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Reviews in Brief

Fisheries Issues: Trade and Access to Resources, Organisation for Economic and Co-operation and Development, Paris, France, 1989. Pp. 323. FF. 250.

Aquaculture: A Review of Recent Experience, Organisation for Economic Co-operation and Development, Paris, France, 1989. Pp. 331. FF. 250.

These publications deal with the issues relating to fisheries trade and access to fishing resources, and technical, marketing, administrative and economic aspects of aquaculture in Member countries of the Organisation for Economic Co-operation and Development (OECD).

The first volume is based on a report which was prepared by the Committee for Fisheries and which was approved by the OECD Council in April 1989. Part I of the volume explores the possibilities for further liberalisation of trade in fisheries, reviews the most commonly used measures which might affect imports and exports and provides an overview on country to country basis of measures currently taken by Member countries. Though a large part of imports from developing countries takes place at low or zero tariff under the system of general preferences, it is noted that tariffs could be a significant obstacle in the trade of certain Member countries. Tariff escalation is considered as an important problem especially with respect to processed products. While tariff quotas set limits on quantity at reduced tariffs, it is argued that they contribute to increasing trade liberalisation. While direct export subsidies have been used in the past, at present no OECD country uses it. Only a few countries use export restrictions. It is unavoidable that different national regulations with respect to health standards, labelling, etc., will have a negative effect on trade in fisheries. Part II of the volume contains a survey of bilateral fisheries agreements, presents the state of the art on the determination of total allowable catch and reviews the practices of Member countries with regard to conditions to access to resources under their jurisdiction.

The second publication includes a collection of 29 papers presented at an Extended Meeting on Aquaculture of the OECD Fisheries Committee in conjunction with its 62nd Session in June 1988. These papers grouped under four sections deal with the technical, marketing, administrative and economic issues relating to aquaculture in the Member countries of OECD. The first group of papers included in the volume describes the main innovations and improvements in breeding techniques and culture systems, identifies technological changes in the fisheries sector affecting aquaculture developments and points to the future directions, compatible with the protection and conservation of the fisheries resources. The second group of papers on marketing aspects of aquaculture considers the development of markets, the marketing strategies pursued and the marketing challenges facing the fisheries industry over the next decade in the Member countries. The administrative aspects of aquaculture discussed in the papers under the third group cover legal provisions and support measures for the development of aquaculture and the implementation of national programmes for aquaculture in the concerned Member countries. The fourth group of papers examines the economics of the fisheries industry, investment, structure of costs and returns and profitability in intensive fish production in Italy and Norway, salmon farming in Scotland and Canada, cultured salmon and shrimp farming in the United States,

Biotechnology Revolution and the Third World: Challenges and Policy Options, Research and Information System for the Non-Aligned and Other Developing Countries (RIS), New Delhi-3, 1988. Pp. x+451. Rs. 250.00.

Biotechnologies and Development, Albert Sasson, United Nations Educational, Scientific and Cultural Organisation (UNESCO), Paris, France, 1988. Pp. 361. \$ 34.00.

While it is widely believed that recent advances in technology can hasten development in developing countries, emerging trends in biotechnology research and development in industrialised countries suggest that appropriate biotechnologies may not be easily accessible to developing countries and they may be employed to perpetuate the inequalities between the rich and poor countries. Thus it is important that the developing countries develop their own technology suited to their own needs. Both these books are concerned with these issues.

The first book, commissioned by Research and Information System for the Non-Aligned and Other Developing Countries, includes 18 papers which together examine the developmental potential and other implications of biotechnologies for developing countries including areas of North-South conflict, with a view to formulating an inventory of policy options. It is argued that developing countries should build up local capability in biotechnology because it is not highly capital intensive.

