**Baseline study for Fisheries Development in Telangana State**

**Questionnaire for Private Hatchery**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Geo code** |  | **Latitude** |  | **Longitude** |  |

* **Field survey team**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Name** | **Signature** | **Place** | **Date\*** |
| * **Enumerator** |  |  |  |  |
| * **Team Leader** |  |  |  |  |
| * **Expert** |  |  |  |  |

**\*Enumerator to record the date of collection of the data and team leader / expert to indicate the date of checking / validation of the questionnaire**

|  |  |  |
| --- | --- | --- |
| **A1** | **Respondents profile** | **1.0** |
| **A2** | **Hatchery Profile** | **2.0** |
| **A3** | **Entrepreneurial aspects** | **3.0** |
| **A4** | **Size, capacity and investment** | **4.0** |
| **A5** | **Production aspects** | **5.0** |
| **A6** | **Costing and economics** | **6.0** |
| **A7** | **Marketing** | **7.0** |
| **A8** | **Feed back and perceptions** | **8.0** |
| **A9** | **Constraints and suggestions** | **9.0** |
| **A10** | **SWOT analysis** | **10.0** |

**A1: Respondents profile (1.0)**

**1.1 General information**

**Name: …………………………………………………………………. Age :………………………………………………………………**

**No. of family members ;**Male: ----------; female: -------------------- Children: -----------

**No. of family members involved in fisheries /related activities** : Male--------; Female----------- Total:-……………..

**Social category : BPL/APL; Caste status:** General/ OBC/ fisher community/ SC/ST/ Other minority/ tribal , others (specify): ----------------------

**General education background:** Illiterate/ primary/ secondary/ graduation / others

**Details of occupation and livelihood:**

Main source of livelihood: agriculture/ reservoir/tank fishing/ aquaculture activities/ business/others (specify)--------

**1.2 Experience in fishing/fisheries related activities**:

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| (i) | <3 yrs |  | (ii) | 3-5 yrs |  | (iii) | 5-10 yrs |  | (iv) | 10-15 yrs |  | (V) | >15 yrs. |  |

**1.3 What are basis of choice for fisheries/ aquaculture activities:**

Availability of water bodies within vicinity/ Family occupation/ no other alternative activity sources

for livelihood /anticipation of better income / success of neighbors, fellow fishers in the region, business enterprise/ others (specify)------------

**1.4 What are assets owned : Boat/ nets/ fish ponds / agricultural land/ House/ vehicles/others (Specify)**

**1.5 What is the share of income from various sources:**

**1.6 What is the total Annual family income : Rs.**

**1.7 Are you a member of societies and other local/ state institutions :Yes or No.**

**If yes, specify :** PFCS/ SHG/others specify---------------

**1.8 Name of the PFSC/ institutions in which you have enrolled as member:**

**Since how long you are member of PFSC**

**1.9 Your involvement in the institutional activities: yes / no**

**If no, why you have not enrolled for membership:**

Not mandatory/ high membership cost/ not interested/ complexity in taking members ship/ any others (specify)------

**1.10 Any other details of respondents/ beneficiaries of activity**

**A2: Hatchery Profile (2.0)**

* 1. **Locational aspects** 
     1. Name of the hatchery unit: ………………………………..

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Village |  | GP Village |  | Mandal |  | District |  |

* 1. **Locational suitability** (Scoring 1. Excellent 2. Satisfactory 3.Unstisfactory)
     1. **Amenities**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Scoring (✓)** | | |
| **1** | **2** | **3.** |
| * Road Access |  |  |  |
| * Water source |  |  |  |
| * Power Supply |  |  |  |
| * Labour Availability |  |  |  |
| * Transportation facilities |  |  |  |
|  |  |  |  |

* + 1. **Nearness/access to :**

|  |  |  |
| --- | --- | --- |
|  | **Distance kms** | **Remarks on nearness/access** |
| * Brood stock farm |  |  |
| * Feed supply |  |  |
| * Medication |  |  |
| * Seed rearing farms |  |  |
| * Commercial fish farms |  |  |
| * Aquaculture unit |  |  |
| * District DOF office |  |  |
| * Mandal DOF office |  |  |
|  |  |  |

