



GOVERNMENT OF KERALA

Abstract

Planning and Economic Affairs (RKI) Department- Project proposals of Fisheries Department- Fish production in cages through participatory approach with beneficiaries of scheduled tribe in Banasurasagar reservoir, Wayanad district- Implementation- Administrative Sanction accorded- Orders issued.

PLANNING & ECONOMIC AFFAIRS (RKI) DEPARTMENT

GO (Rt.) No. 484/2019/P&EA

Thiruvananthapuram, Dated 14/11/2019

- Read:
1. G.O. (P) No. 16/2018/P&EA dated 09/11/2018.
 2. G.O. (P) No. 19/2019/P&EA dated 23/05/2019.
 3. Minutes of the 5th HLEC meeting held on 06/07/2019.
 4. G.O. (Ms) No. 25/2019/P&EA dated 13/08/2019.
 5. Minutes of the 6th HLEC meeting held on 11/10/2019.

ORDER

In the aftermath of the flood of 2018, RKI has been entrusted with the task of planning and implementing a rebuilding strategy for the state as per the G.O. read as 1st paper above. As per the G.O. read as 2nd paper above, Government had approved the Rebuild Kerala Development Programme (RKDP) which constitutes the State's strategic road map for a Green and Resilient Kerala. It encompasses cross cutting and sector based recommendations on policy, regulatory and institutional actions as well as priority investment programmes that are critical for resilient and sustainable recovery and rebuilding of the state. The G.O. read as 1st paper above, also details the operational strategy and institutional framework which deals with deployment and utilization of funds for speedy execution of projects under RKI. The Institutional Framework of RKI is as follows:

- Council of Ministers
- Advisory Council
- High Level Empowered Committee (HLEC)
- RKI Implementation Committee (RKI-IC)

2. As per the operational guidelines and framework of RKI, it has been provided that the HLEC shall approve the project profiles submitted to it by the RKI-IC for placing before the Council of Ministers.

3. The Department of Fisheries submitted the proposal viz. "Fish production in cages through participatory approach with beneficiaries of Scheduled Tribe in Banasurasagar reservoir, Wayanad District" at an estimated requirement of funds to the tune of ₹3.2 crore from the RKI. The proposal was placed before the HLEC in its meeting held on 06/07/2019. The HLEC, as per the minutes read as 3rd paper above, approved the proposal, and the same was placed before the Council of Ministers for consideration. As approved by the Council of Ministers, in-principle sanction was accorded for taking up of the project under RKI as per the G.O. read as 4th paper above. Consequently, the Department of Fisheries submitted the Detailed Project Report in this regard.

4. Following are the salient features of the project.

Introduction:

Fish production in the marine sector of Kerala over the last 10 years presents more or less a stagnating trend with an average production of 5.0 lakh tons. The marine fishery resources of the state has almost attained or even exceeded the optimum levels of production. Hence there is limited scope for further increase in production from in-shore marine fisheries by increasing the fishing effort.

It is in this context that promotion of culture in confinement, appears significant. It provides great scope for increasing fish production through coastal and inland farming activities in sea and inland water areas. In a state like Kerala, with the immense resource of inland water bodies, resorting to cage culture, instead of exploring land based options, would be the natural choice to augment the fish production.

There is great scope for increasing fish production from reservoirs, lakes and rivers. But one of the most important reasons for the lukewarm development of aquaculture in Kerala is the reluctance of farmers to adopt new and innovative technologies for fish farming. Hence the Department of Fisheries proposed to take up demonstrative farming in reservoir areas.

The present proposal is to undertake farming of fishes in cages at Banasurasagar reservoir to demonstrate the technological and financial feasibility of cage farming with the ultimate objective of popularising cage farming of fish as an alternative means of fish production for enhancing the inland fish production of the state, with the participation of the local population belonging to backward class/ fishermen/ Scheduled Tribe.

In addition to popularizing cage farming technology, the proposal envisages production of an additional 1,35,000 kg of quality fish, which in turn expected to have a cascading effect on aquaculture sector as a whole by way of increase in fish production through farming, marketing, creation of additional job opportunities etc.

The present project is expected to have no adverse impact on the surrounding environment.

OBJECTIVES:

- To demonstrate the technical and financial feasibility of farming fish in cages.
- To popularise cage farming as an alternative means of fish production in the rural areas of the state.
- To produce an additional 1,35,000 kg of good quality fish.
- To utilise the otherwise barren reservoir for the production of relatively inexpensive but high quality protein viz., fish.
- To provide direct employment to the persons belonging to lower economic strata of the society in the project area and to create hundreds of man-hours of employment in ancillary activities like fabrication of cages, marketing, processing, transportation etc.
- To encourage farming of fin fishes for production enhancement of high valued species.
- To promote use of water resources, to increase fish production in inland areas.
- To increase the income of fishermen/ fish farmer by practising innovative technologies like cage farming.
- To develop livelihood for the less privileged in the society.

