

ANNUAL REPORT 2020-2021

SOIL AND WATER CONSERVATION DEPARTMENT GOVERNMENT OF MEGHALAYA



Table of Contents

Preface

Messages

Chapter I

Introduction

- Mandate
- Aims
- Objectives
- Prerequisites
- Agenda of Action

Administrative Set-up of the Department

- Directorate, Branch Directorate, Field Offices
- Organizational Set-Up (Flow Chart)

Chapter II

Achievements (Physical/Financial) of the Department

- Budget Outlay of the Department during 2020-21
- Achievements under various schemes for 2020-21

Chapter III

• Programmes of the Department

Chapter IV

- E- Governance
- Education & Training 2020-21

Chapter V

 Photo Gallery of various Schemes implemented by Soil and Water Conservation





Soil and water are the two most important resources essential for human survival. The need for food, fodder, fiber, and shelter has led to an increase in the usage of these resources to meet human needs. In addition, with the impact of climate change and the increase in human population, these resources are in potential of getting deteriorated. Land degradation and soil erosion are the two soil deteriorating factors that account for the resources getting depleted. Change in the water quantity distribution and water quality deterioration due to various anthropogenic and natural factors have led to a constraint in the utilization of the resources. Conservation and management of these resources is the need of the hour for a sustainable environment. For a sustainable environment and agriculture, it is important to protect the soil and water resources from degradation, and best soil and water management practices are to be encouraged and adopted.

The Soil and Water Conservation Department, in its initiatives, have taken up various soil and water conservation works implemented in various schemes and programs. With great delight and immense pleasure, the Department has again come up with the Annual Report for the year 2020-21 to highlight the importance, objectives, progress, and achievements met by the Department. A glance at the Annual Report will provide necessary information on the activities ranging from the implementation of schemes and projects as well as the organizational structure and policy set-up of the Department. The efforts put in by the Department reflect the conservation and management of natural resources as well as other associated goals such as the underlying socio-economic and livelihood promotion activities, particularly of the farming community and rural population.

I am confident that the Annual Report will serve the purpose for which it is being published, providing a clear picture of the tremendous efforts put in by the Department and the milestone it has achieved. I also believe that the Annual Report will become a useful document for concerned individuals, Government officials, public and community leaders, farmers, and villages.

(W. A. Sangma)

Editor & Director Soil & Water Conservation Meghalaya, Shillong





It is with great delight to see that the Soil and Water Conservation Department is publishing its Annual Report 2020-21. I am sure that the works undertaken by the Department will reflect its tremendous outcome and productivity towards conservation and management of our natural resources.

In today's era, our land and people face tremendous challenges on many fronts, of which the environment and rural poverty are at the forefront. However, through the Government's initiatives, the Department has implemented various schemes and projects to address both of these issues. The Annual Report also features administrative matters and achievements both physically and financially, which shows that the Department is making good progress in its mandate to conserve our natural environment and facilitate development, particularly in rural communities.

I am sure that the Annual Report will not only provide information about the works of the Department but also serve as a guide of co-operation and participation of a broad spectrum of society, agencies and interested individuals in achieving the common goals of natural resources conservation and management. I would also like to take this opportunity to congratulate all the members of the Editorial Board, and all the Officers and Staff of the Department who are involved in providing inputs and information in the preparation of the Annual Report and making the report a successful publication.

(Dr. Joram Beda)
Secretary
Government of Meghalaya
Soil & Water Conservation Department





I am pleased and delighted to know that the Soil and Water Conservation Department is publishing the Annual Report 2020-21 to journal the services and success it renders to the people of Meghalaya.

The activities and performance highlighted in the Annual Report will provide insights into works, interventions, success stories, and the best practices that evolve out of the schemes and projects implemented by the Department. I hope that the information provided will generate interest and create awareness of the Department's role in improving the lives of the rural community through livelihood promotion.

I extend heartfelt gratitude to the officers and staff of the Department for rendering their efforts, strength, and wisdom in accomplishing the objectives and goals in conserving the two most essential resources: soil and water, for a better and sustainable future. May they continue to pursue their endeavors to offer high-quality services and continue to serve the people of the State.

(Dr. Vijay Kumar)
Commissioner & Secretary
Government of Meghalaya
Soil & Water Conservation Department

Hamletson Dohling Minister,

Information Technology & Communication, Community & Rural Development and Soil and Water Conservation Departments, Meghalaya, Shillong. Room No. 412, Yojana Bhavan, Meghalaya (C) Secretariat, Shillong - 793001.



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MESSAGE

It gives me immense pleasure to see the devotion and dedication the Soil and Water Conservation Department has put into publishing the Annual Report 2020-21, highlighting the critical activities entrusted to the Department to achieve as per the Government financial provision and sanction.

I am confident that the annual Report will reflect the endeavors of the Department in implementing schemes and projects targeting the critical focus areas in protection management and conservation of the natural resources for the greater interest of the general public and particularly the farming community of the State.

I extend my wishes and sincere appreciation to the Officers and Staffs of the Department for fulfilling their duties which have enabled them to serve the people of the State in different spheres of activities particularly in conserving the soil, water and environment of this region.

I wish the publication of the Annual Report for the year 2020-21 a great success.



(Hamileson Donting)



Chapter 1

INTRODUCTION

1.1 Introduction

Meghalaya, a hilly state with its diverse agro-climatic and ecological conditions characterized by high rainfall and endowed with rich natural resources and bio-diversity is at present under intense pressure and threat due to increasing depletion of the three basic life-support systems, viz., land, water, and vegetation resources. The increasing needs of the ever increasing human population, inadequate management of resources, faulty land and water utilization and practices, climate variability, etc. have led to decreasing land productivity, depletion of water sources, deterioration of soil health, and erosion of eco-services which have subsequently resulted in land degradation, emergence of wastelands and eventually, poverty and under-development, socio-economic fragility, etc. among others. These are posing serious challenges to food, social, economic, livelihood and environment securities. Taking due cognizance of the challenges, the department is implementing various schemes and developmental programs which primarily aim at holistic development, while, at the same time, is introducing and promoting a variety of interventions towards resource conservation, to ultimately achieve sustainable development.

The Soil & Water Conservation Department, since its inception have focused primarily on evolving strategies for controlling land degradation (through watershed approach), targeting area specific problems, demonstration of technologies for popularization and imparting training besides developing technologies for water harvesting and recycling.

1.1.1. Mandate

Natural resource management, particularly soil, water and vegetation resources in the context of perpetual utilization and sustainable development of the said resources to improve and sustain livelihood system and to aid in income earning activities of the user communities

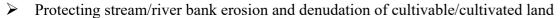
1.1.2. Aims

- To promote sustainable utilization of soil, water and vegetation resources
- > Sustainable food support and water needs
- To promote social, economic and ecological development

1.1.3. Objectives

- Dissipating accelerated soil erosion, surface runoff and erosion of topsoil
- Enhancing water holding capacity of the soil
- Improving soil moisture regime within the soil profile/monolith
- Promoting soil health and tilth
- ➤ Providing soil cover with forest trees/fruit trees/plantation crops etc.





- Protecting drainage area of water sources
- ➤ Harvesting rainwater for multipurpose utilities
- > Enhancing agricultural crop productivity
- Promoting integrated farming system
- Promoting livelihood and gainful employment opportunities

1.1.4. Prerequisites

In the endeavor for natural resources management, it is important for the local partners in development, the local institutions, community, stakeholders and users to unreservedly, voluntarily and actively participate in the different phases viz. exploratory, planning phases and upward. Secondly, it is also equally required for other development Departments to willingly participate for ensuring convergence to bring about holistic and realistic development of the people. Lastly, the importance of Public-Private Partnership in up-scaling the natural resources management programmes require no emphasis.

1.1.5. Agenda of Action

To ensure that the service-deliveries promote and meet the afore-cited aims and objectives, a mechanism to take forward the system is required. They are underlined as follows:

- Formulation of Land Use and Action Plan on a participatory mode; adoption of appropriate soil and water conservation techniques and measures preferably on a Watershed basis, which is increasingly recognized as an ideal approach for Integrated Natural Resources Management Programme.
- Strengthening the information, Education, Communication Systems, and Capacity Building & Demonstration.
- Application of science and technology and research & development inputs.
- Awareness campaign, mobilization and organization of the community, empowerment, building their capacity, up gradation of local skills.
- Promotion and encouragement of Self Help Institutions and other promoting institutions. Designing mechanism to monitor and evaluate socio-techno-economic impacts and results.

1.2. Administrative Setup of the Department

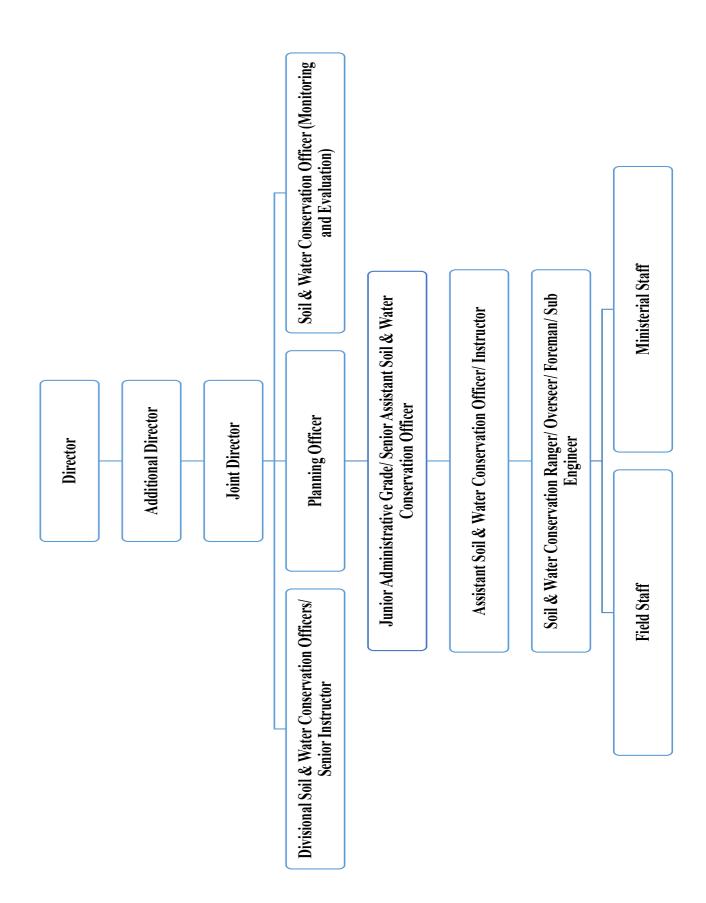
1.	DIRECTORATE OF SOIL & WA	ATER CONSERVATION
		➤ Research & Training, Conservation Training Institute, Byrnihat.
2	BRANCH DIRECTORATE	> Jhum Control, Tura
3	FUNCTIONAL DIVISIONS	Project Formulation Cell Soil and Water Conservation, Soil Survey Division Soil and Water Conservation, Engineering Division
4	DISTRICT/FIELD DIVISIONS	In the field, the works of the Department are executed by the Territorial and the Plantation Crop Divisions supported by the Soil & Water Conservation Ranges and Soil & Water Conservation Beat offices.

