Assessment of Capacity Building Programmes for Pre-Processing and Processing Women Workers in India

NIKITA GOPAL, ARATHY ASHOK, R. RAGHU PRAKASH, PARVATHY U., PRAJITH K. K., RENUKA J., JESMI DEBBARMA and JOICE V. THOMAS

ICAR-CENTRAL INSTITUTE OF FISHERIES TECHNOLOGY, KOCHI, INDIA
• Kerala, Gujarat, Maharashtra, Andhra Pradesh.
• Field centres finalized: number of training programmes conducted; maximum programmes concentrated selected evaluation
• 13 pre-processing and processing units
• Data gathered through:
  • Secondary data (Annual reports of NETFISH)
  • Primary data - field visits using a survey tool
  • Focus Group Discussions with beneficiaries
  • Discussion with coordinators and CE, NETFISH
• A survey tool was developed as a guide for the FGDs as well as one-to-one interviews with respondents
• Informal discussions also held with beneficiaries
• Since most of the survey work was during working hours, the information was also augmented through telephone calls.
Assessment of Capacity Building Programmes for Pre-Processing and Processing Women Workers in India
• Network for Fish Quality Management and Sustainable Fishing (NETFISH) registered society under the aegis of Marine Products Export Development Authority (MPEDA), MoC, GoI
• Established with a view to imparting knowledge to fishermen/ fisherwomen/ processing workers, technicians, etc. in fish quality management, conservation of fish resources as well as sustainable fishing.
• Works with a ‘bottom up’ approach to extension services
• Has a Chief executive who is responsible for the functioning of the organization and is the link between NETFISH and MPEDA.
• All administrative control is with MPEDA, though there is reasonable amount of flexibility in the working of the NETFISH.
• An Executive Committee oversees the functioning of the organization.
• NETFISH conducts its extension activities basically by organizing training programmes for stakeholders at the grassroots level. The major aspects covered in the training programmes are (i) fish quality management and (ii) sustainable fishing.
• Technical information is acquired through available sources and interactions with R&D organizations in the fisheries sector.
• Programmes largely funded by grant from MPEDA, but the organization also received funds through projects funded by other agencies like UNDP, NFDB etc. for specific programmes.
Topics in Fish Quality Management

- Hygienic Onboard handling of fishes onboard
- Hygienic Handling of fishes at harbours
- Handling fishes at pre-processing / processing centers
- Good fish markets
- Production of good quality dry fish
- Hygienic harvest of fishes from aqua farms
Assessment of Capacity Building Programmes for Pre-Processing and Processing Women Workers in India

- **Pie Chart:**
  - Men: 53%
  - Women: 47%

- **Bar Chart:**
  - Pre-processing / Processing:
    - Kerala
    - AP
    - Gujarat
    - Maharashtra

- **Table:**

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>State</th>
<th>Average Age</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Kerala</td>
<td>43.28</td>
<td>28</td>
<td>66</td>
</tr>
<tr>
<td>2</td>
<td>Gujarat</td>
<td>33.26</td>
<td>17</td>
<td>68</td>
</tr>
<tr>
<td>3</td>
<td>Maharashtra</td>
<td>34.69</td>
<td>18</td>
<td>76</td>
</tr>
<tr>
<td>4</td>
<td>AP</td>
<td>43.08</td>
<td>18</td>
<td>70</td>
</tr>
<tr>
<td>All</td>
<td></td>
<td>33.16</td>
<td>17</td>
<td>76</td>
</tr>
</tbody>
</table>
### Assessment of Capacity Building Programmes for Pre-Processing and Processing Women Workers in India

