

ESTIMATES COMMITTEE

(1967-68)

FORTY-THIRD REPORT

FOURTH LOK SABHA

**MINISTRY OF FOOD, AGRICULTURE,
COMMUNITY DEVELOPMENT AND COOPERATION**

DEPARTMENT OF AGRICULTURE

Fisheries Development



सत्यमेव जयते

LOK SABHA SECRETARIAT
NEW DELHI

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C O R R I G E N D A

TO

Forty-third Report (Fourth Lok Sabha)
of Estimates Committee on the Ministry
of Food, Agriculture, Community Develop-
ment and Cooperation (Department of
Agriculture) - Fisheries Development.

Page 2, para 1.7, line 8, for 'for'
read 'far'

Page 4, para 1.15, line 1, for 'an'
read 'on'

Page 15, line 33, insert 'of'
after 'shortfall'

Page 15, line 33, delete 'of'
after 'lakhs'

Page 23, para 2.29, line 4 and 5,
in column 3, for 'Pre-investment
U.S. \$ 694.400' read 'Pre-investment
Survey of'

Page 23, para 2.29, line 4 and 5,
in column 4, for 'Survey of'
read '\$ 694.400'

Page 23, para 2.29, line 6, for
'Central Institute U.S. \$ 426.814'
read 'Central Institute of Fisheries'

(p.t.o.)

Page 23, para 2.29, line 6, column 4,
for 'of Fisheries' read 'U.S. \$ 426.814'
Page 26, para 3.18, line 2, for 'ofr'
read 'for'
Page 39, para 4.22, line 4, for 'possibly'
read 'possible'
Page 41, para 4.30, line 5, for 'each'
read 'each'
Page 43, line 7, for 'recomended'
read 'recommended'
Page 43, line 9, for 'shuld'
read 'should'
Page 43, para 4.37, line 2, for
'recomendation' read 'recommendation'
Page 43, para 4.40, line 1, for 'when'
read 'why'
Page 44, line 1, for 'anaysis'
read 'analysis'
Page 44, para 4.42, line 7, insert
'and' after 'per'
Page 45, line 18, for 'acion'
read 'action'
Page 45, para 4.47, line 6, for
'applicances' read 'appliances'

Page 45, para 4.47, line 7, for
'rgulations' read 'regulations'
Page 45, para 4.48, last line,
for 'on' read 'or'
Page 48, para 5.8, line 2, for
'of' read 'on'
Page 51, para 5.18, line 3, for
'of' read 'off'
Page 51, para 5.19, line 4, for
'Honk' read 'Hong'
Page 53, para 5.26, line 12, for
'conerence' read 'conference'
Page 56, para 5.32, line 4, delete
'preferential and'
Page 63, para 6.17, line 5, for
'frogen' read 'frozen'
Page 81, para 6.67, line 4, insert
'and' after 'in'
Page 88, line 30, for 'edditiional'
'read 'additional'
Page 89, line 2, for 'arived'
read 'arrived'
Page 89, para 7.17, line 5, for
'begies' read 'bogies'
(p.t.o.)

Page 89, para 7.17, line 7, for
'alow' read 'allow'
Page 90, para 7.19, line 4, for
'priority' read 'priority'
Page 97, line 3, for 'iteself'
read 'itself'
Page 106, line 3, for 'Punjanb'
read 'Punjab'
Page 117, S.No.28, line 4, for 'and'
read 'on'
Page 118, line 3, for 'in' read 'to'
Page 118, S.No.32, line 6, delete
'preferential and'
Page 121, S.No.41, line 14, for
'seting' read 'setting'
Page 122, line 2, insert 'a.'
after 'about'
Page 123, S.No.49, line 19, insert
'that' after 'consider'
Page 130, S.No.1, line 2, for 'ensure'
read 'conserve'

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ESTIMATES COMMITTEE

(1967-68)

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INTRODUCTION

1, the Chairman, Estimates Committee, having been authorised by the Committee to submit the Report on their behalf, present this Forty-Third Report on the Ministry of Food, Agriculture, Community Development and Cooperation (Department of Agriculture)—Fisheries Development.

2. The Committee took evidence of the representatives of the Ministry of Food, Agriculture, Community Development and Cooperation (Department of Agriculture) on the 25th November, 1967. The Committee wish to express their thanks to the Secretary, Joint Secretary, Joint Commissioner (Fishery) and other officers of the Ministry of Food, Agriculture, Community Development and Cooperation (Department of Agriculture), for placing before them the material and information they wanted in connection with the examination of the estimates.

3. They also wish to express their thanks to Shri Kurwath Damodaran, Vice-Chairman of the Marine Products Export Promotion Council, Ernakulam; Shri R. Madhavan Nayar, Ex-President, Seafood Canners' and Freezers' Association of India, Cochin, and Dr. N. K. Panikkar, Director, National Institute of Oceanography, Council of Scientific and Industrial Research, New Delhi for giving evidence and making valuable suggestions to the Committee.

4. The Committee also wish to thank Shri T. Muthu-Kannappan, Member, Central Board of Fisheries; Dr. S. B. Setna, Managing Director, New India Fisheries Ltd., Bombay and Kerala Fisheries Corporation Ltd., Ernakulam for furnishing Memoranda to the Committee.

5. The Report was considered and adopted by the Committee on the 25th March, 1968.

6. A statement showing the analysis of recommendations contained in the Report is also appended to the Report (Appendix V).

NEW DELHI;
April 2, 1968.

Chaitra 13, 1890 (Saka).

P. VENKATASUBBIAH,
Chairman,
Estimates Committee.

CHAPTER I

ADMINISTRATION

A. Fisheries Division in the Ministry

1.1. The Fisheries Division in the Department of Agriculture is under the overall charge of a Joint Secretary, assisted by the Fisheries Development Adviser and the other technical officers. An Under Secretary has also been provided in the Division for administrative work relating to the various Institutes under the Fisheries Division. The set up at the Centre is as under:—

“Under the Fisheries Development Adviser, there is a Deputy Fisheries Development Officer, one Assistant Fisheries Development Adviser along with three Deputy Directors—Deputy Director (Fisheries Trade), Deputy Director (Refrigeration) and Deputy Director (Statistics). For implementing the harbour schemes, an Assistant Director (Harbours) has been provided. These officers provide the necessary technical assistance to the Fisheries Development Adviser with regard to technical work in the various fields.”

1.2. The Working Group on Fourth Five Year Plan for Fisheries observed that the present administrative set-up for Fisheries needed considerable expansion and strengthening. The Working Group were of the opinion that the Fisheries Division should also be strengthened by the addition of the following Units:—

- (i) Statistical Organisation.
- (ii) Special Organisation for Harbour Development.
- (iii) Directorate of Extension with panel of Specialists.
- (iv) Directorate of Fish Marketing.
- (v) Special Wing for development of commercial Corporations.

1.3. It has been stated by the Ministry that when the whole Department of Agriculture was reorganised with a view to achieve the maximum utilisation of personnel and agencies of the Department in the task of implementing the agricultural production programmes with a sense of urgency, the Ministry of Food, Agriculture, Community Development and Cooperation (Department of Agriculture) took the opportunity of reorganising the Fisheries Division. The Fisheries Division is now under the

overall charge of a Joint Secretary assisted by Joint Commissioner (Fisheries) and is concerned at the departmental level with policies and programmes on Fisheries development, fish engineering, processing and preservation, fisheries education and fish trade. There are two Branches dealing with technical work and a Statistical Cell in this Wing which is headed by the Joint Commissioner (Fisheries). A chart indicating the administrative set up of the Fisheries Wing in the Department of Agriculture is given in the Appendix I.

1.4. During evidence, the representative of the Ministry has stated that after the Working Group made its recommendations, the organisation of the Division was reviewed along with the review of the various Divisions in the Ministry of Food, Agriculture, Community Development and Co-operation and as a result of this review it was decided that the pattern of Division should be changed and certain radical changes were also suggested and adopted in respect of the method of working. Illustrating his point the representative of the Ministry has stated that previously the position was that the administrative and technical wings were practically compartmentalised in the sense that the technical officers were serving as advisory officers and the formulation and execution of schemes was left entirely to the administrative wing. Now the cardinal feature of this reorganisation is that the two wings are integrated and technical officers are given functions both in respect of formulation of schemes and of implementation. In order to emphasise the change which has been made in the organisational structure, the Ministry have even changed the designation of the technical officers.

1.5. A separate Wing has been set up for Education which will look after the Central Institute of Fisheries Education, Bombay and Central Institute of Fisheries Operations, Cochin. Other training institutes which the Ministry may have to set up in the States will be looked after by the Fisheries Education Division.

1.6. The Committee have been informed during evidence that in the organisational set-up the Ministry have axed a number of posts of Clerks, Assistants, even Section Officers giving each technical officer a Stenographer instead of giving a Clerk, Assistant or a Section Officer.

1.7. It has further been stated in a written note that the emphasis in the re-organisation of the Fisheries Division was on the following:

- (i) Assignment to technical officers of the responsibilities for planning, implementation and supervision of programmes in addition to their advisory functions.
- (ii) Redistribution of subjects and responsibility so as to make the assignment of every officer and unit compact and specific as far as possible.

(iii) Introduction of an officer oriented system for the disposal of technical matters whereby such cases will be directly handled by the officers concerned with full Stenographer system and with such help from technical assistants as may be necessary.

(iv) Introduction of procedure and machinery for closer and continuous contact between the Centre and the States in implementation of agricultural plan schemes.

1.8. In the course of evidence the Committee enquired whether it was ensured that Senior Administrative Officers dealing with Fisheries in the Ministry were not frequently transferred so that direction and formulation of policies were not hampered or changed frequently. It has been stated by the representative of the Ministry that it had so happened that the Joint Secretary in the Ministry in-charge of the Fisheries Wing was transferred frequently in the past.

Fisheries Administration in States

1.9. The Committee desired to have the observations of the Ministry on the Fisheries Administration in the various States especially Madras, Kerala, Mysore and Maharashtra. In a written note submitted to the Committee it has been stated that an appraisal of the Third Plan has shown that insufficient organisation in the Directorate of Fisheries has been responsible, to a great extent, for the shortfall in the expenditure and it was recommended that each State Directorate should have the following:

- (1) Subject matters specialists particularly in survey and designing of fish farms, pisciculture technique, craft and gear and fisheries economics.
- (2) An extension wing.
- (3) The construction wing with necessary engineering staff to take up the construction of fish farms.

1.10. It has also been stated that the Fisheries Administration in the States of Madras, Kerala, Mysore and Maharashtra with independent departments for fisheries is considered adequate.

1.11. The Committee feel that having regard to the scale of development envisaged, the importance of increasing indigenous consumption of fish, the stakes involved in the development programme from the angle of foreign exchange earnings, the potentialities of increasing the earning capacity of millions of fishermen throughout the country and thereby making a

considerable impact on national income and rural prosperity, the increased employment potential and the need for the reorganisation of financial, technical, industrial and marketing resources, it is essential to provide a coordinated direction of the entire programme from the Centre. It is also essential that quick decisions are followed by implementation and utilisation of available resources and that the entire organisational and administrative set-up is geared to this pressing need. Viewed from this angle, the Committee welcome the reorganisation of the Fisheries Division of the Ministry. They hope it would now be possible for the Ministry to formulate and execute schemes with greater expedition than heretofore. They also hope that the Fisheries Division of the Ministry would serve as a model for the States to emulate. The Committee would however like to emphasise that fisheries science being highly technical, some degree of expertise is called for. It is necessary that the Senior Administrative Officers, who are required to direct and formulate policies, should remain in the Fisheries Wing for a certain number of years and are not frequently transferred.

1.12. The Committee feel that developmental work has to move in step with research, which aspect is now being looked after by the Indian Council of Agricultural Research. They cannot over-emphasise the importance of maintaining a close liaison with the Council so that research and development work may progress in unison. The Committee hope that the Ministry will keep a continuous watch over the functioning of the Fisheries Division and assess its working periodically in terms of results achieved.

1.13. The Committee feel unhappy to note that during the Third Plan period insufficient organisation in the Directorate of Fisheries has been responsible to a great extent for the shortfall in the expenditure. This has been admitted by the Ministry themselves. The Committee hope that the Ministry will persuade the State Governments concerned to implement the recommendations for the reorganization of the State Directorates at an early date.

B. Central Board of Fisheries

1.14. In pursuance of the recommendations of the All India Fisheries Conference held at Madras in September, 1956, the Government of India set up the Central Board of Fisheries on the 1st April, 1958 for the purpose of integration and coordination of fisheries research and development activities in the country. The Government of India (Ministry of Food and Agriculture—Department of Agriculture) Resolution No. F.12.24/57-FY(D) dated the 1st April, 1958 setting up the Board is given in Appendix II.

1.15. The Board periodically meets to discuss an national level problems connected with various aspects of fisheries research and development.

It recommends suitable measures for adoption to effect better coordination of fishery activities between the Centre, States and various other organisations and suggests ways and means of implementing the various programmes of development and research on fisheries, having over-all effect among others on the programme of development plans for Centre and States in respect of National Plan, etc. The Board has a Standing Committee to conduct the preliminary work, to watch the progress made on the recommendations of the Board and to report the results to the Board.

1.16. It has been stated by an expert on Fisheries during the course of evidence that the Board has served a very useful purpose in highlighting the difficulties of the fishing industry and should continue as it can have a good part to play in policy making. He has further stated that "an interesting point is that the real problems facing the industry have been diagnosed and have been discussed during the first and second meetings of the Board and there is comparatively little new material which has come as a result of the subsequent meetings. This is an obvious indication that the difficulties diagnosed as early as 1958—60 have still not been sufficiently solved. The usual tussle between the points of view of the Ministries of Food & Agriculture and the Finance have continued and even obvious ameliorative recommendations like tax relief on diesel oil for fishing have not been implemented."

1.17. Asked whether the Board has remained an ineffective body as any of the recommendations made by it from time to time have not been implemented and the Board has no power to get its recommendations implemented, the representative of the Ministry has stated during evidence that the Board as at present is an advisory body. But being well represented it should be in a position to tackle the problems. He has added that any other Body similarly constituted can be effective or ineffective in accordance with the fact how it works. The representative of the Ministry has further stated that:

"Fisheries is mainly in the State Sector. Any Body to be effective must have the executive authority which vests in the State or in the Centre to carry through its things without any hitch; otherwise it has to go through the usual formalities of State and Central executive authority. We have to work within the four corners of the Constitution and with the constitutional checks and balances and find out ways and means of improving the process and methods of quick decision. Our present thinking is that we should make the Central Board of Fisheries effective by bringing the problem before the Board where there is quite a lot of representative membership. As you know, some important

problems have been brought in and also various recommendations have been accepted by the Government—even on matters of taxation. Various recommendations of the Board have been accepted and an attempt is being made to make this body effective. Our submission at present would be that the Administrative Reforms Commission is also going into these matters.

We would also like to have their views on the subject before we take any steps to either modify the Central Board of Fisheries or give it more statutory powers. That is our present view on the subject."

1.18. The Committee wanted to know whether it would not be desirable to constitute a smaller body in place of the present Central Board of Fisheries, which appeared to be the Committee to be rather unwieldy so that the problems could be discussed more thoroughly and effective follow-up action taken. The representative of the Ministry has stated in evidence:

"This is a very valuable suggestion. In fact in the Development Councils, we have done a similar thing. We have got committees—what you may call the technical sub-committees of the Council—which go into all the details of the programmes and suggestions, and then all that goes up to the main Council. We can similarly identify the sectors here and have technical committees where we can get all the interests involved in a small compact body. We do not foresee any difficulty on the States side. They are co-operating in all these bodies. I think we would accede to the suggestion and follow it up."

1.19. The Committee note that the Ministry are conscious of the need of making the Central Board of Fisheries an effective body for the purpose of coordination of fisheries research and development activities in the country. The Committee feel that the Board, as constituted, is an unwieldy body for which it is difficult to make a thorough and technical examination of a problem. The Committee feel that the diverse and complex problems of fisheries cannot be tackled adequately by the Board which meets only for one or two days in a year. They also feel that the follow-up action taken by the Ministry on the resolutions adopted by the Board is not adequate. The Committee, would, therefore, suggest that steps may be taken to reconstitute the Central Board of Fisheries with separate technical committees under its aegis consisting of representatives of the industry, exporters as well as Central and State Government Departments dealing with fisheries. The Committee also suggest that suitable measures may be

devised for the effective implementation of the recommendations made by the Board.

C. Inter-Ministry Coordination

1.20. The Committee desired to know what coordination is being maintained by the Department of Agriculture at the Central level regarding Fisheries with the Ministries of Commerce, Industry etc. and whether the present allocation of functions to different ministries does not hamper integrated approach to the problem and cause delay and difficulties. The Ministry has stated in a written note to the Committee that—

“Coordination, as between different Departments, in regard to policy issued is effected through Committees at various levels. The Committee of Economic Secretaries is one such Committee. *Ad hoc* inter-Ministerial committees at the Joint Secretaries level are also frequently convened for the purpose of sorting out issues in respect of which several Departments are concerned. Inter-departmental meetings mainly involve the Ministry of Industry, the Department of Economic Affairs, Department of Expenditure and the Ministry of Commerce.

Practically all aspects of departmental activity relating to fisheries are within the purview of the Ministry of Food and Agriculture. Certain functions such as those relating to export of fish and fish products fall within the purview of the Ministry of Commerce so far as regulation and export promotion are concerned. There is necessarily some overlap between functions relating to production, processing and distribution and those relating to the various aspects of export. Problems relating to the group of functions are however sufficiently well-defined to permit of independent handling. Similarly there are several industries such as the boat-building industry, the net-making industry and the marine diesel engine industry which are ancillary to the fishing industry. The regulation of these industries is governed by principles evolved by the Ministry of Industry within the frame-work of national industrial policies. The manufacture of equipment etc. for the fishing industry is, in most cases only a part of the total coverage of these industries. The Department of Agriculture is consulted by the Department of Industry in regard to matters specifically pertaining to the requirements of the fishing industry. The role of the Finance Ministry in relation to fisheries schemes is on the pattern gene-

rally applicable in the Central Government in respect of budgetary and expenditure control over the various Departments. The fact that certain functions which have a direct bearing on the development of fisheries is exercised by Departments other than that of Food and Agriculture necessarily tends to delay the finalisation of programmes as well as of execution. Under the existing pattern of allocation of functions this cannot be avoided altogether. Different approaches and points of view naturally exist and these have to be reconciled and programmes finalised on a coordinated basis. The time involved in such coordination is sought to be minimised to the extent feasible by inter-departmental meetings."

1.21. The Committee note that certain functions which have a direct bearing on the development of fisheries are exercised by departments other than that of the Ministry of Food and Agriculture, and this tends to delay the finalisation of programmes as well as of execution. They feel that there is a necessity to evolve methods and procedures as well as unanimity of approach as far as possible in these matters so as to avoid delay which appears to be inherent in the existing pattern. The Committee hope that necessary steps will be taken to ensure that there is no delay in finalising programmes and their execution owing to differences of approach and differences in the points of view within the Government Departments at the Centre. The Committee are of the view that the responsibility for coordination should be that of the Ministry of Food, Agriculture, Community Development and Cooperation (Department of Agriculture).

D. Fisheries Legislation

1.22. From time to time suggestions have been made by various committees for taking suitable legislative measures to develop and conserve fisheries, prevent pollution of waters by factory effluents and revise the arrangements of leasing tanks and other inland waters.

1.23. The All India Fisheries Conference at Madras (September 1956) had passed the following resolutions in regard to the settlement of inland fisheries:

- (1) As far as possible, fishing rights of inland waters be settled with fishermen's Cooperatives and fishermen by profession capable of making the best use of it;
- (2) System of auction by Government Departments or the Gram Panchavats be stopped and settlement made either by negotiation of fixation of equitable rates of royalty on the basis of production;

- (3) Increasing the term of the lease to a suitable period to enable the lessee to take up minor developmental works; and
- (4) Sub-leasing of fishery rights should be discouraged by the lessees."

1.24. The Conference considered the desirability of adopting adequate measures on an All India basis to control the pollution of rivers and prevent damage to the fisheries. The Committee resolved that:

- (1) swamps and fallow water areas with single or multiple ownership be suitably acquired by State Governments by legislation, if necessary;
- (2) capital equipment and technical knowledge be made available to State Fisheries Departments in reclaiming them and taking up Fish Culture; and
- (3) the existing conservation measures be reviewed and a uniform policy be adopted in a region for effective implementation."

1.25. In a memorandum prepared for the use of All India Fisheries Conference on the subject of establishment of Water Pollution Board, it was stated:

"The *Ad hoc* Fisheries Research Committee of the Government of India has recommended the constitution of a Central Water Pollution Board in India with adequate representation of fishery interests in order to study, on a broad basis, the various problems connected with the pollution of waters by industrial wastes and other effluents and their bearing on public health, agriculture and fisheries. Such a water pollution board, if constituted, may consist of representatives from (1) Ministry of Food and Agriculture, (2) Ministry of Health, (3) Ministry of Natural Resources and Scientific Research, (4) Ministry of Commerce and Industry and a representative each from (a) private industries concerned, (b) All India Institute of Hygiene and Public Health, Calcutta and (c) Indian Council of Medical Research. It is also necessary to consider the cooption of members from particular regions while dealing with problems of the region."

1.26. In another memorandum on the conservation of fisheries and legislative measures for the utilisation of derelict and fallow waters, it was stated:

"One of the main difficulties experienced by some States in bringing under fish culture derelict and fallow waters has been

the multiple ownership and control of such waters. The last Fisheries Conference held in New Delhi in September 1948 recommended that the State Government should assume powers by special legislation, if necessary, to acquire these waters for the purpose of developing their fisheries. The Conference also recommended that in order to adopt effective measures for conservation and development, the control of all State-owned productive waters should effectively vest in the Fisheries Department of the State concerned.

Some of the State Governments have enacted legislation for taking over derelict waters for purposes of fishery development and schemes for the improvement of derelict tanks and reclamation of swamps are being implemented for fish production. But this has not yet been possible in most of the States in the country."

1.27. The Central Board of Fisheries at their meeting held in April, 1964, recommended that to ensure proper development of fisheries resources for increased fish production, all water areas in the States should be vested with the Fisheries Departments. Suitable enactments should be introduced to ensure proper development of water areas. In the statement showing action taken on this recommendation, the Ministry have stated that the State Governments have been requested to take necessary steps.

1.28. The Central Board of Fisheries also considered at the same sitting the question of pollution of rivers and large-scale destruction of fish by explosives and other poisonous substances. They suggested that steps should be taken to prohibit pollution of waters by enacting suitable legislation. In a statement showing action taken on the recommendation made by the Central Board of Fisheries, the Ministry have stated that large-scale destruction of fish by explosives and poisonous substances is prohibited under the Fisheries Act and the rules framed by the State Governments under the Act.

1.29. More recently, the Working Group on the Fourth Five Year Plan on Fisheries stressed the need for revising the Indian Fisheries Act with a view to ensure uniformity in legislation throughout the country. The Working Group observed in its report:

"The Indian Fisheries Act (Central Act IV of 1897) is in force in some of the States whereas in some others, separate Fisheries Acts together with different rules framed thereunder are in force. In some of the States, the provisions

in the Indian Fisheries Act have been enforced but no rules have been framed thereunder. The necessity of re-visiting the Act which was promulgated before independence was also keenly felt after the reorganisation of States. Besides, due to pollution of rivers on an increasing scale, utter neglect of private tanks and indiscriminate use of explosives in fishing areas, it has become essential to amend the existing Indian Fisheries Act suitably and to ensure its observance by all the States. The Government of India have also promulgated four proclamations regarding their sovereign rights over sea-bed and sub-soil of the continental shelf adjoining Indian territory and beyond Indian territorial waters, defining the limit of Indian territorial waters, provision of conservation zones in the areas of the high seas adjacent to territorial waters, to regulate fishing activities in the high seas and to exercise control so as to prevent and punish the infringement within Indian territory or territorial waters of Indian Customs, Fiscal immigration and sanitary regulations. The appointment of a suitable officer to examine this aspect of the Legislation is recommended. While doing so, the proposed new legislation should also take into account the need for increase in production and improvement in marketing and processing methods."

1.30. In a note furnished to the Committee, the Ministry have stated that the recommendations of the Working Group have been made known to the State Government for taking appropriate measures to issue necessary rules for the purpose.

1.31. Asked whether any guide-lines have been issued to the various States to initiate action on the lines suggested by the Working Groups, the representative of the Ministry has stated during evidence. "I do not think we have really attended to this problem. We shall have a look at it."

1.32. The Committee have been informed in a written note that at one time it was felt by the Ministry that model rules should be framed but most of the States have framed legislation suited to their specific needs and conditions. No guide-lines have therefore been issued so far to the various States.

1.33. The broad activities covered under the various Acts are given below:

Indian Fisheries Act of 1967	Use of explosives and poison, erection of fixed engines, construction of weirs, regulation of nets, conservation zones, prohibition of fishing.
Aizawl—Rules of Settlement of Fisheries 1953	Settlement of fisheries, pollution by jute retting, regulation of nets, sanctuaries.
Bihar—Notification 1953	Prohibiting fishing in selected areas.
Bombay—Fisheries (Net) Rules, 1952	Regulation of nets in selected areas.
Madhya Pradesh—The Central Province & Berar Fisheries Act 1948.	As under the Indian Fisheries Act.
Madras—Madras Act No. 11, 1929—Amendment 1947.	Control of reservoirs, licensing of inland waters etc.
Punjab—Fisheries Act 1914—Amended 1923 and 1941.	Conservation & regulation of nets etc.
Uttar Pradesh—The United Provinces Fisheries Act, 1948.	Conservation of fry & fish.
West Bengal—1889 Bengal Act—Amended 1939.	Protection of rights in private waters.

1.34. The Committee note that several States have enacted legislation suited to their specific needs and conditions for the development and conservation of fisheries. The Committee, however, feel that there is a pressing need for ensuring uniformity in legislation throughout the country. It is for the Central Government to coordinate the activities of the various State Governments, give them suitable guide-lines to ensure that adequate measures are taken for checking of pollution of rivers, estuarine and other inland waters, conservation and renovation of derelict tanks and other inland water areas and also for settlement of fishing rights. The Committee trust that the assurance given to the Committee that the whole matter shall be looked into would be fulfilled and measures would be taken to initiate legislation incorporating necessary amendments to the Indian Fisheries Act, 1897.

CHAPTER II

FINANCE

A. Plan Provisions during the first three Plans

2.1. Though fish is an accepted item of consumption in several parts of the country and its place in a balanced diet is well-recognised, the gap between the production and requirements of fish for the purpose of an adequate standard of nutrition is still substantial because of the low level of exploitation of the country's vast resources in fisheries. In recent years the development of marine, estuarine and fresh water fisheries has centred on improving the scientific and technological bases of catching operations, culture, preservation, processing and marketing of fish and subsidiary products.

