B

# THE INDO-NORWEGIAN PROJECT IN KERALA:
## - A "Development" Project Revisited -

by Johan Galtung

Wissenschaftskolleg zu Berlin
Wallotstraße 19
1000 Berlin 33

December 1982, December 1983

## 1. The goals.

Norway was one of the first countries to engage in a major project of technical assistance after the war. Already in 1952 some explorations were made in India and in 1953 the Indo-Norwegian Project in Kerala (INP) started.[1] The motivation was clear: To improve the standard of living among the population in general by increasing the catch of fish and thereby the protein consumption available to the people, poor and underfed; and to improve the standard of living among the poor fishermen in particular, by increasing the revenue accruing to them from their operations in the coastal waters. The method was also clear: Not only to increase the production by means of modern equipment (small mechanized boats, eventually bottom trawling), but also the productivity, thereby increasing the hourly income to the fishermen. The Norwegians saw themselves as experts in this. But in addition they originally wanted an "integrated project"[2] concerned with standard of living in more general terms, particularly with health matters. And they wanted some structural innovations, in the form of cooperatives both in the field of production (catching fish) and in the field of distribution, marketing - to protect fishermen and consumers.

Of course, fishing was not an innovation brought to India by the Norwegians. But it is generally agreed that ~~it was~~ the INP ~~that~~ was the major impetus in bringing Indian fisheries from the traditional level at which it had remained for centuries, millennia, to the current "modern" level. India is today fishing nation no. 7 in the world. The number of mechanized boats increased from 23 in 1954/55 in Kerala (when the Norwegians came) to 2,650 in 1976 (in India as a whole from 50 to 10,000 in a period of 25 years). But still there ~~are~~ six and a ~~are~~ half a million fishermen working in the traditional sector with 100,000 traditional crafts, and they are responsible for 70 % of the catch; the mechanized boats (today 11-12,000) for the remaining 30 %.[3]

## 2. The results.

So, to what extent were the goals obtained, in connection with this explosive modernization? From the very beginning,

and increasingly from the end of the 1960s, there has been a sneaking suspicion that this did not at all develop as it should[4] Only now, however, do we have sufficient data to know what happened, due to the incessant, highly laborious work of an Indian social scientist, John Kurien and his associates, at the Centre for Development Studies in Trivandrum, Kerala. The following report is based on his studies[5] and is divided in the sections mentioned above corresponding to the motivation for the project, adding an ecological section at the end that was not on the planning horizon when the project started.

(1). Protein consumption and health. Over the two decades 1956 to 1976 the output of marine fish in Kerala increased at a rate of about 4 % per year.[6] Not so impressive, and it does not at all mean that the protein consumption has gone up. To the contrary, it has gone down. As pointed out by Professor Panikkar at a recent WHO conference in Kerala, in his paper Intersectoral Action for Health: The Kerala Study[7] "Fish used to be the main source of animal protein for the masses here. In recent years, thanks to greater priority for the production of export varieties, and the associated change in technology, the fishery sector has undergone a distorted development, adversely affecting the availability of the locally consumed varieties of marine fish." And he adds "Fish, a traditional source of protein for the masses, has become an expensive luxury item".[8]

How could this happen? The answer is actually quite simple, and can be formulated in terms of supply and demand.[9]

The supply of fish available to the local market has gone down. Most popular among common people are the oil-sardines: In 1968 the catch of 247,000 tons, in 1976 it was less than half, 120,000 tons. The catch of mackerel, less important, also shows a downward trend. For prawns/shrimps there were fluctuations and then a downward trend (to be explored later). There is an

upward trend for other species, but they tend to be expensive. The value of this output increased tremendously, but 90 % of the increase can be attributed to price changes alone.[10] More particularly, the price for export varieties, mostly prawns, was thirteen times higher in 1976 than in 1964, whereas the locally consumed varieties were 5.5 times more expensive. Fish that used to cost 3 to 4 rupees per kilo now (1982) costs between 20 and 30 rupees,[11] closer to the latter. Of course, some of this is due to the general increase in costs of living. But the consumer price index for workers (averaging agricultural and industrial workers) rose only two-and-a-half times during the same period. In other words, the price of locally consumed fish rose more than twice as much as the general price increase for consumers products. This does not mean that there are no buyers: Kerala has upper classes and upper middle classes completely capable of affording fish that expensive, particularly more "elegant" types of fish.

In addition Kerala, like many other parts of India, has a certain proportion of their population abroad as foreign workers, particularly in the Gulf countries, sending money back to their families. This demand will also contribute to driving the prices up. But with the net cash income available to the rapidly growing Kerala population it is now quite clear that less, not more fish is being consumed, due to the modernization. Given the role of protein in building up the resistance capacity of the human body against infectious diseases the health consequences of this are obvious![12] It should be noted that other sources of protein such as egg, milk and meat also are outside the reach of the masses, as they used to be.

