

# ECONOMIC SURVEY REPORT FOR 2021-2022 IN RESPECT OF FISHERIES DEPARTMENT

## 1. SECTORAL OVERVIEW:

Sustainable Development of Fishery Sector in the state of Mizoram for nutritional security and livelihood support in the main vision of the Sector. All fisheries activities are ultimately aims towards production of table sized fish for nutritional security and livelihood support.

In spite of the mountainous physical features, the state has considerable stretches of plain areas bordering Assam and Tripura in its national boundary and Bangladesh and Myanmar in its international border besides various flat lands in certain pockets estimates to be 24,000 hectare of suitable potential areas for fish farming. Mizoram has perennial clear water streams having high oxygen contents in most of the valleys between the mountains. This unique condition with moderate climate and adequate rainfall provides possibility for highly intensive culture of every commercial freshwater fishes.

The total producible water resource available in the state estimated at the end of 2020-2021 under culture sector (ponds) is around 5507.04 hectare and around 8000 Ha in the form of Reservoirs and around 6000 Ha/1750 kms in the form of rivers involving a total of around 22646 no. of Fishers for livelihood.

## 2. ACHIEVEMENT MADE IN THE SECTOR DURING THE YEAR :

The total State budget for Fisheries Department during 2020-2021 is Rs. 988.25 lakhs, out of which Rs. 971.80 lakhs are set under Direction and Administration. The achievement of the Department therefore depends largely on the fund flow under different central schemes.

The pandemic Covid-19 causes minimal activities both in the State Government and private fisheries sector which result in minimal development activities under Fishery sector. However, to make protein rich fish flesh available to consumers during the difficult times the Department has arranged 500 quintals of fish established through Fish supply link chain between local producers and fish vendors.

## 3. BRIEF WRITE-UP OF IMPLEMENTATION OF SCHEMES/ PROJECTS

### a) CSS & CS

Delayed release of funds due to the difficulties caused by the pandemic and restriction of activities in the state during 2020-2021 causes delay in the implementation of schemes and the actual implementation is expected only during the last quarter of the current financial year. The projected achievement of the

Department under various Centrally Sponsored Scheme may be summarized as follows :

**i. PRADHAN MANTRI MATSYA SAMPADA YOJANA(PMMSY):**

The PMMSY Scheme is scheduled to be implemented from 2020-2021 to 2024-2025 the sharing pattern of the scheme is 54:6:40 (GOI : GOM : Beneficiaries) under beneficiary oriented items. During 2020-21 the Government of India have approved a total of Rs. 3381.14 lakhs project for the State of Mizoram out of which the Central Share will be Rs. 1973.54 (54%) lakhs, the State share (6%) will be 240.23 lakhs and the beneficiaries share (40%) will be 1167.365. lakhs. The Govt. of India. has already released 50 % of the Central share i.e Rs. 986.77 lakhs as 1<sup>st</sup> installment.

The projected achievement under the scheme may be summarized as follows :

1. To boost the fish seed productions a total of 5 new freshwater finfish hatchery will be established each at Kolasib, Mamit, Siaha, Champhai and CADC
2. For raising fish seeds to fingerling stage a total area of 46 hectares of rearing ponds will be established at selected locations
3. For increasing fish production a total area of 140 hectares of new fish ponds will be developed covering all the district of the state.
4. Fisheries inputs will be made available to cover 140 hectares of water area.
5. To meet the requirement of ice for hygienic preservation of harvested fish a new Ice plant will be developed at Kolasib and Aizawl.
6. To strengthen marketing infrastructure Fish vending Kiosk will be developed at Ngaizel and Bawngkawn, Aizawl.
7. Inputs will be provided for paddy-cum-fish culture covering 100 hectares.
8. 6233 nos. of families will be assisted under Livelihood and Nutritional Support For Socio-Economically Backward Active Traditional Fishers for Conservation Of Fishers Resources During Fishing Ban/Lean Period.
9. For promotion of Ornamental fish business assistance is given to 12 entrepreneurs for establishment of Backyard Ornamental fish rearing unit and 1 entrepreneur is assisted for establishment of medium sized Ornamental rearing unit.
10. To boost the fish seed production of the state, a project proposal for establishment of Fish Brood Bank at Departmental Fish Seed Farm, Thenzawl has been approved by the Central Government.

