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Project: Globalisation and Seafood Trade Legislation: The Effect on Poverty in India

Report on Final Workshop on Globalisation and Seafood Trade Legislation: The Effect on Poverty in India

23-24 January 2003, Visakhapatnam, Andhra Pradesh, India

by

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Glossary and Abbreviations

AIR	All India Radio
CIFT	Central Institute of Fisheries Technology, India
CMFRI	Central Marine Fisheries Research Institute
CMS	Cirrus Management Services Pvt. Ltd., India
DFID	Department for International Development, UK
DoF	Department of Fisheries, India
EIA	Export Inspection Agency, India
EIC	Export Inspection Council, India
EU	European Union
FGD	Focus Group Discussion
HACCP	Hazard Analysis Critical Control Point
ICM	Integrated Coastal Management, India
ICAR	Indian Council for Agricultural Research
IDP	Inter Departmental Panels
IMM	Integrated Marine Management, UK
ISRO	Indian Space Research Organisation
Lakh	10,000
MPEDA	Marine Products Export Development Authority, India
NABARD	National Bank for Agricultural and Rural Development
NGO	Non Governmental Organisation
NRI	Natural Resources Institute, UK
PHFRP	Post Harvest Fisheries Research Programme, UK
PPA	Participatory Poverty Assessment
QAMS	Quality Assurance Management System
Rs	Indian rupees
SAT	Supervisory Advisory Team

SEAI	Seafood Exporters Association of India
SIFFS	South Indian Federation of Fishermen Societies
SPS	Sanitary and Phyto-Sanitary
TED	Turtle Excluder Device
UK	United Kingdom
USA (or US)	United States of America

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1. WORKSHOP – ORGANISATION, OBJECTIVES AND PARTICIPANTS

1.1 Structure of Report and Summary

This report presents the proceedings and findings of a workshop held in the Green Park Hotel, Visakhapatnam from 23 to 24 January 2003. It was attended by participants (36 in all) representing a cross section of the fisheries industry from producer organisations, NGOs, government organisations and private companies involved in the fish export industry of India. (See appendix 1). The report outlines the results of the research project on "Globalisation and Seafood Trade Legislation – The Impact on Poverty in India" funded by the Post Harvest Fisheries Research Programme (PHFRP) of the Department for International Development (DFID). The workshop considered the status of the export industry in Kerala, Orissa and Andhra Pradesh and the effect that export legislation is having on livelihoods of the poor in these three states. The discussion of the issues raised is given in the main body of the report (section 2) with summaries of the presentations in the Appendices 3 - 5.

The workshop then considered the effect that future implementation of stricter legislation might have on poor stakeholders. The results of these group discussions are presented in the report - see section 3. Group discussions were held to allow participants to synthesise the main impacts that can be foreseen. These impacts require coping strategies on behalf of the industry in order that the poor are not adversely affected by them. These were summarised as follows:

1. Enhancing the ability and providing incentives to the poor to upgrade their systems
2. Adequate provision of infrastructure and communication systems to facilitate transition by the poor to the new regime
3. Exploring opportunities for developing alternative livelihood options for the poor whose occupations are adversely affected by the changed legislation
4. Exploring opportunities for diversification for additional/alternate income generation/enhancement
5. Improving the information flows
6. Making policies and their implementation more context-specific.

Each of these coping strategies was discussed further in groups and the results of these discussions are presented as proposals for implementing strategies and policies for concrete further action in section 3.3.

One of the concerns regarding the further proliferation of results of the research is the means of dissemination of the results. A session was presented on dissemination of results. (See section 4.1)

It was agreed that the raw outputs would be produced on a CD ROM for distribution amongst interested parties.

It was agreed that there were a number of different levels at which the research results should be aimed. At the policy level a series of short briefing papers (policy briefs) aimed at policy makers and implementers (both locally and internationally) would be produced. The six topics used for discussion during the group meetings would make starting points for the briefing sessions/papers.

The project should make efforts to present findings at conferences and seminars and prepare papers for publication in key journals. A short video/CD ROM could be produced which would raise awareness of the issues surrounding the poor in the export sector.

At the grass roots level efforts would be made to produce information packages explaining to the traditional fish workers the legislation in simple terms.

The workshop also considered the methodologies used during the field research and whether lessons could be learnt which would inform and guide future activities of this kind. (See section 4.2)

1.2 Background and Organisation of Workshop

The research project on "Globalisation and Seafood Trade Legislation – The impact on Poverty in India" is funded by the Post Harvest Fisheries Research Programme (PHFRP) of the Department for International Development (DFID) UK. The PHFRP seeks to develop strategies and management systems to improve the post harvest utilisation of fish in ways that will make an impact on the lives of poor producers, processors, traders and consumers. It is part of the overall DFID Programme to develop strategies and management systems to improve post harvest utilisation of fish and its impact on the lives of poor producers, processors, traders and consumers.

1.3 Project Purpose

Using a multi-disciplinary approach the research undertaken by the project aims to generate and disseminate new knowledge and develop a methodology to assess the impact of globalisation and changing international legislation on the livelihoods of the poor in the sector. In addition policy recommendations will be developed relating to people's livelihoods, poverty eradication and global seafood market. The project targets the poor and vulnerable in the fish processing and distribution chains – includes coastal and aquaculture fishing communities (e.g. fishermen, boat and net owners, small scale processors, service providers, traders and distributors).

1.4 Project Outputs and Activities

Through research undertaken by the project the major objective is to obtain an improved understanding of the link between international trade legislation, post-harvest fisheries and livelihoods of poor communities in India.

1. Start-of-project workshop – Visakhapatnam - project collaborators and major stakeholders to jointly prioritise research agenda, identify tools and techniques to meet objectives (June 2001).

2. Desk research – international seafood legislation (by March 2002).

3. Data analysis and assessment of the main export markets for Indian seafood products, particularly the EU, Japan and USA (by June 2002).

4. Data collection and analysis of the seafood export supply chains in Andhra Pradesh, Kerala and Orissa (by June 2002).

5. Analyse the changes in the livelihoods of poor participants in the export supply chain (by December 2002).

6. End-of-project workshop to present research findings, validate methodology and develop policy recommendations (January 2003)

7. Dissemination activities – papers, reports, web articles (Final Technical Report by March 2003).

8. Further dissemination under PHFRP in 2003/04

1.5 Related Projects

DFID, through its Post Harvest Fisheries Research Programme (PHFRP), is funding four related projects in South Asia:

- Changing Fish Utilisation and its Impact on Poverty in India (ICM/IMM)

- Fish Distribution and Coastal Communities: Market and Credit Access Issues in Bangladesh (NRI)
- Globalisation and Seafood Trade Legislation: Its impact on Poverty in India (NRI/Cirrus/ICM/SIFFS)
- Field Evaluation of a Systems Based Approach to the Reduction of Blowfly Infestation of Traditionally Processed Fish in Tropical Developing Countries (MD Associates)

1.6 Collaborators

Four organisations were involved directly as partners in the project as follows:

1. Natural Resources Institute, University of Greenwich, UK
2. Cirrus Management Services Pvt Ltd, Bangalore
3. Integrated Coastal Management (ICM), Kakinada
4. South Indian Federation of Fishermen Societies (SIFFS), Trivandrum

1.7 Objectives of Workshop

The workshop which is the subject of this report had the following objectives:

- Inform stakeholders of the project; meet up with project partners and other interested parties and exchange information and views
- Jointly to discuss findings of the research
- Discuss the methodologies used in the research
- Develop policy actions and interventions arising from the research
- Identify methods and channels of dissemination of the research results

1.8 Participants

Apart from the research collaborators themselves a wide cross section of representatives from various organisations and private companies participated in the workshop. This included representatives from MPEDA, SEAI, CIFT, CMFRI, State Fisheries Departments, NGOs, fisheries journalists, fishermen, aquaculturists and private companies involved in the seafood export trade. A full list of participants is given in Appendix 1.

1.9 Agenda and Activities during the Workshop

The workshop lasted from 12.00hrs on the 23rd January 2003 until 17.00hrs on the 24th January 2003 and was held at the Green Park Hotel, Waltair Main Road, Visakhapatnam, Andhra Pradesh.

The agenda for the workshop is given in appendix 2. The first afternoon was spent in considering the results of the research and outlining the main findings to the participants. Presentations consisted of a summary/overview of the main findings from the research activities followed by more detailed presentations on the findings for the three states studied (Orissa, Andhra Pradesh and Kerala). At the end of the first day the participants were asked to suggest themes which would be discussed during the workshop.

On the second day the participants were divided into three groups for brainstorming discussions of the themes so that conclusions could be reached regarding the research findings, where the research might lead and further study needs.

Presentations were also made on dissemination activities to be undertaken to further the impact of the research and the methodologies used during the research.

2. RESEARCH FINDINGS

2.1 Overall Review of Research Findings

Presentations were made which summarised the research findings generally and on a state by state basis.

The summary presentation emphasised the importance that the exports of seafood from India and from the three states in particular play in earning foreign exchange and providing employment opportunities. The main products for export are shrimp and cephalopods from Kerala, mainly shrimp from Orissa and almost entirely shrimp from Andhra Pradesh. The states vary in their export destinations but the European Union, Japan, United States of America and Asian countries play very important roles. Because of the dominance of EU legislation in framing Indian export regulations it seems that even though many exporters do not export to the EU the way in which the European Union develops food safety legislation will affect most of those in the export industry.

Through field research involving mapping of the export chain, participatory poverty assessment in fishing communities and analysis of the quality factors in the communities the research identified a number of stakeholders in the export supply chain that could be classified as poor or vulnerable to poverty. These included the following groups:

- Trawler crews
- Crew on traditional craft
- Small scale aquaculture producers
- Owners of artisanal fish craft and gear
- Head loaders/labourers at godowns
- Processing workers at landing site
- Resellers/intermediate traders
- Workers in peeling sheds
- House peelers
- Processing workers in processing plants

The research endeavoured to assess what impact the 1997 European Union ban on seafood imports from India had on the various stakeholders. The following points were highlighted in the summary.

