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## The Difficult Transition from Subsistence to Commercial Fishing

The Case of the Bijagòs of Guinea-Bissau

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**ABSTRACT** This article seeks to explain factors behind the continued subsistence orientation of Bijagò fishermen in Guinea-Bissau. The lack of a transition to a commercial adaptation cannot, it is argued, be explained by factors inherent in the artisanal fishery sector itself. Foreign fishermen pursue a highly productive fishery, and access to necessary factors of production as well as demand for fish exist. The explanation is to be found in processes of change in the socio-cultural environment of the Bijagòs, set in motion by the increased options for individual economic strategies and capital accumulation.

### Introduction

Transition from subsistence to commercial fishing among traditional fisherfolks is difficult for a number of well known reasons. The investment required is considerable, with capital being necessary for the purchase and maintenance of both boat or canoe, gear and motor. Fishing societies are typically marginally located in relation to larger markets of exchange, which inhibits sales and capital accumulation. The insecurity involved in fishing makes access to credit limited and conditions often hard. In addition, fisherfolks are typically poor, making involvement in several systems of production, and hence only part-time or seasonal involvement in fisheries, the optimal risk-reducing strategy (Pollnac 1978; Smith 1979; Acheson 1981; Tvedten 1986).

In West-Africa we find some of the major exceptions to the general picture of a deprived fisheries sector. In countries like Senegal and Ghana there are examples of communities where fishing is highly profitable and specialized, based on advanced means of production, market integration and extensive migration (FAO 1988; Everett 1986).

The Nhominkas of Senegal is one group which has gone through the type of transition in question. External preconditions for this transition seem to have been the introduction of the purse-seine and outboard motors in the 1950s and 1960s, while the internal market and commercial tradition in Senegal largely explain why the new technologies had such a profound impact on production. (Chaveau and Samba 1989; Fernandés 1987).

Around 150 Nhominkas have been operating from the Bijagò Islands in Guinea-Bissau from the late 1950s. There they live semi-permanently and produce considerable surpluses through a fishery involving advanced means of production, a variety of high-yielding technologies, and with considerable in-

vestments of both time, labour and capital. The fishermen themselves are not involved in other economic activities, while women process and market fish in addition to doing domestic work.

The Bijagò ethnic group make up the large majority of the 15000 people living on the Bijagò Islands. They represent a typical case of subsistence fishermen, combining a number of alternative economic activities, primarily producing for domestic consumption and using small non-motorized canoes and simple technologies.

Now in the present case of the Bijagòs, the reasons for the predominance of a subsistence oriented fishery are not readily traceable to the factors mentioned in the first paragraph. Means of production are accessible either through development projects located on the islands or through parallel markets in Guinea-Bissau, Senegal and Guinea-Conacry. Though there are no traditional credit institutions (middlemen and middlewomen) accessible and formal credit institutions are reluctant to give loans to fishermen, credit is obtainable through personal social relations and the projects sell gear on favorable credit conditions. With the general improvement of transportation to the mainland and townsmen coming to the Bijagò Islands to collect fish at sales points, the capital Bissau has become accessible as a major market for the exchange of fish. In addition, after years of interacting with and working for the Nhominkas, the Bijagò fishermen are well aware of the methods and potential inherent in a more capital-intensive fishery.

Also, there are no alternative sources of subsistence and income which explain the non-investment in fisheries. Agriculture is the dominant activity, but is mainly for subsistence due to low productivity and lack of a ready market. Products that are marketable (groundnuts, palm-wine, palm-oil) are also characterized by a low level of productivity, and are in addition largely exchanged through non-capital relations of reciprocity.

At the same time the need for cash income is increasing, both because traditional investments (in productive means, clothes, certain foodstuffs, etc.) are becoming more expensive, and because new needs are emerging (taxes, transportation, capital goods, etc.).

In the following we will argue that the major reasons for the non-investment in fisheries by the Bijagòs are not to be found in the artisanal fishery sector itself nor in characteristics of the alternative sources of subsistence and income. Rather, the option of producing surplus value through fisheries has set in motion socio-cultural processes of change between the traditional powerholders in Bijagò society and fishermen. For the time being, these effectively inhibit a transition from subsistence to commercial production.

The case clearly demonstrates the importance of analyzing artisanal fisheries (as other systems of primary production) within a broad social, economic and cultural context.

