

INSTITUTE OF CURRENT WORLD AFFAIRS

FM - 7
Porto de Galinhas III:
Jangada Fishermen.

Recife,
Pernambuco.

25th. July 1966.

Mr. Richard H. Nolte,
Institute of Current World Affairs,
366 Madison Avenue,
New York 17, N.Y.

Dear Mr. Nolte,

Brazilians are the first to tell you that Brazil has turned her back on the sea, both in the past and today. Certainly, from superficial observation, there is surprisingly little Brazilian- owned sea traffic for a country where the overwhelming majority of the population live near the coast, and land communications are very poor. Convoys of lorries rumble up from the South over long stretches of appalling roads, suffering greatly from the conditions. Much of the produce, without doubt, could go by sea with advantage, were there ships to carry it.

The state of fishing in the North East of Brazil is a further reflection of this maritime neglect. An amazingly small fleet of nationally owned deep-sea fishing boats operate in this area; they are heavily outnumbered by the Japanese, and there is now a chance that the American fishing fleets will expand their activities here. The French and others have already exploited the rich waters.

The demand for fish both in the coastal cities and in the interior is high. A recent survey carried out in Recife showed that the local demand was three times as high as existing supplies. Thousands in the North East states, though not actually starving, are suffering from severe malnutrition. Fish with its protein and iron content would obviously help in solving the problem. Yet the difficulties are many. Not only has there been far too little Brazilian interest in fishing investment, but problems of distribution are also severe, since roads in the interior are too poor to allow refrigerated lorries to use them, and present catches are not large enough to salt or dry for inland consumers. It was with good reason that the Pope, in colonial times, granted a dispensation to Brazil over the eating of fish on Fridays: the dispensation is still relevant today.

Inshore fishing in the rich waters of the continental shelf has hardly begun. A few small motor and sailing boats fish from the beaches of the cities. Some small lobster boats are owned by fishing companies. But the commonest vessel used for inshore fishing from Alagoas to Ceará continues to be the romantic, but sadly inadequate, jangada.

The jangada must be one of the most primitive boats in the world still in use. When the Portuguese arrived four hundred and fifty years ago, they found the basic raft already used by the indigenous Tupi-Guarani, and it has evolved little since that time. A type of miniature

Kon-Tiki, jangadas look, without their sails, exactly like pieces of old drift wood washed up on the beach.

From nineteen to twenty three feet long, and with a beam of five to seven feet, the hull consists of six logs, crudely shaped and pinned together with wooden pegs at intervals along the length. One of the most remarkable facts of its construction is that not one nail or piece of metal is used. The wood is so soft that any form of metal would wear it away rapidly.

The fittings on the raft are minimal: near the bow is a small vertical post to which the crude anchor, a suitably shaped stone, is attached. Further aft is the mast stepping of two upright posts across which lies a beam with a hole for the mast, held down to the hull by ropes. The base has a pattern of several small holes, and the mast is stepped in a particular hole depending on the strength of the wind. This is an ingenious system, but when the jangada is tacking into the wind the mast, the boom and the sail have to be lifted to a new position by a member of the crew which requires not inconsiderable strength. Behind the mast lies the centreboard formed from a squared plank, and behind this a construction of thin upright posts to hold the fishing basket, sometimes with a narrow bench on top. Then come a support for the lowered mast, and the helmsman's bench, with posts to hold the sheet of the sail right at the stern.

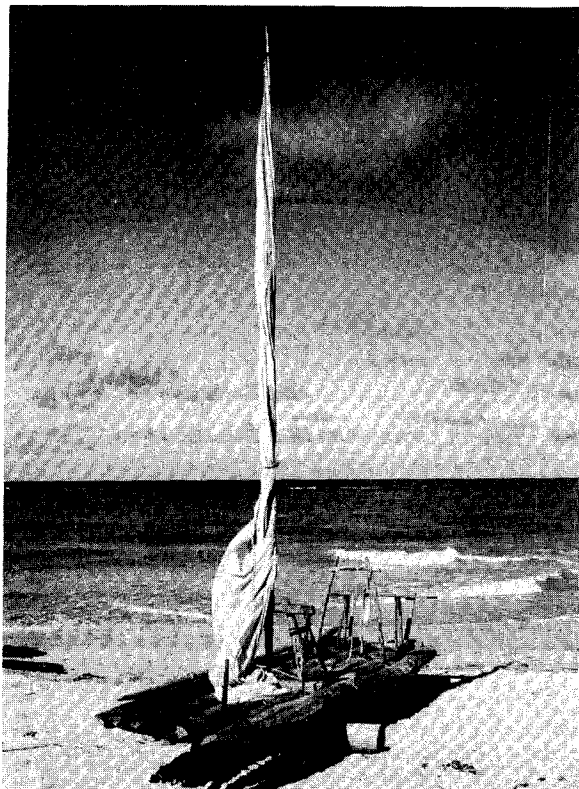
The logs float lightly on the water when the jangada is new, but each month the jangada gets heavier and floats lower, until, in little over a year it is useless and a new one has to be built. The balsa-like, but surprisingly heavy wood comes from a tree (Apeiba Tibourbou), which grows in the rapidly diminishing forests of the Zona da Mata.