- Resulted in sharp decreases in exports from Kerala, while large sums of money were spent on upgrading plants

    - From Orissa some exports were lost but only a minor impact in Andhra Pradesh.
    - Some drastic consequences for export companies but few other stakeholders felt a great impact as such and were not necessarily aware of the reasons for reductions in prices for a while whilst the export industry itself adjusted to changed circumstances.
    - May have led to a smaller group of exporters who can control the markets to their advantage.
- The present quality assurance systems in place for exports are only rigorously enforced at the processing plant level, to some extent on board fishing vessels processing at sea and in some of the larger aquaculture units. In future the EU is likely to implement farm to fork in quality assurance which will require control at all points in the chain. The presentation emphasised this and pointed out that in future the industry will need to demonstrate control at all levels and traceability.

- Traceability would be very difficult to implement at present because of:
    - Scattered landings and supply sources.
    - Lack of communication
    - Lack of awareness

- In future control will be required
    - On board vessels
    - During culture
    - At landings/auctions/markets etc
    - During transport operations
    - At ice plants
    - During all processing operations – including peeling sheds

These changes are coming - the industry/authorities need to anticipate these changes. The three state wise case studies were then presented to the participants.

2.2 Orissa

Appendix 3 contains the notes that accompanied the presentation

The main points to come out of the research can be summarised as follows.

- The study identified as poor certain groups in the export supply chain: traditional fishermen and their crew, crew in the mechanised sector, head loaders and other labourers in the chain, and unskilled workers in processing plants.
- Although the contribution of the traditional fishing sector to overall volumes of exports appears small, the contribution of export species to individual household incomes of fishermen is far from insignificant. The most important export species for traditional fishermen are pomfret, seer fish, and small shrimps followed by prawn. Overall, there is low involvement in the export supply chain by the traditional sector. The mechanised sector on the other hand depends almost exclusively on the export market of a single species – prawn. Other species are treated as by-catch by them. Similarly, brackish water aquaculture depends on a mono culture of black tiger prawn, almost exclusively for the export market.
- Labourers do play a role in the processing of seafood for exports and hence are affected by changes in the industry, mainly in terms of wage rates and working conditions.
- International quality regulations have forced the industry to undertake process improvements. This has definitely improved standards in processing plants, but not necessarily beyond. The quality assurance mechanism beyond the plants remains weak, especially at the landing centres and procurement points. This limits competitiveness of the industry as a whole in international markets, with possible effects on the poor downstream, although the last is not clearly established. The response of the government in regulating the seafood export industry has been reactive rather than proactive.
- Improvement of facilities for on-board handling and at the landing centres is clearly important. Improved information flow (on demand, supply and prevailing prices) to the stakeholders, especially those at the bottom end of the supply chain would increase their bargaining power vis-à-vis the traders and dealers. Lack of availability and accessibility to formal sources of credit is another impediment resulting in increased dependence of poor fishermen on

middlemen and traders.

- Present levels of enforcement of regulations do not seem to have had any visible or discernible adverse impact on livelihoods of the poor involved in the export supply chain. This study seems to indicate that livelihoods of poor people in the chain are currently only marginally affected by international legislation, mostly in a negative way. These effects are however likely to be accentuated if EU type legislation become more stringent or are enforced more stringently. In particular, stricter regulations and enforcement, especially with regard to traceability, could have significant impact on the poor.

2.3 Andhra Pradesh

Appendix 4 contains the notes that accompanied the presentation

The main points of the presentation and study can be summarised as follows.

- Since early 1970s, there has been a rapid reorientation of fish production systems in Andhra Pradesh towards harvesting exportable varieties. Andhra Pradesh has taken the lead in production of shrimp from brackishwater aquaculture (for export markets) and carps from freshwater sources (for out of state markets such as West Bengal). Capture fishing has undergone changes to reflect the emphasis on exports: fishing systems that traditionally depended on a mix of different species have begun to concentrate on fewer varieties with good export values. New fishing gear such as trammel nets and long lines facilitated the process, while trawlers continued to capture shrimp by using nets with smaller mesh sizes.
- While there have been efforts to diversify – by changing fishing grounds into deeper waters through the introduction of deep-sea trawling, by targeting alternative species such as tuna, by using new fishing gear such as high-opening bottom trawls – these have largely remained unsuccessful, and shrimp has continued to be the focus of fishing and export operations.
- Correspondingly, there has been a rapid growth in the infrastructure to facilitate exports of seafood – freezing plants, ice plants and cold storages have come up in areas that have production/processing/export facilities, rapid transport became possible as a result of good roads laid to connect most of the remote fishing villages, telecommunication systems facilitated quick exchange of information between the producers and the buyers and all these changes have had an impact on the way fish are caught, processed, and traded.
- The composition of exports from Visakhapatnam Port reflects the general

'low-volume-high-value' trend of the east coast. The volume and value of exports from Visakhapatnam Port have shown a consistently increasing trend through the 1990s. Japan has been the most important importer of seafood from Visakhapatnam Port, its imports accounting for 75% by volume and 86% by value of the total exported from Visakhapatnam. The US is the second largest importer of seafood from Visakhapatnam Port, followed by China, a number of Southeast Asian countries and the EU. Thus the impact of the EU ban on the seafood exports from Visakhapatnam was only minimal.

- With respect to shrimp, the cultured varieties have come to dominate the exports constituting nearly two-thirds of the quantity and 75% of the value of the total shrimp exports from the state. There has been a corresponding decrease in exports of captured shrimp in real as well as percentage terms. There has been a steady increase in the quantity of finfish exports through 1990s. There are indications that the finfish share of exports is continuing to increase in overall state exports.

- Increased exports have meant the establishment of long chains of product flow and intricate networking between the various players involved in the activities both directly and indirectly. Alongside the change in the market channels for different seafood items, came a wide range of new players into the marketing systems. Commission agents, middlemen, carriers and transporters, truck operators, peelers and processors, packers and handlers, exporters and processing plant operators, ice makers and ice sellers, besides technicians, crate and basket makers, etc., have all found a place for themselves in the rapidly evolving export chains. One consequence of the existence of a large number of intermediates is that the pricing mechanisms are influenced by them, often depriving the fishers of their rightful share.

- There are no serious indications that increasing exports have taken away traditional livelihoods on a large scale. The increased emphasis on shrimp may have meant that many traditional fishing operations that were facing problems with poor catches of fish could manage to remain viable for a period.

- Activities such as shrimp peeling by women, though practiced, are however confined to important port areas like Visakhapatnam, Kakinada, Machilipatnam and Nizampatnam, and where they have been closed over the last decade, it had to do with reasons other than changes in the seafood trade legislation.

- The poor in the export sector mostly fall into the 'invisible poor' category, with very little known about their roles, numbers and the impact of any changes on their livelihoods. Even the apparently well-off categories of the poor are seen to fall into the category of 'potential poor' or 'tomorrow's poor'. Unfortunately, there is little quantitative or qualitative information on the various categories of people working in the export sector, in particular in relation to the impact of changing export trends, seasonality and shocks, such as a ban on exports on their livelihoods. Most of them are not recognised as being direct stakeholders in the export sector, or even in the fishing sector in general, and being unorganised, current policy making largely bypasses them. Consequently, their capacity to access institutional support remains weak. There are indications that their vulnerability is increasing as a result of changing seafood legislation (which emphasises the need for more formalised systems of operation) and, more importantly, decreasing availability of shrimp from the natural sources.

- The changed seafood legislation in late 1990s did not have an apparent direct impact upon many people outside the processing and export categories, but there is evidence that there were long term, indirect, trickle-down effects at all levels. Currently, the quality control systems do not extend beyond the processing plants, and the existing conditions at the landing, handling and pre-processing areas leave much to be desired. Similarly, the use of potentially harmful substances – such as antibiotics in the aquaculture sector – remain largely uncontrolled.

- There are however indications that quality consciousness has been growing amongst different stakeholder groups. Use of ice, better handling, packing and transportation systems are instrumental in meeting the quality requirements of the processing plants.

- The government's efforts to promote and sustain the export sector are felt to be appropriate in some areas, but inadequate in others. That the seafood industry is variously covered under the mandates of different central and state government ministries makes things difficult to implement. Most processing plants have upgraded their production and processing systems to stand up to the international requirements. The government has extended support – technical expertise, technology and subsidies – to the processors in this respect.

- There is a possibility for legislation to become more stringent and widespread in due course in which case the impact upon the various stakeholders would be very serious. Coupled with the problem of declining productivity in both the capture and culture systems, which is offset to a large extent by increases in the value of exports, the application of more stringent quality parameters would have serious consequences for the producer groups. It is possible that the production and processing systems would become more streamlined, and in the process, the seafood export industry could become more concentrated into fewer hands than before. The effect of such change on the poor would be serious, because it is the informal nature of several of the systems – production, pre-processing etc – that provides a livelihood for them.

- It is suggested that a more people-friendly, people-empowering programme be taken up to ensure that the various stakeholders in the export commodity chain play a more productive role in improving the quality of the seafood exports without adversely hitting their own interests. In the short term, it is recommended that more emphasis be placed in raising awareness about quality amongst the different stakeholders, that efforts be made to make the seafood legislation less obscure and user-friendly and more uniform implemented in different countries and that options for diversifying the seafood exports from the state be explored, in terms of increasing the commodities exported, in order to overcome the constraints that a single-minded emphasis on shrimp could give rise to.

2.4 Kerala

Appendix 5 contains the notes that accompanied the presentation

The main points of the presentation and study can be summarised as follows.

