CHAPTER 9

SUMMARY AND CONCLUSIONS

Fisheries sector in Kerala has experienced certain unusual changes. The modernisation of fishery sector in Kerala was ushered in by foreign assistance in 1953. The primary objective of this modernisation attempt was raising the standard of living of the fishermen community by augmenting their productivity. Earning more foreign exchange and raising the domestic availability of fish were also envisaged.

Three decades of development experience in the fisheries showed that the economic condition of the real fishermen got deteriorated and their standard of living declined. The per capita income of the fishermen community got behind the state average. Their means of production became insignificant and irrelevant and work opportunities of the fishermen declined. Above all, they were almost thrown out from fishing activity which had provided a source of livelihood for a long time.

In fact at a broader level, the development experience of Indian economy for more than half a century also shows that the development was on the same pattern. Like in the fishery, Indian planned development too could not attain the stated objectives. More than that, such a course had manifested forces whose operations had aggravated the basic maladies with which the economy was afflicted with since colonisation. These highlight that at micro and macro levels, development issues have a common pattern and hint at the fact that something is at fault with the development approach we pursue.
The successful development experience of advanced capitalist countries had provided substance for the formulation of compendious models of growth. Their experience taught us to believe that such crisp profiles would be a panacea for all the economic ills. Our long colonial association with such economies has facilitated a quick and easy transplantation of these paradigms in LDCs. Limited education on western lines and imitation of similar values and attitudes and the corresponding back turn of the intelligentsia towards indigenous systems as inferior culminated in our perception that there is no alternative to the western paradigms of development.

This flawed outlook made us to lose sight of an original, organic and independent growth pattern conforming to the socio-economic realities in LDCs. Major theories which criticised the capitalist pattern of growth too could not offer a growth perspective which could draw its propulsion from internal dynamics of the economy. Instead, such theories preferred to see development problems of LDCs as problems of social relations which could be settled at the best through a class war. Some economists who were also drawn to their tools of analysis from class clevages, however, gave a more realistic perception to the development issues of LDCs. Their vision that the present predicament of LDCs are the inevitable outcome of capitalist growth have done a great deal in bringing development issues of LDCs as a distinct problem. This qualitative shift in attitude towards the issues of LDCs had prompted many writers to focus critically on the relation between developed economies and less developed ones. Many have found that the LDCs are beset with a series of structural contradictions emanating from the dependant relationship particularly from technological dependency.
Technological dependency compels us to ignore the socio-economic context of its formation and use. We ignore the fact that the leaps in technology is driven out by profit motive and not by any societal considerations. LDCs fervently welcome technology transfers but remain oblivious of the socio-economic disequilibrium it sets in. While the profit designs of the capitalists at the centre keep up upshots in technology, the profit clamour of the capitalists in the periphery provide the way for entry of modern technologies in LDCs. Thus a coalescence of the metropolitan and the periphery capitalists and the perspective that there is no alternative to western paradigms of growth provide an avenue for the entry of foreign technology in LDCs causing vicious circles of technological dependency on the one hand and tempting consequent dependent relations in many areas on the other.

The view that technology is always progressive deny the opportunity to critically assess the implications of its use. We should learn to distinguish profit considerations of alien technology from that of its socio-economic implications. Writers like Braverman have pointed out the necessity of looking technology from a societal perspective rather than from its engineering dimension. The dependent relation of LDCs, and its structural disequilibriums necessitate the assessment of technology from societal premises. The concept of labour process constitute a typical tool to focus on the simultaneous interaction between the technology and the society. The labour process analysis encompasses technological changes and the changes it bring, in turn, upon the means of production, its organisation and the subsequent class polarisations. While this provide a neat canvas to comprehend all such changes, its use in LDCs particularly
in the context of dependent relations provide scope for newer upshots in the labour process analysis. This dimension gives us an explanation of some unusual changes which have occurred in fishery.

In LDCs the labour process analysis amounts to a conflicting relation between two modes of production because of its dependent relation. Unlike in capitalist economies where the articulation between modes of production progressed into a capitalist phase, such a linear change could not occur in a less developed economy. This is because a complete transformation to capitalist epoch could not occur in LDCs on account of limitation of resources. While the resource transfer which continued in the previous centuries deprived an original and organic growth in LDCs, its continuation in the present global regime robe the resources required for a full capitalist growth. The partial transformation, in fact, is a design the capitalist countries engrafted in LDCs through the western paradigms of development. Such partial transformation will be kept so either because metropolitan capitalist did not favour a change or resources are drawn away making it impossible for a neat and complete transformation. This outlook will help us to comprehend changes in fishery.

