

# Fisherwomen In Kerala

## The Impact Of New Technology On Their Lives

*These are extracts from a paper entitled "Fishing, Technology and Women" done for the Centre for Development Studies, Trivandrum. This paper was accompanied by 10 case studies.*



IN 1953, an Indo-Norwegian project was taken up in a block of three traditional fishing villages in Kerala, with a view to introducing modern technologies of fishing and fish preservation. Mechanised boats, improved gear and the use of ice and freezing were introduced. The project also envisaged provision of better health services and sanitation in and around the three villages. The purpose of this study was to discover and document how the resulting changes in technology have affected women of fishing households.

The project, as it was conceived and designed, was mainly geared towards men in the community. Since women did not go out fishing it was assumed that change in the technology of fishing was of no direct concern to women. The idea was that if the benefits of development were to reach men they would automatically trickle down to the women.

The shrinking figures of women's work participation in India since the turn of the century bear ample evidence to the fact that technological change has tended to take work away from women. In spite of this evidence, very little attention is paid to this aspect in most projects that envisage introduction of

new technology. This project, too, did not seem to concern itself with the question: will the new technology take work away from women or create new work opportunities for them? The purpose of this study is to raise this question in retrospect. The study also asks what changes, if any, have come about in the fertility behaviour of women who have lived through a major technological change for almost a generation.

The present study chose 30 fishing households on the basis of a random stratified sample: 10 households were chosen from each of the three villages. For each of the 30 chosen households, information was collected on family genealogy, including names, relationships of all relatives, age, place of birth, education, dowry, occupation, number of children born alive or dead and family planning status. Information was collected on 784 married couples in all.

### Situation In Kerala

Kerala is one of the leading maritime states in India. It has a long coastline of 590 kilometres and a network of rivers, lakes and water areas which make it ideal for fishing. The waters of Kerala are also by far the richest in the country. Kerala has a fishable area as large as the land surface of the state. Its coastline is dotted with 249 fishing villages.

The fishing population of Kerala as a whole amounts to about 770,000 forming 159,000 households. Thus, one of every 30 fishing households in the state is that of a fisherman. There are about 160,000 active fishermen. The

industry provides employment to another 350,000 persons. Fishing families belong to three major religious groups, Hindus, Christians and Muslims.

Fishing occupies an important place in the economy of Kerala as it provides an important source of food and protein, is a major avenue of employment, and in recent years, it has become a major export industry. Kerala's population is essentially a fish eating population. The level of fish consumption in Kerala is four times the national average. Until very recently, fish was a relatively cheap source of protein. Even in the humblest of households there is at least one meal with fish. Eggs, milk or meat rarely enter the diet. Fish remains an integral part of the food.

The people engaged in fisheries come under three distinct groups. Those employed in the actual catching of fish, those engaged in the processing, and those engaged in the making of fishing equipment such as craft and gear. Traditionally, there always existed some export of dried fish and prawn powder from Kerala to South East Asian countries. This activity was, however, marginal. The major preoccupation was to meet the domestic consumption requirements of fish and that too largely for the population of the state and the border districts of the neighbouring state. In recent years, however, exports of prawns has become a major economic activity and Kerala's share in this export is close to 50 percent. The total quantity of prawns exported went up by 12 times

between 1963 and 1977.

Though Kerala occupies only 1.1 percent of India's land area, it supports 3.9 percent of its population. Population in Kerala has been rising consistently from one census period to the next at rates faster than those experienced by the country as a whole from 1901 to 1971. A principal reason for higher rates of growth of population in Kerala, particularly from 1941 to 1971, was a substantial drop in mortality rates without a corresponding decline in fertility rates. While Kerala has the highest population density in India, it also has the highest literacy rate, female as well as male, and the lowest mortality rates. The ratio of women to men in Kerala has always been higher than that for the country as a whole throughout the present century, and it has always been in favour of women. Thus the 1981 census showed that the sex ratio for India was 935 women per 1,000 men, but in Kerala it was 1,034 women per 1,000 men.

However, among the fishing population, there is a clear deficiency of women. Thus in 1981, there were only 974.7 women per 1,000 men in the fishing population but there were 1,019 women per 1,000 men in the rural population of Kerala.

The age at marriage for women has always been higher in Kerala than in the rest of the country. The female age at marriage in Kerala has been rising from decade to decade so that the average for the state was already close to 21 years in 1971 while it was only 17.2 years for the whole of India. Kerala also has the largest percentage of deliveries under institutional care in the country.