SI No. District Range/ Beat Office East Khasi Hills Shillong Soil and Water Conservation (Terri-Southern Soil & Water Conservation Range, Mawphlang. District torial) Division, Shillong 2. Shillong Soil & Water Conservation Range, Shillong. 3. Laitlyngkot Soil & Water Conservation Range, Laitlyngkot. 4. Watershed Management Soil & Water Conservation Range, Shil-5. Sohra Soil & Water Conservation Range, Sohra. Shillong Soil and Water Conservation (Plan-Shillong Soil and Water Conservation (Plantation Crop) Range, tation Crop) Division, Shillong Shillong Beat Office . Weiloi Soil & Water Conservation Beat Office, Weiloi. West Jaintia Jowai Soil and Water Conservation (Territo-. Jowai Soil & Water Conservation Range, Thadlaskein. Hills District rial) Division, Shillong 2. Amlarem Soil & Water Conservation Range, Amlarem. 3. Watershed Management Soil & Water Conservation Range 4. Shangpung Soil & Water Conservation Range, Shangpung. Jowai Soil and Water Conservation (Planta-1. Amlarem Soil and Water Conservation (Plantation Crop)Range tion Crop) Division, Jowai 2. Namdong Soil and Water Conservation (Plantation Crop) Division, Namdong 3. Lumshnong Soil & Water Conservation (Plantation Crop) Range Lumshnong. East Jaintia Hills Soil & Water Conservation East Jaintia Khliehriat Soil & Water Conservation Range, Khliehriat. Hills District Division, Khliehriat 2. Lumshnong Soil & Water Conservation Range, Lumshnong. Ri – Bhoi Ri-Bhoi Soil and Water Conservation Divi-1. Nongpoh Soil & Water Conservation Range, Nongpoh. District sion, Nongpoh 2. Patharkhmah Soil & Water Conservation Range, Patharkhmah. 3. Sonidan Soil & Water Conservation Range, Sonidan. 4. Marngar Soil & Water Conservation (Plantation Crop) Range Marngar Beat Office 1. Umroi Soil & Water Conservation Beat Office, Umroi. West Khasi Nongstoin Soil and Water Conservation 1. Riangdo Soil & Water Conservation Range, Riangdo. Division Hills District 2. Mairang Soil & Water Conservation Range, Mairang. 3. Nongstoin Soil & Water Conservation Range, Nongstoin. 4. Watershed Management Soil & Water Conservation Range Nongstoin. Beat Office 1. Sonapahar (Plantation Crop) Beat Office, Sonapahar South West South West Khasi Hills Soil and Water Con-. Mawkyrwat Soil & Water Conservation Range, Mawkyrwat. Khasi Hills servation Division, Mawkyrwat District 2. Border Areas Soil & Water Conservation Range, Ranikor.

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7	West Garo Hills District	Tura Soil and Water Conservation (Territorial) Division, Tura	1. Southern Soil & Water Conservation Range, Machangpani.
			2. Central Soil & Water Conservation Range, Tebronggre.
			3. Anogre Soil & Water Conservation Range, Anogre.
			4. Damjonggre Soil & Water Conservation Range, Damjonggre
			5. Jongchipara Soil & Water Conservation Range, Jongchipara.
			6. Watershed Management Soil & Water Conservation Range, Tura.
		Tura Soil and Water Conservation (Plantation Crop) Division, Tura	Danakgre Soil & Water Conservation (Plantation Crop) Range, Danakgre
		Beat Office	Dadengre Plantation Crop Soil & Water Conservation Beat Office, Dadengre
8	South Garo Hills District	South Garo Hills Soil and Water Conserva- tion Division, Baghmara	1. Baghmara Soil & Water Conservation Range, Baghmara
			2. Chokpot Soil & Water Conservation (Plantation Crop) Range, Chokpot
		Beat Office	Rongara Soil & Water Conservation PlantationCrop Beat Office, Rongara
9	South West Garo Hills District	South West Garo Hills Soil and Water Conservation Division, Ampati	Damalgre Soil & Water Conservation Range, Damalgre
			2. Zikzak Soil & Water Conservation Range, Zikzak
10	East Garo Hills District	Simsanggre, Soil and Water Conservation, Division, Williamnagar	Eastern Soil & Water Conservation Range, Songsak Bonegre.
			2. Watershed Management Soil & Water Conservation Range, Williamnagar.
			3. Williamnagar Soil & Water Conservation (Plantation Crop) Range, Williamnagar
		Beat Office	Rongjeng Plantation Crop Beat Office, Rongjeng
11	North Garo Hills District	North Garo Hills Soil and Water Conserva- tion Division, Resubelpara	Mendipathar Soil & Water Conservation Range, Mendipathar.
			2. Northern Soil & Water Conservation Range, Wageasi.
			3. Wageasi Soil & Water Conservation Plantation Crop Range, Wageasi
		Beat Office	Adokgre Soil & Water Conservation Beat Office, Adokgre.
			2. Kharkutta Plantation Crop Beat Office, Kharkutta

1.3. Organizational Set-Up of the Soil & Water Conservation



Chapter 🚄

ACHIEVEMENTS (PHYSICAL / FINANCIAL) OF THE DEPARTMENT

Statement Indicating the Budget Outlay and Expenditure inRespect of Development Expenditure Budget2020-21

(Rs in Lakh)

Major/Minor Head of Deptt./Scheme	Budget Outlay (Devp.) 2020-21	Expenditure
(1)	(2)	(3)
REVENUE HEAD		
SOIL & WATER CONSERVATION SECTOR		
2216. HOUSING - <u>STATE SCHEMES</u>		
07. HOUSING		
800. Other Expenditure		
(01) Construction	0.00	
TOTAL 2216	0.00	
2402. SOIL & WATER CONSERVATION		
STATE SCHEMES		
001. DIRECTION & ADMINISTRATION		
(01) Directorate of Soil Conservation		
(02) Divisional Soil Conservation Offices	572.41	447.64419
(03) Soil Conservation Range Offices	79.71	63.32912
(05) Project Formulation Cell	9.00	8.86973
(06) Soil Conservation Engineering Division		
(08) Cash Crop Division	18.00	
(10) Soil Conservation Survey Division		
TOTAL 001	679.12	519.84304
102. SOIL CONSERVATION SCHEME		
(04) Erosion Control Works	110.00	2.17820





(06) Afforestation	250.00	0.00000
(08) Water Conservation & Distribution Works / Irrigation	500.00	25.63100
(09) Cash Crop Development Works	480.00	240.00000
(10) Construction works in Urban Areas	42.28	
(11) Water Harvesting Works / Farm ponds, etc.	220.00	
(14) Integrated Watershed Management Programme (IWMP) (STATE SHARE)	140.00	13.22222
(21) Soil Conservation Scheme under NABARD Loan	1200.00	1964.38177
(23) Accelerated Irrigation Benefits Programme (AIBP) (State Share)	560.00	158.99000
TOTAL 102	3502.28	2404.40319
109. EXTENSION & TRAINING		
(01) Conservation Training Institute		
(02) Training at Soil Conservation Centre		
(03) Extension Programme & Info. Services	1.00	1.00000
TOTAL 109	1.00	1.00000
800. OTHER EXPENDITURE		
(02). Construction & Maintenance of Departmental Non-Residential Buildings		
TOTAL (02)	0.00	0.00000
(06). Meghalaya Commercial Crops Development Board	57.50	57.50000
TOTAL (06)	57.50	57.50000
TOTAL 800	57.50	57.50000
TOTAL STATE SCHEMES	4239.90	2982.74623
CENTRALLY SPONSORED SCHEMES		
102. SOIL CONSERVATION		
(14) Integrated Watershed Management Programme (IWMP) (CENTRAL SHARE)	1000.00	119.00000
TOTAL (14)	1000.00	119.00000
(23) Accelerated Irrigation Benefits Programme (AIBP) (CENTRAL SHARE)	4000.00	715.45000



	1	
TOTAL 102	5000.00	834.45000
800. OTHER EXPENDITURE		
(13) Accelerated Irrigation Benefit Programme (AIBP) (CENTRAL SHARE)		
TOTAL (13)	0.00	0.00
TOTAL 800	0.00	0.00
TOTAL CENTRALLY SPONSORED SCHEMES	5000.00	834.45000
TOTAL 2402	9239.90	3817.19623
2415. AGRICULTURAL RESEARCH & EDUCATION		
01. Soil Conservation Research Centre	5.00	5.00000
TOTAL 2415	5.00	5.00000
TOTAL REVENUE HEAD	9244.90	3822.19623
CAPITAL HEAD		
4416 CAPITAL OUTLAY ON HOUSING		
01. GOVERNMENT RESIDENTIAL BUILDING		
700. OTHER HOUSING		
(01) Construction and maintenance of Departmental Residential Building		
21. Supplies and Materials		
50. Other Charges		
53. Major Works	0.00	
Total (01)	0.00	0.00
TOTAL 4216	0.00	0.00
4402. SOIL & WATER CONSERVATION		
102. SOIL CONSERVATION		
(01) Construction of Departmental Non Residential Building		
53. Major Works	1320.10	181.50857
Total (02)	1320.10	181.50857
TOTAL 4402	1320.10	181.50857
TOTAL CAPITAL HEAD	1320.10	181.50857
GRAND TOTAL	10565.00	4003.70480

Tot development of Figure Energy in different Bisures in the States each erep Figure

$_{\text{Chapter}}3$

PROGRAMMES OF THE DEPARTMENT

3.1. Programmes of the Department

The programmes/schemes implemented by the department include both Centrally Sponsored Schemes as well as State Plan Schemes.

3.1.1. State Plan Schemes

This scheme covers the general areas outside those not specifically covered by other packages of schemes of the Department. Its main objective is to reduce soil erosion hazards and land degradation and conservation of water, where individuals/groups of farmers are targeted. Activities taken up under this Scheme includes:

- i. Water Conservation and Distribution Works
- ii. Cash/Horticultural Crop Development Works

3.1.2. Centrally Sponsored Schemes

- i. Watershed Development Component of the Pradhan Mantri Krishi Sinchayee Yojana (PMKSY-WDC) [erstwhile Integrated Watershed Management Programme, IWMP]
- ii. Pradhan Mantri Krishi Sinchayee Yojana Har Khet Ko Pani (PMKSY-HKKP).
- iii. Rashtriya Krishi Vigyan Yojana (RKVY).
- iv. National Bamboo Mission (NBM).

3.1.3. Other Schemes Implemented by the Department

- i. Springshed Development Works for Rejuvenation of Springs for Climate Resilient Development in Water Stressed Areas of Meghalaya.
- ii. Soil and Water Conservation Scheme under Rural Infrastructure Development Fund (RIDF), NABARD Loan.
- iii. Awareness Campaign and Capacity Building on Natural Resource Management (NRM)

The following schemes/programmes/projects are the currently ongoing projects implemented by the department and are discussed as follows.

3.2. State Plan Schemes/Programmes/Projects:

- i. Water Conservation and Distribution Works: Construction of diversion dams, head water dams at strategic locations to provide perennial source of irrigation to cultivated fields.
 - The works implemented under this scheme is the Construction of Water Supply at Conservation Training Institute (CTI), Byrnihat which is at a cost of Rs 25,63,100/-
- i. Cash/Horticultural Crop Development Works: The Cash Crop Development Scheme is meant for development of Plantation Crops in different Districts in the State. Cash Crop Plantations are

being encouraged in areas where cultivation of other field crops are not feasible due to steep slopes condition, soil fertility status etc. These crops will act as a cover to protect the soil from erosion and at the same time provide supplementary income to the farmers. Individual farmers are being encouraged to take up this scheme in their plots of lands at subsidized rate. TheDepartment is also taking up the works departmentally in the large areas particularly in community lands.

Physical: 1162.2862 Ha

Financial: Rs. 2,40,00,000/-

3.3.Centrally Sponsored Schemes

3.3.1. Watershed Development Component of the Pradhan Mantri Krishi Sinchayee Yojana (PMKSY-WDC) [erstwhile Integrated Watershed Management Programme, IWMP]

The Programme is the result of the new and unified approach of the GOI for treatment and development of the new generation watersheds in a realistic and holistic manner. The Government of India through the National Rainfed Area Authority (NRAA) has evolved the Common Guidelines, 2008 (revised 2011) for implementation of the Watershed Development Projects, The major areas in which paradigm shift has been made under the programme are, inter-alia, institutional funding of the State Government through the State Level Nodal Agency (SLNA) at the State Level, constitution of District and Project Level Institutions for implementation of the projects for the Participatory Watershed Projects with financial, social and economic empowerment to the watershed communities in close coordination with the local institutions. Another aspect is the equity and participatory resources management with due regards to the economically weaker section within the village community. It is a multi-sectoral and multidimensional in nature which hinges on convergence for its success. The Central and State share for the IWMP projects is in the ratio of 90:10.