The sail, made of cheap cotton, is supported on a curved mast without any form of staying. The boom is longer than the mast, giving the sail a distinctive shape much praised by Brazilian poets and artists. The life of the cloth is normally double that of the hull.

All the materials required in the construction of a jangada are available locally. The logs which are the most expensive items and cost about thirty five dollars for a medium to large jangada, are bought from the owners of engenhos, who have them transported to the beach by lorry. The centreboard and long steering-oar are fashioned from any available planks, and the rest of the wood is fetched from the mangrove swamps nearby. Working at their customary leisurely pace it takes a man perhaps six days to build a jangada, but it could be done in two. The standard charge for doing this is five dollars, and the total cost, complete with sail, is about fifty two dollars.

Even in the calmest seas they are streaming with water, and this, together with their very sick-making motion, makes them extremely uncomfortable vessels. They sail badly to windward, are slow with a reaching or following wind, and are naturally unstable and likely to capsize in a sudden squall. It is only the fishermen's skill that prevents this happening often. Moreover, they are technically much harder to sail than

A medium-sized jangada
used for fishing agulhas.



sailing dinghies, and require much greater strength. The helmsman is obliged to keep a very close eye on the behaviour of his craft, and even those long accustomed to it, find steering with the long heavy oar, jammed between two logs in a groove, very tiring.

But for all their practical defects, jangadas are, at one level ideally suited to the local coastal conditions. They are light enough to be hauled up the beach on rollers cut from coconut palm trunks, and from local materials no cheaper type of sea-going craft could be built. The conditions at sea during the Summer months from September to March are favourable.

Regularly, just before dawn, a gentle breeze from the land springs up which lasts for two or three hours, and gives the fishermen time to sail their jangadas out to the fishing grounds, or near them, with a following wind. At seven or eight o'clock, the wind changes direction and becomes Easterly. This allows the fishermen to sail up and down the coast if they wish, and gives them a following

wind for their return. During the remainder of the year, the wind blows frequently from the South, which again allows the rafts to fetch out to sea and back.

Yet their lack of manoeuvrability, their slowness in getting to the fishing grounds, and their short life count seriously against them. Their catches are miserably small throughout the year, and in Winter fishermen will not venture out in even moderate winds, although any orthodox sailing boat or small motor boat could easily do so.

Porto de Galinhas is in most respects a typical jangada community, and one that might be found on any of the beaches of the North East states to the North and South of Pernambuco. Although it has more jangadas than most beaches in the area, this has been a recent development. Like most of the land on the litoral, the site on which the fishermen live is a coconut plantation. Originally the owner lived there and had a permanent labour force to work the plantation. This, before 1888, almost certainly consisted of slaves, and the name Porto de Galinhas itself is a reminder of this earlier period. The site was isolated and ideal for

the illicit import of slaves. The local story is that 'galinha' was the current slang for slave, and hence the name. After that time, for the next forty years, the plantation workers used to fish outside their working hours, both to eat and to sell in the local markets.

On some plantations this lack of specialisation between coconut workers and fishermen is still found, but owing to the absence of a resident owner now, the two functions have separated over the last three decades. There are now ten regular plantation workers who clear the land, cut the fruit, and hack off their outer shells. In between the two monthly harvests the men find similar employment on neighbouring plantations. Their salaries are approximately equal to those of engenho workers, and they are only paid for the days they actually work. In bad weather they earn nothing. The number of fishermen in the community is now nearly eighty, and is constantly growing, as workers from engenhos and other coastal plantations are attracted by a life which, despite its lack of security, gives them total freedom. During the Winter, weeks on end pass when the jangadas bring in nothing. During the Summer, each of the different fishing techniques is a gamble.

