GUIDELINES FOR NFDB SCHEMES

National Fisheries Development Board

Department of Animal Husbandry, Dairying and Fisheries
Ministry of Agriculture, Government of India
Pillar No: 235, PVNR Expressway, SVPNPA Post, Hyderabad – 500 052.
Website: http://nfdb.ap.nic.in Email: info.nfdb@nic.in
Fax No. 040-2401 5568

National Fisheries Development Board
Guidelines for Intensive Aquaculture

1.0 Introduction

Tremendous potential exists in India to augment fish production from freshwater aquaculture resources, which are spread across the length and breadth of the country. With concerted efforts to mobilize farmers to adopt fish farming, application of appropriate technologies for sustainable fish farming and fish seed production and availability of institutional finance, it would be possible to bring in substantial hikes in the annual fish production from the aquaculture sector within a span of 5 to 6 years.Since the mid-seventies, when composite fish farming was demonstrated through the Fish Farmers' Development Agencies (FFDAs) and fish seed production practices were standardized, the fish production levels have increased from about 500 kg/ ha/yr to about 2200 kg/ ha/yr. Presently, production from inland aquaculture is estimated at about 5.4 million tonnes. During the last two decades, flexibility in operation of area and scale of intensity as also compatibility of freshwater aquaculture practices with other farming systems have made freshwater aquaculture a fast growing farming activity in the country.

Indian major carps (IMC) and exotic carps (silver carp, grass carp and common carp) form the mainstay of Indian freshwater aquaculture and contribute over 90 percent of the total freshwater aquaculture production. Besides the IMC and exotic carps, there are several other fast growing species, which include minor carps (*Labeo calbasu, L. bata*), catfishes (singhi, *Heteropneustes fossilis* and magur, *Clarias batrachus*), murrels (*Channa* spp), koi (*Anabas testudineus*), pearlspot (*Etroplus suratensis*), pangas (*Pungasius* spp.), mashseer (*Tor spp*.) giant freshwater prawn *(Macrobrachium rosenbergii)* and riverine prawm (*Macrobrachium malcomsonii*) are the species that can also be cultured as the demand for such fish species is high in certain areas of the country.

About 2.41 million hectares of water bodies are available for freshwater aquaculture in the country, of which the majority area falls under tropical warm water conditions and is amenable for increasing production and productivity levels to about 5 tonnes/ ha/year. With better inputs in terms of seeds, feed and fertilizers, it may be possible to bring in about 8 lakh hectares under intensive aquaculture, in a span of 5-6 years. Through adequate forward and backward linkages, another 50000 hectares of new area can also be brought under intensive aquaculture. Such linkages will *inter alia* require availability of quality fish seed and capacity augmentation of farmers and entrepreneurs to take up scientific methods of fish farming and modern and efficient means of cold chain to market fish in safe and hygienic conditions.

The National Fisheries Development Board (NFDB) is mandated to play a critical role in this direction. An amount of Rs.457.62 crores has been earmarked for development of intensive aquaculture in ponds and the proposed activities are expected to generate

substantial investments resulting in an annual additional production of 26.5 lakh tonnes of fish. The present guidelines on intensive aquaculture in ponds and tanks cover a wide gamut of activities ranging from fish seed and table fish production to human resource development. The objectives of the guidelines are to bring in more clarity and objectivity, thus facilitating the implementing agencies in preparation and submission of suitable proposals in tune with the criterion evolved by the NFDB for providing assistance for development of intensive aquaculture in the country.

2.0 Components of Assistance

The NFDB will assist the following components:

1. Construction of new Ponds and Tanks
2. Renovation of existing Ponds and Tanks
3. One time First-year inputs for fish/prawn culture
4. Establishment of freshwater fish seed hatcheries
5. Construction of fish seed rearing farms
6. Renovation/ up-gradation of existing fish seed hatcheries
7. Renovation of existing fish seed rearing farms
8. Establishment of freshwater prawn seed hatcheries
9. Trout culture in race-ways
10. Running water fish culture
11. Establishment of trout seed hatcheries
12. Brood stock development programme
13. Establishment of trout feed mills
14. Establishment of fish feed mills
15. Training and demonstration
16. Pangasius sutchi culture

2.1 Construction of new Ponds and Tanks

2.1.1 Introduction

The country has large potential for development of freshwater aquaculture in the form of land resources and availability of large number of other cultivable fish species. Due to various reasons, this potential has remained untapped. It is proposed to bring in an additional area of 50,000 ha under intensive aquaculture in the country and to promote this development, subsidy would be extended to cover 50 percent of the area *i.e.* 25,000 hectares.

In addition to the Indian Major Carps, certain species of fish/prawn have commercial importance. Some of the species such as medium sized carps like *Labeo fimbriatus, L. gonius, L. bata, Puntius gonionotus, P. sarana, P. pulchelus*, catfishes (singhi, *Heteropneustes fossilis* and magur, *Clarias batrachus*), Tilapia koi (*Anabas testudineus*), pearlspot (*Etroplus suratensis*), pangas (*Pungasius* spp.), mashseer (*Tor spp*.) and riverine prawn (*Macrobrachium malcomsonii*) need to be promoted by providing special incentive in the form of financial assistance for their intensive aquaculture.

2.1.2 Eligibility criteria

The following criteria will be used to select farmers to take up intensive aquaculture in new ponds:

- Clear title of the land in the name of the applicant/s
- If the land is on lease, lease deed for a minimum period of 7 years
- Those who are trained/ willing to be trained in aquaculture
- Experience of the farmer in freshwater aquaculture

- He /she should not have availed subsidy for the same activity under any scheme or agency
- Assurance/ willingness of the farmer for revolving the sale proceeds of the first crop towards the inputs for second year and onwards
- Bank's consent to provide loan towards the non-subsidy portion of the investment (or) Declaration of the farmer/entrepreneur for investing on his/her own.
- The ponds shall be developed in clusters or the director of fisheries certifies that there is potential for pond construction for aquaculture in a cluster.
- No upper ceiling is prescribed for area proposed for development by an individual farmer/ entrepreneur
- The farmers/entrepreneurs taking up of new species culture by availing bank loan towards non-subsidy portion of the investment will be preferred.

2.1.3 Unit cost and pattern of assistance

a. **Plain areas:** The unit cost for construction of new pond for aquaculture has been estimated as Rs 3.0 lakhs/ha. The subsidy @20% of the unit cost with a ceiling of Rs.60,000/ha for all farmers, except SC/ST farmers for whom the subsidy @25% of the unit cost with a ceiling of Rs.75,000/ha shall be provided.
b. **Hill States/Districts and North East region:** The unit cost for construction of new pond for aquaculture has been estimated as Rs 4.0 lakhs/ha. The subsidy @20% of the unit cost with a ceiling of Rs.80,000/ ha for all farmers, except SC/ST farmers for whom the subsidy @25% of the unit cost with a ceiling of Rs.1,00,000/ha shall be provided.

2.2 Renovation of existing Ponds and Tanks

2.2.1 Introduction

It is estimated that the country has presently more than 24.1 lakh hectares under freshwater aquaculture. The NFDB proposes to bring about one-third (33 %) of this area *i.e.* about 8.0 lakh hectares under intensive aquaculture in the next six years. Generally, the Board will not provide subsidy for the programme. However, in areas where potential for freshwater aquaculture exists but the activity has not picked up due to various reasons, 25 percent of the estimated 8.0 lakh hectare will be covered with subsidy during a span of six years.

Most of the paddy fields are prone to water logging areas in the states of Kerala, Arunachal Pradesh, West Bengal and Assam etc. are suitable for both paddy and aquaculture in successive seasons. Aquaculture during flood season is an age old practice in these water bodies. But it is traditional and un-organized. Invariably there is an alternate crop operation of paddy cultivation and aquaculture, one followed by the other. The practice is called Paddy-cum-fish culture in Arunachal Pradesh, Nagaland, Assam and Manipur and '*Padasekaram*' in Kerala and '*Bashaada* fisheries' in West Bengal. The fish production levels are invariably inconsistent and at the subsistence level. However, some of these water bodies are also having for potential prawn farming. The production levels of fish and prawn could be enhanced by certain interventions like rising of bunds, deepening internal canals, screened sluice gates and by water regulation at least during the culture period of six to eight months. Both prawns/fishes can be cultured with regulated inputs.

2.2.2 Eligibility criteria

The following criteria will be used to select farmers for subsidy to cover 25 percent of the estimated 8.0 lakh hectares (i.e. 2 lakh hectares) for intensive aquaculture

in existing ponds and tanks:

- Clear title of the land in the name of the applicant
- If the land is on lease, lease deed for a minimum period of 7 years
- Existing fish/prawn ponds aged 5yrs and above with due justification for renovation.
- Farmers should avail bank loan towards non-subsidy portion of funds required for renovation/inputs.
- Past performance of the farmer in freshwater aquaculture, including training in the said activity
- Should not be defaulter with any financial institution/Government
- Assurance/ willingness of the farmer for revolving the sale proceeds towards the input costs for subsequent operations
- Bank's consent to provide the loan towards non-subsidy portion
- There is no upper limit of area per farmer

2.2.3 Unit cost and pattern of assistance

The unit cost i.e. the investment cost for the existing fish/prawn ponds for freshwater aquaculture by renovating/ repairing shall be Rs.75,000/ ha. Farmers who wish to avail bank loan towards non-subsidy portion of the investment shall be provided the subsidy @ 20% of the unit cost with a ceiling of Rs.15, 000/ ha for all farmers and @25% of the unit cost with a ceiling of Rs.18,750/ha for SC/ST farmers.

The unit cost for renovation of paddy field for undertaking aquaculture of prawns/ fishes as an alternate crop has been estimated up to Rs.0.30 lakhs/ha. Back-ended subsidy @20% of the unit cost with a ceiling of Rs.6000/ha will be provided.

2.3 One time input costs for fish/prawn culture

2.3.1 Introduction

In intensive aquaculture, the inputs constitute almost 60 percent of the total expenditure. To enable the farmer to adopt scientific farming practices and optimize the per hectare yield, it is essential to provide partial support for input costs during the first-year of operation. It is assumed that the sale proceeds of the first year crop will be resolved by the farmer in the subsequent years in order to make the farming operations sustainable.

2.3.2 Eligibility criteria

The financial assistance towards first year input costs shall be available for one time to those farmers, who have availed financial assistance from NFDB for construction / renovation of ponds / paddy fields.

2.3.3 Unit cost and pattern of assistance

a. **Finfish culture:** The unit cost towards one time first-year input costs for fish culture has been estimated as Rs.50,000/ha. The subsidy shall be @20% of the unit cost with a ceiling of Rs.10,000/ha for all farmers, except SC/ST farmers for whom the subsidy shall be @25% of the unit cost with a ceiling of Rs.12,500/ha

c. **New species:** The unit cost towards one time first-year inputs for culture of new species is given in the table below. The farmers/entrepreneurs taking up of new species culture by availing bank loan towards non-subsidy portion of the funds will be preferred. The subsidy shall be @40% of the unit cost for all farmers.

S.No.	New species	Unit cost estimation for 1 ha. Pond (Rs. in lakhs)
1	*Clarias batrachus*	2.30
2	*Heteropnestes fossilis*	2.19
3	*Anabas testudineus*	2.28
4	*Etroplus suratensis*	1.62
5	*Channa striatus*	2.11
6	*Hybrid tilapia*	2.82

c. Prawn culture: The unit cost towards one time first-year input costs for prawn culture has been estimated as Rs.1,80,000/ha. The subsidy shall be @20% of the unit cost with a ceiling of Rs.36,000/ha for all farmers.

d. Paddy fields: The unit cost towards first year inputs for undertaking aquaculture of prawns/ fishes in paddy fields as an alternate crop is estimated at Rs.0.50 lakhs/ha and those farmers who have availed NFDB subsidy for renovation are eligible for the subsidy @20% of the unit cost.

2.4 Establishment of freshwater fish seed hatcheries

2.4.1 Introduction

Availability of quality seed of cultivable freshwater fish species has always been a limiting factor for intensification of fish production and also for coverage of additional area proposed to be developed under aquaculture. While availability of fish seed is satisfactory in certain parts of the country, in other areas farmers face difficulties in procurement of seed in required quantities. Further, the seed in such deficit areas has to be transported over long distances, which adds to the cost of inputs. Therefore, to meet the requirements of farmers in seed-deficit areas and new areas of aquaculture, it is proposed to support entrepreneurs/ farmers in setting up of about 500 hatcheries for production of quality fish seed with the capacity of 10 million fry/ year/unit.

The new species which have been identified as potential fish species for aquaculture are medium sized carps like *Labeo fimbriatus, L. gonius, L. bata, Puntius gonionotus, P. sarana, P. pulchelus*, air breathing catfishes (singhi, *Heteropneustes fossilis* and magur, *Clarias batrachus*), pabda (*Ompok* spp.), murrels (*Channa* spp), koi (*Anabas testudineus*), pearlspot (*Etroplus suratensis*), pangas (*Pungasius* spp.), mashseer (*Tor spp*.) etc. Though technologies for production of seed of these species have been standardized but their commercial hatcheries are yet to be established in the country. The present seed requirement for their limited culture is depending on wild collections. It is proposed to support entrepreneurs/ farmers in setting up of hatcheries in states for the individual species with regional importance, for production of hatchery bred seed. The capacity of each hatchery having nursery rearing system would be around 1-2 million fry/unit/ year.

2.4.2 Eligibility criteria

The following criteria will be used for selection of entrepreneurs/ farmers and State Fisheries Departments, Quasi Government organizations and Research Institutes for setting up of fish seed hatcheries.

- Clear title of the land in the name of the applicant
- If, the land is on lease, lease deed for a minimum period of 7 years
- The prospective entrepreneurs/ farmers should preferably have received

training in hatchery operations

- Should not be a defaulter with any financial institution/Government
- Assurance/ willingness of the farmer to take up fish seed production on scientific lines and to revolve the sale proceeds towards the inputs for subsequent operations
- Should be willing for availing bank loan towards non-subsidy portion of the investment towards capital cost and first year input costs.
- Bank's consent to provide the loan towards non-subsidy portion of funds
- In case of State Fisheries Departments, Quasi Government organizations and Research Institutes, assurance for budget provision towards the balance funds required for this purpose and working capital costs for subsequent operations.
- Positioning sufficient manpower to manage the hatchery.

2.4.3 Unit cost and pattern of assistance

a. The unit cost of freshwater fish hatchery with a production capacity of 7-8 million fry per year with nurseries has been estimated as Rs.12 lakhs/ unit in plain areas and Rs.16 lakhs/ unit in the hill states/Districts and North-East region. The subsidy shall be 20% on the unit cost with a ceiling of Rs.2.4 lakhs/unit in plain areas and Rs.3.2 lakhs/unit in hill states/Districts and North-East region to farmers/entrepreneurs. State Fisheries Departments, Quasi Government organizations and Research Institutes are entitled for 90% of the unit cost as one time grant.

d. New species: Unit cost for 1-2 million fry/unit/year production capacities for new fish species shall be approved by CIFA, Bhubaneswar. The subsidy shall be @40% of the unit cost for all farmers and 90% one time grant to State Fisheries Departments, Quasi Government organizations and Research Institutes.

2.5 Construction of fish seed rearing farms

2.5.1 Introduction

Requirement of quality fingerlings of 80-100 mm size is a prerequisite for fisheries development in reservoirs and in culture ponds, since; realization would be more if large size fingerlings are stocked. Presently, there are inadequate seed rearing facilities for rearing spawn/fry to fingerlings, even though there is a demand for stock size fingerlings in culture ponds. Therefore, there is every need for creation of infrastructure facilities for rearing spawn/fry to fingerlings. Thus, availability of stock size fingerlings of cultivable freshwater fish species for stocking in reservoirs has been a limiting factor resulting in lower production. While availability of fish fingerlings is satisfactory in certain parts of the country, in other areas farmers face difficulties in procurement of large size fingerlings in required quantities. Further, the fish fingerlings in such deficit areas have to be transported over long a distance, which adds to the cost of inputs. Therefore, to meet the requirements of fish fingerlings, NFDB has proposed to support farmers/entrepreneurs, State Governments, Quasi government organizations/Research institutes in setting up of fish seed rearing units for raising large size fish fingerlings of 80-100 mm.

2.5.2 Eligibility criteria

The following criteria will be used to select farmers/entrepreneurs and State Governments, Quasi government organizations/Research institutes for subsidy to take up creation of infrastructure facilities for rearing spawn/fry to fingerlings in earthen ponds:

- Clear title of the land in the name of the applicant
- If, the land is on lease, lease deed for a minimum period of 7 years
- The prospective entrepreneurs/ farmers should preferably have received training in fish seed rearing
- Should not be defaulter with any financial institution/Government
- Assurance/ willingness of the entrepreneur/farmer for availing bank loan towards non-subsidy portion of the investment towards capital cost and first year input costs.
- Bank's consent to provide the loan towards non-subsidy portion.
- In case of State Fisheries Departments / quasi Govt. organizations/ Research Institutes assurance for budget provision for the balance funds.

2.5.3 Unit cost and Pattern of Assistance

a. Construction: The unit cost for construction of fish seed rearing units has been estimated as Rs 3.0 lakhs/ha, in plain areas and Rs. 4.0 lakhs/ha, in North East States and Hilly Districts . Farmers/entrepreneurs who avail bank loan or who invest on their own shall be provided subsidy @20% for all formers and 25% for SC/STs, of the unit cost. State Governments, Quasi government organizations/Research institutes would be provided with 90% of the unit cost as one time grant.

b. Input costs: The cost of one time first-year inputs for rearing of spawn/fry in to 80-100 mm size fingerlings in one hectare pond has been estimated as Rs.50,000/ha. Farmers / entrepreneurs who avail bank loan or who invest on their own shall be provided subsidy @20% for all formers and 25% for SC/STs, of the unit cost. State Governments, Quasi government organizations/Research institutes would be provided with 90% of the unit cost as one time grant.

2.6 Renovation/up-gradation of existing fish seed hatcheries in Government Sector

2.6.1 Introduction

Increasing the production of quality fish seed is pre-requisite for development of fisheries in the country. Many hatcheries were established under public sector for seed production and most of the Government hatcheries became defunct due to many reasons, including non-availability of funds for regular maintenance towards renovation/ development. Therefore, to improve the amenities in these hatcheries for production of seed, NFDB has come up with novel scheme to support the Government for renovation/ up-gradation of hatcheries.

2.6.2 Eligibility criteria

The following criteria will be used for selection of fish seed hatcheries for renovation/ up-gradation:

- Fish seed hatcheries aged 5 years and above.
- Past performance of the hatchery, fry production capacity, technical feasibility and economic viability for its renovation
- Assurance for budget provision towards the balance funds required for this purpose and working capital costs for subsequent operations
- Positioning sufficient manpower to manage the hatchery

2.6.3 Unit cost and pattern of Assistance

The Unit cost towards repairs and first year input costs shall be Rs.4.0 lakh/unit with production capacity of 7 - 8 million fry per year. State Governments, Quasi government organizations/Research institutes would be provided with 90% of the unit cost as one time grant.

2.7 Renovation of existing fish seed rearing farms in Government Sector

2.7.1 Introduction

Availability of fish seed is pre-requisite for development of fisheries in the country. There are many Government farms which became non-functional over the years. They became defunct due to many reasons, including non-availability of funds for renovation. Therefore to improve the basic amenities in these seed farms for production of seed, NFDB has proposed a scheme to support the Government for renovation of these old seed farms (5 years and above) for making them operational.

2.7.2 Eligibility criteria

The following criteria will be used for selection of fish seed farms for renovation:

- Fish seed rearing farms aged above 5 years
- Past performance of the seed farm, fry production capacity, technical feasibility and economic viability for its renovation.
- Assurance for budget provision towards the balance funds required for this purpose other than the NFDB grant and working capital costs
- Positioning sufficient manpower to manage the seed farm

2.7.3 Unit cost and pattern of Assistance

The Unit cost towards repairs and first year input costs shall be Rs.2.0 lakh/ ha for the renovation of seed rearing farm of aged 5 years and above. State Governments, Quasi government organizations/Research institutes would be provided with 90% of the unit cost as one time grant.

2.8 Establishment of freshwater prawn seed hatchery

2.8.1 Introduction

Availability of quality seed of freshwater prawn has been a limiting factor for intensification of prawn farming and also for coverage of additional area under aquaculture. It is estimated that about 10000 million PL required in the coming years for prawn farming in about 2 lakh hectares as against 200 million seed presently produced through the existing hatcheries. Availability of prawn seed is satisfactory in certain coastal areas, while in other areas, farmers face difficulties in procurement of prawn seed in required quantities. Further, the seed in such deficit areas has to be transported over long distances, which adds to the cost of inputs. Therefore, to meet the requirements of farmers in seed-deficit and new areas of aquaculture, it is proposed to support in setting up of large as well as small hatcheries for production of prawn seed.

2.8.2 Eligibility criteria

The following criteria will be used for selection of States/entrepreneurs/ farmers for setting up of freshwater prawn seed hatcheries:

- Clear title of the land in the name of the applicant

- If, the land is on lease, lease deed for a minimum period of 7 years
- Assurance of the State Department to provide for sufficient working capital funds and take up prawn seed production on scientific lines
- Assurance for the provision in the budget for the balance funds required
- Positioning sufficient manpower to manage the seed farm after renovation
- The prospective entrepreneurs/ farmers should preferably have received training in the hatchery operations of the particular species selected
- Should not be defaulter with any financial institution/Government
- Assurance/ willingness of the State Department/entrepreneur/farmer for prawn seed production on scientific lines and to revolve the sale proceeds towards the inputs for subsequent operations
- Bank's consent to provide loan towards non-subsidy portion of the funds in case of entrepreneurs/farmers
- In case of State Fisheries Departments, assurance for budget provision towards the balance funds required for this purpose and working capital costs for subsequent operations
- Positioning sufficient manpower to manage the hatchery

2.8.3 Unit cost and assistance pattern

a. State Governments: The unit cost for establishment of freshwater prawn seed hatchery of 25 million PL/unit/year minimum capacity shall be Rs.30 lakhs/ unit. 90% of the unit cost would be one-time grant to the State Governments for establishment of hatchery at State level

b. Entrepreneurs/Farmers: The unit cost for establishment small freshwater prawn seed hatchery of 5-8 million PL/unit/year minimum capacity shall be Rs.12.0 lakhs/unit. The back-ended subsidy @20% of the unit cost with a ceiling of Rs.2.40 lakhs to entrepreneurs/farmers shall be provided.

2.9 Trout culture in raceways

2.9.1 Introduction

The trout aquaculture in hills is of very recent origin. It was practiced mostly in Government farms and hatcheries, which were used mainly to maintain some brood-stocks for seed production for stocking into hill streams. The commercial culture of trout became popular only when improved strains of rainbow trout (*Oncorhynchus mykiss*) was imported in states like Jammu & Kashmir and Himachal Pradesh. In Himachal Pradesh, a few private entrepreneurs have taken up trout farming and producing a good quantity of trout for marketing. The Scientific and intensive aquaculture of trout has to be initiated for development of low volume culture systems in raceways. It is proposed therefore to encourage trout farming in low volume culture systems like raceways to enhance production of trout in hill regions.

2.9.2 Eligibility criteria

The following criteria will be used for selection of entrepreneurs/ farmers for setting up of race-way units for trout culture

- Clear title of the land in the name of the applicant
- If, the land is on lease, lease deed for a minimum period of 7 years is required
- Those who are trained/ willing to be trained
- Should not be defaulter with any financial institution/Government

- Assurance/ willingness to revolve the sale proceeds for subsequent operations.
- Bank's consent to provide loan towards the non-subsidy portion of the investment (or) Declaration of the farmer/entrepreneur for investing on his/her own

2.9.3 Unit cost and pattern of assistance

a. **Construction:** The Unit cost for construction of raceway unit of size 45 m^3 (15mx2mx1.5m) water volume with inlet and outlet facilities has been estimated as Rs.1.0 lakh /unit. Farmers/entrepreneurs who availed bank loan or who have invested on their own shall be provided subsidy @20% of the unit cost with a ceiling of Rs.20,000/unit for all farmers, except SC/ST farmers for whom the subsidy shall be @25% of the unit cost with a ceiling of Rs.25,000/unit.

b. **First year inputs:** The cost of one time first-year inputs for race-way farming of trout in 45 m^3 (15mx2mx1.5m) water volume has been estimated as Rs.1.30 lakhs /unit. Subsidy @20% of the unit cost with a ceiling of Rs.26,000/unit for all farmers, except SC/ST farmers for whom the subsidy @25% of the unit cost with a ceiling of Rs.32,500/unit.

2.10 Running water fish culture:

2.10.1 Introduction:

Running water fish culture is generally undertaken in earthen ponds size of 100m^3 (10x10x1M) water in high altitude of Himachal Pradesh, Uttarakhand, J&K and North East states in the country. The fishes suitable for running water culture are trout, mahseer, common carp, silver carp and grass carp. It is an intensive culture system and involves high stocking density and requires high protein feeds.

2.10.2 Eligibility criteria

- Clear title of the land in the name of the applicant
- If the land is on lease, lease deed for a minimum period of 7 years
- Those who are trained/ willing to be trained
- Should not be defaulter with any financial institution/Government
- Assurance/ willingness to revolve the sale proceeds for subsequent operations.
- Bank's consent to provide loan towards the non-subsidy portion of the investment (or) Declaration of the farmer/entrepreneur for investing on his/her own

2.10.3 Unit cost and pattern of assistance

a. **Construction:** The Unit cost for construction of running water fish culture unit size of 100m^3 water with inlet and outlet facilities has been estimated as Rs.0.45lakh /unit. Farmers/entrepreneurs who availed bank loan or who have invested on their own shall be provided subsidy @20% of the unit cost with a ceiling of Rs.9,000/unit for all farmers, except SC/ST farmers for whom the subsidy shall be @25% of the unit cost with a ceiling of Rs.11,250/unit.

b. **First year inputs:** The cost of one time first-year inputs for running water fish culture unit size of 100m^3 water has been estimated as Rs.0.15lakhs /unit. Subsidy @20% of the unit cost with a ceiling of Rs.3,000/unit for all farmers, except SC/ST farmers for whom the subsidy @25% of the unit cost with a ceiling of Rs.3,750/unit shall be provided to those who have availed NFDB subsidy for construction of the units.

2.11 Establishment of trout seed hatchery

2.11.1 Introduction

Most of the indigenous trout species (snow trout, *Schzothorax spp*) of Kashmir have been artificially fecundated and obtained their young ones for stocking of streams in the valley. The fecundity of rainbow/ brown trout ranges from 1700 to 2500 per kg body weight. The incubation period of eggs depends on water temperature. At 70 F rainbow trout eggs hatch in 49-50 days. There are different types incubator units designed with different sizes depending on the brood stock available and production of quantity seed.

2.11.2 Eligibility Criteria

The following criteria will be used to establish the trout hatchery with production capacity of 0.5-1.0 million fry/year/unit by State Fisheries Departments/Research Institutes/Quasi Government organizations are eligible for taking up of the activity.

- Assurance/ willingness of the implementing agency to make specific provision in the budget for the funds other than NFDB grant towards capital and working capital costs for successful operations of the brood bank
- Positioning sufficient manpower to manage the hatchery
- The proposal should be as per the NCWRI (ICAR) Bhimtal norms for scrutiny of the designs/components, estimates and costs

2.11.3 Unit Cost and pattern of assistance

The unit cost for establishment of trout hatchery with production capacity of 0.5-1.0 million fry/annum is Rs. 30 lakhs/unit as assessed by NCWRI, Bhimtal. The NFDB shall extent 100% financial assistance as one time grant to State Fisheries Departments/Research Institutes/Quasi Government organizations.

2.11.4 Eligibility Criteria for 0.2-0.3 million fry /year capacity

The following criteria will be used to establish the trout hatchery by the private entrepreneurs/ farmers for production 0.2-0.3 million fry per year.

- Clear title of the land in the name of the applicant
- If, the land is on lease, lease deed for a minimum period of 7years
- Past performance of the farmer/entrepreneur in trout farming including record of his/ her training in the said activity
- Should not be defaulter with any financial institution/Government
- Assurance/ willingness of the entrepreneur/farmer to revolve the sale proceeds towards the inputs for subsequent operations
- Assurance/ willingness of the entrepreneur/farmer for availing bank loan towards non-subsidy portion of the investment towards capital cost and first year input costs

2.11.5 Unit Cost and pattern of assistance

The unit cost for establishment of trout hatchery with a production capacity of 0.2-0.3 million fry /year has been proposed as Rs.12 lakhs/unit. The back-ended subsidy @20% of the unit cost shall be provided for the eligible farmers/ entrepreneurs.

2.12 Brood stock development programme

2.12.1 Introduction

Seed quality is an important and essential attribute for optimizing the potential for aquaculture production (better yield and good returns). The seed quality is generally related to

the status of the brood-stock and good quality inputs in upbringing of the stock. When the seed is produced from the same offspring, year after a year, which may result in loss of genetic vigour, and is generally termed as 'in-breeding effect' (?) It is also revealing that genetic quality of brood-stock and good hatchery/ nursery management are the other two possible main factors affecting seed quality. Brood farming is therefore an important activity in a commercial hatchery. The brood-stock development includes recruitment of healthy juveniles or yearlings, which are to be procured from natural breeding grounds or from reputed and certified hatcheries. Selected prospective brood fishes are reared for a few months, preferably in earthen ponds (0.2 to 0.4 ha in area with a depth of 1.5 – 2.0 m) at a stocking density of 1,000 kg/ ha.

The brood stock development will depend on the species, seed production targets and traits to be improved. In principle the brood stock should be genetically variable and base population should be established from a wide choice. Information on source of stock, its background information, prior performance and proper evaluation of stocks is very essential before introducing any new stock in to a hatchery. Number of brood stock to be maintained depends on the size of the hatchery, type of breeding programme etc.,

Transportation of brood fishes from collection source to hatchery is again very important, as it would strain the fishes and they are to be transported with maximum care and they are properly maintained after stocking into ponds.

The general concepts of brood stock development should be kept in mind while formulating the proposal.

2.12.2 Eligibility criteria

The following criteria will be used to select the implementing agencies to take up Brood stock development programme including ornamental fishes.

- Assurance/ willingness of the implementing agency to revolve the grant as provided by NFDB, in order to meet the input costs for subsequent operations for its long-term sustenance.
- Assurance/ willingness of the implementing agency to make specific provision in the budget for the funds other than NFDB grant, towards wages of staff for successful management of the brood bank.
- This programme should be taken up by R& D Institutes and / or State fisheries Departments independently or in collaboration. When ever Department of Fisheries plans the activity, it should be in collaboration with a R & D Organization.

2.12.3 Unit cost and pattern of assistance

The unit cost is estimated as Rs. 25 lakhs (Rs.20 lakhs for capital investment and Rs.5 lakhs for revolving grant). In respect of ornamental fishes, the unit cost is estimated as Rs.25 lakhs, including setting up of a farm, transport arrangement for dissemination. The proposal of the applicant shall be referred to the ICAR institute concerned for scrutiny of various components including designs and the cost estimates.

In this case the NFDB shall extend 100 % grant to the State Fisheries Departments/ Research Institutes/ Quasi-government organizations.

2.13 Establishment of Trout feed mill

2.13.1 Introduction

Feeding is a must in farming of trout as they need nutritive feeds with high protein levels. They are specially formulated and extruded to avoid wastage of feed when cultured in running water/raceway systems. In order increase the production levels of trout in hill states there is a need to establish feed mills so that the feeds are readily available for feeding fishes in culture systems. State/ UT Governments can establish feed mills with an installed capacity of 3 t/hour for assured supply of trout feeds to the farmers in cold climate and high altitude areas.

2.13.2 Eligibility criteria

The following criteria shall be applied to establish the trout feed mill with an installed capacity of 3t/ hour of extruded pelleted feed for trout:

- State Fisheries Departments/Research Institutes/Quasi Government organizations are eligible to take up the activity.
- Assurance/ willingness of the applicants viz. State Fisheries Departments/ Research Institutes/Quasi Government organizations to made specific provision in the budget for the required funds other than NFDB grant towards capital investment, working capital costs and staff costs for successful operations of the unit.

2.13.3 Eligibility criteria for private entrepreneurs

- Clear title of the land in the name of the applicant
- Detailed Project Report

2.13.4 Unit Cost and Pattern of assistance

The unit cost for establishing an extruded floating pelleted feed mill for trout with production capacity of 3 t/hour has been estimated as Rs.500 lakh/ unit. The NFDB shall extend 100% financial assistance as one time grant to State Fisheries Departments/Research Institutes/Quasi Government organizations.

2.14. Establishment of fish feed mills

2.14.1 Introduction

Feeding is a must in farming of fin fishes and shell fishes for obtaining higher production levels.

2.14.2 Eligibility criteria

The following criteria shall be applied to establish the fish feed mill

- Clear title of the land in the name of the applicant
- If the land is on lease, lease deed for a minimum period of 7 years
- Should not be defaulter with any financial institution/Government
- Assurance/ willingness of the farmer for revolving the sale proceeds towards the input costs for subsequent operations
- Bank's consent to provide the loan towards non-subsidy portion

Unit cost & pattern of assistance

The unit cost for setting up formulated fish feed unit with production capacity of 1.2

quintal/ day is estimated as Rs.7.5 lakhs. Progressive entrepreneurs/farmers are eligible for back-end subsidy @20% of the unit cost with a ceiling of Rs.1.50 lakh per unit.

2.15 Training and demonstration

2.15.1 Introduction

Skill up-gradation is an important component of any production-oriented activity. The NFDB's objectives of increasing fish yield levels from the existing ponds and tanks and to bring in new areas under aquaculture can be adversely impacted if the technical skills of the farmers/ entrepreneurs are inadequate.

Therefore, to meet this important requirement of human resource development in freshwater aquaculture, the Board envisages mobilization of existing facilities available under public and private sectors to impart training to the fish farmers/ entrepreneurs in the country.

2.15.2 Implementing Agencies

State Fisheries Departments, Fisheries Federations/Corporations, KVKS, Fisheries Colleges and Research Institutes who have training facilities, faculty (in house/ outsource) and extension mechanism are entitled for conduct of training and demonstration programmes.

2.15.3 Training need assessment

Implementing agencies shall identify the issues to meet the objective of enhancing the fish production and training needs are to be based on the field situation. The training needs are state/region specific and the programmes are to be tailor made to suit the requirement of the farmers. Further, all the training needs are not of the same magnitude. Some may require training on the problems/gaps/initiatives and some may require full-fledged technical know-how to start a new activity. Accordingly, the implementing agencies shall design the training modules incorporating the topic, methodology, duration, venue and planning for follow up activity etc.,

2.15.4 Eligibility criteria for selection of a trainee

The following criteria shall be followed by the implementing agencies in selection of a farmer/ entrepreneur/fisherman/ stakeholder connected with pond/tank fisheries to receive training:

- Should be a new/existing fish farmer
- Should be willing to upgrade the existing fish culture practices
- Should be willing to provide balance investment cost and or be willing to avail institutional finance for intensifying fish production
- Should not have participated in any training programme organized by the Fish Farmers' Development Agency on freshwater aquaculture at least six months prior to training under the NFDB Programme. Further, such farmer shall also not be eligible to receive any freshwater aquaculture related training organized by the FFDA or under any other Centrally Sponsored Scheme for one year subsequent to this training
- There should not be duplication of trainees by different agencies

2.15.4 Unit cost (training and demonstration)

The unit cost includes a standard training period of 3-5 days and the following components shall be funded as 100% grant under the programme:

(i) Assistance to farmer: The farmer shall be eligible for a daily allowance of Rs. 150/ day and reimbursement of to and fro travel costs (train/ bus/ auto rickshaw) as per the actual, subject to a maximum of Rs.500.

(ii) Honorarium to resource person: Implementing agencies shall engage the resource persons experienced in the subjects proposed in the training programme. The

provision towards the honorarium payable to resource persons is @Rs.500/ per day of class room/field training and to and fro travel expenses (train/ bus/ auto rickshaw) shall be reimbursed as per the actual, subject to a maximum of Rs 1000 per programme.

(iii) Assistance to implementing agencies: The implementing agency shall be eligible to receive Rs 75/ trainee/ day for a maximum period of 5 days for organizing the training. This cost shall cover expenses towards identification and mobilization of the trainee and course material/ training kits, etc.

(iv) Development of training/ demonstration site(s):

(a) The State Government (Department of Fisheries) shall be eligible to receive a one-time grant of Rs One lakh only (Rs 1,00,000) for development of their existing fish farm for undertaking training/ demonstration programmes on a regular basis. The State Government shall not be eligible for any subsequent grant for the same training site for the same purpose from NFDB or from any other funding agency for a period of five (5) years.

(b) In case the State Government does not posses its own facility which can be used for training/ demonstration, it would be eligible to develop the facility by taking a village Panchayat pond or tank on lease for undertaking training/ demonstration and for the purpose a one-time grant of Rs Fifty thousand only (Rs 50,000) shall be available for making payment towards lease amount and development of the facility for imparting training/ demonstration. The lease shall be for a minimum period of five (5) years and the water spread area should be a minimum of 0.5 ha or more.

(c) In the absence of (a) and (b) above, the State Government may engage the pond(s) of a private farmer for which an amount to Rs.5000 per training programme shall be made available as fee for hiring the facility.

Besides the above, the State Governments and other implementing agencies shall also abide by the following conditions:

- The facilities developed by the State Government shall also be available to other implementing agencies for training of fish farmers under the NFDB programme
- The training/ demonstration facilities developed by the implementing agency shall not be more than 25 km from the training site. However, if such a facility cannot be developed within 25 km, full justification shall be provided
- The NFDB shall not fund any other training/ demonstration site over and above the one developed to ensure its optimal utilization
- The training batch consist of 25 trainees and in no case exceed 30 trainees/ batch
- All State/ Union Territory Governments shall be assisted with the setting up of a maximum of five (5) training/ demonstration sites initially. Additional sites shall only be sanctioned depending upon the performance and optimal utilization of the site(s) already sanctioned. Establishment of additional sites would also be linked to the number of farmers trained, area covered and institutional finance availed by the trained farmers for taking up aquaculture activities
- All other implementing agencies including Fisheries Institutes under the Indian Council of Agricultural Research and the Colleges of Fisheries under the State Agricultural University shall avail their own facilities for which a lump sum of Rs Five thousand only (Rs 5 000) per training programme shall be provided. However, if such agencies do not have their own facility, they shall make use of the facility developed by the State Government or engage the facility of a private farmer, for which Rs Five thousand only (Rs 5 000) per training programme shall be provided
- The State Government shall also train at least one batch of 25 trainees/ entrepreneurs each year who shall be exclusively trained in setting up and

operation of fish seed hatcheries

- The implementing agency shall maintain the profile of each trainee and provide information on the area farmed by each trained farmer, investments made, employment generated and increase in production and productivity. The consolidated information on the above shall be made available to NFDB at quarterly intervals for a period of five years
- The implementing agency shall also be responsible for facilitating institutional finance to the fish farmers
- The implementing agency and the NFDB shall enter into an MoU prior to release of funds for training and demonstration wherever required. The conditions stipulated in the Guidelines shall *inter alia* be a part of the MoU

2.16 Introduction of *Pangasius sutchi* culture
Guidelines for Regulating Introduction of *Pangasius sutchi* in India

The inland aquaculture in India is predominantly a carp farming entity. It is popular in states like Andhra Pradesh, West Bengal, Punjab and Haryana where commercial culture is practiced. The fish production level under commercial carp culture had already at the verge of breaking point due to increased input costs and the market value for fish remaining constant. Added to this there were failures of shrimp farming activity because of occurrence of white spot disease in late 90s. The fish farmers from the three coastal districts, *viz.,* Krishna and East and West Godavari, have now found an alternate species in so called pangus *(Pangasius sutchi)* for a commercial level culture.

Pangasius sutchi is widely cultured in Asia and Southeast Asia, viz China, Vietnam, 'Bangladesh, Thailand and also picking up in countries like Malaysia, Cambodia, etc. However most of the production comes from Vietnam exceeding a production of 1.0 million tons per annum and the main importing countries of the Vietnamese catfish are USA, EU, Russia, Ukraine, etc.

Culture of *Pangasius sutchi* in India

The exotic freshwater catfish *P. sutchi* was first introduced into India in the year 1995-96 in the state of West Bengal from Thailand through Bangladesh. Initially farming was carried in limited area in the states of West Bengal and Andhra Pradesh. But since 2004 its farming has increased due to the commercial importance and by 2008 it is estimated that *Pangasius* is being farmed in an area of about 40,000 ha with an expected production of 1.80 to 2.20 lakhs tons. There is a growing interest among the farming community in other states as well to take up *Pangasius* culture in a larger extent, thus paving way for demand for Its seed and for establishment of commercial scale hatcheries. *Pangasius* is being farmed under monoculture or polycuIture with carps.

Distribution and Habitat

The fish is classified as *Pangasius sutchi* (Flower, 1973) under family Pangasidae of the order Siluriformes. The fish is native to large river systems of Mekong Basin and Chavo Phraya River (Thailand, Cambodia and Vietnam). This species prefers water with a pH of 6.5 - 7.5, hardness 2.0-29 dGH and a temperature of 22-26°C. The fish is also known as

iridescent shark for its glow exhibited in juveniles, because of this they are traded as most wanted ornamental fishes.

Biology and Breeding

P. sutchi when young they are cannibalistic, feeding at the bottom on offal, snail, gastropods, insects, etc and turn to omnivorous feeding habit, readily accepting artificial feeds under confined culture. The species reaches sexual maturity by 3 years of age and can grow to a maximum size of 46kgs. Females are larger than males. In nature the fishes are seasonal spawners and breed during the warmer months. The fishes can be artificially bred in the hatchery by hormone injection. Eggs are dry stripped from females and mixed with milt from the males.

Hatching occurs in 22 to 24 h at 26-30°C. Hatching percentages are variable and may range from 20 to 80%.depending on egg quality and fertilization rate. Larvae are free-swimming and begin feeding on *Artemia* or similar live food 24 hours post-hatch. Cannibalism can be significant if adequate food is not provided. Fry grow rapidly and can be weaned to powdered feed after about 10 days. Production of fingerlings may be accomplished by stocking in nursery ponds with established zooplankton populations. Grading of the juveniles is recommended to remove larger individuals ..
fingerlings can reach 4-6 cm in 40-50 days post-hatch.

Potential of P. sutchi

P. sutchi has tremendous potential in India for its culture due to following advantages:

Fast growth

The fish has rapid growth rate and attains 1.0 to 1.5 kgs in 8 - 10 months during the culture period in ponds/cages.

Adaptability

- *P sutchi* depends mostly on supplementary feeding, and is amicable for culture with least animal husbandry practices.
- The fish being compatible can be cultured along with carps in polyculture.
- The fish under monoculture can be farmed at high densities.
- The fish can even be cultured in areas of low salinity (brackish water and abandoned shrimp farms).
- The fish being non competitor for food with other cultured fishes it is considered to be environment friendly in culture condition.

Culture area

The species can be cultured in ponds, seasonal tanks, abandoned shrimp ponds, cages, canals, reservoirs and other deep landlocked water bodies.

Diseases

Pangasius sutchi is prone to diseases such. as haemorraegic septicemia, bacillary diseases, *Flavobacterium columnarae, Trichodine* which can impact farmed and wild stocks. However, there is no report on occurrence of serious OIE listed diseases during culture.

Marketability

- Since the fish doesn't have intramuscular bones, the flesh can be easily filleted.
- The fish has tremendous potential for domestic market
- India with its large infrastructure and vast experience in shrimp processing & exports can exploit the international market.

Water bodies

Suitable water bodies namely ponds, seasonal tanks, canals, lagoons and reservoirs, brackish water areas especially low saline waters. Abandoned Shrimp ponds having potential for fish culture can be utilized. Besides canals, lagoons and reservoirs may also be utilized once the cage culture technology for *P.sutchi* in India under biosecurity is developed and standardized.

Seed production and requirement

As per the Risk analysis study Report of NBFGR, Lucknow, hatcheries have been established mostly in West Bengal(80-100) and a few in Andhra Pradesh to meet the demand by the farmers. Present production of *P.sutchi* seed in the country is estimated to ‘be around 30-50 Crores/year. Thus in order to maintain the quality of the seed, following measures are to be taken:

Hatchery certification

Certification of the hatcheries that are already producing *P.sutchi* seed in West Bengal and Andhra Pradesh need to be undertaken where even new hatcheries have to be established and they shall be registered with the respective State Government.

Brood stock development

ICAR Institutions, NFDB and MPEDA can import limited numbers of genetically pure broodstock of *P.sutchi* for development of brood stock banks. Public Private Participation (PPP) model can also be explored to build brood stock banks.

Current seed production

Present production of P. sutchi seed in the country is estimated to be 40-50 million

Establishment of hatchery

Suitable guidelines for hatchery establishment and standard operating procedures need to be developed for the accreditation of the hatcheries.

Culture of *Pangasius sutchi*

The culture of *Pangasius sutchi* in India shall be governed by the following guidelines:

Registration:

Farmers who intend to take up *Pangasius sutchi* culture shall apply to the State Fisheries Dept in the prescribed Proforma (Annexure-I) for permission.

Location

Ponds, seasonal/perennial tanks, low saline brackish water areas, abandoned shrimp ponds during monsoon months, cage culture in canals, reservoirs and other deeper water bodies. The farm should not be located adjacent to rivers, flood prone areas. Seepage channel around the culture pond is suggested to avoid infiltration of pond water into adjacent paddy/other crops. In case of cage culture large size fingerlings (more than 100 gm) should be stocked in cages. Inlets and outlets of culture ponds should be provided with screens to prevent escape of fishes from the pond into the natural environment. .

Type and culture intensity

P.sutchi could be cultured both under mono and poly culture systems. Monoculture could be restricted up to semi intensive with a stocking density of less than 20,000 advanced fingerlings (15-20 gm/ha aiming at a production target of 20-25 tons/crop. Under poly culture the stocking density of *Pangasius sutchi* should not be more than 10,000/ha with a target production of 12-14 tons/ha.

Area of culture systems

Each pond should not be **more than 5 hectares in area** and an average depth of 1.5 ft for better monitoring and management. Grow out culture period for ponds could be 8 to 12 months depending upon stocking density and the targeted size at harvest. Cage culture could be about 6 months. Generally the marketable size is 1-1.5 kg.

Cage culture in canals/reservoirs

To develop the feasible technology of *P.sutchi,* for demonstrating to the farmers/entrepreneurs, cage culture should be taken up on a research/pilot scale in different agro climatic situations.

Feeds

Wet feeds should be totally discouraged in the culture. Use of floating pellets is desirable for better growth, better meat quality, better health and better pond water and soil management in order to achieve the FCR of less than 1: 1.5.In case of poly culture mash feeds of good quality may also be used through bag feeding in addition to floating pellets.

