

**E-BOOK  
ON  
ACHIEVEMENTS OF**



**MINOR IRRIGATION DEPARTMENT  
GOVERNMENT OF MIZORAM**

**2015-16**

# **1. BRIEF PROFILE OF MINOR IRRIGATION DEPARTMENT**

## **1.1 Functions of the Department:**

Minor Irrigation Department, formerly functioning as a wing under Agriculture Department was declared a fully fledged Department under the Govt. of Mizoram by way of bifurcation of Agriculture Department on 30.5.2007. The Department has further been restructured into a Technical Department using CPWD Manual and Accounts Code with effect from 3.10.2008. The Department is headed by Chief Engineer.

*The Department is allocated the following subjects.*

1. Minor Irrigation which includes-
  - i) River Lift Irrigation
  - ii) Drips, Sprinklers, Hydrams, etc.
  - iii) Diversion Scheme.
2. Networking of Rivers
3. Command Area Development
4. CSS Programmes relating to Minor Irrigation.
5. Anti-erosion schemes for protection of Wet Rice Cultivation areas under Flood Management Programme.
6. Programmes implemented for harnessing water resources for promotion of agriculture and allied sector.

The full fledged Department initially functioned with 4 (four) Divisions and 9 (nine) Sub-Division offices with 172 nos. of sanctioned posts which is inclusive of technical, administrative, clerical, accounts, etc. Today, the Department is functioning with 230 nos. of sanctioned posts.

## **1.2 Aims of the Department:**

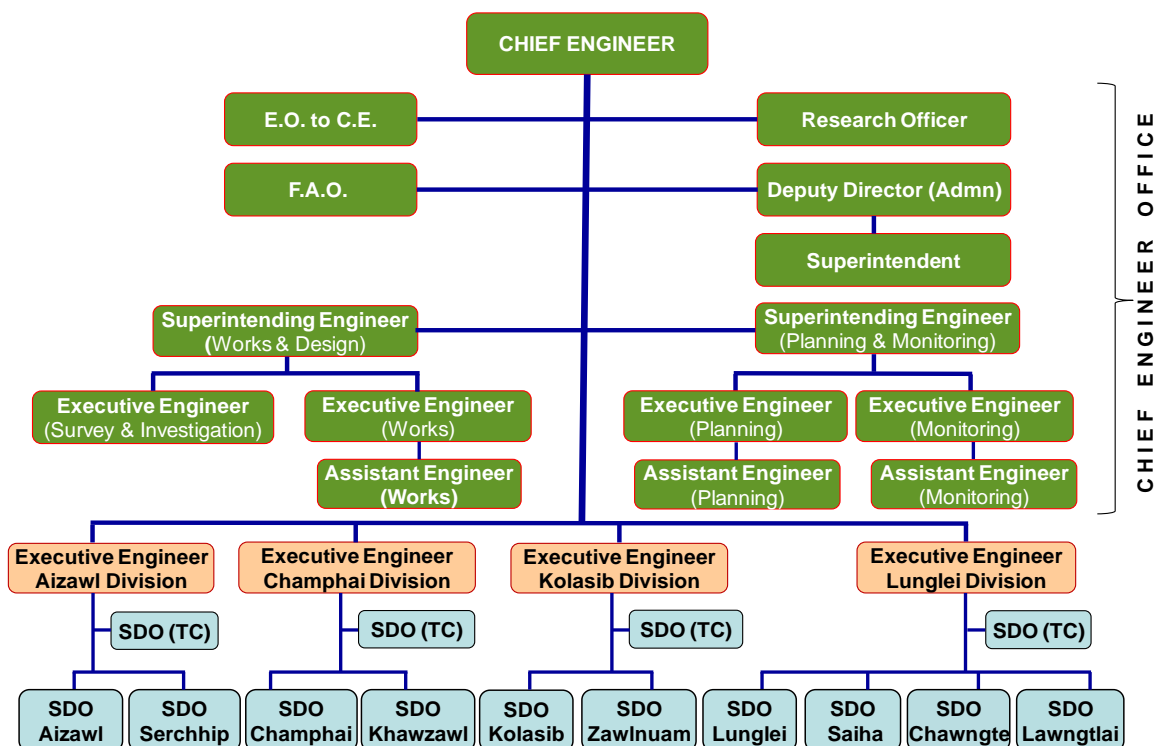
The Department aims to provide sustainable development and efficient management of water and land resources for enhanced productivity of farm sector and improved livelihood of farming community under different agro-climatic conditions.