- Kerala is one of the major maritime states in India accounting for 20.5% of the total marine fish landings in India in 1999 - 2000. The major species landed are oil sardine (14% by volume) and shrimp (13% by volume).
- Kerala is also one of the prominent exporters of seafood from India. During 2000 – 01, Kerala accounted for 20.6% in volume terms and 16.0% in value terms of Indian seafood exports. The major export species from Kerala are shrimp (59% by value, 32% by volume), frozen cuttlefish (15% by value, 16% by value) and frozen squid (13% by value, 17% by volume). Finfishes, which account for 28% by volume, are a relatively low value item accounting for just 9% of the total export value.
- The EU is the main destination for seafood exported from Kerala with 33% of the volume (and 36% of value) during the year 2000 - 01 going to this market. Japan (11% by volume and 18% by value) and the USA (15% by volume and 22% by value) are the other major markets. South East Asia (mainly China),

which accounts for 34% by volume accounts for only 16% by value, indicating that this market mainly buys lower value species such as frozen ribbon fish and frozen mackerel from Kerala.

- The EU market has traditionally been the mainstay of the seafood export industry in Kerala. During the period 1995/96 – 2000/01, Kerala accounted for 47.6% by volume and 42.6% by value of the total Indian seafood export to the EU.
- The EU has been and continues to be the main customer for most of the major seafood processors and exporters in Kerala. Kerala has lagged behind Andhra Pradesh (AP) in catering to the higher value markets of Japan and the USA. Buyers in Japan and the USA are said to have a preference for larger shrimp, which fetch a high price in the international market. However, states like AP have been more successful than Kerala in tapping into these markets. The main reason is the lack of availability of large shrimp in Kerala. AP with its more extensive aquaculture industry is better supplied with the large high value variety of shrimp.
- It is estimated that in Kerala around 10 lakh people depend directly and around 2 lakh people indirectly on the fisheries sector for their livelihood. A significant part of this population depends to varying degrees on the seafood export industry
- The seafood export industry in Kerala consists of various categories of players. Chief among them are artisanal fishermen, trawler crew and trawler owners, peeling shed owners and workers, the processing industry and those working in allied industries such as transportation, ice plants etc.
- Of the 48 processing plants that have EU approval 34 are situated in the Aroor – Chandrur – Munnambam belt in Kochi. Similarly, out of the 45 units, which do not have EU approval, 35 are situated in this belt. Most of the registered peeling sheds in the state are also in this belt. A major reason for this level of regional seafood export activity is the presence of two major fishing harbours in the region, at Kochi and Vypeen. During the period 1999/00 – 2001/02, this region accounted for 81% of the total volume and value of the seafood processed in the entire Kerala state. Kochi is undoubtedly the nerve centre of the processing industry in Kerala. The other major centre for seafood export processing in Kerala is the Neendakara – Shaktikulangara region in Kollam revenue district.
- There are no accurate estimates on the number of people who depend directly

on this sector, but it is evident that significant numbers of people in certain pockets in Kerala (especially the Aroor Chandrur Munnambam belt of Kochi) depend directly on seafood export related activity for their livelihood.

- The livelihoods of the various players within the Kerala seafood industry are highly interrelated and anything that affects any one of the players will have its effects on all the others.

- The peeling shed industry is allied to the processing industry and is entirely dependent on it for its survival. Traditionally, peeling sheds procured raw material such as shrimp, cuttlefish and squid, peeled the material and then sold it to processing plants, which in turn would process the material, pack and export. Traditionally peeling sheds were rudimentary establishments, which were mostly temporary or semi permanent in nature. Local women would work as peelers in these peeling sheds. Most of the women who work as peelers come from the economically weaker sections of the fishing community and income from peeling activity is important for their livelihoods. However, peeling is not the sole activity that is available to the women in these communities. Women from these communities also engage in fish vending, construction and also work as processors/sorters/graders/ packers at seafood processing plants.

- Kerala has a large trawling industry, which is entirely dependent on fishing for export species such as shrimp, cuttlefish and squid. It is estimated that there are about 3,800-4,000 trawlers in the state employing around 30,000 fishermen as crew. Most of these fishermen come from the economically weaker sections within the fishing community. They work as crew as they do not own any fishing craft or gear and therefore do not have much control on the means of production. Fishermen, in general do not engage in non-fishing occupations. There are social and skill related factors, which prevent them from diversifying into other walks of life. This limits the employment opportunity of a fisherman especially one who does not have craft or gear. Thus the only alternate employment opportunity that most trawler crew have is to work as crewmembers in artisanal fishing crafts.

- The trawling industry has been hit hard in recent years by declining catch quantities, rising fuel prices and the intense competition for the limited resources that are available. These factors have contributed to the declining income levels for trawler owners and trawler crew. Fish stocks in the inshore have been severely depleted on account of indiscriminate and eco unfriendly fishing by the trawling industry. Trawlers are thus forced to venture deeper into the sea in search of new fishing grounds. This has forced an upgradation in trawler size and capacity and though the catches and incomes have been declining, new trawlers are being launched in the hope that they can better exploit any new deep sea fishing grounds.

Aquaculture

- The aquaculture industry in Kerala is entirely focussed on shrimp and is mainly export oriented. While the traditional method of shrimp filtration rotated with paddy cultivation has been practised in certain pockets in the state for a very long time, it was in the mid 1990's that modern methods of aquaculture were introduced in the state. Given the higher rate of productivity and other advantages such as larger and more uniform size of shrimp etc, many traditional farmers shifted entirely to the modern method. The industry was picking up when in 2000 the white spot disease hit resulting in large-scale losses to aquaculture farmers. Other issues including rejections by foreign buyers on account of the presence of antibiotic residues have also been a major problem.
- Most farmers involved in aquaculture are relatively well off and are from outside the fishing community. Aquaculture is rarely the main source of income for these farmers and they generally have another business, which is their main income source. The role of the poor in aquaculture is minimal. It is mostly limited to providing labour for preparation of the field before the harvest, feeding the baby shrimp and harvesting the crop.
- Kerala has lagged behind AP in aquaculture. This is particularly true in the area of per hectare productivity. In 1995/96, both states had a per hectare productivity of about 540 tonnes per year. By 2000/01, per hectare productivity in AP had increased to 746 tonnes, but the corresponding figure for Kerala was only 229 tonnes. Aquaculture shrimp production in Kerala fell from 9,000 tonnes in 1995/6 to 7,666 tonnes in 2000/01. AP on the other hand has increased its production from 27,140 tonnes to 67,615 tonnes during the same period. Shrimp aquaculture accounted for around 60% of the total Indian shrimp exports. Kerala's inability to keep pace in aquaculture has been a major reason why Kerala's contribution to all India seafood exports has been declining.

The EU 1997 Import Ban

- In 1997 the EU imposed a ban on shrimp imports from India and Kerala was one of the worst affected. This was mainly due to the fact that most of the processing plants in Kerala were catering exclusively to the EU markets. Within a short span of 4 months, six processing plants in Kerala upgraded their plants to meet EU standards and obtained licenses to export to the EU. At the time of the ban there was a sharp fall in beach prices of export species such as shrimp, cuttlefish and squid. After the ban was lifted on the six units that complied with EU norms the beach prices did not rise much. The market situation was that there were a large numbers of sellers and few buyers. This ensured that the prices remain lower than the pre ban period. The early movers procured raw material at very cheap rates and tapped into the EU market. The other processing plants also followed suit and invested heavily in plant upgradation. Over the next two years several plants obtained EU approval and re-entered the EU market. This resulted in increased competition for raw material, which drove up beach level prices. In 2002, beach prices we re higher than the pre ban price mainly on account of the increased competition and the raw material scarcity.
- The EU ban had both a short-term direct impact and a long-term indirect impact on the peeling shed industry. The short-term impact was that overnight most of the processing plants, which are the sole customers of the peeling sheds, stopped purchases. Thus many peeling sheds found themselves without many of their traditional customers. The numbers of buyers fell sharply and competition among the peeling sheds for the limited market intensified. The ability to provide peeled material on credit to the processing plants emerged as a point of differentiation. Peeling sheds, which were able to provide material on liberal credit arrangements, were preferred. Thus the smaller sheds, which were unable to provide material on credit, were gradually pushed out of the industry. This led to a consolidation of sorts in the industry. There has been a decline in the number of peeling sheds in the aftermath of the EU ban. In place of the large number of individual small scale peeling sheds, there are now larger peeling sheds and peeling shed networks. Most of the small scale peeling sheds that currently operate work as sub contractors to the larger peeling sheds. The larger peeling sheds have been able to survive mainly on account of enlarging their raw material procurement base and the ability to provide peeled material on credit to processing plants.
- The implementation of EU legislation regarding pre processing and processing

of seafood has been varied at different levels of the industry. Since the number of processing plants are few and are required to be registered, there is a greater level of control that governmental bodies which are in charge of implementing legislation have over them. Processors complain that government officials have been too stringent in their interpretations of the EU directives and this has resulted in higher cost of plant upgradation. However a key aspect of the EU directives is that pre processing activity should be carried out on the same premises as the processing activity. The degree to which this aspect of the directive has been enforced is questionable. Many of the processing plants which supply the EU market continue to procure peeled material from independent peeling sheds in direct violation of this requirement of the directive. This is mainly because given the uncertain raw material supply situation and the dispersed nature of raw material availability, it is advantageous for processing plants to rely on the peeling shed industry to aggregate raw material and supply it to them. This reduces the cost of procurement and the risk attached to it (mainly the risk of spoilage) for the processing plants. EU approved processing plants have pre processing facilities attached to them. But in most cases these facilities are mere showpieces during plant inspections by the relevant authorities.

- The fact that the peeling shed industry is still operational is itself testimony to the degree of implementation of EU directives. Not only are they functional (they should not be, if EU directives are strictly enforced), there are few peeling sheds that conform to the process and infrastructure requirements as laid down in the EU guidelines.

- One of the main complaints that processors/exporters have about the EU legislation is that it is more in the nature of a non-tariff trade barrier than an effort to ensure food safety. Many processors are of the opinion that the quality and process standards that they are required to comply with are very expensive to implement and in addition processing plants in Europe are not required to maintain the same high standards. This in turn negatively impacts on the cost competitiveness of Indian exporters' vis-à-vis their EU counterparts. The widely held view in the Kerala industry is that the EU directives are mainly targeted to protect the local industry from cheaper imports.