In the fishery development it was held that Kerala fishery is logged in slumber mainly due to inadequate technology. Capitalist development premises viewed that the production process that evolved over a long time in the fishery is insignificant and irrelevant. Through INP in 1953, the foreign agencies who were the propagators of this new development design found a foot hold in Kerala fishery. They found that the means of production which the fishermen community were accustomed to since a long time were incapable of
modernisation. Consequently some foreign models were brought in and replicated in Kerala fishery. In the meantime, the discovery of foreign markets for some marine food products had resulted in specialising in such products and leaving the general fishery development in the lurch. The foreign intervention, the subsequent dissemination of new technology and the opening up of to lucrative foreign market brought the capitalist forces to the threshold of unlimited expansion of the fishery.

An embodied form of technology and an official rhetoric on modernisation have made capitalist entry an easy affair. The study has identified some specific ways through which the capitalists established their sway in the fishery:

a. they have created a condition for emergence of wage labour.

b. they increasingly began to control work activity through de-skilling traditional knowledge system.

c. they clinched the institutional credit and government policies in their favour.

d. they achieved domination in markets.

e. exploited workers to squeeze out profits by keeping the crew share unchanged for more than three decades.

The capitalist production process had accentuated the down fall of the artisanal sector.

The modern sector rendered the traditional technology less and less viable which has manifested in declining share by the artisanal sector. (Production of the traditional sector continuously declined from 100 per cent in 1956-59 to 97 per
cent in 1960-66, to 84 per cent in 1967-75, to 69 per cent in 1976-80). Similarly induced environmental factors had also caused a considerable fall in the productive capacity of the traditional sector. All these had resulted in permanently blocking the artisanal sector growth. This situation in the fishery has proved our theoretical contention that the peculiar socio-economic condition did not permit LDCs to transform each growth into a fully developed capitalist growth. The subsequent changes in the fishery, further confirm our notion that given such incomplete transformations, they will be, inevitably, changes emanating from the internal dynamics of the economy.

This study has established that in the Kerala fishery the above mentioned changes are emerging. The deprivation of the fishermen infused them to shed off their initial passivity and swing into action, actively and vigorously. This reaction resulted in two dimensions: while the former was the usual resort to collective bargaining, the latter was a unique collective effort validating our theoretical upshots. In collective actions of the fisherfolk, we found certain specialities. Their initial group activities were either localised or restricted within their religious dogmas. However, the capitalist pressure intensified their group activities to surpass all religious and local inhibitions. We also have observed a total change in the character and motives of collective efforts of the fishermen. While the collective efforts have provided an opportunity of scientific orientation and articulation of their perspective, changes they brought at the production level was profound: the fisher folk started intervening with technical innovations and adaptations. The fishermen attempted their technological intervention at:
a. development of knowledge of fixing OBMs in the country crafts,
b. making of plywood boats,
c. fabrication of more efficient gears,
d. changes in organisation of production, and,
e. construction of artificial reefs and use of fish attracting lanterns to augment fish production.

The conflicting terrain which has developed in the fishery between the capitalist modernists and aritsanal fishermen has produced amazing changes in the Kerala fishery since 1980s. This has been treated as a separate epoch known as motorisation as against mechanisation of the earlier three decades. This motorisation which was an outcome of labour class response against capitalist intrusion has set in newer changes. A cardinal change was that the artisanal fishermen succeeded in retrieving dominance in their traditional bastion.

An attempt for an assessment of the motorisation is made with the use of primary data. It reveals that the fisherfolk staged a come back mainly by augmenting their productive capacity. The new technology helped them to overcome many of their infirmities suffered under capitalist mechanisation. The data show that their productive capacity have been enhanced through:

a. lengthening the sea faring capacity,
b. raising their fishing time, and,
c. increasing the number of fishing days.
It has been found that about 56 per cent of the crafts are now able to fish 35 meters and more as against an average 11.8 meters in the non-motorised sector. Similarly, 71 per cent of crafts fish between 6 - 8 hours against a mean time of 3.28 in the non-mechanised category. Also, 63 per cent of crafts now fish more than 200 days which is far ahead of the fishing days of the non-motorised sector.

A measurement of physical efficiency of production in terms of catch per unit effort and catch per unit energy shows that in the Kerala fishery as a whole, these improvements have made a significant impact.

The heightened productive capacity also became instrumental in attracting abundant capital into the artisanal fishery. This is borne out from the data that 82 per cent of crafts and 64 per cent of accessories including gears were financed mainly by borrowings supplemented with own savings.