Behind all of this is, of course, the general switch from fisheries whereby ordinary people made protein available for people in general, including the lower classes, to export-oriented fisheries using modern equipment, whereby protein is made available for consumers abroad, in the form of shrimps, prawns, lobsters and other crustaceans. The development of the prices ~~shown~~ given above shows that there is almost three times as

much money to make per unit for export as per unit for local consumption. That decides the operations engaged in by the commercial sector. Capital is after profit, not after protein and will throw overboard the three quarters of by-catch that is not exportable[13] (much of that can later be caught by the traditional fishermen, however). And it is also decisive for the other big power sector in the society: the state. Bureaucrats and planners are interested in foreign currency in order to buy capital goods abroad, military equipment, and to some extent luxury consumer goods. They will tend to encourage the commercial sector and not be bothered by protein loss or profit gain as long as the export promotion leads to foreign currency gains. Their only control, not necessarily successful, over a commercial sector would be in terms of foreign exchange: that they do not take out their profit in other than local currency.[14]

It is important to note that the tremendous increase in price cannot be explained in terms of increased costs of production alone. It is more a question of what consumers are willing to pay provided they are satisfied with the goods delivered. And since these are consumers goods of very high quality, deep frozen, nicely packed, the meaning of modernization is precisely this: the catch from the sea is lifted out of a traditional economic cycle into a modernized cycle where production is done by trawling, with commercial energy resources and modern gear, and distribution is done by deep freezing, insulated vans and a whole chain of cool storage, ultimately leading to the frigidaire of the individual kitchen.[15] In that cycle there is considerable liquidity available, both as finance capital and as money to buy consumer's goods. The expenditure per unit catch may not necessarily be so high, at least not as long as catch is available. The sales value is enormous precisely because of the quantum jump from one economic cycle to another. This discontinuity between economic cycles tends to be poorly understood by economists.[16] So, as a result the proportion of catch for local consumption fell:

oil-sardines from 47 % to 28 % and mackerel from 12 % to 4 % -[17] making for another demand/supply mix than dictated by ~~basic~~ local need

(2) What happened to the traditional fishermen? Roughly speaking what happened to them was that their general standard of living deteriorated for at least four reasons. If we look at the two sectors, modern and traditional and all the workers working in them (not only the fishermen), then the value per ~~fisher~~ person in real prices (corrected for the increase in the price of the consumers goods) increased from 154 (average 1969=100) in 1969/1971 to 336 in 1974/76; more than a doubling, for the modern sector. For the traditional sector the same period witnessed a decrease in the value of output per worker, from 132 to 128.[18] Thus, the relative standard of living of workers in the traditional sector decreased considerably, from 86 % of the modern level, to 38 %. But then it can be objected that the purpose of the project was exactly to build a sector where the standard of living would be higher, so in a sense that has been obtained?! No. If instead of looking at the average for everybody working in these sectors we look at only the fishermen, those who work with traditional crafts and those who work in the modern sector we find that the traditional ones had 98 % of the income in the first period, relative to the modern ones, and in the second period they had decreased only down to 87 %.[19] Why? Simply because the revenue to the modern sector does not go to the fishermen in that sector, almost all of them recruited from the traditional sector. It goes to the people higher up, those who finance the sector, those who administer it, and all the middle-men between that layer and the fishermen themselves. In short, the improvement in standard of living measured in these crude terms, even to the fishermen in the mechanized sector, has been marginal.

But this is not all. It should be remembered how the prices of fish have gone up. At the same time the catch has gone down, and the fishermen will always need some cash money. This means that even for him, although the data for

this are not yet available, the consumption of fish and thereby protein may have gone down. In spite of living very close to an abundant source of protein he may simply be worse off, being forced to sell what little he catches in order to pay rent to those who own the little patch of the beach where he has his house and is landing his catch (or say they own it),[20] interest on loans for the equipment, some gear etc.

In addition to this he is undergoing a process of proletarization. From being individual or collective owner of a traditional fishing craft he may be out-competed, and be without any means of production. As Kurien says, he may be out for jobs, not fish![21] If he can find that in the modern sector, so much the better - but since this is also a sector in crisis chances are slim. So he joins the ranks of the unemployed

Add to this a more non-material factor: that of demoralization. It almost has to be seen, and particularly by an eye that also knows what the coast-line looked like twenty years ago. At that time almost only the traditional crafts could be seen; the slender canoes, or the catamarans. Today it is like a parade of small trawling vessels, up and down along the beach, with the trawls hanging behind. To watch that from the angle of the traditional sector, whether he is standing on the beach or sitting in his craft, is hardly edifying. Disrespect, scorn for the "traditional," everywhere at the same time as the "modern" is available only to the chosen few.