Identification of thrust areas and priorities and specific well-defined research targets in view of the developmental objectives is important for any national bio-technology programme. In the immediate future, a developing country should concentrate on building capabilities in well established, proven and relatively simpler techniques such as tissue culture, biomass recycling, increasing the efficiency in food processing through improved fermentation, etc. Given the proper policy framework for their development and exploitation, biotechnologies can provide to the developing countries valuable means to expedite the process of their development and pursue a pattern of growth with positive effects on income distribution. However, the study shows how the emerging character of the biotechnology industry in the industrialised countries, linked with research priorities distorted to serve the commercial interests of multinational corporations that dominate it, is likely to result in a situation of increasing vulnerability and dependence of developing countries. The biotechnology revolution is more poor friendly than the green revolution, safer and environmentally sound. While recognising the need for human resource development, it is suggested that brain drain to the developed countries should be prevented. Emphasis should be on low-input sustainable farming systems to benefit marginal and small farmers. While fundamental disagreements over the control and conservation of genetic resources still exist, principally between the industrialised and third world countries, some of the bitterness of the early debates has subsided and the beginnings of a spirit of compromise can be observed. It is suggested that non-governmental organisations (NGOs) can play an important role in stimulating public opinion in the North and increasing the transfer of information to the South.

The second book examines the effect of biotechnology on different areas of an economy. The first part of the book deals with the contribution of plant genetics and crop breeding techniques in increasing agricultural, horticultural and forestry production. Genetic diversity

is advocated as a safety factor against destruction of entire crops through climatic stress and pests. However, plant genetic resources are threatened by the destruction of the natural environment following the regression of equatorial or tropical humid forests and desertification of semi-arid areas. Selected varieties of crops having a high productivity, but a lower genetic diversity are gradually replacing the hardy traditional varieties, less profitable but more resistant to variable weather conditions. It further discusses the use of biotechnology in increasing the nutritional value of food. Of particular importance to developing countries are fermentations in a solid medium. The use of microalgae as feed for animals with a wider range of applications, including the supply of an inexpensive high protein supplement for human food, is also discussed.

Other chapters in the first part of the book discuss the role of biotechnologies in livestock husbandry and animal health, medicine and public health, pharmaceuticals, and conversion of wastes and of agricultural and industrial by-products for energy production and pollution control. The second part of the book examines the impact of biotechnological development on the economy of developing countries. The study concludes that the commercial success already achieved and the huge investments made in the various areas of biotechnologies make the 'biotechnological revolution' an irreversible process, particularly in the agricultural and food processing sectors. More importantly, the social impacts of the biotechnological revolution will not be evenly felt in different countries and among various social groups within the same country. Therefore, issues relating to the effects of biotechnology should take into consideration the economic, social and geopolitical conditions with a view to finding solutions to unfavourable implications of biotechnological applications and designing appropriate strategies to distribute equitably their benefits. Both these books make a significant contribution to the literature on the subject.

Inter-State Variations in Work Force Participation Rates of Women in India: An Analysis, K. Sundaram, Asian Employment Programme Working Papers, Asian Regional Team for Employment Promotion (ARTEP), International Labour Organisation, New Delhi, 1988. Pp. v+50.

Women Workers in South Asia: Employment Problems and Policies in the Context of the Poverty Target Groups Approach, Kalpana Bardhan, Asian Employment Programme (ARTEP), International Labour Organisation, New Delhi, 1987. Pp. vi+88.

Women Workers in South-East Asia: Problems and Strategies, Noeleen Heyzer, Asian Employment Programme (ARTEP), International Labour Organisation, New Delhi, 1987. Pp. vi+96.

A series of six studies on Women Workers have been brought out by the Asian Regional Team for Employment Promotion (ARTEP) with special reference to the Indian sub-continent. They aim at analysing the quantitative dimensions and the socio-economic correlates of the labour force participation of women in different regions of India. Sundaram's study is the first of the series. It examines the determinants of the level and intensity of female participation in economic activity especially in agriculture across 14 major states of India, based on the data of the 32nd Round of the National Sample Survey, relating to the year

1977-78. An important conclusion of this study is that high fertility and the consequential burdens of child rearing inhibited participation in economic activity by women in both rural and urban India. The results suggest that the access to self-employment rather than the total volume of employment has a positive impact on workforce participation rates (WFPRs) of rural women. The significant positive impact of asset-base governing access to self-employment and WFPRs provided an indirect link between fertility and WFPRs. Any element of public policy which reduces the burden of domestic duties will have a positive impact on work participation and any planning for population, employment and general socio-economic development has to be an integrated exercise.

