

## Fisheries in Tripura

### **Ongoing Development Programmes:**

#### ✦ ***Demonstration of Scientific fish culture :***

So far the large water bodies remained neglected. Thus to utilize those water bodies under fish production, emphasis has been laid by the Deptt. for demonstration of extensive fish culture in big water bodies (more than 2.00 ha. Area) through pen culture & stocking of large size of fingerlings , providing required no. of nets and boat etc. .By this time, in this programme, 194.30 ha big water bodies have been covered under scientific fish culture. Besides, demonstration on various technologies viz:- Low cost input technology , Medium cost input technology & Hi-tech fish culture were also extended to the farmers for enhancement of fish production.

#### ✦ ***Prawn farming:***

For encouraging youths on production of high value fish/prawn, a programme of mass demonstration on prawn culture practices have been taken up in all the districts through distribution of Prawn seed among 20 farmers of each Block.

#### ✦ ***Implementation of welfare & development schemes for Sch. Tribes/Sch. Castes :***

235 nos dwelling houses have been provided to the poor fishermen families as a welfare programme and Financial benefit extended to 23 nos Fishermen Coop. Societies in the form of managerial subsidy. There are 145 Fisherman Co-operative Societies including one Apex Body. The Deptt. of Fisheries is providing technical guidance to less privileged societies for their proper growth in fish production. Department has also formed 1365 nos. SHG based on fishery activities.

The members of the Fisherman Co-operative Societies have been covered under “Fisherman Accident Insurance Scheme”. Besides, housing facilities being provided to the poor fishermen families.

In addition financial assistance has been made to 2573 fishermen of Dumbur Reservoir in the lean fishing period under saving cum relief schemes.

#### ✦ ***Increased availability of quality fish fingerlings :***

Tripura has made considerable achievement in fish seed production. Hypophysation of both Major Carp & Chinese Carp is widely popular specially in the private sector & for that purpose 28 No.of hatcheries(Govt.- 19 Nos, Pvt-9 Nos) have been established & regularly utilized. The State is surplus in M/C fish seed production &, more than 330 millions fish seed (Fingerlings) has been produced.

#### ✦ ***Production of Prawn Juvenile :***

This land locked State has made a mark in producing Juveniles of Giant fresh water prawn on commercial scale in artificial sea water. The Prawn Juveniles produced and being supplied to the farmers of remote areas of the State for cultivation and also to other N.E. States. Emphasis has also being laid on popularizing of prawn farming in the State due to its high market demand. So far, the State has developed 20 (twenty) prawn villages.

#### ✦ ***Construction of Fish Farmers Training Centre :***

To motivate fish farmers at G.P. Level/Block etc. training camps are being organized and incentives given to the selected fish farmers for production of fish. Keeping in view of the above, the State has already established 7(seven) Nos. training centre at Bishalgarh , Lembucherra & College tilla under West Tripura District ,one at Udaipur under South Tripura District, two at Harerkhola & Chailengta under Dhalai District and another one at Kumarghat of North Tripura District.

✦ ***Propagation of Pabda & Chitala fish :***

The technology for breeding of endangered fish sps, Pabda (Ompak sps) has been standardized in the State & seed being cultured in farmers pond. Seed production of Chitala ( C.chitala) is also being done and the fish cultured in farmers pond.

✦ ***Fish Feed Manufacturing Plant :***

Availability of good quality balanced fish feed has been a major constraint in popularization of fish culture in the State. To over come this problem 19 such fish feed plant have so far been established in the State for production and supply of balance fish feed

✦ ***Establishment of Fish feed Analysis Laboratory :***

To monitor the quality of fish feed being locally produced in the State, 3 (three) such laboratory have been established one at Agartala, one at Udaipur and another at Kumarghat.

✦ ***Fish Culture in regrouped village & forest areas :***

A programme for bringing newly created water bodies of forest areas & regrouped village under scientific fish culture has been initiated. The concerned members of Joint Forest Management Groups (JFMs)/ forest dwellers are being provided necessary training for fish culture.

✦ ***Popularization on use of "Aerator" in fish culture :***

Towards popularization on use of "Aerator" for quantum increase of fish productivity through hi- tech fish culture 290 nos of Aerator have been supplied under different programme by the Deptt.

✦ ***Raising of stunted fingerlings for stocking of culture ponds :***

"Stunted fingerlings" are known to perform better as stocking material. Work on raising of stunted fingerlings in Govt. farms as well as private sector was initiated during 2007-08.This programme has been continued amongst fish farmers of the State .