3. Inequalities and impending class-struggle. Much of this could have been avoided if the first Norwegian efforts to build cooperatives had succeeded, supported as they also were by Indian authorities. It might not have been compatible with the switch to an export sector possibly better handled by private than public enterprises. But, however that may have been, it is quite clear that the cooperatives failed. Private interests were able to get into them, they were able to overbid the individual fishermen when there was a boom and to throw them off when there was a slump![22] The level of organization among fishermen was inadequate. At this point many might feel

that Kerala, known for its socialist inclinations and its strong communist party, should have been different. But the communist party in Kerala reproduces much of the common caste structure inside the party having a leadership with a strong Brahmanic recruitment basis.[23] From that summit of society the Arayas, the fishermen caste, are very remote indeed, engaged as they are in work that is both dirty, manual and filled with killing. Marxist theory would also tend to accord fishermen at most a marginal role as a driving force in the progress of society, the key roles being reserved for the industrial proletariat and the enlightened elements of the bourgeoisie, possibly with the agricultural laborers joining in.[24]

So there is class and impending class struggle, but without effective and constructive organizations with which to fight this struggle. The wedges driven between owners of means of production on the one hand and those who sell their labor on the other, between rich and poor, between non-Hindus and Hindus (the Norwegians have given tremendous impetus to the Catholics in Kerala),[25] between high-caste and low-caste Hindus, between the modern technocratic class (bureaucrats—the people drop the first seven letters and call them rats - capitalists and professionals of various kinds) and common people are strong and deep.

Of course, it also expresses itself in violence. Up the coast in Goa, where the level of consciousness probably is higher and also the organizational ability, 60 people were killed as a result of the fisheries situation[26] and so (trawlers are put on fire. Trawlers also destroy the gear of the common fishermen, but settlement in court is difficult and the authorities tend to favor the modern sector. In all likelihood this will develop further and more strongly so. It should only be noted that the effort to turn the trend by expanding to real deep sea fishing, so as at least not to be competitive with beach fishing, might dampen some of this conflict. But the catch of fish from the deep sea will, in all probability, be used as animal feed in rich countries to earn foreign

currency and, consequently, not solve problems 1 & 2 above.[27]

(4) The ecological factor. The figures presented by Kurien tell the story very clearly.[28] In Neendakara, where ~~the~~ a point of gravity of the INP was located, the catch of prawns - traditionally an uninteresting commodity often used as manure for coconut palms - was in 1973 an impressive 45.477 tons. The catch per unit effort - in other words a measure of productivity - was 82,6 kg per hour. It looks like the twin goals of high production and high productivity had been obtained. But six years later, in 1979, the catch is down to 14.582 tons, or 32%. And the catch per unit effort is down to 4.2 kg per hour, or 5%! In another place, Purakkad, the decrease in productivity is even more spectacular for the same period: from 95.2 kg/hour to 1.6 kg/hour - meaning that they have to trawl around 6 hours to catch merely ten kilos! What happened?

Overfishing, of course. The vessels operate at most 50 miles off the coast, meaning that this big fleet is competing on a relatively narrow strip. And the strips get even more narrow as trawlers tend to seek inwards in the search for prawns,[29] thereby competing even more with the traditional sector in addition to destroying their gear, making the waters so muddy that the fish stay away, frightening the fish with engine noise and possibly also destroying the ocean floor in the effort to squeeze out the shrimps with bottom trawling.[30] Compare this to the "superstitious, ignorant" fishermen who had an old saying, "never touch a shoal to the left of the boat", thereby saving it from extinction - that day at least. Ecological wisdom, but fishermen's science seems never to meet the science of fisheries, and certainly not at sea, as Kurien says.[31]

The net result of this is very clear: there are 980 export firms now, with 673 freezing units, but only 10% of the capacity is used, not for lack of market[32] (seemingly

inexhaustible in Japan and the US), but for lack of raw material. 50 % of the trawler fleet lies idle, the rest is running up and down hoping for the "pink gold" to return, for a boom year, a bumper crop again. The answer is, possibly, like for the Peruvian anchovy, an enforced stop for some years, which will turn the whole sector even more in disarray but probably restore the species population to prior levels. However, it should be noted that this in no way will solve problems nos. 1, 2 and 3 above.

## 3. Evaluation

The Norwegian technical assistance to Kerala cost 122.3 million Kroner in the period 1952-1972. After that India has received, in the period 1972-1982 fifty million Kroner for boats and 37 million for equipment - all together about 210 million Norwegian Kroner.[33] In itself no big sum compared with the annual budget of the Norwegian technical assistance organization, now around 4 billion Norwegian Kroner although the Krone is worth somewhat less. How are we to evaluate what happened?

My evaluation is that it is a scandal, and not a partial scandal but a total scandal. The question of guilt is metaphysical; that there were no evil intentions is a matter of course. That everything happened the way it did is easily explained: the Norwegians delivered a technology to a capitalism wanting capital accumulation and profit, and to a bureaucracy wanting foreign currency in order to modernize other parts of India (to some extent with the same type of consequences). To reproach a lion that he does not behave like a vegetarian when presented with meat nicely delivered would impress nobody, least of all the lion. The first generation of Norwegians in Kerala understood this

even if they were more concerned with the remnants of feudal India (the maharaja complex) and middle merchants than with the technological forces they themselves to some extent were releasing. The first generation had strong green inclinations-self-management, small communities and respect for Indian traditions - and pink inclinations: this was the left wing of the Norwegian Labour Party with its faith in cooperatives, modernization, etc. The next generation brushed all of that aside. Of India they understood little ~~or nothing~~ and did not want to understand more than a tourist of average intelligence could catch on his or her retina, or film in his camera. The contact was very poor.[34] The project had to succeed, out of consideration for the public opinion at home. The green and the pink receded in the background for the light and dark blue: production up and productivity up! And it looked as if it was a success. One of the employees, Than Kappan Asari[35] (now high up in the fisheries bureaucracy in Kerala) wrote a flamboyant report, frequently quoted. The problem with that report is that it only registers the period of success which comes, almost as a matter of course. In the beginning, after the first difficulties have been overcome everything works out, production and productivity both increase. The difficulties come, as we have seen above, after 1972, after the Norwegians withdrew and started operating in other parts of India from which we will probably also get positive first-phase reports before they once more, perhaps with some sense of timing, withdraw and leave the misery to the Indians, meaning to the resource-poor among them.