### **The Project Villages**

The Indo-Norwegian project was one of the earliest external aid projects agreed upon after India became independent in 1947. With a view to applying aid effort in a concentrated form, three spatially continuous fishing villages in Quilon district were selected. The three villages, covering an area of 25 square kilometres, are located on the national highway going from Cape

Comorin to Salem. Two villages, Shakthikulangara and Neendakara, are predominantly Latin Catholic and one, Puthenthura, is an Araya Hindu fishing village.

It is nearly 27 years since the project was launched in these villages and 17 years since the project was completed. During this period, a number of major changes have occurred in the economies of the villages, though not each village has been affected in the same way. In 1953, not a single mechanised boat was operated by fishermen in these villages but currently there are 419 such boats operated by

in traditional fishing and less than 15 percent in mechanised fishing.

Not only is boat ownership concentrated in Shakthikulangara but its distribution pattern is also quite uneven. Thus, 86 percent of the mechanised boats in the project area are owned by people in Shakthikulangara. Of these, close to 60 percent are owned by persons owning two or more boats. In the other two villages combined the corresponding proportion is 19 percent. It would be reasonably safe to say, therefore, that while Shakthikulangara has benefited more from the mechanisation of boats,



**Women at work in a prawn peeling factory**

local fishermen. There has been a steep decline during the same period in the number of traditional crafts operated by fishermen in these villages.

Before 1953, the fish caught in this area were sardine, butter fish and mackerel. On the introduction of mechanised boats, fishermen started fishing for sharks and seer fish which lay in waters beyond the reach of traditional craft. Today, fishing for prawns altogether dominates the whole catch effort in this area. In Shakthikulangara and Neendakara, 50 percent or more from fishing households are engaged in mechanised fishing. Only 20 percent or so are in traditional fishing. In Puthenthura, on the other hand, close to 60 percent are engaged

yet economic inequalities have increased.

Puthenthura is the village with the highest female work participation. Almost 70 percent of these women are occupied in net making. In the other two villages, most working women are dealers in prawns. While both net making and prawn dealership can be considered activities of the self employed, the former is much lower paid than the latter. In all three villages, around one fourth of the working fisherwomen are engaged in prawn processing for wages but the absolute number of women doing this work in Puthenthura is almost as large as the number drawn from the other two villages together. Interestingly,

headload fish vending, a low income and low status job is concentrated in Shakthikulangara. This could be taken as an indication of the existence of extremes within the fishing community of this particular village.

### **Economic Impact**

The impact of technological change has been enormous in the three study villages. The extent of change has, however, been quite unequal. The maximum impact has been on Shakthikulangara, the village closest to the main boat jetty, in terms of the facilities to which it now has access.

This village is more like a town. The impact is somewhat less in Neendakara, the other Latin Catholic village, which lies across the highway bridge from the main jetty, and the least in the Araya Hindu village, Puthenthura, which is located some distance away from the main boat jetty. The use of ice for preservation seems to have taken firm root and spread uniformly in all three villages irrespective of the method of fishing employed. Even women headload fish vendors use ice when they store their fish or take it out to shell. Since the technological change was followed closely by the discovery of major new prawn grounds, a distinct improvement has taken place in the opportunities for employment and income generation in the area comprising these three villages and their neighbourhood. The over emphasis on prawn fishing has, however introduced profound seasonality in operations with the concentration of activity during the three monsoon months between June and September.

Mechanised fishing is now the dominant source of income and employment in the two Catholic villages. Most menfolk in these villages either own or work for mechanised boats. Mechanisation has increased the disparities in income both within the villages and also between the villages. Improvement in incomes as well as the increase in disparities is clearly visible in the development of housing in the area.

New work opportunities have opened up for fisherwomen in the trading and processing of marine products and net making. These work opportunities are, in general, better paying than the opportunities of work that existed prior to mechanisation. Participation by women in new work opportunities is widespread in all three villages and has distinctly improved over time.

There is also a distinct change in the civil condition of the women workers of these villages. Earlier, either widowed and divorced women or unmarried girls from single parent households took to paid work. Now married women and unmarried girls from two parent households account for the large majority of working women in all three villages. Thus women's work participation has improved qualitatively as well as quantitatively.

There is a marked improvement in the sex ratios in favour of women in all three villages, indicating a lowering of both female infant and maternal mortality rates. The proportion of births conducted with institutional help has increased significantly in all three villages. While in Shakthikulangara and Puthenthura nearly 100 percent of births take place under institutional care, in Neendakara more than 50 percent of births are conducted in hospitals or nursing homes. Even the lower proportion for Neendakara is higher than the proportion of births taking place under institutional care for the rural areas at Kerala as a whole which stood at 45 percent in 1972. For the country as a whole, institutionalised births stood at only 17 percent for the rural areas and 35 percent for urban areas. The acceptance of family planning is close to 50 percent in all three villages. At the same time, female sterilisation is the only accepted form of limiting the family size.

