

**REPORT OF THE HIGH LEVEL
COMMITTEE TO REVIEW
DEEPSEA FISHING POLICY**

February 1996

Submitted to
Government of India
Ministry of Food Processing Industries
New Delhi



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Volume – I
Text and Recommendations

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ABOUT THE REPORT

Volume – I	Text and Recommendations
Volume – II	Supporting Documents
Volume – III	Questionnaire from traditional, mechanised, deepsea sector, maritime state Govt. and members of the Committee
Volume – IV	Constitution of Sub-group and their Reports

Note: Volume II to IV being supportive literature are kept for reference with Ministry of Food Processing Industries, New Delhi.

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CHAPTER 1

Introduction

The new deepsea fishing policy was adopted by the Govt. of India in the year 1991. The policy included initiatives for exploitation and utilisation of deepsea fishery resources within 200 nautical miles Exclusive Economic Zone. The accent of the policy was on increasing the fish production and acquisition of deepsea fishing vessels by the entrepreneurs through the joint ventures and lease arrangement with the foreign collaborators. Apart from the exploitation of resources, the entrepreneurs were permitted under the policy to enter into foreign collaboration for setting up 100% export-oriented units for production, of value added marine products.

The fishermen having apprehensions about the operation of joint-venture vessels in the Indian waters resorted to protest against the joint venture during 1994 and 1995. The matter of acquiring requisite technology and appropriate vessels for the purpose of exploitation of the deepsea fishing vessels vis-à-vis the policy on the deepsea fishing has become the subject of review and debate in the context of present day developments in marine fishery sector in the country.

Constitution and terms of reference of the committee

1. In view of the agitation of fishermen against the joint venture for operation of fishing vessels in the Indian seas a committee to review the deepsea fishing policy 1991 was constituted by Ministry of Food Processing Industries vide Order No. 21001-1/95 FPI (Fy) dated 7.2.95 under the chairmanship of Shri P. Murari, Former Secretary to the Govt. of India and Adviser to Federation of Indian Confederation, and Director General, Fishery Survey of India as the Member Secretary, with a total membership of 15, representing Ministry of Agriculture, Ministry of Food Processing Industries, Surface Transport, Ministry of Commerce, Ministry of Defence, Department of Ocean Development, Indian Council of Agriculture Research, Secretaries-in-Charge of Fisheries of Govt. of Kerala, Gujarat, Maharashtra, Tamil Nadu, Andhra Pradesh and West Bengal.
2. The Committee was then reconstituted with the addition of Smt. Promilla Issar, Joint Secretary, Ministry of Food Processing Industries, Secretary-in-Charge of Fisheries of Govt. of Karnataka, Orissa and Goa as members vide MFPI's Order No. 21001-1/95 FPI (Fy) dated 5.4.95. The terms of reference were also expanded.
3. The committee was further broad based with the inclusion of Members of Parliament, representatives of cooperative societies, traditional fishermen, mechanised boat operators and deepsea fishing sector following their discussions with the Honourable

Minister of State in charge of MFPI, Govt. of India, vide MFPI's order No. 21001-1/95-FPI(Fy) dated 27th July, 1995. The amended terms of reference of the committee are as follows:

- i. To review the potential and distribution of fishery resources in the Indian EEZ in consultation with experts and on the basis of available reports;
- ii. To ascertain the present status of exploitation of marine fishery resources by various sectors, namely, traditional sector, mechanised boats sector and deep sea fishing vessels;
- iii. To ascertain whether the operation of vessels under the new deep sea fishing policy or under charter has affected the traditional fishermen and the marine ecology adversely;
- iv. To suggest the lines on which the future development of the deep sea fishing sector should be charted; and
- v. To suggest measures for protecting the interests of traditional fishermen and for reducing the areas of conflict between traditional fishermen and deep sea fishing vessels.
- vi. The committee would be required to take evidence from various associations of traditional fishermen, mechanised boat operators and deep sea fishing trawlers.
- vii. The committee would submit its report by 30th September, 1995.

Four more Members of Parliament and one representative from Association of Indian Fishery Industry were included in the committee vide MFPI's order No. 21001-1/95-FPI (Fy) dated 17th August, 1995. Final list of members of the committee is as follows:

1.	Shri P. Murari (Retd. IAS) Advisor to FICCI New Delhi	Chairman
2.	Shri S.N. Vekaria Member of Parliament	Member
3.	Maj. Sudhir Sawant Member of Parliament	Member
4.	Shri Ram Naik Member of Parliament	Member
5.	Shri Satyanarayana Dronamraju Member of Parliament	Member
6.	Shri Oscar Fernandes Member of Parliament	Member
7.	Dr. Kartikeswar Patra Member of Parliament	Member
8.	Smt. (Dr.) Padma Nammalvar Member of Parliament	Member
9.	Prof. Amal Dutta Member of Parliament	Member

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| 10. | Shri Harish Narayan Prabhu Zantye
Member of Parliament | Member |
| 11. | Prof. K.V. Thomas
Member of Parliament | Member |
| 12. | Shri Manoranjan Bhakta
Member of Parliament | Member |
| 13. | Shri D.J. Tandel
Member of Parliament | Member |
| 14. | Shri John F. Fernandes
Member of Parliament | Member |
| 15. | Shri Rajubhai Parmar
Member of Parliament | Member |
| 16. | Shri Md. Salim
Member of Parliament | Member |
| 17. | Shri K. Rama Krishna
Member of Parliament | Member |
| 18. | Shri Ummadi Paidi Raju
President
Distt. Fishermen Coop. Society
Visakhapatnam | Member |
| 19. | Shri P.C. Appa Rao
President
Andhra Pradesh Mechanised Fishing
Boat Operators Association
Visakhapatnam | Member |
| 20. | Shri Dilip N. Pagdhare
Chairman
Mahim Machchimar Vividh Karyakari
Sahakari Society Ltd.
Mumbai | Member |
| 21. | Shri Thomas Kocherry
President
National Fisheries Action Committee
Against Joint Ventures
Cochi | Member |
| 22. | Dr. C. Babu Rao
President
Association of Indian Fishery Industries
Visakhapatnam | Member |

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| 23. | Shri P. Jairaj Kumar
Vice President
Deep Sea Fishing Industry Association,
New Delhi | Member |
| 24. | Shri Sunil Sud, IAS
Jt. Secretary, Ministry of Agriculture (MOA)
New Delhi | Member |
| 25. | Smt. Promilla Issar, IAS
Joint Secretary
Ministry of Food Processing Industries (MFPI)
New Delhi | Member |
| 26. | Shri A. Kannan
Dy. Director General
DG of Shipping Mumbai | Member |
| 27. | Shri K.B. Pillai, IAS
Chairman
Marine Products Export Development Authority (MPEDA)
Cochi | Member |
| 28. | Ms Ghazala Meenai
Dy. Secretary, Coast Guard (CG)
Min. of Defence
New Delhi | Member |
| 29. | Dr. S.A.H. Abidi
Director
Dept of Ocean Development (DOD)
New Delhi | Member |
| 30. | Dr. P.V. Dehadrai
Dy. Director General (Fy.)
Indian Council of Agricultural research
Krishi Bhavan
New Delhi | Member |
| 31. | Dr. V. Sriramchandra Murthy
Sr. Scientist
Central Marine Fisheries Research Institute
Cochi | Member |
| 32. | Shri A.D. Desai, IAS
Secretary (Fy.)
Govt. of Gujarat
Gandhinagar | Member |

33.	Dr. S.V. Joshi, IAS Secretary (Fy.) Govt. of Maharashtra Mumbai	Member
34.	Shri G.P. Sevalia, IAS Secretary (Fy.), Govt. of Goa Panjim	Member
35.	Shri K.P. Pandey, IAS Secretary (Fy.) Govt. of Karnataka Bangalore	Member
36.	Shri Chandran, IAS, D. Ravi, IAS Secretary (Fy.) Govt. of Kerala Thiruvananthpuram	Member
37.	Shri M. Ahmed, IAS Secretary (Fy.) Govt. of Tamil Nadu Madras	Member
38.	Shri M.C. Mahapatra, IAS Principal Secretary (Fy.) Govt. of Andhra Pradesh Hyderabad	Member
39.	Shri H.S. Sarkar, IAS Secretary (Fy.) Govt. of Orissa Bhubneswar	Member
40.	Shri R.K. Tripathi, IAS Secretary (Fisheries) Govt. of West Bengal Calcutta	Member
41.	Dr. V.S. Somvanshi Director General Fishery Survey of India Mumbai	Member-Secretary

Meetings and deliberations held by the committee

The first meeting of the committee was held on 6.3.95 Ministry of Food Processing Industries, New Delhi. The first meeting discussed the methodology to be adopted by the committee in

accomplishing its task as per terms of reference. The fisheries departments of maritime states were asked to give their inputs to the committee on the terms of reference. It was also recommended to include representatives from the maritime states of Orissa, Goa and Karnataka as members and the Joint Secretary (Fy) MFPI in the committee.

The second meeting of the committee was held on 19.4.95 in Krishi Bhavan, New Delhi. Important decisions taken in the meeting are:

- a. The committee recommended to request MFPI to extend the term of the committee. The term of the committee was extended upto 30.9.95 (vide letter No.21001-1/95-FPI(Fy), dated: 27.7.95).
- b. A group consisting of Dr. P.V. Dehadrai, Dy. Director General of Indian Council of Agricultural Research (ICAR), Dr. Y.S. Yadava Fisheries Development Commissioner, Ministry of Agriculture and Shri Sebastian De Gonzaga, Director General-in-Charge, Fishery Survey of India was entrusted with the job of framing a questionnaire for recording oral evidence from cross sections of traditional, mechanised and deepsea fishing operators and maritime state governments and other agencies.
- c. Veraval, Cochin and Madras were identified as centres to obtain oral evidence by a team drafted from the committee members.

The third meeting of the committee was held on 2.6.95 in Panchsheel Bhavan, New Delhi. Besides approving the questionnaire the modus-operandi for recording oral and written evidence was worked out during the meeting.

- i. It was decided that a team consisting of Shri P. Murari, Dr. Abidi, Rear Admiral Y.P. Malik, Mrs. Promilla Issar, Dr. P.V. Dehadrai, Shri Sunil Sud, Shri Chandran, Shri C.M. Leuva, Shri S.N. Shanmukha and Shri S.D. Gonzaga will visit Cochin on 24.6.95 to record oral evidence of the target groups.
- ii. It was also decided to replace Shri S.N. Shanmukha by Shri T. Balaraman for visit to Veraval on 10.7.95 to record oral and written evidence.
- iii. Visit to Madras was to be decided after the visit to Cochin and Veraval.
- iv. Approved questionnaire were forwarded to Kerala, Gujarat and Tamil Nadu in advance for translation into regional languages. The state Govts. were requested to identify the target groups and send the list to the Member-Convenor.
- v. Form IV and V were sent to maritime state fisheries and all committee members.

The fourth meeting of the committee was held on 9.8.95 in Krishi Bhavan, New Delhi. After broad basing the committee to facilitate an effective interaction to evolve a consensus on review of deepsea fishing policy, Hon. Member of Parliaments representatives of Coop. Societies, traditional fishermen and industry were included in the committee with modified terms of reference. This was the first meeting of the committee after broad basing and with modified terms of reference, the new members were appraised about the work so far carried out by the committee. Following decisions were taken in the meeting

- i. A status paper on Indian fisheries may be prepared.
- ii. Shri Thomas Kocherry may provide his suggestions for amendments to the questionnaire.
- iii. Shri K.B. Pillai, Chairman, MPEDA be requested to clarify about the diesel subsidy to deepsea vessels including those operating under joint ventures.
- iv. Sub-committees and places of their visit to be finalized in the next meeting.

The fifth meeting of the committee was held on 25.8.95 at Krishi Bhavan, New Delhi. Status paper on deepsea fishing was discussed, centres for visits, constitution of subgroups were finalised. A group was formed to finalize the questionnaire. A set of five questionnaire (Forms I–V) finalized is appended as Annexures I to V. Following decisions were taken.

- i. The documents on the Parliament debates on deepsea fishing may be made available to all members.
- ii. Reports of the UN Conference on straddling and highly migratory fish stocks may be made available to the members.
- iii. Translation of questionnaire in the regional languages may be carried out by the respective state Govts.
- iv. Reports on resources potential may be made available to all members.
- v. Sub-groups visits to centres may be finalised by the Member Secretary in consultation with Secretary (Fisheries) and MP(s) of respective states.
- vi. The term of the committee may be extended upto 30th November, 95.

Sixth meeting of the Committee was held on 17.10.95 at Udyog Bhavan, New Delhi. The committee met after the visits of subgroups was completed and summary of recommendations of the subgroups for Gujarat, Maharashtra, Goa, Tamil Nadu and Andhra Pradesh, Orissa and West Bengal were placed before the committee for discussion. In conclusion following decisions were taken.

- i. Reports of the sub-groups already received may be sent to all the members. Report of the sub-group for Kerala and Karnataka may be sent on receipt of the same.
- ii. Experts from the National Institute of Oceanography and Coast Guard may be invited to give a presentation before the committee.
- iii. List of the States from where questionnaire is to be received may be given to the Chairman.

The seventh meeting of the committee was held on 30.10.95 at Krishi Bhavan, New Delhi. Convenor/senior Members of each subgroup presented their reports before the committee. Dr. Sriram chandra Murthy, Sr. Scientist, CMFRI presented an account of fishery resources available in the Indian EEZ elaborating the steps to be taken for development of deepsea fishing especially for the fish stocks which are not exploited and use of fishing methods which are not practiced by our fishermen. Following decisions were taken

- i. National Institute of Oceanography and Coast Guard may be requested to make their presentations in the next meeting incorporating the points raised by the members of the committee in this meeting.
- ii. Shri Amal Datta, MP, and convener of the sub-group for Andhra Pradesh, Orissa and West Bengal may be requested to accord his approval for the report.
- iii. Member Secretary may prepare the draft report of the committee excluding recommendation and circulate among all the members in advance.
- iv. Next two meetings of the committee will be held on 16th - 17th and 22nd - 23rd November, 1995 at New Delhi.
- v. On 16th November NIO and Coast Guard may make their presentations, after which remaining agenda points will be taken up for discussion.

- vi. On 17th November, 1995 a draft report will be discussed and recommendations of the committee will be drafted.
- vii. In the meeting scheduled to be held on 22nd and 23rd November the final report of the committee will be discussed.
- viii. Final report of the committee may be submitted to the Govt. by 30th November, 1995.

The eighth meeting of the committee was held on 16th and 17th November, 1995 at New Delhi. As decided in the seventh meeting of the committee Coast Guard was requested to make presentation on the points raised by the members.

Dy. inspector General A.K. Mahajan (Director Operations) outlined the activities of the Coast Guard and its role in Indian EEZ. He explained monitoring of chartered, joint venture and leased vessels operating in Indian EEZ.

On 17th November, Ms. Promilla Issar, Joint Secretary, MFPI made presentation before the committee. She explained about the various policy measures taken by the Ministry to develop the deepsea fishing in the Indian EEZ. She made following suggestions:

1. Under the UNCLOS to prompt other countries we should have a deepsea fishing fleet.
2. Due to traditional fishermen coastal fisheries have developed. Similarly deepsea fishing needs to be developed by taking policy initiatives.
3. Resource specific vessels for tuna long lining, hook and line fishing and purse seining may be allowed. The industry needs promotion and if required the direction may be changed.
4. If we leave our deepseas free and without exploitation of resources by us poaching will increase and as such deepsea fishing may be continued.
5. With the increase of deepsea fishing activities Coast Guard will also enlarge ambit of operation and will further put a break on apprehension of Indian vessels by neighbouring countries.

Dr. Y.S. Yadava, Fisheries Development Commissioner, made a presentation on behalf of MOA. He outlined the world scenario, fish production in India, objectives of fishery development, agencies for fishing development, sector wise marine fish production, evaluation of motorisation/mechanisation, schemes for development of coastal marine fisheries and current issues posed for resolution. In conclusion he proposed the MOA's suggestions to ensure a harmonious development of both coastal and deepsea fisheries.

- i. Small mechanised fishing boats should be encouraged to venture far into the sea by increasing their capacity for multi-day voyages. The area upto 150 m. depth may be kept out of bounds of deep sea vessels of above 20 m size.
- ii. The deep sea fishing vessels of above 20 m size should be encouraged to fish in deeper areas beyond 150 m depth so as to tap the resources of that zone. Since the present Indian mechanised fleet has capacity to fish in depths upto 50–70 m waters, this will also be a buffer zone between the two sectors. This will safeguard the coastal fishery sector as there will not be competition from larger vessels in coastal areas.
- iv. MFPI may expedite the formulation of fishery regulations for areas beyond territorial waters.
- v. The Coast Guard should be authorised to have an effective enforcement mechanism over the fishing activities of deepsea fishing vessels (both Indian owned and foreign)

- vi. There should be a proper network of infrastructure and marketing facilities for the better utilisation of fish catches by development of suitable harbour facilities and post harvest technology. This would be pertinent in view of the low value fish available in deep waters.

Dr. S.V. Joshi, Secretary (Fy.), Govt. of Maharashtra said that views of the Maharashtra and Goa fishermen are reflected in sub-group report. The fishermen are against the joint ventures, although they are not adversely affected in the State. Deepsea fishing only contributes 1% of the total catch and may become a third party in the conflicts. The views expressed in the meeting and UNCLOS should be considered before finalising the recommendations.

Shri Ahmed, Secretary (Fy.), Govt. of Tamil Nadu suggested as follows:

- i. Vessels berthed in Madras fishing harbour may be berthed in main harbour to provide space for traditional and mechanised fishermen.
- ii. Foreign crew on board the vessels is creating social tensions which may be looked into.
- iii. Local fishermen cooperatives/associations/federations/groups may be encouraged and assisted to own and operate deepsea fishing vessels.
- iv. Training in deepsea fishing to traditional fishermen may be provided.

Shri Sunder Shekhar, Director, Govt. of West Bengal said that the Chief Minister, West Bengal has sent his views to Ministry of Food Processing Industries including problems of traditional fishermen which are indicated in the subgroup report. In West Bengal the tidal belt is high, salinity is low and continental shelf wide and, as such, deep sea fishing should be permitted only beyond 24 n. miles. The state has enacted MFRA in 1993.

Shri A. Kannan, Dy. Director General, DG Shipping, presented purely personal views and suggested as follows:

- i. Deep sea fishing should be encouraged upto the year 2000, by which time we should develop fishing capability and infrastructure facilities.
- ii. Ship building industry cannot develop on par with foreign ship building industry unless we promote deepsea fishing.
- iii. Infrastructure facilities such as harbours should be developed.
- iv. Shri C.V. Francis, Joint Secretary (Fy.), Govt. of Kerala said the Govt. of Kerala endorses the views of the subgroup on Kerala and Karnataka.

Shri N.C. Parida, Dy. Director (Fisheries), Govt. of Orissa, stated that the subgroup during visits to the state held discussions with various agencies and State Govt. endorses the views of the subgroup.