2.2. In fourth Five Year Plan (Draft Outline) the Planning Commission have stated as follows:—

“At the beginning of the Third Plan the base-line production was estimated to be 14 lakh tonnes. This was sought to be raised to 18 lakh tonnes by the end of Third Plan period. In 1961-62, however, the estimate of base-line production was revised to 9.73 lakh tonnes and the target of production for 1965-66 was set at 11.5 lakh tonnes consisting of 3.5 lakh tonnes of inland water fish and 8 lakh tonnes of marine fish. The outlay for fisheries is proposed to be increased to Rs. 113 crores. The production of fish is expected to be increased from 13 lakh tonnes in 1965-66 to 18 lakh tonnes in 1970-71.”

2.3. Provision for Development of Fisheries (Marine and Inland) during the First, Second and Third Plan periods both in the Central and the State Sectors is indicated below:—

	(Rs. in crores)		
	Central Sector	State Sector	Total
First Plan	1.00	4.13	5.13
Second Plan	3.73	8.53	12.26
Third Plan	6.72	21.86	28.58

2.4. Actual expenditure against the Plan provision during each of the three Plan periods with the break-ups separately for General and State Sectors is shown below:—

(Rs. in crores)			
	Expenditure in Central Sector	Expenditure in State Sector	Total
First Plan	10.38	2.40	2.78
Second Plan	1.80	7.26	9.06
Third Plan	3.08	20.30	23.38

2.5. It has been stated by the Ministry that year by year item-wise expenditure figures are not readily available for the 1st and 2nd Plan periods. Shortfalls in the 3rd Plan figures are indicated schemewise in the following table for Central schemes.

S. No.	Name of scheme	Plan Provision in lakhs of Rs.	Actual Exp.	Shortfall
1.	Deep Sea Fishing	224.00	22.89	-181.11
2.	C.I.F.T.	50.00	21.87	-28.13
3.	Fishing Harbours	5.00	11.50	+6.50
4.	Fish transport	90.00	10.71	-79.29
5.	C.M.F.R.I.	50.00	15.72	-34.28
6.	C.I.F.R.I.	55.00	22.34	-32.66
7.	C.I.F.E.	49.00	21.89	-27.11
8.	C.I.F.O.	61.00	8.77	-52.23
9.	Loans to Coop.	100.00	72.77	-27.23
10.	DVC.	8.00	Nil.	8.00
11.	Indo-Norwegian Project . . . . .	..	100.00 (Appx.)	+100.00
		672.00	308.46	363.54

2.6. The III Plan provision for fisheries in the State sector was Rs. 2,155.32 lakhs against which the expenditure was Rs. 2,029.05 or 94 per cent of the total provision. The limited shortfall in the State Sector has been on account of delays in acquisition of land for development

of Inland Fisheries and supply of equipment in adequate number and lack of technical personnel to execute the schemes. The state-wise provision and expenditure figures are as indicated below:—

(Rs. in lakhs)

States/U. Territories	III Plan	
	Provision	Expenditure
1. Andhra Pradesh	131.22	138.48
2. Assam	50.00	32.94
3. Bihar	71.78	57.62
4. Gujarat	126.74	180.63
5. J. & K.	15.76	8.83
6. Kerala	450.00	326.95
7. Madhya Pradesh	75.00	47.09
8. Madras.	222.00	240.57
9. Maharashtra	178.32	261.15
10. Mysore	130.00	173.63
11. Nagaland	4.00	12.01
12. Orissa	186.00	189.50
13. Punjab	45.00	25.63
14. Rajasthan	20.00	10.29
15. U. P.	101.75	67.46
16. West Bengal	185.03	119.50
17. Andamans	14.77	6.60
18. Delhi	9.53	2.00
19. Goa	67.70	52.68
20. Himachal Pradesh	13.00	8.83
21. Laccadives	18.00	26.05
22. Manipur	6.92	5.80
23. NEFA	1.70	1.72
24. Pondicherry	9.10	14.94
25. Tripura	22.00	18.65
TOTAL	2155.32	2029.05

In the Third Plan the shortfall Rs. 364 lakhs of was mainly due to:

(Rs. in lakhs.)

(a) non procurement of fishing vessels.	110
(b) Non-availability of land for research station, re- search vessel, delay in setting up CIF operatives	140
(c) Delay in construction of rail vans.	88.50
(d) Savings on loans to fisheries coops..	8
(e) Fisheries in DVC.	8
(f) Harbours.	3.50
	358.00

2.7. It has been stated that the shortfall of Rs. 62 lakhs in the Central Sector in the first Plan was mainly due to a delay of over 3 years before the plan formulation could be completed. In the second Plan the Central sector shortfall of Rs. 193 lakhs was because of the fact that instead of new vessels, the TCM gift vessels which had been given to States were subsequently taken over by the Centre. Only about Rs. 25 lakhs were spent as against a provision of Rs. 196.60 lakhs. Rs. 20 lakhs were not utilised, as the Central Directorate of Fisheries was not set-up.

2.8. The following table indicates the amount spent in the State and Central sectors in 1966-67 and anticipated expenditure in 1967-68 as against tentative plan provision of Rs. 113 crores for the Fourth Plan period:

Year	(Rs. in lakhs)		
	Central Sector	State Sector	Total expenditure/anticipated expenditure
1966-67	115.65	831.20	946.46
1967-68	200.00	1097.40	1297.40

2.9. It has been stated that since 113 crores is not a firm figure and planning is being done from year to year it is difficult to indicate the extent of possible savings.

2.10. During the evidence the representative of the Ministry has stated that during the Third Plan there has been a shortfall of approximately 140 lakhs under Research and Education; 52 lakhs under training; 120 lakhs under Exploration; 70 lakhs under transport; 8 lakhs on co-operatives and 3.50 lakhs on harbours. He has added that these figures may need some amount of re-checking. The representative of the Ministry has stated that as a result of detailed analysis made in 1965-66 they have found that most of the items involving foreign exchange, like research equipment, vessels, could not be purchased. The amount of foreign exchange involved was Rs. 2.95 crores.

2.11. In so far as "Training" was concerned, this was delayed because of delay in signing the United Nations Special Fund plan of operations. The shortfall of 120 lakhs under "Exploration" was due to the inability of the Ministry to get the foreign exchange for the purchase of vessels. Explaining the shortfall under "Harbours", the representative of the Ministry has stated that there was some delay in making the pre-investment

survey reports and that they were compelled later on to approach the United Nations Special Fund about the scheme which is now sanctioned. As regards "Transport" the main reason for shortfall was the foreign exchange required for equipment to be imported for the refrigerator vans. As regards the State sector the shortfall in the Third Plan was about Rs. 25 to 30 lakhs. The representative of the Ministry has further stated "During the Third Plan there have been other pressures. Fisheries also had a share therein, particularly foreign exchange. 1962-65 was rather a difficult period."

2.12. From the statistics furnished by the Ministry in regard to the provisions for development of fisheries during the First, Second and Third Plan periods, both in the Central and the State Sectors, and the actual expenditure incurred against the Plan provisions, the Committee note that there have been heavy shortfalls in each of three Plan periods. The Committee are unhappy that the shortfall of Rs. 62 lakhs in the Central Sector in the First Plan period was due to delay of over three years in the Plan formulation itself. The Committee are also constrained to note that in the Second Plan, the shortfall of Rs. 193 lakhs in the Central Sector has been due to the fact that the T.C.M. vessels which had originally been given to the States were taken over by the Centre. The Committee also note that the performance in the Third Plan has been no better. The failure to spend even 50 per cent of the provisions in the Central Sector was due to the following reasons: (i) non-procurement of fishing vessels and the research vessels; (ii) non-availability of land for location of Research Stations; (iii) non-availability of technical personnel; (iv) delay in the appointment of the staff; (v) delay in the construction of rail vans; (vi) savings on loans to fisheries cooperatives; and (vii) delay in the setting up of the Central Institute of Fisheries Operatives.

2.13. The Committee are not convinced with the reasons put forward by the Ministry for the shortfalls in the utilisation of the Plan provisions. They consider that if detailed schemes had been prepared in time and co-ordinated action taken to arrange finance, staff and equipments, it should have been possible for the Ministry to utilise the provisions fully. The Committee cannot over-emphasise that vigorous efforts should be made to complete the Plan schemes within the Plan period itself so that they are not carried forward from one Plan to another. They would suggest that detailed planning of schemes to be undertaken in the next Plan should be initiated now so that their execution is evenly spread throughout the period of the Plan and the history of the past is not repeated.

B. Fourth Plan Provisions

Pattern of Central assistance to the States

2.14. It has been stated that the question of rationalising the pattern of Central assistance for State Plan Schemes in the IV Five Year Plan has been under consideration in the Planning Commission and the final proposals of the Planning Commission were considered by a Committee of the National Development Council. It was agreed that the pattern of Central assistance for State Plan Schemes might be by broad heads of development except for a few high priority schemes for which specific patterns were laid down. For fisheries under Agricultural Production Programme, the pattern of Central assistance approved by the Committee of the N.D.C. is 30 per cent loan and 20 per cent grant.

2.15. The Pattern of Central assistance for Centrally sponsored schemes *viz.* Provision of landing and berthing facilities for fishing vessels at minor ports, the Scheme has been approved as a Centrally sponsored scheme with financial assistance of 50 per cent grant and 50 per cent loan for 1966-67 and 100 per cent grant for the rest of the years of IV plan.

2.16. The major items of understanding with the States regarding expenditure during Fourth Five Year Plan are stated to be as follows:—

- (i) Pattern of assistance will be changed from head wise to a general pattern of 30 per cent loan and 20 per cent grant.
- (ii) Centre will sponsor all harbour schemes including cold storages, ice factories on harbour sites.
- (iii) Centre will continue exploration of the deep sea, research and higher education and training in coordination with the States.
- (iv) Centre will arrange foreign experts and fellowships abroad.
- (v) Centre will assist in programmes involving foreign collaboration for the States.
- (vi) As far as possible States will take advantage of the capital available from the Agricultural Refinance Corporation for Cooperative projects.

2.17. It has been stated that the present practice is for the States to present their annual plan to the Planning Commission at the end of the year for the ensuing year and hitherto annual Plans for 1966-67 and 1967-68 have only been approved.

2.18. As mentioned above the Planning Commission has tentatively accepted the outlay for fisheries at Rs. 113 crores after devaluation. The targets have also been fixed tentatively as follows:—

(Rs. in crores)		
Items	Original total outlay	Revised outlay
I. Marine Fisheries		
(a) Mechanised fishing by small boats.	34·40	38·40
(b) Mechanised fishing by large boats.	5·24	13·65
TOTAL	39·64	52·05
II. Inland Fisheries		
(a) Reclamation of land	33·00	9·00
(b) Nurseries.	4·48	6·00
(c) Reservoirs.	0·58	2·00
TOTAL	38·06	17·00
III. Ancillary Schemes		
(a) Harbours.	17·00	17·00
(b) Research	3·05	4·00
(c) Training	2·25	3·70
(d) Exploration	3·00	6·35
(e) Processing/Corporations/Cooperatives/Pilot Schemes/Miscellaneous, etc. . . . .	..	12·90
GRAND TOTAL	114·00	113·00

2.19. Out of these, as previously estimated, the expenditure by the Centre will be Rs. 37 crores as detailed below:—

(Rs. in crores)	
(a) Harbours	17·00
(b) Research	3·00
(c) Training	2·65
(d) Exploration.. . . .	6·35
(e) Pilot Scheme	8·00
	37·00

2.20. Out of Rs. 113 crores, Rs. 76 crores is provisionally estimated to be spent in the States and Union Territories subject to further revision. Details are given below:

	(Rs. in crores.)
(a) Small mechanised boats.	38.40
(b) Large boats.	13.65
(c) Reclamation	9.00
(d) Nurseries.	6.00
(e) Reservoir.	2.00
(f) Research	1.00
(g) Training	1.05
(h) Processing, Corporations, Cooperatives and miscellaneous.	4.90
	76.00

2.21. The States have formulated a IV Plan covering only Rs. 62.89 crores against which the Planning Commission has agreed to Rs. 60.51 crores with the following break-up:

	(Rs. in lakhs)			
Name of State.	Proposed by the State	Agreed by Planning Commission	Approved outlay 1966-67	Estimated 1967-68
(1) Andhra Pradesh	303	238	50	45
(2) Assam	137	100	15	15
(3) Bihar.	273	270	45	40
(4) Gujarat	461	439	77	70
(5) Haryana	13	13	1	1
(6) Jammu & Kashmir	30	21	6	5
(7) Kerala.	1250	1250	139	150
(8) Madhya Pradesh.	315	365	40	38
(9) Madras.	888	788	100	100
(10) Maharashtra.	703	703	122	135
(11) Mysore.	300	400	48	80
(12) Orissa.	433	400	60	65
(13) Punjab	46	46	8	5
(14) Rajasthan	75	85	8	15
(15) U. P.	201	213	30	30
(16) West Bengal.	508	400	85	70
(17) Nagaland.	40	30	6	8
TOTAL	5976	5661	840	872

Name of State	Proposed by the State	Agreed by the Planning Commission	Approved outlay 1966-67	Estimated 1967-68
<i>Union Territories:</i>				
(1) Andamans	16.99	10.00	4.00	..
(2) Chandigarh	..	1.00	..	..
(3) Delhi	8.10	8.00	2.00	4.14
(4) Goa	130.00	123.00	27.00	20.47
(5) Himachal Pradesh	51.00	51.00	5.00	12.37
(6) Laccadives	..	80.00	15.00	..
(7) Manipur	20.00	24.00	5.00	5.00
(8) NEFA	..	10.00	1.00	0.85
(9) Pondicherry	30.74	41.00	..	15.00
(10) Tripura	56.66	42.00	8.00	8.70
TOTAL	313.49	290.00	65.00	66.53
GRAND TOTAL	6289.49	6051.00	905.00	938.53

2.22. It has been stated that the present practice is for the States to present their annual plan to the Planning Commission at the end of the year for the ensuing year and hitherto annual Plans for 1966-67 and 1967-68 have only been approved. The State-wise allocation for 1966-67 and estimated for 1967-68 is given above. It is not possible to give yearwise and itemwise allocation at this stage.

2.23. Asked what amount would be raised from States resources out of Rs. 60.51 crores agreed to the Ministry have stated that the State resources are estimated as a whole and there is no special earmarking for fisheries.

2.24. Out of the total provision of Rs. 37 crores to be spent by the Centre Rs. 5 crores is Centrally sponsored and the balance of Rs. 32 crores will be in the Central Sector. The break-up is given below:—

Harbours (Major)	Rs. 12 crores	+ 5 crores (Minor Centrally sponsored)
Research	Rs. 3	"
Training	Rs. 2.65	"
Exploration	Rs. 6.35	"
Pilot Schemes	Rs. 8.00	"
TOTAL	Rs. 32 crores	+ 5 crores —Rs. 37 crores.

2.25. It has been stated by the Ministry that it has not been possible to work out in detail the break-up of Rs. 113 crores for the whole Plan period as details are obtained during the Annual Plan discussions. Broadly, developmental schemes account for 85 per cent of the expenditure, 15 per cent going to Research Stations and Institutes. Out of the developmental expenditure approximately less than 5 per cent expenditure is spent on administration and establishment.

2.26. The representative of the Ministry has stated during evidence that in 1966-67 they have been able to spend only Rs. 10 crores. They hope to spend only 17 crores during 1967-68. The rate of expenditure will have to be stepped up during the remaining three years to catch up the tentative provision of Rs. 113 crores for a five-year period.

2.27. It has been stated that during the Fourth Plan period, the estimated amount of foreign exchange needed is Rs. 20.15 crores. The estimated foreign exchange expenditure during the first two years (1966-67 and 1967-68) is Rs. 5.72 crores.

The main items of import for fisheries schemes are indicated below:—

- (1) Marine Diesel engines.
- (2) Fishing Vessels.
- (3) Net making plants.
- (4) Floats.
- (5) Fish-finders echo sounders.
- (6) Radio Telephone equipments.
- (7) Marine radars.
- (8) Fishmeal plant.
- (9) Refrigeration equipment for vans.
- (10) Harbour construction equipment viz. syncrolift, mobile cranes, dredgers, navigational lights, etc.
- (11) Hemp twine.
- (12) Caprolactum for nylon yarn/twine.

2.28. As regards foreign exchange requirements, the Committee wanted to know whether the amount of Rs. 20.15 crores had been estimated after taking into consideration the research results achieved by the Central Institute of Fisheries Technology which are expected to lead to considerable saving of foreign exchange. The representative of the Ministry has stated during evidence that they had brought the foreign exchange requirement down to Rs. 12 crores by a further exercise on the basis of what could be indigenously manufactured. They were also pur-

suing with Bharat Electronics for manufacturing electronic equipment and they would thus have further savings.

2.29. The Committee have also been informed that the following commitments have been made for financial assistance during the Fourth Five Year Plan:—

- | | | |
|-----------------------------------------------|--------------------------------------------|-----------------------------------|
| 1. U. N. Development Programme (Special Fund) | Pre-investment U.S. \$ 694.400 | Survey of Fishing Harbours. |
| 2. Do. | Central Institute U.S. \$ 426.814 | of Fisheries Education. |
| 3. Norway | Indo-Norwegian Project. | Rs. 420 lakhs. |
| 4. Japan. | Marine Products Processing Training Centre | Rs. 1.78 lakhs* (equipment only). |

2.30. The Committee note that the phasing of the expenditure has not been in accordance with the plan outlay as this has been regulated by the resources position from year to year.

2.31. The Committee note that the Ministry have been able to spend only Rs. 10 crores in the first year and Rs. 17 crores in the second year. They, therefore, would like to emphasise that the expenditure rate should be stepped up in the next three years so that the level may be reached by 1970-71.

2.32. The Committee are glad to note that the Ministry have been able to effect a reduction in the foreign exchange requirements by effective utilisation of indigenously manufactured items. The Committee would stress that as far as possible indigenous sources should be fully tapped before going in for imported equipment.

2.33. The Committee are also happy to note that commitments have been made by the U.N. Special Fund, Norway and Japan for financial assistance for specific projects. They would suggest that the Ministry may explore the feasibility of obtaining assistance for the Deep Sea Fishing Organisation also from some international organisation.

* Assistance already received.

CHAPTER III

MARINE FISH PRODUCTION

A. Present Marine Fish Production

(i) *Assessment of Sea Resources*

3.1. According to expert estimates India can produce annually 100 lakh tonnes of fish—85 lakh tonnes marine fish and 15 lakh tonnes inland fish against which the production in recent years has varied from 9.44 lakh tonnes to 15.20 lakh tonnes.

3.2. Exploitation of the sea so far has been almost exclusively from the inshore belt extending upto about 10 kilometres in width and 10 fathoms in depth.

(ii) *Efforts to increase the marine fish production*

3.3. Development of fisheries over the different Plan periods has broadly been concerned with mechanisation of fishing boats for increased marine fish catch, providing landing and berthing facilities for such boats, exploration of the seas for locating fishing grounds for intensive and commercial fishing. Over and above these, emphasis is also being given to the establishment of ice plants and cold storages, provision of refrigerated rail road transport, establishment of Fisheries Cooperatives, arrangements for research and training.

First Five Year Plan

3.4. It has been stated that during the First Plan period, marine Fisheries Schemes were directed towards mechanisation of fishing crafts and introduction of new mechanised boats and gear charting of fishing grounds supply of fisheries requisites, facilities for training, marketing, storage and transport. The Central and State Governments took progressive measures for increasing fish production and developing the fishery industry in India with some measure of success. The Central Government paid special attention to exploratory fishing in off-shore waters and to the solution of vital research problems of marine fisheries. With a view to promoting the application of research to the development of fisheries and for disseminating information on approved techniques of fish culture and for arranging supplies of fish seeds to deficit states, one Fisheries Extension Unit was established at Calcutta in the First Plan period.

Second Five Year Plan

3.5. It has been stated by the Ministry that during the Second Plan period fisheries Development took more definite shape, and the development was broadly in the fields of marine fisheries and inland fisheries and in ancillary schemes including training and research as well as in miscellaneous schemes on marketing, processing etc.

3.6. In the field of marine fisheries greater emphasis was laid by the Ministry on mechanization of fishing boats, and nearly 1,200 boats were mechanised during the period, bringing the total number of such boats in operation to about 2161 at the end of the Second Plan period. Increased use of synthetic fibre and mechanised boats contributed to increase in sea fish production. Training in power fishing was imparted to 1200 fishermen and in shrimp trawling to 9 candidates. 22 persons were trained as skippers.

3.7. It has been stated by the Ministry that provision of ice and cold storage as well as refrigerated road transport from catching centres to marketing centres were considered an essential part of fisheries development. Accordingly 21 ice plants of a total capacity of 168 tonnes per day were established besides one mobile ice plant of 3 tonnes capacity. 22 cold storages of 585 tonnes capacity and 6 freezing plants of 23 tonnes per day capacity were also installed.

3.8. Refrigerated railway vans were also introduced for the first time for transportation of fish from the coastal producing areas to the consuming centres.

3.9. Export of fish and fish products reached a peak in 1959 with the value of exports at Rs. 6.3 crores. This included large scale export of frozen prawns.

3.10. Research work in marine fisheries was extended with introduction of new centres. The Central Institute of Fisheries Technology establishment during the Second Plan started systematic study of technological problems in fishing and fish processing. Development of quality standards of fish products was also started.

3.11. The Cooperative movement in fisheries made considerable progress in the State of Gujarat and to a certain extent in Kerala, Mysore and Maharashtra.

Third Five Year Plan.

3.12. It has been stated by the Ministry that a significant increase in the marine fish landings during the Third Plan period was noticed due to the programme of mechanisation of fishing craft. Although a programme

of introduction of 4,000 mechanised boats was planned/during the Third Plan period, the Ministry was able to introduce only about 3045 boats with marine diesel engines from both indigenous and imported sources.

3.13. The Third Plan provided for the setting up of 72 Ice and Cold Storages Plants at important fish landing and consuming centres. In fact 47 Ice Plants set up in different States have a capacity of 225 tonnes per day, 55 cold storages have a storage capacity of 2047 tonnes per day and 5 freezing plants can take care of 20 tonnes per day.

3.14. During the Third Plan the Ministry placed orders with the Ministry of Railways for the construction of 3 refrigerated rail vans but they could not be completed during the period.

3.15. With the introduction of a large number of mechanised boats, it was considered necessary to place greater emphasis on the training of operatives as well as of Administrative Officers. 16 Fishermen Training Centres were functioning in the States of Gujarat, Maharashtra, Mysore, Kerala, Madras and A.P. and in all 3,000 fishermen candidates were trained. Training facilities were also offered in the Fishing Centres established with the assistance of the Indo-Norwegian Project in Kerala, Mysore and Madras States. A Marine Products processing training centre was set up with the assistance of Government of Japan for providing training of candidates from the Industry and the State Fisheries Departments in improved methods of fish processing.

The Central Fisheries Research Institutes for Marine Fisheries extended their activities and significant contributions were made in charting of fishing grounds and study of hydrological factors affecting fisheries.

3.16. An allocation of Rs. 100 lakhs was made to provide loans to fisheries companies and Cooperatives to help them in undertaking development programmes of integrated nature including marketing of fish. The fishing industry in the private sector also increased its activities established in Bombay, Mangalore and Cochin area.

3.17. Export of fish and fish products increased considerably and reached a peak of Rs. 6.4 crores in 1964.

3.18. The Government of Orissa set up a fisheries Corporation in the State for commercial exploitation of the seas.

Plan for year ending 1970-71.

3.19. It is expected by the Ministry that during the period ending 1970-71 the annual additional production of fish on full development will be 5 lakh tonnes as against the present average production of about 13 lakh tonnes.

3.20. The most important aspect of the production programme in fisheries in the period ending 1970-71 is the introduction of 8,000 small mechanised boats. To achieve the target greater stress is being laid on indigenous production of marine diesel engines. In addition 200 medium and large boats ranging in size from 55 ft. to 120 ft. are proposed to be introduced.

3.21. It has been stated by the Ministry that exploratory fishing during the Third Plan was hampered largely due to the lack of fishing vessels. It has been decided to obtain 22 vessels of 55 ft. length and 2 large vessels of 105 ft. length for undertaking the work in a systematic manner. The large vessels will be able to go far deeper in the sea and undertake survey of mid-water and bottom fish over large areas. Fitted with modern electronic equipment they will also be in a position to signal occurrence of fish to commercial vessels for exploitation. The Ministry propose to start intensive fishing with 22 fishing vessels of medium and large size from 5 bases.

3.22. The Governments of Kerala, West Bengal and Uttar Pradesh have set up State Fisheries Corporation for operating the development projects completed by the State Fisheries Departments. They operate within the State mainly through Fisheries Cooperatives and Federations and also assist them in several ways. The Governments of Mysore and Maharashtra are also intending to set up such Corporations shortly.

(iii) *Targets*

3.23. The following statement summarises the production of fish and targets fixed for achievement during the First Three Plan periods:

(in '000 tonnes.)

Year	<i>First Plan</i>		Target to be achieved by 1955—1000	
	Inland	Marine	Subsistance Fisheries	Total
I	2	3	4	5
1951	218.0	534.0	200.0	952.0
1952 . . .	215.8	528.4	200.0	944.2
1953 . . .	237.5	581.4	200.0	1018.9
1954 . . .	240.3	588.2	200.0	1028.5
1955 . . .	243.3	595.7	200.0	1039.0

1	2	3	4	5
<i>Second Plan</i>				
<i>Target to be achieved by 1960—1400</i>				
1956 . . .	293·5	718·8	200·0	1212·3
1957 . . .	357·5	870·5	200·0	1433·0
1958 . . .	308·5	755·9	200·0	1264·4
1959 . . .	238·2	584·6	200·0	1022·8
1960 . . .	280·2	879·7	200·0	1359·9
<i>Third Plan.</i>				
<i>Target to be achieved by 1965—1800</i>				
1961 . . .	277·4	683·6	200·0	1161·0
1962 . . .	329·7	644·2	200·0	1173·9
1963 . . .	3390·2	655·5	200·0	1245·7
1964 . . .	459·86	860·35	200·0	1520·2
1965 . . .	453·0	822·0	200·0	1475·0

3.24. A statement showing in brief the financial and physical progress of development made in different branches during the First Three Five-Year Plans and the targets fixed for the period ending 1970-71 is given below:

	First plan period	Second plan Period	Third plan period	Fourth plan period (Estimated targets for period ending 1970-71)
	1	2	3	4
1. Financial Outlay (Crore Rs.)				
Allocation	5.13	12.26	28.58	113.00
Expenditure	2.78	9.06	23.38	..
2. Mechanisation of boats (Nos.)	961	1206	3045	8000
Large boats (Nos.) . . . . .	..	..	..	200
3. Landing and Berthing Facilities				
(a) Survey (No. of centres) . . . . .	..	8	26	44
(b) Layout plans & Estimates . . . . .	..	7	17	40
(c) Work taken up . . . . .	..	2	16	34
(d) Completed . . . . .	..	..	1	29 (8 nos. completed since)
4. Exploratory Work				
Vessels (nos.) . . . . .	..	20	9	45
Stations (nos.) . . . . .	..	3	6	10
5. Fishermen's Cooperative Societies (Progressive total)	N.A.	2355	3177 (Upto end of 1965)	3500
6. Ice & Cold Storages Ice Plant (Nos.) . . . . .	..	22	47	61

	1	2	3	4
Capacity	171 tons/day	225 tons/day	646 tons/day
Cold storages (Nos)	22	55	48
Capacity	585 tons/day	2047 tons/day	3738 tons/day
Freezing plants (Nos.)	6	5	14
Capacity	23 tons/day	20 tons/day	110 tons/day
7. Refrigerated rail vans (Nos.)	6 (Nos.)	3 (not delivered)	22
8. Refrigerated road vans (Nos.)	³¹ (26 delivered in 1966-67)	100
9. Production level in best year of Plan (lakh tonne)	10.99	14.75	19.75
10. Export of fish & Fish products (Crore Rs.)	6.3 (Peak in 1959)	6.4 (Peak in 1964)	33.0

3.25. The Committee note that as against the potentialities of 100 lakh tons of annual production (85 lakh tons of marine fish and 15 lakh tons of inland fish) the actual production in recent years has varied from 9.44 lakh tons to 15.20 lakhs tons only. They are unhappy that no concerted efforts were made to increase the production of fish in the past. They would like to be assured that future plans in this behalf will be more realistic and concerted steps will be taken to achieve the financial and physical targets, by providing the necessary vessels, crafts, gear, equipment, trained personnel, harbour facilities etc. and by greater and deeper exploitation of the sea around the country.

