13. THE NEED FOR AUGMENTING POLICIES IN FISHERIES SECTOR

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India is a country with immense fishing and culture potential. The unscientific practices carried out in this sector have led it to a chaotic condition from which it is high time to get rid off. Management of the sector in an efficient way will help its revival from the prevailing situation. Policies are steps taken with a futuristic outlook. It's a relatively new term in the fishery sector. Policies taken in the past by European nations in the sector were well organized and adoption of such models may help to cut a new fishery policy for India. Fish and fisheries – both marine and inland – are an intrinsic part of the livelihoods of many in developing countries. Recent work indicates the important contribution to food security made by fish caught as a part-time occupation of essentially agricultural households. The interface between the resource and people's livelihoods – especially those of the landless has so far been largely disregarded in the policies of governments and donors, which tend to be dominated by high seas fishing interests and other aspects of sectoral policy. Considerations of this kind suggest that a review of the orientation of fisheries policies would be opportune.

Need for policies in fisheries

1. Fish is a depleting resource though earlier in 19th century it was thought as an inexhaustible resource
2. Fishing in territorial waters of other countries often led to conflicts (often referred as ‘conflict waters’)
3. Needed to conserve and preserve the fast depleting stocks and genomic diversity.
4. Needed to preserve the rights of traditional fishermen.

Stage in 1972

<table>
<thead>
<tr>
<th>Category</th>
<th>% world catch</th>
<th>Off own coast</th>
<th>Off other coast</th>
<th>Off developed countries</th>
<th>Off developing countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developed</td>
<td>61</td>
<td>58.3</td>
<td>41.7</td>
<td>30.9</td>
<td>10.8</td>
</tr>
<tr>
<td>countries</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Developing</td>
<td>39</td>
<td>95.1</td>
<td>4.9</td>
<td>2.6</td>
<td>2.3</td>
</tr>
<tr>
<td>countries</td>
<td></td>
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</tr>
</tbody>
</table>
Inference

1. Though the developing nations in all have more resource they contribute only 40% of the total catch.

2. Catches of developing countries are mainly from their own territorial water which may deplete their natural stock, but developed nations spread the nets to others.

Some important international fisheries organizations

**NEAFC** (1959) North East Atlantic Fisheries Commission
Mesh size regulations, landing size, closed season, closed areas, gear restrictions, total allowable catch (TAC).
* Management of herring fishery

**NAFO** (1978) North West Atlantic Fisheries Organization
Individual national quota regulations
Free inspection of boats of one nation by another member nation

**IWC** (1946) International Whaling Commission
Blue whale unit (BWU)
1 BWU = 6 sci or 2 fin oil units

**IATTC** (1949) Inter American Tropical Tuna Commission

200 mile EEZ & 12 n mile territorial limits were approved internationally

Types of Policies

1. Structural policies
2. Market policies
3. Conservational policies

Indian Scenario

Fisheries development in India is coupled with the plans that were adopted by the government

**First Five Year Plan (1951-56)**

Emphasis was mainly given on marine sector
a) Mechanisation of country crafts  
b) Developmental activities in harbours  
c) Market developments  
d) Provisions for ice storage & transport  
e) Provision for offshore fishing  

- Intensive seed collection from spawning sites was the main threat in FW sector  

Second five-year Plan (1956-61)  

Marine sector  
1. Improvements of fishing methods and mechanisation of crafts  
2. Supply of nylon nets to fishermen  
3. Provision of landing centre and harbour  
4. Integration of fish transport, storage, marketing and utilization  
5. Deep sea fishing  

Inland sector  
- Reservoir management and conservation  
- Fish seed production and distribution  

Third Five Year Plan (1961-66)  

Objectives  
1. Increased fish production  
2. Improved economic status of fishermen community  
3. Development of export trade  
4. Formation and operation of fisheries co-operatives  
5. Expansion of freezer plants, e/s and canning plants  