The motorisation has brought some favourable changes in the ownership pattern as 40 per cent of non-owners became owners during post-motorised period mainly through partnership and co-operative ownership. This increasing ownership rights and control of fishery by artisanal fishermen have resulted in raising the divisible income in favour of fishermen. It was found that 2/3 of the fishing units distributes 60 - 65 per cent of net receipts as wages. In short, all these changes helped the artisanal fishermen in recapturing the labour process.

An analysis of the motorisation process in terms of economic performance reveals that, by and large, this epoch has been a success as majority of these crafts are making profits. While in the North zone it was 87 per cent, in the South, 91 per cent of the crafts are profitable.
In terms of rate of return on capital, a comparative analysis shows that the Southern fishery gets a return of 63 per cent as against 34 per cent in the North. It was found that this difference stems mainly on account of higher operating expenditure, sales commission and crew remuneration in the Northern fishery.

A measurement of physical efficiency of production in terms of catch per unit effort and catch per unit energy shows that in the Kerala fishery as a whole, these indices are 2.85 kg and 0.26 kg respectively. Zone wise comparison of this shows that both are almost identical.

Post motorised phase has put out certain interesting conclusions. While motorisation is an attempt by fisherfolk against capitalist exploitation, it has not augmented the productive efficiency of the fishery as is evident from the low values of catch per unit effort and energy, over time, in comparison. However, fishing remain a profitable venture on account of a favourable price factor, which remain a notable feature of Kerala fishery.

Similarly, it has been observed that the artisanal fishermen who were critical of capitalists production themselves are increasingly pursuing capitalist behaviour. More crafts fixed with high powered OBMs are introduced, the size of the nets has increased, mesh size narrowed and the number of OBMs in crafts have raised. However, the pursuance of the capitalist production traits could not be construed as offshoot of animal spirits of competition. On the other hand this points to the fact that Kerala fishery is still affected by the remnants of the ravages of capitalist growth. Marine production has reached the pinnacle heights of maximum sustainable yield under the mechanisation phase itself. Motorisation
process has inflated the number of crafts bringing down catch per unit effort and compelling the fishermen to put in more fishing efforts and thus making fishing activity more and more expensive. This results in over investment in fishing units and at the point where catches could not pay for such investment, a vicious circle sets in making fishing catastrophic to artisanal fishermen. Given this impending scenario, we endeavoured at an assessment of government policies to highlight the policy changes required to maintain the advantage of the artisanal fishermen in their protracted struggle against the capitalists.

A realistic approach to fishery development was conceived by government of Travancore as part of modernisation during pre-independence period. The prime thrust in this attempt was to augment the productive capacity of the artisanal sector through gradual improvement of the means of production. However, this gradual approach was viewed as ‘backward’ under the premises of capitalist development. At organisational level, co-operatives were also formed for all round benefit of fishermen. The policies since independence actually resulted in thwarting a linear and organic growth process embedded in earlier development approach. The principle of co-operativism was tried to help the fisherman to withstand the capitalist pressure. Capitalist succeeded in scuttling such attempts of empowerment and hijacked the systems in their favour. The plan allocations were also gone into strengthening the capitalist forces in the sector.

The fishery crises since mid 1970s reflected uncertainty and lack of proper direction in government policies. The scientific temper and tone of the articulation of fishing issues by the artisanal fishermen as well as by expert committees, however, has provided some sense of policy direction to the government.
Government was convinced that the crisis in the fishery was attributed to overfishing resorted to by mechanised and motorised sectors and thus driving home the need for conservation of resources and initiating sustainable development paradigms. This is increasingly reflected in various provisions and programmes envisaged in the Fisheries Policy formulated by the Government in 1994.

Thus on balance, in the Kerala fishery we see a shadow of complex issues still existing as remnants of capitalist growth. The survival strategies which have emerged as a response against isolation and deprivation of fishermen community, per se could not save the fishery. However, such strategies indicate that future issues are reflecting to newer resource management techniques involving more and more of community participation to secure sustainable development of the fishery resources. At a general level, the development experience of the fishery teach that the process of modernisation should not be imposed vertically; it must be propelled from its internal dynamics. A lesson of profound importance is that traditional knowledge base and experience nurtured and enriched by generations should not be dubbed as irrelevant and inappropriate; rather strategies of modernisation must draw up such knowledge systems as infrastructural columns.
<table>
<thead>
<tr>
<th></th>
<th>Author(s)</th>
<th>Title/Notes</th>
</tr>
</thead>
</table>