B. Package Programme

3.26. The Central Board of Fisheries at their meeting held in 1964 had recommended that package programme should be taken up in selected areas for intensive fisheries development.

3.27. Explaining the high-lights of the package programme it has been stated by the Ministry that In Andhra Pradesh, Rajasthan, Bihar, Mysore, Madhya Pradesh, Orissa and Uttar Pradesh, the package programmes relate to intensive fish-culture and fishing. Marine Fisheries Projects have been taken up in selected centres which include shore facilities, operation of mechanised fishing vessels, ice and cold storage and processing plant linked by marketing of fish and fishery products. Facilities for boat-building and repairs of boats are also included in these projects.

3.28. About extension of the package programme to other States and Union Territories it has been stated that the programmes now recommended in the maritime State will be of this type and centred round fishing ports.

3.29. The Committee have been informed that the inputs required are provided by the State Governments as part of their plan schemes and are assisted by the Centre in the pattern of assistance provided in the Plan.

3.30. The Ministry have also stated that no formal assessment has yet been made about the working of the package programme.

3.31. The Committee are happy to note that the Ministry have taken up package programme in selected areas for intensive fisheries development, in Andhra Pradesh, Rajasthan, Bihar, Mysore, Madhya Pradesh, Orissa and Uttar Pradesh. They hope that package programmes will be extended to other States (including the maritime States) and Union Territories also so that targets for increased fish production can be realised in time.

C. Pelagic Fishing Explorations

3.32. The Working Group on the Fourth Five Year Plan on Fisheries in its report had *inter-alia* recommended that the work relating to Deep Sea Fishing Exploration should be taken up with foreign collaboration.

3.33. It has been stated by the Ministry that "the exploratory programme is expanded under Indo-Norwegian Project. A proposal is under consideration for initiating pelagic fishing exploration under U.N. Special Fund."

3.34. The Committee wanted to know the details of the proposal and also whether any agreement has been concluded with the U.N. Special Fund for this purpose. In a written note furnished by the Ministry it has been stated that the proposal is to have experts and vessels with the assistance of United Nations Special Fund. A team of experts is likely to visit India shortly to have discussions on the programme. It will take some time before the scheme is finally approved.

3.35. The Committee hope that arrangements for securing vessels and services of experts from the U.N. Special Fund will be finalised at an early date so that exploratory programme can be extended for augmenting fish production.

CHAPTER IV

CRAFT AND GEAR

A. Mechanisation Programme

4.1. It has been stated that the need for mechanisation of the existing boats or introduction of new designs of power boats to enable fishing in waters beyond the present range of operations and to improve landings by reducing the time taken for going to and returning from fishing grounds etc. has been recognised by the fishery administrators and a programme of mechanisation of fishing crafts was initiated in the First Plan and considerable emphasis was given to mechanisation programme in all the maritime States. F.A.O. Naval Architects and also experts of the Indo-Norwegian Project developed new designs for mechanised fishing crafts suitable for different sections of the coast. Encouraging results were obtained and there was good demand for mechanised fishing crafts, particularly in Bombay and Madras States. By the end of the First Plan, about 650 boats were mechanised mostly in Bombay State. As a result of propaganda and demonstrations the fishermen realised the advantages of mechanised fishing on a larger scale than expected previously. The Central and State Governments encouraged this programme by providing engines, boats and gear on loan-cum-subsidy basis, the loans being repayable in easy instalments over a period of five to seven years, either in cash or as share of the catches.

4.2. During the Second Five Year Plan greater emphasis was laid on mechanisation of fishing boats and nearly 1200 boats were mechanised. The Third Plan provided for the mechanisation of 4000 fishing crafts and operation of 35 larger vessels. The target for mechanisation of fishing crafts was fixed at 2700 through the Public Sector and 1300 through the Private Sector. During the Third Plan period a total of 3045 boats were mechanised and there was a short-fall of about 1000 boats in the mechanisation programme.

4.3. Explaining the reasons for this short-fall, it has been stated that the programme of mechanisation of boats has been hampered by the difficulty in obtaining marine diesel engines due to very limited production in the country and the paucity of foreign exchange for importing marine diesel engines and synthetic fishing twine and the inability of indigenous manufacturers to make any significant contribution. At present there are 5 indi-

genous firms licensed for manufacturing marine diesel engines. Production of indigenous marine diesel engines started in 1963 but the capacity for manufacture of suitable engines is limited in relation to requirements of mechanisation programme.

4.4. Asked what are the targets laid down for the Fourth Five Year Plan and what steps have been taken or are proposed to be taken to ensure that the targets laid down are duly achieved, it has been stated in a written note submitted to the Committee that the most important aspect of the production programme in fisheries in the Fourth Five Year Plan is the introduction of 8000 small mechanised boats. In addition 200 medium and large boats ranging in size from 55' to 120' are proposed to be introduced. To achieve the target, greater stress is being laid on indigenous production of marine diesel engines. Government of India have under consideration schemes for collaboration with a Japanese firm for increasing the indigenous production capacity of a selected type by about 1000 units annually. Judging from the reports of the Boats and Crafts Committee, it may be expected that 4000 engines from the existing plants and 2000 Yanmar engines from India would be produced if the projected Yanmar venture goes into operation within the next 2 years. 2000 engines may have to be imported to achieve the target.

4.5. In this connection, it has been stated in a Memorandum submitted to the Committee by a leading expert on fisheries as follows:—

“The most important development is the mechanisation of fishing boats and here the idea has caught on in most maritime States, Maharashtra leading and Kerala & Gujarat following. Taken for the last ten years as a whole the increase in the number of mechanised boats from a few hundreds to nearly three thousand at present is a substantial increase but falls far short of the expectations. The achievement during the Third Plan has been very disappointing although there were good schemes from all States. A vigorous pursuit of fishing boat mechanisation is a national necessity and should be supported by large scale indigenous manufacture of diesel engines and the establishment of several boat-building yards. A change from the smaller mechanised boats to larger boats or medium boats should occur because the inshore waters are slowly becoming over-fished, and at any event the nearshore waters should be reserved for the small non-mechanised boats. The major increase in production has been mainly because of the introduction of mechanised boats and improvement of fishing techniques.”

4.6. Asked how many mechanised fishing boats were produced during the last two years the representative of the Ministry gave the following figures during evidence:—

1966-67	.. ..	1000 boats
1967-68	.. ..	850 boats (estimate).

4.7. It has been admitted that on the basis of this performance, the targets laid down for the Fourth Five Year Plan may not be fulfilled. Explaining the reasons for this shortfall, it has further been stated during evidence that, "When we formulated the Fourth Plan, various proposals were made by the States. These were checked and accepted. In the first two years, in every sector, we have not found money for the plan formulation and as a result there has been a shortfall here and we have to find out some way. 8000 boats can be usefully employed and we can increase our capacity, etc. It is something which has got to be done. We shall try whether we can do something like a crash programme of the Third Plan."

4.8. Asked whether there is sufficient capacity for boat-building in the country, the Committee have been informed during evidence that 2000 boats could be constructed per year but the capacity for the production of engines is only 1200 per year. The representative of the Ministry assured the Committee that Government would try to link these two capacities.

4.9. The Committee are constrained to note that there have been heavy shortfalls in achieving the targets laid down for the introduction of mechanised boats during the Third Plan period. The Committee are also unhappy to note that there is no likelihood of achieving the target of 8000 mechanised boats laid down for the period ending 1970-71. They suggest that the feasibility of drawing up a crash programme for the production of mechanised boats may be considered. The Committee also feel that there is an imperative need to link up the construction of boats with the manufacture of engines and other requisites required for a mechanised boat, so that there is no delay in manufacturing complete mechanised boats.

4.10. In this connection, the Committee would also like to draw the attention of Government to the recommendations contained in paras 2.22, 2.23 and 2.24 of their Thirty-Eighth Report on the Ministry of Food, Agriculture, Community Development and Cooperation (Department of Agriculture)—Central Institute of Fisheries Technology, Ernakulam.

B. Marine Diesel Engines

4.11. The Central Board of Fisheries, at its meetings held on the 13th and 14th November, 1965 had recommended as follows:—

- (i) State Governments should report by January each year of their requirements of marine diesel engines for coming year.

- (ii) Central Fisheries Corporation should place orders for these engines by March.
- (iii) Ministry of Food and Agriculture should restrict the types of marine diesel engines to be imported, arrange for credit sources either under credit programmes or under trade agreements.
- (iv) Central Fisheries Corporation should also arrange for obtaining the spare parts required for the engines in each State in the same manner. It was emphasised that priority should be given for the import of spare parts.
- (v) A survey of the performance of different types of engines, taking into consideration the complaints made by the fishermen in their operation, maintenance and servicing in different States should be conducted within three months and action taken to rectify the defects by the appropriate authorities.

4.12. So far as the recommendation at (i) above is concerned, it has been stated that the State Governments were instructed accordingly. As regards recommendations at (ii) and (iv) above, it has been stated that the Central Fisheries Corporation have not yet decided to undertake this work. For recommendation at (iii) above, it has been stated that this is according to the prevailing practice. In respect of recommendation at (v) above, it has been stated as follows:—

“A survey has been conducted and it is found that the defects are due to lack of adequate knowledge in the handling of new types of engines for which the suppliers had not provided facilities nor instructions. In some cases, engines were also defective or after-sale service was not satisfactory. It has been decided not to import engines which have not given satisfactory performance and engines not having suitable after-sale service arrangements.”

4.13. Again at its meetings held on the 29th and 30th October, 1966, the Central Board of Fisheries made the following recommendations:—

- (i) Advance arrangements be made for import of marine diesel engines over a period of time taking into consideration the indigenous capacity;
- (ii) A penalty clause be included in the agreements to be entered into with the firms for supply of diesel engines for delay and for short delivery.

4.14. The following action has been stated to be taken on the recommendation reproduced at (i) above:—

“During 1966-67, it was assessed that 500 engines will have to be imported. The clearance of D.G.T.D. was obtained but foreign exchange sufficient only to purchase about 263 engines was made available in March, 1967. Orders for this number had been placed with the State Trading Corporation in April, 1967.

For 1967-68, the Boats and Crafts Committee have estimated that about 500 engines will have to be imported apart from about 900 engines promised to be supplied by the indigenous manufacturers. The Department of Economic Affairs have already been requested to issue credit allocation for import of these engines.”

4.15. In respect of recommendation mentioned at (ii) above, it has been stated that most of the State Governments have such a clause in their existing contracts or would include in future contracts.

4.16. Asked about the present procedure for assessing the requirements of marine diesel engines, it has been stated in a written note furnished to the Committee that the assessment of the requirements of marine diesel engines is made at the time of discussing the annual plans of the State and by the Boats and Crafts Committee. The States Departments and the industry are consulted in the matter. Normally this is done in November/December of the previous year.

4.17. It has further been stated that the capacity of the indigenous manufacturers for supply of marine diesel engines is taken into consideration, before clearance from the Directorate-General, Technical Development is obtained for import from foreign countries. The import has been restricted during recent years to certain makes from Japan and Denmark against credit facilities.

4.18. In this connection, in a Memorandum submitted to the Committee by an Organisation, it has been stated as follows:—

“There are 3 or 4 Indian manufacturers producing marine diesel engines but their production had been insufficient, the delivery had been unsatisfactory and even the machines themselves technically not fully perfect. However because of the existence of the indigenous manufacturers there were considerable difficulties in importing marine diesel engines from abroad. Because of the assistance available from various countries engines have been obtained from all those countries

and consequently it had not been possible to standardise the makes to facilitate service and spare parts. It would be preferable to have a few types of engines instead of a large number from different countries as the latter would necessitate going after all those countries for spare parts.

Towards the close of the 4th Plan it had been possible to obtain atleast a good percentage of the engines required for the implementation of the schemes both from indigenous sources as well as from abroad."

4.19. The Committee have been informed during evidence that, "There has been some difficulty about getting the precise estimate of how many engines actually we can expect from the indigenous industry. On the basis of the performance of the indigenous industry in the year 1966-67, we formed a precise estimate of how many they could produce. They gave us 392 engines between April, 1966 and June, 1967." It has further been stated during evidence that, "The indigenous industry gave us their capacity as 1120. This is the estimate for the period from July, 1967 to March, 1968. Actually we did not need 1120 engines for the programme which we had already in hand. Then, they said that we should take all these engines which they are in a position to make against whatever programme we have. Although we had asked the indigenous industry on several occasions that our future requirements would be only low revolution engines, the industry had gone ahead with making high revolution engines. Now the number of high revolution engines which they are able to produce is 1120 engines, whereas we have found after detailed analysis that the low revolution engines would be about 60 per cent. of the total requirement of engines."

4.20. In reply to a question, it has been further stated during evidence that, "I can indicate that this matter was discussed in very great detail at a meeting which was convened by the Special Secretary in the Ministry of Industrial Development and all the representatives of the engine manufacturers attended that meeting. This was held in October, 1967 and at that meeting all the issues regarding low revolution engines and high revolution engines were discussed in very great detail. Now that they have started manufacturing high revolution engines, what could be done to dovetail their requirements with the requirements of the industry was also discussed. In fact, all along the intention has been to see that the requirements of indigenous industry are balanced with those of fishing industry."

4.21. In reply to a further question, it has been stated during evidence that, "The position is that upto 1966-67, there was no question at all about our capacity to absorb the entire indigenous manufacture. What was being manufactured was being absorbed." Explaining the reasons for the

change in this position, it has been stated that, "The capacity of the States to undertake programme for boat building is now being decided from year to year and the number of boats which they have been able to make now is much less than we had thought they would be able to take up. During the Fourth Plan, the States have not been able to take up the programme on the scale which we had envisaged when we set the targets for the Fourth Plan."

4.22. The Committee regret to note that many of the recommendations made by the Central Board of Fisheries as early as 1965 regarding 'Marine Diesel Engines' have not yet been implemented. They hope that the Government will implement these recommendations as early as possibly.

4.23. The Committee note the present procedure of assessing the requirements of marine diesel engines from year to year. They are, however, concerned to observe that there has been controversy as between high revolution engines and low revolution engines. The Committee would like the Government to take concerted steps to resolve this controversy as early as possible. The Committee expect the Ministry of Food, Agriculture, Community Development & Cooperation and the Ministry of Industrial Development to take effective measures to dovetail the requirements of the indigenous marine diesel engines industry with those of the fishing industry. In any case, the Committee would like to be assured that the indigenous capacity of the marine diesel engine industry will not be allowed to lie idle and they will be given due encouragement to produce more low revolution engines whose requirements are estimated to be 60 per cent. of the total requirement of engines.

4.24. So far as the import of marine diesel engines is concerned, the Committee suggest that they should be imported only from those countries which could guarantee the supply of spare parts and after-sale service as well. In any event, to conserve foreign exchange, the import of engines from foreign countries has to be kept to the barest minimum and all out efforts have to be made to give encouragement for indigenous production. It is very much desirable that in importing marine diesel engines, care is taken to obtain a few varieties of standard engines rather than a number of varieties of different standards and specifications.

4.25. The Committee are unhappy to note that the State Governments have not been able to take up the mechanisation programme as was envisaged at the time of setting the targets for the period ending 1970-71. In the opinion of the Committee, the mechanisation of fishing boats is a national necessity and concerted efforts should be made to achieve the targets laid down.

C. Yanmar Engines

4.26. It has been stated that the proposal to manufacture Yanmar marine diesel engines in India was first contemplated in 1960 and a licence was given to a private firm in Madras in 1961. This licence was cancelled as no action was taken by them for over two years. Thereafter in May, 1964 when an Indian delegation headed by the then Food Secretary visited Japan in order to seek Japanese collaboration and assistance in fisheries development, it revived this proposal. In their discussions, the Yanmar Diesel Engine Co. Ltd. of Japan showed interest to collaborate with India for the manufacture of Yanmar marine engines and gave a detailed proposal through their business interest in India, Messrs Nichimen & Co. Ltd. The proposal was examined in consultation with other Ministries concerned and it needed modification in certain respects. The collaborators have recently submitted a revised report together with the broad economics of the project. On the basis of the revised report, it is proposed to set up the Yanmar Marine Diesel Engine Project in the public sector in collaboration between the Central Fisheries Corporation and the Yanmar Diesel Engine Co. Ltd. of Japan.

4.27. The new Company is proposed to be set up in the public sector with an authorised capital of Rs. 5 crores. It issued share capital which is now estimated to be about Rs. 2 crores is proposed to be subscribed to the extent of 90 per cent by the Central Fisheries Corporation and the balance 10 per cent by the foreign collaborators. The following is the manufacturing programme for the initial five years—

1. Model 2 LDGFE 33 H.P.	60 Nos. per annum
2. Model 3 LDGFE 50 H.P.	500 Nos. per annum
3. Model 4 LDGFER 66 H.P.	440 Nos. per annum
TOTAL	1000 Nos.

The total requirement of foreign exchange during the period of five years on account of import of plant and machinery, raw material, components, drawing and design fee, payment of royalty, etc. amounts to Rs. 5.52 crores. On the other hand, the cost of importing Yanmar engines at the rate of 600 Nos. per annum for five years from Japan at the existing prices works out to about Rs. 6.52 crores. Thus according to the present estimate, the project visualises a saving of foreign exchange to the tune of Rupees one crore during the period of five years. The requirement of foreign exchange is proposed to be met out of Yen credit.

4.28. The location of the Project is proposed to be at Ennore in Madras State. The Government of Madras has undertaken to make available land, power and water etc., required for the project.

4.29. The Capital Plan of the project is indicated in the following Statement:

<i>Capital</i>	Rs.
Land	2,14,450
Building	18,50,400
Machinery	2,75,58,503
Misc. Expenditure	70,000
	<hr/>
	2,96,93,353
Working Capital	1,01,30,000
	<hr/>
	1,01,30,000
	<hr/>
	3,98,23,353
Or say .	4,00,00,000
Share Capital	2,00,00,000
Loan	2,00,00,000

4.30. The average cost per engine on the basis of cost of production works out to Rs. 21,000. The import price (cif) per engine of the three models proposed to be manufactured at present is as follows:—

	Rs.
1. Model 2 LDGFE 33 H.P.	13,500 each
2. Model 3 LDGFE 50 H.P.	20,000 each
3. Model 4 LDGFE 66 H.P.	26,000 each

4.31. The cost of engines of corresponding Horse Power which are at present being indigenously manufactured is as follows:

Ruston Engine

	Rs.
1. H.P. range 24.5 to 29	21,930 to 22,320 each
2. H.P. range 49 to 58	38,920 to 39,570 each
3. H.P. range 75 to 87	57,150 to 57,800 each

4.32. Subject to the cost of production having been correctly assessed, the proposal would be justified. The report of the firm is at present vetted by the Directorate General, Technical Development. It is proposed that, subject to the acceptance of the technical feasibility by the Directorate General, Technical Development, the Corporation may apply for issue of an industrial licence. A detailed project report indicating the economics of the scheme on a component-wise basis will then be drawn up. The project would require the approval of the Foreign Agreements Committee and the Industrial Licensing Committee.

4.33. Asked when was the decision to get Yanmar diesel engines manufactured in the public sector taken, the representative of the Ministry has stated during evidence that it was "In January, 1967."

4.34. The Committee note that there is a proposal to get Yanmar diesel engines manufactured in the public sector in collaboration between the Central Fisheries Corporation and the Yanmar Diesel Engine Company Limited, Japan. They would like the Government to finalise the details of the project after verification of the cost of production, without undue delay, so that the targets of mechanisation programme envisaged could be adhered to.

D. Price of the Engines and Subsidy

4.35. At its meetings held in October, 1966, the Central Board of Fisheries recommended as follows:—

- (i) The question of prices of marine diesel engines produced indigenously should be looked into and the prices reduced;
- (ii) That excise duty on marine diesel engines be reduced from 10 per cent to 5 per cent as in the case of agricultural machinery.

4.36. The following action is stated to have been taken by the Ministry of Food and Agriculture on these recommendations:—

- (i) The question of reduction of price was discussed in an inter-departmental meeting held on 26-5-1967 in the Ministry of Finance and it was decided that the Ministry of Industrial Development should go into the question of fixing the price of indigenous engines at a reasonable level.
- (ii) Previously engines were liable to duty under item No. 29(i) of the Central Excise Tariff and were, therefore, subject to a duty of 10 per cent. This has however, been reclassified

under item No. 29(ii) of the said Act and are automatically subject to a duty of 5 per cent. However, this Ministry have been in correspondence with the Ministry of Finance for complete exemption from payment of excise duty as in the case of tractors for agriculture and are still pursuing it.

Earlier, the Central Board of Fisheries at its meeting held in November, 1965 had recommended as follows:—

“.....that details of consumption of diesel oil of different H.P. engines and their costs should be worked out and the comparative costs of the relief in relation to the possible increase in capital subsidy should be studied quickly.”

4.37. The following action is stated to have been taken by Ministry on this recommendation:—

“The details were worked out and the proposals for relief placed before the Agricultural Production Board which suggested that the present rate of 50 per cent subsidy on engines need not be changed but relief on operating cost might be allowed. Accordingly a subsidy on diesel at 32 paise rate per gallon is being given and shared equally by the State and the Centre.”

4.38. The Committee desired to know the present position about the matters referred to above. They have been informed during evidence that the Ministry of Industrial Development were asked in March, 1967 to take up with the indigenous manufacturers the question of bringing down the price of the engines. That Ministry took up this matter in the meeting held in October, 1967 with the indigenous manufacturers. They have pointed out to the indigenous manufacturers that the cost of the indigenous engines is very high as compared to the imported engines and they should bring down the cost. The indigenous manufacturers have been asked to give a full account of their views in the matter.

4.39. Asked about the difference in the prices of imported engines and indigenous engines, the Committee have been informed during evidence that the difference is as much as between 50 per cent to 100 per cent i.e. about Rs. 10,000 to Rs. 20,000.

4.40. Asked when this question was not taken up at the very outset, the representative of the Ministry has stated during evidence that, “Earlier when the question was taken up about reduction of price, the general view that in the case of indigenous manufacturers unless a situation was reached

in which it was considered necessary to make a detailed analysis of costs, we should not be too rigid in enforcing prices. They should be allowed to develop. A stage has now been reached when the indigenous manufacturing industry has got over its teething troubles. Now it is making fairly substantial number of engines. Now proper costing can be done and we have asked the Ministry of Industrial Development to look into this question of price and they have agreed to this."

4.41. Asked what will be the position if the indigenous manufacturers refuse to reduce the price, the Committee have been informed during evidence that, "Statutorily we can fix prices. We have got the powers to do it. As a developing industry, they were given some time but now a stage has come when they have to justify their cost."

4.42. So far as the subsidy for marine diesel engine is concerned, it has been stated during evidence that it varies from State to State. It ranges from 40 per cent to 50 per cent of the cost of the engine. Relief on diesel oil has been provided recently on the following basis:—

7.5 per litre with the ceiling of Rs. 500 per 20 H.P. Engine.

7.5 per litre with the ceiling of Rs. 1000 per 40 H.P. Engine.

7.5 per litre with the ceiling of Rs. 1050 per above 40 H.P. Engine.

4.43. The Committee note that the cost of an indigenous engine is 50% to 100% (i.e. Rs. 10,000 to Rs. 20,000) higher than the imported engine. The Committee feel that enough care should have been taken from the very beginning to keep down the cost of an indigenous engine. They hope that it will be possible for the Government to persuade the indigenous industry to bring down the cost voluntarily and it will not be necessary to invoke statutory powers.

4.44. The Committee would further like the Government to consider whether complete exemption from payment of excise duty could be given on marine diesel engines as is the case with tractors for agriculture.

4.45. The Committee would also suggest that a Study Team may be appointed to go into the pattern of subsidy being given by various State Governments on marine diesel engines so that uniform rules could be laid down for the purpose.

E. Life Saving Equipment

4.46. The Central Board of Fisheries at its meetings held in December, 1962 recommended as follows:—

"That the whole question regarding provision of life-saving equipment, etc. to the fishermen, as recommended by the *Ad hoc*

Fisheries Enquiry Committee should be taken up with the Ministry of Transport. In order to enable such of those fishermen who cannot afford to equip their boats with life saving equipment, it was decided that the cost of such equipment should be included in the cost of the boat so as to bring it within the scope of subsidy under the pattern of central assistance."

The following action is stated to have been taken by Government on the above recommendation:—

"The matter was taken up with the Ministry of Transport and life saving appliances rules have been amended for the fishing vessels."

The Central Board of Fisheries at its meetings held in April, 1964 also recommended as follows:—

"Guiding lights and other safety measures may be provided."

On this recommendation, the following action is stated to have been taken by the Government:—

"Andhra Pradesh, Gujarat, Kerala, Maharashtra had taken action as proposed. West Bengal had reported that they would take necessary action at the time of finalising the harbour schemes. Lacadives made necessary provision for guiding lights."

4.47. The Committee desired to know the present position in the matter. In a written note submitted to the Committee, it has been stated that the question of providing life-saving equipment was taken up with the Ministry of Transport and the Ministry of Transport have laid down the items for fishing vessels of different categories in June, 1966. The fishing boats are to be provided with certain items of life-saving appliances according to these regulations. The State Departments are attending to these requirements with regard to the boats supplied to fishermen and falling under this category.

4.48. With regard to the provision of guiding lights, it has been stated in a written note submitted to the Committee that the provision of guiding lights, navigational lights and marking of wrecks along the Indian coast is done by the Light Houses and Light Ships Department of the Ministry of Transport and Shipping, as the provision of these lights conform to certain system and navigational rules. As minor ports and major ports, lights and buoys are provided by the Port Departments on Port Authorities in consul-

tation with the above Department. Fire fighting equipment is also available at these ports, but the need for this equipment for the fishing harbours has not been felt.