To provide assured irrigation facility for increased production of food grains and other crops, provide sustainable farming alternatives to shifting cultivation and to usher in permanent cultivation through construction of basic infrastructures for development of all potential areas including hillside cultivation areas within Minor Irrigation Project Command Areas and protect agricultural lands along the banks of mountain streams and rivers from stream bank erosion and land subsidence caused by flood during monsoon.

### 1.3 Objectives of the Department:

1. Creation of irrigation potential by construction of basic infrastructures required for providing assured irrigation.
2. Protection of agricultural lands from river/stream bank erosion by construction of various river/stream bank protection structures under Flood Management Programme (C.S.S.).
3. Optimum utilization of created irrigation potentials in completed minor irrigation schemes/projects to minimize the gap between irrigation potential created and irrigation potential utilized.
4. To improve storage capacities of water bodies and also to recover and extend their lost irrigation potential.
5. Increasing active participation of stakeholders/farmers in implementation of minor irrigation schemes and operation & maintenance of completed schemes/projects by formation of Water Users Associations (WUAs)
6. To ensure quality control and effective monitoring of various schemes under Minor Irrigation Department.
7. Capacity building of departmental engineers and farmers.

### 1.4 Organizational Chart of Minor Irrigation Department



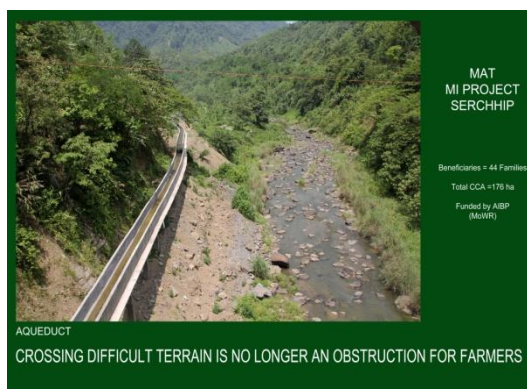
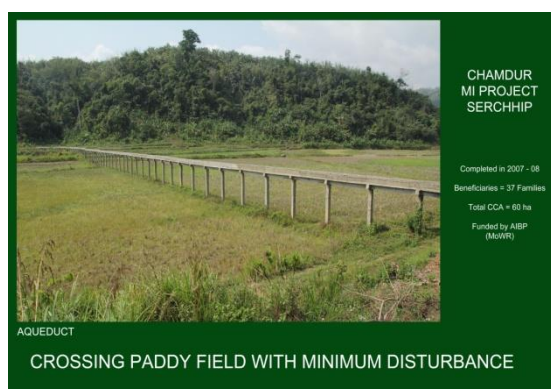
## 2. SCHEMES UNDER MINOR IRRIGATION DEPARTMENT

Minor Irrigation Department has been implementing the following schemes under Ministry of Water Resources, River Development & Ganga Rejuvenation, Government of India:

### 2.1 Minor Irrigation Schemes:

Minor Irrigation Schemes provides scopes for construction of project approach roads, water harvesting structures and/or diversion weir, irrigation channel, field channel, field drains, farm road and land leveling & shaping. Minor Irrigation Schemes are funded under Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) – Har Khet ko Pani under Ministry of Water Resources, River Development & Ganga Rejuvenation. Under this programme 90% of the project cost is received from Government of India as Central Assistance and 10% as State Share.

As per estimation of Mizoram Remote Sensing Application Centre, Science & Technology Department, Aizawl, total WRC potential area of Mizoram is 74,644 ha. So far, 439 Minor Irrigation Projects covering 18,228 ha command area have been completed.





## 2.2 Anti Erosion Schemes under Flood Management Programme:

To control and manage erosion due to heavy rain and long monsoon season and check further damage to the agricultural field, Anti-erosion scheme is taken up by the department. The funding pattern of Flood Management Programme under AIBP is 80% Central Grant and 20% State Share.