Objectives:

The main objectives of the programme are as follows:

- i. To dissipate soil and water erosion and surface run-off.
- ii. To harvest/recycle surface runoff and rainwater.
- iii. To enhance soil moisture regime/ water holding capacity.
- iv. To promote sub-surface flow, base flow and ground water recharge.
- v. To improve soil health and tilth.
- vi. To improve production and productivity.
- vii. To promote generation and gainful employment opportunities.

Rationale:

The PMKSY-WDC, erstwhile IWMP is being implemented in the state in all of the 11 districts of the state. There are a total of 5 Batches containing 84 projects which were initiated from 2009-10.

Activities taken under various components of the programme:

- i. **Entry Point Activity (EPA):** Under Entry Point Activity activities like Link Road/Approach Road, Spring Tapped Chamber, Drinking Well, Foot Bridge, Public Toilet, Foot Path, Drinking Water Tank etc. are taken up.
- ii. **Arable Land Treatment :** Under this component, activities like bench terrace, improvement of existing paddy fields, Peripheral bunding, Plantation of plantation and horticultural crops etc. are taken up.
- iii. **Non-Arable Land Treatment :** Under this component, activities like Afforestation, improvement of degraded forest, Agro-Forestry activities etc. are taken up.
- iv. **Drainage line Treatment :** Under this component, activities like Water Harvesting Structure, Check dams, Dug-out ponds, Irrigation Channels, protection walls etc. are taken up.
- v. **Livelihood Activities:** Under this component, activities like Vegetables Production/ Kitchen Gardening, Composting, Tailoring, Carpentry, Weaving, Masonry/ Hollow Block Making etc. are taken up.
- vi. **Production system and micro-enterprise:** Under this component, Poultry Farming, Piggery Farming, Pisciculture, Apiculture, Mushroom cultivation Floriculture, Betel nut Processing etc. are taken up.
- vii. Capacity Building and Training: Capacity Building is one of the most important components under the Watershed Programme. Capacity Building and Training is done at all levels State Level, District Level, Project Level and the Watershed Level. Capacity Building is carried out throughout the project period right from the Preparatory Phase, Watershed Work Phase, and the Consolidation and Withdrawal Phase.
- viii. **Monitoring, Evaluation and Learning:** Monitoring and evaluation of the projects are carried out at each of the Phases (Preparatory, Watershed Work Phase, and the consolidation and Withdrawal Phase) by empaneled agencies as approved by the Department of Land Resources, MoRD, NEHU, SIRD, ICAR, NIRD etc. and also through Con-current Third-Party Monitoring and Evaluation (North Eastern Development Finance Corporation Ltd. (NEDFI).

PMKSY-WDC Batches:

- Batch I which was initiated in 2009-2010 with total projects 18 nos. has been completed in the year 2018-2019.
- Batch II which was initiated in 2010-2011 with total projects 29 nos. has been completed in the year 2018-2019.
- Batch III which was initiated in 2011-2012 with total projects 14 nos. has been completed in the year 2020-2021.
- For Batches IV and V, the implementation for 12 Nos and 11 Nos of projects respectively, has been transferred to the Government of Meghalaya vide Government of India letter Z-11011/32/2014-PPC Dated 01-08-2018.

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Meghalaya State Watershed and Wasteland Development Authority (MSWWDA)

For the state of Meghalaya, the SLNA was constituted on 25th June 2009, called the Meghalaya State Watershed & Wasteland Development Agency (MSWWDA) which has been registered under the Meghalaya Societies Registration Act, XII of 1983.

The main functions of the MSWWDA are:

- Prepare the State Perspective and Strategic Plan of watershed development of the state
- Establish and maintain a State Level Data Cell from funds sanctioned by the Government of India
- Provide technical support to the Watershed Cell cum Data Centre
- Approve independent institutions for capacity building and work out the overall capacity building strategy
- Approve Project Implementing Agencies (PIAs) identified/selected by District Level Committee by adopting appropriate objective selection criteria and transparent system
- Establish monitoring, evaluation and learning systems at various levels
- Ensure regular and quality online monitoring of watershed projects in the state

Prepare State Specific Process Guidelines, Technology Manuals, etc. in coordination with the Nodal Ministry/NRAA and operationalize the same.

List Of Sanctioned IWMP Projects of Meghalaya State During the Year 2011-12 Vide Sanction LetterNO.K.11013/1/2011/IWMP (Meghalaya), dt.30.06.2011

Batch III(2011-2012) Rupees in Lakhs

SI.			Area for treat-	Total	Central	State	I	nent upto 9-20		ment for 0-21	Cumu Achieven 2020	nent upto
No.	District	Name of C&RD Block	ment (ha)	Project Cost	Share 90%	Share 10%	Finan- cial	Physical	Finan- cial	Physical	Finan- cial	Physical
1	East Khasi Hills- IWMP-XI, IWMP- XII.	Mawphlang- Mawkynrew- Mawryngkneng, Shella- Bholaganj- Mawsynram.	5000	750	675	75	701.42	4676	39.77	265	741.20	4941
2	West Khasi Hills- IWMP- VIII, IWMP- IX.	Nongstoin, Mawshynrut.	5000	750	675	75	668.19	4455	73.79	492	741.98	4947
3	Jaintia Hills- IW- MP-VI, IWMP-VII.	Laskein-Thadlaskein, Laskein.	8000	1200	1080	120	1147.57	7651	39.29	262	1186.86	7913
4	Ri-Bhoi- IWMP-VII	Umling, Jirang.	2500	375	337.5	37.5	344.99	2300	25.50	170	370.48	2470
5	East Garo Hills- IWMP-VII, IW- MP-VIII.	Resubelpara- Samanda, Kharkutta- Rongjeng.	5000	750	675	75	725.77	4838	15.74	105	741.51	4943
6	West Garo Hills – IWMP-X, IW- MP-XI, IWMP-XII.	Rongram, Selsella- Tikrikilla- Dadenggre, Zikzak-Dalu- Gamnegre.	8000	1200	1080	120	1132.71	7551	55.19	368	1187.90	7919
7	South Garo Hills- IWMP-V, IW- MP-VI.	Chokpot, Rongara	4000	600	540	60	570.09	3801	23.23	155	593.32	3956
Gran	d Total		37500	5625	5062.5	562.5	5290.73	35271	272.52	1817	5563.25	37088

3.3.2. Pradhan Mantri Krishi Sinchayee Yojana Har Khet Ko Pani (PMKSY-HKKP)

Sanctioned by the Ministry of Jal Shakti, Department of Water Resources, River Development and Ganga Rejuvenation, Government of India. This Surface Minor Irrigation (SMI) schemes with irrigation potential less than 2000 hectare were included under (AIBP) for providing Central Assistance (CA) since 1999-2000 for Special Category States including Meghalaya with Central Assistance of 90 % and 10 % State Share.

Objectives:

The aims and objectives of this scheme are:-

- i. To provide assured water availability all year round for agriculture and allied activities.
- ii. Enhance the productivity level of land and water resources in the context of irrigated agriculture and its allied activities.
- iii. Improve the socio-economic set up of the people within the Project Area.
- v. To safely dispose off surface runoff without causing soil erosion.
- v. Restore and stabilize the water table and moisture content and thereby increase crop productivity.
- vi. Have sustainable development through conservation and management of soil and water.

However, since the Financial Year 2015-16, the SMI Schemes were brought under the umbrella of Pradhan Mantri Krishi Sinchayee Yojana – Har Khet Ko Pani (PMKSY-HKKP).

The work components include construction of:

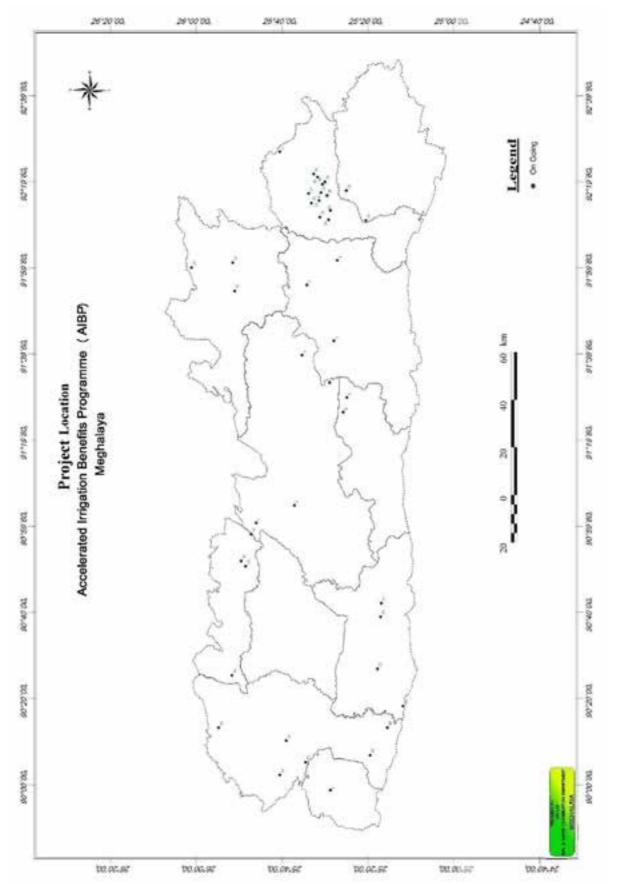
- i. Irrigation Dams / Water Distribution Structures.
- ii. Water Harvesting Structures of two types, i.e.
 - Impounding type
 - Dug out type
- iii. Protection Walls / Retaining Walls of cultivated fields, i.e., of Stone Masonry, Gabion Structure, Spurs, etc.
- i.v Irrigation Channels, Aqueducts, etc.

Benefits from the Schemes:

- i. Assured irrigation throughout the year
- ii. Yield of agriculture crops enhanced due to increased cropping intensity
- iii. Better water harvesting system will be evolved
- iv. Improved income levels of the farmers
- v. Changing cropping pattern from mono cropping to multiple cropping

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Statement Showing the Progress of the 42 Nos. Ongoing SMI Schemes Under PMKSY-HKKP

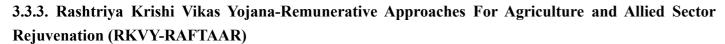
Implemented By Soil And Water Conservation Department, Govt. Of Meghalaya