- One of the long-term effects of the EU ban is the emergence of a small group of powerful players in the processing industry. It is estimated that in 1999/00 8 out of the approximately 80 seafood processors in Kerala handled around 80%

by volume and value of the total seafood that was processed in the state. There are concerns that this same group could exercise greater control over the supply chain in the years to come, manipulate prices and thus hurt the other players in the industry.

- The implementation of the EU legislation has at best been patchy. That explains to a large extent the lack of any significant impact on the livelihoods of people who depend on this industry. However, the situation could be very different if implementation is carried through thoroughly. The first casualty of a thorough implementation could be the peeling shed industry, as EU legislation requires all pre-processing activities to be carried out in approved pre processing facilities attached to the main processing plant. If the farm to fork principle, which requires traceability, is carried out it could have cost implications for all players in the supply chain. It remains to be seen how the various players will cope with any such strict implementation of international seafood legislation.

3. DISCUSSION THEMES

3.1 Possible Discussion Themes

Following the presentations of the study findings a plenary round table discussion was held to identify themes that might be discussed in order to clarify and inform future policy and research needs. Participants suggested the following possible themes:

1. Quality upgradation – who survives/who becomes extinct?
2. More clarification on who are the poor and where is the poverty line?
3. Alternative employment availability, concentrating on those that have least or no opportunities.
4. Infrastructure.
5. Conservation of resources – biological and environmental management.
6. Value addition.
7. Traditional fishing methods.
8. Conflict between mechanised and traditional fishermen.
9. Transparency in acts and legislation – particularly those concerned with the issue of turtle excluder devises – TEDs.
10. Role of women in post harvest fisheries.
11. Information flows to the fishing communities.
12. Costs of imposition of quality verses the returns.

As can be seen some of the themes suggested were unrelated to the post harvest fisheries research programme and so were not open for discussion. However it was felt that most of the other themes could be discussed under a general heading as follows:

The Impact of Stricter Seafood Import Laws on Various Sectors of the Indian Seafood Industry

3.2 Group Discussions: Possible Impact of Stricter Legislation

The participants were divided randomly into three groups to discuss and draw up a list of impacts that are likely to occur when stricter seafood import laws are implemented in the Indian seafood industry.

The following list summarises the points raised by the groups and laid the foundation for further elaboration during a plenary session.

Negative Impacts

- Entire sector will be affected.
- In the production sector, from catamaran to the biggest boats will need modifications
- Owners and crew are affected as a result
- Landing and handling activities everywhere will undergo changes, with the workers there being affected.
- Women's roles will be reduced – the changes in peeling activities will mean job losses.
- Owners of peeling sheds will be affected because they need to spend a lot of money and this will result in loses during the process of upgrading.
- Transportation: the way the material is transported will change, and all those involved in traditional transport systems will be affected.
- Farm sector: lack of facilities to test the product will mean that farmers cannot send their product to particular countries, and will sell to countries that pay less.
- Ice should be purchased at approved ice plants, so those who are running ice plants will be adversely affected. Investing in flake ice machines will be very difficult.
- Processing plants – upgrading the plants is a very expensive and uncertain proposition. As a result, the suppliers will be affected too.
- Serious livelihood issues will crop up as a result of all changes.
- These impacts will make people rethink their current processes, and will lead to drastic changes to adopt the legislation.
- When that happens, in the long term, there is the possibility of improved incomes for all stakeholders all around.
- Traditional fishermen are pushed out of export chain
- The role of women is reduced in pre-processing and processing sectors because of the lack of skills and knowledge.
- Ancillary suppliers (ice plants) will reduce, and job opportunities will go away.
- Aquaculture: Small-scale farmers, feed suppliers will become extinct.
- Role of labourers at the landing centres and at the harbours will decline.
- Reduction in aquaculture activities
- Feed producers and transporters will need to be included in the process of up grading and could be negatively impacted.

- Reduction in employment opportunities in the sector
- Reduction in export of quality seafood
- Collapse of fishing industry as a whole
- Loss in foreign exchange – impacts upon the economy

Positive Impacts

- Response to quality controls improve
- Response to long standing demands of facilities at landing centre improves
- Response to training needs will improve.
- Improvement in quality consciousness, infrastructure, overall fish production

During a plenary session the above impacts were discussed and from this a number of constraints mitigating the impact of stricter food safety standards were elaborated. These constraints can be summarised in the following statements:

1. There is an inability and lack of incentive to upgrade to higher food safety standards at unit level.
2. The infrastructure and communications systems are inadequate for the transition to higher food safety standards
3. There will be no place for certain occupations in future
4. There is a lack of alternative sources of employment for certain operatives
5. Implementation will be constrained by poor flow of information
6. There is a lack of context specific policy making and implementation

3.3 Group Discussions: Coping Strategies to Overcome the Impact of Stricter Legislation

The Groups discussed the coping strategies that are considered necessary to over come the constraints identified; these strategies were as follows:

1. Enhancing the ability and providing incentives to the poor to upgrade their systems
2. Adequate provision of infrastructure and communication systems to facilitate transition by the poor to the new regime
3. Exploring opportunities for developing alternative livelihood options for the poor whose occupations are adversely affected by the changed legislation
4. Exploring opportunities for diversification for additional/alternate income generation/enhancement
5. Improving the information flows

6. Making policies and their implementation more context-specific.

Group discussions were then held to elaborate on what concrete steps could and should be taken to implement these strategies.

Topic 1 Enhancing the ability and providing incentives to the poor to upgrade their systems

It was felt that awareness and training on the standards needed for export was required for all sectors, down to the grass roots level. This should provide an understanding not only of the standards themselves but also what the negative aspects of lack of compliance might be to the stakeholders.

It was also apparent that financial resources are not presently available to many sectors of the industry in order for them to comply with present and future requirements.

The industry is not in a position to impart training and CIFT and MPEDA are not able to undertake this training on a large scale. Support from agencies such as cooperative societies, self help groups, NGOs and perhaps financial sources such as NABARD would be required.

The remit of MPEDA should be widened to other sectors of the industry both for technical and financial support and individuals may be better placed to take advantage of these opportunities by the formation of cooperatives, self help groups and associations.

Topic 2 Adequate provision of infrastructure and communication systems to facilitate transition by the poor to the new regime

It was felt that there is a need to demark landing areas specifically for the fishing and fish processing industries and that these need to be provided with common landing facilities such as water and landing platforms. There is dire need to ensure that these facilities are managed and maintained in a satisfactory way.

The demarcation of land for these facilities could be the responsibility of a number of bodies such as MPEDA or Fisheries Department but allocation of the land must be made in consultation with the local community and end users.

The facilities can be funded by organizations concerned with the promotion of exports such as MPEDA, SEAI, DoF but maintenance and up-keep should be guaranteed through the delegation of responsibility to an association of end users and stakeholders.

This will require financial and human resources, political and administrative commitment and mobilisation of the local community.

Topic 3 Exploring opportunities for developing alternative livelihood options for the poor whose occupations are adversely affected by the changed legislation

It was felt that there was not enough information available to understand who is being marginalised by the legislation and that a specific study is required to address this further. As a result both national and micro level interventions will be necessary involving NGOs and civil society.

Topic 4 Exploring opportunities for diversification for additional/alternate income generation/enhancement

It was felt that there may be number of alternative employment opportunities for those disadvantaged by the imposition of stricter legislation but that these would be specific to particular groups and locations. These might include diversification to occupations outside the industry or value addition within the industry. What ever occupations/opportunities might present themselves it is clear that a number of prerequisites were required. These include awareness building amongst the stakeholders of these opportunities and upgrading of skills for these occupations. This would require collaboration between government departments to identify opportunities and provide the skills necessary.

Self help groups and NGOs might be important conduits for imparting these skills but the Department of Rural Development would be the most appropriate coordinating government department with ICAR institutions providing the skills upgrading. Credit will also be necessary for new occupations and this could appropriately be provided from NABARD through self help groups, NGOs and cooperatives.

The main problems likely to be encountered were identified as the excessive bureaucracy which will be encountered in government bodies that might be responsible for the activities and the fact that many of those affected feel type-cast as members of the fisheries community and feel that they have to remain in the relevant occupations.

Topic 5 Improving the information flows

The various organisations involved such as DoF, MPEDA NGOs and others are lacking information and there is a need for better information flow. Information is needed on quality control and marketing issues. Information on local legislation yet alone international legislation is not available to all sectors of the industry. It is essential that awareness and training programmes be undertaken and this can be undertaken by DoF through the NGO network. A standardised "Quality Kit" could be produced for this purpose and disseminated through grass roots organisations. For this to be effective fisherfolk need to be involved and convinced of the need for such awareness, funds need to be available and various departments of government need to work together to bring about change.

Topic 6 Making policies and their implementation more context-specific

There is a need for uniform policy in handling, fishing and marketing aspects in the industry and a uniform policy on monitoring food safety aspects. State governments need to upgrade their policies to suit the national and international requirements.

Certification for people to enter into the sector is necessary assuming that they have the required skills and abilities. These skills should be imparted through government agencies. State, central government agencies and NGOs would be responsible for this with the enactment of new legal powers. It is essential that the primary and secondary stakeholders (the industry in the broadest sense) be involved in this process.

4. DISSEMINATION AND METHODOLOGY

4.1 Dissemination

One of the major objectives of the workshop was to identify methods and channels of dissemination of the results of the research and any policy implications. There is a growing recognition of the importance of dissemination of research outputs from DFID research efforts.

It was agreed that the raw outputs from the research such as study reports and workshop proceedings along with other relevant documents such as international and Indian legislation on fish safety would be produced on a CD ROM for distribution amongst interested parties.