.

Fertilization

Under monoculture, manuring of culture pond may not be required; however agriculture lime should be applied @ 100kg per ha depending on the pH of pond soil and water. For polyculture ponds, fertilization using organicl inorganic manures could be followed as per

the soil fertility.

Feed storage

Proper feed storage facility should be provided at the farm site with proper. ventilation and fumigation. The feed should be stacked on raised wooden platforms without touching the walls to avoid mould. The feed should be used within three months from the date of production .

Health management

Banned antibiotics should not be used. Sanitizers such as bromine, iodine, lime etc., may be used judiciously. Unnecessary usage of other chemicals/ drugs shall be avoided. During culture, water exchange should be decided depending on the water quality status. After every two crops pond desiltation and drying should be carried out. The used culture water should not be discharged directly into natural without any treatment such as lime, Sodium hypochlorite etc. As far as possible run off from agriculture fields should be avoided to reduce bioaccumulation of pesticides. Health and growth monitoring should be done regularly on monthly basis. Any sign of diseases occurrence/incidences should be immediately reported to the State Fisheries Department.

Record keeping

Registers should be maintained pond wise on day to day management of the farm indicating the details of stocking, source of seed, other inputs, sampling details, water quality details, health, growth etc. The records should be produced at the time of inspection by the concerned fisheries authorities (Annexure-II).

Harvesting

Feeding should be suspended one/two days prior to harvest. Harvesting can be carried out in *two* phases(6-8 months; 10-12 months) .Harvesting may be done using drag nets and quick harvesting is suggested.

Post harvest and transport

Harvested fish should be immediately iced and transported for domestic markets/processing plants.

Training programmes

The training programming for farmers shall be taken up by the concerned State Fisheries Department/Research Organizations/KVK's.

Penalty

Culture of Pangasius sutchi in water bodies namely ponds in fresh waters and brackish water, areas especially low salinity, abandoned Shrimp ponds, seasonal tanks, cage in canals, lagoons and reservoirs, without prior permission from State Fisheries Department is illegal and such farmers are liable for punishment which includes seizure of stock and demolishing of ponds, etc.,

Unit cost:

The unit cost for construction of new pond (s) and renovation of existing pond(s) and towards the inputs such as seed and feed etc., for Pangasius sutchi fish culture are as detailed below:

Sl. No	Item	Cost / Ha (Rs in Lakh)	Subsidy on the unit cost
A	**Construction/Renovation cost**		
	(i) Construction of ponds with sluices, pipeline etc	3.00	General: 20% SC/ST : 25%
	(ii) Renovation of existing ponds (Max. 10 Ha)	0.75	
B	**Inputs cost**		
	(i) Cost of seed	0.60	General & SC/ST : 40%
	(ii) Cost of feed and	4.40	
	Total inputs cost	5.00	

Eligibility criteria

1. Those farmers/entrepreneurs, who have been sanctioned bank loan or received willingness letter from a bank for providing loan towards non-subsidy portion for construction / renovation of existing ponds and inputs cost are only eligible to apply for NFDB subsidy.

2. Construction/renovation of the pond(s) and registration as per GoI guidelines are mandatory to get NFDB subsidy

Pattern of assistance:

NFDB extends the financial assistance in the form of incentive subsidy as shown in the above table under unit cost. The subsidy towards construction/renovation of ponds and onetime first year inputs cost shall be back-ended and will be adjusted against recovery of the final installment (s) of the bank loan availed for this purpose.

a) The incentive subsidy @40% towards onetime first year inputs cost for Pangasius sutchi fish culture is available for applications received up to 31st March 2014.

Annexure-I

Application Format (Pangasius sutchi)

Sl.No	Item	Filled in by the applicant
1	Name and address of the Applicants(s)/ registered in full (in Block Letters with permanent address)	
2	Status of the Farm: Individual/Society /Private/proprietary /Partnership p	
3	Address for communication	
	Street	
	City	
	District	
	State	
4	Location of the farm	
	State	
	District	
	Taluk/Mandal	
	Revenue village	
	Survey number	
5	Ownership (Whether free hold or on lease)	
6	If on lease, Specify the lease period and attach copy of lease deed	
7	Whether the farm is registered with DoF and approved by CAA/Other Agency (Enclose a copy of the certificate	
8	Attested copy of the layout of the farm approved by DoF/MPEDA/Chartered Engineer	
9	List species that are cultured in the farm (Existing)	
10	Source of water	

11	Pond history	
	a) Month & year of construction of the ponds and received if any	
	b) Production details of Fish/shrimp from the year of construction	
	c) Whether assistance for fish farming received under Central/State Government? If so, please provide the details	
	d) Present condition of the ponds, if existing	
12	Details of the proposed ponds construction/renovation/repair works of the ponds	
13	Proposed date of operation of the farm and tentative schedule of activities	
14	List of Machinery and facilities available at the farm (As per to the Proforma at Appendix-I).	
15	Estimates regarding input costs and economics of operations in culture of Pangasius sutchi in ponds and cages	

Declaration by the Applicant

I/We……..son/daughter/wife of ……..Residing at …… hereby declare that the information furnished above is true to the best of my/ our knowledge and belief. I am/ we are fully aware that if it is found that the information furnished by me/ we/ us is false or there is any kind of deviation/ violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/ us.

Date:

Place: Signature of the applicant (s)

Countersigned by the implementing Agency (Director of Fisheries of the state)

Date:

Place: Signature and seal of the authorized representative of the Implementing Agency

*** This form should be accompanied by the additional information regarding available infrastructure at the farm as per Appendix-I and the declaration by the applicant as per Appendix-II.**

Appendix-I

Proforma for furnishing details of infrastructure available at the farm belong to Shri/Smt……..at…… ……..

Physical facilities

Farm extent (in hectares) :

No. of ponds :

Area of each pond :

Bund height of each pond :

Water outlet (Hume pipes/ sluice gates) :

Sedimentation tank :

Buildings

a) Office / Admn :

b) Living quarters :

c) Stores :

d) Lab for undertaking basic tests :

Machinery:

Pumps :

Aerators :

Gen Set :

Machine Room :

Place: Signature of the applicant

Date: Name:

Address:

Appendix-II

Declaration to be furnished by the owner of the farm along with the application (to be signed on Rs 100/- Non- judicial stamp paper).

1.I/We……aged……..son(s)/daughter(s)/wife of…….and owner(s) of the farm at……location/in ...../District of ..... (State) hereby declare that I/ We have read and understood the norms for undertaking *Pangasius sutchi* culture and agree to abide by the conditions laid down in the guidelines.

2. I/We hereby declare that I/we shall follow the guidelines issued by Government of India ..... for farming *Pangasius sutchi.*

3.I/We also agree to abide by any instructions that may be issued by concerned agency from time to time regarding the culture of *Pangasius sutchi* failing which I/*W'e* understand that the registration may be cancelled.

4. I/We also agree to the inspection of the farm by any designated officer(s) of the concerned Agency at any time, with prior intimation.

5. I/We also agree to provide information regarding source of the seed, production record, laboratory analysis sheets to the inspection team and shall submit regular reports.

6. I/We also agree to abide by the specifications and penalty clause laid down in the guidelines in the farming of *Pangasius sutchi* failing which I/we shall be liable to the cancellation of the approval as well as destruction of all the stocks in the pond(s).

7. I/We also undertake that a quality certificate shall accompany the consignment of fish shipped from my/our establishment (self certification) regarding the chemicals/ antibiotics residue status of the fish.

Place: Signature of the applicant

Date: Name:

Address:

3.0 Submission of proposal:

3.1 All the eligible applicants shall submit duly filled in application prescribed by NFDB for intensive aquaculture in new fish ponds and tanks (Form-I), intensive aquaculture in existing fish ponds and tanks (Form-II), establishment of fish seed hatcheries (Form-III), construction of fish seed rearing farms (Form-IV) Renovation/upgradation of existing fish seed hatcheries (Form-V), Renovation of existing fish seed rearing farms (VI), establishment of prawn seed hatcheries (VII)Trout culture in race-ways and Running water fish culture (Form-VIII), Establishment of trout seed hatcheries (Form-IX), Brood stock management program (Form-X) Establishment of feed mills/units (Form-XI) and Training and demonstration (Form-XII) through the Director/Commissioner of Fisheries of the respective states, who are the implementing agencies. The state fisheries department shall verify the applications with respect to the technical feasibility and other requirements as per the eligibility criteria under the activity and forward with recommendation to NFDB by countersigning the applications in a consolidated form for sanction and release of funds.

3.2 Wherever, the State Fisheries Departments, Quasi Government organizations and Research Institutes are the applicants, shall submit the duly filled in prescribed application directly to the NFDB for sanction and release of funds.

All other applicants shall submit the applications through the State Fisheries Departments concerned

4.0 Release of funds:

4.1 Generally, the subsidy sanctioned shall be released to the implementing agencies in two installments for the activities relating to construction of new ponds and tanks, renovation of existing ponds and tanks and for establishment of hatcheries for production of fish and prawn seed to the respective implementing agencies. The first installment i.e., 50% of subsidy for construction/renovation shall be released on approval of the proposal by the NFDB and the second installment of subsidy i.e., balance 50% for construction/renovation and 100% subsidy for input costs shall be released at the beginning of culture/seed production activity and on receipt of the utilization certificate for the first installment of the subsidy and works completion certificate from the implementing agency. However, based on the volume of the proposals approved, NFDB may prescribe the number of installments for release of funds while sanctioning the subsidy and funds will be released in periodic instalments depending upon the progress of work.

4.2 In case of the grant, release of funds in the installments shall be prescribed by NFDB based on the nature of the activity and the implementation plan.

4.3 The financial assistance for conduct of training and demonstration programmes shall be released to the implementing agencies in appropriate phases on approval of the proposal.

5.0 Disbursement of subsidy:

5.1 The NFDB subsidy shall be back-ended in both the cases of self financed as well as bank loan availed towards the non-subsidy portion of funds. In case of bank loan, the subsidy provided to the farmer/entrepreneur shall be adjusted against recovery of the last few installments of the bank loan and whereas, in case of self-finance, the subsidy shall be disbursed by the implementing agencies after completion of civil works in all respects and at the beginning of culture/seed production activity however, the detailed conditions for disbursement of the NFDB assistance will be indicated in the respective sanctioned.

6.0 Submission of Utilisation Certificate

The Implementing Agencies shall submit utilization certificates (UC) in respect of the funds released to them by the Board. Such certificates shall be submitted in ***Form-XII*** on half-yearly basis *i.e.* during July and January of each year. The utilisation certificates can also be submitted in between if activities for which funds were released earlier have been completed and the next dose of subsidy is required to complete the remaining works by the farmer with a view to release the second and subsequent instalments, part UCs shall be submitted.

7.0 Physical and financial progress reports

In addition to the Utilisation Certificate, the implementing agencies shall monitor implementation of the activity, the obtain the information and submit physical and financial progress report on quarterly basis and the compliance at the end of implementation of the each and every activity.

8.0 Monitoring and valuation

The State Governments shall set up a dedicated Monitoring and Evaluation Cell (M & E) in the Department of Fisheries to periodically monitor and evaluate the progress of activities implemented under the NFDB funding. The Cell may be set up under the chairpersonship of the Secretary In-charge of Fisheries and may include representatives of the State Departments of Finance and Fisheries and representatives of FFDA and Commercial Bank/ NABARD. The M & E Cell shall also establish financial and physical targets in consultation with the NFDB against which the performance and utilisation of funds shall be monitored.

Form – I

National Fisheries Development Board
Application for Intensive Aquaculture: New Ponds and Tanks

Sl. No	Particulars	Information furnished by the applicant
(1)	(2)	(3)
1	Name of the applicant (IN BLOCK LETTERS): S/o D/o W/o If, SC/ST (Enclosed proof)	
2	Address for communication: (telephone/ mobile number)	
3	Details of land where aquaculture activity is proposed to be taken up: Enclose copy of the land title document	
	a) State:	
	b) District:	
	c) Taluk/ Mandal:	
	d) Revenue Village:	
	e) Survey Number(s):	
	f) Ownership (whether freehold or on lease):	
	g) If on lease, duration of lease (minimum 7 years):	
	h) Total area of the proposed pond/s (in ha):	
	i) Total water spread area (in ha):	
4	j) Approximate area of fish ponds within the village of the proposed site	
5	Detailed plan and estimate of the proposed construction works of the new pond/ tank to be certified by the Department of Fisheries/ FFDA/ ICAR Fisheries Institute/ Colleges of Fisheries): (Enclose)	
6	Whether assistance for this purpose has been obtained under any other scheme of the Central/ State Government? If so, please provide the details:	
7	Details regarding economics of operation:	
8	Experience of the applicant in the field and details of training undergone so far:	
9	Source of funds: a. Bank loan – Enclose bank consent letter b. Self finance- Enclose declaration	
10	Tentative schedule of activities:	
11	Marketing tie up:	

Declaration by the Applicant

I/We…….....……son/daughter of ……hereby declare that the information furnished above is true to the best of my/our knowledge and belief. I am/we are fully aware that if it is found that the information furnished in the application is false or there is any kind of deviation/violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/us.

Date:

Place: Signature of the applicant/s

Countersigned by the implementing Agency

The application has been verified as per the NFDB guidelines and found correct. The farm has been inspected by the Departmental Officer/s and found feasible for taking up intensive aquaculture as proposed in the application.

Date:

Place: Signature and seal of the head
of the Dept./ authorised officer

Form -II

National Fisheries Development Board

Application for renovation of **Existing Ponds and Tanks**

Sl. No	Particulars	Information furnished by the applicant
(1)	(2)	(3)
1	Name of the applicant (IN BLOCK LETTERS): S/o D/o W/o If, SC/ST (Enclosed proof)	
2	Address for communication Telephone/mobile:	
3	Details of land where aquaculture activity is proposed to be taken up: Enclose land title document	
	a) State:	
	b) District:	
	c) Taluk/ Mandal:	
	d) Revenue Village:	
	e) Survey Number(s):	
	f) Ownership (whether freehold or on lease):	
	g) If on lease (Enclose lease document)	
	h) Pond/s area (in ha):	
	i) Total water spread area (in ha):	
4	Month & year of construction of the ponds and financial assistance received.	
5	Production details of Fish/prawn for the past 3years.	
6	Whether assistance for this purpose has been obtained under any other scheme of the Central/ State Government? If so, please provide details:	
7	Present condition of the pond/s and justification for renovation-Enclose a note	
8	Detailed estimate for the proposed renovation/ repair works of the ponds/ tank. (Certified by the Department of Fisheries/ FFDA/ ICAR Fisheries Institute/ Colleges of Fisheries)- Enclose	
9	Estimates regarding input costs and economics of operations, certified by a Fisheries professional: Enclose	
10	Source of funds: Bank loan – Enclose bank consent letter	
11	Whether the applicant is in default of payment to any Financial Institution/ Government. If yes, please provide the details and the reasons for default:	
12	Tentative schedule of activities and Marketing tie up:	

Declaration by the Applicant

I/We …… …… …….. ..... son/daughter/wife of …… …… …… …… …… ……hereby declare that the information furnished above is true to the best of my/our knowledge and belief. I am/we are fully aware that if it is found that the information furnished in the application is false or there is any kind of deviation/violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/us.

Date:

Place: Signature of the applicant/s

Countersigned of the implementing Agency

The application has been verified as per the NFDB guidelines and found correct. The farm/pond has been inspected by the Departmental Officer/s and found feasible for renovation for taking up intensive aquaculture as proposed in the application.

Date:
Place:

Signature and seal of the head
of the Dept./ authorised officer

Form – III

National Fisheries Development Board

Application for establishment of freshwater **Fish seed hatchery**

Sl. No	Particulars of the applicant	Information furnished by the applicant
(1)	(2)	(3)
1.0	Name and address of the applicant/ firm/ association/ Self Help Group (IN BLOCK LETTERS):	
2.0	Address for communication (telephone/ mobile number):	
3.0	Details of land where aquaculture activity is proposed to be taken up: Enclose copy of the land title document	
	a) State:	
	b) District:	
	c) Taluk/ Mandal:	
	d) Revenue Village:	
	e) Survey Number/s	
	f) Ownership (whether freehold or on lease):	
	g) If on lease, duration of lease:	
	h) Total land area in which the hatchery would be set up (in ha):	
4.0	Details of the proposed hatchery: Enclose detailed project report showing the following details	
	a) Type of hatchery & capacity:	
	b) Fish species	
	c) Production capacity, spawn per cycle(in millions):	
	e) Production cycles proposed to be taken per year:	
	f) Area for broodstock and nursery ponds	
	g) Source of water:	
	h) Source of brood stock:	
	h) Detailed estimates of the proposed construction works of the hatchery. (Design details/engineering works to be certified by the Department of Fisheries/ FFDA/ ICAR Fisheries Institute/ Colleges of Fisheries):	

5.0	Source of funds: Bank loan – Enclose bank consent letter	
6.0	Whether assistance for this purpose has been obtained under any other scheme of the Central/ State Government? If so, please provide the details:	
7.0	Whether the applicant is in default of payment to any Financial Institution/ Government. If yes, please provide the details and the reasons for default:	
8.0	Experience of the applicant in operation of hatcheries and details of training(s) undergone so far:	
9.0	Details regarding economics of operation:	
10.0	Tentative schedule of activities such as distribution and marketing of seed and transport arrangements, etc:	
11.0	Marketing tie up:	

Declaration by the Applicant

I/We…….....……..son/daughter/wife of ……hereby declare that the information furnished above is true to the best of my/our knowledge and belief. I am/we are fully aware that if it is found that the information furnished in the application is false or there is any kind of deviation/violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/us.

Date:

Place: Signature of the applicant/s

Countersigned by the implementing Agency

The application has been verified as per the NFDB guidelines and found correct. The farm has been inspected by the Departmental Officer/s and found feasible for establishment of fish seed hatchery as proposed in the application.

Date:

Place: Signature and seal of the head
of the Dept./ authorised officer

Form-IV

National Fisheries Development Board

Application for construction of **fish seed rearing farms**

Sl. No	Particulars	Information furnished by the applicant
(1)	(2)	(3)
1.0	Name of the applicant (IN BLOCK LETTERS): S/o D/o W/o If, SC/ST (Enclosed proof)	
2.0	Address for communication: (telephone/ mobile number)	
3.0	Details of land where aquaculture activity is proposed to be taken up: Enclose copy of the land title document	
	a) State:	
	b) District:	
	c) Taluk/ Mandal:	
	d) Revenue Village:	
	e) Survey Number(s):	
	f) Ownership (whether freehold or on lease):	
	g) If on lease, duration of lease (minimum 7 years):	
	h) Total area of the proposed fish seed rearing pond/s (in ha):	
	i) Total water spread area (in ha):	
4.0	Detailed plan and estimate of the proposed construction works of the new pond/ tank to be certified by the Department of Fisheries/ FFDA/ ICAR Fisheries Institute/ Colleges of Fisheries):	
5.0	Whether assistance for this purpose has been obtained under any other scheme of the Central/ State Government? If so, please provide the details:	
6.0	Details regarding economics of operation:	
7.0	Experience of the applicant in the field and details of training undergone so far:	
8.0	Source of funds: a. Bank loan – Enclose consent letter b. Self finance- Enclose declaration	
9.0	Tentative schedule of activities:	
10.0	Marketing tie up:	

Declaration by the Applicant

I/We…….....……..son/daughter/wife of ……hereby declare that the information furnished above is true to the best of my/our knowledge and belief. I am/we are fully aware that if it is found that the information furnished in the application is false or there is any kind of deviation/violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/us.

Date:

Place: Signature of the applicant/s

Countersigned by the implementing Agency

The application has been verified as per the NFDB guidelines and found correct. The farm has been inspected by the Departmental Officer/s and found feasible for taking up intensive aquaculture as proposed in the application.

Date:

Place: Signature and seal of the head
of the Dept./ authorised officer

Form – V

National Fisheries Development Board

Application for **Renovation/up-gradation of existing fish seed hatchery**

Sl. No	Particulars sought from the applicant	Information furnished by the applicant
(1)	(2)	(3)
1.0	Name and address of the applicant (IN BLOCK LETTERS):	
2.0	Address for communication: (telephone/ mobile number):	
3.0	Details of the fish seed hatchery proposed for renovation:	
	a) State:	
	b) District:	
	c) Taluk/ Mandal:	
	d) Revenue Village:	
	e) Survey Number/s	
	f) Total land area (in ha):	
4.0	Details of the existing hatchery: Enclose a report on the present status showing the following details	
	a) Year of establishment:	
	b) Type of hatchery	
	c) Fish species	
	d) Production capacity (fry)/year	
	e) Area under broodstock and nursery ponds	
	f) Source of water:	
	g) Source of brood stock:	
5.0	Detailed plan and estimates of the proposed renovation/ up-gradation of hatchery- Enclose detailed project report	
6.0	Whether provision is made for the state share of required funds for renovation. If so, please furnish the details	

7.0	Details regarding economics of operation after renovation: Enclose	
8.0	Tentative schedule of activities	

Declaration by the Applicant

I hereby declare that the information furnished in the application is true to the best of my knowledge and belief. The proposal has been prepared by inspecting the hatchery by the Departmental Officer/s and found feasible for renovation.

Date:

Place:

Signature and seal
o f the applicant
(Head of the Department)

Form – VI

National Fisheries Development Board

Application for **Renovation of existing fish seed rearing farms**

Sl. No	Particulars sought from the applicant	Information furnished by the applicant
(1)	(2)	(3)
1.0	Name and address of the applicant (IN BLOCK LETTERS):	
2.0	Address for communication (telephone/ mobile number):	
3.0	Details of the proposed fish seed rearing farm:	
	a) State:	
	b) District:	
	c) Taluk/ Mandal:	
	d) Revenue Village:	
	e) Survey Number/s	
	f) Total land area (ha):	
4.0	Details of the existing seed rearing farm: Enclose a report on the present status of the farm showing the following details	
	a) Year of establishment:	
	b) Number and size of the rearing ponds (in ha)	
	c) Total production capacity of advanced fry/fingerlings/year:	
	d) Fish species	
	g) Production per year:	
	i) Source of water:	
	j) Source of spawn/fry:	

5.0	Detailed plan and estimates of the proposed area (Ha) for renovation of the seed rearing farm: Enclose the detailed project report	
6.0	Whether provision is made for the state share of required funds (10%) for renovation.	
7.0	Whether assistance for this purpose has been obtained under any other scheme of the Central/ State Government? If so, please provide the details:	
8.0	Economics of operation after renovation: Enclose	
9.0	Tentative schedule of activities	

Declaration by the Applicant

I hereby declare that the information furnished in the application is true to the best of my knowledge and belief. The proposal has been prepared by inspecting the hatchery by the Departmental Officer/s and found feasible for renovation.

Date:

Place:

Signature and seal
of the applicant/s
(Head of the Department)

Form – VII

National Fisheries Development Board

Application for establishment of **Prawn Seed Hatchery**

Sl. No	Particulars sought from the applicant	Information furnished by the applicant
(1)	(2)	(3)
1.0	Name and address of the applicant/ firm/ association/ Self Help Group (IN BLOCK LETTERS):	
2.0	Address for communication (telephone/ mobile number):	
3.0	Details of land where aquaculture activity is proposed to be taken up: Enclose copy of the land title document	
	a) State:	
	b) District:	
	c) Taluk/ Mandal:	
	d) Revenue Village:	
	e) Survey Number/s	
	f) Ownership (whether freehold or on lease):	
	g) If on lease, duration of lease:	
	h) Total land area in which the hatchery would be set up (in ha.)	
4.0	Details of the proposed hatchery: Enclose detailed project report showing the following details	
	a) Type of hatchery	
	b) Numbers and size of larval tanks:	
	c) Production capacity PL/Year (in millions):	
	d) Production cycles proposed to be taken per year:	
	e) Water source	
	f) Area under brood stock ponds	
	g) Source of brood stock:	
	h) Details of the proposed construction works of the hatchery. (Design details/engineering works to be certified by the Department of Fisheries/ ICAR Fisheries Institute/ Colleges of Fisheries):	

5.0	Detailed estimates of the Bank for providing loan for construction and working capital money towards non-subsidy portion of funds:	
6.0	Whether assistance for this purpose has been obtained under any other scheme of the Central/ State Government? If so, please provide the details:	
7.0	Whether the applicant is in default of payment to any Financial Institution/ Government. If yes, please provide the details and the reasons for default:	
8.0	Experience of the applicant in operation of hatcheries and details of training(s) undergone so far:	
9.0	Details regarding economics of operation: Enclose	
10.0	Tentative schedule of activities such as distribution and marketing of seed and transport arrangements, etc:	
11.0	Marketing tie up:	

Declaration by the Applicant

I/We…….....……..son/daughter/wife of ……hereby declare that the information furnished above is true to the best of my/our knowledge and belief. I am/we are fully aware that if it is found that the information furnished in the application is false or there is any kind of deviation/violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/us.

Date:

Place: Signature of the applicant/s

Countersigned by the implementing Agency

The application has been verified as per the NFDB guidelines and found correct. The farm has been inspected by the Departmental Officer/s and found feasible for establishment of fish seed hatchery as proposed in the application.

Date:

Place: Signature and seal
of the Implementing Agency

Form – VIII

National Fisheries Development Board

Application for construction of **Trout culture in race-ways**

Or Running water fish culture

Sl. No	Particulars	Information furnished by the applicant
(1)	(2)	(3)
1.0	Name of the applicant (IN BLOCK LETTERS): S/o D/o W/o If, SC/ST (Enclosed proof)	
2.0	Address for communication: (telephone/ mobile number)	
3.0	Details of land where aquaculture activity is proposed to be taken up: Enclose copy of the land title document	
	a) State:	
	b) District:	
	c) Taluk/ Mandal:	
	d) Revenue Village:	
	e) Survey Number(s):	
	f) Ownership (whether freehold or on lease):	
	g) If on lease, duration of lease (minimum 7 years):	
	h) Size & No. of Race-way units / Running water fish culture units	
4.0	Detailed plan and estimate of the proposed construction works of the new pond/ tank to be certified by the Department of Fisheries/ FFDA/ ICAR Fisheries Institute/ Colleges of Fisheries):	
5.0	Whether assistance for this purpose has been obtained under any other scheme of the Central/ State Government? If so, please provide the details:	
6.0	Details regarding economics of operation:	
7.0	Experience of the applicant in the field and details of training undergone so far:	
8.0	Source of funds: a. Bank loan – Enclose consent letter b. Self finance- Enclose declaration	
9.0	Tentative schedule of activities:	
10.0	Marketing tie up:	

Declaration by the Applicant

I/We…….....……..son/daughter/wife of ……hereby declare that the information furnished above is true to the best of my/our knowledge and belief. I am/we are fully aware that if it is found that the information furnished in the application is false or there is any kind of deviation/violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/us.

Date:

Place: Signature of the applicant/s

Countersigned by the implementing Agency

The application has been verified as per the NFDB guidelines and found correct. The farm has been inspected by the Departmental Officer/s and found feasible for taking up intensive aquaculture as proposed in the application.

Date:

Place: Signature and seal of the head
of the Dept./ authorised officer

Form – IX

National Fisheries Development Board

Application for establishment of freshwater **Trout seed hatchery**

Sl. No	Particulars of the applicant	Information furnished by the applicant
(1)	(2)	(3)
1.0	Name and address of the applicant/ firm/ association/ Self Help Group (IN BLOCK LETTERS):	
2.0	Address for communication (telephone/ mobile number):	
3.0	Details of land where aquaculture activity is proposed to be taken up: Enclose copy of the land title document	
	a) State:	
	b) District:	
	c) Taluk/ Mandal:	
	d) Revenue Village:	
	e) Survey Number/s	
	f) Ownership (whether freehold or on lease):	
	g) If on lease, duration of lease:	
	h) Total land area in which the hatchery would be set up (in ha):	
4.0	Details of the proposed hatchery: Enclose detailed project report showing the following details	
	a) Type of hatchery:	
	b) Trout species	
	c) Production capacity fry (in millions):	
	e) Production cycles proposed to be taken per year:	
	f) Area for broodstock and nursery ponds	
	g) Source of water:	
	h) Source of brood stock:	
	h) Detailed estimates of the proposed construction works of the hatchery. (Design details/engineering works to be certified by the Department of Fisheries/ FFDA/ ICAR Fisheries Institute/ Colleges of Fisheries):	

5.0	Source of funds: **a.** Bank loan – Enclose bank consent letter **b.** Self finance- Enclose declaration	
6.0	Whether assistance for this purpose has been obtained under any other scheme of the Central/ State Government? If so, please provide the details:	
7.0	Whether the applicant is in default of payment to any Financial Institution/ Government. If yes, please provide the details and the reasons for default:	
8.0	Experience of the applicant in operation of hatcheries and details of training(s) undergone so far:	
9.0	Details regarding economics of operation:	
10.0	Tentative schedule of activities such as distribution and marketing of seed and transport arrangements, etc:	
11.0	Marketing tie up:	

Declaration by the Applicant

I/We…….....……..son/daughter/wife of ……hereby declare that the information furnished above is true to the best of my/our knowledge and belief. I am/we are fully aware that if it is found that the information furnished in the application is false or there is any kind of deviation/violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/us.

Date:

Place: Signature of the applicant/s

Countersigned by the implementing Agency

The application has been verified as per the NFDB guidelines and found correct. The farm has been inspected by the Departmental Officer/s and found feasible for establishment of fish seed hatchery as proposed in the application.

Date:

Place: Signature and seal
of the Implementing Agency
(Head of the Department)

Form - X

National Fisheries Development Board

Application for establishment of freshwater **Brood stock management programme**

Sl. No	Particulars of the applicant	Information furnished by the
(1)	(2)	(3)
1.0	Name of the organization (ICAR Institute/State Fisheries Depts/Agricultural Universities (IN BLOCK LETTERS):	
2.0	Address for communication (Telephone/ mobile number):	
3.0	Experience of the organization in handling similar projects with proven record	
4.0	Details of Hatchery/Fish Farm where brood stock management programme is proposed to be taken up taken up: Enclose copy of the land title document	
	a) State:	
	b) District:	
	c) Taluk/ Mandal:	
	d) Revenue Village:	
	h) Total land area of the site (in ha):	
5.0	Details of the proposed brood bank: Enclose detailed project report showing the following	
	a) Type of hatchery	
	b) Fish/prawn species	
	c) Production capacity, spawn per cycle(in millions):	
	e) Production cycles proposed to be taken per year:	
	f) Area for brood stock and nursery ponds	
	g) Source of water:	
	h) Source of fish/prawn for brood stock development:	
6.0	Items of expenditure under the proposed programme	

	a) Costs towards the works and equipment (Design details/engineering works) certified by the competent authority:	
	b) Costs towards recurring expenditure	
	c) Manpower requirement (regular/casual)	
7.0	Whether assistance for this purpose has been obtained under any other scheme of the Central/ State Government? If so, please provide the details:	
8.0	Details regarding feasibility of the programme:	
9.0	Tentative schedule of activities	
10.0	Expected outcome of the programme (enclose report)	

Declaration by the Applicant

I/We…….....……..hereby declare that the information furnished above is true to the best of my/our knowledge and belief. I am/we are fully aware that if it is found that the information furnished in the application is false or there is any kind of deviation/violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/us.

Date:
Place:

Signature and seal
of the Implementing Agency
(Head of the institution)

Form -XI

National Fisheries Development Board

Application for **Establishment of fish/trout feed mill**

Sl. No	Particulars	Information furnished by the applicant
(1)	(2)	(3)
1.0	Name and address of the applicant/ firm/ association (IN BLOCK LETTERS):	
2.0	Address for communication (telephone/ mobile number):	
3.0	Location of the proposed feed mill: Enclose land title document	
	a) State:	
	b) District:	
	c) Taluk/ Mandal:	
	d) Revenue Village:	
	e) Survey Number(s):	
	f) Ownership (freehold or lease):	
	g) If on lease, enclose the lease document:	
4.0	Detailed plan and estimates of the proposed establishment of the feed mill: Enclose the detailed project report covering the following details.	
	a) Type of feed mill and Technology	
	b) Production capacity /per hour	
	c) Type of the machinery (indigenous/imported)	
	d) Total estimated cost of the project (show the capital cost + recurring costs separately)	
	e) Approximate cost of the machinery and equipment	
	F) Source of raw materials (feed ingredients)	
	g) Distance from the nearest feed mill in operation	

6.0	Source of funds: a. Bank loan-Sanction letters b. Promoters contribution Enclose the loan sanction letter	
7.0	Whether assistance for this purpose has been obtained under any other scheme of the Central/ State Government? If so, please provide the details:	
8.0	Experience of the applicant in the proposed activity and their organization profile. Incorporate the details in the project report	
9.0	Economics of operation:	
10.0	Tentative schedule of activities:	
11.0	Marketing tie up:	

Declaration by the Applicant

I/We…….....……..son/daughter/wife of ……hereby declare that the information furnished above is true to the best of my/our knowledge and belief. I am/we are fully aware that if it is found that the information furnished in the application is false or there is any kind of deviation/violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/us.

Date:

Place: Signature of the applicant/s

Countersigned by the implementing Agency

The application has been verified as per the NFDB guidelines and found correct. The farm has been inspected by the Departmental Officer/s and found feasible for renovation for taking up intensive aquaculture as proposed in the application.

Date:

Place: Signature and seal
of the Implementing Agency
(Head of the Department)

Form-XII

National Fisheries Development Board
'Application for Training and Demonstration programmes

Sl. No	Particulars sought from the Implementing Agency	Information furnished by the Implementing Agency		
(1)	(2)	(3)		
1.0	Name and address of the Implementing Agency:			
2.0	Location of the Training Facility:	**District**	**Block**	**Village**
3.0	Facilities available or proposed for imparting training:			
4.0	Details of the Training Programme:			
	a) Number of persons to be trained in fish farming and in hatchery operations (to be given separately):			
	b) Of which number of existing fish farmers:			
	c) Farmers having their own ponds/ tanks to undertake fish culture:			
5.0	Area under fish culture/ expected to increase after training programme:			
	a) Existing fish farm area (ha):			
	b) New area to be developed by the trained farmers (ha):			
6.0	Average fish production in the area (kg/ ha/ annum):			
7.0	Whether the demonstration site would be in the Fish Farm of the State Government or will be taken up in village Panchayat ponds on lease basis:			
8.0	If demonstration site other than the farm of the Department of Fisheries, please provide the following details:			
	a) Complete address of the pond/ tank:			
	b) Size of the pond/ tank (ha):			
	c) Distance from the location of the training site:			
9.0	Whether the Implementing Agency proposes to engage farmer's pond? If so, the number of training programmes to be conducted in a year may be indicated:			
10.0	Financial Implications:			
	a) Training			
	(i) Assistance to farmer @ Rs 125/ day:			
	(ii) Reimbursement of to and fro travel expenses to farmer:			

	(iv) Honorarium to resource persons and reimbursement of to and fro travel expenses:		
	(iii) Assistance to implementing agency @ Rs 75/ trainee/ day:		
	Total of (a)		
	b) Demonstration Unit		
	Grand Total (a + b)		
11.0	Technical capabilities of resource persons to be engaged in training: Enclose particulars		
12.0	Any other details in support of the proposal		

Declaration by the Applicant

I/We…… …… .....……son / daughter of …… …… …… ……hereby declare that the information furnished above is true to the best of my/our knowledge and belief. I am/we are fully aware that if it is found that the information furnished in the application is false or there is any kind of deviation/violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/us.

Date:

Place: Signature of the applicant/s

Countersigned by the State Fisheries Department

The application has been verified as per the NFDB guidelines and found correct. The farm has been inspected by the Departmental Officer/s and found feasible for taking up intensive aquaculture as proposed in the application.

Date:

Place: Signature and seal of the head of the Dept./ authorised officer

Form-XIII

National Fisheries Development Board

Form for Submission of Utilization Certificate

Sl. No	Letter No and date	Amount

1.0 Certified that out of Rs _____ sanctioned during the year_____ in favour of _____ under the National Fisheries Development Board's Letter No given in the margin and Rs _____ on account of unspent balance of the previous sanction, a sum of Rs _____ has been utilized for the purpose of_____ for which it was sanctioned and that the balance of Rs _____ remains unutilized. The same will be adjusted towards the next installment payable during the period_____.

2.0 Certified that I have satisfied myself that the conditions on which the funds were sanctioned by the National Fisheries Development Board have been duly fulfilled/ are being fulfilled and that I have exercised the following checks to see that the money was actually utilized for the purpose for which it was sanctioned.

Date:
Place:

Signature and seal of the authorized representative of the Implementing Agency

National Fisheries Development Board
Guidelines for Fisheries Development in Reservoirs (RFD)

1.0 Introduction

Reservoirs form an important source of fish production in India. Presently, the area under reservoir fisheries in the country has been estimated at about 3.0 million hectares and with the constant addition of new reservoirs/ impoundments, this area is likely to further increase in the coming years. The average productivity from all categories of reservoirs is estimated at about 15 kg/ ha/ year, although potential exists for manifold increase as demonstrated in some small, medium and large reservoirs in the country. Poor appreciation of the biological and limnological functions governing the production regimes of reservoirs and lack of stocking programmes have rendered below-optimal utilization of the fisheries potential of the reservoirs. It is expected that through sustained supplementary stocking of quality fingerlings, augmenting the fish stocks through auto stocking, adoption of appropriate mesh sizes, optimum fishing effort and enforcement of closed areas and closed seasons the average productivity could be increased to a level of 500 kg/ha/yr from small reservoirs; 200 kg/ ha/ yr from medium reservoirs; and 100-150 kg/ ha/ yr from the large reservoirs.

The best management practices evolved over the years for different categories of reservoirs entail 'stocking-cum-capture practices' for large and medium reservoirs and 'put and take practices' for small reservoirs. However, the success of these management practices would necessitate formulation of appropriate reservoir policies by the State Governments, which should take into consideration the intended beneficiaries; socio-economic benefits that would accrue to the beneficiaries, especially the poorest of poor segments of the society; human resource development; fisheries management rights; conservation and protection of breeding areas; lease policy, forward and backward linkages, etc. Further, the policy should also provide clear and unfettered access to the Department of Fisheries to carry out fish production activities in the reservoir.

Considering the fish production potentiality of the reservoirs in India, moderate investments can yield larger quantities of fish besides increasing the employment opportunities for the rural population. However, the success of fisheries development in reservoirs will be largely dictated by the formulation of appropriate lease policies, selection of reservoirs and commitment of the implementing agencies, including the beneficiaries to adopt scientific norms for both stocking and harvesting. The National Fisheries Development Board (NFDB) proposes that out of the 3.0 million hectares of reservoir area in the country, at least 50 percent would be taken up under its Reservoir Fisheries Development Programme within a span of five years.

2.0 Classification of reservoirs

The size of the reservoirs would be an important determinant of type and amount of financial investments to be made, likely increments in fish production, generation of employment, etc. Based on the understanding of the fish production potentiality of different

sizes of reservoirs and their productivity in the country, these water bodies have been classified into the following size groups:

Categorisation of reservoirs as per water spread area

Sl No.	Category	Water spread area (in hectare)
1.0	Small reservoirs	
	Category A	40 – 200
	Category B	201 – 1 000
2.0	Medium reservoirs	1 001 – 5 000
3.0	Large reservoirs	5 001 and above

3.0 Implementation of Reservoir Fisheries Development Programme

The State Government (Department of Fisheries) shall be the main agency for implementation of the Reservoir Fisheries Development Programme. They will be responsible for selection of the reservoirs to be developed under the NFDB programme, leasing of the water body to the beneficiary *i.e.* the lessee, monitoring and evaluation of the stocking and harvesting activities, assisting the beneficiaries in establishing sound forward and backward linkages, providing technical support and in capacity building of the beneficiaries from time to time. These Guidelines have been developed for the benefit of the States to undertake and develop fisheries in the reservoir having water spread area 40 hectares and above with minimum water retention period of 09 – 12 months.

4.0 Norms for leasing of reservoirs

The lease period and the lease amount is a pre-requisite for sustainable development of fisheries in the reservoirs. To allow the beneficiaries to develop and sustain fisheries in the reservoirs, especially those under medium and large categories, a minimum lease period of five (5) years is necessary. However, a longer lease period of 10-15 years would be preferable as the beneficiary/ Cooperative /entrepreneurs will have larger stakes in the development of the reservoir and would not look for short-term gains at the cost of sustainability. Further, the leasing should be carried out on a competitive basis with only reasonable incentives to cooperative societies.

Presently, the lease value for reservoirs is largely determined on historical data of fish production from the said water body. In most cases this data pertains to the first few years of impoundment, when the water body generally undergoes a 'trophic burst' *i.e.* sudden increase in biological productivity leading to greater fish biomass. However, in the absence of a sustained stocking programme, this 'trophic burst' seldom lasts for more than a couple of years and the long-term 'trophic depression' starts and the fish biomass drops considerably. Any attempt to consider the lease value on the basis of the initial production (fish biomass) or productivity can be unrealistic and will be a disincentive for the beneficiary, often leading to failure of repayment, etc. To allow for a more realistic assessment of the lease value, the following parameters may be taken into consideration:

(i) Water retention time and effective storage level of the reservoirs.
(ii) Fishing obstacles in the reservoir.
(iii) Spill-over problems, especially in case of small reservoirs.
(iv) Conflicting uses with other user agencies of the reservoir water.

(v) Existing fish fauna of the reservoir, with special focus on the availability of predator species.
(vi) Extent of auto stocking in the reservoir.
(vii) Average of the last 5-7 years fish production from the reservoir.

5.0 Components of Assistance

The NFDB will assist the following two components to support fisheries development in the reservoirs:

- Stocking of reservoirs with fingerlings size of **80-100 mm.**
- Training to beneficiaries

6.0 Norms for stocking of reservoirs

Stocking will be the mainstay of reservoir fisheries development and will facilitate fish production on sustainable basis. Generally, the Indian major carps comprising fish species such as *Catla catla* (catla), *Labeo rohita* (rohu), *Cirrhinus mrigala* (mrigal) will form the core species for stocking of the reservoirs across the country. The implementing agencies in consultation with the beneficiary may also consider need-based stocking of additional species such as *L. bata*, *L. calbasu. L. fimbriatus, Ctenopharyngodon idella* (grass carp) and Tor *spp.* (mahaseer).

As a thumb rule, small reservoirs and those under medium category where auto stocking is not possible will require a regular stocking programme to utilize the productive potential of the water body. In the absence of auto stocking, this annual stocking is essential, otherwise the production potential of the water body shall remain un/underutilized. The annual stocking shall be made with the funds released initially by the NFDB as revolving fund. The large reservoirs will necessitate supplementary stocking until a critical mass of breeding population is established in the water body to ensure replenishment of the stocks that are harvested annually. This category will also include medium reservoirs where auto stocking takes place.

NFDB programme envisages stocking of the reservoirs with a standard stocking rate of 1,000 fingerlings/ ha. Based on the size of the reservoir, water retention period, prevalence of predators and productive water area, the implementing agency shall have the flexibility. However, it shall be ensured that this deviation from the standard stocking rate (1,000 fingerlings per hectare) does not fall below 500 fingerlings per hectare in case of medium, large reservoirs and does not exceed 2000 fingerlings per hectare in case of small reservoirs. Under the NFDB scheme the fingerling should be @2000/ha in small reservoirs, @1000/ha in medium reservoirs and @500/ha in large reservoirs. The reservoirs having total water spread area of more than 1000 ha are entitled to receive the financial assistance for stocking of fingerlings for three consecutive years @ 50% of the first year sanction of stocking. In case small reservoirs the amount released initially will be used as revolving fund for stocking of reservoirs. The State Government shall also be required to share 25 percent income on actual lease/license/auction/ royalty/any other mode received on the reservoir in question with the NFDB.

7.0 Financial assistance for stocking

The financial assistance to be provided by the NFDB towards stocking of **80-100 mm**, shall be Rupee one (Re 1) per fingerling. The total number of fingerlings for which funds shall be provided will be determined on the basis of the effective water spread area

(EWSA).This cost shall include all inputs that would go towards production of the fingerlings whether *ex-situ* (in earthen ponds) or *in-situ* (in pens and cages) and its transportation to the reservoir site for stocking. The Implementing Agency shall carry out this activity with adequate monitoring and supervision at each stage to ensure that fingerlings of right size and numbers are stocked in the reservoir. Release of funds will be made in two (2) installments, first installment will be released on sanction of the scheme and the second installment will be released based on the progress report.

8.0 Training of beneficiaries

8.1 Introduction

NFDB's objectives of developing fisheries in the reservoirs can be adversely impacted if the technical and management skills of the fishermen are inadequate. Therefore, to meet this important requirement, the Board will provide financial assistance for imparting training to fishermen who constitute the lessees to whom the reservoir is leased out for fishing purposes. The period of training upto five days and the subject shall include reservoir fishery management and its principals in accordance with the state fishery policy and fish seed raring in *ex-situ and in-situ* operations.

8.2 Unit Cost (training and demonstration)

Assistance will be given to the state Departments of Fisheries for organizing training programs to the beneficiary fishermen on the reservoir in fingerlings rearing through Cages/Pens/earthen ponds and in reservoir fisheries management. Training period will be up to 5 days with following financial assistance.

(i) Assistance to fishermen: The fishermen shall be eligible for a daily allowance of Rs 150/ day and reimbursement of to and fro travel (train/ bus/ auto rickshaw) shall be reimbursed as per actual, subject to a maximum of Rs 500.

(ii) Honorarium to resource person: Implementing Agencies shall engage the resource person/s experienced in the subjects proposed for training programme. The provision towards honorarium payable to resource persons is Rs 500/ - day of class room/field training and to and fro travel expenses (train/ bus/ auto rickshaw) shall be reimbursed as per actual, subject to a maximum of Rs 1000/- programme.

(iii) Assistance to Implementing Agencies: The implementing agency shall be eligible to receive Rs 75/ trainee/ day for a maximum period up to 5 days for organizing the training. This cost shall cover expenses towards identification and mobilization of training requirements (course material/ training kits) etc.

9.0 Submission of proposals

The Implementing Agency shall be required to submit a detailed project proposal to the NFDB, which shall also incorporate the feasibility of the proposed activity. The proposal shall be submitted in prescribed format attached to these Guidelines. Implementing Agencies shall submit the proposal to NFDB well advance (Before on set of monsoon season) to ensure effective implementation of the activity.

