DETAILED PROJECT REPORT

UMTHAM WATERSHED MANAGEMENT PROJECT

IWMP – VI

2010-2011

RANIKOR C & RD BLOCK

WEST KHASI HILLS DISTRICT

MEGHALAYA

SUMMARY

Name of the State	:	Meghalaya
Name of the District	:	West Khasi Hills District
Name of the C&RD Block	:	Ranikor
Name of the Villages	:	 Rngi Mawpat, 2. Rangkhiat, 3. Phlangdiloin, 4. Pyndensynia, Phlangmawprah, 6. Nongmluh, 7. Mawmynsor, 8. Mawthungmlang, Mawphansaw, 10. Thnangbyriang
Name of the Project	:	West Khasi Hills – IWMP – VI
Total Geographical Area	:	4189 Ha
Total Treatment Area	:	1700 Ha
Total Project Cost	:	255.0 lakhs
Project Duration	:	5 Years
Project Implementing Agency	:	Soil & Water Conservation Nongstoin Division.

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CHAPTER I

INTRODUCTION AND BACKGROUND

1.1 Project Background:

The Umtham (IWMP-VI) project is located in Ranikor C&RD Block, West Khasi Hills District of Meghalaya. Consisting of a single micro-watershed, the project area is drained by the Wah Umtham River and its tributaries flowing in a north to south direction. The total area is 4189 Ha with 1700 ha to be treated under the Integrated Watershed Management Programme (IWMP).

The Project area is located at a distance of about 35 km from Mawkyrwat the Civil Sub-Divisional Head Quarter and about 60 km from Nongstoin the District Headquarter. A total of 10 (Ten) villages are covered under the project. These are –

1. Rngi Mawpat, 2. Rangkhiat, 3. Phlangdiloin, 4. Pyndensynia,

5. Phlangmawprah, 6. Nongmluh, 7. Mawmynsor, 8. Mawthungmlang,

9. Mawphansaw, 10. Thnangbyriang.

1.2 Micro-watershed Information:

The micro-watershed code is whole of 3C1B1a1c, 3C1B1a1b, 3C1B1b4g and part of 3C1B14a, 1C1B1b5e, 3C1B1a1d, 3C1B1a1d as codified by the North East Space Application Centre (NESAC).

1.3 Need and Scope for Watershed Development: The Micro - watershed with its unique location and demand to cater to the population of the area is deteriorating very fast, therefore; there is an urgent need to conserve and manage natural resources such as soil, water and vegetation for enhancing and sustaining land and water productivity on sustainable basis thereby promoting food, social, economic & livelihood security. To dissipate soil and water erosion, surface runoff, to harvest, recycle surface run-off, rain water, improve soil moisture regime, water holding capacity, to promote sub-surface flow, base flow, and recharge ground flow, to improve soil health and tilth, crop production, biomass productivity and enhance climate change adaptation.

The proposed project will also focus on food production and improving its productivity under existing conditions selecting nutritious local crops and by introducing improved low input varieties of crops. This will enhance the capability of local societies to sustain while enjoying a decent rural life style. In the event of promoting local as well as improved varieties of crops biomass productivity would also be considered. In the current scenario of changing climatic conditions, several shifting cultivation crop varieties need to be considered for popularizing. Some of these crops have a wide tolerability to temperature and rainfall making them adaptable to changing climatic conditions. As a step forward to enhance climate change adaptation, an experimental effort would be needed to be taken to find out the most adaptable shifting cultivation crops readily available from nearby areas in the proposed project area. This will also help to retain crop diversity of shifting cultivation areas as this type of subsistence agriculture is reducing day by day and is being replaced by more lucrative but highly damaging coal mining.

This is expected to provide sustainability and food security to these remote communities.

With proper intervention and rightly selection of activities as per land suitability there is a huge scope for development of the watershed and improves the ecological balance, economic gain which would bring equilibrium and bring about sustainability.

1.4 Other developmental projects/schemes running in the Project Area: The other developmental projects/schemes undertaken in the Project Area is MGNREGS

CHAPTER II

BASIC INFORMATION OF THE PROJECT AREA

2.1 Location: The area is located between 91°15" to91°19"30' East Longitude & 25°16"30' to 25° 22"30's North Latitude. It is situated at a distance of 60km from Nongstoin the Headquarter of West Khasi Hills District and falls under Ranikor C&RD Block which is within the Mawkyrwat Civil Sub- Division Jurisdiction. The Project Area is connected by Black top road about 30km and the other 30km with Kutcha road up to Phlangdiloin whereas other village on the other side of the Umtham River is approachable only by foot of about 2 to 2.5 hours walk. There are 10 villages falling within the watershed, namely,

1. Rngi Mawpat, 2. Rangkhiat, 3. Phlangdiloin, 4. Pyndensynia,

5. Phlangmawprah, 6. Nongmluh, 7. Mawmynsor, 8. Mawthungmlang,

9. Mawphansaw, 10. Thnangbyriang

2.2 Physiography: The Total Geographical Area (TGA) of the Project is 4189 Ha out of which the Treatable Area is 1700 Ha which has been proposed for treatment under different soil & water Conservation activities. The altitude ranges from 800m to 1200m above mean sea level and physiography is gentle to steep slope.

Elevation (metres)	Slope Range (%)	Order of watershed Sub/Micro-watershed	Major streams	Topography
800 m to 1200 m	15% and Above	Micro Watershed	Umtham Umtyllang Iong Tynnaw Kynthang Longjisi Rangkhiat Rangryngi Phud Mawlein Ken Langrin Umphan Jurkdait Phudmynniaw Rangsengiong Umdohlang langhaiang	Gentle to Steep slope

Table 2.1: Physiographic details

2.3 Drainage: The major stream draining the micro-watershed is the Wah Umtham which is a 5th order stream flowing in a north-south direction. The slopes of the micro-watershed are dissected by numerous small tributaries flowing to the Wah Umtham.

Average Drainage density: The Average Drainage Density calculated is 4.592km/km². The total length of the streams is 192.4km (1st order to 5th order) and the area is 41.89km².

Average Drainage Density = <u>Total length of streams in the watershed (km)</u> Area of the watershed (km²)

Bifurcation Ratio: The bifurcation ratio of the watershed is 3.755. There are 157 first order streams, 30 second order, 7 third orders, 2 fourth orders and 1 fifth order.

Bifurcation Ratio = <u>Previous stream order (Nos of segments)</u> Next order (Nos. of segment)

2.4 Soil: Soil is very shallow. Texture is sandy and loamy sand at the upper horizon. Exposure to erosion hazard is severe to very severe. (Awaiting Report).

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)
	Water erosion:							
		West Khasi Hills		a	Sheet		NA	
			West Khasi	b	Rill	NA		NA
1	Meghalaya		Hills –	с	Gully			
		11115	IWMP VI	Sub total				
				Wind erosion		NA	NA	NA
					wind crosion			

2.5 Climate: The area in the foothills or low lying areas and mid-slopes are hot in summer and tepid during winter. The midslope areas have a mild summer and cool winter. The area on the higher reaches is warm during summer and cold during winter. The average annual rainfall is 7000mm.

1	2	3	4	5	6	7		8	9									
S1.	SI. Name of Area (in Na				Names of the	ames of the		Average annual rainfall in mm (preceding 5 years'	Major crop	95								
No.	State	Agro-climatic zone	a) Type b) Area	,	average)	a) Name	b) Area (ha)											
		Mild, Wet Cold, Moisture								Betel nut	100							
	Mild, Wet		Mild, Wet	Mild, Wet	Mild, Wet	Mild, Wet	Mild, Wet	Mild, Wet							Betel leaf	52		
1	Maghalawa		oisture 4189 Ha sture	ild, Moisture 4189 Ha ot moisture								West Khasi	West Khasi		4189 Ha	7000 mm	citrus	32
	Meghalaya	Hot moisture										+109 па	+109 Па	+169 па	Hills	Hills – IWMP – VI	Sandy, loamy sand, sandy loam and loam.	4189 Па
		Hot, Wet												Black pepper	36			
										Pineapple	18							
								Total		868.0								

Table 2.2. A sure allowed's sure a	C 41		
Table 2.3: Agro-climatic zones o	i the broiect areas	. soll types, average	rainfall and major crops.
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*Source: NESAC

2.6 Agriculture Agro-Forestry & Horticultural Activities: The main crops that are cultivated by the majority of the populace depending on the locations and favorable condition of the area are as follows: Broom grass, betel nuts, betel leaves, tezpata, citrus, pepper, pine apple. Apart from the major crops, some minor crops especially vegetables, here are the few crops commonly grown: King; chilly, cabbage, mustard leaf, ginger, turmeric, aubergines and other garden vegetables. Jhum cultivation are practiced extensively over the hill slopes in the past few years; where the main crops are hill paddy, tapioca, brinjal, chillies, yam, sweet potato , etc.. these plots are later being used either for permanent crop like Broom grass, betel nuts, betel leaves, tezpata, citrus, pepper, pine apple, etc. and some areas are being left fallow.

	Area	Average Yield
Crops	(ha)	(Qtl) per ha.
Broom Grass	610	10 - 12
Betel Nut	100	09 - 10
Betel Leaf	52	10-12
Tezpata	20	20
Citrus	32	44
Pepper	36	6
Pine-Apple	18	57
Total	868.0	

Table 2.4: Crop yield and production

*Source: Economic and Statistic, Meghalaya.

- 2.7 Natural Vegetation: The natural vegetation of the area is fairly poor due to tremendous biotic pressure such as recurring fire hazards, over exploitation of timber and fuel woods, particularly charcoal burning which has spelt a bane for the farmer of the area. The barren topography of the area blended in a mosaic in a rocky outcrop exposure where soil depth is very shallow which bare testimony to this fact. The main species dominating these areas are <u>Schima khasiana</u> (dieng ngan) <u>Betula alnoides</u> (dieng lieng lieh), <u>Alnus nepaliensis</u> (dieng lieng iong), <u>Castonopsis spp</u> (dieng stap), <u>Duabanga Sonneratoides</u> (dieng bai), <u>Quercus</u> spp (dieng sai) which has got economic value whereas other species are of no economic value and are scattered all over the project area.
- 2.8 Socio-Economic Profile: Socio economically the people of the area are very poor owing primarily to low agricultural productivity where people have to explore other means of livelihood. The average annual income is about Rs. 40,000/- per family.

Demographic Status: The total household in the watershed project is 363 with a total population of 2056, of which 1012 are male and 1044 are female. The detail of the household in each of the villages in the watershed project is as follows:

	Table: 2.5 Demographic Status										
Sl	Villages	Nos. of Households	Male	Female	Total						
No											
1	Rngimawpat	16	35	32	67						
2	Rangkhiat	34	93	95	188						
3	Phlangdiloin	122	312	378	690						
4	Pyndensynia	53	150	156	306						
5	Phlangmawprah,	36	112	107	219						
6	Nongmluh	34	91	82	173						
7	Mawmynsor	13	42	40	82						
8	Mawthungmlang	30	119	101	220						
9	Mawphansaw,	15	33	30	63						
10	Thnangbyriang	10	25	23	48						
	Total	363	1012	1044	2056						

Infrastructure facilities:

- a) Roads: All the villages in the Project area are not connected by roads. Most villages are connected by footpath while some villages are connected by kutcha roads.
- b) Schools: There are several schools in the project area which include lower primary, upper primary and secondary schools run either by the Mission or the Government.
- c) Electricity: All 10 villages within the project Area have been electrified.
- d) Health: All villages seek health care and medical facilities from Wahkaji Primary Health Centre and Mawkyrwat Community Health Centre.
- e) Water supply: The PHE has been catering to the water supply requirements of the villages. However the supply is insufficient and erratic. A large number of remote habitation have to depend on spring and natural source of water especially during the dry season.
- f) Marketing Facility: There is a weekly market held once in 8 days at Umdohlun village. The other weekly markets of Ranikor and Mawkyrwat are also important to the people of these villages.

Table 2.6: Infrastructure Status.

1	2		3		4					
Name of District	Name of Project		Parameters:	Status						
		(i)	No. of villages connected to the main road by an all-weather road.	4 nos with weat or even footpa		re as others h	ave no road			
		(ii)	No. of village provided with electricity	All villages ha	d been electrif	ïed				
		(iii)	No. of households without access to drinking water	Nil						
		(iv)	No. of educational institutions:	(P)	(UP)	(S)	(HS)			
			Primary (P)/ Secondary (S)/ Higher Secondary (HS)/ upper Primary (UP)	16	4	4	1			
XX7 / X71	West Khasi	(v)	(v) No. of village with access to Primary Health Centre		10					
West Khasi	Hills – IWMP	(vi)	No. of village with access Veterinary Dispensary	Nil						
Hills	VI	(vii)	No. of village with access Post Office	10						
		(viii)	No. of village with access Banks	10						
		(ix)	No. of village with access Markets/ mandis	10						
		(x)	No. of village with access Agro-Industries	Nil						
		(xi)	Total quantity of surplus milk	Nil						
		(xii)	No. of milk collection centres	(U)	(S)	(PA)	(0)			
			(e.g. Union (U)/ Society (S)/ Private agency (PA)/ Others (O))	Nil	Nil	Nil	Nil			
		(xiii)	No. of villages with access to Aganwadi Centres	10 Nos.	ł	1	•			
		(xiv)	Any other facilities with no. of villages (please specify)							

2.9 Livestock: The important livestock's of the area are goats, piggery, poultry, cattle (cows and bulls), etc. and these are being taken up only as a part time occupation.

Table 2.7: Existing	g investock population
Type of Animal	Population
Piggery	590
Poultry	3080
Cattle	5
Goats	675

Table 2.7: Existing livestock population

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

Table 2.8: Land Holding:

1	2	3	4	5	6			
Name of Name of the	Types of Farmer	No. of households	No. of BPL		Land holding (ha)			
District	Project	••		households Irrigated Nil 169	Irrigated	Rainfed	Total	
		(i) Large	82	160	Nil	423.0	423.0	
		(ii) Small	204		Nil	440.0	440.0	
West Khasi Hills	West Khasi Hills – IWMP VI	(iii) Marginal	8	109	Nil	5.0	5.0	
Fills		(iv) Landless	69		Nil	Nil	Nil	
		Sub - Total	363	169	Nil	868.0	868.0	

Table 2.9: Common Property Resources in the Project Area

1	2	3	4						5	
Name of	Name of the	CPR	Total Area (ha) Area owned/ In possession of				Area available for treatment (ha)			
District Projects	Projects	Particulars	Pvt. Person	Govt. (specify deptt.)	PRI	Any other (Community)	Pvt. Person	Govt. (specify deptt.)	PRI	Any other (Community)
		(i) Wasteland/ degraded land	960	-		1520	960			1520
		(ii) Pastures	12.0	-	-	-	12.0	-	-	-
		(iii) Private Agriculture land(Cash crops)	868.0							
		(iv) Village woodlot	30.0				30.0			
	West Khasi	(v) Forest (Degraded)	325.0			210	325.0			210
West Khasi	Hills – IWMP	(vi) Village Ponds/ Tanks	4.0							
Hills	VI	(vii) Community Buildings		4.762 (PWD, PHE,PHC, Govt Schools)		56.30				
		(viii) Weekly Markets				0				
		(ix) Permanent Markets				0				
		(x) Temples/ Places of worship				18 nos. /9.0				
		(xi) Others (water Tank)				16 nos./0.3				
		Total	2198	4.762		1795.6				

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.

Categories	Area (ha)
Treeclad area – open	3490.483
Wasteland-scrub land - open scrub	442.2621
Other shifting cultivation current	123.1039
Agricultural land - Crop land - Kharif crop	9.48336
Wasteland-scrub land - Dense scrub	28.06811
Waste land - Sandy area – Riverine	61.05185
Waste Land - Barren rock/ Stony waste	34.54782
Total	4189.00

Table: 3.0, Land use and land cover

*Source: NESAC

2.12 **Problems of the Area :** Baseline Survey and PRA Exercise carried out indicates the major problems of the watershed area as per the villages surveyed are as listed below:

- (1) Poor road and infrastructure
- (2) Low marketing facilities for potential new products.
- (3) Poor Health Care facilities.
- (4) Water scarcity (inadequate water supply facility) especially in dry season.
- (5) Very low agricultural activity
- (6) Low fertility of soil due to heavy rainfall causing leaching of nutrients
- (7) Less geographical area under dense forest.
- (8) Scanty vegetation covers due to recurring fire hazards and over exploitation
- (9) Lack of modern technological inputs for farming
- (10)Lack of awareness and knowledge on improved agricultural practices
- (11)Un-utilized wastelands
- (12) Very poor sanitation

Measurable attempts and approaches have been formulated in the watershed treatment plan of the detailed project report so as to mitigate the problem and expecting to overcome them.

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) <u>GIS & Remote Sensing</u>: To facilitate the process of prioritization and planning Geographic Information System was use. The land use and land cover (LULC) maps prepared by the North Eastern Space Application Centre (NESAC) using the LISS III images (2006) were used. The proposed 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	3
Sl.No.	Scientific criteria/ inputs used	No. of projects in which scientific criteria were used
A.	Planning	
	Cluster approach	Yes
	Whether technical back-stopping for the project has been arranged? If yes, mention the name of the Institute.	Yes,
		NESAC, SLNA an NEHU
	Baseline survey	Yes
	Hydro-geological survey	No
	Contour mapping	No
	Participatory Net Planning (PNP)	Yes

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

3.2 Project Implementing Agency:

The PIA is the Soil & Water Conservation Nongstoin Division, West 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 Division, Nongstoin
West Khasi Hills	West Khasi Hills – IWMP VI	(iii) Designation & Address	Divisional Soil & Water Conservation Officer, Nongstoin
west Khasi Tims		(iv) Telephone	03654-280236
		(v) Fax	03654-280236
		(vi) E-mail	

3.3 Institution Building

i) Watershed Committee (WC)

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

Table 3.2: Details of Watershed Committees (WC):

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Names of the Districts	Names of projects	Names of WCs	Date of Registration as a Society (dd/mm/ yyyy)	Designa tion	M/F	SC	ST	SF	MF	LF	Land-less	UG	SHG	GP	Any other	Educational Qualify- cation	Function/s assigned#
		Umtham		Chairman	М	-	ST			\checkmark						SSLC	A,B,C,D,E,G,H,I
West Khasi	WKH – IWMP				Secretary	М	-	ST									B.A, Diploma in Forestry
Hills District	VI	Watershed		Member	10 M	-	ST	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark				Class VI -	
			Member	4 F	-	ST		\checkmark			\checkmark				B.A.	A,B,E,H	
				Total	16												

PNP and PRA A.

B. Planning

C. Maintenance of Accounts E.

- D. Signing of cheques and making payments Cost Estimation Supervision of construction activities F.
- Verification & Measurement G.
- Social Audit I.

- Record of labour employed H.
- Any other (please specify). J.