**ii. RASHTRIYA KISHAN VIKAS YOJANA (RKVY):-**

The Scheme Rashtriya Krishi Vikas Yojana was implemented through Agriculture Department (State Nodal Department) and the total outlay for 2020-2021 is Rs. 113.12. lakhs out of which the Govt. of India share is Rs. 101.80 lakhs and the State share is Rs. 11.313 lakhs.

The achievement under RKVY scheme during 2020-2021 is as follows :

- 4 hectares of new ponds will be established by selecting beneficiaries.
- 3 Units of fish retail outlet will be established at strategic locations.
- 3.7 hectare of fingerling rearing areas will be established.
- 1 no. of Ice plant will be established to strengthen post-harvest infrastructure.
- 4 two-wheeler with ice box will be provided to beneficiaries for doorstep marketing of fish.

#### **ARTICLE 275:**

Article 275 schemes are implemented through State Nodal Department - Social welfare Department and the approved layout for Fisheries during 2020-2021 is Rs. 175.02 lakhs for 3 (three) selected district viz. Aizawl, Champhai & Mamit and the anticipated achievement is as shown below:

- Construction of new ponds for 96 nos. of beneficiaries
- Construction of Fish Seed Rearing ponds for 17 nos. of beneficiaries
- Renovation of existing ponds for 29 nos. of beneficiaries
- Construction of 3 nos. of Cold storage
- Riverine Fisheries Conservation Awareness programme at Mamit and Aizawl District.

#### **SPECIAL ASSISTANCE TO STATES FOR CAPITAL EXPENDITURE :**

The scheme is implemented by the Department under the State Nodal Department – Horticulture Department. Under this scheme a total amount of Rs. 123.00 lakhs are already sanctioned by the Government for establishment of a Cold Storage at Ngaizel, Aizawl to strengthen post-harvest infrastructure for fisheries as well as other agriculture products.

#### **4. Problems, Opportunities and Future Prospects**

- **Problems :**

Although the Department activities are gradually improving the status of the rural artisan, still many constraints have been noted in the past as stated below:

- 1) Fish culture/Aquaculture is a highly technical subject which needs comprehensive policy framing for development of inland waters. The difficult terrain and topography of the state requires more capital investment in creating new water bodies pond which is rather difficult to afford by rural farmers as compared to plain areas. Therefore, Adequate funding is required for enhancement of input supply such as fish seed fish seeds, medicines etc for Culture Fisheries, for achieving targeted level of production.

The low production per hectare as compared to other states is due to the under-stocking of fish seeds in the available area and non-availability of adequate inputs for the fish farmers.

- 2) The low manpower in the Department is also another limiting factor for Aquaculture to pick up its momentum up to the expectations during the past two decades.

- **Opportunities:**

Fishery is land based activity providing high yield value in terms of unit area productivity thereby providing alternate source of livelihood to destructive Jhum cultivation and opportunities for economic upliftment of the rural farmers. The state is estimated to have potential to develop around 24000 hectares of area under fish culture and have scope for attaining self-sustainability in fish flesh by development of vital infrastructure like hatcheries, bringing more potential area under fish culture and increased utilization of the existing reservoirs thereby offering income generation to the rural mass to improve the economic condition and livelihood of rural farmers.

The State has 16 major rivers with a combine length of 1752.02 kms blessed with fauna of fish species and 2 medium Hydro Electric Project reservoirs. Judicious utilization of the open water bodies can provide sustainable livelihood to the nearby rural population not only through fish catch but also through eco-tourism.

- **Future Prospect:**

Perspective 5 (five) years action plan for overall development of Aquaculture has been prepared by the State Fisheries Department addressing the various present limitations of the state under different Central schemes. The success of the perspective plan requires a proper contribution by the State Government as State share for fisheries development programmes.

Under Mizoram Fisheries Act, 2016 which promotes judicious use of the existing water bodies in the state for sustainable aquaculture, the Department is going to introduce licensing system of fish catch under specific rules in the capture sector which will not only promote legal system of fish catching and at the same time generate revenue for the government.

Presently there are 12 nos. of registered private hatcheries in the state and 3 nos. of functional hatcheries under the State Department. Most of the existing Hatcheries especially the government farms need renovation and could not be utilized to their full potential. The other limiting factor for production of fish seeds is the unavailability of quality brood stock which the Department hope to address by establishment of Brood Bank at Thenzawl under PMMSY Scheme.