It was agreed that there were a number of different levels at which the research results should be aimed. At the policy level a series of short briefing papers (policy briefs) might be appropriate which highlighted the needs for policy change. These would be aimed at policy makers and implementers (both locally and internationally) and could be strengthened by face to face presentations to key personnel. The six topics used for discussion during the group meetings would make starting points for the briefing sessions/papers.

The project should make efforts to present findings at conferences and seminars and prepare papers for publication in key journals such as INFOFISH International, Fishing Chimes etc. The use of the World Wide Web (Onefish and the PHFRP web site) should be explored. A short video/CD ROM could be produced which would raise awareness of the issues surrounding the poor in the export sector.

A number of possible means of dissemination to the grass roots level were discussed. It was agreed that local language and local media (radio) must be used in many instances and NGOs; officers of the district fisheries offices; extension workers could all play an important role. Information packages explaining to the traditional fish workers the legislation in simple terms were essential needs. Some possible means of "getting the messages across" were suggested as below:

- Local language, local electronic media (radio and television such as AIR, and Doordarshan) should be made use of for dissemination

- Awareness camps at the grassroots level, involving local, grassroots level organisations
- Involving government departments – Department of Fisheries (district officers and further down the line)
- Street plays and folk theatre
- Video film aimed at the civil society to humanise the poor
- Dissemination packages aimed at different strata of the export sector
- ISRO has a mass communication project with fishers – they are making use of radio programmes. All fishing boats carry radios onboard and they listen to the programmes while fishing.
- Posters, pamphlets and handbills for disseminating the do's and don'ts targeted at different stakeholder groups in the sector to be developed for display in local languages for the benefit of different export sector participants

4.2 Methodology

The methods employed during the field studies were as much as possible standardised so that results from the three states could be compared.

The basic research question to be answered was "How has international seafood legislation (such as EU directive) affected the livelihoods of poor people who depend on the export industry"

To answer this question, we needed to know who are involved in the export industry (i.e. all the categories of people who involved right from the time the shrimp is caught to the time it is loaded on the ship).

This involved a two stage study

1. Stage One - Map the export supply chain
2. Stage Two - Identify the poor within the supply chain and study the impact that international legislation has had on them.

Stage 1 - Mapping the supply chain

Information on the supply chain was collected from secondary sources such as:

- Key informants from government authorities, central agencies
- Published documents of various previous projects and workshops/meetings

- Magazine and periodical articles
- The world-wide web
- Previous studies of export chains in the three states

Stakeholders identified at stage 1

- Crew and owners of trawling vessels
- Crew and owners of artisanal fishing units
- Owners and workers of aquaculture farms
- Middlemen traders who deal exclusively in export species
- Peeling shed owners and workers
- Processing plant owners and workers
- Exporters
- Ancillary industries such as ice plants, transportation, headload workers etc.

Stage 2 - Understanding the impact of the legislation

Now that we had identified the various stakeholders, we asked two questions

1. Who are the poor in the supply chain?
2. What has been impact of international legislation on these?

The tools used for the field work was participatory poverty assessment in focus group discussions, individual interviews within a sustainable livelihoods approach framework.

One of the problems identified during the discussions on this topic was how poverty was defined. The methodology gave a subjective assessment of poverty based on ideas created by participants in the discussions rather than an absolute measure of wealth. It was felt that more in depth studies could be made in this regard. Poor in some areas may mean not poor or no-so-poor in others. Details of how different people (including the poor) are paid or compensated for their work/efforts could have been included.

Appendix 1 - List of Participants

	Name / Designation
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Appendix 2 - Agenda

Seafood Legislation Workshop
Green Park Hotel, Visakhapatnam, A.P.
23 - 24 January 2003

Thursday 23 January 2003

Time	Activity	Responsibility
Morning	Arrival of participants and Registration	
12.30	Buffet Lunch	
14.00	Welcome	Peter Greenhalgh, NRI
14.10	Overview of Project and Purpose of Workshop	Peter Greenhalgh
14.30	Summary of Synthesis Report on Conclusions from Research in Three States	Ivor Clucas Peter Greenhalgh
15.00	Orissa specific situation	M. Ashok/Rakesh Supkar Cirrus
15.40	Andhra Pradesh specific situation	Venkatesh Salagrama ICM
16.20	Kerala specific situation	Girish Simon SIFFS
17.00	Main themes for discussions on day 2	Roundtable
17.45	Close	
19.00	Evening meal	

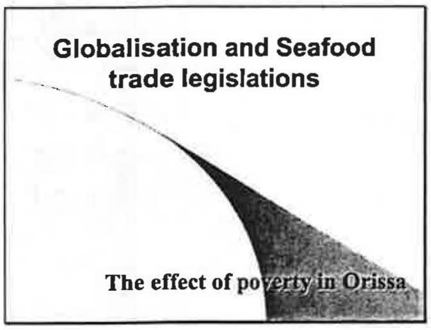
Friday 24 January 2003

Time	Activity	Responsibility
09.00	Theme: Dissemination - how, where and when?	Peter Greenhalgh
10.15	Introduction to Themes and Plenary and Group Sessions	Venkatesh Salagrama and Ivor Clucas
11.30	Theme 1: Impact of Stricter Seafood	

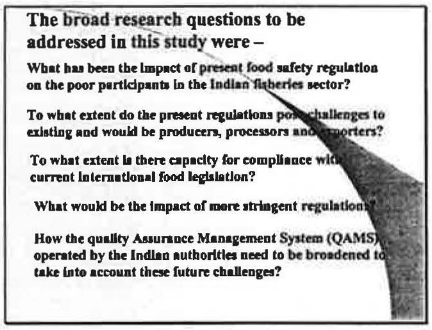
	Import Laws on Various Sectors of the Indian Seafood A. Introduction by VS and IC - Group Discussions - Group Presentation of Findings	
12.30	B. Plenary Session to Outline Coping Strategies and Provide Solutions to Impact Findings	
13.00	Lunch	
14.00	C. Group Sessions to Discuss Practical Aspects of Implementing Solutions and Coping Strategies followed by Group Presentations of Findings	
15.15	Theme: Methodologies to assess impact of international seafood legislation on the poor - Methodologies used in: AP (Venkatesh) Kerala (Girish) and Orissa (Rakesh) - Plenary discussions	Ashok
16.00	Conclusions and the Next Steps	Vivekanandan Peter Greenhalgh
16.45	Votes of thanks and Close	Peter Greenhalgh

Appendix 3 - Slides accompanying presentation on Orissa

Slide 1

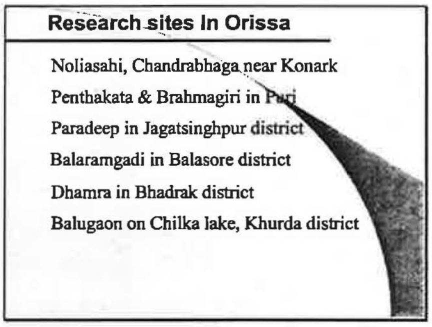


Slide 2

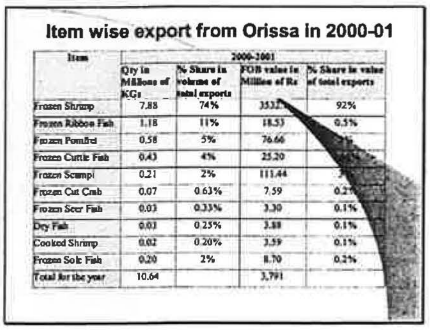


Slide 3

Slide 4



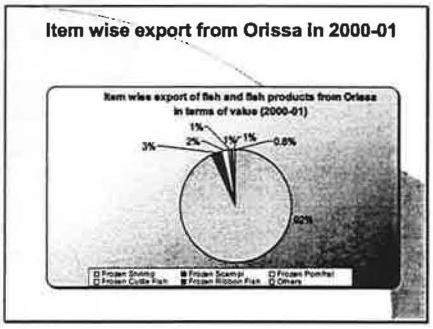
Slide 5



Item wise export from Orissa in 2000-01

Item	2000-2001			
	Qty in Millions of KGs	% Share in volume of total exports	FOB value in Million of Rs	% Share in value of total exports
Frozen Shrimp	7.88	74%	3532	92%
Frozen Ribbon Fish	1.18	11%	18.53	0.5%
Frozen Pomfret	0.58	5%	76.66	[illegible]
Frozen Cuttle Fish	0.43	4%	25.20	[illegible]
Frozen Scampi	0.21	2%	111.44	[illegible]
Frozen Cut Crab	0.07	0.63%	7.59	0.2%
Frozen Seer Fish	0.03	0.33%	3.30	0.1%
Dry Fish	0.03	0.25%	3.88	0.1%
Cooked Shrimp	0.02	0.20%	3.59	0.1%
Frozen Sole Fish	0.20	2%	8.70	0.2%
Total for the year	10.64		3,791	

Slide 6



Slide 7

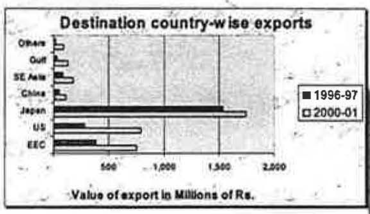
Destination country wise exports of seafood from Orissa

Percentage of total export	[illegible]		[illegible]		[illegible]		[illegible]		[illegible]	
	Qty Wise	Value wise	Qty Wise	Value wise	Qty Wise	Value wise	Qty Wise	Value wise	Qty Wise	Value wise
EEC	17%	20%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
US	19%	21%	[illegible]	[illegible]	[illegible]	[illegible]	17%	[illegible]	[illegible]	[illegible]
Japan	36%	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	40%	[illegible]	[illegible]	[illegible]
China	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
S.E. Asia	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Gulf	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Others	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

(Source: MPEDA, Bhubaneshwar Office)

Slide 8

Destination country wise exports of seafood from Orissa



Slide 9

Findings

Contribution of small scale sector
- Small and getting smaller over the years
- No of traditional crafts stagnated/reduced
- Proportion of prawn/shrimp catch low

Identification of poor in the supply chain - through PPA
- Head-loaders/ labourers at godowns
- Fisherman crew in traditional crafts
- Fisherman
- Trawler crew
- Labourers in the processing plants

Slide 10

Findings...