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		
Names of	Names of]	Fotal no. of regi	stered SHC	Bs	No.	of mem	bers		No. o	of SC/ST catego	l in each ry	No.	of BPL catego	in each ry
the Districts		With only Men	With only Women	With both	Total	Categories	М	F	Total	М	F	Total	М	F	Total
West Khasi Hills	WKH. IWMP VI	-	-			(i) Landless (ii) SF (iii) MF (iv) LF									

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		Tota	l no. of UG's		יז	lo. of memb	bers		No. of S	C/ST in ea	ach category	No. of	BPL in each	category	
Districts	Projects	Men	Women	Both	Total	Categories	М	F	Total	М	F	Total	М	F	Total	
						(i)Landless	30	20	50	30	20	50	18	9	27	
West Khasi	WKH			0	0	(ii) SF	25	15	40	25	15	40				
Hills	WKH IWMP-VI			9	9	(iii) MF	25	-	25	25	-	25				
						(iv) LF	20	-	20	20	-	20				
Total					9		100	35	135	100	35	135	18	9	27	

CHAPTER IV

PROJECT ACTIVITIES

4.1 Preparatory Phase:

i) Entry Point Activities (EPA)

	-					(Financia	al – Rs. in lakh)			
Sl	2	3	4	5	6	7	8	9	10	11
Sl. No.	State	District	Names of Project	Amount earmarked for EPA 4%	Entry Point Activities planned	Estimated cost	Expenditure incurred	Balance	Expected outcome	Actual outcome
1	Meghalaya	West Khasi Hills	West Khasi Hills – IWMP VI	10.20 Lakhs	 Public Toilet (2 nos) Drinking Well (5 nos) W/H cum washing Place(2nos) Footbridge(1no) C/Dam (2 nos) 	3,44,140.00 2,64,660.00 1,02,760.00 1,70,430.00 1,38,010.00	3,44,140.00 2,64,660.00 1,02,760.00 1,70,430.00 1,38,010.00	Nil	Sense of civic & Sanitation Responsibility to common property, availability of drinking water during lean period connectivity during peak torrential	

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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 activities	Baseline survey	Hydro- geologic al survey	Identifying technical support agencies	Resource agree- ments	Preparatio n of DPR	Evaluation of DPR	Any other (please specify)	Cost incurred (Rs. In lakh)
West Khasi Hills	West Khasi Hills – IWMP VI	Formation of Sub- Committee	2 Nos	1 No	Socio – Economic survey and participatory Rural Appraisal Exercise GPS Survey Baseline survey for identifying of worksite and intervention	N.A	Done	Done	Done		DPR, Institutional & Capacity Builbing, IEC Activities	5.1

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

1	2	3	4	5		6								7					
						Pre Proje	ect						Propose	d Project					
								Aug	-	/ repair of e uctures	existing	C	Construction of	new structu	res		Total t	arget	
Sl. N o	Name of States	Name of Districts	Name of Projects	Type of structures	N o	Area irrigated (ha)	Storage capacit y	No	Area to be treated (ha)	Storage capacity	Estimate d cost (in lakhs)	No	Area to be treated (ha)	Storage capacity (per unit)	Estimate d cost (in lakhs)	No	Area to be treated (ha)	Stora ge capac ity (m ³)	Estimate d cost
1				(i) Tank	16		500m ³ each												
			West	(ii) Dud-out Pond	3		900m ³ each					4	32.0	700m ³	2.5941	4	32.0	700m	2.5941
	Megh	West	Khasi Hills –	(iii) Lake	1		45000 m ³												
	alaya	Khasi Hills	IWMP	(iv) C Dam								15	183 .207	600m ³	13.9699	15	183 .207	600m 3	13.9699
				(v) Wells	6		$1.5m^{3}$					1	5.0	9m^3	0.5	1	5.0	9m^3	0.5
				(vi) Water Harvesting	1		1200m 3					18	236.0	2088m ³	19.5673	18	236.0	2088 m ³	19.5673
				D/Irrigation								2	2.0	-	1.48	2	2.0	-	1.48
			Total		26							40	458.207		38.1113	40	458.207		38.1113

						8					9	10
					Achievement	due to project						
Augm	entation/ repa	ir of existing	structures		Construction	ires		Total achievemen	nt	Change in storage capacity (col 8-6)	Change in irrigated area (ha) Col. (8-6)	
No	Area irrigated (ha)	Storage capacity	Expenditure incurred (in lakhs)	No	Area irrigated (ha)	Storage capacity	Expenditure incurred (in lakhs)	Area irrigated (ha) Storage capacity Estimation				-
	-											

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

1	2	3	4	5		6					7								8				9
					Pre	e-project				Propo	osed targ	et					Achi	eveme	nt due to p	project			
S	Names of States	IO	of	Type of	No	No. Area irrigated (ha)				Total	target		entation/ re sting recharg structures			struction o arging stru		Total ach	ievement	Change in irrigated area			
	No. States Distri	Districts	projects	structures		irrigated (ha)	No.	Area to be irrigated (ha)	Estimate d cost	No.	Area to be irrigate d (ha)	Estimate d cost	Area to be irrigated (ha)	Estimate	No.		Expen di-ture incurre d		Area irri- gated (ha)	Expend i-ture incurre d	Area irri- gated (ha)	Expendi- ture incurred	()
1	Meghalaya	West	WKH-	(i)Open wells																			
1	weghalaya	Khasi Hills		(ii)Bore wells		Nil		Nil			Nil		Nil			Nil			Nil		Nil		
		111115		(iii)Others (Drinking Well)	6					6		3.1466						6		3.1466		3.1466	
				Total for the project																			

4.2.3 Activities executed by User Groups in the Project Areas.

	2				3			
			Major activities of the UGs -	Targets				
Names of Districts	Names of Projects		Structure/ activity propo	sed		No. of UGs involved	Estimated Cost	Amount of WDF to be
	FIOJECIS	Sl. No.	Туре	No.#	Treatment (ha)		Estimated Cost	collected (Rs.)
			Public Toilet	2			3.4414	
			Drinking Well	5			2.6466	
		1.	W/H cum washing Place	2			1.0276	
			Footbridge	1			1.7043	
	West Khasi		C/Dam	2			1.3801	
West Khasi Hills	Hills –		Afforestation		45.0		4.545	0.22725
west Khasi Tillis	IWMP VI		Strip Plantation		32.0		1.3651	0.06826
			Improvement of existing Degraded forest		500.0		18.00	0.9
		2.	Dug-out	4	32.0		2.5941	0.12971
			Check dam	15	183.207		13.9699	0.6985
			Drinking well	1	5.0		0.5	0.025
			Water harvesting	18	236.0		19.5673	0.97837

4.2.4 Activities executed by User Groups in the Project Areas:

	ž Š			4					
			Major	activities of the	UGs – Achievements				
	Structure/ activity			No. of UGs	Expenditure incurred	No. of	f mandays		Amount of WDF collected
Sl. No.	Туре	No.#	Treated Area (ha.)	involved	(Rs.)	SC	ST	F	(Rs.)
1.	Public Toilet Drinking Well W/H cum washing Place Footbridge C/Dam	2 5 2 1 2		9	3.4414 2.6466 1.0276 1.7043 1.3801		0.05231		
2.	Afforestation Strip Plantation Improvement of existing Degraded forest Dug-out Check dam Drinking well Water harvesting	4 15 1 18	45.0 32.0 500.0 32.0 183.207 5.0 236.0				0.31047		0.22725 0.06826 0.9 0.12971 0.6985 0.025 0.97837

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

1	2		3	
			Major activities of the SHGs	
Names of the Districts	Names of projects	Name of activity	No. of SHGs involved	Average annual income from activity per SHG
		Cattle rearing		
		Grocery shop/small cottage industry		
		Food processing		
West Khasi Hills	West Khasi Hills – IWMP VI	Mushroom cultivation		
		Pisiculture		
		Apiculture		
		Poultry		
		Piggery		

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

4			5		6	7		8		9	10
No. of SHGs	Тс		ceived by the SH t in Rs.)	G	Total annual Income	Total annual	No. of S	SHGs	Graded as	Total Amount of	No. of SHGs
given training	Loan from revolving fund	Training	Material	Others (pl. specify)	generated (Rs.)	Savings (Rs.)	Ι	II	III	loan sanctioned by the bank(s)	federated

1	2	3		4	ļ		5	6		7		8	3	9		10		11		1	2	13
District	Names of projects	Ridge area		ueau	nent	Nur rais	sing	Land devel		Croj demonstr	ations	Pas develo	pment	Veterin	ces	Fishe develop	ment	Non-conver energy	/	spee	cify)	Total cost incurred (Rs. In lakhs)
		(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	(a)	(b)	
WKH	WKH- IWMP -VI	Aff ⁿ 45.0 ha	4.5450	C/Dam cum Washing place 183.207 ha	13.9699			Peripheral Bunding 45.713 ha	9.5426	87 units/ 21.75 ha	4.35											32.4075
		Strip Plantation 32.0 ha	1.3651	D/ Irrigation 2.0ha	1.48			Contour Bunding 93.33ha	7.00													9.8451
		Improve ⁿ of Forest 500.0 ha	18.0	Dug- out/F/Po nd 32.0 ha	2.5941			Impro- paddy 2.0 ha	0.086													20.6801
		Agro- Horti 400.0 ha	34.40	W/harve sting 236.0 ha	19.5673																	53.9673
		Agro- Forestry 100.0 ha	10.10	D/well 5.0 ha	0.50																	10.6

4.2.8 Details of engineering structures in watershed works:

1	2	3		4			5		6				7							8	
			Ту	pe of treatme	nt		Type of l	and	Executing agency			1	Target					A	Achi	evement	
District	Project	Name of structures	(i) Ridge area (R)	(ii) Drainage line (D)	(iii) Land Dev. (L)	(i) Pri- vate		(iii) Others (pl. specify)	(i) UG (ii)SHG (iii) Others (pl specify)	CHIN / FIIII	(R	s. ir		completion	No. of units No./ cu.m. rmt)	i (R	apen incu s. in W	rred 1 lak	l (h)	Status of comple-tion	Actual month & year of completion (mm/yyyy)
		Contour bund		-	L	Р	-	-	UG/WC	93.33 ha				03/14	-	-	-	-	-	-	-
		Peripheral			L	Р			UG/WC	47.713 ha				03/14							
West	WKH-	Drip Irrigation		D		Р			UG/WC	2.0ha				03/14							
Khasi	IWMP VI	Dug out F/Pond		D		Р			UG/WC	4 Nos				03/14							
Hills	VI	Water Harvesting		D			C		UG/WC	18 Nos	5			03/14							
		Dam cum Washing Place		D			C		UG/WC	15 Nos	\$			03/14							
		D/Well		D			C		UG/WC	1Nos				03/14							
		Any others (pl. specify)																			

Contd.

4.2.9 Details of engineering structures in watershed works.

									9										
									Outcomes										
Reduction in run	Area treated#		Vater l	evel (n	1)		luction intal)	Income	e (Rs.)		Ν	/landays g	enerated			1	No. of benefi	ciaries	
off (cu.m)	(ha)		roject	Post p	oroject	D	Destauriss	Pre-		SC	ST	Others (Men)	Women	Total	SC	ST	Others	Women	Total
		Rainy	Non	Rainy	Non	Pre-project	-project Post project		Post project			(ivicity)							

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

1	2	3		4			5		6			7				8	
			Тур	pe of treatn	nent	1	ype of l	and	Executing agency			Target				Achievement	
District	Projec t	Name of structure/ work	(i) Ridge area (R)	(ii) Drainage line (D)	(iii) Land dev. (L)		(ii) Comm unity	(iii) Others (pl. specify)	(i) UG (ii)SHG (iii) Others (pl. specify)	Area (ha)	No. of plants	Estimated cost (Rs. in lakh)	Expected month & year of comple-tion (mm/ yyyy)	Area (ha)	No. of plants	Expendi-ture incurred (Rs. in lakh)	Actual month & year of comple- tion (mm/ yyyy)
		Afforestation	R			\checkmark			UG/SHG	45.0	13,500	4.545	03/2014				
	WKH	Strip plantation	R				\checkmark		UG/WC	32.0	4288	1.3651	03/2014	-	-	-	-
WKH	IWMP	Agro-forestry			L	\checkmark			Benefeciaries	100.0	30,000	10.10	03/2014	-	-	-	-
WNH	VI	Improvement of existing forest	R			~	\checkmark		UG/WC	500.0	50,000	18.00	03/2014				
		Agro- Horticulture			L	\checkmark			Benefeciaries	400.0	64,000	34.40	03/2014	-	-	-	-

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							
							Outcome	es						
De la cianta de C	Destation	(Inco	me		-	Mandays ge	enerated			-	No. of bene	ficiaries	
Reduction in run off (cu.m)	Production	i (quintal)	(Rs	5.)	SC	ST	Others	Women	Total	SC	ST	Others	Women	Total
(cu.iii)	Pre-project	Post project	Pre-project	Post project	50	51	Others	women	Total	50	51	Oulers	women	Totai
<u> </u>														

4.2.12 Details of allied / other activities:

1	2	3		4		5		6		7
				Type of	land	Executing agency		Target	Achie	vement
District	Project	Name of activity@	(i) Private	(ii) Community	(iii) Others (landless)	(i) UG (ii)SHG (iii) Others (pl. specify)	Estimated cost (Rs. in lakh)	(mm/yyyy)	Expendi-ture incurred (Rs. in lakh)	Actual month & year of completion (mm/yyyy)
		Tailoring – 15 units	-	-	\checkmark	UG/SHG	1.20	03/2014		
		Carpentry/ Agri-implements/ Basket making etc - 12 nos.	\checkmark		\checkmark	Individual	0.60	03/2014		
		Apiculture – 101Units	\checkmark			UG/SHG/Individual	8.08	03/2014		
		Poultry/Piggery /Duckery – 34units	\checkmark			Do	2.72	03/2014		
	Umtham	Hollow Block – 1no			\checkmark	Individual	0.30	03/2014		
West Khasi	Ommuni	Piggery Farming– 17units	\checkmark			UG/SHG/Individual	5.10	03/2014		
Hills	IWMP VI	Vermi-Composting - 30 units	\checkmark			UG/SHG/Individual	3.75	03/2014		
		Kitchen gardening - 366 units	\checkmark			Individual	9.15	03/2014		
		Fruit processing - 12 units	\checkmark			UG/SHG/Individual	6.00	03/2014		
		Sericulture – 1 units	\checkmark			Individual	0.30	03/2014		
		Mushroom cultn – 2 units	\checkmark			SHG/Individual	0.60	03/2014		
		Cattle rearing - 4 units	\checkmark			SHG/Individual	2.00	03/2014		
		Grocery shop -41 units	\checkmark			SHG/Individual	12.30	03/2014		
		Pisiculture – 21 units	\checkmark			Individual	6.3	03/2014		

(Contd.)

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

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

4.2.13 Details of allied / other activities:

					8						
				Out	comes						
Income (Rs.)				Mandays ge	nerated				No. of benef	iciaries	
Pre-project P	Post project	SC	ST	Others	Women	Total	SC	ST	Others	Women	Total

4.3 Consolidation and withdrawal phase

Details of activities in the CPRs in the project areas:

1	2	3	4	5		(ó				7				
						Tar	get			A	Achievement	•			
Names of the Districts	Names of projects	Name(s) of the villages	CPR particulars	Activity proposed	Target area under the activity (ha)	Estimated expenditure (Rs.)	Expected no. of beneficia- ries	Estimated contribution to WDF (Rs.)	Area treated under the activity (ha)	Expenditure incurred (Rs.)	Actual no. of benefici- aries	No. of	f mand	ays F	WDF collected (Rs.)
		Rngimawpat		1. Public Toilet (2nos)		3,44,140.00	500								
		Rangkhiat Phlangdiloin	Improved of degraded forest,	2. Drinking Well (6 nos)		3,14,660.00	300	15733.0							
WKH	WKH IWMP	Pyndensynia Phlangmawprah Nongmluh	footpath, footbridge,	3.W/H cum washing Place(9 nos)		8,20,880.00	350	41044.0							
	VI	Mawmynsor Mawthungmlang	C/Dam cum washing place,	4.Footbridge 5. C/Dam (2		1,70,430.00	500	6900.0							
		Mawphansaw, Thnangbyriang	D/Wells.	nos) 6.Farm		1,38,010.00									
				Pond(6 nos)		4,83,760.00	300	24188.0							
			Total	25(nos)		22,71,880.00									

CHAPTER V PROJECT PHASING & BUDGETING

PLAN FOR RELEASE OF PROJECT FUND BY SLNA TO PIA & WC FOR UMTHAM WATERSHED (WEST KHASI HILLS DISTRICT IWMP PROJECT VI)

	Prescribed Percentage %		PIA %		WC %		Year Wise Phasing & breakup of prescribed percentage under column – 2 (%)											
Particulars of Budget Component							1 st Year		2 nd Year		3 rd year		4 th Year		5 th Year			
	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin	Phy	Fin		
1. Administrative																		
I.Administrative cost	10	25.50	10	25.50	-	-			2%	5.10	5%	12.75	3%	7.65	-	-		
ii.Monitoring	1	2.55	1	2.55	-	-	-	-	0.2%	0.51	0.5%	1.25	0.3%	0.765	-	-		
iii.Evaluation	1	2.55	1	2.55	-	-	-	-	0.3%	0.765	0.5%	1.25	0.2%	0.51	-	-		
Total of 1:	12	30.60	12	30.60	-	-			2.5%	6.375	6%	15.30	3.5%	8.925	-	-		
2. Preparatory Phase															-	-		
i.Entry Point Activities	4	10.20	4	10.20			4%	10.20	-	-	-	-	-	-	-	-		
ii. Institution, capacity building and training, IEC activities	5	12.75	5	12.75			1%	2.55	2%	5.10	1%	2.55	1%	2.55	-	-		
iii.Preparation of DPR	1	2.55	1	2.55			1%	2.55							-	-		
Total of 2:	10	25.50	10	25.50			6%	15.30	2%	5.10	1%	2.55	1%	2.55	-	-		
3.Watershed Works Phase															-	-		
i.Watershed treatment/development works	50	127.50			50	127.50			7.5%	19.125	35%	89.25	7.5%	19.125	-	-		
ii.livelihood activities	10	25.50			10	25.50			1%	2.55	3%	7.65	6%	15.3	-	-		
iii.Production system & micro Enterprises	13	33.15			13	33.15			1%	2.55	5%	12.75	7%	17.85	-	-		
Total of 3:	73	186.15			73	186.15			9.5%	24.225	43%	109.65	20.5%	52.275	-	-		
4.Consolidation & withdrawal phase	5	12.75			5	12.75									5%	12.75		
Total of 4:	5	12.75			5	12.75									5%	12.75		
Total of 1-4:	100%	255.0	22%	56.10	78%	198.9	6%	15.30	14%	35.70	50%	127.50	25%	63.75	5%	12.75		

ACTION PLAN OF UMTHAM WATERSHED UNDER IWMP – VI, NONGSTION DIVISION:WEST KHASI HILLS DISTRICT.

Name of District: West Khasi Hills Name of C&RD BlockRanikor. Total Project Area: 4189 ha Total Treatment Area: 1700 Ha. Total project Cost: 255.0(lakhs) No. of villages – 10 nos.