Dr. P.V. Dehadrai, Dy. Director General, ICAR outlined the conflicts between traditional and mechanised sectors and need for development of deepsea in Indian EEZ. He suggested that besides encouraging traditional and mechanised fishing we should have resource specific vessels for tuna long lining, squid jigging and purse seining.

Following decisions were taken

- i. Shri Thomas Kochery, Jairaj Kumar, Dilip N. Pagdhare and Dr. V.S. Somvanshi will make their presentations in the morning session.
- ii. In the afternoon the committee will finalise the broad recommendations.

During the ninth meeting of the committee held on 22.11.95 in Udyog Bhavan on deepsea fishing policy, presentations were made by Dr. V.S. Somvanshi, Shri Jairaj Kumar, Deepsea Fishing Industries Association, Dr. Babu Rao of AIFI and Shri Thomas Kochery, Action Committee on Joint Venture.

Dr. V.S. Somvanshi made a detailed presentation on commercial fishing techniques, deep-sea resources available in the Indian EEZ with reference to their types and abundance. He also outlined the potential estimates of demersal (1.931 million tonnes), pelagic (1.742 million tonnes) and oceanic (0.426 million tonnes) fish stocks in the Indian EEZ. The maximum sustainable yield of fish stocks in the Indian EEZ has been estimated by the FSI based on data collected through exploratory surveys. Since the present production is only 2.67 million tonnes, he stressed the need for undertaking deepsea fishing for sustainable development and exploitation of demersal, pelagic and oceanic fish stocks in the Indian EEZ. He also pointed out that the deep sea fishing being capital intensive and highly skilled, we may have to opt for joint-ventures so as to enable us to step up the fish production, acquire larger vessels and technical skills to undertake deepsea fishing eventually on our own. He also indicated the possibilities of striking new resources through future exploratory surveys especially from the deeper and oceanic regions. He firmly opined that the depth and distance limitations may not be logical and each of the resources should be managed at sustainable level by identifying their distributional niche and abundance.

Dr. Somvanshi also made a presentation on behalf of the National Institute of Oceanography and stated that based on the primary, secondary and tertiary production studies the Institute has estimated the maximum sustainable yield as 4.74 million tonnes from the Indian EEZ. The breakup figures for the potential of pelagic and demersal stocks estimated are 2.02 and 2.45 million tonnes. The pelagic component includes the potential estimate of oceanic fish stocks of 0.3 million tonnes. He, therefore, pointed out that these results of NIO studies based on 21000 points covering different eco-systems in space and time more or less corroborate the estimates made through the exploratory surveys. Both studies carried out independently have shown potential for deepsea fishing in the Indian EEZ.

Dr. C. Babu Rao, made the following suggestions for sustainable fishing in the Indian EEZ.

- i. In the coastal areas upto 50m depth the exploitation is almost optimal and therefore no more vessels should be added in this zone except a few vessels for pelagic fish in the east coast. The number of vessels in operation should be maintained by opting the Japanese model of issuing licence to construct new vessels whenever the old one becomes non-functional.
- ii. In the zone beyond 50m depth a fresh survey is essential for ascertaining the resources position for a sustainable fishing. Encourage fishermen to target on species available in this zone viz. sciaenids, horse mackerel, bulls eye, scad, ribbon fish, etc. which are commercially less important by creating facilities like cold storage and facilities for value addition to the products. All these varieties can be harvested by trawlers of 16–20m length.
- iii. Encourage trap fishing and long lining for demersal fishes in rocky areas in A & N Islands, Gulf of Mannar, etc.
- iv. Culture of mussel, oyster etc. may be encouraged which has great potential for development.
- v. Make special effort to harvest tuna resources available in the Indian Ocean.

- vi. Develop infrastructure facilities for domestic markets like large cold storage all along the coast and refrigerated transport systems. Other facilities required include creation of specialised processing facilities, ports, training to the fishermen.
- vii. Monitoring and regulation of fisheries may be brought under one umbrella i.e. a separate Ministry for fisheries may be set up.

Shri Jairaj Kumar, Secretary, Deep Sea Fishing Industry Association, clarified the points raised in the subgroup reports regarding operation of joint venture vessels and its impact on traditional/mechanised fishermen. He also pointed out various concerns of traditional fishermen such as depletion of catches, destruction of fishing nets, upgradation of technology by the existing traditional/mechanised vessels, etc. In order to better management of deepsea resources and to prevent infiltration into the areas demarcated for traditional and mechanised craft he suggested as follows:

- a. The introduction of new/additional resource specific vessels need be on controlled basis depending upon the availability of various fish species in the deep sea area concerned.
- b. Resources, specific methods such as tuna long lining, tuna purse seining, squid jigging, pole and line fishing etc., should be immediately allowed either on joint venture, lease, charter or test fishing.
- c. Permissions be given only to well experienced and financially capable entrepreneurs to acquire and operate Deepsea fishing vessels under Joint Venture or direct acquisition.
- d. Permissions for operation of Indian Flag vessels such as tuna long liners, purse seiners, squid jiggers, stern trawlers, pole and line fishing vessels under exclusive Indian ownership or Equity based Joint Ventures be allowed.
- e. Charter of all types of vessels with Foreign Flag may not be allowed in future. However, permissions given so far may be honoured to operate for the permits issued.
- f. Deep Sea Fishing Vessels be fitted with INMARSAT - C terminals Linked to Global positioning System (GPS), Coast Guard to be equipped with equipment having facilities, where by they can retrieve any vessels position.
- g. Fishing beyond territorial waters should be regulated for all types and sizes of vessels whether it be deepsea vessels mechanised vessels keeping in view the Life Saving, Fire Fighting, Navigational and Communication Equipment.

Shri Thomas Kocherry, President, National Fisheries Action Committee against Joint Ventures presented the history of deep sea fishing in India and role of fishermen in it, different policy measures adopted by the Govt. of India for development of deepsea sector. He also clarified about the UN Convention of 1982 on utilisation of living resources of the seas and UN convention of 1995 on straddling stocks. He explained how important are these conventions and its binding on India. He finally concluded that all the licenses issued for joint venture/chartered vessels /leased vessels should be cancelled and no new licenses should be issued. Poaching by the foreign vessels should be stopped by creating proper enforcing force in the sea.

In conclusion it was decided that the committee will meet again on 29th and 30th November 1995 at New Delhi and finalise recommendations. Ms. Promilla Issar Joint Secretary, MFPI was requested to prepare draft recommendations to be finalised in the next meeting on 29–30 November, 1995.

Tenth meeting of the committee was held on 29th November and 1st December 1995. Ms Promilla Issar, Jt. Secretary, MFPI presented the draft recommendations. In the draft recommendations: two alternatives were suggested. Among these, after detailed discussions consensus was arrived on the following:

1. All charter permits for bull trawlers should be cancelled.
2. All charter permits for stern trawlers should be cancelled.
3. Valid charter permits for tuna longliners and squid jiggers may be continued, but no extension for these may be given. In any case no vessels in this category may be operated under charter beyond 31.12.96.
4. Permissions given for leasing and test fishing may be cancelled if the vessels have not been brought in.
5. In future, no stern trawlers may be allowed under leasing and test fishing.
6. In future, leasing and test fishing may be allowed only for resource specific vessels for exploiting oceanic resources.
7. Resource specific vessels operating under leasing and test fishing may be allowed to continue under presently valid permissions.
8. Stern trawlers operating under leasing and test fishing may be allowed to continue under presently valid permissions, but their term may not be renewed after current term expires.

Since most of the members could not be present for the meeting on 1.12.95, a decision was taken to call the next meeting of the committee on 12th and 13th December, 1995 at New Delhi. It was also decided make available following reports to the members;

(1) Report of the Murari committee, (2) Report of the Sudarsan committee, (3) FAO report prepared by Mr. Guidiceli, FAO consultant and (4) Parliamentary debates in May 1995.

The eleventh meeting of the committee was held in Udyog Bhavan, New Delhi on 12th and 13th December 1995. The discussions were mainly focused on the availability of resources as assessed by the FAO consultant, Sudarsan Committee etc. Prof. Amal Dutta raised the doubt whether we need foreign vessels to exploit these resources and requested to clarify the same. Shri Ram Naik, M.P. was of the view that the catch and value realisation by the foreign vessels are insignificant then why should the foreign vessels be permitted to exploit these resources. Shri Sunil Sud, Joint Secretary, MOA stated that the resources potential as revalidated by the Expert Committee in 1990 should be accepted as valid figure. Dr. Dehadrai, DDG (Fy.), ICAR suggested that the traditional sector can be equipped to venture into deepsea, however it was felt that there are limitations even after upgradation. Major Sudhir Sawant, M.P. suggested that foreign vessels should be banned. Traditional fishermen should be protected and Co-operative societies should be encouraged to take up deepsea fishing, proper law should be enacted and existing licenses should be cancelled.

The chairman opined that in the interest of nation, long term recommendations should be formulated. He also stated that upgradation of the existing fleet and providing financial support and technical support to the cooperative societies to take up deepsea fishing may take 10–15 years to exploit the resources. Two alternatives as recommendations were presented to the committee. A decision was taken to have a final meeting of the committee on 20th in New Delhi to discuss and finalise the recommendations and the draft report.

The Twelfth meeting of the committee was held on 20.12.95. The Chairman, informed the members that the committee may submit the report to the Govt. expeditiously. The recommendations should be adopted as far as possible unanimously and dissent note, if any, should be added to the report. As requested by the Shri Parmar, M.P. a detailed account of the Malta agreement was presented by Dr. P.V. Dehadrai, Dy. Director General (Fy.), ICAR, Dr. (Mrs.) Padma Nammalwar., M.P. opined that Alternate-II among the draft recommendation with necessary modification be considered. She had also stated that distance limit of 100 n. miles be reduced to which Chairman clarified that distance/depth seems to indicate protection to the traditional fisherman but they will also act as deterrent to the Indian owend deepsea fishing vessels. Shri Dronam Raju, M.P. suggested that priority be given to fishermen co-operative societies. The Chairman suggested a group consisting of (1) Prof. Amal Dutta, M.P. (2) Dr. V.S. Somvanshi, Director General, FSI and (3) Dr. Y.S. Yadava, Fisheries Development Commissioner, MOA to moderate and draft final recommendation of the committee to be discussed in the next meeting.

Thirteenth meeting of the committee was held on 24th, January, 1996 at Udyog Bhavan, New Delhi. Recommendation drafted by the three men drafting committee were taken up for the discussion. At first the difference of opinion among the three members were incorporated and then recommendations were finalised one by one. In conclusion following decisions were taken:

- a. Final report of the committee may be approved by the Chairman.
- b. Dissent notes if any, may sent to the Member Secretary before 3rd, February, 1996.
- c. Final approved report of the committee should be sent to all the members 5 days in advance of the next meeting of the committee.
- d. Dissent notes should also be incorporate in the final report of the committee.
- e. The final meeting of the committee will be held at 11.00 A.M. on 6th February, 1996 at New Delhi for finalising and signing the report.
- f. On 6th February, 1996 Aftersoon the members of the committee will meet the Honourable Minister of state for Food Processing Industries and present the repot to him.

Formulation of subgroups to collect oral evidences from target groups

The terms of reference of the committee envisages 'The committee would be required to take evidence from various associations of traditional fishermen, mechanised boat operators and deepsea fishing trawlers'. Accordingly a set of questionnaire were devised to collect oral and written evidences from different target groups were recorded in the formats detailed below:

Form no.	Target group	Type of evidence
Form I	Traditional fishermen	Oral
Form II	Mechanised fishermen	Oral
Form III	Deepsea vessel operators	written
Form IV	Maritime state Govts	written
Form V	Members of the committee	written

In the third meeting of the committee it was decided to collect evidences at Veraval (Gujarat) and Cochin (Kerala). Two sub-groups were formed for this purpose. The sub-groups visited the two centres to record oral evidences but the target groups boycotted it.

After the broad basing of the committee, members were of the opinion that evidences may be recorded at two centres in each state. Accordingly five subgroups were formed for the states viz.

- | | | |
|----|---|---------------|
| 1. | Gujarat, Daman and Diu | Sub-group I |
| 2. | Maharashtra and Goa | Sub-group II |
| 3. | Kerala and Karnataka | Sub-group III |
| 4. | Tamil Nadu, Andaman and Nicobar Islands | Sub-group IV |
| 5. | Andhra Pradesh, Orissa and West Bengal | Sub-group V |

The questionnaire were also suitably modified with inclusion of points raised by the new members. Constitution of each of the sub-groups were as follows:

1. Members of Parliament of the respective states.
2. Secretary (Fy.) of respective maritime states.
3. Representative of Industry/Associations/Co-op. Society.
4. Resource persons from MOA/ICAR/DOD/FSI/MFPI/CMFRI/Defence/Members of the subgroups and places visited by them to record evidence were as follows

Subgroups (states & members)	Places visited	Dates of visits
1. Gujarat Shri S.N. Vekaria, M.P. Shri Rajubhai Parmar, M.P. Shri D.J. Tandel, M.P. Shri A.D. Desai, Secretary (Fy.), Gujarat Shri D.N. Pagdhare, President, MMVKSS, Ltd., Bombay Comdt. R.M. Sharma, Dy. Director (Operations), MOD Dr. S.A.H. Abidi, Director, DOD	Veraval, Mangrol, Porbandar	21st and 22nd Sept. 1995
2. Maharashtra and Goa Shri Ram Naik, M.P. Major Sudhir Sawant, M.P. Shri John F. Fernandes, M.P. Shri Harish N.P. Zantye, M.P. Dr. S.V. Joshi, Secretary (Fy.), Maharashtra Shri G.P. Sevalia, Secretary (Fy.), Goa Shri D.N. Pagdhare, President, MMVKSS, Ltd., Bombay Dr. S.A.H. Abidi, Director, DOD Dr. V.S. Somvanshi, Director General, FSI Shri Sanjeev Khanna, Deepsea Fishing Industry Association	Bombay, Satpati, Ratnagiri, Oras, Dona Paula, Malim	25th to 28th Sept. 1995

- | | | |
|---|--|-------------------------------------|
| <p>3. Kerala & Karnataka</p> <p>Shri Oscar Fernandes, M.P.
Shri K.V. Thomas, M.P.
Shri C. Chandran, Secretary (Fy.),
Kerala
Shri H.S. Venkatesh, Secretary (Fy.),
Karnataka
Shri Thomas Kochery, President,
NFACAJV, Cochin
Shri K.B. Pillai, Chairman, MPEDA,
Cochin
Dr. V. S. Murthy, Sr. Scientist, CMFRI,
Cochin</p> | <p>Mangalore, Hajmadi,
Malpe, Hangarkatta,
Gangoli, Karwar,
Honnavar, Bhatkal,
Shirur, Cochin,
Neendakara, Calicut,
Thiruvananthapuram</p> | <p>7th to 9th October,
1995</p> |
| <p>4. Tamil Nadu</p> <p>Dr. (Smt.) Padma, M.P.
Shri Manoranjan Bhakta, M.P.
Ms. Promilla Issar, Joint Secretary, MFPI
Shri M. Ahmed, Secretary (Fy.), Tamil
Nadu
Shri P. Jairaj Kumar, President, DFSA,
Hyderabad
Dr. V.S. Murthy, Sr. Scientist, CMFRI,
Cochin
Comdt. R.M. Sharma, Dy. Director
(Operation), MOD</p> | <p>Madras, Kovalam</p> | <p>17th, Sept. 1995</p> |
| <p>5. Andhra, Orissa West Bengal</p> <p>Shri S.Dronam Raju, M.P.
Shri K. Ramakrishna, M.P.
Shri K. Patra, M.P.
Prof. Amal Datta, M.P.
Shri Md. Salim, M.P.
Shri K.C. Mishra, Secy. (Fy.), Andhra
Pradesh
Shri H.S. Sarkar, Secy. (Fy.), Orissa
Shri R. K. Tripathi, Secy. (Fy.), West
Bengal
Shri K.B. Pillai, Chairman, MPEDA
Comdt. P.M. Sharma, Dy. Director
(Operations), MOD
Dr. C. Babu Rao, President, AIFI,
Visakhapatnam
Shri U. Paidi Raju, President, DFCS,
Visakhapatnam
Shri P.C. Appa Rao, President, APMFBO,
Visakhapatnam</p> | <p>Visakhapatnam,
Bhavanipadu,
Paradeep, Puri,
Shankarpur, Bobkani.</p> | <p>22nd to 24 Sept.
1995</p> |



CHAPTER 2

Marine Fisheries in India

Present status of marine fisheries

Fisheries sector in India has made significant progress since the inception of Five Year Plans. With the fish production of 4.4 million tonnes from the marine and inland sectors together (1992–93), India is the seventh largest producer of fish in the world. In the marine sector the fish production increased from 0.53 million tonnes in 1950–51 to 2.69 million tonnes (1994–95). Earnings from marine products export has gone up from Rs. 2.46 crores in 1950–51 to Rs. 3553 crores (1994–95). The GDP from fisheries sector is in the order of Rs. 7686 crores (at current prices). Some of the salient statistics of Indian fisheries are given in Table 1.

Table 1: Indian fisheries statistics at a glance

1.	Length of coastline	8129 km.
2.	Shelf area	About 0.45 million sq.km.
3.	Exclusive economic zone	2.02 million sq. km.
4.	Estimates of resource potential	
	i. Inland sector	4.5 million tonnes
	ii. Marine sector	3.9 million tonnes
5.	Fishermen population (1992)	
	i. Full time fishermen	1965446
	ii. Part time fishermen	1376407
	iii. Occasional fishermen	2451758
	Total	5793611
6.	Fishing crafts (1992–93)	
	Traditional	171752
	Mechanised	34848
7.	Fish production in 1994–95 (Provisional)	
	Marine	2.69 million tonnes
	Inland	2.09 million tonnes
	Total	4.78 million tonnes
8.	Export of Marine Products (1994–95)	
	Quantity (Metric tonnes)	305131
	Value (Rs. Crores)	3553.08

Source: Hand Book on Fisheries Statistics 1993, Ministry of Agriculture

Although the basic objectives of fisheries development viz., augmentation of fish production and export earnings from marine products remained the same throughout the Five Year Plans, welfare of fishermen was included as an important objective during the VIIth and VIII Plans. The developmental strategy was accordingly oriented to modernisation of the traditional and mechanised sector, and the introduction of a judicious mix of resource specific deepsea fishing vessels through charter, joint venture, 100% EOU etc. for optimum exploitation of fisheries resources in the EEZ and increasing export besides improving of living standards of traditional fishermen. The scheme of development of deepsea fishing was transferred by Govt. of India during 1988–89 from the Ministry of Agriculture to the Ministry of Food Processing Industries.