In all of this some patterns of argumentation crystallize. Readers will no doubt recognize them, among others among themselves. Examples:

(1) The goal was not to increase the living standard in the population in general or fishermen in particular; it was precisely to increase production and productivity. Wrong. The goal was more human. I shall never forget the picture of the poor little child

on the poster I helped distributing at the office of the People's Assistance to India Organization in 1953. That later on the goal was adjusted to what one felt one was achieving is another matter; human, but not for that reason very honest. In addition to this it is also clear that they didn't even manage that. The increase in production was a minor one and now even negative; productivity has clearly been decreasing — because of wrong choice of technology.

(2) The foreign currency made can be used to buy protein. Right, this is possible, it can even be used to buy wheat. But in general it is much more probable that the currency will be used for quite other things; rather than a roundabout way of getting protein.

(3) We cannot interfere in the inner affairs of India; our task was only to give them the technology. Wrong. If this is not interference, even to manipulation of a society belonging to an other people, what then is interference? But perhaps one thinks in terms of explicitly formulated conditions. Again wrong: conditions have been formulated all the time, at every negotiation; every agreement entered into was full of conditions. It is only that these conditions were all in the blue, and not in the green or red directions. The conditions were technically rational (under no condition should the engine get too hot!) not humanly rational (under no condition should the price of fish for the common consumer increase!); and in addition to that also commercially rational. What this argument reflects is only the blindness of he who argues for his own political and social bias.

(4) OK - it worked out badly, but the Indians are to blame, not we. Wrong. An argument of this type rejects any form of responsibility for the consequences of one's own action It reveals an ethic of intentions in the extreme: as long as my intention is clean I cannot be reproached. Fortunately, we do

not necessarily practise such rules in our daily intercourse. When we give things to people, also when we give them gifts, we are always doing it with some kind of image of how it will work out, and if we have good intentions we also want good consequences. The Norwegians had an image: it will work more or less as at home, in Norway. Unforgivably naive: we were in Norway in the 1950s by and large rich enough to make the transition from traditional to a modern economic cycle for the products of the oceans; we acquired freezers for the frozen fish. Those who could not afford this economically were as few in our society as those who could afford it in India were few in theirs. Not to know this is unforgivable. In addition, Norwegians also knew something about fish that somehow became ever more expensive and more difficult to get hold of — only that in Norway consumers could afford this.

No, if one wants to explain the Norwegian exercise one has to get underneath this kind of superficial rhetoric. And then one comes down to a layer, some kind of sub-stratum from which projects of this kind are drawing their nutrition:

- The pagan complex, internalized in elementary schools: they are pagans those people out there, ignorant, dirty, superstitious, waiting for the Word, the technological Gospel.

- Norway as the chosen country, not that we are big or rich, but we are "without colonial traditions", there is something special about us, this is the country where the laws of capitalism are no longer valid and marxism is not even knocking at the door, a country beyond suspicion, full of missionary eagerness ~~and~~ but justifiably so;

- the need for atonement, we - that means the West, not Norway - has been sinning through colonialism and warfare, perhaps also "exploitation" although that word

usually is not mentioned; development assistance is the indulgence, one has to pay so that it really hurts, projects have to be expensive;

- universalism, what is good for Norway, what worked out in Norway is also good for others, no double standards please;

- the unreflected, generalized conservatism, blindness as to how social structures work and react, blindness in front of power in general and money power in particular; "that smacks of politics", the idea that the political views shared by most Norwegians from far into the Conservative Party to far into the Labour Party is not politics but simply common sense; even "objectivity";

- the joy at being expert, to be ~~something~~ somebody because one knows something that nobody else, at least within a circle of a couple of hundred kilometers radius, knows.

- anti-communism, the idea that communism feeds on poverty, hence poverty has to be abolished in a crusading spirit.

And Norway certainly knew something; but what Norway knew made the step from expert to export not only a short one, but almost a necessary one. Should one rather start experimenting with new sails on improved catamarans, with smoking and freezing of fish into blocks of ice, with simple chariots for bicycles?[36] For this there is no particular expertise in Norway, what would then happen to Norway? Of course it may be true that a traditional sector still catches six times as much protein per fisherman per day as the modern sector, and generates four times as much employment per rupee (in a population with a very heavy unemployment), but what is that against the fact that the modern sector has two and a half times as high income from exports?[37] Besides, we have been through such problems in Norway, too. And our country has no problems --- Well, perhaps one could not say that any longer. Many of those problems, by the way, are related to vulnerable export industry, something Indians may get a touch of, when the

shrimps have come back, if the Japanese for some reason or another start decreasing the import to their beloved tempura and sashimi. Perhaps at that point I am touching something fundamental: why should the Indians not have the same problems as we have? Who do they think they are, above such problems perhaps? Are we not in the same (fishing) boat?