SI.		I st Ye	ar	II nd Year		III rd Year		IV th Year		V th Year		Total	
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:												
А.	Administrative cost:	-	-										
i.	Honourarium of WDT Members @ Rs. 5000/ month - 3 no.	-	-		1.80		2.70		1.80	-	-		6.30
ii.	Hon ^{rm} of Watershed Volunteers @ Rs2500/- month – 3 nos.	-	-		0.90		1.80		0.90	-	-		3.60
iii.	Hon ^{rm} WCO's @ Rs. 750/ month.	-	-		0.090		0.18		0.09	-	-		0.36
iv.	Hon ^{rm} WCM @ Rs. 300/members/ month for 25 nos.	-	-		0.90		1.80		0.90	-	-		3.60
v	Sub-Committee @ Rs 100/member/month for 50	-	-		0.60		1.20		0.60	-	-		2.40
vi	Hon ^{rm} Office assistance @ Rs. 3000/- month.	-	-		0.36		0.72		0.36	-	-		1.44
vii	Hon ^{rm} Chartered Accountant /Social Audit	-	-		0.10		0.80		0.40	-	-		1.30
viii	TA/DA of Field Asstt. @ 5000/ month	-	-		0.15		1.50		0.60	-	-		2.25
ix.	Hiring charges of office building @ 1000	-	-		0.12		0.24		0.12	-	-		0.48
х	Hiring charges of vehicle @ 5000/ month	-	-		0.05	-	1.00	-	0.75	-	-		1.80
xi	Office expenses, POL, Stationeries, printing of SHG's books, pamphlets, tea, snacks etc, cost of camera.	-	-	-	0.03	-	0.81	-	1.13	-	-	-	1.97
	Total of A:	-	-	2 %	5.10	5 %	12.75	3 %	7.65	-	-	10 %	25.50
	PREPARATORY PHASE :												
B.	Entry Point Activities:												
i.	Check Dam	2nos	1.3801	-	-	-	-	-	-	-	-	2nos	1.3801
ii.	Public Toilet	2nos	3.4414	-	-	-	-	-	-	-	-	2nos	3.4414
iii	Drinking Well	5nos	2.6466	-	-	-	-	-	-	-	-	5nos	2.6466
iv	Washing/Bathing/p.Form	2nos	1.0276	-	-	-	-	-	-	-	-	2nos	1.0276
v	Footbridge	1no	1.7043	-	-	-	-	-	-	-	-	1no	1.7043
	Total of B:	4%	10.2	-	-	-	-	-	-	-	-	4%	10.2

1	2	3	4	5	6	7	8	9	10	11	12	13	14
С	Training:												
i.	Awareness Campaign & Capacity building		0.4		1.0		0.4		0.4	-	-		2.4
ii.	Exposure visits – off. Campus		0.4		1.0		0.4		0.4	-	-		2.4
iii.	Capacity building of SHG's/ UG's.		0.75		1.7		0.75		0.75	-	-		4.15
iv.	Capacity building of WC Members.		0.5		0.7		0.5		0.5	-	-		1.9
v.	Capacity of WDT/WV		0.5		0.7		0.5		0.5	-	-		1.9
	Total of C:	1%	2.55	2%	5.1	1%	2.55	1%	2.55	0	0	5%	12.75
D.	Detailed Project Report:			-	-	-	-	-	-	-	-		
i.	Cost of Resources Inventories works			-	-	-	-	-	-	-	-		
ii.	Cost of PRA Exercises			-	-	-	-	-	-	-	-		
iii.	Cost of Land use Survey works			-	-	-	-	-	-	-	-		
iv.	Cost of formulating			-	-	-	-	-	-	-	-		
	Total of D:	1%	2.55	-	-	-	-	-	-	-	-	1%	2.55
E.	Monitoring & Evaluation:												
i.	Monitoring	-	-	0.2%	0.51	0.5%	1.275	0.3%	0.765	-	-	1%	2.55
ii.	Evaluation.	-	-	0.3%	0.765	0.5%	1.275	0.2%	0.51	-	-	1%	2.55
	Total of E:	-	-	0.5%	1.275	1%	2.55	0.5%	1.275	0	0	2%	5.10
	Total of I (A to E)	6%	15.30	4.5%	11.475	7%	20.4	4.5%	8.925	0	0	22%	56.10
II	PROJECT COST/WATERSHED WORKS PHASE :			7.5%		35%		7.5%				50%	
А.	Arable Land Treatment:												
i.	Contour Bunds @ Rs. 7,500/ ha for 93.33 ha	-	-	-	-	93.33 ha	7.0			-	-	93.33 ha	7.0
ii	Agro-Horticulture Devt. Rs. 8,600/ ha for 400 ha	-	-	-	-	56.0 ha	23.60	344.0 ha	10.80	-	-	400.0 ha	34.40
iii	Peripheral Bunding@ Rs 50/ r.m for 19085.2 r.m	-	-	52.2/0.10 ha	0.0261	18558.8 /46.0825 ha	9.2794	474.2/1.5305 ha	0.2371	-	-	19085.2/ 47.713 ha	9.5426
iv	Crop Demonstration@ Rs 5,000 / Unit for 87 Units	-	-	1/0.25 ha	0.05	86/21.5 ha	4.3000			-	-	87/ 21.75 ha	4.35
v	Improvement of existing paddy field @ Rs 4,300/ha for 2ha	-	-	1/2.0 ha	0.086	-	-	-	-			1/2.0 ha	0.086
	Total of A :	-	-	2.35 ha	0.1621	216.9125 ha	44.1794	345.5305 ha	11.0371	-	-	564.793 ha	55.3786
В.	Non- Arable Land Treatment:												
i	Afforestation @ Rs 10,100/ha for 45ha	-	-	9/30.0 ha	3.24	15.0 ha	1.305			-	-	9/45.0 ha	4.545
ii.	Agro-Forestry Devt. works @ Rs. 10,100/ ha for 100 ha	-	-	-	-	10.0 ha	7.2	90.0 ha	2.9	-	-	100.0 ha	10.1
iii	Improvement of existing Degraded Forest @ Rs. 3600/ ha for 500 ha	_	-	267.4125 ha	13.0	232.5875 ha	5.0			-	-	500.0 ha	18.0
iv.	Strip Plantation @ Rs.4,266/ ha for 32	-	-	20.0 ha	0.9843	12.0 ha	0.3808			-	-	32.0 ha	1.3651
	Total of B:	-	-	317.4125 ha	17.2243	269.5875 ha	13.8858	90.0 ha	2.90	-	-	677.0 ha	34.0101

1	2	3	4	5	6	7	8	9	10	11	12	13	14
С	Drainage Line Treatment:												
i.	Drip irrigation	_	-			2/2.00 ha	1.48					2/2.0 ha	1.48
ii	Dug-Out Pond/Farm Pond	-	-	1/11.50 ha	0.9273	3/20.50 ha	1.6668					4/32.0 ha	2.5941
iii	Water Harvesting structures	-	-			18/236.0 ha	19.5673					18/ 236.0 ha	19.5673
iv	Check Dam cum Washing Place	-	-	1/8.7375 ha	0.8113	7/100.0 ha	7.9707	7/74.4695 ha	5.1879			15/183 .207 ha	13.9699
v	Drinking Well	-	-			1/5.0 ha	0.50					1/5.0 ha	0.50
	Total of C :	-	-	2/ 20.2375 ha	1.7386	31/363.5 ha	31.1848	7/74.4695 ha	5.1879	-	-	458.207 ha	38.1113
	Total of $(A + B + C)$	-	-	340.0 ha	19.125	850.0 ha	89.25	510.0 ha	19.125	-	-	1700.0 ha	127.50
1	2												
D	Livelihood Activities for landless persons:			1%		3%		6%				10%	
i.	Carpentry/Black smithy/Basketry/Agri- Implementation@ Rs5000/unit	-	-	2	0.10	8	0.40	2	0.10	-	-	12	0.60
ii.	Tailoring/knitting/H.Craft @ Rs 8000/ unit	-	-	5	0.40	5	0.40	5	0.40	-	-	15	1.20
iv.	Kitchen Garden@ Rs 2,500/ unit	-	-	2	0.05	26	0.65	338	8.45	-	-	366	9.15
v.	Vermi Composition@ Rs 12,500/unit	-	-			8	1.0	22	2.75	-	-	30	3.75
vi	Poultry/Duckery/Piggery @ Rs 8,000/ unit	-	-	5	0.40	25	2.0	4	0.32	-	-	34	2.72
ix	Apiculture @ Rs 8,000/unit	-	-	20	1.60	40	3.20	41	3.28	-	-	101	8.08
	Total of D:	-	-	34	2.55	112	7.65	412	15.30	-	-	558	25.50
E.	Production System and Micro Enterprises (SHG's):			1%		5%		7%				13%	
i.	Cattle Rearing@ Rs50,000/ unit	-	-	2.00	1.0	0	-	2	1.0	-	-	4	2.0
ii	Vermi Composition@ Rs 25,000/unit			1	0.25	0	-		-			1	0.25
iii	Grocery Shop/Electrical/Cobbler shop @ Rs 30,000/unit	-	-			15	4.50	26	7.80	-	-	41	12.3
iv	Fruit Processing/Preservation@ Rs50,000/unit	-	-	2	1.0	3	1.50	7	3.50	-	-	12	6.0
v	Mushroom Cultivation@ Rs 30,000/ unit	-	-	0	-	2	0.60			-	-	2	0.6
vi	Pisiculture (Fingerling distribution)@ Rs30,000/unit	-	-	0	-	12.5	3.75	8.5	2.55	-	-	21	6.3
vii	Hollow Block @ Rs. 30,000/Unit	-	-	1	0.30	0	-			-	-	1	0.3
viii	Sericulture @ Rs 30,000/unit	-	-			1	0.30			-	-	1	0.3
ix	Piggery@ Rs 30,000/unit	-	-			7	2.10	10	3.0	-	-	17	5.1
	Total of E :	-	-	6	2.55	40.5	12.75	53.5	17.85	-	-	100	33.15
1	2	3	4	5	6	7	8	9	10	11	12	13	14
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F.	Consolidation & Exit Phase:											-	
i.	Repairs, Maintenance of CPR's.	-	-	-	-	-	-	-	-	-		-	
ii.	Improving the sustainability of various Interventions	-	-	-	-	-	-	-	-	-		-	
iii.	Documentation of successful experiences & Preparation of Completion Report	-	-	-	-	-	-	-	-	-		-	
iv	Capacity building of W.C, SHGs, UGs, for maintenance & operation of Assets during post project period											-	
	Total of F:	-	-	-	-	-	-	-	-	5%	12.75	5%	12.75
	Total of II (A+B+C+D+E+F)	-	-	9.5%	24.225	43%	109.65	20.5%	52.275	5%	12.75	78%	198.90
	Grand Total (I + II)	6%	15.30	14%	35.70	50%	127.50	25%	63.75	5%	12.75	100%	255.00

Approved by

Project Leader (Divisional Soil & Water Conservation Officer) Nongstoin Division, Nongstoin Deputy Commissioner West Khasi Hills District

WATERSHED TREATMENT PLAN UNDER IWMP WEST KHASI HILLS PROJECT-VI

(Umtham and Umtajuh-Umkynshain Micro Watershed)

Name of District: West Khasi Hills Name of C&RD Block: Ranikor

Total Project Area: 8646 ha Total Treatment Area: 3500 ha

		I st Y	ear	II nd	Year	III ^r	^d Year	IV th Y	ear	V th Y	lear	To	tal
Sl. No	Activities	Phy (No/ha)	Fin	Phy (No/ha)	Fin	Phy (No/ha)	Fin	Phy (No/ha)	Fin	Phy (No/ha)	Fin	Phy (No/ha)	Fin
Ι	MANAGEMENT COST:												
А.	Administrative cost:	-	-										
i.	Honourarium of WDT Members @ Rs. $5000/$ month $- 3$ nos (each wshd).	-	-		3.60		5.40		3.60	-	-		12.60
ii.	Hon ^{rm} of Watershed Volunteers @ Rs2500/- month – 3 nos. (each wshd).	-	-		1.80		3.60		1.80	-	-		7.20
iii.	Hon ^{rm} WCO's @ Rs. 750/ month.	-	-		0.18		0.36		0.18	-	-		0.72
iv.	Hon ^{rm} WCM @ Rs. 300/members/ month for 25 nos. (each wshd).	-	-		1.80		3.60		1.80	-	-		7.20
v	Sub-Committee @ Rs 100/member/month for 50(each wshd).	-	-		1.20		2.40		1.20	-	-		4.80
vi	Hon ^{rm} Office assistance @ Rs. 3000/- month.	-	-		0.72		1.44		0.72	-	-		2.88
vii	Hon ^{rm} Chartered Accountant /Social Audit	-	-		0.22		1.70		0.85	-	-		2.77
viii	TA/DA of Field Asstt. @ 5000/ month	-	-		0.40		3.00		1.20	-	-		4.60
ix.	Hiring charges of office building @ 1000	-	-		0.24		0.48		0.24	-	-		0.96
Х	Hiring charges of vehicle @ 5000/ month	-	-		0.15	-	2.00	-	1.50	-	-		3.65
xi	Office expenses, POL, Stationeries, printing of SHG's books, pamphlets, tea, snacks etc, cost of camera.	-	-	-	0.19	-	2.27	-	2.66	-	-	-	5.12
	Total Of A	-	-	2%	10.50	5%	26.25	3%	15.750	-	-	10%	52.5

	PREPARATORY PHASE :											-	
B.	Entry Point Activities:											-	
i.	Check Dam	2nos	1.3801	-	-	-	-	-	-	-	-	2nos	1.3801
ii.	Public Toilet	4 nos	6.7828	-	-	-	-	-	-	-	-	4 nos	6.7828
iii	Drinking Well	7 nos	3.6466	-	-	-	-	-	-	-	-	7 nos	3.6466
iv	W/Harvesting cum washing place	2 nos	1.0276	-	-	-	-	-	-	-	-	2 nos	1.0276
v	Footbridge	1 no	1.7043	-	-	-	-	-	-	-	-	1 no	1.7043
vi	Footpath	1 no	1.125									1 no	1.125
vii	Tank and Washing	2 nos	2.6172									2 nos	2.6172
viii	C/Dam cum Washing	2 nos	1.6993									2 nos	1.6993
ix	C/Dam cum Footpath	1 no	1.0171									1 no	1.0171
	Total of B:	4%	21.00	-	-	-	-	-	-	-	-	4%	21.00
С	Training:											-	
i.	Awareness Campaign & Capacity building		0.40		2.00		0.90	-	0.90	-	-	-	4.20
ii.	Exposure visits – off. Campus		0.40		2.00		0.90	-	0.90	-	-	-	4.20
iii.	Capacity building of SHG's/ UG's.		2.05		3.70		1.75	-	1.75	-	-	-	9.25
iv.	Capacity building of WC Members.		1.20		1.40		0.85	-	0.85	-	-	-	4.30
v.	Capacity of WDT/WV		1.20		1.40		0.85	-	0.85	-	-	-	4.30
	Total of C:	1%	5.25	2%	10.50	1%	5.25	1%	5.25	-	-	5%	26.25
D.	Detailed Project Report:											-	-
i.	Cost of Resources Inventories works											-	
ii.	Cost of PRA Exercises											-	
iii.	Cost of Land use Survey works											-	
iv.	Cost of formulating	1										-	
Е.	Total of D: Monitoring & Evaluation:	1	5.25									1	5.25
E.				0.00	1.05	0.5%	2.625	0.20/	1.575			-	5.25
1.	Monitoring			0.2%	1.05		2.625	0.3%	1.575			1	5.25
ii.	Evaluation			0.3 %	1.575	0.5%	2.625	0.2%	1.05			1	5.25
	Total of E:	<i>(</i>) /	21.50	0.5	2.625	1%	5.2500	0.5%	2.625	-	-	2%	10.50
	Total of I (A to E)	6%	31.50	4.5%	23.625	7%	36.75	4.5%	23.625	-	-	22%	115.50

П	PROJECT COST/WATERSHED WORKS PHASE :			7.5%		35%		7.5%				50%	
А.	Arable Land Treatment:											-	
i.	Contour Bunds @ Rs. 7,500/ ha	-	-	-	-	93.33	7.00	-	-	-	-	93.33	7.00
ii	Agro-Horticulture Devt. Rs. 8,600/ ha	-	-	-	-	166.36	57.466	807.6400	26.298	-	-	974.00	83.764
iii	Peripheral Bunding@ Rs50/ r.m	-	-	550.2/1.35	0.2751	18594.2/ 46.1725	9.2971	618.2/ 1.8905	0.3091	-	-	19762.6/ 49.413	9.8813
iv	Crop Demonstration@ Rs 5,000 /ha	-	-	17/4.25	0.85	86/21.50	4.3000	24/6.00	1.20	-	-	127/31.75	6.35
v	Improvement of existing paddy field @ Rs 4,300/ha	-	-	2.00	0.086	-	-	-	-			2.00	0.086
	Total of A :	-	-	7.60	1.2111	327.3625	78.0632	815.5305	27.8071	-	-	1,150.493	107.0814
B.	Non- Arable Land Treatment:											-	
i	Afforestation @ Rs 10,100/ha	-	-	50.00	6.12	35.00	2.4650			-	-	85.00	8.585
ii.	Agro-Forestry Devt. works @ Rs. 10,100/ ha	-	-	-	-	60.00	15.8400	160.00	6.38	-	-	220.00	22.22
iii	Improvement of existing Degraded Forest @ Rs. 3600/ ha	-	-	569.8225	26.0000	430.1775	10.00			-	-	1,000.00	36.00
iv.	Strip Plantation @ Rs.4,266/ ha	-	-	40.000	1.9071	22.00	0.7378			-	-	62.00	2.6449
	Total of B:	-	-	659.8225	34.0271	547.1775	29.0428	160.00	6.38	-	-	1,367.00	69.4499
С	Drainage Line Treatment:											-	
i.	Drip irrigation	-	-			2/2.00	1.48					2/2.00	1.48
ii	Dug-Out Pond/Farm Pond	-	-	2/20.52	1.4773	4/24.90	1.9599					6/45.42	3.4372
iii	Water Harvesting structures	-	-			19/344.95	25.6283					19/ 344.95	25.6283
iv	Check Dam cum Washing Place	-	-	2/12.0575	0.9995	8/125.18	9.4152	7/74.4695	5.1879			17/ 211.707	15.6026
v	Drinking Well	-	-			1/5.00	0.50					1/5.00	0.50
vi	Protection Wall					5/32.80	2.1899					5/32.8000	2.1899
vii	Footpath			1/0	1.66	11/0	12.776					12/0	14.436
viii	Water Tank					12/277.43	18.4873					12/277.43	18.4873
ix	Soak Tank					3/63.20	4.2075					3/63.20	4.2075
	Total of C :	-	-	32.5775	4.1368	875.46	76.644	74.4695	5.1879	-	-	77/ 982.507	85.9687
	Total of A + B + C	-	-	700.00	39.375	1,750.0	183.75	1,050.0	39.375	-	-	3,500.00	262.50