✦ ***Development of Fisheries in Open water bodies :***

The objective under this programme is ranch the open water bodies ( i.e River,lake & Reservoir) of the State with size of fingerlings (7-10 cm & above 10 cm size) for enhancing fish yield as well as ensuring income potential of the fishermen living in & around the water bodies.Presently fish from Dumber Reservoir is being harvested through license holder fishermen & royalty is collected from harvested fish.

✦ ***Improvement of Brood stock :***

Genetic deterioration because of repeated inbreeding and inhibition of growth, have been observed in the presently available hatchery bred seed used for fish culture. A programme for genetic improvement of brood stock has been initiated by collecting of riverine fish seed .

✦ ***Establishment of Research Laboratory with PCR facilities for fish diseases :***

Two nos. research laboratory (with PCR facilities) have been established for fish diseases diagnostics & treatment of which one is at Udaipur and another is at Kumarghat.

## Fisheries Statistics (As available with Fisheries Dept, Govt of Tripura)

| SL No                        | Particulars  | Unit  | NAME OF DISTRICT |                |                |                |                |                |                 |                |                 |
|------------------------------|--|-------|------------------|----------------|----------------|----------------|----------------|----------------|-----------------|----------------|-----------------|
|                              |  |       | NORTH            | UNOKUTI        | DHALAI         | KHOWAI         | WEST           | SHIPAIJALA     | GOMTI           | SOUTH          | TOTAL           |
| 1                            | Population as per Census-2011.                                   | Lakhs | 4.16             | 2.77           | 3.78           | 3.27           | 9.18           | 4.84           | 4.37            | 4.34           | 36.71           |
| 2                            | Present Population -2014. (as per growth rate 1.475%)            | do    | 4.34             | 2.89           | 3.96           | 3.42           | 9.60           | 5.05           | 4.57            | 4.53           | 38.36           |
| 3                            | Population of Fish eater (95%)                                   | do    | 4.12             | 2.75           | 3.76           | 3.25           | 9.12           | 4.80           | 4.34            | 4.30           | 36.44           |
| 4                            | Demand of Fish   |       |                  |                |                |                |                |                |                 |                |                 |
|                              | a) Nutritional Demand @ 11 Kg /head/year                         | MT    | 4532             | 3025           | 4136           | 3575           | 10032          | 5280           | 4774            | 4730           | 40084           |
|                              | b) Demand as per Consumption @ 17 kgs.                           | MT    | 7004             | 4675           | 6392           | 5525           | 15,504         | 8160           | 7378            | 7310           | 61948           |
| 5                            | Culture Fisheries  |       |                  |                |                |                |                |                |                 |                |                 |
|                              | a) Ponds/ Tanks  |       |                  |                |                |                |                |                |                 |                |                 |
|                              | (i) No   | Nos.  | 18001            | 11333          | 13162          | 16212          | 20712          | 23736          | 18196           | 26658          | 148010          |
|                              | (ii) Area  | Ha    | 1814.23          | 1120.84        | 1470.87        | 1525.68        | 2208.02        | 2827.44        | 2630.64         | 2419.09        | 16016.81        |
|                              | b) Minibarrage   |       |                  |                |                |                |                |                |                 |                |                 |
|                              | (i) No   | Nos.  | 5562             | 4013           | 10788          | 5702           | 1121           | 3059           | 8207            | 3328           | 41780           |
|                              | (ii) Area  | Ha    | 1207.62          | 858.43         | 2340.57        | 1280.08        | 275.12         | 725.89         | 1908.33         | 725.85         | 9321.89         |
|                              | <b>Total Nos. of Culture Fisheries :-</b>                        |       | <b>23563</b>     | <b>15346</b>   | <b>23950</b>   | <b>21914</b>   | <b>21833</b>   | <b>26795</b>   | <b>26403</b>    | <b>29986</b>   | <b>189790</b>   |
|                              | <b>Total area of Culture Fisheries :-</b>                        |       | <b>3021.85</b>   | <b>1979.27</b> | <b>3811.44</b> | <b>2805.76</b> | <b>2483.14</b> | <b>3553.33</b> | <b>4538.97</b>  | <b>3144.94</b> | <b>25338.70</b> |
| 7                            | Capture Fisheries  |       |                  |                |                |                |                |                |                 |                |                 |
|                              | a) Rivers  | Ha.   | 204.62           | 182.33         | 473.42         | 91.32          | 708.50         | 81.94          | 1088.48         | 179.87         | 3010.48         |
|                              | b) Revulets  |       | 0                | 8.00           | 337.76         | 119.68         | 202.50         | 68.86          | 134.36          | 41.94          | 913.10          |
|                              | c) Barrage   |       | 132.38           | 0              | 0              | 403.00         | 6.00           | 0              | 200.00          | 0              | 741.38          |
|                              | d) Lake  |       | 0                | 64.00          | 0              | 0              | 0              | 100.46         | 0               | 0              | 164.46          |
|                              | e) Reservoir   |       | 0                | 0              | 1524.67        | 0              | 0              | 0              | 1524.67         | 0              | 3049.34         |
|                              | <b>Total area of Capture Fisheries :-</b>                        |       | <b>337.00</b>    | <b>254.33</b>  | <b>2335.85</b> | <b>614.00</b>  | <b>917.00</b>  | <b>251.26</b>  | <b>2947.51</b>  | <b>221.81</b>  | <b>7878.76</b>  |