Importance of export-species to the livelihoods of the poor

Effect on domestic consumption

Impact on livelihoods of basket makers

Main problems

1. **Scarcity of catch**
2. **Increased cost of fishing**
3. **Outbreak of viral disease**

Slide 11

Food safety legislations

Capacity for compliance

Possible future impact of stringent regulations

1.Problems related to traceability of the material

2. Quality enforcement on inputs like ice

3. Regulation of hygiene conditions at landing centres and on board fishing craft:

4. Financing of operations

Slide 12

Implications of the study

Impact of regulation on Poor has so far been limited, mainly because of the lack of enforcement of the regulations.

Monitoring and enforcement of Orissa Marine Fisheries Regulation Act (OMFRA)

Assessment of numbers of players involved in various sectors and different activities of post harvest

Up gradation of facilities at landing centres, jetties and harbours

Slide 13

Implications of the study

Package of practices for aquaculture farmers

Creating awareness on quality regulation at ground level

Capacity building of government system to ensure compliance

Involvement of stakeholders in the upkeep of landing centres

Appendix 4 - Summary of Seafood Legislation Report for Andhra Pradesh

The first slide shows a map of Andhra Pradesh indicating the coastal districts and the places where fieldwork has been conducted for this study.

The next two slides provide a brief background to fisheries in Andhra Pradesh.

Reliability of Statistics Presented

Right at the beginning, it must be mentioned that many of the statistics to be presented here are analysed perhaps for the first time since their compilation for this study, and consequently, are not meant to be anything more than indicative of particular trends that we came across. The figures and percentages do no more than present a trend, and they should not be taken too literally. The same applies to the sources of data as well, although it is stressed that the information comes from impeccable sources.

Fish Production in Andhra Pradesh (Slide)

According to the Department of Fisheries, the total fish supply in Andhra Pradesh in 1998-99 was estimated at half-a-million tonnes.

In the 10-year period from 1985/86 to 1995/96, the total fish production in the state increased by 52 percent.

During the same period, marine fish production increased by 20%, which is lower than the 63% increase for the country as a whole.

Inland fish production doubled from 100,000 tonnes to 200,000 tonnes, as against a 51% increase for the entire country.

Aquaculture grew rapidly in Andhra Pradesh through the 1980s and '90s. In 1998, the production of shrimp from culture sources stood at 45,000 tonnes, nearly double the production during 1995-96.

Growing emphasis on exports in the state

Since early 1970s, there has been a rapid reorientation of fish production systems in Andhra Pradesh towards harvesting exportable varieties. Being a state where fish consumption is relatively low has helped gear the production systems to cater to export and ex-state demands. (Slide)

Although other species have begun to be exported, shrimp continues to be the basis of most marine and brackishwater fishing and culture operations, and any changes related to production, processing or trade of shrimp have repercussions on the sector as a whole.

Capture fishing has undergone changes to reflect the emphasis on exports: fishing systems that depended on a mix of different species have begun to concentrate on fewer varieties – mainly shrimp – with a good export value.

Mechanised fishing sector developed almost as a means to harvest shrimp. In due course, most artisanal fishing operations also underwent changes to target shrimp.

While there are no indications that increasing exports have taken away traditional livelihoods on a large scale, the reorientation of fishing operations to catch shrimp encouraged two things: one, over-capitalisation of the sector in the hopes of increasing profits, and two, over-dependence and possible overexploitation of the shrimp resource, besides most other commercial species. The result has been that trader-financiers have become de facto owners of the fishing fleets in artisanal sector.

On the other hand, the increased value of shrimp in the international markets may also have meant that many traditional fishing operations that were facing problems with poor catches of fish could continue to remain viable.

Improved infrastructure to cater to export trade (Slide)

Correspondingly, there has been a rapid growth in infrastructure to facilitate exports of seafood. Freezing plants, ice plants and cold storages have come up in areas that have the production/processing/export facilities. Rapid transport became possible as a result of good roads laid to connect most of the remote fishing villages. Telecommunication systems facilitated quick exchange of information between the producers and the buyers. I believe cell phones are the newest technology helping conclude transactions even before the shrimp are in the boat. While many of these developments can be traced to the growth of shrimp exports, it is clear that all these changes have had an impact on the way any fish is caught, processed, and traded.

Exports from Andhra Pradesh

The problem of quantifying seafood exports from Andhra Pradesh

It is both surprising, and disturbing, that there is no information on the total quantity of exports from Andhra Pradesh. The Marine Products Export Development Authority (MPEDA) which has the responsibility of collecting and disseminating export statistics for seafood does not have a distinct category for Andhra Pradesh, and gives out port-wise information only. The state Department of Fisheries in Andhra Pradesh draws its information from MPEDA, and uses the figures for Visakhapatnam as exports from the state, thereby leaving out a significant percentage of fish produced in Andhra Pradesh but exported through Chennai Port. On the other hand, nearly a third of the seafood exported from Visakhapatnam originates in Orissa. It is possible to differentiate Orissa's share of exports from Visakhapatnam Port, using Orissa Department of Fisheries statistics, but Andhra Pradesh's share in Chennai exports is not known. We have used the statistics for Visakhapatnam as a proxy for indicating seafood export trends for the state as a whole.

Volume and value of exports from Visakhapatnam (Slide)

The volume and value of exports from Visakhapatnam Port have shown a consistently increasing trend through the 1990s. During the period 1991-1998, the total volume of exports from Visakhapatnam had gone up by more than 200% from 10,000 Tonnes to about 24,000 Tonnes, while the value went up more than four times from 1900 million rupees to 8000 million.

The east coast has traditionally exported low volume-high value products. In the year 2000, the exports by quantity from Visakhapatnam Port amounted to about 5.6 percent of the total volume of exports from the country, but they fetched 18 percent of the total export earnings. (Slide)

However, since 1997, the quantum of exports from Visakhapatnam port has remained more or less static, and it is the value of exports that has been going up and keeping the industry in profit. This is significant because it could be indicative of a general levelling off of exports from the state.

Share of Andhra Pradesh in exports from Visakhapatnam (Slide)

When the quantity of seafood from Orissa which is exported through Visakhapatnam is deducted from the overall exports from Visakhapatnam, it appears that Andhra

Pradesh's share in overall exports from Visakhapatnam Port ranges between 65 and 85 per cent in terms of quantity and between 70 and 80 percent in terms of value. (Slide) (Slide)

The percentage of exports to total production in the state ranges between four and six percent, and between 10 and 13 percent when taken as a percentage of marine and brackishwater production.

Contribution of culture sources (Slide)

With respect to shrimp, the cultured varieties have come to dominate the exports constituting nearly two-thirds of the quantity and 75% of the value of the total shrimp exports from the state. (Slide) There has been a corresponding decrease in the exports of captured shrimp in real as well as percentage terms. (Slide)

Contribution of artisanal sector (Slide)

According to the Department of Fisheries, the non-mechanised, i.e., artisanal, small-scale, sector contributes as much as, and often more than, the mechanised sector to the overall landings of penaeid shrimp (and consequently to the exports).

However, CMFRI statistics suggest that the contribution of non-mechanised boats to the total shrimp landings declined from 25 percent in 1980 to 10 percent in 1997, and this remains a major gap in our understanding of relative contributions by different sectors. This is important to know because most of the development effort in the fisheries sector is geared to help boost the exports.

Species exported (Slide)

In 1991, more than 97% of the total exports from Visakhapatnam consisted of frozen shrimp. By 2000, the composition of shrimp (including cultured shrimp) by weight in the total exports came down to less than 80%, although, in terms of value, shrimp still constitutes 96 percent of the export earnings.

There has been a steady increase in the quantity of finfish in the exports through 1990s. There are indications that the finfish constituents are continuing to increase in the overall exports from the state.

Country-wise exports of seafood from Visakhapatnam (Slide)

Japan has been the most important importer of seafood from Visakhapatnam Port, its imports accounting for 75% by volume and 86% by value of the total exported.

The US is the second largest importer of seafood from Visakhapatnam Port, followed by China, a number of Southeast Asian countries and the EU. (Slide)

Europe accounted for about 5% of the total exports from Visakhapatnam Port and the decade of 1990s saw a decline in the percentage of exports to Europe. In real terms also, the growth of exports to EU has been comparatively sluggish. For instance, exports to the US during the decade increased five-fold in terms of quantity and 17-fold in terms of value, when compared to the EU markets, which grew by 45 percent by quantity and about three times by value.

It is in this background that apart from a few direct exporters to the EU, few people in the industry were aware of the EU ban of 1997 and that its impact on the seafood industry in Andhra Pradesh remained minimal.

Players in the export sector

Increased exports have meant the establishment of long chains of product flow and intricate networking between the various players involved in the activities both directly and indirectly.

The striking feature of the seafood export sector is the existence within it of an informal segment and a formal segment, the people in the informal sector outnumbering those in the formal sector by many times. The formal category consists of the exporter-processors and a few producer groups, who have the necessary institutional structures to operate along specific systems of production and marketing. (Slide)

On the other hand, the current systems of production dictate that the pre-processing stages of the activities remain as informal as possible, as it is expensive and risky for more formal structures and processes to be put in place, and maintained throughout the year. Thus the vast majority of the producers and intermediaries continue to remain in the informal category.

This informal networking has allowed the entry of a number of new players into processing, transport and marketing systems, opening opportunities for poor people to find employment in the sector. (Slide)

The internationalisation of Indian seafood industry broke caste and class barriers effectively, and gave rise to new classes equally effortlessly. Commission agents, middlemen, carriers and transporters, truck and bullock cart operators, peelers and shrimp head-removers and processors, packers and handlers, exporters and processing plant operators, ice makers, sellers and crushers, besides technicians, crate and basket makers, insulated systems manufacturers and sellers, have all found a place for themselves in the rapidly evolving export chains.