### **Women's Role And Status**

The micro level information collected through the autobiographies of women from the study area enables us to supplement the insights gained at the macro level. Even though women

from fishing households were never directly engaged in what may narrowly be defined as fishing, they always participated in a number of related activities, not all of which got necessarily paid for, which supplemented the average household's income earning capacity. Unfortunately, there is hardly a census or survey that has adequately captured the full extent of work participation by women from fishing households. This is as true today as it was a generation ago. Still, on the basis of whatever information we could collect and put together it appears that women's work participation has increased considerably in the three villages.

The ideal norm, both now and in the previous generation, among both Hindus and Catholics in this area is for women to devote all their time to housework and not to seek work outside the house. Working outside the home is considered essentially a male job. It was felt that by going out to work women would expose themselves and come into contact with other men. However, from the autobiographies we find that quite a few women even in the previous generation were doing something besides their day to day housekeeping, in spite of the norm. Women in the Catholic villages reported remembering their mothers husking rice, dealing in broken rice, collecting shells, vending fish, making nets and defibring coir. Among Arayas, defibring appeared to be the single most important occupation of women of the previous generation. Net making came next. The fact is that most grandmothers and mothers did have some remunerative occupation. Fish vending by headload was an occupation most frequently reported in the Catholic villages whereas midwifery was more common in the Araya village. It is probably true that many of these activities were seasonal and brought in meagre additional income, but the fact cannot be overlooked that these women were engaged in income generating activities.

## Present Generation

Several of our principal respondents had started doing work at an early age, helping their mothers. Some worked independently of their mothers though in related activities. The Araya women were less involved in work as children since most of them were attending school. Latin Catholic women respondents had practically no schooling and were totally illiterate. Some Catholic women gave up work after they got married, while others took to work that would bring in slightly higher earnings.

It is noteworthy that only two out of 10 respondents are at present not engaged in an income earning activity. However, several of them were confined to their homes, bearing and rearing children, for the first few years after their marriage. It is equally noteworthy that the work they are now engaged in is quite different in nature and income generation to the work that their mothers were engaged in or that they themselves as children did. One woman, who used to spin coir ropes as a child while her mother defibred coir husks, is now engaged in fish trade as a prawn dealer. Another has graduated from shell collection to fish trade and another from headload fish vending to the management of her household boats. One woman runs a mutual saving club and a women's tea shop while another has started making nylon trawl nets for use in mechanised boats. One who worked for several years as a peeler of prawns has lately taken to net making at home.

Not only has the type of work changed but the income has also improved considerably. Since fishing, mechanised as well as traditional, is still highly seasonal, the associated activities have also tended to be equally seasonal in terms of the employment and the income they offer. For the present generation, particularly those born in the fifties, work opportunities definitely seem to have increased, though the work available to women in the Catholic villages has been more

remunerative than that within easy reach of women in the Araya village.

## Younger Generation

Of a total of 18 younger women, daughters and daughters-in-law, in the homes of our 10 respondents, only four are working outside the home. The rest are mostly involved in bearing and rearing children. It is relevant to bear in mind that all these 18 young women have had better levels of education and better access to medical facilities than had their mothers. It is likely that most if not all these women will take steps not to undergo excessive childbearing. To the extent this comes about, many of those not working now may decide to take some work once their children are sufficiently grown up.



## Change In Status

Involvement in work has brought major changes in the lifestyle of several of our respondents. Work now means not only going out of the house, but also meeting, dealing and competing with men, taking independent financial decisions and handling comparatively large sums of money. Those of our respondents who, by dint of their hard work and business acumen, have become reasonably successful in their work, carry a lot of weight in their households.

In such cases, men's roles too have undergone a change. Normally, men in fishing households are not in the habit of helping in any so called female tasks or taking care of children. Even when they are not occupied full time in their work, they do not help with women's work. Now with women going out for long stretches of time, men have to take on some responsibility for the care of children coming back from school. Two of our respondents, who are not employed, do not have the kind of freedom and status enjoyed by the eight employed respondents. The nonemployed women continue to play the dependent, subservient role of the traditional household wife. For them, contact with the outside world is only

through their husbands or the extended family. These women ask no questions and try not to differ with their husbands on any matter.