D	Livelihood Activities for landless persons:			1%		3%		6%				10%	
i	Carpentry/Black smithy/Basketry/Agri- Implementation@Rs5000/unit	-	-	12	0.60	8	0.40	19	0.95	-	-	39	1.95
ii.	Tailoring/knitting/H.Craft @ Rs 8000/ unit	-	-	6	0.48	27	2.16	15	1.20	-	-	48	3.84
iii	Kitchen Garden@ Rs 2,500/ unit	-	-	44	1.10	30	0.75	386	9.65	-	-	456	11.40
iv	Vermi Composition@ Rs 12,500/unit	-	-			40	5.00	58	7.25	-	-	98	12.25
v	Poultry/Duckery/Piggery @ Rs 10,000/ unit	-	-	14	1.12	53	4.24	104	8.32	-	-	171	13.68
vi	Furniture Tool @ Rs5000/unit							1	0.05			1	0.05
vii	Soap Making @ Rs15000/unit			1	0.15								0.25
viii	Hollow Block @ Rs. 5000/Unit			4	0.20								0.20
ix	Cobbler/H.Craft @ Rs10,000/unit							8	0.80				0.80
Х	Apiculture @ Rs 5,000/unit	-	-	20	1.60	40	3.20	41	3.28	-	-	101	8.08
	Total of D:	-	-	101	5.25	198	15.75	632	31.50	-	-	931	52.50
Е.	Production System and Micro Enterprises (SHG's):			1%		5%		7%				13	
i.	Cattle Rearing@ Rs 50,000/ unit	-	-	3	1.50	5	2.50	5	2.50	-	-	13	6.50
ii	Vermi Composition@ Rs 25,000/unit			1	0.25	0	-		-			1	0.25
iii	Grocery /Electrical/Garment/Furniture/Food Stall @ Rs 30,000/unit	-	-	2	0.60	15	4.50	38	11.40	-	-	55	16.50
iv	Fruit Processing/Preservation@ Rs50,000/unit	-	-	2	1.00	3	1.50	7	3.50	-	-	12	6.00
v	Mushroom Cultivation@ Rs 30,000/ unit	-	-	1	0.30	2	0.60	1	0.30	-	-	4	1.20
vi	Pisiculture (Fingerling distribution) @ Rs 30,000/unit	-	-	0	-	18.5	5.55	8.5	2.55	-	-	27	8.10
viii	Hollow Block @ Rs. 30,000/Unit	-	-	1	0.30	0	-			-	-	1	0.30
ix	Sericulture @ Rs 30,000/unit	-	-			1	0.30			-	-	1	0.30
х	Piggery@ Rs 30,000/unit	-	-	1	0.30	11	3.30	44	13.20	-	-	56	16.80
xi	Steel Fabrication@ Rs 30,000/unit					2	0.60					2	0.60
xii	Barber Shop @ Rs 30,000/unit			1	0.30	2	0.60					3	0.90
xiii	Rice Mill Operation @ Rs 40,000/unit					2	0.80	3	1.20			5	2.00
xiv	Coffee Processing @ Rs 30,000/unit							1	0.30			1	0.30
XV	Goat Rearing @ Rs 30,000/unit			1	0.30	12	3.60	6	1.80			19	5.70
xvi	Water Pump @ Rs 40,000/ Unit			1	0.40							1.00	0.40
xvii	Fruit Processing/Preservation @ Rs 40,000/unit					6	2.40					6.00	2.40
	Total of E :	-	-	14	5.25	79.50	26.25	113.50	36.75	-	-	207	68.25

F.	Consolidation & Exit Phase:											-	
i.	Repairs, Maintenance of CPR's.	-	-	-	-	-	-	-	-	-		-	
ii.	Improving the sustainability of various Interventions	-	-	-	-	-	-	-	-	-		-	
iii.	Documentation of successful experiences & Preparation of Completion Report	-	-	-	-	-	-	-	-	-		-	
iv	Capacity building of W.C, SHGs, UGs, for maintenance & operation of Assets during post project period											-	
	Total of F:	-	-	-	-	-	-	-	-	5%	26.25	5%	26.25
	Total of II (A+B+C+D+E+F)	-	-	9.5%	49.875	43%	225.75	20.5%	107.625	5%	26.25	78%	409.50
	Grand Total (I + II)	6%	31.50	14%	73.50	50%	262.50	25%	131.25	5%	26.25	100%	525.00

Approved by

Project Leader Divisional Soil & Water Conservation Officer Nongstoiñ Division, Nongstoiñ

Deputy Commissioner West Khasi Hills District

VILLAGE WISE ACTION PLAN OF UMTHAM WATERSHED UNDER IWMP – VI, NONGSTOIN DIVISION, WEST KHASI HILLS DISTRICT

Name of District: West Khasi Hills Name of C&RD Block:Ranikor. Total geographical area: 4189Ha Area for treatment: 1700Ha No. of villages – 10 nos. Area (Ha/nos/rm/units): Financial (Rs in Lakh)

SI.	Activities		igi- wpat	Rang	khiat	Phlan	gdiloin	Pynde	ensynia	Phla maw	ang- prah	Nong	gmluh	Mawr	nynsor	Mawt mla	-	Mawp	hansaw	Thna byri		То	otal
No		Phy (no/ha)	Fin	Phy (no/ha)	Fin	Phy (no/ha)	Fin	Phy (no/ha)	Fin	Phy (no/ha)	Fin	Phy no/ha)	Fin	Phy (no/ha)	Fin	Phy (no/ha)	Fin	Phy (no/ha)	Fin	Phy (no/ha)	Fin	Phy (no/ha)	Fin
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Ι	WATERSHED WORKS PHASE : 50%																						
А.	Arable Land Treatment:													-									
i.	Agro-Horticulture @ Rs 8,600/ Ha for 400.0 ha	10.0	0.86	30.0	2.58	120.0	10.32	61	5.246	80.0	6.88	30.0	2.58	2.5	0.215	50.0	4.3	12.5	1.075	4.0	0.344	400.0	34.4
iii.	Contour Bunding@ Rs 7,500/ Ha for 93.33 ha	6.0	0.45	10.0	0.75	23.0	1.725	11.0	0.8252 5	10.33	0.7747 5	10.0	0.75	6.0	0.45	8.0	0.6	5.0	0.375	4.0	0.3	93.33	7.0
iv	Peripheral Bounding@ Rs 50/rm for 19085.2 rm	2285. 2 /5.713	1.1426	4000/ 10	2.0	1200 /3.0	0.60	2000 /5.0	1.0	2000/5	1.0	1200/ 3	0.6	1440/ 3.6	0.72	2080/ 5.2	1.04	2080/ 5.2	1.04	800/2	0.4	19085.2 /47.713	9.5426
v	Crop Demonstration & Innovative activities@Rs 5,000/Unit for 87 units	7/1.75	0.35	12/3.0	0.6	12/3.0	0.6	8/2.0	0.4	8/2.0	0.4	8/2.0	0.4	8/2.0	0.4	8/2.0	0.4	8/2.0	0.4	8/2.0	0.4	87/21.75	4.35
vi	Improvement of existing paddy field@ Rs4,300 / Ha for 2 ha							2	0.086													2/2.0	0.086
	Total of A	23.463	2.8026	53	5.93	149	13.425	81	7.55725	97.33	9.05475	45	4.33	14.1	1.785	65.2	6.34	24.7	2.89	12	1.444	564.793	55.3847
В.	Non- Arable Land Treatment:																						
i.	Afforestation@ Rs10,100 /Ha for 45 ha			5.0	0.505	25.0	2.525	5.0	0.505	5.0	0.505							5.0	0.505			45.0	4.545
ii	Strip plantation@ Rs 4,266/ha for 32 ha	5.0	0.2133	5.0	0.213 3	5.0	0.2133	5.0	0.2133	2.0	0.0853 2	2.0	0.08532	2.0	0.08532	2.0	0.0853	2.0	0.08532	2.0	0.085 32	32.0	1.3651
iii.	Improvement of existing Forest@ Rs3,600 / Ha for 500 ha	55.0	1.98	4.0	0.144	6.0	0.216	5.0	0.18	90.0	3.24	65.0	2.34	75.0	2.7	80.0	2.88	60.0	2.16	60.0	2.16	500.0	18
iv	Agro-Forestry@ Rs10,100 / Ha for 100 ha	6.0	0.606	10.0	1.01	26.0	2.626	15.0	1.515	10.0	1.01	10.0	1.01	5.0	0.505	8.0	0.808	6.0	0.606	4.0	0.404	100.0	10.1
	Total of B	66.0	2.7993	24.0	1.8723	62.0	5.5803	30.0	2.4133	107.0	4.84032	77.0	3.43532	82.0	3.29032	90.0	3.7733	73.0	3.35632	66.0	2.649 32	677.0	34.0101

С	Drainage Line Treatment:																						
i	Drip irrigation	1	0.74	1	0.74																	2/2.0	1.48
ii	Dug out Pond/Farm Pond	2	2.094 3			2	0.499 8															4/32.0	2.5941
iii	Water harvesting/Farm Pond	1	1.273			7	7.735 4	2	1.758 2	1	1.5327	3	2.2754	1	1.4738	2	2.563 8	1	0.955			18/236.0	19.5673
iv	C Dam cum washing place			2	2.119 3	6	4.872 8	1	0.732 8	2	2.731	1	0.3503	1	1.4738	2	1.689 9					15/ 183.207	13.9699
vi	D/Well									1	0.5											1/5.0	0.5
	Total of C	4	4.107 3	3	2.859 3	15	13.10 8	3	2.491	4	4.7637	4	2.6257	2	2.9476	4	4.253 7	1	0.955	0	0	40/ 458.207	38.1113
	Total of I:(A+B+C)	93.463	9.7092	80	10.661 6	226	31.9333	114	12.4615 5	208.33	18.6587 7	126	10.39102	98.1	8.02292	159.2	14.367	98.7	7.20132	78	4.093 32	1700.0	127.50

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
II.	(D) Livelihood Activities for landless persons: 10%																						
	Carpentry/ Black smithy/Basketry/Agri- Implementation @Rs.5000/unit	1	0.05	1	0.05	4	0.2	2	0.1	1	0.05	2	0.1	-	-	-		-	-	1	0.05	12	0.6
	Tailoring/ Knitting/H.Craft @Rs. 8000/Unit	-	-	4	0.32	6	0.48	1	0.08	1	0.08	-	-	1	0.08	-	-	2	0.16	-	-	15	1.2
	Kitchen Garden @Rs. 2,500/unit	16	0.4	34	0.85	122	3.05	53	1.325	36	0.9	34	0.85	13	0.325	30	0.75	15	0.375	13	0.325	366	9.15
	Vermi composing @Rs. 12,500/Unit	2	0.25	3	0.375	7	0.875	4	0.5	4	0.5	2	0.25	2	0.25	2	0.25	2	0.25	2	0.25	30	3.75
	Poultry/Piggery/ducker y @Rs. 8,000/unit	4	0.32	7	0.56	7	0.56	2	0.16	4	0.32	3	0.24	1	0.08	3	0.24	2	0.16	1	0.08	34	2.72
	Apiculture @ Rs 8,000/ unit	8	0.64	9	0.72	27	2.16	16	1.28	9	0.72	7	0.56	5	0.4	9	0.72	7	0.56	4	0.32	101	8.08
	Total of II (D)	31	1.66	58	2.875	173	7.325	78	3.445	55	2.57	48	2	22	1.135	44	1.96	28	1.505	21	1.025	558	25.5

III ·	(E) Production System and Micro Enterprises (SHG's): 13%																						
	Cattle rearing @Rs. 50,000/unit					2	1.0			1	0.5					1	0.5					4	2.0
	Vermi composing @Rs. 25,000/Unit					1	0.25															1	0.25
	Grocery/Electrical/cob bler shop @Rs. 30,000/Unit	1	0.3	4	1.2	11	3.3	5	1.5	6	1.8	-	-	1	0.3	9	2.7	2	0.6	2	0.6	41	12.3
	Fruit processing/Preservation @Rs.50,000/Unit	2	1.0	2	1.0	1	0.5	1	0.5	1	0.5	1	0.5	1	0.5	1	0.5	1	0.5	1	0.5	12	6.0
	Mushroom cultivation @Rs.30,000/Unit	-	-	1	0.3	-	-	-	-	1	0.3	-	-	-	-	-	-	-	-	-	-	2	0.6
	Pisiculture (finjerling distribution) @ Rs.30,000/ unit	4	1.2			7	2.1	2	0.6	1	0.3	4	1.2			2	0.6	1	0.3			21	6.3
	Hollow Block @ Rs. 30,000/Unit-			1	0.3																	1	0.3
	Sericulture Rs.30,000/unit-	-	-	-	-	1	0.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0.3
	Piggery @Rs.30,000/Unit-	1	0.3	2	0.6	3	0.9	3	0.9	2	0.6	1	0.3	1	0.3	2	0.6	1	0.3	1	0.3	17	5.1
	TOTAL OF III (E):	8	2.80	10	3.4	26	8.35	11	3.5	12	4.0	6	2.0	3	1.1	15	4.9	5	1.7	4	1.4	100	33.15
	TOTAL OF II AND III (D+E)	39	4.46	68	6.275	199	15.67 5	89	6.945	67	6.57	54	4	25	2.235	59	6.86	33	3.205	25	2.425	658	58.65
	GRAND TOTAL I+II+III (A+B+C+D+E)	39/ 119.583	14.1 692	68/ 102.43	16.93 66	199/ 392.05	47.60 83	89 /149.4 3	19.406 55	67/ 245.88	25.228 77	54/ 173.54	14.3910 2	25/ 121.44	10.2579 2	59/ 205.9	21.227	33/ 111.8	10.4063 2	25/78	6.5183 2	658/1700	186.15

WDT Members Community Organizer

WDT Members (Forestry) WDT Members (Civil Engineering)

WDT Members (Agriculture) Project Leader Umtham Watershed Committee IWMP-VI

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

1	1	2	3	4	5	6	5	7	8	9			10				11		
S I	5	Name of State	Name of Districts	Names of Projects	Year of sanctio	Project (dd/mm	duration √ yyyy)	Area of the	Project cost (Rs.	Names of Micro watersheds & Code nos. (as per		Area (ha) o	of the projects				rea details		
					n	From	То	projects	In lakh)	DoLR's unique codification)						(,	FJ,	
											Cultivate d rainfed area	Cultivate d irrigated area	Uncultivated	wasteland	Pvt. Agri. Land	Forest land	Comm unity land(Rai d)	Others (pl. specify)	Total area (ha)
													a) Temporary fallow	b) Per manent					
]	l	Meghalaya	West Khasi Hills	West Khasi Hills – IWMP VI	2010- 11	2010	2015	1700ha	255.0	Whole of 3C1B1a1a, 3C1B1a1b, 3C1B1b4g Part of 3C1B14a,3C1B1b 5e, 3C1B1a1d, 3C1B1a1e	868.0	-	1615.0	1086.0	868	620.0	2701.0	-	4189.0

Fund provision for the IWMP projects from all sources:

1	2	3	3					4						5
						Fu	nds from other	sources in	n addition to IV	WMP funds		1		
District	Name of Projects	IWMP	Fund	Converge	nce funds	Р	PP	Con	nmunity	Institutio	nal finance	Others	(Pl. specify)	Total
		Central Share	State Share	Name of Scheme	Amount (Lakhs)	Name of private sector	Financial contri- bution	Name	Financial contri- bution	Name	Financial contri- bution	Name	Financial contri- bution	
West Khasi Hills	West Khasi Hills – IWMP VI	229.50	25.50	MGNREGS	7.994	NIL	NIL	NIL	NIL	NIL	NIL	NIL	NIL	255.0

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

1	2	3	4		5					6			
				Di	stt. Agency's Proje	ect Account det	ails	Watershed Committee (WC) account details:					
Sl. No	Names of States	Name of Districts	Names of Projects	Name of the Bank and Branch where project account has been opened	Account Number (to be obtained confidentially)	Account type (Savings/ Current/ Others)	Name & Designation of authorized persons who operate the account.	Name of Watershed Committee	Name of the Bank and Branch where project account has been opened	Account number (to be obtained confiden- tially	Account type (Savings/ current others)	Name & Designation of authorized persons who operate the account.	
1	Megha laya	West Khasi Hills	West Khasi Hills – IWMP VI	SBI Nongstoin		Saving	Shri.D.K.Khonglah DS & WCO	Umtham, Watershed Committee	Rural Bank	Yet to Obtain	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	convergence (Ks. 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 [@]	Level at which decision for convergence was taken ^{\$}
1	West Khasi Hills	West Khasi Hills – IWMP VI	* Community Rural Development Department NREGS	7.994	Agro-forestry/horticulture, improvement of Degraded forest, strip plantation, Afforestation.	Page No. 41	Block Level & District Level

DETAILED ACTION PLAN FOR CONVERGENCE OF IWMP WITH MGNREGS UNDER UMTHAM WATERSHED IWMP-VI, RANIKOR BLOCK, WEST KHASI HILLS DISTRICT, MEGHALAYA

(Physical in ha),(Amount-Rs. In lakhs)

				Total Area of	Area proposed	Total cost	IWMP (40 %)	MGNREGS(60%)	,
Slno	Nos and Name of Village	Year of project	Name of Works	Scheme Proposed	for Convergence	for convergence	Amount	Amount	Remarks
			Afforestation	45.0 ha (creation)	15.0 ha @ Rs 7200/-	1.08	0.432	0.648	
		$\mathrm{II}^{\mathrm{nd}}$	Improvement of degraded forests	500.0 ha (creation)	150.0ha @Rs2600/-	3.90	1.56	2.34	
			Strip Plantation	32.0 ha (Creation)	5.0 ha@Rs 3076/-	0.1538	0.0615	0.09230	
		Total	of II nd	577.0 ha	170.00 ha	5.1338	2.0535	3.0803	
	 Rngi Mawpat Rang Khiat Phlangdiloin 		Agro- 400 I Horticulture (Creat		48.55 ha@ Rs5900/-	2.86435	1.14585	1.7185	
1	4. Pyndensynia		Agro-Forestry	100.0 ha (creation)	20.0 ha @Rs 7200/-	1.44	0.576	0.864	
	5. Phlangmawprah6. Nongmluh7. Mournameer	$\mathrm{III}^{\mathrm{rd}}$	Afforestation	45.0 ha (Maintenance)	15.0 ha@Rs 2900/-	0.435	0.174	0.261	
	 Mawmynsor Mawthungmlang Mawphansaw 		Improvement of degraded forests	500.0ha (Maintenance)	150.0 ha@ Rs 1000/-	1.50	0.60	0.90	
	10.Thnangbyriang		Strip Plantation	32.0ha (Maintenance)	5.0 ha @Rs 1190/-	0.0595	0.0238	0.0357	
		Total	of III rd	412.5	68.55 ha	6.29885	2.51965	3.7792	
		IV th	Agro-Forestry	100.0 ha (Maintenance)	20.0 ha @ Rs 2900/-	0.58	0.232	0.348	
			Agro- Horticulture	400 ha (Maintenance)	48.55 ha @ Rs 2700/-	1.31075	0.52425	0.7865	
		Total	of IV th	-	-	1.89075	0.75625	1.1345	
		Gran	d Total	1077.00 ha	238.55 ha	13.3234	5.3294	7.994	

Public-Private Partnership in the IWMP projects: NIL

1	2	3		4			5	6	7	8	9
		Name of	T	ype of agreement s	igned	Financial contribution					
District	Name of project	Sector		b)Contract	c) Any other (pl. specify)	IWMP	Private sector	Partnership Interventions	Expected Outcomes	Actual Outcomes	Comments