All these fishing techniques are primitive. The larger jangadas fish for agulha (half-beaks), and carry a crew of three, an agulha net, and a small raft, with buoyancy to support one man. The jangada sails out, and near the shore, the crew start to look for fish on the surface of the water. As soon as they are sighted, the sail is lowered, and a man paddles out on the raft in a semi-circle, dragging the net behind him, and bringing it back to the jangada. The method is cumbersome, and many agulha escape each time the net is cast, but the fishing if successful brings high returns, since each agulha is worth one and a half cents, and the crew of one jangada may bring in as many as three thousand agulha. On the other hand, this type of fishing is also the most risky as the jangada is larger and therefore more expensive to build, the nets alone cost twenty five dollars, and extra gear is needed. All too often no fish are caught, and the jangada returns empty handed.

The smaller standard sized jangadas with a crew of one or two use a trawling line, or sometimes two lines, baited with agulhas to catch mackerel, bonito, or other large predatory fish. The raft sails to and fro, with the line tied in a loose knot to the leg of the fisherman steering. This system again is full of chance, and frequently nothing is caught. But all the fish caught in this way are among the most expensive and if, for instance, a bonito of five kilos is caught, it earns the fisherman three dollars and well repays a day's fishing.

Jangadas also sail five or six miles offshore, anchor and fish with hooks and lines for deeper water fish. Most of these are poorer, cheaper quality fish, but the chances of catching at least a few are high. On a good day, a raft may earn from two dollars fifty to four dollars, but rarely more than this.

Fish traps made of wild cane fibre are used by the jangada owners who have the foresight to save. They are laid in couples two or three miles off shore with stones for anchors. No buoys are used since the

fishermen do not trust each other, and are afraid that their traps, if marked, will be lifted. When the traps are laid the fishermen take a careful bearing of the position by noting six marks on the shore hills, coconut palms and other prominent objects. To retrieve the traps, a hook on a length of line is dragged along the bottom, a time wasting and tedious process, until one of the traps is hooked. Not unsurprisingly, many of the traps are lost during the year as they are carried away by currents on the sea bed, and it is doubtful whether it would not be better to have a few stolen than the certain loss of many.

Tainha (silver mullet) are caught by another system. A net is used close inshore by four men in two canoes made from large hollowed out logs. Both canoes have nets similar to tennis nets running along their length. As the men beat the water, the fish leap out of the sea, hit the net and fall into the canoe. It is one of the few methods of fishing that is possible in Winter as well as Summer, and although it is hard work, the yield is as much as seven dollars on a good day.

For the first time this year small nylon drift nets have appeared. These are taken out in the evening by their owners and left overnight in the sea. By fishermen's standards they are extremely expensive, costing about twenty five dollars, and most of these nets are owned by rich outsiders who receive a variable proportion of the catch.

The day of the fisherman starts at dawn. As the light creeps over the Eastern horizon, men come down to the beach, carrying lines, hooks and water bottles which are usually old cachaça bottles with a string carrying handle. They discuss the weather and possibilities of fishing, making slow decisions. Sometimes as much as a third of the fleet decide not to go out for any one of innumerable excuses. They lack bait, do not trust the weather, or are simply feeling tired. Doubt over the weather is simply a formal excuse, since the Summer weather here is extremely predictable. The barefooted fishermen are in tattered old shorts and shirts, and wear broad-brimmed straw hats with the edges turned up at rakish angles. Some look like Mexican bandits, others like English gardeners. All their movements are slow and deliberate. Those going out fishing start rolling their jangadas down to the sea on the two rollers. Once launched, they are paddled out to deep water. The helmsman takes the steering oar, and with it skilfully steers the raft out to deeper water whilst the crew unfurls the sail. With a gentle land breeze behind, the whole fleet makes off in different directions, in a short while becoming small white specks, and ultimately disappearing over the horizon.