	٠ پر	Total Proj	Total Project Cost Sanctioned	mctioned	Total Potential	Expenditu Î	Expenditure incurred during 2013-2014	d during	Poten- tial cre-	Expend	Expenditure incurred during 2016-17	rred 7	Poten- tial cre-	Expend duri	Expenditure incurred during 2020-21	urred 21	Poten- tial cre-
Name of District & Project	Name or C&RD Block	CS	SS	Total	Irrigation Area to be created	S	SS	Total	ated in 2013-14	S	SS	Total	ated in 2016-17	S	S	Total	ated in 2020-21
	,	(R)	(Rs. in Lakh)		(Ha)	8	(Rs. in Lakh)		(Ha)	(R	(Rs. in Lakh)		(Ha)	(Rs	(Rs. in Lakh)		(Ha)
(1)	(2)	(3)	(4)	(5)	(9)	0	(8)	(6)	(10)	(11)	(12)	(13)	(14)	(15)	(91)	(12)	(18)
East Khasi Hills																	
Umladew	Mawryn- gkneng	113.28	12.59	125.87	260.00	22.66	2.52	25.18	52.00	22.64	2.51	25.15	52.00	4.03	0.90	4.93	10.00
Wah Khimmurah	Mawphlang	204.13	22.68	226.81	151.20	40.83	4.54	45.37	30.00	40.79	4.53	45.32	30.00	7.26	1.61	8.87	6.00
Wahtyrkhang	Mawphlang	246.41	27.38	273.79	184.00	49.29	5.48	54.77	37.00	49.24	5.47	54.71	37.00	8.76	1.95	10.71	7.00
Umrangshim-Umjapieh	Mawkynrew	571.55	63.51	635.06	431.00	114.34	12.71	127.05	86.00	114.21	12.69	126.90	86.00	20.31	4.51	24.82	17.00
Umphaliang-Wah Jaroit	Mawryn- gkneng	368.03	40.89	408.92	280.00	73.63	8.18	81.81	26.00	73.54	8.18	81.72	26.00	13.08	2.91	15.99	11.00
Wesî Khasi Hills																	
Upper Khri	Mairang	502.59	55.84	558.43	367.00	100.55	11.17	111.72	73.00	100.43	11.16	111.59	73.00	17.86	3.97	21.83	14.00
Langdongdai	Mawshynrut	176.44	19.60	196.05	136.00	35.30	3.92	39.22	27.00	35.26	3.92	39.18	27.00	6.27	1.39	7.66	5.00
South West Khasi Hills																	
Umkynja	Mawkyrwat	349.97	38.89	388.86	374.00	70.02	7.78	77.80	75.00	69.94	7.77	77.71	75.00	12.44	2.76	15.20	15.00
Upper Umrilang	Mawkyrwat	815.37	09.06	905.97	607.00	163.12	18.12	181.24	121.00	162.94	18.10	181.04	121.00	28.98	6.44	35.42	24.00
Ri-Bhoi																	
Umsaw	Umling	403.20	44.80	448.00	500.00	80.67	8.96	89.63	100.00	80.57	8.95	89.52	100.00	14.33	3.18	17.51	20.00

(8)	0

Middle Umran	Umsning	401.49	44.61	446.10	260.00	80.32	8.92	89.24	52.00	80.23	8.92	89.15	52.00	14.27	3.17	17.44	10.00
Umkei	Umsning	300.40	33.38	333.78	219.00	60.10	6.67	66.77	44.00	60.03	6.67	02.99	44.00	10.68	2.37	13.05	9.00
Amparling	Umling	812.80	90.31	903.11	590.00	162.60	18.07	180.67	118.00	162.42	18.05	180.47	118.00	28.89	6.42	35.31	23.00
North Garo Hills																	
Middle Ildek	Kharkutta	354.38	39.37	393.75	262.50	70.89	7.88	78.77	53.00	70.82	7.86	78.68	52.00	12.60	2.80	15.40	10.00
Middle Chil	Kharkutta	440.85	48.98	489.83	326.55	88.19	9.80	97.99	65.00	88.10	9.78	97.88	65.00	15.67	3.48	19.15	13.00
Rajing	Resubelpara	567.00	63.00	630.00	420.00	113.44	12.60	126.04	84.00	113.30	12.59	125.89	84.00	20.15	4.48	24.63	16.00
West Garo Hills																	
Mongalgre-Dichinggre	Dadenggre	240.97	26.78	267.75	178.50	48.21	5.36	53.57	36.00	48.15	5.35	53.50	36.00	8.57	1.90	10.47	7.00
Middle Grim	Dalu	418.17	46.46	464.63	310.00	83.65	9.30	92.95	62.00	83.56	9.29	92.85	62.00	14.86	3.30	18.16	12.00
Bakla	Dalu	862.74	98.86	958.60	638.40	172.59	19.18	191.77	128.00	172.40	19.16	191.56	127.00	30.66	6.81	37.47	25.00
Dongdonga	Selsella	878.85	97.65	976.50	651.00	175.81	19.54	195.35	130.00	175.62	19.52	195.14	130.00	31.24	6.94	38.18	25.00
Lower Pilgi	Selsella	576.00	64.00	640.00	426.70	115.24	12.80	128.04	85.00	115.10	12.79	127.89	85.00	20.47	4.55	25.02	17.00
Roni-Dabong	Tikrikilla	708.75	78.75	787.50	525.00	141.79	15.75	157.54	105.00	141.63	15.74	157.37	105.00	25.19	5.60	30.79	21.00
South West Garo Hills																	
Muji	Betasing	1034.53	114.95	1149.48	728.00	206.96	23.00	229.96	146.00	206.73	22.97	229.70	145.00	36.77	8.17	44.94	28.00
South Garo Hills																	
Nengkong Rongdik	Baghmara	305.27	33.92	339.19	700.00	61.07	6.79	98.29	140.00	61.00	6.78	67.78	140.00	0.00	0.00	0.00	0.00
Dareng Warima	Chokpot	1367.56	151.95	1519.51	965.00	273.58	30.40	303.98	193.00	273.28	30.37	303.65	193.00	60.79	14.91	82.00	62.00

Lower Bugi	Gasuapara	1267.37	140.82	1408.19	894.00	253.54	28.17	281.71	179.00	253.26	28.14	281.40	179.00	64.58	14.35	78.93	59.00
Rongai	Rongara	764.76	84.97	849.73	540.00	152.99	17.00	169.99	108.00	152.82	16.98	169.80	108.00	0.00	0.00	0.00	0.00
East Jaintia Hills																	
Lower Myntdu	Khlichriat	512.37	56.93	569.30	449.00	102.50	11.39	113.89	90.00	102.39	11.38	113.77	90.00	18.21	4.05	22.26	18.00
We A Jaintia Hills																	
Upper Umplu	Thadlaskein	413.14	45.90	459.04	310.00	82.65	9.18	91.83	62.00	82.56	9.17	91.73	62.00	16.13	3.58	19.71	15.00
Middle Myntdu	Thadlaskein Khliehriat	889.15	98.80	987.95	00.099	177.88	19.76	197.64	132.00	177.68	19.74	197.42	132.00	28.01	6.23	34.24	27.00
Amrayang Umshyrpu	Amlarem	359.36	39.93	399.29	290.00	71.89	7.99	79.88	58.00	71.81	7.98	79.79	58.00	13.58	3.02	16.60	13.00
Parmupliang Cluster	Thadlaskein	322.75	35.86	358.62	292.00	64.57	7.17	71.74	58.00	64.50	7.16	71.66	58.00	16.49	3.66	20.15	16.00
Wah Synshar Cluster	Thadlaskein	242.94	26.99	269.94	216.00	48.60	5.40	54.00	43.00	48.55	5.39	53.94	43.00	0.00	0.00	0.00	0.00
Thlu Ummulong Cluster	Thadlaskein	406.02	45.11	451.14	371.00	81.22	9.03	90.25	74.00	81.14	9.01	90.15	74.00	20.16	4.48	24.64	19.00
Umpawai Cluster	Thadlaskein	522.90	58.10	581.00	441.00	104.61	11.62	116.23	88.00	104.49	11.61	116.10	88.00	15.46	3.44	18.90	15.00
Nartiang Cluster	Thadlaskein	190.82	21.20	212.02	170.00	38.18	4.24	42.42	34.00	38.13	4.24	42.37	34.00	13.08	2.91	15.98	12.00
Nongjngi Cluster	Thadlaskein	92.65	10.29	102.95	83.00	18.54	2.06	20.60	17.00	18.51	2.06	20.57	16.00	4.20	0.93	5.13	4.00
Wah Sabkjat Cluster	Thadlaskein	412.03	45.78	457.81	528.00	82.43	9.16	91.59	106.00	82.34	9.15	91.49	105.00	4.69	1.05	5.74	4.00
Sasein Cluster	Thadlaskein	264.64	29.40	294.05	236.00	52.95	5.88	58.83	47.00	52.88	5.88	58.76	47.00	12.19	2.71	14.90	12.00
Myntwa Cluster	Laskein	217.93	24.21	242.15	175.00	43.60	4.84	48.44	35.00	43.55	4.84	48.39	35.00	10.10	2.24	12.35	10.00
Wah Yiangkar Cluster	Laskein	182.69	20.30	202.99	149.00	36.55	4.06	40.61	30.00	36.51	4.05	40.56	30.00	8.21	1.82	10.03	8.00
Wah Sawian Cluster	Laskein	49.77	5.53	55.30	42.00	9.62	1.11	11.06	8.00	9.95	1.10	11.05	8.00	0.00	0.00	0.00	0.00
Grand Total: 42 Nos.		20132.05	2236.90	22368.95	16336.85	4027.50	447.50	4475.00	3267.00	4023.00	447.00	4470.00	3262.00	715.45	158.99	874.44	639.00



The area of focus of this programme is for the development of Rainfed Farming Systems in and outside watershed areas as also integrated development of watershed areas, wastelands, river valleys and for activities relating to enhancement of crop production and popularization of micro-irrigation systems. The thrust area is to protect the loss of topsoil, improving soil fertility, enhancing crop production, land and water productivity of watershed areas comprising of wastelands, river valleys and the eco-system as a whole. The programme is implemented with the Department of Agriculture as the Nodal Agency.

Aim:

RKVY-RAFTAAR aims at making farming a remunerative economic activity through strengthening the farmer's effort, risk mitigation and promoting agri-business entrepreneurship. Its major focus is on pre and post-harvest infrastructure, besides promoting agri-entrepreneurship and innovations.

Objectives:

- i. To strengthen the farmers" efforts through creation of required pre and postharvest agri-infrastructure that increases access to quality inputs, storage, market facilities etc. and enables farmers to make informed choices.
- ii. To provide autonomy, flexibility to States to plan and execute schemes as per local/ farmers" needs.
- iii. To promote value chain addition linked production models that will help farmers increase their income as well as encourage production/productivity
- iv. To mitigate risk of farmers with focus on additional income generation activities like integrated farming, mushroom cultivation, bee keeping, aromatic plant cultivation, floriculture etc.
- v. To attend national priorities through several sub-schemes
- vi. To empower youth through skill development, innovation and agri-entrepreneurship based on agribusiness models that attract them to agriculture

The proposed schemes under RKVY mainly comprise of the following:

- i. Soil and Water Conservation for enhancing crop production and productivity in river valley/ valley bottom lands
- ii. Soil and Water Conservation for improving crop production and productivity of cultivated Jhum and Bun lands including abandoned Jhum and Bun lands
- iii. Soil and Water Conservation for restoring and reclaiming cultivable wastelands affected by mining and quarrying
- iv. Soil and Water Conservation for improvement of traditional water conservation and distribution system for enhanced crop production

Scheme Interventions:

Land development works such as terracing, contour bunding, improvement of paddy fields for control of soil erosion and moisture conservation, for increasing area under agriculture and for

- enhancing crop production and crop productivity in river valley/valley bottom lands and lower slopes
- ii. Erosion control works such as Gabion structures, retaining walls/protection walls, etc. near to the streams and river banks to protect cultivated fields from stream bank erosions. Gully plugs/check dams for gully control
- iii. Construction of small diversion structures, check dams and water harvesting structures at strategic locations and conveyance structures/field channels to provide perennial and assured water availability to the developed lands (terraced). The water harvesting structures will harness the rain water and surface runoff which can be used for irrigating the agriculture field besides providing other opportunity for other activities to the farmers such as fisheries and meeting domestic water needs

Anticipated Outcomes:

- i. Protection of cultivable lands in the state against the hazard of soil erosion
- ii. Area under cultivation will be increased
- iii. Enhanced crop production and productivity
- iv. Water saving techniques through established micro irrigation facilities
- v. Improve water availability during lean season
- vi. Increase of income of the farmers with the increased in livelihood activities such as pisiculture, animal husbandry, etc.

