

Labor Intensive vs. Capital Intensive: "Conflict within the Fishing Industry"

When discussing which type of fishing fleet is the most apt to ensure the viability of rural communities, we are used to debating, more or less explicitly, the merits of job creation versus increases in fishermen's income, i.e., a small number of fishermen having a high income or a large number of small-scale fishermen with a lower average income.

The possibility of preserving and eventually increasing the number of jobs for fishermen is often used as an argument in favor of small-scale fisheries in developing countries. Thus, D. Thomson (ICLARM Newsletter, July 1980, p. 3) comparing, among other things, the number of fishermen employed by small-scale fisheries and by commercial fisheries in these countries, concludes that a small-scale fishery is more apt to ensure the survival of rural communities.

In developed countries, where the problem of hunger is less crucial, the viability of most rural communities depends mainly on the local availability of adequate jobs and incomes.

In Canada, it is this aspect which the 1982 Report of the Task Force on Atlantic Fisheries mentioned when defining its new fishery policy for the Atlantic region. It underlines the conflict which it claims is inevitable, in a larger framework, between the industry's viability and the necessity of employing "as many people as possible" in the rural regions where it is "the only possible source of employment".

An example from Quebec, Canada, obliges us to make a finer distinction concerning which form of the industry best allows the inhabitants of these communities to live and work in their country, when one takes into consideration the number of jobs created on land by fishing activities. The table below shows that for two vessels of equal size (18 m) fishing for essentially the same species but using different techniques, there is appreciable

One cannot generalize this example for every situation. However, the following points are relevant:

The choice of a fleet calls for a rigorous evaluation of monetary and social costs, such as the price of supporting an entirely new technology and the possibility of aggravating external dependence for developing countries (see article by F. Dioury, p. 16).

However, one must not underestimate the benefits of commercial fisheries, such as a higher income per worker, an increased number of full-time jobs on sea and on land, an improvement of nutrition due to a greater quantity of fish available for human consumption, the possibility to exploit a fishing area not previously exploited by the coastal countries, and a larger volume of output permitting economies of scale in the marketing network.

Finally, it is all a question of degree. One could think of a small-scale fishery as being more or less labor intensive or an industrial fishery as being more or less capitalistic. Also, it may be desirable economically and socially to have a combination of these types of fishing fleets. ●

CLAUDE RIOUX

Professor-Researcher
Marine Resources Study Group
Université du Québec à Rimouski 300
Avenue des Ursulines
Rimouski, Québec, Canada G5L 3A1

difference in the level of investment made and the number of jobs created.

Note that the type of boat requiring the greater investment does not necessarily procure a higher yield per crew member nor a higher rate of return on the investment even if it creates the highest net profits and creates more jobs for fishermen. Note also that a corollary does not necessarily exist between the amount of investment and the number of jobs created in the processing sector.

To increase economic spinoffs that will favor rural communities, it seems necessary to try to make profitable investments in the fishing effort and to create specialized jobs in fish preservation and processing.

	Longliner	Trawler
Cost on leaving shipyard (\$)	148,595	64,633
Average manpower (persons)	4.7	3.9
Landed volume (t)	209.13	313.62
Landings/crew member (t)	44.49	80.41
Crew's income (\$ each)	11,164	15,494
Crew's hourly wage (\$/hour)	7.07	10.29
Net profit (\$)	8,248	7,932
Return on the investment (%)	5.55	12.27
Jobs created in the processing sector (per fisherman)	1.2	2.2
Total employment per \$1 million invested	70	193.4

(Source: Bureau de la Statistique du Québec)