## **II. SECTORAL STATISTICS / BRIEF WRITE-UP:**

In spite of the mountainous physical features, the state has considerable stretches of plain areas bordering Assam and Tripura in its national boundary and

Bangladesh and Myanmar in its international border besides various flat lands in certain pockets estimates to be 24,000 hectares of suitable potential areas for fish farming. Mizoram has perennial clear water streams having high oxygen contents in most of the valleys between the mountains. This unique condition with moderate climate and adequate rainfall provides possibility for highly intensive culture of every commercial freshwater fishes.

The fisheries sector in the state of Mizoram is also badly affected by the pandemic Covid-19, the associated restrictions results in unavailability of necessary inputs especially fish seeds and fish feeds at the crucial time which leads to understocking of fish seeds, shorter culture period and under feeding of the fish stocks. As a result, the fish production of the State declined by around 38.86 % during 2020-2021.

### **Total Fish Production & Area, revenue Collected (District-wise)**

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|   | <b>2020-2021</b> |                 |                                 |
|---|------------------|-----------------|---------------------------------|
| District  | No of ponds      | Area in hectare | Estimated Fish production in MT |
| Aizawl  | 1255             | 418.71          | 209.35                          |
| Lunglei   | 1656             | 595.61          | 297.80                          |
| Saiha   | 1185             | 442.01          | 265.20                          |
| Kolasib   | 3018             | 1149.21         | 1149.21                         |
| Mamit   | 2815             | 1133.41         | 1133.41                         |
| Lawngtlai   | 2155             | 765.69          | 459.41                          |
| Serchhip  | 1375             | 409.69          | 348.23                          |
| Champhai  | 1373             | 455.75          | 364.60                          |
| Hnahthial   | 365              | 32.00           | 14.72                           |
| Khawzawl  | 668              | 52.00           | 35.88                           |
| Saitual   | 616              | 53.00           | 26.50                           |
|   | 16481            | 5507.04         | 4304.31                         |
| <b>Average production in culture Sector (MT/Ha)</b> |                  |                 | <b>0.78</b>                     |
| <b>Growth in MT from previous year</b>              |                  |                 | <b>-2738.79</b>                 |
| <b>Growth % in culture Sector</b>                   |                  |                 | <b>-38.86</b>                   |

- **District-wise Revenue Collection during 2020-2021:**

The source of revenue for the Department is from the subsidized sale of fishery inputs viz. fish seeds, fish feeds and nets and gears.

| <b>Office</b>   | <b>Revenue Collection during 2020-2021 (Rs. in lakhs)</b> |
|-----------------|---|
| Directorate     | 712915  |
| DFDO, Aizawl    | 834750  |
| DFDO, Lunglei   | 164800  |
| DFDO, Saiha     | 370950  |
| DFDO, Kolasib   | 5686325   |
| DFDO, Mamit     | 3986822   |
| DFDO, Lawngtlai | 605200  |
| DFDO, Serchhip  | 758650  |
| DFDO, Champhai  | 659200  |
| <b>Total</b>    | <b>13776612</b>   |

**Total fish Imports, Volume and Value:**

Due to restriction associated with the pandemic the fish imports of the state also decline during 2020-2021 to an estimated 1000 tonne with total value of about Rs. 2000.00 lakhs calculated at the wholesale rate of Rs. 200 rupees per kg.

**Production/Import of Fish feed and fish seed:**

The total fish seed requirement of the state is estimated to be Rs. 440.57 lakhs fingerling calculating on the basis of available water bodies under culture sector alone at the end of 2020-2021.

Limited activity in the hatcheries due to pandemic Covid-19 restriction causes decline in the production of fish seeds. However, due to training given by the Department on breeding of common carp fish, a few farmers are able to produce common carp fish seed which somehow softens the acute shortage of fish seeds.

Out of this entire requirement the state was estimated to produce only around 100.00 lakhs of fingerlings both from private and government resources and another 100 lakh nos. is estimated to be imported from neighboring states. Therefore, the shortfall is estimated to be around 240.00 lakhs nos. of fish seed which leads to understocking and thereby decline in overall fish production.

Though small capacity fish feed mills are established through different schemes due to the high cost of production cost the production of fish feeds within the state is negligible and around 10000 quintals of pelleted fish feeds are estimated to be imported from other states during 2020-2021 both through government and private parties.