10.0 Monitoring and Evaluation

Since the ultimate success of fisheries development in the reservoirs would be determined by the stocking programme, it is essential to constitute a committee to monitor the activities and oversee the stocking of fingerlings in the reservoir. The said committee may be constituted involving representatives of the following organizations/ agencies:

(i) Representative of the District Revenue Department
(ii) Representative of the Irrigation/ Power Department
(iii) Representative of the Local Body
(iv) Representative of the Lessee
(v) Representative of the Department of Fisheries

In addition, the State Governments shall set up a dedicated Monitoring and Evaluation Cell (M & E) in the Department of Fisheries to periodically monitor and evaluate the progress of activities implemented under the NFDB funding. The Cell may be set up under the chairpersonship of the Secretary In-charge of Fisheries and may include representatives of the State Departments of Finance and Fisheries and representatives of FFDA and Commercial Bank/ NABARD. The M & E Cell shall also establish financial and physical targets in consultation with the NFDB against which the performance and utilisation of funds shall be monitored.

11.0 Submission of progress reports and utilization certificates

The Implementing Agencies shall submit quarterly reports on the physical and financial progress of the activity in a prescribed formats of NFDB so as to facilitate the funding agency to review the activity. Utilization certificate in respect of the funds released for undertaking the activity shall be submitted to the NFDB in GFR format. The Utilization certificate could also be submitted on half-yearly basis.

12.0 General norms

(i) As a pre-requisite, any scheme proposed for development of reservoir fisheries should be financially viable, socially acceptable, and environmentally sound. The technical parameters proposed in the scheme should be in conformity with the scientific norms developed for reservoir fisheries.

(ii) The Department of Fisheries shall register all fishing crafts and gear shall maintain a registry of such crafts and gear to estimate the effort deployed in the reservoir.

(iii)The beneficiary shall maintain full record of stocking of fish fingerlings released into the reservoir and daily records of fish catch harvested for each unit. Such records shall be verified by the fisheries officer concerned. This data shall be made available to the NFDB at specified intervals.

(iv)The beneficiaries, in consultation with the Implementing Agency, shall make suitable arrangements for marketing of fish harvested from the reservoir.

(v) The Implementing Agency must ensure that the beneficiaries are adequately trained in all aspects of reservoir fisheries such as fingerlings rearing in Cages/ Pens/ Earthen ponds and Fishery management in reservoirs.

(vi)The Implementing Agency shall maintain a separate account for the funds released by NFDB under this activity.

(vii) The implementing agency shall ensure that the stocking and harvesting activities are taken up as per scientific norms and any harvesting practice that may have adverse impact on the sustainability of the reservoir fisheries shall not be allowed by the Implementing Agency.

(viii) The Implementing Agency shall also strictly enforce closed season and wherever necessary closed areas in reservoirs where auto stocking takes place in order to protect the fish brood stock and the juveniles.

FORM-I

National Fisheries Development Board
Form for Financial Assistance for Development of Fisheries in Reservoirs.
(First year stocking)

Name of the Implementing Agency:

S.No	Details	
1.	Name of the Reservoir:	
2	Category of the reservoir (Large: >5001 ha WSA, Medium 1001 to 5000 ha WSA, Small 40 to 1000 ha)	
3.	Location particulars	
	a. State:	
	b. District(s):	
	c. Taluk(s)/ Mandal(s):	
	d. Revenue village(s)	
	e. Name of Department having control over the fisher development and disposal.	
4	Water spread area in hectares	
	a. Total Water spread area (ha)	
	b. Effective Water spread area (ha)	
	c. Period of water retention	
5	Mode of Disposal of the Reservoir for fishing rights	
	Lease a. Period of lease b. Lease amount	
	Royalty Revenue to the Govt. approximately	
	License License fee per year	
	Auction a. period b. Auction amount	
	Any other mode (specify)	
	a. Period b. Amount to the government	
6	Proposed stocking of fingerlings **80-100** mm (Based on effective water spread area)	

7	Source of procurement of fry for rearing into fingerlings **80-100** mm size	
	a. Govt. fish seed farms	
	b. Private fish seed farms	
	c. Species composition for stocking	
8	Seed rearing activity	
	a). *Ex situ* (Rearing of seed 80-100 mm size in land based nurseries)	
	b).In situ (Rearing of seed 80-100 mm size cages, pens and peripheral ponds)	
9	Share of 25% of the lease/auction/license /others revenue earmarked to the NFDB	Rs.
10	Present production in the reservoir Kg/ha/yr	
11	Expected production after implementation of NFDB scheme Kg/ha/Yr	
13	Fisheries Management in Reservoirs (Mesh regulation / Conservation)	
14	No. of fishermen depending on the reservoir fisheries	
15	Mode of fishing (type of nets and craft are used in fishing)	
16	Any other information, if any	

Place:

Date:

Signature and seal of the head of the department / authorized officer

Form-II

National Fisheries Development Board

Form for Financial Assistance for Development of Fisheries in Reservoirs.

(For Second/Third/ Fourth consecutive year stocking in large and medium reservoirs)

Name of the Implementing Agency:

S.No	Details	
1.	Name of the Reservoir:	
2	Category of the reservoir (Large: >5001 ha WSA, Medium 1001 to 5000 ha WSA,	
3.	Location particulars	
	a. State:	
	b. District(s):	
	c. Taluk(s)/ Mandal(s):	
	d. Revenue village(s)	
	e. Name of the Department having control over the development of fisheries and it's disposal.	
4	Water spread area in hectares	
	a. Total Water spread area	
	b. Effective Water spread area	
	c. Period of water retention	
5	Mode of Disposal of the Reservoir	
	Lease a. Period of lease b. Lease amount	
	Royalty Revenue to the Govt. approximately	
	License License fee for year	
	Auction a. period b. Auction amount	
	Any other mode (specify) a. Period b. Revenue to the Govt.	
6	Previous year(s) particulars	
I	Fingerlings stocked last year.	
	a . Number Stocked	
	b. Size of fingerlings stocked	

	c. Composition of fish stocked	
II	Production particulars	
	a. Mode of harvest	
	b. Production before stocking under NFDB scheme	
	c. Production after implementation of the NFDB scheme	
	d. Increase in production per hectare/yr	
III	Fisheries Management in Reservoirs (Conservation measures)	
	a. Ban observed during the breeding season	
	b. Mesh Regulation observed	
7	Share of 25% of the lease/auction/license /others revenue paid to the NFDB	Rs.
8	Proposed stocking of fingerlings 80-100 mm (Based on effective water spread area)	
9	Source of procurement of fry for rearing into fingerlings of 80-100 mm size	
	a. Govt. fish seed farms	
	b. Private fish seed farms	
	c. Composition of stocking	
10	Seed rearing activity	
	a. *Ex situ* (Rearing of seed to >100 mm size in land based nurseries)	
	b.*In situ* (Rearing of seed to > 100mm size cages and pens)	
11	Share of 25% of the lease/auction/license /others revenue earmarked to the NFDB	Rs.
12	No. of fishermen depending on the reservoir fisheries	
13	Mode of fishing (type of nets and craft are used in fishing)	
14	Any other information, if any	

Place: **Signature and seal of the head of the department / authorized officer**

Date:

Form-III

National Fisheries Development Board

Form for Financial Assistance for Training program on seed rearing in pens &Cages and ponds and Reservoir Fishery Management. (Combined/Separate)

Name of the Implementing Agency:

S.No	Details	
1.	Name of the Reservoir:	
2	Category of the reservoir (Large: >5000 ha WSA, Medium 1001 to 5000 ha WSA, Small 40 to 1000 ha)	
3.	Location particulars	
	a. State:	
	b. District(s):	
	c. Taluk(s)/ Mandal(s):	
	d. Revenue village(s)	
	e. Name of the Department having control over the development of fisheries in reservoir and it's disposal.	
4	Water spread area in hectares	
	a. Total Water spread area	
	b. Effective Water spread area	
	c. Period of water retention	
5	Mode of Disposal of the Reservoir	
	Lease a. Period of lease b. Revenue on the lease to the Govt.	
	Royalty Revenue to the Govt. approximately	
	License Revenue to the Govt.approximately	
	Auction a. period b. Revenue to the Govt.	
	Any other mode specify a. Period b. Revenue to the Govt.	
6	Whether Fingerlings stocked already or proposed for stocking	
7	Training	

	a. No of fishermen depending on the reservoir	
	b. No of fishermen proposed for training	
	c. Subject of Training program	
	i. Seed rearing in pens and cages/land based ponds (2 days)	
	ii. Reservoir fisheries management(3 days)	
	d. No of days of training	
	e. Training site and venue	
	f. Resource person(s)	
	g. Expected out come from the training	
8	**Financial Implications**	
	a. Assistance to farmer @ Rs 150/ day / per fishermen	
	b. Reimbursement of to and fro travel expenses to farmer: Rs 100/day.	
	c. Honorarium to resource persons and reimbursement of to and fro travel Rs 1000+2500	
	d Assistance to implementing agency @ Rs 100/ trainee/ day:	
	Total	

Note: The training shall be given by the trained resource persons who had undergone the TOT program on reservoir fishery management and seed raring in pens and cages under NDFB Program. The number of fishermen should not exceed 30/batch and training period is maximum 5 (reservoir fisheries management and pen/ cage culture)

Place: **Signature and seal of the head of the department / authorized officer**

Date:

National Fisheries Development Board
Guidelines for Coastal Aquaculture

1.0 Introduction

The coastal states of India are bestowed with vast brackish water area suitable for aquaculture. A total of 2.15 lakh Ha has been developed for aquaculture, dominated extensively by shrimp culture with an estimated production of 1.10 – 1.20 Lakh metric tonnes of shrimp valued over Rs. 3,000 Crores.

With the enactment of the Coastal Aquaculture Authority Act, 2005 a substantial increase in the coastal aquaculture activities through implementation of good management practices is envisaged that contribute to the well being of the coastal environment and communities.

In addition to the shrimp culture, coastal environment has tremendous potential to take up farming of other species having commercial importance (fin fish culture, crabs, other crustaceans etc). Dissemination of technology is vital for the growth of the culture activity and production and this can be achieved only through organized training programs to encourage farmers to take up diversified culture activities and increase production levels using good management practices.

Imparting training enhances potential for wide variety of fish production, sustainable aquaculture, enhance technical manpower and improve livelihood through efficient utilization of the available assets. The NFDB's programmes on coastal aquaculture envisages bringing an additional area of 1,00,000 ha under shrimp farming and another 50,000 ha under finfish farming (Sea bass, groupers, snappers, mullets etc.,).

The objective of the guidelines is aimed at bringing in clarity and objectivity, thus facilitating the implementing agencies in preparation and submission of suitable proposals in tune with the criteria evolved by the NFDB for providing assistance for the development of coastal aquaculture in the country.

2.0 COMPONENTS OF ASSISTANCE

The NFDB will assist coastal aquaculture through following schemes:-

2.1 Training and Demonstration
2.2 Need based financial assistance for infrastructure development in coastal aquaculture Aquatic Quarantine etc.)
2.3 SPF shrimp Nauplii production centres.
2.4 Additional infrastructure for Specific Pathogen Free shrimp seed hatcheries
2.5 Assistance for additional infrastructure to Specific Pathogen Free shrimp culture farms
2.6 Construction of ponds for brackish water fin fish culture
2.7 Additional infrastructure for modification of existing shrimp farms for brackish water finfish culture
2.8 Input assistance for brackish water fin fish culture in ponds.
2.9 Promotion of cage culture in Brackish Water Fin Fishes in Ponds and Brackishwater Areas

2.10 Input assistance for cage culture of brackish water fin fish in ponds and open backwater areas

2.11 Need Based Financial Assistance for Development and Demonstration of Innovative / New Technologies

a) To increase fish production/ productivity and broodstock development
b) Culture of New species
c) Production of Low cost feed with high nutritive value,
d) Promotion of New Farming practices (cage/pen culture etc.)
e) Development of diagnostic kits (including biotechnological kits)

2.12 Financial Assistance for Setting up of Aquatic Animal Health and Environment Management Laboratory (AAHEL)

2.1 TRAINING AND DEMONSTRATION

2.1.1 Introduction*:*

Training and demonstration are the important tools for skill enhancement and technology upgradation for any production oriented activity. The NFDB's objective of ensuring sustainable coastal aquaculture and improve production levels can be achieved only when the technical skills of the farmers/entrepreneurs are adequate. Thus to meet the important requirement of human resource development in coastal aquaculture, the board envisages mobilization of existing facilities available under public and private sector to impart training to the farmers/entrepreneurs.

2.1.2 Unit cost

The unit cost includes a standard training period of five (5) days and the following activities shall be funded under the programme:

(i) **Assistance to farmer*:*** The farmer shall be eligible for a daily allowance of Rs 150/ day and reimbursement of to and fro travel (train/ bus/ auto rickshaw) shall be reimbursed as per actuals, subject to a maximum of Rs 500.

(ii) **Honorarium to resource person*:*** For conduct of training, the implementing agency may engage the services of one resource person per training programme. The provision towards the honorarium payable to resource persons is at @ Rs 500/ day of class room/field training and to and fro travel expenses (train/ bus/ auto rickshaw) shall be reimbursed as per actuals, subject to a maximum of Rs 1,000 per programme.

(iii) **Assistance to implementing agencies*:*** The implementing agency shall be eligible to receive Rs 75 / trainee/ day for a maximum period of 5 days for organizing the training. This cost shall cover expenses towards identification and mobilization of the trainee and course material/ training kits, etc.

(iv) **Development of training/ demonstration site(s):**

The state government is eligible for one time grant to develop facility to impart training to the beneficiaries

(i) A grant of Rs One lakh only (Rs. 1 00 000) for development of their existing fish / shrimp farm to impart training/ demonstration. It is not eligible to receive any other grant either from NFDB or other financial institutions for next five years.

Or

(ii) A grant of Rs Fifty thousand only (Rs 50 000) as lease amount for taking village Panchayat pond or tank and development to impart training/demonstration. The lease shall be for a minimum period of five (5) years and the water spread area should be a minimum of 0.5 ha or more.

Or

(iii) Engage the pond(s) of a private farmer for which an amount of Rs 5 000 per training programme shall be made available as fee for hiring the facility.

2.1.3 Implementing Agencies

State Fisheries Departments, Fisheries Federations/Corporations, KVKS, Fisheries Colleges and Research Institutes who have training facilities, faculty (in house/ outsource) and extension mechanism are entitled for conduct of training and demonstration programmes.

2.1.4 OBLIGATIONS OF THE IMPLEMENTING AGENCIES

i. The facilities developed by the State Government shall also be available to other implementing agencies for training of coastal aquaculture farmers under the NFDB programme.
ii. The training/ demonstration facilities developed by the implementing agency shall not be more than 25 km from the training site. However, if such a facility cannot be developed within 25 km, full justification shall be provided.
iii. The NFDB shall not fund any other training/ demonstration site over and above the one developed to ensure its optimal utilization.
iv. Each training batch shall consist of 25 trainees and in no case exceed 30 trainees per batch.
v. All State/ Union Territory Governments shall be assisted with the setting up of a maximum of five (5) training/ demonstration sites initially. Establishment of additional sites would also be linked to the performance and optimal utilization, number of farmers trained, area covered and institutional finance availed by the trained farmers for taking up aquaculture activities.
vi. All other implementing agencies including Fisheries Institutes under the Indian Council of Agricultural Research and the Colleges of Fisheries under the State Agricultural University shall avail their own facilities for which a lump sum of Rs. 5000/- (Rupees Five thousand only) per training programme shall be provided. However, if such agencies do not have their own facility, they shall make use of the facility developed by the State Government or engage the facility of a private farmer, for which Rs. 5000/- (Rupees Five thousand only) per training programme shall be provided.
vii. The State Government shall also train at least one batch of 25 trainees/ entrepreneurs each year who shall be trained in adoption of Good Farming Practices in coastal aquaculture.
viii. The implementing agency shall maintain the profile of each trainee and provide information on the area farmed by each trained farmer, investments made, employment generated and increase in production and productivity. The consolidated information on the above shall be made available to NFDB at quarterly intervals for a period of five years.
ix. The implementing agency shall also be responsible for facilitating institutional finance to the trained farmers.
x. The implementing agency and the NFDB shall enter into an MOU prior to release of funds for training and demonstration. The conditions stipulated in the Guidelines shall *inter alia* be a part of the MOU.

2.1.5 Submission of Proposals

All proposals shall be submitted by the Implementing Agencies at the beginning of each quarter (*i.e.* April, July, October, and January) to the NFDB for approval and release of funds. To ensure uniformity in the details provided by the Implementing Agencies, application shall be submitted in the form attached to the guidelines **(FORM-I).**

2.1.6 Release of funds

The grant for Training and Demonstration shall be released in a single phase or in installments, on approval of the proposal by the NFDB.

2.1.7 Submission of Utilization Certificate

The Implementing Agencies shall submit utilization certificates in respect of the funds released to them by the Board. Such certificates shall be submitted in **Form II** on half-yearly basis *i.e.* during July and January of each year.

2.1.8 Monitoring and Evaluation

The State Governments shall set up a dedicated Monitoring and Evaluation Cell (M & E) in the Department of Fisheries to periodically monitor and evaluate the progress of activities implemented under the NFDB funding. The Cell may be set up under the chairpersonship of the Secretary In-charge of Fisheries and may include representatives of the State Departments of Finance and Fisheries and representatives of BFDA and Commercial Bank/ NABARD. The M & E Cell shall also establish financial and physical targets in consultation with the NFDB against which the performance and utilization of funds shall be monitored.

2.2 NEED BASED FINANCIAL ASSISTANCE FOR INFRASTRUCTURE DEVELOPMENT IN COASTAL AQUACULTURE (AQUATIC QUARANTINE ETC.)

2.2.1 DESCRIPTION AND OBJECTIVE

Coastal Aquaculture in the country is providing employment and livelihood support to considerable number of people. However, the species for culture in coastal aquaculture is *Penaeus monodon* centric, without much diversification. In this regard, Government of India is making its earnest attempts to introduce new varieties of shrimps and other commercially important fish species for culture in coastal aquaculture. Introduction of such aquatic animals require proper regulatory mechanism to bring in genetically viable and healthy stock without compromising the bio security of the native stock. For this purpose aquatic quarantine facilities have to be established to meet the increasing demand for import of genetically viable and healthy broodstock. NFDB envisages financial support for establishing such facilities.

2.2.2 Beneficiaries

Government agencies designated by the Ministry of Agriculture, Government of India for this purpose.

2.2.3 Unit Cost

Unit cost as approved by the Department of Animal Husbandry, Dairying and Fisheries, Ministry of Agriculture, Government of India.

2.2.4 Quantum of assistance

90% grant to meet the capital expenditure to establish the Aquatic Quarantine Facility and a one time revolving grant to meet the working capital requirement of the facility for the first six months.

2.2.5 Conditions specific to the scheme

i. Application should be submitted in the prescribed format **(FORM-III)** along with a project report.
ii. Implementing agency should execute the project in the specified time frame.

iii. Proper mechanism to make the facility self reliant to meet the working capital requirements.
iv. Should follow the guidelines and instructions given by the Government of India from time to time. A specific Memorandum of Understanding (MoU) has to be executed with NFDB to avail the assistance.
v. Budget estimates supported with Bill of Quantities (BoQ)
vi. Physical verification/inspection at different stages will be undertaken by duly authorized officials of the Board and/or other experts as may be decided from time to time.
vii. The facilities created and machinery/equipments installed under the scheme shall not be removed from the premises without obtaining a written permission of the Board/Respective agency.

2.3 ASSISTANCE TO SPF SHRIMP NAUPLII PRODUCTION CENTRES

2.3.1 DESCRIPTION AND OBJECTIVE

Shrimp aquaculture in the country is passing through a difficult phase due to frequent outbreak of viral diseases resulting in decreased production, loss of crop affecting sustainability and economic viability. It is essential to contain the diseases from spreading vertically and horizontally by adopting proper bio security measures. Genetically improved shrimp species grown under strict biosecurity conditions and developed into a Specific Pathogen Free (SPF) shrimp broodstock has to be used in the hatcheries to avoid spreading of viral diseases vertically. Such type of SPF shrimp stock cannot be maintained in every shrimp hatchery due to bio security reasons and cost involved to maintain them in isolation. Smaller size hatcheries with facilities exclusively to hold SPF shrimp broodstock can act as SPF shrimp nauplii production centres, can supply the required quantities of SPF shrimp nauplii to the hatcheries to produce disease free post larvae for supply to the farmers.

2.3.2 Beneficiaries

Government and private sector hatcheries

2.3.3 Unit Cost

Rs. 25.0 Lakhs is required to develop the SPF shrimp broodstock holding facility accompanied with a minimum nauplii production capacity of 200 million per year.

2.3.4 Quantum of assistance

100% of the unit cost (not exceeding Rs. 25.00 Lakhs) would be extended as grant to Government sector SPF shrimp nauplii production centres and 25% of unit cost (not exceeding Rs. 6.25 Lakhs) would be extended as back ended subsidy to private sector SPF shrimp nauplii production centres, whereas SC/ST entrepreneurs would be eligible for 30% subsidy assistance, not exceeding Rs. 7.50 Lakhs.

2.3.5 Items eligible for Assistance

Broodstock holding tanks, maturation and spawning tanks, air blowers, generator, water pumps. These items should be sufficient enough to produce minimum of 200 million nauplii per year.

2.3.6 Conditions specific to the scheme

i. The works shall be undertaken only after obtaining due approval from NFDB.
ii. Nauplii production centre should be registered as per the mandatory requirements of the Coastal Aquaculture Authority (CAA).
iii. Back ended subsidy released to the bank, where term loan was availed to establish the facility
iv. SPF nauplii production centre has to use the SPF shrimp broodstock from the suppliers approved by CAA.

v. Permission from the local authorities has to be obtained for constructing the facility.

vi. The Executive Director & Senior Executive (Tech)/ Consultant of NFDB shall conduct inspection in the nauplii production centre along with a member from DoF/ Local Officer of MPEDA to ensure the eligibility for financial assistance from NFDB and has to submit an inspection report to NFDB (minimum three representatives are required to form the quorum).

vii. A techno economic viability report along with cost estimates duly attested by a chartered Engineer related to civil works has to be submitted along with the application.

viii. Physical verification/inspection at different stages will be undertaken by duly authorized officials of the Board and/or other experts as may be decided from time to time.

ix. An agreement bond in Rs. 100/- non judicial stamp paper has to be executed to NFDB agreeing to operate the nauplii production centre atleast for seven years.

2.3.7 Documents Required

i. Application in the prescribed format **(FORM-IV)**
ii. A copy of the project report
iii. Layout of the nauplii production centre
iv. Copy of the Term Loan Sanction Letter obtained from the bank
v. Expenditure statement supported with BoQ and Certified copies of the bills
vi. Copies of the land documents along with encumbrances certificates.
vii. Copy Coastal Aquaculture Authority registration certificate.
viii. Copy of the registration obtained from MPEDA.
ix. Copy of the NOC obtained from local body
x. Declaration to the effect that no financial assistance is availed from any other department under the present scheme.

2.3.8 UNIT COST ESTIMATE FOR ESTABLISHING SPF SHRIMP NAUPLII PRODUCTION CENTRE

Non-recurring (One time investment)		(Approximate cost-Rs)
1.	Buildings: Hatchery Shed	6,00,000
	Quarantine room	1,00,000
	Broodstock holding tanks & Maturation Tanks	5,40,000
	Spawning & Hatching tanks	3,00,000
	Reservoirs	3,00,000
	Air blowers	1,20,000
	Generator	2,00,000
	Pressure sand filters	1,80,000
	UV filter	75,000
	Sea water / fresh water intake facilities (Including pumps and accessories)	85,000
Total capital cost		25,00,000

2.4 ADDITIONAL INFRASTRUCTURE FOR SPECIFIC PATHOGEN FREE (SPF) SHRIMP SEED HATCHERIES

2.4.1 DESCRIPTION AND OBJECTIVE

Coastal aquaculture in the country is of *Penaeus monodon* centric and due to lack of disease free broodstock to produce post larvae the sector is starving for quality shrimp seeds. At the farm level due to lack of supply of disease free shrimp seeds, resulting in frequent outbreak of viral diseases, decreased production, loss of crop affecting sustainability and

economic viability of the farming operations. It is essential to contain the diseases from spreading vertically and horizontally by adopting proper bio security measures. Genetically improved shrimp species grown under strict biosecurity conditions and developed into a Specific Pathogen Free (SPF) shrimp broodstock has to be used in the hatcheries to avoid spreading of viral diseases vertically. Existing shrimp hatcheries need to improve their infrastructure to meet the bio security requirements for water treatment, storage, aeration and disposal.

2.4.2 Beneficiaries

Government and private sector hatcheries

2.4.3 Unit Cost

Rs. 20.0 Lakhs is required to provide additional infrastructure facilities to meet the biosecurity requirements in the existing shrimp hatcheries with a production capacity of minimum 30 million PL's/year.

2.4.4 Quantum of assistance

90% of the unit cost (not exceeding Rs. 18.0 Lakhs) would be extended as grant to Government sector hatcheries and 25% of unit cost (not exceeding Rs.5.0 Lakhs) would be extended as back ended subsidy to private sector shrimp hatcheries, whereas SC/ST entrepreneurs would be eligible for 30% subsidy assistance, not exceeding Rs. 6.00 Lakhs.

2.4.5 Items eligible for Assistance

Broodstock holding tanks, maturation and spawning tanks, air blowers, generator, water pumps, biosecurity arrangements and Effluent Treatment System. The hatchery should have facilities to produce a minimum of 30 million SPF post larvae per year.

2.4.6 **Conditions specific to the scheme**

i. The works shall be undertaken only after obtaining due approval from NFDB.
ii. Shrimp hatchery should be registered as per the mandatory requirements of the Coastal Aquaculture Authority (CAA)
iii. Hatchery has to procure SPF shrimp broodstock from the suppliers approved by CAA.
iv. Permission from the local authorities has to be obtained for the facility.
v. The Executive Director & Senior Executive (Tech)/ Consultant of NFDB shall conduct inspection in the SPF shrimp seed hatcheries along with a member from DoF/ Local Officer of MPEDA to ensure the eligibility for financial assistance from NFDB and has to submit an inspection report to NFDB (minimum three representatives are required to form the quorum).
vi. Detailed estimates shall be submitted duly attested by a chartered Engineer related to civil works.
vii. Application to avail the subsidy assistance has to be routed through the State Fisheries Department.
viii. Back ended subsidy released to the bank, where term loan was availed to establish the facility
ix. Physical verification/inspection at different stages will be undertaken by duly authorized officials of the Board and/or other experts as may be decided from time to time.
x. An agreement bond in Rs. 100/- non judicial stamp paper has to be executed to NFDB agreeing to operate their hatchery atleast for seven years

2.4.7 Documents Required

i. Application in the prescribed format **(FORM-V)**
ii. A copy of the project report
iii. Layout of the hatchery

iv. Copy of the Term Loan Sanction Letter obtained from the bank
v. Expenditure statement on the capital infrastructure supported with BoQ.
vi. Certified copies of the bills related to capital investment with TIN Number
vii. Copies of the land documents along with encumbrances certificates.
viii. Copy Coastal Aquaculture Authority registration certificate.
ix. Copy of the registration obtained with State Govt./ MPEDA.
x. Copy of the NOC obtained from local body
xi. Declaration to the effect that no financial assistance is availed from any other department under the present scheme.

2.4.8 UNIT COST ESTIMATE FOR ADDITIONAL INFRASTRUCTURES FOR SPF SHRIMP SEED HATCHERIES

Non-recurring (One time investment)		(Approximate cost-Rs)
	Buildings: Hatchery Shed	2,65,000
	Quarantine room	1,00,000
	Broodstock holding & Maturation tanks	6,40,000
	Spawning & hatching tanks	2,40,000
	ETP	4,00,000
	Pressure sand filters 2 nos	1,80,000
	UV filter 1 nos	75,000
	Biosecurity	1,00,000
Total capital cost in Rs.		20,00,000

2.5 ASSISTANCE FOR ADDITIONAL INFRASTRUCTURE TO SPECIFICPATHOGEN FREE SHRIMP CULTURE FARMS

2.5.1 DESCRIPTION AND OBJECTIVE

Shrimp culture farms have to be provided with basic infrastructure to meet the biosecurity requirements of the farm for the successful production and sustainability. While stocking the SPF shrimp post larvae, shrimp farms need to have the facilities for biosecurity like bird fencing, crab fencing, water treatment ponds, additional aeration, pumping and effluent treatment ponds. Such facilities would help the farmer an assured crop along with increased production. Discharging the shrimp pond water after proper treatment through effluent treatment system would help to maintain the source water in good quality.

2.5.2 Beneficiaries

Private sector shrimp farms of minimum of **5.0 ha** size (Water spread area) to a maximum of 25.0 hectares (Water spread area) developed into suitable size ponds for culture. Neighboring farmers can join together to establish the additional infrastructure for the SPF shrimp farming.

2.5.3 Unit Cost

About Rs. 15.0 Lakhs is required for a 5.0 hectare farm (Water spread area) to provide additional infrastructure facilities in the existing shrimp farms to meet the biosecurity requirements.

2.5.4 Quantum of assistance

25% of unit cost (not exceeding Rs.3.75 Lakhs) would be extended as back ended subsidy to private sector shrimp farms of 5.0 ha. (Water spread area) with an ETS area of 10% of the total Water Spread Area (WSA) of the farm. For SC/ST's the subsidy assistance would be 30% of the unit cost (not exceeding Rs. 4.50 Lakhs).

2.5.5 Items eligible for Assistance

Strengthening of the bunds, repair of sluice gates, bird & crab fencing, water treatment ponds and Effluent Treatment System.

2.5.6 Conditions specific to the scheme

i. The farmer shall submit an application along with the prescribed documents to the Officer in Charge of the Department of Fisheries, of the concern district where the farm is located.
ii. The farmer has to simultaneously apply for license from the Coastal Aquaculture Authority for *L. vannamei* culture/SPF shrimp culture.
iii. The farmer shall undertake the works only after submitting the application form to the State Fisheries Department and after obtaining administrative sanction from NFDB.
iv. The Officer in charge of Department of Fisheries of the concerned district has to submit a consolidated statement to the NFDB indicating the details of the applications received.
v. The consolidated statement has to be sent to NFDB through the Head of the Office of the State Fisheries Department to the NFDB for obtaining administrative sanction.
vi. After obtaining administrative sanction from NFDB, the State Fisheries Department has to communicate the sanction details to the farmer to undertake the works.
vii. The Officer in Charge of the district for the Department of Fisheries has to prepare a final consolidated statement on the famers, who had completed the works and obtained license for the culture of *L. vannamei/* SPF shrimp.
viii. The final consolidated statement has to be signed by the inspecting officer, district in charge for the Department of Fisheries and Head of the State Fisheries Department and send it to NFDB for release of the subsidy.
ix. NFDB subsidy would be released to the State Fisheries Department, with a request to credit into the loan account of the respective farmers.
x. After releasing the subsidy amount the State Fisheries Department has to issue the Utilization Certificate to NFDB along with the physical and financial progress report.
xi. Shrimp farmer has to procure SPF shrimp Post Larvae from the hatcheries approved by CAA only.
xii. Physical verification/inspection at different stages will be undertaken by duly authorized officials of the Board and/or other experts as may be decided from time to time.

2.5.7 Documents required to be submitted to the State Fisheries Department along with the application form

i. Application in the prescribed format **(FORM-VI).**
ii. A copy of the project report indicating the techno economic viability & IRR.
iii. Copies of the land documents along with encumbrances certificates.
iv. Copy Coastal Aquaculture Authority registration certificate for *P. monodon/ L. vannamei* culture.
v. Copy of the Term Loan Sanction / consent Letter obtained from the bank
vi. Layout of the farm
vii. Declaration by the farmer stating that no financial assistance is availed from any other department for the same purpose.

2.5.8 UNIT COST ESTIMATE FOR ADDITIONAL INFRASTRUCTURE FOR SPECIFIC PATHOGEN FREE SHRIMP CULTURE FARMS FOR A 5.0 HECTARE (WATER SPREAD AREA) FARM

Capital Investment		(Approximate cost-Rs)
	Strengthening of bunds	1,00,000
	Repair of sluice gates	50,000
	Pumps and accessories	1,00,000
	Aerators	5,00,000
	Bird and crab fencing	1,00,000
	Construction of a reservoir pond (1.0 Ha.)	1,50,000
	Effluent treatment system (0.50 Ha.)	5,00,000
Total capital Cost		15,00,000

2.6 CONSTRUCTION OF NEW PONDS FOR BRACKISH WATER FINFISH CULTURE

2.6.1 DESCRIPTION AND OBJECTIVE

The coastal aquaculture dominated by shrimp culture since 1990's showed a decline in production and reached stagnation due to serious diseases outbreaks, export rejections due to antibiotic and chemical residues and bad quality product. Thus, there is great deal of necessity to explore diversification to other suitable species of commercial importance and promotion of marine fin fishes constitutes as a suitable candidate. However the infrastructure developed for shrimp culture may not be directly suitable for taking up finfish culture.

2.6.2 **Beneficiaries**

Farmers and entrepreneurs developing brackishwater fin fish culture farms of minimum 1.0 ha. size to a maximum of 25.0 hectares (Water spread area) developed into suitable size ponds for brackishwater fin fish culture.

2.6.3 Unit Cost

Rs 2.40 lakhs per hectare (Water spread area) for the construction of a new brackishwater fin fish culture farm.

2.6.4 **Quantum of assistance**

25% of the unit cost (not exceeding Rs. 60,000) to all the farmers and 30% of the unit cost (not exceeding Rs. 72,000) in case of SC/ST's as one time back ended subsidy.

2.6.5 **Items eligible for Assistance**

Capital expenditure on farm development including construction of earthen bunds, concrete inlet and outlet sluices, water pumps and aerators.

2.6.6 **Conditions specific to the scheme**

i. The farmer shall submit an application along with the prescribed documents to the Officer in Charge of the Department of Fisheries, of the concern district, where the farm is located.
ii. The farmer has to simultaneously apply for license from the Coastal Aquaculture Authority for brackishwater finfish culture.
iii. The farmer shall undertake the works only after submitting the application form to the State Fisheries Department and after obtaining administrative sanction from NFDB.
iv. The Officer in charge of Department of Fisheries of the concerned district has to submit a consolidated statement to the NFDB indicating the details of the applications received.

v. The consolidated statement has to be sent to NFDB through the Head of the Office of the State Fisheries Department to the NFDB for obtaining administrative sanction.
vi. After obtaining administrative sanction from NFDB, the State Fisheries Department has to communicate the sanction details to the farmer to undertake the works.
vii. The Officer in Charge of the district for the Department of Fisheries has to prepare a final consolidated statement on the famers, who had completed the works and obtained license for brackishwater finfish culture.
viii. The final consolidated statement has to be signed by the inspecting officer, district in charge for the Department of Fisheries and Head of the State Fisheries Department and send it to NFDB for release of the subsidy.
ix. NFDB subsidy would be released to the State Fisheries Department, with a request to credit into the loan account of the respective farmers.
x. After releasing the subsidy amount the State Fisheries Department has to issue the Utilization Certificate to NFDB along with the physical and financial progress report.
xi. Physical verification/inspection at different stages will be undertaken by duly authorized officials of the Board and/or other experts as may be decided from time to time.

2.6.7 **Documents required to be submitted to the State Fisheries Department along with the application form**

i. Application in the prescribed format **(FORM-VII)**
ii. A copy of the project report indicating the techno economic viability & IRR.
iii. Copies of the land documents along with encumbrances certificates.
iv. Copy Coastal Aquaculture Authority registration certificate for brackishwater finfish culture
v. Copy of the Term Loan Sanction / consent Letter obtained from the bank
vi. Layout of the farm
vii. Declaration by the farmer stating that no financial assistance is availed from any other department for the same purpose.

2.6.8 UNIT COST ESTIMATE FOR CONSTRUCTION OF NEW PONDS FOR BRACKISH WATER FINFISH CULTURE

Non-recurring (One time investment)		**(Approximate cost-Rs)**
	Excavation and bund construction/ha	1,00,000
	Happas & Catwalk	10,000
	Water intake & Outlet sluice	40,000
	Aerators	50,000
	Water pumps with accessories	40,000
Total capital cost		**2,40,000**

2.7 FINANCIAL ASSISSTANCE FOR ADDITIONAL INFRASTRUCTURE FOR MODIFICATION OF EXISTING SHRIMP FARM FOR BRACKISH WATER FINFISH CULTURE

2.7.1 DESCRIPTION AND OBJECTIVE

The coastal aquaculture dominated by shrimp culture since 1990's for more than a decade showed a decline in production and reached stagnation due to serious disease outbreaks, export rejections for the presence of antibiotic and chemical residues and low quality product. This led to reduction in the farming activity.

Thus there is great deal of necessity to explore diversification to other suitable species of commercial importance and culture of brackishwater fin fishes constitutes as a suitable proposition. However the infrastructure developed for shrimp culture may not be directly suitable for taking up finfish culture and many need certain modifications to the existing farms, and enhancement of infrastructure.

2.7.2 Beneficiaries

Farmers and entrepreneurs developing brackishwater fin fish culture farms are eligible for support and area for assistance is minimum of 1.0 hectare and the upper limit is 25.0 hectares (Water spread area) developed into suitable size ponds.

2.7.3 Unit Cost

Rs 2.00 lakhs per hectare (Water spread area) for the additional capital infrastructure development.

2.7.4 Quantum of assistance

25% of the unit cost (not exceeding Rs. 50,000/-) to all the farmers and 30% of the unit cost (not exceeding Rs. 60,000/-) in case of SC/ST's as one time back ended subsidy.

2.7.5 Items eligible for Assistance

Capital expenditure on developing additional infrastructure including farm modification (Strengthening of the bunds, repairing sluice gates), pumps, aerators and other required infrastructure.

2.7.6 Conditions specific to the scheme

i. The farmer shall submit an application along with the prescribed documents to the Officer in Charge of the Department of Fisheries, of the concern district where the farm is located.
ii. The farmer has to simultaneously apply for license from the Coastal Aquaculture Authority for issue of license for brackishwater finfish culture.
iii. The farmer shall undertake the works only after submitting the application form to the State Fisheries Department and after obtaining administrative sanction from NFDB.
iv. The Officer in charge of Department of Fisheries of the concern district has to submit a consolidated statement to the NFDB indicating the details of the applications received.
v. The consolidated statement has to be sent to NFDB through the Head of the Office of the State Fisheries Department to the NFDB for obtaining administrative sanction.
vi. After obtaining administrative sanction from NFDB, the State Fisheries Department has to communicate the sanction details to the farmer to undertake the works.
vii. The Officer in Charge of the district for the Department of Fisheries has to prepare a final consolidated statement on the famers, who had completed the works and obtained license for brackishwater finfish culture.
viii. The final consolidated statement has to be signed by the inspecting officer, district in charge for the Department of Fisheries and Head of the State Fisheries Department and send it to NFDB for release of the subsidy.

ix. NFDB subsidy would be released to the State Fisheries Department, with a request to credit into the loan account of the respective farmer.
x. After releasing the subsidy amount the State Fisheries Department has to issue the Utilization Certificate to NFDB along with the physical and financial progress report.
xi. Physical verification/inspection at different stages will be undertaken by duly authorized officials of the Board and/or other experts as may be decided from time to time.

2.7.7 Documents required to be submitted to the State Fisheries Department along with the application form

i. Application in the prescribed format **(FORM-VIII)**
ii. A copy of the project report indicating the techno economic viability & IRR.
iii. Copies of the land documents along with encumbrances certificates.
iv. Copy Coastal Aquaculture Authority registration certificate for brackishwater finfish culture
v. Copy of the Term Loan Sanction / consent Letter obtained from the bank
vi. Layout of the farm
vii. Declaration to the effect that no financial assistance is availed from any other department for the same purpose.

2.7.8 UNIT COST ESTIMATE FOR THE ADDITIONAL INFRACTURE FOR MODIFICATION OF EXISTING SHRIMP FARM FOR BRACKISH WATER FINFISH CULTURE

Non-recurring (One time investment)		(Approximate cost-Rs)
	Strengthening of bunds/ha	60,000
	Happas & Catwalk	10,000
	Repair of sluice gates & water inlet	40,000
	Aerators	50,000
	Pumps 10 hp including accessories	40,000
Total additional capital investment		**2,00,000**

2.8 FINANCIAL ASSISTANCE TOWARDS INPUT COST FOR BRACKISH WATER FINFISH CULTURE IN PONDS

2.8.1 Description and Objective

In aquaculture systems, the inputs constitute almost 60% of the total expenditure, which becomes a constraint while undertaking a new species for culture without having clear knowledge on the outcome. To enable the farmer to adopt scientific farming practices and optimize per hectare yield, it is essential to provide partial support for input costs during the first- year of operation. The profits generated from the first crop can be used subsequently as revolving fund towards recurring expenditure for the subsequent crops and make farming operations more sustainable.

2.8.2 Eligibility Criteria

The support towards first –time inputs will be available to brackishwater finfish farmers, who are availing the NFDB's assistance for developing new brackishwater finfish culture farm or modifying the existing shrimp farm for brackishwater finfish culture. Minimum eligible area

for assistance is 1.0 hectare and the upper limit is 25.0 hectares (Water spread area) developed into suitable size ponds.

2.8.3 Unit Cost (Input cost)

The unit cost for first year inputs has been estimated to be Rs. 3.00 lakhs per hectare (Water spread area) for all the categories of farmers. However, the unit cost will be varying based on the targeted production per hectare. The unit cost of Rs. 3.0 lakhs has been worked out for the production capacity of 5 tonnes per hectare (Water spread area).

2.8.4 Quantum of assistance

Assistance for inputs to the aquaculture farmers is available @ 25% of the unit cost upto a maximum of Rs. 75,000/ ha (Water spread area), as one time back ended subsidy, whereas SC/ST farmers would be eligible for 30% subsidy assistance, not exceeding Rs. 90,000/ha.

2.8.5 Items eligible for Assistance

Cost of seeds, nets, feeds, feed additives and management Chemicals.

2.8.6 Conditions specific to the scheme

i. The farmers who have applied for financial assistance from NFDB for construction of new farm or modification of existing shrimp farm to undertake brackishwater fin fish culture are only eligible for one time input subsidy assistance.
ii. The farmer shall submit an application along with the prescribed documents to the Officer in Charge of the Department of Fisheries, of the concerned district where the farm is located. Application for input subsidy assistance has to be submitted along with the subsidy assistance application for construction of new farm for brackishwater fin fish culture or modification of existing shrimp farm for fin fish culture.
iii. The farmer has to simultaneously apply for license from the Coastal Aquaculture Authority for issue of license for brackishwater finfish culture.
iv. The farmer shall incur the working capital expenditure only after obtaining administrative sanction from NFDB.
v. The Officer in charge of Department of Fisheries of the concern district has to submit a consolidated statement to the NFDB indicating the details of the applications received.
vi. The consolidated statement has to be sent to NFDB through the Head of the Office of the State Fisheries Department to the NFDB for obtaining administrative sanction.
vii. After obtaining administrative sanction from NFDB, the State Fisheries Department has to communicate the sanction details to the farmer to commence the production.
viii. The Officer in Charge of the district for the Department of Fisheries has to prepare a final consolidated statement on the famers, who had obtained license for brackishwater finfish culture.
ix. The final consolidated statement has to be signed by the inspecting officer, district in charge for the Department of Fisheries and Head of the State Fisheries Department and send it to NFDB for release of the subsidy.
x. NFDB subsidy would be released to the State Fisheries Department, with a request to credit into the loan account of the respective farmer.
xi. After releasing the subsidy amount the State Fisheries Department has to issue the Utilization Certificate to NFDB along with the financial progress report.
xii. Physical verification/inspection at different stages will be undertaken by duly authorized officials of the Board and/or other experts as may be decided from time to time.

2.8.7 Documents required to be submitted to the State Fisheries Department along with the application form

i. Application in the prescribed format **(FORM-IX)**

ii. A copy of the project report indicating the techno economic viability & IRR.
iii. Copies of the land documents along with encumbrances certificates.
iv. Copy Coastal Aquaculture Authority registration certificate for brackishwater finfish culture
v. Copy of the Term Loan Sanction / consent Letter obtained from the bank
vi. Layout of the farm
vii. Declaration to the effect that no financial assistance is availed from any other department for the same purpose.

2.8.8 UNIT COST ESTIMATE FOR INPUT ASSISTANCE (WORKING CAPITAL) FOR BRACKISH WATER FINFISH CULTURE IN PONDS

Recurring cost		(Approximate cost-Rs)
	Pond preparation, pumping & aeration	25,000
	Cost of Seed @Rs.3/fingerling for 10,000 Nos.	30,000
	Feed cost for the production output of 5 tonnes/ ha.	2,00,000
	Wages & Harvesting expenses	35,000
	Lime & management chemicals	5,000
	Water test kits & Miscellaneous	5,000
Total Working capital cost		**3,00,000**

2.09 FINANCIAL ASSISTANCE FOR CAGE CULTURE OF BRACKISH WATER FIN FISHES IN PONDS AND BRACKISHWATER AREAS.

To promote diversification in coastal aquaculture fin fishes like seabass, groupers, mullets and milk fish can be cultured in cages placed in ponds and brackish water areas for achieving higher production.

2.09.01 Eligibility Criteria

The assistance would be towards capital investment required for cage culture of brackishwater fin fishes in ponds and brackishwater areas. Entrepreneurs and farmers are eligible for subsidy assistance from NFDB.

2.09.02 Unit Cost

The unit cost on the capital investment has been estimated to be Rs. 10.00 lakhs/ha. Minimum of 1.0 hectare area and to a maximum of 10 hectare area (Water spread area) would be eligible for subsidy assistance. Anticipated production per hectare shall be between 10 - 12 tonnes.

2.09.03 Quantum of assistance

Assistance to the aquaculture farmers and entrepreneurs would be @ 25% of the unit cost as one time back ended subsidy (not exceeding Rs. 2.50 Lakhs/ha.), whereas SC/ST farmers/ entrepreneurs would be eligible for 30% subsidy assistance, not exceeding Rs. 3.00 Lakhs/ha.

2.09.04 Items eligible for Assistance

Capital expenditure towards knotless nets, cage accessories, catwalk, mechanical graders, construction of earthen bunds, concrete inlet and outlet sluices, water pumps and aerators.

2.09.05 Conditions specific to the scheme

- The farmer shall submit an application along with the prescribed documents to the Officer in Charge of the Department of Fisheries, of the concern district where the farm is located.

- The farmer has to simultaneously apply for license from the Coastal Aquaculture Authority for issue of license for brackishwater finfish culture.
- Farmer has to avail technical support from an Institution/authorized agency to undertake cage culture of brackishwater finfish culture.
- The farmer shall undertake the works only after submitting the application form to the State Fisheries Department and after obtaining administrative sanction from NFDB.
- The Officer in charge of Department of Fisheries of the concern district has to submit a consolidated statement to the NFDB indicating the details of the applications received.
- The consolidated statement has to be sent to NFDB through the Head of the Office of the State Fisheries Department to the NFDB for obtaining administrative sanction.
- After obtaining administrative sanction from NFDB, the State Fisheries Department has to communicate the sanction details to the farmer to undertake the works.
- The Officer in Charge of the district for the Department of Fisheries has to prepare a final consolidated statement on the famers, who had completed the works and obtained license for brackishwater finfish culture.
- The final consolidated statement has to be signed by the inspecting officer, district in charge for the Department of Fisheries and Head of the State Fisheries Department and send it to NFDB for release of the subsidy.
- NFDB subsidy would be released to the State Fisheries Department, with a request to credit into the loan account of the respective farmer.
- After releasing the subsidy amount the State Fisheries Department has to issue the Utilization Certificate to NFDB along with the financial progress report.
- Shrimp farm has to procure SPF shrimp PL from the hatcheries approved by CAA only.
- Physical verification/inspection at different stages will be undertaken by duly authorized officials of the Board and/or other experts as may be decided from time to time.