## 4. Epilogue

In January 1970 I wrote an article in the Norwegian paper Dagbladet about this theme ("Development or Economic Growth")[38] from the Norwegian encampment in the INP district: "The air-conditioning was hanging, rusty and heavy, in the window-sill". It has now fallen down, disappeared. The glory is gone. There is no longer "a varnished yellow board with Indo-Norwegian Project written on it". The tracks have been erased, the camp, built for a short period, is empty, delapidated, a ruin. One of the old "servants" came running and remembered what I a long time ago had forgotten: here, you lived, 22 years ago, and here was the room of the beloved Mr. Lund, the first director, the man who saw everything and understood most of it. But there were stronger forces that came after him. The trawlers are hunting for the last shrimps, sometimes with good luck, making the memories of the Klondyke years at the end of the 1960s and beginning of the 1970s come alive, among the money-greedy. And close to the camp, just a couple of meters away, the traditional fisheries go on just as before, only so hopelessly inferior in the fight for the resources that are now dwindling. As a little comfort for Norway I might, however, add, that when I asked what could be done about it the answer was, "The Norwegians have to come back again". Well, well ---

It was usually along the coast that the Vikings were at their worst, not far inside the country. The Norwegian fisheries project in India has been faithful to this tradition. But India has incredible strength. From where I am writing, a little up in the mountains, with the coast as a strip framing the forest of palm-trees I can see the smoke. There

is a touch of aroma in the air. From the temples the music is coming up. It is early morning, it is timeless. They managed the Moguls. They managed the British. They even managed to get rid of Indira Ghaundy (this is the correct spelling, her husband was parsee and any confusion with the real Gandhi should be avoided even if she prefers that spelling of the name), and putting her back again. They will probably also overcome the effects of Norwegian assistance. A more serious question is whether Norway will learn anything from this experience. I know only one Norwegian development project in detail, this one, the one that for an entire generation will be standing as the Norwegian technical assistance project. But I have my suspicion about others.(39) What happened in Burma, for instance?(40) Do we have to wait for conscious, critical social research to emerge in Burma so that it can speak a language that even we in the West can understand?(41) How long are we to continue this scandalous way?(42) Answer: Probably as long as we still have some money left, ~~In other words,~~ That may be not for a very long period, if the present "economic crisis" is going to continue, something it shows all signs of doing. And perhaps that is all to the good!(43)

## 5. Postscript: the fifth factor

Above the point has been made that the INP project failed in four ways: less protein became available to the population, the level of living of the fishermen decreased, partly violent conflict between the traditional and modern sectors emerged, and depletion of the raw material, particularly the shrimps, set in. Still, however, the project was a success in the sense of bein a major source of foreign currency.

The fifth factor was always there latently: the vulnerability of the export market, but did not become fully evident till September 1983.(44) In an article "Shrimp Industry, Dangerous Dependence" it is pointed out that most of the Indian seafood export value of Rs 3.61o million comes from Kerala, and 85% of that from the export of shrimp, most of which is marketed in Japan. And: "September saw Japan shutting its doors to shrimp exports from India, in response to a sharp spurt in prices to an all-time high of Rs 16o pr kg. Overnight the whole shrimp export industry

was crippled. Dismayed exporters, their processing plants overflowing with unsold shrimp, turned away fishermen - leaving the nearly 300 000 people engaged in the business in various stages of financial disaster. The shrimp price crashed to Rs 100 in Japan and the exporters searched desperately for alternative markets, with little luck. And to add to the panick, the state government announced a power cut. With Rs 300 million worth of frozen shrimp at stake, exporters were in a pretty pickle, and were saved only by the Marine Products Export Development Authority which was exempt from the power cut and offered its modern and sophisticated facilities for cold storage at Cochin. Happy days returned soon enough when Japan re-entered the market once stocks in that country got depleted. But the instability in a business that didn't have the cushion of a diversified market was well and truly exposed".

Export vulnerability for mono-crop countries with only one or a few trade partners is a well known subject in the theory of underdevelopment. Diversification of export commodities and multiplication of trade partners are among the classical recipes. India may encounter the problem that competitors, such as Thailand and the Philippines (49), are closer to the major market, Japan, and Mexico closer to the US. A producers' organization along OPEC lines may run into the difficulty that the product is less indispensable than oil. In the meantime the export dependency will hang like a Damocles sword over the whole exercise. As indicated above, the step from expert to export is not only a short one but fraught with dangers.

And that leads to the major problem: under what conditions could these dangers have been avoided? What would be the theoretical points of entry for the formulation of practical strategies that could lead to happier results? Above some such points have been indicated, let us make them more explicit:

(1) A world that is stratified in countries with higher and lower buying power

(2) A country that is stratified in classes with higher and lower buying power

(3) An extraction (or processing) technology that can be used to produce products that can fetch higher or lower net prices

(4) A storage (or distribution) technology that prices the product out of reach for some markets, but not for others

The technology for catching seafood could be used for shrimp as

as well as for fish; the storage/distribution technology eliminated most buyers for the fish but not for the shrimps; these buyers were in the upper strata of domestic and global society, yielding a small internal but rich market, and a big world, export market; with all the consequences given above.