Coastline, continental shelf and EEZ

With the declaration of the Indian Exclusive Economic Zone (EEZ) in 1977 India acquired sovereign rights to explore, exploit and manage the resources within the 200 nautical miles EEZ. The extent of the Indian EEZ is about 2.02 million sq.km., of which 42.6% of the area is on the west coast, 27.8% on the east coast and 29.6% around the Andaman & Nicobar Islands. The continental shelf (0–200 m depth) accounts for about 22% of the EEZ and the rest is the oceanic regions. The statewise information on continental shelf, coastline, fish landing centres etc. is given in Table 2.

Fisheries infrastructure

The fishing fleet consists of 1,71,752 traditional craft, of which 25,467 are motorised, and 34,848 mechanised boats. The state-wise fishing craft statistics is given in Table 3. Besides, there are about 180 deepsea fishing vessels.

Creation of fishing harbours and landing centres was an important developmental activity under the Plan schemes to promote marine fisheries. The number of fishing harbours and landing centres commissioned and under construction (as on 31.3.1995), are:

	Commissioned	Under construction	Total
Major fishing harbours	5	1	6
Minor fishing harbours	27	11	38
Fish landing centres	109	28	137

Marine fish production

The marine fish production in India has gone up from 0.53 million tonnes at the commencement of the First Plan period to 2.69 million tonnes in 1994–95. The average growth rate during the VIIth and VIIIth Plans was at an impressive level of about 6.5% per annum. The all India marine fish production and growth rate during the period from 1950–51 onwards are given in Table 4.

Among the maritime states, Gujarat ranks first in marine fish production (6.45 lakh tonnes estimated provisionally for 1994–95) followed by Kerala, Maharashtra and Tamil Nadu. The state-wise production statistics is given in Table 5.

Recognising the scope for increasing fish production from the offshore and oceanic areas, and the lack of technology, expertise and infrastructure towards this, the government formulated a policy for chartering of foreign fishing vessels by Indian companies, in 1981 (revised in 1986). Three categories of vessels viz. tuna longliners, pair trawlers and stern trawlers operated under this scheme. Details of the operation of these vessels for the period 1990–1994 are given in Table 6.

Table 2: Coastline and continental shelf – state wise*

SL No	State/UT	Approx. length of coastline (kms)	Continental shelf ('000 sq. kms.)
1.	Andhra Pradesh	974	31
2.	Goa	104	10
3.	Gujarat	1600	164
4.	Karnataka	300	25
5.	Kerala	590	40
6.	Maharashtra	720	112
7.	Orissa	480	24
8.	Tamil Nadu	1000	41
9.	West Bengal (P)	157	17
10.	Andaman & Nicobar	2000	35
11.	Pondicherry	45	1
12.	Lakshadweep	132	4
13.	Dammn & Diu	27	0
	Total	8129	504

*Provisional

Source: State/UT Govts., 1993 (as reported in supplement on Fisheries statistics 1995)

Table 3: Fishing crafts in maritime states/UTs as on 1992–93

States/UTs	Traditional crafts	Motorised traditional out of col. (2)	Mechanised boats	Total
1	2	3	4	5 = 2 + 4
Gujarat	12555	3730	5294	17849
Maharashtra	9171	244	7661	16832
Karnataka	11860	190	3730	15590
Kerala	26137	11374	3742	29879
Tamil Nadu	33691	5152	5426	39117
Andhra Pradesh	50333	1688	4082	54415
Orissa	14630	1142	1118	15748
West Bengal	4361	270	1880	6241
Lakshadweep	745	298	415	1160
A & N Islands	964	124	184	1148
Pondicherry	5305	355	466	5771
Goa	2000	900	850	2850
Total	171752	25467	34848	206600

Source: Hand book of Fisheries Statistics 1993, Ministry of Agriculture

Table 4: All India marine fish production

(in Lakh Tonnes)

Year	Fish production	Annual growth rate (%)
1950–51	5.34	
1960–61	8.80	0.65
1970–71	10.86	0.23
1980–81	15.55	0.43
1981–82	14.45	-7.07
1982–83	14.27	-1.25
1983–84	15.19	6.45
1984–85	16.98	11.78
1985–86	17.16	1.06
1986–87	17.13	-0.17
1987–88	16.58	-3.21
1988–89	18.17	9.59
1989–90	22.75	25.21
1990–91	23.00	1.10
1991–92	24.47	6.39
1992–93	25.76	5.27
1993–94	26.49	2.83
1994–95*	26.92	1.62

*Provisional

Source: Supplement on Fisheries Statistics, 1995. Ministry of Agriculture

Table 5: State-wise marine fish production – 1990–91 to 1994–95

('000 Tonnes)

State	1990–91	1991–92	1992–93	1993–94	1994–95*
Andhra Pradesh	120.35	125.79	113.07	154.32	150.26
Goa	53.18	47.11	101.41	102.11	98.46
Gujarat	500.00	516.85	589.00	619.84	645.26
Karnataka	183.83	181.41	174.19	174.52	173.75
Kerala	514.24	524.76	496.24	559.20	548.37
Maharashtra	325.00	390.86	387.55	350.40	357.00
Orissa	78.00	87.88	119.38	103.93	122.89
Tamil Nadu	288.95	301.00	308.00	317.72	330.50
West Bengal	125.00	142.00	145.00	153.00	151.20
Andaman & Nicobar	15.15	25.19	24.17	25.08	26.12
Daman & Diu	7.73	15.94	13.43	11.53	11.50
Lakshadweep	7.60	5.81	9.73	9.41	9.75
Pondicherry	30.60	32.68	35.00	37.78	36.75

* Provisional

Source: Supplement on Fisheries Statistics, 1995, Ministry of Agriculture

Table 6: Number of chartered vessels operated in the Indian EEZ and catch and value, 1990–1994

Year	Tuna longliners		Stern trawlers		Pair trawlers		Total		Value	
	No. of vessels	Catch (tonnes)	No. of vessels	Catch (tonnes)	No. of vessels	Catch (tonnes)	No. of vessels	Catch (tonnes)	US\$ (million)	Rs.* (crores)
1990	58	10533	8	3889	10	4010	76	18432	19.66	61.94
1991	22	4332	13	6670	6	3865	41	14866	14.99	47.22
1992	23	5066	5	2085	6	3398	34	10549	10.92	34.41
1993	28	2307	3	2491	5	3175	36	7973	7.29	22.26
1994	12	2150	13	2885	5	3842	30	8876	7.99	25.15

* Exchange rate taken as 1 US \$ = Rs. 31.50 Source: Fishery Survey of India

Table 7: Fish export from India

Year	Quantity ('000 tonnes)	Value (Rs. Crores)
1950–51	19.7	2.46
1960–61	15.7	3.92
1970–71	35.9	35.07
1980–81	75.6	234.84
1981–82	70.1	286.01
1982–83	78.2	361.36
1983–84	92.7	373.02
1984–85	86.2	384.29
1985–86	83.7	398.00
1986–87	85.8	460.67
1987–88	97.2	531.20
1988–89	99.8	597.85
1989–90	110.2	635.00
1990–91	139.4	893.37
1991–92	171.8	1375.89
1992–93	208.6	1767.43
1993–94	244.0	2503.62
1994–95	273.2	3272.69

Source: MPEDA

Exports of Marine products

A part of marine fish landings in India are source of seafood processing and exports. The export of marine products in terms of quantity increased from 19,700 tonnes in 1950–51 to 2,73,243 tonnes in 1994–95. In value terms the increase was from Rs. 2.46 crores in 1950–51 to Rs. 3273 crores in 1994–95 (Table 7). Though shrimps accounted for about 70% of value of exports, in

Table 8: Item-wise export of marine products

Item		Q: Quantity in Tonnes		
		1994–95	1993–94	1992–93
Fr. Shrimp	Q:	101776	86541	74051
	V:	2414.46	1770.73	1176.83
Fresh/Fr. Fish	Q:	103337	94022	75794
	V:	339.25	296.00	233.53
Fr. Squid	Q:	39730	34741	30364
	V:	254.39	192.47	151.90
Fr. Cuttle fish	Q:	17858	18998	18981
	V:	149.24	138.18	118.88
Others	Q:	10542	9658	9835
	V:	115.41	106.24	87.42
Total	Q:	273243	243960	209025
	V:	3272.69	2503.62	1768.56

Source: MPEDA

recent years there has been diversification of exported products. In 1994–95 fresh frozen fish formed 37%, in quantity terms, of marine products export from India, largely due to the recent policy initiatives oriented to exploitation and export of finfish resources and due to new markets being opened up for these items. The item-wise export of marine products is given in Table 8.

Fisheries regulation

The operation of foreign fishing vessels in Indian EEZ is regulated under provisions of the Maritime Zones of India (Regulation of fishing by foreign vessels) Act, 1981 and Rules thereunder. Besides restricting fishing operations in certain areas such as shrimp grounds in the Sandheads and off Quilon, the rules in general restrict the fishing beyond 12 nautical miles along the east coast and 24 nautical miles along the west coast. In the case of territorial waters the fishing activity is regulated by the respective maritime state governments under marine fisheries regulation acts or by executive orders. The states of Maharashtra, Karnataka, Kerala, Tamil Nadu, Orissa, Goa, Andhra Pradesh, west Bengal and the Union Territories of Pondicherry have enacted Marine Fishing Regulations Acts.

Progress of deepsea fishing in the Indian EEZ

India declared a 200 miles Exclusive Economic Zone on the Indian Ocean by enacting the Territorial Waters, Continental Shelf, Exclusive Economic Zone and other Maritime Zones Act, 1976, thereby earning the exclusive rights to exploit the living and non-living resources in this area, comprising of 2.02 million sq. kilometers. This total area has exploitable fishery resources of about 3.9 million tonnes annually, out of which only, 2.7 million tonnes is being exploited. A major portion of this potential is available in the coastal waters (also called the territorial waters), which extend upto 12 nautical miles from the shore. This area is reserved exclusively for fishing by traditional fisher-

men, who have been joined by mechanised trawlers of less than 20 meters length. There is no bar on coastal fishermen or mechanised trawlers fishing in deepsea areas. The exploitation of fishery resources in the coastal areas is very heavy, whereas the resources in the deepsea are largely unexploited. Subsequent to acquiring exclusive rights for exploitation of the resources in the EEZ, it has been peremptory to take necessary steps to exploit deepsea fishery resources.

India has had no traditional entrepreneurship in the deep sea fishery sector which is highly capital intensive and risk prone. In order to promote investment in this sector for greater exploitation of marine fishery resources towards availability of fish for export earnings and for employment generation, the Government provided certain policy supports for the development of the industry. The Shipping Development Fund Committee entrusted with the task of extending soft loans to the deepsea fishing sector. Loans were provided to the extent of 95% of the cost of the vessel and the debt equity ratio was 6:1. A number of Indian companies acquired deepsea fishing vessels since 1975 but almost all of these were shrimp trawlers and operated on the east coast in a limited coastal area from Visakhapatnam. The fleet strength of these shrimp trawlers continued to rise and their operations were economically viable till a point was reached when the gold rush tendency invited more players in the field than were sustainable on the basis of available resources. The average catch per trawler reached an all time high of 35 tons per annum when the total number of vessels operating was 68 in 1984. As the number of shrimp trawlers continued to increase and reached 180 in 1991, the average catch per trawler fluctuated between 2.6 tons and 10.5 tons during the period 1987 and 1991. Approximately half the numbers of these shrimp trawlers are in operation at present. Since a number of vessels from this fleet were observed to be nonoperational because of induction of mini trawlers and sona boats, various committees and FAO consultant have made suggestions for gainfully employing them in diversities fishing. The Government had offered a rehabilitation package them in 1991, which was further liberalised in 1992, but these efforts have failed and another proposal for rehabilitation of the shrimp industry is under consideration of the Government. Earlier, the Government of India had abolished the SDFC and appointed SCICI Ltd., as its designated agency to discharge the functions of the erstwhile SDFC including management of its loan portfolio, in 1987.

Another policy initiative taken by the Government of India was to introduce the charter policies of 1981 and 1986. It was found that the requisite technology for exploiting the deepsea resources was not available in India and it was necessary to expose the Indian entrepreneurs to the latest developments in the field.

During 1977–78, a few companies were allowed to charter vessels from Thailand. It was soon realised that a legislation would be required to regulate the activities of foreign fishing vessels operating in the Indian EEZ, and therefore, the MZI Act was enacted in 1982. The charter policy of 1981 was announced with the following objectives:

1. to establish the abundance and distribution of fishery resources in the deepsea in the Indian EEZ;
2. to assess suitable craft and gear for economic operation;
3. transfer of technology;
4. to enlarge the deepsea fishing fleet on ownership basis; and
5. to establish overseas markets for non-conventional fish.

Under this policy, the charterers were required to acquire the same number of vessels as they had operated under charter. The long term objective was to build up a deepsea fishing fleet capa-

ble of adopting modern fishing methods towards exploitation of resources in the Indian EEZ on a sustainable basis. It was envisaged that, learning from their experience with chartered foreign fishing vessels, the Indian entrepreneurs would build up an indigenous fleet on similar lines.

This charter policy was reviewed and certain modifications to the same were considered necessary. A new charter policy was, therefore introduced in 1986, allowing only resource-specific vessels like tuna fishing vessels, squid jiggers, stern trawlers etc. Bull trawlers, which were earlier permitted under the 1981 policy, were no longer permitted under the 1986 policy, as the operation of an unlimited number of bull trawlers was not considered to be ecologically safe.

Another charter policy was announced in 1989 but this was not operationalised and was finally scrapped. The 1981 charter policy has also been phased out and no new applications for charter are being considered. At present, there are 29 valid charter permits and 12 vessels in operation under the scheme. On the whole, it was found by the Government that the charter policy had achieved its objectives in respect of introducing the Indian entrepreneurs to the deep-sea fishing sector, and therefore, a new approach was found necessary.

It can, therefore, be seen that a number of separate initiatives were taken during the '70s and '80s in order to develop this sector. During this time, the target resources were high value shrimps which was greatly in demand in the foreign markets and the industry experienced a boom during these years. About 180 Indian owned vessels were brought into operation, during this period. Almost all of these vessels were deployed for shrimp fishing.

Another development during this period was the phenomenal increase in the number of mechanised boats, motorised boats and intermediate craft. While acquisition of deepsea fishing trawlers requires clearance from the Central Government, there is no such condition imposed on the acquisition of smaller fishing vessels.

It is estimated that there are 34,848 mechanised vessels 25,467 motorised boats and 1,71,752 traditional crafts engaged in fishing operations in coastal areas. Concentrated fishing activity, relating to the exploitation exclusively of shrimp resources along the East Coast, resulted in excessive pressure on these resources. The economic returns from this industrial activity attracted large number of entrants into this field and the fishing effort was increased without reference to the sustainability of shrimp resources.

The deepsea fishing sector in general suffered a slump after 1987 and some of the major reasons for this are as follows:

1. Operation of a large number of vessels for exploitation of shrimp resources in the Northern Bay of Bengal including trawlers as well as mechanised and non-mechanised boats, in the absence of an effective regulatory mechanism.
2. Fishing efforts directed towards and concentrated in a limited geographical area.
3. Inadequate post-harvest, infrastructure and technology for processing of alternative fish resources.
4. Lack of trained crew in specialised fishing methods and inadequacy of professional management.
5. Slump in the international market for shrimp.
6. An under-developed domestic market for other fish, which is high volume, albeit of low value.

The matter was discussed at inter Ministerial level in order to address these problems. It was found that one of the major requirements of a new policy would be increased emphasis on exploi-

tation of non-shrimp resources which are high volume but comparatively low value. Latest technology for exploitation for non-shrimp resources and also for making such ventures economically viable, was not available indigenously. These non-shrimp resources are also dispersed over large areas with a varying degree of concentration as compared to shrimp resources and therefore require large and resource specific vessels. The sector was also in need of latest technology for value addition in respect to such resources so that they would find a ready export market and also manufactured products would be acceptable in the domestic market. In order to promote diversified fishing for non-shrimp resources in the larger area of the Indian EEZ, to induct the latest technology for this purpose and for greater value addition for the export and domestic markets, the Government of India announced the new DeepSea Fishing Policy in 1991. This policy encourages the setting up of joint ventures, leasing and test fishing projects for technology transfer, since other nations have the requisite technology and the appropriate vessels for this purpose.

Deepsea fishing policy – 1991

The new policy on deepsea fishing has been announced in March, 1991, which involves three new schemes namely (i) Leasing of Foreign Fishing Vessels for operation in the Indian EEZ. (ii) Test Fishing by engaging foreign fishing vessels and (iii) Joint Ventures between Indian and foreign companies in deepsea fishing, processing and marketing. The salient features of the policy are given below:

- i. Leasing of foreign fishing vessels
 - a. Long terms leasing of foreign fishing vessels for operation in Indian Waters will be allowed in terms of the Maritime Zones of India Rules, 1982.
 - b. Leased vessels should be preferably new. However, second hand vessels also will be taken on lease subject to satisfactory performance of the vessels.
 - c. Central Government will prescribe the value addition in respect of leased vessels for each project on case to case basis.
 - d. An amount equal to one year lease rent shall be submitted in the form of bank guarantee in favour of Government of India. The bank guarantee should be valid till the end of the lease period.
- ii. Test Fishing
 - a. Test fishing will be permitted in the Indian EEZ only in the following types of fishing operations.
 1. Trawling for deepsea lobster and deepsea shrimp (other than pair trawling) beyond the territorial waters
 2. Long lining
 3. Tuna purse seining
 4. Other methods such as squid jigging, hand lining etc.
 - b. Test Fishing will not be permitted for shrimp sources in the Northern Bay of Bengal region.
 - c. The foreign collaborator undertaking test fishing should be an established fishing company operating and owning a fleet of deep sea fishing vessels.
 - d. Test fishing will be governed by the provisions of Maritime Zones of India Act, 1981, Merchant Shipping Act, 1958 and the Maritime Zones of India Rules 1982' (as amended from time to time) and the broad guidelines specified herein.

- e. All data generated including details of operations during test fishing will be made available to the Marine Products Export Development Authority (MPEDA) and the Fishery Survey of India.
 - f. The Indian and foreign companies will deposit a bank guarantee of Rs. 2.5 lakhs per vessel from an approved bank and valid for 18 months in favour of MPEDA.
- iii. Joint Ventures
- i. Joint ventures involving financial and technical collobration for exploitation of deep sea resources within and beyond EEZ by any of the following methods would be encouraged;
 - Trawling for deep sea lobster and deep sea shrimp (other than Pair Trawling) beyond the territorial waters;
 - ii. Long lining;
 - iii. Tuna purse seining;
 - iv. Other methods such as squid jigging, hand lining etc. (provided however that no joint venture proposal for shrimping in Northern Bay of Bengal shall be considered).

Joint venture companies in addition to acquisition of vessels may take vessels on lease with foreign registration and foreign ownership. Such leased vessels may be permitted to fish in the Indian EEZ subject to the provisions of the MZI Act, 1981, the Merchant Shipping Act 1958 and MPEDA Act 1972, and the Rules framed thereunder.

