhphang		05	07				1 driller								22,000
10.	Smti. Embi Ryngnga	02	03	05	-	-	-	Farmer	-	-	-	-	-	04	-	20,000
11.	Shri. Jim Nodrick	04	05	09	1	-	1	Farmer	-	-	-	-	-	05	-	28,000
	Umdor															
12.	Shri. Moonstar Iawbor	01	00	01	-	-	1	Farmer	-	-	-	-	-	-	-	20,000
13.	Smti. Sngur Iawbor	01	01	02	-	_	-	Farmer	-	-	-	-	-	_	-	25,000
14.	Shri. Dak Tynsong	05	03	08	-	2	2	Laboure	-	-	-	-	-	06	-	15,000
								r								
15.	Smti. Eletric Ryngnga	03	01	04	-	-	-	Laboure	-	-	-	_	-	05	-	17,000

								r								
		39	43	82				1	D	3.P.L =	52 No.	<u> </u>				
		39	43	02					D	0.F.L –	32 NOS	·.				
16.	Shri. Swaran Khongphai	05	03	08	-	-	-	Labourer	-	-	-	-	-	-	-	28,000
17.	Shri. Hestar Iawbor	03	04	07	-	-	-	Farmer	-	-	-	-	-	-	-	20,000
18.	Shri. Weldon Majaw	03	02	05	-	1	-	Labourer	-	-	-	-	-	04	-	28,000
19.	Smti. Ophit Khonglam	03	03	06	-	-	-	Labourer	-	-	-	-	-	03	-	28,000
20.	Shri. Teibor Majaw	05	02	07	-	-	-	Labourer	-	-	-	-	-	02	-	28,000
21.	Shri. Balwel Majaw	03	02	05	-	-	-	Farmer	-	-	-	-	-	10	-	19,000
22.	Shri. Love Massar	01	06	07	-	-	-	Farmer	-	-	-	-	-	10	-	22,000
23.	Smti. Riaisoh Majaw	04	02	06	-	-	-	Farmer	-	-	_	-	-	04	-	26,000
24.	Shri. Losten Buhphang	02	04	06	-	1	1	Daily Labourer	-	-	-	-	-	08	-	28,000
25.	Shri. Helin Mawpat	00	01	01	-	-	-	Daily Labourer	-	-	-	-	-	-	-	28,000
26.	Shri. Albis Tynthai	03	05	08	-	-	_	Farmer	-	1	-	-	-	-	-	20,000
27.	Smti. Baioh Massar	05	05	10	-	1	1	Farmer	-	-	-	-	-	-	-	23,000
28.	Shri. Etlar Khongshei	01	00	01	-	-	-	Daily Labourer	1	1	-	-	-	-	-	28,000
29.	Smti. Sohtimai Sohtun	01	03	04	-	-	-	Daily Labourer	-	-	-	-	-	06	-	28,000
30.	Smti. Pleitimai Khongphai	01	03	04	-	1	1	Daily Labourer	-	-	-	-	-	02	-	28,000
31.	Smti. Dibona Khongphai	02	03	05	-	-	-	Labourer	-	-	-	-	-	05	-	28,000
32.	Smti. Mebitina Iawbor	02	03	05	_	-	_	Farmer	-	-	_	-	-	02	-	23,000
33.	Smti. Twin Thangkhiew	05	01	06	-	-	-	Farmer	-	-	-	-	-	08	-	25,000
34.	Smti. Ikoniiar	02	01	03	-	-	-	Farmer	-	-	-	-	-	04	-	20,000

	Thangkhiew															
35.	Smti. Lama Thangkhiew	01	02	03	_	-	-	Farmer	-	-	-	-	-	05	-	15,000
	Total	52	55	107												
36.	Everynam Massar	02	02	04	-	-	-	Farmer	-	-	-	-	-	-	-	18,000
37.	Riewkhud Massar	01	01	02	-	-	-	Farmer	-	-	-	-	-	04	-	15,000
38.	Edret Ryngnga	-	-	-	-	-	-	Farmer	-	-	-	-	-	04	-	17,000
39.	Thwin Thangkhiew	04	01	05	-	-	-	Farmer	-	-	-	-	-	05	-	20,000
40.	Alik Khongphai	-	-	-	-	-	-	Farmer	-	-	-	-	-	04	-	20,000
41.	Pynkhlain Buhphang	01	01	02	-	-	-	Daily Labourer	1	-	-	-	-	03	-	15,000
42.	Lamphrang Thangkhiew	01	-	01	-	-	-	Daily Labourer	-	-	-	-	-	05	-	17,000
43.	Liiod Majaw	03	03	03	-	-	-	Farmer	-	-	-	-	-	06	-	25,000
44.	Remi Thabah	02	03	05	-	-	-	Farmer	-	-	-	-	-	07	-	23,000
45.	Serman Khongphai	03	01	04	-	-	-	Daily Labourer	1	-	-	-	-	03	-	28,000
46.	Inos Ryngnga	05	02	07	_	_	-	Farmer	_	-	_	_	02	10	_	15,000
47.	Tyngshain Ryngnga	05	03	08	-	_	-	Farmer	_	-	-	-	_	07	-	13,000
48.	Rimunbok Ryngnga	01	07	08	-	-	-	Farmer	-	-	-	_	-	09	_	28,000
49.	Ibora Khongphai	01	01	02	-	-	-	Farmer	-	-	-	-	-	03	-	17,000
50.	Simos Tham	04	02	06	-	-	-	Farmer	-	-	-	-	-	05	-	15,000
51.	Biplo Iawbor	05	02	07	-	-	-	Farmer	-	-	-	-	-	06	-	22,000
52.	Jingkmen Thangkhiew	01	02	03	-	-	-	Farmer	-	-	_	-	-	07	-	24,000
53.	Dwin Thangkhiew	-	03	03	-	-	-	Farmer	-	-	-	-	-	04	-	20,000
54.	Training Thangkhiew	05	04	09	-	-	-	Daily Labourer	-	-	-	-	01	05	-	28,000

	Total	44	38	82												
	*** 11: 601 11:	0.4	0.4	0.0					1			0.2	Ι			15.000
55.	Wolling Thangkhiew	04	04	08	-	-	-	Farmer	-	-	-	02	-	09	-	17,000
56.	Ephri Ryngnga	02	01	03	-	-	-	Farmer	-	-	-	-	-	07	-	18,000
57.	Shaintimon Massar	-	02	02	-	-	-	Farmer	-	-	-	-	-	03	-	15,000
58.	Oming Khongshei	04	03	07	-	-	-	Daily Labourer	-	-	-	-	-	08	-	28,000
59.	Shilbi Khongphai	02	01	03	-	-	-	Labourer	-	-	-	-	-	04	-	28,000
60.	Riewspah Iawbor	04	-	04	-	-	-	Farmer	-	-	-	-	-	07	-	15,000
61.	Rat Iawbor	01	-	01	-	-	-	Farmer	-	-	-	-	-	05	-	18,000
62.	Rilan Iawbor	09	01	10	-	-	-	Farmer	-	-	-	-	-	11	-	20,000
63.	Miss Iawbor	05	01	06	-	-	-	Farmer	-	-	-	-	-	05	-	22,000
64.	Hehbor Ryngnga	02	02	04	-	-	-	Farmer	-	-	-	-	-	06	-	30,000
65.	Khiah Massar	03	02	05	-	-	-	Farmer	-	-	-	-	-	06	-	25,000
66.	Kop Mawkon	01	01	02	-	-	-	Farmer	-	-	-	-	-	04	-	20,000
67.	Iohi Khonglam	04	03	07	-	-	-	Daily Labourer	-	-	-	-	-	09	-	28,000
68.	Tinet Khongkhriam	04	03	07	-	01	01	Daily Labourer	-	-	-	-	-	05	-	28,000
69.	Khrawbok Thangkhiew	01	01	02	-	-	-	Daily Labourer	ı	ı	-	-	-	09	-	20,000
70.	Nangbha Dkhar	02	02	04	-	-	ı	Farmer	-	ı	-	-	-	05	-	16,000
71.	Badskhem Thangkhiew	02	02	04	-	-	-	Farmer	-	-	-	-	-	07	-	22,000
72.	Dirabad Khongthohrem	03	03	06	-	-	-	Farmer	-	-	-	-	-	05	-	20,000
73.	Emdor Khongthohrem	01	01	02	-	-	-	Daily Labourer	-	-	-	-	-	04	-	28,000

74.	Reka Tham	01	02	03	-	-	_	Farmer	-	-	-	1	-	08	-	16,000
		55	35	90												

**POPULATION**:-

MALE = 190 - FEMALE = 171 TOTAL = 361

### SOCIO ECONOMIC DATA OF SUKTIA VILLAGE UNDER UPPER THARIA WATERSHED

										1,						Annual
								Occupati	Agricu					_		Income
			Population	on		Literac	У	on	Are	a			Livest	tock		
Sl.N	Name Of Them Head	Mal	Femal	Total	Lite	Illite	Total		Settled	Jhum	C	Pig	Goa	Poultry	Но	
О	of Family	e	e		rate	rate					О		t		rse	
	-										W					
1.	Shri. Kel Tynthai	02	04	06	-	-	-	Farmer	-	-	-	-	-	30	-	30,000
2.	Shri. Phansing	04	03	07	-	-	-	Farmer	-	-	-	3	-	10	-	23,000
	Khongshei															
3.	Shri. Eswit Umdor	05	05	10	1	2	3	Farmer	-	-	-	1	-	-	-	22,000
4.	Shri. Pynhunlang	04	02	06	-	-	-	Farmer	-	-	-	4	-	04	-	19,000
	Thabah															
5.	Shri. Banang	01	01	02	-	-	-	Daily	-	-	-	2	-	-	-	23,000
	Khongshei							earner								
6.	Shri. Shandra Majaw	04	-	04	-	-	-	Farmer	-	-	-	-	-	-	-	15,000
7.	Shri. Koliphod Majaw	01	02	03	-	-	-	Daily	-	Jhum	-	-	-	-	-	21,000
								earner								
8.	Shri. Kmenlang	01	02	03	-	-	-	Farmer	-	-	-	1	-	10	-	28,000
	Riahtam															

9.	Shri. Ketila Tynthai	01	01	02	-	-	_	Farmer	-	-	-	-	-	-	-	20,000
10.	Shri. Sbunlang Khongshei	01	03	04	-	-	-	Farmer	-	-	-	1	-	02	-	28,000
11.	Shri. Rikod Massar	03	02	05	-	-	-	Farmer	-	-	-	ı	-	-	-	19,000
12.	Shri. Kloniar Khongknian	03	02	05	-	-	-	Farmer	-	-	-	-	-	-	-	20,000
13.	Shri. Thwil Tham	-	01	01	-	-	-	Farmer	-	-	-	-	-	20	-	23,000
14.	Shri. Lehbha Tynthai	04	04	08	-	-	-	Laboure r	-	-	-	-	-	50	-	22,000
15.	Shri. Eswin Tynthai	01	01	02	1	-	1	Laboure r	-	-	-	2	-	30	-	28,000
16.	Shri. Deman Ryngnga	02	01	03	-	-	-	Farmer	-	-	-	ı	-	-	-	28,000
17.	Shri. Kobar Massar	03	01	04	1	1	1	Farmer	-	Jhum	-	2	-	-	-	25,000
18.	Shri. Deben Massar	04	02	06	-	-	-	Farmer	-	-	-	1	-	-	-	22,000
19.	Shri. Anshar Khongkhnian	02	02	04	-	-	-	Farmer	-	-	1	-	-	-	-	20,000
20.	Shri. Bok Tyngsong	05	03	08	-	-	-	Daily earner	-	-	1	-	-	-	-	28,000
21.	Shri. Phuin Krangthah	-	01	01	-	-	-	Farmer	-	-	-	-	-	10	-	25,000
		51	43	94												
22.	Smti. Novina Khongthah	-	01	01	-	-	-	Farmer	-	-	-	-	-	10	-	22,000
23.	Smti. Melbina Marbaniang	03	03	06	1	-	1	Farmer	-	Jhum	1	-	-	03	-	28,000
24.	Shri. Donso Tding	01	03	04	-	_	-	Daily earner	-	-	-	3	-	-	-	25,000
25.	Shri. Daliaw Raam	03	01	04	-	-	-	Farmer	-	-	-	1	-	-	-	28,000
26.	Shri. Shaniah Thabah	02	02	04	-	-	-	Daily earner	-	-	-	2	-	-	-	28,000