Imagine now that the technology could only be used to extract/process a product that did not come in "sophisticated" and "ordinary" varieties, and that the storage/distribution technology did not make the product appreciably more expensive to the end consumer (among other reasons because he might have to buy storage facilities - such as frigidaires - on his side). In that case it should still be within reach of the traditional consumer, assuming he is still interested in the product. If these conditions are not met and the project is operating in a market economy and in a capitalist society (meaning that a major goal is capital accumulation, and the method is playing on the market so as to maximize profits) then the result will be as above. But if the conditions are not met the results might be better basic need satisfaction for those most in need even with a market economy in a capitalist society, simply because gains can be made by playing on high quantities of poor consumers rather than small quantities of rich consumers (and on high quantities of rich consumers abroad).

Looking at the four conditions, noting that (1) and (2) will remain valid for some time, the key operational conditions are (3) and (4) and the common factor is - of course - technology; ~~but~~ not only production/extraction technology, but also storage/distribution/consumption technology. On earlier occasions I tended to focus more on storage technology, arguing not only for less expensive technology for catching the food, but also for storing it. I would now go one step further: if the same technology can be used for different products it will be used for the product that yields higher profits, unless non- or even anti-capitalistic controls are brought into the picture. New agricultural techniques will be used for coffee beans rather than nutritional beans, and so on. Ideally the technology should be less versatile, more specific, if such controls cannot operate for socio-political reasons. And still there would be problems. A modern dairy produces milk -- but milk can be separated into cream for the upper classes and very lean varieties for the lower classes, and the optimal separation from a profit point may not coincide with the optimal separation from a basic needs (including health for the over-

fed) point of view. Under extreme conditions it may pay to throw the leaner varieties away or to make them so lean that nutritional value is negligible.

A car factory can be used to produce an inexpensive people's car, but the technology for an expensive car for few people, and the storage and distribution system, is about the same. It may, of course, still be referred to as a people's car (rich people are also people, even when they have a major part of the consumption technology, a garage or at least parking space) - as is the case for the Indian Maruti car, launched December 1983 at the price of Rs 47.5oo (an industrial worker earns something like Rs 12 per day). So there are problems. Needless to say, we have this technological versatility not just by chance but precisely in order to make product substitution keeping the extraction/production/storage/distribution facilities relatively constant possible, playing optimally on the market.

Conclusion: under the condition of a market economy/capitalist society development assistance based on technoloy transfer is likely to have the class of consequences discussed above. This is also true when a country has been able to play on the world market (because it was not colonized, was a first-comer, etc.) so as to transform itself into a world upper class, making very many products available to all classes in the country. Norway managed that, actually only after the Second world war. India will not manage this in any foreseeable future. Hence "modernization" assistance is likely to be counterproductive - if the goal is satisfaction of basic needs for those most in need.(47)

N O T E S

* The present paper is based on a short trip to the original INP [Indo-Norwegian Project] area in Kerala November 1982, as a follow-up of my research stays in the area December 1960, July 1962, December 1969, January 1976. I am grateful to all the informants in the area who so willingly contributed information, but above all want to record my indebtedness to John Kurien, Sebastian Mathew et al at the Centre for Development Studies, a highly qualified team of local researchers who through their findings contribute to the understanding of the real [although mainly unintended] consequences of technical assistance projects of this kind. The research project was one of the first projects undertaken by the International Peace Research Institute, Oslo, jointly with the anthropologist Arne Martin Klausen The postscript is based on a trip to India December 1983.

[1] See Galtung, 1980 for an image of the early beginnings, with references to the official documents and a field trip. At that time the INP was new, also in this author's mind, and my research problem was more focussed on what kind of relations the INP would engender between Indians and Norwegians at all levels. The research on the real impact in the local area came as a consequence of the 1969 field trip.

[2] This is referred to in posttive terms here, "intergrated" standing for multi-purpose, more community-oriented, as opposed to uni-purpose, more technically oriented. For the official presentation, see Sandven, Per, The Indo-Norwegian Project in Kerala, NORAD, Oslo, 195
[3] See Kurien 1978, first chapters, and Kurien 1982a, p. 78.

[4] See Klausen 1968, Galtung 1961/1980a, 1974/1980b and 1970.

(5) The presentation below draws heavily on Kurien 1978, 1979 and 1982a; the paper written for FAO/UNDP (1982b) perhaps being less useful.

(6) Kurien, 1982 a, p. 24. The figure is 3.65% to be exact.

(7) ibid., p. 147

(8) ibid., p. 69. Professor Panikkar faults the technology and mentions that "it has been suggested that augmenting fish production for local consumption be based on less capital-intensive technology using less commercial fuels" - referring to another paper from the Centre for Development Studies in Trivadrum, Kerala, Some Notes on the Possibility of Decentralized Development in Kerala, mimeo.

(9) Kurien, 1979 actually has this as the major theme throughout.

(10) Kurien, 1982 a P. 24 and Kurien, 1979 P. 88.