|                              | <b>Total water area (Culture &amp; Capture) :-</b>               |       | <b>3358.85</b>   | <b>2233.60</b> | <b>6147.29</b> | <b>3419.76</b> | <b>3400.14</b> | <b>3804.59</b> | <b>7486.48</b>  | <b>3366.75</b> | <b>33217.46</b> |
| 8                            | Production of Fish (Culture Fisheries)                           |       |                  |                |                |                |                |                |                 |                |                 |
|                              | a) Ponds/ Tanks  | MT    | 4033.70          | 2871.69        | 3469.47        | 4278.66        | 5626.67        | 6875.26        | 5808.64         | 5758.56        | 38722.65        |
|                              | b) Minibarrage   |       | 2616.75          | 2016.94        | 5119.94        | 3544.01        | 661.27         | 1420.18        | 4075.68         | 1464.33        | 20919.10        |
|                              | <b>Total Prodn. of Fish from Culture Fisheries:-</b>             |       | <b>6650.45</b>   | <b>4888.63</b> | <b>8589.41</b> | <b>7822.67</b> | <b>6287.94</b> | <b>8295.44</b> | <b>9884.32</b>  | <b>7222.89</b> | <b>59641.75</b> |
| SL No                        | Particulars  | Unit  | NAME OF DISTRICT |                |                |                |                |                |                 |                |                 |
|                              |  |       | NORTH            | UNOKUTI        | DHALAI         | KHOWAI         | WEST           | SHIPAIJALA     | GOMTI           | SOUTH          | TOTAL           |
| 9                            | Production of Fish (Capture Fisheries)                           |       |                  |                |                |                |                |                |                 |                |                 |
|                              | a) Rivers  | MT    | 77.62            | 76.76          | 89.97          | 16.84          | 55.74          | 50.73          | 101.07          | 42.98          | 511.71          |
|                              | b) Revulets  |       | 0                | 6.60           | 28.60          | 20.63          | 46.31          | 81.61          | 74.94           | 7.42           | 266.11          |
|                              | c) Barrage   |       | 107.73           | 0              | 0              | 19.20          | 0              | 118.00         | 58.79           | 0              | 303.72          |
|                              | d) Lake  |       | 0                | 36.50          | 11.12          | 0              | 1.00           | 122.53         | 18.00           | 0              | 189.15          |
|                              | e) Reservoir   |       | 0                | 0              | 322.39         | 0              | 0              | 0              | 24.27           | 0              | 346.66          |
|                              | <b>Total Prodn. of Fish Capture Fisheries:-</b>                  |       | <b>185.35</b>    | <b>119.86</b>  | <b>452.08</b>  | <b>56.67</b>   | <b>103.05</b>  | <b>372.87</b>  | <b>277.07</b>   | <b>50.40</b>   | <b>1617.35</b>  |
|                              | <b>Total prodn. of fish from Culture &amp; Capture :-</b>        |       | <b>6835.80</b>   | <b>5008.49</b> | <b>9041.49</b> | <b>7879.34</b> | <b>6390.99</b> | <b>8668.31</b> | <b>10161.39</b> | <b>7273.29</b> | <b>61259.10</b> |
| 10                           | Imported of Fish   |       |                  |                |                |                |                |                |                 |                |                 |
|                              | a) From Bangladesh   | MT    | 480.16           | 153.75         | 249.17         | 400.25         | 948.16         | 346.40         | 503.62          | 299.90         | 3381.41         |
|                              | b) From Other State  |       | 999.96           | 605.76         | 809.28         | 827.85         | 2224.96        | 1018.40        | 814.12          | 1204.00        | 8504.33         |
|                              | <b>Total of Fish Imported :-</b>                                 |       | <b>1480.1</b>    | <b>759.51</b>  | <b>1058.5</b>  | <b>1228.1</b>  | <b>3173.12</b> | <b>1364.8</b>  | <b>1317.74</b>  | <b>1503.90</b> | <b>11885.7</b>  |
| 11                           | Total availability of Fish (Prodn. + Import)                     | MT    | 8315.92          | 5768.00        | 10099.94       | 9107.44        | 9564.11        | 10033.11       | 11479.13        | 8777.19        | 73144.84        |
| 12                           | Productivity /ha./year   |       |                  |                |                |                |                |                |                 |                |                 |
|                              | a) From Culture Fisheries  | Kg    | 2426             | 2625           | 2499           | 3229           | 2732           | 2670           | 2345            | 2390           | 2581            |
|                              | b) From Capture Fisheries  |       | 550              | 471            | 193            | 91             | 396            | 506            | 88              | 319            | 205             |
| 13                           | Requirement of Fish seed   |       |                  |                |                |                |                |                |                 |                |                 |
|                              | a) For Culture Fisheries @ 10,000/ha.                            | Lakhs | 286.68           | 191.08         | 376.70         | 278.71         | 244.64         | 337.64         | 449.10          | 305.85         | 2470.40         |
|                              | b) For Capture Fisheries @ 500/ha.                               |       | 1.70             | 1.27           | 11.68          | 3.07           | 4.58           | 1.26           | 14.74           | 1.10           | 39.40           |
|                              | <b>Total requirement of Fish seed :-</b>                         |       | <b>288.38</b>    | <b>192.35</b>  | <b>388.38</b>  | <b>281.78</b>  | <b>249.22</b>  | <b>338.90</b>  | <b>463.84</b>   | <b>306.95</b>  | <b>2509.80</b>  |
| 14                           | Production of Fish seed  |       |                  |                |                |                |                |                |                 |                |                 |
|                              | a) From Ponds/ Tanks   | Lakhs | 150.93           | 169.21         | 174.79         | 278.29         | 254.43         | 736.10         | 926.55          | 233.19         | 2923.49         |
|                              | b) From Minibarrage  |       | 15.70            | 36.82          | 67.74          | 59.75          | 1.14           | 30.50          | 143.21          | 15.65          | 370.51          |