2.09.06 Documents required to be submitted to the State Fisheries Department along with the application form (FORM No. X)

- Application in the prescribed format.
- A copy of the project report indicating the techno economic viability & IRR.
- Copies of the land documents along with encumbrances certificates.
- Copy Coastal Aquaculture Authority registration certificate for brackishwater finfish culture
- Copy of the Term Loan Sanction / consent Letter obtained from the bank
- Layout of the farm
- Declaration to the effect that no financial assistance is availed from any other department for the same purpose.

2.09.07 Unit Cost Estimate for Cage Culture of Brackishwater Fin fishes in Ponds and Open Backwaters

Non-recurring (One time investment)		(Approximate cost-Rs)
1	Construction/ strengthening of the pond	1,00,000
2.	Cost of cages & knotless nets for the production capacity of 10- 12 tonnes per hectare	6,00,000
3.	Catwalk	20,000

4.	Water pump with accessories	80,000
5.	Aerators	1,00,000
6.	Mechanical graders and other equipments	30,000
7	Inlets and outlet sluice gates	70,000
Total capital cost in Rs.		**10,00,000**

2.10. INPUTS ASSISTANCE FOR CAGE CULTURE OF BRACKISH WATER FIN FISHES IN PONDS AND OPEN BACKWATER AREAS.

2.10.1 Description and Objective

To promote diversification in coastal aquaculture fin fishes like seabass, groupers, mullets and milk fish cultured in cages placed in ponds and open backwaters for achieving higher production.

2.10.2 Eligibility Criteria

The support towards first –time inputs will be available to farmers who start cage culture of brackishwater fin fishes in ponds and open Brackishwater areas for the first time on a commercial scale would be eligible for input subsidy assistance.

2.10.3 Unit Cost (Input cost)

The unit cost for first year inputs has been estimated to be Rs. 7.00 lakhs/ha (Water spread area) for a production capacity of 10 – 12 tonnes per hectare (Water spread area).

2.10.4 Quantum of assistance

Assistance for inputs to the aquaculture farmers is available @ 25% of the unit cost as one time back ended subsidy (not exceeding Rs. 1.75 Lakhs/ha.), whereas SC/ST farmers would be eligible for 30% subsidy assistance, not exceeding Rs. 2.10 Lakhs/ha. The subsidy would be calculated based on the actual expenditure incurred and eligible NFDB assistance, which ever less will be considered.

2.10.5 Items eligible for Assistance

Cost of seeds, nets, imported feeds or highly nutritive feeds with high FCR than the regular feeds used, feed additives and management Chemicals

2.10.6 Conditions specific to the scheme

i. Farmers who start cage culture of brackishwater fin fishes in ponds and open Brackishwater areas for the first time on a commercial scale would be eligible for input subsidy assistance.
ii. The farmer shall submit an application along with the prescribed documents to the Officer in Charge of the Department of Fisheries, of the concern district where the farm is located.
iii. The farmer shall submit an application along with the prescribed documents to the Officer in Charge of the Department of Fisheries, of the concern district where the farm is located.
iv. The farmer has to simultaneously apply for license from the Coastal Aquaculture Authority for issue of license for brackishwater finfish culture.
v. Farmer has to avail technical support from an Institution/authorized agency to undertake cage culture of brackishwater finfish culture.
vi. The farmer shall commence the production only after submitting the application form to the State Fisheries Department and after obtaining administrative sanction from NFDB.

vii. The Officer in charge of Department of Fisheries of the concern district has to submit a consolidated statement to the NFDB indicating the details of the applications received.
viii. The consolidated statement has to be sent to NFDB through the Head of the Office of the State Fisheries Department to the NFDB for obtaining administrative sanction.
ix. After obtaining administrative sanction from NFDB, the State Fisheries Department has to communicate the sanction details to the farmer to commence the production.
x. The Officer in Charge of the district for the Department of Fisheries has to prepare a final consolidated statement on the famers, who had commenced the production and obtained license from CAA for brackishwater finfish culture.
xi. The final consolidated statement has to be signed by the inspecting officer, district in charge for the Department of Fisheries and Head of the State Fisheries Department and send to NFDB for release of the subsidy.
xii. NFDB subsidy would be released to the State Fisheries Department, with a request to credit into the loan account of the respective farmer.
xiii. After releasing the subsidy amount the State Fisheries Department has to issue the Utilization Certificate to NFDB along with the financial progress report.
xiv. Physical verification/inspection at different stages will be undertaken by duly authorized officials of the Board and/or other experts as may be decided from time to time.

2.10.7 Documents required to be submitted to the State Fisheries Department along with the application form

i. Application in the prescribed format **(FORM-XI)**
ii. A copy of the project report indicating the techno economic viability & IRR.
iii. Copies of the land documents along with encumbrances certificates.
iv. Copy Coastal Aquaculture Authority registration certificate for brackishwater finfish culture
v. Copy of the Term Loan Sanction / consent Letter obtained from the bank
vi. Layout of the farm
vii. Declaration to the effect that no financial assistance is availed from any other department for the same purpose.

2.10.8 UNIT COST ESTIMATE FOR INPUT ASSISTANCE TO CAGE CULTURE OF BRACKISHWATER FIN FISHES IN PONDS AND OPEN BACKWATERS

Non-recurring (One time investment)		(Approximate cost-Rs)
	Cost of seed	80,000
	Cost of feed	5,00,000
	Management chemicals & test kits	70,000
	Pond preparation	50,000
Total input cost in Rs.		**7,00,000**

2.11 NEED BASED FINANCIAL ASSISTANCE FOR DEVELOPMENT AND DEMONSTRATION OF INNOVATIVE / NEW TECHNOLOGIES

2.11.1 Description and Objective

Need based financial assistance for increasing fish production/ productivity and broodstock development, culture of New species, production of Low cost feed with high nutritive value, promotion of New Farming Practices (cage/pen culture etc.) and Development of diagnostic

kits (including biotechnological kits) would be eligible for subsidy/soft loan assistance to the tune of 40% of the unit cost.

2.11.2 Eligibility Criteria

a. Farmers, Fisheries Federations/Corporations and entrepreneurs are eligible to avail the assistance from NFDB.
b. Beneficiary should submit a comprehensive proposal highlighting the innovative technology involved, economic viability, technical feasibility etc.
c. The innovative proposal will be referred to the National level R & D Institution for evaluation and appraisal.
d. Unit cost and quantum of assistance will be decided by NFDB based on the need, importance and adaptability by the farmers.
e. NFDB has every right to reject the proposal without assigning any reason.

2.11.3 Quantum of assistance

Assistance to the tune of:

(1) 40% of the project cost (capital and one time inputs cost) as one time back ended subsidy for culture of new species.

(2) 40% of the project cost (capital cost) as one time back ended subsidy for low cost feeds with high nutritive value.

(3) 40% of the project cost (capital and one time inputs cost) as one time back ended subsidy for new farming practices (cage/ pen culture).

(4) 40% soft loan @ 5% interest rate for development of diagnostic kits.

2.11.4 Items eligible for Assistance

Basic Infrastructure required for the innovative proposal, Feeds, Chemicals etc.,

2.11.5 Conditions specific to the scheme

i. Application to be submitted in prescribed format **(FORM-XII)** along with a project proposal.
ii. The beneficiary shall undertake the works only after submitting an advance application form duly filled through the State Fisheries Department and after obtaining due approval from NFDB.
iii. The innovative proposal should be on a pilot scale to give desired outputs within the specified time frame.
iv. Adaptability and techno-economic viability has to be narrated in detailed in the proposal.
v. Necessary permission from the relevant institutions and government agencies has to be obtained prior to the sanction of the NFDB's funding support.
vi. Should not have availed any type of financial assistance from any other Govt. Department/agencies.
vii. The applicant has to furnish estimate and completion certificate duly attested by a chartered Engineer related to civil works. Chartered Accountant in relation to expenditure made on machinery, equipment etc.,
viii. Physical verification/inspection at different stages will be undertaken by duly authorized officials of the Board and/or other experts as may be decided from time to time.
ix. Financial assistance will be released only after satisfactory completion, commissioning of the work, and after executing a bond for period of five years.
x. The facilities created and machinery/equipments installed under the scheme shall not be removed from the premises without obtaining a written permission of the Board/Respective agency.

xi. The beneficiary shall maintain the facility including all machinery always in good condition.

xii. In case of violation of any of the conditions of the Bond, NFDB shall be entitled to recover the financial assistance amount in full from the beneficiary along with 12% interest and the Board shall initiate such penal action as may deem fit to impose.

2.12 Financial Assistance for Setting up of Aquatic Animal Health and Environment Management Laboratory (AAHEL)

2.12.1. Introduction

Diseases are the major bottlenecks for the development of aquaculture sector in the world. The loss due to diseases amounts to be around 10-15% of the production cost in aquaculture sector. However, this loss can be substantially reduced if due attention is being given on scientific health management. The development of suitable, rapid and sensitive diagnostics or diagnosis measures plays an important role in better health management practices. In a vast country like India, we do have a few well-equipped laboratories with well-trained manpower to render perfect diagnosis on fish diseases. Further, if you see, there are countable laboratories those who can work on newer emerging pathogens and also they do not have quarantine facilities.

Diagnosis refers to the process of identifying a disease through careful examination of symptoms and signs. Proper diagnosis leads to the possible treatment as well as other follow-up like maintaining good health and it will provide a better knowledge on main pathologies and diseases of the animal. Early and precise diagnosis will be effective in taking proper preventive measures. The diagnostic laboratories should have rapid and sensitive diagnostic tools to identify varied pathogens or conditions (bacteria, virus, fungus, parasites, toxicants etc.) besides facilities for testing water and soil qualities for ideal aqua farming.

The HRD should be strong enough to cater the regional needs on emergency basis. The collection and dispatch of infected samples to proper laboratories in distantly located places pose a major concern for exact or quicker diagnosis of diseases. Hence, the fish farmers are incurring a major loss due to spread of diseases. Hence, it is ideal to have R&D facilities and disease diagnostic laboratories in the major aquaculture states (those where facilities are not available) that may serve as referral laboratories for a particular state. Keeping above aspects in mind, two types of disease diagnostic labs are proposed to meet the requirement in the field. For the Inland states the emphasis was given for the soil and water analysis, histopathology and microbiology. Whereas laboratories to be set up in coastal states would have an additional component of PCR lab is included.

2.12.2. Beneficiaries

The State Fisheries Departments, Fisheries Corporations, Agencies/ Institutions under the Central/ State Government and KVKs having Fisheries Extension Service units with required technical manpower and adequate space for establishing the facility.

2.12.3. Unit Cost

The cost of establishing disease diagnosis including the cost of consumables for one year is Rs. 40.00 Lakhs and for the labs to be set up in coastal states inclusive of one year cost for consumables is Rs. 56.00 Lakhs. The breakup details are as below:-

Budget Summary for the establishment of Aquatic Animal Health and Environment Management Laboratory (AAHEML)

Sl. No.	Components	Coastal state (Rs. in lakhs)	Inland state (Rs. in lakhs)
1	Soil and water quality analysis	16.00	16.00
2	Microbiology	13.00	13.00
3	Histopathology	3.00	3.00
4	PCR Lab	13.55	--
5	Office Equipment	3.00	3.00
6.	Lab Furniture	4.00	3.00
7	Cost of Consumables for the first year	3.45	2.00
	Total	56.00	40.00

2.12.4. Quantum of assistance

One time grant to meet the cost for establishing the Aquatic Animal Health and Environment Management Laboratory including the cost of consumables as specified above.

2.12.5 Items eligible for Assistance

The Capital infrastructure including the cost of equipments, office and lab furniture and consumables as per the items listed below.

2.12.6 Conditions specific to the scheme

i. The State Fisheries Department/ the implementing agency shall submit the application in the prescribed format through the Head of the Institution.
ii. Detailed cost estimate for the proposed expenditure with the copies quotations has to be submitted along with the application.
iii. Layout design of the proposed laboratory, details of the trained man power to be positioned for day to day operations shall be indicated.
iv. Location of the proposed laboratory, number of farmers likely to use the facility, details of the farming area in hectares nearer to the laboratory and justification for setting up of the laboratory shall be submitted.
v. List of private sector diagnostic laboratories located about 30 kilometer radius of the proposed laboratory has to be enclosed.
vi. Qualified and trained manpower shall be placed in the laboratory and the salaries and wages shall be met from the implementing agency.
vii. The rental charges for the laboratory premises shall be born by the implementing agency and the rental charges shall not be incurred from the revenue generated by the laboratory.

viii. The revenue generated through the operations of the laboratory shall be used only to meet the recurring expenditure of the laboratory. The funds shall not be diverted for any other purpose without obtaining the permission form the Head of the Institution and NFDB.

ix. Half yearly report on the number of samples tested under various categories, revenue generated and manpower in place shall be submitted to the NFDB through the Head of institution.

x. Statement showing the proposed charges for testing various parameters in the laboratory shall be submitted along with the proposal.

xi. The laboratory has to maintain registers pertaining to the details of the farmers submitted samples for testing, samples tested, results and charges collected.

xii. The projected revenue generation from the laboratory shall be sufficient enough to meet the operational expenses of the laboratory for the subsequent years.

xiii. Purchase of equipments, furniture, consumables shall be made by duly following the procedures in vogue by the Government of India/ State Government.

xiv. The technical staff employed in the laboratory shall be trained regularly in the ICAR Fisheries Research Institutions/ referral laboratories on various diagnostic procedures.

xv. The NFDB would release the grant on execution of a specific Memorandum of Understanding (MoU).

2.12.7. Manpower Required:

Trained Lab in-charge, Analyst, Lab Assistant and Lab Attendant should be provided in the laboratory and their salary and wage components shall be born by the respective implementing agencies.

2.12.8. Documents required to be submitted along with the application form

i. Application in the prescribed format (FORM-XIII)

ii. A copy of the project report indicating the techno economic viability operations of the lab.

iii. Details and qualification of manpower to be placed in the lab.

iv. Source of funding for salaries and wages of the staff

v. List of equipments, furniture to be purchased along with the copies of the quotations

vi. Layout of the laboratory showing various diagnostic sections

2.12.9. Activities of AAHEML

(i) Seed Quality Testing Parameters

1. Stress test - Formalin
2. Fry health analysis
3. Vibrio counts …water
4. Total bacterial counts…water
5. Presence of viral pathogens – WSSV (PCR)
6. Presence of viral pathogens - MBV (Squash and PCR (if required)
7. Histo-pathological investigations for bacterial, fungal and viral infections

(ii) Water quality testing Parameters

1. Salinity + pH +Alkalinity
2. Lime requirement, Gypsum requirement
3. Redox potential
4. Ammonia
5. Nitrite
6. Nitrate

(iii) Feed Testing Parameters

1. Water stability
2. Proximate analysis

2.12.10. Costs for establishment of AAHEML (Maritime States)

(i) Office Equipment: 3 lakhs

(ii) Lab furniture: 4 lakhs

(iii) Equipment required and their Cost

Soil and water analysis

Equipments Required	Cost
1. Multi parameter water quality analyzer	400000
2. Portable redox meter (Imported)	75000
3. Portable DO meter (Imported)	50000
4. Portable U.V.Visible spectrophotometer (Imported)	450000
5. Kjeltec N digestion and distillation system	400000
6. Refrigerator	15000
7. Salinometer	10000
8. Soil Analysis Equipments	200000
Sub-Total	1600000

Microbiology & Histopathology

S. No	Equipment	Cost
1	Autoclave (portable)	20000
2	Histopathology Equipments	300000
3	Hot air oven	60000
4	BOD Incubator (temperature controlled below ambient)	125000
5	Laminar Flow	150000
6	Microscope with phase contrast facility	700000
7	Electronic Balance	120000
8	Micropipettes	60000
9	pH meter	15000
10	Distillation unit	20000
11	Gas connection	10000
12	Electrical heater/hot plate	20000
	Total	1600000

PCR

1	Thermal Cycler	250000
2	Micropipettes	100000
3	Vortex mixer	10000
4	Magnetic stirrer	30000
5	Electrophoresis power pack	60000
6	Gel electrophoresis system	30000
7	Gel documentation system	250000
8	Dry bath	150000
9	Micro-centrifuge	80000

10	-20°C Freezer	250000
11	Air Conditioner	30000
12	Voltage stabilizers	40000
13	UPS	60000
14	Microwave oven	15000
	Total	1355000

Recurring expenditure for one year (chemicals) for both environment and fish health: Rs.3,45,000/-

Total Cost: 56,00,000/-

2.12.11. Costs for establishment of AAHEML (Inland States)

(i) Office Equipment: 3 lakhs
(ii) Lab furniture: 3 lakhs
(iii) Equipment required and their Cost

Soil and water analysis

Equipments Required	Cost
1. Multi parameter water quality analyzer	400000
2. Portable redox meter (Imported)	75000
3. Portable DO meter (Imported)	50000
4. Portable U.V. Visible spectrophotometer (Imported)	450000
5. Kjeltec N digestion and distillation system	400000
6. Refrigerator	15000
7. Salinometer	10000
8. Soil Analysis Equipments	200000
Sub-Total	1600000

Microbiology

S. No	Equipment	Cost
1	Autoclave (portable)	20000
2	Histopathology Equipments	300000
3	Hot air oven	60000
4	BOD Incubator (temperature controlled below ambient)	125000
5	Laminar Flow	150000
6	Microscope with phase contrast facility	700000
7	Electronic Balance	120000
8	Micropipettes	60000
9	pH meter	15000
10	Distillation unit	20000
11	Gas connection	10000
12	Electrical heater/hot plate	20000
	Total	1600000

Recurring expenditure for one year (chemicals) for both environment and fish health: Rs.2,00,000/-

Total Cost: Rs. 40,00,000/-

FORM I

National Fisheries Development Board
Application for Training and Demonstration in Coastal Aquaculture

S. No	Particulars sought from the Implementing Agency	Information furnished by the Implementing Agency		
(1)	(2)	(3)		
1	Name and address of the Implementing Agency:			
2	Location of the Training Facility:	**District**	**Block**	**Village**
3	Facilities available or proposed for imparting training:			
4	Details of the Training Programme:			
	9) Number of persons to be trained in coastal aquaculture and in hatchery operations (to be given separately):			
	b) Of which number of existing coastal aquaculture farmers:			
	c) Farmers having their own ponds/ tanks to undertake coastal aquaculture:			
5	Area under coastal aquaculture/ expected to increase after training programme:			
	a) Existing area under coastal aquaculture (ha):			
	b) New area to be developed by the trained farmers (ha):			
6	Average production of shrimps and fish in the area (kg/ ha/ annum):			
7	Whether the demonstration site would be in the Farm of the State Government or will be taken up in farm on lease basis:			
8	If demonstration site other than the farm of the Department of Fisheries, please provide the following details:			
	a) Complete address of the farm:			
	b) Size of the ponds (ha):			
	c) Distance from the location of the training site:			
9	Whether the implementing Agency proposes to engage farmer's pond? If so the number of training programmes to be conducted in a year may be indicated:			
10	Financial Implications:			
	a) Training			
	(i) Assistance to farmer @ Rs 150/ day for			

	5 days:		
	(ii) Reimbursement of to and fro travel expenses to farmer:		
	(iv) Assistance to implementing agency @ Rs 75/trainee/ day:		
	(iii) Honorarium to resource persons and reimbursement of to and fro travel expenses:		
	Total of (a)		
	b) Demonstration Unit		
	Grand Total (a + b)		
11	Technical capabilities of resource persons to be engaged in training:		
12	Any other details in support of the proposal		

Date:

Place: Signature and seal of the authorized representative of the Implementing Agency

Declaration by the Applicant

I/We……...……..……...……..son/daughter/wife of……...…….....residing at…….....……. hereby declare that the information furnished above is true to the best of my/ our knowledge and belief. I am/ we are fully aware that if it is found that the information furnished by me/ we is false or there is any kind of deviation/ violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/ us.

Date:

Place: Signature of the Applicant (s)

Countersigned by the Implementing Agency

Date:

Place: Signature and seal of the authorized representative of the Implementing Agency

FORM – II

National Fisheries Development Board

Form for Submission of Utilization Certificate

Sl. No	Letter No and date	Amount

Certified that out of Rs _____ sanctioned during the year_____ in favour of _____ under the National Fisheries Development Board's Letter No given in the margin and Rs _____ on account of unspent balance of the previous sanction, a sum of Rs _____ has been utilized for the purpose of_____ for which it was sanctioned and that the balance of Rs _____ remains unutilized. The same will be adjusted towards the next installment payable during the period_____.

2.0 Certified that I have satisfied myself that the conditions on which the funds were sanctioned by the National Fisheries Development Board have been duly fulfilled/ are being fulfilled and that I have exercised the following checks to see that the money was actually utilized for the purpose for which it was sanctioned.

Date:

Place:

Signature and seal of the
Authorized representative of the
Implementing Agency

Form III

National Fisheries Development Board

APPLICATION FOR SUBMISSION OF PROPOSAL FOR NEEDS BASED FINANCIAL ASSISTANCE FOR INFRASTRUCTURE DEVELOPMENT IN COASTAL AQUACULTURE (AQUATIC QUARANTINE ETC.)

S. No	Particulars sought from the applicant	Information furnished by the applicant
(1)	(2)	(3)
1	Name and address of the applicant (IN BLOCK LETTERS):	
2	Address for communication	
	Street:	
	City:	
	Dist:	
	State:	
	Phone: (O):	
	(R):	
	(Fax):	
	Mobile:	
	E-mail:	
3	Is the quarantine facility is approved by Government of India. If Yes, copy of the letter may be enclosed.	
4	Total financial outlay of the project along with technical details & BoQ	
5	Details of the land where the proposed construction of aquatic quarantine to be undertaken	
	State:	
	District:	
	Taluk/Mandal	
	Revenue Village:	
	Survey No:	
	Pond/s area(in ha)	
	Total water spread area(in ha):	
6	Ownership(whether freehold or on lease):	
7	If on lease, duration of lease (minimum of seven years). Enclose a copy of the lease agreement.	
8	Total area of the land for the proposed quarantine centre.	
9	Enclose copy of the Project report--Design details/approved layout of the aquatic quarantine by concerned government agency.	
10	Estimated Project Cost	Cost(Rs)
11	Details regarding economics of operation:	

Declaration by the Applicant

I/We……...……..……...…….son/daughter/wife of……..…… ……..…….....residing at…….....……..…… hereby declare that the information furnished above is true to the best of my/ our knowledge and belief. I am/ we are fully aware that if it is found that the information furnished by me/ we is false or there is any kind of deviation/ violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/ us.

I/We hereby declare and certify that we have not availed of any grant or assistance from any Government Agencies for creation of the facilities. It is further informed that we will not claim assistance from any other institutions.

Date:

Place: Signature of the Applicant (s)

Countersigned by the Implementing Agency

Date:

Place: Signature and seal of the authorized representative of the Implementing Agency

Form IV

National Fisheries Development Board

APPLICATION FOR FINANCIAL ASSISTANCE FOR SPF SHRIMP NAUPLII PRODUCTION CENTRES

S. No	Particulars sought from the applicant	Information furnished by the applicant
(1)	(2)	(3)
1	Name and address of the applicant (IN BLOCK LETTERS):	
2	Address for communication	
	Street:	
	City:	
	Dist:	
	State:	
	Phone: (O):	
	(R):	
	(Fax):	
	Mobile:	
3	E-mail:	
4	Copy of the SPF nauplii production centre registration certificate issued by MPEDA.	
5	Details of the land where the proposed construction of SPF nauplii production centre	
	State:	
	District:	
	Taluk/Mandal	
	Revenue Village:	
	Survey No:	
	Pond/s area(in ha)	
	Total water spread area(in ha):	
6	Ownership(whether freehold or on lease):	
7	If on lease, duration of lease (minimum seven years). .Enclose a copy of the lease agreement	
8	Total land area of the proposed nauplii centre (in ha):	
9	Capacity of the nauplii center:	
10	Technology to be adopted (imported/indigenous):	
11	Production capacity (in million nauplii per production cycle):	
12	Source of brood stock:	
13	Details of the proposed construction works of the nauplii centre. (Design details/engineering works to be submitted):	
14	Is the nauplii centre is equipped with PCR laboratory.	YES/NO

15	Enclose copy of the project report—design details/approved layout of the SPF nauplii centre/machinery	
16	Projected estimate cost	Cost (Rs)
17	NFDB funding requested:	
18	Project cost: Source of funds 1.State Government/ Promoter's contribution: 2.Assistance from other Government Schemes: 3. Details of Bank finance:	
19	Details regarding economics of operation:	

Declaration by the Applicant

I/We……...…….....……..son/daughter/wife of……...……..…….....residing at…….....……..……. hereby declare that the information furnished above is true to the best of my/ our knowledge and belief. I am/ we are fully aware that if it is found that the information furnished by me/ we is false or there is any kind of deviation/ violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/ us.

I/We hereby declare and certify that we have not availed of any subsidy assistance from any Government Agencies for creation of the facilities. It is further informed that we will not claim assistance from any other institutions.

Date:

Place: Signature of the Applicant (s)

Countersigned by the Implementing Agency

Date:

Place:

Signature and seal of the authorized
Representative of the implementing agency

FROM V

National Fisheries Development Board

APPLICATION FOR FINANCIAL ASSISTANCE FOR ADDITIONAL INFRASTRUCTURE FOR SPECIFIC PATHOGEN FREE (SPF) SHRIMP SEED HATCHERIES

S. No	Particulars sought from the applicant	Information furnished by the applicant
(1)	(2)	(3)
1	Name and address of the applicant (IN BLOCK LETTERS):	
2	Address for communication	
	Street :	
	City:	
	Dist:	
	State:	
	Phone: (O):	
	(R):	
	(Fax):	
	Mobile:	
	E-mail:	
3	Copy of the hatchery registration certificate issued by MPEDA.	
4	Approval received from the Coastal Aquaculture Authority (Enclose a copy)	
5	Is No Objection Certificate obtained from Village governing body? If Yes, enclose copy of the certificate	YES/NO
6	Details of the land where the proposed construction work of addl. facilities for SPF shrimp seed hatchery	
	State:	
	District:	
	Taluk/Mandal	
	Revenue Village:	
	Survey No:	
	Pond/s area(in ha)	
	Total water spread area(in ha):	
7	Ownership(whether freehold or on lease):	
8	If on lease, duration of lease (not less than seven years):	
9	Enclose copy of the original project report--design details/approved layout of the hatchery/ machinery	
10	Is the hatchery is equipped with PCR laboratory.	YES/NO
11	Enclose copy of the project report—design details/approved layout of the hatchery/machinery by incorporating the additional facilities/machinery	
12	Projected estimate cost	Cost (Rs)

13	NFDB funding requested:	
14	Project cost: Source of funds 1.State Government contribution: 2.Assistance from other Government Schemes:	
15.	Details on tie up with the Bank for availing institutional finance:	

Declaration by the Applicant

I/We……...……..……...……..son/daughter/wife of……...…….....residing at…….....…… hereby declare that the information furnished above is true to the best of my/ our knowledge and belief. I am/ we are fully aware that if it is found that the information furnished by me/ we is false or there is any kind of deviation/ violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/ us.

I/We hereby declare and certify that we have not availed of any subsidy assistance from any Government Agencies for creation of the facilities. It is further informed that we will not claim assistance from any other institutions.

Date:

Place: Signature of the Applicant (s)

Countersigned by the Implementing Agency

Date:

Place: Signature and seal of the authorized representative of the Implementing Agency

FORM VI

National Fisheries Development Board

APPLICATION FOR FINANCIAL ASSISTANCE FOR ADDITIONAL INFRASTRUCTURE TO SPECIFIC PATHOGEN FREE (SPF) SHRIMP CULTURE FARMS

S. No	Particulars sought from the applicant	Information furnished by the applicant
(1)	(2)	(3)
1	Name and address of the applicant (IN BLOCK LETTERS):	
2	Address for communication	
	Street:	
	City:	
	Dist:	
	State:	
	Phone: (O)-	
	(R)-	
	(Fax)	
	Mobile:	
	E-mail:	
3	Is No Objection Certificate obtained from local Village Body? If yes, enclose a attested copy of the certificate	
4	Is the farm registered with CAA? If Yes, Registration No.(Enclose a copy of the certificate)	
5	Details of registration with CAA for SPF *L. vannamei* culture	
6	Details of the land where the proposed construction for additional infrastructure to undertake SPF shrimp culture	
	State:	
	District:	
	Taluk/Mandal	
	Revenue Village:	
	Survey No:	
	Pond/s area(in ha)	
	Total water spread area(in ha):	
7	Ownership(whether freehold or on lease):	
8	If on lease, duration of lease (minimum of seven years). Enclose a copy of the lease agreement	
9	Month and year of construction of pond(s) and financial assistance received.	
10	Whether assistance for this purpose has been obtained under any other scheme of the Central/State Government? If so, please provide details:	

11	Enclose copy of the original project report--Design details/approved layout of the farm by chartered engineer/state department engineer/MPEDA	
12	Enclose copy of the Project report--Design details incorporating the additional infrastructure/approved layout of the farm by chartered engineer/state department engineer/MPEDA	
13	Project estimated cost	Cost(Rs)
14	Project cost: Source of funds 1.Promoters contribution: 2.Bank Finance : 3.Assistance from Government Schemes:	
15	Details on tie up with the Bank for availing institutional finance:	

Declaration by the Applicant

I/We……...……..……...……..son/daughter/wife of……...…….....residing at…….....……. hereby declare that the information furnished above is true to the best of my/ our knowledge and belief. I am/ we are fully aware that if it is found that the information furnished by me/ we is false or there is any kind of deviation/ violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/ us.

I/We hereby declare and certify that we have not availed of any subsidy assistance from any Government Agencies for creation of the facilities. It is further informed that we will not claim assistance from any other institutions.

Date:
Place: Signature of the Applicant (s)

Countersigned by the Implementing Agency

Date:
Place: Signature and seal of the authorized representative of the Implementing Agency

FORM VII

National Fisheries Development Board

APPLICATION FOR FINANCIAL ASSISTANCE FOR CONSTRUCTION OF NEW FARM FOR BRACKISH WATER FINFISH CULTURE

S. No	Particulars sought from the applicant	Information furnished by the applicant
(1)	(2)	(3)
1	Name and address of the applicant (IN BLOCK LETTERS):	
2	Address for communication	
	Street:	
	City:	
	Dist:	
	State:	
	Phone: (O):	
	(R):	
	(Fax):	
	Mobile:	
	E-mail:	
3	Is No Objection Certificate obtained from the local Village body? If yes enclose a copy of the certificate	
4	Is the farm has obtained registration from CAA. If Yes, registration No.(enclose copy of the certificate)	
5	Details of the land where the proposed construction work of new farm for finfish culture to be undertaken	
	State:	
	District:	
	Taluk/Mandal	
	Revenue Village:	
	Survey No:	
	Pond/s area(in ha)	
	Total water spread area(in ha):	
6	Ownership(whether freehold or on lease):	
7	If on lease, duration of lease (Not less than seven years) (Enclose a copy of the lease agreement)	
8	Month and year of construction of pond(s) and financial assistance received.	
9	Whether assistance for this purpose has been obtained under any other scheme of the Central/State Government? If so, please provide details:	
10	Enclose copy of the original project report--	

	Design details/approved layout of the farm by chartered engineer/state department engineer/MPEDA	
11	Project estimated cost (enclose list of items and cost)	Cost(Rs)
12	Project cost: Source of funds 1.Promoters contribution: 2.Bank Finance : 3.Assistance from Government Schemes:	
13	Details on tie up with the Bank for availing institutional finance:	

Declaration by the Applicant

I/We……...……..……...……..son/daughter/wife of……..…….....residing at…….....…… hereby declare that the information furnished above is true to the best of my/ our knowledge and belief. I am/ we are fully aware that if it is found that the information furnished by me/ we is false or there is any kind of deviation/ violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/ us.

I/We hereby declare and certify that we have not availed of any subsidy assistance from any Government Agencies for creation of the facilities. It is further informed that we will not claim assistance from any other institutions.

Date:
Place: Signature of the Applicant (s)

Countersigned by the Implementing Agency

Date:

Place: Signature and seal of the authorized representative of the Implementing Agency

FORM VIII

National Fisheries Development Board

APPLICATION FOR FINANCIAL ASSISTANCE FOR MODIFICATION OF EXISTING SHRIMP FARM FOR BRACKISH WATER FINFISH CULTURE

S. No	Particulars sought from the applicant	Information furnished by the applicant
(1)	(2)	(3)
1	Name and address of the applicant (IN BLOCK LETTERS):	
2	Address for communication	
	Street:	
	Place:	
	Dist:	
	State:	
	Phone: (O):	
	(R):	
	(Fax):	
	Mobile:	
	E-mail:	
3	Is No objection certificate is obtained from local village body. If yes enclose a attested copy of the certificate	
4	Is the farm is registered with CAA. If yes, enclose a attested copy of the certificate	
5	Details of the land where the proposed construction of additional infrastructure for brackish water finfish culture to be undertaken	
	State:	
	District:	
	Taluk/Mandal	
	Revenue Village:	
	Survey No:	
	Pond/s area(in ha)	
	Total water spread area(in ha):	
6	Ownership(whether freehold or on lease):	
7	If on lease, duration of lease (minimum of seven years). Enclose a copy of the lease agreement	
8	Enclose copy of the original project report--Design details/approved layout of the farm/ machinery	
9	Enclose copy of the project report along with layout of the farm approved by the State Fisheries Department/MPEDA/Chartered Engineer incorporating the additional infrastructure for brackish water finfish culture (items eligible under the scheme).	
10	Estimated project cost	Cost(Rs)

11	Project cost: Source of funds 1.Promoters contribution: 2.Bank Finance : 3.Assistance from Government Schemes:	
12	Details on tie up with the Bank for availing institutional finance:	

Declaration by the Applicant

I/We……...……..……...……..son/daughter/wife of……...…….....residing at…….....……. hereby declare that the information furnished above is true to the best of my/ our knowledge and belief. I am/ we are fully aware that if it is found that the information furnished by me/ we is false or there is any kind of deviation/ violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/ us.

I/We hereby declare and certify that we have not availed of any subsidy assistance from any Government Agencies for creation of the facilities. It is further informed that we will not claim assistance from any other institutions.

Date:
Place: Signature of the Applicant/s

Countersigned by the Implementing Agency

Date:
Place: Signature and seal of the authorized representative of the Implementing Agency

FORM IX

National Fisheries Development Board

APPLICATION FOR SUBMISSION OF PROPOSAL FOR FINANCIAL ASSISTANCE TOWARDS INPUT COST FOR BRACKISHWATER FIN FISH CULTURE

S. No	Particulars sought from the applicant	Information furnished by the applicant
(1)	(2)	(3)
1	Name and address of the applicant (IN BLOCK LETTERS):	
2	Address for communication	
	Street:	
	City:	
	Dist:	
	State:	
	Phone: (O):	
	(R):	
	(Fax):	
	Mobile:	
	E-mail:	
3	Is No Objection Certificate obtained from local village body. If yes, enclose copy of the certificate	
4	Is the farm registered with CAA. If Yes, Registration No.(Enclose a copy of the certificate)	
5	Details of the land where the farm is located and proposed to avail the input subsidy to undertake brackish water fin fish culture.	
	State:	
	District:	
	Taluk/Mandal	
	Revenue Village:	
	Survey No:	
	Pond/s area(in ha)	
	Total water spread area(in ha):	
6	Ownership(whether freehold or on lease):	
7	If on lease, duration of lease(minimum lease period seven years).Enclose a copy of the lease agreement	
8	Project estimated cost	Cost(Rs)
9	Project cost: Source of funds 1.Promoters contribution: 2.Bank Finance : 3.Assistance from Government Schemes:	
10	Details on tie up with the Bank for availing institutional finance	
11	Details regarding economics of operation:	

Declaration by the Applicant

I/We……...……..……...……..son/daughter/wife of……...…….....residing at…….....……. hereby declare that the information furnished above is true to the best of my/ our knowledge and belief. I am/ we are fully aware that if it is found that the information furnished by me/ we is false or there is any kind of deviation/ violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/ us.

I/We hereby declare and certify that we have not availed of any subsidy assistance from any Government Agencies for input cost for brackish water finfish culture in ponds. It is further informed that we will not claim assistance from any other institutions.

Date:
Place: Signature of the Applicant (s)

Countersigned by the Implementing Agency

Date:
Place: Signature and seal of the authorized representative of the Implementing Agency

FORM X

National Fisheries Development Board
Application for financial assistance for cage culture of brackish water fin fishes in ponds and backwaters

S. No.	Particulars sought from the applicant	Information furnished by the applicant
(1)	(2)	(3)
1.0	Name and address of the applicant (IN BLOCK LETTERS):	
2.0	Address for communication	
	Street:	
	City:	
	Dist:	
	State:	
	Phone: (O):	
	(R):	
	(F):	
	Mobile:	
	E-mail:	
3.0	Is No Objection Certificate is obtained from local village body. If yes enclose a attested copy of the certificate	
4.0	Is the farm is registered with CAA. If yes, enclose a attested copy of the certificate	
5.0	Details of the land where the proposed construction work/farming of fin fish to be undertaken	
	State:	
	District:	
	Taluk/Mandal	
	Revenue Village:	

	Survey No:	
	Pond/s area(in ha)	
	Total water spread area(in ha):	
6.0	Ownership(whether freehold or on lease):	
7.0	If on lease, duration of lease(Minimum of five years).Enclose a copy of the lease agreement	
8.0	Enclose copy of the Project report--Design details/approved layout of the farm	
9.0	Project estimated cost	Cost(Rs)
10.0	Project cost: Source of funds 1.Promoters contribution: 2.Bank Finance : 3.Assistance from Government Schemes:	
11.0	Details on tie up with the Bank for availing institutional finance:	
12.0	Details regarding economics of operation:	

Declaration by the Applicant

I/We……...……..……...……..son/daughter/wife of……...…….....residing at…….....……. hereby declare that the information furnished above is true to the best of my/ our knowledge and belief. I am/ we are fully aware that if it is found that the information furnished by me/ we is false or there is any kind of deviation/ violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/ us.

I/We hereby declare and certify that we have not availed of any subsidy assistance from any Government Agencies for creation of the facilities. It is further informed that we will not claim assistance from any other institutions.

Date:

Place: Signature of the Applicant (s)

Countersigned by the Implementing Agency

Date:

Place: Signature and seal of the authorized representative of the Implementing Agency

FORM XI

National Fisheries Development Board

APPLICATION FOR FINANCIAL ASSISTANCE FOR INPUTS FOR CAGE CULTURE OF BRACKISH WATER FIN FISHES IN PONDS AND BRACKISHWATER AREAS.

S. No	Particulars sought from the applicant	Information furnished by the applicant
(1)	(2)	(3)
1	Name and address of the applicant (IN BLOCK LETTERS):	
2	Address for communication	
	Street:	
	City:	
	Dist:	
	State:	
	Phone: (O):	
	(R):	
	(Fax):	
	Mobile:	
	E-mail:	
3	Is the farm has obtained No Objection certificate from the local village body ?. If yes, enclose a copy of the certificate.	
4	Is the farm is registered with CAA. If yes, registration No.	
5	Details of the land where the farm is located for availing subsidy assistance under the scheme.	
	State:	
	District:	
	Taluk/Mandal	
	Revenue Village:	
	Survey No:	
	Pond/s area(in ha)	
	Total water spread area(in ha):	
6	Ownership(whether freehold or on lease):	
7	If on lease, duration of lease(minimum of seven years), Enclose a copy of the lease agreement	
8	Enclose copy of the Project report/Design details and approved layout of the farm(State Department Engineer/ MPEDA/ Chartered Engineer	
9	Project cost	Cost(Rs)

10	Project cost: Source of funds 1.Promoters contribution: 2.Bank Finance : 3.Assistance from Government Schemes:	
11	Details on tie up with the Bank for availing institutional finance:	
12	Details regarding economics of the operation:	

Declaration by the Applicant

I/We……...……..……...……..son/daughter/wife of……...…….....residing at…….....……. hereby declare that the information furnished above is true to the best of my/ our knowledge and belief. I am/ we are fully aware that if it is found that the information furnished by me/ we is false or there is any kind of deviation/ violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/ us.

I/We hereby declare and certify that we have not availed of any subsidy assistance from any Government Agencies for inputs assistance for cage culture of brackish water fin fishes in ponds and brackishwater areas. It is further informed that I/we will not claim assistance from any other institutions.

Date:

Place: Signature of the Applicant (s)

Countersigned by the Implementing Agency

Date:

Place: Signature and seal of the authorized representative of the Implementing Agency

FORM XII

National Fisheries Development Board

APPLICATION FOR NEED BASED FINANCIAL ASSISTANCE FOR DEVELOPMENT/DEMONSTRATION OF INNOVATIVE / NEW TECHNOLOGIES

S. No	Particulars sought from the applicant	Information furnished by the applicant
(1)	(2)	(3)
1	Name and address of the applicant (IN BLOCK LETTERS):	
2	Address for communication	
	Street:	
	City:	
	Dist:	
	State:	
	Phone: (O):	
	(R):	
	(Fax):	
	Mobile:	
	E-mail:	
3	Is No Objection certificate obtained from local village body? If yes, enclose a copy of attested certificate	
4	Is the farm/hatchery/feed mill has obtained registration certificate from CAA/MPEDA. If Yes, Registration No.	
5	Details of the land where the proposed activity to be undertaken	
	State:	
	District:	
	Taluk/Mandal	
	Revenue Village:	
	Survey No:	
	Pond/s area(in ha)	
	Total water spread area(in ha):	
6	Ownership(whether freehold or on lease):	
7	If on lease, duration of lease(minimum of seven years). Enclose a copy of the lease agreement.	
8	Enclose copy of the Project report--Design details	
9	Project estimated cost	Cost(Rs)
10	Project cost: Source of funds 1.Promoters contribution: 2.Bank Finance : 3.Assistance from Government Schemes:	
11	Details on tie up with the Bank for availing institutional finance:	
12	Details regarding economics of operation:	

Declaration by the Applicant

I/We……...……..……...……..son/daughter/wife of……...…….....residing at…….....……. hereby declare that the information furnished above is true to the best of my/ our knowledge and belief. I am/ we are fully aware that if it is found that the information furnished by me/ we is false or there is any kind of deviation/ violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/ us.

I/We hereby declare and certify that we have not availed of any subsidy assistance from any Government Agencies for creation of the facilities. It is further informed that we will not claim assistance from any other institutions.

Date:

Place: Signature of the Applicant (s)

Countersigned by the Implementing Agency

Date:

Place: Signature and seal of the authorized representative of the Implementing Agency

Form XIII

National Fisheries Development Board

Application for financial assistance for setting up of Aquatic Animal Health and Environment Management Laboratory in various States of India

S. No	Particulars sought from the applicant	Information furnished by the applicant
(1)	(2)	(3)
1	Name and address of the applicant (IN BLOCK LETTERS):	
2	Address for communication	
	Street:	
	Place:	
	Dist:	
	State:	
	Phone: (O):	
	(R):	
	(Fax):	
	Mobile:	
	E-mail:	
3	Total land area to be utilized for the AAHE Lab (Enclose a layout map showing different diagnostic sections of the lab)	
4	Is the farm is registered with any Accreditation Institutions. If yes, enclose a copy of the certificate	
5	Details of the proposed location of the AAHEL facility	
	State:	
	District:	
	Taluk/Mandal	
	Revenue Village:	
	Street :	
	Door No.	
6	Ownership of the Premises (whether freehold or on lease/ rent):	
7	If on lease/rent, duration of lease/rent Enclose a copy of the lease/rental agreement	
8	Enclose copy of the project report on unit economics of operation and maintenance	
10	Estimated project cost	Cost(Rs)
11	Details of the number of persons to be deployed in the laboratory and their qualification	
12	Source of funds to meet the salaries and wages of the laboratory staff	

Declaration by the Applicant

I/We……...……..……...……..son/daughter/wife of……...…….....residing at…….....……. hereby declare that the information furnished above is true to the best of my/ our knowledge and belief. I am/ we are fully aware that if it is found that the information furnished by me/ we is false or there is any kind of deviation/ violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/ us.

I/We hereby declare and certify that we have not availed of any assistance from any Government Agencies for creation of the same facilities. It is further informed that we will not claim assistance from any other institutions on the same facility.

Date:
Place: **Signature of the Applicant/s**

Countersigned by the Implementing Agency

Date:
Place: **Signature and seal of the authorized representative of the Implementing Agency**

National Fisheries Development Board
Guidelines for Mariculture

1.0 Introduction

World aquaculture production (food fish and aquatic plants) has grown significantly during the past half-a-century. FAO statistics shows that from a production of about 1 million tonnes in the early 1950s, the world aquaculture production in 2004 was reported to have risen to 59.4 million tonnes, with a value of US$ 70.3 billion. Of this, mariculture is reported to account for 36% of the total quantity and 33.6% of the total value of aquaculture production. The potentially cultivable candidate species in India include about 20 species of finfishes, 29 crustaceans, 17 molluscs, 7 seaweeds and many other species of ornamental and therapeutic value.

2.0 Objectives of the scheme

To supplement the marine fish production through:

i. Production of fin fish seed by diversification of shrimp hatcheries
ii. Open sea cage culture.
iii. Diversified mariculture through molluscan farming
iv. Popularization of concept of the cage culture through setting of model demonstration and units and imparting training to the traditional fishermen

3.0 Components of Assistance

The NFDB will assist the following components:

i) Production of finfish seed in shrimp hatcheries
ii) Setting up of open sea cage culture
iii) Demonstration of model sea cage culture to traditional fishermen
iv) Marine ornamental fish culture
v) Molluscan farming including pearl culture
vi) Training and demonstration

4.0 Production of finfish seeds

In view of the need for diversification of the defunct shrimp hatcheries, the scheme provides for production of finfish seed.