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

CHAPTER VI CAPACITY BUILDING

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		
		Name of	Full Address	Name &			Accre-			Performanc	e	
S.	State	the	with contact no.,	Designation	Institute [#] Area(s) of specialization		ditation	Refer-	No. of	No. of	No. of	No. of
No	State	Training	website & e-	of the Head			details	ence	trainings	trainees to	trainings	trainees
		Institute	mail	of Institute			uctails	Year	assigned	be trained	conducted	trained
1		NIRD (NER)	Guwahati	Director	Central Govt.	Remote Sensing, Rural Devt.	NA	-				
2	а	SIRD	Nongsder	Director	State Govt.	Capacity Building	NA	-				
3	ghalaya	RRTC	Umran	Director	Don-Bosco	Agri-Horti, Animal Husbandry, Entrepreneurship	NA					
4	Лeg	ICAR	Umiam	Director	Central Govt.	Do	NA					
5	2	VTC	Kyrdem Kulai	Director	State Govt.	Animal Husbandry	NA					
6		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)

[@] 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 current	ersons trained Sources of funding for training (T		s utilized akhs)	
Stakeholders	of persons	trained so far	during current financial year	financial year	a) DoLR b) Any other (Pl. specify)		a) DoLR	b) Any other (Pl. specify)
SLNA				-				
DRDA/ZP cell				-				
PIAs				-				
WDTs	6	6		6				
UGs	72	72		72	\checkmark		2.55	
SHGs	240	240		240				
WCs	50	50		50				
GPs	-	-		-				
Community	-	-		-				
Others (Farmer Awareness)	340	340		340				

Table 6.3: Information, Education & Communication (IEC) activities for the year 2010-11 as on 31/01/2011(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	0.40	0.40	Better Awarness
2.	Farmer Training	S&WC (T) Division	0.40	0.40	Better Awarness
3.	Exposure Visits	S&WC (T) Division	0.40	0.40	Better Awarness
4.	Capacity Building (WDT/WV/SHG's/UG's	S&WC (T) Division	0.85	0.85	Better Awarness
	Total		2.55	2.55	Better Awarness

CHAPTER VII EXPECTED OUTCOME

Table 7.1 Employment related outcomes:

						1								2		
Sl	Name of Village					Wage emp	loymen	t					S	Self employr	nent	
No	Name of Vinage			No. of man					of benefic		-			<u>), of benefic</u>		
		SC	ST	Others	Women	Total	SC	ST	Others	Women	Total	SC	ST	Others	Women	Total
1.	Rngi Mawpat		100 %	3,204	3,325	6,529		100 %			32					
2.	Rang Khiat		100 %	4,500	4,626	9,126		100 %			68					
3.	Phlangdiloin		100 %	12,860	12,995	25,855		100 %			244					
4.	Pyndensynia		100 %	5,200	5,376	10,576		100 %			106					
5.	Phlangmawprah		100 %	6,412	6,500	12,912		100 %			72					
6.	Nongmluh		100 %	3,513	3,490	7,003		100 %			68					
7.	Mawmynsor		100 %	2,376	2,450	4,826		100 %			26					
8	Mawthungmlang		100 %	5,313	5,375	10,688		100 %			60					
9	Mawphansaw		100 %	2,416	2,518	4,934		100 %			30					
10	Thnangbyriang		100 %	1,496	1,516	3,012		100 %			20					
	Total			47290	48171	95,461					726					

Table 7.2 Migration Details:

1	2	3	4	5	6	7	8	9]	10
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)	major activi	igration identify ties of IWMP onsible (b) Livelihoods
						ene vinuge (inii)		()	(a) Structures	(b) Livelinoous
				Ν	Ι	L				

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

Table 7.3 Economic benefits accrued to women:

	1	2	2		3	4
Wa	nges	Trai	ning	L	ivelihoods	
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)

* 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	Names of the	Names of the villages	Particular of CPR	Nature of	Period of	Benef	iciary de	tails (no. of f	families)	User Charges
Districts	projects		OI CPK	right	right	SC	ST	Others	Total	(Rs.)
		1. Rngi Mawpat				-	16		16	Nil
		2. Rang Khiat				-	36		36	Nil
		3. Phlangdiloin				-	153		153	Nil
West Khasi Hills		4. Pyndensynia	Improved of degraded			-	45		45	Nil
District	WKH-IWMP-III	5. Phlangmawprah	forest, footpath,	FW, MFP, P, Rd, So, T, Wd, Wi.	Lifetime	-	37		37	Nil
District	VV IXI1-1 VV IVI1 -III	6. Nongmluh	footbridge, C/Dam cum washing place,			-	35		35	Nil
		7. Mawmynsor	D/Wells.				13		13	Nil
		8. Mawthungmlang					30		30	Nil
	-	9. Mawphansaw					16		16	Nil
		10.Thnangbyriang					10		10	Nil

* From column no. 2, no. of States; from column no. 3, no. of Districts; from column no. 4, no. of projects; from column no. 5, no. of villages; from column nos. 9 & 10, particular-wise totals for the entire country may be given at the end of the table.

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

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

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

 Table 7.5 Water related outcomes:

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

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

* 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 project		lability of drinking o. of monhs in a y		Qua	lity of drinking v	water	Comments
District	Name of the project	Pre-project	Post-project	Change in availability	Pre-project	Post-project	Change in quality	Comments
West Khasi Hills District	WKH-IWMP VI	9 months	10 – 12months	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	ı.m.	
District	Name of the project	Name of major crop	through water saving devices ^{\$}	through water conserving agronomic practices [#]	Any other (pl specify)	Total
West Khasi Hills District	WKH-IWMP VI	Betel leaf	Alkathene pipes	Vermi-compost, mulching	-	-
		Black Pepper	Alkathene pipes			

* 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, practicewise totals may be mentioned at the end of the table for the entire country.

^{\$} Sprinkler, Drip, PVC pipe, etc.
 [#] Vermi-compost, organic manuring, Mulching, Check basin, Alternate furrow, Ridges & furrow & other scientific practices.

Vegetation/ crop related outcomes:

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

1	2	3				4						5						6		
					Pre	-project	ţ				Mi	id-term					yield per ha (Qt		ject	
Names of the Districts	Name of Projects	Name of crops	Ar (h		Y (Qt	erage ield l) per na.	Pro	Total duction Qtl)	Ar (h	rea a)	Yi	erage ield a (Qtl)	Prod	otal uction Qtl)	Ar (h	rea a)	Yie	eld		roduction Qtl)
			Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.
		Broom Grass	-	610		10-12		10-12												
West	WKH-	Tezpata	-	20		20		20												
Khasi	IWMP VI	Orange																		
Hills		-	-	32		44		44												
District																				

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

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

1	2	3	4	5				6						7					1	8		
							Pre-p	project					Mid	-term					Post-p	oroject		
Sl No.	Names of States	Names of the Districts	Name of Projects	Name of crops	Aı (h	rea a)	Yi	rage eld) per a.	Prod 1	otal uctio n ptl)		rea la)	1	rage eld 1 (Qtl)	Produ	otal uction (tl)	Ar (h	rea a)	Aver Yie per (Q	eld ha	To Produ (Q	iction
					Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.
1	Meghalaya	West Khasi Hills	WKH- IWMP	Betel leaf	-	52	-	10-12	-	10-12												
		District	VI	Black Pepper	-	36	-	6	-	6												
				Pine-Apple	-	18	-	57	-	57												
			Total for the District																			

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

Irri. - Irrigated Rf - Rainfed

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

1	2	3	4	5			(6					7	/					8	;		
							Pre-p	roject					Mid-	term					Post-p	roject		
Sl No.	SI Names OI No States	Names of the Districts	Name of Projects	Name of crops		rea 1a)	Yi	rage eld) per a.	Pro	otal ductio n Qtl)		rea 1a)	Aver Yie per ha		Tot Produ (Qt	ction	Aro (ha		Avei Yie per (Q	eld ha	Tot Produ (Q	ction
					Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.	Irri	Rf.
			WKH- IWMP VI	Betel leaf	-	100	-	10-12	-	10-12												
		West Khasi		Betel nut	-	52	-	9-10	-	9-10												
1	Meghalaya	Hills																				
		District	Total for the District																			

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

Irri. – Irrigated Rf – Rainfed

Table 7.6.4 Increase/ Decrease in area under fodder:

1	2	3		4			5	
			Existi	ng area under fodd	er (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
West Khasi Hills District	WKH-IWMP VI	5 yrs(2010-15)	LULC Map NESAC 2006		36.28			

* 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	
			Exi	sting area tree cov	ver (ha)		Achievement (ha)	
District	Name of project	Duration of Project	Source/Name of report	Year of reference	Area already under forest/vegetative cover/Tree Clap Open	Forest/vegetative cover area proposed to be covered under IWMP	Forest/vegetative cover area actually covered under IWMP	Change in forest/vegetative cover area
West Khasi Hills District	WKH-IWMP VI	5 yrs(2010-15)	LULC Map NESAC	2006	3961.0 ha	577.0 ha	-	

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

Table 7.6.6 Increase/ Decrease in area under horticulture:

1	2	3		4			5	
			Existing	area under horticult	ure (ha)		Achievement (ha)	
District	Name of project	Duration of Project	Source/Name of report	Year of reference	Area already under horticulture	Area under horticulture proposed to be covered through IWMP	Area under horticulture actually covered through IWMP	Change in area under horticulture
West Khasi Hills District	WKH-IWMP VI	5 yrs(2010-15)	15) PRA -		40.0	400.0	Yet to be covered	

* 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.

1	2	3		4			5	
			Existing a	area under fuel-	wood(ha)		Achievement (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
West Khasi Hills District	WKH-IWMP VI	5 yrs(2010-15)	LULC Map NESAC	2006	2701.0		-	

* 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
Names of the	Name of			Pre-proje	ect		Mid-terr	n		Post-proje	ct	
Districts	Projects	Type of Animal	No.	Yield	Income (in Lakh)	No.	Yield	Income	No.	Yield	Income	Remarks
		Cattle	5	14600	2.62	13	56480	10.1664	20	1,02,200	18.396	
West Khasi Hills	WKH-IWMP	Piggery	675	-	27.0	-	-	-	-	-	-	
District	VI	Poultry	590	-	17.70	750	-	80.80	890	-	97.60	
		Apiculture	3080	-	4.62	3380	-	5.70	3730	-	5.595	
	Total for all projects											
Total for all Districts												

* 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		6			7					8		
		Nama e	Fund required	S	ources of f	unding (Rs.))	Actual Expenditure		No. of b	eneficiari	es traineo	d	No. o	of bene	ficiaries	taking up a	activity
District	Project	Name of activity	for the activity (Rs.)	Project Fund	Benefi -ciary	Others (pl. specify)	Total	incurred on activity (Rs.)	SC	ST	Others	Women	Total	SC	ST	Other s	Women	Total
		Tailoring	1.20	1.20														15
		Hollow Block	0.30	0.30														1
		Carpentry	0.60	0.60														12
West	WKH-	Poultry/Piggery/ Duckery	2.72	2.72														34
Khasi Hills	IWMP	Apiculture	8.08	8.08														101
District	VI	Piggery	5.10	5.10														17
District		Grocery/Cobbler Electrical shop	12.30	12.30														41
		Cattle rearing	2.0	2.0														4
		Sericulture	0.3	0.3														1

(Contd.)

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

Table 7.7.3 Details of other livelihoods created for landless people:

	9	10			11		12
	mployed indirectly in e activity	Annual increase in		gration		t of backward-	Any other
Total	Grand Total	income due to activity (Rs.)	(INO. OF D Pre-project	eneficiaries) Post-project	Pre-project	l linkages Post-project	information (pl. Specify)
	(8+9)		ite project	r ost project	ine project	r ost project	

 Table 7.7.4 Details of other livelihoods created for farmers:

1	2	3	4	5			6	7			8					
District		Name of	Fund required for the	Sources of funding (Rs.) in Lakhs			Actual Expenditure	No. of farmers trained			No. of farmers taking up activity					
	Project	activity	activity (Rs.) in lakhs	Project Fund	Benefi -ciary	Others (pl. specify)	Total	incurred on activity (Rs.)	SF	MF	LF	Total	SF	MF	LF	Total
West Khasi	WKH- IWMP VI	i) Mushroom cultivation	0.60	0.60												2
Hills District		ii) Fruit processing	6.0	6.0												12
		iii)Pisiculture	6.3	6.3									21			
		iv)Vermi - compos ting	4.00	4.00												31
		v)Kitchen - gardening	9.15	9.15												366

* 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			12		
No. of persons employed indirectly in the activity		Annual increase in income due to activity	Impact of liv Migration (No. of beneficiaries)			of backward- linkages	Any other information
Total	Grand Total (8+9)	(Rs.)	Pre-project	Post-project	Pre-project	Post-project	(pl. 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				
		(i) Seed certification	-	-	-	
		(ii) Seed supply system	-	-	-	
		(iii) Fertilizer supply system	-	-	-	
		(iv) Pesticide supply system	-	-	-	
		(v) Credit institutions	1	2	3	
		(vi) Water supply	25	10	35	
		(vii) Extension services	1	1	1	
		(viii) Nurseries	-	-	-	
		(ix) Tools/machinery suppliers	0	67	80	
		(x) Price Support system	-	-	-	
		(xi) Labour	0	60,300	72,000	
		(xii) Any other (please specify)				
		(A) Forward linkages				
		(i) Harvesting/threshing machinery	-	-	-	
West Khasi Hills District	WKH-IWMP VI	(ii) Storage (including cold storage)	-	12	15	
West Kindst Tillis District		(iii) Road network	1	1	1	
		(iv) Transport facilities	1	1	1	
		(v) Markets / Mandis	1	1	1	
		(vi) Agro and other Industries		-	-	
		(vii) Milk and other collection centres		4	6	
		(viii) Labour		16,200	20,700	
		(ix) Any other (please specify)				

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

Table 7.9 Abstract of outcomes:

1	2	3	4	5	6	7	
Sl. No.	State	Item	Unit	Pre-project Status	Post-project Status	Remarks	
		Status of water table					
		Ground water structures repaired/ rejuvenated					
		Quality of drinking water		Moderately Portable	Improved		
		Availability of drinking water		Insufficient	Sufficient		
		Increase in irrigation potential		100% Rainfed			
		Change in cropping/ land use pattern		Mono & Double cropping	Mix cropping		
		Area under agricultural crop					
		I Area under single crop		610ha			
		Ii Area under double crop		258ha			
	Meghalaya	Iii Area under multiple crop					
		Net increase in crop production area					
		Increase in area under vegetation			32		
		Increase in area under horticulture			400.0 ha		
		Increase in area under fuel & fodder			577.0 ha		
		Increase in milk production					
		No. of SHGs					
		Increase in no. of livelihoods					
		Increase in income		35,000.0	50,000.0		
		Migration					
		No. of school going children		805	957		
		SHG Federations formed					
		Credit linkage with banks					
		Resource use agreements					
		WDF collection & management					
		Summary of lessons learnt	May be attac	ched as a separate file			

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. In Lakh)	Expected quantifiable benefits (Rs. In Lakh)	Expenditure incurred (Rs.in Lakh)	Actual quantifiable benefit (Rs. in Lakh)	Benefit: Cost ratio [#]	IRR
West Khasi Hills District	WKH-IWMP VI	Wah Umtham	As per Action Plan	255.0	1,797.55	255.0	633.9371	1.26:1	26%

* 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.

[#] B: C ratio more than 1 – cost effective

Less than 1 - Not cost effective

ANNEXURE MAP




























25°15'41.04"



ANNEXURE II

SOCIO-ECONOMIC SURVEY DETAILS

SOCIO – ECONOMIC DATA

	Name of the village				Total	Ownersh	ip of land	in Ha	Total	Tota	l annual In Rupees	-		Remarks
Sl. No.	Name of the village	Name of the Head of the Family	Total no of Adult	Total no of Minor	includin g head of family	Cultivabl e land	Non cultivab le land	Total area	Area under cultivatio n at present	Agric ulture	Livesto	Labour/B ussiness	Total annual Income	Kellar Kö
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Rngi Mawpat	Woly Wahlang	2	0	2	3	0	3	1.50	50,000	20,000	5,000	75,000	
2	Rngi Mawpat	Kimyour Syiemiong	2	3	5	3	1	4	1.00	20,000	40,000	30,000	90,000	
3	Rngi Mawpat	Pendar Iawphniaw	2	4	6	10	0	10	2.00	70,000	10,000	20,000	1,00,000	
4	Rngi Mawpat	Colostar Marthong	2	2	4	4	2	6	2.00	50,000	30,000	70,000	87,000	
5	Rngi Mawpat	Longsimai Syiemiong	2	0	2	3	0	3	1.50	20,000	20,000	40,000	80,000	
6	Rngi Mawpat	Klostar Iawphniaw	4	0	4	3	2	5	2.00	50,000	10,000	15,000	75,000	
7	Rngi Mawpat	Siewdorlin Syiemiong	2	1	3	2	1	3	1.00	10,000	40,000	30,000	80,000	
8	Rngi Mawpat	Davies Syiemiong	2	1	3	5	.50	5.50	2.50	50,000	12,000	-	62,000	
9	Rngi Mawpat	Denlion Syiemiong	2	4	6	3	3	6	2.00	40,000	30,000	15,000	85,000	
10	Rngi Mawpat	Klebar Syiemiong	2	1	3	6	1	7	2.00	45,000	15,000	20,000	80,000	
11	Rngi Mawpat	Santimon Sylemiong	2	3	5	3	2	5	1.50	30,000	20,000	20,000	70,000	
12	Rngi Mawpat	Dentishon Syiemiong	1	0	1	1	3	4	1.00	20,000	20,000	40,000	80,000	
13	Rngi Mawpat	Slipshon Syiemiong	2	1	3	10	0	10	2.00	40,000	30,000	30,000	1,00,000	
14	Rngi Mawpat	Elbina Syiemiong	4	0	4	5	0	5	2.00	30,000	15,000	40,000	85,000	
15	Rngi Mawpat	Bethesda Syiemiong	2	6	8	5	0	5	2.00	40,000	20,000	40,000	1,00,000	
16	Rngi Mawpat	Barlinstar Sylemiong	4	4	8	10	0	10	3.00	60,000	-	80,000	1,40,000	
17		Total	37	30	67	76	15.5	91.5	29	6,25,0 00	3,32,000	4,95,000	13,89,000	