- To create alternative employment opportunities for the fishermen.
- To ensure optimum utilization of reservoir for fisheries development.
- To sustain the livelihood of fishermen.
- To eradicate poverty among reservoir fishermen belonging to SC /ST.
- To uplift the socio-economic status of fishermen.
- To address the issues of nutritional deficiency in the tribal population.
- To ensure the availability of quality fish to public.
- To introduce participatory approach development programme.

It is proposed to establish cage culture units in the reservoirs, with 9 grids of 10 cages each of 6x4x4m size (individual cage size) and to undertake fish farming in them. The floating cage of 6x4x4m made of HDPE is proposed at the site for the farming. The fabricated floating cage is towed and installed in the pre-determined location using multi point mooring systems.

Implementing Agency: The project will be implemented by the Fisheries Department in the Banasurasagar Dam through the Agency for Development of Aquaculture, Kerala (ADAK).

COST ESTIMATE:

For the implementation of the project, an amount of ₹320 lakh (Rupees Three Hundred and Twenty lakh only) is expected to be required. The details of fund requirement are provided below.

Item	Amount (in Rs. lakh)
A. FIXED CAPITAL	
1. Construction and erection of nine cage grids (each of 10 cages) with facilities for shed for storage/shelter, floating platform/ catwalk, feeding ramps etc.	135.00
2. Facilities for seed rearing, Water quality testing equipment, testing kits, dinghi and/or wooden/ fibre glass craft/ canoe Insulated boxes, plastic crates, buckets, basins, other plastic wares, frames, nets, meshes etc.	13.50
3. Miscellaneous, unforeseen expenses	4.50
Total (A)	153.00

B. WORKING CAPITAL (for one crop)	
1. Seed (3.84lakh nos.) inclusive of seed transportation cost	27.648
2. Feed (270MT), Chemical, drugs inclusive of transportation cost	82.62
3. Electricity & fuels, unforeseen	1.80
Total (B)	112.068
C. SALARIES AND WAGES	26.00
D. PROJECT IMPLEMENTATION EXPENSES	28.932
E. TOTAL INVESTMENT FOR THE RESERVOIR (A+B+C+D)	320.00

Cost-Benefit Estimate for a HDPE Cage of 6m x 4m x 4m

SI No.	Head of Expense	Unit cost (Rs.)
A	Capital cost	
1	HDPE Floating cages with platform, solar lanterns, grow out nets, rearing net, canoe etc.	1,70,000
	Total	1,70,000
B	Operational cost	
1	Average fish seed cost, 3840 Nos @Rs.8/seed	30,720
2	Pellet 2.7MT@Rs.34/Kg	91,800
3	Transportation and other related expenses	2000
	Total	1,24,520
	Grand Total= A+B	2,94,520
	Production/ cage (kg)	1500
	Gross Income/ cage @Rs.200/kg	3,00,000

Cost benefit analysis: The nine grid units (each of 10 cages) requires an initial investment of ₹320 lakh (Rupees Three Hundred and Twenty lakh only). Of this, an amount of ₹153.00 lakh is for meeting the capital investment and ₹138.068 lakh is for meeting the working capital requirement and wages. The unit is expected to generate revenue of ₹270.00 lakh and a net profit of ₹132.00 lakh per annum.

Time line: Fish culture in cages will be started within two months on obtaining administrative approval.

5. The HLEC of RKI, in its meeting held on 11/10/2019, approved the Detailed Project Report as detailed above and accorded sanction to issue Administrative Sanction for the same.

6. In the circumstances, the Government are pleased to issue Administrative Sanction for the implementation of the Project with the components as detailed in the above mentioned paras, under the Rebuild Kerala Initiative at an estimated cost of ₹320 lakh (Rupees Three hundred and Twenty lakh only) by sourcing requisite funds from the Development Policy Loan. Expenditure in this regard will be debited to the budget provision under H/A 5475-00-115-94-Post flood Projects under Rebuild Kerala Initiative (P).

7. The Department of Fisheries shall formulate an effective monitoring mechanism for the timely implementation of the project. Necessary clearances from all the concerned, including KSEB, shall be obtained by the Department before commencing the implementation. The beneficiaries involved shall be selected in a transparent manner.

**By order of the Governor,
Dr. VENU V.
Principal Secretary to Government**

To:

The Director of Fisheries, Thiruvananthapuram.

Executive Director, Agency for Development of Aquaculture, Kerala.

The Principal Accountant General (A&E/ Audit), Thiruvananthapuram.

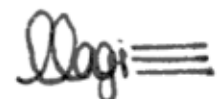
Finance Department.

Fisheries Department.

Information & Public Relations (Web & New Media) Department (for publishing in Government website)

Stock File/Office Copy [F.No.RKI3/91/2019-PLGEA]

Forwarded/ By Order,



Section Officer

Copy:

Principal Secretary, Fisheries Department.

Special Secretary to Chief Secretary.

All members of HLEC and RKI-IC.