Between midday and four o'clock in the afternoon, the jangadas return one by one with their very varied catches. The helmsman sails the raft's nose at the beach, and bystanders help to push it onto its rollers and haul it up above the high water line. The sail is left up as the on-shore wind helps to blow the jangada up the beach, but afterwards the sheet is let go, and the sail is left to dry in the wind. The fishing basket is then lifted off, and carried on the head of one of the crew to the public weighing house, where the contents are weighed. As the first rafts arrive the men sleeping or talking on the terrace come to life and gather round to watch, buy fish, or discuss the individual

catches.

The division of the fish depends upon the ownership of the jangada. The total catch is apportioned equally between the members of the crew, plus one portion for the owner of the vessel. Some fishermen own their own rafts, in which case their portion is double that of the others, but more often the jangada is owned by a pombeiro. These are men who, by careful planning, have managed to save and buy one or more rafts. None in fact own more than three at present, not because they could not afford to buy more, but because there is a shortage of reliable crews. The pombeiros receive not only the owner's portion of the catch, but have the option, which they naturally take up, of buying any fish that the crew wish to sell, and can pay them a price slightly lower than the current selling price. Their lives are idle, and apart from meeting their jangadas as they come in, the pombeiros' only day of work is Sunday when they go off to the market to sell their fish.

The pombeiros are also the moneylenders in the community, and loan money to fishermen wishing to buy their own jangadas. No interest is ever paid on loans for whatever purpose they are made, but when a fisherman borrows money to build a jangada, the arrangement is that he is bound to sell his fish to the pombeiro who lent him the money throughout the life of the raft. The loan is kept strictly separate from the pombeiro's payments for fish. Not unnaturally, the creditors remember all their debtors, but quite often small sums of under three dollars are considered as gifts by the recipients, and the creditor would be surprised if he were repaid.

Most fish are sold by the weight and quality: only agulhas are sold by the number, and their price is based on the assumption that one hundred fish weigh five kilos. Mackerel and the fleshy, hunting fish are first quality and are the most expensive, and the larger, soft, meaty fish are second quality. The remainder, which tend to be small, less tasty and over rich constitute the third quality. The price of second quality fish is twice that of third, and of first quality is three times that of third. Agulhas are slightly cheaper than second quality fish.

The public weighing house was built by the municipality some fifteen years ago, and is run by an old, sleepy negro, who notes the amount of each catch, as the prefeitura takes a small levy for each kilo weighed. Compared with most beaches, the interference of the municipal authorities is very slight, as on most others they fix the price at which the fish is to be sold. Here, however, prices are fixed by the fishermen themselves, and the only interference from outside is the frequently ignored by-law that local consumers should be given preference over those buying to sell elsewhere.

Until about a year ago, almost all the fish caught was sold to the pombeiros, if not to families wanting it for their own consumption. and although marketing systems are now undergoing radical changes, the traditional methods still predominate. As the pombeiros only sold in the local weekly markets, they were faced with the problem of preserving the fish for several days in a climate where, without ice, fish normally goes bad overnight. This was overcome in two ways: by salting and by cooking.

During the Summer months a common spectacle in the afternoonn is the women of the house squatting round large aluminium bowls, gutting agulha, which when cleaned are rubbed in coarse salt to preserve them. If for some reason these are not sold the first Sunday, they are threaded on a cord, and , like washing, hung out to dry, glinting in the sun.

Other types of fish are cleaned and cooked over an optdoor wood fire. This method, however, does not preserve them for more than two or three days, and only fish caught in the latter part of the week can be used. On Friday and Saturday nights, the village is lit up with bonfires of coconut wood, cooking rows of fish on little wooden spits or griddles. These, together with any available fresh fish, are carried to the market, either in the hired lorry that arrives each Sunday morning at 2.30 a.m., or in panniers on their beasts of burden, or on foot.

In the past year, there have been fundamental changes in the local patterns of distribution, and it is likely that from these beginnings yet more far reaching changes will result. Formerly, all the entrepreneurs in the fishing business were local men resident in Porto de Galinhas: one or two outsiders came to buy fish more or less regularly, but only on a very small scale, and in no sense affected the general pattern.

Twelve months ago a lorry, owned and driven by a man from Recife, appeared to buy all available fish to sell direct in the market there. Bringing large blocks of ice with him, he used a pombeiro's house to store the fish, and employed a pombeiro to act as his agent. This man collected as much fish as he could, and the man came down once a week to fetch it. The idea might have succeeded but for two big mistakes made by him. Firstly, in order to obtain more fish, he offered a price higher



Jangadas setting out to sea during a festa.

than that universally accepted, much to the anger of the competing pombeiros, and secondly, even more foolishly, he began selling some of the fresh frozen fish in the very markets where the pombeiros were selling their salted and cooked fish. Obviously the latter were not able to compete without lowering their prices very considerably, and, on one of the very few occasions when the fishermen and pombeiros have acted as a body, they all refused to sell any more fish to the man.