27.	Shri. William	03	01	04	-	-	_	Daily	-	_	-	-	-	08	-	28,000
	Khongkhnian							earner								
28.	Shri. Sukhanaia	03	01	04	-	-	-	Farmer	-	-	-	2	-	07	-	23,000
	Massar															
29.	Smti. Balah Khongshei	01	01	02	-	-	-	Farmer	_	Jhum	-	-	-	-	-	20,000
30.	Smti. Rijan Khongshei	06	05	11	-	-	-	Farmer	-	-	-	-	-	-	-	25,000
31.	Shri. Koming Thabah	01	03	04	-	-	-	Farmer	-	-	-	-	-	-	-	20,000
32.	Smti. Plesibon Buhphang	04	01	05	-	-	-	Farmer	-	_	-	-	-	-	-	19,000
33.	Smti. Klistina Massar	01	01	02	-	-	-	Farmer	-	-	-	-	-	-	-	23,000
34.	Shri. Nicolas Riahtam	02	04	06	-	-	-	Daily	-	-	-	-	-	-	-	28,000
								earner								
35.	Shri. Story Khriam	01	01	02	-	-	-	Daily	-	-	-	1	-	-	-	28,000
								earner								
36.	Smti. Rophina Massar	02	05	07	-	-	-	Farmer	-	-	-	ı	-	08	-	25,000
37.	Shri. Suk Khriam	03	02	05	-	-	-	Daily	-	-	-	-	-	-	-	28,000
								earner								
38.	Smti. Santilian Tynthai	01	02	03	-	-	-	Farmer	-	Jhum	-	-	-	-	-	23,000
39.	Smti. Englan Tding	01	01	02	-	-	-	Farmer	-	-	-	-	-	-	-	24,000
40.	Smti. Wanda Tding	01	01	02	-	-	-	Farmer	-	-	-	-	-	-	-	22,000
41.	Smti. Sirian Syngai	-	01	01	-	-	-	Farmer	-	Jhum	-	-	-	05	-	22,000
42.	Smti. Phartin Massar	05	01	06	-	-	-	Farmer	-	-	-	-	-	-	-	20,000
43.	Shri. Kmen Singh	03	02	05	-	-	-	Farmer	-	Jhum	-	-	-	-	-	23,000
44.	Shri. Willing Riahtam	05	04	09	-	-	-	Farmer	-	Jhum	-	-	-	13	-	19,000
		52	47	99												
45.	Smti. Ribo	04	06	10	_	-	-	Farmer	-	-	-	-	-	-	-	24,000
	Khongkhnian															
46.	Shri. Ramlus Majaw	04	01	05	-	-	_	Daily	-	Jhum	-	1	-	-	-	28,000
								earner								
47.	Smti. Twil Majaw	04	03	07	-	-	-	Farmer	-	-	-	-	-	10	-	23,000

48.	Smti. Dihmon Majaw	05	04	09	-	-	-	Farmer	-	-	-	-	-	-	-	20,000
49.	Shri. Alphon Riahtam	04	06	10	-	-	-	Daily	-	Jhum	-	-	-	-	-	28,000
								earner								
50.	Smti. Drian Thabah	03	04	07	-	-	-	Farmer	-	-	-	2	-	-	-	23,000
51.	Smti. Kisona Majaw	01	04	05	-	-	-	Farmer	-	-	-	-	-	-	-	15,000
52.	Smti. Jalmeris Riahtam	02	04	06	-	-	-	Farmer	-	-	-	-	01	15	-	19,000
53.	Shri. Hip Massar	02	04	06	-	-	-	Daily earner	-	-	1	-	-	-	-	28,000
54.	Shri. Rilan Khongshei	05	03	08	-	-	-	Daily earner	-	-	-	2	-	-	-	28,000
55.	Smti. Dilo Tyngsong	01	01	02	-	-	-	Farmer	-	-	-	1	-	-	-	25,000
56.	Shri. Bok Massar	03	02	05	-	-	-	Farmer	_	-	-	-	-	40	-	23,000
57.	Shri. Espar Nailar	03	02	05	-	-	-	Daily earner	-	-	-	-	-	02	-	28,000
58.	Shri. Banan Tynthai	03	02	05	-	-	-	Farmer	-	Jhum	-	-	-	05	-	22,000
59.	Smti. Tyngkai khongkhnian	01	01	02	-	-	-	Farmer	-	Jhum	-	-	-	-	-	22,000
60.	Smti. Thwir Majaw	-	01	01	-	-	-	Farmer	_	-	-	4	-	-	-	20,000
61.	Smti. Jenita Majaw	-	01	01	-	-	-	Farmer	-	-	-	-	-	-	-	23,000
62.	Smti. Daphira Majaw	01	01	02	1	-	-	Farmer	-	-	-	-	-	-	-	22,000
63.	Smti. Banrilang Majaw	01	02	03	-	-	-	Farmer	-	-	-	-	-	-	-	22,000
64.	Shri. Massilin Majaw	01	01	02	-	-	-	Daily earner	-	-	-	1	-	-	-	28,000

65.	Smti. Jinghun Majaw	02	02	04	-	-	-	Farmer	-	Jhum	-	-	-	20	-	20,000
66.	Shri. Bikanan Khongthah	02	02	04	-	-	-	Farmer	-	Jhum	-	-	-	30	-	22,000
		52	57	109												
67.	Smti. Milibon Buhphang	02	03	05	-	-	-	Farmer	-	Jhum	-	1	-	05	-	23,000
68.	Shri. Wil Khongshei	01	02	03	-	-	-	Daily earner	-	-	-	2	-	10	-	28,000
69.	Shri. Janai Khongshei	03	04	07	-	-	-	Daily earner	-	-	-	1	-	05	-	28,000
70.	Shri. Kenis Khongkhnian	02	01	03	1	2	3	Daily earner	-	-	-	-	-	15	-	25,000
71.	Shri. Puson Iawram	02	01	03	1	2	3	Farmer	-	-	-	-	-	-	-	28,000
72.	Shri. Pinto Khongkhnian	02	01	03	-	-	-	Farmer	-	Jhum	-	1	-	-	-	25,000
73.	Shri. Lokes Riahtam	03	ı	03	-	-	ı	Farmer	-	Jhum	-	-	1	20	ı	20,000
74.	Shri. Bna Bhatia	02	01	03	-	-	-	Farmer	-	Jhum	-	-	-	15	-	23,000
75.	Shri. Dorin Majaw	01	03	04	-	-	-	Farmer	-	Jhum	-	-	-	10	-	15,000
76.	Smti. Ebrista Majaw	-	01	01	-	-	-	Farmer	-	Jhum	-	3	-	-	-	20,000
77.	Shri. Solomon Tyngsong	01	-	01	-	-	-	Farmer	-	Jhum	-	-	-	-	-	22,000

	19	17	36						

**Population :-** Male:174 Female: 164 Total: 338

## SOCIO ECONOMIC DATA OF TYRNA VILLAGE WAH UMSAI WATERSHED

			Populatio	on	L	iteracy		Occupation	Agricultu	ıre Area		]	Livesto	ck		Annua l Incom e
Sl.N	Name Of Them Head	Mal	Femal	Total	Lite	Illite	То		Settled	Jhum	Cow	Pig	Goa	Poultry	Н	
О	of Family	e	e		rate	rate	tal						t		or	
	~,,	0.0	0.7									_		0.1	se	20.000
1.	Sharai Pde	02	05	07	3	4	7	Labourer	-	-	-	1	-	01	-	28,000
2.	Melson Pde	03	02	05	-	-	-	Labourer	-	-	-	1	-	01	-	28,000
3.	Andrial Wansai	02	02	04	1	3	4	Farmer	-	-	-	-	-	01	-	28,000
4.	Brian Sohkhlet	01	02	03	1	2	3	Farmer	-	-	-	1	-	01	-	23,000
5.	Golget Chyne	05	02	07	-	-	-	Farmer	-	-	-	-	-	01	-	20,000
6.	Dhesto Sawian	03	02	05	2	3	5	Farmer	-	-	-	1	-	01	-	23,000
7.	Jesentus Shati	03	04	07	-	-	-	Farmer	-	-	-	1	-	01	-	20,000
8.	Endina Kharpuri	01	01	02	-	-	-	Farmer	-	-	-	1	-	01	-	26,000
9.	Grifit Sohkhlet	05	02	07	3	4	7	Farmer	-	-	-	1	-	01	-	20,000
10.	Norwel Wanphai	02	02	04	-	-	-	Farmer	-	-	-	-	-	-	-	22,000
11.	Maira Pde	02	04	06	2	4	6	Farmer	-	-	-	-	-	01	-	24,000
12.	Khrin Wahlang	01	03	04	-	-	-	Farmer	_	-	-	1	-	01	-	26,000
13.	Thrin Wahlang	02	06	08	-	-	-	Farmer	_	-	-	1	-	01	-	28,000
14.	Jeson Wahlang	02	02	04	-	-	-	Farmer	-	-	-	_	-	-	-	22,000
15.	Beling Pde	04	03	07	-	-	-	Farmer	-	-	-	1	-	01	-	23,000
	_															
16.	Prem Sohkhlet	04	03	07	3	4	7	Farmer	-	-	-	-	-	01	-	25,000
17.	Roi Wahlang	03	02	05	-	-	-	Labourer	-	-	-	1	-	01	-	22,000
18.	Seibor Pde	01	01	02	_	-	_	Labourer	-	-	-	_	-	-	_	24,000

19.	Golstar Syiemlieh	04	01	05	-	-	-	Labourer	-	-	-	-	-	-	-	27,000
20.	Salin Sohkhlet	-	04	04	3	1	4	Farmer	-	-	-	-	-	01	-	26,000
21.	Oner Byrnia	01	01	02	-	-	-	Labourer	-	-	-	1	-	01	-	28,000
22.	Loster Sohkhlet	05	03	08	-	-	-	Labourer	-	-	-	1	-	01	-	28,000
23.	Dornila Thabah	03	03	06	2	4	6	Labourer	-	-	-	-	-	01	-	28,000
24.	Batskhem Sawian	03	03	06	-	-	-	Labourer	-	-	-	1	-	01	-	26,000
25.	Patsi Pde	03	03	06	-	-	-	Labourer	-	-	-	-	-	01	-	25,000
26.	Nansi Sawian	01	01	02	2	2	4	Farmer	-	-	-	-	-	01	-	15,000
27.	Arphuson Sawian	02	03	05	-	-	-	Farmer	-	-	-	-	-	01	-	14,000
28.	Piia Lyngdoh	02	02	04	-	-	-	Labourer	-	-	-	1	-	01	-	28,000
29.	Phas Lyngdoh	02	01	03	-	-	-	Labourer	-	-	-	-	-	01	-	20,000
30.	Estomel Phanrang	02	03	05	-	-	-	Labourer	-	-	-	-	-	01	-	28,000
31.	Bletly Sohkhlet	03	05	08	4	4	8	Farmer	-	-	-	-	-	01	-	25,000
32.	Redstar Syiemlieh	05	02	07	1	6	7	Labourer	-	-	-	-	-	01	-	28,000
33.	Olga Khyllep	01	03	04	-	-	-	Labourer	-	-	-	1	-	01	-	20,000
34.	Phran Khyllep	02	03	05	ı	1	-	Labourer	-	1	-	-	-	01	-	28,000
35.	Esto Sawian	02	-	02	-	-	-	Labourer	-	-	-	-	-	01	-	26,000
36.	Refill Sawian	02	01	03	-	-	-	Labourer	-	-	-	-	-	01	-	20,000
37.	Whiterose Sohkhlet	04	02	06	1	-	-	Labourer	-	1	-	1	-	01	-	20,000
38.	Ambrus Wansai	02	03	05	1	ı	-	Labourer	-	ı	-	1	-	01	-	22,000
39.	Kyrmen Wahlang	02	02	04	ı	1	-	Labourer	-	1	-	-	-	01	-	25,000
40.	Pis Majaw	02	02	04	1	ı	-	Labourer	-	ı	-	-	-	01	-	20,000
41.	Living Majaw	03	03	06	-	-	-	Labourer	-	-	1	-	-	01	-	15,000
42.	Moris Majaw	02	02	04	1	-	-	Farmer	-	1	-	1	-	01	-	18,000
43.	Donkupar Syiemlieh	01	01	02	1	ı	-	Farmer	-	ı	-	-	-	01	-	22,000
44.	Dlor Marbaniang	03	03	06	-	-	-	Farmer	-	-	-	1	-	01	-	20,000
45.	Airis Wahlang	01	02	03	1	ı	-	Labourer	-	ı	-	1	-	01	-	14,000
46.	Peter Pde	02	01	03	-		-	Labourer	-	-	-		_	01	-	28,000
47.	Siio Pde	01	04	05	-	-	-	Labourer	-	-	-	1	_	01	-	28,000

48.	Ailin Lyngdoh	01	02	03	_	_	-	Labourer	-	1	-	1	-	01	-	28,000
49.	Siio Pde	04	03	07	-	-	-	Farmer	-	-	-	1	-	01	-	28,000
50.	Holmida Pde	02	03	05	-	-	-	Labourer	-	-	-	-	-	01	-	15,000
51.	Toibon Pde	03	-	03	-	-	-	Labourer	-	-	-	-	-	01	-	25,000
52.	Lukar Wahlang	02	02	04	-	-	-	Labourer	-	-	-	1	-	01	-	26,000
53.	Aisi Wahlang	02	02	04	-	-	-	Labourer	-	-	-	1	-	01	-	18,000
54.	Paskha Chyne	03	-	03	-	-	-	Labourer	-	-	-	1	-	01	-	15,000
55.	Medalin Wahlang	04	04	08	-	-	-	Labourer	-	-	-	1	-	01	-	22,000
56.	Sixtus Wahlang	01	03	04	-	-	-	Labourer	-	1	-	1	-	01	-	25,000
57.	Risuk Wahlang	01	04	05	2	3	5	Labourer	-	-	-	-	-	01	-	20,000
58.	Josep Chyne	01	02	03	-	-	-	Labourer	-	-	-	1	-	01	-	14,000
59.	Hidron Chyne	01	04	05	2	3	5	Labourer	-	1	-	1	-	01	-	28,000
60.	Shortila Sun	01	04	05	1	4	5	Labourer	-	ı	-	-	-	01	-	20,000
61.	Toni Sawian	01	01	02	-	-	-	Labourer	-	1	-	-	-	01	-	25,000
62.	Merian	02	03	05	2	3	5	Labourer	-	ı	-	1	-	01	-	22,000
63.	Shor Sohkhlet	04	02	06	1	5	6	Labourer	-	1	-	1	-	01	-	20,000
64.	Shining Sohkhlet	03	03	06	-	-	-	Labourer	-	1	-	1	-	01	-	24,000
65.	Ebok Dohling	02	02	04	-	-	-	Labourer	-	ı	-	-	-	01	-	20,000
66.	Bistina Majaw	02	04	06	-	-	-	Farmer	-	ı	-	1	-	01	-	22,000
67.	Bisto Phanrang	01	ı	01	-	-	-	Labourer	-	ı	-	-	-	01	-	28,000
68.	Kwin Majaw	01	03	04	-	-	-	Labourer	-	1	-	-	-	01	-	17,000
69.	Jelbina Wansai	05	04	09	-	-	-	Labourer	-	ı	-	1	-	01	-	24,000
70.	Kener Byrnia	03	04	07	2	5	7	Labourer	-	1	-	-	-	01	-	27,000
71.	Airinus Kharpuri	02	04	06	3	3	6	Farmer	-	ı	-	-	-	01	-	22,000
72.	Andrial Wansai	02	02	04	1	3	4	Labourer	-	ı	-	1	-	01	-	26,000
73.	Judit Shati	01	01	02	-	-	-	Labourer	-	ı	-	-	-	01	-	23,000
74.	Edom Chyne	03	01	04	1	3	4	Labourer	-	-	-	-	-	01	-	16,000
75.	Lashembor Pde	03	01	04	_	-	-	Labourer	-	1	-	1	-	01	-	20,000
76.	Emordian Muiong	02	01	03	-	-	-	Labourer	-	ı	-	-	-	01	-	20,000
77.	Wolning Sohkhlet	02	02	04	-	-	-	Labourer	-	-	-	-	-	01	-	15,000

