## **Fisheries Economy**

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## Economies of location and scale in fish processing are important but generalization on this aspect of the subject is difficult. Some of the relevant factors are site specific. Proximity to raw-material sources, i.e. the fishing grounds, unless a factory-ship operation is contemplated, is an obvious consideration. Other determinants of location include the availability of power and a trained labour force and the presence of transportation nodes (where shipment to distant markets is involved).

 Economies of scale in processing typically are realized at a fairly modest throughput capacity (possibly as little as 10,000 tons raw fish/year). Scale is more significant with reference to business organization (for financing, bulk purchasing of supplies and market service) and to the conduct of research and development. Hence the prevalence of the multi-plant firm (horizontal integration) in this division of fisheries.

 As compared with "industrialized" fish harvesting i.e. harvesting by fleets using largescale technology (in contrast with the artisanal type of operation), fish processing is relatively labour intensive (in some cases a ratio of 3:1 is observed). Generalization, again, could mislead. When throughput units (individual animals) are uniform in size or when size is irrelevant, as in reduction processes, mechanization is feasible. Otherwise, manual operations (for dressing, skinning, filleting and the like) are necessary. The choice as between the use of manpower and machines depends in general on relative costs (based on wages, rentals, permissible write-offs and so on).

## While the fish-processing industry and by extension the fish trade are not subject directly to the pressures (stemming from open access and the use of common-property resources) that impinge on the primary industry, the processing division especially may not be immune to an analogous tendency toward over-expansion

 Over-expansion and the associated over-crowding of the primary industry often lead to widespread dispersion of operations and an accompanying increase in the seasonal peakedness of fish landings, i.e. the raw material for the fish-processing industry. In adjusting to this trend, firms in the latter division are induced to install additional facilities (branch or "feeder" plants) and/or additional firms enter the industry. The resulting emergence of redundant processing capacity sometimes is fostered by governments, anxious to expand employment opportunities and maintain sales outlets for primary producers, through provision of incentives, e.g. construction subsidies, and (from a rational viewpoint) superfluous infrastructure.

 Since the entry of additional firms in the processing division tends to fragment trading operations, the fish trade may be affected as well by the developments just described. Where the export of fishery products is important for the growth and success of the industry, fragmentation in trading activity may be a serious weakness.  By encouraging intra-trade competition, for example, it reduces the trade's ability to compete with powerful rivals in export markets. In certain circumstances, e.g. a downturn in the business cycle, this debilitating tendency may be countered by mergers among private firms or, failing that, the government concerned may intervene to consolidate export-trading operations by regulation (licensing and the imposition of entry criteria) or by creation of a state trading agency.