### The Artisanal Fishery at the Bijagò Islands

The Bijagò archipelago consists of 53 islands of which 19 are inhabited by a population of around 15000 people. Most of these (90 per cent) belong to the Bijagò ethnic group. Other groups are Mandingas, Beafadas, and Papeis. The Bijagòs live in small villages of 100-200 persons, with the extended household, matrilineal clans and age-grades as the central socio-cultural institutions (see below).

The actual number of fishermen on the Bijagò Islands is not known. A total of around 450 (390 nationals and 60 foreigners) have actually been in contact and registered with the Bubaque Project on the island with the same name.<sup>1</sup> However, with a few exceptions these come from Bubaque itself and the 3 closest islands of Rubane, Ilha de Soga and Ilha de Galinha. An estimate of 900 fishermen seems reasonable given the population distribution in the archipelago. Of these around 150 are Senegalese, mainly operating from the islands of Rubane and Soga.

For the same reason the 150 canoes registered at the project is likely to be an underestimate. The real number is probably around 300, with 250 being of a small traditional type and 50 of the larger Senegalese type. Only about 60 of the canoes are thought to have outboard motors, including all those belonging to the Senegalese.<sup>2</sup>

No scientific data on the resource situation in the archipelago are available, but the fishermen themselves do not regard the access to resources per se as a major constraint. Registered individual catches of 1-3 tonnes of both pelagic and demersal fish indicate a satisfactory access to fish. The most common species are mullet (*tainha/mugil capurri*), bonga shad (*djafal/etmalosa fimbriata*), barracuda (*bicuda/sphyraena quanchanco*) and croakers (*corvina/scianidade*). The total catch of 699 tonnes/year in 1988 delivered to the Bubaque Project neither represents potential nor actual production, as a large part of the catch is used for subsistence or distributed outside official channels. However, the statistics reveal considerably higher entries for foreigners than for nationals, which supports our point that the former produce more and are more involved in markets of exchange.

Looking at the labour process of artisanal fisheries on the Bijagò Islands (i.e. the physical and technical arrangements of productive activity), most of the fishing is carried out within the confines of the archipelago. One obvious reason is the limited range of most of the production units, but also the more mobile motorized units normally fish within this area. The main exception are the so-called fishing campaigns *campanhas de pesca*, where one or more production units set up a camp, fish and market catches in other areas for periods of 1-4 weeks. Normally the camps are located closer to the larger markets, such as Bolama, Bissau, and Cacheu. Although the more distant locations are only accessible by motorized canoe, the most important ones can also be reached by non-motorized units.

As regards productive means, two basic types of canoe are utilized. One is

the smaller dugout canoe (*pailão*), with a length of 5-10 meters and a carrying capacity of up to 1 tonne. This is the traditional canoe of the Bijagò Islands, and costs 250-300.000 PG.<sup>3</sup> The other is the larger Senegalese canoe (*piroque*), with a length of 10-17 meters and a carrying capacity of up to 3 tonnes. These are made of a base-trunk and planks, and presently cost 5-7 million PG. There are two carpenters on the Bijagò Islands on a professional basis making canoes. Although the prices are high, there are no significant constraints to the access to the material and labour necessary for building canoes.

Outboard motors are expensive and hard to get hold of. The main sources are the parallel markets in Guinea-Bissau and Senegal, for a cost of approximately 3 million PG. Running costs are also considerable, with present gasoline prices of 850 PG/liter. However, the Bubaque project has supplied a number of motors the past ten years both at a cheaper rate and under favorable repayment conditions.

The gear used is also of two main types, one of which is related to the traditional fishery on the island and the other was introduced by the Senegalese immigrants.

The first type consists of mechanical fishing gear such as traps, lines and snares, hand cast nets and smaller gill- and entangling nets. The latter cost around 200.000 PG. The second type consists of large beach-seines and driftnets. These cost around 1.2 million PG. Bottom set nets have not been common, probably due to the strong tidal currents in the canals between the islands.

Credit for buying productive means is not available through the channels normally associated with artisanal fisheries in West Africa. There is no class of middlemen and middlewomen, and formal credit institutions are generally closed to fishermen. However, credit is available through parallel markets (normally based in Senegal, Gambia or Guinea-Conacry), and through the artisanal fishery projects mentioned above. In the latter case, repayment conditions are favorable.