|                              | <b>Total Production of Fish seed</b>                             |       | <b>166.63</b>    | <b>206.03</b>  | <b>242.53</b>  | <b>338.04</b>  | <b>255.57</b>  | <b>766.60</b>  | <b>1069.76</b>  | <b>248.84</b>  | <b>3294.00</b>  |
| 15                           | Prawn Seed Production  | Lakhs | 0                | 3.47           | 0              | 0              | 0.32           | 0              | 2.31            | 0              | 6.10            |
| 16                           | Prawn Production   | Kg    | 1374             | 2343           | 5154           | 1483           | 2689           | 1801           | 1851            | 4601           | 21296           |
| 17                           | Per capita Fish Production                                       | Kgs   | 16.59            | 18.21          | 24.05          | 24.24          | 7.01           | 18.06          | 23.41           | 16.91          | 16.81           |
| 18                           | Per capita Fish Consumption                                      | Kgs   | 20.18            | 20.97          | 26.86          | 28.02          | 10.89          | 20.90          | 26.45           | 20.41          | 20.07           |
| 19                           | Gap between production & consumption                             | Kgs   | 3.59             | 2.76           | 2.81           | 3.78           | 3.88           | 2.84           | 3.04            | 3.50           | 3.26            |
| SL No                        | Particulars  | Unit  | NAME OF DISTRICT |                |                |                |                |                |                 |                |                 |
|                              |  |       | NORTH            | UNOKUTI        | DHALAI         | KHOWAI         | WEST           | SHIPAIJALA     | GOMTI           | SOUTH          | TOTAL           |
| 21                           | New water area created   |       |                  |                |                |                |                |                |                 |                |                 |
|                              | a) Nos.  | No.   | 711              | 326            | 704            | 485            | 627            | 585            | 526             | 408            | 4372            |
|                              | b) Area  | Ha.   | 106.27           | 50.85          | 113.67         | 63.52          | 80.52          | 92.29          | 74.14           | 53.40          | 634.66          |
| 22                           | Area utilized for Fish production                                | Ha.   | 2741.22          | 1862.67        | 3436.68        | 2422.70        | 2301.31        | 3107.08        | 4214.63         | 3021.76        | 23108.05        |
| 23                           | Area utilized for Fish seed production                           | Ha.   | 18.42            | 29.02          | 41.53          | 34.50          | 41.18          | 66.46          | 94.20           | 43.64          | 368.95          |
|                              | <b>Total area utilized for production :-</b>                     |       | <b>2759.64</b>   | <b>1891.69</b> | <b>3478.21</b> | <b>2457.20</b> | <b>2342.49</b> | <b>3173.54</b> | <b>4308.83</b>  | <b>3065.4</b>  | <b>23477.00</b> |
| 24                           | Nos. of Farmers including Govt., SHGs, Fisheries Co.op, JFM etc. | No.   | 21906            | 14036          | 22016          | 19518          | 20592          | 24880          | 23158           | 27044          | 173150          |
| DISTRICT WISE INFRASTRUCTURE |  |       |                  |                |                |                |                |                |                 |                |                 |
| 25                           | Fish Breeding Farm   | Nos.  | 0                | 2              | 1              | 0              | 2              | 0              | 4               | 0              | 9               |
| 26                           | Fish Seed Centre   | do    | 3                | 0              | 2              | 2              | 2              | 1              | 2               | 2              | 14              |
| 27                           | Fishermen Co-operative Societies                                 | do    | 20               | 0              | 13             | 9              | 34             | 22             | 24              | 21             | 143             |
| 28                           | F.F.D.A  | do    | 1                | 0              | 1              | 0              | 1              | 0              | 1               | 0              | 4               |
| 29                           | Fish Farmers Training Centre                                     | do    | 2                | 1              | 2              | 0              | 1              | 1              | 0               | 1              | 8               |
| 30                           | Fishery Awareness Centre   | do    | 0                | 0              | 0              | 0              | 1              | 0              | 1               | 1              | 3               |
| 31                           | M. C. Hatchery (Chinese)   | do    | 0                | 2              | 3              | 1              | 2              | 0              | 3               | 2              | 13              |
| 32                           | Prawn Hatchery   | do    | 1                | 1              | 0              | 0              | 3              | 1              | 1               | 1              | 8               |
| 33                           | Cat fish Hatchery  | do    | 0                | 0              | 1              | 0              | 1              | 1              | 1               | 1              | 5               |
| 34                           | F.R.P Hatchery   | do    | 1                | 0              | 0              | 1              | 0              | 0              | 1               | 1              | 4               |
| 35                           | Ornamental Breeding Centre                                       | do    | 0                | 0              | 0              | 0              | 1              | 0              | 0               | 0              | 1               |
| 36                           | Fish Health Investigation Centre                                 | do    | 0                | 0              | 0              | 0              | 1              | 0              | 0               | 0              | 1               |
| 37                           | Soil & Water Testing Laboratories                                | do    | 3                | 2              | 5              | 3              | 3              | 2              | 3               | 6              | 27              |