- b. foreign crew may be permitted on a case basis subject to such terms as may be agreed upon. A schedule of phasing out of foreign crew should be submitted at the time of application.
- c. The area of the operation of the vessels would be regulated by the Maritime Zones of India Act and Rules and instructions/orders issued by Government of India.
- d. From the time of operation of the vessel, the project should attain a positive net foreign exchange inflow in each year of operation. The cost of fuel procured in India would be included while computing the foreign exchange outflow.

Potential of marine fishery resources in the Indian EEZ

Several estimates have been made of the fishery resource potential or annual maximum sustainable yield of the fish stocks in the Indian EEZ based on primary productivity studies, exploratory surveys and other parameters (Jones and Banerjee, 1973; Mitra, 1973; George et al., 1977; Nair and Gopinathan, 1981; Joseph, 1985, 1987; Sudarsan et al., 1988; Alagaraja, 1989; Desai et al., 1990; Mathew et al., 1990).

These estimates range from 3 to 5.5 million tonnes for the EEZ upto 200 nautical miles from the coast. The most direct among the estimates are those based on exploratory surveys in case of demersal resources and acoustic surveys coupled with test fishing in the case of small pelagics. Joseph (1980, 1987) made estimates of demersal resources upto 40 fathoms (73 m) depth based on exploratory surveys and demersal and pelagic resources combined for the areas between 0–200 m and 200–500 m depth. Sudarsan et al. (1988) assessed the demersal resources along the Indian coast in 50–300m depth on the basis of exploratory surveys.

The potential yield of demersal, coastal pelagic and oceanic fish resources based on the resources surveys and current production is 3.92 million tonnes from the Indian EEZ as given below:

Region resource	Andaman & Nicobar				Total
	West coast	East coast	Lakshadweep	Nicobar	
Demersal	1.251	0.656	–	0.022	1.929 0.004*
Pelagic	1.106	0.434	0.063	0.139	1.742
Oceanic					0.246
Total	2.357	1.09	0.063	0.161	3.921

* Demersal resources from 300–500 m depth zone (except from Lat.8°–10°N along west coast)

i. Demersal fishery resources

The Maximum Sustainable Yield (MSY) of demersal stocks from the continental shelf and slope upto 500m depth is about 1.93 million tonnes. Of this, 1.28 million tonnes is expected from within 50m depth contour and 0.65 million tonnes from deeper waters (50–500m depth zone). Coast-wise, the potential along west coast including Lakshadweep is assessed as 1.25 million tonnes, east coast 0.66 million tonnes and around Andaman and Nicobar Islands 0.02 million tonnes.

Composition of the potential yield of demersal stocks in 50–300m depth along different regions of Indian coast as estimated from trawl surveys is presented in Table 9.

ii. Coastal pelagic resources

The total potential yield of pelagic stocks over the continental shelf is estimated to be 1.74 million tonnes. About 63% of the estimated stock is on the west coast, 25% on the east coast, 4% around the Lakshadweep Island and 8% in the Andaman and Nicobar waters. By depth, about 57% of the potential is supported by the column over 0–50 m depth zone.

Estimated potential yield of different pelagic stocks over the continental shelf (0–200 m) along Indian coast are presented in Table 10.

iii. Oceanic resources

The estimates of potential yield of larger pelagic stocks of tuna, bill fishes, sharks & others from the surface fishery alongwith estimates from subsurface fishery in the Indian EEZ.

(Sudarsan et al. (1989)) are given below

Species/group	Potential yield (in '000 tonnes)		Total
	Subsurface* fishery	Surface** fishery	
Yellow fin tuna	27	81.9	108.9
Big eye tuna	0.3	–	0.3
Skipjack	0.1	100.1	100.2
Bill fishes	3.8	–	3.8
Pelagic sharks	15.8	15.8	31.6
Other fishes	1.2	–	1.2
Total	48.2	197.8	246

* Estimates by Sudarsan et al. (1989)

** Estimate in the present study

Table 9: Potential yield of estimates of demersal resources in 50–300/500 m depth along the different region (in '000 tonnes)

Region species/group	North west coast	South west coast	Wadge bank	Gulf of Mannar	Lower east coast	Upper east coast	Total
Threadfin breams (Nemipterus spp.)	71.7	25.0	10.1	0.3	0.4	3.1	110.6
Cat fishes	42.5	11.0	0.7	–	0.2	9.0	63.4
Sharka, akatea and rays	10.5	0.8	0.5	0.2	0.1	0.9	13.0
Bulls eye (Prichanthus spp.)	25.5	18.2	0.5	0.2	3.4	7.0	54.8
Perches	9.9	1.2	1.3	0.5	0.3	1.4	14.6
Mackerels	9.0	2.5	–	–	0.9	49.8	62.2
Ribbon fishes	19.8	2.3	–	0.1	–	1.1	23.3
Squids & Cuttle fishes	14.8	4.7	0.5	0.2	0.1	0.3	20.6
Horse mackerel	62.0	–	–	–	0.8	3.2	66.0
Scads (Decapterus spp.)	2.9	8.6	1.0	0.2	1.4	9.3	23.4
Trevally (Caranx spp.)	8.3	3.3	1.6	0.2	0.7	3.0	17.1
Ghol (Protonebea)	3.5	–	–	–	–	0.6	4.1
Others sciaenids	14.6	0.1	–	–	0.1	3.1	17.9
Lizard fish	11.6	7.2	1.7	–	0.2	0.2	20.9
Pomfrets	10.6	–	–	–	–	2.0	12.9
Black ruff (Centrolophus niger)	–	7.7	–	–	0.8	0.8	9.3
Crabs	–	4.8	1.0	2.0	0.1	0.8	8.2
Indian drift fish (Ariomma indica)	–	1.6	0.6	0.2	0.7	4.0	7.1
Clupeide	6.2	–	–	–	0.6	7.5	14.3
Barracuda	0.8	–	–	1.2	–	1.2	3.2
Silver bellies	–	–	–	0.2	0.6	2.7	3.5
Deepsea prawns	–	3.1	–	–	0.1	0.1	3.3
Deepsea lobster	–	4.5	0.1	0.7	–	–	5.3
Others	55.4	5.7	1.0	0.6	1.0	7.6	71.3
Total	379.0	112.3	20.6	6.8	12.5	118.2	649.4

* Upto 500 m depth in lat. 8–10 along south west coast only

Source: FSI Bulletin No. 20

Table 10: Potential yield of different pelagic stocks over the continental slope in Indian EEZ

Coast species group	North west			South west			Lower east			Upper east			Lakshdweep		A & N		Total
	0-50	50-200	Total	0-50	50-200	Total	0-50	50-200	Total	0-50	50-200	Total	0-200	200-500	0-200	200-500	
Mackerels	12	-	12	36	-	36	17	-	17	7	-	7	-	-	-	-	77
Oil sardine	11	-	11	160	-	160	6	-	6	4	-	4	-	-	-	-	181
Lesser sardines	10	-	10	24	-	24	49	-	49	8	-	8	-	-	10	10	101
Anchovies	3	-	3	21	-	21	18	-	18	7	-	7	-	-	1	1	80
Other	36	-	36	18	-	18	13	-	13	35	-	35	5	5	10	10	117
Bombay duck	115	-	115	-	-	-	-	-	-	17	-	17	-	-	-	-	132
coastal tunas	3	11	14	11	67	78	6	10	16	1	4	5	50	100	100	263	
Carangids	4	67	71	9	73	82	15	36	51	5	21	26	-	1	1	231	
Seer fish	15	-	15	5	-	5	31	-	31	10	-	10	-	-	5	66	
Ribbon fish	49	94	143	6	74	80	9	10	19	9	15	24	-	-	-	266	
Pelagic	1	15	16	2	29	31	1	4	5	1	5	6	-	-	5	63	
Others	42	1	43	50	2	52	48	1	49	10	1	11	8	2	2	165	
Total	331	118	519	342	245	587	213	61	274	114	46	160	63	139	139	1742	

Source: FSI Bulletin No. 20

In an attempt to identify avenues for the sustainable and viable diversified fishing operations of a deepsea fleet composed of about 180 vessels concentrating on shrimping, initiated by the Govt. of India/Association of Fishery Industries, the FAO deputed a consultant Mr. M. Giudicelli to India in 1992. The consultant made a tentative sizing and commercial valuation of the above potential for the development/diversification of deepsea fishing beyond the 50 m isobars and in oceanic waters. He has based his evaluation on the following assumptions.

- a. significant catches per unit of fishing effort, which means large, dense and stable fish concentrations or
- b. target resources of high to medium market value

It may be seen that the consultant has left out highly dense fish stocks while apportioning the 1,64,000 tonnes of exportable fish justifying probably same scale of profit for the vessels otherwise overfishing the shrimp stocks. This has created misunderstanding in certain sections regarding the potential of deepsea fish stocks in the EEZ. Thus India needs to devise deepsea fishing policy not only for rehabilitating the 180 deepsea fishing vessels by utilising a portion of the potential viz. 1,64,000 tonnes but also the remaining potential to augment the total marine fish production to 3.92 million tonnes by exploiting highly dense fish stocks in the EEZ for export as well as domestic supplies.

In order to exploit fully the potential in the Indian EEZ it is therefore necessary to introduce resource specific technologies and vessels. These technologies could be of squid jigging, tuna longlining, tuna purse-seining, mid-water trawling etc.

CHAPTER 3

Deepsea Fishing

Deepsea fishing and its impact

Vessels under joint venture are registered in India and owned by the Indian companies and fly the Indian flag. Vessels under leasing and test fishing are operated on hire by the Indian companies and fly the foreign flag. Twenty-five vessels are operating under the New Deep Sea Fishing Policy as of now. Vessels operating under charter, leasing and test fishing which fly the foreign flag, can operate only beyond 24 nautical miles on the west coast because of the gradual continental slope, so that greater oceanic area is available for coastal fishing with fewer deepsea fishing vessels operating in the same. On the east coast, however, all the deepsea fishing vessels, whether flying the foreign or Indian flag, operate beyond 12 nautical miles.

The State Governments have jurisdiction over coastal fishing and Agriculture Ministry have advisory role in development of the coastal fisheries. In the territorial waters areas are divided in varying range viz. upto 5 km in Kerala, 5/10 fathoms in Maharashtra, exclusively for fishing by traditional fishermen, the areas beyond this in territorial waters is accessible to the mechanised boats as well, but in the recent past mechanised trawlers of less than 20 metres length have increased in number thereby competing with them in exploitation of the resources available in coastal waters. The number of mechanised trawlers has increased from 24,272 to 34,848 between 1989–90 and 1992–93. The catch from deepsea fishing vessels is about 27,000 tonnes out of a total marine fish production of about 27 lakh tonnes. Mechanised fishing boats constitute 27% of the total fishing craft in India but harvest 63% of the marine fish production, while the share of traditional craft is about 36% of the marine fish production and deep sea fishing vessels harvest about 1% of the total marine fish production. The unchecked increase in the number of mechanised fishing boats has eroded into the fishing activities of traditional fishermen and their share of the total catch has consequently reduced in direct proportion to the increase in the mechanised fishing boats. That is why traditional fishermen, though constituting more than 70% of the total fishing crafts in India, harvest only 33% of the catch, whereas before the large scale entry of mechanised trawlers, they had the coastal areas entirely to themselves. The relative positions and the growth of these three fisheries sectors are indicated below:

Sl.No.	Type of vessel	% Contribution in total marine fish production by different sectors		
		1985–86	1990–91	1993–94
1.	Traditional craft	61	41	36
2.	Mechanised fishing boats	38	58	63
3.	Deepsea Fishing vessels	1	1	1

It is therefore, seen that the proportion of total catch by traditional craft has reduced drastically in the last decade and this reduction is caused directly by the increase in the proportion of the total catch by mechanised trawlers.

Marine fish production in India is estimated to be 2.692 million tonnes, of which fishing vessels operating in the coastal areas (0–50 m depth) contributed about 2.06 million tonnes against the estimated availability of 2.2 million tonnes and remaining 0.632 million tonnes has come from the areas between 50 and 200 m depth and a small contribution from areas beyond 200 m depth. This suggests that the resources in coastal areas are under heavy exploitation and the effort requires to be kept at a sustainable level.

The impact of fishing, coastal industrial development, pollution and discharge of sewage on the fish stocks is debated in various fora from time to time. In the case of Indian seas, some coastal or harbour areas seem to have been affected. The FAO report on review of state of world fisheries resources (1995) relates this impact to the increased population pressure and on emerging industries in coastal areas of developing countries. The report also touches upon the destruction of marine habitats namely coral reefs and mangroves. It points out the fact that wider impacts of these disturbances on the balance of the marine life and coastal habitat is generally unquantified at the current time. In the Indian context, the environmental parameters need to be continuously monitored so as to assess the extent of impact on the health of the ecosystem and the fish stocks. In view of this, it is felt necessary to assign responsibility of scientific data and information collection along with the fishery resources data and correlation analysis with a nodal agency like Fishery Survey of India, by strengthening the organisation with requisite resources of vessels, equipments and personnel.

Comments of MOA on status paper

As desired by members of the committee the MFPI prepared a status paper on deepsea fishing as a background information for the committee. The paper provides information regarding the EEZ, the types and potential of resources therein and fish production trend, export of marine products, infrastructure available, number of traditional crafts, mechanised boats and deepsea fishing vessels under charter, joint venture, lease and test fishing schemes.

The MOA in their comments on the status paper have suggested that the areas beyond 50 m depth contour to be considered as deepsea following the FAO definition instead of 12 nautical miles territorial waters limit. Of the total harvestable potential of 2.28 million tonnes from 0 to 50 m depth zone the Ministry of Agriculture's estimate of present exploitation is about 2.06 million tonnes leaving the balance of harvestable potential of 0.22 million tonnes for future exploitation. The transfer of technology through charter is observed to be insignificant as the Indian crew were taken on board to fulfil the charter obligation rather than training or transfer of technology. MOA mentioned that it may not be fully true that the advent of large number of mechanised and motorised boats put a pressure on the coastal fishery giving examples of Arabian sea coast and areas between Paradeep and Nizampattanam where these boats have been operating beyond territorial water limit.

It is stated by MOA that the coastal fisheries are fully within the jurisdiction of states and union territories, and the MOA has an advisory role in development of the coastal fisheries. Disagreeing with the point on mechanised boats competing with traditional boats in coastal

waters, MOA states that because of addition of motorised and mechanised fleet the area of operation has largely increased and these fleets fish well beyond the operation limits of traditional craft. The large mechanised vessels of 20m overall length onwards infringe into shallower waters and compete with smaller mechanised trawlers and motorised boats. The shallower waters are also found to be more lucrative than the deepsea by the licensed deepsea fishing joint venture vessels.

It is true that the percentage contribution of traditional sector in the overall landings has gone down during the last ten years mainly because of a relative increase of motorised/mechanised boats. This is bound to happen in developing sector. There has been a marked increase of landings by the traditional sector from 1990–91 (7.7 lakh) onwards (8.95 lakh tonnes) in 1993–94, indicating no competition between the traditional and motorised/mechanised craft.

In 0–50 depth zone, harvestable potential is 2.28 million tonnes against the estimated landings of 2.06 million tonnes still leaving an exploitable crop of 0.22 million tonnes. The remaining 0.632 million tonnes of landings came from 50 to 200 m depth zone and a small contribution from areas beyond 200 m depth. The harvesting of resources is being maintained at a sustainable level in the coastal areas.

Potential vis-à-vis production

As the estimated fishery potential is 3.92 million tonnes and the current production is in the order of 2.69 million tonnes, an additional yield of 1.2 million tonnes is harvestable from the Indian EEZ. In the coastal sector there is already heavy fishing pressure, and the scope for increased production is extremely limited. The additional yield remains to be harvested mainly from the offshore sector where it is only marginally exploited now and from the oceanic sector which is virtually unexploited.

The resource potential in the oceanic sector, which constitutes the tunas and allied resources, is about 0.25 million tonnes. Out of this the current yield is less than 5%, mostly harvested by chartered vessels, which leaves vast scope for expansion of this sector.



CHAPTER 4

Evidence Obtained Through Questionnaires

In order to collect oral evidence from the target group comprising traditional, mechanised, joint venture operators, state fisheries departments and members of the committee, a set of questionnaire was framed and circulated among these to record their opinion. Following is the summary of the information furnished by various targeted groups.

Traditional fishermen (Questionnaire Form-I)

This was meant for traditional fishermen and information was collected from the coastal states of Gujarat, Maharashtra, Goa, Karnataka, Kerala and Tamil Nadu. On analysing the information furnished by them the following common views are emerged:

- i. Fishing operation of the traditional crafts is mostly confined to 0–50m depth in all the States except in Karnataka and Tamil Nadu where depth of operation extends beyond 50m viz. 50–100m depth 78% and 34% respectively, and 17% of the boats in Tamil Nadu operate beyond 100m depth.
- ii. Regarding damage of their fishing gear by mechanised or deepsea fishing vessels fishermen of Goa expressed 100% yes, Karnataka 61%, Kerala 61%, Tamil Nadu 66% where as 25% of the Gujarat fishermen affirmed damage to their nets.
- iii. Conflict between traditional and mechanised sector are reported by all the states.
- iv. Opinion regarding aptitude and capability for deepsea fishing shows that fishermen in Maharashtra and Karnataka have got the capability. They also indicates that their fish catches are affected because of the operation of larger vessels in the area.
- v. The information furnished also reveals that traditional and mechanised sector in Maharashtra and Karnataka desire to exploit the resources upto 200m depth with improved technologies and foreign vessels are not needed.
- vi. Views of fishermen in Maharashtra, Goa and Karnataka are in support of withdrawl of the existing licenses issued to larger vessels and that no new licenses should be issued.

Mechanised boat operators (Questionnaire Form-II)

This format was designed for collecting oral evidence from the target group of mechanised boat operators. On analysing the information furnished by them the following view points emerged:

- i. The overall length of the vessels in operation are in the range of 10–20 m except those in Kerala where the length of all the vessels reported is above 20 m.
- ii. Shrimps are the targeted species of the vessels of Gujarat and Kerala while it is not so in Maharashtra and Goa.

- iii. Regarding investment for installation of equipment for fish finding, navigation and communication all are in favour of opting for the modern equipment.
- iv. Gear damage by foreign vessels are reported by the operators from Gujarat (67%), Maharashtra (28%) and Goa (100%).
- v. Competition for fish catch is also reported by the mechanised boat operators from Gujarat (33%), Maharashtra (56%), Goa (75%) and Kerala (100%).
- vi. Fishing regulation is recommended by the operators from all the states.

Joint venture operators (Questionnaire Form-III)

Bay Liners Ltd. Hyderabad

Operates a long liner from base port Cochin under 100% EOU scheme. Catch reported is 600–700 kgs per day. Value realisation is indicated low due to world tuna rates falling down. Tuna longlining has had highly inconsistent yield pattern during the last few years leading to huge loss. No incident of damage to any net of traditional or mechanised boat has occurred.

Sri Kumaran Fisheries (P) Ltd.