Beach-seining (for *djafal*) and driftnets (for *bicuda*) are clearly potentially the most productive fishing methods, with catches recorded of 1-3 tons per day of fishing. Based on data on foreign fishermen from the seven artisanal fishery projects in the country, and a qualified guess of the number of trips and registered production (representing 50 per cent of total), we have estimated the average number of fishing trips per month to be eight and the average catch per trip to be 520 kilograms. This makes an average monthly production per unit of 4160 kilograms (Tvedten, Båge et. al. 1989). The average includes the 3-4 months a year when the Nhominkas return to their natal villages in Senegal and do not fish.

Traditional adaptations, like the smaller gill- and entangling nets do, however, have potential for a considerably larger production. On the basis of the same project data mentioned above we have estimated the average number of trips per unit per month for national fishermen to be four and the average catch per trip to be 200 kilograms. This makes a monthly production of 800 kilograms (*ibid.*). Also national fishermen leave the occupation for 3-4 months a year, partly to carry out agricultural work and partly to fulfil socio-cultural obligations (see below).

Moving now to the relations of production, we may note that the larger operation based on motorized canoes and beach-seines/driftnets are mainly controlled by the Senegalese fishermen. The technologies demand working groups of 8-10 and 3-4 persons respectively.

The means of production are normally owned by the household head, and the core of the crew consists of one son or other dependent in addition to the owner himself. Typically, the Nhominkas select one son to become a fisherman while others are sent to Senegal for other types of training or education. The selected son will accompany the fishermen from the age of 3-4 years, and will participate in the actual fishing from the age of 10-12 years. At the age of 25-30 most Nhominka men involved in the sector will have their own operation.

In addition to the core group, the crew consists of employed Bijagò fishermen. These are often young and the Nhominkas consider them to be unprofessional and unstable. One obvious reason is the low pay, but the hard and the consecutive work is also a reason for them only working for short periods of time. For the Nhominkas these relations mean high profitability, but the lack of stable and able crew also puts restrictions on the operations.

The fishing operations of the Bijagòs are normally family-based, with the owner typically staying on shore while 2-4 children or other dependents fish. In cases where the crews consist of brothers, new groups tend to be formed as the sons of individual crew members grow up and form the basis for a new family-based production group. Only for the few practising beach-seining does the unit of production normally not correspond to the nuclear or extended household group, due to the large number of people involved. For those producing a surplus beyond what is needed for consumption and local distribution, the profits seem to be fairly equally distributed among crew-members, with shares also being allotted to boat, motor and gear. There are no distinct rules regarding who may or may not invest in a new operation.

The distribution of fish among the Bijagòs has traditionally been geared towards consumption for the immediate family. With the large number of people involved in fishery in some way or another, the importance of fish for bartering or other types of reciprocal relations does not seem to have been very pronounced. The prices obtained locally have also been very low, due to the limited purchasing power of the population.

During the past ten years, however, market exchange has become more common. The need for cash income has increased as the Bijagò Islands have become increasingly involved in the national economy. Traditional objects of investment like productive means, clothes, certain foodstuffs, etc., have become more expensive, and new requirements have emerged (taxes, transportation, capital goods).

For the national fishermen the project established on the island of Bubaque became the first real option for cash sales. The private markets in Bissau and other population centers represent the second option. First it was mainly utilized by the Senegalese fishermen going into Bissau with their large motorized canoes, but the market has also become more easily accessible to smaller units as intermediaries are increasingly establishing marketing points within the archipelago

itself. Moreover, the distance between two of the islands (Ilha Formosa and Ilha das Galinhas) and Bissau is fairly short, making direct sales possible.

The prices in the three marketing types identified (i.e. local exchange, project exchange and capital market exchange) vary considerably. Local prices are constrained by restricted demand and low purchasing power, those paid by the project have increased in the past couple of years, but are still subject to official control, and the prices on the main markets for exchange have increased significantly with the economic liberalization following the present structural adjustment program.

The average prices obtained on the external markets of exchange of 700 PG/kg for 1st and 2nd quality fish and of 400 PG/kg for 3rd and 4th quality fish imply a considerable potential monthly income. Seen in relation to the general cost of living, and options and constraints identified in the artisanal fishery sector, increased investments and efforts seem to be a viable option for the national fishermen. The viability of the Nhominka operations clearly indicate that such a strategy is feasible. When such a transition has not taken place, we will have to look for explanations elsewhere.