4.49. Ship to shore radio telephone facilities are available at Bombay, Ratnagiri, Karwar, Mangalore, Cochin, Tuticorin, Madras, Visakhapatnam and Diamond Harbour which can be made use of by bigger fishing vessels in case of distress.

4.50. The Committee consider that the provision of life-saving equipment for boats of the fishermen and guiding lights at the various fishing harbours are essential to minimise the risks and hazards which the fishermen have to run daily because of their occupation. They feel that the life-saving equipment should be made an essential component of a mechanised fishing boat and its cost should be included in the cost of the boat itself without placing an additional burden on the fishermen.

4.51. The Committee also suggest that the Ministry may persuade such of the States as have not yet provided guiding lights to do so as early as possible.

CHAPTER V

EXPORTS

A. Export Promotion Schemes

5.1. Realising the growing importance of the sea food industry as a valuable earner of foreign exchange, the Government of India set up the Marine Products Export Promotion Council in the year 1961-62, *i.e.* at the commencement of the Third Plan. The total export earnings from the marine products at the time of formation of the Council was only of the order of Rs. 3.92 crores. The sea food industry in India is wholly export-oriented. According to the studies made by the Marine Products Export Promotion Council recently, basing on the resources|potential of the fisheries in the coastal and off-shore waters and other related factors, the development prospects of this industry is stated to be in fact virtually unlimited.

5.2. The industry has now three distinct sectors, the oldest of them is the sector engaged in the production of dried sea foods like dried prawns, dried fish and miscellaneous dried marine products. A major portion of the production of this sector goes for export.

5.3. For more than a 100 years, India has been exporting this traditional item to neighbouring countries like Ceylon and Burma. Dried sea foods are now marketed in several Middle East countries. Until about 1954 preservation of sea foods by drying and salt curing was the only method practised in India and the entire sea food exports of the country comprised only of dried marine products.

5.4. The value of export earnings from the year 1960-61 to 1966-67 of fish and fish products from India is as follows:

Year	Value of export
	(In crores of Rs.)
1960-61	4.62
1961-62	3.91
1962-63	4.08
1963-64	5.71
1964-65	6.82
1965-66	6.59
1966-67	10.95

(Exports from June 1, 1966 to March, 1967 adjusted to pre-devaluation value of the rupee).

5.5. The Committee have also been informed that steps were taken during the Second Five Year Plan to increase the export of fish and fish products and their export reached a peak in 1959 with the value of exports at Rs. 6.3 crores. This included large-scale export of frozen prawn. During the Third Plan period export of fish and fish products increased considerably and reached a peak of Rs. 6.4 crores in 1964.

5.6. As regards the export of fish and fish products to earn foreign exchange during the period ending 1970-71, it has been stated that this question has been given due consideration in the formulation and implementation of the Plan. The following steps have been suggested to raise the exports substantially:—

- (i) Steping up marine fish production in the maritime States and setting up processing plants especially for freezing and caning.
- (ii) Setting up of State Corporations or Centre Co-operative enterprise in mechanised fishing and adoption of modern methods of processing and canning.
- (iii) Exporting suitable varieties of fish which are otherwise consumed locally in the absence of suitable organisation for processing and marketing.
- (iv) Arranging supply of suitable equipments at reasonable rates and giving subsidies for processing and marketing.

5.7. It has further been stated that a target of earning Rs. 37.70 crores in 1970-71 has been fixed by the Ministry of Commerce. As regards the measures taken so far to augment the export of fishery products so that the targets set for the period ending 1970-71 are achieved by the date, it has been stated to the Committee that besides an outlay of Rs. 113 crores proposed for that period by the Ministry of Food & Agriculture, the Marine Products Export Promotion Council has launched an export drive programme to boost up exports by participating in fairs|exhibitions abroad, conducting market surveys and sponsoring delegations| study teams to explore the foreign markets. The Council has joined the International Shrimp Council, Washington, a world-wide organisation which is engaged in publicity programmes to promote the export of fishery products. The Government has announced the Registered Exporters' Policy Scheme which takes care of the needs of import requirements of the sea food exporters, published in Insopt Trade Control Policy for the year April, 1967—March 1968.

5.8. The Ministry of Commerce introduced a scheme for import of capital equipments in March, 1967 which provides for allotment of a high

priority basis of capital goods, equipment, dyes, jigs and tools (not indigenously manufactured) to the exporting units and exporting industries from out of a special allocation of foreign exchange. This is meant for expansion, modernisation and diversification of production facilities for increased exports. The facilities are intended to assist manufacturers with a good export performance so that they may intensify their export effort. On references received from the Ministry of Commerce, the Ministry of Food & Agriculture, C.D. & Co-operation (Department of Agriculture) have recommended under the scheme import of items like low RPM marine diesel engines, plate freezers, refrigerants, compressors with fly wheels, etc.

5.9. In the course of evidence the Committee desired to know from a fisheries expert whether it would not be desirable to meet the needs of every Indian first before increasing the export of fish to foreign countries to earn foreign exchange. He has stated, "The actual percentage of the fish which we export in terms of tonnage is very small but it is the quality because what can be visualised is most of the fish product that goes out, especially in recent years, in West-coast shrimp and prawn. The point is by the export of this extremely small fraction of our production we can secure substantial return of foreign currency. This would help it we are going to invest the same, plough back the same to improve our fisheries. In fact the point which I want to emphasise is that the export possibility in this field should be ploughed back to produce more fish in our own country, which will provide fish for our own country."

5.10. The representative of the Marine Products Export Promotion Council, Ernakulam has also stated in evidence: "Out of the total catches of prawns 30 per cent is exclusively exported whereas the rest 70 per cent is exclusively available for inland consumption. We should not reduce the exports. We are exporting only prawns which is consumed by very few people in India. I am selling it at 50 per cent of my export price and still there is no body to purchase it. The catches of other fish is neglected today because fishermen go in for prawn as they get more money from us and we in return also get more money from abroad." The Committee have been further informed in evidence that, "By putting more trawlers we will get increased catches because trawlers will catch not only shrimps but also other fish which could be ideally utilised for internal consumption."

5.11. The Committee appreciate the efforts that are being made by the Government for augmenting the export of fish and fishery products to foreign countries, but they have to point out that what has so far been done in this direction is much too little. Of the three great oceans of the world, the Indian Ocean is the least exploited one. Recent studies have

also indicated high productivity of the Indian Ocean and the low yield is attributed to the lack of precise knowledge regarding the exploitable fisheries and the low fishing effort. Considering the importance of fish as a rich source of protein and in view of its potential availability in quantity, its importance as a subsidiary food particularly against the background of protein deficiency in dietary norms in the country and considering the urgent need for increasing earnings of foreign exchange, the Committee need hardly point out that the performance so far of Government as well as of the industry in the matter of production and export has not been significant. The Committee are doubtful whether on the basis of the present performance the country will be in a position to reach the target of earning Rs. 37.70 crores in 1970-71 in foreign exchange. The Committee would, however, emphasise the need for an all out effort both on the part of Government as well as on the part of industry to increase the foreign exchange earnings substantially even if the target fixed is not achieved.

5.12. In this connection the Committee would like to stress that while stepping up exports, the needs of the poorer sections of the population to get fish at cheaper rates should not be neglected.

B. Effects of Devaluation

5.13. The Committee desired to know whether a general study covering all the items of export had been undertaken by the Ministry of Commerce to find out the impact of devaluation on these items and whether any conclusions had been arrived at in so far as fisheries products are concerned. The Committee have been informed in a written note that the Ministry of Commerce "undertook a study of the effects of devaluation and came to the conclusion that the effects had been beneficial in the case of the fish export industry." This has been substantiated by the statistics furnished which has been quoted in an earlier para of this report.

5.14. The representative of the Marine Products Export Promotion Council, Ernakulam has, however, stated that by devaluation "exports have not gone up. . . . In 1964-65 we exported fish of 2,11,22,000 Kg. while in 1966-67 we exported only 2,11,16,000 Kg. of fish. So the exports in 1964-65 and 1966-67 remain the same whereas the export earnings have gone up from Rs. 7.14 crores to Rs. 17.36 crores." Asked whether the export earnings had gone up due to devaluation only, he has stated, "One reason is devaluation; secondly, the American price last year was very good. It has gone from 80 cents to 1 \$ and 25 cents, and this year it is dropping. It has dropped by 30 per cent or 40 per cent." Asked if there was any likelihood of the quantity of export going up, the representative has stated, "It will definitely go down. All these figures will not be maintained. . . . The quantity will not go down as it is, but the foreign exchange will go down unless we catch more fish for exports."

5.15. The representative of the Sea Food Canners' and Freezers' Association of India, Cochin when asked whether the export of the country was not commensurate with the production, has stated in evidence, "Exports have been made possible by the available catch, by the increased catches due to mechanisation and partial utilisation of the catches which used to be dried and sent to Burma. Our point has always been that there is so much potential for export, there is so much demand in the world market for our shrimps, but we do not have enough production."

5.16. The Committee feel concerned to note that there is divergence of opinion between the Ministry and the Marine Products Export Promotion Council as to the effect of devaluation and earnings from export of fish and fishery products. The Committee are inclined to feel that the points raised merit close investigation. In any case the Committee are of the view that the quantity of fish to be exported has to be increased so as to keep up at least the level of foreign exchange earned during the year 1966-67. The Committee hope the Ministry will devote serious attention to this aspect.

C. Loss of Market in Eastern Countries

5.17. The Committee have been informed in a written note that the value of export of fish and fisheries products from India to Burma reached a peak of Rs. 95,99,516 in 1961-62 but it dwindled to Rs. 15,55,250 in 1965-66. Similarly, in the case of Ceylon the value of export which was Rs. 2,58,10,562 in 1960-61 came down to Rs. 65,31,797 in 1965-66.

5.18. In the course of evidence the representative of the Marine Products Export Promotion Council, Ernakulam has stated: "We have been exporting dried fish for centuries from the Tuticorin coast of Madras to Ceylon. Ceylon was our main market all these days but Ceylon has set up a monopoly purchasing organisation. We were actually selling them on most uneconomic prices and now our exports to Ceylon have considerably gone down and all this fish is now being consumed in the internal market."

5.19. The representative of the Sea Food Canners' and Freezers' Association of India, Cochin, has stated in evidence: "We have been exporting to Burma, Ceylon, some of the Eastern European countries, Malaysia and to Honk Kong certain quantities of dried prawns but after the war when these countries were also faced with the problem of acute foreign exchange shortage which we have been experiencing, they cut down on the imports of certain of the non-essential items. This cut down has been very progressive, with the result that today Burma takes in about 450 tons of dry fishery products as against 6,000 tons which Burma used to take in 1947-48. The imports have gone down. They are substituting it particularly by their own catches. Part of it they have got to do without." He has

further stated in evidence: "After the revolution in Burma, they set up a Purchase Council. Then came the stage when Burma was faced with the same foreign exchange situation as we are faced. They drastically cut the imports of dried prawns." He has further stated that, "Coming to Ceylon, it is a very large importer of dried pickled and semi-cured fish. . . . the same problems beset that Government and they have also a centralised purchasing agency which now negotiates directly with the State Trading Corporation—because the S.T.C. has taken over the entire foreign exports of dry fish to Ceylon. . . . We have in other words lost about 75 per cent of the dried prawn market in the Eastern countries."

5.20. The Ministry in a written note furnished to the Committee has stated: "The Government of Burma restricted import of dried prawn in 1959-60. Their requirements are being obtained from other sources."

5.21. The Government of Ceylon are developing their own fisheries. They are also obtaining their requirements of dry fish partly from Pakistan, Maldives, etc. The requirements are also diminishing as a result of repatriation of Indian labourers who constituted the main market for dry fish."

5.22. The Committee are unhappy to note that India has lost about 75 per cent. of the dried prawn market in the Eastern countries. The Committee feel that concerted efforts are needed to go into this matter thoroughly and improve the situation so that exports in the Eastern countries could also be stepped up.

D. Indiscriminate Growth of Exporters

5.23. The Committee have been informed in a Memorandum that "today there are about 82 firms actually engaged in the export of frozen and canned shrimps while about 200 names of firms have been registered with the Marine Products Export Promotion Council as exporters. This is against 12 or 13 exporters who were existing 3 or 4 years ago. While a large number of exporters may contribute to increased export and consequently more foreign exchange for the present, this indiscriminate growth of the industry will have very adverse effect on the trade as well as in the foreign markets. Processing of fish which is an item of food and highly perishable is something which cannot be done by any and everybody. Neither can it be on a cottage industry scale, but involves high technical skill, standards of hygiene etc. Apart from a dozen exporters who have their own freezing plants all others are doing freezing work at random in one plant or other with the result that a uniform standard of product is impossible. A large number of canning plants also have grown in all places and in all sorts of manners. In this circumstance this industry cannot have any high standards nor any stability and this will definitely tell in the foreign markets. This effect had already been experienced."

5.24. It has been urged before the Committee that "while the shrimp production remains at the same level, indiscriminate growth of the exporters does not increase the export but will only divide among them the already existing raw material. This will lead to a fragmentation of the raw material with full benefit to none.

"Considering all these, it is necessary that a very good check is exercised on the growth of exporters indiscriminately by even fixing certain minimum standards of technical competency, financial backing, hygienic and sanitary standards etc. The Indian Standard Institution has recently laid down specifications for hygienic standards of fish processing factories. This also could be done through the Cold Storage Order already existing or it would be possible to introduce provisions in the Fisheries Act."

5.25. The Committee suggest that the above-mentioned points raised in the memorandum placed before the Committee may be examined by the Ministry in consultation with the Ministry of Commerce in order to see if any remedial measure is required for exercising a check on the indiscriminate growth of exporters of fish and fishery products.

E. Shipping Space

5.26. The Committee desired to know the present shipping facilities available for export of fisheries products to USA, UK, the Continent, Japan, Australia, etc. and the steps that have been taken or are proposed to be taken to augment these facilities. The Committee have been informed in a written note as under:—

"These rates of freight are fixed by the East Coast of India/Pakistan/U.S.A. Conference Lines. All the important shipping lines have joined together and have fixed unanimous rates to avoid competition. The shippers enter into agreement called Dual Rate Contract System with the lines which provide for definite rates and certain rebates.

"The Conference Lines have been showing preferential treatment to other countries and are unfair to India. For example, while Indian goods are charged at 1.18 cents per mile, other countries like Australia and Newzealand are charged only 0.84 and 0.94 cents respectively. Further, every now and then the Conference threatens that unless the shippers are careful and ship their cargo by their ships only, any rebates or discount that may be allowed will not be paid.

"The Indian Shippers have represented about the high freight rates and non-availability of adequate reefer space in ships

for frozen and canned sea foods from India, to the Conference, but to no avail. The matter has been taken up by the Ministry of Commerce with the Freight Investigation Bureau of the Director-General of Shipping and it is under examination."

5.27. The Committee desired to know whether the Ministry of Food, Agriculture, C. D. and Cooperation (Department of Agriculture) has taken up the matter of preferential treatment shown by the Conference Lines to other countries and their being unfair to India, with the Ministry of Transport or other authorities. The Committee have been informed in a written note: "The Director-General of Shipping has taken up the matter with the Conference Lines, but the matter has not been settled yet. Alternative steps will be considered after the outcome of the negotiations with the Conference Lines."

5.28. With regard to the representations by the Indian shippers about the high freight rate and non-availability of adequate reefer space in ships for frozen and canned sea food from India, the Committee have been informed in a written note: "The matter is being pursued by the Ministry of Commerce with the West Coast of India and Pakistan/U.S.A. Conference and the good offices of the Indian Member Lines has also been sought in the matter." The Committee desired to know if there was any proposal to have a certain proportion of future ships that are manufactured or obtained by the Indian Companies to have refrigerated holds for shipping frozen and canned sea food from India. It has been stated in a written note, "The Ministry of Transport has taken note of this requirement."

5.29. The Committee have been informed in a memorandum submitted to them by the Sea Food Canners' and Freezers' Association of India, Cochin, that, "One way of augmenting exports will be to provide refrigerated warehousing facilities in the major export centres" and "If extension of foreign trade in fisheries products is to take place smoothly, there should be adequate shipping facilities." The Committee desired to know what the suggestions of the Association were to improve matters. The representative of the Association has stated in evidence, "What we want is reefer space. We are thinking of both frozen and canned items. Canned items can be sent by any steamer to any destination. No refrigeration is necessary. But frozen goods can only be sent by steamers which have refrigerated holds. They are very limited. Fortunately for us there are plenty of these facilities from India to America. But from India to other countries there are very few vessels. Whereas there are 7 ships from Cochin to New York a month, there is only one vessel from Cochin to Australia. There is hardly any vessel or only one vessel,

sometimes in 2 or 3 months to Japan; hardly one vessel to North-European ports. You can well imagine the problems when an order for 3,000 cases has to be fulfilled. Things have been produced and are kept for 2 months or 6 weeks just for want of shipping space. One of the very essential things in the expansion of world trade will be to provide more and more steamers going to the different ports of the world equipped with refrigerated holds." Asked to state whether this trade in the export of fish and fishery products was not seasonal and that is why there was shortage of shipping facilities as the ship owners considered this as very unremunerative, the representative of the Association has stated that he did not agree with this view. He has stated, "The figures will speak for themselves. Look at the month-wise export figures. There may be some minor fluctuations." The Committee desired to know what were the reasons why private shipping companies did not provide enough cold-storage facilities. The representative has stated in evidence. "There may be some steamers which are provided with reefer compartments with some dimensions. But normally this has to be thought of at the time of designing a ship. It is a very expensive and hazardous proposition for a vessel which is not today equipped with reefer compartment to have one now. So it follows that only vessels which are designed to have reefer compartments can have them. But it is not correct to say that they do not pay. Almost all the marine vessels are being provided with refrigerated holds. On the other hand, refrigerated cargo is the highest freighted cargo in the world. So the remedy to the situation is that we should have our own Indian Lines. Two of them belong to the Government or are closely controlled by Government. They should be told first to provide their ships with refrigerated holds. Our Government should insist upon our vessels to be provided with refrigerated holds and those which have them should be asked to work them."

5.30. The attention of the Committee has been drawn to a news-item appearing in Financial Express (Bombay) dated the 22nd February, 1968, according to which for the first time in the country refrigerated cargo container service will be introduced by the Shipping Corporation of India. The Rs. Rs. 75,000 Container, built in the U.K., is placed on "M.V. State of Bihar" which is plying between India and Japan. It is expected that the Container would earn freight to the extent of Rs. 5,000 per voyage. The cost of the Container is expected to be recovered in about 30 months' time. Since there has been acute paucity of refrigerated space available on the West-coast of India-Japan trade route, the introduction of the new container service by the Corporation would help trade and facilitate boosting the export trade of the country. The Corporation has plans to acquire another 11 containers in the next 5 months.

5.31. The Committee are glad to note that the Shipping Corporation of India has already made a start in introducing refrigerated cargo container

service. They trust it will be possible for the Corporation and other Indian Shipping Companies to introduce similar container service in various trade routes through which Indian fish and fishery products are exported to foreign countries.

5.32. The Committee feel unhappy to note that "The Conference Lines have been showing preferential treatment to other countries and are unfair to India." The Committee consider the situation to be rather serious and they feel that immediate steps are necessary to counteract such preferential and unfair treatment to India. The Committee hope that the Government will also formulate a suitable long-term policy in the matter.

F. Packaging, Labelling, etc.

5.33. The Committee have been informed in a written note that in connection with the incentives being given to the fisheries industries for export of fishery products, it has been decided that the following items may be allowed to be imported subject to certain conditions:—

- (i) Refrigerants (Freon 12 and 22 Arcton 12 and 22).
- (ii) Spare parts for refrigeration machinery.
- (iii) Printed wax cartons.
- (iv) Printed master cartons.
- (v) Printed labels.
- (vi) Printed card board, corrugated boards, cartons and sleeves.
- (vii) Vegetable parchment paper.
- (viii) Citric acid.
- (ix) Spare parts of canning machinery.
- (x) Tin plate.
- (xi) Nylon twine of 210 x 3 deniers.
- (xii) Fishing hooks.
- (xiii) Box strapping.
- (xiv) Stainless steel sheets and plates for fabrication of processing equipment.

5.34. The Committee desired to know the reasons that prevented the manufacture of many of these items indigenously as they appear to be very small and simple items. The representative of the Ministry has stated in evidence that the list of items is periodically reviewed by the Ministry of Commerce in consultation with the D.G.T.D. and the items which can be manufactured here are taken out. This is a continuing process and it is a question of competition. Asked what the difficulties

were with regard to the printed labels, the representative of the Ministry has stated, "It is a kind of market preference. We are to compete with other people in the sophisticated market." As regards the fishing hooks, it has been stated that, "They have been coming to India from Norway from a particular firm and it has taken such a root and the demand is not very large. One or two people have started manufacturing this."

5.35. The Committee have been informed that one difficulty in the export of shrimps etc. in tins to the American market is the high price of tin in India. It has been stated that the supply of such tin is the monopoly in India of only one company. The Committee desired to know whether Government has considered the problem faced by the industry with regard to tin plates, and if so, when steps have been taken by them in the matter. The Committee have been informed in evidence by the representative of the Ministry that, "We have allowed the registered persons to import tin plates as one of the items and they can make a nomination in favour of fabricators. They are allowed foreign exchange upto a certain limit." He has admitted that a company has the monopoly of supply of tin plates in India.

5.36. The attention of the Committee has been drawn to a report of the Indian Sea Food Delegation to U.S.A., Canada, U.K., West Germany and France in 1964 which was published in Volume IX, No. 3, July, 1964 issue of Indian Fisheries Bulletin. The Delegation had *inter alia* made the following suggestions:—

"Economy in printing Cartons could be achieved by adopting a central design for different brands and grades of a manufacturer's products, with appropriate changes in the colour scheme for different brands and grades. The same device could be adopted in printing cartons of different exporters.

The Master Cartons used by the Indian exporters are of such poor quality that they cannot withstand the stresses and strains of transit and handling with the result that they arrived at the destination in a very damaged condition. A radical improvement in the quality of master cartons is an immediate necessity.

Marketing the goods in retail packages yield much greater profits than wholesale packages. The 'over-wrap' method of packaging should prove to be advantageous and it would be fairly simple to import the special kind of machine required for this.

The international can size, which is prevalent in America is the 4½ oz. net weight can. It is a matter for serious consideration as to whether it would be feasible and economic to market Indian canned shrimp in 4½ oz. cans.

As regards frozen shrimp, the consumers in U.K. prefer layer packing, which would show the product to better advantage. The market preference is said to be for 1 lb. carton, rather than for 5 lb. carton.

In all European countries, it is obligatory that labels, etc. should be printed in the local language. Indian exporters would do well to make a special note of this."

5.37. The Committee feel that efforts are needed to see that as many of the items as are at present allowed to be imported subject to certain conditions, are produced indigenously in India, as many of them are simple items for which it is not desirable to spend foreign exchange.

5.38. As regards tin plates, the Committee would like the Ministry in consultation with the Ministry of Commerce to devote attention to this matter so that the high price of tin plates required for canning shrimps etc. does not adversely affect the export trade. The Committee understand that a cheaper substitute for tin has been recently produced in the country. They hope it will be possible to pursue this further in order to see that the substitute can be commercially exploited and have an impact in reducing the price of cans used for packing shrimps for export.

5.39. The Committee note that some of the recommendations made by the Indian Sea Food Delegation, 1964 are likely to improve the position of export by making the products conform to the requirements of the importing countries and by making the packages and labels attractive. They trust that the Ministry would take steps to ensure that these recommendations are implemented and observed by the exporters.

CHAPTER VI

FISHERY INDUSTRY AND FISHERIES COOPERATIVES

A. Integrated Development

6.1. The Working Group on the Fourth Five Year Plan on Fisheries (1963) in its report has stated that the fishing industry occupies a peculiar position in that it cannot be looked upon merely from the point of view of the quantum of investment and its financial return. It is more in the nature of a "food industry" of national importance. In 'inland fisheries' the crop takes 2 to 3 years to be marketable which brings along several factors, e.g. draught, floods, disease, etc. leading to huge losses. Similarly, in marine fisheries the hazards of the sea and considerable fluctuations of the fish population from year to year affect the output. Besides, new fishing techniques are being developed rapidly and the industry is unable to keep pace with these developments. Accordingly, fishing industry is still one of the most heavily subsidised industries in the world even in advanced countries.

6.2. The Working Group on the Fourth Five Year Plan on Fisheries has further observed that "the climate in India for the development of the fishing industry has improved on account of the activities in the first three Plans but even then taking into account the fact that we have to compete in the world market, Government assistance has to be realistic and Government policy oriented to this end should take into consideration the following factors:

- (i) Special financial hazards of the industry due to uncertainty of catching operations and high perishability of catches;
- (ii) Increased production of fish means improvement in food supplies;
- (iii) Abundance of fish supply can protect health and improve living standards of the consumers as well as the producers and also lead to increase in national income.
- (iv) Greater attention to fisheries means better utilisation of natural resources which are otherwise likely to be exploited by other countries."

6.3. Another point that has been stressed in the report of the Working Group on Fourth Five Year Plan is that the present value of fish products

that are exported ranges between Rs. 4 to 6 crores per year and this is about 10 per cent of the total marine catch. The potentiality of the Sea Food Industry to step up exports is great by increasing the export of frozen and canned shrimps and export of tuna, perches, pomfrets, lobsters in specialised markets. The export target during the last year of the Fourth Plan is fixed at Rs. 20 crores (pre-devaluation value).

6.4. Asked to state the broad details of the assistance rendered by Government so far in the fishery industry, the Ministry in a written note have stated as under:

“Governmental assistance to the fishery industry has been in the following fields:

1. Development of techniques, extension and training;
2. Capital and subsidy for mechanised boats;
3. Subsidy for diesel oil;
4. Grants for fisheries equipment;
5. Assistance to cooperatives regarding capital, managerial personnel, etc.; and
6. Import facilities for fishing requisites.”

6.5. As to the steps taken for the integrated development of the sea-food industry, the Ministry in a written note furnished to the Committee have stated:

“For the development of marine fisheries, an amount of Rs. 39.64 crores is proposed to be spent during the Fourth Plan. For marketing and processing a total sum of Rs. 9 crores has been allocated out of which about 75 per cent will be utilised for development of sea food industries. Simultaneously the Central Institute of Fisheries Technology with the proposed outlay of Rs. 0.80 crores, Central Marine Research Institute with an outlay of Rs. 0.45 crores, Deep Sea Fishing Stations with an outlay of Rs. 3 crores and the Central Institute of Fisheries Operatives with an outlay of Rs. 1.25 crores would assist the industry in the various fields of development of processing techniques, exploration, research on fishery resources, training of fishery operatives, etc. In addition, the Marine Products Processing Training Centre set up in collaboration with the Japanese Government has also been training processing technologists to provide the various processing industries with adequately trained technicians.”