Plan budget and expenditure on fisheries from I – III five year plans  

<table>
<thead>
<tr>
<th>Plans</th>
<th>Total Expense (crores)</th>
<th>Agriculture and allied</th>
<th>Fisheries</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Approved</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Actual</td>
</tr>
<tr>
<td>I (1951-56)</td>
<td>1960</td>
<td>241 (12.2%)</td>
<td>5.13 (0.261%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2.78</td>
</tr>
<tr>
<td>II (1956-61)</td>
<td>4600</td>
<td>667 (14.5%)</td>
<td>12.26 (0.266%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>9.06</td>
</tr>
<tr>
<td>III (1961-66)</td>
<td>8777</td>
<td>1280 (14.9%)</td>
<td>42.3 (3.3%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>31.67</td>
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</table>
The three interim annual plans were there from 1966-1969 with no special development in fisheries sector. The three annual plans were carried out, as the result of the three five year plans was not satisfactory.

**Fourth Five Year Plan (1969-74)**

**Major objectives**

1. Increase productions of fishes to meet cheaper source of protein  
2. Developing the export potential  
3. Improving the socio- economic conditions of fishermen  
4. Training in fisheries and utilization of institutional finance were emphasized.  
5. Networking features of this period  
6. Abolition of licensing the crafts  
7. Distribution of Taccari loans (short term loans) to needy fishermen  
8. Provision of loan to fishermen co-operatives with subsidy  
9. The agricultural refinance corporations and IDBI started finding some fisheries schemes

**Budgetary allocations (in crores)**

<table>
<thead>
<tr>
<th>Total expenses</th>
<th>15779</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural / allied</td>
<td>2210 (14%)</td>
</tr>
<tr>
<td>Fisheries (Approved)</td>
<td>82.68 (0.524%)</td>
</tr>
<tr>
<td>(Actual)</td>
<td>54.11</td>
</tr>
</tbody>
</table>

**Fifth Five Year Plan (1974-79)**

It had two important view points

1. Productions programme  
   Intended to explore and exploit (economically) the national fishery resource

2. New food programme  
   To reach out to the weaker sections (with lens buying power) with better quality protein of cheaper prices.

**Strategies**

1. To encourage private sector to take up deep sea fishing (Import D.S.F.V)  
2. To increase number of farms for increased fish production and to enhance F.W prawn culture.
Strategies for betterment of fisherman community

a) Development of appropriate technology
b) Provision of share capital through co-operatives
c) Marketing & processing facilities
d) FFDAs were established

Exploratory Surveys

75 vessels from 12 bases carried out surveys in 2.8 lakh sq: km along both the coasts.

Budget allocation

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
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<tbody>
<tr>
<td>Total</td>
<td>39322.00</td>
</tr>
<tr>
<td>Agricultural / allied</td>
<td>4302.00 (11%)</td>
</tr>
<tr>
<td>Fisheries (Approved)</td>
<td>151.24 (0.38%)</td>
</tr>
<tr>
<td>(Actual)</td>
<td>134.98</td>
</tr>
</tbody>
</table>

Sixth Five Year Plan (1980-85)

Objectives

- Increase in production in both Marine & Inland sector
- Extension intensification's
- Need for extension in Indian inland Sector Aquaculture was studied in this plan period.
- Intensive resource assessment surveys in marine sector / optimum exploitation
- Intensification of processing, marketing & value additions

Budgeting allocation (in Rs. Crores)

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>97500.00</td>
</tr>
<tr>
<td>Agriculture</td>
<td>12539.00 (13%)</td>
</tr>
<tr>
<td>Fisheries</td>
<td>371.14 (0.3%)</td>
</tr>
</tbody>
</table>

Seventh Five Year Plan (1985-90)

Marine sector strengthening strategies

- Exploitation of EEZ through higher investment in deep sea fishing (beyond 40 fathoms).
- Diversification of fishing methods
- New gears were introduced
- FRP & ferrocement boats
- Laws were enforced to avoid conflicts between traditional fishermen and mechanized boaters
- Suggested having small landing centres for traditional fishermen
- Insurance welfare schemes for fishermen.
- Value addition in domestic fishing products
- Proposal for "hygienic fish market" through a chain of integrated cold chain of whole sale & retail outlets perfectly under co-operative sector
- Fisheries industrial estates
- FSI & CIFNET were re-organized & strengthened during plan span.
- Intensification of inland cultures in tanks through the help of FFDA.