Since then, another man, realising the potential, has started similar negotiations, but has not made the same mistakes. He is making every effort to ingratiate himself with the fishermen and pombeiros, and has rented a house in which his family live and he keeps his supplies of ice. During the Summer he was carrying fish into Recife three or four times a week, but during the Winter it is only worth his while to make the journey once, or at the most twice, a week. His prices are the same as those offered by pombeiros and he only sells in Recife.

It is proving an interesting experiment. During the Summer months there was enough fish around for him to meet with little hostility. Pombeiros profited as they could sell to him any fresh fish caught at the beginning of the week. Fishermen not tied to pombeiros were able to sell to him at the pombeiros' selling price rather than their buying price. In the Winter months life for him, like everybody else, is harder. There is little fish to buy, and although the by-law giving local consumers priority is openly infringed, causing some ill-feeling, he still cannot obtain enough to make a reasonable income. Road conditions are appalling and frequently he is unable to get through to Recife on account of the almost permanent floods. On top of this, the excessive wear and tear leads to high car repair bills.

As time goes on the present fluid relationships must harden, and either the entrepreneur will continue to buy the fish at the current rate, gradually taking over the role of the pombeiros, or as is more probable, his hand will be forced, and he will find himself at the mercy of the sellers, unless some outside control is exercised. One of his present strengths is the present lack of corporate spirit amongst those supplying him with fish. If they were to unite against him as an outsider, as they did with the earlier entrepreneur, they could push their prices up more in line with those in the city. Some of the sharper men are already making use of him, and are being given ice to preserve their own fish, a small but portentous move. He is also doing the weekly shipping of another in Recife, as food prices are much lower there. There is a danger that his numerous efforts to make himself popular will become merely laughable.

This lack of corporate unity among fishermen has long been recognised, and one major effort that badly needed this has been a sad failure. The coast of Pernambuco, like that of other coastal states, is divided into a number of fishing zones, known as colonies. Along the coast of this state are thirteen of these colonies, each with its seat in one of the larger fishing communities; Porto de Galinhas is the seat of colony Z-12, which covers a long stretch of coastline, and has more jangadas than any other. Like so many schemes in this country, the plan in theory sounded excellent, and could be of considerable help to the

wretchedly poor fishermen. However, the scheme, started in 1952 under the Federal auspices of Getulio Vargas, has fallen short of its aims for account of two common Brazilian failings: the lack of continuation in office holding, and the corruption and idleness of the bureaucratic bodies involved. The incapacity of the fishermen for cooperative action has been a further flaw, but had the officials been more responsible this latter contributory factor would not have mattered. The plan was, that in return for a nominal monthly payment by all the fishermen, they and their families should receive free education and medical treatment.

A medical post was built, equipped with stretchers, dentist's chairs, and other objects necessary for basic medical treatment. A resident male nurse, a caretaker and a washerwoman were employed full time to run the post, and weekly visits were paid by a doctor and a dentist from Recife. In addition to this, in cases of serious illness, transport to the city was arranged, and specialist treatment provided free. A teacher, albeit untrained, was employed to teach the sons of fishermen. At that time there were no free schools in the village, although now it is scarcely necessary as there are three other schools to cater for the hundred and thirty children. The elected president of the colony had a certain amount of power over the fishermen, and could send them to the local police for any fishing offences.

The picture today is a sad one. For five years now the doctor and dentist have not appeared. For five years no medical supplies for the post have arrived. The teacher has not received any pay during this period. The nurse is still here, receives his salary regularly, but charges for any treatment given to the fishermen as well as any medicine that he may buy for them himself. The caretaker receives his sinecure, and the washerwoman, who, in true Brazilian fashion, happens to be the caretaker's wife, is still paid. But she gives the washing, together with her family's washing to another woman whom she pays a tenth of what she receives. The last elected president of the colony resigned in impotent disgust at the whole situation. A pawn has been put in to fill the post, but does virtually nothing. Few of the fishermen in these circumstances are willing to make their monthly contribution, although this is but eight cents. They rightly consider that they get nothing out of the colony: the bureaucracy, on the other hand, is too idle to do anything about the situation. And so the vicious circle continues.