	Name of the village			T ()	Total	Owners	nip of land	in Ha	Total		Total annu come(inRu		T ()	Remarks
Sl. No.		Name of the Head of the Family	Total no of Adult	Total no of Minor	includin g head of family	Cultivabl e land	Non cultivab le land	Total area	Area under cultivati on at present	Agricul ture	Livesto ck	Labour/B ussiness	Total annual Income	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Rangkhiat	Shri Handfree Wahlang	2	4	6	6	6	12	5	35,000	10,000	15,000	60,000	
2	Rangkhiat	Shri Bripton Morshra	4	6	10	3	4	7	2	30,000	8,000	10,000	48,000	
3	Rangkhiat	Shri Shemmingwell	2	1	3	2	2	4	2	35,000	5,000	5,000	45,000	
4	Rangkhiat	Shri Plingshon	1	-	1	4	3	7	3	30,000	5,000	5,000	40,000	
5	Rangkhiat	Shri Braibis Wahlang	2	6	8	3	3	6	2	34,000	10,000	10,000	54,000	
6	Rangkhiat	Smt Pildaris	4	1	5	5	4	9	3	32,000	11,000	9,000	52,000	
7	Rangkhiat	Shri Mepstarful Syrman	2	7	9	3	2	5	2	31,000	9,000	12,000	52,000	
8	Rangkhiat	Shri Welthing Syrman	2	4	6	3	3	6	4	30,000	8,000	10,000	48,000	
9	Rangkhiat	Shri Poldastan Kharsaw	6	5	11	2	2	4	2	35,000	9,000	8,000	52,000	
10	Rangkhiat	Shri Filick S Lyngdoh	5	3	8	2	1	3	1	30,000	7,000	10,000	47,000	
11	Rangkhiat	Shri Khoslan Thongni	2	2	4	2	2	4	1	29,000	10,000	5,000	44,000	
12	Rangkhiat	Shri Tairanson Thongni	2	5	7	1	1	2	1	28,000	8,000	9,000	45,000	
13	Rangkhiat	Shri Dranglyn S Lyngdoh	4	4	8	2	1	3	1	30,000	10,000	5,000	45,000	
14	Rangkhiat	Shri Gringlan Nongphlang	2	-	2	2	2	4	2	25,000	15,000	1,000	41,000	
15	Rangkhiat	Shri Stulding Marshra	3	5	8	3	1	4	1	30,000	13,000	8,000	51,000	
16	Rangkhiat	Shri Robet Nongphlang	4	6	10	2	2	4	1	31,000	12,000	2,000	45,000	
17	Rangkhiat	Shri Khrawbor Marshra	2	3	5	2	2	4	1	26,00	24,000	1,000	51,000	
18	Rangkhiat	Shri Diamonstar Thongni	2	2	4	1	1	2	1	24,000	10,000	1,000	35,000	
19	Rangkhiat	Shri Kynphamstar	2	1	3	1	1	2	1	27,000	14,000	2,000	43,000	
20	Rangkhiat	Smt Lendaris Kharsaw	2	1	3	5	4	9	3	32,000	10,000	10,000	55,000	
21	Rangkhiat	Shri Fulgensijul	4	6	10	4	3	7	2	35,000	10,000	10,000	55,000	
22	Rangkhiat	Smt Ninelydaris	1	3	4	1	1	3	1	29,000	10,000	1,000	31,000	
23	Rangkhiat	Smt Philisita S Lyngdoh	4	4	8	1	1	2	1	22,000	8,000	10,000	41,000	
24	Rangkhiat	Smt Kisfully Kharsaw	1	4	5	1	1	2	1	25,000	5,000	1,000	31,000	
25	Rangkhiat	Shri Billyshan Syrman	1	7	8	2	2	4	1	30,000	10,000	5,000	45,000	
26	Rangkhiat	Shri Maitphanlin	2	2	4	4	3	7	2	33,000	11,000	9,000	53,000	
27	Rangkhiat	Shri Tipborlin Nonglang	2	2	4	1	1	2	1	38,000	5,000	2,000	45,000	
28	Rangkhiat	Smt Pyndaplin	2	1	3	1	1	2	1	20,000	10,000	3,000	33,000	
29	Rangkhiat	Shri Debralin Wahlang	2	4	6	3	2	5	2	34,000	10,000	10,000	54,000	
30	Rangkhiat	Shri Kiliyes Sylemiong	2	6	8	2	1	3	1	29,000	10,000	5,000	44,000	
31	Rangkhiat	Smt Prisila S Lyngdoh	1	-	1	1	1	2	1	20,000	9,000	1,000	30,000	
32	Rangkhiat	Smt Jeniles	1	1	2	1	1	2	1	21,000	8,000	1,000	30,000	
33	Rangkhiat	Shri Klinislan Syrman	1	-	1	2	1	3	1	30,000	7,000	2,000	39,000	

34	Rangkhiat	Smt Damitre S Lyngdoh	1	2	3	1	1	2	1	25,000	5,000	2,000	32,000	
35		Total	80	108	188	79	67	147	56	9,69,000	3,26,000	2,00,000	15,16,000	

	Name of the village				Total	Ownersh	nip of land	in Ha	Total		Total annu come(inRu			Remarks
Sl. No.		Name of the Head of the Family	Total no of Adult	Total no of Minor	includin g head of family	Cultivabl e land	Non cultivab le land	Total area	Area under cultivati on at present	Agricul ture	Livesto ck	Labour/B ussiness	Total annual Income	
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Phlangdiloin	Shri David N Giri	2	2	4	2	1.5	3.5	1	30,000	20,000	4,35,000	4,85,000	
2	Phlangdiloin	Shri Manbha Nongrum	4	3	7	3	-	3	1.5	18,000	700	50,000	69,200	
3	Phlangdiloin	Shri Final Rose Nonglang	2	5	7	3.5	1.5	5	1.5	30,000	2,000	15,000	65,000	
4	Phlangdiloin	Shri Dlesstar Nongphlang	2	3	5	10	2	12	4	10,000	20,000	1,40,000	1,80,000	
5	Phlangdiloin	Shri Swellyros L Lyngdoh	1	3	4	3	2	5	2	30,000	2,000	1,22,000	1,54,000	
6	Phlangdiloin	Shri Hardingwell Thongni	2	5	7	5	5	10	2	25,000	-	30,000	55,000	
7	Phlangdiloin	Smt Ernes Marshra	4	4	8	1	.5	1.5	1	25,000	5,000	30,000	60,000	
8	Phlangdiloin	Shri Westerly Dkhar	3	3	6	.5	.5	1	5	20,000	10,000	40,000	70,000	
9	Phlangdiloin	Shri Silasting Nongphlang	4	3	7	2	1	3	1	10,000	5,000	1,40,000	1,55,000	
10	Phlangdiloin	Shri Blassius Thongni	4	2	6	3	1	4	2	50,000	1,000	30,000	81,000	
11	Phlangdiloin	Shri Besterling Lyngdoh	2	3	5	3	1	4	2	50,000	20,000	30,000	1,00,000	
12	Phlangdiloin	Shri Landing Nongphlang	2	4	6	2	2	4	2	20,000	1,000	1,60,000	1,80,000	
13	Phlangdiloin	Shri Rosman Thongni	2	5	7							50,000	50,000	
14	Phlangdiloin	Shri Franklin Thongni	4	3	7	2	1	3	5	10,000	1,000	40,000	51,000	
15	Phlangdiloin	Smt Evamary N Phlang	1	0	1							28,300	28,300	
16	Phlangdiloin	Smt Aisidora Nonglang	2	3	5	3		3	1.5	18,500	7,500	50,000	93,000	
17	Phlangdiloin	Smt Meribel Thongni	1	3	4	3		3	1	1,500	1,000	23,000	25,500	
18	Phlangdiloin	Shri Josterfill Thongni	2	4	6	2	1	3	1	10,000	5,000	1,40,000	1,55,000	
19	Phlangdiloin	Smt Kmendolina	3	2	5	1	1.5	2.5	1	30,000		1,500	45,000	
20	Phlangdiloin	Shri Dominic Riangshiang	2	6	8	4		4	1.5	10,000	2,000	30,000	42,000	
21	Phlangdiloin	Smt kwestina Nonglang	3	3	6	1	1.5	2.5	1	10,000		20,000	30,000	
22	Phlangdiloin	Smt Elsistina Thongni	1	2	3	2		2	.5	3,000		36,000	39,000	
23	Phlangdiloin	Shri Skallin Thongni	2	3	5	2		2	.5	2,500		1,20,000	1,22,500	
24	Phlangdiloin	Shri Protasius Syiemiong	2	9	11	1	1.5	2.5	.5	30,000	1,000	22,000	53,000	
25	Phlangdiloin	Shri Terensius Lyngkhoi	2	7	9	1	.5	1.5	1	40,000	1,000	20,000	61,000	
26	Phlangdiloin	Shri Herman Thongni	2	3	5	2	1	3	.5	10,000	20,000		30,000	
27	Phlangdiloin	Shri Ephriem S Lyngkhoi	2	3	5	.5	.5	1	.5	20,000	10,000	10,000	40,000	
28	Phlangdiloin	Shri Gilbert Syiemiong	2	3	5	4		4	1.5	30,000	1,000	22,000	53,000	

29	Phlangdiloin	Smt klerentina S Lyngdoh	3	4		7	2	9	2.5	8,000	1,500	25,000	34,500	
30	Phlangdiloin	Shri Twingkel Thongni	2	6	8	2	1	3	2.5	22,500	8,000	36,000	66,500	
31	Phlangdiloin	Shri Medingland Myrthong	3	5	8	4	1.5	5.5	4	28,800	16,200	50,000	98,000	
32	Phlangdiloin	Shri Dwingly Thongni-iong	2	5	7	3	2	5	3	18,000	12,000	76,000	46,000	
33	Phlangdiloin	Shri Apmondar Marshillong	2	4	6	1.5	2	3.5	1.5	16,000	23,500	28,500	68,000	
34	Phlangdiloin	Shri Nasarius Imiong	2	3	5	2.5	1.5	4	2.5	26,000	18,300	21,700	65,700	
35	Phlangdiloin	Smt Nesibon Thongni	1	2	3	3.5	1	4.5	3.5	32,000	17,700	26,200	75,900	
36	Phlangdiloin	Smt Lididora Thongni	1	6	7	2	1	3	2.5	30,000	12,000	6,000	48,000	
37	Phlangdiloin	Shri Quictonal Nongrum	2	4	6	5	2	7	5	25,000	8,000	27,800	60,800	
38	Phlangdiloin	Shri Phrolington Lyngkhoi	3	4	7	6	1	7	6	28,000	10,000	1,30,000	1,68,000	
39	Phlangdiloin	Shri Brestonel Thongni	2	7	9	1	2	3	1	20,500	11,200	10,000	41,700	
40	Phlangdiloin	Smt Distilda Mawlieh	1	7	8	2	2	4	2	12,000	6,500	20,000	38,500	
41	Phlangdiloin	Shri Joynal Abdin Ali	2	6	8	3	1	4	3	18,000	2,000	30,000	50,000	
42	Phlangdiloin	Shri Worfil Thongni	2	4	6	1	1	2	1	6,000	12,000	20,000	38,000	
43	Phlangdiloin	Shri Micheal S Lyngdoh	1	4	5	2	1	3	2	13,000	16,000	10,000	39,000	
44	Phlangdiloin	Shri Evarland Nongsiej	2	4	6	2	1.5	3.5	2	11,000	18,000	8,000	37,000	
45	Phlangdiloin	Smt Kwentinoris Nongphlang	1	4	5	4	2	6	4	25,000	1,000	20,000	46,000	
46	Phlangdiloin	Shri Graiswillstone Imiong	2	6	8	1	2	3	1	6,500	500	30,700	47,700	
47	Phlangdiloin	Delistina Nongphlang	2	10	12	6	1	7	6	38,000	1,500	10,000	49,500	
48	Phlangdiloin	Shri Berally Thongni	3	2	5	15	10	25	15	1,20,985	35,000	2,400	1,58,385	
49	Phlangdiloin	Shri Oparmos Syiemiong	4	2	6	9	5	14	9	72,000	30,000	10,000	1,12,000	
50	Phlangdiloin	Shri nuksababha Thongni	2	2	4	7	3	10	7	42,000	2,500	6,000	73,000	
51	Phlangdiloin	Shri Goslgy Imiong	4	2	6	10	20	30	10	30,000	6,000	2,40,000	2,76,000	
52	Phlangdiloin	Shri Jesterwell Imiong	3	1	4	3	2	5	3	20,000	9,000	18,000	47,000	
53	Phlangdiloin	Shri Onamstar Syiemiong	2	3	5	1	5	6	1	5,000	3,000	71,500	79,500	
54	Phlangdiloin	Smt Thwin Sangriang	1	3	4	1	1	2	1	6,000	9,000	36,000	51,000	
55	Phlangdiloin	Smt Plistina Thongni	3	4	7	2	1	3	2	14,000	8,000	36,000	58,000	
56	Phlangdiloin	Shri Stikshanroy Marngar	4	3	7	2	0	2	2	13,500	16,000	12,500	42,000	
57	Phlangdiloin	Shri Rangborlin Thongni	3	5	8	4	1	5	4	24,300	12,200	15,000	51,500	
58	Phlangdiloin	Shri Jesmanroy K Dewsaw	2	5	7	2	1	3	2	12,000	10,000	20,000	42,000	
59	Phlangdiloin	Shri Lovelyson Thongni	2	6	8	3	1.5	4.5	1.5	30,000	20,000	25,000	75,000	
60	Phlangdiloin	Shri Bassius Thongni	2	4	6	2	1	2	1	25,000	18,000	23,000	67,000	
61	Phlangdiloin	Shri Ames Thongni	2	1	3	2	1	2	1	27,000	19,000	24,000	70,000	
62	Phlangdiloin	Shri Brimly Lyngdoh	2	0	2	1.5	1	2.5	0.5	20,000	16,000	15,000	57,000	
63	Phlangdiloin	Shri Helistrida Thongni	1	4	5	3	1.5	4.5	1.5	25,000	18,000	19,000	61,000	
64	Phlangdiloin	Shri Harlin Imiong	2	2	4	3	1.5	4.5	1.5	25,000	19,000	18,000	62,000	
65	Phlangdiloin	Shri Lisparly Thongni	2	2	4	3	1.5	4.5	1.5	25,000	20,000	20,000	65,000	
66	Phlangdiloin	Shri Beltishal Thongni	4	4	8	2	1	3	1	20,000	11,000	20,000	51,000	
67	Phlangdiloin	Shri Phrangstarwell Thongni	2	4	6	4	3	7	1	40,000	30,000	27,000	97,000	
68	Phlangdiloin	Shri Phillip sohshang	2	5	7	2	1.5	3.5	0.5	25,000	20,000	17,000	63,000	

69	Phlangdiloin	Shri Rodri Marshra	2	4	6	2	1.5	3.5	1	20,000	18,000	15,000	53,000	
70	Phlangdiloin	Smt Lstarda Syrman	3	3	6	3	2	5	1	30,000	25,000	20,000	75,000	
71	Phlangdiloin	Shri Khrisdin Thongni	3	1	4	2	1.5	3.5	0.5	25,000	20,000	18,000	63,000	
72	Phlangdiloin	Shri Lucasson K shiiing	2	6	8	3	2	5	3	30,000	27,000	18,000	75,000	
73	Phlangdiloin	Smt Dahunshisha Thongni	1	3	4	2	1.5	3.5	0.5	28,000	20,000	19,000	67,000	
74	Phlangdiloin	Shri Novel Imiong	4	2	6	2	1	3	1	20,000	20,000	13,000	53,000s	
75	Phlangdiloin	Smt Tignlina Thongni	2	1	3	3	2	5	1	30,000	20,000	25,000	75,000	
76	Phlangdiloin	Smt Dondor Marngar	3	4	7	3	2	5	1	30,000	25,000	20,000	75,000	
77	Phlangdiloin	Shri Kyllishon Lyngdoh	4	2	6	2	1.5	2.5	0.5	27,000	20,000	18,000	65,000	
78	Phlangdiloin	Shri Ploster Myrthong	2	6	8	4	3	7	1	35,000	20,000	18,000	73,000	
79	Phlangdiloin	Shri Bastibal Sylemiong	2	3	5	1	0.5	1.5	0.5	25,000	18,000	16,000	59,000	
80	Phlangdiloin	Shri Gabriel Thongni	2	4	6	2	1	3	1	27,000	23,000	20,000	70,000	
81	Phlangdiloin	Shri Alandonal Thongni	2	5	7	2	1.5	3.5	0.5	25,000	20,000	18,000	63,000	
82	Phlangdiloin	Shri Royalson Thongni	2	5	7	3	2	5	1	28,000	25,000	20,000	73,000	
83	Phlangdiloin	Shri Tainingstar Shangrit	2	0	2	2	1	3	1	28,000	26,000	23,000	77,000	
84	Phlangdiloin	Shri asanter Thongni	2	3	5	3	2	5	1	30,000	25,000	20,000	75,000	
85	Phlangdiloin	Shri Phassius Thongni	2	6	8	1	0,5	1.5	1	24,000	19,000	18,000	61,000	
86	Phlangdiloin	Smt Bersheba Wahlang	2	7	9	3	2	5	1	27,000	20,000	18,000	65,000	
87	Phlangdiloin	Shri Straithwater Marshra	2	3	5	3	2	5	1	30,000	25,000	20,000	75,000	
88	Phlangdiloin	ShriKassius Thongni	2	6	8	2	1	3	2	11,700	9,000	20,000	40,700	
89	Phlangdiloin	Shri Beswell Thongni	2	5	7	1.5	2	3.5	1.5	8,500	72,000	6,000	86,500	
90	Phlangdiloin	Shri Fransis Thongni	2	2	4	2.5	1	3.5	2.5	14,000	18,000	16,000	48,000	
91	Phlangdiloin	Shri Pailandar Paliar	2	3	5	5	3	8	5	30,000	20,000	8,000	58,000	
92	Phlangdiloin	Shri Oldingstone	2	4	6	1	1	2	1	5,800	10,000	35,000	50,800	
93	Phlangdiloin	Shri Bransly Thongni	2	6	8	3	1	4	3	17,000	12,000	24,000	54,000	
94	Phlangdiloin	Shri Shngainkupar Dkhar	2	2	4	0.5	1	1.5	0.5	4,000	16,500	28,000	48,000	
95	Phlangdiloin	Shri Isakiel Marngar	2	6	8	2	0.5	2.5	2	12,000	12,000	30,000	54,000	
96	Phlangdiloin	Shri Aldrin Imiong	2	3	5	1	1	2	1	5,800	18,200	28,000	52,000	
97	Phlangdiloin	Shri Abester Imiong	2	2	4	1	1.5	2.5	1	6,000	12,000	20,000	38,000	
98	Phlangdiloin	Shri Dishon Lyngdoh	2	2	4	1	1	2	1	6,000	20,000	15,000	41,000	
99	Phlangdiloin	Shri Daulus Nongphlang	2	3	5	2	1	3	2	12,000	8,000	40,000	60,000	
100	Phlangdiloin	Shri Transius S Lyngdoh	3	3	6	1	1	2	1	6,200	14,400	36,400	57,000	
101	Phlangdiloin	Shri Ioanis Nonphlang	2	1	3	3	1	4	3	17,800	13,000	40,200	71,000	
102	Phlangdiloin	Shri Thomas Thongni	3	2	5	1	0.5	1.5	1	5,000	10,000	45,000	60,000	
103	Phlangdiloin	Shri Kyntiewkupar Thongni	2	2	4	0	1.5	1.5	0	0	3,000	42,000	45,000	
104	Phlangdiloin	Shri Tarcis Dkhar	2	4	6	1	1	2	1	6,000	4,000	36,000	46,000	
105	Phlangdiloin	Shri Sorking Langrin	2	2	4	2	3	5	2	11,800	22,200	10,000	44,000	
106	Phlangdiloin	Shri Phasterwell Imiong	2	4	6	1	1	2	1	5,900	4,000	40,700	50,600	
107	Phlangdiloin	Shri Shngainkupar Syiemiong	2	2	4	2	0	2	2	12,300	8,200	24,600	45,100	
108	Phlangdiloin	Shri Shembel Thongni	2	3	5	1	1	2	1	6,000	8,000	58,000	72,000	