78.	Biio Wansai	01	02	03	-	-	-	Labourer	-	-	-	-	-	01	-	28,000
79.	Daplin Kharkongor	02	04	06	-	-	-	Labourer	-	-	-	1	-	01	-	25,000
80.	Disbih Sawian	01	02	03	-	-	-	Labourer	-	-	-	-	-	01	-	28,000
81.	Stadly Sohkhlet	03	03	06	1	5	6	Labourer	-	-	-	1	-	01	-	30,000
82.	Hehdalin Sohkhlet	05	04	09	4	5	9	Farmer	-	-	-	-	-	01	-	22,000
83.	Daphira Sohkhlet	01	02	03	-	-	-	Labourer	-	-	-	-	-	01	-	28,000
84.	Winter Phanrang	02	02	04	2	2	5	Farmer	-	-	-	-	-	01	-	15,000
85.	Presbila Wanphai	04	02	06	-	-	-	Labourer	-	-	-	-	-	01	-	28,000
86.	Sianti Khyllep	03	03	06	3	3	6	Farmer	-	-	-	-	-	01	-	18,000
87.	Kletus majaw	04	03	07	2	5	7	Labourer	-	-	-	-	-	01	-	19,000
88.	Mon Kharpuri	01	01	02	-	-	-	Labourer	-	-	-	-	-	-	-	28,000
89.	Rewsea Thabah	03	03	06	-	-	-	Labourer	-	-	-	1	-	01	-	20,000
90.	Phertila Sohkhlet	04	03	07	1	6	7	Farmer	-	-	-	-	-	01	-	20,000
91.	Iun Nongbri	03	03	06	-	-	-	Labourer	-	-	-	-	-	01	-	22,000
92.	Bren Khyllep	01	03	04	-	-	-	Labourer	-	-	-	1	-	01	-	23,000
93.	Phul Khyllep	04	02	06	-	1	-	Labourer	-	1	-	1	-	01	-	27,000
94.	Benjamin Khyllep	01	-	01	-	-	-	Labourer	-	-	-	-	-	-	-	25,000
95.	Rus Khyllep	03	02	05	-	-	-	Labourer	_	1	-	1	-	01	-	20,000
96.	Debit Dohling	03	03	06	-	-	-	Labourer	-	-	-	-	-	01	-	28,000
97.	Silvery Sohkhlet	04	03	07	2	5	7	Farmer	-	-	-	-	-	01	-	25,000
98.	Dhon Majaw	01	-	01	-	-	-	Labourer	-	-	-	-	-	01	-	22,000
99.	Shngain Sun	02	01	03	1	2	3	Labourer	-	ı	-	-	-	01	-	25,000
100.	Bandalin Majaw	01	02	03	2	1	3	Farmer	-	1	-	-	-	01	-	23,000
101.	Aisilda Khyllep	01	02	03	-	-	-	Labourer	-	-	-	-	-	01	-	20,000
102.	Pis Syiemlieh	01	02	03	-	1	-	Labourer	-	1	-	-	-	01	-	15,000
103.	Shanti Khyllep	01	01	02	-	ı	-	Labourer	-	ı	-	1	-	01	-	18,000
104.	Biten Mawa	03	02	05	-	ı	-	Labourer	-	1	-	-	-	01	-	15,000
105.	Dapbianglin Sohkhlet	04	04	08	1	7	8	Farmer	-	-	-	1	-	-	_	20,000
106.	Sted Syiemlieh	03	03	06	2	4	6	Labourer	-	-	-	-	-	01	-	28,000
107.	Phran Dohling	02	03	05	-	-	-	Labourer	-	-	-	-	-	01	-	20,000

108.	Jesanta Dohling	01	04	05	2	3	5	Labourer	-	-	-	-	-	-	_	25,000
109.	Beronica Sohkhlet	03	03	06	-	-	-	Labourer	-	-	-	-	-	01	-	20,000
110.	Arbinus Byrnia	03	03	06	-	-	-	Labourer	-	-	-	1	-	01	-	22,000
111.	Bok Shati	03	05	08	2	6	8	Labourer	-	-	-	1	-	01	-	15,000
112.	Marybel Shati	03	03	06	1	5	6	Labourer	-	-	-	1	-	-	-	15,000
113.	Tino Wahlang	02	02	04	1	3	4	Labourer	-	-	-	-	_	-	-	22,000
114.	Jan Pde	05	04	09	3	6	9	Farmer	-	-	-	1	-	01	-	22,000
115.	Roslin Byrnia	01	-	01	-	-	-	Labourer	-	1	-	-	-	-	-	28,000
116.	Marin Sohkhlet	04	03	07	2	5	7	Farmer	-	ı	-	1	-	01	-	20,000
117.	Bror Syiemlieh	03	03	06	1	5	6	Farmer	-	ı	-	-	-	01	-	25,000
118.	Ribarton Sohkhlet	03	02	05	-	-	-	Labourer	-	ı	-	-	-	01	-	23,000
119.	Tis Mawa	05	03	08	1	7	8	Labourer	-	-	-	-	-	01	-	15,000
120.	Ridalin Wahlang	02	01	03	-	-	-	Labourer	-	ı	-	-	-	-	-	20,000
121.	Beritus Wahlang	01	01	02	-	-	-	Labourer	-	-	-	-	-	01	-	18,000
122.	Kynpham Majaw	02	05	07	-	-	-	Labourer	-	-	-	1	-	01	-	15,000
123.	Brijensing Nongbri	03	-	03	-	-	-	Labourer	-	-	-	-	-	01	-	20,000
124.	Lucky Sohkhlet	07	03	10	2	8	10	Labourer	-	-	-	-	-	01	-	19,000
125.	Basimon Wahlang	02	02	04	1	3	4	Farmer	-	-	-	1	-	01	-	22,000
126.	Mara Wanphai	01	02	03	-	-	-	Labourer	-	-	-	-	-	01	-	26,000
127.	Saralin Wanphai	02	04	06	-	-	-	Labourer	-	-	-	-	-	01	-	24,000
128.	Niltila Sohkhlet	02	04	06	2	4	6	Labourer	-	-	-	1	-	01	-	20,000
129.	Barihun Sohkhlet	02	04	06	-	-	-	Labourer	-	-	-	-	-	01	-	18,000
130.	Betsi Sohkhlet	03	04	07	2	5	7	Labourer	-	-	-	1	-	01	-	25,000
131.	Springda Sohkhlet	01	05	06	3	3	6	Labourer	-	-	-	-	-	01	-	14,000
132.	Mem Memkon	02	02	04	-	-	-	Labourer	-	-	-	-	-	01	-	15,000
133.	Boy Chyne	03	03	06	-	-	-	Labourer	-	-	-	1	-	01	-	28,000
134.	Kleriia Chyne	01	01	02	1	1	2	Farmer	-	-	-	1	-	01	-	23,000
135.	Trena Pde	01	03	04	-	-	-	Labourer	-	-	-	-	-	01	-	26,000
136.	Wanaihun Sawian	04	03	07	-	-	-	Labourer	-	-	-	1	-	-	-	24,000
137.	Rikardus Sohkhlet	02	02	04	-	-	-	Labourer	-	-	-	-	-	01	-	20,000

138.	Lam Muiong	01	-	01	-	-	-	Labourer	-	-	-	-	-	-	-	25,000
139.	Patrik Phanrang	01	1	01	-	-	-	Labourer	1	-	-	-	-	01	-	18,000
140.	Lenar Wanphai	01	-	01	-	-	-	Labourer	-	-	-	-	-	-	-	20,000
141.	Kyntiew Sohkhlet	03	02	05	1	4	5	Labourer	1	-	-	-	-	01	-	13,000
142.	Marbel Sawian	02	02	04	1	3	4	Labourer	-	-	-	-	-	01	-	26,000
143.	Tarsen Mawkon	02	01	03	1	2	3	Labourer	-	-	-	1	1	01	-	15,000
144.	Nightstar Syiemlieh	03	01	04	-	3	3	Labourer	ı	-	-	-	-	01	-	28,000
	TOTAL	340	341	681												

Population: Male :340 Female: 341 Total:681

B.P.L = 122

## SOCIO ECONOMIC DATA OF NONGLA VILLAGE UNDER UPPER THARIA WATERSHED

								Occupa	Agric	ulture						Annual Income
			Population	on		Literac	ey .	tion	_	ea			Livesto	ock		
Sl.N	Name Of Them Head	Mal	Femal	Total	Lite	Illit	Total		Settle	Jhum	Co	Pig	Goa	Poultry	Но	
О	of Family	e	e		rate	erat			d		W		t		rse	
						e										
1.	Shri. Director Manar	05	02	07	-	-	-	Farmer	-	-	-	1	-	10	-	30,000
2.	Smti. Dwelsibon Majaw	02	05	07	1	3	4	Labour	-	-	-	-	-	05	-	28,000
3.	Shri. Moses Ksing	03	04	07	-	-	-	Farmer	-	-	-	-	-	10	_	25,000
4.	Smti. Wanhun Tyngsong	02	03	05	-	-	_	Farmer	-	-	-	1	-	10	-	20,000
5.	Smti. Riples Khongphai	01	04	05	-	-	-	Farmer	-	-	-	-	-	12	-	15,000
6.	Smti. Moris Tynthai	03	01	04	-	-	-	Farmer	-	-	-	1	-	06	-	19,000
7.	Shri. Kyrshan Ksing	03	02	05	-	-	-	Farmer	-	-	-	2	-	07	-	23,000
8.	Shri. Lukas Ksing	03	06	09	-	-	-	Daily earner	-	Jhum	-	1	-	08	-	28,000
9.	Shri. Mohes Shabong	02	03	05	-	-	-	Daily earner	-	-	-	1	-	10	-	20,000
10.	Smti. Stik Kharmawpat	01	01	02	-	-	-	Daily earner	-	-	-	2	-	07	-	19,000
11.	Shri. Hedrick Umdor	05	04	09	1	-	1	Daily earner	-	-	-	3	-	06	-	20,000
12.	Smti. Aitibet Ksing	05	04	09	-	-	-	Daily earner	-	-	-	1	-	08	-	19,000
13.	Smti. Hohek Khongkhnian	04	04	08	-	-	-	Daily earner	-	-	-	1	_	05	-	25,000

14.	Smti. Bibian Massar	04	05	09	-	-	-	Daily	-	-	-	1	-	06	-	18,000
15.	Smti. Permit	03	04	07				earner				2		08		10,000
15.		03	04	07	-	-	-	Daily	-	-	-	2	-	08	-	18,000
1.6	Kharmawpat	0.2	0.2	0.6	1	1	2	earner				1		07		20.000
16.	Smti. Khemtimon	03	03	06	1	1	2	Daily	-	-	-	1	-	07	-	20,000
	Ksing							earner								
17.	Smti. Dorina Massar	04	05	09	-	-	-	Daily	-	-	-	3	-	05	-	28,000
								earner				_		_		
18.	Shri. Binton Masar	01	01	02	-	-	-	Daily	-	-	-	2	-	06	-	22,000
								earner								
	Total	54	61	115												
10	Smti. Dlissibon	05	03	08				Farmer				1		15		24.000
19.		05	03	08	_	_	-	Farmer	-	-	_	1	-	15	-	24,000
20	Ryngnga	0.5	0.2	00				Г				2		0.6		20.000
20.	Smti. Sidora Massar	05	03	08	-	-	-	Farmer	-	-	-	2	-	06	-	20,000
21.	Smti. Bilinda Massar	03	03	06	-	-	-	Farmer	-	-	-	3	-	10	-	21,000
22.	Smti. Kwessibon	-	02	02	-	1	1	Farmer	-	-	-	-	-	05	-	18,000
	Massar															
23.	Smti. Pura Majaw	01	03	04	-	-	-	Farmer	-	-	-	-	-	08	-	14,000
24.	Smti. Tehmon	04	01	05	-	-	-	Farmer	-	-	-	1	-	07	-	16,000
	Khongkhnian															
25.	Smti. Sampat	02	04	06	1	1	2	Farmer	-	_	-	1	-	10	-	28,000
	Khongkhnian															
26.	Smti. Buhtilut Ksing	04	01	05	-	-	-	Farmer	-	-	-	-	-	12	-	25,000
27.	Smti. Balty Massar	02	01	03	-	-	-	Farmer	-	-	-	1	-	15	-	24,000
28.	Smti. Salinda	04	04	08	-	-	-	Farmer	-	-	-	1	-	05	-	21,000
	Tyngsong															
29.	Smti. Betsaida Tham	03	02	05	-	-	-	Farmer	-	-	-	-	-	12	-	18,000
30.	Smti. Klirda Tham	01	02	03	-	-	_	Farmer	-	_	-	-	-	13	-	21,000
31.	Smti. Kroslinda Tham	01	03	04	_	_	_	Farmer	-	_	-	1	_	15	<u> </u>	22,000