* + 1. **Problems/deficiencies, if any, in locational suitability**

|  |  |
| --- | --- |
|  |  |
|  |  |
|  |  |
|  |  |

* 1. **Establishment and status**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| 2.3.1 | Year of Establishment |  | | | | |
| 2.3.2 | Farm area |  | | | | |
| 2.3.3 | Service area /jurisdiction |  | | | | |
| 2.3.4 | Spawn production capacity |  | | | | |
| 2.3.5 | Number of years engaged in this activity |  | | | | |
| 2.3.6 | Species covered | **Year I** | **Year II** | | **Year III** |
|  | * Indian Major carps |  |  | |  |
|  |  |  |  | |  |
|  |  |  |  | |  |
|  |  |  |  | |  |
|  | * Exotic species |  |  | |  |
|  | a. |  |  | |  |
|  | b. |  |  | |  |
|  | c. |  |  | |  |
|  | ⮚ Indigenous species |  |  | |  |
|  | a. |  |  | |  |
|  | b |  |  | |  |
|  | c |  |  | |  |
| 2.3.7 | Type of Hatchery | **(✓)** | | **capacity per cycle** | |
|  | Portable | ( ) | |  | |
|  | Concrete circular (Chinese) | ( ) | |  | |
|  | FRP tank | ( ) | |  | |
|  | Traditional hapa hatching | ( ) | |  | |
| 2.3.8 | What is the production in the last 3 yrs? | | | | |
|  | * Year I | | | | |
|  | * Year II | | | | |
|  | * Year III | | | | |

**A3: Entrepreneurial aspects(3.0)**

**3.1 Were you engaged in fisheries activities earlier, if yes-**

|  |  |
| --- | --- |
| 1. Years of experience |  |
| 1. Nature of Activities |  |

**3.2 Is hatchery business your main activity or are you involved in other activities?, If so, pl. Mention the activities.**

|  |
| --- |
|  |

**3.3 Did you get help in identifying location or self- who assisted- DOF/local/ other farmer**

|  |
| --- |
|  |

|  |  |  |  |
| --- | --- | --- | --- |
| **3.4** | **What made you to start hatchery business** | | |
|  | Water availability |  |
|  | Good demand for spawn |  |
|  | Got motivated seeing others |  |
|  | Interesting and remunerative business |  |
|  | Others(specify) |  |

**3.5 Are you into other aquaculture activities, if so, mentionthe activities: ---------------**

**3.6 Did you undergo any special training before starting hatchery business if yes , details**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Type of training** | **Duration** | **Self/sponsored** | **Subjects learnt** | **Remarks** |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

**A4: Size, capacity and investment (4.0)**

4.1 Designed capacity per cycle …………………….. In lakhs

4.2 Additional capacity added over the period .....................

4.3 Present capacity..................

4.4 Source of funding: own/ fully funded by Govt./ partially funded by govt/ others (specify): -------;

4.6 Nature of support obtained

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sl.no** | **Particulars** | **Supporting agency** | | | |
| **DOF** | **Govt** | **Institution** | **others** |
| I | Pond construction |  |  |  |  |
| Ii | Brood stock procurement |  |  |  |  |
| iii | Feed |  |  |  |  |
| iv. | Nets |  |  |  |  |
| v. | Others |  |  |  |  |
| vi | Amount (Rs) |  |  |  |  |

4.7 Loans availed if any : Rs.---------------------------- and source:

4.8 Source for loan :

|  |  |  |  |
| --- | --- | --- | --- |
| 1. Friends and Relatives |  | 1. Commercial banks |  |
| 1. Money lenders |  | 1. Others (specify) |  |
| 1. Cooperative society |  |  |  |

**A5: Production aspects (5.0)**

* 1. **Operational details** 
     1. **Brood stock and breeding**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Brood stock species** | **Numbers** | **Age** | **Weight (kg)** |
|  | * **Indian Major carps** |  |  |  |
|  | 1. Male |  |  |  |
|  | 1. Female |  |  |  |
|  | * **Exotic species** |  |  |  |
|  | 1. Male |  |  |  |
|  | 1. Female |  |  |  |
|  | **⮚ Indigenous species** |  |  |  |
|  | 1. Male |  |  |  |
|  | 1. Female |  |  |  |