PROGRESS OF PROJECTS IMPLEMENTED BY SOIL & WATER CONSERVATION SECTOR UNDER RKVY DURING THE YEAR 2020-2021

			Name of		Tar	get	Achiev	ement
Sl. No.	District	Name of Projects/ Scheme	C&RD Block	Name of Village (s)	Financial (in lakhs)	Physical (ha)	Financial (in lakhs)	Physical (ha)
1	West Khasi Hills	Umshaidshaid Multipurpose Dam	Mairang	Nongthliew	9	14.6	9	14.6
2	South West Khasi Hills	Photumdohkha RKVY	Mawkyrwat	Phottde and Photjalei	18.38	37	18.38	37
3	Ri-Bhoi	Umshangling RKVY	Umling	Pahansyiem	27	11	27	11
4	East Garo Hills	Rongak RKVY Project	Samanda	Samanda Medipagre	29.37	12.5	29.37	12.5
5	West Garo Hills	Jeldopara RKVY	Selsella	Jeldopara	6.39	82	6.39	82
6	South Garo Hills	RKVY Project	Gasuapara	Kapasipara	19.88	31.51	19.88	31.51
7	North Garo Hills	Kentra Project	Kharkutta	Kentra	25	32	25	32
8	South West Garo Hills	Jagnapara RKVY	Betasing	Jagnapara	14.99	4	14.99	4
		Total			150.00	224.61	150.00	224.61



The National Bamboo Mission (NBM) was launched as a Centrally Sponsored Scheme in 2006-07 and was subsumed under Mission for Integrated Development of Horticulture (MIDH) during 2014-15 and continued till 2015-16.

Objectives:

- i. To increase the area under bamboo plantation in non-forest Government and private lands to supplement farm income and contribute towards resilience to climate change as well as availability of quality raw material requirement of industries. The bamboo plantations will be promoted predominantly in farmers' fields, homesteads, community lands, arable wastelands, and along irrigation canals, water bodies etc.
- ii. To improve post-harvest management through establishment of innovative primary processing units near the source of production, primary treatment and seasoning plants, preservation technologies and market infrastructure
- iii. To promote product development keeping in view market demand, by assisting R&D, entrepreneurship & business models at micro, small and medium levels and feed bigger industry
- iv. To rejuvenate the under developed bamboo industry in India
- v. To promote skill development, capacity building, awareness generation for development of bamboo sector from production to market demand
- vi. To realign efforts so as to reduce dependency on import of bamboo and bamboo products by way of improved productivity and suitability of domestic raw material for industry, so as to enhance income of the primary producers

Strategy under NBM in Meghalaya:

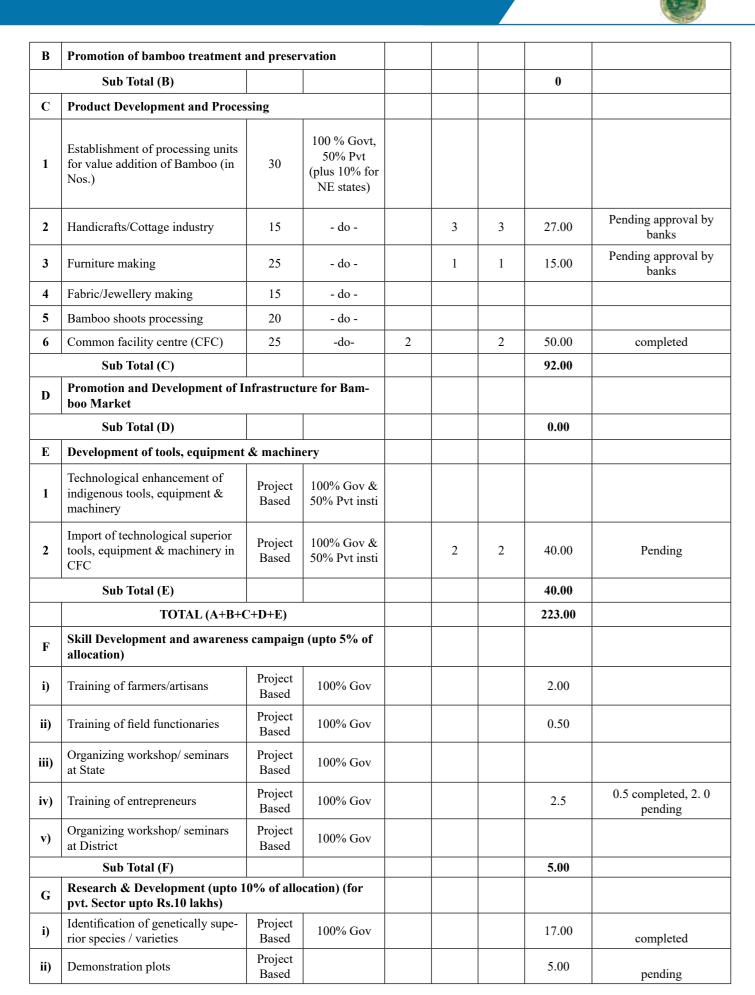
The following are the thrust points aimed for intervention under the mission:

- Mapping of the available resources of bamboo is crucial, including a comprehensive value chain mapping to evolve feasible plans for setting up of processing units which can utilize the existing available raw materials. The outcomes will enable the state to formulate comprehensive plans for development of the bamboo sector as well as aid entrepreneurs for setting up bamboo based units and also avail credit linkages.
- ii. Creation of a platform for sharing of the traditional knowledge and exchange of ideas among the artisans from various parts of the state, towards evolution of the best techniques and products from the existing conditions for local utilization in the state and region.
- iii. The NBM Meghalaya is seeking financial assistance from NEC for achieving this objective. This is aimed at documentation of the traditional practices and products of the state, facilitate exchange of information towards upgrading the existing traditional knowledge among the different tribes, generate awareness on product refinement/standardization and the advanced technologies available, exposure to new products and markets, and encourage upcoming artisans and entrepreneurs for upscaling of operations with assistance from the mission.

- iv. Intervention in the form of new designs, new products, with assistance or collaborations from reputed organizations that can help build up the artisans to produce products that can help augment their income and quality of products
- v. Simultaneous conversion of bamboo from a natural vegetation into a crop will be encouraged at the different levels. The use of improved management, varieties, species, along with optimal selection of land for bamboo cultivation will help build up the availability of quality raw materials for various utilities.
- vi. There is much bamboo resources in the state, but the development of the sector needs to be done in a planned manner. At present the units planned for establishment under NBM will be utilizing the natural bamboo resources available. After these units are established, depots, godowns, haats and markets will be developed in the vicinity of the bamboo areas to act as aggregation centres. These will also act to regulate the quality and quantity of raw materials that will be sourced. Simultaneously, development of the bamboo units will be taken up in the form of clusters, duly incorporating the relevant ancillary units, bamboo plantations, etc. to ensure minimal waste generation, maximize the utility of the resource and sustainable, overall upliftment of the farmers and entrepreneurs in the clusters.
- vii. Ensuring progressive growth of the sector in a sustainable manner, taking into account the availability of the appropriate raw materials, availability of technology, prevalent level of utility of the raw materials, existing processing/value addition works, demand, upscaling and refining of traditional skill, quality standard, entrepreneurs, etc.

Details of Achievements under NBM

				A.	AP 2019-2	20 (FY 20	020-21)	
SI	Activity	Cost norms (Rs. in	Subsidy		Physical	l	Financial Pending 2019-20	
		lakh)		Gov	Pvt	Total		Remarks
A	Propagation and Cultivation							
	Bamboo Nursery both in public	and by Pv	t sector					
	Hi-tech (2 Ha - 50,000 plants)	50	100% Gov, 50% Pvt.					
1	Big (1 ha - 25,000 plants)	16	100% Gov, 50% Pvt.					
	Small (0.5 Ha 16,000 plants)	10	100% Gov, 50% Pvt.		2	2	10	1 completed, 1 Pending
							10.00	
2	High Density Plantation on Gov/ community land (2 Ha < 3000 plants)	0.5	100% Gov 50% Pvt.	4.5		4.5	2.25	completed
3	Block plantation/boundary plantation on farmers field (375-450 plants / Ha)	0.5	100% Gov 50% Pvt.		315	315	78.75	completed
	Sub Total (A)						91.00	



iii)	Bamboo market research	Project Based	100% Gov		15.00	completed
	Sub Total (G)				37.00	
Н	Project Management (upto 5% of allocation) (100% Gov)				12.778	11.94 utilised
	Grand Total (A to H)				277.778	181.794 utilised

3.4. Other Schemes Implemented by the Department

3.4.1. Springshed Development Works for Rejuvenation of Springs for Climate Resilient Development in Water Stressed Areas of Meghalaya

Project on Spring-Shed Development Works for Rejuvenation of springs for climate resilience development in the water stressed areas of Meghalaya, a financial assistance under National Adaptation Fund for Climate Change (NAFCC), Ministry of Environment, Forests & Climate Change, GOI & National Implementing Entity of NAFCC, NABARD. The project functions under the guidance of the Planning Department, the Meghalaya Basin Development Authority (MBDA) being the Project Management Unit (PMU) and the Department being the actual Project Implementing Agency (PIA). The project development objective is to strengthen community-led natural resources management in selected landscapes in the State.

Rationale:

The Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) has indicated that "the negative impacts of climate change on freshwater systems outweigh its benefits", with runoff declining in most streams and rivers. Impacts of climate change on the hydrology of an area depend on physiographical and hydro-geological characteristics of its catchment area and amount of lake or groundwater storage in the catchment. The Springshed Development Project has been conceptualized to address the issues f degradation of water sources i.e. the spring sources which are also the feeder sources of all streams and rivers in the State.

According to the estimates, the State has over 60,000 springs. A sample survey of 714 springs (MINR, 2015) has revealed that over 54 % of the springs have either dried or water discharge from them has significantly reduced (<50%). Impaired springshave caused widespread water stress in the rural landscape, adversely affecting agriculture, livestock and other alliedlivelihood activities of the people and causing hardship and drudgery. Despite heavy rainfall, many areas are water-stressed, especially during the dry months (November to April) due to increase in demand-supply gap which may lead to a surge in theuse of ground water.

Aims:

The project aims to revive springs through spring-shed developmental works in a landscape approach. This will maintain base-flow of springs to ensure water security, food security and economy in general for the



stakeholders, through scientific and participatory management techniques, and also reduce vulnerability of dependent communities.

Project Objective:	To revive impaired and critical springs to ensure enhanced water, food and livelihood security as a climate change adaptation strategy of vulnerable communities through scientific and participatory development of spring-sheds
Project Duration:	Four Years
Project Location:	306 Spring-sheds spread across all districts
District:	11 Districts of the State
Total Project Cost:	₹ 22,91,54,400/-
Status of work	Completed Status o

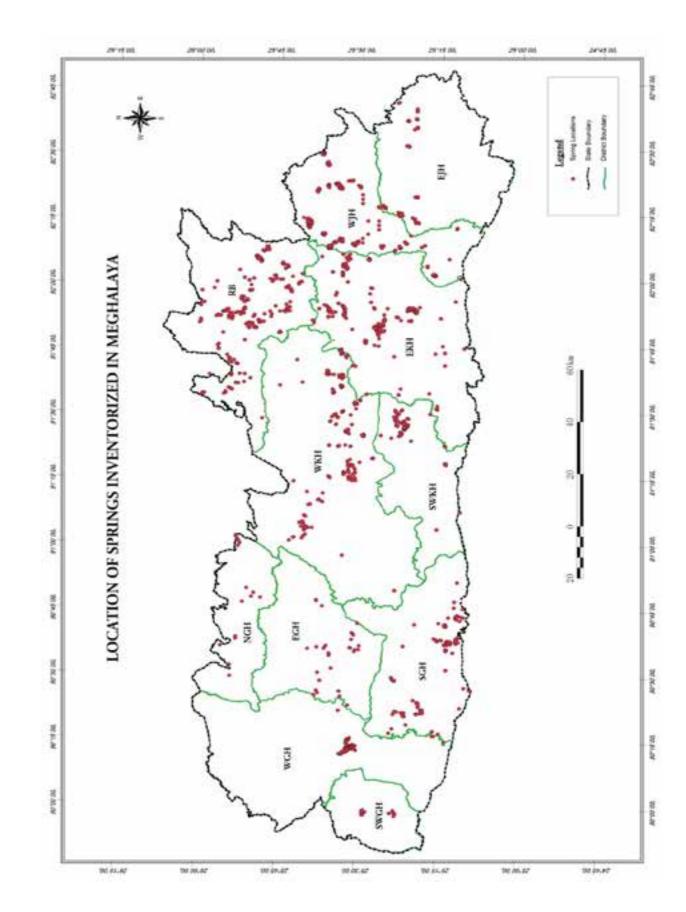
Project Components:

- i. Vulnerability assessment and spring-shed inventorisation
- ii. Spring rejuvenation and structural measures
- iii. Livelihood interventions
- iv. Capacity building
- v. Project management

Project Interventions:

Under the Springshed Project, upto the financial year 2018-2019, critical springs were identified and detailed surveys conducted. A total of 412 springs falling under 306 Springsheds has been identified for treatment. The recharge zone of each of these 412 springs have been identified and mapped. Appropriate structural and vegetative interventions are being undertaken to restore the impaired springs.