(i) Construction of new finfish hatcheries
(ii) Modification of the defunct shrimp hatcheries for finfish seed production

4.1 Eligibility criteria

• Individuals/Organizations with the ownership of shrimp/scampi hatcheries located in coastal areas where the water resource is suitable for marine finfish seed production and clear title of land where the hatchery is situated.
• Commitment of entrepreneur to bear 80% of the cost towards diversification.
• Prospective entrepreneur should have received training, preferably in finfish hatchery Operations

4.2 Type of Assistance

The cost for development of shrimp hatchery includes repair/ renovation/modification of the existing structures, additional tanks/facilities for live feed culture, larval rearing, etc., and tentative unit cost and economics are indicated in Annexure-I. The assistance from NFDB will be to the tune of 20% of the cost of diversification, as a back-ended subsidy.

5.0 Setting up of open sea cage culture units

5.1. Introduction

Fishing industry is facing a major crisis with fish stocks depleting all over the world as well as in India. This decline in the world fish supply is the result of over fishing, indiscriminate fishing methods and degradation of coastal and inland ecosystem due to various reasons. There is recognition that marine cage culture system needs to be introduced in Indian waters not only to counteract the trend of stagnancy in marine fish landings, but also to increase fish production and thereby providing an avenue for the fishers to augment their present income level.

5.2. Eligibility criteria

Central Government institutions/ agencies, State Fisheries Departments, Fisheries Corporations, Federations, Fishermen Societies Fishermen groups, SHGs and entrepreneurs who should posses necessary clearances for undertaking the cage culture activity in the coastal areas.

5.3. Unit cost

The unit cost of a modern fish net cage system includes the cost of net material, HDPE frames, floats, anchors and establishment of on-shore facilities and the tentative unit cost and economics, for both large scale and small scale operations are indicated in Annexure II & III. The capital investment required per cage is Rs. 6.00 Lakhs and the working capital requirement for one crop is Rs. 4.15 Lakhs/ per cage.

5.4. Type of Assistance

The Central Government institutions/ agencies, State Fisheries Departments, Fisheries Corporations are eligible for 90% of the unit cost (capital cost + one crop working capital cost) as one time grant to demonstrate the technology to the fishermen societies/ groups/ SHGs. The fishermen societies/groups, SHGs, farmers and entrepreneurs are eligible for a subsidy assistance of 40% on the unit cost (capital cost + one crop working capital cost) not exceeding Rs. 4.06 lakhs/cage. The Unit cost estimate is enclosed as Annexure - II

5.5. Conditions specific to the implementation of the scheme

(i) For setting up of demonstration units by the Government institutions/Fisheries Corporations

The following criteria shall be applicable for the selection of organization/agency for setting up demonstration farms:

- ICAR Research Institutes/State Fisheries Departments/ state Fisheries Federations/ Corporations, Fisheries Colleges, with adequate shore facilities and trained manpower in coastal aquaculture and mariculture.
- The state fisheries department/ central government institution/ Fisheries Corporation shall have the technology tie up from the ICAR Fisheries Research institution or any other government institution having expertise and experience to transfer the technology and to undertake demonstration to fishermen/ fishermen societies/ groups/ SHGs.
- The open sea cage culture demonstration shall be undertaken after obtaining necessary permission from the central/ state government departments/ agencies.
- Source of funding for the remaining 10% of the project cost has to be indicated.
- The institution proposing to avail the grant from the NFDB shall bear all the expenditure for subsequent demonstrations not less than 3 years. demonstration utilization of cages and source o culture units

(ii) Selection of farmers/fishermen for receiving the demonstration

The following criteria shall be applicable for the selection of farmer/fisherman for receiving the demonstration:

- Should be a fisherman with fishing/fish farming as the major occupation
- Should be sponsored by State Government/Fishermen Co-operatives/ SHGs/ Fisheries Development Agencies
- Priority should be given for fishermen affected by Marine Protected Areas/natural calamities.

(iii) Conditions specific to the subsidy assistance scheme

i. The fishermen societies/groups, SHGs, farmers and entrepreneurs shall submit an application along with the prescribed documents to the Officer in Charge of the Department of Fisheries, of the concern district, where the activity to be started.
ii. The beneficiary shall undertake the works only after submitting the application form to the State Fisheries Department and after obtaining administrative sanction from NFDB.
iii. The Officer in charge of Department of Fisheries of the concerned district has to send the proposal to NFDB through the Head of the Office of the State Fisheries Department to the NFDB for obtaining administrative sanction.
iv. After obtaining administrative sanction from NFDB, the State Fisheries Department has to communicate the sanction details to the beneficiary to undertake the works.
v. The Officer in Charge of the district for the Department of Fisheries has to forward the request for release of NFDB assistance duly after physical verification of the open sea cage culture unit. The inspection report shall be certified by the inspecting officer, district in charge for the Department of Fisheries and Head of the State Fisheries Department and may be send to NFDB for release of the subsidy.
vi. NFDB subsidy would be released to the State Fisheries Department, with a request to credit into the loan account of the respective beneficiaries.

vii. After releasing the subsidy amount the State Fisheries Department has to issue the Utilization Certificate to NFDB along with the physical and financial progress report.
viii. Physical verification/inspection at different stages will be undertaken by duly authorized officials of the Board and/or other experts as may be decided from time to time.

- **Documents required to avail the financial assistance**

i. Application in the prescribed format **(Form-II)**
ii. A copy of the project report indicating the techno economic viability & IRR.
iii. Copies of the permissions obtained from the government agencies for undertaking open sea cage culture.
iv. Copy of the Term Loan Sanction / consent Letter obtained from the bank
v. Declaration by the beneficiary stating that no financial assistance is availed from any other Central/ State Government Department for the same purpose.

6.0 Commercial Cage culture

6.1 Eligibility Criteria

For establishment of two demonstration hatcheries, Agencies with expertise for ornamental fish seed production technologies would be considered and fishermen familiar with marine ornamental fishes would be given preference for training.

6.2 Type of Assistance

The components of one unit of marine ornamental fish hatchery include sea water intake system, filtration system, FRP tanks, Live feed culture system and the costs for operation and demonstration are indicated in Annexure-III.

7.0 Marine ornamental fish culture

In recent years, a lucrative marine ornamental fish trade has emerged at an international level and the trade is getting expanded annually. It is a low volume high value enterprise and a long term sustainable trade of marine ornamentals could be developed only hatchery-produced fish.

7.1 Eligibility Criteria

For establishment of two demonstration hatcheries, Agencies with expertise for ornamental fish seed production technologies would be considered and fishermen familiar with marine ornamental fishes would be given preference for training.

7.2 Type of Assistance

The components of one unit of marine ornamental fish hatchery include sea water intake system, filtration system, FRP tanks, Live feed culture system and the costs for operation and demonstration are indicated in Annexure-V.

As regards Training component, the assistance for a standard training period of ten days is as indicated in Annexure-IV.

8.0 Mussel Farming

Maritime states along the west coast of India have extensive estuaries, which open to the Arabian Sea. Based on the hydrographic condition, in most estuaries, two phases viz., a marine phase during December to May, and a brackish water phase during June to

November have been observed. It is during the marine phase that the ecosystem becomes conducive for mussel culture. During 2005-06, the estimated farmed mussel production in the country was about 10,060 tonnes. The NFDB envisages promotion of mussel farming in the maritime states of India through development fund assistance.

8.2. Eligibility Criteria:

The criteria for selection of farmers/ fishers/Women SHGs for grants for estuarine/ open-sea mussel farming are as follows:

- Proximity of fishers/ farmers homestead to an estuarine water body with marine conditions during summer months/ Proximity of fishers/ farmers homestead to calm seas
- Proximity to sea where seed mussels will be available during post-monsoon months
- Necessary clearances for undertaking mussel farming in coastal waters
- Past experience of the farmer in undertaking mussel farming
- Willingness of the farmer to take up mussel farming on scientific lines
- All proposals must be routed through concerned State Department of Fisheries.
- Should have preferably received training in mussel farming or willing to undergo training.
- Willing to meet 50% cost of the project from own resources in case bank loan is not forth coming

8.3. Type of Assistance:

The components of one mussel farming unit include rack / raft holding mussel ropes with semi-automatic seeder, de-clumper and post-harvest and depuration facilities and the costs for operation is indicated shown below. The NFDB assistance would be 50% subsidy on capital and recurring cost.

8.4. Unit Cost:

Per unit capital costs (50m2 Raft and 200m seeded length			
Item	Quantity	Rate(`)	Amount (`)
Bamboo Poles	32 nos	125	4000
Rope for construction	3kg	140	420
Seeding Rope	23kg	140	3640
contingency			1250
Total			9310

Operating Cost / Unit			
Item	Quantity	Rate(in `)	Amount

			(in `)
Cotton netting material	50m	12	600
Nylon rope for attaching Sinkers and mussel ropes	2kg	240	480
Needles	5 nos	3	15
Nylon rope for stitching	1Kg	120	120
Cost of mussel seeds	400 kg	8	3200
Canoe hiring charges	5 Mandays	200	1000
Labour for seeding	20 Mandays	150	3000
Marketing Expenses	LS		1250
Transportation of poles			625
Transportation of seeds			400
Total			10690

Economic Viability of the Mussel/Clam/Oyster culture for a Unit of 50m2 Raft

Capital Cost : ` 9310/-

Operational Cost : ` 10690/-

Total Cost : ` 20000/-

Means of Finance

Beneficiary Contribution of an SHG : ` 10000/-

(` 2000/person - SHG of 5 members)

Subsidy from Government ` 10000/-

Total Cost : ` 20000/-

Annual Cost of Operations

1	Operational Cost	:	` 10690/-
2	Repair and Maintence		` 1069/-
	(10% of Capital cost)		
3	Contingency	:	` 534.5/-
	(5% of Capital cost)		
	Total Cost	:	` 12.293.5/-

Profit Analysis

Sale of 200kg of Shell on Mussel @` 21.5/kg ` 43.000/-

The Prise may vary from ` 15 to ` 35/kg

Net Profit/Unit/Culture : ` 43000 - 12293.5

` 30706.5

1	Income per person/Culture	:	` 6141.3
	(for an SHG of 5 persons/group)		
2	Individual	:	` 30706.5

8.5. Submission of proposal:

All the eligible applicants shall submit duly filled in application prescribed by NFDB for taking up mussel farming (Form I) through the Director/Commissioner of Fisheries of the respective states. The state fisheries department shall verify the applications with respect to the technical feasibility and other requirements as per the eligibility criteria under the activity

and forward with recommendation to NFDB by countersigning the applications in a consolidated form for sanction and release of funds.

Wherever, the State Fisheries Departments, Quasi Government organizations and Research Institutes are the implementing agencies, shall submit the duly filled in prescribed application directly to the NFDB for sanction and release of funds.

All other applicants shall submit the applications through the State Fisheries Departments concerned

8.6. Documents Required:

1. Duly filled in application form.
2. Details of the Project.
3. Item wise estimate of infrastructure works to be certified by the concerned state DoF officials.
4. List of items along with quotations.
5. Details about the management/ source of finance.
6. Bankers consent letter.
7. Permission obtained from the Government institutions/departments to take up mussel culture.

8.7. Release of funds

The subsidy shall be released in a single installment, as a back ended subsidy / through Department of Fisheries.

8.8. Submission of Utilization Certificate

The Implementing Agencies shall submit utilization certificates in respect of the funds released to them by the Board. Such certificates shall be submitted in **Form II**. The utilization certificates can also be submitted in between if activities for which funds were released earlier have been completed and the next dose of subsidy is required to complete the remaining works.

9.0 Edible Oyster Farming

Farming of edible oyster (*Crassostrea madrasensis*) is being undertaken by small scale farmers in shallow estuaries, bays and backwaters in a big way. In the adopted rack and ren method, a series of vertical poles are driven into the bottom in rows, on top of which horizontal bars are placed. Spat collection is done either from the wild or produced in hatcheries, on suitable cultch materials. Spat collectors consist of clean oyster shells (5-6 Nos.) suspended on a 3 mm nylon rope at spaced intervals of 15-20 cm and suspended from racks, close to natural oyster beds. Spat collection and further rearing is carried out at the same farm site and harvestable size of 80 mm is reached in 8-10 months. Harvesting is done manually with a production rate of 8-10 tonnes/ha. Oyster shells are also in demand by local

cement and lime industry and culture production has increased to 800 tonnes in the year 2000.

9.1 Eligibility Criteria

The criteria for selection of farmers/ fishers/women SHGs for grants for mussel farming are as follows:

- Proximity of fishers/ farmers homestead to an estuarine water body with marine conditions during summer months
- Willingness of the entrepreneur to take up oyster farming
- Necessary clearances for undertaking oyster farming in coastal waters

9.2 Type of Assistance

The components of one Unit include rack and ren unit holding oyster rens with post-harvest and depuration facilities and the costs for operation and demonstration are indicated in Annexure-V. The NFDB assistance would be 25% back ended subsidy on capital and recurring cost and 30% subsidy in case of SC/STs

10.0 Training and demonstration:-

Training and demonstration may be taken up on Sea Cage Culture/ Marine Ornamental Fish Culture/Mussel Farming/Edible Oyster Farming. The duration of each demonstration/training will be for a total of 5 days, for a batch of about 25 trainees. The details of the assistance for training are given below:-

(v) **Assistance to fishermen*:*** The fishermen shall be eligible for a daily allowance of Rs 150/ day and reimbursement of to and fro travel (train/ bus/ auto rickshaw) shall be reimbursed as per actuals, subject to a maximum of Rs 500.

(vi) **Honorarium to resource person*:*** For conduct of training, the implementing agency may engage the services of one resource person per training programme. The provision towards the honorarium payable to resource persons is at @ Rs 500/ day of class room/field training and to and fro travel expenses (train/ bus/ auto rickshaw) shall be reimbursed as per actuals, subject to a maximum of Rs 1 000 per programme.

(vii) **Assistance to implementing agencies*:*** The implementing agency shall be eligible to receive Rs 75 / trainee/ day for a maximum period of 5 days for organizing the training. This cost shall cover expenses towards identification and mobilization of the trainee and course material/ training kits, etc.

The implementing agency and the NFDB shall enter into an MoU prior to release of funds for training and demonstration wherever required. The conditions stipulated in the Guidelines shall *inter alia* be a part of the MoU.

Annexure-I

Production of finfish seed from shrimp hatcheries

Tentative unit cost and economics for production of 1million finfish seed

Development of broodstock facility	:	`15 lakhs
Cost of repair/renovation/modification of existing structures and cost of additional facilities For larval rearing	:	` 25 lakhs
Cost of repair/renovation/modification of existing structures and cost of additional tanks for live feed production	:	` 10 lakhs
Cost of repair/renovation/modification of existing structures and cost of additional tanks	:	` 20 lakhs
Total Capital cost	:	` 70 Lakhs
Operational costs per year	:	` 30 lakhs
Depreciation @20%	:	`14 lakhs
Total	**:**	**` 44 lakhs**
Sale of 1 million finfish seed @ Rs.5/seed	:	` 50 lakhs
Profit per year	:	` 6 lakhs

Annexure-III

Unit Cost and economics for setting up of open sea cage culture in one cage for fisherman household/ SHGs

Sl. No	Items	Apprx. Cost/ crop (Rs. in lakh)				
Capital Investment		I	II	III	IV	V
1	**Fixed assets** Onshore facility ; floating cages (**Apprx. 12 meter dia; 1 No. only)**	**6.0**	**--**	**--**	**--**	**--**
Cost Of Production						
2	Depreciation on fixed assets (~10%)	0.6	0.6	0.6	0.6	0.6
3	Fry (20-25g size) (@ mean price of Rs.5/- : sea bass or grouper) (total 10,000 seed per cage)	0.5	1.0	1.0	1.1	1.1
4	Feed (trash fish @ Rs. 5000/tonne; minimum of 6 tonnes required for producing 1 tonne fish)	1.8	3.6	3.6	3.6	3.6
5	Harvesting and transporting	0.25	0.50	0.50	0.50	0.50
6	Miscellaneous expenditure	0.20	0.20	0.20	0.30	0.30
7	Interest on borrowed money(~@8% per annum) (10 lakhs borrowed)	0.8	0.7	0.6	0.5	0.4
8	Total cost of production (1+2+3+4+5+6+7)	**10.15**	**6.6**	**6.5**	**6.6**	**6.5**
9	**Annual production (t) *** (expected about 60 tonnes; at 80% survival and mean of 0.6 kg per fish)	**6 tonnes**	**12 tonnes**	**12 tonnes**	**12 tonnes**	**12 tonnes**
10	Unit cost of production per tonne (6/7)	1.69	0.55	0.54	0.55	0.54
Financial Analysis						
13	Sale price (@Rs.100/ kg)	100/kg	110/kg	120/kg	130/kg	140/kg
14	Revenue from sales	**6.0**	**13.2**	**14.4**	**15.6**	**16.8**
15	Profit over cost of production (14-11)	-4.15	6.6	7.9	9.0	10.3
16	Repayment of loan	0	2.5	2.5	2.5	2.5
17	Net profit	**-4.15**	**4.1**	**5.4**	**6.5**	**7.8**

Annexure-IV

Tentative Unit Cost and economics for Setting up of open sea cage culture

Sl. No	Items	Apprx. Cost/ crop (Rs. in lakh)				
CAPITAL INVESTMENT		I	II	III	IV	V
1	**Fixed assets** Onshore facility ; floating cages (Apprx.12 meter dia;10 Nos) + working hut, motorized boats and other equipments	**60.0**	**--**	**--**	**--**	**--**
COST OF PRODUCTION						
2	Depreciation on fixed assets (~10%)	6.0	6.0	6.0	6.0	6.0
3	Manpower (1 manager @ Rs. 45000 per month) + (2 farm hands @ Rs. 20000 per month) + bonus	10.0	11.0	12.0	13.0	14.0
4	Fuel maintenance and miscellaneous	10.0	11.0	12.0	13.0	14.0
5	Onshore facility working charges (Lab works, water, electricity, communication, watch & ward etc.)	3.0	3.0	3.0	4.0	4.0
6	Fry (20-25g size) (@ mean price of Rs.5/- : sea bass or grouper) (total 1,00,000 seed for 10 cages)	5.0	10.0	10.0	11.0	11.0
7	Feed (trash fish @ Rs. 5000/tonne; minimum of 6 tonnes required for producing 1 tonne fish)	18.0	36.0	36.0	36.0	36.0
8	Harvesting and transporting	2.0	4.0	4.0	5.0	5.0
9	Miscellaneous expenditure	2.0	2.0	2.0	3.0	3.0
10	Interest on borrowed money(~@8% per annum) (100 lakhs borrowed)	8.0	7.0	6.0	5.0	4.0
11	Total cost of production (2+3+4+5+6+7+8+9+10)	**64.0**	**90.0**	**91.0**	**96.0**	**97.0**
	Annual production (t) * (expected about 60 tonnes; at 80% survival and mean of 0.6 kg per fish)	**60 tonnes**	**120 tonnes**	**120 tonnes**	**120 tonnes**	**120 tonnes**
12	Unit cost of production per tonne (6/7)	1.067	0.75	0.76	0.80	0.81
Financial analysis						
13	Sale price (@Rs.100/ kg)	100/kg	110/kg	120/kg	130/kg	140/kg
14	Revenue from sales	**60.0**	**132.0**	**144.0**	**156.0**	**168.0**
15	Profit over cost of production (14-11)	-4.0	47.0	57.0	65.0	75.0
16	Repayment of loan	0	25.0	25.0	25.0	25.0
17	Net profit	-4.0	22.0	32.0	40.0	50.0

Annexure-V

Tentative Unit cost and economics for production of marine ornamental fish

Cost (Rs. lakhs)		
Capital Cost		
1.	**Fixed Assets**	
	Sea water intake , sedimentation, filtration system	25
	Blower +generator	5
	Air conditioner	1
	Broodstock development facilities (25 pair) and cost of broodstock	10
	Live feed culture facilities	5
	Larval rearing facilities	5
	Nursery grow out facilities	10
	Total Capital costs (A)	61
2.	**Operational costs** (B)	10
3.	**Depreciation** (@ 20% of the fixed Capital cost) (C)	12.2
	Total (B+C)	22.2
	Total Cost of Production (A+B+C)	83.2
4.	**Annual Production (Nos.)**	
	At survival (minimum 50%): Production : @300 seeds/ Month/Pair	
	Total No. of seeds produced per month/30 pair: 9000	
	Total No. of seeds produced per year/25 pair: 1,08000	
	Total No. of seeds produced per year (Round off) :100000 seeds	
5.	**Financial analysis**	
	Sale Price @Rs.50/seed	
	Revenue from sale	50
	Gross Return (D)	**50**
	Production cost less depreciation {(D)- (B+C)}	27.8
	Gross Cash Return (E)	27.8
	Pay out period (A/D)	1.22

Annexure- V

Tentative cost benefit of Mussel Farming – Rack Culture
Rack size 30m x 20m (1200 ropes of 1 m)

FORM –I

Application for establishment of New Finfish Hatcheries / Modification of defunct Shrimp Hatcheries for Finfish Hatcheries

Sl. No	Particulars sought from the applicant	Information furnished by the applicant
(1)	(2)	(3)
1	Name and address of the applicant/ firm/ association/ Self Help Group (IN BLOCK LETTERS):	
2	Address for communication	
	Telephone:	
	Fax:	
	Mobile:	
	E-mail:	
3	Details of land where the shrimp hatchery is located which is proposed to be upgraded to a finfish hatchery:	
	a) State:	
	b) District:	
	c) Taluk/ Mandal:	
	d) Revenue Village:	
	e) Survey No.:	
	f) Whether located in the permitted zone as per the CRZ Act:	
	g) Ownership (whether freehold or on lease):	
	h) If on lease, duration of lease:	
	i) Total land area of the existing shrimp hatchery (in ha):	
	j) Capacity of the shrimp hatchery:	
	k) No. of tanks with tonnage:	
	l) Water holding capacity:	
	m) Other amenities available:	
	n) Water intake and filtration system:	
	o) Drainage water treatment facility:	
	p) Live feed culture facility:	
	q) Laboratory facility for disease diagnosis and water quality analysis:	
4	Details of the proposed marine finfish hatchery	
	a) Extent of additional area available for upgrading to finfish seed production:	
	b) Numbers and size of brood stock tanks:	
	c) Numbers and size of hatching tanks:	
	d) Numbers and size of live feed tanks:	
	e) Numbers and size of nursery tanks:	
	f) Details of aeration facility:	
	g) Drainage water treatment facility:	
	h) Technology to be adopted (imported/indigenous):	

	i) Production capacity (in million fry per production cycle):	
	j) Number of seed production cycles proposed per year:	
	k) Facilities, if any for nursery rearing. If so, capacity of the nurseries:	
	l) Source and quality of water:	
	m) Source of brood stock:	
	n) Details of the proposed construction works in the hatchery. (Design details/engineering works to be submitted):	
	o) Details of feed for brood stock and fry; and feed storage facility:	
	p) Live feed culture facility:	
	q) Laboratory facility for disease diagnosis and water quality analysis:	
5	Details on tie up with the Bank for availing institutional finance:	
6	Arrangement for seed money (please furnish documentary proof, such as statement of Bank account, etc.):	
7	Whether the applicant is in default of payment to any Financial Institution/ State Government for loan/ assistance availed earlier. If yes, please provide the details and the reasons for default:	
8	Experience of the applicant in operation of hatcheries and details of training(s) undergone so far:	
9	Details regarding economics of operation:	
10	Marketing tie up:	
11	Expected date of operation of the hatchery and tentative schedule of activities such as distribution and marketing of seed and transport arrangements, etc:	
12	Number of existing finfish hatcheries set up within a radius of 50 kms of the proposed hatchery and their production capacities:	
13	Source and number of workers employed for construction as well as day-today hatchery operations: (man days per year):	

Declaration by the Applicant

I/We……...……..……...……..son/daughter/wife of……...…….....residing at…….....……. hereby declare that the information furnished above is true to the best of my/ our knowledge and belief. I am/ we are fully aware that if it is found that the information furnished by me/ we is false or there is any kind of deviation/ violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/ us.

Date:

Place: Signature of the Applicant (s)

Countersigned by the Implementing Agency

Date:

Place: **Signature and seal of the authorized representative of the Implementing Agency**

FORM – II

Proposal for setting up open sea cage culture

Sl. No	Particulars sought from the applicant	Information furnished by the applicant
(1)	(2)	(3)
1	Name and address of the company/ firm (IN BLOCK LETTERS):	
2	Address for communication Telephone Fax Mobile: E-mail:	
3	Details of the area where sea cage culture activity is proposed to be taken up:	
	a) State:	
	b) District:	
	c) Taluk/ Mandal:	
	d) Near by Revenue Village:	
	e) Latitude and longitude :	
	f) Details of lease:	
	g) Duration of lease:	
	h) Total farm area (in ha):	
	i) Details of the proposed construction works of cage farms. (Design details/engineering works to be submitted):	
	j) Number of cage units:	
	k) Dimensions of each cage:	
	l) Maximum fish holding capacity in each cage:	
	m) Details of other structures including floats, anchors, watch towers, light-buoys:	
	n) Details of mechanized/motorized crafts for transporting men and material to and fro:	
4	On-shore facilities for the cage farm: Details of the area where the on-shore facility is proposed to be taken up	
	a) State:	
	b) District:	
	c) Taluk/ Mandal:	
	d) Near by Revenue Village:	
	e) Survey Number :	
	f) Whether located in the permitted zone as per the CRZ Act:	
	g) Ownership (whether free hold or open lease):	
	h) If on lease, details and duration of lease:	
	i) Details of the proposed construction works of on-shore facility. (Design details/engineering works to be certified and approved by the Competent Authority):	
	j) Species and source of fry:	

	k)	Details of the holding facility for the seed (fry to fingerling):	
	l)	Number and dimensions of fry rearing tanks:	
	m)	Water intake and treatment facility:	
	n)	Source and quality of water:	
	o)	Drainage water treatment facility:	
	p)	Details of feed to be used for fry:	
	q)	Storage facility for feed (for rearing and seed cultured fish):	
	r)	Frozen / Chilled storage facility for harvested fish:	
	s)	Details of mechanized/motorized crafts for transporting men and material to and fro:	
	t)	On-shore laboratory for monitoring water quality parameters and disease diagnosis in the cage farm site:	
	u)	Communication facility (wireless/mobile) between on-shore and sea cage facilities:	
5	Whether the assistance for the sea cage culture has been sought under any other scheme of the Central/State Government? If so, please provide the details:		
6	Whether the Company/Firm is in default of payment to any financial institution/State Government for loan/assistance availed earlier. If yes, please provide the details and the reasons for default:		
7	Estimates regarding input cost:		
	a)	Species to be cage cultured:	
	b)	Stocking density (please specify the stage of stocking – fry/fingerling) – numbers per cubic meter of cage:	
	c)	Cost of seed (Rs. per thousand):	
	d)	Source of procurement:	
	e)	Transportation cost (Rs. Per thousand):	
	f)	Details of feed to be used, its quantity and cost:	
	g)	Source of procurement of feed:	
	h)	Transportation cost of feed from on-shore facility to the cage culture site:	
	i)	Number of culture cycles per year:	
	j)	Salaries/wages:	
	k)	Harvesting cost:	
	l)	Operational cost for the on-shore facility:	
8	Experience of the applicant in the cage culture and details of training(s) undergone so far:		
9	Details regarding economics of operation:		
10	Whether any financial tie up has been made for availing Bank loan, if so please provide the details:		
11	Expected date of operation of the farm and tentative schedule of activities:		

12	Marketing tie up:	
13	Source and number of labour employed for construction as well as day-today culture operations (man days per year):	

Declaration by the Authorized Signatory of the Company/Firm

I/We…….....……..…….....son/daughter/wife of……..…...……...……..…..residing at……....……..……hereby declare that the information furnished above is true to the best of my/ our knowledge and belief. I am/ we are fully aware that if it is found that the information furnished by me/ we is false or there is any kind of deviation/ violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/ us.

Date:

Place: Signature of the applicant (s)

Countersigned by the Implementing Agency

Date:

Place: **Signature and seal of the authorized representative of the Implementing Agency**

FORM –III

Proposal for taking up of Mussel Farming/ Marine Ornamental Fish Culture/Edible Oyster Farming

Sl. No	Particulars sought from the applicant	Information furnished by the applicant
(1)	(2)	(3)
1	Name and address of the applicant/ firm/ association/ Self Help Group (IN BLOCK	
2	Address for communication	
	Telephone:	
	Fax:	
	Mobile:	
	E-mail:	
3	Details	
	a) State:	
	b) District:	
	c) Taluk/ Mandal:	
	d) Revenue Village:	
	e) Capacity:	
	f) No. of rafts / net bags:	
	g) Laboratory facility for disease diagnosis and water quality analysis:	
	h) Technology to be adopted (imported/indigenous):	
	i) Production capacity (in production	
	j) Number of production cycles proposed	
	k) Facilities, if any for culturing. If so,	
	l) Source and quality of water:	
	m) Source of sapling stock:	
	Projected source of funds	
	1, Source o finance	
	2, Own finance	
	3, Others	
	Total	
5	Details on tie up with the Bank for availing institutional finance:	
6	Arrangement for loan (please furnish documentary proof, such as loan sanction letter.):	
7	Whether the applicant is in default of payment to any Financial Institution/ State Government for loan/ assistance availed earlier. If yes, please provide the details and the reasons for default:	
8	Experience of the applicant in operation and training(s) undergone so far:	

9	Details regarding unit economics of operation:	
10	Marketing tie up:	
11	Expected date of operation and tentative schedule of activities such as distribution and marketing and transport arrangements, etc:	

Declaration by the Applicant

I/We……...……..……...……..son/ daughter/ wife of… …… …… ….. …… …… …….. .....residing
at…….....……
hereby declare that the information furnished above is true to the best of my/ our knowledge and belief. I am/ we are fully aware that if it is found that the information furnished by me/ we is false or there is any kind of deviation/ violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/ us.

Date:

Place: Signature of the Applicant (s)

Countersigned by the Implementing Agency

Date:

Place: Signature and seal of the authorized representative of the Implementing Agency

FORM – IV

Proposal for Training in Sea Cage Culture/ Marine Ornamental Fish Culture/Mussel Farming/Edible Oyster Farming

Sl. No	Particulars sought from the Trainee	Information furnished by the Trainee			
(1)	(2)	(3)			
1	Name and postal address of the Trainee:				
2	Location of the Trainee:	**District**	**Block**	**Panchayat**	**Village**
3	Age and Date of Birth:				
4	Sex:				
5	Voter's ID Card No.:				
6	Occupation:				
7	Annual Income:				
8	Whether belong to SC/ST/OBC				
9	Whether a member of Fishermen Co-operative Society/SHG. If so; • Name & Address of the Fishermen Co-operative Society/SHG: • Member Since When: • Membership ID No.:				
10	Has any previous experience in aquaculture, if so, specify details:				
11	Distance from the location of the training site:				
12	How this training programme to be made use:				
13	Signature of the Applicant:				
To be forwarded by the Sponsoring/Nominating Agency					
14	Recommendation of the Agency : • Whether after training the agency would take up cage culture in co-operative/SHG mode:				
15	Name and Signature of the Authorized Signatory of the Nominating Agency:				
16	Financial Implications:				
	Item	**Number**		**Amount**	
	a) Training				
	(i) Assistance to farmer @ Rs 150/ day for 5 days:				
	(ii) Reimbursement of to and fro travel expenses to farmer upto Rs. 500/ trainees or actuals, whichever is less:				
	(iv) Honorarium to resource persons @ Rs. 500/ day and reimbursement of to and fro travel expenses to a maximum of Rs. 1000/ training programme or actuals, whichever is less:				

	(iii) Assistance to implementing agency @ Rs 75/ trainee/ day:		
	Total		
10	Technical capabilities of resource persons to be engaged in training:		
11	Any other details in support of the proposal		

Declaration by the Applicant

I/We……..……....……..……..son/daughter/wife of……..……...…...……...residing at……hereby declare that the information furnished above is true to the best of my/ our knowledge and belief. I am/ we are fully aware that if it is found that the information furnished by me/ we is false or there is any kind of deviation/ violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/ us.

Date:

Place: Signature of the Applicant (s)

Countersigned by the Nominating/Sponsoring Agency

Date:

Place: Signature and seal of the authorized Representative of the Nominating/ Sponsoring Agency

FORM –V

National Fisheries Development Board

Form for Submission of Utilization Certificate

Sl. No	Letter No and date	Amount

Certified that out of Rs. _____ sanctioned during the year_____ in favour of _____ under the National Fisheries Development Board's Letter No given in the margin and Rs. _____ on account of unspent balance of the previous sanction, a sum of Rs. _____ has been utilized for the purpose of_____ for which it was sanctioned and that the balance of Rs. _____ remains unutilized. The same will be adjusted towards the next installment payable during the period _____.

Physical progress:

Certified that I have satisfied myself that the conditions on which the funds were sanctioned by the National Fisheries Development Board have been duly fulfilled/ are being fulfilled and that I have exercised the following checks to see that the money was actually utilized for the purpose for which it was sanctioned.

Date:

Place:

Signature and seal of the authorized representative of the Implementing Agency

National Fisheries Development Board
Guidelines for Seaweed Cultivation

1.0 Introduction

Seaweed cultivation, as a diversification activity in mariculture, has tremendous potential all along the Indian coast. Seaweeds are rich in vitamins and minerals and are consumed as food in various parts of the world and used for the production of phytochemicals, *viz*., agar, carrageenan and alginate, which are widely employed as gelling, stabilizing and thickening agents in several industries of food, confectionery, pharmaceutical, dairy, textile, paper, paint, etc.

In India, seaweeds are used as raw materials for the production of agar, alginate and liquid seaweed fertilizer (LSF). There are about 20 agar industries, 10 algin industries and a few LSF industries situated at different places in the maritime states of Tamil Nadu, Karnataka, Andhra Pradesh and Gujarat. The red algae *Gelidiella acerosa*, *Gracilaria edulis, G. crassa, G. foliifera and G. verrucosa* are used for agar manufacture and brown algae *Sargassum* spp., *Turbinaria* spp. and *Cystoseira trinodis* for the production of alginates and liquid seaweed fertilizer. The quantity of seaweeds exploited is inadequate to meet the raw material requirement of Indian seaweed industries.

Seaweeds such as Gracilaria edulis, Hypnea musciformis, Kappaphycus alvarezii, Enteromorpha flexuosa and Acanthophora spicifera can be successfully cultivated in long-line ropes and nets by vegetative propagation method. This activity has a potential to provide income and employment to about 200,000 families.

Seaweeds are wonder plants of the Sea and considered as medical food of the 21st century. They have innumerous applications in food, pharmaceutical, textile and chemical industries and world demand is increasing every year. The world production has gone up to 15 million tonnes worth of US $8.0 billion and China is the world leader followed by Japan, South Korea, Philippines, Indonesia etc. Seaweeds are also found to provide a strong base as growth promoters of several plants because of their properties such as cytokinine, auxin and gibberllines. Therefore seaweeds will be the major source of raw material for bio-fertilizer to start organic agriculture revolution in the country.

The vast sea with rich nutrients around mainland and islands and with plenty of sunlight throughout the year in tropical climatic conditions are natural gifts to India to produce at least 1.0 million tonnes of seaweeds (dried) and employ nearly 200,000 families with an annual earning of about ` 1.0 lakh per family. The annual turnover through Kappaphycus alvarezii / Gracilaria edulis / Gelidiella acerosa seaweed cultivation alone can be safely estimated to be Rs 2, 000 crores.

Seaweeds provide shelter to a variety of organisms and enhance biodiversity. They absorb CO2 and reduce global warming. They are also efficient in controlling organic pollution including heavy metals in the inshore waters. Thus, seaweed cultivation is an eco-friendly with sustainable income to the coastal poor. India is blessed with rich in seaweed resources. Wild seaweeds are harvested for agar agar and algin production especially in the area of Gulf of Mannar. If this coastal community could be supported for scientific farming it is possible to generate at least `.10,000/- per month for a family. Therefore the following scheme is proposed for inclusion in NFDBs scheme.

2.0 Components of Assistance

The NFDB will assist the following components to support Sea weed cultivation:

- Training and demonstration
- Assistance for seaweed Cultivation
- Establishment of seaweed processing units

2.1 Training and Demonstration

2.1.1 Eligibility criteria

Following criteria will be applied for selection of agencies for conduct of training/demonstration programmes:

- Fisheries Institutes/State Fisheries Departments / Fisheries Colleges / NGOs /SHGs with a background of coastal aquaculture
- Availability of adequate manpower and expertise to conduct frontline demonstration to traditional fishermen/ women

The following criteria shall be applicable for selection of a farmers/ entrepreneurs (preferably fisher women) to receive training:

- Past experience of the farmer in undertaking seaweed cultivation
- Willingness of the farmer to take up sea weed cultivation on scientific lines
- Should be willing to upgrade the existing cultivation practices.
- Availability of adequate manpower and expertise to conduct frontline demonstration to traditional fishermen/ SHG women by reputed NGOs.
- All proposals must be routed through concerned State Department of Fisheries.
- Village near the seashore should be selected.
- Should have preferably received training in seaweed cultivation or willing to undergo training.
- Should not be a defaulter with any financial institution/Government.
- Willingness to meet 50% from own resources in case the bank loan is not forthcoming.

The criteria for selection of farmers/ fishers/ SHGs/ reputed NGOs for demonstration of sea weed cultivation. The following criteria shall be applicable for selection of a farmers/ entrepreneurs (preferably fisher women).

2.1.2 Type of Assistance

The NFDB assistance would be towards organization of Training and Demonstration, as detailed below and in Annexure-I and Form-I:

(i) Assistance to farmer: The farmer shall be eligible for a daily allowance of Rs 150/ day and reimbursement of to and fro travel (train/ bus/ auto rickshaw) shall be reimbursed as per actuals, subject to a maximum of Rs 500.

(ii) Honorarium to resource persons: For conduct of training, the implementing agency may engage the services of one resource person per training programme. The resource person may be given an honorarium of Rs 500 per day and to and fro travel expenses (train/ bus/ auto rickshaw) shall be reimbursed as per actuals, subject to a maximum of Rs 1 000.

(iii) Assistance to implementing agencies: The implementing agency shall be eligible to receive Rs 75/ trainee/ day for a maximum period of 5 days for organizing the training. This cost shall cover expenses towards identification and mobilization of the trainee and course material/ training kits, etc.

(iv) Development of training/ demonstration site(s):

(a) The Government agencies/NGOs/ Other agencies shall be eligible to receive a one-time grant of a maximum of Rs One lakh only (Rs 1,00,000) for development of demonstration site for undertaking training / demonstration programmes on a regular basis. The Government agencies/NGOs/ Other agencies shall not be eligible for any subsequent grant for the same training site for the same purpose from NFDB or from any other funding agency for a period of five (5) years.

(b) In case the Government agencies/NGOs/ Other agencies does not posses its own facility which can be used for training/ demonstration, it would be eligible to develop the facility by taking a private agencies on lease for undertaking training/ demonstration and for the purpose a one-time grant of Rs Fifty thousand only (Rs 50 000) shall be available for making payment towards lease amount and development of the facility for imparting training/ demonstration. The lease shall be for a minimum period of five (5) years.

(c) In the absence of (a) and (b) above, the Government agencies/NGOs/ Other agencies may engage the facililties of a private firm for which an amount to Rs 5 000 per training programme shall be made available as fee for hiring the facility.

Besides the above, the Government agencies/NGOs/ Other agencies shall also abide by the following conditions:

- The facilities developed by the Government agencies/NGOs/ Other agencies shall also be available to other implementing agencies for training of fish farmers under the NFDB programme.
- The training/ demonstration facilities developed by the implementing agency shall not be more than 25 km from the training site. However, if such a facility cannot be developed within 25 km, full justification shall be provided.
- The NFDB shall not fund any other training/ demonstration site over and above the one developed to ensure its optimal utilization.
- Each training batch shall consist of 25 trainees and in no case exceed 30 trainees per batch.
- All State/ Union Territory Governments shall be assisted with the setting up of a maximum of fifteen (15) training/ demonstration sites initially. Additional sites shall only be sanctioned depending upon the performance and optimal utilization of the site(s) already sanctioned. Establishment of additional sites would also be linked to the number of farmers trained, area covered and institutional finance availed by the trained farmers for taking up aquaculture activities.
- All other implementing agencies including Fisheries Institutes under the Indian Council of Agricultural Research and the Colleges of Fisheries under the State Agricultural University shall avail their own facilities for which a lump sum of Rs Five thousand only (Rs 5 000) per training programme shall be provided. However, if such agencies do not have their own facility, they shall make use of the facility developed by the State Government or engage the facility of a private farmer, for which Rs Five thousand only (Rs 5 000) per training programme shall be provided.
- The implementing agency shall maintain the profile of each trainee and provide information on the area farmed by each trained farmer, investments made, employment generated and increase in production and productivity. The consolidated information on the above shall be made available to NFDB at quarterly intervals for a period of five years.

- The implementing agency shall also be responsible for facilitating institutional finance to the fish farmers.
- The implementing agency and the NFDB shall enter into an MOU prior to release of funds for training and demonstration. The conditions stipulated in the Guidelines shall *inter alia* be a part of the MOU.
- The components of the sea weed cultivation includes Bamboo rafts , Anchor, twisted ropes, HDPE braider, Ropes, fishing nets, seed material, raft laying etc., facilities for infrastructure operational cost as indicated in the Annexure –II and III. The NFDB assistance would be in the form of 50 % subsidy to the farmers/ fishers/ women SHGs.

2.2 Assistance for seaweed cultivation

2.3 Establishment of seaweed processing plants

In view of specialized nature of the processing of seaweeds for specific high value produce like carragenan, specific proposals will be considered, with the NFDB assistance in the form of equity to the tune of 20% of the investment costs.

3.0 Submission of Proposals

All proposals received from the beneficiaries shall be submitted to the NFDB for approval and release of funds. To ensure uniformity in the details provided by the farmers and the implementing Agencies, application shall be submitted in the following forms:

Form I : Training and demonstration.

The application form for training and demonstration shall be filled up by the Implementing Agency and submitted to the NFDB for consideration of release of funds.

All the eligible applicants shall submit duly filled in application prescribed by NFDB for taking up Seaweed Cultivation (Form II) through the Director/Commissioner of Fisheries of the respective states. The state fisheries department shall verify the applications with respect to the technical feasibility and other requirements as per the eligibility criteria under the activity and forward with recommendation to NFDB by countersigning the applications in a consolidated form for sanction and release of funds.

Wherever, the State Fisheries Departments, Quasi Government organizations and Research Institutes are the implementing agencies, shall submit the duly filled in prescribed application directly to the NFDB for sanction and release of funds.

All other applicants shall submit the applications through the State Fisheries Departments concerned

4. Documents Required

1. Duly filled in application form.
2. Details of the Project.
3. Design and layout.
4. Item wise estimate of infrastructure works to be certified by the concerned state DoF

officials.

5. List of items along with quotations.
6. Details about the management.
7. Bankers consent letter, if any
8. A copy of the project appraisal report from the bank, if any
9. Permission obtained from the Government institutions/departments to take up sea weed culture.

5.0 Release of funds

The subsidy for Training and Demonstration shall be released in a single installment, on approval of the proposal by the NFDB.

6.0 Submission of Utilization Certificate

The Implementing Agencies shall submit utilization certificates in respect of the funds released to them by the Board. Such certificates shall be submitted in ***Form III*** on half-yearly basis *i.e.* during July and January of each year. The utilization certificates can also be submitted in between if activities for which funds were released earlier have been completed and the next dose of subsidy is required to complete the remaining works by the farmer.

7.0 Monitoring and Evaluation

A dedicated monitoring and evaluation (M&E) cell shall be set up at NFDB head quarters to periodically monitor and evaluate the progress of activities implemented under NFDB funding. A project monitoring committee comprising of experts in the subject matter as well as finance and representative of financing organizations may be constituted to periodically review the progress of the activities including the achievements related to physical, financial and production targets.

Annexure-I

Summary of the Norms for Assistance towards Seaweed cultivation

Sl. No	Item	Activities	Unit Cost	Subsidy	Remarks
1.0	**Training and Demonstration**	(i) Assistance to farmers for participation in 5 days training programme (batch of 25 – 30). (ii) Honorarium to Resource Persons. (iii) Assistance to implementing agency for training and demonstration.	(i) Daily allowance of Rs 150/ day /trainee and reimbursement of actual to and fro travel, subject to a maximum of Rs 500 per trainee. (ii) Honorarium of Rs 500 per day and actual to and fro travel expenses, subject to a maximum of Rs 1000. (iii) Rs 75/ trainee/ day to the Implementing Agency towards identification, mobilization of beneficiaries, supply of training material, etc. (iv) Development of demonstration unit @ Rs 1 00 000/- (one time grant) to the Implementing Agency to conduct regular training/ demonstration activities. (v) In absence of own facility, grant of Rs 50 000/- shall be available to the State Government to lease private unit and its development for conduct of training/ demonstration, etc. (vi) In the absence of (iv) and (v) above, Rs 5 000/- per training program for hiring suitable facility from private farmer. (vii) ICAR Fisheries Institutes/ Colleges of Fisheries under State Agriculture Universities/ Other Agencies using their own facilities will get a lump sum amount of Rs 5,000/- per training programme for this purpose.		