6.6. The Committee are in agreement with the views of the "Working Group on Fourth Five Year Plan on Fisheries" that the potentialities of the sea food industry to step up the export of fish and fish products to specialised markets are great. An essential prerequisite for the integrated development of this industry and more so in the case of sea food industry is that the necessary infra-structure should be built up.

6.7. The Committee note that steps are being taken by Government for the development of marine fisheries by giving increased grants to Central Institutes concerned with research and development and by making suitable arrangements for marketing and processing of fish and fish products. The Committee would, however, impress upon the Ministry the need for coordinating efforts with those of the State Fisheries Departments, the private industry and the Marine Products Export Promotion Council which have a useful role to play in promoting the export of marine products.

B. Ancillary Equipment

6.8. The Central Board of Fisheries at its meeting held in April, 1964, recommended that marine fishermen should be provided with loan and subsidy for supply of fishing gear including nets, hemp twine, fishing hooks, nylon etc. and fishing vessels. In order to expedite progress of mechanisation, priority should be given to the procurement of marine engines both from indigenous and outside resources and their distribution to the fishermen with cent per cent assistance of loan and subsidy. The makes of engines should be standardised as far as possible and servicing facilities and ready availability of spare parts should be ensured. For fishing requisites, adequate foreign exchange should be made available, not only for import but also for manufacture of indigenous equipment particularly engines.

6.9. It has been stated by the Ministry that for Fourth Five Year Plan a uniform pattern of assistance of 30 per cent loan and 20 per cent grant has been laid down for fisheries irrespective of the nomenclature of schemes. State schemes provided for subsidies and loans to cooperatives and fishermen for items like boats, engines, nylon, diesel, salt, ice and cold storage plants and for reclamation. All these schemes are covered by the pattern of assistance for the Centre to the States.

6.10. It has been further stated that four firms are licensed for the manufacture of nylon yarn and twine required for the fishing industry but only one of them, M/s. Garware Nylons, are manufacturing the nylon required by the industry. In order to make available adequate quantity of nylon yarn and twine to the fishermen at a reasonable price, Government of India arranged import of caprolactum against Dutch credit and handed over the entire quantity to M/s. Garware Nylons on the condition that they would sell the finished product at the price fixed by the Government. It

is expected that the quantity of caprolactum imported (450 tonnes approximate) will be sufficient to meet the requirements of the fishing industry for about a year and a half at the present rate of consumption.

6.11. It has been further stated that the import of nylon twine has been banned from 1962 except under schemes for providing incentives to exporters of fish and fish products. As regards hemp twine, import ceilings of Rs. 6.0 lakhs during each of the years 1963-64 and 1964-65 and of Rs. 1.0 lakh for 1965-66 were fixed and there had been no complaints of insufficiency. During 1966-67 this was provided under the scheme for priority industry and no specific foreign exchange ceiling was allocated. By March, 1967, Fishermen Cooperative Societies of Maharashtra and Gujarat had forwarded import licence application of the value of Rs. 6.70 lakhs to the licensing authorities. The Ministry has further stated that the arrangements require review from time to time. Since these fishing twines are treated under the scheme for priority industries, no difficulty in the supply of caprolactum (raw material for nylon manufactured in the country) and hemp twine is visualised.

6.12. The Committee would like to stress that the success of the fishery industry depends to a large extent on the quality of the equipment like engines, winches, floats, wire ropes, fishing nets and twine, etc. A reference to the supply of mechanised boats has already been made in an earlier chapter. They suggest that the Central and the State Governments may explore the possibilities of assisting the fishery industry by adopting a more liberal pattern of assistance by way of grants, loans and subsidies.

6.13. The Committee note that the present quantity of caprolactum imported would be sufficient to meet the requirements of the industry for nylon yarn and twine for about a year and a half. In view of the fact that the import of nylon twine has been banned and there are only a few units manufacturing nylon yarn and twine required exclusively for the fishing industry, the Committee suggest that Government may examine whether new units manufacturing synthetic fibres should not be persuaded to accept a certain amount of fishing twine production as a fixed responsibility.

6.14. The Committee are surprised to note that while four firms have been licensed for the manufacture of nylon yarn required by the fishing industry, only one of them, namely, M/s. Garware Nylons, is manufacturing nylon required by the fishery industry. The Committee would like this matter to be looked into as they understand that manufacturing units find it more profitable to manufacture high grade nylon apparel for wear rather than manufacture fishing twine and nets.

6.15. The Committee also suggest that the requirement of fishery industry in regard to electronic equipments like echo sounders, etc. may be

met by imports, preferably under some Trade Agreements, till such time the demand is sufficient to justify indigenous production.

C. Frozen Storages, Ice Plants and Water Facilities

6.16. For the development of the fishery industry provision of frozen storages is a necessity. The Central Board of Fisheries at their meeting held in October, 1965, stressed the need for establishing freezing plants and frozen storages in important landing and consuming centres so as to utilise the abundant landings in certain seasons and avoiding waste of such valuable food or fish.

6.17. The Committee have been informed in a written note that the State Governments concerned requested the Central Government to consider setting up of large frozen storages of 250 tons and 100 tons capacity in the following places:

250 tons frozen storage plants	100 tons frozen storage plants
(i) Mormugao	(i) Delhi
(ii) Malpe	(ii) Calcutta
(iii) Mangalore	(iii) Hyderabad
(iv) Cochin	(iv) Madras
(v) Bombay	(v) Poona

A decision was taken that Centre would sponsor fully such storages as part of the harbour development programme but the rest would be in the State Sector. This proposal was examined in consultation with the Planning Commission and the Ministry of Finance and it was agreed that refrigeration facilities such as ice and cold storage, freezing plant and frozen storages would be provided at the important landing centres under the centrally sponsored harbour scheme and also the Central sector major fishing harbour scheme. It has further been stated that Centrally sponsored storages have been included in the harbour proposal for Bombay, Madras, Tuticorin, Vizakhapatnam and Mangalore.

618. The Committee have been given to understand that several maritime States have initiated action to provide frozen storages.

6.19. In Andhra Pradesh, ice-cum-cold storage plants are functioning at the following places:

1. Visakhapatnam With 20 tons ice making capacity and 350 tons storage capacity.
2. Hyderabad With 2 tons ice making capacity and 4 tons storage capacity in addition a flake ice plant of 3 tons capacity is also installed.
3. Rajahmundry A walk-in-cooler of 2 tons storage capacity.
4. Nizamasagar With a 2-ton ice making and 4 ton fish storage capacity.
5. Tadepalligudem With 5 tons ice making capacity and 10 tons fish storage capacity.

6.20 At the following places ice-cum cold storage plants and deep freezing plant are under erection :

1. Visakhapatnam Deep Freezing plant ; 2½ plate freezer & 50 tons Deep Freeze Storage.
2. Nellore 10 tons ice making capacity and 20 tons fish storage capacity.

6.21 At the following places ice-cum-cold storage plants are working under the fishermen cooperative or other private sectors :

1. Amalapuram With 5 tons ice making capacity and 10 tons fish storage capacity by Central Delta Fishermen Central Cooperative Society.
2. Kakinada With 15 tons ice making capacity and 120 tons fish storage capacity by M/s. Fish Products Limited.

6.22. It has been stated that the above storages will meet the needs of the State.

6.23. In Kerala the fast growth of fishing and consequent increased fish landings necessitated the organisation of proper fish landing centres and harbours and of fish landing establishments. There was a simultaneous increase in the ice and storage facilities to handle the catches and to keep pace with the growth of processing of exportable varieties of fish. During the Third Plan there were 11 ice plants in the public sector with a combined production capacity of 320 tons of ice per day. Five ice plants in the public sector and 21 ice plants in the private sector were in various stages of construction and these when completed would raise the total production capacity to 550 tons per day. Fourteen freezing factories were commis-

sioned in the private sector. These with the fourth freezing plants in the public sector have a freezing capacity of 183 tons and a canning capacity of about 40 tons per day. The State has plans to augment the freezing capacity during the coming years.

6.24. In Madras a number of ice and cold storage plants have been set up by the Fisheries Department in important marine and inland fishing centres for the preservation and storage of fish. There is an increasing tendency for the use of ice for fish production. The practice of keeping the fish in the cold storage is however only getting a slower response. It has been stated that the present capacity of the ice plants is 30½ tons daily and the storage capacity of the cold storage is 73½ tons. These will go up to 82½ tons ice and 131½ tons storage as soon as all the plants are commissioned.

6.25. In Gujarat there are 83 ice and cold storages in the State having a total capacity for storage of fish of 5284 M. tonnes. It has been stated that this capacity is inadequate and therefore a scheme to encourage setting up of more ice and cold storage is included in the State Plan. The State Government also gives subsidy at the rate of 25% for setting up of plants by a cooperative or an individual.

6.26. In West Bengal a cold storage has been constructed at Howrah which would accommodate about 160 tons of fish. More cold storages will be constructed as and when necessary.

6.27. As regards Maharashtra, it has been stated that during recent years a good number of ice and cold storages have been established in the cooperative and public sector, but with the fast growth of industry, the pace is not adequate. Steps are being taken to provide incentive to cooperatives of fishermen in the State for establishment of ice and cold storage factories during the Fourth Five Year Plan.

6.28. The State Government of Mysore proposes to undertake coordinated fisheries development at six centres, namely, Mangalore, Malpe, Gangolli, Bhatkal, Honnavar and Karwar during the Fourth Five Year Plan. For this purpose, establishment of six marine projects at these places is proposed. The development of fisheries under the Indo-Norwegian Project at Karwar is included in this. These Projects would *inter alia* include provision of preservation and processing facilities for fish, with ice, cold storage, freezing, canning and salt curing.

6.29. The Committee attach considerable importance to frozen storages in the development of fisheries in the country. These storages not only provide economic return to the producer but supply good quality fish at

reasonable rates to the consumers. The Committee note that the Fisheries Departments in maritime States as well as the industry are taking energetic steps to augment the existing storage facilities. They hope that the assistance provided by the Central Government (30 per cent loans and 20 per cent grants) would be fully utilised by the State Departments of Fisheries, and that the State Governments would continue to provide the necessary subsidy to cooperatives and individuals for setting up frozen storages.

6.30. From the project report for the development of fisheries prepared by the Marine Products Export Promotion Council, the Committee gather that the installed capacity of the freezing factories in Kerala, Mysore and Maharashtra is not being fully utilised. The Committee would therefore like to stress that the installed capacity of the freezing factories should be fully utilised before any new schemes are drawn up for setting up additional units in those areas. The Committee hope that the Central Government which is concerned with the setting up of freezing plants and frozen storages in major and minor ports, would take expeditious action to activate the scheme in this regard so that freezing facilities may be available to the industry as well as to the Fishermen's Cooperative Societies at reasonable rates without delay.

6.31. Alongside the provision of frozen storages, the Ministry may, in consultation with the State Governments, make arrangements for providing adequate supply of ice required for preserving the catch. Provision of water for processing units is also very important. The Committee understand that in some States, the cost of water per thousand gallons comes to about Rs. 8.00 which is on the high side. The Committee hope that this matter would be looked into by the Government.

6.32. Yet another important factor which merits careful consideration is the peeling sheds. The Committee understand that there are several peeling sheds in the rural areas which are mostly thatched sheds and are not hygienically maintained. The Committee would stress the need for setting up of good peeling sheds suitably equipped for hygienic handling and storage of marine fishes prior to their despatch to the main factories.

6.33. The Committee also suggest that, as far as possible, canning units should be set up along with the freezing units. This should ensure more economical working of the canning units.

6.34. Another matter which requires urgent consideration is the need for research and devising scientific methods for improving the techniques of drying fish by artificial methods.

D. Subsidiary Industries

6.35 It has been stated that the following are the subsidiary industries to the fishery industry:

1. Production of Fish Meal.
2. Extraction of fish body oil—preparation of paints, lubricating oil and printers' ink from fish body oil.
3. Extraction of liver oil.
4. Fish protein concentrate.
5. Bacteriological peptone.
6. Manufacture of useful products from prawn waste.
7. Ensiled products from trash fish.
8. Leather from shark skin.
9. Manufacture of shark fin rays.
10. Isinglass from the air bladder of fish.
11. Fish sauce.
12. Prepared foods like fish flake, fish soup powder, breaded fishery products, fish paste, fish concentrates and fish noodles.
13. Boat building.
14. Marine Engine manufacture.
15. Manufacture of mechanical fishing accessories like winches, gurdies etc.
16. Twine and rope twisting.
17. Net making.
18. Manufacture of floats and sinkers.
19. Manufacture of electronic fish detecting devices.

6.36 Asked about the steps that have been taken to develop each of the above subsidiary industries, the Ministry have, in a written note, stated as under:

(1) *Fish Meal*.—Investigation have been going on at the Bombay Unit of the Central Institute of Fisheries Technology to study the various aspects of preparation of fish meal. These studies also included the changes in the nutrition value of meals prepared from mixtures of miscellaneous fish. Necessary data on the production of fish meal from some of the suitable varieties of fish have been collected. Two 8 ton (raw fish) plants, one at Jaffarabad and another at Bombay, are now operating. Two bigger plants, one at Goa (20 tons) and the other at Malpe (35 tons) are not in operation due to shortage of raw materials at low price and other reasons.

It has been stated that with the increased efforts with mechanized fishing there is bound to be an increase in the landings of cheap varieties of fish. It is estimated that the amount of trash fish landed by a shrimp boat sometimes goes upto 70 per cent. Besides large quantities of sardine will be available along the Malabar Coast during seasons for reduction into fish meal. Along the Cape Comorin and Tuticorin Coasts large quantities of silver bellies are also landed during certain seasons. A unit for the production of fish meal from the latter species is already being established in Mandapam under the aegis of the Indo-Norwegian Project. At present landing centres are distributed far and wide so that no one centre can provide raw material for operation of a large fish meal plant. With the development of fishery harbours, the landings when concentrated will provide raw material. The present requirements are for the establishment of smaller units of $\frac{1}{2}$ to 1 ton capacity of finished products per day at the various fish landing places.

(2) Fish body oil industry has been well established on the Malabar Coast, with an annual production of approximately 2000 to 3000 metric tons. The main source for this oil is oil sardine and the production is on a cottage industry level. The quality of the oil produced has been found to be poor so that the bulk of it is at present used for painting wooden fishing boats.

Investigations were taken up by the Central Institute of Fisheries Technology on the two important aspects of this problem viz. (i) standardisation of a method for the preparation of quality oil to such existing commercial condition now; (ii) estimation of the possibility of preparing products for industrial purpose. As a result a method has been worked out, demonstrated and popularised. Detailed procedures have also been worked out for the preparation of water repellent paints, lubricating oil for marine engines, factice and printing ink from sardine oil.

(3) Three Shark Liver Oil extraction plants are already operating in the public sector (Bombay, Veraval, Calicut and Trivandrum). Work connected with the purification, concentration, factification and preparation of additional products are carried out in these factories.

(4) Fish protein concentrate—odourless fish flour for human consumption: A method for the preparation of odourless fish flour from both dressed and whole trash fish has been worked out by the Central Institute of Fisheries Technology. It is proposed to work this method in the pilot scale soon.

(5) Bacteriological peptone from trash fish; Methods have been worked out in the Central Institute of Fisheries Technology for the preparation

of bacteriological peptone from dressed trash fish. The product is comparable to Difco samples which are at present imported. This method also is expected to be operated on pilot scale soon.

(6) The Central Institute of Fisheries Technology has been investigating on the utilization of large quantities of shrimp waste available from prawn freezing and canning factories. Methods have been worked out to extract pure protein, and compounds like glucosamine hydrochloride and cholesterol. The possibility of preparing animal feeds from prawn shell waste has also been established.

(7) The possibility of utilizing whole trash fish in a semiliquid form for use as poultry and cattle feed has been worked out and demonstrated to the trade by the C.I.F.T. The product is stable for over 2 years, is devoid of fishy odour and can be transported in cheap containers.

(8) The Veraval Sub-station of the C.I.F.T. has evolved a method for the preparation of high quality leather from shark skin.

(9) Work on the preparation of shark fin rays of exportable quality is being carried out at the Bombay Unit of the C.I.F.T.

(10) Preparation of isinglass is being carried out on a semi-commercial level in the Bombay region. The investigation connected with this product is being carried out by the Maharashtra State Fisheries Technology Laboratory, Bombay.

(11) The possibility of preparing fermented sauces from certain varieties have been proved by work carried out at the C.I.F.T. Unit at Calicut. Standardisation of the method for this is under way.

(12) In view of the large scope for export of prepared foods from fish investigations have been taken up by the C.I.F.T. As a result of these studies methods have been standardized for the preparation of fish flake, fish concentrates, fish paste, fish noodle, fish soup powder, and breaded fish products.

(13) Layout of boat yards have been prepared and provided and several yards have been established. Design of fishing boats have been made and are provided at a nominal cost to interested parties.

(14) Indigenously manufactured engines are being tested for quality and performance. Drawings showing installation details are provided to builders and other interested parties.

(15) Designs of winches and gurdies with the power take-off arrangements are being provided to manufacturers as well as boat owners.

(16) Specifications of twines and ropes with different materials have been drawn up and are provided to manufacturers as well as other interested parties. Advice is also being given for the proper layout of twisting

factories. Materials are also tested in the laboratory for the quality standards.

(17) Designs of various classes of nets have been made and are supplied to interested parties at a nominal cost. Advice is also given for the machinery and the proper layout of the net making plants.

(18) Specifications of floats and sinkers were being provided to manufacturers and material manufactured were given tested for quality standards.

(19) Specifications and drawings of electronic equipments were being provided to the manufacturers. The equipments made were also being tested in the laboratory and suggestions made for improving the efficiency of each equipment.

6.37 The Committee wanted to know how far research at the various research centres is industry-oriented. In a written note, the Ministry have stated that all the Fishery Research Institutes conduct research with a view to apply the results to the fishery industry. The Central Marine Research Institute besides studying the biology of the fishes and analysing the oceanographical data, also collects the statistics of catches and biologically interprets the nature of the fishing ground covered by the deep sea fishing exploratory vessels of the Government of India. The entire research is oriented to prediction of the fishery in the future and the potentialities of the various areas.

6.38 The Central Inland Fisheries Research Institute undertakes research on all aspects of inland fisheries including development of induced breeding techniques and improved methods of fish culture and exploitation.

6.39 The Central Institute of Fisheries Technology is in direct touch with the fishing and processing industries, observing the day to day problems and solving them experimentally as well as on commercial scale in collaboration with the private industry. The research work relates to designing of new types of boats, giving direction to boat building-yards regarding the suitability of various materials to be used, evolving new techniques and material in the use of construction of boats and gear, advising the processing industries on improved methods of handling and processing of fish etc.

6.40 As to the steps taken to make research industry oriented, it has been stated that these include the following:

(1) Giving facilities to research workers at the CMFRI to conduct oceanographical study by permitting them to go on board the vessels of the Government of India, State Governments and INP.

(2) Publication of the results of exploratory fishing in the local languages to give the widest publicity possible to help private industry to take up fishing.

(3) Demonstration of improved techniques in fish culture to the public and issue of pamphlets for the general use of public.

(4) Helping the research workers at the CIFT to be in close contact with the private industry and providing all the necessary equipment for conducting research on specific problems confronted by the industry.

(5) Setting up Sub-stations and Units in various parts of the country so that research may be oriented to solving the local problems of the industry.

6.41. The Central Institute of Fisheries Technology looks into the problem of fishery industry in particular. The Institute consists of two branches, namely, Craft and Gear; and Processing. Between them all the technological problems of the fishery industry are covered.

6.42. The Committee note the efforts being made by the Ministry to develop subsidiary industries of the fishery industry in the country. They would like to stress that by-products and the processes being developed by the research institutes, specially the Central Institute of Fisheries Technology, should be commercially exploited. The industry should be encouraged to utilise the techniques evolved by the Central Fisheries Research Institutes in the proper exploitation of the fishery resources. The Committee would suggest that in the research programmes of the technological research institutes under the Centre and the States, priority may be given to the development of such by-products as fish protein concentrates, bacteriological peptone, fish flake, etc., which have great potentialities for providing protein food to the under-nourished sections of the population. The Committee have already emphasised the need for intensifying research on fish protein concentrate in para 2.46. of their Thirty-Eighth Report on the Ministry of Food, Agriculture, Community Development and Cooperation (Department of Agriculture)—Central Institute of Fisheries Technology, Ernakulam. The Committee hope that the Central Government would provide the necessary technical assistance to the States in the setting up of subsidiary industries.

E. Financial Assistance (including assistance to cooperatives)

6.43. The pattern of assistance given by the Central Government during the Third Five Year Plan was stated to be as follows:—

<i>A. State Plan Schemes</i>	<i>Grant</i>	
1. Education and Training	N.R. R.	75% 50%
2. Research Surveys and Demonstration	<i>Grant</i>	50%

3. Ice Plant and Cold Storage	<i>Subsidy</i>	25%
	to be shared equally	by Centre and States
	<i>Loan</i>	75%
4. Mechanisation of fishing boats (for engines only)	<i>Subsidy</i>	50%
	to be shared equally	by Centre and States
	<i>Loan</i>	50%
5. Provision of landing and berthing facilities at minor operations	<i>Loan</i>	50%
	<i>Grant</i>	50%
6. Inland fisheries—Distribution of fry and fingerlings and stocking of fish	<i>Grant</i>	50%
B. Centrally Sponsored Schemes		
Loans to Fisheries Cooperatives	<i>Loan</i>	100%
C. Statement showing pattern of Central Assistance for various schemes under Crash Programme.		
(i) Landing and Berthing facilities	<i>Grant</i>	50%
	<i>Loan</i>	50%
(ii) Approach Roads	<i>Loan</i>	100%
(iii) Refrigerated Transport	} <i>Grant</i>	25%
(iv) Cold storage and processing facilities		<i>Loan</i>	75%
(v) Agencies for financing production, processing and marketing	<i>Loan</i>	100%
(vi) Inland Fisheries	<i>Grant</i>	50%
(vii) Training	<i>Grant</i>	100%
(viii) Supervisory staff	<i>Grant</i>	50%
	The balance to be met by the State.	

6.44. The Ministry have stated that now the pattern of assistance from the Central Government to the State Government for all fishery development schemes in the State sector is 20 per cent grant and 30 per cent loan. The Central Government gives 100 per cent grant to the State Governments for development of minor fishing ports. There is no provision for grant for fishing vessels or fish processing plants to private enterprise.

6.45. The Working Group on the Fourth Five Year Plan for Fisheries has emphasised the need to make available adequate capital for rapid expansion of the fisheries industry through governmental sources. "This is of vital importance if fisheries were to be emancipated from the present condition under which the fish wholesale merchants and the village money-lenders provide limited finance to the fishing industry, aimed primarily at keeping the primary producers at the subsistence level. The position is further aggravated by the reluctance on the part of banks to provide financial accommodation to the entrepreneurs (both private and cooperative) who may be willing to take up large development projects. The Working Group recommended that in addition to provision of capital, development expenses including working capital should also be made available for the industry." The Working Group further emphasised the need for early decision in regard to the agencies which would provide additional capital to the industry, as well as the rate of interest on par with agricultural loans.

6.46. The Central Board of Fisheries also, at its meeting held in December 1962, recommended that the capital required for the fishing industry should be made available on par with agriculture. Another alternative recommended was to give Government guarantees for the loans obtained from the banks by industry.

6.47. At its meeting held in November, 1965, the Board recommended that the pattern of financial assistance to the Fisheries Cooperatives as in the Third Plan should be examined in greater detail for continuance in the Fourth Plan or for modification in such a manner that financial assistance from the Government and the banks were made available for fisheries cooperatives in time as in agriculture or industry.

6.48. In a statement showing action taken on the recommendations made by the Central Board of Fisheries, the Ministry have stated that the pattern of assistance to fisheries cooperatives was taken up with the Planning Commission which did not agree for retention of the scheme as Centrally sponsored Scheme. As such the scheme has been transferred to the State Sector.

6.49. As regards the question of providing credit to the Fisheries Cooperatives on par with the Agricultural Cooperatives, the Ministry have stated in a written note that the matter was taken up again and again with the Reserve Bank of India and in a reply in June, 1966 the Reserve Bank had stated that according to the recommendations made by the Study Group on Fisheries Cooperatives, working capital requirements of Fisheries Cooperative Societies should be made available by the Government as provided for in the Fourth Plan. The Reserve Bank, therefore, felt that the question of treating the Fisheries Cooperatives on par with the Agricultural Coopera-

tives in the matter of provision of credit facilities at low rate of interest by making necessary amendment to the Reserve Bank of India Act does not arise.

6.50. In a written material furnished to the Committee, it has been stated that "during the Third Five Year Plan, a provision of Rs. 100 lakhs was made under a Central scheme entitled 'Loan to Fisheries Cooperatives' in order to provide loan assistance to fisheries cooperatives through the State Governments for undertaking large-scale operations in fisheries, fish processing and fish marketing. The scheme was operated as a Centrally-sponsored scheme. The fisheries cooperatives were requested to formulate commercially feasible schemes and send them through their State Governments to the Government of India for technical approval and sanctioning of the loan. Since certain criteria were laid down for eligibility to the loan, the State Governments strengthened the share capital and toned up the organisational set-up before recommending the cooperatives to the Government of India for grant of loans. Several cooperative societies in Gujarat, Maharashtra, Mysore, Andhra Pradesh and Orissa were benefited by the scheme and the total expenditure incurred during the Third Five Year Plan was Rs. 72.77 lakhs."

"The assistance provided by the Government of India during the Third Plan gave a fillip to the cooperative movement in fisheries. No provision has been made for Central assistance to fisheries cooperatives during the Fourth Five Year Plan." It has further been stated that "an attempt has been made to obtain loan from the Agricultural Refinance Corporation at least for a few viable units already proved successful in the cooperative field for selected items. A loan of about Rs. 89 lakhs has been secured by a fisheries marketing federation in Mysore State and similar approach is being made by the fisheries cooperatives in other States like Gujarat, Maharashtra, Andhra Pradesh, Madras, West Bengal, etc. The finance available from the Agricultural Refinance Corporation is limited in scope and would only partially meet the credit requirements of the fisheries cooperatives in the context of the expansion envisaged during the Fourth Five Year Plan. It is also envisaged that 50 per cent of the production and marketing of fish in the country would be carried out through fisheries cooperatives as against about 3 per cent during the Third Plan period. The final solution for obtaining credit by the fisheries cooperatives would no doubt depend on the availability of financial accommodation from institutional sources and such an accommodation will not have the necessary impact unless fisheries is recognised as a seasonal operation under the purview of the Reserve Bank of India Act."

6.51. Asked to state the present position regarding the provision of capital to the industry and to the cooperative sector, the representative of

the Ministry has stated during evidence that the Reserve Bank has agreed to raise the credit limits of Central Cooperative Banks to meet the requirements of properly functioning cooperatives. For the purpose of institutional financing for large fishery trawlers, the Reserve Bank has agreed to give hire-purchase and deferred payment terms through the commercial banks. The Reserve Bank will give loans to commercial banks on 5 per cent rate of interest and the commercial banks would charge 7 per cent interest from the entrepreneurs. He has further stated that commercial banks cannot take up individual cooperatives but they have agreed that if Central Cooperative Banks are prepared to take finance from them on compact area schemes they may be able to finance them. He has assured the Committee that fisheries will now be taken as part of the agricultural development. Details are now being settled with the banks.