| Sl. No | Particulars                          | Unit | AS PER SURVEY OF FISHERIES<br>DEPT, GOVT OF TRIPURA |
|--------|--------------------------------------|------|---|
| 01.    | No. of Private Fish Farmer           | Nos. | 192909  |
| 02.    | <b>Water area</b>                    | ha   | 37247.75  |
|        | i)Culture fisheries                  | ha   | 29368.99  |
|        | ii)Capture Fisheries                 | ha   | 7878.76   |
| 03.    | <b>Fish Production:-</b>             | MT   | 78574.21  |
|        | i)Culture fisheries                  | MT   | 76763.264   |
|        | ii) Capture fisheries                | MT   | 1810.946  |
| 04.    | <b>Productivity(kg/year/ha)</b>      |      |   |
|        | i)Culture Fisheries                  | Kg   | 2763  |
|        | ii)Capture Fisheries                 | Kg   | 230   |
| 05.    | <b>Total Number of Fish Hatchery</b> | Nos. | 88  |

|            |  |      |          |
|------------|--|------|----------|
| <b>06.</b> | <b>Fish seed production</b>                                | Lakh | 4679.62  |
| <b>07.</b> | <b>Water bodies utilized for pisciculture</b>              | ha   | 28101.63 |
|            | i)For fish seed production                                 | ha   | 347.64   |
|            | ii)For Fish culture  | ha   | 27753.99 |
| <b>08.</b> | <b>Number of Fisheries Cooperative Society</b>             | Nos. | 308      |
| <b>09.</b> | <b>Number of Fishery based SHGs</b>                        | Nos. | 632      |
| <b>10.</b> | <b>Number of Fishermen</b>                                 | Nos. | 10296    |
| <b>11.</b> | <b>Number of Govt. Fish Farm (including society farms)</b> | Nos. | 21       |
| <b>12.</b> | <b>Per capita Fish consumption</b>                         | Kg   | 26.26    |