32.	Smti. Litilda Ryngnga	01	03	04	1	-	1	Farmer	-	-	-	2	-	10	-	26,000
33.	Smti. Kresent	03	03	06	-	-	-	Daily	-	-	-	2	-	14	-	28,000
	Ryngnga							earner								
34.	Shri. Nikodimos	01	04	05	-	-	-	Daily	-	-	-	1	-	08	-	21,000
	Ksing							earner								
35.	Shri. Pynneh	01	-	01	-	-	-	Daily	-	-	-	-	-	10	-	22,000
	Khongkhnian							earner								
36.	Shri. Roken Tyngsong	02	02	04	-	-	-	Daily	-	-	-	1	-	07	-	25,000
								earner								
37.	Smti. Wandap Massar	03	01	04	-	-	-	Daily	-	-	-	1	-	12	-	22,000
20		0.1		0.1				earner						10		22.000
38.	Shri. Jopthiaw Ksing	01	-	01	-	-	-	Daily	-	-	-	-	-	10	-	22,000
								earner								
39.	Smti. Bolda Tynthai	02	01	03	-	-	-	Farmer	-	-	-	-	-	08	-	21,000
40.	Shri. Briwel Ryngnga	02	01	03	-	-	-	Farmer	-	-	-	-	-	08	-	21,000
	Total	51	47	98												
4.1	T1-1:11 T411	01	03	04				D - 11				1		10		10.000
41.	Thidlang Tynthai	01	03	04	_	-	-	Daily	-	-	-	1	_	10	-	19,000
10	3.6 . 1.	0.1	0.1	0.2				earner				2		10		22.000
42.	Merianlin	01	01	02	-	-	-	Farmer	-	-	-	2	-	10	-	23,000
12	Kharmawpat	01		01										05		22.000
43.	Hamlet Ryngnga	_	-	_	-	-	-		-	-	-	-	-	05	-	22,000
44.	Wanda Manar	01	02	03	-	-	-	Farmer	-	-	-	1	-	10		20,000
45.	Martidora Ksing	02	05	07	2	4	6	Farmer	-	-	-	3	-	12	-	21,000
46.	Thuesibon Majaw	01	03	04	1	2	3	Farmer	-	-	-	2	-	10	-	25,000
	Total	07	14	21												

<u>POPULATION</u>:- MALE = 112 - FEMALE = 122 TOTAL = 234 BPL:16

## SOCIO ECONOMIC DATA OF NONGTHYMMAI VILLAGE UNDER WAH UMSAI

			Populatio	on		Literac	у	Occupat ion	_	culture rea			Livest	ock		Annu al Inco me
Sl.N	Name Of Them Head	Mal	Femal	Total	Lite	Illit	Total		Settle	Jhum	Co	Pig	Goa	Poultr	Horse	
О	of Family	e	e		rate	erat e			d		W		t	У		
1.	Drak Syiemlieh	01	04	05	-	-	-	Laboure r	-	-	-	1	-	01	-	20,00
2.	Denis Mawa	02	03	05	1	4	5	Laboure r	-	-	-	1	-	01	-	26,00 0
3.	Dian Syiemlieh	03	02	05	3	2	5	Laboure r	-	-	-	1	-	01	-	24,00
4.	Philis Mawa	02	02	04	-	-	-	Laboure r	-	-	-	1	-	01	-	22,00
5.	Ammalis Mawa	02	03	05	-	-	-	Laboure r	-	-	-	1	-	01	-	20,00
6.	Hidral Chyne	02	02	04	1	3	4	Laboure r	-	-	-	1	-	01	-	18,00 0
7.	Mishel Pde	03	01	04	-	-	-	Laboure r	-	-	-	1	-	01	-	23,00
8.	Peter Syiemlieh	02	02	04	1	3	4	Laboure r	-	-	-	1	-	01	-	28,00
9.	Rishot Syiemlieh	04	03	07	4	3	7	Laboure r	-	-	_	1	-	01	-	16,00 0
10.	Molin Syiemlieh	02	02	04	-	-	-	Laboure r	-	-	-	1	-	01	_	16,00 0
11.	Sisilia Syiemlieh	03	01	04	-	-	-	Laboure	-	-	-	1	-	01	-	18,00

								r								0
12.	Aipilmon Stiemlieh	03	02	05	2	3	5	Laboure	-	-	-	1	-	01	-	25,00
								r								0
13.	Nolas Syiemlieh	02	02	04	-	-	-	Laboure	-	-	-	1	-	01	-	22,00
								r								0
14.	Paul Syiemlieh	02	03	05	-	-	-	Laboure	-	-	-	1	-	01	-	21,00
								r								0
15.	Ti Syiemlieh	03	01	04	-	-	-	Laboure	-	-	-	1	-	01	-	20,00
								r								0
	Total	36	33	69												

B.P.L = 11

Male: 36 Female: 33 Total: 69

## SOCIO ECONOMIC DATA OF MAWSHAMOK VILLAGE UNDER WAH UMSAI

		P	Populatio	n		Literacy		Occupati on	Agric Aı	ulture ea		]	Livesto	ock		Annua l Incom e
Sl.No	Name Of Them	Male	Fema	Total	Litera	Illiterat	Tot		Settle	Jhum	Co	Pig	Goa	Poult	Hors	
	Head of Family		le		te	e	al		d		W		t	ry	e	
1.	Pisher Pde	01	-	01	-	-	-	Farmer	-	-	-	1	-	01	-	26,000
2.	Siiur Majaw	01	-	01	-	-	-	Farmer	-	-	-	-	-	01	-	25,000
3.	Helson Majaw	01	-	01	-	-	-	Farmer	-	-	-	-	-	01	-	22,000
4.	Edwi Wahlang	03	01	04	-	-	-	Farmer	-	-	-	1	-	01	-	23,000
5.	Wilfred Mawa	05	03	08	-	-	-	Farmer	-	-	-	-	-	01	-	26,000
6.	Lidia	02	04	06	1	5	6	Farmer	-	-	-	1	-	01	-	25,000
7.	Tassius Sohkhlet	01	05	06	1	5	6	Farmer	-	-	-	1	-	01	-	28,000
8.	Milia Byrnia	01	03	04	1	3	4	Farmer	-	-	-	1	-	01	-	28,000
9.	Kladinus Byrnia	02	02	04	-	-	-	Farmer	-	-	-	1	-	01	-	25,000
10.	Krim Wahlang	01	01	02	-	-	-	Farmer	-	-	-	-	-	-	-	20,000
11.	Ren Byrnia	01	02	03	1	2	3	Labourer	-	-	-	-	-	01	-	22,000
12.	Ainer Byrnia	-	01	01	-	-	-	Labourer	-	-	-	1	-	01	-	26,000
13.	Trida Byrnia	03	02	05	2	3	5	Farmer	-	-	-	1	-	01	-	28,000
14.	Hordar Sawian	01	02	03	1	2	3	Farmer	-	-	-	-	-	-	-	15,000
15.	Lussiar Majaw	04	03	07	1	6	7	Farmer	-	-	-	1	-	01	-	19,000
16.	Jer Byrnia	01	-	01	-	-	-	Farmer	-	-	-	-	-	01	-	2,800
17.	Kmen Wanshong	01	02	03	1	2	3	Farmer	-	-	-	-	-	01	-	25,000

18.	Shon	01	02	03	-	-	-	Farmer	-	-	-	-	-	01	_	22,000
	Wanshong															
19.	Linda Lubri	02	04	06	-	-	-	Farmer	-	-	-	1	-	01	-	25,000
20.	Newkwin	04	03	07	-	-	-	Farmer	-	-	-	1	-	01	-	22,000
	Mawa															
21.	Oskwin Mawa	04	04	08	1	-	-	Farmer	-	-	1	1	-	01	-	20,000
22.	Bigtoria	03	04	07	1	6	7	Farmer	-	-	-	-	-	01	-	25,000
	Wanwar															
23.	Sanjum Chyne	03	01	04	1	3	4	Farmer	-	ı	ı	1	-	01	-	28,000
24.	Teibor Thabah	02	01	03	1	2	3	Farmer	-	1	ı	1	-	01	-	28,000
25.	Wim Mawa	02	01	03	1	-	-	Farmer	-	-	1	1	-	01	-	23,000
26.	Silda Wahlang	04	04	08	-	-	-	Farmer	-	-	-	1	-	01	-	26,000
27.	Bring Majaw	05	04	09	2	7	9	Farmer	-	-	1	1	-	01	-	19,000
28.	Eldi Majaw	01	01	02	-	-	-	Farmer	-	-	-	-	-	01	-	20,000
29.	Aitica Majaw	02	02	04	2	2	4	Farmer	-	-	1	1	-	01	-	23,000
30.	Lassing Majaw	04	05	09	1	8	9	Farmer	-	-	-	1	-	01	-	25,000
31.	Snodrop	01	03	04	1	3	4	Farmer	-	-	-	-	-	01	-	14,000
	Syiemlieh															
32.	Lit Syiemlieh	03	01	04	1	-	-	Farmer	-	-	1	-	-	01	-	14,000
33.	Sloda	01	03	04	2	2	4	Farmer	-	-	-	1	-	01	-	23,000
	Syiemlieh															
34.	Longlip	03	02	05	-	-	-	Farmer	-	-	-	-	-	01	-	28,000
	Syiemlieh															
35.	Sikrin Sohkhlet	02	03	05	-	-	-	Labourer	-	-	ı	1	-	01	-	20,000
36.	Let Sohkhlet	02	01	03	1	2	-	Labourer	-	-	ı	1	-	01	-	25,000
37.	Hir Majaw	03	04	07	1	6	-	Farmer	-	1	-	1	-	01	-	20,000
38.	Rita Syiemlieh	02	05	07	6	1	-	Farmer	-	1	ı	ı	-	01	-	26,000
39.	Driak	01	02	03	1	2	-	Farmer	-	-	-	-	-	01	-	16,000
	Syiemlieh															
40.	Airinis Lubri	01	03	04	-	-	-	Farmer	-	ı	-	-	-	01	-	23,000

41.	Jakop Majaw	05	05	10	1	9	-	Farmer	_	_	-	1	-	01	-	25,000
42.	Romanus Wahlang	01	-	01	-	-	-	Farmer	-	-	-	1	-	01	-	17,000
43.	Evan Mawa	03	01	04	-	-	-	Labourer	-	-	-	-	-	01	-	- 16,000
	Total	94	100	194												

B.P.L = 31 Male: 94 Female: 100 Total: 194

## SOCIO ECONOMIC DATA OF LUMSOHPHIE VILLAGE UNDER WAH UMSAI

		]	Populati	on		Literac	cy	Occupa tion	Agricul Area				Lives	tock		Annual Income
Sl.N	Name Of Them Head	Mal	Fema	Total	Lite	Illit	Total		Settled	Jhu	Co	Pi	Goa	Poult	Hors	
О	of Family	e	le		rate	erat e				m	W	g	t	ry	e	
1.	Plan Syiemlieh	03	03	06	3	3	6	Daily Labour er	-	-	-	1	-	01	-	28,000
2.	Mik Syiemlieh	02	02	04	-	-	-	Daily Labour er	-	-	-	-	-	01	-	26,000
3.	Densi Syiemlieh	01	01	02	2	-	2	Daily Labour er	-	-	-	-	-	01	-	20,000
4.	Wim Sohkhlet	03	02	05	-	-	-	Daily Labour er	-	-	-	1	-	01	-	24,000
5.	Hilda Syiemlieh	02	01	03	-	-	-	Daily Labour er	-	-	-	-	-	01	-	19,000
6.	Nelson Pde	03	03	06	4	2	6	Farmer	-	-	-	1	-	01	-	19,000
7.	Devid Mon	02	02	04	-	_	-	Farmer	-	-	-	1	-	01	-	15,000
8.	Memri Nongbri	01	03	04	-	-	-	Farmer	-	-	-	1	-	01	-	14,000
9.	Leston Pde	04	04	08	4	4	8	Farmer	-	-	-	1	-	01	-	22,000
10.	Kit Syiemlieh	01	02	03	1	2	3	Farmer	-	-	-	-	-	-	-	24,000
11.	Promen Syiemlieh	01	04	05	2	3	5	Labour	-	-	-	-	-	01	-	28,000

								er								
12.	Phror Pde	03	03	06	-	-	-	Labour er	-	-	-	1	-	01	-	25,000
13.	Pilas Pde	02	02	04	1	3	4	Daily Labour er	-	-	-	1	-	01	-	23,000
14.	Blos Marbaniang	01	01	02	1	1	2	Farmer	-	-	-	-	-	-	-	28,000
15.	Teibor Marbaniang	01	-	01	-	-	-	Farmer	-	-	-	1	-	01	-	25,000
16.	Baswa Khyllep	03	03	06	-	-	-	Daily Labour er	-	-	-	-	-	01	-	22,000
17.	Budsing Bynnud	04	02	06	1	5	6	Daily laboure r		-	-	1	-	01	-	20,000
18.	Rihun Pde	01	01	02	1	-	1	Farmer	-	-	-	1	-	01	-	18,000
19.	Baiai Pde	02	02	04	1	3	4	Farmer	-	-	-	1	-	01	-	27,000
20.	Heh Wanshong	02	03	05	2	3	5	Farmer	1	-	-	1	-	01	-	15,000
21.	Kolom Pde	02	04	06	-	-	-	Farmer	-	-	-	1	-	01	-	20,000