6.52. In this connection, it would be worthwhile to specify the types of assistance given by some of the advanced countries for the fishery industry:

NORWAY:

Loans are granted from the fishery bank which is a State Corporation having the objective of financing the fishing industry. The Bank makes loans to the fishing fleet for the following purposes:—

- (i) Acquisition of new vessels;
- (ii) Acquisition of second-hand vessels;
- (iii) Necessary conversion of loans on vessels;
- (iv) Rebuilding and repair of vessels and purchase of equipment;
- (v) Purchase of gear.

Loans on vessels are secured by mortgage—first or second—in the vessel and by a lien in her insurance policy. Loans for the purchase of gears are secured by mortgage which comprises all the gears the applicant owns at the time of his application as well as that which he acquires later on. The period of repayment for loans on first mortgage on wooden vessels is 12 years. For the second mortgage loans the Bank may exempt the borrower from repayment in the first two years, after the loan has been granted.

Loan on vessels, first mortgage, $3\frac{1}{2}$ per cent interest.

Loan on vessels, second mortgage, 2 per cent interest.

JAPAN:

The Agriculture, Forestry and Fisheries Finance Corporation is empowered to make the loans. Loans for improvement, construction or purchase of fishing vessels may be made to co-operatives including both co-operatives engaged in fishing and credit co-operatives and to individuals or firms engaged in fishing. Loans may be made to individuals and undertakings other than co-operatives only if their number of regular employees is under 300 and the gross tonnage of fishing vessels operated is below 1000 tons. Loans may also be made for acquisition of ropes and nets, made of synthetic fibres.

Loans must normally be repaid over a period of 10 years or less, usually at an interest of $7\frac{1}{2}$ per cent per annum. No repayment of principal is required during the first 2 years. Loans are usually limited to 60 per cent of the cost of the project and a maximum limit for loan has also been fixed.

Loans to co-operatives and other undertakings are normally secured by mortgage of the vessel and by a personal guarantee from the Directors whereas loans to individuals are normally secured by mortgage of assets of comparable value and by a personal guarantee from at least 4 persons.

U.S.A.

Loans are made by the Secretary of the Interior or his authorised representative under the Fish and Wild Life Act 1956. The Act created the Fisheries Loan Fund and it is used as a revolving fund. Any person in any State of U.S.A. is qualified for financial assistance if such a person:

- (i) owns a commercial fishing vessel of United States registry;
- (ii) owns any type of commercial fishing gear;
- (iii) owns any property, equipment or facilities useful in conducting research into basic problems of fisheries;
- (iv) is a fishery marketing co-operative engaged in marketing of catches of fish or shell fish by the Members.

Loans may be made for financing and refinancing operations, maintenance, replacement, repair and equipment of fishing gears and vessels, etc.

The loans will bear an interest of not less than 3 per cent per annum.

U.K.

Grants for acquisition of new fishing vessels upto 140 feet in length and new engines are granted under White Fish and Herring Fish Industries

Act, 1953. The Herring Industries Board and the White Fish Authority operate the grants. The normal rate of grant is 25% of the expenditure incurred in acquiring a new vessel or a new engine or for conversion of old vessels to oil-firing or diesel propulsion. Grant is generally upto £ 15,000, but grants are made upto £ 30,000 per boat. Loans are normally limited to 60% of the cost of a vessel, engine or conversion. The period of repayment varies from 5 to 15 years. Sixty per cent loan is also granted for nets and gears.

FRANCE:

Decree No. 54—306 of 18th March, 1954, as amended by Decree No. 55—192 of 20th January 1955, governs the grants and loans provided by the Government for modernisation of fishing boats. Lump-sum grants are provided to French Shipyards for building and repair of fishing boats of over 50 tons, in order to cover the difference between the cost of ship building in France and in other countries. A loan of 75% is provided for construction of boats, purchase as well as acquisition of new nautical instruments, ship building materials and engines.

6.53. The Committee note that the pattern of Central Government assistance during the Third Plan was 50% grant generally on all schemes except on the scheme "Loans to Fishermen's Cooperative Societies" which was a Centrally sponsored scheme and on the scheme for mechanisation of fishing boats for which a grant calculated at 50% of the subsidy allowed to engines was given. The Committee also note that the quantum of assistance has been scaled down further after the termination of the Third Plan period, the present quantum of assistance being only 20% grant and 30% loan. There is also no provision for direct Government grant for fishing vessels or fish processing plants to private enterprise. The Committee feel that the present scale of Government assistance is inadequate and it has to be considerably augmented so as enable the States to undertake the development activities envisaged during the next Plan period. They also consider the present arrangements in regard to provision of credit to the industry and to the Fisheries Cooperatives are not satisfactory. They suggest that new methods of financing fishing industry should be explored including, if necessary, the establishment of fisheries credit banks or corporations as are in operation in some of the advanced countries.

6.54. The Committee note that the Reserve Bank has very recently agreed to give credit to private entrepreneurs through commercial banks. They hope that the details of the terms of credit to be extended by the Reserve Bank to the commercial banks in this regard would be finalized at an early date so that the fishery industry can obtain the much-needed finance for purchase of large fishing vessels.

6.55. As regards finances for the Cooperative Societies, the Committee would urge that till other suitable and firm arrangements for meeting the financial requirements of the cooperative sector are made, the Central Co-operative Banks should be encouraged to meet the working capital requirements of Fisheries Cooperative Societies and for this purpose the Reserve Bank should raise, at an early date, the credit limits of such banks so as to enable them to meet the requirements of Fisheries Cooperatives!

F. Fisheries Cooperatives

6.56. In a written note furnished to the Committee, it has been stated that during the Third Five Year Plan the number of societies increased from 2,538 to 3,177 and the number of members from 2.68 lakhs to 3.21 lakhs. The turn over also increased from Rs. 1.44 crores to Rs. 3.31 crores. Apart from the general improvement registered in the working of the cooperative societies, many societies had taken up remunerative schemes for production, processing and marketing including export. The diversification of their activities in various fields of fisheries industry has also infused certain degree of confidence in the cooperative societies and there is a general trend to take up large ventures with substantial outlay provided adequate institutional finance is available.

6.57. It has also been stated that "it is also envisaged that at least 50% of the production and marketing of fish in the country would be carried out through fishery cooperative as against 3% during the Third Plan." The following measures have been taken by the Government to achieve 50% targets of production through cooperatives:

(i) The State Governments have been advised to eliminate uneconomical cooperative societies and revitalise the societies which have potentialities and bring into being additional units of 1,900 inland societies, 1,500 marine (indigenous) societies, 100 marine (mechanised) societies, and 220 marketing federations.

(ii) Special efforts are being made to organise cooperatives in and around fishing harbours, reservoirs, lakes, bheels, irrigation tanks etc.

(iii) The organisation of cooperatives would take the form of primary societies, federations and apex societies. Ten to fifteen primary societies would be covered by a marketing federation and these federations would be located at places where marketing potentialities exist. The primary societies would be organised in contiguous areas and the primary as well as marketing societies would cater to the entire economic need of the fishermen community in the area without leaving any gap or the fisherman to stray away from the cooperative fold.

(iv) To facilitate increased production, not less than 50% of the provision for the development of fisheries during the next Plan would be

made available to the Cooperatives. In practice the State Governments have been endeavouring to spend as much provision as possible through cooperative societies.

6.58. The Committee have been informed that in some of the States like Bihar, U.P., West Bengal, Madhya Pradesh, Orissa etc. the fishery cooperatives are entirely under the control of Cooperation Departments. In other States like Madras, Kerala, Mysore, etc. the Fishery Departments administer the cooperative societies with the help of a Cooperative Cell for which staff have been drawn from the Cooperative Departments. Although the fishermen cooperatives can be administered entirely by the elected members of the Board of Directors, it has been found that in the initial stages it is necessary to guide the cooperatives and have control over the functions by appointing Government officials as *ex-officio* Presidents and Secretaries of the Societies. This has also been found necessary due to the fact that if the cooperatives are left to themselves, the vested interests like merchants and middlemen gain control over the cooperatives to the detriment of the cooperative movement itself. After an initial period of three to five years, many of the cooperatives manage their own affairs but they are constantly guided in the technical aspects of the programmes undertaken by the Cooperatives. Since large share of the credit made available to the Cooperatives is from the Government certain amount of Governmental control has been found necessary.

6.59. The Committee have also been informed that the Study Group on Fishery Cooperatives has recommended that at least 3,500 primary societies each with 150 members, covering about 5.25 lakhs fishermen comprising of more than 60% of the active fishermen population in India should be organised during the Fourth Five Year Plan. The Study Group has also recommended that a comprehensive survey should be undertaken by each State Government to identify the viable and non-viable units and strengthen them financially and organisationally.

6.60. In a written note furnished to the Committee, the Ministry have stated that in accordance with the recommendations of the Study Group on Fisheries Cooperatives, the State Governments have been advised to undertake such a survey.

6.61. The Committee attach considerable importance to the development of cooperatives for undertaking distribution of fishery requisites, manufacture of nets, processing of fish and marketing. The cooperatives can also play a useful role in the field of boat building. The Committee consider it imperative that efforts should be made to revitalise the primary societies and link them up with marketing federations. Maximum possible credit should be given to the primary societies through the marketing

federations so that the cooperatives are not compelled to seek loan from merchants and middlemen to the detriment of the cooperative movement itself.

6.62. The Committee commend the efforts made by the Ministry to achieve 50% targets of production through cooperatives. They hope that the Ministry would keep a continuous watch over the progress of the co-operative societies in the States and assist the State Governments in the technical aspects of the programmes undertaken by the cooperatives.

6.63. The Committee would like to stress in this connection the need for careful approach in the matter in order to ensure that the people genuinely engaged in fishing and fisheries are benefited through the co-operatives and middlemen, profiteers and other foreign elements are kept out of such societies.

6.64. Now that the Reserve Bank has agreed to provide increased capital to the Central Cooperative Banks for financing fisheries cooperatives, the Committee hope that it would be possible for the State Governments to strengthen the non-viable units financially and organisationally so that there may be a general levelling up of the fisheries cooperatives in the States.

G. Marketing of Fish

6.65. The Committee desired to know the existing arrangements for marketing of fish within India and whether these were adequate; and the steps taken to ensure that as far as possible genuine fishermen benefited from the system of distribution and marketing of fish. In evidence the representative of the Ministry has stated: "Marketing is still mostly in the hands of middlemen mostly. Cooperative marketing as such is only making a very slow progress. States have encouraged the fishermen's cooperatives by giving them preference in getting the facilities to put up storages or utilising Government storage, transport, refrigerated sealed cabinets etc. But cooperative marketing as such is not developing with all these facilities given to the cooperatives. In the fisheries marketing, the middlemen have a very large say today in the country and the problem is how to get over this. We cannot say we have even succeeded anywhere—I mean the position is bad."

6.66. Asked to clarify whether in the development of cooperative marketing the bottleneck existed at the State Government level or elsewhere, the representative has stated in evidence: "The catching is in one area, marketing is in another area. Cooperatives are localised. That is fishermen of a certain area catch the fish. They have to take the help of somebody else. or their organisation should move locally to another

centre, to sell. Now unless there is a sort of all India cooperative fisheries organisation, or a federal unit, or a thing like that, which can help each other on the marketing side and the fishing side, it is difficult for a localised unit to go and sell in another area. Then they have to go and compete in an established market where already the middlemen have got some sort of a monopoly in the area. In fact they control the fish. For example, even when the Cooperative Societies in Chilka Lake wanted to go to Calcutta and sell it, we did try but we failed miserably, because as soon as this fish went, the market was pushed down, or the fish was not removed in time. So we had to lose. We are working against very powerful units. That is why even with all this idea of Central Fisheries Corporation trying to help them, the progress is very slow. The cooperatives are not linking up with us and secondly even the few who are coming forward, are being weaned away by middlemen who are coming actively in the picture and offering a slightly higher price. Ultimately they fall into the trap. The basic problem is this. Not only in fisheries cooperatives, in all producers cooperatives in the agriculture sector, the producers cooperatives and the consumers cooperatives have not linked up. Even today this is the position. And our problem has been how to get these two to come together. Something like that we have attempted here in the Central Fisheries Corporation and also in the State Corporations. Even these things are not moving very satisfactorily."

6.67. In the course of their study visit to Calcutta in October, 1967, the Study Group of the Estimates Committee were informed that fishery cooperatives in West Bengal had been formed with groups of fishermen living generally in around a number of tanks situated in close proximity of one another. But most of the fishermen were so poor that they could not even buy a single share to become members of the societies. Another bottleneck in the way of successful implementation of the cooperative scheme had been the dearth of executive officers with managerial talent, leadership, knowledge of working of corporate business etc. A further snag in the operation of the scheme had been want of proper linking of primary with central societies. In many societies the hold of middlemen is so great that the main benefit goes to a few. Such malpractices can be checked if there are efficient executive officers.

6.68. In this connection the question of supply of fish to the Calcutta market and the need to reduce the high sale price came up for discussion. The Study Group had been informed that the quantities of fish procured by the Central Fisheries Corporation had been very modest in comparison with the total demand and usual supply in the Calcutta market. It had, not, therefore, been able to create any impact by and large on the price structure. It has been felt that the monopolistic ring of the wholesalers in the fish market could only be broken when they would be in a position

to procure significant quantities of fish at reasonable rates and market them in Calcutta. The organisation had been tapping sources throughout the country and had been directing their efforts largely towards undertaking measures both long term and immediate to increase supplies. They expect that by obtaining lease of more reservoirs throughout India for exploitation and by opening of stalls in the Calcutta market and in the city of Calcutta, they would be able actually to overcome the difficulties and attain the objectives for which the organisation had been set up.

6.69. The Committee note the efforts being made by the Central and State Governments to improve the marketing and other facilities for the fishermen through cooperative societies. In the opinion of the Committee, however, many of the cooperative societies are not well-organised; nor many of the people who are members of the cooperative societies well-educated; and most of them have not the economic stamina to run the societies effectively. These appear to be some of the built-in difficulties of fishermen's cooperatives. The Committee, therefore, feel that what the Government will have to do in the matter is to build up the organisation from above and the organisation should trickle down from above to the lowest level so that the system can be more broad based and more securely and economically organised to bring in maximum benefit to the poorer sections of the fishermen.

6.70. As regards supply and marketing of fish to Calcutta, the Committee feel that the impact of the Central Government organisation in increasing supply to the Calcutta market and thereby breaking the monopolistic ring and the ruling high prices of fish in the market has not at all been significant. To achieve this object, a net work of reservoirs and other sources throughout the country has to be established for exploitation. Efforts are also to be made to open departmental stalls to curb the prevailing high prices. They hope the energy of the authorities concerned would be directed to this end.

CHAPTER VII

MOVEMENT OF FISH BY RAIL

7.1 Considering the need for expending market facilities for catches from production points which had developed in the country, the Government decided to provide quick transport facilities for fresh fish to be transported over long distances and to have six refrigerated rail vans on an experimental basis during the Second Five Year Plan. The refrigeration equipment was received from T.C. M. as a gift and the Government of India incurred the expenditure on construction of the chasis and the body at its own cost. Six refrigerated vans each with a capacity of 15 tons payload and with facility to maintain the temperature at $32^{\circ}\text{F} \pm$ were put into operation on different potential routes. It has been stated that after trials on a number of routes some of which proved uneconomical due to difficulties in attaching these vans to convenient and fast trains and due to slow response from the merchants, the vans are now being successfully operated in Calicut-Madras, Vijayawada-Calcutta and Palasa-Calcutta routes. The average load per day is more than the quantity anticipated and all the vans are utilised to full capacity. Originally, these vans were intended to be run entirely by the Ministry of Food, Agriculture, Community Development and Cooperation under the operational charge of the Ministry of Railways but, later, by 1965, the entire responsibility of running and maintaining the vans was handed over to the Railways.

7.2. Until the first April, 1965, the Ministry of Food and Agriculture was required to make good the loss in operation. At an inter-departmental meeting held in 1964, the entire question was reviewed and it was decided that while the capital cost of the vans would be made by the Ministry of Food and Agriculture, the vans would be handed over to the railways thereafter and no further payment should be made to them on account of the operational losses.

7.3. During the Third Five Year Plan, a provision of Rs. 90 lakhs was made for construction of 20 similar refrigerated vans. It has been stated that due to certain difficulties like difficult foreign exchange position and delay in arrival of equipment ordered abroad, it resulted in slow progress of the construction of the vans with the result that not more than 3 vans could be ordered during the Third Five Year Plan.

7.4. The Committee understand that out of three vans ordered, one has already been supplied and two are expected to be supplied very soon.

7.5. It has been stated that during the Fourth Five Year Plan, a provision of Rs. 100 lakhs was proposed for constructing 22 vans—16 for chilled fish and 6 for frozen fish. The estimate of 22 vans has been arrived at as follows:

Route	Type of Van	Type of Refrigeration	No. of Vans
1. Bombay-Calcutta	BG	Chilled	3
2. Delhi-Calcutta	BG	Chilled	3
3. Madras-Calcutta	BG	Frozen/Chilled	3
4. Mangalore-Madras	BG	Frozen/Chilled	3
5. Cochin-Madras	BG	Frozen/Chilled	2
6. Mandapam-Madras	MG	Frozen/Chilled	3
7. Tuticorin-Madras	MG	Frozen/Chilled	3
8. Veraval-Delhi	MG	Frozen/Chilled	2
TOTAL			22

7.6. It has been stated that on account of the same factor which prevented rapid construction of the refrigerated vans during the Third Five Year Plan, and on the advice of the Ministry of Finance, provision was made for only three vans during 1966-67 for which orders were proposed to be placed on the Ministry of Railways.

7.7. The Committee wanted to know the present position in regard to the supply of three refrigerated vans required during 1966-67. In a written note, the Ministry have stated as follows:—

“The question of constructing three vans as first step in the programme for construction of twenty-two vans during the Fourth Five Year Plan period was taken up with the Railway Ministry in June, 1966. The matter was simultaneously taken up with the D.G.T.D. in regard to clearance of import of refrigeration units. The D.G.T.D. suggested in this connection that certain firms should be contacted to ascertain whether they could manufacture the refrigeration units. The Ministry of Railways were then requested to finalise the designs of the vans and the specifications of the

refrigeration equipment taking into consideration the possibility of the units being indigenously manufactured. The Ministry of Railways explored the feasibility of having the refrigeration units manufactured in the country and various measures were taken by them in this connection. The matter was finally placed by them before the Air-conditioning and Refrigeration Council of India for consideration at its 14th meeting held in Madras in January, 1967. The Members of the Council were requested to indicate whether they could undertake construction of the refrigeration equipment of the required specifications. In February, 1967 the Ministry of Railways intimated the Department of Agriculture that M/s. Kirloskar Pneumatics who have collaboration arrangement with M/s J. Store and Company had intimated the Ministry of Railways that they would be able to get the equipment fabricated. The Ministry of Railways, therefore, proposed to pursue the matter further on these lines. Since it was clear from this indication of the position that there was no clear prospect of indigenous manufacture materialising within a reasonable period, the Department of Agriculture took up the matter with the DGTD in March, 1967 and recommended strongly that import of three refrigeration units should be permitted immediately. The position in regard to the progress made by the Ministry of Railways in arranging for the indigenous manufacture of refrigeration units was explained to the DGTD in this connection. In this context the DGTD agreed in April, 1967, to the import of three refrigeration units. The import of refrigeration units also involved allocation of foreign exchange. When the Department of Economic Affairs (Ministry of Finance) was approached, that Department again suggested that the indigenous resources for the fabrication of refrigeration equipment should be tapped and if import becomes inevitable, rupee payment sources should be tried. The Ministry of Railways who had been exploring the possibility of getting the equipment fabricated, intimated that M/s. Kirloskar Pneumatics Limited, Poona have agreed to fabricate this equipment on placement of firm orders and have offered delivery within 7 to 8 months of the placement of orders. Since efforts were being made to explore the possibilities of indigenous fabrication of the refrigeration equipment, no orders could be placed with the Ministry of Railways in 1966-67. Orders have been placed now for three vans in 1967-68. The construction of vans in the remaining years of the Fourth Five Year Plan will be so program-

med that the targets of 22 vans laid down for the Fourth Plan are achieved by the end of the Plan. The main difficulty was in regard to refrigeration equipment. If the indigenous unit is satisfactory, there should be no serious difficulty in achieving the target. The problem in such cases is that import is disallowed when there is some indigenous production or indications of possible indigenous production. In similar circumstances, in the case of trawlers this Department had proposed that to serve the twin purpose of developing fisheries and fostering indigenous trawlers construction industry, a proportion of the trawlers should be imported—the balance of the requirements being obtained from the still untested indigenous industry. In view of the difficult foreign exchange position and the emphasis on protection of developing indigenous industry, this approach does not find general acceptance in the various Ministries concerned with the determination of import policy

It is expected that all the three vans will be available for operation by the end of this year. One van will be put on the Calicut-Madras route and the other two which are metre gauge vans will be put on the Veraval-Delhi route."

7.8. The Ministry have also stated that, "the slow progress in the execution of this important scheme is, therefore, due to difficulties in obtaining refrigeration equipment from abroad resulting mainly from an appraisal of indigenous manufacturing capacity which was not ultimately realised. If, however, indigenous production of the refrigeration equipment is taken up this year and the Ministry of Railways are in a position to undertake construction of the remaining 19 vans in a phased manner before the end of the Fourth Five Year Plan, the target will be achieved."

7.9. With regard to the three vans which were required during the Third Plan period, the representative of the Ministry has stated in evidence that "We have not at all made satisfactory progress in the construction of Railway vans. We placed the orders on the Ministry of Railways in 1962 and only about two months ago the Ministry of Railways indicated that one van is ready and the other two vans will be given to us within a month or two. It has taken very long time."

7.10. As regards the three vans which are required in 1967, the representative of the Ministry has stated in evidence: "It is because of this difficulty about the indigenous manufacture versus imported units that this thing has been delayed for the last two years. Because of the difficulty of refrigeration unit, the Railways were saying that they would be able to take up only three vans. We will now take up the matter with them and ask them why cannot they take more vans since the indigenous industry can supply these units."

7.11. The Committee regret to note that the question of providing facilities for quick transport of fresh fish in refrigerated rail vans has not been viewed with a sense of urgency. They are unhappy to note that although 20 refrigerated rail vans were required during the Third Five Year Plan, orders for only three vans could be placed and out of this only one van has so far been supplied. The position regarding the supply of vans required during the period ending 1970-71 is no better. Against the requirements of 22 refrigerated rail vans, the Ministry could place orders, after protracted correspondence and discussion with various authorities, for only three refrigerated rail vans during 1967-68, although initially they were required to be ordered during 1966-67.

7.12. While the Committee appreciate that indigenous capacity should be fully developed and utilised for the manufacture of refrigerated rail vans, they are of the opinion that no embargo should be placed on the import of refrigeration equipments if it is realized that it is beyond the capacity of the indigenous manufacturers to deliver such equipments. The Committee are doubtful if at the present rate of progress the Ministry would be in a position to obtain 22 refrigerated rail vans during the period ending 1970-71. The Committee would, therefore, suggest that a phased programme may be drawn up for the supply of refrigeration equipment for the remaining 19 refrigerated rail vans, both from indigenous sources as well as from abroad, after taking into consideration the production capacity of the indigenous manufacturers to supply refrigeration equipments of the desired specifications.

7.13. In a written note furnished to the Committee in regard to the arrangements made for the transport of fish on the Southern Railway, it has been stated as under:—

“At present fish traffic is offered in bulk from stations on Calicut-Shoranur section, to Madras and Cochin. Fish traffic is loaded in a bogie parcel van daily at stations on Calicut-Shoranur Section. This bogie parcel van is despatched by No. 62 Kasergod-Shoranur Passenger from Calicut to Shoranur and onwards by No. 2 Mangalore-Madras Mail from Shoranur to Madras daily. On two days in the week this bogie parcel van is replaced by a refrigerated van from Calicut to Madras on Mondays and Thursdays. The refrigerated van contains two compartments of 7.5 tonnes capacity each. Out of the two compartments one is utilised for the transport of fish booked from stations on Calicut-Shoranur section intended for consumption at Madras. The other compartment is utilised for the transport of other perishable traffic like jack fruits, green ginger etc. from stations on West Coast to Madras. In the return journey from Madras to Calicut there is no traffic

offering with the result the vans run practically empty by passenger trains throughout the year.

Fish traffic offering from stations on Calicut-Shoranur section and bound for Cochin area is cleared in a bogie parcel van and despatched by No. 30 Mangalore-Cochin Express upto Shoranur and onwards by No. 564 Passenger to facilitate unloading at all stations since a large number of canning industries are spread out on this section. In the return direction the bogie parcel van is returned by No. 29 Cochin-Mangalore Express.

In addition to the above traffic there is some quantity of fish traffic from Mettupalaiyam, Mettur Dam and Bangalore City to Howrah side loaded and despatched in train service bogie parcel van and bogie III with brake and luggage by No. 20 Cochin-Madras Mail and No. 8 Bangalore-Madras Mail. The fish is re-iced at Madras Central and transported to Howrah in train service luggage van daily by No. 38 Madras-Howrah Janta Express.

Other fish traffic offering in small quantities from Mandapam area to Madras is cleared in train service luggage van during the season.

The Central Ministry of Food and Agriculture and Governments of Kerala and Mysore States have suggested introduction of refrigerated van service for transport of fish on the following routes:

- (i) From Calicut to Howrah.
- (ii) From Mangalore to Madras/Bangalore.

With the two refrigerated vans available on this Railway it is not possible to extend the service to any other routes. When additional vans become available the proposal will receive further consideration."

7.14. The Study Group of the Estimates Committee which visited Madras during September, 1967, were informed by the General Manager of the Southern Railway that the average time taken for the movement of fish from Mettur Dam and Mettupalaiyam to Howrah is about 60 hours. The Committee wanted to know whether it would be desirable to transport fish in faster trains so that they reach destination stations in shorter periods of time. The Ministry in a written note have stated that it would be desirable that fish should always be

transported in faster trains. This has been general problem in all the Railways and a satisfactory solution has not been arrived at as the Railways are unwilling to sacrifice the running time by allowing extra time for loading and unloading of fish. The only practicable approach is to make one of the faster trains to be allowed for fish traffic.

7.15. The Committee note the present arrangements for the transport of fish on the Southern Railway. They feel that there is an imperative need for the provision of a refrigerated van service from Calicut to Howrah. It is also desirable to provide a refrigerated van service in place of the existing parcel van service in the Mangalore-Shoranur section for despatch of consignments to Cochin. The Committee hope that the Ministry would keep a note of the trends in fish traffic while introducing refrigerated rail vans in the various sections of the Southern Railway. The Committee also suggest that the Ministry may take up with the Railways the question of attaching the refrigerated rail vans with some of the faster trains so that the fish consignments may reach the destination stations in the shortest possible time.