Annexure - II

Estimated Unit Cost per Raft Infrastructure Cost for Seaweed Cultivation in Bamboo Rafts

S.No	Particulars/Description	Quantity Required	Cost per Raft (in `)
1.	3-4" dia hallow bamboos of 12'x 4' for main frame + 4' x 4' for diagonals (without any natural holes, crakes etc.,) @ ` 3.75 per feet of bamboo	64'	240.00
2.	Five-toothed iron anchor of 15 kg each (@ ` 50 per kg) – one anchor can hold a cluster of 10 rafts	1.5 kg	75.00
3.	3mm PP twisted rope for plantation – 20bits of 4.5m each (@ `130 per kg)	420 gm	55.00
4.	Cost of HDPE braider pieces (20 pcs x 20 ropes = 400 pcs of 25 cm each)(@ `190 per kg)	165 gm	31.00
5.	Braider twining charges @ ` 1.00 per 20 ties For one raft 400 ties = ` 20	20 ropes	20.00
6.	Raft framing rope 6m x 12 ties per raft i.e., 36mts of 6mm rope(@`130 per kg)	650 gm	85.00
7.	Used HDPE fishing net to protect the raft bottom (4m x 4m size) (@ ` 60/ kg) + labour chargesRs10	1 kg	70.00
8.	2mm rope to tie the HDPE net (28 mts) (@`130 per kg)	100 gm	13.00
9.	Anchoring rope of 10 mm thickness (17m per cluster of 10 rafts) (@ `130 per kg)	100 gm	13.00
10.	Raft linking ropes per cluster 10 rafts – 6mm thick – 2 ties x 3m x 9 pairs = 54m length (@ `130 per kg)	100 gm	13.00
11.	Seed material (150 gm x 400 ties @ ` 2.50 per Kg)	60 kg	150.00
12.	Raft laying + maintenance cost	-	100.00
13.	Miscellaneous expenses	-	135.00
	Total Cost per Raft		**1,000.00**

Income model for one cycle (45 days)

1. Capital Investment

S.No.	Particulars/Description	Cost (in `)
1.	No of rafts required for SHGs (@ 45 rafts per member)	900 rafts
2.	Cost of raft (900 x `1000)	9,00,000
3.	Cost of catamaran (one no. @ `10,000)	10,000
4.	Tarpaulin sheets (10 nos. @ ` 500 per sheet)	5,000
5.	Anchor boring machine	30,000
6.	Yamaha Engine (2 watts)	25,000
7	Miscellaneous	30,000
	Total project cost per SHG with 20 members	**10,00,000**

2. Income generation in one culture cycle of 45 days

S.No	Particulars/Description	Cost (in `)
1.	Strength of SHG – 20 Nos per group	
2.	Number of harvest per day	One raft
3.	Seaweed biomass harvest per day (Wet Weight) (retaining 2700 kg as seed for the next crop)	8,100 kg
4.	Seaweed Dry Weight @ 10: 1 ratio dry weight basis	810 kg
5.	Selling price @Rs18 per kg (18 x 810)	14,580
6.	Selling price excluding technical labour cost @ `100 per raft (100 x 45 = 4,500*)	10,080
	Income of SHG member per day	224
	Income of SHG member per month	6720
	Income for 4 cycles in the 1st year per SHG member (Approximately 200 days)	44,800
	Income for 6 cycles in the 2nd and 3rd year per SHG member (Approximately 150 days per year)	67,200

- **Mostly family labour is engaged**

Annexure – III

Estimated unit economics of Seaweed farming through mono-line net bag technology in the open Sea condition

A. Cost of single Mono-Line (Break up details)

S.No	Particulars/Description	Cost (in `)
1	Mono line Lead Rope(10 mm) 104 m	1000.00
2	Anchor rope 5 m x 4 m = 20 m	440.00
3	Net bags (0.5 m x 0.5 m) 200 Nos. xRs 6	1200.00
4	Lead rope loop and net bags hanging rope (3mm) (`1 x 200)	300.00
5	Mono line Ring 0.5 x 200	100.00
6	Cost of Anchors. 4 Nos. (` 50 x 4)	200.00
7	Net bag mending rope 1 ¼ inch (` 500g, 200No.)	90.00
8	Floats (` 4 x 40)	160.00
9	Anchor rope ring 50 x 4	200.00
10	Seed cost 500g, 200 Nos.	120.00
11	Transport charges for seed plant	90.00
12	Labor cost for rope and net bag preparation cum mooring the Mono-line in the open sea (250 x 4)	1100.00
	Total	**5000.00**

B. Production of seaweed per Mono-Line

1	Production in one mono line @1: 4 growth in 200 net bags (0.5Kg grows to 2.0 Kg within 30 days)	300 kg
2	Selling cost @ 10:1 dry weight basis (`18 X 30)	540
3	Technical labor cost for harvesting single Mono-line @` 50 per line	50
	Income per line	**590**

C. Income Model for 30 days cycle @ 5+5 lines harvest per day

1. Capital Investment

S.No	Particulars/Description	Cost (in `)
i.	No. of mono-lines required per SHG group	300 Nos.
ii.	Cost of Mono-lines(300 X ` 5000)	15,00,000
iii.	Cost of catamaran 1 No. (10000)	10,000
iv.	Tarpaulin Sheets (` 500 X 10)	5,000
v.	Anchor boring machine	30,000
vi.	Yamaha Engine (2 watts)	25,000
vii	Miscellaneous	30,000
	Total project cost per SHG group with 20 members	**16,00,000**

2. Income generation in one culture cycle of 30 days

i.	Strength of SHG group	20 Nos
ii.	No. of mono line harvest per day(5 +5 lines)	10 Lines
iii.	Sea weed biomass harvest per day (wet weight)	3000Kg
iv.	Seaweed dry weight @ 10:1 ratio dry wt basis	300 Kg
v.	Selling price@ `18/Kg (18 X 300)	` 5400
vi.	Selling price excluding technical labor cost @Rs 50 per line (50 X10)	` 4900
vii.	Income of SHG member / per day	` 245
	Monthly Income per SHG member	**` 7350**

FORM – I

Proposal for Training and Demonstration in seaweed farming

Sl. No	Particulars sought from the Implementing Agency	Information furnished by the Implementing Agency		
(1)	(2)	(3)		
1.0	Name and address of the Implementing Agency:			
2.0	Location of the Training Facility:	**District**	**Block**	**Village**
3.0	Facilities available or proposed for imparting training:			
4.0	Details of the Training Programme:			
	a) Number of persons to be trained in seaweed farming (to be given separately):			
	b) Of which ,the number of existing seaweed farmers:			
	c) Details of demo farms proposed, number of frames, area, depth, location etc			
	d) Species to be farmed			
	e) marketing tie-ups			
	f) Indicative economics			
5.0	Financial Implications:			
	Item	**Number**	**Amount**	
	a) Training			
	(i) Assistance to farmer @ Rs 150/ day for 5 days:			
	(ii) Reimbursement of to and fro travel expenses to farmer:			
	(iv) Honorarium to resource persons and reimbursement of to and fro travel expenses:			
	(iii) Assistance to implementing agency @ Rs 75/ trainee/ day:			
	Total of (a)			
	b) Demonstration Unit			
	Grand Total (a + b)			
10.0	Technical capabilities of resource persons to be engaged in training:			
11.0	Any other details in support of the proposal			

Date:

Place:

Signature and seal of the authorized representative of the Implementing Agency

Declaration by the Applicant

I/We …….....…….. son/daughter/wife of ……...…….....…… Residing at ..…… …… hereby declare that the information furnished above is true to the best of my/ our knowledge and belief. I am/ we are fully aware that if it is found that the information furnished by me/ we/ us is false or there is any kind of deviation/ violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/ us.

Date:

Place:

Signature of the applicant (s)

Countersigned by the implementing Agency

Date:

Place:

Signature and seal of the authorized representative of the Implementing Agency

Form- II

Proposal for taking up of Seaweed Cultivation

Sl. No	Particulars sought from the applicant	Information furnished by the applicant
(1)	(2)	(3)
1	Name and address of the applicant/ firm/ association/ Self Help Group (IN BLOCK LETTERS):	
2	Address for communication	
	Telephone:	
	Fax:	
	Mobile:	
	E-mail:	
3	Details of SEA WEED CULTIVATION	
	a) State:	
	b) District:	
	c) Taluk/ Mandal:	
	d) Revenue Village:	
	e) Capacity:	
	f) No. of rafts / net bags:	
	g) Laboratory facility for disease diagnosis and water quality analysis:	
	h) Technology to be adopted	
	i) Production capacity (in production	
	j) Number of production cycles proposed per	
	k) Facilities, if any for culturing. If so, capacity	
	l) Source and quality of water:	
	m) Source of sapling stock:	
	Projected source of funds	
	1, Own Investment	
	2, Bank finance	
	3, Subsidy	
	Total	
5	Details on tie up with the Bank for availing institutional finance:	
6	Arrangement for loan (please furnish documentary proof, such as loan sanction letter.):	
7	Whether the applicant is in default of payment to any Financial Institution/ State Government for loan/ assistance availed earlier. If yes, please provide the details and the reasons for default:	
8	Experience of the applicant in operation and training(s) undergone so far:	
9	Details regarding economics of operation:	
10	Marketing tie up:	
11	Expected date of operation and tentative schedule of activities such as distribution and marketing and transport arrangements, etc:	

Declaration by the Applicant

I/We……...……..……...……..son/ daughter/ wife of… …… …… ….. …… …… …….. .....residing
at…….....……
hereby declare that the information furnished above is true to the best of my/ our knowledge and belief. I am/ we are fully aware that if it is found that the information furnished by me/ we is false or there is any kind of deviation/ violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/ us.

Date:

Place: **Signature of the Applicant (s)**

Countersigned by the Implementing Agency

Date:

Place: Signature and seal of the
authorized representative
of the Implementing Agency

FORM – III

Form for Submission of Utilization Certificate

Sl. No	Letter No and date	Amount

Certified that out of Rs. _____ sanctioned during the year_____ in favour of _____ under the National Fisheries Development Board's Letter No given in the margin and Rs. _____ on account of unspent balance of the previous sanction, a sum of Rs. _____ has been utilized for the purpose of_____ for which it was sanctioned and that the balance of Rs. _____ remains unutilized. The same will be adjusted towards the next installment payable during the period_____.

Physical progress:

Certified that I have satisfied myself that the conditions on which the funds were sanctioned by the National Fisheries Development Board have been duly fulfilled/ are being fulfilled and that I have exercised the following checks to see that the money was actually utilized for the purpose for which it was sanctioned.

Date:

Place:

Signature and seal of the authorized representative of the Implementing Agency

National Fisheries Development Board
Guidelines for Infrastructure for Fishing Harbours and Landing centre's

1. Introduction

The fishing harbours and landing centres are the initial centres of fish handling. Due to poor sanitary and hygienic conditions as well as temperature prevailing at these centres, there is substantial reduction in quality of the fish landed. Provision of clean and sanitary building with ancillary facilities like potable water and ice, fly-proofing arrangements and chilled storage at fishing harbours is an essential requirement to maintain quality and safety requirements for the fish landed. NFDB proposes to provide funding to establish these facilities at incomplete fishing harbours and landing centres.

The NFDB would provide support to those cases where the schemes already taken up by the State Governments have remained incomplete even after the original project cost has been fully spent or where after completion of the project, certain critically needed additional facilities have to be created. Further, the Board shall finance such projects only if the same can be completed in a reasonable period, and an effective arrangement can be put in place for the management of the facility.

2. Objectives of the scheme

i) To bring significant reduction in the loss due to fish spoilage.
ii) To make available clean, hygienic fish to consumers in local and overseas markets.
iii) To improve the overall conditions of the existing FHs/FLCs in the country to international standards like HACCP/Euro norms.

2.1 Components of Assistance for Fishing Harbour

The NFDB will assist the following components:

i) Fish landing quay
ii) Outfitting quay
iii) Asphalt roads within the harbor complex
iv) Concrete surfaces (Fish unloading/loading areas and Vehicle Parking area behind the fish auction hall)
v) Fish handling and auction hall
vi) Public toilet blocks
vii) Electric power supply ,distribution and general lighting
viii) Fresh water storage, supply and distribution with ground water sumps, pump house and overhead tank
ix) Seawater supply and distribution with shallow water tube well, pump house and overhead tank
x) Drainage and sewerage lines including septic tanks, sewage treatment system etc
xi) Fire hydrants and extinguishers
xii) Environmental impact assessment and monitoring
xiii) Revetment with stone pitching on waterside below the quays and on the land side of the harbor complex
xiv) Slipway/ Ramp

xv) Any other facility critically needed (including up-gradation/modernization) to meet the HACCP requirement and any other standard which is mandatory as per GOI norms.

2.2 Eligibility criteria

Existing fishing harbours owned by State/Central Govt. Departments, Maritime board/Port trust, Boat owners' associations and cooperatives will be eligible for the support.

2.3 Type of assistance

NFDB would provide 100% financial assistance to those cases where the schemes already taken up by the State Governments have remained incomplete even after the original project cost has been fully spent or where after completion of the project, certain critically needed additional facilities have to be created, provided the same can be completed within a reasonable period and an effective arrangement is put in place for the management of the facility.

3. Landing centres

Landing centres are comparatively small facilities for landing the catch from traditional fishing crafts. On an average, about 25 to 100 traditional crafts are expected to land their catch in a landing centre. A traditional craft can catch about 500 kg fish/day. There can be landing simultaneously from 10 crafts, necessitating a handling facility for 5 tonnes at a time and 50 tonnes per day. Accordingly, there shall be water, ice and insulated store to take care of landed fish so that the catch is safe and prime in quality.

3.1 Components of Assistance

The NFDB will assist the following components:

i) Fish landing quay
ii) Outfitting quay
iii) Asphalt road and internal water bound macadam roads
iv) Concrete surfaces (Fish unloading/loading areas and Vehicle Parking area behind the fish auction hall)
v) Fish handling and auction hall
vi) Public toilet blocks
vii) Electric power supply and distribution including electric substation and general lighting
viii) Ice and Fresh water supply
ix) Drainage and sewerage
x) Any other standard which is mandatory as per GOI norms.

3.2. Eligibility criteria

Existing landing centres established by the Govt. sector/ Cooperative Societies that are incomplete and lack the required facilities.

3.3 Type of assistance

100% financial assistance would provide support to those cases where the schemes already taken up by the State Governments have remained incomplete even after the original project cost has been fully spent or where after completion of the project, certain critically needed additional facilities have to be created, provided the same can be completed within a reasonable period and an effective arrangement is put in place for the management of the facility.

3.4Management Committee

The implementing agency has to constitute a management committee involving stake holders / Boat owners association/ Exporters/ Processors with a tenure of every 2 years.

Further implementing agency has to maintain the fishing harbor/landing centre for the period of 16 years from the revenue collected.

1.5 Submission of Proposals

All proposals received from eligible applicants shall be submitted to NFDB for consideration and funding in Form-I.

1.6 Release of funds

Generally, the grant shall be released in two installments for activities relating to modernization of fishing harbours and landing centres. The first installment i.e 10% of the sanctioned amount shall be released on approval of the proposal by the NFDB and the second installment shall be released after submission of the utilization certificate of the first installment.

3.7 Submission of Utilization Certificate

The Implementing Agencies shall submit utilization certificates in respect of the funds released to them by the Board. Such certificates shall be submitted in ***Form II (GFR*** format) on half-yearly basis *i.e.* during July and January of each year. The utilization certificates can also be submitted in between if activities for which funds were released earlier have been completed and the next dose of subsidy is required to complete the remaining works by the farmer.

3.8 Monitoring and Evaluation

NFDB/ project monitoring committee comprising of experts in the subject matter, as well as finance and representatives of the Financing Organizations will periodically review the progress of the activities including the achievements related to physical, financial and production targets and evaluate the progress of activities implemented under the NFDB funding.

FORM – I

Proposal for renovation of existing fishing harbours and fish landing centres

Facilities exciting in the Landing center/ /Fishing harbour

1	**General Information**	
1.1	Name and Address of the Landing Centre/ Fishing Harbour	
1.2	Managed by State/Port Trusts	
1.3	Chief Executive/Ph/Fax/Mob./e-mail	
1.4	Date of commissioning	
1.5	Category	
1.6	Total Area	
1.7	No. of Boats permitted	
1.8	Major fish landings/ Average landings per day	
1.10	No. of exporters, who are availing the facility	
	Engineering Details General	
	Plumbing Design & Diagram	
2.0	**Water & Ice**	
2.02	Source of water	
2.03	Whether water is potable or not?	
2.05	Is there any adequate chlorinated facility?	
2.06	Is there any water treatment facility?	
2.07	Is there any ice plant attached to the harbour/or procured from outside	
2.09	If yes, is it approved by the competent authority?	
2.10	Whether any ice crushing facility available& adequately protected?	
2.12	Whether any direct ice-loading system is available?	
2.16	Are the containers used non-corrodible?	
3.0	**Auction Hall**	
3.01	Are the surrounding protected from wind blown dust?	
3.02	Whether the building constructed is of permanent nature.	
3.04	Is there a raised platform?	
3.05	Is there adequate drainage facility?	
3.07	Is the drainage facility smooth for easy cleaning & covered?	
3.09	Whether the floor of the auction hall is smooth with enough slope for proper drainage?	
3.10	Is the wall of the auction hall is washable up to a height of one meter &joints rounded & easy cleaning?	
3.13	Is there any change room provided?	
3.14	Are there sufficient ventilation provided?	
3.15	Are the lights sufficiently protected?	
3.16	Is the auction hall protected from entry of birds and animals?	
3.17	Whether separate vehicle-parking facility is provided?	
4.0	**Chill Room**	

4.01	Whether chill room provided?	
4.02	If so, whether the temperature is maintained below 4° C & recorded?	
5.0	**Hygiene /Sanitation**	
5.01	Whether any written SOP is available?	
5.02	If so, whether the same is addressing all the areas?	
5.03	Is there any systematic procedure available for cleaning and disinfection?	
5.04	Are there any cleaning procedure designed to prevent contamination at all stages of handling?	
5.06	Are the workers provided with uniforms	
5.07	Are there any hand washing facility available at the entrance?	
5.08	If so, specify the level of available chlorine used for sanitation?	
5.09	Whether foot dip and hand dip provided at the entry point?	
5.10	Are the workers periodically trained in personal behaviour and hygiene?	
5.11	Are the workers medically examined at a regular interval?	
5.12	Are there any records maintained?	
5.13	Whether the personnel hygiene and behavior of the employees are monitored every day?	
5.14	Is there any responsible person to supervise the hygiene practices?	
5.15	If so, is he sufficiently trained?	
6.0	**Records**	
6.01	Whether any record available for sanitation & personnel hygiene?	
6.02	Whether any records are available to trace out the individual vessel catches?	
6.03	Are any other relevant records available	

FORM II

Sl. No	Particulars sought from the applicant	Information furnished by the applicant
(1)	(2)	(3)
1	Name and address of the applicant/ association/Self Help Group/Dept. of Fisheries of State Governments/local self governing bodies, boat owners' association (IN BLOCK LETTERS):	
2	Address for communication (telephone/ mobile number):	
3	Details of the location of the fishing harbour/landing centre:	
	a) State:	
	b) District:	
	c) Taluk/ Mandal:	
	d) Revenue Village:	
	e) Survey Number(s):	
	f) Ownership (whether freehold or on lease):	
	g) If on lease, duration of lease:	
	h) Total area (in ha):	
	i) Details of the proposed construction works (Design details/engineering works to be certified by CICEF/ Harbour Engineering Department/ Authorized state/Central Govt. Departments.	
4	Details regarding assistance received earlier for the construction / Renovation, if any carried out earlier may be mentioned along with the year and amount incurred on such construction / renovation:	
5	Whether the applicant is in default of payment to any Financial Institution/ State Government for loan/ assistance availed earlier. If yes, please provide the details and the reasons for default:	
6	**Estimates regarding input costs:**	
	a) No. of crafts can be moored:	
	b) Quantity of fish that will be handled :	
	c) Cost:	
	d) No. of protected platforms :	
	e) Source of water	
	f) Source of ice and its details	
	g) No. of toilets	
	h) Rest room for workers	
	i) Details of ETP facility	

	j) Details of insulated store	
	l) Canteen	
7	Whether any financial tie up has been made for availing Bank loan, if so please provide the details:	
8	Expected date of commencing of activities	
9	Source and number of labour employed for housekeeping as well as day-today handling & cleaning operations:	

Declaration by the Applicant

I/We…….....……..son/daughter/wife of…….....……Working at…… hereby declare that the information furnished above is true to the best of my/ our knowledge and belief. I am/ we are fully aware that if it is found that the information furnished by me/ we/ us is false or there is any kind of deviation/ violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/ us.

Date:

Place: Signature of the applicant

Countersigned by the implementing Agency

Date:

Place: Signature and seal of the authorized representative of the Implementing Agency

FORM – II

National Fisheries Development Board

Form for Submission of Utilization Certificate

Sl. No	Letter No and date	Amount

Certified that out of Rs. _____ sanctioned during the year_____ in favour of _____ under the National Fisheries Development Board's Letter No given in the margin and Rs. _____ on account of unspent balance of the previous sanction, a sum of Rs. _____ has been utilized for the purpose of_____ for which it was sanctioned and that the balance of Rs. _____ remains unutilized. The same will be adjusted towards the next installment payable during the period_____.

Physical progress:

Certified that I have satisfied myself that the conditions on which the funds were sanctioned by the National Fisheries Development Board have been duly fulfilled/ are being fulfilled and that I have exercised the following checks to see that the money was actually utilized for the purpose for which it was sanctioned.

Date:
Place:

Signature and seal of the authorized representative of the Implementing Agency

National Fisheries Development Board

Guidelines for Fish Dressing Centers, Hygienic Fish Handling facilities in Fishing Harbours and Solar Drying of Fish

1.0 Introduction

The domestic market in India consumes nearly 85% fish produced annually. Hygiene in handling and transportation of fish has been a matter of concern, resulting in substantial post-harvest losses as well as reduction in quality. In order to prevent post-harvest losses, degradation of quality and food safety problems, the NFDB proposes to support setting up of fish dressing centres near the major fish production/landing centers, with facilities to handle process and pack fish hygienically for sale through retail outlets and imparting training particularly to fisherwomen on a much large scale.

Further, considering the importance of drying of fish as a method of fish preservation, NFDB proposes to set up hygienic solar fish drying units and fish drying platforms for sun drying all over India. These units are planned to provide practical models for fishers to adopt similar methods for their drying requirements, resulting in safe and of quality, dried fishery products and significant reduction in post-harvest losses.

2.0 Components of Assistance:

The NFDB assists the following schemes to support the fish dressing, processing and solar drying of fish.

- Model Fish Dressing Centres
- Hygienic Fish Handling Facilities (Fishing Harbour premises)
- Setting up of Solar drying of fish units
- Platforms for Sun drying of fish
- Training and demonstration to fisherwomen

2.1.0. Model Fish Dressing Centre:

2.1.1 Beneficiaries:

All Government Departments / Quasi Government Organizations/Research Institutes

2.1.2 Unit Cost:

Unit cost upto Rs. 150.00 lakhs

2.1.3. Type of assistance

The NFDB will provide 90% grant to the Government Departments / Quasi Governments Organizations / Research Institutes towards capital cost and balance 10% should be met by the concerned agency. Working capital shall be met by the concerned agency.

2.2.0. Hygienic Fish Handling Facilities (Fishing Harbour premises)

2.2.1. Beneficiaries:

Government Departments / Quasi Government Organizations/Research Institutes and entrepreneurs

2.2.2. Unit Cost

Unit cost estimate to be recommended by Central Fisheries Institute concerned.

2.2.3. Type of assistance

(a) The NFDB will provide 90% grant to the Government Departments / Quasi Governments Organizations / Research Institutes towards capital cost and balance 10% should be met by the concerned agency. Working capital shall be met by the concerned agency.

(b) The NFDB's assistance will be in the form of 40% soft loan at 5% interest rate to the entrepreneurs.

2.2.4. Items Eligible for assistance:

The components of Fish Dressing/processing centre and Hygienic fish handling facilities are detailed below which can be customized to different situations:

No.	Items
1	Building
	i. Chilled store – 5 ton (150 sq.ft)
	ii. Pre – Processing hall (500-1000 Sq.ft)
	iii. Chilled store for finished products – 10 tons 250Sq.ft.
	iv. Processing Hall
	v. Cold Storage (200 sq.ft.)
	vi. Change room, Toilets/ Rest room
	vii. Quality control lab
	viii. Store room
	ix. Office Room
2	Refrigeration system
3	Water purification
4	Flake ice unit
5	Solid waste disposal facilities
6	Processing tables
7	Cutting bandsaw
8	Heat sealers (10 nos.)
9	Vacuum packing machine
10	Insulated boxes
11	Crates and utensils
12	Insulated truck
13	Freezing and frozen storage facilities
	i. Plate freezer (5 TPD)
	ii. Tunnel freezer (5 TPD)
	iii. Cold Store (50 t)
14	Loading & Unloading facility
15	Parking facility

2.2.5. Documents Required:

- Land documents
- Design and lay out
- Item –wise estimate of civil works certified by Government or chartered engineer
- List of plant and machinery along with quotations for each item from the supplier
- Details about management of the facility, revenue generation, and maintenance.

2.3.0. Solar Drying of Fish Units:

2.3.1. Components of Assistance: The NFDB assists the following two components to support solar drying of fish:

- Setting up of Solar Fish drying units

- Platforms for Sun drying of fish

2.3.2. Setting up of Solar drying units

Under this category, the NFDB supports setting up of solar drying units with (i) capacity of 1,000 kg or above wet fish per load, (ii) upto 100 Kg wet fish per load. The driers under this category can be solar driers and solar driers with LPG/electric back-up.

2.3.3. Unit Cost:

Unit cost (i) upto to Rs. 25.00 lakhs for 1000 Kg. and above, (ii) upto Rs.6.0 lakhs for 100 Kg.

2.3.4. Beneficiaries:

Government Departments / Quasi Government Organizations / Research institutions are eligible to avail the benefit under the scheme. Fishermen / Fisherwomen / SHGs / Entrepreneurs are encouraged for setting up of solar driers upto 100 Kg. per load.

2.3.5. Items eligible for assistance

- Building for receiving, cleaning and Washing, drying facility – 1500 sq.ft.
- Insulated boxes 100 kg X 4
- Utensils, weighing balances, trays, cutlery, cutting board, etc.
- Pre-processing table (4)
- Water purification system
- Sanitary facilities, toilet etc.
- ETS (Effluent Treatment System)
- Drier 500 kg/load up to 4 nos.
- Vacuum packing unit
- Packing materials
- SS Trolleys
- SS Fish Loading trays
- Solar hot water system
- LPG or electric back up heating system.

2.3.6. Type of Assistance

A) The NFDB's assistance will be upto 90% grant to Government Departments / Quasi Government Organizations / Research institutes.

B) The NFDB's financial assistance will be 25% subsidy (30% subsidy for SC/ ST, and N.E. Regions) to Fishermen / Fisherwomen / SHGs / Entrepreneurs

2.3.7. Documents Required

(a) Land documents
(b) Design & lay out
(c) Item –wise estimate of civil works certified by Government or chartered engineer
(d) List of plant and machinery along with quotations for each item from the supplier
(e) Details about management of the facility, revenue generation, and maintenance.

2.4.0. Platforms for Sun Drying of Fish

The Sun drying platforms for drying of fish can be prepared from SS mesh on SS frame or cement platform (10 sq.mt area) so that proper sanitation and hygiene can be maintained on a daily basis. The capacity shall be 100 kg wet fish or its multiples. This will enable better quality dry fish production which will improve consumer appeal and marketing with significant reduction in post-harvest losses.

2.4.1. Beneficiaries:

Government Departments / Quasi Government Organizations / Research institutions, Fishermen / Fisherwomen / SHGs / Entrepreneurs

2.4.2. Unit Cost: Unit cost up to Rs.35,000/-

2.4.3. Requirements

- Utensils
- SS frame & mesh platform (150 sq.ft) with fly proof facility/ Cement platform
- Sealing machine, 2 nos.
- Cutting board & cutlery
- SS Tables, 2 nos.
- Semi permanent fly proof shed

2.4.4. Type of Assistance

A) The NFDB's assistance will be upto 90% grant to Government Departments / Quasi Government Organizations / Research institutes

B) The NFDB's financial assistance will be 25% subsidy (30% subsidy for SC/ ST, and N.E. Regions) to Fishermen / Fisherwomen / Entrepreneurs

2.4.5. Documents Required:

(a) Design and lay out

(b) Item –wise estimate of civil works certified by Government or chartered engineer

(c) List of equipments along with quotations for each item from the supplier

2.5.0. Training and Demonstration

Poor handling of fish causes spoilage and reduction in quality which in turn reduces the income to the traders and poor quality of fish to the consumers. In order to overcome these problems, it is proposed to impart training to the traders especially to the fisherwomen who handle the fish in large quantity, on hygienic handling of fresh fish and their value addition.

2.5.1. Eligible Agencies:

Developmental organizations with proven track record in training - State and Central Agencies / R&D Departments/Institutes, State Fisheries Corporations / State Fisheries Federations, women SHGs engaged in fisheries sponsored by State fisheries and other rural development departments with background of fish processing and value addition. ·

2.5.2. Type of Assistance

The NFDB assistance for the purpose shall be as detailed in Annexure-I.

Annexure-I

Norms for Assistance towards Training and Demonstration on value addition, hygienic handling of fish and solar drying of fish

Sl. No	Item	Activities	Assistance provided
1.0	**Training and Demonstration**	Assistance to traders for participation in 5 days training programme* (batch of 25 – 30). Honorarium to Resource Persons. Assistance to implementing agency for training and demonstration.	i. Daily allowance of Rs 150/ day /trainee and reimbursement of actual to and fro travel, subject to a maximum of Rs 500 per trainee. ii. Honorarium of Rs 500/day and actual to and fro travels, subject to a maximum of Rs 1000. iii. Rs 75/trainee/day to the Implementing Agency towards identification, mobilization of beneficiaries, supply of training material, etc. iv. Development of demonstration unit @ Rs 1.0 lakh (one time grant) to the Implementing Agency to conduct regular training/ demonstration activities. v. In absence of own facility, grant of Rs 50 000/- shall be available to the State Government to lease private unit and its development for conduct of training/ demonstration, etc. vi. In the absence of (iv) and (v) above, Rs 5 000/- per training program for hiring suitable facility from private farmer. vii. ICAR Fisheries Institutes/ Colleges of Fisheries under State Agriculture Universities/ Other Agencies using their own facilities will get a lump sum amount of Rs 1,00,000/- one time grant for this purpose.

- Duration of the Different Training Programmes:
  Training on value addition – maximum 5 days
  Training on Dry fish production & Marketing – 2 – 3 days

FORM – I

Proposal for establishing Fish Dressing/Processing Centres and Hygienic fish handling facilities

Sl. No	Particulars	Information furnished by the applicant
(1)	**(2)**	**(3)**
1	Name and address of the Government Departments/ Quasi Government Organizations/ Research Institutes (IN BLOCK LETTERS):	
2	Address for communication (telephone/Fax/ mobile number):	
3	Details of land where processing activity is proposed to be taken up:	
	State:	
	District:	
	Taluk/ Mandal:	
	Revenue Village:	
	Survey Number(s):	
	Ownership (whether freehold or on lease):	
	If on lease, duration of lease:	
	Total land area (in ha):	
	Total built up area (in ha):	
4	Details of the proposed activity (Lay out plan/ Design details and engineering works(item wise/work wise details)	
5	Whether the applicant is in default of payment to any Financial Institution/ State Government for loan/ assistance availed earlier. If yes, please provide the details and the reasons for default:	
6	***Estimates regarding input costs:***	
7	Products to be developed and species to be processed:	
8	Processing capacity:	
9	Recurring Cost Raw material Sub material Packing material Utilities	
10	Source of procurement:	
11	Experience of the applicant/Agency in the field and details	
12	Details regarding economics of operation:	
13	Whether any financial tie up has been made for availing Bank loan, if so please provide the details:	
14	Expected date of operation of the processing	

	activity:	
15	Marketing tie up:	

Declaration by the Applicant

I/ We…….....…....……..son/daughter/wife of …….....……. Working at…….....…… hereby declare that the information furnished above is true to the best of my/ our knowledge and belief. I am/ we are fully aware that if it is found that the information furnished by me/ we/ us is false or there is any kind of deviation/ violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/ us. Further, it is declared that this organization/institute has not availed any subsidy/grant for the proposed project or any part of it from any other Government Agency.

Date:

Place: Signature of the applicant (s)

Countersigned by the implementing Agency

Date: Signature and seal of the authorized representative of the Implementing Agency

FORM – II

Proposal for fabrication of Solar drier/ Sun drying platforms

Sl. No	Particulars	Information furnished by the applicant
(1)	**(2)**	**(3)**
1	Name and address of the Government Department/ Quasi Government Organization/ Research Institute/ Farmer/ Entrepreneur (IN BLOCK LETTERS):	
2	Address for communication (telephone/ Fax/ mobile number):	
3	Details of land where drying activity is proposed to be taken up:	
	State:	
	District:	
	Taluk/ Mandal:	
	Revenue Village:	
	Ownership (whether freehold or on lease):	
	If on lease, duration of lease:	
	Total land area in which the drying unit be set up (in ha):	
4	Details of the proposed drying facility	
	Type of drying	
	Numbers and size of drier – Capacity of the drier (Raw material)	
	Technology to be adopted	
	Production capacity	
	Source of water	
	Details of the proposed construction works of drier, Design details/engineering works.	
5	Details on tie up with the Bank for availing institutional finance	
6	Arrangement for seed money	
7	Whether the applicant is in default of payment to any Financial Institution/ State Government for loan/ assistance availed earlier. If yes, please provide the details and the reasons for default:	
8	*Experience of the applicant in drying and details of training undergone*	
9	*Details regarding economics of operation*	
10	Expected date of operation of the drier and tentative schedule of activities	
11	Number of drying units set up within a radius of 10 km	
12	Source and number of workers employed for day-today drying operations	

Declaration by the Applicant

I/We……..…….....……...……..son/ daughter/ wife of …….....……Working at…… hereby declare that the information furnished above is true to the best of my/ our knowledge and belief. I am/ we are fully aware that if it is found that the information furnished by me/ we/ us is false or there is any kind of deviation/ violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/ us. Further, it is declared that this organization/institute has not availed any subsidy/grant for the proposed project or any part of it from any other Government Agency.

Date:

Place: Signature of the applicant (s)

Countersigned by the implementing Agency

Date: Signature and seal of the authorized representative of the Implementing Agency

FORM –III

Proposal for Training and Demonstration in Fish processing/ Solar Drying of fish/ Value addition

Sl. No	Particulars sought from the Implementing Agency	Information furnished by the Implementing Agency		
(1)	(2)	(3)		
1	Name and address of the Implementing Agency:			
2	Location of the Training Facility:	**District**	**Block**	**Village**
3	Facilities available or proposed for imparting training:			
4	(a) Details of the Training Programme:			
	(b) Number of persons to be trained in fish processing/pre-processing/solar drying/ valued added product processing (to be given separately):			
5	*Whether the Implementing Agency proposes to conduct training at its own training centre or in field? Number of training programmes to be conducted in a year may be indicated? What is the group size?*			
6	Financial Implications:			
	Item	**Number**		**Amount**
	a) Training			
	(i) DA of Rs. 150/day/trainee and reimbursement of actual to and fro travel, subject to a maximum of Rs. 500/trainee) (ii) Honorarium of Rs. 500/day and actual to and fro travel expenses, subject to a maximum of Rs. 1000/- (iii) Rs. 75/trainee/day to the Implementing Agency towards identification, mobilization of beneficiaries, supply of training material, etc.			
	b) Demonstration Unit			
7	Technical capabilities of resource persons to be engaged in training:			
8	Any other details in support of the proposal			

Date:

Signature and seal of the authorized representative of the Implementing Agency

National Fisheries Development Board

Form for Submission of Utilization Certificate

Sl. No	Letter No and date	Amount

Certified that out of Rs _____ sanctioned during the year_____ in favor of _____ under the National Fisheries Development Board's Letter No given in the margin and Rs _____ on account of unspent balance of the previous sanction, a sum of Rs _____ has been utilized for the purpose of_____ for which it was sanctioned and that the balance of Rs _____ remains unutilized. The same will be adjusted towards the next installment payable during the period_____.

Physical progress:

Certified that I have satisfied myself that the conditions on which the funds were sanctioned by the National Fisheries Development Board have been duly fulfilled/ are being fulfilled and that I have exercised the following checks to see that the money was actually utilized for the purpose for which it was sanctioned.

Date:
Place:

Signature and seal of the authorized representative of the Implementing Agency

National Fisheries Development Board
Guidelines for Domestic Marketing

1.0 Introduction

The establishment of domestic markets plays a very crucial role in the development of fisheries sector in the country. Apart from minimizing post-harvest losses, it helps in increasing revenue, enhancing employment opportunities and offers high standards of hygiene and sanitation leading to food safety. The importance of domestic marketing in India can be understood from the fact that only about 15% of the total fish landing is utilized for export of fishery products and the remaining about 85% is distributed through domestic markets. As more and more trade restrictions are being imposed on the fishery product exports, a well developed domestic marketing system only can ensure the viability of the fisheries sector.

About 70% of the fish catch is marketed fresh and the remaining is utilized in the form of processed, dried, smoked, reduced to fishmeal, etc. As per the available data, a majority of the total population consumes fish in the country with an average per capita consumption of 9 kg/year. However, the harvested fish is not evenly distributed to interior areas due to lack of transportation and non-availability of proper storage facilities. Therefore, there is a need for balanced system of distribution to make fish available in the interior areas at reasonable rates.

The fish produced in the country, both from marine and inland sectors, is marketed domestically through a network of wholesale, major, minor retail, roadside markets, etc. The majority of domestic markets are unhygienic and the fish storing and handling facilities are poor. There is also a lack of proper transportation system including roads, refrigerated vehicles, etc. Availability of potable water, good quality ice, electricity, waste disposal system, etc. is inadequate. There is considerable time lag during the transportation of fish from the landing centre to the interior markets which results in poor quality of material leading to food borne diseases, nutritional and post harvest loss. The activities proposed under NFDB for development of domestic marketing are expected to significantly contribute in reducing post harvest losses, enhance revenue and also improve the hygienic and sanitary conditions in fish markets.

2.0 Areas for the development of domestic fish marketing system:

2.1 Modernization of wholesale fish markets
2.2 Development / construction of new retail market, complexes and retail outlets
2.3 New wholesale markets
2.4 Establishment of modern fish retail outlets by NFDB
2.5 Setting up of fish retail outlets
2.6 Retailing by fisherwomen
2.7 Cold chain development and processing of value added products
2.8 Cold Chain Development through Equity Participation by NFDB
2.9 Training on hygienic handling of fish
2.10 Campaign for promotion of fish products and consumption
2.11 Organization of fish festivals/fish melas

2.12 Developing working models /branding/ benchmarking/certification

2.1 Modernisation of Wholesale Fish Markets

The wholesale fish markets are generally located at strategic points where the fish and fishery products arrive and distributed to different parts of the country. The trading is mainly between agents /intermediaries and also packing and repacking of fish take place in these markets. Most of the wholesale markets in the country at present are in an unorganized way, without adequate facilities for fish handling and storage. For improving the wholesale markets, there needs to be adequate parking space for the vehicles, loading and unloading facilities including equipments. A well developed transportation system is an essential component of wholesale marketing. Development of motorable roads, connectivity with other retail and landing centers and interior markets should be established to facilitate easy transportation. Large scale storage facilities, cold storage, provision for ice, water, communication facilities and waste management system, etc. are to be established. Hygiene and sanitation as per prescribed standards should also be enforced. This activity is intended to assist modernization of existing wholesale fish markets and construction of new wholesale fish markets.

2.1.1 Beneficiaries

Government Fisheries Departments, Quasi Government Organizations, Local Civic Bodies, Research Institutes are eligible to apply.

2.1.2 Unit Cost:

Rs.250.00 lakhs/50 stalls; approximate area of 3.0 acres.

2.1.3 Items eligible for assistance

The components for the financial assistance in the modernization of existing markets or construction of new wholesale markets are as follows, where need-based financial support will be provided by the Board:

- Market building, auction halls
- Parking space
- Loading and unloading facilities
- Weighing machines
- Cold storage facilities
- Hygienic stalls with proper roofing, tiled flooring and interiors
- Packing and transportation
- Ice, water and accessories
- Electricity and lighting
- Communication and information facilities
- Waste management system
- Resting room and pay & use toilet facilities
- Proper drainage
- Sufficient water supply with an overhead tank
- Internal Roads
- Compound wall with gate
- Canteen, bank and office
- Generator Set
- Any other related facilities

2.1.4 Type of assistance

The NFDB will provide 90% grant with a unit cost of Rs. 250 lakhs / 50 Stalls

2.1.5 Documents required

(a) Duly filled in application form
(b) Detailed Project Report
(c) Land document
(d) Design and layout
(e) Item-wise estimate of civil works certified by Government or Chartered Engineer
(f) List of plants and machinery along with quotations
(g) Action plan for management of the facility, revenue generation and maintenance
(h) Memorandum of understanding

2.1.6. Conditions specific to the scheme

(a) There has to be a separate market management committee for day to day administration and maintenance of the market in terms of cleaning, stall allotment, user fee collection, lighting, sanitation and other primary requirements of market.
(b) After completion of the project, the market management committee must adopt HACCP standards for fish handling and adopt food grade standards for water, fish packing and handling materials.
(c) Markets must be maintained as per the hygienic conditions issued from time to time by NFDB and State Governments.
(d) Fisheries Corporations/Federations proposing modernization of markets should be in good working condition and accounts should have been audited regularly.
(e) A committee having engineers and technical officers will examine the proposals. The grant will be released in installments based on the progress of work. There shall be a mid-term appraisal of the project.
(f) A separate training programme has to be organized to the management committee on various aspects of wholesale fish markets: functioning, hygiene, food contamination, HACCP etc.

2.2 **Development/ construction of new retail markets, complexes and retail outlets:**

The retail outlets are important links in the entire domestic marketing system. It is only through retail markets, fish is traded to consumer. The main drawback of the retail market is that the fish reaches for distribution in poor quality due to handling, storage and transportation problems. A chain of cold storages have to be provided right from the primary producer to the consumer in the system, at different locations to control the spoilage. Apart from cold storages, provision for other amenities like hygienic stalls and platforms for trading, potable water, ice facility, proper civil structure, roofing and flooring, moving space for smooth trading of commodities, facility for display of products, suitable equipment for washing, weighing, communication, toilet facilities, etc. are required.

2.2.1 Beneficiaries:

a. State Fisheries Departments and Quasi Government Organizations
b. Entrepreneurs

2.2.2. Unit Cost:

Rs.50.00 lakhs to 100.00 lakhs for establishment of major retail markets (approx. 1.0 acre area, 20 outlets) and upto Rs. 50.00 lakhs for minor retail market (approx.0.5 acre area, 10 outlets)

2.2.3 Items eligible for assistance:

The components for the financial assistance for retail outlets are as follows, where need-based financial support will be provided by the Board:

• Cold storage facilities
• Potable water and ice facility (flake ice)

• Hygienic stalls with proper roofing and flooring
• Display unit and facility for cutting, storage
• Fish dressing unit
• Unloading facilities
•Weighing equipment
• Waste management system
• Transportation facility
• Communication and information facilities
• Restroom and pay & use toilet facilities
• Electricity and lighting
• Internal road and proper drainage facilities
• Parking space
• Compound wall with gate
• Any other related facilities

2.2.4 Type of Assistance:
The NFDB will provide financial assistance **(a)** upto 90% of capital investment as grant to Government Departments and Quasi Government Organizations, and **(b)** 25% of capital investment as subsidy to the entrepreneurs.

2.2.5 Documents required:
(a) Duly filled in application form
(b) Detailed Project Report
(c) Land document
(d) Design and layout
(e) Item-wise estimate of civil works certified by Government or Chartered Engineer
(f) List of plants and machinery along with quotations
(g) Action plan for management of the facility, revenue generation and maintenance

2.2.6 Conditions specific to the scheme:
(a) There has to be a separate market management committee for day to day administration and maintenance of the market in terms of cleaning, stall allotment, user fee collection, lighting, sanitation and other primary requirements of market.
(b) After completion of the project, the market management committee must adopt HACCP standards for fish handling and adopt food grade standards for water, fish packing and handling materials.
(c) Markets must be maintained as per the hygienic conditions issued from time to time by NFDB and State Governments Departments.
(d) Fisheries Corporations/Federations should be in good working condition.
(e) A committee having engineers and technical officers will examine the proposals. The grant has to be released in installments based on the progress of work. There shall be a mid-term appraisal of the project.

2.3 **New Wholesale Markets:**
In the coming years, it is anticipated that national fish production will increase. Similarly, the demand for fish will also increase considering the health value of eating fish. Hence, it is very essential to supply good quality fish to consumer in a hygienic environment. The private entrepreneurs have to play an important role in establishing wholesale fish markets with all the required amenities.

2.3.1 Beneficiaries:

All entrepreneurs including individuals, firms, companies, registered associations, and registered societies are eligible to avail the scheme. The designs and specifications approved by NFDB are to be adopted for this scheme.

2.3.2 Unit Cost:

Unit cost has to be decided and appraised on case to case basis.

2.3.3 Items eligible for assistance:

- Market building, auction hall
- Sufficient parking space
- Loading and unloading facilities
- Weighing machine
- Cold storage facilities
- Hygienic stalls with proper roofing, tiled flooring and interiors
- Packing and transportation
- Ice, water and accessories
- Electricity and lighting
- Communication and information facilities
- Waste management system
- Resting room and pay & use toilet facilities
- Proper drainage
- Sufficient water supply with an overhead tank
- Internal Roads
- Compound wall with gate for protection
- Canteen, bank and office
- Any other related facilities

2.3.4 Type of assistance

The NFDB will provide a soft loan of 40% at 5% interest rate to Entrepreneurs through banks.

2.3.5 Documents required:

(a) Duly filled in application form
(b) Detailed Project Report
(c) Land document
(d) Design and layout
(e) Item-wise estimate of civil works certified by Government or Chartered Engineer
(f) List of plants and machinery along with quotations
(g) Details about management of the facility, revenue generation, and regular maintenance
(h) Banker's consent letter
(i) A copy of project appraisal report from Bank

2.3.6 Conditions specific to the scheme:

(a) Experience in the relevant field.
(b) After establishment of the outlet, the unit must be operated for fish sale for a minimum period of 7 years.
(c) The loan and the interest have to be repaid by equal monthly installment during a period of 5 years. However, there will be a moratorium of one year for payment of loan after the commissioning of the market.
(d) Beneficiary has to provide the required surety for the loan availed.
(e) Beneficiary has to enter into tripartite agreement with the financing Bank and NFDB.

2.4 **Establishment of Modern Fish Retail Outlets by NFDB**

One of the objectives of NFDB is to improve the domestic fish marketing network. On the one hand, with the anticipated increase in fish production of the country, especially from inland water resources, there will be pressure to find suitable market for cultured fish and prawn. Without an organized and assured market, the fish culture practices may not expand and intensify. On the other hand, the awareness about the health benefits of fish consumption is increasing among consumers. Further, growing population of the country also requires higher quantity of fish supply to meet the nutritional requirement. As a component of fish market improvement programme, it is proposed to identify suitable locations in metropolitan cities and establish modern fish retail outlets.

2.4.1 Beneficiaries:

NFDB will establish the retail outlets, and will be leased/ rented to eligible entrepreneurs / self help groups / ex-servicemen to manage the unit under PPP mode. Emphasis will also be given to establish a network involving a supply chain, central storage and distribution system. The retail outlets can also serve as distribution point for fish sellers with bicycle or motor cycle with insulated boxes.

2.4.2 Unit cost:

To be decided and appraised on case to case basis and on the local conditions. Normally, it may cost upto Rs.10 lakhs excluding the building cost.

2.4.3 Items required:

All the components required for a modern fish retail outlets like chilled storage, deep freezer, chilled display cabinet, cleaning and cutting facility, water, waste disposal system, electronic weighing balance, facilities to sell ready-to-cook and ready-to-eat products, and prepared fish products etc.

2.5 Setting up of Fish Retail Outlets

2.5.1 Beneficiaries:

NFDB will assist for establishment of retail fish outlets by eligible entrepreneurs including individuals, firms, companies, registered associations and registered societies.