Operates two stern trawlers for deepsea fishing from Paradeep port. Catches realised are 1000 kg per day in 50–100 m depth and 200 kg per day in above 100 m depth. Catches are disposed by 100% export. Exploitation of deepsea shrimps and lobsters can be done by Indian owned vessels and joint venture is not required. Size of vessels suggested for stern trawling and tuna longlining in Indian EEZ is 22–30 m and 20–40 m OAL respectively. Unless Govt. of India strengthens the Coast Guard to curtail poaching by foreign vessels the intrusion of foreign vessels in our EEZ will be unavoidable even though the Govt. of India stops issuing permits for fishing.

Moon Marine India Pvt. Ltd.

Operates eight tuna long line vessels on lease from Taiwan. Catches comprises mainly of tunas-60% and marlin and bill fishes-40%.

Maritime state governments (Questionnaire Form-IV)

Gujarat

Normal distance of fishing of traditional craft is reported as upto 50 nautical miles (n.m.), motorised boats upto 60 n.m. and mechanised upto 200 n.m. About 83.4 % of the estimated resources of Gujarat can be exploited by the fishermen of Gujarat. At present the state Govt. do not have any scheme for technological upgradation. Regarding UN Law the state Govt. opines that first it should be ascertained what is surplus allowable catch. Moreover, the fishermen of Gujarat are capable of exploiting the standing stock. On oceanic resources state opinion is that the question of exploitation of oceanic tunas is applicable to Lakshadweep, Andaman and Nicobar Islands where such resources are available. Regarding Marine Fishing Regulation Act (MFRA) it is felt that there should be separate MFRA for each state. Proposed season for ban on fishing is from mid May to mid September.

Maharashtra

The normal range of distance of operation of traditional and motorised crafts is 5–10 km (9–15 m depth) and mechanised boats is 30–50 km (35–50 m depth). The overall fish production of the

state is stabilised around 3.75 Lakh tonnes. In the context of the UN law of the sea even if the joint venture vessels are introduced they are not likely to intrude in the fishing area below 50 m depth. Ban on fishing should be according to the breeding habit of the fish and prawns and need not be uniform throughout the coastal line of a particular state.

Goa

The normal range of distance and depth of operation of traditional craft is 2–4 nm (14–20 m), motorised boats is 3–7 nm (10–25 m) and mechanised boats is 3–32 nm (15–85 m). The maximum distance and depth being covered by the three classes of vessels are 5 nm (21 m), 10 nm (31 m) and 50 nm (130 m) respectively. Resources studies indicate that existing mechanised boats are capable of exploiting the resources in 50–150 m depth. State proposes to upgrade the existing vessels in phased manner. Ban during monsoon months should be applicable to all the three categories of the fishing vessels. New vessels should be permitted to the extent of (1) replacement of existing vessels (2) upgradation of existing fleet and encouragement to traditional vessels in the context of UN law of the sea, some of the fishing vessels can be engaged for long lining, hook and line fishing and squid jigging.

Karnataka

Present area of normal operation for traditional craft is 0 to 4 nm, motorised 1 to 10 nm and mechanised 3 to 25 nm ranging from 0 to 55 m depth and maximum distance of operation is 200 nm by mechanised boats. For exploitation of resources available in 50–200 m depth zone only about 500 vessels are capable. State has plans to equip the mechanised boats with electronic equipments with assistance in form of 25% subsidy. Depletion of stocks are not reported in the state except drastic decline in sardine and mackerel landings. In context of UN law, Indian owned vessels are capable of exploiting the stocks. For oceanic resources Indian owned vessels with some modifications can exploit. Fishing regulations are necessary to conserve the fish resources.

Tamil Nadu

All existing boats are equipped only for bottom trawling and none of them are capable of fishing beyond 100/110 m employing this method. In the context of the UN law the Govt. view is that deepsea fishing should be done by Fisheries Co-operatives, Federations/Associations/Group of trained fishermen, and fisheries development corporations of the states with financial support from Govt. of India/Financial institutions. Training input should be given by respective institutions giving preference to traditional fishermen. Control of fishing efforts suggested is at Maximum Economic Yield (MEY) level. Restrictions as per the provision under MFRA number/type of fishing can be enforced.

Andhra Pradesh

Craft presently in operation are traditional (11265) motorised (883) and mechanised (1240). Their normal range of operation is 10, 20, 35 nautical miles respectively from the shore. With technological upgradation existing mechanised boats will be able to exploit resources in the continental shelf. On UN Law the state is of the opinion that Indian own fleet is fully capable of exploitation of the resource. Exploitation of oceanic tuna resources joint venture is the best course of action, if the present financial institutions cannot finance the projects. Fishing should be banned from July to September.

Orissa

Present area of operation is upto 5 km for traditional crafts, 5–15 km for motorised boats and beyond 15 km for vessels above 15 m OAL. Depletion or decline in catches is not reported in the state. Regarding UN Law, joint ventures can be considered for mid water trawling and longlining after proper examination. For tuna resources joint ventures can be considered after examination. Fishing ban for trawlers exists from 15th April to 15th July.

West Bengal

Present area of operation of traditional craft is from 5 to 7 nm, motorised boats from 10 to 12 nm and mechanised boats from 20 to 25 nm with maximum depth of operation at 50 m. Existing crafts are not capable of exploiting the resources in outer continental shelf but technological upgradation can enable them to exploit these resources. On UN Law of the sea joint venture is suggested, provided Indian fishermen are trained, alternatively it is discouraged. For exploitation of oceanic resources joint venture is suggested provided Indian fishermen are trained, alternatively it is discouraged. Fishing efforts at Maximum Sustainable Yield (MSY) level are suggested. Regarding Uniform MFRA it is stated that considering all the factors related to marine fishery of different maritime states it may not be possible to make uniform for all the states. Fishing ban during March to May is suggested.

Members of the committee (Questionnaire Form-V)

Prof. K.V. Thomas, Member of Parliament

Ban should continue. All the licences issued for charter and joint venture and lease should be cancelled. All poaching by foreign vessels should be stopped. Equity debt ratio of the joint venture agreements, until the serviceability end, most of vessels involved are very old, some are bull trawlers and therefore agreements are illegal and invalid and cancellation can be done easily. Encourage motorised traditional and small mechanised sectors to take up more and more deepsea fishing and provide them with fuel subsidy, fish finders, ice box, safety equipments etc. Marine fishing regulation act should be enacted by the parliament for deepsea, which should aim at conservation of fisheries resources, protection of fishermen and a sustainable fishery. Cheap protein for the masses, maximum export earning, labour intensive fishery should be the aim of such legislation. One fishery authority under one fisheries ministry should guarantee all the above.

Joint Secretary, Ministry of Agriculture

The present Indian mechanised fleet has capacity to fish in depths upto 50–80 m waters. Technological upgradation of the existing fleet will enable them to exploit resources in the outer continental shelf. The shrimp trawlers lying idle at present could suitably be equipped for tuna long lining in the oceanic region. Intermediate non-trawl type of crafts of about 15 m size could be deployed for undertaking multiday fishing to exploit the under-exploited fishery resources such as sharks, tunas etc. Considering the resources potential available further increase could be made only by exploiting from areas beyond 50 m depth to a level of about 0.8–1.0 million tonnes. Projects for large scale exploitation of deepsea fishery resources such as tunas, squids, cuttle fish etc. are likely to be viable considering the demand for these products in the interna-

tional market. Indian entrepreneurs can successfully penetrate into foreign markets by converting non-conventional varieties of fish into attractive products by product development through value addition. In the context of UN Law of the sea a limited entry of Joint venture programme could be allowed till the Indian deepsea fishing vessels are suitably modified to make these vessels resources specific. Fishing methods for demersal trawling, midwater trawling, hook and line fishing, squid fishing and long lining can be allowed either as resource specific vessels or multi-purpose vessels. We should have deepsea fishing upto requirement of exploiting the under-exploited resources such as deepsea and oceanic. Present ban need not be continued for tuna long liners, hook and line vessels, oceanic purse seiners, squid jiggers etc. in deepsea zone since they may not affect the coastal fishery.

Chairman, MPEDA

Existing mechanised vessels may not be able to harvest the resources in areas upto 200m depth as many of the existing mechanised vessels are small ones. Most of the existing vessels being of wooden hull it would be difficult to upgrade them. However, larger mechanised vessels built during the last few years can effectively exploit the resources. Exploitation of deeper water resources at a depth beyond 150 m. will not be viable for domestic marketing. Within 50–150 m depth there are resources of low value fishes but its prevailing market value may not make the fishing viable. On the UN Law of the sea it is opined that joint ventures only for tuna longlining and oceanic squid jigging are necessary. Mechanised fishing will be required to exploit the demersal stock. Most of the commercially important species now caught by large deepsea fishing vessels can be exploited by large mechanised vessels and existing deepsea shrimp trawlers with suitable modification. Regarding existing ban, tuna longliners, hook and line vessels and limited number of oceanic squid jiggers may be permitted. MSY level of fishing efforts may be considered.

Deputy Director General, ICAR

Existing mechanised boats can harvest the resources in the outer continental shelf. There is an overall increase in the catches because the fishing operations by traditional and mechanised boats are extending into deeper waters (upto 120m) and further offshore. In the context of UN Law of the sea joint venture is an appropriate measure till Indian owned fleet is capable of full utilisation of the resources. Suggested fishing methods are squid jigging and long lining. Fishing effort at MSY level may be considered. The existing ban may be lifted for special types of vessels, till Indian owned vessel catch up. Trawling by deepsea vessels on the continental shelf should be banned.

Ministry of Defence

In context of UN Law of sea, joint ventures can be allowed for mid water trawling, hook and lining, squid jigging and long lining. Joint venture is the best course for exploiting tuna resources. The Ministry of Defence through the Coast Guard, is mainly concerned with the safety of Indian fishermen and enforcement of Maritime Zones Act of India, 1981 by apprehending the foreign fishing vessels. In this context, it is suggested that mechanised boats which are of 10 to 12 metres in length, and not having sea going ability or life saving appliances and communication equipment, should not be allowed to operate beyond territorial waters. Simultaneously, the provision of INMARSAT 'C' terminal with GPS facility in all fishing trawlers operating under

chartered and joint venture/leasing and test fishing should be insisted upon and needs to be incorporated in the terms and conditions of the Permit.

Director general, Fishery Survey of India

Existing mechanised boats have the capacity to exploit the resources upto 80 m depth. Considering the engine power, winch capacity and wooden construction, technological upgradation of existing boats may not help to exploit the resources in the outer continental shelf and the augmentation of the catch may be only marginal. Catches in the inshore waters remain at optimum level of exploitation, the present increase in catches is due to expansion of fishing activity upto 80 m depth along certain areas. In the context of the UN Law of the sea, joint venture is an appropriate measure provided these vessels have adequate life span to continue operation upto a minimum of 15 years. Fishing methods like mid-water trawling, hook and line fishing, squid jigging, long lining and demersal trawling for deepsea demersals may be allowed. Joint venture is the best course of action for utilising tuna resources. Ban should be lifted for tuna long liners, specific number of stern trawlers for deepsea shrimp and fin fish resources and mid-water trawling for columnar and pelagic fish stocks.

Secretary (Fisheries), Govt. of Gujarat

Normal distance of fishing for traditional craft is upto 50 nautical miles (nm), motorised upto 60 nm and mechanised upto 200 nm. About 83.4 % of the estimated resources of Gujarat can be exploited by the fishermen of Gujarat. At present state do not have any scheme for technological upgradation. Regarding UN Law of the sea first it should be ascertained what is surplus allowable catch. Moreover, the fishermen of Gujarat are capable of exploiting the standing stock. On oceanic resources state opinions is the question of exploitation of oceanic tunas is applicable to Lakshadweep, Andaman and Nicobar Islands where such resources are available. Regarding MFRA it is felt that there should be separate MFRA for each state. Proposed season for ban is from mid May to mid September. The ban should be imposed & continued for fishing in the entire EEZ along the Gujarat coast by the chartered/foreign fishing vessels.

Secretary (Fisheries), Govt. of Maharashtra

Regarding augmentation of the catch considering the potential resources available, catch beyond continental shelf may be increased after introduction of larger vessels. Overall increase in fish catch can be attributed to diversified fishing methods adopted by fishermen according to market demand. In the context of the UN Law of the sea, joint venture may be continued only for a period of initial 3 years. However hook and line fishing and squid jigging may be allowed.

Development Commissioner, Govt. of Goa

Existing mechanised boats are capable of exploiting the resources in the outer continental shelf. Regarding UN law of the Seas joint venture is not the appropriate method. There is fear that by the time Indian (Goa state) fishermen will be fully engaged and capable for such fishing, the Joint venture fishing vessels will reduce the resources by over exploiting. However, some proportion of fishing vessels for hook and line fishing, squid jigging and long lining can be engaged. Oceanic tunas and allied resources can be exploited if the Indian mechanised vessels are properly equipped with necessary technology. No fresh licences should be issued, only tuna long line and hook and line vessels may be allowed from the existing licence. Ban should continue.

Secretary (Fisheries), Govt. of Andhra Pradesh

Existing mechanised boats are not capable of exploiting the resources available for exploitation in the outer continental shelf. Regarding UN Law of the sea joint venture is an appropriate measure for the present in view of lack of huge financial resources, qualified technicians and latest navigational and other equipment and demersal, midwater trawling, Hook and line fishing, Squid jigging and longlining can be allowed. Oceanic tuna and allied resources in the Indian EEZ can be utilised by exploiting initially for a specified period say 5 years thereafter our countrymen can exploit by experience. Ban should be applicable for the trawlers which are conducting fishing below 50 m depth.

Secretary (Fisheries), Govt. of Orissa

Existing mechanised boats are capable of fishing upto depth range of 50 m. Only deepsea fishing vessels may exploit the resources in the outer continental shelf. For augmenting the catches provision of 50 deepsea vessels has been made to operate from Paradeep fishing harbour during the current financial year. Regarding UN Law of the Seas tuna longline fishing is recommended. Effort at MSY level are recommended. Ban should continue till policy is made.

Secretary (Fisheries), Govt. of West Bengal

Existing mechanised boats are not capable to exploit the resources in the outer continental shelf area. Demersal trawling, Mid water trawling and Hook and line fishing is suggested till the Indian owned fleet is capable of full utilisation of the resources. Fishing efforts at MSY level are suggested. Present ban should continue till a suitable policy is adopted at higher level.

Shri Thomas Kocherry, President NFACAJV

In 1989 itself the Screening Committee, High Power Committee banned Bull Trawling. But again the Ministry of Food Processing Industries (MFPI) continued to give the licences. Similarly MFPI issued a notification on 31.12.93 putting an end to Chartered vessels. But MFPI continued to give the licences even after this date. All the agreements of Joint Ventures are illegal and invalid. Since these are 100% EOU, they are bound to go after only export variety and thus leading to unlimited BYCATCHES. These displace 20 lakhs active fishermen together with about 2.5 crores of fisherpeople. These deprive 30 crores of fish consumers of fish. Because there is Mid Sea Transfer and there is no proper accounting and no proper infra structure there is no guarantee that foreign exchange will increase. On the other hand food processing and the export by the Indian companies is bound go to down. Finally the poaching fishing vessels continue creating problems. In the light of these all the licences issued for Joint Ventures/Chartered vessels/Leased vessels should be cancelled and no new licence should be issued. Poaching by the foreign vessels should be stopped by creating proper enforcing force in the sea.

Shri P. Jairaj Kumar, Vice President, Deepsea Fishing Industry Association

Existing mechanised vessels cannot exploit the resources in the outer continental shelf due to inadequate and suitable type of fishing gear, technology, experience, freezing, processing and value adding capabilities. In the context of UN Law of the sea Joint venture is suggested for transfer of technology, marketing of catches, processing for value addition and to be able to acquire a fleet of deepsea fishing vessels. Demersal and mid water trawling is suggested with restriction on the number of vessels, gear, mesh size only for nonshrimping resources, bull trawling should

not be allowed. Hook and line fishing, squid jigging, and long lining is suggested. Joint venture vessels are not foreign vessels, they are Indian vessels. For exploiting tuna resources there is a need for foreign fishing vessels either on lease or charter and for other resources specific type of fishing such as squid jigging and pole and line fishing there is a need for foreign investment. Ban on fishing should be immediately lifted for atleast resource specific vessels. Fishing effort should be limited at MSY level.

Shri P.C. Appa Rao, President, Andhra Pradesh Mechanised Fishing Boat Operators Association, Visakhapatnam

Opinion of the member is not given in the form V. However the opinion/views expressed in a letter are as follows:

Knowledge of the traditional fishermen, fishermen cooperative societies, other related with the fishing industry are opposing Deep Sea Fishing Policy, so far my observation the Deep Sea Fishing Policy is not useful, hence requesting not to implement and also requesting to cancel the permits issued already to the joint venture vessels.

Shri Dilip N. Pagdhare, President, Mahim Machchimar Vividh Karyakari Sahakari Society Ltd., Bombay

1. Providing training centres of Deepsea Fishing.
2. Reserving jobs for the fisher folk in the Merchant Navy so that they will have good access to large vessels and different equipment.
3. By setting up an active body to look into the welfare of fishermen (by providing schools, hospitals, etc.).

Views from various agencies/associations/action groups

1. All Kerela Deep sea Trawlers Operators Association
 1. By joint venture scheme deepsea fishing, nothing has been gained from Indian side.
 2. Issuing of licences for joint venture is a call for unauthorised fishing in deepsea.
 3. Destroys the environmental conditions.
 4. Commonman is denied of our own sea food.
 5. Loss of employment opportunity.

Suggestions: (1) Fishing in areas upto 200m depth can be done by local fishermen provided they are given the necessary support like training, modern electronic equipments such as GPS, echosounder and communication systems. (2) Diesel oil subsidy should be given as encouragement.
2. Akhila Kerala Dheevera Sabha, Kerala
3. Kerala Pradesh Matsya Thozhilali Congress State Committee
4. Kerala Fisheries Co-ordination Committee
5. Mechanised Fishing Boat Operators Association, Quilon
6. Boat Owners & Associates Organisation, Kollam
 1. Reconsider the existing joint venture\chartered and leasing policy and formulate a new deepsea fishing policy en-couraging the Indian fishermen for deepsea fishing in all possible ways.