Rejuvenation works of springs will be taken up in the near future by the Department targeting 100 springsheds per year (10 per district) tentatively. Interventions such as catchment protection, soil moisture conservations, drainage line treatments, erosion control works, groundwater recharge, plantation activities and wherever feasible livelihood promotion will be encouraged. These assets created will ensure serving the purpose over the long term.





The Department implemented Scheme under Rural Infrastructure Development Fund (RIDF) - NABARD Loan from the year 2000-2001 onwards. The basic objective of the scheme is to enhance the productivity of agriculture and its allied activities and in small river valleys, thereby improving the socio-economic set up of the people in the rural areas. Besides these, the scheme also envisages to promote sustainable development through conservation and management of soil and water.

Aims and Objectives:

- 1. To reduce soil erosion and land degradation so as to maintain soil health, as well as conserving moisture thereby resulting in increase on productivity.
- 2. To enhance the existing productivity of available land.
- 3. To generate employment as well as to increase income of the rural people.
- 4. To enhance the knowledge and skill of the farmers through capacity building and training.

Strategies:

- 1. Adoption of watershed approach for treatment of degraded areas as cluster and contiguous manner.
- 2. Integration of sectoral measures for comprehensive development and maintenance.
- 3. Consolidation treatment efforts through projectile approach with proper choice of treatment measures.
- 4. Multi-disciplinary approach at district and project level while evolving program measures and conducting farmer training, involving various line departments.
- 5. To mitigate ill effects of unfocused cultivation by introducing appropriate land use as per land capability and adoption of improved technologies.

Scheme Interventions:

- 1. Water Harvesting Structures / Farm Ponds.
- 2. Head Water Dam / Diversion Dam, etc.
- 3. Protection Wall / Retaining Wall / Gabion Structure.
- 4. Bench Terraces / Contour Bund.
- 5. Improvement of existing paddy fields, etc.
- 6. Micro –Irrigation for increasing crop production

Anticipated Outcomes:

- 1. Assured irrigation throughout the year
- 2. Increased agricultural crop production
- 3. Per unit area enhancement of agricultural crops productivity due to increase in crop intensity
- 4. Improved food security and livelihood opportunity
- 5. Better water harvesting system will be evolved
- 6. Maintain stability of drainage flow
- 7. Improved income levels of the farmers
- 8. Improved drinking water availability
- 9. To facilitate transport of agriculture produce to the nearest market

Conservation Scheme Under NABARD Loan Statement Showing the Progress and Status of the 8 Nos. River Valley Projects Included Under RIDF-XXIV Under

S. S.	Name of District and Project	C&RD Block	Tota (R	Total Project Cost (Rs. in Lakh)	Cost h)	Total Area to be	Exper UI	Expenditure incurred UPTO 2019-20 (Rs. in Lakh)	urred 20 h)	Area treated UPTO 2019-20	Exper du ()	Expenditure incurred during 2020-21 (Rs. in lakh)	urred 21)	Area treated during
,			NAB- ARD Loan	State Share	Total	(Hect- are)	NAB- ARD Loan	State Share	Total	(Hect- are)	NAB- ARD Loan	State Share	Total	(Hect- are)
I	2	3	4	5	9	7	8	6	0I	II	12	13	14	15
	East Khasi Hills													
I	Wah Lyngkien Phase-I	Mawphlang	258.15	13.59	271.74	166.00	139.76	7.35	147.11	90.00	118.39	6.24	124.63	76.00
	West Khasi Hills													
7	Kyrshai Cluster-I	Nongstoin	190.24	10.01	200.25	167.00	102.99	5.42	108.41	90.00	87.25	4.59	91.84	77.00
3	Them Lawbyrtun Cluster-I	Mawthadrais- han	284.70	14.98	299.68	338.00	154.13	8.12	162.25	183.00	130.57	6.86	137.43	155.00
	East Jaintia Hills													
4	Umdot-Umlaru	Khliehriat	285.91	15.05	300.96	156.00	154.77	8.15	162.92	85.00	131.14	96.90	138.04	71.00
	West Jaintia Hills													
5	Ramut Umpaai	Thadlaskein	283.54	14.92	298.46	125.00	153.49	80.8	161.57	68.00	130.05	6.84	136.89	57.00
	North Garo Hills													
9	Andok	Resubelpara	278.57	14.66	293.23	320.00	150.81	7.94	158.75	173.00	127.76	6.72	134.48	147.00
	West Garo Hills													
7	Lower Sugri	Rongram	283.58	14.92	298.50	199.00	153.51	8.08	65.191	108.00	130.07	6.84	136.91	91.00
8	Upper Sugri	Rongram	103.31	5.44	108.75	72.50	55.94	2.94	28.88	39.00	47.37	2.50	49.87	33.50

Statement Showing the Progress and Status of the 12 Nos. River Valley Projects Included Under RIDF-XXV Under Soil Conservation Scheme Under NABARD Loan

(Rs. in Lakh)

SI.	Name of Project	Name of District	C&RD Block	Tota	Total Project Cost	Sost	Area to be treated (Hect-	Expendit	Expenditure incurred during 2020-21	d during	Area Treated during 2020-21 (Hect- are)
				NAB- ARD Loan	State Share	Total	are)	NAB- ARD Loan	State Share	Total	
I	2	3		4	5	9	7	8	6	10	II
	Lyngdoh Nongbri Catchment Protection Works cum Eco-Tourism Development, Laitryngew	East Khasi Hills	1.Shella-Bholaganj anj 2.Khatarshnong-Laitkroh	33.54	1.77	35.31	15.00	10.06	0.53	10.59	5.00
2	Upper Phodpyntoh	South West Khasi Hills	Mawkyrwat	84.86	4.47	89.33	44.60	25.46	1.34	26.80	13.00
3	Kyrshai Cluster II	West Khasi Hills	Nongstoin	24.38	1.28	25.66	25.70	7.31	0.38	69.7	8.00
4	Umdap	Ri Bhoi	Umling	85.50	4.50	90.00	39.00	25.65	1.35	27.00	12.00
S	Upper Umpyoid	East Jaintia Hills	Saipung	24.39	1.28	25.67	10.50	7.32	0.39	7.71	3.00
9	Moolatyab	West Jaintia Hills	Thadlaskein	201.49	10.60	212.09	145.00	60.45	3.18	63.63	44.00
7	Wahshangpet	West Jaintia Hills	Thadlaskein	189.94	10.00	199.94	84.00	56.98	3.00	59.98	25.00
∞	Dalbot	East Garo Hills	Samanda	85.50	4.50	90.00	90.00	25.65	1.35	27.00	27.00
6	Drong Rompa	South Garo Hills	Gasuapara	85.50	4.50	90.00	80.38	25.65	1.35	27.00	24.00
10	Chibonga	North Garo Hills	Kharkutta	24.38	1.28	25.66	20.00	7.31	0.38	7.69	6.00
11	Masugrong	West Garo Hills	Rongram	24.39	1.28	25.67	15.66	7.32	0.39	7.71	5.00
12	Tewali	South West Garo Hills	Zikzak	85.50	4.50	90.00	65.40	25.65	1.35	27.00	20.00
	Grand Total: 12 nos.			949.37	49.96	999.33	635.24	284.81	14.99	299.80	192.00

Statement Showing the Progress and Status of the 21 Nos. River Valley Projects Included Under RIDF-XXVI Under Soil Conservation Scheme Under NABARD Loan

(Rs. in Lakh)

<u>s</u>	,	3.00	Name of C&RD	Tota	Total Project Cost	Jost	Area to be	Expendit	Expenditure incurred during 2020-21	d during	Area treated during
S o	name of Froject	rvaille of District	Block	NABARD Loan	State Share	Total	(Hect- are)	NABARD Loan	State Share	Total	2020-21 (Hect- are)
ω	(2)	(3)	(4)	(5)	(9)	0)	(8)	6)	(01)	(11)	(12)
-	Asil RVP	East Garo Hills	Songsak	24.00	1.26	25.26	12.00	7.20	0.00	7.20	3.00
7	Bolkinggre RVP	East Garo Hills	Samanda	58.33	3.07	61.40	27.50	17.50	0.00	17.50	8.00
3	Gabil Daningka RVP	East Garo Hills	Rongjeng	22.17	1.17	23.34	10.00	6.65	0.00	6.65	3.00
4	Old Musiang Lamare RVP	East Jaintia Hills	Khlichriat	47.50	2.50	50.00	20.00	14.25	0.00	14.25	00.9
S	Umpaitmaw-Sangmein RVP	East Khasi Hills	Mylliem	47.50	2.50	50.00	21.00	14.25	0.00	14.25	00.9
9	Umtongsyiem-Umjilieng RVP	East Khasi Hills	Mylliem	142.50	7.50	150.00	744.00	42.75	0.00	42.75	212.00
7	Umlynter-Sonatola RVP	East Khasi Hills	Mawsynram	95.00	5.00	100.00	132.00	28.50	0.00	28.50	38.00
8	Chilchora RVP	North Garo Hills	Resubelpara	33.25	1.75	35.00	20.00	6.67	0.00	9.97	00.9
6	Rongbu RVP	North Garo Hills	Kharkutta	33.25	1.75	35.00	25.00	6.67	0.00	9.97	7.00
10	Umsha RVP	Ri-Bhoi	Umsning	95.00	5.00	100.00	59.00	28.50	0.00	28.50	17.00
11	Chitmang Chaiwat RVP	South Garo Hills	Baghmara	120.65	6.35	127.00	70.00	36.19	0.00	36.19	20.00
12	Malchapara RVP	South West Garo Hills	Betasing	76.00	4.00	80.00	32.00	22.80	0.00	22.80	9.00
13	Sngeimitnah RVP	South West Khasi Hills	Mawkyrwat	66.50	3.50	70.00	55.00	19.95	0.00	19.95	16.00
14	Sakal RVP	West Garo Hills	Rongram	47.50	2.50	50.00	25.00	14.25	0.00	14.25	7.00
15	Dakura RVP	West Garo Hills	Rongram	23.75	1.25	25.00	12.50	7.13	0.00	7.13	4.00
16	Sanjeng RVP	West Garo Hills	Rongram	23.75	1.25	25.00	12.50	7.13	0.00	7.13	4.00
17	Thwailaroit RVP	West Jaintia Hills	Thadlaskein	83.82	4.41	88.23	17.00	40.52	0.00	40.52	5.00
18	Amlamar RVP	West Jaintia Hills	Amlarem	51.25	2.70	53.94	43.00	0.00	0.00	0.00	0.00
19	Thangsniang RVP	West Jaintia Hills	Laskein	68.18	3.59	71.77	14.00	20.45	0.00	20.45	4.00
20	Dkhen RVP	West Jaintia Hills	Amlarem	53.26	2.80	56.06	97.00	15.98	0.00	15.98	28.00
21	RVP in West Khasi Hills District	West Khasi Hills	1.Mawshynrut, 2.Mairang, 3.Nongsto- in, 4.Mawthadraishan	76.00	4.00	80.00	44.50	22.80	0.00	22.80	13.00
	Grand Total: 21 nos.			1289.15	67.85	1357.00	1493.00	386.74	0.00	386.74	416.00