22.	Saron Khyllep	03	03	06	-	-	-	Farmer	-	-	-	1	-	01	-	18,000
23.	Shimti Pde	02	02	04	-	-	-	Farmer	-	-	-	1	-	01	-	24,000
	Total	49	53	102												

B.P.L = 20 Male:49 female: 53 Total: 102

# SOCIO ECONOMIC DATA OF TYRNGEI VILLAGE UNDER UPPPER THARIA

			Population	n n		Literac	· v	Occupat ion	Agricu Are				Livest	ock		Annual Income
Sl.N	Name Of Them Head	Mal	Femal	Total	Lite	Illit	Total	1011	Settled	Jhum	Co	Pi	Goa	Poultr	Hor	
0	of Family	e	e	1 Otal	rate	erat	Total		Settled	Jiiuiii	w	g	t	V	se	
	Of Tunning				Tate	e					**	5		,	30	
1.	Shri. Jemanwel Nelar	3	3	6	-	-	-	Daily	-	-	-	2	-	40	-	24,000
								Earner								
2.	Shri. Dlin Syngngai	3	3	6	-	-	-	Farmer	-	-	-	3	-	56	-	26,000
3.	Shri. Stephan	1	2	3	-	-	-	Farmer	-	-	-	2	-	32	-	20,000
	Khongkhnian															
4.	Shri. Sada Khongthoh	3	1	4	-	-	-	Farmer	-	-	ı	3	-	50	-	21,000
5.	Shri. Hot Khongshei	4	1	5	-	-	-	Farmer	-	-	ı	2	-	24	-	28,000
6.	Smti. Ainola Dkhar	1	3	4	-	-	-	Farmer	-	-	ı	2	-	16	-	25,000
7.	Smti. Brot Khongthoh	1	3	4	-	-	-	Farmer	-	-	ı	3	-	50	-	18,000
8.	Shri. Pynbiang Majaw	4	2	6	ı	-	-	Farmer	-	-	ı	4	-	61	-	18,000
9.	Shri. Boto Khongthoh	5	2	7	ı	-	-	Farmer	-	-	ı	4	-	60	-	16,000
10.	Shri. Wilson Ryngnga	3	4	7	ī	-	-	Farmer	-	-	ı	2	-	20	-	25,000
11.	Shri. Paila Syngai	6	4	10	-	-	-	Daily	-	-	-	1	-	40	-	22,000
								Earner								
12.	Shri. Kwei Khongsdir	2	2	4	-	-	-	Daily	-	-	-	1	-	15	-	23,000
								Earner								
13.	Shri. Markus	2	2	4	-	-	-	Daily	-	-	-	2	-	20	-	27,000
	Khongkrom							Earner								
14.	Smti. Sida Khongthoh	2	3	5	-	-	-	Daily	-	-	-	1	-	18	-	24,000
								Earner								
15.	Shri. Batai	1	1	2	-	-	-	Farmer	-	-	-	2	-	24	-	22,000
		1	1	l	1	Ī	1	I	l	l	1	1	l		l	1

	Khongkrom															
16.	Shri. Right Khongngai	2	4	6	-	-	-	Farmer	-	-	-	3	-	30	-	21,000
17.	Shri. Drai	2	2	4	-	-	-	Farmer	-	-	-	1	-	05	-	20,000
18.	Shri. Shanbor Syngai	3	1	4	-	-	-	Farmer	-	-	-	3	-	40	-	22,000
19.	Shri. Bashilor Khongthoh	5	3	8	-	-	-	Farmer	-	-	-	4	-	35	-	25,000
20.	Shri. Loren Khongkhnian	4	2	6	-	-	-	Farmer	-	-	-	2	-	16	-	26,000
21.	Shri. Ribad Syngai	1	2	3	-	-	-	Farmer	-	-	-	2	-	20	-	14,000
22.	Shri. Morbi Dkhar	1	1	2	-	-	-	Farmer	-	-	-	1	-	10	-	17,000
23.	Smti. Parmen Khongthoh	ı	4	4	-	-	-	Farmer	-	-	-	1	-	16	-	22,000
24.	Shri. Koma Thabah	4	2	6	-	-	-	Farmer	-	-	-	3	-	22	-	22,000
25.	Shri. Kesno Khongthoh	1	-	1	-	-	-	Farmer	-	-	-	1	-	10	-	25,000
26.	Shri. Greatman Majaw	1	-	1	-	-	-	Farmer	-	-	-	1	-	05	-	27,000
27	Shri. Mining Thabah	1	1	2	-	-	-	Farmer	-	-	-	4	-	25	-	25,000
28.	Smti. Thum Khongthoh	1	1	2	-	-	-	Farmer	-	-	-	1	-	08	-	26,000
29.	Shri. Micky Umdor	1	-	1	-	-	-	Daily	-	-	-	5	-	50	-	26,000
30.	Smti. Anjeline Umdor	4	3	7	-	-	-	Farmer	-	-	-	5	-	60	-	22,000
31.	Shri. Riphit Khongthoh	4	3	7	-	_	-	Farmer	-	_	-	2	-	30		16,000

Male: 76 Female: 63 Total:139 BPL: 09

# ANNEXURE III COST ESTIMATES

#### **ESTIMATE FOR CONSTRUCTION OF PROTECTION WALL.**

(Rate Based as per MPWD scheduled or rates for Road and Bridges for Eastern circle, Shillong for the year 2008-09)

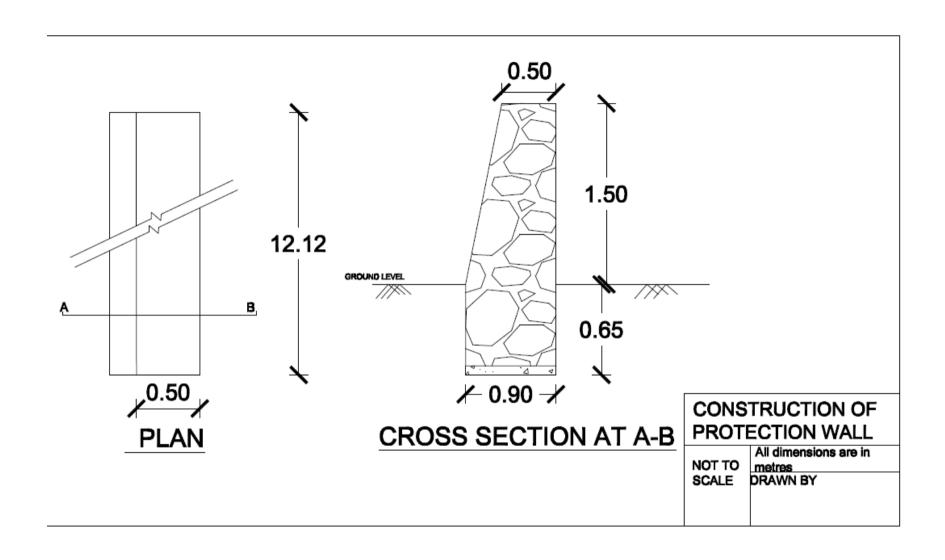
SI no	PARTICULARS	NO	DIM	ENSI	NC	QTY	UNIT	RATE	AMOUNT
			L	В	Н				(RS)
1/6 (a)	Earthwork in excavation for foundation of hume pipe, culvert, slab drain, retaininmg wall face well up to the desired founding level including dewatering, bailing out of water and protecting the sides of foundation by adequate shoring, scaffolding. The foundation is leveled both longitudinally and traversely as directed								
		1	12.12	0.9	0.65	7.09	CU.M		
			ТОТ	AL		7.09	CU.M	93	659.39
2/26	Providing cement concrete work in proportion 1;4;8 with hard broken stones aggregates 40mm down graded, including necessary carriage of stone and sand within a distance of 200m and curing, complete as directed	1	12.12	0.9	0.1	1.09	CU.M		
		-	TOT		0.1	1.09	CU.M	2136	2329.95
3/20(a)	Providing regular stone masonary in retaining walls, breast walls, and wing walls with hammer dressed or blunt chisel dressed stones of heavy section (size not less than 25 cm x25cm x30 cm) with proper key stones not less than 25cmx25cmx75cm, in cement mortar1;6 including carriages of stones within 200m and filling in trenches and providing weep hole at 1;2 to 1:5 apart complete as directed	1			0.55				
		1	12.12 12.12	0.9	0.55 1.5	6.00 12.73	CU.M CU.M		
		•	TOT	•	1.0	18.73	CU.M	1060	19848.92

**GRAND TOTAL** 

22838.26

SAY :- Rs. 22,830.00

Rupees Twenty Two Thousand Eight Hundred Thirty only.



#### MODEL ESTIMATE FOR CONSTRUCTION OF PROTECTION WALL

(The rate based as per M.P.W.D Schedule of rates for Roads, Bridges and

E & D Works 2008 - 2009)

Name of Beneficiaries -

Name of Location

1/6 Earthwork in excavation for foundation of Hume pipe culvert, slab drain, retaining wall, face wall up to the desired founding level i/c. dewatering, bailing out of water to keep the foundation dry and protecting the sides of foundation by adequate shoring, scaffolding. The foundation is leveled both longitudinally and transversely as directed.

$$1 \times 10.00 \times 1.00 \times 0.65 = 6.50 \text{ m}^3$$

@ Rs.93.00/m<sup>3</sup>

Rs. 604.50

2/26 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.

$$10.00 \times 1.00 \times 0.10 = 1.00 \text{ m}^3$$

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

Rs. 2136.00

3/20 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 complete as directed.

$$10.00 \times 0.90 \times 0.55 = 4.95 \text{ m}^3$$

$$10.00 \times \frac{0.50 + 0.90}{2} \times 2.00 = \underline{14.00 \text{ m}^3}$$

18.95 m<sup>3</sup>

@ Rs.1060.00/m<sup>3</sup>

Rs.20087.00

TOTAL:

Rs.22827.50

Say Rs.22,830.00

(Rupees Twenty two thousand eight hundred thirty) only.

#### ESTIMATE FOR CONSTRUCTION OF WATER HARVESTING STRUCTURE.

(Rate Based as per MPWD scheduled or rates for Road and Bridges for Eastern circle, Shillong for the year 2008-09)

SI no	PARTICULARS	NO	[	DIMENS	ON	QTY	UNIT	RATE	AMOUNT
			L	В	Н				•
1/4 (b)	Earthwork in excavation for foundation for abutment and wing walls of bridges and culvert, upto the founding level including dewatering, bailing out of water and protecting the sides of foundation by adequate shoring, scaffolding. The foundation is leveled both longitudinally and traversely as directed								
	DAM	1	16	1.2	0.95	18.24	CU.M		
	WING WALL (U/S) WING WALL (D/S)	2 2	5.7 5.5	0.9 0.9	0.75 0.75	7.70 7.43	CU.M CU.M		
			Т	OTAL	•	33.36	CU.M	152	5070.72
2/26	Providing cement concrete work in proportion 1;4;8 with hard broken stones aggregates 40mm down graded, including necessary carriage of stone and sand within a distance of 200m and curing, complete as directed								
	DAM WING WALL (U/S)	1 2	16 5.7	1.2 0.9	0.1 0.1	1.92 1.026	CU.M CU.M		
	WING WALL (D/S)	2	5.5	0.9	0.1	0.99	CU.M		
			Т	OTAL		3.94	CU.M	2136	8407.30
3/41(a)	Providing shuttering with dressed planks not less than 25mm thick properly joined including battens, props to the proper level and removing of the same after the concrete is hardened complete as directed								
	DAM	1	16	1.75		28	SQ.M		
			Т	OTAL		28.00	SQ.M	295	8260.00
4/28	Providing cement concrete work in proportion 1;3;6 with hard broken stones aggregates 40mm down graded, including necessary carriage of stone and sand within a distance of 200m and curing, complete as directed								
	DAM	1	16	0.1	2.6	4.16	CU.M		
			Т	OTAL		4.16	CU.M	2344	9751.04

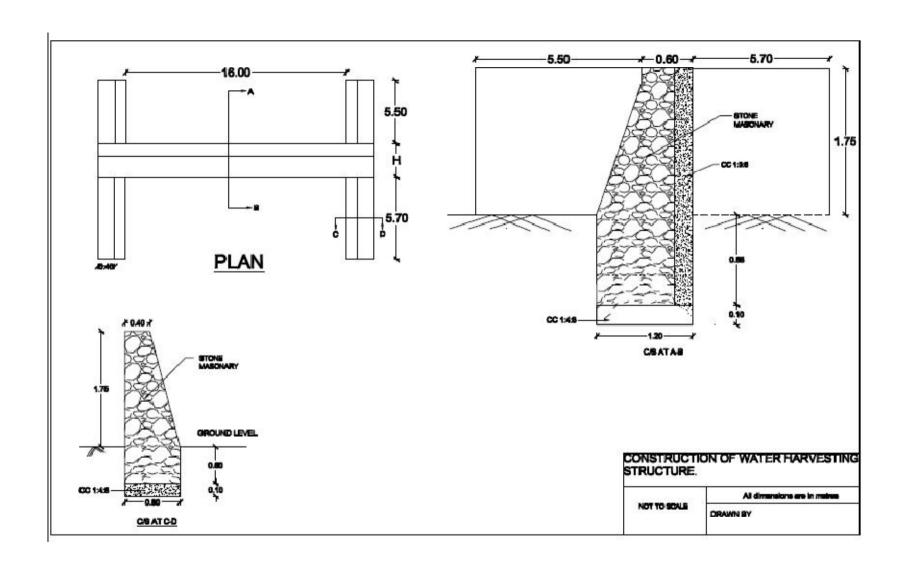
5/20(a)	Providing regular stone masonary in retaining walls, breast walls, and wing walls with hammer dressed or blunt chisel dressed stones of heavy section (size not less than 25 cm x25cm x30 cm) with proper key stones not less than 25cmx25cmx75cm, in cement mortar1;6 including carriages of stones within 200m and filling in trenches and providing weep hole at 1;2 to 1:5 apart complete as directed								
	DAM	1	16	1.1	0.85	14.96	CU.M		
		1	16	0.80	1.75	22.40	CU.M		
	WING WALL (U/S)	2	5.7 5.7	0.9 0.70	0.65 1.75	6.67 13.97	CU.M CU.M		
	MINO MALL (DO)	2	5.5	0.70	0.65	6.44	CU.M		
	WING WALL (D/S)	2	5.5	0.70	1.75	13.48	CU.M		
				l	_			1060	92579 24
6/06				OTAL		77.90	CU.M	1060	82578.24
6/26	Providing 12mm thick cement plastering including cleaing the surface, curing carriage of sand within 200m complete			l				1060	82578.24
6/26	Providing 12mm thick cement plastering including cleaing the surface, curing carriage of sand within 200m complete  DAM	1		l	-			1060	82578.24
6/26	200m complete	1 1	T	OTAL	-	77.90	CU.M	1060	82578.24
6/26	200m complete	1 1 2	<b>T</b>	<b>OTAL</b> 0.6	-	<b>77.90</b> 9.6	CU.M SQ.M	1060	82578.24
6/26	200m complete DAM	1 1 2 2	16 16 5.7 5.7	0.6 1.75		<b>77.90</b> 9.6 28	SQ.M SQ.M SQ.M SQ.M SQ.M	1060	82578.24
6/26	200m complete DAM	_	16 16 16 5.7	0.6 1.75 0.4		9.6 28 4.56	SQ.M SQ.M SQ.M	1060	82578.24
6/26	200m complete DAM WING WALL (U/S)	_	16 16 5.7 5.7	0.6 1.75 0.4 1.75	-	9.6 28 4.56 19.95	SQ.M SQ.M SQ.M SQ.M SQ.M	1060	82578.24

**GRAND TOTAL** 

122042.976

SAY ` 1,22,000.00

RUPEES ONE LAKH TWENTY TWO THOUSAND ONLY.