2. Cancel all the Licences issued for joint venture, leasing and chartered vessels and stop poaching by the foreign fishing vessels.
 3. The optimum number of fishing vessels which may operate in the Indian Ocean may be fixed.
 4. Fishing effort towards exploitation of shrimp resources should not be allowed to increase.
 5. The pressure on shrimp resources should be reduced by restricting the operation of shrimp trawlers to about half the present strength. The rest should either be modified for diversified fishing or use as cargo vessels.
 6. Conservation and management of marine resources should be given great attention and certain restrictions may be introduced from time to time to achieve this objectives.
 7. In order to promote deepsea fishing priority should be given to the fishermen co-operatives. All facilities and concession offered to the fisheries sector for deepsea fishing should be given to the fishermen co-operatives.
 8. The High Speed Diesel subsidy should be given to all the units even if they do not directly export the catch.
 9. Training for Indian fishermen in deepsea fishing operation has to be provided.
 10. Fishing vessels of 15 m and above are to be considered as deep sea fishing vessels.
 11. The Central Government as a matter of policy should recognise fish production activities at par with agriculture and post harvest activities will be recognised as industrial activity.
 12. The fishery resources potential of the country and its level of production and harvest shall be periodically assessed.
 13. To achieve and maintain this level of sustainable fish harvest and production the ecosystem of the whole aquatic terrain under the country's jurisdiction should be kept in good state of health by monitoring and regulating its use within the purview of the legal enactment.
 14. Special attention should be given to enhance the level of institutional finance for deep-sea fishing activity by fishermen.
 15. Steps to be initiated to undertake an aquarium reform in the countries territorial waters which shall ensure that the rights of ownership of fishing assets shall rest only with those who fish.
7. All Kerala Mechanised Fishing Boat Operators Association, Cochin
Suggestions made by the Association pertains:
1. To cancel all license issued to operate joint venture and charter vessels.
 2. To evolve a new deepsea fishing policy encouraging indigenous mechanised and traditional fishing sector to enhance deepsea fishing operation at a sustainable level with appropriate technologies.
 3. To order a high level vigilance enquiry into the involvement of top officials in MFPI in issuing the licence for deepsea fishing.
8. Representation of the Govt. of Gujarat on deepsea fishing policy
- A. Memorandum submitted to the Prime Minister by the Govt. of Gujarat
1. If the permission granted to the foreign fishing vessels for fishing in Indian waters is not withdrawn there would be a depletion of the fishery resources.

2. The country wants to conserve the resources in the interest of fishing industry of the country.
3. The country does not lose anything if deepsea fishing operations are suspended forthwith.
4. The gain to the country by the exploitation of deepsea resources by the foreign vessels is very very meagre and for this paltry amount the Govt. of India should not encourage the foreign fishing vessels for fishing in the Indian waters.
5. The states fishermen are capable of fishing in the deeper areas and can contribute further to the nation by increasing the fish production and export.

B. Govt. of Gujarat representation to the Chairman of the committee

The Govt. of Gujarat suggested as follows:

1. To withdraw permission granted to foreign vessels for fishing in Indian waters to avoid depletion of stocks.
2. The states fishermen are capable of fishing in deepsea waters.
3. Conserve the resources in the interest of the fishing industry.
4. The country does not lose anything if deepsea fishing operations are suspended.
5. The gain by exploitation of deepsea resource by foreign vessels is very meagre and for this the Govt. of India should not encourage fishing by foreign vessels.

C. Letter to Prime Minister by Chief Minister Govt. of Gujarat dated 17.8.94

Requested complete ban on the deepsea vessels in ocean depth below 100 fathoms. If this is difficult, exclude deepsea fishing vessels from the Exclusive Economic Zone altogether.

Letter to Prime Minister by Chief Minister Govt. of Gujarat dated 16.1.95

The local fishermen of Gujarat are capable of fishing upto a depth of 100 fathoms which occurs at a distance of 60–70 km. of the coast. The vessels licensed by the Govt. of India should be allowed to operate only beyond 100 fathoms along north west coast and only resource specific vessels be allowed beyond this limit in the EEZ.

D. Points addressed to Minister of FPI dated 7.2.94

1. Necessary instructions may be given to the Navy and Coast Guard for frequent patrolling.
2. Necessary notices may be issued to the vessels breaching the terms and conditions as per the provision of MZI Act (Regulation of fishing by foreign vessels) 1991.
3. The issue of the grant of permission to foreign vessels in the EEZ may be reviewed immediately in consultation with the concerned coastal States, MFPI expert bodies and other concerned organisations. All approval should be given in consultation with the State Govts. concerned. Renewal of existing permissions also be made subject to review.

E. Points addressed by Shashikant Lakhani to Minister dated 17.12.94

1. There are no studies indicating the total resources that has been scientifically divided into what is available in 12 nautical miles.
2. Local mechanised boats are fishing upto 70–100 fathom depth and 70–80 km. distance. Hence introduction of deepsea fishing vessels in the traditional fishing grounds are needless and destructive elements of competition.
3. The coastal vessels are certainly gaining operational competence to fish beyond the territorial waters.
4. The catch reported by the deepsea fishing vessels is deliberately being under quoted.

5. Majority of the companies who operate 117 stern trawlers are based in Delhi. These vessels are capable of destroying the resources
6. Only resource specific vessels like tuna longliners and hook liners should have been licensed rather than the stern trawlers.

9. Representation of Govt. of Maharashtra on deepsea fishing policy

The Govt. of Maharashtra in their memorandum have indicated an unexploited balance of marine fishery resources off Maharashtra coasts as over 1.2 million tonnes for which it is suggested to introduce an intermediate type of fishing craft in the size range of 17–21 m OAL with 150 HP or higher power engine, having an endurance of 10 days fishing at sea. The Govt. desires the committee to consider following views while framing the new deepsea fishing policy.

1. Issue of new licences under the charter/joint ventures to be stopped and the existing licences to be revoked, as early as possible.
2. In view of conservation of fish stocks, monsoon being breeding seasons for fishes, closed season for fishing may be observed along Maharashtra coast.
3. Local fishermen may be encouraged for undertaking deepsea fishing by providing:
 - (a) existing suitable mechanised boats with duty free Global Positioning System (GPS), echosounder/sonar, fish finders, communication equipments, etc.
 - (b) financial assistance to intermediate fishing crafts (with 150 HP engine) in deep sea fishing (100 to 150 m depth) through NCDC, and
 - (c) training in deepsea fishing techniques.

10. Deepsea Fishing Industry Association, New Delhi. (Jairaj Kumar)

In order to manage the deepsea resources and to prevent infiltration into areas demarcated for traditional and mechanised craft following points may be considered.

1. Resource specific methods be allowed either joint venture, lease or charter.
2. All charter licence be phased out and no fresh licence be issued.
3. All deepsea vessels be fitted with INMARSAT-C & GPS
4. On the basis of availability of resources, a 12 n. miles be demarcated with 3 mile buffer zone between deepsea vessels and mechanised craft.
5. For stern trawlers strict regulation on vessel size, gear size, mesh size etc. be enforced.
6. Specific license for deepsea lobster and prawn fishing.

11. Matsya Parisramikula Sankshema Sangam, Vizag

1. No specific suggestions.

12. Andhra Pradesh Mechanised Fishing Boat Operators Association, Vizag

1. Not to issue license to foreign vessels and cancel the licenses issued so far.
2. Implement subsidy on diesel oil for small mechanised fishing boats.

13. Kerala Fisheries Society, TVM - submitted through Shri. P. C. George

A draft guidelines for a revised programme submitted for exploitation of the fishery resources in the EEZ to make it more relevant to our present need and to meet declared objectives.

14. Sea food Peeling Shed Owners' Association, Bombay

Requesting about the facilities for peeling shed for processing.

15. Shri Sadashiv P. Fadte, Goa

Licenses issued to foreign vessels to fish in Indian waters be revoked immediately.

16. Bharatiya Janata. Party, Panaji Goa

1. Deep sea trawlers operates in the areas where traditional mechanised boats are also operating and there has been instances of loss of net at sea.
2. Vessels of foreign origin have been found to. sweep the sea clean by various modes in the depth range of about 40 and 50 fms.
3. Govt. should immediately revoke the licenses issued to the foreign fishing vessels in order to safe guard the interest of local community.

17. Sea food Exporters Association of Karnataka and Goa, Manglore

Drastic collapse in the foreign market of marine products has put survival at stake. Would appreciate to have continuous dialogue in this matter.

18. Inchita Fisheries Pvt. Ltd. Madras

The Chinese collaborators do not have the best interest of India. Request to call for the records and conduct a high level inquiry and pending the decision suspend all operations of the C.N.F.C. vessels in India.

19. Goenchea Tamponkarancho Ekvott, Goa

There exists a conflict between traditional and Indian mechanised sector. We require a 10km zone from the shore free from trawlers and purse seiners mainly to protect traditional fishermen and ecology.

Stop deep sea foreign fishing vessels and to protect traditional fishermen of Goa and also India.

20. Maharashtra Machhimar Kruti Samity, Bombay

1. The review committee should accept the recommendations of the FAO consultant (1992) Mr. Gudicelli.
2. All the licenses issued for joint ventures and chartered vessels should be cancelled. No new license should be issued.

21. St. Aloysius Seminary, Nagercoil

1. The licences issued to joint venture, chartered vessels should be cancelled. The reason is that they are causing depletion of fish resources in the Indian waters.
2. It displaces the traditional and small mechanised fishermen in Tamil Nadu and a great variety of fish had been indiscriminately harvested and many species of fish are thrown our as useless. The nets and the fishing gears are damaged and destroyed by these vessels and some fish workers had lost their lives too.
3. Lakhs of fish consumers in Tamil Nadu are deprived of fish which has been their cheap nutrition. All the fish caught by these vessels are processed in the sea itself and exported to other countries. Hence the local markets have the least quantity of fish which have to be brought at a very high price which the majority of the Tamil people who are poor can not afford to buy.

4. The Indian fish workers are capable to fish in the Indian EEZ. Even with the least equipped traditional fishing boats we are able to reach the deep sea to carry out the fishing operation. If we are equipped more, we will be able to bring in more of foreign currency to our dear nation.

22. Tamilnadu Fishermen-Kadal Thozhilalar Federation

1. Oppose Joint venture chartered vessels foreign fishing vessels.
2. We are capable of fishing upto 200 miles EEZ.
3. It will displace us and deprive will continues effects.

23. Nagai District Fisher Peoples Forum, Tamil Nadu

1. Oppose joint venture/foreign fishing vessels because they destroy our nets and vessels.
2. The fishes in the deepsea can be caught by traditional and small mechanised sector. The small fishermen and the traditional are capable of going to up to 200 miles EEZ.
3. These huge fishing vessels destroy our sea bed and deplete our resources. Therefore we cannot take the risk of allowing such vessels at the expense of 80 lakhs fishermen.

24. Tamilnadu Fisheries Action Committee Against Joint Ventures, Madras

1. Our fish stock will be totally depleted by the technology adopted by the industrial fishing vessels coming under the joint venture deepsea fishing scheme.
2. Fishermen are capable of doing sustainable fishing upto 200 n miles provided they are given deisel at the rate of Rs. 2 per litre and provided other facilities needed to do deep sea fishing.

25. Tamil Nadu Fisher Workers Union, Nagarcoil

1. We request you to use your good offices to stop joint ventures, chartered vessels leasing vessels, poaching foreign vessels which not only exploit the fish resources but also eliminate the regeneration of sea resources because of the usage of trawl nets as they destroy the fishing nets and other deepsea fauna and flora. Government should take immediate measures to stop the foreign naval ship's atrocities in the sea.

26. Kanyakumary, District Action Committee Against Joint Ventures, Manakudy P.O.

Suggestions as under 25.

27. Forum of Fisheries Professionals, Visakhapatnam

1. To enhance the capability of Indian enterprise to successfully exploit the resources in the EEZ which would go waste if not done so.
2. To selectively allow foreign participation in areas of fishing where we don't have expertise or experience.
3. To acitively encourage formulation of joint ventures to exploit the highly migratory species such as tuna which occur in the EEZ's of more than one country and also in the high seas and joining the EEZS.
4. Another area where the Government could step in is providing, training technical and financial assistance for the small scale fishing sector to graduate into high tech area of deep sea fishing.

5. Utilisation of the vast potential resources for increased fish production for domestic consumption and for export of quality fish and fish products.
6. To develop technologies for higher productivity with environmental sustainability and conservation of biodiversity.
7. To improve the socio-economic status of the rural poor and fisherfolk through developmental programmes.

28. Govt. of Kerala

1. Suspend all the licenses issued under the new deep sea fishing policy.
2. Do not issue fresh licences for deep sea fishing vessels.
3. The state may be given jurisdiction upto 24 nautical miles as against 12 nautical miles at present.
4. A new deep sea fishing policy may be formulated which ensures the expansion of ambit of operations of small scale fishermen to deeper waters for harvesting the resources. Support measures to the small scale fishermen may be given by Government of India. The new deep sea fishing policy should ensure increase supply of fish for domestic consumption and added employment opportunities to the small scale fishermen.
5. The policy approach of Government of India in the fisheries sector (Both in the Coastal waters and Deep Sea) may be reflected in the proposed National Fisheries Policy.
6. A new surveillance machinery under the State Government will have to be created to ensure that the deep sea fishing vessels will not intrude into our territorial waters for fishing, Government of India can finance construction of suitable vessels for surveillance measures and Government can also provide for maintenance of such vessels.

29. National Fishworkers Forum, Calcutta

1. Cancel all licenses given to all foreign fishing vessel under joint venture or chartered scheme with immediate effect.
2. Help us to expand out operation by imparting training for the use of modern vessels - fish finder, eco sounder, navigator, compressor etc. also providing financial assistance for the acquisition of them and also for diversification of our fishing effort.
3. Enact a national Marine Fishing Regulation Act to cover the entire Exclusive Economic Zone of India.

30. Association of Deep Sea Going Artisanal Fishermen Thoothoor Post, Kanyakumary District
We strongly oppose the present deepsea fishing policy of the Govt. of India which completely ignores the extent of the skill and capacity of existing groups of Indian fishermen like ours. We are fully convinced that large investments and high tech is not essential for exploiting our deep-sea. The need is for skilled and courageous fishermen who receive critical support from Govt. agencies. Some of the problems faced are as follows:

1. Lack of adequate licence to fish for fishing in Indian states.
2. Non availability of diesel at concessional rates.
3. Lack of adequate insurance.

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4. Financial and technological upgradation support for improvement of boats, navigational equipments, ice boxes, improvement of fishing gear, communication facilities etc.
 5. Problems of being run over by ships of shipping lines thereby loosing longline gear.
 6. Lack of permission to fish in Lakshadweep and Andaman waters.



CHAPTER 5

Recommendations of the Subgroups

Gujarat

After very close and indepth discussions and keeping the points expressed by the fishermen of the area in view the subcommittee have come to the following conclusions:

1. Because of the Deep Sea Fishing Policy of Govt. of India under which licences were granted to foreign fishing vessels for fishing in Gujarat waters without taking into confidence the Fishermen of the State or the Gujarat State, has affected the interest of the Gujarat fishermen.
2. The fishermen of Gujarat are the real sufferers in terms of decline of catch per trip, damages to their boats and nets, destruction of potential grounds by indiscriminate fishing.
3. The fishermen of Gujarat state are hard workers and are capable of going into deepsea provided they are given assistance to acquire technology and equipment subject to certain regulatory measures to avoid same controversy again. They are capable of bringing more catches to the country.
4. In Gujarat there is no conflict between the traditional sector and mechanised sectors. Both are working harmoniously.

Considering these observations, the sub-group is of the opinion that the case of fishermen of Gujarat and supported by the State Government is genuine and we recommend to Government (Ministry of Food Processing Industries) not to issue any fresh licences to foreign fishing vessels either charter or Joint venture and not to renew the existing licences and also revoke the licences already issued.

Maharashtra and Goa

Having recorded the oral evidence and based on the above mentioned observations, the Sub-Group recommends the following:

1. Issue of new licences under the charter/joint ventures to be stopped and the existing licences to be revoked, as early as possible.
2. Uniform maritime laws for fishing in territorial waters may be enacted by Government of India, to avoid conflicts between fishermen engaged in traditional and mechanised sectors.
3. In view of conservation of fish stocks, monsoons being breeding season for fishes, closed season for fishing may be observed along Maharashtra-Goa coast.
4. Fishermen may be encouraged for undertaking deepsea fishing by providing:
 - a. existing suitable mechanised boats with duty free Global Positioning Systems (GPS), echosounder/sonar, Fish Finders Communication Equipment etc.

- b. financial assistance to acquire deepsea fishing vessels under joint ventures/out-right purchase through NCDC/other financing agencies; and
- c. training in deepsea fishing techniques.

The Committee may consider the above findings/observations and recommendations of the SubGroup while formulating the recommendations to the Government of India.

Kerela and Karnataka

Having toured the states of Karnataka and Kerala the Sub-groups conclusions are as follows:

1. There is conflict between the joint ventures and the deepsea fishing vessels and the traditional fishermen and the mechanised sector.
2. The finding is the deepsea fishing vessels encroach upon the traditional fishing zones.
3. There is an universal opposition by the fishermen for allowing the present kind of chartered/ joint venture and leased deepsea fishing vessels operating in Exclusive Economic Zone.
4. There is a need for cancellation of the licenses already granted.
5. The ban on grant of further licenses to continue.
6. The finding is that there is already over exploitation within the territorial waters and in order to ease the situation the fishermen willing and capable be equipped with the latest equipments like the fish finder, Echosounder, GPS navigator, fuel subsidy etc.
7. The fishermen to be provided with adequate finance by formulating proper scheme through the financial institutions such as banks and NABARD.
8. It is also observed as it is the traditional fishermen doing mechanised fishing and motorised (Out Board Engines) fishing have already ventured into deepsea fishing like four night fishing and even night fishing etc. where they go in for deep sea fishing.
9. There is also report that poaching by foreign vessels is still going on and the Coast Guard have not been able to prevent such poaching.
10. It is also felt in view of the fact that the Coast Guard are not able to handle the situation there would be need for a specialised force to enforce marine regulations.
11. It is also felt that there is a need for enactment of Marine Fishing Regulation Act by Parliament not only to enforce the regulation but also to conserve the marine wealth. There is a feeling that a separate fishermen authority and Ministry should be constituted bringing all fisheries administration under one umbrella.

Tamil Nadu

Summing up, the following main points emerged based on oral evidence of this area.

- the fishermen in this area are not averse to “deep sea fishing” and they have a mis-conception about the deep sea location itself, this position is to be cleared because in the minds of these fishermen 40/60 fathoms is the “deep sea”.
- Participation of local fishermen in the “Deep sea fishing operation” is to be considered.
- the request for training in CIFNET is genuine and to be considered favourably by the authorities.
- the information on the fishing grounds/survey grounds identified has to reach the fishermen and to this end the Fishery Survey of India, and other agencies of State and Central Government have to take immediate steps to circulate the information to these fishermen in local language.

- periodical information through TV and All India Radio should be undertaken to convey to the fishermen the methods of fishing, area and migration of fishes.
- the State/Central Government may have to consider increasing the subsidy element so that 50% cost on outboard motors may be extended from the present limit of Rs. 10000 in view of spiralling prices of the engine. Present cost of the engine for a cattamaram is about Rs. 29,000.
- the problem of coastal fishermen is purely “management of coastal fisheries” and hence regulatory measures should be undertaken more so because of the increased number of fishing crafts (in each category of fishing craft i.e. cattamaram, canoes fitted with Outboard motors and mechanised boats). The more the number of crafts the per-unit catch effort is falling down.
- special problems of inter state disputes among fishermen was highlighted since fishermen of Madras migrate to Andhra waters and fishermen of Kanniyakumari of the same state migrate to Kerala and Karnataka waters and consequently there are disputes and harassment. This problem may be given importance and possibility of inter state permit for the fishing crafts of one state to other vice-versa may be considered by Centre as well as the State Governments.