7.16. The Committee understand that present statistics in respect of earnings on fish traffic as well as from perishable traffic are not maintained separately. They suggest that the Ministry may impress on the Railways the desirability of maintaining statistics in respect of earnings accruing from fish traffic in all zonal Railways.

7.17. The Fish Seed Committee (1966) recommended the improvement in the existing methods of transportation of fish seed and breeders and improvement in the existing types of containers. They also suggested that Railway Board should be approached for providing sufficient number of special bogies at all important State production centres and to provide more accommodation in faster trains. They further recommended that the Indian Airlines Corporation should be requested to allow concessional rates for air transport of seed and to provide more accommodation by faster planes. The Ministry of Transport and Communications should also be approached to provide necessary facilities for loading fish seed in private planes at Dum Dum Airport.

7.18. The Committee have been informed by the Ministry that the above recommendation of the Fish Seed Committee (1966) have been accepted by the Government. The Central Board of Fisheries has requested the State Governments to take necessary action. The Department of Agriculture has requested the State Governments to furnish the data on the quantum of fish seed which would be required to be transported from specific centres by air or by train and the destinations so that the matter

could be taken up with the Indian Airlines Corporation and the Ministry of Railways.

7.19. The Committee trust that the Ministry would process the data furnished by the State Governments concerned on the quantum of fish seed required to be transported by air or by trains to various destinations on a priority basis and take up the matter with the concerned authorities at an early date.

CHAPTER VIII

EXTENSION ACTIVITIES

8. 1. It has been stated that the Research Institutes are publishing bulletins news-letters and other handouts embodying information of extension value. The Training Institutes under the Ministry are also making available the results of research through their training Courses. The Ministry are bringing out Indian Fisheries Bulletin and other occasional pamphlets embodying information considered useful to the industry.

8.2. Some of the States like Assam, Kerala and Madras have their own Extension Units for the dissemination of knowledge among the fisheries operatives. A note on the extension activities of State Governments is given in Appendix III. The Committee have been informed by the Ministry that almost all States have facilities for training officers including those working in the Community Development Departments so that the useful results of research may be applied through the field workers.

8.3. Asked to state what specific efforts had been made in making the results of research achieved in various Institutes available to the users the Ministry have stated that the nature of efforts during each of the last three years was similar and relates to the following:

- (1) Extension work through Fisheries Extension Units directly under the Ministry, attached to the Central Institute of Fisheries Technology and State Governments.
- (2) Training of personnel through, (i) Central Institute of Fisheries Education, (ii) Central Institute of Fisheries Operatives, (iii) Training Centre attached to the Central Institute of Inland Fisheries Research, (iv) Marine Products Processing Training Centre and (v) Deep Sea Fishing Station (vi) other training institutes attached to State Governments.
- (3) Publications: (i) Indian Fisheries Bulletin—quarterly, (ii) Central Inland Fisheries Research Institute Bulletin *mimeo-occasional*, (iii) Central Institute of Fisheries Education Bulletin *mimeo-occasional*, (iv) Central Institute of Fisheries Technology Newsletter *Mimeo-quarterly*, (v) Bibliography on Fisheries

-mimeo-quarterly, (vi) Fisheries Extension Newsletter-mimeo-quarterly, (vii) Annual Reports of Research Institute|States. (viii) Pamphlet "Get more Fish."

- (4) Advice by Central Institute of Fisheries Technology on fishing crafts and gears.

8.4. The Working Group on Fourth Five Year Plan on Fisheries considered it essential that the following pattern of organisation of extension services should be brought into existence as early as possible:

- (1) A Central Directorate of Fisheries Extension with a panel of specialists in different subjects should be set up.
- (2) An extension wing should be created in the Directorate of Fisheries of each State and there should be effective technical collaboration between the Central Directorate and the State Extension Wing.

8.5. The Committee have been informed by the Ministry in a written note that no proposal for a Central Directorate of Fisheries Extension is under consideration of the Central Government.

8.6. Regarding setting up of extension wings in the Directorate of Fisheries of each State, the Ministry have stated that the latest information is not available, but some States have organised extension wings through the regional organisation and training programmes.

8.7. The Committee have also been informed that ten Fisheries Extension Units were started by the Ministry in 1956-57 with a view to extend the results of research achieved in Fisheries Research Institutes to the fish farmers but these units were, as a measure of economy, wound up with effect from 31st March, 1967. The Central Government have no extension units at present. Although sufficient advance has been made in mechanised fishing and inland fish cultural practices, the States have not yet developed a system of extension services.

8.8. During evidence the representative of the Ministry has stated as follows:

".....the extension wings were removed but now we have decided that it is necessary to have the extension wings. We shall formulate it shortly and we hope to get it through."

8.9. The Committee are of the view that in an industry with undeveloped technology it is essential that the efficiency of extension service should

be maintained at a high level. They are unhappy that much attention has not been paid to the recommendation of the Working Group on Fisheries for setting up a separate wing of Extension Machinery. In this connection, the Committee would like to invite the attention of the Ministry to the recommendations made in paras 4.6 and 4.7 of their 36th Report on the Ministry of Food, Agriculture, Community Development and Cooperation (Department of Agriculture)—Central Marine Fisheries Research Institute, Mandapam Camp.

CHAPTER IX

BETTERMENT OF FISHERMEN: WELFARE ACTIVITIES

9.1. In a note furnished to the Committee, the Ministry have stated that the planning of fisheries administration in the country has been made also to see to the betterment of fishermen. The directions in which special efforts have been made for ameliorating the conditions of fishermen are stated below:

Fishing Rights

9.2. Preference is given to fishermen cooperative societies working in inland areas in the matter of leasing out of State-owned water areas. In Andhra Pradesh, the fishermen get the fishing rights based on the average lease amount for the preceding three years. In U.P. the fishermen are given weightage of $12\frac{1}{2}$ per cent over other bidders in the matter of auctioning of fishing rights. In Manipur, this concession is up to 25 per cent.

Relief to Fishermen

9.3. In States like Madras which lie in the cyclonic belt, marine accidents are frequent calling for immediate relief measures. For this purpose, the Director of Fisheries has been delegated powers to grant relief to fishermen who are involved in accidents caused by natural calamities, upto limit of Rs. 5,000 a year, the grant in each case not exceeding Rs. 100/-. Fishermen are also given relief for the loss of their craft and tackles, both in cash and in kind. 50 per cent of the amount thus advanced is treated as subsidy and the other 50 per cent treated as loan. Government of Madras has a distressed relief fund for the purpose of supplying provisions of food, clothing etc., in times of emergency. This fund is constituted by donations of fishermen cooperatives, donations from private parties, sale of flags, during fishermen week and other miscellaneous contributions. The operation of the fund is by committee with Minister of Fisheries as the Chairman and the Director of Fisheries as the Secretary-cum-treasurer. This relief is besides the relief given by Revenue Department.

9.4. When fishermen are lost in the sea, the assistance of Navy and Air Force is obtained in spotting the missing fishermen and their crafts.

The expenditure in this connection is generally borne by the Departments concerned.

Incentives to the children of poor fishermen in the matter of training

9.5. The incentives given by State Governments in the matter of training vary from State to State. In all cases the training is free and some monetary assistance is given to support the trainees during the period of training. The trainees undergoing training in the fishermen's training centres (marine) are given a stipend of Rs. 50/- per month and allowance on days when they go out on sea.

9.6. The Committee have been informed that the Government of Maharashtra have taken adequate care to train the fisher-youth in engine maintenance, navigation and modern mechanized methods of fishing by opening training centres in each maritime district and inducing them to attend the centres by giving them monthly stipends. Fisheries schools are also opened for their primary education. Higher professional training is given in the institutions conducted by the Central Government.

9.7. In Mysore the Fishermen's Training Centres at Honnavar and Gangolly for training fishermen in mechanised fishing and one inland Fisheries Training Centre at Krishnarajasagar established during the Third Plan, are to be continued during the Fourth Plan period and one more training Centre for marine fishermen is proposed to be started. Two more training centres in inland fishermen are also proposed.

9.8. The Draft Fourth Five Year Plan for development of fisheries in Kerala provides for increase in the number of trainees in each of the four existing training centres from 40 to 60 in each batch and the starting of a new centre at Neendakara. There is also a scheme for the training of 155 persons as master fishermen, engine drivers and second hands in the Central Institute of Fisheries Operatives.

9.9. In Andhra Pradesh, a training institute has been established at Kakirada in 1959 where fishermen are trained in modern methods of fishing and handling of mechanised boats. Trainees are paid a stipend of Rs. 65/- each every month during training. The course was originally of 6 months duration but since April, 1966, the duration has been increased to one year so that the fishermen may fully learn the maintenance of engines even for medium-sized boats.

9.10. In Gujarat the Government is running four primary fisheries schools at Baroda, Bhadbhat (Broach) Umarsad and Kolak. So far, 2735 pupils have been taught in these schools elementary subjects with bias on fisheries. Fisher-youths are also trained at two training centres

run by the State at Veraval and Kolak. Till now, 492 trainees have taken advantage of these centres who after completion of the training are well-equipped to man independently the mechanised vessels.

9.11. In Madras, the Fisheries Department runs training centres for fishermen in all the maritime districts and an inland centre at Mettur Dam for training them in mechanised and modern methods of fishing, principles of navigation and handling of engines.

9.12. In West Bengal, short-term training is given to fishery operatives and departmental junior staff at Kalyani Research Station. It has been stated that adequate training facilities for fishery operatives are not available in West Bengal.

9.13. Advanced training to fisheries operatives is provided at the Central Institute of Fisheries Operatives, Ernakulam and sponsoring agencies, which are very often State Governments, are required to provide a stipend of Rs. 100 a month. Inland training courses, as a rule, do not provide any regular stipend. But, wherever such training courses are organised for the implementation of special programmes like UNICEF, stipends are provided.

9.14. In States like Mysore, Bombay and Madras primary and secondary schools are run by the Fisheries Department and a good number of the students receive financial assistance in addition to assistance like mid-day meal, milk etc. provided by UNICEF, CARE etc. The Bihar Fisheries Department is running 17 night schools for adult education. Some of the States like Kerala, who had earlier fisheries schools have transferred the schools to the Department of Education.

Housing, Medical and other facilities.

9.15. The inland fishermen are usually migratory in character and none of the inland States have any special schemes for housing, medical and other facilities. With regard to the marine fishermen, the necessity for providing such facilities has been accepted and schemes have been drawn up with this object in view. Kerala has drawn up a scheme for the construction of suitable types of quarters for fishermen. The Government is giving assistance upto Rs. 500 in the matter of acquisition of land and Rs. 900 for the construction of building, the fishermen having to contribute not more than Rs. 100, which itself can be tendered as labour. Although, originally each residential unit was to cost only Rs. 1000, it has now been proposed to revise the cost to Rs. 1500 a unit. The Madras Government have already constructed, 240 houses for the accommodation of fishermen, each house costing Rs. 850. For this purpose an interest free loan of Rs. 300

and a subsidy of Rs. 550 has been given to individual fisherman. Proposals are under way for the construction of additional fishermen colonies at various fishing villages. In Madras city itself, the State Housing Board has constructed a number of multi-storeyed tenements for the use of fishermen. In Gujarat, the Department has proposed to implement a scheme which among other things will provide housing, scholarship to fishermen children, hostel facilities etc. to the fishermen community. In Maharashtra, it is proposed to give financial assistance in the form of loan amounting to a total of Rs. 125 lakhs during the Fourth Plan period for the construction of houses, digging wells etc.

9.16. With regard to medical facilities, no state has made separate provision for fishermen community, except for the Health Centre of the Indo-Norwegian Project located at Neendakara. Some medical facilities are available with the cultural centres of fishing villages in Gujarat, for which financial assistance used to be given by the Fisheries Department. This scheme has, however, been wound up with the Third Five Year Plan, although such facilities may again become available with the operation of model village scheme, which has now been proposed.

9.17. Facilities like provision of approach roads, drinking water, fish-curing yards, supply of ice and salt at subsidised rates are also intended for the betterment of fishermen community.

9.18. The Committee attach considerable importance to the socio-economic rehabilitation of the fishermen population. No improvement in fish production can be possible unless the economic status of fishermen is improved and they are provided the basic amenities of life like education, housing, medical facilities, etc. The Committee are aware that the socio-economic uplift of the fishermen is being brought about by fostering co-operative movement among the fishermen but they feel that there is scope for greater involvement by the Government in the welfare activities for the betterment of the fishermen community. In this connection, the Committee suggest that the Central Government should persuade the State Governments to assign lands to the fishermen on which their dwellings stand, which are now subject to short-term lease. Grants and loans may also be provided for construction which may ensure health and comfort of fishermen who have a hard life at sea. The Committee further suggest that greater opportunities should be given to the children of fishermen in the matter of recruitment to the Indian Navy and to the Merchant Marine where there is a natural scope for their employment. In this connection, Fishery Schools should be enabled to provide preparatory courses.

9.19. The Committee note that the incentives given by the State Governments in the matter of training vary from State to State. It is desirable

that there is a uniform pattern of assistance to the trainees in the various training institutions.

9.20. In their report on the Central Institute of Fisheries Operatives Ernakulam the Committee have noted that there is a shortfall in the number of trainees deputed by the State Governments. The Committee consider the non-utilisation of the training facilities as a national waste as this would inevitably retard the development of fisheries in the country. They would urge the need for the fuller utilisation of the intake capacity of the training institutes under the Central and State Governments, by giving greater opportunity to persons from fishermen community.

9.21. The Committee note that only one or two States have drawn up schemes for the construction of suitable types of quarters for fishermen. They would urge that such of the fishermen colonies as have sizeable concentration of fishermen should be properly developed and provided with medical, housing and educational facilities besides approach roads, drinking water, fish-curing yards, etc., so that they may serve as model fishing villages. The Committee would impress on the Ministry the need for providing adequate technical and financial assistance to the State Governments for implementing the model fishing village scheme.

P. VENKATASUBBIAH,

Chairman,

Estimates Committee-

NEW DELHI;

April 2, 1968.

Chaitra 13, 1890 (Saka).

APPENDIX II

(Vide para 1.14)

Resolution of the Government of India setting up the Central Board of Fisheries

(To be published in Part I, Section I of the Gazette of India)
No. F.12-24/57-FY(D)

GOVERNMENT OF INDIA

MINISTRY OF FOOD & AGRICULTURE

(DEPARTMENT OF AGRICULTURE)

New Delhi, the 1st April, 1958.

RESOLUTION

In pursuance of the recommendation of the "All India Fisheries Conference" held at Madras in September, 1956, the Government of India have decided to set up a Central Board of Fisheries for the purpose of integration and coordination of Fisheries Research and Development activities in the country.

2. *Constitution:*

The Board has accordingly been constituted as under:

Chairman

1. Minister of Food and Agriculture or his nominee.

Members

2. to 15. Ministers in charge of Fisheries of the States of Andhra Pradesh, Assam, Bihar, Bombay, Jammu and Kashmir, Kerala, Madhya Pradesh, Madras, Mysore, Orissa, Punjab, Rajasthan, Uttar Pradesh and West Bengal.
16. Joint Secretary to the Government of India in the Ministry of Food and Agriculture, Deptt. of Agriculture in charge of Fisheries.
17. Dr. N. K. Panikkar, Fisheries Development Adviser to the Government of India.

18. Dr. S. Jones, Chief Research Officer, Central Marine Fisheries Research Station, Mandapam.
19. Dr. B. S. Bhimachar, Chief Research Officer, Central Inland Fisheries Research Station, Calcutta.
20. Superintending Engineer, Deep Sea Fishing Station, Bombay.
21. Shri K. L. Ghei, Financial Adviser, C.I. & F.A. Division, Representative of the Ministry of Finance.
22. Dr. V. A. Mehta, Deputy Development Officer (Food), Development Wing, Representative of the Ministry of Commerce and Industry.
23. Shri H. P. Mathrani, I.S.E. (Retd.), Development Adviser and Joint Secretary, Department of Transport, Representative of the Ministry of Transport and Communications.
24. Shri G. P. Sahani, Director Planning, Railway Board, Representative of the Ministry of Railways.
25. Captain S. N. Kohli, I.N., Director of Naval Plan, Naval Headquarters, representative of the Ministry of Defence.
26. Shri N. C. Koli, }
 27. Shri A. K. Mukerjee, } Representatives of Fishermen's Co-
 28. Shri S. K. Amn. } operative Societies.
29. Shri R. Madhavan Nair.—Representative of the Fishing Industry.
30. Dr. D. Bhatia, Deputy Fisheries Dev. Adviser to the Government of India—Member Secretary.

3. Functions

The functions of the Board will be as follows. The Board will periodically meet:

- (i) to discuss at national level problems connected with various aspects of fisheries research and development;
- (ii) to recommend suitable measures for adoption to effect better coordination of fishery activities between the Centre, States and various other organisations; and
- (iii) to suggest ways and means of implementing the various programmes of development and research on fisheries, having over-all effect among others on the programme of development plans of Centre and States in respect of National Plan, etc.

4. Rules of Business:

- (i) The tenure of appointment of the members of the Board other than those who are appointed by reason of their office of appointment will be three years.
- (ii) The Board shall meet at least once in a year.
- (iii) The Board shall have a Standing Committee to conduct the preliminary work, to watch the progress made on the recommendations of the Board and to report the results to the Board.
- (iv) The Secretary will fix the date, time and venue of the meeting of the Board. The agenda will be circulated at least six weeks in advance of each meeting of the Board.

ORDER

Ordered that a copy of the resolution be communicated to all State Governments all Ministries and Departments of the Government of India, Cabinet Secretariat, Principal Private Secretary to the President, the Military Secretary to the President, Prime Minister's Secretariat, Indian Trade Commissioners, All Indian Embassies, High Commissioner for India in London, Director of Commercial Intelligence and Statistics, Calcutta, High Commissioner for India in Pakistan, all Universities in India.

Ordered also that it be published in the Gazette of India.

Sd/-KRISHAN CHAND

Joint Secretary to the Govt. of India

To

**The Publisher
Gazette of India,
New Delhi.**

No. 12-2357-FY(D), New Delhi, the 1st April, 1958.

Copy forwarded, for information, to:

- 1. The Superintending Engineer, Deep Sea Fishing Station, Botawalla Chambers, Sir P.M. Road, Bombay.**
- 2. The Chief Research Officer, Central Marine Fisheries Research Station, P.O. Mandapam Camp (S. India).**
- 3. The Chief Research Officer, Central Inland Fisheries Research Station, 66, Upper Circular Road, Calcutta-9.**

4. All Fisheries Extension Units.
5. Central Fisheries Technological Res. Station, XXI/29, Kochangadi, Mattancheri, Cochin-5.
6. Administration Coordination Section (with four spare copies for circulation in the Monday list)—
7. Establishment I Section.
8. Fisheries Instt. Section.
9. Guard File (3 copies)

By order etc.,
Sd/- PARTAP SINGH
Under Secretary to the Govt. of India

APPENDIX III

(Vide para 8.2)

Note on the extension activities of the State Government

1. *Andaman and Nicobar Islands*.—No research institutes have been set up.

2. *Assam*.—The State has established only one Research Centre at Joy-sagar in Sibsagar District, where results are yet to be achieved.

3. *Goa*.—The results are made known through the agency of District Extension Officers.

4. *Himachal Pradesh*.—No research institutions have been set up.

5. *Jammu and Kashmir*.—The results of research achieved by Research workers are made available to the users through Departmental agencies.

6. *Laccadives, Minicoy and Amindivi*.—No research institutes have been set up.

7. *Madhya Pradesh*.—A programme of applied research has been taken at Fish Research Laboratories at Nowgong, Gwalior, Raipur and Bhopal. The results achieved there are given a field trial in the fish-farms, village-ponds and tanks selected for the purpose. The results are carried to the private parties through Fisheries Extension Officers.

8. *Madras*.—The results achieved by various Research Units are made known by the Department to the users through audio-visual publicity vans, (fish projectors, tape records and loud speakers), by participation in Agricultural Seminars, exhibitions and fairs where specimens, charts, models relating to research are exhibited. A journal is published in English and booklets and handouts in Tamil are also distributed. Separate seminars on fisheries are arranged in the Districts. Actual demonstrations of seed collection, seed production by induced spawning, seed transport, feeding and rearing procedures in departmental nurseries and fish farms are arranged. Other methods employed for propagation of results are:—

- (1) Periodical radio talks.
- (2) Documentary films.
- (3) Demonstration of actual fishing operations over new fishing grounds located by the Department.

9. *Manipur*.—No research institutions have been set up.

10. *Nagaland*.—No research institutions have been set up.

11. *Punjab*.—No research institutions have been set up.

12. *Rajasthan*.—A Research Laboratory is located at Udaipur. The results achieved are circulated to the Regional Fisheries Development Offices from where these are propagated to private pisciculturists, fish contractors etc.

13. *Tripura*.—No research institutes have been set up.

14. *Uttar Pradesh*.—No Fisheries Research Institute has been set up by the State Government. Investigations regarding various field problems are carried out at the Central Fisheries Laboratory at Lucknow. The results thus derived after field trials are recommended for applications in the field to the Departmental personnel through instructions or guide letters. Results of general interest are compiled and printed either as handbills or small booklets for distribution. Demonstration tanks have been established in the Districts. Stalls are also set up in important fairs and exhibitions. Lectures and film shows are also arranged.

15. *West Bengal*.—The results achieved in the two State-owned Institutions are made known to fishermen and fish farmers through:

- (1) Publication of popular literature in the form of booklets and pamphlets; and
- (2) Demonstrations by trained Extension staff posted in different Districts, Sub-Divisions and Blocks.

16. *Maharashtra*.—The results of research and investigations conducted by exploratory fishing improved methods of fishing and other technological aspects are directly communicated to the users either through necessary demonstrations or through meeting with them. Important findings on some of the aspects of biological investigations are published in a periodical brought out in a regional language which has a bias for fisheries.

17. *Kerala*.—The results achieved in Research Stations are made known to users by issue of publicity pamphlets from time to time and through special publications.

18. *Mysore*.—The Fisheries Research Station Hessarghatta which was under the control of Department of Fisheries was transferred to the University of Agricultural Sciences, Bangalore some two years ago, and the Fisheries Research undertaken so far was not substantial.

19. *Andhra Pradesh*.—There is only one Research Institute for conducting experiments on fish culture. The experiments conducted so far are being tried departmentally at present and they are not sufficiently ripe for extension to farmers. The methods adopted by the Department for introducing better methods for increasing fish production, both in Inland and Marine, are by demonstrations of profitableness of these methods.

20. *Bihar*.—The results achieved by the Fisheries Research Institute are discussed at meetings of the District Fisheries Officers at least thrice a year and through them the results are made known to the extension staff who in turn popularise the same among the fish farmers in the State. Frequently the Fisheries Officers acquaint the public with improved methods of fish culture through radio talks at well.

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| <p>21. <i>Haryana</i>.
 22. <i>Pondicherry</i>.
 23. <i>Dadra and Nagar Haveli</i></p> | } | <p>No research Institutes have been set up.</p> |
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APPENDIX IV

Summary of Recommendations/conclusions contained in the Report

S. No.	Reference to para. No. of the Report	Summary of Recommendations/Conclusions
1	2	3
1.	1.11	<p>The Committee feel that having regard to the scale of development envisaged, the importance of increasing indigenous consumption of fish, the stakes involved in the development programme from the angle of foreign exchange earnings, the potentialities of increasing the earning capacity of millions of fishermen throughout the country and thereby making a considerable impact on national income and rural prosperity, the increased employment potential and the need for the reorganisation of financial, technical, industrial and marketing resources, it is essential to provide a coordinated direction of the entire programme of fisheries development from the Centre. It is also essential that quick decisions are followed by implementation and utilisation of available resources and that the entire organisational and administrative set-up is geared to this pressing need. Viewed from this angle, the Committee welcome the reorganization of the Fisheries Division of the Ministry. They hope it would now be possible for the Ministry to formulate and execute schemes with greater expedition than heretofore. They also hope that the Fisheries Division of the Ministry would serve as a model for the States to emulate. The Committee would however like to emphasise that fisheries science being highly technical, some degree of expertise is called for. It is necessary that the Senior Administrative</p>

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Officers, who are required to direct and formulate policies, should remain in the Fisheries Wing for a certain number of years and are not frequently transferred.

2. 1.12 The Committee feel that developmental work has to move in step with research, which aspect is now being looked after by the Indian Council of Agricultural Research. They cannot over-emphasise the importance of maintaining a close liaison with the Council so that research and development work may progress in unison. The Committee hope that the Ministry will keep a continuous watch over the functioning of the Fisheries Division and assess its working periodically in terms of results achieved.
3. 1.13 The Committee feel unhappy to note that during the Third plan period insufficient organisation in the Directorate of Fisheries has been responsible to a great extent for the shortfall in the expenditure. This has been admitted by the Ministry themselves. The Committee hope that the Ministry will persuade the State Governments concerned to implement the recommendations for the reorganisation of the State Directorates at an early date.
4. 1.19 The Committee note that the Ministry are conscious of the need of making the Central Board of Fisheries an effective body for the purpose of co-ordination of fisheries research and development activities in the country. The Committee feel that the Board, as constituted, is an unwieldy body for which it is difficult to make a thorough and technical examination of a problem. The Committee feel that the diverse and complex problems of fisheries cannot be tackled adequately by the Board which meets only for one or two days in a year. They also feel that the follow-up action taken by the Ministry on the resolutions adopted by the Board is not adequate. The Committee, would, therefore, suggest that steps may be taken to reconstitute the

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Central Board of Fisheries with separate technical committees under its aegis consisting of representatives of the industry, exporters as well as Central and State Government Departments dealing with fisheries.

5. 1.19

The Committee suggest that suitable measures may be devised for the effective implementation of the recommendations made by the Central Board of Fisheries.

6. 1.21

The Committee note that certain functions which have a direct bearing on the development of fisheries are exercised by departments other than that of the Ministry of Food and Agriculture, and this tends to delay the finalisation of programmes as well as of execution. They feel that there is a necessity to evolve methods and procedures as well as unanimity of approach as far as possible in these matters so as to avoid delay which appears to be inherent in the existing pattern. The Committee hope that necessary steps will be taken to ensure that there is no delay in finalising programmes and their execution owing to differences of approach and differences in the points of view within the Government Departments at the Centre. The Committee are of the view that the responsibility for coordination should be that of the Ministry of Food, Agriculture, Community Development and Cooperation (Department of Agriculture).

7. 1.34

The Committee note that several States have enacted legislation suited to their specific needs and conditions for the development and conservation of fisheries. The Committee, however, feel that there is a pressing need for ensuring uniformity in legislation throughout the country. It is for the Central Government to coordinate the activities of the various State Governments, give them suitable guidelines to ensure that adequate measures are taken for checking of pollution of rivers, estuarine and other inland waters, conservation and renovation of dere-

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lict tanks and other inland water areas and also for settlement of fishing rights. The Committee trust that the assurance given to the Committee that the whole matter shall be looked into would be fulfilled and measures would be taken to initiate legislation incorporating necessary amendments to the Indian Fisheries Act, 1897.