The intergenerational change in women's literacy has been quite pronounced. The mothers of all our 10 respondents were totally illiterate. Not even one of the mothers is reported to have attended school. In the case of our respondents, the situation improved. While all three Araya women respondents are literate, having attended school for five years or more,

four out of seven Latin Catholic respondents are completely illiterate, never having had any schooling. The other three have been to school for three years or less, and are now unable to read and write. With regard to the children of our respondents, the position is remarkably similar for both the religions, in that they have all been sent to school for sufficient lengths of time. One girl is going to college. Thus there can be no doubt that remarkable improvement has been achieved among the Araya and Latin Catholic fisherfolk of the three study villages with respect to literacy level. It is noteworthy that girls are not lagging behind.

There appears to be no change with regard to the ideas about universal marriage in either community. Both groups subscribe to the idea that marriage is universally necessary and life is incomplete without it. In spite of better levels of education and better economic status, the age of marriage has not been pushed up considerably. However, even at the turn of the century prepuberty marriages hardly ever took place in this part of the country. The age difference between bride and groom has remained the same, around six to seven years.

The age of marriage was low, around 16 or 17 years, for the mothers of all our respondents. Although our respondents too were married at a relatively young age, it would still be correct to say that they were married somewhat later in age than their mothers. However, it is not quite clear that the new generation of girls is marrying later. The average age at marriage of Latin Catholic women works out to 16.5 or below. The average age at marriage of the four married daughters of our Araya respondents works out to 21. Girls from Araya households tend to get married around the age of 20 whereas Latin Catholic girls, it appears, still get married around 17. The one Catholic girl who is in college is an exception, not at all the rule. One possible reason for delayed marriages among the Araya fisher women could

be that they tend to take to work even when unmarried whereas this is much less so among Latin Catholics. On the other hand, there is a phenomenal rise in dowry among the Catholics, and this factor is bound, to operate as a brake on early marriage because parents have to put together the necessary resources before they can get their daughters married.

Clearly, this factor has not had this impact so far.



### Marriage And Dowry

Among both Latin Catholics and Araya Hindus, marriages are arranged by parents and other relatives. The major part of the responsibility of finding the right groom or bride falls on the relatives. The main considerations that affect the choice of a partner are caste, religious group, possible dowry, economic

position and the family background. In both groups, there are certain rules as to who should marry whom. Among Hindus, cross cousin marriages are preferred but amongst Catholics this kind of marriage is prohibited and a large number of other relatives are also excluded from marital partnership. As a result, Catholic households keep good track of their genealogies. The church also keeps systematic records of births, deaths and marriages.

Dowry among Latin Catholic was of very modest proportions and virtually nonexistent among the Arayas at the turn of the century. None of the Araya respondents mentioned dowry being given in earlier times. Many Araya grandmothers and mothers were married without any exchange of dowry at all.

Though dowry is not an entirely new concept in these fishing villages, it did not prevail in the way it does today. We find that most of the mothers of our respondents got married with a dowry comprising of silver trinkets. Only occasionally did a cash sum of Rs 50 or so pass hands. By the late sixties, however, dowry had escalated considerably, particularly amongst Catholics. This could be explained by their recent prosperity in the wake of mechanisation of fishing and the discovery of prawns in large quantities.

With the situation in regard to dowry worsening in recent years, parents have to put aside very much larger sums than ever before to get their daughters married. They expect their sons to bring in equally large dowries. In the Araya village, the sums that pass hands at the time of marriage are somewhat smaller. But Araya fishermen are, on the whole, not doing as well financially as are Catholic fishermen. The important fact is that dowry is now no less strongly rooted among Arayas than among Catholics.

Dowry is usually given in cash, land and gold ornaments. Both communities record the amount of dowry given. Catholics report it to, the church where it is recorded in the marriage register, and the Arayas record it in their Araya

Sewa Samithi. Cash is usually handed over during the engagement ceremony to the groom's parents. Gold jewellery is worn by the girl. The gold content and purity is discreetly checked, and discrepancy results in rejection of the girl. Owing to lack of resources, marriages often take place on part payment of the dowry coupled with a promise to pay the rest later on. The girl's parents thus buy some time. If the promise is not kept, it leads to endless misunderstandings which tend to find expression in verbal exchanges and sarcastic remarks. The situation is further aggravated when the girl goes for her confinement to her mother's house, as is the custom, and is not called back or is not allowed to return unless she brings the promised amount.

Even when the girl brings the full dowry, there seem to be endless misunderstandings with regard to its use. The problems arise because the parents-in-law feel that the dowry should belong to them since they have invested in the son. The girl's parents give it on the assumption that it is meant principally for the use of the girl and her husband. The true ownership of the dowry is not made explicit. In the initial period, since the girl is usually in a rather weak position, she can often be made to agree to anything.