#### **Alternative Sources of Subsistence and Income**

Alternative sources of subsistence and income will often give clues to the economic strategies pursued in one particular sector. From the point of view of the fisherman, allocation of both labour, time and resources may best be made in other sectors either for economic or socio-cultural reasons.

In the present case, fishing activities are carried out in combination with four other principal sources of subsistence and income. These are arable agriculture, the extraction of palm tree products, the raising of domestic animals (cattle, goats, sheep, pigs and fowl), and wage labour. In addition to these hunting and the production of handicrafts are potential options, but they both involve a very limited number of households and the options for capital accumulation are small.

Arable agriculture is the basic production system of the Bijagòs, and it also occupies a central position in their socio-cultural life. The primary crop is rice, produced by slash and burn cultivation. Rotation every second year is practised. Access to land is communal and tied to village membership, but soil is of poor quality and increasingly scarce. As cultivation is rainfed without the use of artificial irrigation, crops are also vulnerable to variations in precipitation. More and more of the cultivation is carried out on the uninhabited islands of the archipelago, where birds and other animals represent a constant threat to the crops. In addition to the staple rice, secondary crops like cassava, sweet potatoes, peanuts, beans, maize, yam, and squash are produced on private plots closer to the village settlements.

The basic unit of production in agriculture coincides with the household, except in peak seasons where external relations of production are entered into by those having larger operations and the means to do so. Women do most of the

time-consuming tasks like planting, weeding, birdscaring and harvesting during the 4-5 months (June-October) of the agricultural season. The men are primarily involved in clearing the land (burning and destumping), which is normally carried out during a period of 4-6 weeks between March and June.

Given these conditions agricultural productivity is low, and only in rare cases surpasses subsistence requirements. The exchangeability of most of the agricultural crops is also limited, because most households grow rice, the local purchasing power is low, and the distance to the major markets is too long to cover the additional costs. Only for export crops like peanuts and cashew nuts is there a ready market, but here productivity is limited and commercial buyers operating in the rest of the country only rarely come to the Bijagò Islands due to the limited production and inaccessibility of their production areas.

Agriculture, then, does not significantly conflict with fishing activities and the sector does not represent an alternative object of investments. In fact, as most households cannot produce above subsistence needs the requirement for cash to buy agricultural products is often considerable, particularly in the final phase of the agricultural cycle.

The season for extraction of palm-tree products (palm wine and palm kernels) is from December to March and June-July respectively. Both represent an important potential source of income, and the work is done mainly by the men. However, the work is short and hectic as no initial cultivation of the plants is carried out, and most households only have access to a limited number of trees. Hence this activity does not significantly interfere with fishing, nor does it does not represent a viable alternative for investment and income, except for the few who control a larger number of trees.

The production of domestic animals is, with a few exceptions, also carried out on a small scale and mainly for consumption or local bartering.

This leaves wage labour as the last potential source of income. On the Bijagò Islands payed work is available at the development projects, commercial stores and a hotel. There are also government institutons, but the education and social contacts needed for acquiring these jobs make this option irrelevant for all but a few Bijagòs. Alternatively, jobs may be obtained by moving to other areas like Bissau. Hardly any of the Bijagòs has done that, largely for the same reasons of insufficient education and social network.

Thus while the Bijagòs do pursue a diversified economic adaptation, and this seems plausible given the low productivity, this does not explain why men do not invest more in fisheries. It seems possible to invest considerably more labour, time and resources than is the case. Higher incomes would relieve some of the strains related to both subsistence requirements and the increasing need for cash accounted for above.

#### **The Socio-Cultural Setting**

Having shown that reasons for the lack of transition from subsistence to commercial fisheries among the national fishermen of the Bijagò Islands are not evi-

dent in the fishery sector itself or in its relation to alternative systems of production, we now turn to the socio-cultural organization of the Bijagòs for possible explanations (see Silva 1984; Scantamburlo 1978; Kristiansen 1988; Tvedten, Båge et. al. 1989; Caballero 1987).