Not only the marketing system is showing signs of change after decades with little innovation. Four years ago, the owner of the adjacent fazenda, an exceedingly rich man who owns not only the largest fazenda in the area, but also has numerous other interests in the region. He has earned himself the reputation of toying with an idea, putting a great deal of capital into it, and then abandoning or forgetting it completely. One such scheme was to fish lobsters on a large scale in the sea near his fazenda. Porto de Galinhas was the centre of the project, and he built ice houses, to preserve the lobsters, houses for administrators, and a fleet of small motor boats crewed by local fishermen, mainly from the community itself. He grossly underpaid these crews, and although many fishermen gladly opted for this more regular form of income at the beginning, selling or putting into store their jangadas, most were disillusioned after a short time. Moreover, the initially plentiful lobsters were rapidly fished to extinction, by

being over-fished and unable to breed. After two years the enterprise was abandoned, but by this time most of the fishermen had already reverted to their old way of life.

However, it had opened their eyes to the possibilities of motor boats, and made the more ambitious dissatisfied with their sluggish and uncomfortable jangadas. As a result three men have retained the motor boats: one still works for the owner, and the other two have bought their vessels from him. These latter two are among the sharpest men in the community, and are rapidly becoming much the richest. They are able to go further out to sea, are not dependent upon the wind, and can go out comfortably in the rougher seas. If they had the opportunity, probably twenty or more of the younger men would buy their own motor boats, but they cannot raise the capital, and could only do it by paying in instalments.

The optimum months for fishing are November, December, and January; that is, the mid-Summer months. Fishermen go out five or six days a week, and bring back anything up to twenty kilos on a jangada. From March onwards the weather gets worse, and has the doubly harmful effect of reducing the number of surface fish, and of preventing the jangadas from going out. By June, only tainha, which are close in shore, are caught in any quantity. On account of this high wind and heavy rain the jangadas cannot go out more than once or twice a week, and if they do manage to get out the effort is all too often in vain, and they return home empty handed.

From the middle of May until October, in order not to die of starvation, most of the fishermen put their jangadas in store and have recourse to other measures. The most profitable of these is laying shrimp traps in the mangrove swamps near the village. The traps are conical cylinders made of strips of cane similar to bamboo, bound together. One end is sealed with half a coconut shell, while the other has a double 'gate' of spikes so that the shrimps can enter but find it impossible to get out.

A family lays anything from thirty to two hundred traps which are emptied each morning, regardless of the weather. Only if the water is too deep are they neglected. But wading around in the deep-brown, rank, stinking, dirty water lifting and setting the traps is a thoroughly unpleasant task even in good weather. The water is swarming with microbes, including some that cause severe skin diseases, and contains cercariae that cause schistomiasis.

Shrimps, however, are lucrative. Sold by the litre, a measure that varies from place to place, this amount can be collected from thirty traps on a good day, and is worth thirty cents. A few shrimps are retained for the family to eat immediately, but most are boiled up in salty water and sold to local buyers who sell them for double the price in the nearby markets.

Apart from shrimping, the only possibility in Winter is inshore fishing. Some fish with rods from the rocks at low tide, or from makeshift jangadas near the beach. Others throw hand nets in the shallow water with little more success. In both cases catches are miserable, and usually

consist of a few aquarium size fish that would provide a thin meal for a family of six, and rarely is more than fifty cents earned in a day.

Not only the fishermen are affected by the weather. The pombeiros suffer as there is little fish for them to buy and sell. The roads are often so flooded that the lorry cannot take them to the market, and only by carrying a limited amount on horseback and struggling with the elements can they hope to recover what they have paid for the fish. This they are frequently unable to sell, as their customers, the moradores from the engenhos, paid only a dollar a week, cannot afford to buy them. Shopkeepers suffer as their sales drop, and as time goes on, more and more everyday needs tend to be bought on credit. Finally, the fringe members of society who live by performing small service for others suffer, as nobody can afford to employ them.