Andhra Pradesh, Orissa and West Bengal

The Sub Group consisting of Members of Parliament was appointed for on the spot visit to three coastal States of the east coast namely Andhra Pradesh, Orissa and West Bengal with Amal Dutta MP as Chairman of the Group (MP West Bengal). The Sub Group visited Visakhapatnam Fishing Harbour (Andhra Pradesh) on 22nd September, 1995. Paradip Fishing Harbour (Orissa) on 23rd and Shankarpur Fishing Harbour (West Bengal) on 24th September. The members of the Sub Group who attended at the different fishing harbour are set out in Annexure ‘B’.

All who made representation before the Committee objected to and protested against the operation of ‘foreign vessels’ operating in Indian Waters under any kind of licence. The demand was based on the perception that:

- a. The foreign vessels were responsible for taking away so much fish that catch made by traditional fisherman had gone down tremendously anywhere from 50 to 75% over the years.
- b. That the foreign vessels are responsible for causing damage to the fishing nets of traditional boats.
- c. That the foreign vessels do fishing in the areas demarcated for the traditional sectors i.e. within the territorial waters or the 12 n. miles limit. It must however be noted that in many cases the representatives of Association of traditional fishing boats spoke only against big boats and seemed to be using the terms foreign vessels and big vessels interchangeably.
- d. That these vessels are destroying a lot of fish and throwing them into the water because they do not want to be burdened to with fish of lower value.
- e. If licence is given to foreign vessels or vessels brought under foreign ventures are allowed to fish in Indian water, their number cannot be restricted as they can easily operate or do operate under duplicate or forged papers.

Apart from expressing deep and possibly sincerely believed hostility towards foreign vessels/big vessels. The traditional fishermen representatives claimed that they could increase their

catch from the miserable levels say 10 to 15 kgs per day to much higher levels if the Government helps them to acquire better technology. Some of them claimed that their income per fisherman had got reduced from Rs. 80 to Rs. 5 per day because “the bigger trawlers take away all the catch”.

Mechanised boats Associations of Kakinada also said that they faced difficulty from larger trawlers. The Association claimed that they operate within a range of 50 kms.

While making their demands the traditional sectors, the mechanised sectors as well as the Indian trawler owner Association all wanted that:

- a. no further licence for foreign vessels on charter or test fishing or joint ventures should be given.
- b. all such licence should be immediately cancelled.
- c. condemned the issuing of such licence by the Government in the recent past to 6 or 8 Thai vessels.

Some further suggestions and demands from the Representatives of traditional fishermen, mechanised boat and trawler owners were as follows:

- a. because of lack of infrastructure facilities for storage of fish in the major landing centres/ fishing harbours, the fishermen are not encouraged to bring many varieties of fish which they catch and throw them back to the water. If proper storage and other facilities were set up, discards will be reduced considerably and the fisher men will get some increase in their incomes also. It is therefore demanded that necessary infrastructure facilities in this regard should be set up in all landing centres and fishing harbours for storage of fish as well as facilities for production of fish meal and fish oil should be promoted so that low valued fish can be used, again thereby increasing in quality and the value of catch of both traditional and mechanised fishing vessels.

Fishermen of all sectors submitted that cyclone warning system is not adequate and the situation needs immediately correction. At Shankarpur West Bengal fishermen’s Association stated that fishermen in West Bengal Coast had to depend upon the weather broadcasts from Bangladesh because of the lack of adequate warning system from India.

The small and medium mechanised boat operators stated that if appropriate facilities for locating fish and navigational equipment were arranged by the Government and appropriate financial support arranged, they would be in a position to extend the fishing operations to distant areas. They demanded that instead of wasting money on giving facilities and subsidies for, collaborative ventures for inducting foreign vessels for deep sea fishing the technology of indigenous fishing fleet should be upgraded by the Government.

Some people felt that there was a need to regulate the number of fishing crafts of the traditional and mechanised sectors also, apart from the bigger vessels, whether indigenous or foreign and suggested that there should be a freeze on further expansion of these fleets as well. The States should arm themselves with necessary legislative power for this and other purposes. Those States who had not yet enacted Marine Fishing Regulation Act should take immediate steps to do so. In this context there was a further submission that the mesh size or fishing nets used by different type of boats for fishing or in different areas should be strictly regulated.

The Group feels that the above submission and demands are most pertinent and should be given due weight by the Review Committee.

While both the Indian trawlers association and mechanised boats association repeatedly claimed that they have no conflict with the traditional fishermen, the sub group is not convinced that this is really so. The representatives of the traditional fishermen have repeatedly spoken against larger vessels and not merely foreign vessels and it is obviously that the tremendous growth of mechanised boats observed enough congestion at all harbours visited by the sub group. It is apparent that:

- a. that much of the woes of the traditional fishermen are due to the larger catches obviously going to the mechanised sectors whose share of the total catch have rise tremendously.
- b. unregulated growth of both traditional and mechanized sector.
- c. poaching in the area reserved for traditional sector. if true, is not only due to the foreign venture vessels but more likely due to the Indian owned trawlers, as the number of foreign venture etc. vessels officially operating are quite low.

All categories were more or less unanimous in their perception that poaching whether in the zone reserved for traditional boats namely the territorial waters or in any part of the EEZ, the coast guards do not have the necessary competence either because of the lack of the resources or because they are not fully alert to their duties in their respect. If coast guards had been able to appear be more alert and active, the sub group felt the apprehension about poaching by foreign vessels would not have arisen. The Coast Guard representatives at the ports visited themselves admitted to shortage of vessels which does not allow them to effectively patrol those areas meant for fishing by traditional and mechanised boats.



CHAPTER 6

Recommendations of the Committee

Having considered the present status of marine fisheries vis-à-vis the fishery potential in the Indian EEZ,

Foreseeing the possible adverse implications of operation of deepsea fishing vessels on the socio-economic conditions of the traditional and small scale mechanised sector,

Desiring to improve the fishing capabilities of the traditional and mechanised sector with appropriate technological upgradation,

Stressing the need for a balanced development of fisheries with due priority to the traditional and small mechanised sector,

Knowing the necessity of optimum utilisation of marine fishery resources, within the national jurisdiction, at the sustainable level,

Conscious of the need for appropriate legislation with regard to area/depth restrictions for harmonious development of the different sectors in the fishery,

Noting the necessity of strict surveillance and implementation of these restrictions,

Reaffirming the importance of conservation of fishery resources and preservation of biodiversity,

Recognising the importance of fishery resources surveys and monitoring as essential inputs for fisheries development and

Considering the opinions and views of all sectors concerned with the marine fisheries,

The committee recommends that;

1. All permits issued for fishing by joint venture/charter/lease/test fishing should immediately be cancelled subject to legal processes as may be required.
2. No renewal, extension or new licenses/permits be issued in future for fishing to joint venture/charter/lease/test fishing vessels.
3. All licenses/permits for fishing may be made public documents and copy thereof made available for inspection in the office of the registered authority.
4. The areas already being exploited or which may be exploited in the medium term by fishermen operating traditional craft or mechanised vessels below 20 m size should not be permitted for exploitation by any vessels above 20 m. length except currently operated Indian registered vessels which may operate in the area for only 3 years.
5. Since the Indian mechanised boats below 20 m size have the capacity to fish in depths upto about 70–90 m; on the west coast, the distance from the shore represented by 150 m depth line should be out of bounds for all vessels of more than 20 m length except vessels mentioned at para 4. Where the 150 m depth zone is less than 50 nautical miles from the shore, the distance upto 100 nautical miles should be reserved for

Indian vessels less than 20 m length. On the east coast, starting from Kanyakumari, Indian vessels below 20 m size would have exclusive access upto 100 m depth or 50 nautical miles from the shore whichever is farther except relaxation in para 4. The depth zone would also be defined by coordinates indicating distance from the shore. Distance will be determined by National Hydrographic Office/Coast Guard/Fishery Survey of India.

6. In regard to Andaman & Nicobar and the Lakshadweep groups of islands, a distance of 50 nautical miles from the shore would be reserved exclusively for Indian vessels below 20 m length with proviso at para 4. Further, if so required, the limit would be defined taking into account the need to keep waters between islands reserved exclusively for Indian vessels, even if some portions fall beyond the limit of 50 nautical miles.
7. In the area open to the vessels above 20 m length, resource specific vessels for tuna and tuna like fishes, squids and cuttle fish, deepsea fin-fishes in mid-water or pelagic regions and oceanic tuna may be allowed for exploitation by tuna longlining, tuna purse seining, squid jigging and mid-water trawling, provided these are defacto Indian owned registered vessels. The Indian owners should have both the debt-equity as 51%.
8. The fleet size for different fishing grounds may be fixed taking into account of the maximum sustainable yield and the need for conservation of resources.
9. In order to conserve fishery resources in our waters, to protect fishermen and to reduce conflicts in the sea, deepsea fishing regulations should be enacted by the Parliament after consulting the fishing community.
10. For preventing conflicts between the traditional small mechanised, larger deepsea vessels strict vigilance to be exercised by the Coast Guard. To attain this objective the Coast Guard should be strengthened, expanded, upgraded technically with the State-of-the-art system of navigation, surveillance and weaponry and properly tasked to prevent poaching by foreign vessels and observance of zone restriction by indigenous vessels. In case Coast Guard is not able to perform the task then by some other agency State or Central, would be identified to ensure that those vessels excluded from specific areas do not violate prohibitions.
11. The Government should take active steps as well as make finances available for upgradation or technological skills and equipment used by the traditional fishermen, for mechanised boats and the Indian deepsea fishing fleet so that each can effectively fish in the areas reserved for it by law or as practical. Duty concessions and concessional finance should be made available for both navigational as well as fishing equipment aimed at competence upgradation to the state-of-the-art level to all the three categories with priority to the traditional sector.
12. Traditional and small mechanised sector should be assisted by adequate regular supply of fuel and by providing HSD and kerosene and by providing subsidy taking into account the benefits given to deep sea fishing vessels.
13. All types of marine fisheries should come under one Ministry. The Government should also consider setting up a Fishery Authority of India to function in the manner in which such authorities set up in other countries function and to be responsible for formulation of policies as well as their implementation.
14. The Fishery Survey of India should also be technically upgraded by induction of the modern technology and equipment so that it can identify and map the location of all types of

- fish, study impact of different technologies and ecological changes. There should be proper co-ordination and co-operation between the National Remote Sensing Agencies and the Fishery Survey of India for this purpose.
15. The Government should give priority to the creation of the infrastructure needed for preventing wastage of fishery resources which is occurring through throwing away by-catch. This may be achieved by providing a chain of cold storage, ice factories, fish processing facilities, fish meal and feed manufacturing for value addition to the products of fishermen and their co-operatives.
 16. Infrastructure facilities such as fishing harbours for the existing and modern upgraded craft along east and west coasts as well as in island groups of LakshawEEP and Andaman & Nicobar Islands may be created on priority basis.
 17. Fishermen, fisherwomen and their cooperatives may be provided with financial assistance for upgradation and acquisition of larger vessels for marketing and other related activities.
 18. The Government should give priority to training fishermen and fisherwomen in handling new equipment, larger vessels and new fishing techniques besides fish handling and processing aspects.
 19. Government should take effective steps to tackle the menace of pollutants/effluents/sewage let out by industries which affects marine life adversely.
 20. Government should take a decision on the recommendations of the committee within a period of six months.
 21. The deep sea fishing policy should be revised periodically say every 3–5 years.

Abbreviations used in the report

UNCLOS	United Nations Convention on the Law of the Sea
MOA	Ministry of Agriculture
MFPI	Ministry of Food Processing Industries
MFRA	Marine Fishing Regulation Act
AIFI	Association of Indian Fishery Industry
ACOV	Action Committee on Joint Ventures
GPS	Global Positioning System
INMARSAT	International Marine Satellite Organisation
DFIA	Deepsea Fishing Industry Association
NFACAJV	National Fisheries Action Committee against Joint Ventures
MMVKSS	Mahim Machimar Vivid Karyakari Shahakari Society
DFCS	District Fishermen Cooperative Society
APMFBOA	Andhra Pradesh Mechanised Fishing Boat Operators Association
SDFC	Shipping Development Fund Committee
SCICI	Shipping Credit and Investment Company of India
CMFRI	Central Marine Fisheries Research Institute
NIO	National Institute of Oceanography
FAO	Food and Agriculture organization of United Nations
MPEDA	Marine Products Export Development Authority
ICAR	Indian Council for Agricultural Research
DOD	Department of Ocean Development
EEZ	Exclusive Economic Zone
MSY	Maximum Sustainable Yield
MEY	Maximum Economic Yield
FSI	Fishery Survey of India

A note of dissent by Dr. Padma on recommendations of the committee to review deepsea fishing policy

Date 30.01.1996

Dr. (Mrs) PADMA
M. B. B. S., D. G. O.
Member of Parliament
(Lok Sabha)
Member of Standing Committee
Food & Civil Suppliers
Member Of Welfare Of Scheduled
Castes & Scheduled Tribes
Member of Consultative Committee
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Dear Mr. Chairman,

I put on record my dissent and protest over the recommendations finalised by the committee and also on the manner in which the proceedings had been carried out.

In the meeting on 20.12.95, I had requested the committee for some information which were vital in the interest of the Nation, such as the report from the External Affairs Ministry on the applicability of the UN law of the Sea, the comments of the Commerce Ministry on the effect on the Economic Liberalisation Policy of the Country etc. These matters were however not brought up during the discussions while finalising the draft recommendations on 24.1.'96. Further, the draft recommendations of the previous meeting were circulated just before the meeting on 24.1.'96 and which did not give us an opportunity to have a detailed discussion the same.

From the proceedings of the sub-committees, it is clear that no serious attempt has been made to procure the evidence from the various deep sea fishing companies and in spite of their written request to the committee a hearing was denied. Further, the committee had also received representations from other affected parties such as the Foreign Collaborators and the crew on board the deep sea vessels. I strongly feel that these affected sections should have been given adequate hearing before the finalisation of the report. In light of these anomalies the report would be treated as lopsided in favour of the traditional and mechanised sectors.

While, I believe that there should be harmony among all sections of the Indian Fishing Community, basing the recommendations solely on the report of the fact finding sub committees constituted at the early part of the functioning of the committee, which again did not give sufficient emphasis to some of the effected sectors would be incomplete.

Further, in the subsequent meetings of the committee, the scientists and various data collecting agencies had presented their views, which have not been taken into reckoning in the recommendations. Neither the charges against the Deep Sea Fishing Industry could be proved genuine nor the claims of the traditional and mechanised sectors could stand the test of scrutiny of scientific analysis, yet the deep sea sector has been penalised.

While this committee had an opportunity to streamline the fishing sector, formulated a path for its growth and resolve the minor conflics in the sector to become a force to reckon with in the world, the committee through its present recommendations would not only wipe out the nascent deep sea fishing fleet of the country but would leave our rich resources open to poaching by foreign countries.

Some of the recommendations such as the ban imposition of the 100 mile barrier for deep sea fishing vessels have been taken on an arbitrary basis rather than being based on the techno-economic feasibility of such operations. Further, even resource specific types of fishing which neither effecting the traditional sectors nor the environment have not been spared.

I would now request the Chairman to put this note of dissent in the report of the Committee. Kindly confirm the receipt of the same.

With regards,
Yours sincerely,



(Dr. PADMA)

A note of dissent by Dr. V.S. Somvanshi on recommendations of the committee to review deepsea fishing policy

The draft recommendations circulated among the members of the Committee do not encourage deepsea fishing development in the Indian EEZ. I, therefore, furnish this note of dissent as follows:

1. Potential of fish stocks in the Indian EEZ is 3.9 million tonnes. Considering the current fish production, exploitable balance of potential is 1.3 million tonnes.
2. Resources need to be managed not by depth or distance limits convenient to humans but by their own distributional niche and concentration so as to control effort applied in totality on them and to ensure their sustainability.
3. There is no data to prove that fishing by vessels operating under the Deepsea fishing policy are affecting traditional fishermen. This may be viewed from the following facts:
 - i. By virtue of having bigger draft and gear size, they cannot operate in shallow waters.
 - ii. Area restrictions.
 - iii. Type of fish they catch specially oceanic tuna, squids and fin-fish species.
 - iv. Despite the operation of chartered/joint venture/leased vessels the fish production from the coastal sector (by traditional and small mechanised sectors) during the last 10 years has gone up from 1.5 million tonnes (1983–84) to 2.6 million tonnes (1993–94), an impressive growth rate of 73%.
4. The recommendation for banning fishing by all larger vessels by all methods is neither based on any factual data nor has any scientific reasoning. It is a product of mere perceptions that has no scientific validity.

In absence of data to prove contrary, following methods for deepsea fishing cannot be banned:

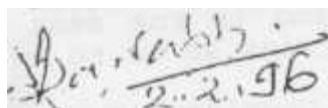
 - a. Long lining for tuna and allied fishing
 - b. Squid jigging
 - c. Purse seining for oceanic tunas
 - d. Mid-water trawling, and
 - e. Deepsea bottom trawling

Demersal trawling as an internationally practiced commercial fishing method may be considered for aimed exploitation of resident deepsea resources. Number and effort of all types of vessels in respect each resource exploited to be monitored and controlled. This could be done by introducing vessels in phases and by reviewing effort extended vis-à-vis resources.
5. Developmental wheel should not be rotated in reverse when we have miles to go in achieving the set objectives of deepsea fisheries development.
6. Self rejuvenating resources cannot be allowed to have natural death thereby incurring permanent loss to human kind.
7. Provisions under the Law of the Sea Convention by the United Nations entrust us with attendant responsibilities and bindings for development through acquiring capabilities to exploit and use resources and their conservation in the EEZ.
8. There is need for upgrading and consolidating the national effort to collect data on various aspects of changes in environmental, ecological and resources structure due to introduction of new fishing techniques and associated problems. Any such perceptions advanced against

- the deepsea fishing and techniques per se, should be then examined to encourage or to ban the techniques in accordance with the data collected and results thereof.
9. It would be prudent to continue our efforts to develop deepsea fishing eventually to built up our own fleet and establish optimum fish production figure by exploiting the potential of fish stocks in the EEZ.
 10. We should look for competing with the other fishing nations in the region by increasing our strength in fishing not only in exploiting the resources within the EEZ but also by fishing for stocks to be shared in the international waters beyond the Indian EEZ and in the seas around Antarctica by associating with other countries so as to establish our capability and claim.
 11. Considering the potential for deepsea fishing in totality, the development could be planned by introducing vessels under different technologies in stages and reviewed by a Standing Committee every year.
 12. Among the recommendations of the committee the distance limits of 50n miles and 100n miles along east coast and west coast respectively are too far from the present fishing grounds in which the traditional and mechanised boats operate, leaving vast areas with depths upto 3000m in certain sections remaining as 'no-man's area' allowing the native fish stocks to die its natural death causing permanent loss to the nation and human kind.
 13. The presently operating mechanised boats undertaking demersal trawling with their capacities of winch, engine power and fish hold can effectively conduct fishing upto 70–80m depth and have limitations in undertaking deepsea fishing. Hence, deepsea bottom trawling, mid-water trawling, tuna long lining, tuna purse seining, squid jiggling in areas beyond 100m, otherwise possible from larger vessels will not be practised unless such vessels are introduced in our fleet. Moreover, half the EEZ cannot be effectively and fully exploited by the existing traditional and mechanised sectors as well as by the diversified shrimp trawlers. Introduction of larger vessels with long endurance for economic viability is therefore an inevitable proposition and should not be given up by the nation. Policies can always be revamped to derive greater benenefits from the developmental efforts.
 14. The new policy to be devised should be implemented in phases and fishermen cooperatives/ individuals may be provided with certain slots in the first phase. An apex body of cooperatives in each maritime state may be considered for this purpose.
 15. Traditional fishermen and mechanised boat owners have been receiving assistance from Government during past 3 decades to increase mobility of their craft and to enhance their fishing efficiency through use of modern gear materials and mechanisation.