* + - 1. Is there any marking/tagging followed to identify pedigree of breeders- yes/No if yes, technique used - -----------------------
      2. Source of brood stock for breeding purposes - on farm ( ) out sourced ( )

if out sourced,

5.1.1.3 Place of sourcing ………………………. Tanks ……………………………. Reservior…………………………….Others (specify)………………………..

5.1.1.4 Distance of the source from hatchery……………………..(km)

5.1.1.5 Brood stock choice : Farm bred ( ) Natural collection ( )

5.1.1.6 Mode of collection and transport ………………….………….

5.1.1.7 Brood fish collected and directly used for breeding Yes/No

if no

|  |  |
| --- | --- |
| a. |  |
| b. |  |
| c. |  |
| d. |  |

**5.1.1.8 Prospective breeders collected and raised for short period-if so duration Is it done on annual basis?**

|  |  |
| --- | --- |
| a. |  |
| b. |  |
| c. |  |
| d. |  |

* + - 1. **Percentage of spawning success ………………………………….**
      2. **How often you replace your brood stock- if so what is the % of replenishment/replacement**

|  |  |
| --- | --- |
| a. |  |
| b. |  |
| c. |  |
| d. |  |

**5.1.1.11 How do you replenish/replace your brood stock- from within the farm or outside**

|  |  |
| --- | --- |
| a. |  |
| b. |  |
| c. |  |
| d. |  |

* + - 1. **Do you find any difference in the performance of between farm raised breeders and breeder collected from outside? If so indicate in the following table:**

|  |  |  |  |
| --- | --- | --- | --- |
| **Parameters** | **Raised breeders** | **Collected breeders** | **Remarks** |
| * Per cent success |  |  |  |
| * Fecundity |  |  |  |
| * Fertilization % |  |  |  |
| * Hatching rate |  |  |  |
| * Survival of spawn/fry |  |  |  |

**5.1.1.13 On the whole which one you feel is better in terms of operation and success**

|  |  |
| --- | --- |
| a. |  |
| b. |  |
| c. |  |
| d. |  |

**5.4.1.14 Ornamental fish breeding - Species normally bred, Purpose, Breeding protocols, Scope and prospects**

|  |  |
| --- | --- |
| a. |  |
| b. |  |
| c. |  |
| d. |  |

* 1. **Pre stocking**
* Pre stocking preparations- Drying/disinfection- liming(kg/ha);
* Manuring- Type of manure-cow dung/poultry Kg/ha
  1. **Stocking and post stocking**
* Stocking- stocking density/ ratio/ha
* Sex wise stocking or mixed stocking
* Type of feed, feeding rate and feed management,
* water quality etc.,
  1. **Spawning**
* Type of spawning - species wise or mixed spawning(all the species bred together)
* Is it mass spawning or individual mating
* Any inducing agent used-name and dosage – male/female
  1. **Duration of rearing period**

|  |
| --- |
|  |

* 1. **Number of crops taken in a year**

|  |
| --- |
|  |

* 1. **Survival per crop (%)**

|  |
| --- |
|  |

* 1. **Record keeping ( day wise breeding to spawn lifting)**

|  |
| --- |
|  |

* 1. **Technical problems encountered during production- Diseases, water quality and others.**

|  |
| --- |
|  |

**5.10 Measures adopted to overcome the problems**

|  |
| --- |
|  |

**A6: Costing and economics(6.0)**

**6.1 Economics – targeted spawn production ------------------ (lakh nos.)**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Cost of production costs** | **Unit** | **Qty** | | **Rate** | **Cost (Rs.)** |
| 6.1.1 | Brood fish |  |  | |  |  |
| 6.1.2 | Feed |  |  | |  |  |
| 6.1.3 | Inducing agents |  |  | |  |  |
| 6.1.4 | Consumable items |  |  | |  |  |
| 6.1.5 | Others (specify) |  |  | |  |  |
|  |  |  |  | |  |  |
|  |  |  |  | |  |  |
|  |  |  |  | |  |  |
|  |  |  |  | |  |  |
| **6.1.6** | **Survival (%)** | | |  | | |
| **6.1.7** | **Net saleable (qty in lakh nos.)** | | |  | | |
| **6.1.8** | **Cost of production (Rs. per unit)** | | |  | | |
| **6.1.9** | **Sale price (Rs. per unit)** | | |  | | |
| **6.1.10** | **Margin (Rs. per unit)** | | |  | | |
| **6.1.11** | **Total Income (Rs.)** | | |  | | |