#### ESTIMATE FOR CONSTRUCTION OF WATER HARVESTING STRUCTURE.

(Rate Based as per MPWD scheduled or rates for Road and Bridges for Eastern circle, Shillong for the year 2008-09)

2000 03)									
SI no	PARTICULARS	NO	DI	MENSI	NC	QTY	UNIT	RATE	AMOUNT
			L	В	Н				•
1/4 (b)	Earthwork in excavation for foundation for abutment and wing walls of bridges and culvert, upto the founding level including dewatering, bailing out of water and protecting the sides of foundation by adequate shoring, scaffolding. The foundation is leveled both longitudinally and traversely as directed								
	DAM	1	10	1.2	0.9	10.80	CU.M		
	WING WALL (U/S)	2	3.15	0.9	0.70	3.97	CU.M		
	WING WALL (D/S)	2	3.12	0.9	0.70	3.93	CU.M		
			ТО	TAL		18.70	CU.M	152	2842.4304
2/26	Providing cement concrete work in proportion 1;4;8 with hard broken stones aggregates 40mm down graded, including necessary carriage of stone and sand within a distance of 200m and curing, complete as directed								
	DAM	1	10	1.2	0.1	1.20	CU.M		
	WING WALL (U/S)	2	3.15	0.9	0.1	0.567	CU.M		
	WING WALL (D/S)	2	3.12	0.9	0.1	0.5616	CU.M		
			то	TAL		2.33	CU.M	2136	4973.89
3/41(a)	Providing shuttering with dressed planks not less than 25mm thick properly joined including battens, props to the proper level and removing of the same after the concrete is hardened complete as directed  DAM	1	10	1.75		17.5	SQ.M		
			то	TAL		17.50	SQ.M	295	5162.50
4/28	Providing cement concrete work in proportion 1;3;6 with hard broken stones aggregates 40mm down graded, including necessary carriage of stone and sand within a distance of 200m and curing, complete as directed DAM	1	10	0.1	2.55	2.55	CU.M		

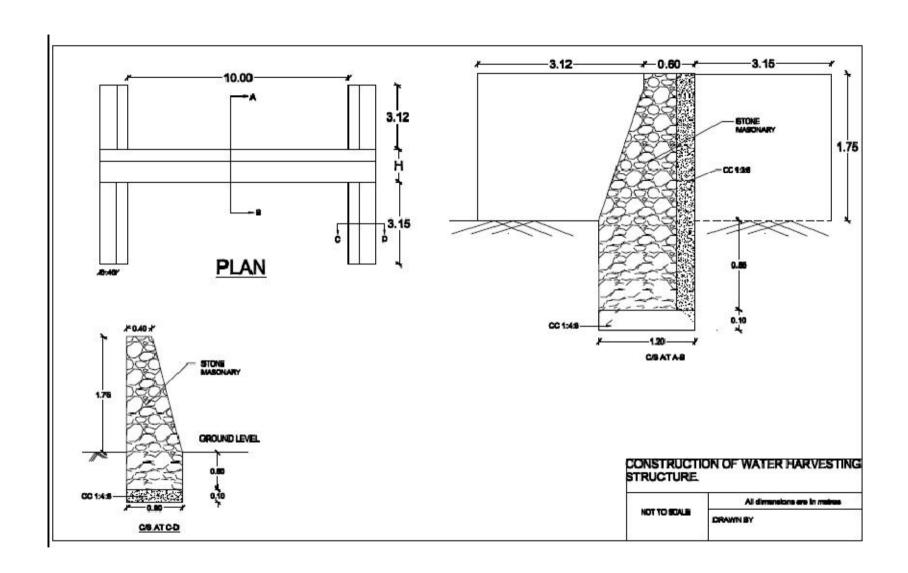
		TOTAL				2.55	CU.M	2344	5977.2
5/20(a)	Providing regular stone masonary in retaining walls, breast walls, and wing walls with hammer dressed or blunt chisel dressed stones of heavy section (size not less than 25 cm x25cm x30 cm) with proper key stones not less than 25cmx25cmx75cm, in cement mortar1;6 including carriages of stones within 200m and filling in trenches and providing weep hole at 1;2 to 1:5 apart complete as directed								
	DAM	1	10	1.1	0.8	8.80	CU.M		
		1	10	0.80	1.75	14.00	CU.M		
	WING WALL (U/S)	2	3.15	0.90	0.60	3.40	CU.M		
		2	3.15	0.70	1.75	7.72	CU.M		
	WING WALL (D/S)	2	3.12	0.90	0.60	3.37	CU.M		
		2	3.12	0.70	1.75	7.64	CU.M		
		TOTAL			44.93	CU.M	1060	47629.09	
9/26	Providing 12mm thick cement plastering including cleaing the surface, curing carriage of sand within 200m complete								
	DAM	1	10	0.6		6	SQ.M		
		1	10	1.75		17.5	SQ.M		
	WING WALL (U/S)	2	3.15	0.4		2.52	SQ.M		
		2	3.15	1.75		11.025	SQ.M		
	WING WALL (D/S)	2	3.12	0.4		2.496	SQ.M		
		2	3.12	1.75		10.92	SQ.M		
			TO	TAL		50.46	SQ.M	93	4692.87

**GRAND TOTAL** 

71277.979

SAY `71,250.00.00

RUPEES SEVENTY ONE THOUSAND TWO HUNDRED FIFTY ONLY.



#### MODEL ESTIMATE FOR CONSTRUCTION OF WATER HARVESTING STRUCTURE

(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 -

1/5 (a) Earthwork in excavation for abutment and wing walls of bridges and culverts, up to the desired founding level including dewatering, bailing out of water and protecting the foundation sides by adequate shoring, scaffolding and including leveling the foundation longitudinally and transversely etc.

$$1 \times 6.00 \times 1.00 \times = 3.00 \text{ m}^{3}$$

$$0.50$$

$$1 \times 1.90 \times 1.50 \times = 0.99 \text{ m}^{3}$$

$$0.35$$

$$1 \times 1.90 \times 0.20 \times = 0.11 \text{ m}^{3}$$

$$0.30$$

$$0.30$$

$$0.85.124.00/\text{m}^{3}$$

Rs. 508.40

2/26 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.

$$1 \times 6.00 \times 1.00 \times = 0.60 \text{ m}^3$$
  
0.10

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

Rs. 1281.60

3/41 Providing shuttering with dressed planks not less than 25mm thick

properly joined including battens, props to the proper level and removing the same after the concrete hardened.

$$\begin{array}{rcl}
1 \times 6.00 \times 1.10 & = & 6.60 \text{ m}^2 \\
1 \times 6.00 \times 1.20 & = & 7.20 \text{ m}^2 \\
2 \times 5.00 \times 0.40 & = & 4.00 \text{ m}^2 \\
4 \times 1.70 \times 0.30 & = & 2.40 \text{ m}^2 \\
4 \times 1.20 \times 0.30 & = & 1.44 \text{ m}^2 \\
4 \times 0.40 \times 0.30 & = & 0.48 \text{ m}^2 \\
2 \times 1.20 \times 0.20 & = & 0.48 \text{ m}^2 \\
2 \times 0.40 \times 0.20 & = & 0.16 \text{ m}^2 \\
2 \times 1.90 \times 0.20 & = & 0.76 \text{ m}^2 \\
23.16 \text{ m}^2 & \text{@ Rs.295.00/m}^2
\end{array}$$

Rs. 6832.20

4/28 Providing cement concrete work in abutments, wing walls and return walls 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 etc.

Rs.21682.00

5/24 Providing stone pitching with one man size boulders not less than 25cm X 25cm X 30cm long including filling the interstices with spoils and carriage of stone within a distance of 200m complete as directed.

$$1 \times 1.90 \times 1.50 \times 0.25 = 0.71 \text{ m}^3$$
  
@ Rs.512.00/m<sup>3</sup>

Rs. 363.52

6/27 Providing 12mm thick cement plastering including cleaning surface, curing and carriage of sand within 200m complete.

Rs. 2153.88

TOTAL: Rs.32821.60

Say Rs.32,800.00

(Rupees Thirty two thousand eight hundred) only

## ESTIMATE FOR CONSTRUCTION OF CONTOUR BUNDING.

WIDTH - (0.50 + 0.30)/2

(Rate Based as per MPWD scheduled or rates for Roads and Bridges for Eastern circle, Shillong for the year 2008-09)

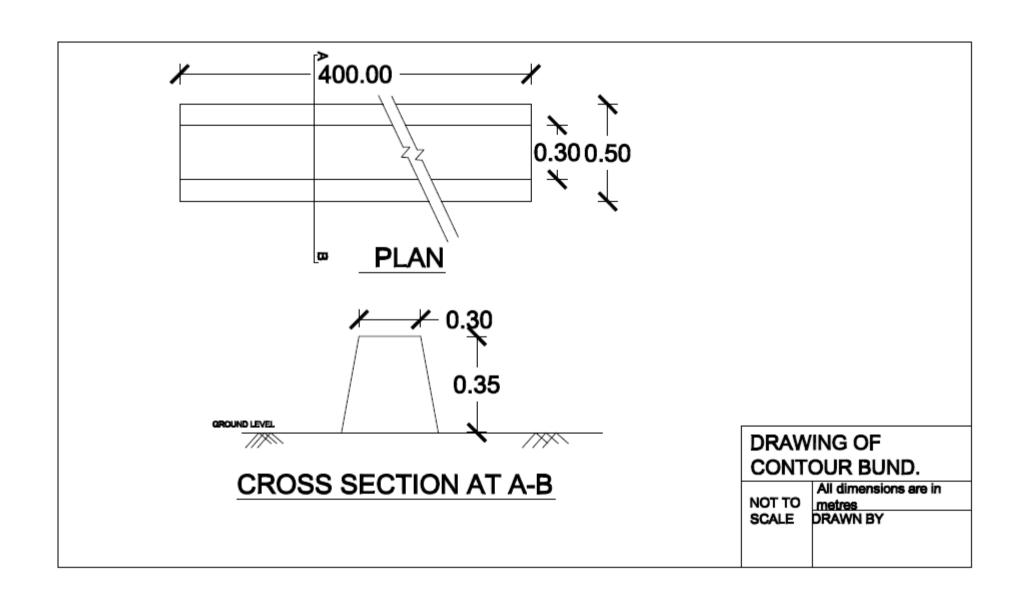
SI no	PARTICULARS		DIMENSION			QTY	UNIT	RATE	AMOUNT
		NO	L	В	Н			(Rs)	(RS)
1/8	Earthwork in filling with approved earth like sandy soil, moorum etc, in an embankment in layers not exceeding 20cm thick including breaking clods, dressing and ramming and lead upto 30m and lift upto 150cm								
		1	400	0.4	0.35	56.00	cu.m		
		TOTAL			56.00	cu.m	134	7504.00	

GRAND TOTAL

7504.00

Say 7,500.00 Per Hectare

(RUPEES SEVEN THOUSAND FIVE HUNDRED) ONLY.