## 2.3 Command Area Development & Water Management Programme:

To enhance utilization of created potentials, development of command areas in completed minor irrigation projects is taken up under Command Area Development & Water Management Programme. The funding pattern is 50:50 Government of India and State Government.

For better utilization of potential created under Minor Irrigation Projects, following broad activities are to be covered under Command Area Development Programme: survey, planning, design and execution of On-Farm Development works, construction of field, intermediate and link drains, at least 10% of the CCA of each project under Micro Irrigation, Mechanized land leveling in selected areas.



## **2.4 Repair, Renovation & Restoration (RRR) of Water Bodies:**

Ministry of Water Resources, RD & GR has launched the scheme of Repair, Renovation & Restoration (RRR) of Water Bodies as a State sector scheme to restore and augment storage capacities of water bodies and also to recover and extend their lost irrigation potential.

All public and community owned water bodies can be covered under the project. Targeted benefits under the project will include creation of additional irrigation potential, increase in agriculture/horticulture/pisciculture production and productivity, increase in recharge of groundwater, increase in availability of drinking water, impact on water quality, promotion of tourism and culture

The funding pattern of RRR for Special Category States is 90% Central Assistance and 10% State Share. 10% of the project cost will be earmarked by the State Government for capacity building, awareness and institutional strengthening.

## **2.5 National Hydrology Project:**

National Hydrology Project was introduced by the Ministry of Water Resources, RD &GR, Government of India with World Bank assistance covering the entire country in terms of establishment of Hydrological Information System (HIS) and Decision Support Systems for flood forecasting, reservoir operations and water resources management. The project is proposed to provide reliable, timely, quality and consistent hydro-meteorological data which will be accessible for public through web portals and online library etc. The project will cover the entire country and it is expected to be implemented within a span of eight years.

### 3. ACHEIVEMENT DURING 2015-16

#### 3.1 Minor Irrigation Schemes:

14 New Minor Irrigation Schemes were implemented during 2015-16 under PMKSY (Har Khet ko Pani) at a total estimated cost of Rs. 1370.81 lakh and cover Command area of 552 ha. These projects are scheduled to be completed during 2017-18. The list of projects is as detailed below:

Sl. No	Name of Project	CCA (ha)	IPC (ha)	Estimated Cost	Amount sanctioned during 2015-16 (in lakh of rupees)		
					Central Assistance	State share	Total
<b>AIZAWL DIVISION</b>							
1	Khawhnuai MI Project	60	149	148.00	23.40	5.20	28.60
2	Hmundozau MI Project	41	102	102.00	16.20	3.60	19.80
3	Sihpuizau MI Project	44	68	108.00	17.10	3.80	20.90
4	Lahmunzau MI Project	57	89	141.00	11.25	2.50	13.75
5	Lower Tuiphai MI Project	36	60	89.53	13.50	3.00	16.50
<b>CHAMPHAI DIVISION</b>							
6	Tlabung Ph-II MI Project	48	55	119.47	18.00	4.00	22.00
7	Dimphai MI Project	20	23	49.74	6.75	1.50	8.25
8	Tuiaw MI Project	26	31	64.63	9.00	2.00	11.00
9	Bawnzawl MI Project	35	50	87.15	13.50	3.00	16.50
<b>KOLASIB DIVISION</b>							
10	Sihlui MI Project	38	51	94.82	13.50	3.00	16.50
11	Saikhuma MI Project	45	57	112.05	18.00	4.00	22.00
12	Lower Sesih MI Project	30	41	74.97	11.25	2.50	13.75
13	Ramrizau MI Project	24	46	59.84	9.00	2.00	11.00
<b>LUNGLEI DIVISION</b>							
14	De MI Project	48	74	119.61	18.00	4.00	22.00
<b>GRAND TOTAL</b>		<b>552</b>	<b>896</b>	<b>1370.81</b>	<b>198.45</b>	<b>44.10</b>	<b>242.55</b>

#### 3.2 Anti-Erosion Scheme under Flood Management Programme (FMP):

The first and foremost anti-erosion project under FMP-Khawlailung Anti-Erosion scheme, Vathlawng Valley, Tepaku, Phura was completed during 2015-16 at a total cost of Rs. 399.00 lakh. The scheme provides for construction of Gabion structures for protection of WRC areas.