(Slide) The existence of a large number of intermediaries means that the pricing mechanisms are influenced by factors other than the intrinsic worth of the product, often depriving the fishers of their rightful share in the sale. The study has indicated a minimum margin of 10% at each level, consequently, the more number of intermediaries there are, the less is the share of the fisherman.

This informal networking of the supply chains, as can be expected, is a cause for concern in the face of stiffening seafood legislation. The problem becomes more acute when it is recognised that the capacities of many categories of the poor people in the sector to invest in upgrading their current systems of production or trade are limited.

Consequently, the prevalence of the informal practices of production and pre-processing indicates that while the implementation of any legislation will prove to be difficult in the short run, the adverse impacts of its effective implementation will be felt by the poor in the medium to long run, because the new legislation require that the systems become more controllable and efficient, and this can happen only when they become more formalised.

The poor and the Export Sector (Slide)

The poor in the export sector mostly fall into the 'invisible poor' category. Unfortunately, there is little quantitative or qualitative information on the various categories of people working in the export sector, in relation to the impact of changing export trends, seasonality and shocks such as ban on exports on their livelihoods. With most of them unrecognised as being direct stakeholders in the export sector, or even in the fishing sector in general, and being unorganised, current policy making largely bypasses them. Consequently, their capacity to access institutional support remains weak.

The first thing that can be said of the poor in the sector is that the gender equation in the export commodity chains is heavily tilted in favour of men. Although women dominate in some activities, such as peeling and processing, the women's ability to obtain a decent livelihood is heavily dependent on the men who run the factories. It is important to note that whilst all factories employ women as processing labourers, it is often men who are employed as supervisors over them.

Many of the women involved in processing are single, unmarried girls coming from poor families in distant places. The poverty that characterises their background means that (i) their families often depend on their incomes for subsistence, (ii) their future prospects – marriage, settling down to a secure life – are very uncertain seeing that the girls must find the means to be able to do so on their own, and (iii) their ability to negotiate – let alone demand – for a better treatment from their employers is limited.

The origin of a large percentage of these women in a distant state brings in another complication to their ability to integrate into the society they are forced to live in.

The second category of women who are involved in pre-processing and processing work are those from single-headed households, where the woman is the sole bread earner in the family. Once again, they are constrained along the same lines as the unmarried girls, although their vulnerability may not be as sharp as in the case of the Malayali girls.

The second thing is the fact that the old people have a limited role to play in the sector. One has to be at the peak of his/her abilities to be able to remain within the export sector, either as a producer, or as a processor, or as an ancillary worker. By the time a poor person 'retires' from the activity, s/he has literally no resources to fall back upon. It is the lucky few who can afford to live upon their earnings, or on their children's earnings, but a large percentage remains destitute.

Thirdly, being mostly involved in 'invisible' and poorly organised trades such as peeling and processing, there is little by way of employment security, social security and old-age security.

(Slide) The poverty of the producers who depend on shrimp for their livelihood is a result of:

(i) Continuing reduction in access to, and availability of, shrimp
(ii) Need for excessive investment in fishing – the amount spent often exceeding the returns
(iii) Lack of opportunities for diversification of occupations because of lack of

the knowledge, skills, ability, opportunities and time

(iv) Excessive dependence on shrimp on the one hand and on the middlemen and traders on the other (which is acute in remote villages), and

(v) Lack, or inadequacy, of security nets – in terms of use rights and access rights, and lean season assistance

Going by these criteria, even the apparently well-off categories of the stakeholders – such as boat owners – are seen to fall into the category of 'potential poor' or 'tomorrow's poor', when the issue of reduction of shrimp and other important catches is taken into consideration.

Impact of Seafood legislation (Slide)

The changes to the seafood legislation in late 1990s did not have an apparent direct impact upon many people outside the processing and export categories, but there is evidence that there were long term, indirect, trickle-down effects at all levels.

In the post-1997 period, when the EU regulations came into force, all changes in the export commodity chains in Andhra Pradesh are almost entirely confined to the processing infrastructure and operations only, while the production and procurement systems remained more or less untouched.

Most processing plants have upgraded their production and processing systems to stand up to the international requirements. The government has extended support – technical expertise, technology and subsidies – to the processors in this. Many processors felt that the changed legislation helped in making the industry more competitive and able to diversify its market base.

Most processing factory owners and operators pointed out that the fears of the need for high investment to meet the requirements of the guidelines – insistence on particular types of material for upgradation – were unfounded.

There was initially much confusion with respect to the EU regulations – there was a misunderstanding or misinterpretation of the directives in some cases and this has been attributed at least partly to the obscurity of the language employed in the EU directive itself, and partly to the over-enthusiastic interpretations of the implementing officers.

Now, with increased government support and cooperation for upgrading the facilities, most processing plants have facilities more suitable to meet international standards.

MPEDA has also supported most processing plants to upgrade their facilities to cater to the more demanding markets such as the EU, and at the same time, ensured that the directives are implemented properly.

At present, the implementation of seafood legislation or the consequent quality raising programmes do not extend beyond the processing plants, and the existing conditions at the landing, handling and pre-processing areas continue to be as they have been all along. Similarly, in aquaculture, small farmers remain blissfully ignorant about the negative fallout of some of their practices, such as the use of potentially harmful substances.

The lack of enforcement of the regulations at the production (i.e., onboard the vessels) and procurement (i.e., landing centres, collection points etc.) levels is said to be due to the inability of the existing structures – at the Government of India level or at the state-level – to keep a check on these systems. The lack of clarity in roles between various state- and central-ministries and departments adds to the problem.

In the long term, this will have serious repercussions all around, particularly because the future legislation will have the potential to be more sweeping and far-reaching in their impacts. The recent furore over the issue of using antibiotics and the muddy smell in shrimp in the aquaculture produce underlines this concern.

There are however indications that quality consciousness has been growing amongst different stakeholder groups. Use of ice, better handling, packing and transportation systems are instrumental in meeting the quality requirements of the processing plants. The uptake of such measures is largely to overcome the problem of poor fish catches, but serves the purpose all right. Similarly, there has been a trend towards shrimp being procured whole by the processing companies, but it had to do with other, and more practical, reasons than just changed seafood legislation.

The Government of India takes the possibility of increased restrictions on the Indian seafood seriously and has been imposing stringent controls on the exports – particularly the shrimp, while at the same time extending all necessary support to the industry to cope with the changing export conditions.

Issues of concern

1. Declining productivity of capture fisheries and increasing problems with culture sources of shrimp.
2. Fluctuations in seafood export markets – the wide fluctuations in demand and

prices for seafood over the past few years make exporters wary, and this is where the potential of EU as an important trading partner becomes important.

Ways forward

It is recommended:

- that more emphasis be placed in raising awareness about quality amongst the different stakeholders,
- that efforts be made to make the seafood legislation less obscure and user-friendly and more uniform across the different countries within a region (i.e., EU), and
- that options for diversifying the seafood exports from the state be explored, for increasing the commodities exported to overcome the constraints that a single-minded emphasis on shrimp could give rise to.

More specifically, the following points will need to be considered: (Slide)

1. More documentation – both quantitative and qualitative – would need to be done to fill the gaps in our current understanding of the various stakeholders in the fishing sector as a whole, and in the export segment in particular.

   The state department of fisheries has the necessary manpower as well as the expertise and rapport with the communities and would be ideally suited for undertaking the work.

2. There is a need and possibility for reorienting development priorities from seafood exports to seafood exporters – from commodities to people.

   The priority would be to know how many people benefited and from what sections of the society from such an export. This might require multi-disciplinary approaches to study the impacts of a change on a wide range of stakeholders and ensure that the negative consequences are minimised while the positive ones are maximised.

3. The fact that none of the producers and a variety of other important stakeholders was even aware of the changes in the export legislation over the last decade indicates a failure – or, at best, apathy – on the part of the extension services in reaching the poor.
4. One reason for this is that an organisation like the MPEDA – which knows such things – is not equipped to undertake a task of this proportion, while the extension

services of the Department of Fisheries may not have much of an idea about the ban themselves. If the MPEDA were to work in conjunction with Department of Fisheries at least as far as its extension services are concerned, it would yield a more fruitful result.

5. There are gaps in our knowledge of issues such as the quantity of exports from Andhra Pradesh. Policy making is essentially dependent upon the availability of dependable data, and the failure to develop such data will be catastrophic. These information gaps are very significant in that they do not allow things to be put in perspective, and lead to lopsided allotment of funds, efforts and initiatives in one direction or the other.
6. There are quite a few agencies – MPEDA, Department of Fisheries, CIFT, EIA, SEAI, etc – and an equal number of Ministries (Ministry of Agriculture, Food Processing, Commerce, etc) all of which have a direct or indirect role to play with respect to exports, and yet, the linkages between different agencies remain tenuous and need strengthening. There is also much duplication of efforts as a result – data gathering, training, extension and even funding support – and there is much scope for a more focused and better coordinated programme for export promotion along more sustainable and equitable lines.
7. The support extended by the government through MPEDA to the processing industries in coping with the changeover to more rigorous export standards will need to be extended further down the line, both horizontally (i.e., to people working in the processing industry as wage earners) and vertically (i.e., to people in the production chain – crewmembers, small-scale aquaculturists etc). It is obvious that they must be in tune with the government thinking in this respect both for their and the country's benefit, it is necessary that they be given a more important role in the plan of things.
8. (Slide) Another important area of concern is the total lack of hygiene and cleanliness at most landing centres and fishing harbours, and from the way the operations are allowed to take place at these places. There is an urgent need for organising the systems at the landing centres efficiently, and to upgrade them to meet the national and international standards adequately. This is obviously to be done for the most part by the industry, but without sufficient government encouragement and support, this cannot be done.
9. An area of particular concern in most coastal districts of Andhra Pradesh is the lack or inadequate supply of potable water and electricity, both of which are absolutely essential in maintaining the quality of the shrimp for export. Making good quality ice available consistently throughout the year is a good investment for the state as a whole.