2.5.2 Unit cost:

Upto Rs.10.00 lakhs

2.5.3 Items required:

All the components required for a modern fish retail outlets like chilled storage, deep freezer, chilled display cabinet, cleaning and cutting facility, flooring, sidewall with tiles, water, waste disposal system, electronic weighing balance, facilities to sell ready to cook and ready-to-eat products, and prepared fish products etc are eligible for subsidy

2.5.4 Type of assistance:

(a) NFDB's assistance will be in the form of subsidy @ 25 % of approved project cost to entrepreneurs (30% subsidy for SCs /STs/ NE regions). (i) For those entrepreneurs who avail bank loan for setting up of fish retail outlets, subsidy will be released through bank on completion of the units and after inspection by the NFDB officials. (ii) In the case of those entrepreneurs who invest their capital on their own, subsidy will be released and credited into their bank accounts after completion of entire unit and after inspection of the units by the NFDB officials or NFDB authorized officals.

(b) NFDB will provide 90% financial assistance in the form of grant on capital cost to Government departments/Quasi government organizations.

2.5.5 Documents required:

(a) Duly filled in application form
(b) Project Report
(c) Land document

(d) Design and layout
(e) Item-wise estimate of civil works certified by Government or Chartered Engineer
(f) List of equipments along with quotations
(g) Consent letter from bank, and a copy of project appraisal report from bank
(h) Trade license from local civic body
(i) Other relevant documents, if any

2.5.6 Conditions specific to the scheme:

Stall should be maintained in hygienic condition as specified by NFDB. It must be operated at least for 7 years after establishment.

2.6 Retailing by Fisherwomen

In the fisheries sector, retail fish marketing has provided vast employment opportunities especially for fisherwomen. However, owing to lack of financial support and managerial skills, the retail fish marketing by fisherwomen is still in traditional fashion, without any modernization. Introduction of efficient transport system, insulated boxes, chilled storages, display cabinets, clean fish cutting area, packing and handling facilities will help to augment the income of fisherwomen, and to provide hygienic fish to consumers.

2.6.1 Beneficiaries:

Fisherwomen who are involved in fish marketing and fisherwomen, who are from fishermen community and members of local fishermen or fisherwomen co-operative societies, are eligible to avail the benefits of the scheme.

2.6.2 Unit Cost:

Upto Rs.10.00 lakhs

2.6.3 Items eligible for assistance:

The components for the financial assistance are as follows:

- Vending stalls with requisite equipments
- Insulated fish boxes
- Deep freezer for storage
- Display arrangement
- Transport facility
- Electronic weighing balance
- Equipment for fish dressing and packaging
- Utensils for value addition, stove and cooking gas
- Civil works inside the outlets
- Any other suitable items

2.6.4 Type of assistance:

The NFDB will provide a subsidy of 40% on the project cost. (i) For those entrepreneurs who avail bank loan for setting up of fish retail outlets, subsidy will be released through bank on completion of the units and after inspection by the NFDB officials. (ii) In the case of those entrepreneurs who invest their capital on their own, subsidy will be released and credited into their bank accounts after completion of entire unit and after inspection of the units by the NFDB officials or NFDB authorised officials.

2.6.5 Documents required:

(a) Duly filled in application form
(b) Project Report
(c) Land document (minimum area of 15 x 10 ft)
(d) Design and layout
(e) Item-wise estimate of civil works certified by Government or Chartered Engineer
(f) List of equipments along with quotations

(g) Certificate in trading of fish/membership of FCS/Association
(h) Fish trading license
(i) Other relevant documents, if any

2.6.6 Conditions specific to the Scheme

(1) The beneficiaries should undergo training on hygienic handling of fish and fish products.
(2) Required permission/license has to be obtained from competent authority.
(3) After establishment of the outlet, the unit must be operated for fish sale for a minimum period of 7 years.
(4) Stall should be maintained in hygienic, fly free condition and subject to inspection and audit by NFDB. There has to be a separate dressing place with periodic waste disposal system.

2.7 Cold Chain Development and Processing of value added products

The ongoing urbanization has changed the way of living and cooking style of people particularly in metropolitan cities. Consumers who want to eat fish are finding it difficult to get clean and hygienic fish in their apartments/house owing to lack of knowledge, cleaning space, waste disposal system and time. Hence, ready to eat and ready to cook products are need of the day.

2.7.1 Beneficiaries:

All entrepreneurs including individuals firms, companies, registered associations, and registered societies through commercial banks; Fisheries Federations and Corporations are also eligible for availing the benefits of the scheme.

2.7.2 Unit Cost:

Unit cost has to be decided and appraised on case to case basis.

2.7.3 Items eligible for assistance

- Cold (chilled) storages
- Pre-processing facilities
- Ice manufacturing unit
- Insulated and/or refrigerated vehicles
- Insulated boxes
- Deep freezer
- Cold (frozen) storage
- Freezing plants – contact freezer; tunnel freezer
- Water supply
- Waste management system
- Effluent treatment system
- Equipment and machinery which are required for value addition of fish

2.7.4 Type of Assistance:

The NFDB's assistance would be in the form of 40% soft loan at 5% interest rate to Entrepreneurs through banks; Fisheries Federations and Corporations can avail the loan assistance directly from NFDB.

2.7.5 Documents required:

(a) Duly filled in application form
(b) Detailed Project Report
(c) Land ownership document /lease document for a minimum period of 7 years
(d) Design and layout

(e) Item-wise estimate of civil works certified by Government or Chartered Engineer
(f) List of plant and machinery along with quotations
(g) Action plan for management of the facility, revenue generation and maintenance
(h) Memorandum of Agreement between the NFDB and Beneficiary

2.7.6 Conditions specific to the scheme

The project will be evaluated through an independent agency/person selected by NFDB.
(a) Environmental Monitoring Plan has to be submitted along with the project.
(b) Loan along with interest will be recovered in equal monthly installments within a period of 7 years after one year moratorium period for loan amount.

2.8 Cold Chain Development through Equity Participation by NFDB

The success of fish marketing will depend upon well organized fish supply chain. It is essential to establish network of fish collection, grading, cleaning, handling, transportation and storage system. Similarly, processed, frozen fish products have to be supplied to hinterland through a cold chain. Many processing industries are getting involved in development of fish products for domestic market. Hence, there is a need for the involvement of NFDB to hasten up this process.

2.8.1 Beneficiaries:

All entrepreneurs including individuals, firms, companies, registered associations, and registered societies are eligible to avail the scheme.

2.8.2 Unit Cost:

Unit cost has to be decided and appraised on case to case basis.

2.8.3 Items eligible for assistance

(a) Cold (chilled) storages
(b) Pre processing facilities
(c) Ice manufacturing unit
(d) Insulated and/or refrigerated vehicles
(e) Insulated boxes
(f) Deep freezer
(g) Cold (frozen) storage
(h) Freezing plants – contact freezer; blast/tunnel freezer
(i) Water supply
(j) Waste management system
(k) Effluent treatment system
(l) Any other component relevant to the scheme

2.8.4 Type of Assistance:

The NFDB assistance would be in the form of equity in the capital investment, decided on case to case basis.

2.8.5 Documents required:

(a) Duly filled in application form
(b) Detailed Project Report
(c) Land document
(d) Design and layout
(e) Item-wise estimate of civil works certified by Government or Chartered Engineer
(f) List of plants and machinery along with quotations
(g) Action plan for management of the facility, revenue generation and maintenance.
(h) Memorandum of Agreement between the NFDB and Beneficiary

2.8.6 Conditions specific to the scheme

The project will be evaluated through an independent agency/person selected by NFDB or NFDB's in-house team.

(a) The profit from the project has to be shared with NFDB in the ratio mutually agreed upon by both the parties
(b) Environmental Monitoring Plan has to be submitted along with the project.

2.9 Training on hygienic handling of fish

Fish decomposes very fast. The biochemical/enzymatic degradation and microbial decomposition of fish start from the moment fish is caught in the net. The good practice of fish handling at various stages, from harvesting to landing, marketing, upto cooking and consumption, it is very important to retain the quality of fish. Therefore, it is essential to organize training programmes for fishermen, fish workers, fish traders and consumers in hygienic handling of fish.

2.9.1 Beneficiaries:

Government departments/Research institutions/ Quasi Government organizations can avail 100% financial assistance from NFDB to organize such training programmmes

2.9.2 Unit cost:

Training programme is proposed for one day including practical demonstration of handling of fish. The eligible financial assistance is provided in annexure-I.

2.9.3 Type of assistance:

As detailed in annexure-I

2.9.4 Documents required:

(a) Duly filled in application form
(b) Detailed training programme
(c) Contents and tentative schedule of the programme
(d) Facilities available in the Institution for training
(e) Name and specialization of resource person(s)
(f) Tentative list of beneficiaries

2.10 Campaign for promotion of fish products and consumption

The campaign to increase fish consumption through newspapers, electronic media, hoardings and various other modes of publicity is required for promotion of fisheries sector.

2.10.1 Beneficiaries:

This activity will be mainly carried out by NFDB. However, Government departments, Research institutions, and quasi government organizations can also avail financial assistance to campaign for promotion of fish products and consumption subject to specific plan approval from NFDB.

2.10.2Unit cost

Each proposal will be examined and appraised on case to case basis

2.10.3 Items eligible for assistance: To be decided on case to case basis

2.10.4 Type of assistance:

The NFDB's assistance would be 100% grant

2.10.5 Documents required:

(a) A detailed proposal with cost estimates
(b) Anticipated benefits
(c) Other relevant documents

2.11 Organization of fish festivals / fish melas

In order to create awareness on fish production, consumption, and promotion of fish and fishery products and to create awareness about various technological developments, it is felt

essential to organize fish festivals or fish melas. Various developmental initiatives, schemes, programmes and technologies including ornamental fisheries can be exhibited during those festivals or melas

2.11.1 Beneficiaries:

National Fisheries Development Board / State Government departments/ Quasi Government organizations

2.11.2 **Unit cost**: Upto Rs 50.00 lakhs

2.11.3 **Items eligible for assistance**:

Exhibitions, construction of stalls, ground rent, electricity, generator, water supply, sanitation, aquarium stalls, fish stalls, inauguration and closing functions, Seminars and workshops, quiz, essay competition for school children and for participants, advertisement, any other related items.

2.11.4 **Type of assistance**:

NFDB will meet 100% of the cost when it organizes fish festival/melas. NFDB will provide a maximum of 50% of the expenditure on above items as grant to the State Governments / quasi Governments organizations.

2.11.5 **Documents required**:

A detailed proposal indicating the place, venue and date of fish festival / mela, organizers and co-sponsors, number and nature of stalls, activities arranged, organizations expected to participate, cost estimates, source of remaining 50% funding.

2.11.6 **Conditions specific to the scheme**:

A detailed statement of item-wise expenditure, list of participants in stalls, seminars etc have to be provided after completion of the event. The name and logo of NFDB as sponsor has to be prominently indicated in invitations, name boards, hoardings, and advertisements and at the exhibition venue.

2.12 Developing working models/ branding / bench marking/ certification

2.12.1 **Beneficiaries:**

Government departments, research institutions, and quasi government organizations can avail financial assistance under this scheme.

2.12.2 **Unit cost:**

It has to be decided and appraised on case to case basis.

2.12.3 Items eligible for assistance:

To be decided and appraised on case to case basis

2.12.4 Type of Assistance

NFDB's assistance will be upto 90% grant to Government Departments/ Quasi Government Organizations / Research Institutes for undertaking activities in developing working models / branding / bench marking / certification and for the activities related to increasing fish production, post harvest and marketing.

2.12.5 Documents required:

(a) A detailed project proposal
(b) Source of fund for remaining 10% of project cost
(c) Experience and Expertise of the organization in executing the proposed work
(d) Anticipated benefits
(e) Any other relevant documents

2.13 Submission of Proposals:

All proposals from eligible applicants shall be submitted to NFDB through the State Fisheries Departments for consideration or funding for the schemes in the prescribed forms annexure to the guidelines.

3.0 Release of Funds:

The grant shall be released to Government /quasi government departments in two equal installments for modernization / construction of wholesale markets/ retail outlets/ small scale retail units. The first installment shall be released on approval of the proposal by the NFDB and subsequent installment shall be released depending upon the progress of civil work and submission of utilization certificate of the previous installments. In the case of entrepreneurs, subsidy/ soft loan will be released to bank, after release of term loan from the bank. For entrepreneurs implementing the project with their own finance, subsidy will be released after completion of the project to their bank account.

4.0 Submission of Utilization Certificate:

The implementing Agencies shall submit utilization certificates in respect of the funds released to them by the Board. Such certificates shall be submitted in ***Form-V*** on half-yearly basis *i.e.* during July and January of each year. The utilization certificates can also be submitted in between if activities for which funds were released earlier have been completed and the next dose of subsidy is required to complete the remaining works by the farmer.

5.0 Monitoring and Evaluation:

The Monitoring and Evaluation (M&E) Cell of the NFDB will periodically monitor and evaluate the progress of activities implemented under the NFDB funding. A project monitoring committee comprising of experts in the subject matter, as well as finance and representatives of the Financing Organizations may be constituted to periodically to review the progress of the activities including the achievements related to physical, financial and production targets.

Table-1. Estimated Cost for Establishment of Wholesale fish market

Total area envisaged is 3 acres

Sl. No.	Particulars of investment	Approx. cost (Rs. Lakhs)	Remarks
1	Sufficient parking space	20.00	50 trucks to be parked at any point of time (one acre)
2	Loading and unloading facility	5.00	5 Loading Platforms
3	Cold Storage facility	15.00	10 tons capacity
4	Modern civil structures with sufficient moving space / Hygienic stalls with proper roofing and tiled flooring (50 nos.)	60.00	7500 sq. feet @ Rs.800 and additional 20000 sq feet @ Rs. 1.00 per sq. feet.
5	Electricity, lighting & Generator	15.00	
6	Packing and transportation	7.00	
7	Ice, water and accessories	30.00	Flake ice units
8	Communication facilities	5.00	
9	Information system	5.00	Digital display board of available products and prices
10	Waste management system	25.00	Effluent treatment plants etc.
11	Resting room and toilet facilities	10.00	
12	Proper drainage	10.00	Plumbing
13	Sufficient water supply with overhead tank	7.00	With taps at vendor platforms, loading and unloading points,
14	Compound wall with gate for protection	10.00	
15	Canteen	10.00	
16	Miscellaneous and unforeseen costs	16.00	
	TOTAL	**250.00***	

Note: Individual component cost may vary subject to the total unit cost of Rs. 250.00 lakhs

Table – 2. Estimated Cost for MAJOR RETAIL MARKET – Investment cost from Rs. 50 lakhs to Rs. 1.0 crore

Total area envisaged is 1.00 acre.

Sl. No.	Particulars of investment	Approx. cost (Rs. Lakhs)	Remarks
1	Cold Storage facility	15.00	2 nos.
2	Potable water and ice facility	20.00	Flake ice machines/ ice plant
3	Hygienic stalls with proper roofing and tiled flooring (20 nos.)	16.00	2000 sq. feet @ 800 Rs.
4	Portable display unit with facility for cutting, storage	10.00	Stainless Steel table @ 6 lakhs, Visi-cooler
5	Fish Dressing facility	2.00	Temperature controlled room with suitable cutting tables, vessels, equipments, etc.
6	Unloading facility	2.00	2 Loading Platforms, with cleaning facility
7	Packing and transportation	10.00	Tarred approach road and circling road for transport at Rs. 400 per sq. m.
8	Waste management system	8.00	Effluent treatment plants, etc.
9	Resting room and toilet facilities	2.00	
10	Proper drainage, Compound wall with gate for protection	15.00	
	TOTAL	**100.00***	

Note: Unit cost may range between 50 lakhs to 100 lakhs depending upon the number of stalls.

Table -3. Estimated Cost for minor retail market – Investment cost upto Rs. 50 lakhs
Total area envisaged is 0.50 acre

Sl. No.	Particulars of investment	Approx. cost (Rs. Lakhs)	Remarks
1	Cold Storage facility	7.50	1 no.
2	Potable water and ice facility	9.00	Flake ice machines
3	Hygienic stalls with proper roofing and tiled flooring (10 nos.)	8.00	1000 sq. feet @ 800 Rs.
4	Portable display unit with facility for cutting, storage	5.00	Stainless Steel table @ 6 lakhs Visi-cooler
5	Fish Dressing facility	1.00	Temperature controlled room with suitable cutting tables, vessels, equipments, etc.
6	Unloading facility	1.00	1 Loading Platforms, with cleaning facility
7	Packing and transportation	6.00	Tarred approach road and circling road for transport at Rs. 400 per sq. m.
8	Waste management system	4.00	Effluent treatment plants, etc.
9	Resting room and toilet facilities	1.00	
10	Proper drainage, Compound wall with gate for protection	7.50	
	TOTAL	**50.00***	

Note: Individual component cost may vary subject to the total unit cost of Rs.50.00 lakhs

Table – 4. Estimated cost for Fish Retail Outlets – Investment upto Rs.10.00 lakhs

Financial sanction is to be provided for the entire unit or the sub-unit Scheme: Setting up of units Board retain its right to approve the scheme either in full or part on the basis of its merit.

Sl. No.	Facility	Cost (Rs. Lakhs)	Remarks
1	Vending stalls with requisite equipment	1.00	
2	Kiosks and similar trading outlets	2.00	
3	Mobile selling units	5.00	Two / Three wheelers etc
4	Insulated fish boxes	0.50	2 nos.
5	Utensils for value addition	0.10	
6	Stove and cooking gas	0.15	
7	Refrigerators	0.25	
8	Any other suitable items	1.00	
	TOTAL	**10.00**	

Annexure-I

Summary of the Norms for Assistance towards Training and Demonstration on value addition, hygienic handling of fish and solar drying of fish

Sl. No	Item	Activities	Assistance available
1.0	**Training and Demonstration**	Assistance to fish traders for participation in training programme* (batch of 25 – 30).	i. Daily allowance of Rs 150/ day /trainee and reimbursement of actual to and fro travel, subject to a maximum of Rs 500 per trainee.
		Honorarium to Resource Persons	ii. Honorarium of Rs 500 per day, and actual to and fro travel, subject to a maximum of Rs 1000.
		Assistance to implementing agency for training and demonstration.	ii. Rs 75/ trainee/ day to the Implementing Agency towards identification, mobilization of beneficiaries, supply of training material, etc.
			iv. Development of demonstration unit @ Rs 1.0 lakh (one time grant) to the Implementing Agency to conduct regular training/ demonstration activities.
			v. In absence of own facility, grant of Rs 50 000/- shall be available to the State Government to lease private unit and its development for conduct of training/ demonstration, etc.
			vi. In the absence of (iv) and (v) above, Rs 5 000/- per training program for hiring suitable facility from private farmer.
			ii. (vii) ICAR Fisheries Institutes/ Colleges of Fisheries under State Agriculture Universities/ Other Agencies using their own facilities will get a lump sum amount of Rs 1,00,000/- one time grant for this purpose.

- Duration of the Different Training Programmes:
  Training on value addition – maximum 5 days
  Training on Dry fish production & Marketing – 2 – 3 days
  Hygienic handling of fish – 1 day

FORM – I

Proposal for Modernisation / Construction of wholesale markets

Sl. No	Particulars	Information furnished by the applicant
(1)	(2)	(3)
1	Name and address of the applicant (IN BLOCK LETTERS):	
2	Address for communication (telephone/ mobile number):	
3	Details of registration in case of companies, firms, associations and others	
4	Details of Location of the market to be modernised / proposed to be taken up:	
	a) State:	
	b) District:	
	c) Taluk/ Mandal:	
	d) Revenue Village:	
	e) Survey Number(s):	
	f) Ownership (whether freehold or on lease):	
	g) If on lease, duration of lease:	
	h) Total land area (in ha):	
	i) Area of present civil structure (Plinth area)	
	j) Details of the proposed renovation/ repair works /modernization (Design details/engineering works to be certified by the Department of Fisheries/ local bodies):	
	k) Justification for modernization with expected outcome l) Justification for establishment of a new wholesale fish market or its viability in case of new markets	
5	Details regarding assistance received earlier for the construction/ modernization of the market. Renovation, if any carried out earlier may be mentioned along with the year and amount incurred on such renovation:	
6	Whether the applicant is in default of payment to any Financial Institution/ State Government for loan/ assistance availed earlier. If yes, please provide the details and the reasons for default:	
7	Estimates regarding infrastructure: (Rs. Lakhs)	
	a) Modern civil structure with sufficient moving space	
	b) Parking space	
	c) Hygienic stalls with modern roofing and flooring	
	d) Cold storage facilities	
	e) Loading and Unloading facilities	
	f) Cost of HACCP norms implementation	
	g) Ice, Potable water facility	
	h) Transportation cost	
	i) Insulated vans/ trucks/ other vehicles	

	(No. and Cost)	
	j) Drainage and waste management facility :	
	k) Communication and networking system	
	l) Amenities for the workers and Public	
	m) Additional land (ha) adjacent to the existing market needed for modernization and the approx. cost for acquiring land	
8	Experience and technical competence of the applicant	
9	Details regarding economics of operation (Enclose a separate sheet)	
10	Whether any financial tie up has been made for availing Bank loan, if so please provide the details:	
11	Expected date of completion of the work and tentative schedule of activities:	
12	Expected rate of return of investment	
13	Expected employment generation (a) Regular, (b) Ad hoc	

Date:
Place:

Signature and seal of the authorized Representative of the Implementing Agency

Declaration by the Applicant

I/ We…….....……..son/daughter/wife of…….....……Residing at..... …… hereby declare that the information furnished above is true to the best of my/ our knowledge and belief. I/ we have not availed any assistance (subsidy/ grant) for this project or any part of this project from any Government department or agency. I am/ we are fully aware that if it is found that the information furnished by me/ we/ us is false or there is any kind of deviation/ violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/ us.

Date:

Place:

Signature of the applicant (s)

Countersigned by the implementing Agency

Date:
Place:

Signature and seal of the authorized Representative of the Implementing Agency

FORM – II

Proposal for Retail market/outlets (Major/ Minor)

Sl. No	Particulars	Information furnished by the applicant
(1)	(2)	(3)
1	Name and address of the applicant/ firm/ association/ Self Help Group (IN BLOCK LETTERS):	
2	Address for communication (telephone/ mobile number):	
3	Details of registration in case of others	
4	Details of Location of the proposed retail market for which cold chain set up is to be taken up:	
	a) State:	
	b) District:	
	c) Taluk/ Mandal:	
	d) Revenue Village:	
	e) Survey Number(s):	
	f) Ownership (whether freehold or on lease):	
	g) If on lease, duration of lease:	
	h) Total land area (in ha):	
	i) Area of present civil structure (Plinth area)	
	j) Details of the proposed capacity of the cold storage required (Design details to be certified by the Department of Fisheries/ Local bodies):	
	k) Justification for cold storage facility with expected outcome	
	l) Quantum of fish handled per day presently (tonnes)	
	m) Destination of commodities (with distance in Km)	
5	Details regarding assistance received earlier for the market for any type of civil work. Renovation, if any carried out earlier may be mentioned along with the year and amount incurred on such renovation:	
6	Whether the applicant is in default of payment to any Financial Institution/ State Government for loan/ assistance availed earlier. If yes, please provide the details and the reasons for default:	
7	Estimates regarding infrastructure: (Rs. Lakhs)	
	a) Civil structure with sufficient moving space	
	b) Parking space	
	c) Hygienic stalls with modern roofing and flooring	
	d) Cold storage facilities along with capacity	
	e) Loading and Unloading facilities	
	f) Cost of HACCP norms implementation	
	g) Ice, Potable water facility	
	h) Transportation cost	
	i) Drainage and waste management facility :	

	j) Communication and networking system	
	k) Amenities for the workers and Public	
8	Experience and technical competence of the applicant	
9	Details regarding economics of operation:	
10	Whether any financial tie up has been made for availing Bank loan, if so please provide the details:	
11	Expected date of completion of the work and tentative schedule of activities:	
12	Expected rate of return of investment (enclose a separate sheet)	
13	Expected employment generation out of the scheme on a) Regular b) Temporary	

Date:
Place:

Signature and seal of the authorized Representative of the Implementing Agency

Declaration by the Applicant

I/ We…….....……..son/daughter/wife of…….....……..Residing at…… hereby declare that the information furnished above is true to the best of my/ our knowledge and belief. I/ We have not availed any assistance (subsidy/ grant) for this project or any part of this project from any Government department or agency. I am/ we are fully aware that if it is found that the information furnished by me/ web is false or there is any kind of deviation/ violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/ us.

Date:
Place:

Signature of the applicant (s)

Countersigned by the Implementing Agency

Date:
Place:

Signature and seal of the authorized Representative of the Implementing Agency

FORM – III

Proposal for Cold Chain Development and Processing of Value Added Products

Sl. No	Particulars	Information furnished by the applicant
(1)	(2)	(3)
1	Name and address of the applicant (IN BLOCK LETTERS):	
2	Address for communication (telephone/ mobile number):	
3	Details of registration in case of companies, firms, associations and others	
4	Details of Location of the project proposed to be taken up:	
	a) State:	
	b) District:	
	c) Taluk/ Mandal:	
	d) Revenue Village:	
	e) Survey Number(s):	
	f) Ownership (whether freehold or on lease):	
	g) If on lease, duration of lease:	
	h) Total land area (in ha):	
	i) Area of present civil structure (Plinth area), if any	
	j) Details of Design, engineering works to be certified by Government or Chartered Engineer.	
5	Details regarding assistance received earlier for the Development of Cold Chain facilities.	
6	Whether the applicant is in default of payment to any Financial Institution/ State Government for loan/ assistance availed earlier. If yes, please provide the details and the reasons for default:	
7	Estimates regarding infrastructure: (Rs. Lakhs)	
	a) Modern civil structure with sufficient moving space	
	b) Parking space	
	c) Pre processing facilities	
	d) Cold storage facilities	
	e) Loading and Unloading facilities	
	f) Cost of HACCP norms implementation	
	g) Ice, Potable water facility	
	h) Freezing Plants	
	i) Insulated vans/ trucks/ other vehicles (No. and Cost)	
	j) Drainage and waste management facility :	
	k) Communication and networking system	
	l) Amenities for the workers and Public	

	m) Additional land (ha) adjacent to the existing market needed for modernization and the approx. cost for acquiring land	
8	Experience and technical competence of the applicant	
9	Details regarding economics of operation:	
10	Whether any financial tie up has been made for availing Bank loan, if so please provide the details:	
11	Expected date of completion of the work and tentative schedule of activities:	
12	Expected rate of return of investment (enclose separate sheet)	
13	Expected employment generation out of the scheme a)Regular b) Temporary	

Date: Signature and seal of the authorized
Place: Representative of the Implementing Agency

Declaration by the Applicant

I/ We…….....……..son/daughter/wife of…….....……..Residing at…… hereby declare that the information furnished above is true to the best of my/ our knowledge and belief. I/ We have not availed any assistance (subsidy/ grant) for this project or any part of this project from any Government department or agency. I am/ we are fully aware that if it is found that the information furnished by me/ we is false or there is any kind of deviation/ violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/ us.

Date:

Place: Signature of the applicant (s)

Countersigned by the Implementing Agency

Date: Signature and seal of the authorized
Place: Representative of the Implementing Agency

FORM –IV

Proposal for Training and Demonstration on hygienic handling of fish

Sl. No	Particulars	Information furnished by the Implementing Agency		
(1)	(2)	(3)		
1	Name and address of the Implementing Agency:			
2	Location of the Training Facility:	**District**	**Block**	**Village**
3	Facilities available or proposed for imparting training:			
4	a) Details of the Training Programme:			
	b) Number of persons to be trained on hygienic handling of fish (to be given separately):			
5	*Whether the Implementing Agency proposes to conduct training at its own training centre or in field? Number of training programmes to be conducted in a year may be indicated? What is the group size?*			
6	Financial Implications:			
	Item	**Number**		**Amount**
	a) Training			
	(i) DA of Rs. 150/day/trainee and reimbursement of actual to and fro travel, subject to a maximum of Rs. 500/trainee) (ii) Honorarium of Rs. 500/day and actual to and fro travel expenses, subject to a maximum of Rs. 1000/- (iii) Rs. 75/trainee/day to the Implementing Agency towards identification, mobilization of beneficiaries, supply of training material, etc.			
	b) Demonstration Unit			
7	Technical capabilities of resource persons to be engaged in training:			
8	Any other details in support of the proposal			

Date:
Place:

Signature and seal of the authorized representative of the Implementing Agency

FORM-V

National Fisheries Development Board

Form for Submission of Utilization Certificate

Sl. No	Letter No and date	Amount

Certified that out of Rs _____ sanctioned during the year_____ in favor of _____ under the National Fisheries Development Board's Letter No given in the margin and Rs _____ on account of unspent balance of the previous sanction, a sum of Rs _____ has been utilized for the purpose of_____ for which it was sanctioned and that the balance of Rs _____ remains unutilized. The same will be adjusted towards the next installment payable during the period_____.

Physical progress:

Certified that I have satisfied myself that the conditions on which the funds were sanctioned by the National Fisheries Development Board have been duly fulfilled/ are being fulfilled and that I have exercised the following checks to see that the money was actually utilized for the purpose for which it was sanctioned.

Date:
Place:

Signature and seal of the authorized representative of the Implementing Agency

National Fisheries Development Board

Guidelines and format for grants for Technology Upgradation

1.0 Scope of Technology upgradation scheme

During technology generation process, trials are carried out in laboratories and farms managed by research institutions. The results obtained from laboratories, yard experiments and limited on-station trials when disseminated as technology to farmers under different agro-climatic conditions, often have 'yield gaps'. It is known that either indigenous or alien technologies are available which are fully or partially being adopted by the farmers. Hence, these technologies have to be upgraded for eventual adoption by testing them in farmer's farm conditions for refinement to suit the demands of the farming system and the farmer. The scope of the scheme for technology upgradation is to address the yield gap between on-station trials and farmers ponds; upgrade older technologies being currently adopted by farmers or fishers; and refine and adopt technologies which have not been widely disseminated. These projects would rely mainly on the effective functioning of feedback and feed forward systems taking into consideration the current expectations of users of technology and adaptive learning of technology generators and disseminators.

2.0 Criteria for selecting technology up gradation projects

The following criteria would be followed to select the projects for technology up- gradation:

- The proposed technology for up-gradation addresses a current problem in the field and would benefit a large number of farmers
- The potential for up-scaling and repeatability of the upgraded technology as given in the project proposal is possible
- The project clearly outlines the techno-economic viability and the expected enhanced profit and environmental impact if any
- The project focuses on-field demonstration and evaluation with minimum of testing in the laboratories and farms of the institutions
- Attention has been paid to increase income generation beyond the existing levels
- Linkages with ongoing research, development and dissemination programmes is clear

3.0 Criteria for selecting institution(s) applying for proposals

- Contribution in terms of technology development or dissemination in the field of fisheries and aquaculture
- Expertise available in the proposed institution(s) for implementing the project
- The lead institution or one of the partner institution must have an established presence and the capacity to deploy its own staff in the geographic area where the project is to be taken up.
- The institutional collaboration if it is multi-institutional project is clear

4.0 Submission of Proposals

Proposals shall be submitted to the NFDB for approval and release of funds in *FORM-I.*

5.0 Submission of Utilisation Certificate

The Implementing Agencies shall submit utilization certificates in respect of the funds released to them by the Board. Such certificates shall be submitted in *Form II* on half-yearly basis *i.e.* during July and January of each year. The utilisation certificates can also be submitted in between if activities for which funds were released earlier have been completed and the next dose of equity share is required to complete the remaining works by the farmer.

5.1 Monitoring and Evaluation

A dedicated monitoring and evaluation (M&E) cell shall be set up at NFDB head quarters to periodically monitor and evaluate the progress of activities implemented under NFDB funding. A project monitoring committee comprising of experts in the subject matter as well as finance and representative of financing organizations may be constituted to periodically review the progress of the activities including the achievements related to physical, financial and production targets.

FORM-I

Proposal under the Technology upgradation scheme

1. Project title
2. Project summary (500 words)
3. Specific objectives- Objectives to be specific, measurable, achievable, realistic and time bound
4. Is the project single institutional or multiple-institutional. If multi institutional the name of the lead institution.
5. Participating Institution(s) profile (to give separately for each institution)
    - 5.1 Address of each
    - 5.2 Affiliation of the institution (s) (Govt./ Non Govt./Others to Specify)
    - 5.3 Nature of the business (To indicate the total percentage of the institute effort in the following activities - Research/ Education/ Training/ Extension/others to specify)
    - 5.4 Major source of funding of the institution
    - 5.5 Connectivity of the participating institutions and investigators (in case of multi- institutional projects only)
6. Project duration
7. Manpower
8. Principal Investigator of lead institution: Name; Designation; Address; Area of work
9. Co-PIs: Name; Designation; Address; Area of work
10. Contractual staff: No of Senior Research Fellow or Research Associate and Filed assistant to be recruited for project duration
11. Target area and population (250 words)
    - 11.1 Project area- Suitable geographic area to be described for the purpose of adaptive or multi location trials (number of villages selected, with population)
    - 11.2 Number of farmers/ fishermen the project would adopt for the demonstration
12. **Technical details (500 words)**
    - 12.1 Generic name of technology to be upgraded

12.2 Farming system / fisheries in which the technology is to be applied e.g freshwater pond/ freshwater ornamental/ mariculture/ freshwater fisheries

12.3 Description of the technology being upgraded (details of fisheries technology/ farming system, inputs and farming practices, no. of on-station and farm trials and the success stories) (200 words).

12.4 Rationale for up-gradation (need for intervention, indicating yield gaps/ need for refinement of certain components of technology/ need for field evaluation etc).(200 words).

12.5 Review of current status of research and development pertaining to the technology being up-graded (300 words)

12.6 Methodology (tools to be used and mechanism to involve target population, design of demonstration ,statistical and economic analysis)(200 words)

13. Existing facilities/ equipment available in the in institution that would be utilized for the project

14. Work plan

14.1 Organization of work components and time schedule of activities

Work components		1st year				2nd year				3rd year			
S.No	Activities	1.	2.	3.	4.	1.	2.	3.	4.	1.	2.	3.	4.

14.2 Important milestonnes

S.No	Milestone	Expected Completion (Month/Year)

15. Specify the outputs with achievable targets for each output

16. Projected economics of the upgraded technology at farmers ponds/ fishery technology (fixed costs, Operational costs, Gross returns, Net returns over operational costs, Benefit / Cost ratio, Pay back period)

17. Expected social and economical benefits due to adoption of the upgraded technology by the farmers participating in the project (300 words)

18. Include environmental impact (if any) of the upgraded technology in a scale of 1-5 with 1 having lowest adverse impact and 5 the maximum. Give reasons for your projection (100 words)

19. Linkage with other ongoing research projects, other development dissemination programmes (100 words)

20. Scalability and repeatability of upgraded technologies (100 words)

21. Plan for dissemination of the results within the project duration to extension agents(100 words)

22. Monitoring and evaluation parameters/indicators that will be reported yearly

23. Budget details

S.No	Item	Budget			
		1st Year	2nd Year	3rd Year	Total
A.	**Recurring**				
1.	Manpower 1.1 Senior Research Fellow or junior Research fellow				
	1.2 Filed assistant				
2.	Consumables				
3.	Travel				
4.	Contingencies 4.1 Operating the project				
	4.2 Input costs to farmers/fishers				
	4.3 Capacity building of farmers/ fishers				
5.	Institutional Overheads				
	Sub total				
B.	**Non-recurring**				
1.	Permanent equipment				
2.	Works				
	Sub total				
Grand Total (A+B)					

In case of multi-institutional project, the budget estimate to be given separately for each institution.

Sl.no	Institution	Recurring	Non-recurring	Total
	Grand total			

24. Justification to be given for each head and sub-head separately and worksheets to be attached for 4.2 and 4.3 mentioned in the above table)

Signature of the Project Leader and date

25. Declaration/Certification

It is certified that:

a) the same project has not been submitted to any other agency/agencies for financial support/or already not completed with the financial support from other funding agencies.
b) the Institute assumes to undertake the financial and other management responsibilities of the project.
c) The institute welcomes participation of Dr./Shri/Smt./Km…….. as the Principal Investigator and Dr./Shri/Smt./Km……... as the Co-Investigator for the project and that in the unforeseen event of discontinuance by the Principal

Investigator, the Co-Investigator will assume responsibility of the fruitful completion of the project (with due intimation to NFDB)

Signature of the Head of the Institution with seal and date

PROFORMA FOR BIO-DATA OF INVESTIGATORS

1. Name _____
Date of Birth _____ Sex _____
Designation _____
Department _____
Institute/University _____
Address
_____Pin
_____Telephone _____E-mail

2. Education (Post-graduation onwards) & Professional Career

Sl No	University/Institution	Degree Awarded	Year Award /Prize/ Certificate

3. Research/ extension experience in various institutions ***(if necessary, attach separate sheets)***.

Sl No	Institution	Period	Brief details of work carried out

4. Completed and ongoing projects(s) carried out (State only major projects of last 3 years)

Sl. No.	Title of Project and objectives	Funding Agency	Duration From To	No. of personal working under this project	Total Approved Cost (Rs.)

5. Publications ***(number only)***

Books	Research Papers/ Reports	General Articles	Patents	Others (Please specify)

6. **List maximum of five recent publications relevant to the proposed area of work.**

Place :
Date : Signature of the Investigator

Note : Principal Investigator and Co-Investigators from all participating institutions should provide their bio data in this format.

Guidelines to prepare project proposals

1. **Budget**
   - Senior research fellows or research associates with minimum of Masters' degree qualifications with existing monthly emoluments as on date
   - Field assistants with minimum qualification of matriculation and existing monthly emoluments as on date
   - Actual cost of non-recurring equipments / construction of pilot unit should depend on the critical requirement and is left for the discretion of the board to accept or reject
   - Calculation of inputs for farmers/fishermen. A maximum of 75% of the inputs that could be given in kind (like quality seed, feed, nets, etc.) for a farmer/fishermen for two consecutive crop/fishing season can be given. Detailed cost estimate to be attached.
   - The training to be given under the project – the calculation to be based on the guidelines developed by NFDB
2. **Description of the implementing agency(ies) in case they are NGOs**
   - Back ground of the agency, work being done. List of ongoing and completed projects, during the last 5 years with the granting agency, duration and quantum of funding.
   - Expertise available the proposed institution for implementing the project.
   - Please also enclose the paper regarding the Registration Certificate, MoA including By-laws and mandate, Audit statement of accounts for the last three years, Annual report including activity profile for last three years in case of NGOs.
   - Clear cut commitment/letter of consent of other participating institution(s) to be enclosed.
3. **10 copies of the proposal may be submitted to**:- The Chief Executive, National Fisheries Development Board, Blocks 401-402, Maitri Vihar, HUDA Commercial Complex, Ameerpet, Hyderabad – 500038, Andhra Pradesh.

Form-II

National Fisheries Development Board

Form for Submission of Utilization Certificate

Sl. No	Letter No and date	Amount

Certified that out of Rs. _____ sanctioned during the year_____ in favour of _____ under the National Fisheries Development Board's Letter No given in the margin and Rs. _____ on account of unspent balance of the previous sanction, a sum of Rs. _____ has been utilized for the purpose of_____ for which it was sanctioned and that the balance of Rs. _____ remains unutilized. The same will be adjusted towards the next installment payable during the period_____.

Physical progress:

Certified that I have satisfied myself that the conditions on which the funds were sanctioned by the National Fisheries Development Board have been duly fulfilled/ are being fulfilled and that I have exercised the following checks to see that the money was actually utilized for the purpose for which it was sanctioned.

Date:

Place:

Signature and seal of the
authorized representative of the
Implementing Agency

National Fisheries Development Board

Guidelines for Human Resource Development Programmes in Fisheries Sector

1.0 INTRODUCTION

Historically, extension has been the weakest link in the development and modernization of the fisheries sector in India. The availability of technical personnel in the Department of Fisheries (DoF), the line department in the States/ Union Territories (UTs), to support the vital extension functions at the grassroots level has been negligible, resulting in poor Transfer of Technology (TOT), lack of coordination with other line departments and poor research linkages.

Due to lack of focus on extension, the resultant training need assessment and the human resource development (HRD) at all levels in the DoF, as also at the field and farmers level, has remained neglected. It is well recognized that technical, financial and management skills are vital for the development of any food production sector and unfortunately this aspect has received the least attention in the fisheries sector. Further, management skills are also essential to forge linkages, develop skills and capacities and provide technical backstopping at the cutting edge level. Improving the efficiency of the existing field-level institutions is also a priority, if these institutions are to become the vehicles for promoting inland and coastal aquaculture development in the country.

Therefore, there is an urgent need to strengthen HRD in the fisheries sector and also consider promoting alternatives mechanisms of delivery through innovative methodologies, which meet the growing needs of the sector. With the conventional top down approaches showing limited success in extension services, there is a need to promote bottom up participatory approach with effective coordination and convergence at the appropriate levels. Such efforts should primarily aim at empowering the marginalized and poorest of the poor in the fisheries sector, besides disseminating technologies and information on diversified opportunities, improved post-harvest practices, sustainable utilization of the resources, marketing of the produce, use of science in day to day activities, etc for the benefit of the existing and new cadres of fishers and fish farmers in the country.

The National Fisheries Development Board (NFDB) has laid adequate focus on the HRD and extension aspects. The objectives of the Board *inter alia* emphasize on bringing major activities relating to fisheries and aquaculture for focused attention and professional management, achieving sustainable management and conservation of natural resources including the fish stocks, applying modern tools of research and development including biotechnology for optimizing production and productivity from fisheries and training and empowering women in the fisheries sector. These objectives of the Board clearly highlight the need for improving the existing HRD levels in the fisheries sector. Therefore, to achieve the above-stated objectives of the NFDB, the following guidelines have been prepared, which are intended to serve as benchmark for the Board to initiate its activities in the field of HRD and extension services in the country.

2.0 HRD STRATEGY

With a view to mainstreaming the HRD interventions within the existing fisheries institutional set up in the country, there is need to adopt a systematic approach in terms of target groups and their training requirements, identification of training institutions and development of training modules and contents. The identified training programs have to cater not only to the needs of the fisheries personnel at the entry/ induction level but also to those arising from time to time at their different career levels. Given the emerging scenario in the context of market driven development initiatives, the fisheries personnel have to be kept abreast of not only the latest technologies but also the management and marketing aspects as well. This calls for the extensive utilization of the available training/ HRD resources at the state and national levels, with appropriate strengthening, etc.

As the target group for the HRD in the fisheries sector is considerably large in number, there would be a need to augment the capacity of the States/ UTs to realize the training needs. Thus, creating a cadre of trainers in different institutions assumes special significance. The modules for training have to be worked out keeping in view the specific needs of different target groups with focus on the job and performance requirements. Secondly, the modules will have to provide for practical orientation to the contents so that the trainees will utilize the learning in the 'back home' situation. In order to ensure these, the need for provision of necessary resources can hardly be over emphasized. In other words, the financial allocations for HRD will have to provide to meet the logistics of the trainees so that the training capacity and opportunities are optimally utilized.

3.0 Target groups for HRD

The target groups for training will include the functionaries of the DoF and of all the quasi-government organizations such as fisheries corporations, FFDAs, BFDAs, etc. Besides, the functionaries at the cutting edge level, the senior officials of the DoF at the managerial level will also need exposure to the emerging trends in policy and program management and to the success stories in different parts of the country. It is, therefore, essential to empower them through well-designed HRD programmes, which *inter alia* could include scientific developments in farming practices, emerging environmental issues in fisheries and aquaculture, business approaches in processing, marketing, etc. The HRD programmes may also focus on empowerment of these agencies using the public-private partnership (PPP) mode. It can be visualized that DOF can provide vital organic linkages with the NFDB as its potential field arms. The FFDAs/ BFDAs can also be valuable links with other field-level agencies/ stakeholders such as the Krishi Vigyan Kendras (KVKs) and the ATMAs. As these agencies will be operating at the cutting – edge, their capacity building will be a continuous activity.

4.0 4.0 Modules and contents of training

It is generally recognized that successful HRD and or extension initiatives incorporate combination of skills for various categories of personnel serving the technical, administrative, financial and support services of the organization. Such initiative have inbuilt mechanisms for follow up with critical reviews, etc to see the efficacy of the training and the delivery of skills and knowledge at the different levels. The reviews also provide the opportunity for mid-term corrections, if any. Therefore, in view of the above, it is essential to build up capsules of training curriculum to meet the HRD and extension requirements of the fisheries sector.

4.1 Induction Training

The induction training could be maximum period of ten days. Each training course would be undertaken at the identified institution having specialization in the areas concerned. The Board will bear the entire training cost. The financial implications would cover boarding, lodging charges for the period of his/ her training at the specified institution and to and fro trawling charges for the trainees. The trainees would include officers at the induction level such as Fisheries Officers, Assistant Directors (wherever recruited directly) and middle-level functionaries of Fisheries Corporations and any other Public Sector Unit concerned with fisheries development in the States/ UTs.

4.2 Training of Master Trainers

It is essential to build a cadre of master trainers for carrying forward the task of HRD in fisheries sector. Such master trainers would be picked up from the DoF of the States/ UTs/ Fisheries Corporations/ State Agriculture Universities/ KVKs/ NGOs and the Indian Council of Agricultural Research (ICAR) Fisheries Institutions. The master trainers will be selected on the basis of competitive selection/ handpicking through regional assessment adopting the following criteria:

- Relevant technical background,
- Training aptitude,
- Adequate communication skills,
- Team work and leadership qualities,
- Age group of 35 - 55 years,

The above process could be handled by expert institutions such as MANAGE, ASCI Hyderabad, ICAR fisheries Research institutes, KVKS ,COFS and state level institutes.

5.0 Proposed HRD institutions and their strengths (including selection criteria, etc.)

Keeping in view the broad spectrum of the training needs, a range of institutions within and outside the fisheries discipline will be required to meet the growing needs of the sector. Besides institutions dealing exclusively with fisheries and aquaculture related subjects, there are a large number agencies/ institutions dealing with agriculture management and extension, agriculture marketing, agriculture finance, etc which need to be utilized for providing training to various levels of functionaries in the fisheries sector

- Identification of training institutions regionally relevant.
- Identification and capacity building of master trainers.
- Development of selected management modules.
- Organization of regional/ national consultation workshops on HRD.
- Monitoring and evaluation of HRD activities.
- Organization of orientation workshops for senior level functionaries.
- Networking with technical and management training institutions at national and international levels.

The ICAR has eight institutions dealing exclusively with fisheries and aquaculture. Together, these institutions cover the entire range of subject-matter specializations and will be handy for up gradation of technical skills/ capacities of the personnel of the DoF and related agencies. Over the years, these institutions have developed number of location specific technologies and there is need to extend these to the field through updating the competencies of the functionaries from time to time.

