

## **Maharashtra plans policy to promote cage culture for creating employment**

With an ambitious target to unleash the potential of Blue Revolution by promoting growth and employment generation in inland fisheries, the state government is working on a policy to promote cage culture for fresh water fish.

To ensure the ease of doing business for those who wish to invest in such fish cage farms, the government will ensure that all permissions and clearances needed for the projects are in place before bidding them out.

Some varieties that are being looked at for such captive inland breeding include tilapia, pangasius, basa, Asian bass and some types of shrimp. For the purpose, floating net cages will be submerged in nursery ponds in dams and water bodies. The state is also looking at promoting cage culture in sea and brackish water, and erection of demonstration projects, including one at Ratnagiri.

"Maharashtra has a reservoir area of around 4 lakh hectare and we plan to bring a maximum of 1% of this under fish cage farming," said a senior official from the state animal husbandry, dairy development and fisheries department, adding that inland fishing had a huge untapped potential in the state. The department is preparing a draft policy to be tabled before the state cabinet.

"Each cage can generate direct employment for 10 people. If 1,000 cages are put up, this can provide 10,000 jobs and indirect employment to around 15,000 people," he said. "We, however, need skill development programmes," the official explained, adding that the sector could be a major employment generator.

"Instead of granting fresh financial subsidies, we will ensure that all clearances for these sites are in place before bidding them out. Many permissions are required, such as those from the MPCB, MahaVitaran and irrigation department. We will secure them for investors," he explained.

The official said the area to be utilised for rearing fish in cages would be restricted to just 1% of the dams and irrigation reservoirs to prevent an accumulation of biomass. The oxygen and pollution levels in these water bodies will be monitored regularly. These projects will not be started in areas where chemicals and sewage are discharged.

"We, however, need to boost availability of fish seed locally. We have 30 fish seed hatcheries with a capacity to produce 150 crore seeds. But the actual production is just around 29 crore. Since we are unable to meet the demand, fish seed has to be imported from Chhattisgarh and Andhra Pradesh," the official said, adding that they planned to utilise the capacity to the optimum and take production to 50 crore seeds this year.

At present, Maharashtra has just around 10 cages at locations such as dams at Dimbhe, Ujani, Panshet and Vangani, including the government, private, fishermen co-operatives and NGO-promoted projects.

"The fish will be reared in a high-density controlled environment," said the official, adding that the weight, feed and growth of the fish will be monitored on a real-time basis. "Around 5,000-7,000 fingerlings will be released in one tank and they will grow up to 1 kg, ensuring that each cage can produce around five ton fish. If even 50 cages are put up in a reservoir, we will be able to harvest 250 tons annually," he noted.

The state government will also seek to boost productivity of fish farming in open reservoirs.

Maharashtra has 4 LMT marine fish production and 1.5 LMT of inland fish production. During 2014-15, the state's contribution in marine, inland and total fish production (provisional) of India was 13.1%, 2.2% and 6%, respectively, according to the Economic Survey of Maharashtra 2015-16. In 2014-15, Maharashtra exported 1.52 LMT fish worth Rs4,273 crore.

According to the Centre, fish production has increased from 7.5 lakh tons in 1950-51 to 100.70 lakh tons during 2014-15.