109	Phlangdiloin	Shri Sylvester Thongni	2	4	6	1.5	1	2.5	1.5	6,200	4,200	66,000	76,400	
110	Phlangdiloin	Shri Primrose Thongni	1	0	1	1	0	1	1	5,700	3,300	24,000	33,000	
111	Phlangdiloin	Shri Standar Thongni	3	4	7	2	1	3	2	12,100	6,700	48,200	67,000	
112	Phlangdiloin	Smt SukjailinThongni	1	3	4	1	1	2	1	5,400	12,300	18,400	36,100	
113	Phlangdiloin	Shri Shainingstar Thongni	2	3	5	3	1	4	3	17,000	8,000	30,000	55,000	
114	Phlangdiloin	Shri Romius Thongni	1	0	1	1	2	3	1	5,000	3,000	28,000	36,000	
115	Phlangdiloin	Shri Micheal J Myrthong	2	3	5	1	0	1	1	5,200	4,600	1,20,000	1,29,800	
116	Phlangdiloin	Shri Khlainborlang Myrthong	2	2	4	2	1	3	2	12,000	5,000	52,000	69,000	
117	Phlangdiloin	Smt Natalis S Marngar	2	4	6	1.5	1	2.5	1.5	7,500	10,300	38,200	56,000	
118	Phlangdiloin	Shri Dishon Shangrit	2	3	5	1.5	1	2.5	1.5	9,000	7,000	40,000	56,000	
119	Phlangdiloin	Smt Christine Damon Blah	2	1	3	1	1	1	0.5	6,000	8,500	48,000	62,500	
120	Phlangdiloin	Shri Gilbert S Lyngdoh	2	1	3	2	2	1	1	12,400	9,000	30,000	51,400	
121	Phlangdiloin	Shri Jamborlin Shangrit	2	1	3	2	2	1	1	12,000	11,000	28,000	51,000	
122	Phlangdiloin	Shri Bryllen Henry Syiemiong	2	2	4	1	15	1.5	1	6,000	36,000	2,800	44,800	
		Total	271	429	690	315.5	210.5	496	246	2393896	1523212	4629613	8534399	

					Total	Owners	nip of land	in Ha	Total		Total annu come(inRu			
Sl. No.	Name of the village	Name of the Head of the Family	Total no of Adult	Total no of Minor	includin g head of family	Cultivabl e land	Non cultivab le land	Total area	Area under cultivati on at present	Agricul ture	Livesto ck	Labour/B ussiness	Total annual Income	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Pyndensynia	Alexander Thongni	2	6	8	2	1.5	3.5	3.5	45,000	10,000	25,000	80,000	
2	Pyndensynia	Thessoloni Thongni	3	1	4	3.5	1.5	4.5	1	30,000	2000	15,000	65,000	
3	Pyndensynia	Mackdonal Lyngdoh	3	7	10	2	2	4	1	10,000	1,000	1,40,000	1,51,000	
4	Pyndensynia	Budman Nongsiang	5	1	6	3	2	5	2	30,000	2,000	1,22,000	1,54,000	
5	Pyndensynia	Amos Thongni	6	3	9	5	1	6	2	25,000		30,000	55,000	
6	Pyndensynia	Plistarwell Thongni	4	4	8	1	0.5	1.5	1	25,000	5,000	30,000	55,000	
7	Pyndensynia	Dinilsing Lyngdoh	2	3	5	0.5	0.5	1	0.5	20,000	10,000	40,000	70,000	
8	Pyndensynia	Nedy Thongni	2	0	2	0.5	0.5	1	0.5	20,000	10,000	10,000	40,000	
9	Pyndensynia	Antis Thongni	2	3	5							50,000	50,000	
10	Pyndensynia	Starwein Sangriang	2	3	5	2	1	3	1	10,000	5,000	1,40,000	1,55,000	
11	Pyndensynia	Maksaldis Thongni	4	1	5	3	1	4	2	50,000	1,000	30,000	81,000	
12	Pyndensynia	Philisila Syiemiong	3	3	6	3	1	4	2	50,000	20,000	30,000	1,00,000	
13	Pyndensynia	Yusta Sangriang	2	6	8	2	2	4	2	20,000	1,000	1,60,000	1,81,000	
14	Pyndensynia	Belnile Thongni	2	1	3	2	1	3	0.5	10,000	1,000	40,000	51,000	

15	Pyndensynia	Orisha Thongni	2	1	3	2	1	3	0.5	10,000		20,000	30,000	
16	Pyndensynia	Yonderking Lyngdoh	6	6	12	1	0.5	1.5	1	40,000	1,000	20,000	61,000	
17	Pyndensynia	Sunitalin Tongni	1	1	2	1	0.5	1.5	1	30,000		15,000	45,000	
18	Pyndensynia	Annebasant Thongni	2	2	4	1	1.5	2.5	1	20,000		20,000	40,000	
19	Pyndensynia	Krinshon Nonglang	5	4	9	4		4	1.5	10,000	2,000	30,000	42,000	
20	Pyndensynia	Tiewruby Syrman	1	5	6	2		2	0.5	3,000		36,000	39,000	
21	Pyndensynia	Tendis Syrman	2	3	5	2		2	0.5	3,000		36,000	39,000	
22	Pyndensynia	Evangelin S Lyngdoh	2	3	5	2		2	0.5	8,000	1,500	25,000	34,500	
23	Pyndensynia	Skatklip K Syrman	2	6	8	4		4	1.5	10,000	3,000	40,000	53,000	
24	Pyndensynia	Fuljohn L Langrin	2	4	6	1	0.5	1.5	0.5	30,000	1,000	22,000	53,000	
25	Pyndensynia	Baldestar K Syrman	2	2	4							25,500	25,500	
26	Pyndensynia	Drastowell Thongni	4	3	7	2		2	1	44,000	8,000	21,000	73,000	
27	Pyndensynia	Paswell Lyngdoh	3	5	8	3		3	1	1,500	1,000	23,000	25,000	
28	Pyndensynia	Mestonath K Lyngdoh	3	4	7	3		3	1.5	18,500	700	50,000	69,200	
29	Pyndensynia	Ediltrodis L Shiji	3	0	3					,		28,300	28,300	
30	Pyndensynia	Water Marngar	3	3	3	2	3	5	3	10,000	2,000	10,000	22,000	
31	Pyndensynia	Nerius Thongni	2	5	7	2	3	5	2	10,000	1,000	1,000	21,000	
32	Pyndensynia	Aitihun Syiemiong	2	1	3					,	2,000	10,000	12,000	
33	Pyndensynia	Disiphul Lyngdoh	2	3	5	2	2	4	1	2,500	2,000	11,000	15,500	
34	Pyndensynia	Pynshailang Sylemiong	2	4	6	2	1	3	1	5,000		10,000	15,000	
35	Pyndensynia	Drabat Marngar	2	6	8	1	3	4	1	10,000	1,000	20,000	31,000	
36	Pyndensynia	Nerius Iawphniaw	2	3	5	1	2	3	1	10,000	2,000	3,000	15,000	
37	Pyndensynia	Plaster Sylemiong	3	4	7	2	5	7	2	35,000	15,000	40,000	90,000	
38	Pyndensynia	Mostonon Nongphlang	2	7	9	6	4	10	2	40,000	3,000	40,000	1,10,000	
39	Pyndensynia	Kwerning K Bani	2	7	9						2,500	27,000	29,500	
40	Pyndensynia	Reshelin Thongni	2	1	3	1	1	2	1	3,000		10,000	13,000	
41	Pyndensynia	Hainulist Thongni	4	8	12	1	2	3	1	40,000		20,000	60,000	
42	Pyndensynia	Phidalis Sylemiong	1		1	3	2	5	1	2,000		10,000	12,000	
43	Pyndensynia	Biolin Nongphlang	1	4	5	2	2	4	3	40,000	1,500	40,000	81,500	
44	Pyndensynia	Sunilsingh Lyngdph	2	2	4	3	2	5	2	15,000	10,000	20,000	45,000	
45	Pyndensynia	Darihun Myrthong	2	1	3	2	3	5	2	10,000	15,000	30,000	55,000	
46	Pyndensynia	Baiamon Lyngdoh	1		1	3	2	5	3	15,000	1,000	40,000	65,000	
47	Pyndensynia	Bakar Thongni	4	5	9	3	4	7	1	30,000	4,000	50,000	84,000	
48	Pyndensynia	Herbest Nongphlang	5	1	6	8	2	10	4	80,000	12,000	25,000	1,17,000	
49	Pyndensynia	Pauljinstar Nonglang	2	4	6	3	2	5	1.5	30,000		30,000	60,000	
50	Pyndensynia	Drepstarwell Thongni	2	2	4	2		2	0.5	3,000		47,000	50,000	
51	Pyndensynia	Elinking S Lyngdoh	2	1	3	1		1	0.5	3,000		47,000	50,000	
52	Pyndensynia	Sirinus S Lyngdoh	3	3	6	7	1	8	2	10,000	2,000	50,000	62,000	
53	Pyndensynia	Srildaris S Lyngdoh	2	6	8	2		2	1	5,000		1,20,000	1,25,000	
	· · ·	Total	137	172	306	116.5	65.5	181.5	67.5	981500	162200	1984800	3186000	

					Total	Ownersh	nip of land	in Ha	Total		otal ann me(inRu			
Sl. No.	Name of the village	Name of the Head of the Family	Total no of Adult	Total no of Minor	includin g head of family	Cultivabl e land	Non cultivab le land	Total area	Area under cultivatio n at present	Agricul ture	Livest ock	Labour/B ussiness	Total annual Income	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Phlangmawprah	Shri Skelly Thongni	5	8	13	6	5	11	5	30,000			80,000	
2	Phlangmawprah	Shri Braitstar Nonglang	2	3	5	2	1	3	2	15,000			20,000	
3	Phlangmawprah	Smt Elmolin Thongni	4	3	7	3	2	5	3	15,000			25,000	
4	Phlangmawprah	Shri Sharli Paliar	2		2	1	1	2	2	10,000			15,000	
5	Phlangmawprah	Shri Swenderwell	2	6	8	3	2	5	5	20,000			35,000	
6	Phlangmawprah	Shri Winningston Myrthong	7	6	13	3	2	5	3	20,000			30,000	
7	Phlangmawprah	Shri Resterwell Thongni	2	1	3	3	1	4	3	15,000			20,000	
8	Phlangmawprah	Shri Shemphang Syrman	2	1	3	2	1	3	2	10,000			20,000	
9	Phlangmawprah	Shri Besalin Wahlang	2	1	3	2	1	3	2	15,000			25,000	
10	Phlangmawprah	Shri Kyrmenskhem Myrthong	4	5	9	6	4	10	6	40,000			50,000	
11	Phlangmawprah	Shri Stanley Rynkew	3	1	4	4	2	6	4	30,000			35,000	
12	Phlangmawprah	Shri Lamborlang Warjri	2	6	8	3	2	5	3	25,000			28,000	
13	Phlangmawprah	Shri Dromly Thongni	6	3	9	4	2	6	4	25,000			30,000	
14	Phlangmawprah	Shri Sparlin Dkhar	4	1	5	2	2	4	2	25,000			35,000	
15	Phlangmawprah	Shri Stendersis Thongni	3	6	9	3	2	5	3	25,000			30,000	
16	Phlangmawprah	Shri Kwersing Thongni	5	2	7	4	2	6	4	25,000			35,000	
17	Phlangmawprah	Shri Tluden Iawphniaw	2	5	7	2	1	3	2	20,000			27,000	
18	Phlangmawprah	Smt Krisila Thongni	2	1	3	4	2	4	6	25,000			30,000	
19	Phlangmawprah	Smt Kwersila K Lyngdoh	3	3	6	3	2	5	3	20,000			25,000	
20	Phlangmawprah	Smt Trelbilen Thongni	2	1	3	3	1	4	3	15,000			25,000	
21	Phlangmawprah	Shri Phomigstar K Lyngdoh	3	5	8	3	1	3	4	20,000			30,000	
22	Phlangmawprah	Shri Mankupar Thongni	5	6	11	3	2	3	5	20,000			60,000	
23	Phlangmawprah	Smt Prillida Thongni	3	1	4	4	2	6	4	20,000			25,000	
24	Phlangmawprah	Shri Edius Paliar	3		3	4	1	5	4	25,000			30,000	
25	Phlangmawprah	Shri Fulgenstar Thongni	2	3	5	3	2	5	3	20,000			60,000	
26	Phlangmawprah	Shri Kyrmenskhem Syiemiong	2		2	2	1	3	2	15,000			20,000	
27	Phlangmawprah	Shri Klephotstar Thongni	3	6	9	4	2	6	4	20,000			30,000	
28	Phlangmawprah	Shri Phasborlin Nongpdem	2	3	5	2	2	4	2	18,000			27,000	
29	Phlangmawprah	Shri Hapjonstar Thongni	2	4	6	3	2	5	2	15,000			26,000	

30	Phlangmawprah	Shri Sainpyniar Thongni	2	3	5	2	1	3	2	10,000	20,000
31	Phlangmawprah	Shri Khespingwell Iawphniaw	2	7	9	4	2	6	4	40,000	70,000
32	Phlangmawprah	Shri Phainamstar Thngni	2	6	8	3	2	5	3	25,000	30,000
33	Phlangmawprah	Shri Sainkupar K Lyngdoh	2	2	4	2	2	4	2	20,000	24,000
34	Phlangmawprah	Shri Operateword L Ryngaid	2	2	4	2	1	3	2	15,000	23,000
35	Phlangmawprah	Shri Elinroi Thongni	2	3	5	3	1	4	3	18,000	25,000
36	Phlangmawprah	Shri Grosstarwell Thongni	2	2	4	3	2	5	3	20,000	30,000
		Total	103	116	219	110	64	169	116	746000	1150000

					Total	Ownersł	nip of land	in Ha	Total		otal ann me(inRu			
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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Nongmluh	Shri Klinilishon Nonglang	2	5	7									
2	Nongmluh	Shri Syndarson K Lyngdoh	2	5	7	3	3	6	3	15,000	700	10,000	25,700	
3	Nongmluh	Shri Groslan Nonglang	3	2	5	4	40	44	3	20,000	2,000	10,000	32,000	
4	Nongmluh	Shri Goldenstar Marshra	2	2	4	2	25	27	2	4,000	0	10,000	14,000	
5	Nongmluh	Shri Biangborlin Nonphlang	2	1	3	2	10	12	2	5,000	0	11,000	16,000	
6	Nongmluh	Smt Joycy Marshra	1	1	2	1	5	6	1	4,000	0	10,000	14,000	
7	Nongmluh	Shri Limowell Syiemiong	2	6	8	3	15	18	3	6,000	500	12,000	18,500	
8	Nongmluh	Smt Kmencydaris Marshra	2	0	2	1	6	7	1	3,000	0	11,000	14,000	
9	Nongmluh	Shri Blesstarrose Shangdiar	2	1	3	1	1	2	1	1,000	300	12,500	13,800	
10	Nongmluh	Shri Lepdingroy Marshra	3	6	9	2	23	25	2	10,000	0	10,000	20,000	
11	Nongmluh	Shri Bilonoro Wahlang	4	5	9	3	25	28	3	8,000	500	12,000	20,500	
12	Nongmluh	Shri Drolly Nongsiej	2	5	7	1	10	11	1	3,000	0	10,000	13,000	
13	Nongmluh	Shri Wilcomfort Nongrem	2	3	5	2	15	17	2	5,000	500	10,000	15,000	
14	Nongmluh	Smt Dralin Nonglang	3	3	6	2	20	22	2	6,000	0	10,000	16,000	
15	Nongmluh	Shri Meshalroy Dkhar	2	3	5	1	9	10	1	5,000	0	10,000	15,000	
16	Nongmluh	Shri Shainingstar Marshra	2	2	4	3	30	33	3	5,000	0	10,000	15,000	
17	Nongmluh	Shri Ebires Nongphlang	2	1	3	1	5	6	1	4,000	0	10,000	14,000	
18	Nongmluh	Smt Plentina Nonglang	1	0	1	1	2	3	1	5,000	500	10,000	15,500	
19	Nongmluh	Shri Moskinglan Nonglang	2	5	7	2	4	6	2	6,000	800	12,500	19,300	
20	Nongmluh	Shri Roslanduroy Marshra	2	5	7	4	30	34	4	9,500	500	10,000	20,000	
21	Nongmluh	Shri Knipskiran Marshra	2	4	6	2	18	20	2	6,000	500	12,000	18,500	
22	Nongmluh	Shri Lumlang Wahlang	2	3	5	2	3	5	2	10,000	0	10,000	20,000	

23	Nongmluh	Smt Sermoris Marshra	2	1	3	6	25	31	6	6,000	1,000	10,000	17,000	
24	Nongmluh	Shri Gasparwell Dkhar	4	2	7	5	25	30	5	5,000	500	10,000	15,000	
25	Nongmluh	Shri Columbus L Marshillong	2	4	6	6	20	26	6	6,000	500	20,000	26,500	
26	Nongmluh	Shri Sebingker Mawlot	2	4	6	3	22	25	3	5,000	0	10,000	15,000	
27	Nongmluh	Shri Phrangstul Syiemiong	1	3	4	1	13	14	1	6,000	0	11,000	17,000	
28	Nongmluh	Shri Elingstar Thongni	2	7	9	1	2	3	1	3,000	1,000	10,000	14,000	
29	Nongmluh	Shri Umiar Syiemiong	2	1	3	2	25	27	2	5,000	0	10,000	15,000	
30	Nongmluh	Smt Ebina Marshra	4	3	7	5	30	35	5	6,000	0	11,000	17,000	
31	Nongmluh	Smt Kyntinghai Syiemiong	2	2	4	3	10	13	3	5,000	0	10,000	15,000	
32	Nongmluh	Smt Shalbis Nonglang	1	3	4	2	13	15	2	5,000	1,000	10,000	16,000	
33	Nongmluh	Smt Daplin Syiemiong	2	0	2	2	8	10	2	5,000	0	10,000	15,000	
34	Nongmluh	Shri Morningstar Syiemiong	2	1	3	1	6	7	1	4,000	0	10,000	14,000	
35		Total	73	99	173	80	498	578	79	201500	10800	355000	566300	