(11) Information given by Professor Raj of the same Centre, checked by the present author.

(12) The intervening factor being the blood quality of the body.

(13) It has to be understood that the fish and the shrimps compete for scarce storage and freezing space, on their way to the consumer in order to understand why so much can be thrown over board - space being reserved for the commodity fetching the higher prices.

(14) Of course, there are ways of getting around this through

seller-buyer agreements, underbilling, keeping the balance in the hard currency country for local consumption when on visit, etc.

(15) This, of course, is the normal cycle in Norway, but only after the 1950s - it is a relatively recent phenomenon.

(16) Or rather: they seem to act as if they do not understand it. The major factor shaping their epistemology is probably the identification with the modern cycle for reasons of ideology and cultural bias and particularly because of its "economic rationality", and the (naive) faith that the modern will drive out the traditional as it did in the rich part of the world - naive because of the lack of understandin of the difference in international context.

(17) Kurien, 1978, p.54, comparing 1974-76 with 1956-58.

(18) Kurien, 1978, p. 68.

(19) Kurien, 1978, p. 73.

(20) Just a reminder that the "modernization of fisheries" is not the only problem with which the traditional fishermen are confronted

(21) Kurien, 1982, p. 55.

(22) Of course, this certainly is not only the case for India, and not only for the sector of fisheries.

(23) I am thinking of the Namboodiripad brahmins and the role played in the Kerala State Communist Party.

(24) In addition, of course, Marxists tend to believe in modernization, in the scientific-technical revolution - if only property relations are right. There seem to be very few Marxist studies critical of techniques per se.

(25) Klausen 1968 focuses on the differences between the Catholic village Sakthikulangara and the Hindu village Neendakara in the INP area, the former fully utilizing the facilities of the INP. My own interpretation is in terms of caste. Indian fishermen being of very low caste (the work being dirty, not only manual, and it involves the fisherman in the act of killing)and rank equilibrium being the general norm it was and is simply unpermissible for the low rank fisherman to become rich. The Catholic village was a class but not a caste society, giving to the fishermen more mobility chances. Both were given mechanized boats. But in Neendakara I witnessed myswlf how, at night, both were pushed over to the Catholic village and used by them (when the Norwegians in the camp could not see it; I had the advantage of living in the village), being rented out im a highly complew way through Nayar middlemen, higher up and hence less worried about getting richer.

(26) Asle Finnseth,"Rovfiske og vold i India-hjelpens kjölvann", Folkevett, 1982, pp. 16

(27) The reason is simple: if a foreign market pays better, then the products will be sold there whether they are fished within throwing distance of the beach, in shallow waters or from the deep sea.

(28) Kurien, 1982a, p. 82.

(29) Kurien, 1982a, pp. 79ff.

(30) The implication in terms of larvae and immature shrimps is obvious.

(31) Kurien, 1982a, p. 59.

(32) See postscript, though: the market has not disappeared, but is not quite inelastic either.

(33) The same type of project is now continued in Orissa, India.

(34) Living in the village, I hadample occasion to see how only very few Norwegians ever ventured into the villages, but left the encampment by car. They met the Indians at work, not at home, not in their more general setting. This, of course, is the general pattern for such projects.

(35) The report, The Impsct of the Indo-Norwegian Project on the Growth and Development of Indian Fisheries was written for the FAO Conference on Investment in Fisheries, Roma 1969.

(36) A Belgian group has been experimenting, together with Indians, with such technologies further down on the Kerala coast.

(37) It should be pointed out that the argument of this paper is not against export, but against export to the rich outcompeting local consumption for the poor. Export is trade, trade ties peoples and countries together, when not exploitative then that os all to the good.

(38) Galtung, 1970.

(39)

Thus, NORAD (the Norwegian Development Assistance Agency) also had a project at Turkawa (Lake Rudolph), giving a support of Norwegian kroner 20 million over 12 years. I have not visited the project myself, but two independent and reliable witnesses, one Swedish and one Norwegian, report the following. The goal was to make Nile perch from the lake available in large quantities by means of modern catching and storing techniques, with a giant factory for deep freezing and insulated vans. Partly because of the rise in oil prices, partly because the roads destroyed the vans, but mainly because the product became too expensive the project was abandoned. There was one happy outcome, however: the local foshermen found the flat roof of the deep freeze factory very well suited for drying the fish in a more conventional way.... It will be interesting to see whether the NORAD project in Tanzania to modernize the fisheries (the Mbagani project, Norwegian kroner 150 million over 10 years) will have similar effects, my prediction being that it will - with the hope that the prediction is self-denying.

(40) See Trond Haugen and Svein Wilhelmsen, Eksport av norsk fiskeriteknologi til Burma, Norges Handelshöyskole, Bergen, 1981; with details of an almost incredible concatenation of errors and ignorance in the transfer of trawling technology. For an analysis of a Norwegian technical assistance project involving shipping line in Tanzania, see Ronald Bugge, L'inadequation entre les moyens mis en oeuvre et les objectifs poursuivis dans l'aide aux projets, IUED, Geneva, 1983 - with the same theme of unreflected transfer from Norway and ships that even physically, from a purely engineering point of view, were inadequate. Also see Mushi and Kjekshus, Aid and Development. Some Tanzanian Experiences, NUPI, Oslo, 1982.