**A7: Marketing (7.0)**

**7.1 What is your service area- same districts/neighbouring districts**

|  |  |
| --- | --- |
| a. |  |
| b. |  |
| c. |  |
| d. |  |

**7.2 Have you estimated the total demand for your area of operation?**

|  |  |
| --- | --- |
| a. |  |
| b. |  |
| c. |  |
| d. |  |

**7.3 How much of the demand (%) you are able to meet**

|  |  |
| --- | --- |
| a. |  |
| b. |  |
| c. |  |
| d. |  |

**7.4 In your opinion how is the short fall being met and from which sources**

|  |  |
| --- | --- |
| a. |  |
| b. |  |
| c. |  |
| d. |  |

**7.5 How do you sell your spawn- on prior indent /demand or first come first served basis**

|  |  |
| --- | --- |
| a. |  |
| b. |  |
| c. |  |
| d. |  |

**7.6 Who are your clients- state farms/ private parties/agents/farmers**

|  |  |
| --- | --- |
| a. |  |
| b. |  |
| c. |  |
| d. |  |

**7.7 How do you fix your sale price and what is the price of spawn for the last three years ?**

|  |  |
| --- | --- |
| a. |  |
| b. |  |
| c. |  |
| d. |  |

**A8: Feedback and perceptions (8.0)**

**8.1 Regarding the govt move on Privatization of hatcheries what is your opinion**

|  |  |
| --- | --- |
| a. |  |
| b. |  |
| c. |  |
| d. |  |

**8.2 Will you be interested in taking over Govt hatcheries if an offer is made?**

**If yes,**

* What are your conditions-
* as it is where it is
* Only if it is fully functional with all infrastructure in place
* On long term lease basis
* Do you expect any buy back system from Govt/other support
* You want full free hand for sale without any conditions
  1. **How will you arrive at the lease amount if you decide on takeover**

|  |  |
| --- | --- |
| a. |  |
| b. |  |
| c. |  |
| d. |  |

**8.4 Do you feel it is remunerative/profitable for private agencies to take over such hatcheries , Yes/No**

If no, what are the reasons?

|  |  |
| --- | --- |
| a. |  |
| b. |  |
| c. |  |
| d. |  |

If yes, in what way-

|  |  |
| --- | --- |
| a. |  |
| b. |  |
| c. |  |
| d. |  |

* 1. **Do you feel the present support provided by govt is sufficient? Yes/No; if no what is expected of the Govt.**

|  |  |
| --- | --- |
| a. |  |
| b. |  |
| c. |  |
| d. |  |

* 1. **Do you intend to continue and expand activities? If yes, Do you expect more support govt and in what way**

|  |  |
| --- | --- |
| a. |  |
| b. |  |
| c. |  |
| d. |  |

**8.7 Are you ready to further expand your Hatchery Yes/No**

**If yes, what are the reasons?**

|  |  |
| --- | --- |
| a. |  |
| b. |  |
| c. |  |
| d. |  |

**If no also what are the reasons**

|  |  |
| --- | --- |
| a. |  |
| b. |  |
| c. |  |
| d. |  |

**8.8 Problems/Constraints faced by you in hatchery business:**

|  |  |
| --- | --- |
| a. |  |
| b. |  |
| c. |  |
| d. |  |

* + 1. **What are causes for the above problems?**

|  |  |
| --- | --- |
| a. |  |
| b. |  |
| c. |  |
| d. |  |

* + 1. **Suggestions for improvement:**

|  |  |
| --- | --- |
| a. |  |
| b. |  |
| c. |  |
| d. |  |

* + 1. **Expectations from the Government/ other institutions for betterment in hatcheries?**

|  |  |
| --- | --- |
| a. |  |
| b. |  |
| c. |  |
| d. |  |

**A9: Constraints and suggestions (9.0)**

|  |  |  |
| --- | --- | --- |
| **Constraint related to** | **Diagnosis of the problem** | **Your suggestion/solution** |
| * Water supply |  |  |
| * Power supply |  |  |
| * Input supply |  |  |
| * Man power |  |  |
| * Technical guidance |  |  |
| * Infrastructure inadequacy |  |  |
| * Lack of proper facilities |  |  |
| * Climatic/Natural calamities |  |  |
| * Any others (specify) |  |  |

**A10: SWOT Analysis (10.0)**

**10. 1 List the major strengths of your hatchery unit on which you can consolidate your operations?**

|  |  |
| --- | --- |
| a. |  |
| b. |  |
| c. |  |
| d. |  |

* 1. **Mention the weakness that needs to be addressed?**

|  |  |
| --- | --- |
| a. |  |
| b. |  |
| c. |  |
| d. |  |

* 1. **What are the opportunities that exist for betterment in hatchery business?**

|  |  |
| --- | --- |
| a. |  |
| b. |  |
| c. |  |
| d. |  |

* 1. **What are the threats that need mitigation?**

|  |  |
| --- | --- |
| a. |  |
| b. |  |
| c. |  |
| d. |  |