10. The current EU legislation concerning of export of seafood is not very clearly defined – obscurities still remain. This lack of clarity stems from the heterogeneity of the EU Commission itself, with different member-states opting for/preferring different standards. There is a need for a common code of conduct for all EU countries, and while formulating the guidelines; it is also necessary to involve representatives of the seafood industry itself, so that they could have a say in deciding to what extent they could go in stipulating optimum standards.
11. In aquaculture, there is obviously a need to regulate the use of antibiotics and other such potentially harmful substances. At a fundamental level, there is a need to go back to the basics, although nobody seems to know how.
12. The most important factor that makes the entire export industry vulnerable to high levels of risk – i.e., depletion of resources and poor catches/harvests – remains to be addressed. Without doing something about the drastic reduction in seafood production, there is not much that any changes in the seafood legislation could do one way or the other.
13. The single-minded dependence on the shrimp notwithstanding, there is ample potential for diversification of the export basket to include many fish species as well. Although the returns would not be quite as lucrative as in the case of shrimp, there is no doubt that export of fish is also a profitable activity. However, before any attempts are made to diversify, their potential consequences on the traditional stakeholder groups depending on the particular species – dry fish manufacturers and such like – will need to be considered and studied in detail.

Future scenario (Slide)

There is a possibility for the legislation to become more stringent and widespread in due course, and the impacts upon the various stakeholders will need attention.

On the one hand, adoption of stricter norms, and their effective implementation will indeed make for a radical change in the conditions of the processing workers in the factories. Any factory intending to obtain certification for export would be assessed for the condition of its workers. Besides stipulating the numbers of people that a factory would need to employ, based upon the capacity of the factory, the norms also effectively legitimise the employment of these women and improve their living conditions. This could mean that stricter enforcement of the legislation would help improve the living conditions of the processors.

On the other hand, the application of more stringent quality parameters, coupled with the problem of declining productivity in both the capture and culture systems, would have serious consequences for the producer groups. The government will obviously not be in a position to extend assistance to all stakeholders simultaneously to upgrade their systems to stand up to the international requirements, and most of the smaller players will find themselves pushed out of the race.

There are indications of many corporate firms in the sector gradually moving away from fishing and fish processing operations into less risky areas. It was reported that there have been no new proposals for setting up processing plants in Visakhapatnam for some time now. With most small and part-time players withdrawing from the seafood export segment, exports would get concentrated into fewer hands, and the current poor supply situation also favours such concentration. Already, it is not uncommon to find one plant processing the products from 4-5 companies simultaneously. As a result, it is possible that the production and processing systems would become more streamlined.

These changes would obviously have the effect of reducing the number of new entrants into fishing, thereby lessening competition and possibly pressure on the resource. With fewer companies managing the exports, they would be able to balance their supply-demand situation more efficiently to suit the existing systems, and keep prices more or less stable. This will also contribute to more formal systems to emerge in the supply sector, with far-reaching consequences for all concerned.

Such a change in the market hold – from a large number of short-term and/or low investment operators to a handful of long term players – will make the industry far more sophisticated, able to keep up with the changing international demand and requirements, and more manageable, but the issues of equity and sustainability will still remain.

While moving away is possible for some sections of the sector, a large majority of the people – particularly the poorer sections – will continue to depend on the sea and the exports for their survival, and their needs will need to be considered seriously.

Thus, the effect of any changes in legislation on the poor could be serious, because it is the informal nature of several of the systems – production, pre-processing etc – that provides a livelihood for them. The impact of any changes on vulnerable sections like women, the poorer producers, processors and old people will be considerable, but this is an area that remains to be investigated. Not having experienced any major upheavals as a result of past and present regulatory regimes, it is difficult to arrive at any conclusions at this stage, except to say that the fact of having no prior experience of such a thing will probably mean inadequate responses at all levels.

Ways forward

When the seafood legislation covers the producers in a more efficient manner, one of three things could happen:

(i) the fishers would continue to operate the same way as they always did, but in a criminalized manner, as is happening with the other regulations,

(ii) the fishers would take to other non-export species, but this is highly unlikely because the economies of scale would not any more favour reverting to good old ways, or

(iii) the fishers would simply have to stop fishing and go into other sectors in search of work – and this is already happening in most coastal areas.

(Slide) A fourth option would be that the seafood legislation, as well as the resource management programmes, are taken down to the community level, and with the concurrence and the participation of the communities, a feasible management regime for quality control would be chalked out so that the responsibility for implementing it would rest as much with the communities as with the implementing agencies themselves.

Being involved in the exercise as a direct stakeholder, and told what the consequences would be for not complying with the international legislation, the different stakeholders could work out practical and cost-effective measures to enforce the regulations in a more people-friendly manner, and in such a way that quality would not be compromised.

Appendix 5 - A case study of Kerala State, India

South Indian Federation of Fishermen Societies
Trivandrum, Kerala

The Kerala seafood industry

- 10 lakh depend directly and 2 lakh indirectly on fishing and allied activities in Kerala
- Exact numbers involved exclusively in the seafood export industry unknown
- Main stakeholders in the seafood export industry

  - Crew (max - 30,000) and owners of trawling vessels
  - Crew and owners of artisanal fishing units
  - Middlemen traders who deal exclusively in export species
  - Peeling shed owners and workers
  - Processing plant owners and workers
  - Exporters
  - Ancillary industries such as ice plants, transportation etc.
  - The Government of India

The poor within the seafood export industry in Kerala

- Fishermen who work as crew on trawling vessels
  Considered 'vulnerable'.
  Do not own fishing assets and thus forced to depend on others for work
- Significant section of owners and crew of artisanal fishing units
  Income from fishing fluctuates widely
  Generally owners have large loans to repay
- Peeling shed workers and house peelers
  Mostly from the poorest sections of the fishing community
  Mostly female relatives of crewmembers
  Peeling not considered 'respectable'

The impact of the EU ban

The immediate impact

- Ban imposed on 1st of August 1997
- Impact most keenly felt in Kerala

- Ban coincided with the cuttlefish season
- Raw material procurement fell sharply
- Prices fell sharply to around 25% of pre ban levels
- Only those supplying to Non EU markets continued procurement
- For a fortnight after the ban, many trawling vessels stopped fishing
- Many peeling sheds closed down temporarily on account of lack of orders
- 6 processing plants obtain EU licenses in December 1997
- Market characterized by large number of sellers (I.e. trawling units & peeling sheds) and a small number of buyers
- Intense competition among peeling sheds
- Larger ones that are able to provide raw material on liberal credit terms survive.
- Many small peeling sheds forced to close down permanently.
- House peeling came to an abrupt halt
- Loss of employment for peelers for about 4 - 6 months
- Many shifted to working as temporary labourers in the construction industry
- Temporary loss of livelihood for trawler crew
- No discernable short term impact on artisanal fishermen

The long term impact on the processing industry

- The ban forced processing plants to invest large amounts in plant upgradation
- This left many processing plants with little working capital
- 'The early mover advantage'
- Consolidation within the industry
- Emergence of a small number of powerful players who control most of the processing and export
- Many who upgraded are in trouble; low capacity utilisation
- The long term impact on peeling shed industry
- Hastened a shake up in the peeling shed industry
- Small number of sheds with financial resources and good procurement network dominate
- Small independent peeling sheds marginalised
- Emergence of peeling sub contractors
- The re-emergence of house based peeling

General trends

- The EU ban overshadowed by the dwindling raw material supply situation
- Declining CPUE reported during fieldwork
- Trawlers struggling to breakeven
- Overcapacity at all levels in the industry (trawlers, peeling sheds, processing plants) makes the problem worse
- Rising costs of operating trawlers
  - Rising fuel costs
  - Depletion of inshore resources forcing vessels to go farther

The peeling shed industry

- Peeling shed industry remains intact despite EU directive; however resulted in internal structural changes
- Peelings sheds are by and large the same in terms of infrastructure and processes as they were during the pre ban days
- Some improvement though, mainly driven by demand form processing plants
- EU licensed processing plants continue to procure peeled material from peeling sheds which are not EU compliant

Why peeling sheds are difficult to get rid of?

- They perform several vital tasks for the processing industry in Kerala
  - They are aggregators of raw material
  - Increasingly, an important source of credit to processing plants
  - Have a cost advantage over processing plants in peeling activity
  -

So, why don't peeling sheds upgrade?

- No money
  - MPEDA issues subsidies (max of 50%) after the upgradation
  - Banks do not want to take a risk with an uncertain industry
- No incentive
  - Just running harder to stay in the same place
  - No guarantee of better margins after upgradation
- No enforcement
  - What is the point in investing if house peeling is not stopped?
- Uncertainty over raw material supply

The impact on livelihoods so far

- Impact on livelihoods of the poor minimal
  - Affected more by raw material shortage and rising costs
  - Most respondents did not readily recall the ban
  - 'Just one among the many reasons given for depressing prices'
  - Peelers found alternate employment without too much difficulty
  - Low beach prices for about a year for the trawlers
  - Prices recovered as more processors got EU approval and restarted procurement
  - Current prices higher than pre ban levels
  - Rising beach prices have ensured that overall incomes of trawler crew have not declined drastically on account of raw material shortage

The future.....

- If EU directive 91/493/EU is strictly enforced, then
  - Most peeling sheds will have to close permanently
  - Peelers will have to seek alternate employment
- Harbours and landing sites must upgrade or be left out
  - Who will bear the cost and who will be responsible for infrastructure maintenance?
  - The problem of monitoring artisanal landing centres
- Stricter international legislation based on the farm to fork principle in the pipeline
  - Likely to prescribe standards for fishing vessels, ice plants as well
  - Who will bear the cost of upgradation given the uncertainty in returns?
  - The issue of trace-ability