#### State-wise Literacy Rates and Education Level:

<table>
<thead>
<tr>
<th>State</th>
<th>Illiterate</th>
<th>Basic Literacy</th>
<th>Primary</th>
<th>Middle</th>
<th>High School</th>
<th>Higher Secondary</th>
<th>Technical Education</th>
<th>Degree and above</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kerala</td>
<td>0.00</td>
<td>6.17</td>
<td>9.88</td>
<td>24.69</td>
<td>39.51</td>
<td>13.58</td>
<td>0.00</td>
<td>6.17</td>
</tr>
<tr>
<td>Gujarat</td>
<td>7.41</td>
<td>1.23</td>
<td>8.64</td>
<td>20.99</td>
<td>28.40</td>
<td>12.35</td>
<td>0.00</td>
<td>20.99</td>
</tr>
<tr>
<td>Maharashtra</td>
<td>8.10</td>
<td>0.00</td>
<td>4.05</td>
<td>17.81</td>
<td>57.89</td>
<td>8.10</td>
<td>0.81</td>
<td>3.24</td>
</tr>
<tr>
<td>AP</td>
<td>41.82</td>
<td>4.55</td>
<td>17.27</td>
<td>13.64</td>
<td>12.73</td>
<td>2.73</td>
<td>5.45</td>
<td>1.82</td>
</tr>
</tbody>
</table>
The evaluation of the programmes was conducted using a survey tool which consisted of three broad sections. One section dealt with the pedagogy of the training. When training is being imparted to an adult group and a group that is mixed in its level of literacy (which can be taken as a proxy for technical information on quality and other aspects of fisheries and fishing activity), the pedagogy assumes significance. The training programme must be so structured that the information passed on is easily understandable and therefore retention can be ensured. Also the average size of the population to be catered to is also variable and the entire population repetition in the number of programmes is required. The first part thus concentrated on the general satisfaction regarding the training programme and following aspects of the training:

- Relevance
- Content
- Time & Length
- Medium of instruction
- Training method
- Training Facilities
- Usefulness of materials
- Effectiveness of trainer
- Inclusiveness (in the form of encouragement to participate in discussions)
- Overall Rating
• The rating was on a three point scale of “Agree (Yes)/Don’t Know/Disagree (No)". The scale was deliberately kept simple considering the level of understanding of the respondents. Also since most of the data collection was done during the active working hours, a more complex set of scales would have not elicited the right kind of responses.
• The second and third sections of the survey schedule dealt with the awareness and application of the information passed on to the beneficiaries. While one section dealt with was about the content of what they had been taught and how much of it they remembered. This was thus more to do with the impact the training had on the awareness and knowledge of the stakeholders for whom the programmes are tailored. The third part dealt with the practical aspects of the knowledge gained and how it was actually applied by the beneficiaries in their daily work routine. All responses were sought on a ‘Yes/No’ format.
• The programmes for the pre-processing and processing units are held on location at the units. Since the programmes can be held only during working hours as the largely women workforce will not be available otherwise, the training is given in batches of 25-30 persons.
• Repeated visits to the same centre are carried out to cover all the beneficiaries.
Assessment of Capacity Building Programmes for Pre-Processing and Processing Women Workers in India
The programmes for the pre-processing and processing units are held on location at the units. Since the programmes can be held only during working hours as the largely women workforce will not be available otherwise, the training is given in batches of 25-30 persons. Repeated visits to the same centre are carried out to cover all the beneficiaries.

The working hours of the women and the cooperation of the processing factories or pre-processing units are essential in conduct of this programme and it is possible that conflicts on interest in this regard may have led to this perception, especially when there is work in the plants.
From the information gathered through the survey as well as the FGDs it is clear that the overall rating of the programmes is in general good and there is satisfaction among the beneficiaries on the programmes in general. The general opinion was that the programmes are relevant and they need to know about the topics being dealt with in the training programmes. The methods and materials used for training, the skill of the Coordinators in engaging the beneficiaries have all got positive reviews from the stakeholders. There is also the recognition on the limitations of the Coordinators in not being able to cater to the training needs of all the beneficiaries, though there is expectation reading the same.
A change in the pattern of disbursement of the beneficiary allowance for attending the programme has undergone a change. While in initial years this was disbursed as it is, over a period of time, it was felt that the money could be better utilized if essential inputs are made available to the fishers and fish workers; processing workers and for drying yards. The allowance alone could not meet the expenditure. This led to the beneficiaries putting in their share, generally through the stakeholder organizations with whom the NEFISH has linkages and who facilitate the conduct of the programmes. This has led to supply of inputs like boots, gloves, shovels, plastic baskets etc. in harbours and landing centres; aprons, caps, mouth pieces etc. in pre-processing and processing centres (the management in processing centres do this anyway, but in PPCs it is not so common for the management to do so); plastic sheets and racks for drying etc. This has proven to be very useful in actually implementing what was being extended through the training programmes.
Awareness related to fish quality management after the training programme and Application of knowledge gained in training at work place