5.1 Proposed institutions for HRD

The institutions where the training will take place can be broadly placed under the following groups:

- Subject - Matter Institutions
- Management Institutions
- Financial Institutions
- Multipurpose Institutions
- Extension and Transfer of Technology Institutions.

5.2 Criteria for selection of HRD institutions/ agencies

The following criteria can be used in selection of an appropriate Institution/ agency for providing HRD support to the sector:

- Faculty strength & availability of relevant expertise.
- Capability of the institute to outsource the expertise.
- Track record of the institute in conducting similar training programmes.
- Capacity for handholding.
- Networking with other institutions.
- Capacity to undertake action research/ operational policy interventions.
- Level of recognition by the concerned State/ UT.
- Status of physical facilities available like training halls, syndicate rooms, library, Internet, hostel facilities, etc.
- Availability of teaching aids like computers, LCD projector, etc.
- Accessibility and connectivity of the training institute.
- Training cost proposed by the institute, which might include institutional charges, tuition fees, course material, honorarium to resource persons, transport for field visits, boarding and lodging charges and other logistics.
-

6.0 Assigning the HRD responsibilities

The NFDB will canvas among the identified institutions in the country by circulating the (i) Selection criteria, (ii) Training modules and (iii) Proposed clientele to be trained and seek proposals inviting technical competence in handling the programmes along with costs, etc. A committee headed by the Chief Executive, NFDB would screen the proposals and assign the responsibility of conducting the training programmes identified at different levels.

7.0 Other useful considerations in designing/ refining HRD strategies in Fisheries Sector

Besides the above, the following points would also be useful in designing/ refining the HRD strategy for the fisheries sector by the NFDB:

- Development of trainers' bank
- Development of training material (different modes such as print form, e-learning, (C- DAC) model.
- Networking with international HRD organizations.
- Action research in HRD for continuous feedback.
- Strategic Research & Extension Plan (SREP) reflected priorities should be made mandatory for HRD interventions at district-level and below and KVK interventions should be sought accordingly.

- Continuous up dating of master trainers by providing opportunities for specialization.
- Recognition of master trainers through certification by appropriate State/ Government of India agencies. ICAR Fisheries Research Institutions/ SAMETI/ MANAGE may be considered for certification.
- Training manpower of the DoF should have inbuilt linkages with other development functionaries to understand the farming systems perspective.
- Potential-linked HRD support (example: tapping up of aquaculture potential in the Ganga – Brahmaputra basin).
- HRD in critical areas like seed, feed, health, post-harvest, etc should adequately focus at the needs of the local level.
- Mainstreaming gender issues while formulating HRD Strategy.
- HRD intervention sharing workshop may be organized at regional basis by NFDB in collaboration with other agencies

8.0 The following norms are formulated to organize the training courses

1) The period of training course is limited to maximum of 10 days
2) Number of trainees /batch is limited up to 20 participants
3) TA will be provided to the participants by NFDB separately on request from the organizing institutes after submission of travel documents
4) The travel cost is limited to II AC Train fare (as per the eligibility of the participant)
5) No DA is eligible to the participants since boarding and lodging facilities are being provided by the concerned training institutes with the funding support of NFDB
6) Realistic funding support will be provided to the training organizing institute towards course fee, honorarium & TA to the resource personnel, boarding& lodging charges, publications, local visits and miscellaneous expenditure

9.0 Expected outputs of the HRD Programme

The overall benefits of sound HRD programmes for any developmental sector are enormous and contribute to the sustainable utilization of the resources, improved livelihoods and larger benefits to the society as a whole. Some of the most visible outputs that can be conceived from the HRD programmes in fisheries sector are as follows

- Knowledge and skill up-gradation at various levels.
- Improved delivery of extension services.
- Promotion of fisher groups and their empowerment.
- Increased market intelligence.
- Increased appreciation of inter-departmental linkages and coordination.
- Better management and information system.
- Better impact assessment for mid-course corrections through monitoring and evaluation.
- Revitalizing the training and extension components of fisheries sector.
- Increased income and livelihood options of various fisher groups.

10.0 Monitoring and Evaluation

A dedicated Monitoring and Evaluation (M&E) committee shall be set up by NFDB to periodically monitor and evaluate the progress of training programmes under NFDB funding support. A project Monitoring and Evaluation committee comprising of HRD expert, subject matter expert and a representative from NFDB finance wing may be constituted to periodically review the progress related to physical and financial achievements

The training organizing institutes at the end of the each training course should prepare a format and circulate to the trainees to get the subject wise and resource person wise evaluation on the training course. The organizing institutes should also collect the data yearly (for 3 years) from each participant how far they are utilizing the knowledge of training and practical implementation in the field. This information should be sent to NFDB for further evaluation on overall training programmes.

National Fisheries Development Board
Guidelines for Deep Sea Fishing and Tuna Processing

1. Introduction

Tunas being highly valued food fishes are targeted by coastal as well as distant waters fishing nations throughout the Indian Ocean region. Tuna fishing and fisheries have become a focal point while addressing issues of development, utilization and management of fisheries in the Indian Ocean in the light of EEZ regulations and other international conventions. In India ,Tuna fishing is mainly an artisanal activity except for a brief phase of chartered and joint venture tuna fishing by long liners during 1990s. The estimated potential of tuna is about 2.78 lakh tonnes in the Indian exclusive economic zone (EEZ). Given the markets for tuna exports, the increasing exploitation of tunas along the mainland is picking up momentum and it is necessary to develop tuna fisheries in India. Until recently, tuna resources in the Indian Ocean have been mainly utilized by distant water fishing nations like France, Spain, Taiwan and Thailand only. While bearing in mind that the tuna stocks in the neighbourhood of the Indian EEZ is already being fished commercially, India will also have to develop new strategies for increasing tuna production from its seas and sustain it. For this, regional approaches will have to be adopted taking in to account the fishing gears, crafts, seasons and infrastructure facilities available for value addition and export.

Keeping this in view the National Fisheries Development Board has prioritised Tuna Fishing and Tuna Processing to develop the Fishing industry.

The NFDB has the following schemes for the development of Deep Sea Fishing and Tuna Processing.

2. Development of Indigenous Tuna Fishing Fleet

2.1 Eligibility

Government Department/ Federations/Entrepreneurs/ Fishers and Fishermen co-operative societies.

2.2 Eligible Assistan

NFDB would support Boats of 18-20 meters (unit cost Rs.75 lakhs including gear component) The NFDB' may contribute 25-33 percent of the total cost of construction as equity participation and the beneficiaries could raise the balance through loans , etc. After moratorium of one year , the beneficiaries could start repaying the Board's equity in equal instalments.

2.3 Documents Required

- Finalisation of blueprints for different OALs and hull material and other requirements, such as RSW, gear, etc. by CIFT Kochi, , and MPEDA Kochi and other authorised agencies.
- The proposal should be forwarded to NFDB through State Fisheries Departments.

3. Human Resource Development

- Out sourcing trainers for harvest and post-harvest activities/ Expert for processing sector/ Trainees of Central Institute of Fisheries Nautical Engineering and Training (CIFNET).

4. Up-gradation of processing units

4.1 Eligibility

Government Departments/ Fishermen Federations/fishermen co operatives.

4.2 **Eligible Assistance**

NFDB assistance in the form of 20-30% equity participation for ICAR/Government institutions.

4.3 Objectives

- Up-gradation of existing processing units to allow value addition of tuna and tuna-like species, setting of new units exclusively for tuna and tuna-like species.

Form I

Proposal for up gradation of Tuna processing Units

Sl. No	Particulars sought from the applicant	Information furnished by the applicant
(1)	(2)	(3)
1	Name and address of the applicant/ firm/ institutes/ departments/ cooperatives/Self Help Group/NGO (IN BLOCK LETTERS):	
2	Address for communication (telephone/ mobile number):	
3	Details of land where processing activity is proposed to be taken up:	
	a) State:	
	b) District:	
	c) Taluk/ Mandal:	
	d) Revenue Village:	
	e) Survey Number(s):	
	f) Ownership (whether freehold or on lease):	
	g) If on lease, duration of lease:	
	h) Total land area (in ha):	
	i) Total built up area (in ha):	
	j) Details of the proposed activity (Detailed project report with layout and detailed design of the facility/engineering works to be certified by MPEDA/ / CIFT/ NIFPHATT/ Developmental Institutes under central and state governments):	
4	Whether the applicant is in default of payment to any Financial Institution/ State Government for loan/ assistance availed earlier. If yes, please provide the details and the reasons for default:	
5	**Estimates regarding input costs:**	
	a) Products to be developed and species to be processed:	
	b) Processing capacity:	
	c) Recurring Cost Raw material Sub material Packing material Utilities	
	d) Source of procurement:	
6	Experience of the applicant/Agency in the field and details of training undergone so far:	
7	Details regarding economics of operation:	
8	Whether any financial tie up has been made for availing Bank loan, if so please provide the	

	details:	
9	Expected date of operation of the processing activity:	
10	Marketing tie up:	
11	Source and number of labour employed for renovation as well as day-today culture operations:	

Declaration by the Applicant

I/ We…….....…....……..son/daughter/wife of …….....…… Working at…….....…… hereby declare that the information furnished above is true to the best of my/ our knowledge and belief. I am/ we are fully aware that if it is found that the information furnished by me/ we/ us is false or there is any kind of deviation/ violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/ us.

Date:

Place: Signature of the applicant (s)

Countersigned by the implementing Agency

Date:

Place: Signature and seal of the authorized representative of the Implementing Agency

FORM – II

Proposal for Training and Demonstration in Deep sea Fishing and Tuna processing

Sl. No	Particulars sought from the Implementing Agency	Information furnished by the Implementing Agency		
(1)	(2)	(3)		
1	Name and address of the Implementing Agency:			
2	Location of the Training Facility:	**District**	**Block**	**Village**
3	Facilities available or proposed for imparting training:			
4	Details of the Training Programme:			
	a) Number of persons to be trained in fish processing/pre-processing/valued added product processing (to be given separately):			
5	Whether the Implementing Agency proposes to conduct training at its own training centre or in field? Number of training programmes to be conducted in a year may be indicated? What is the group size?			
6	Financial Implications:			
	Item	**Number**		**Amount**
	a) Training			
	(iv) DA of Rs. 125/day/trainee and reimburse-ment of actual to and fro travel, subject to a maximum of Rs. 500/trainee) (v) Honorarium of Rs. 1250 and actual to and fro travel expenses, subject to a maximum of Rs. 1000/- (vi) Rs. 75/trainee/day to the Implementing Agency towards identification, mobilization of beneficiaries, supply of training material, etc.			
	b) Demonstration Unit			
7	Technical capabilities of resource persons to be engaged in training:			
8	Any other details in support of the proposal			

Date:
Place:

Signature and seal of the authorized representative of the Implementing Agency

Declaration by the Applicant

I/We……...…….....……...……..son/ daughter/ wife of …….....……Working at…… hereby declare that the information furnished above is true to the best of my/ our knowledge and belief. I am/ we are fully aware that if it is found that the information furnished by me/ we/ us is false or there is any kind of deviation/ violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/ us.

Date:

Place: Signature of the applicant (s)

Countersigned by the implementing Agency

Date:

Place: Signature and seal of the authorized representative of the Implementing Agency

Form-III

National Fisheries Development Board

Form for Submission of Utilization Certificate

Sl. No	Letter No and date	Amount

Certified that out of Rs. _____ sanctioned during the year_____ in favour of _____ under the National Fisheries Development Board's Letter No given in the margin and Rs. _____ on account of unspent balance of the previous sanction, a sum of Rs. _____ has been utilized for the purpose of_____ for which it was sanctioned and that the balance of Rs. _____ remains unutilized. The same will be adjusted towards the next instalment payable during the period_____.

Physical progress:

Certified that I have satisfied myself that the conditions on which the funds were sanctioned by the National Fisheries Development Board have been duly fulfilled/ are being fulfilled and that I have exercised the following checks to see that the money was actually utilized for the purpose for which it was sanctioned.

Date:

Place:

Signature and seal of the
authorized representative of the
Implementing Agency

National Fisheries Development Board

Guidelines for 'Other Activities'

1.0 Introduction

The NFDB has ten defined activities such as Intensive Aquaculture in ponds and tanks, Reservoir fisheries, Coastal aquaculture, Deep sea fishing and tuna processing, Mariculture, Sea ranching, Seaweed cultivation, In
frastructure for post-harvest processing, Fish dressing centres and solar drying of fish, Domestic marketing. The present aspect of 'Other Activities' provides for innovative areas in fisheries and aquaculture such as Artificial reefs/Fish Aggregating Devices, Sport fisheries, Aqua-tourism and other innovative activities.

2.0 Artificial Reefs/Fish Aggregating Devices

It is well established that fishes tend to aggregate around floating objects as well as to underwater reefs. Hence the creation of artificial habitats by employing floating fish aggregation devices (FADs) and bottom set artificial reefs (AR) can attract fishes around these structures and these areas can serve as fishing centres. It is a very economical activity for the fishermen, since the ground assures good fish catch and catch rates. The wastage of fuel and time for searching for fishing grounds can be avoided. Such habitats can also help to prevent the most destructive of fishing practices like bottom trawling. The unit cost for a structure is around Rs. 2.5 lakhs.

Institutions with expertise on installation and operation of artificial reefs/fish aggregating devices would be preferred for providing assistance for training and demonstration in the installation of artificial reefs/fish aggregating devices as per details given in Annexure-I and the format of application as given in Form OA-I.

3.0 Freshwater Ornamental Fisheries

Ornamental fish keeping and its propagation has been an interesting activity for many, which provide not only aesthetic pleasure but also financial openings. About 600 ornamental fish species have been reported worldwide from various aquatic environments. Indian waters possess a rich diversity of ornamental fish, with over 100 indigenous varieties, in addition to a similar number of exotic species that are bred in captivity. The growing interest in aquarium fishes has resulted in steady increase in aquarium fish trade globally. According to FAO (2204) , earning from ornamental fish trade is US $ 251 million and more than 60% of the aquarium production comes from the households of developing countries.

Now a day the aquaria are being maintained in many corporate offices, government offices hospitals, schools, airports, railway stations and bus stations etc, in addition to many households, as such there is greater demand for readymade aquaria. The abrication of aquaria is the best suited activity for urban and semi urban youth including men and women. The youth, therefore can be encouraged to commence the fabrication of aquaria as an income generating activity.

There is a lot of scope in India for ornamental fish trade as it is endowed with a suitable climate, water resources and large manpower base. About more than 100 ornamental fish species are easily bred domestically. Their commercial breeding and rearing can be done at

the back yards of households to meet fast growing domestic market of the ornamental fishes. Today almost all of the tank bred ornamental fish in India comes from the small scale or back yard type of breeding units. More over the unit value of ornamental fish is higher than the food fish. As such this sector offers good opportunity for rural and urban households to augment income. Potential man power, therefore, can be trained in ornamental fish breeding and rearing technology. Breeding and rearing livebearers of ornamental fishes is the entry point in the ornamental sector as it involves a simple technique and less investment.

Considering the production potential, good market demand for ornamental fishes and growing interest for maintaining aquaria in corporate sector and households, and keeping in view of the employment opportunity to the urban and semi urban youth National Fisheries Development Board (NFDB) has launched a scheme for providing financial assistance for certain components.

3.1 Components

3.1.1 Ornamental fish production – Backyard hatcheries for women SHGs / Fisher women cooperatives/ other house holds

3.1.2 Medium scale unit for ornamental fish production by the entrepreneurs

3.1.3. Integrated ornamental fishery units with hatcheries for ornamental fishes

3.1.4.Setting up of Aquarium fabrication units - women SHGs / Fisher women cooperatives/ others

3.1.5. Training and demonstration to the beneficiaries of the scheme.

3.1.1 Backyard hatcheries for Ornamental fish production

a) Eligibility criteria

i. Members of women SHGs / fisherwomen cooperatives and any household those who have own house with a minimum area of approximately 200-250 sft vacant land with adequate water facility for setting up of ornamental fish production unit.

ii. Members of women SHGs/ fisherwomen cooperatives and any household those who have vacant land with a minimum area of approximately 200-250 sft and adequate water facility on lease for a minimum of 7 years period adjacent to their house for setting up of ornamental fish production unit .

iii. Willing to take up the activity in accordance with the guidelines of NFDB

iv. Prospective beneficiaries willing to undergo training at the Government sponsored institutions.

b) Unit cost & Pattern of Assistance

The unit cost for establishment of back-yard hatchery is estimated at Rs.1, 00,000/- NFDB provides 50% of the unit cost as subsidy for members of women SHGs and fisher women cooperatives and 25% subsidy to any individual household and 30% subsidy for S.C/S.T/N.E for establishment of back-yard hatchery. Subsidy amount will be released in two equal installments to the bank account of the beneficiary through the Department of Fisheries of the respective state /implementing agency . First installment will be released on sanction of the unit and the second installment on completion of works.

c) Submission of Proposal and documents

The applicants shall submit proposal in the format (Form-I) prescribed by NFDB through the State Department of Fisheries /Central Government organizations / ICAR institutes with relevant documents under advance copy to NFDB.

d) Relevant documents

i. Proof of identity (Ration card, Bank account, Voter ID, Photo ID, Passport, Kisan Credit card)

ii. Document for proof of availability of vacant land on the household premises (back yard photo) certified by the official of Fisheries Department/Local body/Revenue/Registration Department official.

iii. Consent from the financing bank if availing bank loan or in case of self financing, the beneficiary has to furnish self declaration on one hundred rupees non Judiciary stamped bond paper.

i. Lease-hold document for minimum period of 7 years.

ii. Detailed Estimation for construction of back yard units attested by the Department of fisheries.

e) Submission of Utilization Certificate & Compliance Report

The beneficiary shall submit utilization certificate, supported by relevant bills/vouchers/ photographs in respect of setting up of the back yard hatchery to the State Fisheries Department implementing agency which in turn shall submit U.C in consolidation form to NFDB.

f) Record keeping

The beneficiary shall put a board indicating that the backyard hatchery has been sponsored by the NFDB. And also maintain a register with all details of production of ornamental fishes (variety and quantity) and shall be shown to the fisheries department and NFDB during their inspection visit.

g) Unit cost for setting up of Back Yard Hatchery

Sl No	.Item	Amount in Rs.
1	**Capital cost**	
1.1	Low cost shed	7000
1.2	Breeding tanks (small cement tubs of desirable size or glass tubs) (120 cft)	14000
1.3	Rearing tubs (216 cft)	25000
1.4	Brood stock tanks, (160 cft)	20000
1.5	Pipelines & aerators and accessories	10000
1.6	Oxygen cylinder:	10000
1.7	Electric heaters and miscellaneous items	4000
	Sub-Total	**90000**
2.	**Recurring costs**	
2.1	Brood stock 200 fishes @Rs.20 per fish	4000
2.2	Feed and medicines	3000
2.3	Electricity charges, Breeding baskets, nets and miscellaneous	3000
	Sub-Total	**10000**
	Grand total	**100000.00**

Note :

1. One cft area holds 28.17 liters of water

2. The NFDB subsidy will be 50% of the unit cost (limited to Rs.50,000 per unit) .The specifications and amounts are indicative / approximated and may vary at different places, however the total cost for back yard hatchery unit shall be limited to Rs, 100000/- (Rupees one lakh only)

3.1.2 Medium scale ornamental breeding and rearing unit

a) Eligibility criteria

i. Entrepreneurs having owned a minimum area of approximately 300 mts vacant land with adequate water facility for setting up of ornamental fish production unit.

ii. Entrepreneurs having taken a minimum area of approximately 300mts vacant land with adequate water facility on lease for minimum period of 7 years for setting up of ornamental fish production unit .

iii. Willing to take up the activity in accordance with the guidelines of NFDB

iv. Prospective beneficiaries willing to undergo training at the Government sponsored institutions.

b) Unit cost & Pattern of Assistance

The unit cost for establishment of middle scale breeding and rearing of ornamental unit is estimated at Rs.8.00 lakhs. NFDB provides 25% subsidy to entrepreneurs and in case of S.C/S.T/N.E to whom the subsidy is 30% of the unit cost. The subsidy amount will be released in two equal installments to the bank account of the beneficiary through State Department of Fisheries of the respective state/ implementing agency. First installment will be released on sanction of the unit and the second installment on completion of works.

c) Submission of Proposal and documents

The applicants shall submit proposal in the format (Form-II) prescribed by NFDB through the State Department of Fisheries/ Central Government organizations / ICAR institutes with relevant documents under advance copy to NFDB.

d) Relevant documents

i. Proof of identity (Ration card, Bank account, Voter ID, Photo ID, Passport, Kisan Credit card)

ii. Document for proof of availability of vacant land in the name Entrepreneur(s)

iii. Consent from the financing bank if availing bank loan or in case of self financing, the beneficiary has to furnish self declaration on one hundred rupees non Judiciary stamped bond paper.

iii. Lease-hold document for minimum period of 7 years.

iv. Detailed Estimation for construction of medium scale unit attested by the Department of fisheries.

e) Submission of Utilization Certificate & Compliance Report

The beneficiary shall submit utilization certificate, supported by relevant bills/vouchers/ photographs in respect of unit to the State Fisheries Department/ implementing agency which in turn shall submit U.C in consolidation form to NFDB.

f) Record keeping

The beneficiary shall put a board indicating that the ornamental unit has been sponsored by the NFDB. And also maintain a register with all details of production of ornamental fishes (variety and quantity) and shall be shown to the fisheries department and NFDB during their inspection visit.

g) Unit costs for medium scale Ornamental fish unit: Area 300 Sq.mts

Sl No.	Item	Amount in Rs.
1	**Capital cost**	
1.1	Shed including, shadenet/agrinet	100000
1.2	Breeding tanks(883cft)	100000

1.3	Rearing (1766 cft)	200000
	fish holding tanks (glass aquaria) 10 No of desirable size	50000
1.4	Brood stock tanks (883cft)	100000
1.5	Water source and pump set ,Pipelines, aeration system and accessories	100000
1.6	Oxygen cylinder:	10000
1.7	Electric heaters, filtration system, miscellaneous items	40000
	Sub-Total	**700000**
2.	**Recurring costs**	
2.1	Brood stock (Live bearers and egg layers)*	50000
2.2	Feed, medicines and fertilizers	25000
2.3	Electricity charges	15000
2.4	Chemicals and glassware, Breeding baskets, nets and miscellaneous	10000
	Sub-Total	**100000**
	Grand total	**800000**

Note: 1. Targeted production: 1,00,000 live bearers and 25,000 egg layers.

2.The amounts are indicative / approximated and may vary at different palces, however the total cost for hatchery unit shall be limited to Rs, 800000/- (Rupees eight lakh only)

3.1.3 Integrated ornamental fishery units

a) Eligibility criteria

i. State Fisheries Department / Fisheries corporations / Federations/ICAR institutions having own land and water facilities adequate enough to set up the unit. The land along with water facility may be hired on lease basis with a minimum period of 7 years.

ii. The private entrepreneurs having owned a minimum land area of 1000 sq fts and water facility for setting up of integrated ornamental unit.

iii. The private entrepreneurs having taken a minimum land area of 1000 sq fts and water facility on lease for a period of 7 years to set up of integrated ornamental unit.

iv. Willing to take up the activity in accordance with the guidelines of NFDB

v. Prospective beneficiaries willing to undergo training at the Government sponsored institutions.

b) Unit cost & Pattern of Assistance

The unit cost for establishment of integrated ornamental fishery units is estimated at Rs.15.00lakhs.NFDB provides 90% grant to State Fisheries Department, and 10% subsidy to the entrepreneurs for setting up of integrated ornamental fisheries unit. Subsidy will be released in two installments. In case of entrepreneurs subsidy will be released through Department of Fisheries / implementing agency to the beneficiary account. First installment will be released on sanction of proposal and second installment will be after completion of the unit. The grant will be released in installments based on the progress of the work.

c) Submission of Proposal

State Fisheries Departments and other implementing agencies, shall submit proposals duly justifying the scheme to NFDB. The entrepreneurs shall submit their proposal through State Fisheries Department

d) Relevant documents

i. Document for proof availability of vacant land hold by the organization.

ii. Lease-hold document for minimum period of 7years.

In case of entrepreneurs,

i. Proof of identity (Ration card, Bank account, Voter ID, Photo ID, Passport, Kisan Credit card)

ii. Document for proof of availability of vacant land in the name Entrepreneur(s)

iii .Consent from the financing bank

v. Lease-hold document for minimum period of 7 years.

vi. Detailed Estimation for construction of integrated ornamental fisheries unit attested by the Department of fisheries.

e) Submission of Utilization Certificate & Compliance Report

The beneficiary organization shall submit utilization certificate, supported by relevant bills/vouchers/ photographs in respect of aquarium unit to the NFDB. Entrepreneurs shall submit U. C along with relevant vouchers to the implementing agency which in turn shall submit the U.C in consolidated form.

f) Record keeping

The beneficiary organization shall put a board indicating that the integrated unit has been sponsored by the NFDB. And also maintain a register with all details of on production and sales particulars and shall be shown to the NFDB and GOI during their inspection visit.

g) Unit cost for Integrated ornamental fish unit : Minimum area required: 1000 Sq. Mt

No.	Item	Amount in Rs.
	Capital cost	
1	Shed including shadenet/ polyhouse	2.50
2	Office cum-laboratory	2.00
3	Brood stock and breeding tanks	3.00
4	Rearing tanks	1.00
5	Pipelines, plumbing	1.00
6	Oxygen cylinder, aeration system and accessories	1.50
7	Electric heaters, miscellaneous items	1.50
8	Water treatment facility	0.50
9	Water source, supply unit and overhead tank	1.50
10	Quarantine facility	0.50
	Total	15.00

Note 1. Targeted production: 2, 00,000 nos live bears and 50, 000 nos egg layers

2. The amounts are indicative / approximated and may vary at different palces, however the total cost for unit shall be limited to Rs, 1500000/- (Rupees fifteen lakh only)

3.1.4 Aquarium fabrication units

a) Eligibility criteria

i. Members of Women SHGs /fisherwomen cooperatives and any individual having owned adequate vacant place for setting up fabrication of aquaria unit as prescribed by the NFDB.

ii. Members of Women SHGs/ fisherwomen cooperative societies, any individual having taken adequate vacant land on lease for a minimum period of 7 years for setting up fabrication of aquaria unit as prescribed by NFDB.

iii. Willing to take up the activity in accordance with the guidelines of NFDB

iv. Prospective beneficiaries willing to undergo training at the Government sponsored institutions

b) Unit & Pattern of Assistance

The unit cost for establishment of fabrication of aquaria unit is estimated at Rs.1, 00,000/- NFDB provides 50% of the unit cost as subsidy for members of women SHGs and fisher women cooperatives and 25% subsidy to any individual and S.C/S.T /N.E the subsidy is 30% for establishment of fabrication of aquaria unit. The balance amount can be availed as loan from the bank or it can be borne by the beneficiary. Subsidy amount will be released in two installments through state department of fisheries/ implementing agency to the account of beneficiary. First installment will be released on sanction of proposal and second installment will be after completion of the unit. The grant will be released in installments based on the progress of the work.

c) Submission of Proposal and documents

The applicants shall submit proposal in the format prescribed by NFDB through the State Department of Fisheries / Central government/ ICAR institutions with relevant documents.

d) Relevant documents

i. Proof of identity (Ration card, Gas connection, Bank account, Photo ID , Latest telephone or power bill)

ii. Document for proof of availability of vacant land on the house hold premises (back yard photo) certified by the official of fisheries department

iii. Consent from the financing bank if availing bank loan or in case the self financing, the beneficiary has to furnish self declaration on one hundred rupees Non Judiciary stamped bond paper.

iv. If the land is taken on lease , the Lease-hold document for a minimum period of 7 years as per the procedure in vogue.

vi. Detailed Estimation for construction of back yard units attested by the Department of fisheries.

e) Submission of Utilization Certificate & Compliance Report

The beneficiary shall submit utilization certificate, supported by relevant bills/vouchers/ photographs in respect of aquarium unit to the fisheries department implementing agency which in turn shall submit to the NFDB in consolidation form

f) Record keeping

The beneficiary shall put a board indicating that the aquarium fabrication unit has been sponsored by the NFDB and maintain a register with all details of manufactured aquaria and shall be shown to the fisheries department and NFDB during their inspection visit.

g) Unit Cost for Back Yard Aquaria fabrication

Sl No.	Item	Amount in Rs.
1	**Capital cost**	
1.1	Low cost shed (Brick wall with asbestos sheet) 16x12	40000.00
1.2	Wooden slots 10 Nos (desirable size)	20000.00
1.3	Glass cutting machine	10000.00
1.4	Electrical equipment and other necessities	10000.00
	Sub-Total	**80000.00**
	Sub-Total	**90000.00**

2.	**Recurring costs (one time)**	
1.7	Glass material of desirable thickness	15000
1.8	Gun material and other miscellanies items	5000.00
	Sub-Total	**20000.00**
	Grand total	**100000.00**

Note The amounts are indicative / approximated and may vary at different places, however the total cost for back yard hatchery unit shall be limited to Rs, 100000/- (Rupees one lakh only)

3.1.5 Training of beneficiaries

a) 1ntroduction

Assistance will be given to the beneficiaries for undertaking the activity for production of ornamental fish .Training period will be up to 5 days for initial skill development with following financial assistance. If advanced training is required the assistance will be provided for not more than 3 days.

b) Eligibility criteria

i. Members of Women SHGs /Fisherwomen cooperatives and any individual setting up of ornamental units
ii. Willing to take up the activity in accordance with the guidelines of NFDB

c) Unit cost & Pattern of Assistance

NFDB Provides 100% financial assistance towards the training program. The number of trainees in batch shall not exceed 30 people.

(i) Assistance to beneficiary : The fishermen shall be eligible for a daily allowance of Rs 150/ day and reimbursement of to and fro travel (train/ bus/ auto rickshaw) shall be reimbursed as per actuals, subject to a maximum of Rs 500.

(ii) Honorarium to resource person: The Implementing Agencies shall engage the resource persons experienced in the subject proposed for training programme. The provision towards honorarium to resource persons is Rs. 500/- day of class room/field training and to and fro travel expenses (train/ bus/ auto rickshaw) shall be reimbursed as per actual, subject to a maximum of Rs 1 000/ per programme.

(iii) Assistance to Implementing Agencies: The implementing agency shall be eligible to receive Rs 75/-/ trainee/ day for a maximum period up to 5 days for organizing the training. This cost shall cover expenses towards identification and mobilization of training requirements (course material/ training kits) etc.

Demonist ration: The implementing agency will be provided an amount of Rs. 5000/- for demonstrate the activity during training period.

d) Submission of Proposal and documents

The applicants shall submit proposal in the format prescribed by NFDB through the State Department of Fisheries/ Central government/ ICAR institutions with relevant documents with relevant documents.

e) Relevant documents

Duly filled in application form along consolidated list of beneficiaries with required details

f) Submission of Utilization Certificate & Compliance Report

The implementing agency shall submit utilization certificate, supported by relevant bills/vouchers/ photographs in respect of training program.

4.0 Exposure visits to Fisheries functionaries and Progressive fish farmers

4.1 Introduction

Exposure visit to progressive fish farmers and fisheries filed functionaries of the development department/ R&D organization is essential for creating awareness through training and visit to the areas where the technologies are popular and well accepted. Exposure visits could be within the State or outside the State depending on the feasibility. It provides an opportunity to visit places wherever aquaculture/post harvest processing/marketing etc., are taken up with good management practices.

4.2 Eligibility Criteria

The Director of Fisheries may nominate the field functionaries for such training for exposure visits. The identified progressive farmers could be identified by zonal / district level officers under intimation to the Director of Fisheries. There could be 2 programmes for field officers of Department and 2 programmes for progressive farmers in a year. The exposure could be a component in the 10 days training program with 5 days theoretical training and 5 days planned exposure visits to the good area of aquaculture practiced by progressive farmers in the neighboring states. In addition to the training cost, the participants in the training program could be paid Rs. 200/- day for their accommodation during 5 days exposure visit.

4.3 Duration: The total duration of exposure visit could be for a maximum period of 5 days (excluding journeys period).

4.4 Transport: All officers/field functionaries are entitled to travel by 2 tier AC depending on eligibility. While those from North East States are entitled for air fare up to Kolkata and train journey (II nd AC) beyond Kolkata, The progressive farmers are eligible for sleeper/bus depending on convenience. Local transport on share basis (non A/C) may be hired and actual claims may be preferred by producing bills.

4.5 Food Allowance: Rs. 200/ day will be provided for exposure visit including journey period for farmers.

4.6 Accommodation: Officers on exposure visit are eligible for accommodation allowance of Rs. 700/- per day subject to production of lodging bills. For farmers, accommodation allowance of Rs. 300/- per day may be allowed subject to production of lodging bills if the government accommodation is not available and used.

All proposals should be sent by the Director of Fisheries of concerned state/UTs. However, NFDB reserves the right to decide the exposure visits depending on need to conduct such exposure visits.

The Utilization certificate in the prescribed proforma should be sent to NFDB along with bills/tickets and bank DD for unutilized amount to NFDB for final settlement.

5.0 Cage culture of economically important species in reservoirs

a) Introduction

India has vast reservoir area to an extent of over 3.0 million ha, which remained under-exploited or less utilized for various reasons. The reservoirs need to be harnessed for augmenting fish production by taking up appropriate management measures like stock enhancement, optimum exploitation, including initiation of cage and pen culture of suitable species of fishes. Cage and pen culture, together on the other hand is known as culture of finfish and shell fish in enclosures, can be practiced at various levels such as extensive, semi-intensive and intensive depending on the input management. Though these technologies independently are adopted here and

there in some reservoirs, flood plains, etc. but the technology of enclosure aquaculture is yet to be adopted on a commercial scale. Therefore, these technologies need demonstration for fully convincing the commercial viability for their mass scale adoption by utilizing the open water systems like reservoirs or any other suitable deep water bodies.

As reservoirs being with common property rights, it is proposed that the State Governments or ICAR Institutes or other fisheries R&D could demonstrate cage and pen culture availing the opportunity of financial assistance provided by the NFDB in the form of pilot project. However, the assistance could also be provided later to the entrepreneurs/ farmers if the viability of the technology is established for commercial level farming in some selected reservoirs in the country. The pilot project will be technically evaluated and it is for the NFDB to accept or reject the proposals based on the feasibility and merit.

The following organizations can undertake /demonstrate culture of fishes/ prawns in cages in selected reservoirs in India.

- State Departments/ ICAR Institutes other fisheries R&D
- Necessary clearances for undertaking cage and pen farming in the selected reservoirs

These pilot projects will be extended 100% funding support to assess the feasibility.

6.0 Other innovative activities

Other innovative activities recognized depending on the innovations and the technologies developed with in and out side the country could be supported based on technical feasibility and economic viability in consultation with the professional groups / organizations with a view to establish pilot studies for adoption by the stake holders if found suitable. These pilot studies could be taken up by R&D organizations/ Development departments (State Govt.).

FORM – OA- I

Application for setting up units of artificial reefs/fish aggregating devices for demonstration

Sl. No	Particulars sought from the applicant	Information furnished by the applicant	
(1)	(2)	(3)	
1	Name and address of the Applicant/ Firm/ Association/ Self Help Group/ Govt. Organization (IN BLOCK LETTERS):		
2	Address for communication: Telephone: Fax: Mobile: E-mail:		
3	Details of area where the proposed activity is to be taken up:		
	a) State:		
	b) District:		
	c) Taluk/ Mandal:		
	d) Revenue Village:		
	e) Ownership (whether freehold or on lease/agreement):		
	f) If on lease/ agreement, duration of lease/agreement:		
	g) Lat long position of the AR/FAD		
4	Details of the proposed artificial reefs/fish aggregating devices		
	a) Type of unit (AR/FAD)		
	b) Number of modules to be employed		
	c) Size of each module		
	d) Technology to be adopted:		
	e) Details of the proposed construction works of the AR/FAD. (Design details/engineering works to be submitted)		
	f. Mode of installation		
	g. proposed underwater observations on the installed reefs		
	Methodology proposed for the assessment of the production from AR/FAD		
5	Experience of the applicant in operation of AR/FAD:		
6	Expected date of operation of installation and tentative schedule of activities such as underwater observations, catch assessment etc.		
7	Details of the Training/demonstration Programme:		
8	Number of persons to be trained in AR/FAD		
9	Financial Implications:		
	Item	**Number**	**Total Amount**
	a) Training		
	(i) Assistance to farmer @ Rs 125/ day for 10 days:		
	(ii) Reimbursement of to and fro travel expenses to		

	farmer:		
	(iv) Honorarium to resource persons and reimbursement of to and fro travel expenses:		
	(iii) Assistance to implementing agency @ Rs 75/ trainee/ day:		
10	Technical capabilities of resource persons to be engaged in training:		
11	Any other details in support of the proposal		

Declaration by the Applicant

I/ We……..son/ daughter/ wife of……...……..……..residing at…… hereby declare that the information furnished above is true to the best of my/ our knowledge and belief. I am/ we are fully aware that if it is found that the information furnished by me/ we is false or there is any kind of deviation/ violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/ us.

Date:

Place: Signature of the applicant (s)

Countersigned by the Implementing Agency

Date:

Place: Signature and seal of the authorized

FORM-I

NATIONAL FISHERIES DEVELOPMENT BOARD

APPLICATION FOR SETTING UP OF BACK-YARD ORNAMENTAL FISH UNIT

1	Full name of the applicant	Photo
2	Father's/ spouse name If SC/ST enclose proof	
3	Age	
4	Gender	Male ☐ Female ☐
5	Details of the SHG/ women cooperative Society /Details of the individual	
6	Address of the house where the back yard unit coming up and address	Houne No ---------- Street---------- Village ---------- Post office---------- Mandal/taluk/block---------- Town/City---------- District---------- State----------Pin code---------- Tel ----------Mobile---------- Fax---------- E.mail----------
7	Status of the applicant	Owner ☐ Lease ☐
8	Contact Address	Houne No ---------- Street---------- Village ---------- Post office---------- Mandal/taluk/block---------- Town/City---------- District---------- State----------Pin code---------- Tel ----------Mobile---------- Fax---------- E.mail----------
9	Occupation	
10	No of units proposed (maximum three units only)	
11	Bank account details	
12	If bank finance provide details	
13	Water source details	
14	Construction details	As per the unit cost

15	Source of brood stock	
16	Main species	
17	Sales details	
18	Viability and feasibility	Net profit =Sales-Expenditure

Declaration by the Applicant

I/ We……..son/ daughter/ wife of……...……..……..residing at…… hereby declare that the information furnished above is true to the best of my/ our knowledge and belief. I am/ we are fully aware that if it is found that the information furnished by me/ we is false or there is any kind of deviation/ violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/ us.

Signature of the Applicant

Signature seal of the head of the department / Authorized officer

FORM-II

NATIONAL FISHERIES DEVELOPMENT BOARD

APPLICATION FOR SETTING UP OF MIDDLE SCALE ORNAMENTAL FISH UNIT

1	Full name of the applicant	Photo
2	Father's/ spouse name	
3	Age	
4	Gender	Male ☐ Female ☐
5	Address where the middle scale unit is constructing	Village ---------- Post office---------- Mandal/taluk/block---------- Town/City---------- District---------- State----------Pin code---------- Tel ----------Mobile---------- Fax---------- E.mail----------
6	Status of the applicant	Owner ☐ Lease ☐
7	Contact Address	Houne No ---------- Street---------- Village ---------- Post office---------- Mandal/taluk/block---------- Town/City---------- District---------- State----------Pin code---------- Tel ----------Mobile---------- Fax---------- E.mail----------
8	Occupation	
9	No of units proposed (maximum)	
10	Bank account details	
11	If bank finance provide details	
12	Water source details	
13	Construction details	As per the unit cost
14	Source of brood stock	
15	Main species	
16	Sales details	
17	Viability and feasibility	Net profit =Sales-Expenditure

Declaration by the Applicant

I/ We……..son/ daughter/ wife of……..……..……..residing at…… hereby declare that the information furnished above is true to the best of my/ our knowledge and belief. I am/ we are fully aware that if it is found that the information furnished by me/ we is false or there is any kind of deviation/ violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/ us.

Signature of the Applicant

Signature seal of the head of the department / Authorized officer

FORM-III

NATIONAL FISHERIES DEVELOPMENT BOARD

APPLICATION FOR SETTING UP OF INTEGRATED ORNAMENTAL FISH UNIT

1	Name of the organization / Entrepreneur	
2	Location of proposed unit	Village ---------- Post office---------- Mandal/taluk/block---------- Town/City---------- District---------- State----------Pin code----------
2	Contact Address	House No ---------- Street---------- Village ---------- Post office---------- Mandal/taluk/block---------- Town/City---------- District---------- State----------Pin code---------- Tel ----------Mobile---------- Fax---------- E.mail----------
3	Land area and sy No	
4	Resource for tapping 10 % finance .	
5	Water source details	
6	Construction details	As per the unit cost
7	Source of brood stock	
8	Main species	
9	Sales details	
10	Viability and feasibility	Net profit =Sales-Expenditure
11	Market tie up (details shall be provided)	

Declaration by the Applicant

I/ We…….son/ daughter/ wife of…… …… ……..……..……..residing at… …… …… …… hereby declare that the information furnished above is true to the best of my/ our knowledge and belief. I am/ we are fully aware that if it is found that the information furnished by me/ we is false or there is any kind of deviation/ violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/ us.

Signature of the Applicant

Signature and seal of the head of the department/Authorized officer

FORM-IV

NATIONAL FISHERIES DEVELOPMENT BOARD

APPLICATION FOR SETTING UP OF INTEGRATED ORNAMENTAL FISH UNIT

1	Name of the organization /Full name of the entrepreneur	Photo
2	Father's/ spouse name of the entrepreneur	
3	Age of the applicant	
4	Gender	Male ☐ Female ☐
5	Address of the organization/ Address of the entrepreneur	House No ---------- Street---------- Village ---------- Post office---------- Mandal/taluk/block---------- Town/City---------- District---------- State----------Pin code---------- Tel ----------Mobile---------- Fax---------- E.mail----------
6	Contact Address	House No ---------- Street---------- Village ---------- Post office---------- Mandal/taluk/block---------- Town/City---------- District---------- State----------Pin code---------- Tel ----------Mobile---------- Fax---------- E.mail----------
7	Occupation in case of entrepreneur	
8	Land and Sy No details	
9	Bank account details	
10	If bank finance provide details	
11	Water source details	
12	Construction details	As per the unit cost
13	Source of brood stock	
14	Main species	
15	Sales details	

16	Viability and feasibility	Net profit =Sales-Expenditure
17	Market tie up (details shall be provided)	

Declaration by the Applicant

I/ We……..son/ daughter/ wife of……...……..……..residing at…… hereby declare that the information furnished above is true to the best of my/ our knowledge and belief. I am/ we are fully aware that if it is found that the information furnished by me/ we is false or there is any kind of deviation/ violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/ us.

Signature of the Applicant

Signature seal of the head of the department / Authorized officer

FORM-V

NATIONAL FISHERIES DEVELOPMENT BOARD
APPLICATION FOR AVAILING FINANCIAL ASSISTANCE FOR SETTING UP OF AQURIUM FABRICATION UNIT

1	Full name of the applicant	Photo
2	Father's/ spouse name If SC/ST enclose proof	
3	Age	
4	Gender	Male ☐ Female ☐
5	Details of the SHG/ women cooperative Society /Details of the individual	
6	Address of the location where the the aquarium fabrication unit is set up	House No ---------- Street---------- Village ---------- Post office---------- Mandal/taluk/block---------- Town/City---------- District---------- State----------Pin code---------- Tel ----------Mobile---------- Fax---------- E.mail----------
7	Status of the applicant	Owner ☐ Lease ☐
8	Contact Address	House No ---------- Street---------- Village ---------- Post office---------- Mandal/taluk/block---------- Town/City---------- District---------- State----------Pin code---------- Tel ----------Mobile---------- Fax---------- E.mail----------
9	Occupation	
10	No of units proposed (one unit only per individual)	
11	Bank account details	

12	If bank finance provide details	
13	Construction details	As per the unit cost
14	Source of procurement of materials	
15	Source of marketing details	
16	Viability and feasibility	Net profit =Sales-Expenditure

Declaration by the Applicant

I/ We……..son/ daughter/ wife of……...……..……..residing at…… hereby declare that the information furnished above is true to the best of my/ our knowledge and belief. I am/ we are fully aware that if it is found that the information furnished by me/ we is false or there is any kind of deviation/ violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/ us.

Signature of the Applicant

Signature seal of the head of the department / Authorized officer

FORM-VI

NATIONAL FISHERIES DEVELOPMENT BOARD
APPLICATION FOR AVAILING FINANCIAL ASSISTANCE FOR TRAINING IN ORNAMENTAL FISHERIES

1	Name of the organization	
2	Address of the organization	House No ---------- Street---------- Village ---------- Post office---------- Mandal/taluk/block---------- Town/City---------- District---------- State----------Pin code---------- Tel ----------Mobile---------- Fax---------- E.mail----------
3	No of candidates proposed for training (Detailed list with address should be attached)	
4	Whether application for setting up of unit already submitted or proposed to submit.	
5	Details of the training program	
	a. No of days of training	As per the unit cost
	b Training site and venue	
	c. Resource persons	
	d. Expected out come from the training	
6	**Financial Implications**	
	a. Assistance to farmer @ Rs 125/ day / per fishermen	
	b. Reimbursement of to and fro travel expenses: Rs up to 500 or actual	
	c. Honorarium to resource persons and reimbursement of to and fro travel Rs 500/day T.A up to 1000	
	d Assistance to implementing agency @	

	Rs 75/ trainee/ day	
	e. Demonist ration unit Rs up to Rs 5000/-	

Declaration by the Applicant

I/ We……..son/ daughter/ wife of……..……..……..residing at…… hereby declare that the information furnished above is true to the best of my/ our knowledge and belief. I am/ we are fully aware that if it is found that the information furnished by me/ we is false or there is any kind of deviation/ violation of the conditions under which assistance is provided to me by the NFDB, any action as deemed fit for violation of this condition may be taken against me/ us.

Signature of the Applicant

Signature seal of the head of the department / Authorized officer

Form for Submission of Utilization Certificate

Sl. No	Letter No and date	Amount

Certified that out of Rs _____ sanctioned during the year_____ in favour of _____ under the National Fisheries Development Board's Letter No given in the margin and Rs _____ on account of unspent balance of the previous sanction, a sum of Rs _____ has been utilized for the purpose of_____ for which it was sanctioned and that the balance of Rs _____ remains unutilized. The same will be adjusted towards the next installment payable during the period_____.

2.0 Certified that I have satisfied myself that the conditions on which the funds were sanctioned by the National Fisheries Development Board have been duly fulfilled/ are being fulfilled and that I have exercised the following checks to see that the money was actually utilized for the purpose for which it was sanctioned.

Date:
Place:

Signature and seal of the authorized representative of the Implementing Agency