From I to VII Five year plans

Total fish production - 7.25 lakh tones to 31.5 lakh tones (319% increase)

Annual growth rate (till 1990) 4.06%
First time production achieved = 3.67 mt (1990)
target levels
Marine sector 240%
Inland sector 543%
Hatcheries both indoor & outdoor enhanced seed production by 72% by end of 1990.
Boats 24000
Harbour 140
Allocation for fisheries in VIII plan = Rs. 500 Crores.

Eighth Five year plan (1992-1997)

- Promotion of inland sector to the highest extend special & separate emphasis were given to develop F-W B.W and non-conventional water resources (like Ox-bow lakes)
- Wet land reclamation
- Promotion of maritime
- Conversation policies
- Closed seasons, closed areas, fisheries sanctuaries
- Welfare facilities for fishermen community
- Housing
- Financial assistances
- Sanitation
- Education in Free
Achievements of 8th Five year plan

So far the best for fisheries

Average annual growth rate  5.7% (from base year of VIII plan)
Shrimp seed  1000 million / year
Fishseed production  15,700m (1995)

Export earning crossed $ billion  (1995)
Total outlay for fisheries in 8th plan Rs. 1172 crores.

The Current Five year plan (9th) (1997-2002)

Objectives

Marine sector

- Enhancing production of fish and productivity of fishermen / fisherwomen / Fishing industry and thereby generating employment
- Increasing the per capita consumption to 11kg/hr from 8kg/ annum
- Integration of approach to marine & Inland taking into account of sustainable eco friendly aquaculture
- Conservation of aquatic resources and genetic diversity

Gears

- Enforcement of MFRA in states
- Inclusion of TED
- GIS in fisheries

Inland sector

- Increasing productivity of reservoirs
- Impact assessment of river valley projects on fisheries
- Ranching lagoons & rivers with seed reared from Hi tech hatcheries equipped with sophisticated laboratories.
- Cold water fishery hatcheries for Trouts, Mahseers & hills stream species

Extension

- Scientific extension programmes to be incorporated
- Adoption of model fishermen villages
- Development of inland Fishery statistics in states
Target production at the base year of IX Five-year plan (2002)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth rate in marine sector</td>
<td>3% annual</td>
</tr>
<tr>
<td>Growth rate in Inland sector</td>
<td>6% annual</td>
</tr>
<tr>
<td>Total fish production</td>
<td>6.37 m tons (present 5.2 mt)</td>
</tr>
<tr>
<td>Seed production (growth rate)</td>
<td>7%</td>
</tr>
<tr>
<td>Expected target (carp seed)</td>
<td>23000 million fry</td>
</tr>
<tr>
<td>Shrimp seed</td>
<td>16000 million PL (target)</td>
</tr>
<tr>
<td>Fin fish fry</td>
<td>100 million (close to target)</td>
</tr>
<tr>
<td>Budget allocation</td>
<td>Rs.1200 Crores</td>
</tr>
</tbody>
</table>

Policy conclusions

- Artisanal coastal and inland fisheries have so far been relatively neglected in policy. The introduction of a livelihoods perspective suggests innovative ways in which policies towards them might be formulated.
- More closely integrated approaches to fisheries, agriculture, water and other sectors need to be adopted in development policy and planning.
- To assure sustainable resource management and future food security, the Food and Agriculture Organisation’s Code of Conduct for Responsible Fishing should be adopted and promoted:
  - The capacity for sustainable fisheries management needs to be increased and developed at all levels – regional, national and community.

The capacity for access to information that is relevant and in the appropriate format needs to be increased at regional, national, and in particular, at community levels.

The fisheries developments in India are mainly depicted in the five-year plans that were taken after independence. Putting the developments in nutshell, we can conclude that, the need to revive the sector was understood lately only after it started contributing heavily in the GDP of the country. The later half of the planning programme started to give added importance to the fisheries sector and sooner the budgetary allocation started to increase in subsequent years with the highest allocation being in the present plan. Let's hope that fisheries will answer the hungry calls of poor people in India with adequate supply of cheap good quality protein.