### 3.3 NABARD:

Minor Irrigation Department had taken up Minor Irrigation schemes with assistance from NABARD loan since 1999.

During 2015-16, 11 new Minor Irrigation Projects are implemented with assistance of RIDF- XXI under NABARD at a total estimated cost of Rs. 1403.37 lakh to irrigate potential area of 760 ha. Out of the 11 projects, 4 projects are scheduled to be completed during 2016-17 and the remaining projects are scheduled to be completed during 2017-18. The list of projects under RIDF-XXI is as detailed below:

Sl. No	Name of Project	CCA (ha)	IPC (ha)	Estimated Cost (Rs. In lakh)	Amount Sanctioned during 2015-16
1	Hliappui MI Project, Lengte	52	84	129.03	40.00
2	Chhura Bahrasuk MIP, N.Vanlaiphai	40	52	98.30	35.00
3	Sesih MI Project, Champhai	80	89	195.41	70.00
4	Thingmaldin MIP, Champhai	60	66	148.70	50.00
5	Hmawngmuallui MIP, Chawngtlai	55	70	135.93	50.00
6	Chitesih MI Project, Vairengte	40	54	99.93	35.00
7	Chemphai LI Project, Bilkhawthlir	70	88	174.30	60.00
8	Dumkhel MI Project, Kolasib	25	34	62.25	20.00
9	HatkoraZau MI Project, Thinghlun	25	43	62.26	20.00
10	Nghasih MI Project, Lunglei	34	50	85.38	30.00
11	Ngengrual MI Project, Thingfal	85	132	211.88	80.00
	<b>GRAND TOTAL</b>	<b>566</b>	<b>760</b>	<b>1403</b>	<b>490.00</b>

### 3.4 NATIONAL HYDROLOGY PROJECT:

National Hydrology Project was introduced by the Ministry of Water Resources, Govt. of India with World Bank assistance for establishment of Hydrological Information System (HIS) and Decision Support Systems for flood forecasting, reservoir operations and water resources management. The project is proposed to provide reliable, timely, quality and consistent hydro-meteorological data which will be accessible for public through web portals and online library etc. The project will cover the entire country and it is expected to be implemented within a span of eight years starting from 2016-17 to 2023-24. The National Hydrology will be 100% funded by Central Government with World Bank Assistance. The estimated amount for National Hydrology Project for Mizoram is Rs. 3,100 lakh. The first two years will be focused mainly on capacity development of officials, consultancy, digitization of existing documents, acquisition of satellite imageries and infrastructure development.



### 3.5 Japan International Cooperation Agency (JICA):

JICA sponsored Development study entitled “Study on Development and Management of Land and Water Resources for Sustainable Agriculture in Mizoram” which was started in September, 2013 was concluded in April, 2015 and Final report containing the Master Plan was submitted. The Master Plan aims at increasing the self sufficiency rate of paddy at 50% in Mizoram by the year 2035. Government of Mizoram has adopted this Master Plan as the ‘**Road map for Development of Agriculture and Irrigation Sector**’.

For successful implementation of the Master Plan, a Technical Cooperation Project proposal entitled ‘**Capacity Development for Effective Irrigation and Agriculture Planning and Implementation for Minor Irrigation Scheme**’ was approved and Record of Discussion was signed by Government of India and Government of Japan on October, 2016. This Technical Cooperation Project will be 100% grant by Government of Japan.

With assistance of JICA Study Team, JICA’s ODA Loan proposal entitled ‘**Land and Water Resources Development and Management Project for Livelihood Improvement in Mizoram**’ is prepared and submitted to Government of India. This proposal contains schemes to be implemented by different departments like Minor Irrigation Department, Department of Agriculture, Department of Horticulture and Soil & Water Conservation Department. The ODA loan proposal amounts to Rs. 1,229.90 crore and the project are scheduled to be implemented in 7 years starting from 2017-18.