Statement Showing the Progress and Status of the 17 Nos. River Valley Projects Included Under RIDF-XXVI (Additional) Under Soil Conservation Scheme Under NABARD Loan

Area treated during 2020-21 (Hectare) (Rs. in Lakh) 0.00 7.00 7.00 3.00 10.00 3.00 1.00 288.00 6.00 10.00 10.00 5.00 11.00 32.00 12.58 11.40 19.95 19.45 0.00 6.20 17.10 327.75 11.40 19.95 42.75 Total $|\mathfrak{I}|$ Expenditure incurred during 2020-21 State Share 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 (01) 19.45 0.00 6.20 17.10 327.75 11.40 19.95 42.75 14.25 12.58 15.92 8.55 19.95 NAB-ARD Loan treated (Hectare) 1024.10 25.00 20.00 24.00 34.00 11.00 15.00 38.10 12.00 34.00 35.00 4.00 26.00 17.00 112.50 558.00 8 50.00 44.15 55.85 50.00 30.00 43.47 37.08 9.46 60.00 1150.01 70.00 40.00 70.00 40.00 150.00 Total 0 Total Project Cost 2.50 2.21 2.79 2.50 State Share 3.50 1.50 2.00 3.50 2.17 1.85 0.48 3.00 57.50 2.00 9 NABARD 47.50 41.94 53.06 47.50 41.30 35.23 1092.51 66.50 28.50 66.50 8.98 57.00 38.00 142.50 3 C&RD Block Khatarshnong-Laitkroh Bhoirymbong Mawphlang Mylliem Resubelpara Thadlaskein Baghmara 4 Amlarem Name of District East Khasi Hills North Garo Hills Ri-Bhoi Ri-Bhoi South Garo Hills South West Garo Hills West Jaintia Hills West Jaintia Hills West Jaintia Hills Khasi Hills Khasi Hills East Jaintia Hills West Khasi Hills East Khasi Hills East Khasi Hills West Garo Hills East Garo Hills $|\mathfrak{S}|$ South West Khasi Hills Mawrah (Lawlhun-Sahskei) SMR Name of District Nongpyiur-Nongkseh Cluster SMR Mawngap SMR Mylliem SMR Dumisi SMR Grand Total: 17 nos. Wah Tyngkla SMR Bolmoram Dochokgre SMR Pohsahkhap SMR 2 Rongdong Nala Sohkhwai SMR Paglapara SMR Phodkroh SMR SMRs in West Khasi Hills Khahnar SMR Sasatbol SMR SMR Tken SMR Umlew 12 13 4 15 16 S S 10 17 ∞ 0

3.4.3. Awareness Campaign and Capacity Building on Natural Resources Management

The purpose of the programme on Awareness Campaign and Capacity Building on Natural Resource Management in the rural villages across Meghalaya is to raise awareness regarding the importance of natural resources and managing these resources sustainably by inculcating a sense of ownership and commitment to the various communities.

Raising awareness and building capacities of the community across every village in the State will enable the people to adapt to present challenges faced due to exploitation and degradation of natural resources. Also, adapting to climate resilient approach to natural resource management will be critical to soil, land, water and air which has an impact on agricultural productivity, water security, etc.

The Department oversees the entire exercise of the programme which is for a period of more than a year and is currently worked out in two phases i.e., Phase I and II occurring simultaneously in each district. The entire exercise of the programme is implemented by 11 Territorial Division and 3 Plantation Crop Division of the Soil and Water Conservation Department.

The Phase I include:-

- Preliminary survey and visit to the 6000 villages across the state which is undertaken by the Department at the District level/ Divisional Offices.
- Target group involved in the programme: All communities and groups such as SHGs, Women's Group, Youths, etc.
- Conduct of mass awareness campaign on natural resource management and providing of IEC materials to the participants.
- Around 3 village facilitators per village are selected for undergoing the intensive Phase II-3-days capacity building at the District level.

The Phase II include:-

- In this phase, the three days Intensive Capacity building on natural resource management to the village facilitators is conducted under the supervision of the department. The training is held in batches consisting of 40-50 Nos of participants/trainees.
- Approximately about 18000 VCFs selected across the state will be trained.

The outcomes of the awareness campaign and capacity building on natural resource management to 6000 villages across the state is to enable the community to understand its importance and create a sense of commitment and ownership of their natural resources and also empowering them towards a sustainable approach in resource utilization. The selected facilitators of each village will also be the drivers for adapting changes in natural resource management and they will be empowered to identifyi and map resources of the area for efficient management practices.





Cost of the Programme:

The **Total Project Cost** (TPC) of the Awareness Campaign and Capacity Building on Natural Resource Management has been worked out to be Rs. 15,00,05,000/-.

Summary of the cost expenditure of the entire exercise is given below:

Sl. No.	Head	Total Amount (In Rupees)
1.	Phase I	
a.	Recurring Cost	5,52,00,000
b.	Non-recurring Cost	23,75,000
	Total	5,75,75,000
2.	Phase II	
a.	Recurring Cost	9,24,30,000
	Grand Total	15,00,05,000
	RupeesFifteen Crore a	nd Five Thousand Only

Summary on the Progress and Status of the Programme (As on March 2021)

State	No of Villages Completed in the Sensitization Programme	No. of Villages Completed in the 3-Days VCF Train- ing Programme	No. of VCF trained in the Programme
MEGHALAYA	2096	884	2204

The district-wise breakup of the programme with regard to the one-day sensitization and three-day VCF training to the Community Led Landscape Management Programme (CLLMP), Meghalaya Livelihoods and Access to Market Projects (M-LAMP) and others villages is shown in the following Table.

Progress of the Divisions showing the 1-day Sensitization to villages as on March 2021

Divisions	Nos. of M-LAMP Villages Completed	Nos. of CLLMP Villages Completed	Nos. of Non-LAMP/ Non-CLLMP Villages Completed	Total
Shillong Territorial	71	81	42	194
Shillong Plantation Crop	77	9	26	112
Jowai Plantation Crop	98	6	36	140
Jowai Territorial	12	16	119	147
Khliehriat	15	20	45	80
Ri-Bhoi	26	41	88	155
Nongstoin	15	17	210	242
Mawkyrwat	35	41	64	140
Resubelpara	67	20	53	140

Tura Territorial	132	21		153	
Tura Plantation Crop	74	8	6	88	
Ampati	42	46	99	187	
Simsanggre	25	15	139	179	
Baghmara	25	20	94	139	
TOTAL	714	361	1021	2096	

Progress of the Divisions showing the 3-days VCF training to villages as on March 2021

Divisions	Nos. of M-LAMP Villages Completed	Nos of VCF selected	Nos. of CLLMP Villages Complet- ed	Nos. of VCF selected	Nos. of Non- LAMP/ Non-CLL- MP Villag- es Com- pleted	Nos of VCF se- lected	Total No. of Villages completed	Total Nos of VCF trained
Shillong Territorial	47	127	60	162	14	34	121	323
Shillong Plantation Crop	14	31	8	17	-		22	48
Jowai Plantation Crop	71	171	6	16	21	54	98	241
Jowai Territorial	9	24	16	44	81	214	106	282
Khliehriat	8	14	16	44	13	25	37	83
Ri-Bhoi	21	46	16	40	39	101	76	187
Nongstoin	3	9	9	25	57	145	69	179
Mawkyrwat	25	58	32	92	59	149	116	299
Resubelpara	15	38	3	8	6	15	24	61
Tura Territirial	12	36					12	36
Tura Plantation Crop	8	24					8	24
Ampati	7	17	29	76	4	11	40	104
Simsanggre	5	12	5	14	34	77	44	103
Baghmara	24	61	7	19	80	213	111	293
TOTAL	269	668	207	557	408	1038	884	2204



Fund utilization as on March 2021

Phases	Date of Released	Amount (in Rs.)	Remarks
Phase I (1st Release)	13 th January 2021	1,58,02,500	Release to 14 Divisions targeting 140 villages per Division @ Rs 8062.50/- per village.
Phase II (1st Release)	11 th March 2021	1,76,17,400	Release to 14 Divisions targeting 6 batches for 13 Divisions and 3 batches for 1 division @ Rs. 205400/- per batch along with the amount earmarked for purchase of two projectors for each Division @ Rs 35000/- per projector
Phase I (2 nd release)	19 th March 2021	94,81,501	Release to 13 Divisions – 11 Divisions targeting 100 villages, 1 Division targeting 71 Villages, and 1 Division targeting 5 Villages @ Rs 8062.50 per village
Total Amount already released to 14 Divisions		4,29,01,401	For both Phase-I and Phase-II

3.5. CONSERVATION TRAINING INSTITUTE (CTI), BYRNIHAT

The Conservation Training Institute (CTI) is one of the oldest Institutes in the North Eastern Region of India. It has immensely and consistently contributed to soil and water conservation in the region since its establishment in 15th October, 1973, by meeting the training requirements of the Department and allied organizations of the state as well as the region as a whole both at the Soil and Water Conservation Demonstrator/ Forester Level and Range Officer Level.

The Conservation Training Institute mainly conducts two long term training programmes, namely:-

- <u>Field Assistant Training Programme</u>: The Field Assistant Training Programme is designed for Field Executives in the Rank of Soil & Water Conservation Demonstrator Junior-I and equivalent. During the year 2020-2021, no Field Assistant Training Programme was held due to the COVID-19 Pandemic lockdown that was declared since the month of March 2020 onwards.
- <u>Middle Level Technician Training Programme</u>: During the year 2020-2021, no MLTTP Training for the year 2020-2021 was conducted due to the ongoing COVID-19 pandemic.

3.6. Meghalaya Commercial Crops Development Board (MCCDB)

The Meghalaya Commercial Crops Development Board (MCCDB) came into being vide an Act called the Meghalaya Commercial Crops Development Board Act, 1996 effected from 1st June, 1997. However, the MCCDB actually formally inaugurated its office at Dhankheti, Shillong on the 3rd August, 2001 and its nucleus Branch at Tura was inaugurated on the 21st May, 2002. The activities of the Board include the promotion of commercial crops cultivation, processing and marketing in the State.

46

Chapter 4

E-GOVERNANCE

4.1. E-GOVERNANCE

Initiatives taken under e-governance by the Department:

- 1. Departmental website www. megsoil.gov.in
 - Main Content
 - Why Soil and Water Conservation
 - Basic Information
 - Major Programmes
 - Guidelines for Central Schemes
 - Training Institute
 - Achievements
 - Annual Report
 - Citizens' Charter
 - Right to Information Suo Moto Disclosure under RTI Act.
 - IWMP (Integrated Watershed Management Programme)- Detailed Project Report
 - MCCDB (Meghalaya Commercial Crops Development Board)
 - Others
 - Notice Board
 - Picture Gallery
- 2. Management Information System (MIS) IWMP.
- 3. Management Information System (MIS) NBM
- 3. Public Financial Management System (PFMS).
- 4. BHUVAN Drishti-Srishti.
- 4.2. Education and Training 2020 2021 (April 2020 upto March 2021)

A. Training of Gazetted Officers:

. The Department deputed (i) Smti. Meba-i-shisha Bani, Sr. Assistant Soil & Water Conservation Officer, (ii) Shri. Laren Pangkam D. Arengh, Assistant Soil & Water Conservation Officer and (iii) Shri. Lamkupar Sohlang, Assistant Soil & Water Conservation Officer, to attend the three days Training-cum-Workshop on e-PAMS (Project Appraisal Management System) at National Water Academy, Pune, held on 30th June, 2020 to 2nd July, 2020.