We came across many instances where the husband used the dowry his wife brought to buy a boat, build a house or buy his passage to the Gulf. Generally, the groom is allowed to dispose of the sum as he likes with little difficulty or misunderstanding on either side. It is when his parents try to use the dowry that complications start. In the event of the death of the husband or break up of the marriage, the dowry ought to be returned. Where there is dispute on this score, the church or the Samithi has to step in.

The idea that a woman must produce a child, preferably a male child, without undue delay, holds good to this day. A bride has to prove her fertility. Among Arayas, a woman who gives birth only to daughters or one who has

no children can be cast off. One woman was asked to go back to her parents because the astrologers prophesied only birth of daughters to her. Another woman wants her son to send his wife away because she has not conceived.

This tremendous concern over childlessness is reflected in the religious vows women take and the ayurvedic potions and allopathic treatment resorted to in the hope of making an infertile woman fertile. One has not heard of potions or vows for a woman to be saved from excess fertility. Given the tremendous concern over fertility and the arrival of male children, it is of no great surprise that all our 10



respondents were born in families with a rather large number of children.

The mothers of our respondents delivered all their children at home with little or no qualified medical help. A certain course of ayurvedic treatment is given to the new mother in both religious groups, irrespective of the means of the household. The faith in and awareness of ayurvedic medicines is uniformly of a high order and well spread. Most women, young and old, recall the care given to them after delivery. There is not much change over the years with regard to the after delivery care given to the new mother.

The major difference now is the increasing shift of deliveries from home to hospital. While in the previous generation, not one mother had made use of hospital facilities, all our 10 respondents had been to the hospital for at least some of their deliveries. In the case of daughters and daughters-in-law, the shift from home to hospital has been total.

Loss of children at an early age used to be frequent in both groups. Elderly Catholic respondents recalled the continuous ringing of church bells indicating usually infant deaths. This position seems to have improved considerably in the lives of our respondents.

Among our respondents, five out of 10 have had fewer children than their parents had; four have had larger number of children and one has the same number as her parents had. The average number of children per respondent works out to be a little higher than it does for their parents, 6.7 against six. So the shift towards a smaller sized family cannot be claimed for our respondents. It is noticeable that the number of children born to Arayas, both the respondents and their parents, is smaller than the number born to Catholics, 4.3 and 6.3 respectively.

It is when we come to the married sons and daughters of our respondents that we notice a distinct tendency towards a decline in the number of children. The number of these young couples adds up to 18. Six of the 18 women have undergone sterilisation. Of these six, as many as three underwent sterilisation after having had only two children. The tendency towards a decline in the number of children prevails among the Catholic as well as the Hindu fisherwomen though the latter seem to be somewhat ahead of the former.

The custom among both religious groups is for wives to go back to their natal homes at least for the first few births. Apart from thus shifting the financial burden of the birth on the woman's parents, the practice was

meant to give her some emotional and psychological support, and also time to recuperate, by keeping the couple apart in their respective homes. The separation period among Catholics is just one month, till the child is baptised, Among the Arayas, it is longer. The older Araya women feel that this led to better spacing of births. Now with the greater availability of medical help in this area, many daughters-in-law do not even go back to their natal homes for delivery.

In both religious groups, the idea of taking to contraception for spacing has not taken root. The idea is quickly to have as many children as one wants and then to go in for female sterilisation. The acceptance of female sterilisation reflects a basic preference regarding who, husband or wife, should undergo an operation, once it is agreed that no more children are needed. All the 10 respondents have now been operated on. All the women told us that they were being advised to get sterilised earlier, but it took them and their families time to make up their minds. It is interesting to note that all of them had reservations with respect to the after effects of sterilisation, and now complain about frequent headaches and general weakness.

We may conclude with the words of Beatrice, a prawn dealer in Neendakara, who, when asked if the project had benefited women, said: "The mechanisation of boats and the discovery of prawns in Neendakara sea did not benefit the women directly because we women do not go out to sea for fishing. Some people might, as you say, even complain that the project completely ignored women because no



thought was given to what would happen to women when the proposed changes were introduced in the technology of fishing. How can they say that, knowing that women in the area were direct beneficiaries of facilities like hospital service and the supply of piped drinking water? I am not really worried about whether they thought of men first and women later. The fact remains that for women not only from within the project area, but also from outside,

immense work opportunities were thrown open. Take my own case. But for the project, I would have been like those headload fish vendors you see in other towns and villages, eking out a miserable living. I have no doubt that even a family of modest means such as ours can think of the future with some confidence, only because of the project. We have not become very rich as some have, but at least we have become better off than we were before." □