(41) Thus, in a very glossy report from the Irish foreign ministry, with much exposure given to the minister of state at the Department of foriegn affairs, Mr. Jim O'Keeffe, one reads about a project in Tanzania "aimed at upgrading the methods of animal husbandry - - expected to lead to increased production of milk, for which there is a ready demand"(Assiatance to Developing Countries, Report for the Year 1982, p. 15)and for Sudan that "most of the construction work on the major Gezira Dairy Cooperative Project was completed in 1981 -- the milk processing plant was commissioned in May 1982 --"(p. 19) And one wonders: what will the price per unit milk become? Who can afford it? And, just as importantly: to what extent do such projects transfer production factors for inexpensive but low productivity milk to expensive but high productivity milk? I do not know, the example is chosen at random among all such reports -- but I have my suspicions. How dependent is the proper evaluation on the existence, in the country, of good development researchers capable of challenging such self-congratulatory reports?

(42) "Scandalous way" may seem strong for some. However, the evaluation by Platteau, a Belgian possibly more disinterested than Indians and Norwegians, as recipients and donors respectively is quite clear (Platteau, 1982, p. 37):

"Revealingly, big investors, mostly from outside the area, have already begun to withdraw their capital from Sakthi. The presumed losers are ($1^{o}$) the small local boat owners who did not correctly anticipate the downswing of the cycle and based their profit expectations on the past performance of trawler boats; and ($2^{o}$) the boat crews whose employment opportunities are suddenly frustrated. Furthermore, in case overtrawling in Sakthi's inshore waters has also encroached upon the available stock of other fish varieties than prawn, traditional fishermen are probably a third category on the losers' list. In many respects, the story of Sakthi is therefore the history of capitalist development in a nutshell. And the story isn't finished yet". All of this in spite of, or because of, what Platteau also says (p. 18): "When I say that the impact of the INP has been beyond all expectations, I mean that private economic agents responded to the stimuli and the new opportunities it created on a scale that nobody would have thought possible when the Indian central government decided to start an experiment to modernize fisheries in a Pilot Area of Kerala".

(43) Not only Norway, also the Netherlands (and probably other countries) have participated in this kind of develolment assistance. Shrimp trawlers were delivered by the Dutch technical assistance, seventeen of them, built in the ship-yards De Hoop and Damen. Overfishing by mechanized boats and trawlers became a major problem in Goa where the catch decreased from 40.000 tons in 1971 to 26.500 tons in 1979. The Indian "National Forum for Catamaran and Countryboat Fishermen's Rights and Marine Wealth", representing thirteen organizations of fishermen, warned in a letter the Dutch minister of development assistance, and the project came to an end. For reports on this, see Ben van Aken, "Trawlers voor India: Exportbevordering of ontwikkelingshulp?", Onze Wereld, October/November 1981, pp. 10-11 and Jan Stoof, "Jan de Koning haalt zich de woede van zes en een half miljoen Indiase vissers op de nek", Vrij Nederland, 16/5 1981, p.4.

Then, of course, India is not the only place such things happen. In an advertisment in the International Herald Tribune, 11/7/1983, on the occasion of the fifth anniversary of the military coming to power in Mauritania one page is devoted to "Fishing the traditional way -- and the modern way" with a set of photos for either. The traditional set ends with the produce being sold on the spot and consumed very near by; the modern set ends with "produce is ready for export." which country provided the "development assistance" in the Mauritanian case is unimportant: the problem is systemic, structural, not linked to particular donors and receivers.

(44) India Today, December 15, 1[illegible], p. 129

(45) Tadem (1977, p. 19) puts modernization of fisheriesin a broader picture that is important although it does not apply to the INP, where Norway supplied the technology, India did the business and Japan became the market:

"--Japanese interests in Philippine fishing must be viewed in the context of Japan's overall economic strategy towards the Philippines and other developing countries. The cornering of sources of raw materials while retaining these same sources as markets for finished goods, the export of capital through joint ventures and the relocation of "dirty" industries, the granting of self-serving loans and technical assistance and the eventual creation of a situation of dependency - all of these characterize Japan's economic adventure into the Third World. The complicity of national elites in this process cannot be overemphasized".

(46) Particularly in Galtung 1980b, asit appeared in 1974.

(47) Perhaps it should be emphasized very clearly that this type of criticism is different from the point often made that development assistance enriches the donor country, sometimes more than the recipient country. In my studies of the INP I have not found any indication in this direction, thus the machinery was not even Norwegian. In that sense the assistance given was "idealistic", unguided by narrow self-interests - but alsp unguided by any understanding of social and economic processes, partly because the experts were in the technical fields associated with the project and the board members etc. at best were amateurs in such fields. Nor should, incidentally, the critique be confused with the tendency sometimes found to mix development assistance with missionary Christianity; I have not discovered any signs in that direction either. Nor can it be said that the project benefited a dictatorship: India in general and Kerala in particular were as democratic as one can reasonably demand. But these three "critical" categories, important as they are, are by no means sufficient to cover what can, and in fact does, go wrong.