- ii. The Department deputed Shri. Nangsan Khongwir, Assistant Soil & Water Conservation Officer to attend a 1(one) day online Stakeholder's Workshop to Deliberate Development of Disaster Resilient Shillong, held on the 15th December, 2020 at 10:30a.m. to 12:30p.m through video conferencing.
- iii. The Department deputed (i) Smti. B. H. Syiem, Divisional Soil & Water Conservation Officer, Soil Survey Division, (ii) Shri. T. War, Divisional Soil & Water Conservation Officer, Instructor C.T.I, Byrnihat, and (iii) Dr. L. Hynniewta, Assistant Soil & Water Conservation Officer, Instructor C.T.I., Byrnihat, to attend the three days Capacity Building Course on "Soil Health Card, soil sampling procedure and laboratory analysis" held on 18th 20th February, 2021 at CPGS-AS, Umiam, Meghalaya.
- iv. The Department deputed Shri. Mykinson Blah, L.D.A-cum-Typist, to attend a 1(one) day training programme on "Productivity & Time Management" (Training Code: TM/SH/20-21/01) for the Government Officials of East Khasi Hills District and Heads of Administrative Departments on the 25th February, 2021, at MATI, permanent campus, Mawdiangdiang, Shillong.
- v. The Department deputed (i) Shri. N.J.S. Kharmalki, Planning Officer, (ii) Shri. Taisderjune Egnecious Ch. Sangma, LDA, and (iii) Shri. Damonbha Lyngdoh Nonglait, LDA, to attend the training programme on "Digital Payments" for the Officers and Staff of the Head of Departments, held on 26th February, 2021, at MATI, permanent campus, Mawdiangdiang, Shillong.
- vi. The Department deputed (i) Shri. Hitler R. Sangma, Assistant Soil & Water Conservation Officer, and (ii) Smti. Julitha Ch. Marak, Assistant Soil & Water Conservation Officer, to attend the training programme on "Application of Information technology in agriculture: geo-spatial mapping, sensor based drip irrigation, GHGs emission and statistical computing tools", held from 22nd March 27th March 2021, at ICAR Research Complex for NEH Region, Umiam.

Chapter 5

Photo Gallery

5.1. Photo Gallery

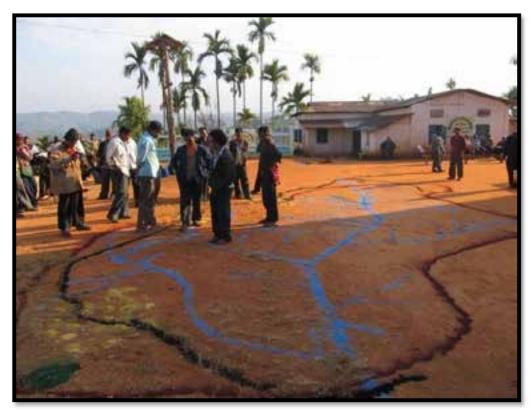
5.1.1. Watershed Development Component of the Pradhan Mantri Krishi Sinchayee Yojana (PMKSY-WDC) [erstwhile Integrated Watershed Management Programme, IWMP]



Farm Pond at Wah Langdeng Watershed, West Jaintia Hills, Batch-III (IWMP-VII)



Bench Terracing at Mawlum Rim Under Umrapiong Watershed IWMP-IV, East Khasi Hills



Participatory Rural Appraisal at Umta Village, Ri-Bhoi under Batch V IWMP-IX Project



Capacity Building Programme under IWMP Batch- II for South West Garo Hills

5.1.2. Pradhan Mantri Krishi Sinchayee Yojana Har Khet Ko Pani (PMKSY-HKKP)



Before Construction



After Construction

District: South West Khasi Hills District

Project: Umkynja AIBP-HKKP

Village: Nonglyngkien Geo - Coordinates: 25.417186 91.426818°



Before Construction



After Construction

District: South West Khasi Hills District Project: Upper Umrilang AIBP-HKKP Village: Diwah Shadmoit

Geo - Coordinates: 25.437458° 91.526268°



Before Construction



After Construction

District: Ri-Bhoi

Project: Umkei AIBP GPS: 25°52'43.23", 91°59'59.21"



R.C.C. Dam at Golde Stream (Middle Chill River Valley Project), North Garo Hills



CC Canal at Mutong Village, Khliehriat





RCC Irrigation Dam at Nokatgre, Selsella C & RD Block, West Garo Hills



RCC Dam with channel at Roni Asim under Roni Dabong AIBP, West Garo Hills



RCC Dam at Wah Dewiong Um Phaliang - Wah Jaroit Under Mawryngkneng C&RD Block, East Khasi Hills District



Before



After Umpawai AIBP Cluster, West Jaintia Hills



Before



After
Nartiang AIBP Cluster, West Jaintia Hills

5.1.3. Springshed Development Works for Rejuvenation of Springs for Climate Resilient Development in Water Stressed Areas of Meghalaya



Trenching works in the Springshed Recharge Areas



Percolation / small dug out structures



Loose Boulder Check Dam

LOCATION: PERKSEH A
SPRINGSHED NAME: PERKSEH
VILLAGE: IEWDUH, LYNGKYRDEM VILLAGE
LATITUDE (IN DECIMAL DEGREE): 25.34002°
LONGITUDE (IN DECIMAL DEGREE): 91.89957°
C&RD BLOCK: PYNURSLA
DISTRICT: EAST KHASI HILLS







Spring Chamber with Storage Tank



AL Abity

Percolation / small dug out structures

Fisheries activities



Poultry activities under the Springshed Development Project



Tree Plantation by Village Community in Springshed Areas





School Children along with village community planting trees in the Springshed areas of their respective villages







Fruit trees/Horticulture/Fodder plantation under Springshed Development Project



Village Level Awareness and Training Programme on Springshed at village level



State Level Capacity Building and Training of District Officials by ACWADAM, PSI, and ARGHYAM

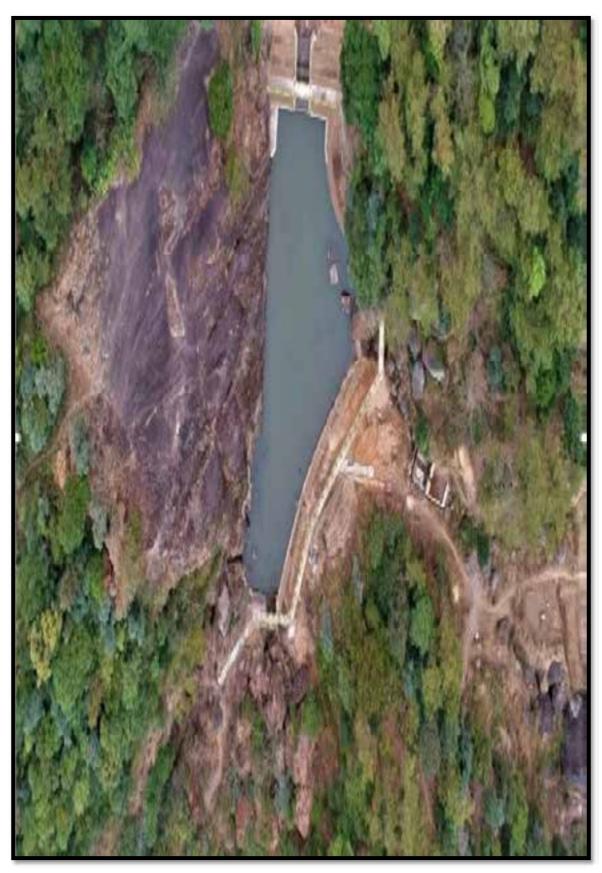
5.1.4. Rural Infrastructure Development Fund (RIDF), NABARD Loan



Before



After
Name of Project: Sngeimitnah RIDF-XXVI
Location: Sngei-longwir/Jakrem, South West Khasi Hills



Water Harvesting Structure at Lawjynriew, Mawkyllei, West Khasi Hills under RIDF XXIV



Before



After Construction



After Construction RCC Dam at Rymbai – Synrang Sahdakha under Umdot Umlaru RIDF XXIV East Jaintia Hills District



Before



During



After
Bench Terrace at Ukiam, Nongstoin under RIDF XXIV- Kyrshai & Them
Lawbyrtun, West Khasi Hills



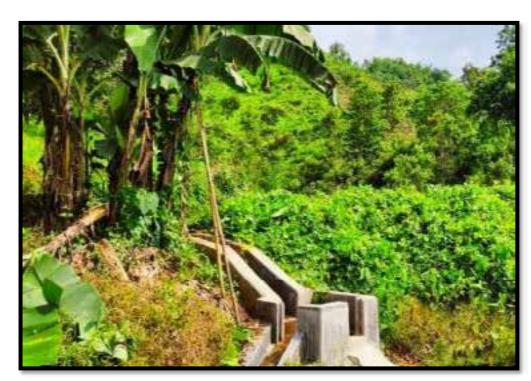
Irrigation Dam at Ruga Reginggittim under RIDF XXV, South Garo Hills



CC Irrigation Channel at Ruga Adinggre under RIDF XXV, South Garo Hills



RCC Check Dam at Tewaligre under RIDF XXV, South West Garo Hills



CC Irrigation canal at Lum Diengblei under Sohkhwai RIDF XXVI, Ri-Bhoi

5.1.5. Rashtriya Krishi Vikas Yojana-Remunerative Approaches for Agriculture and Allied Sector Rejuvenation (RKVY-RAFTAAR)



Multipurpose Dam at Umshaid Shaid, Nongthliew Village, West Khasi Hills





Before After

District : South West Khasi Hills District

Type of Structure : Protection Wall Village : Phottdei : Kyntangniang

Location : Kyntangniang Geo - Coordinates: :25°23'58.65" 91.23'51.25"





Before After

District : South West Khasi Hills District

Project : RKVY
Village : Phottdei
Location : Photumsaw

Geo - Coordinates: :25°24'39.16" 91.24'05.01"





After

Before

District: Ri-Bhoi

Project: Umshanling RKVY Village: Pahamsyiem Location: Umshangling

Area: 5.00 Ha.

GPS: 25°54'36", 91°51'20"





After

Before

District: Ri-Bhoi

Project: Umshanling RKVY Village: Pahamsyiem Location: Umshangling

Area: 1.50 Ha.

GPS: 25°54'35", 91°51'20"





Protection Wall & Water Harvesting Structure Kentra, RKVY, North Garo Hills

5.1.6. National Bamboo Mission





Bamboo plantation in South West Khasi Hills



Block plantation at Kynrud, West Khasi Hills





Bamboo Seedling are raised in a well-equipped Nursery at Namdong Range Office, West Jaintia Hills





National Bamboo Nursery of 1 ha in West Garo Hills





Block Plantation in Ri-Bhoi District





Block Plantation of 4 ha under National Bamboo Mission in East Garo Hills













Tools and Equipment under National Bamboo Mission





5.1.7. Awareness Campaign and Capacity Building on Natural Resources Management











One day Sensitization and Awareness Programme on NRM at Khliehriat C&RD Block, East Jaintia Hills







One day Sensitization and Awareness Programme on NRM at Resubelpara C&RD Block, North Garo Hills



One day Sensitization and Awareness Programme on NRM at Nongstoin C&RD Block, West Khasi Hills







Three-days VCF training Programme on NRM conducted by the Soil and Water Conservation, Shillong Territorial at East Khasi Hills District





Three-days VCF training Programme on NRM conducted by the Soil and Water Conservation, Jowai Plantation Crop at West Jaintia Hills District





Three-days VCF training Programme on NRM conducted by the Ri-Bhoi Division at Conservation Training Institute, Byrnihat



Three-days VCF training Programme on NRM conducted by the Soil and Water Conservation, Nongstoin Division at Don Bosco Tech, School, West Khasi Hills