• The second and third sections are discussed concurrently.
• The second section of the survey tool dealt with the increase in knowledge levels after attending the training programmes organized by NETFISH.
• The questions listed for each group was based on the topics covered for the particular programme. For instance, the harbour worker who attended training in Quality was asked questions relating to the quality parameters to be maintained in a harbour and in ways and means on how to do it, as the training would have focused on that. Quality in processing units would be on hygienic handling and processing and for drying on hygienic drying practices.
• The third section of the survey tool dealt with the application of the knowledge and skills in their work after attending the training programmes. This is other words is the adoption of the improved practices that have been imparted to the stakeholders through the training programmes and can be considered as direct impact of the programmes.
• Pooled percentages have been used for the description in both the cases.
Awareness levels of pre-processing and processing sector workers ranged from 80-100% for different parameters selected.
Use clean uniform, gloves, head gear, mouth piece and gum boots
Cleaning hands, legs and nails and disinfecting in chlorine water before entering the peeling shed
Avoidance of working when there are cracks in the skin or having contagious diseases
Avoidance of smoking and chewing pan masala in the plant
Avoiding ornaments while handling fish
Use of raised receiving area for unloading the raw material
Use of peeling tables made of stainless steel
Use of cleaning vessels made of plastic or steel
Use of clean tables for peeling shrimps
Use of clean utensils for putting the materials
Keeping cool temperature during the entire preprocessing period
Use of ice to keep the preprocessed material

Adoption of quality- Pre-processing/ Processing Centres
It is observed that in processing and pre-processing units the levels of adoption are high. These units are directly linked to the export market and thus have a stake in maintenance of quality. From the various units covered during the survey the observations have been that most processing factories have a system in place for ensuring the quality of the product. This is because the companies have to cater to the demands of the importing country standards and are subject to frequent inspections and audits. The labour is thus fairly well trained and the training by NETFISH is an additional input to their skilled workforce. The labour in the factories, especially the processing sector, is also now largely composed of migrants and thus there is always demand for training to be given to new batches of workers. Since this a requirement also of the companies, the stipend amount can be actually saved if NETFISH can tie up with the factories to just provide the training and not disburse the stipend which can be borne by the company. For the pre-processing sector, this can be continued. The pre-processing sector also caters to the processing factories and is staffed by women workers. However, most of the workers in this sector are local. The aprons and gloves supplied by NETFISH have been very helpful to the workers in the pre-processing sector. However, the requirements are too high for NETFISH to be able to cater to. It is imperative that the training scheme be linked to the owners of the PPCs contributing to the betterment of the working conditions of the workers in the long run. It has also been observed that multiple programmes have been conducted in the same units so as to cover all the workers. Also PPCs were observed only in Kerala state. In the pre-processing plants in Kerala, as well as processing factories in other states, the use of jewellery still continues, especially jewellery that cannot be removed like nose studs. Use of bindis is also observed in some processing units of Maharashtra, which is against the standard operating protocols. Since the supervision of these is not very strict this is also continued by the women, though they realize that it is against the standard operating procedures in a seafood unit. Though the workers have been provided with aprons and uniforms (mostly supplied by NETFISH) the usage of gloves, face masks, caps and gum boots are absent (even when employees were working wearing jewellery). In Kerala, the number of unauthorized PPC’s are very high and there are instances of poaching of trained employees by these companies.
**SEA CLUB- AN INNOVATION FOR INVOLVEMENT OF YOUTH**