#### **ESTIMATE FOR CONSTRUCTION OF CHECK DAM**

(Rate Based as per MPWD scheduled or rates for Road and Bridges for Eastern circle, Shillong for the year 2008-09)

_	ased as per MPWD scheduled or rates for Road and Bridges for Eastern circle, Shillong for the year 2008-					QTY			
SI no	PARTICULARS			NO DIMENSION			UNIT	RATE	AMOUNT
			L	В	Н				(RS)
1/4 (b)	Earthwork in excavation for foundation for abutment and wing walls of bridges and culvert, upto the								
	founding level including dewatering, bailing out of water and protecting the sides of foundation by								
	adequate shoring, scaffolding. The foundation is leveled both longitudinally and traversely as directed								
	DAM	١,	_	0.0	0.75	2.20	CLLM		
	DAM	1	5	0.9	0.75	3.38 3.60	CU.M CU.M		
	WING WALL (U/S) APRON	2	3	0.8 1.45	0.75 0.25		CU.M		
	AFRON		TO		0.25	1.81 <b>8.79</b>	CU.M	152	1335.7
2/26			10	AL		0.79	CO.IVI	132	1333.1
2/20	Providing cement concrete work in proportion 1;4;8 with hard broken stones aggregates 40mm down								
	graded, including necessary carriage of stone and sand within a distance of 200m and curing,		_	0.0	0.4	0.45	01114		
	DAM	1	5	0.9	0.1	0.45	CU.M		
	WING WALL	2	1 3 TO	0.8	0.1	0.48 <b>0.93</b>	CU.M	2136	4000 40
2/44/6\			10	AL		0.93	CU.W	2136	1986.48
3/41(a)	Providing shuttering with dressed planks not less than 25mm thick properly joined including battens, props to the proper level and removing of the same after the concrete is hardened complete								
	props to the proper level and removing of the same after the concrete is hardened complete  DAM	1	_	1.5		7.5	SQ.M		
	APRON	2	5 1.45	1.5 0.1		7.5 0.29	SQ.M		
	APRON		1.45 <b>TO</b>			7.79	SQ.M	295	2298.05
4/28			10	AL		7.79	SQ.W	295	2298.05
4/20	Providing cement concrete work in proportion 1;3;6 with hard broken stones aggregates 40mm down								
	graded, including necessary carriage of stone and sand within a distance of 200m and curing, c		_						
	DAM	1	5	0.1	2.15	1.08	CU.M		
	APRON	1 5 1.45 0.1				0.725	CU.M	2011	1010.0
F (0.0 ( - )		TOTAL				1.80	CU.M	2344	4219.2
5/20(a)	Providing regular stone masonary in retaining walls, breast walls, and wing walls with hammer dressed or blunt chisel dressed stones of heavy section (size not less than 25 cm x25cm x30 cm) with								
	proper key stones not less than 25cmx25cmx75cm, in cement mortar1;6 including carriages of stones								
	within 200m and filling in trenches and providing weep hole at 1;2 to 1:5 apart								
	main zoon and ming in torrors and probably roop root at 1,2 to 110 apart								
	DAM	1	5	0.8	0.65	2.60	CU.M		
		1	5	0.65	1.5	4.88	CU.M		
	WING WALLS	2	3	0.8	0.65	3.12	CU.M		
		2	3	0.55	1.5	4.95	CU.M		
			TOTAL		15.55	CU.M	1060	16477.70	
7/24	Providing stone pitching with one man size boulders not less than 25cm x 25cm x 30 cm including								
	filling the interstices with spoils and carriages of stone within a distance of 200m completed								
	APRON	1	5	1.45	0.25	1.8125	CU.M		
		TOTAL			1.81	CU.M	512	928.00	

9/26	Providing 12mm thick cement plastering including cleaing the surface, curing carriage of sand within 200m complete							
	DAM	1	5	0.5	2.5	SQ.M		
		1	5	1.5	7.5	SQ.M		
	WWALLS	2	3	0.5	3	SQ.M		
		2	3	1.5	9	SQ.M		
	APRON	1	5	1.45	7.25	SQ.M		
			TOT	ΓAL	29.25	SQ.M	93	2720.25

GRAND
TOTAL 29965.38

SAY 29,900.00

( RUPEES TWENTY NINE THOUSAND NINE HUNDRED ) ONLY.

#### MODEL ESTIMATE FOR CONSTRUCTION OF C.C. CHECK DAM

(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 -

1/5 (a) Earthwork in excavation for abutment and wing walls of bridges and culverts, up to the desired founding level including dewatering, bailing out of water and protecting the foundation sides by adequate shoring, scaffolding and including leveling the foundation longitudinally and transversely etc.

$$1 \times 5.80 \times 1.00 \times 0.50 = 2.90 \text{ m}^{3}$$

$$1 \times 4.85 \times 1.50 \times 0.30 = 2.18 \text{ m}^{3}$$

$$5.08 \text{ m}^{3}$$

$$\text{@ Rs.} 124.00/\text{m}^{3}$$

Rs. 629.92

2/26 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.