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Sl. No.	Name of the village	Name of the Head of the Family	Total no of Adult	Total no of Minor	includin g head of family	Cultivabl e land	Non cultivab le land	Total area	Area under cultivati on at present	Agricul ture	Livesto ck	Labour/B ussiness	Total annual Income	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Mawmynsor	Shri Fulbingstar Nonglang	6	2	8	6	6	12	5	10,000	15,000	15,000	40,000	
2	Mawmynsor	Shri Mechalcalin Thongni	5	2	7	2	2	4	2	8,000	3,000	14,000	25,000	
3	Mawmynsor	Shri Dillingstar Lyngkhoi	4	2	6	4	3	7	2	10,000	5,000	15,000	30,000	
4	Mawmynsor	Shri Khrandar Thongni	7	2	9	2	1	3	1.5	10,000	5,000	13,000	28,000	
5	Mawmynsor	Shri Oldingstar Lyngkhoi	4	2	6	3	1	4	1	8,000	8,000	10,000	26,000	
6	Mawmynsor	Shri Wosking Nonglang	1	0	1	3	2	5	2	14,000	3,000	8,000	25,000	
7	Mawmynsor	Shri Coles Paliar	5	2	7	1	1	2	1	15,000	10,000	10,000	35,000	
8	Mawmynsor	Shri Tailos Lyngkhoi	6	2	8	2	0.5	2.5	1.5	10,000	10,000	15,000	35,000	
9	Mawmynsor	Shri Astringwell Kharsaw	6	2	8	3	2	5	2.5	12,000	8,000	10,000	30,000	
10	Mawmynsor	Smt Hammong Nonglang	5	1	6	1	1	2	1	9,000	5,000	11,000	25,000	
11	Mawmynsor	Smt Bresphinda Nonglang	5	1	6	1	1	2	1	7,000	6,000	7,000	20,000	
12	Mawmynsor	Smt Dilidi Nonglang	2	2	4	2	0.5	2.5	1.5	11,000	9,000	10,000	30,000	
13	Mawmynsor	Smt Philidaris Nonglang	4	2	6	4	1	0.5	1	12,000	8,000	10,000	35,000	
14		Total	60	22	82	34	22	51.5	23	136000	95000	148000	384000	

					Total	Ownersh	nip of land	in Ha	Total		Total annu come(inRu			
SI. No.	Name of the village	Name of the Head of the Family	Total no of Adult	Total no of Minor	includin g head of family	Cultivabl e land	Non cultivab le land	Total area	Area under cultivati on at present	Agricul ture	Livesto ck	Labour/B ussiness	Total annual Income	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Mawthungmlang	Shri Brindabon Marshra	3	5	8	3	1.5	3	1.5	30,000	20,000	25,000	75,000	
2	Mawthungmlang	Shri Akelius Paliar	2	12	14	2	1	2	1	25,000	18,000	23,000	67,000	
3	Mawthungmlang	Shri Geinliwel Dkhaar	2	6	8	2	1	2	1	27,000	19,000	24,000	70,000	
4	Mawthungmlang	Shri Jonawel Paliar	2	2	4	1.5	1	1.5	0.5	20,000	16,000	15,000	51,000	
5	Mawthungmlang	Shri Sunningstar Thongni	2	6	8	3	1.5	3	1.5	25,000	18,000	18,000	61,000	
6	Mawthungmlang	Shri Piswel Thongni	2	7	9	3	1.5	3	1.5	25,000	19,000	18,000	62,000	
7	Mawthungmlang	Shri Loskingdor Dkhar	2	10	12	3	1.5	3	1.5	25,000	20,000	20,000	65,000	
8	Mawthungmlang	Smt Kelina Kharsaw	1	6	7	2	1	2	1	20,000	15,000	16,000	51,000	
9	Mawthungmlang	Shri Brelding Turnia	2	8	10	4	3	4	1	40,000	30,000	27,000	97,000	
10	Mawthungmlang	Shri Melkhie Paliar	2	4	6	2	1.5	2	0.5	25,000	20,000	18,000	63,000	
11	Mawthungmlang	Shri Khoslan Thongni	2	6	8	2	1	2	1	20,000	18,000	15,000	53,000	
12	Mawthungmlang	Smt Drelsila Thongni	1	6	7	3	2	3	1	30,000	25,000	20,000	75,000	
13	Mawthungmlang	Smt Mildaris Thongni	1	3	4	2	1.5	2	0.5	25,000	20,000	18,000	62,000	
14	Mawthungmlang	Smt Joycyful Thongni	1	9	10	3	2	3	1	30,000	25,000	20,000	75,000	
15	Mawthungmlang	Shri Khrimly Dkhar	2	6	8	2	1.5	2	0.5	28,000	20,000	19,000	67,000	
16	Mawthungmlang	Shri Tiri Lyngkhoi	2	4	6	2	1	2	1	20,000	18,000	15,000	53,000	
17	Mawthungmlang	Shri Shemphang Nongphlang	2	6	8	3	2	3	1	30,000	25,000	20,000	75,000	
18	Mawthungmlang	Shri Orentis Lyngkhoi	2	4	6	4	3	7	1	50,000	35,000	30,000	1,15,000	
19	Mawthungmlang	Shri Blostar Nonglang	2	3	5	2	1.5	2	0.5	27,000	20,000	18,000	65,000	
20	Mawthungmlang	Shri Smeling Marngar	4	6	10	4	3	4	1	40,000	30,000	20,000	90,000	
21	Mawthungmlang	Shri Nostar Thongni	2	13	15	4	3	4	1	40,000	32,000	25,000	97,000	
22	Mawthungmlang	Shri Chanborlein Thongni	2	7	9	3	2	3	1	35,000	30,000	25,000	90,000	
23	Mawthungmlang	Shanbor Riamsiej	2	4	6	2	1.5	2	0.5	25,000	20,000	18,000	63,000	
24	Mawthungmlang	Smt Ridalin Thongni	2	4	6	2	1	2	1	23,000	18,000	16,000	57,000	
25	Mawthungmlang	Phaitdalin Thongni	2	3	5	1	0.5	1	0.5	25,000	18,000	16,000	59,000	
26	Mawthungmlang	Alda symber	2	1	3	1	0.5	1	0.5	24,000	19,000	18,000	61,000	
27	Mawthungmlang	Darisha Thongni	2	2	4	1	0.5	1	0.5	25,000	18,000	16,000	59,000	
28	Mawthungmlang	Iarlinda Kharsaw	1	2	3	1	0.5	1	0.5	24,000	19,000	18,000	65,000	
29	Mawthungmlang	Pherda Thongni	1	4	5	3	2	3	1	27,000	20,000	18,000	65,000	
30	Mawthungmlang	Gospar Hyniewta	2	4	6	3	2	3	1	30,000	25,000	20,000	75,000	
31		Total	57	163	220	73.5	46.5	76.5	27	840000	650000	589000	2083000	

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SI. No.	Name of the village	Name of the Head of the Family	Total no of Adult	Total no of Minor	includin g head of family	Cultivabl e land	Non cultivab le land	Total area	Area under cultivati on at present	Agricul ture	Livesto ck	Labour/B ussiness	Total annual Income	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Mawphansaw	Braitkingstar Thongni	2	5	7	3	1.5	3	1.5	30,000	20,000	25,000	75,000	
2	Mawphansaw	Goldenstar Imiong	2	6	8	4	3	4	1	40,000	30,000	27,000	97,000	
3	Mawphansaw	Astolin Syiemiong	1	4	5	2	1	2	1	20,000	18,000	15,000	53,000	
4	Mawphansaw	Noliroy k Lyngdoh	2	3	5	4	3	4	1	40,000	30,000	27,000	97,000	
5	Mawphansaw	Shri Yusstar Paliar	2	6	8	2	1	2	1	20,000	18,000	15,000	53,000	
6	Mawphansaw	Shri Vilalius Paliar	2	2	4	1	0.5	1	0.5	25,000	18,000	16,000	54,000	
7	Mawphansaw	Smt Shainphyrnai Syiemiong	1	1	2	1	0.5	1	0.5	25,000	18,000	15,000	53,000	
8	Mawphansaw	Smt Pasfulela Syiemiong	1	1	2	2	1	2	1	20,000	18,000	15,000	53,000	1
9	Mawphansaw	Shri Stikshalrose Thongni	2	2	4	3	3	6	1	30,000	25,000	20,000	75,000	
10	Mawphansaw	Shri Calton Kharkrang	2	3	5	1	0.5	1	0.5	25,000	18,000	15,000	53,000	
11	Mawphansaw	Smt Ritiful Syiemiong	2	1	3	2	1	2	1	23,000	18,000	16,000	57,000	
12	Mawphansaw	Shri Rester Well Thongni	2	1	3	1	0.5	1	0.5	20,000	18,000	15,000	53,000	
13	Mawphansaw	Smt Kyntilin Syiemiong	1	1	2	2	1.5	2	0.5	25,000	20,000	18,000	63,000	
14	Mawphansaw	Smt Baiamon Syiemiong	2	1	3	3	2	3	1	30,000	25,000	20,000	75,000	
15	Mawphansaw	Smt Iban Syiemiong	1	1	2	2	1.5	2	0.5	27,000	20,000	18,000	65,000	
16		Total	25	38	63	33	21.5	36	12.5	400000	314000	277000	976000	

					Total	Ownersh	ip of land	in Ha	Total		Fotal annu ome(inRup			
SI. No.	Name of the village	Name of the Head of the Family	Total no of Adult	Total no of Minor	includin g head of family	Cultivabl e land	Non cultivab le land	Total area	Area under cultivatio n at present	Agricult ure	Livesto ck	Labour/B ussiness	Total annual Income	Remarks
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1	Thnangbyriang	Shri Ripphlingstar Nonglang	2	2	4	2	1	3	1	30,000	20,000	25,000	75,000	
2	Thnangbyriang	Smt Priantina Syrman	2	3	5	4	3	4	1	40,000	30,000	30,000	1,00,000	
3	Thnangbyriang	Shri Gearayan Nonglang	2	3	5	2	1	2	1	20,000	19,000	20,000	50,000	
4	Thnangbyriang	Shri Korsing Marshra	2	1	3	4	3	4	1	60,000	40,000	25,000	1,25,000	
5	Thnangbyriang	Shri Lasting Kharsaw	2	6	8	3	2	3	1	20,000	30,000	25,000	75,000	
6	Thnangbyriang	Shri Orkhenal Syrman	2	0	2	2	1.5	2	0.5	30,000	25,000	18,000	74,000	
7	Thnangbyriang	Smt mulkera Syrman	2	6	8	3	2	3	1.5	40,000	30,000	35,000	1,05,000	
8	Thnangbyriang	Shri Rikheres Syrman	2	7	9	1	0.5	1	0.5	22,000	20,000	20,000	62,000	
9	Thnangbyriang	Shri Harninotis Nonglang	2	4	6	4	3	4	1	51,000	18,000	30,000	99,000	
10	Thnangbyriang	Shri Kyrmenskhem Nonglang	2	1	3	1	0.5	1	0.5	18,000	32,000	22,000	72,000	
		Total	20	33	53	26	16.5	27	9	3,31,000	2,64,000	2,50,000	8,45,000	

ANNEXURE III

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

Spacing - 8m x 6.3m

Plant Density - 200Nos.

А.	Preliminary works		
I.	Site clearance		
	3 mandays @ Rs.100/- per manday	-	Rs. 300.00
	II. Pit digging (pit size 0.45m x 0.45m x 0.45m)		
	200Nos. @ Rs.5/- each	-	<u>Rs.1000.00</u>
	Total	-	Rs.1300.00
В.	First year Planting		
	I. Cost of planting materials		
	200 Nos. @ Rs.15/- each	-	Rs.2000.00
	II. Cost of planting 200 Nos. @ Rs. 3/- each	-	Rs. 600.00
	III. Weeding two times		
	20 mandays @ Rs.100/- per manday	-	<u>Rs.2000.00</u>
	Total	-	Rs.4600.00
С.	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	-	<u>Rs. 340.00</u>
	Total	-	Rs.2700.00
	Grand Total $A+B+C = Rs.1300.00 + Rs.4600.00 + Rs.27$	= 00.00	Rs.8600.00

(Rupees Eight thousand six hundred) only.

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

Spacing 6m x 5.5m

Plant Density - 300 Nos.

B.	Preliminary works			
J.	Jungle clearance etc. 5 mandays @ Rs.100/- per manday		-	Rs. 500.00
II.	Pit digging (pit size 0.30m x 0.30m x 0.30m 300 Nos. @ Rs.4/- each	n) Total	-	<u>Rs. 1200.00</u> Rs. 1700.00
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	Total	- -	<u>Rs. 500.00</u> Rs. 5500.00
C.	Second year Planting			
I.	Vacancy refilling (10%)		-	Rs. 400.00
II.	Weeding two times 20 mandays @ Rs.100/- per manday		-	Rs. 2000.00
III.	Fire protection measures 5 mandays @ Rs.100/- per manday	Total	-	<u>Rs. 500.00</u> Rs. 2900.00
Gra	and Total $A+B+C = Rs.1700.00 + Rs.5500.0$	0 + Rs.2900.00) =	Rs.10100.00

(Rupees Ten thousand one hundred) only.

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

Spacing 6m x 5.5m

Plant Density - 300 Nos.

C.	Preliminary works			
K.	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	n) Total	-	<u>Rs. 1200.00</u> Rs. 1700.00
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	Total	-	<u>Rs. 500.00</u> Rs. 5500.00
C.	Second year Planting			
I.	Vacancy refilling (10%)		-	Rs. 400.00
II.	Weeding two times 20 mandays @ Rs.100/- per manday		-	Rs. 2000.00
III.	Fire protection measures 5 mandays @ Rs.100/- per manday	Total	-	<u>Rs. 500.00</u> Rs. 2900.00
Gra	and Total $A+B+C = Rs.1700.00 + Rs.5500.0$	0 + Rs.2900.00) =	Rs.10100.00

(Rupees Ten thousand one hundred) only.

MODEL NORMS PER HECTARE FOR IMPROVEMENT OF DEGRADED FOREST (INTEGRATED WATERSHED MANAGEMENT PROGRAMME) (Rate as per PWD, SOR for R&B 2008 – 2009)

D. <u>Preliminary works</u>

L.	Site clearance 3 mandays @ Rs.100/- per manday		-	Rs. 300.00
II.	Pit digging (pit size 0.30m x 0.30m x 0.30m 100 Nos. @ Rs.4/- each) Total	-	<u>Rs. 400.00</u> Rs. 700.00
В.	First year Planting			
I.	Cost of planting materials 100 Nos. @ Rs.8/- each		-	Rs. 800.00
II.	Cost of planting 100 Nos. @ Rs. 2/- each		-	Rs. 200.00
III.	Round Weeding around the plant four times 5 mandays @ Rs.100/- per manday		-	Rs. 500.00
IV.	Fire protection measures 4 mandays @ Rs.100/- per manday	Total	-	<u>Rs. 400.00</u> Rs.1900.00
C.	Second year Planting			
I.	Refilling vacancy (10%)		-	Rs. 100.00
III.	Round Weeding around the plant four times 5 mandays @ Rs.100/- per manday		-	Rs. 500.00
III.	Fire protection measures 4 mandays @ Rs.100/- per manday	Total	-	<u>Rs. 400.00</u> Rs.1000.00
Gra	nd Total $A+B+C = Rs.700.00 + Rs.1900.00 -$	+ Rs.1000.00	=	Rs.3600.00

(Rupees Three thousand six hundred) only.

COST NORMS FOR IMPROVEMENT OF EXISTING PADDY FIELD (INTEGRATED WATERSHED MANAGEMENT PROGRAMME) (Rate as per PWD, SOR for R&B 2008-09)

A. MARGINAL BUND:

50×<u>0.40+0.70</u>

2 ×0.60

= - Rs. 15.50m³

B. SHOULDER BUND:

$1/3$ (a) Earthwork in excavation etc. in ordinates $10 \text{ pcc} \times 50 \times 0.50 + 0.20$	nary soil		
$\frac{10 \text{ nos } \times 50 \times \underline{0.50 + 0.30}}{2} \times 0.50$		=	- Rs. 100.00 m ³
Land leveling L.S		=	<u>- Rs. 50.00m³</u> - Rs. 166.5
@ Rs. 26.00/-per m ³	Total	= =	- <u>Rs. 4329.00</u> - Rs. 4329.00
		Say	Rs.4,300.00

(Rupees Four Thousand three hundred) only.

MODEL NORMS PER HECTARE FOR STRIP PLANTATION TWO ROW ALONG THE BOUNDARY WIYH FAST GROWING SPECIES (INTEGRATED WATERSHED MANAGEMENT PROGRAMME) (Rate as per PWD, SOR for R&B 2008 – 2009)

Spacing 6m from plant to plant

Plant Density -2.5 from roe to row

E.	Preliminary works			
N	 I. Jungle clearance etc. 2 mandays @ Rs.100/- per manday 		-	Rs. 200.00
Π	. Pit digging (pit size 0.30m x 0.30m x 0.30m 134 Nos. @ Rs.4/- each	ı) Total	-	<u>Rs. 536.00</u> Rs. 736.00
B.	First year Planting			
I.	Cost of planting materials 134 Nos. @ Rs.8/- each		-	Rs. 1072.00
II.	Cost of planting 134 Nos. @ Rs. 2/- each		-	Rs. 268.00
III	. Weeding two times 6 mandays @ Rs.100/- per manday		-	Rs. 600.00
IV	 Fire protection measures 4 mandays @ Rs.100/- per manday 	Total	-	<u>Rs. 400.00</u> Rs. 2340.00
C.	Second year Planting			
I.	Vacancy refilling (10%)		-	Rs. 190.00
II.	Weeding two times 6 mandays @ Rs.100/- per manday		-	Rs. 600.00
III	 Fire protection measures 4 mandays @ Rs.100/- per manday 	Total	-	<u>Rs. 400.00</u> Rs. 1190.00

Grand Total A+B+C = Rs.736.00 + Rs.2340.00 + Rs.1190.00 = Rs.4266.00

(Rupees Ten thousand one hundred) only.

COST NORMS FOR EARTHEN CONTOUR BUND (INTEGRATED WATERSHED MANAGEMENT PROGRAMME) (Rate as per PWD, SOR for R&B 2008-09)

A. CONTOUR BUNDS SPECIFICATION & COSTS

Top Width	=	0.5m
Bottom Width	=	1.0m
Height	=	0.77m
Spacing	=	20m
Total length	=	$5 \times 100m = 500m$

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

$500m \times \frac{0.5+1.0}{2}m$ =288.5m ³		
@ Rs. 26.00/- m ³	=	Rs 7500.00
Total	=	Rs 7500.00

(Rupees Seven Thousand Five Hundred) only

COST NORMS FOR CROP DEMONSTRATION (INTEGRATED WATERSHED MANAGEMENT PROGRAMME) (Rate as per PWD, SOR for R&B 2008-09)

Crop Demonstration

Sl.No 1	Item of Works Soil working and cost of sowing – 5 Mandays @ Rs 100./- Mdays		Amount Rs 500.00
2	Cost of seeds for 4 varieties @ Rs 300/variety/Kg		Rs 1200.00
3	Organic manure		Rs 500.00
4	Watering including implements (pipe etc)		Rs 1500.00
5	Plant protection including hand sprayers		Rs 800.00
6	Mulching (winter crop to conserve moisture)/weeding/intercultural operation		<u>Rs 500.00</u>
		Total	Rs 5000.00

(Rupees five thousand)only

COST NORMS FOR EARTHEN PERIPHERAL BUNDING WITH LIVE VEGETATION PER METRE (INTEGRATED WATERSHED MANAGEMENT PROGRAMME) (Rate as per PWD, SOR for R&B 2008-09)

A. PERIPHERAL BUNDS SPECIFICATION & COSTS

Top Width	=	1.0m
Bottom Width	=	1.2m
Height	=	1.0m

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

 $1.0m \times 1.0+1.2$ m

2	$\times 1.0$	$=1.0m^{3}$		
	@ Rs. 39.00	$0/-m^3$	=	Rs 43.00

2. Supllying and planting of live hedges on to of bunds with local shrubs/cutting etc.

Per Running metre in L.S	=	<u>Rs 7.00</u>
Total	=	Rs 50.00

(Rupees Fifty) only

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