Sea Club was an innovative idea to bring in awareness among the younger generation of our country about the fisheries sector and about their responsibilities to the same. A group of undergraduate students of fisheries and aquaculture of the St. Albert’s College in Cochin, Kerala were motivated to initiate the Club. This move was supported by their teachers and with their help they came out with the idea of creating a street play focusing on conservation of fisheries wealth. The play was conceptualized, scripted and performed by the students. The performance was in harbours in the district. In an interaction the students felt that they had become more sensitive to the issues of the sector. It has also helped them in their understanding of the subject and their will to contribute to the sector. This effort by NETFISH requires special mention. The enlistment of youngsters to be ambassadors to propagate the ideas of the Society will be a way to achieve the long term goals for the sector.

Interaction with the young actors of the Sea Club

The performance by Sea Club Members
• The NETFISH has been able to make its presence felt in all the four states where the evaluation was undertaken.
• The approach of the personnel is appreciated by the stakeholders in all the places surveyed.
• The method of functioning of NETFISH in the conduct of the filed level programmes taking into confidence all the local stakeholder groups and associations is appropriate.
• The programmes conducted have been effective as far as the satisfaction of the beneficiaries with the content and method of training was concerned.
• The programmes have also been able to improve the levels of awareness among the stakeholders on the very important aspects of hygiene and sanitation in harbours, landing centres and on-board, in pre-processing and processing centres and during centres. Also the need to conserve our fisheries resources is being disseminated through programmes focusing on conservation. Adoption levels are not very high (even though perceptions on adoption was fairly high) as was observed from the extensive surveys undertaken as part of the evaluation.
• Activities of NETFISH are well planned and relevant and need to be continued and further intensified with suitable manpower and funding support.
Programmes

- As mentioned above, NETFISH sets the annual training programmes targets and works towards its achievement through the State Coordinators. The programmes are charted out by the Coordinators in consultation with the CE based on the immediate needs that are obvious from the field visits. Over the years they have been codified into the four main programmes on conservation and quality in harbours/landing centres; quality in pre-processing and processing; and quality in drying (where drying activities are predominant). The coordinators in all the four states where the study was undertaken have proven to be the focal points of the programme implementation.
- The number of programmes targeted annually is 200. It has been observed that the Coordinator is expected to cover the entire area under his/her jurisdiction.
- The Coordinators are taking all efforts to see that the area is covered with at least one programme in each centre.
- The trainings could be planned during off-season. The stipend/allowance will be an added income supplement during such periods.
- While the programmes have been able to create sufficient awareness among the stakeholders as was evident from the study, the impact on the ground leaves much to be desired.
• The coverage per training programme is about 30 trainees. This will hardly be a small percentage of the workforce in bigger centres. Even in smaller centres multiple programmes will be required to cover all the beneficiaries at least once. While the purpose of the training programmes is not to physically cover the entire workforce in a given place, it is advisable to meet the expectation of the beneficiary group.

• For the training programmes which are mainly intended to create awareness or providing information ICT based dissemination may be adopted for larger coverage. Mobile based applications may be used for this purpose.

• It was observed that there is a need for intensive programmes which demands regular follow up programmes concentrated on a few selected centres. The time interval between programmes should also not be too long which may dilute the gains already achieved.