8. 2.12

From the statistics furnished by the Ministry in regard to the provisions for development of fisheries during the First, Second and Third Plan periods, both in the Central and the State Sectors, and the actual expenditure incurred against the Plan provisions, the Committee note that there have been heavy shortfalls in each of the three Plan periods. The Committee are unhappy that the shortfall of Rs. 62 lakhs in the Central Sector in the First Plan period was due to delay of over three years in the Plan formulation itself. The Committee are also constrained to note that in the Second Plan, the shortfall of Rs. 193 lakhs in the Central Sector has been due to the fact that the T.C.M. vessels which had originally been given to the States were taken over by the Centre. The Committee also note that the performance in the Third Plan has been no better. The failure to spend even 50 per cent of the provisions in the Central Sector was due to the following reasons: (i) non-procurement of fishing vessels and the research vessels; (ii) non-availability of land for location of Research Stations; (iii) non-availability of technical personnel; (iv) delay in the appointment of the staff; (v) delay in the construction of rail vans; (vi) savings on loans to fisheries cooperatives; and (vii) delay in the setting up of the Central Institute of Fisheries Operatives.

2.13

The Committee are not convinced with the reasons put forward by the Ministry for the shortfalls in the utilisation of the Plan provisions. They consider that if detailed schemes had been prepared in time

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and coordinated action taken to arrange finance, staff and equipments, it should have been possible for the Ministry to utilise the provisions fully. The Committee cannot over-emphasise that vigorous efforts should be made to complete the Plan schemes within the Plan period itself so that they are not carried forward from one Plan to another. They would suggest that detailed planning of schemes to be undertaken in the next Plan should be initiated now so that their execution is evenly spread throughout the period of the Plan and the history of the past is not repeated.

9. 2.30

The Committee note that the phasing of the expenditure since 1966-67 has not been in accordance with the plan outlay as this has been regulated by the resources position from year to year.

2.31

The Committee note that the Ministry have been able to spend only Rs. 10 crores in the first year and Rs. 17 crores in the second year. They, therefore, would like to emphasise that the expenditure rate should be stepped up in the next three years so that the level may be reached by 1970-71.

10. 2.32

The Committee are glad to note that the Ministry have been able to effect a reduction in the foreign exchange requirements by effective utilisation of indigenously manufactured items. The Committee would stress that as far as possible indigenous sources should be fully tapped before going in for imported equipment.

11. 2.33

The Committee are happy to note that commitments have been made by the U.N. Special Fund, Norway and Japan for financial assistance for specific projects. They would suggest that the Ministry may explore the feasibility of obtaining assistance for the Deep Sea Fishing Organisation also from some international organisation.

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12. 3.25 The Committee note that as against the potentialities of 100 lakh tons of annual production (85 lakh tons of marine fish and 15 lakh tons of inland fish) the actual production in recent years has varied from 9.44 lakh tons to 15.20 lakh tons only. They are unhappy that no concerted efforts were made to increase the production of fish in the past. They would like to be assured that future plans in this behalf will be more realistic and concerted steps will be taken to achieve the financial and physical targets, by providing the necessary vessels, crafts, gear, equipment, trained personnel, harbour facilities etc. and by greater and deeper exploitation of the sea around the country.
13. 3.31 The Committee are happy to note that the Ministry have taken up package programme in selected areas for intensive fisheries development, in Andhra Pradesh, Rajasthan, Bihar, Mysore, Madhya Pradesh, Orissa and Uttar Pradesh. They hope that package programmes will be extended to other States (including the maritime States) and Union Territories also so that targets for increased fish production can be realised in time.
14. 3.35 The Committee hope that arrangements for securing vessels and services of experts from the U.N. Special Fund will be finalised at an early date so that exploratory programme can be extended for augmenting fish production.
15. 4.9 The Committee are constrained to note that there have been heavy shortfalls in achieving the targets laid down for the introduction of mechanised boats during the Third Plan period. The Committee are also unhappy to note that there is no likelihood of achieving the target of 8000 mechanised boats laid down for the period ending 1970-71. They suggest that the feasibility of drawing up a crash programme for the production of mechanised boats may be considered. The Committee also feel that there is an
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imperative need to link up the construction of boats with the manufacture of engines and other requisites required for a mechanised boat, so that there is no delay in manufacturing complete mechanised boats.

4.10 In this connection, the Committee would also like to draw the attention of Government to the recommendations contained in paras 2.22, 2.23 and 2.24 of their Thirty-Eighth Report on the Ministry of Food, Agriculture, Community Development and Cooperation (Department of Agriculture)—Central Institute of Fisheries Technology, Ernakulam.

16. 4.22 The Committee regret to note that many of the recommendations made by the Central Board of Fisheries as early as 1965 regarding 'Marine Diesel Engines' have not yet been implemented. They hope that the Government will implement these recommendations as early as possible.

17. 4.23 The Committee note the present procedure of assessing the requirements of marine diesel engines from year to year. They are, however, concerned to observe that there has been controversy as between high revolution engines and low revolution engines. The Committee would like the Government to take concerned steps to resolve this controversy as early as possible. The Committee expect the Ministry of Food, Agriculture, Community Development and Cooperation and the Ministry of Industrial Development to take effective measures to dovetail the requirements of the indigenous marine diesel engines industry with those of the fishing industry. In any case, the Committee would like to be assured that the indigenous capacity of the marine diesel engine industry will not be allowed to lie idle and they will be given the due encouragement to produce more low revolution engines whose requirements are estimated to be 60 per cent of the total requirement of engines.

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| 18. | 4.24 | <p>So far as the import of marine diesel engines is concerned, the Committee suggest that they should be imported only from those countries which could guarantee the supply of spare parts and after-sale service as well. In any event, to conserve foreign exchange, the import of engines from foreign countries has to be kept to the barest minimum and all out efforts have to be made to give encouragement for indigenous production. It is very much desirable that in importing marine diesel engines, care is taken to obtain a few varieties of standard engines rather than a number of varieties of different standards and specifications.</p> |
| 19. | 4.25 | <p>The Committee are unhappy to note that the State Governments have not been able to take up the Mechanisation programme as was envisaged at the time of setting the targets for the period during 1970-71. In the opinion of the Committee, the mechanisation of fishing boats is a national necessity and concerted effort should be made to achieve the targets laid down.</p> |
| 20. | 4.34 | <p>The Committee note that there is a proposal to get Yanmar diesel engines manufactured in the public sector in collaboration between the Central Fisheries Corporation and the Yanmar Diesel Engine Company Limited, Japan. They would like the Government to finalise the details of the project after verification of the cost of production without undue delay, so that the targets of mechanisation programme envisaged could be adhered to.</p> |
| 21. | 4.43 | <p>The Committee note that the cost of an indigenous engine is 50 per cent to 100 per cent (i.e. Rs. 10,000 to 20,000) higher than the imported engine. The Committee feel that enough care should have been taken from the very beginning to keep down the cost of an indigenous engine. They hope that it will be possible for the Government to persuade the indigenous industry to bring down the cost</p> |
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		voluntarily and it will not be necessary to invoke statutory powers.
22.	4.44	The Committee would like the Government to consider whether complete exemption from payment of excise duty could be given on marine diesel engines as is the case with tractors for agriculture.
23.	4.45	The Committee would suggest that a study team may be appointed to go into the pattern of subsidy being given by various State Governments on marine diesel engines so that uniform rules could be laid down for the purpose.
24.	4.50	The Committee consider that the provision of life-saving equipment for boats of the fishermen and guiding lights at the various fishing harbours are essential to minimise the risks and hazards which the fishermen have to run daily because of their occupation. They feel that the life-saving equipment should be made an essential component of a mechanised fishing boat and its cost should be included in the cost of the boat itself without placing an additional financial burden on the fishermen.
25.	4.51	The Committee suggest that the Ministry may persuade such of the States as have not yet provided guiding lights at the various fishing harbours to do so as early as possible.
26.	5.11	The Committee appreciate the efforts that are made by the Government for augmenting the export of fish and fishery products to foreign countries, but they have to point out that what has so far been done in this direction is much too little. Of the three great oceans of the world, the Indian Ocean is the least exploited one. Recent studies have also indicated high productivity of the Indian Ocean and the low yield is attributed to the lack of precise knowledge regarding the exploitable fisheries and the low

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fishing effort. Considering the importance of fish as a rich source of protein and in view of its potential availability in quantity, its importance as a subsidiary food particularly against the background of protein deficiency in dietary norms in the country and considering the urgent need for increasing earnings of foreign exchange, the Committee need hardly point out that the performance so far of Government as well as of the industry in the matter of production and export has not been significant. The Committee are doubtful whether on the basis of the present performance the country will be in a position to reach the target of earning Rs. 37.70 crores in 1970-71 in foreign exchange. The Committee would, however, emphasise the need for an all out effort both on the part of Government as well as on the part of industry to increase the foreign exchange earnings substantially even if the target fixed is not achieved.

27. 5.12 The Committee would like to stress that while stepping up exports, the needs of the poorer sections of the population to get fish at cheaper rates should not be neglected.
28. 5.16 The Committee feel concerned to note that there is divergence of opinion between the Ministry and the Marine Products Export Promotion Council as to the effect of devaluation and earnings from export of fish and fishery products. The Committee are inclined to feel that the points raised merit close investigation. In any case the Committee are of the view that the quantity of fish to be exported has to be increased so as to keep up at least the level of foreign exchange earned during the year 1966-67. The Committee hope that the Ministry will devote serious attention to this aspect.
29. 5.22 The Committee are unhappy to note that India has lost about 75 per cent of the dried prawn market in the Eastern countries. The Committee feel that
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		concerted efforts are needed to go into this matter thoroughly and improve the situation so that exports in the Eastern Countries could also be stepped up.
30.	5.25	The Committee suggest that the points raised in the memorandum referred to in paras 5.23 and 5.24 of the Report may be examined by the Ministry in consultation with the Ministry of Commerce in order to see if any remedial measure is required for exercising a check on the indiscriminate growth of exporters of fish and fishery products
31.	5.31	The Committee are glad to note that the Shipping Corporation of India has already made a start in introducing refrigerated cargo container service. They trust it will be possible for the Corporation and other Indian Shipping Companies to introduce similar container service in various trade routes through which Indian fish and fishery products are exported to foreign countries.
32.	5.32	The Committee feel unhappy to note that "The Conference Lines have been showing preferential treatment to other countries and are unfair to India" The Committee consider the situation to be rather serious and they feel that immediate steps are necessary to counteract such preferential and unfair treatment to India. The Committee hope that the Government will also formulate a suitable long-term policy in the matter.
33.	5.37	The Committee feel that efforts are needed to see that as many of the items as are at present allowed to be imported subject to certain conditions, are produced indigenously in India, as many of them are simple items for which it is not desirable to spend foreign exchange.
34.	5.38	As regards tin plates, the Committee would like the Ministry in consultation with the Ministry of Commerce to devote attention to this matter, so that the

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high price of tin plates required for canning shrimps etc. does not adversely affect the export trade. The Committee understand that a cheaper substitute for tin has been recently produced in the country. They hope it will be possible to pursue this further in order to see that the substitute can be commercially exploited and have an impact in reducing the price of cans used for packing shrimps for export.

35. 5.39

The Committee note that some of the recommendations made by the Indian Sea Food Delegation, 1964 are likely to improve the position of export by making the products conform to the requirements of the importing countries and by making the packages and labels attractive. They trust that the Ministry would take steps to ensure that these recommendations are implemented and observed by the exporters.

36. 6.6

The Committee are in agreement with the views of the "Working Group on Fourth Five Year Plan on Fisheries" that the potentialities of the sea food industry to step up the export of fish and fish products to specialised markets are great. An essential prerequisite for the integrated development of any industry and more so in the case of sea food industry is that the necessary infra-structure should be built up.

6.7

The Committee note that steps are being taken by Government for the development of marine fisheries by giving increased grants to Central Institutes concerned with research and development and by making suitable arrangements for marketing and processing of fish and fish products. The Committee would, however, impress upon the Ministry the need for co-ordinating efforts with those of the State Fisheries Departments, the private industry and the Marine Products Export Promotion Council which have a useful role to play in promoting the export of marine products.

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37. 6.12 The Committee would like to stress that the success of the fishery industry depends to a large extent on the quality of the equipment like engines, winches, floats, wire ropes, fishing nets and twine, etc. A reference to the supply of mechanised boats has already been made in an earlier chapter. They suggest that the Central and the State Governments may explore the possibilities of assisting the fishery industry by adopting a more liberal pattern of assistance by way of grants, loans and subsidies.
38. 6.13 The Committee note that the present quantity of caprolactum imported would be sufficient to meet the requirements of the industry for nylon yarn and twine for about a year and a half. In view of the fact that the import of nylon twine has been banned and there are only a few units manufacturing nylon yarn and twine required exclusively for the fishing industry, the Committee suggest that Government may examine whether new units manufacturing synthetic fibres should not be persuaded to accept a certain amount of fishing twine production as a fixed responsibility.
39. 6.14 The Committee are surprised to note that while four firms have been licensed for the manufacture of nylon yarn required by the fishing industry, only one of them, namely, M/s. Garware Nylons, is manufacturing nylon required by the fishery industry. The Committee would like this matter to be looked into as they understand that manufacturing units find it more profitable to manufacture high grade nylon apparel for wear rather than manufacture fishing twine and nets.
40. 6.15 The Committee suggest that the requirement of fishery industry in regard to electronic equipments like echo sounders, etc. may be met by imports, preferably under some Trade Agreements, till such time the demand is sufficient to justify indigenous production.
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41. 6.29

The Committee attach considerable importance to frozen storages in the development of fisheries in the country. These storages not only provide economic return to the producer but supply good quality fish at reasonable rates to the consumers. The committee note that the Fisheries Departments in maritime States as well as the industry are taking energetic steps to augment the existing storage facilities. They hope that the assistance provided by the Central Government (30 per cent loans and 20 per cent grants) would be fully utilised by the State Departments of Fisheries, and that the State Governments would continue to provide the necessary subsidy to cooperatives and individuals for setting up frozen storages.

42. 6.30

From the project report for the development of fisheries prepared by the Marine Products Export Promotion Council, the Committee gather that the installed capacity of the freezing factories in Kerala, Mysore and Maharashtra is not being fully utilised. The Committee would therefore like to stress that the installed capacity of the freezing factories should be fully utilised before any new schemes are drawn up for setting up additional units in those areas. The Committee hope that the Central Government which is concerned with the setting up of freezing plants and frozen storages in major and minor ports, would take expeditious action to activate the scheme in this regard so that freezing facilities may be available to the industry as well as to the Fishmen's Cooperative Societies at reasonable rates without delay.

43. 6.31

Alongside the provision of frozen storages, the Ministry may, in consultation with the State Governments, make arrangements for providing adequate supply of ice required for preserving the catch.

44. 6.31

Provision of water for processing units is very important. The Committee understand that in some

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- States, the cost of water per thousand gallons comes to about 8.00 which is on the high side. The Committee hope that this matter would be looked into by the Government.
45. 6.32 An important factor which merits careful consideration is the peeling sheds. The Committee understand that there are several peeling sheds in the rural areas which are mostly thatched sheds and are not hygienically maintained. The Committee would stress the need for setting up of good peeling sheds suitably equipped for hygienic handling and storage of marine fishes prior to their despatch to the main factories.
46. 6.33 The Committee also suggest that, as far as possible, canning units should be set up along with the freezing units. This should ensure more economical working of the canning units.
47. 6.34 A matter which requires urgent consideration is the need for research and devising scientific methods for improving the techniques of drying fish by artificial methods.
48. 6.42 The Committee note the efforts being made by the Ministry to develop subsidiary industries of the fishery industry in the country. They would like to stress that by-products and the processes being developed by the research institutes, specially the Central Institute of Fisheries Technology, should be commercially exploited. The industry should be encouraged to utilise the techniques evolved by the Central Fisheries Research Institutes in the proper exploitation of the fishery resources. The Committee would suggest that in the research programmes of the technological research institutes under the Centre and the States, priority may be given to the development of such by-products as fish protein concentrates, bacteriological peptone, fish flake, etc., which have great potentialities for providing protein food to the under-nourished sections of the population. The Committee have already em-
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phasised the need for intensifying research on fish protein concentrate in para 2.46 of their Thirty-Eighth Report on the Ministry of Food, Agriculture, Community Development and Cooperation (Department of Agriculture)—Central Institute of Fisheries Technology, Ernakulam. The Committee hope that the Central Government would provide the necessary technical assistance to the States in the setting up of subsidiary industries.

49. 6.53

(i) The Committee note that the pattern of Central Government assistance during the Third Plan was 50 per cent. grant generally on all schemes except on the scheme "Loans to Fishermen's Cooperative Societies" which was a Centrally sponsored scheme and on the scheme for mechanisation of fishing boats for which a grant calculated at 50 per cent. of the subsidy allowed to engines was given. The Committee also note that the quantum of assistance has been scaled down further after the termination of the Third Plan period, the present quantum of assistance being only 20 per cent. grant and 30 per cent. loan. There is also no provision for direct Government grant for fishing vessels or fish processing plants to private enterprise. The Committee feel that the present scale of Government assistance is inadequate and it has to be considerably augmented so as to enable the States to undertake the development activities envisaged during the next Plan period. They also consider the present arrangements in regard to provision of credit to the industry and to the Fisheries Cooperatives are not satisfactory. They suggest that new methods of financing fishing industry should be explored including, if necessary, the establishment of fisheries credit banks or corporations as are in operation in some of the advanced countries.

6.54

(ii) The Committee note that the Reserve Bank has very recently agreed to give credit to private entrepreneurs through commercial banks. They hope that the details of the terms of credit to be extended by

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the Reserve Bank to the commercial banks in this regard would be finalised at an early date so that the fishery industry can obtain the much-needed finance for purchase of large fishing vessels.

6.55 (iii) As regards finances for the Cooperative Societies, the Committee would urge that till other suitable and firm arrangements for meeting the financial requirements of the cooperative sector are made, the Central Cooperative Banks should be encouraged to meet the working capital requirements of Fisheries Cooperative Societies and for this purpose the Reserve Bank should raise, at an early date, the credit limits of such banks so as to enable them to meet the requirements of Fisheries Cooperatives.

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6.61

(i) The Committee attach considerable importance to the development of cooperatives for undertaking distribution of fishery requisites, manufacture of nets, processing of fish and marketing. The cooperatives can also play a useful role in the field of boat building. The Committee consider it imperative that efforts should be made to revitalise the primary societies and link them up with marketing federations. Maximum possible credit should be given to the primary societies through the marketing federations so that the cooperatives are not compelled to seek loan from merchants and middlemen to the detriment of the cooperative movement itself.

6.62

(ii) The Committee commend the efforts made by the Ministry to achieve 50 per cent. targets of production through cooperatives. They hope that the Ministry would keep a continuous watch over the progress of the cooperative societies in the States and assist the State Governments in the technical aspects of the programmes undertaken by the cooperatives.

6.63

(iii) The Committee would like to stress in this connection the need for careful approach in the matter in order to ensure that the people genuinely engaged in fishing and fisheries are benefited through

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the cooperatives and middlemen, profiteers and other foreign elements are kept out of such societies.

6.64

(iv) Now that the Reserve Bank has agreed to provide increased capital to the Central Cooperative Banks for financing fisheries cooperatives, the Committee hope that it would be possible for the State Governments to strengthen the non-viable units financially and organisationally so that there may be a general levelling up of the fisheries cooperatives in the States.

51.

6.69

The Committee note the efforts being made by the Central and State Governments to improve the marketing and other facilities for the fishermen through cooperative societies. In the opinion of the Committee, however, many of the cooperative societies are not well-organised; nor many of the people who are members of the cooperative societies well-educated; and most of them have not the economic stamina to run the societies effectively. These appear to be some of the built-in difficulties of fishermen's cooperatives. The Committee, therefore, feel that what the Government will have to do in the matter is to build up the organisation from above and the organisation should trickle down from above to the lowest level so that the system can be more broad based and more securely and economically organised to bring in maximum benefit to the poorer sections of the fishermen.

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6.70

As regards supply and marketing of fish to Calcutta, the Committee feel that the impact of the Central Government organisation in increasing supply to the Calcutta market and thereby breaking the monopolistic ring and the ruling high prices of fish in the market has not at all been significant. To achieve this object, network of reservoirs and other sources throughout the country has to be established for exploitation. Efforts are also to be made to open departmental stalls to curb the prevailing high prices. They hope the energy of the authorities concerned would be directed to this end.

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53. 7.11

(i) The Committee regret to note that the question of providing facilities for quick transport of fresh fish in refrigerated rail vans has not been viewed with a sense of urgency. They are unhappy to note that although 20 refrigerated rail vans were required during the Third Five Year Plan, orders for only three vans could be placed and out of this only one van has so far been supplied. The position regarding the supply of vans required during the period ending 1970-71 is no better. Against the requirements of 22 refrigerated rail vans, the Ministry could place orders, after protracted correspondence and discussion with various authorities. For only three refrigerated rail vans during 1967-68, although initially they were required to be ordered during 1966-67.

7.12

(ii) While the Committee appreciate that indigenous capacity should be fully developed and utilised for the manufacture of refrigerated rail vans, they are of the opinion that no embargo should be placed on the import of refrigeration equipments if it is realised that it is beyond the capacity of the indigenous manufacturers to deliver such equipments. The Committee are doubtful if at the present rate of progress the Ministry would be in a position to obtain 22 refrigerated rail vans during the period ending 1970-71. The Committee would, therefore, suggest that a phased programme may be drawn up for the supply of refrigeration equipment for the remaining 19 refrigerated rail vans, both from indigenous sources as well as from abroad, after taking into consideration the production capacity of the indigenous manufacturers to supply refrigeration equipments of the desired specifications.

54. 7.15

The Committee note the present arrangements for the transport of fish on the Southern Railway. They feel that there is an imperative need for the provision of a refrigerated van service from Calicut to Howrah. It is also desirable to provide a refrigerated van service in place of the existing parcel van service in the Mangalore-Shoranur section for despatch of consign-

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		ments to Cochin. The Committee hope that the Ministry would keep a note of the trends in fish traffic while introducing refrigerated rail vans in the various sections of the Southern Railway.
55.	7.19	The Committee suggest that the Ministry may take up with the Railways the question of attaching the refrigerated rail vans with some of the faster trains so that the fish consignments may reach the destination stations in the shortest possible time.
56.	7.16.	The Committee understand that at present statistics in respect of earnings on fish traffic as well as from perishable traffic are not maintained separately. They suggest that the Ministry may impress on the Railways the desirability of maintaining statistics in respect of earnings accruing from fish traffic in all zonal Railways.
57.	7.19	The Committee trust that the Ministry would process the data furnished by the State Governments concerned on the quantum of fish seed required to be transported by air or by trains to various destinations on a priority basis and take up the matter with the concerned authorities at an early date.
58.	8.9	The Committee are of the view that in an industry with undeveloped technology it is essential that the efficiency of extension service should be maintained at a high level. They are unhappy that much attention has not been paid to the recommendation of the Working Group on Fisheries for setting up a separate wing of Extension Machinery. In this connection, the Committee would like to invite the attention of the Ministry to the recommendations made in paras 4.6 and 4.7 of their 36th Report on the Ministry of Food, Agriculture, Community Development and Co-operation (Department of Agriculture)—Central Marine Fisheries Research Institute, Mandapam Camp.
58.	9.18	The Committee attach considerable importance to the socio-economic rehabilitation of the fishermen

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population. No improvement in fish production can be possible unless the economic status of fishermen is improved and they are provided the basic amenities of life like education, housing, medical facilities, etc. The Committee are aware that the socio-economic uplift of the fishermen is being brought about by fostering cooperative movement among the fishermen but they feel that there is scope for greater involvement by the Government in the welfare activities for the betterment of the fishermen community. In this connection, the Committee suggest that the Central Government should persuade the State Governments to assign lands to the fishermen on which their dwellings stand, which are now subject to short-term lease. Grants and loans may also be provided for construction which may ensure health and comfort of fishermen who have a hard life at sea. The Committee further suggest that greater opportunities should be given to the children of fishermen in the matter of recruitment to the Indian Navy and to the Merchant Marine where there is a natural scope for their employment. In this connection, Fishery Schools should be enabled to provide preparatory courses.

60. 9.19

The Committee note that the incentives given by the State Governments in the matter of training the fishermen vary from State to State. It is desirable that there is a uniform pattern of assistance to the trainees in the various training institutions.

61. 9.20

In their report on the Central Institute of Fisheries Operatives, Ernakulam, the Committee have noted that there is a shortfall in the number of trainees deputed by the State Governments. The Committee consider the non-utilisation of the training facilities as a national waste as this would inevitably retard the development of fisheries in the country. They would urge the need for the fuller utilisation of the intake capacity of the training institutes under the

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62.	9.21	<p data-bbox="360 208 992 270">Central and State Governments, by giving greater opportunity to persons from fishermen community.</p> <p data-bbox="360 299 992 729">The Committee note that only one or two States have drawn up schemes for the construction of suitable types of quarters for fishermen. They would urge that such of the fishermen colonies as have sizeable concentration of fishermen should be properly developed and provided with medical, housing and educational facilities besides approach roads, drinking water, fish curing yards, etc., so that they may serve as model fishing villages. The Committee would impress on the Ministry the need for providing adequate technical and financial assistance to the State Governments for implementing the model fishing village scheme.</p>

APPENDIX V

Analysis of Recommendations/Conclusions contained in the Report

I. CLASSIFICATION OF RECOMMENDATIONS

A. Recommendations for improving the organisation and working.—

S. Nos. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 35, 36, 37, 38, 39, 40, 41, 43, 44, 45, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62. —57

B. Recommendations for effecting economy.—

S. Nos. 18, 33, 34, 42, 46.

II. ANALYSIS OF THE RECOMMENDATIONS DIRECTED TOWARDS ECONOMY:

S. No.	S. No. as per Summary of Recommendations (Appendix IV)	Particulars
1	2	3
1.	18	The Committee have pointed out that in order to ensure foreign exchange the import of marine diesel engines from foreign countries has to be kept to the barest minimum and all out efforts have to be made to give encouragement for indigenous production.
2.	33	The Committee feel that efforts are needed to see that as many of the items as are at present allowed to be imported subject to certain conditions, are produced indigenously in India, as many of them are simple items for which it is not desirable to spend foreign exchange.
3.	34	The Committee have suggested that the cheaper substitute for tin which has been recently produced

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		in the country should be commercially exploited for reducing the price of cans used for packing shrimps for export.
4.	42	The Committee have stressed that the installed capacity of the freezing factories in Kerala, Mysore and Maharashtra should be fully utilised before any new schemes are drawn up for setting up additional units in those areas.
5.	46	The Committee have suggested that, as far as possible, canning units should be set up alongwith the freezing units for ensuring more economical working of the canning units.