What is required now for improving their income is to provide inputs for proper fish handling, preservation and marketing of fish to fetch high value. Simultaneously, suitable mechanised boats may be encouraged to go in for deepsea fishing by adopting requisite navigational, communication and fish finding equipment.

The above points need to be considered seriously for framing new deepsea fishing policy else we may lag behind many developing countries in deepsea fishing development for a long time to come.



(Dr. V.S. Somvanshi)

Dissent note to the final recommendations of the review committee on the deep sea fishing policy of government of India

We, the undersigned members of the Review Committee, in general, endorse the recommendations given by the Committee. However, we express our dissent on some of the specific recommendations.

This dissent note that we submit, comprises of our recommendations and their rationale, on those specific items with which we differ. This may be duly incorporated into the Report of the Review Committee to be submitted before the Government.

On Recommendation No. 1

The recommendation in its present form gives scope for the government, not to cancel the licences issued, in the name of 'legal processes'. This loophole has to be closed. If government sees legal hurdles in cancelling the licences already issued, they have to overcome those through proper interventions. We propose the following amended recommendation.

Our Recommendation

“All permits/licences issued for fishing by joint venture/chartered/lease/test vessels should be immediately cancelled. Legal impediments if any, must be removed through change of rules, orders and/or even through legal or constitutional amendments.”

Rationale

- Charter scheme was already scrapped vide the GOI order No.30035/7/93-Fy(T-VII) from 31.12.1993 onwards.
- The screening Committee for considering applications for charter of foreign fishing vessels, on 19.3.1987, banned taking even applications for bull trawling, under the revised policy of 1986. Please refer, NO.30018/1/87-Fy(T-VII)
- All the agreements *ab-initio* are invalid, because all the foreign vessels involved are more than 15 years old. This is in violation of the High Power Committee's recommendation that the Vessels should not be older than 7 years.
- All the joint venture vessels are on deferred payment basis. The equity-debt ratio is so impropportionate, that, de facto, they are not joint ventures. In reality, they are ninety nine percent foreign vessels. This, again, is an open violation of the Joint Venture rules.
- The leasing is on a long term basis, and it does not benefit the country in any way. It openly legalises poaching by the foreign vessels.

- The clause, ‘until the serviceability of the vessel ceases’ is illegal, as ‘serviceability’ is not defined anywhere.
- All the vessels involved have violated zonal restrictions placed on them by fishing in the territorial waters.
- The spirit of the Indian Constitution, particularly article 21 and directive principles, are important in this context. It was in this light, Supreme Court upheld the monsoon trawl ban to protect the traditional fisherpeople, and explained the meaning of development. This judgement is relevant the present context. In the Civil Appeal Nos. 4223/26 of 1993 Justice B.P. Jeevan Reddy and Justice S.C. Aggarwal said “We are also on the opinion that the Government of Kerala is perfectly justified in adopting the attitude that the public interest cannot be determined only by looking at the quantum of fish caught in a year. The Government is perfectly justified in saying that it is under an obligation to protect the economic interest of the traditional fishermen and ensure that they are not deprived on their slender means of livelihood. Whether one calls it distributive justice or development with a human face, the ultimate truth is that the object of all development is the human beings. There can be no development for the sake of development. Priorities ought no be inverted nor the true perspective lost in the quest for more production”.

On Recommendation No. 5

Instead of “on the East coast starting from Kanyakumari, Indian vessels below 20 mtrs. would have exclusive access upto 100 mtrs. depth or 50 nautical miles from the shore whichever farther”,

we recommend 150 mtrs. depth or 100 nautical miles.

Rationale

- The East coast is very steep compared to the West coast.
- The sandheads off West Bengal, very rich for shrimps and cuttle fish, has been a plan for constant conflicts between the small mechanised sector and the industrial fleets. The Oceanic region has to be protected and conserved.

On Recommendation No. 7

The recommendation in the report gives scope for the introduction of large industrial vessels (fleets) to exploit those varieties of fish which are currently harvested by the traditional and small mechanised fishermen of the country. Especially, Squid and Cuttle fish are being exploited in sizeable, quantities by us. In any case, Purseining and Mid water trawling should not be promoted, because they are over-efficient and ecologically destructive. Oceanic Tuna and related species may be allowed for exploitation by resource specific vessels, mainly longliners. Vessel requirements in relation to these specific resources have to be ascertained periodically. Only on that basis periodic (may be annual) licences be given to Indian vessels. Therefore, we propose the following as our Recommendation No.7.

“In the area opened to the oceanic vessels above 20 mtrs. length, for Tuna and Tuna like fishes, only Tuna Longliner may be allowed. However, priority should be given to the existing Indian Deep Sea Fishing vessels, lying under utilised at Visakhapatnam, with necessary diversifications. The diversification should be taking into account the recommendations given by the two expert committees, viz. {1} Report of the Technical Committee on the Deep Sea Fishing Industry in India (Committee headed by P. Murari and constituted by GOI in 1993) and {2} Report of FAO Consultant, Capt. Gudicelli, on Deep Sea Fishing in India, 1992”.

Rationale

- All the oceans in the world, except the Indian ocean are depleted because of the indiscriminate fishing by the industrial fleets. (Please refer “Net Loss: Fish, Jobs, and the Marine Environment”, by Peter Weber 1995). India is the only exception to this, because of the absence of such huge vessels. Our small, sensitive and tropical waters cannot in anyway accomodate these huge vessels. If these huge vessels for temperate waters which lead to such depletion in the oceans with much bigger fisheries, what would not happen to our ocean?
- 80 lakhs fisherpeople depend on Indian fishery. The destruction in one area will have repercussion on other areas in the tropical waters. All the oceanic species are highly migratory. India cannot afford to take such risk when 80 lakhs fisher people are depending on it.
- There is not much commercially viable species in the deep sea. According to the FAO study, only 1,64,000 tonnes of fish are annually available. Our small mechanised boats and the Indian trawlers lying unutilised in Visakhapatnam are capable of catching the same, provided their gears are diversified.
- Huge investment and huge vessels will not bring profit; only small vessels below 25 mtrs., with diversified fishing gears, can bring profit from DSF. Since our waters are tropical, smallness and diversification of gears are vital from the dimension of conservation. The operating costs for “latest technology equipments” will be the highest. The catches comprising low value fish will not make such operation economically viable. Government of India’s proposal for joint venture is based on the hope of introducing greater value addition technology at the post harvest stage. When the unit cost of production of the low value fish is very high, the special processing cost will make the product all the more costly. The best alternative would be to use a low cost harvesting technology to make the products more competitive in the market.
- The UN Treaty 1995 article 5 (h) says “take measures to prevent or eliminate over fishing and access fishing capacity and to ensure that levels of fishing efforts do not exceed those commensurate with sustainable use of fishery resources”. Article 5 (i) says “take into account the interest of artisanal and subsistence fisheries”.

Our Recommendation on No. 8

“The details of fleet size and other aspects of the fishing operations for different fishing grounds may be fixed taking into account the Optimum Social Yield (OSY), the need for

conservation of resources, and in keeping with the Code of Conduct for Responsible Fisheries.”

Rationale

- It is now recognised world over that MSY is too optimistic a level to target. In a tropical fishery this is all the more an elusive concept to use.
- The catch per vessel, both in the traditional and the small mechanised sectors, is drastically going down all over India. This is an alarming situation.
- The top priority should be given to ensure that the two lakhs traditional crafts and thirty five thousand small mechanised crafts are utilised in a sustainable and profitable manner. Investing on industrial fleets or using industrial fleets will be dead investment and result in economic overfishing.

Our Recommendation on No. 9

“In order to conserve fishery resources in our EEZ, Parliament should enact legislation, in consultation with all the stakeholders in the fishery, particularly, the traditional fishing communities. The legislation should be modelled after the UN Treaty on Straddling and Highly Migratory fish Stocks, (1995) and in harmony with the the Code of Conduct for Responsible Fisheries. 1995).”

Rationale

The UN Treaty (meant for area outside EEZ) is a very good document to be extended inwards into our whole EEZ. This is partly because our maritime states are almost like separate countries (also fishery is a state subject) and even within the EEZ we have an EEZ for the small scale operators and the rest for the others. We also have straddling and migratory stocks in the EEZ. Consequently the problems are similar to those addressed by the UN Treaty of 1995.

Our Recommendation on No. 14 (to be added to the present one)

“All state governments should, as a priority, install appropriate communication and safety at sea measures both onshore and onboard vessels. Measures for rescue at sea operations should be upgraded and fishworkers be provided with training in signalling.”

Rationale

- The security of the fisher people should be guaranteed.
- Thomas Kocherry
National Fisheries Action Committee Against Joint Ventures.

Association of Indian Fishery Industries

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AIFI/96/DN/34

Dt.30.01.96

Dr. V. S. Somvanshi
Director General
Fishery Survey of India
Botawala Chambers
Sir P. M. Road
Bombay - 400 001

Dear Sir,

Sub: Dissent note on the Recommendations of the Committee.

We are enclosing herewith the Dissent note for the recommendations of the Committee to review Deepsea Fishing policy headed by Sri. P. Murari. IAS (Retd.).

We request you to include the AIFI Dissent note in final recommendations of the Committee.

Thanking You.

Yours faithfully,
for ASSOCIATION OF INDIAN FISHERY INDUSTRIES

(C.BABU RAO)
President.

Enc1: As above.

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Note of dissent of Dr. C. Baburao, representing the association of Indian fisheries industries, on the recommendations of the committee to review deep sea fishing policy

While the Committee was set up to review deepsea fishing policy, the committee transgressed its limit and made recommendations on traditional and small scale sector, which is not within its purview.

The recommendations of the Committee so far as the operations of Indian vessels of over 20-M length are concerned, are biased to the extent that the rights now being traditionally enjoyed by these vessels under national laws and international conventions are ignored. The recommendations virtually disregarded this reality and the ground conditions that the Indian Deep sea fishing vessels, including those over 20-M length have full sanction under Maritime Zones Act of India to conduct fishing in the Indian Exclusive Economic Zone, barring the territorial waters (12-Nautical Miles from the coast line) which forms the National jurisdiction (in definition of the EEZ), fishing in which is regulated by the Maritime Fishing Regulation Acts introduced by the coastal state governments. These State Acts prohibit fishing by larger vessels in the territorial waters. The Maritime Zones Act of India has been exclusively designed to regulate fishing by foreign fishing vessels and it has no relation with the regulations of fishing by Indian vessels in the EEZ as defined in the Act. This definition is in accordance with the International conventions. The difference between the National jurisdiction and the jurisdiction over EEZ, as is well known, is that whereas in the national jurisdiction (territorial waters) there is no obligation whatsoever to permit the foreign fishing vessels to operate while in the EEZ, the concerned nation has the obligation to grant permissions for fishing by foreign fishing vessels through quotas or otherwise as provided in the Maritime Zones Act and in accordance with the international conventions to which India is a party. This obligation, however, may be fully or partly exercised or not exercised at all according to the state of development and traditional rights of other nations.

The main recommendations, among others, that should have been made:

1. There has to be a clear recommendation designed to protect the inherent fishing rights and economic interests thereto of Deepsea fishing vessels of over 20-M length to fish in Indian EEZ, excluding territorial waters.

Traditional and mechanised sectors would always be free to fish within or outside the territorial waters, by these sectors and in this context the least that can be done is to increase the recommended limit of 20-M length for operation is to raise the same to 30 M. These sectors should be assisted by the State and the Central Governments to upgrade their skills through a long term coaching, training and education to enable them to extend their operations farther and farther within the limits of EEZ, with diversified fishing activities with provision of the needed infrastructure for them and others as well, which should include not only fishing harbours and landing centres, but also processing plants capable of manu-

- facturing not only traditional products but also value - added items and a chain of domestic market outlets linked to fishing harbours and other landing centers.
2. There should have been clear recommendation for providing upgraded coaching, training and education facilities for various categories of personnel, by setting up Coastal Fishery Development Agencies for a range of about 100 km length each at feasible points all along the coastline for the purpose. The committee is perfunctory and that too paid a passing attention to the needs of upgrading the capabilities of traditional fishermen on a long term basis. The infrastructure needs for bringing the upgradation and addition to the infrastructure have been referred to without emphasis and this aspect has to find a place in the recommendations in clear terms.
 3. The need for development of Deepsea Fishing industry and the mechanism required for the purpose are not covered adequately in the recommendations, overlooking the fact that in the context of globalisation of various sectors, Deepsea Fishing should also be a part of them. According to the present recommendations of the committee, this exclusion will remain a conspicuous and harmful omission. Exclusion of this aspect in its recommendation, particularly in the context of international conventions on the subject, including the latest one on High Sea Straddling Stocks, would have serious international and national repercussions, to the disadvantage of the country. A recommendation to cover this aspect is of paramount importance.
 4. The committee failed to recommend measures to fill up the existing void in stepping up fishing efforts in the EEZ outside territorial waters.
 5. The recommendations have not spelt out the areas in which bilateral and multilateral assistance would have to be availed of. At the present stage of knowledge and experience of the nation, without this support, albeit for a limited duration; it is of critical importance to cover this aspect in the recommendations.
 6. No measures are recommended to equip the existing Indian ship building yards or for building up of new yards for the construction of fishing vessels of larger sizes of various types. This is a clear omission and would have to be covered by the recommendations.
 7. The recommendations are silent on bringing into being stable and implementable and workable arrangements for providing financial assistance to fishing companies on an enduring basis for indigenous construction or import of new or used vessels keeping in view the miserable failure of the presently dormant existing system. The recommendation to cover this aspect is a prime necessity without which the industry will not be able to develop.
 8. The recommendations have not covered the financial package recommended by the first Murari committee before its expansion. A recommendation on this is essential for the rehabilitation of existing Indian deep sea fishing vessels (about 180 nos.)
 9. The first Murari committee recommended provision of financial assistance for equipping the existing shrimp trawlers with additional systems of fishing such as tuna long lining. There is no reiterating recommendation on this crucial requirement.

10. Having outlined the recommendations that should have been made part of the report, among others. I want to point out that the committee has not recognised the implications of operations of foreign fishing vessels with or without permission on the economics of operations of Indian deepsea fishing vessels. The committee's anxiety is exclusively directed at traditional and small mechanised sector.
11. Further, the committee expressed only a perfunctory desire to improve the fishing capabilities of traditional and small mechanised sectors to enable them to achieve appropriate technological upgradation.
12. The committee failed to record in its recommendation the needed concern over the necessity of sustainable utilisation of marine fisheries resources in India's national jurisdiction (territorial waters).

National jurisdiction (territorial waters) extends only upto 12 nm. Although aware of this, the committee ignored the necessity for optimal sustainable utilisation of marine fisheries resources in the EEZ which is not the same and co-terminus with national jurisdiction, as per the provisions in section 3 and section 7 of the Territorial Waters, Continental Shelf, EEZ, and other Maritime Zones Act 1976 (80 of 1976).

As already stated, national jurisdiction extends over territorial waters only and so far as the regulation of operations of Indian vessels in the Exclusive Economic Zone is concerned Indian vessels are free to conduct Fishing without any legal restraint. Such a provision needs amendment as it would come into conflict with provisions in International Conventions to which India is a signatory, and also the provisions in Maritime Zones of India Act.

13. The committee overlooked. in suggesting introduction of legislations with regard to area and depth restriction for harmonious development of the Exclusive Economic Zone that these are relevant only for application to boats operating in territorial waters but not to Indian owned vessels operating beyond territorial waters, unless there is proof to frame rules for such a regulation under Maritime Zones of India Act.
14. Indian-owned vessels to operate or operating under joint ventures in Indian EEZ could not be prevented from operating in the EEZ, excluding territorial waters, under rules notified under Maritime Zones Act of India Act, as long as they hold approvals.
15. It is the unfettered privilege of Indian owned vessels of 20m length and above to undertake fishing in the Indian eez, excluding territorial waters. Fishing in territorial waters is governed by the provisions of the Marine Fishing regulations Acts introduced by the various coastal state governments, as per the guidelines circulated by the Indian Government.
16. The recommendation that the Indian Deepsea fishing fleet of over 20m length may be given time to fish in Indian EEZ for 3 years, is insidious, arbitrary and contrary to the existing legislations and contravenes natural justice and the provisions in the Indian constitution which provides for equal opportunities under law and does not allow impairing of flow of commerce. This misplaced sense of charity when the vessels have a right to fish in the area, is an insult to the Indian deepsea fishing industry, which is an important part of national endeavour towards an industrial and economic revolution in the country.

17. The recommendations that the vessels over 20m length shall not fish upto 150 fathoms depth or upto a distance of 50 nm is unlawful, unrealistic and in any case not amenable to implementation, as conflicts will be unleashed. The Indian vessels of over 20m length entitled under the existing regulations to fish beyond territorial waters as per the provisions under the Marine Fishing Regulation Acts of Coastal State Governments and as per the provisions of the Maritime Zones of India Act which is strictly and totally related to the regulation of operations of foreign fishing vessels and not Indian vessels including those operating under joint ventures.

The question of determining the depth zone does not arise. Territorial waters are the only zone for introducing such regulations so far as Indian vessels of 20m length and over are concerned. The traditional and mechanized fishing vessels are always free to undertake fishing not only in the territorial waters but in the remaining parts of the EEZ.

Further, the 20m length restriction is arbitrary. The best that could be done in this arbitrariness, in order to protect the interests of vessels exceeding 20m length is to enhance the same to 30m length to enable them to fish in the zone from 12 nm to 50 nm notwithstanding the fact that such a provision in the recommendations is not called for as per the provisions in the Maritime Zone of India Act.

Indian vessels of over 20m length are fully entitled to fish in the EEZ around Andaman & Nicobar Islands and Lakshdweep Islands, without restriction barring the territorial waters around the Islands.

The Government of India may kindly consider all the above aspects, before announcing the new deep sea fishing policy.

For Association of Indian Fishery Industries,

President