• The conditions in most of the harbours and landing centres surveyed as well as the drying yards have not shown marked qualitative improvements, except in one or two cases (for e. Munakkakadavu, Thoppumpady and Munambam. It may be noted that Munambam was one of the first to be improved when the issue of EU rejections arose in the late 1990s and so it had a head start already before NETFISH came into being).
• One main factor impeding the improvement is the disconnect between various agencies functioning in the harbours and landing centres. There is very little clarity on the roles and responsibilities among the various agencies, making it easy to pass the buck for non-implementation of basic quality requirements in these important facilities in the fisheries value chain. NETFISH alone cannot bring in the necessary changes on the ground in such situation. Conscious efforts are needed to bring in the required synergy between the various organizations involved in the management of the infrastructure. MPEDA, in its position and capacity as a National Authority, could play a decisive role in this matter. Involvement of actual end-user stakeholder groups in the decision making process will also be helpful. Already there are Harbour Management Committees (some like in Kollam which have been constituted with the efforts of NETFISH), but they need to be more pro-active in functioning.

• It is also recommended that instead of spreading the programmes too thin NETFISH could concentrate on one particular area showing potential and carry out intensive programmes there, before taking up another area. This strategy could be tried for improved effectiveness, though it is understood that NETFISH has limitations as far as its influence in governance of facilities like harbours are concerned. However, one notable feature was that NETFISH (not as an arm of MPEDA) is easily recognizable in these places, and this can be used for the benefit of the sector. The posters put up by NETFISH are the only guidance that the fishers and fish workers using the harbours and landing centres have. More stress can be laid in areas where changes are more evident.
• The programmes are generally carried out with the involvement of local stakeholder organizations like boat owners associations, NGOs, industry etc. A concerted effort may be taken to strengthen the linkages further. They could be involved right from the planning process and attempts can be made in Trainers Training from among members in the local contact organizations. This will give them a stake in conducting the programmes.

• Exposure visits for beneficiaries to other centres/states may also be introduced so that impacts can be reinforced through the visits and it can be a motivator to adopt changes.

• The pedagogy of the training needs to be constantly revised and refined. As of now, the Coordinators or invited experts give talks and this is followed up by practical exposure (though limited, as the trainings are usually single day). A pre and post evaluation strategy may be introduced to study immediate effectiveness and followed up by evaluation after a fixed time period, before the next training is scheduled.

• There is a conscious effort on the part of NETFISH to bring in innovation and they carry out special programmes like harbour clean ups and other mass campaigns. These may again be more focused and inclusive and limited to a few targeted campaigns. Medical camps are a good option to increase visibility at the same time be useful to the community at large.

• The linkages with R&D institutions and state departments may be strengthened so that expertise is always readily available for conduct of the programmes. This will also help in updating the information base of NETFISH.
• More stress may be laid in preparing and updating training manuals. They may be simplified, translated into regional languages and disseminated widely.

• Before undertaking a training programme a needs assessment may be carried out. Beneficiaries and stakeholders are not at the same level when it comes to understanding, knowledge and skill levels. This is true for every trainee group. This will help in tailoring the programme in a better fashion and make it more effective.

• It was observed that earlier a stipend/allowance was given to the beneficiaries. However, now the stipend amount along with a small beneficiary contribution is being channeled into providing essential inputs to the beneficiaries in the form of boots, gloves, shovels, baskets, aprons, caps and other items. This move is a very good attempt. However, it is noticed that now more than the information that the beneficiaries expect the inputs to be provided. Most of these inputs need replacement after their useful life. NETFISH cannot cater to this demand and in the long run this will become an impediment in the conduct of programmes itself. This may thus be rationalized and the supply of inputs may be channelized through the local stakeholder organizations or NGOs with which NETFISH collaborates in conducting the programmes. Input supply agencies may be linked directly to the stakeholders for this.

• Linkages may be established with press and media to popularize the activities of NETFISH. A media cell could be established with reorientation of duties of existing NETFISH staff.
Assessment of Capacity Building Programmes for Pre-Processing and Processing Women Workers in India
THANK YOU

0484-2412300
cift@ciftmail.org
aris.cift@gmail.com
091-484-2668212

www.cift.res.in

CIFT Junction, Willingdon Island, Matsyapuri P.O. Kochi-682 029

ICAR-CENTRAL INSTITUTE OF FISHERVES TECHNOLOGY, KOCHI, INDIA