$$1 \times 5.80 \times 1.00 \times 0.10 = 0.58 \text{ m}^3$$
  
@ Rs.2136.00/m<sup>3</sup> Rs. 1238.88

3/41 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 \times 5.80 \times 1.10 = 6.38 \text{ m}^{2}
1 \times 5.80 \times 1.20 = 6.96 \text{ m}^{2}
2 \times 3.50 \times 0.40 = 2.80 \text{ m}^{2}
1 \times 7.85 \times 0.05 = 0.39 \text{ m}^{2}
16.53 \text{ m}^{2}
\text{Rs.295.00/m}^{2}
```

Rs. 7876.35

4/28 Providing cement concrete work in abutments, wing walls and return walls 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 etc.

$$1 \times 5.80 \times 1.00 \times 0.40 = 2.32 \text{ m}^{3}$$

$$1 \times 5.80 \times \frac{1.00 + 0.50}{2} \times 1.10 = 4.78 \text{ m}^{3}$$

$$2 \times 1.50 \times 0.50 \times 0.40 = 0.60 \text{ m}^{3}$$

$$1 \times 4.85 \times 1.50 \times 0.10 = 0.73 \text{ m}^{3}$$

$$8.43 \text{ m}^{3}$$

$$8 \times 2344.00/\text{m}^{3}$$

Rs.2344.00/m<sup>3</sup> Rs.19759.92

5/24 Providing stone pitching with one man size boulders not less than 25cm X 25cm X 30cm long including filling the interstices with spoils and carriage of stone within a distance of 200m complete as directed.

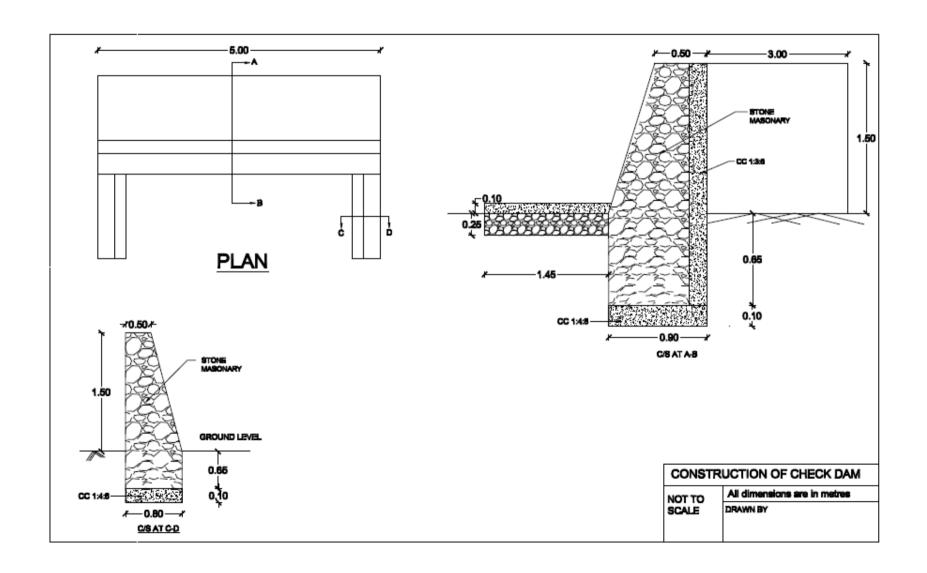
$$1 \times 4.85 \times 1.50 \times 0.25 = 1.82 \text{ m}^3$$
  
@ Rs.512.00/m<sup>3</sup> Rs. 931.84

6/27 Providing 12mm thick cement plastering including cleaning surface, curing and carriage of sand within 200m complete.

Rs. 2447.76 TOTAL: Rs.29884.67

Say Rs.29,900.00

(Rupees Twenty nine thousand nine hundred) only.



## MODEL OF ACTIVITIES UNDER INTEGRATED WASTELAND MANAGEMENT PROGRAMME (IWMP) FOR 500 HA PROJECT AREA.

	AREA.		
A. <u>A</u>	ARABLE LAND TREATMENT		
I.	Agro-Horticulture 100 Ha @ Rs. 8350/-per ha with Temperate	-	Rs. 8,35,000.00
II.	Contour bunding/Half Moon/Terraces/Loose boulder bund 50 Ha @ Rs. 7500/-per ha	-	Rs. 3,75,000.00
III.	Peripheral bunding 8000 Rm 20 Ha @ Rs. 50/- per Rm	-	Rs. 4,00,000.00
IV.	Improvement of Existing Paddy Field 30 Ha @ Rs. 4300/-per ha	_	Rs. 1,29,000.00
	TOTAL ARABLE LAND 200 HA		Rs. 17,39,000.00
В. 1	NON ARABLE LAND TREATMENT		
I.	Afforestation with Pine/Non Pine 60 Ha @ Rs. 10100/- per ha	-	Rs. 6,06,000.00
II.	Strip plantation two rows along the field boundary with fast		
	growing species 30 Ha @ Rs. 4266/- per ha	-	Rs. 1,27,980.00
III.	Improvement of Degraded Forest 150 Ha @ Rs. 3600/- per ha	_	Rs. 5,40,000.00
	TOTAL NON ARABLE LAND 240 HA	_	Rs. 12,73,980.00
C. <u>I</u>	DRAINAGE LINE TREATMENT		
I.	Check Dam (Span – 5.8m) 8 Nos (24 Ha) @ Rs. 29900/-each	-	Rs. 2,39,200.00
II.	Protection Wall (span – 10m) 6 Nos (8 Ha) @ Rs. 22830/-each	-	Rs. 1,36,980.00
III.	Small Dug out pond (Size-20m x 10m) 7 Nos 10 Ha @ Rs. 1600/-each	-	Rs. 1,12,000.00
IV.	Water Harvesting (Span - 6m) 7 Nos (18 Ha) @ Rs. 32800/each	-	Rs. 2,29,600.00
V.	Run-off Disposal Channel 740 Rm @ Rs. 26/- per Rm	-	Rs. 19,240.00
	TOTAL DRAINAGE LINE 60 HA	-	Rs. 7,37,020.00
	GRAND TOTAL 500 HA	-	Rs. 37,50,000.00

## MODEL NORMS PER HECTARE FOR AGRO – HORTICULTURE WITH CITRUS FRUIT (INTEGRATED WATERSHED MANAGEMENT PROGRAMME)

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

Spacing - 8m x 6.3m

Plant Density - 200 Nos.

#### A. <u>Preliminary works</u>

I. Site clearance

3 mandays @ Rs.100/- per manday - Rs. 300.00

II. Pit digging (pit size  $0.45m \times 0.45m \times 0.45m$ )

200 Nos. @ Rs.5/- each - <u>Rs.1000.00</u>

Total - Rs.1300.00

#### 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 - Rs.2000.00

Total - Rs.4600.00

#### C. Second year Planting

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 - Rs. 340.00

Total - Rs.2700.00

Grand Total A+B+C = Rs.1300.00 + Rs.4600.00 + Rs.2700.00 = Rs.8600.00

(Rupees Eight thousand six hundred) only.

## MODEL NORMS PER HECTARE FOR AFFORESTATION WITH PINE/NON-PINE (INTEGRATED WATERSHED MANAGEMENT PROGRAMME)

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

Spacing 6m x 5.5m

Plant Density – 300 Nos.

B.	Preliminary	y 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

- <u>Rs. 1200.00</u> Total - <u>Rs. 1700.00</u>

#### B. First year Planting

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 - <u>Rs. 500.00</u>

Total - Rs. 5500.00

#### C. Second year Planting

I. Vacancy refilling (10%) - Rs. 400.00

II. Weeding two times 20 mandays

@ 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.5500.00 + Rs.2900.00 = Rs.10100.00

(Rupees Ten thousand one hundred) only.

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

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

Top Width = 0.4 m

Bottom Width = 1.0 m

Height = 0.9 m

Length = 10 m

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

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

Total = Rs.7,500.00

(Rupees Seven Thousand Five Hundred) only.

## COST NORMS FOR HALF MOON TERRACES (IWMP) (Rate as per PWD, SOR for R&B 2008 – 2009)

#### A. SPECIFICATIONS & COSTS OF BOX/HALF MOON TERRACES

Terrace Width = 1.2 m

Terrace Height = 1.2 m

Terrace Length = 1.2 m

Spacing of Boxes =  $6m \times 5m$ 

No. of Box/Hectare = 334 Nos.

1/3 (a) Earthwork in excavation etc. in ordinary soil etc.

 $334 \text{ Nos. x} ^{1}/_{2} \text{ x } 1.2 \text{ x } 1.2 \text{ x } 1.2 \text{ = } 288.50 \text{m}^{3}$ 

@ Rs.26.00/m $^3$  = Rs.7,500.00

Total = Rs.7,500.00

(Rupees Seven Thousand Five 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		-	Rs. 400.00
B.	First year Planting	Total	-	Rs. 700.00
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 5 mandays @ Rs.100/- per manday	four times	_	Rs. 500.00
IV.	Fire protection measures 4 mandays @ Rs.100/- per manday	Total	- -	Rs. 400.00 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.	Fire protection measures 4 mandays @ Rs.100/- per manday	Total	- -	Rs. 400.00 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.

#### **ANNEXURE IV**

MOA, NOC, REGISTRATION CERTIFICATES, PHOTOS ETC.

# NO OBJECTION CERTIFICATE Dated - 01.03.2011. This is to certify that the Dorbar Shnong Mawsiangel, Sohra Sylemship has no Objection for the Upper Tharia Watershed committee to register in the Office of the Deputy Commissioner, Shillong, for Registration under the Societies Registration Act of XII 1983. The watershed committee operates under the jurisdiction of the village/Elaka. ff. Reinana Sirdar Mawslangel Sohra Sylemship

#### NO OBJECTION CERTIFICATE

Dated - 01.03.2011.

This is to certify that the Dorbar Shnong THRNA (MANDHANDK, LUMSOHPHE, NENGTHYMMAI) has no Objection for the Umsai Watershed committee to register in the Office of the Deputy Commissioner, Shillong, for Registration under the Societies Registration Act of XII 1983.

The watershed committee operates under the jurisdiction of the village/Elaka.

S. L. SOHKHLET Sirdar of Elaka Tyrna

#### NO OBJECTION CERTIFICATE

Dated - 01.03.2011.

This is to certify that the Dorbar Shnong Nongla, Sohra Sylemship has no Objection for the Upper Tharia Watershed committee to register in the Office of the Deputy Commissioner, Shillong, for Registration under the Societies Registration Act of XII 1983.

The watershed committee operates under the jurisdiction of the village/Elaka.

Sordar Nongia

Certificate of	of Registration of Societies	
	ACT 12 Of 1983	
No.	E. 16/5/ of 2010/183	
	Upper Tharia Watershed Committee IWNP (2010-11) Preject-VI	
12 of 1983.	ed under Meghalaya Societies Registration A	
	Shilleng  day of March	
	en day of	.464
	hundred and fifty only.	
	Registrar of Societies, Meghalaya, Shillong.	

	The state of the s
	Certificate of Registration of Societies
	ACT 12 Of 1983
	No. E.16/5/ of 2010/184
	I hereby certify that Wah Umsai Watershed Committee  IWMP (2016-11) Project-VI
🤻 12	s this day been registered under Meghalaya Societies Registration Act, of 1983.
	ven under my hand atShilleng
all the second	3 day of March
	o thousand and <u>eleven</u>
Re	gistration fee of Rs. Two hundred and fifty only.
	Mhort
	Registrar of Societies, Meghalaya, Shillong.

#### MEMORANDUM OF ASSOCIATION

OF

UPPER THARIA Watershed Committee covering village Suktia, Nongla, Mawsiangei and Tyrngei under IWMP Project-VI, Shella-Bholaganj C&RD Block, East Khasi Hills District, Meghalaya.

- 7. Name of Committee: UPPER THARIA Watershed Committee under Project- VI IWMP, Shella-Bholaganj C&RD Block, East Khasi Hills District, Meghalaya.
- Registration Office of Committee: UPPER THARIA Watershed Committee, village Suktia, Nongla, Mawsiangei and Tyrngei, Shella-Bholaganj C&RD Block, East Khasi Hills District, Meghalaya, P.O Pynursla P.S. Pynursla.
- 9. Date of Establishment :28th September 2010
- 10. Objectives:
  - (i) To involve primary stakeholders at the centre of Planning, Budgeting, Implementation and Management of Watershed Projects.
  - (ii) To promote facilitation of social mobilization, community organization at the village/watershed level, building the capacities of village/watershed communities in planning and implementation and to ensure equity arrangements.
  - (iii) To promote empowerment of the village/watershed community socially, economically, financially, etc., with a sense of ownership/ rights to ownership and responsibility and accountability.
  - (iv) To build up, associated links closely with village Durbar/ council of coordinating and convergence of rural development programmes within the Watershed Projects for holistic and realistic development of Watershed Committee.
  - (v) To perform the duties, roles and responsibilities of the Society through the Governing Body listed in Rule 11 of the Constitution.
- 11. The Governing Body of the Society(Watershed Committee):

SI.No	Name	Address	Designation
1.	Shri. Kel Tymthai	Suktia	Chairman
2.	Shri. A.S. Kharlukhi	S & WC (T) Division, Shillong	Project Leader
3.	Shri. L. Wanniang	- D0 -	Secretary
4.	Shri. Pynbiang Majaw	Tyrngei	Member
5.	Shri. Jemanuel Nilar	- D0 -	- Do -
6.	Shri. Phrangsngi Khongthah	- D0 -	- Do -
7.	Shri. Director Massar	Nongla	- Do -
8.	Shri. Koswel Tymthai	- D0 -	- Do -
9.	Shri. Moses Ksing	- D0 -	- Do -
10.	Shri. Hehbor Ryngnga	Mawsiangei	- Do -
11.	Shri. Tyngshain Ryngnga	- D0 -	- Do -
12.	Shri. Mlan Khongshei	Suktia	- Do -
13.	Shri. Pynsuk Khriam	- D0 -	- Do -
14.	Smti. Ailin Thabah	- D0 -	- Do -
15.	Smti.I.Dohling	Jaiaw, Shillong	WDT Member
16.	Shri.Samuelson Lyngdoh	Lumpyngngad, Shillong	WDT Member

Chainten
Upper Theria (IWMP)
Watershed Committee

Project Lader
Upper Tharia (IWMP)
Watershed Committee

 12. We the undersigned are desirous of forming the Committee in pursuance of the Memorandum of Committee:

SI.No	Signature	Occupation Signatory	& Designation of the	Name, Address, Occupation & Description witness	
1.	CK In Wai		Chairman		
2.	Asn	Service	Project Leader		
3.	Amust Amust PM SE man P. Khongthah Myrthai	Service	Secretary	Range Officer	_
4.	puo	cultivator	Meml <b>&amp;ohra</b>	Soil & Water Conserval	tion Ra
5.	JE man	cultivator	Member	Joina.	
6.	P. Khongthah	cultivator	Member	ALL MANAGEMENT AND	
7.	Hurthai	cultivator	Member		
8.	H. Reynanga	cultivator	Member		
9.	Mosson	cultivator	Member		
10.	Phinian	cultivator	Member		
11.	1.1.	cultivator	Member		
12.	MIT	cultivator	Member		
13.	Monor kain	cultivator	Member		
14.		cultivator	Member		
15.	Josephing.	WDT Mem	ber		
16.	of Change Change the many life a bit age	WDT Meml	per	Calculation -	

Upper Theria (IWMP)
Watershed Committee

Project Leader
Upper The WMP)
Watershed Committee

Secretary
Upper Tharia (IWMP)
Watershed Company

#### MEMORANDUM OF ASSOCIATION

OF

WAH UMSAI Watershed Committee covering village Nongthymmai, Lumsohphie, Mawshamok and Tyrna under IWMP Project-VI, Shella-Bholaganj C&RD Block, East Khasi Hills District, Meghalaya.

- Name of Committee: Wahumsai Watershed Committee under Project- VI IWMP, Shella-Bholaganj C&RD Block, East Khasi Hills District, Meghalaya.
   Registration Office of Committee: WAH UMSAI Watershed Committee, village Nongthymmai, Lumsohphie, Mawshamok and Tyrna, Shella-Bholaganj Block, East Khasi Hills District, Meghalaya, P.O Sohra, P.S Sohra.
   Date of Establishment :29<sup>TI</sup> September.2010
   Objectives
- 4. Objectives:
  - To involve primary stakeholders at the centre of Planning, Budgeting, Implementation and Management of Watershed Projects. (i)
  - To promote facilitation of social mobilization, community organization at the village/watershed level, building the capacities of village/watershed communities in planning and implementation and to ensure equity
  - To promote empowerment of the village/watershed community socially, economically, financially, etc., with a sense of ownership/ rights to ownership and responsibility and accountability.

    To build up, associated links closely with village Durbar/ council of
  - coordinating and convergence of rural development programmes within the Watershed Projects for holistic and realistic development of Watershed Committee.
  - To perform the duties, roles and responsibilities of the Society through the Governing Body listed in Rule 11 of the Constitution.

#### 5. The Governing Body of the Society(Watershed Committee):

0131	Name	Address	Designation
Sl.No			Chairman
1.	Shri. Stadly Sohkhlet	S & WC (T) Division, Shillong	Project Leader
2.	Shri. A.S. Kharlukhi	- D0 -	Secretary
3.	Shri. L. Wanniang		Member
4.	Shri. Tyron Syiemlieh	Nongthymmai	- Do -
5.	Shri, Peter Syiemlieh	- Do -	- Do -
6.	Shri. Leston Pde	Lumsohphie	
	Shri. Wimstar Sohkhlet	- Do -	- Do -
7.	Shri. Willistar Schidings Shri. Brudes langrai	Mawshamok	- Do -
8.		- Do -	- Do -
9.	Shri. Larsing Majaw	Tyrna	- Do -
10.	Shri. Restar Majaw	- Do -	- Do -
11.	Shri. Rojul Dohling	- Do -	- Do -
12.	Shri. Andreas Wansai	The second secon	- Do -
13.	Shri, Grefit Sohkhlet	- Do -	- Do -
14.	Smti. Airy Sohkhlet	- Do -	- Do -
15.	Smti. Jesika Dohling	- Do -	WDT Member
	Smti. I.Dohling	Jaiaw, Shillong	W LI I Welliber
16.	Shri.Samuelson Lyngdoh	Lumpyngngad, Shillong	WDT Member
17	Shri Samuelson Lyngdon	1.	THE PERSON NAMED IN COLUMN TWO IS NOT THE OWNER.

Wahumsai (IWMP) Watershed Committee

Wah Umsai (IWMP) Watersned Committee 6. We the undersigned are desirous of forming the Committee in pursuance of the Memorandum of Committee:

SI.No	Signature	Occupation & I Signatory	Designation of the	Name, Address, Occupation & Description witness
1.	S SUMP		Chairman	
2.	1X2V	Service Pro	ject Leader	····
3.	Tisquelil P. Squelil	Service	Secretary Sohra So	Wange Officer il & Water Conservation
4.	Tisa · lil	cultivator	Member	Sohra.
5.	P to endich	cultivator	Member	
6.	Dade	cultivator	Member	
7.	( A Soldhist	cultivator	Member	
8.	Jakey Solkher	cultivator	Member	
9.	1 2000/11	cultivator	Member	
10.	Lynn	cultivator	Member	
11.	Robbles	cultivator	Member	
12.	Alay :	cultivator	Member	
13.	Aus	cultivator	Member	
14.	Dohkhiet	cultivator	Member	
15.	Dohling Johling	cultivator	Member	
16.	Johlings	WDT Member		
17.	3.0.5337	WDT Member	Star of Position	

Chairman Wahumsai (IWMP) Watershed Committee

Project Leder Wah Umsai (WMP) Watershed Committee Secretary
Wah Umsai (IWMP)
Watershed Committee



## PRA EXERCISE CUM AWARENESS PROGRAMME AT TYRNA VILLAGE UNDER WAH UMSAI MICRO WATERSHED

#### **IWMP-PROJECT VI 2010-11**

**SOCIO-ECONOMIC SURVEY** 





#### **RESOURCE MAPPING**

#### **RESOURCE MAPPING**





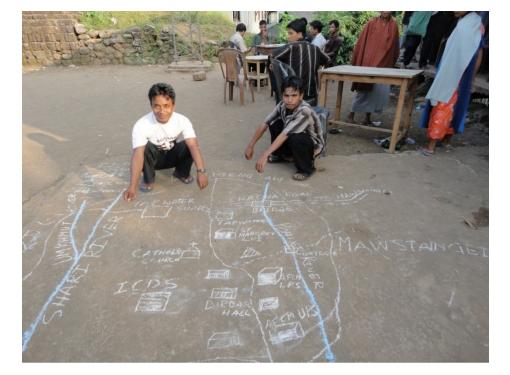
MATRIX RANKING



# PRA EXERCISE CUM AWARENESS PROGRAMME AT SUKTIA VILLAGE UNDER UPPER THARIA MICRO WATERSHED IWMP PROJECT-VI 2010-11

DETAILED MAP OF THE WATERSHED





#### DETAILED MAP OF THE WATERSHED

#### SOCIO-ECONOMIC SURVEY





#### **RESOURCE MAPPING**

#### **MATRIX RANKING**





AWARENESS CUM TRAINING PROGRAMME HELD AT SUKTIA VILLAGE ON THE  $24^{\mathrm{TH}}$  NOVEMBER 2010 UNDER UPPER THARIA WATERSHED OF IWMP PROJECT VI 2010-11

SHRI.H.S KHARPRAN,AS & WCO SPOKE AT THE AWARENESS PROGRAMME AT SUKTIA VILLAGE UNDER UPPER THARIA WATERSHED OF IWMP PROJECT VI 2010-11





#### SYIEM OF SOHRA DELIVERING HIS SPEECH AT THE PROGRAMME

SHRI. SHADAP, AGRICULTURE DEVELOPMENT OFFICER OF SHELLA BHOLAGANJ C & RD BLOCK DURING THE TRAINING SESSION





#### SMT.I.DOHLING DURING THE TRAINING SESSION

SORDAR OF NONGLA DELIVERING HIS SPEECH AT THE PROGRAMME





AWARENESS PROGRAMME HELD AT TYRNA VILLAGE ON THE 18<sup>TH</sup> NOVEMBER 2010 UNDER WAH UMSAI MICRO WATERSHED IWMP PROJECT VI 2010-11

SHRILL WANNIANG, RANGE OFFICER SOHRA S& WC RANGE, DURING
THE AWARENESS PROGRAMME AT TYRNA VILLAGE UNDER WAH
UMSAI WATERSHED IWMP 2010-11





### SHRI.B.P. MARWEIN, AS &WCO SPOKE ON THE OCASSION AT TYRNA VILLAGE UNDER WAH UMSAI DURING THE AWARENESS PROGRAMME

SHRI.J.D.SUCHIANG, SUB DIVISIONAL OFFICER (C) SOHRA SUB DIVISION SPOKE ON THE AWARENESS PROGRAMME AT TYRNA UNDER WAH UMSAI IWMP 2010-11





PARTICIPANTS IN THE PROGRAMME AT TYRNA VILLAGE UNDER WAH UMSAI WATERSHED IWMP PROJECT VI 2010-11