The studies of Bardhan and Heyzer analyse the factors which influence both the demand and the supply of female labour, including the effects of changing technology and work organisation in Asia. The labour force participation rate for the female population of 15 years and over at the beginning of the eighties ranged from the very low of 11 per cent in Pakistan and about 14 per cent in Bangladesh to a high of 45 per cent in Nepal, with India and Sri Lanka in between at 30 per cent and 27 per cent respectively. An attempt is made to answer the question to what extent the rising participation rates of female labour have brought higher standards of living to the women and their families. The studies also discuss the effectiveness of poverty-targeted policies aimed to improve the position of women in the wage sector. One of the points highlighted in Bardhan's study is the rising proportion of casual (temporarily hired) labourers among all wage-workers and the rising proportion of women in the growing ranks of casual labourers; by and large, they are non-unionised and outside the labour laws. In the case of women self-employed as petty producers or traders, it is noted that the issues of access to markets and even to government supplied credit and other inputs cannot be dealt in isolation from the issues of group organisation. The study also suggests that the agricultural extension services should be reoriented in order to be more useful for those operations that women take care of. The need is also emphasised to incorporate the organisations of poorer women as an informational and feedback resource for modifying or redesigning old poverty-targeted programmes as well as for designing new ones.

Heyzer's study which examines the latest statistics and research on women workers in South-East Asia, shows that the rise in employment of women is more in the service sector than in the industrial sector. The vast majority of women in the region still find their livelihood in the agricultural sector. However, development policies have lost sight of the economic role played by women. In the rural areas, investment in women's training and education is not considered profitable from the commercial point of view. Contrary to expectations, introduction of technology has had negative effects on women from the lowest strata of rural society, even if it has helped to improve the well-being of members in the upper and middle strata of these communities. The study suggests that future policy interventions and strategies should be oriented towards women's access to resources in their own right. These studies enhance our understanding of the role of women in the labour market, the problems faced by them and the strategies and policies designed to improve their working and living conditions.

Our Common Future, The World Commission on Environment and Development, Oxford University Press, 1987. Pp. xviii+383. Rs. 110.00.

The World Commission on Environment and Development was set up by the United Nation in 1983 under the chairperson Mrs. G.H. Brundtland to formulate long-term environmental strategies for achieving sustainable development by the year 2000 and beyond and to recommend ways by which the concern for the environment may be translated into greater co-operation among developing countries and between countries at different stages of economic and social development and lead to the achievement of common and mutually supportive objectives that take account of the inter-relationships between people, resources, environment, and development. The Commission submitted its report to the United Nations in 1987. The report is composed of 12 chapters grouped under three parts. According to the report, there has been a growing realisation in national governments and multilateral institutions that it is impossible to separate economic development issues from environmental issues. Many forms of development erode the environmental resources upon which they must be based. The recent crisis in Africa most tragically illustrates the ways in which economics and ecology can interact destructively and trip into disaster. Poverty is a major cause and effect of global environmental problems. Today a greater number of people go hungry and live in slums. The annual increase in industrial production is as large as the total production in Europe in 1950. This has resulted in tremendous environmental stress. The green-house effect which is a threat to life-support systems, springs directly from increased resource use. Another threat is posed by the depletion of the atmospheric ozone layer. It has been found that environmental stresses and patterns of economic development are linked together and environmental and economic problems are linked to many social and political factors. Thus a new approach is suggested in which all nations aim at a type of development that integrates production unit with resource conservation and enhancement and which links both to the provision of an adequate livelihood base and equitable access to resources.

The report emphasises the need for sustainable development which can be achieved through population stabilisation, reducing poverty, developing appropriate technology, legal processes, community knowledge and participation, recognising the inter-sectoral linkages, reorientation of international relations and extending aid to debt-ridden countries. To preserve the ecosystems, the report emphasises that there must be conservation of the species and conservation of the genetic material in wild species. A safe environmentally sound and economically viable energy pathway is considered imperative for sustaining human progress. Proper management of the commons - the oceans, outer space, and the Antarctica - is considered important. Global peace and security should be maintained, and the various international institutions must develop a holistic approach to environmental problems. The issues raised in the report are inevitably of far-reaching importance to the quality of life on earth. The report has called for such major efforts as greater willingness and co-operation to combat international poverty, to maintain peace and enhance security world-wide and to manage the global commons, and for national and international action in respect of population, food, plant and animal species, energy, industry and urban settlements. The policy direct- ions required in these areas are spelt out in the report.