A weekly income averaging five or six dollars is spent almost entirely on farinha, coffee, sugar and bread or bolachas (water biscuits). Fish or shrimps are eaten once a day or less, and diets are yet further restricted by the lack of fruits available in this season. Those that there are tend to go bad before ripening. Vegetables are considered a luxury, but a large proportion of the income in some families goes on cigarettes and drink. As one very heavy drinker said: 'Some people are foolish enough to spend their money on vegetables'.

The community is without doubt underdeveloped economically. This is partly attributable to the very precarious income normally made by janga fishermen, and partly to their attitudes towards saving and investment. During the Summer months a fisherman makes enough money to live comfortably by his standards. His family have enough to eat, to buy the scanty clothes that are needed, and to put their houses in order after the Winter storms, and they can afford to go into Recife periodically for shopping and to visit the doctor or friends.

But after all this there is little left, and what there is has to be divided between saving for the Winter and investing in fishing equipment or other durable goods such as contraband radios. Most families effect a compromise between the two, keeping a little for the Winter and spending the rest. However, the latter is so little that they cannot invest in nets or other equipment that would enable them to earn considerably more. The Winter months are invariably hard, and those that do not keep some money from the Summer suffer proportionately more during the Winter and have to buy everything on credit. Those that are thrifty have only about six weeks of real belt tightening.

The concept of saving in case of an emergency or for old age, is non-existent. They do not keep a small supply of money always in the house, but, if the need arose, would rely on others to help. In an inflationary economy such as this, with the Cruzeiro losing up to eighty per cent of its value in a year, there is little point in hoarding paper money. Yet very few fishermen see the sensible alternative of investing the money in some object that retains its value and can be sold when the need arises. One of the exceptional families who have done this bought themselves a second mule and a small shed last Summer, not because they were needed in themselves, but because they do not lose their value and can be easily sold

when the money is wanted. All too frequently the feeling that money burns a hole in the pocket is apparent, and any spare cash goes on a small extravagance such as an extra pair of shoes, a shirt, or a blouse.

To improve their financial position by buying motor boats or even developing fishing techniques would require capital. Saving sufficient themselves is almost impossible, and the only feasible alternative is through loans. But borrowing is not a course that appeals to the majority, except for buying certain standard objects such as the jangadas themselves. Many regard borrowing as an admittance of defeat, and several hard-working, intelligent men have said with pride that they have never borrowed money from anybody. They are not aware of the advantages to be gained in some cases, and that there is no social stigma if the loan is repaid. All the most successful men, moreover, have only reached their position by borrowing. Part of the deep dislike of loans is due to their basic mistrust of each other, manifested by their system of marking traps, and never leaving their houses unlocked for a moment, and their consequent fear of never being repaid. Almost all loans therefore tend to be made between members of a family, and the few people with money to lend who are willing to do so freely outside their families are regarded as 'soft'. It is generally very difficult for an individual without a family with some money to obtain a sizeable loan.

The only way of overcoming this block towards loans would be an injection of capital from outside, perhaps from the government fishing development body, who could lend enough on easy terms to buy motor boats and expensive equipment. In the early stages some nursing and teaching would be necessary to persuade people to make their payments regularly since such a concept is completely foreign to their autocratic economy. If they failed to pay, the equipment could be removed without compensation so that the lender's risk would be minimal. From this, the idea of loans might become more generally acceptable, and the economy develop under its own impetus.

As it is, the majority are apathetic towards the idea of bettering themselves. That fishermen are poor and cannot become rich is their accepted philosophy. They are not miserable as they relish their freedom, and they would be earning little more in other jobs open to them in the interior. They could earn more in the city if they were lucky, but the risk of total unemployment there is enough to deter most. Knowing that they could not earn much more even by working harder, they give leisure high priority, and throughout the year do a minimum amount of work. This has the vicious effect, especially in Winter, of restricting their diet, thereby lowering their state of health and their capacity for work. Most would be very willing to work harder if given the opportunity to earn more, but without some outside stimulus this is unlikely to occur for many years yet.

The situation is a sad one, and there is little excuse for the backwardness of this littoral. The plentiful fish are badly needed to supplement food supplies, and there are men available to catch them. The missing catalyst is money, which could easily be provided by the federal authorities, and were it properly controlled, would be an extremely rewarding form of investment. Perhaps one day the Brazilian officials responsible for this sector will be display a little more interest, and take some positive action. My hopes at the moment are thin.

Yours sincerely,

Fanny Mitchell.

.Fanny Mitchell.