The traditional seclusion of the Bijagò Islands from the mainland is still evident in a number of socio-cultural traits separating them from the rest of Guinea-Bissau. In the interior there are the stratified, centralized, Muslim societies of the Fula and Mandinga, while in the coastal areas the Senegambian speakers (Manjacos, Balantes, Felupes, Brames, and Papeis) have egalitarian, uncentralized, non-Islamic societies. The Bijagòs do not have a central political authority, but form social entities that are both interdependent and stratified.

The British and German settlers living in the archipelago until around 1920, and the Portuguese colonizers who remained until the 1970s had only a limited impact on the socio-cultural life of the Bijagòs, partly due to their small number, active resistance, and the concentration of their activities on the island of Bubaque. Only since the last half of the 1970s have stronger processes of change been set in motion. The establishment of schools, a number of development projects, general stores and increased contact with the mainland generally have changed both people's own evaluations as well as aspects of their social organization. The latter changes include less strict exogamous marriage and post-marital residence rules and an increase in the number of female headed households. However, the basic socio-cultural structure is still intact and the indications of change are most evident among a relatively small group of people having direct economic or other contacts with the mainland.

The socio-cultural institutions that form the basis of Bijagòs daily social and economic life are the village, the clans, the household and the age-grades.

Each village (*tabanca*) has 100-200 inhabitants, belonging to the same matrilineal clan. The geographically separated villages are largely inter-related in socio-cultural and economic matters. Each village is divided into sections or wards, each occupied by an extended family.

The four existing exogamous clans (*gerações*) are important for regulating marriage alliances, and access to land and other productive resources is tied to clan membership. Furthermore, political leaders are elected on a clan basis, and specific clans regulate cultural institutions like ceremonies connected with production cycles.

The household (*larga*) is a semi-autonomous unit, consisting of a senior male member with 2-3 wives, brothers or sons, and adolescent girls and children. Men usually remain in the village where they were born. With post-marital residence, being virilocal, sisters and daughters move to their husband's homes. They will, however, move back in case of the husband's death or divorce. Men and women are relatively equal in daily decision making, including economic matters.

Formally there is also a state committee (*comité do estado*) in each village, but in reality these have little impact either because they are marginal or because they merge with traditional institutions.

The socio-cultural institution most relevant for our analysis, however, is that

of age-grades (*classes de idade*). Age-grades (or age-classes) are social categories based on age through which individuals pass in the course of the life cycle.<sup>4</sup> The relations between members of the same age-grade are often as intimate as those between close relatives, and just as important for the individual. There is a strong solidarity among those belonging to the same grade, and this increases as they advance through life and their grade or class acquires a more dominant position in society.

The age-grades have implications for rights and duties of both an economic and social nature. In specific periods of their lives, both men and women use a significant part of their time, labour and resources following the behavioural rules prescribed for their grade.

Basic to the functioning of the cultural institution of age-grades is the notion of age-grade secrets, which are open only to those having earned the right to know by advancing to the age-grade in question. Age-grade secrets involve both socio-cultural matters (knowledge necessary to relate to the authority of ancestors, the history and mythology of the Bijagòs, and socio-economic conditions (ritual undertakings necessary to improve the fertility of land, knowledge about flora and fauna, knowledge about conditions related to productive activities). Revealing secrets to persons who have not achieved the right to know are believed to have serious repercussions, both for the individual who gives away the secret and the one who receives it. The repercussions are normally mediated through witchcraft accusations that may result in ritual death through loss of one's soul to demons (*korandes*), physical injuries or death, or harvest losses.

The interest in preserving the hierarchical system obviously lies in the rights and duties that membership imply. These are fairly well defined, and fall broadly into three periods. The first is an early period of socialization and leisure lasting until the age of 20-25. While the economic responsibility for the family and village is small, so are the rights over the resources that may be accumulated. Ideally nothing acquired before the initiation into the second age-grade can be kept, including children. The middle period is marked by a heavy economic responsibility, but still with few rights beyond one's own household. Both men and women are expected to contribute to the maintenance of their own household, as well as to other expenses attached to the clan and the village. The final age-grade (*ocotò*) is that of the elders, which is characterized by prestige, authority and the right of economic support from other household members, the clan and the village.

Recruitment to the different age-grades is carried out through an elaborate system of ceremonies. These include prolonged periods of seclusion from people not yet introduced to the relevant age-grade secrets, and ultimately large feasts involving initiation rites, material offerings and lavish consumption. Such occasions cause movement of a large number of people both between different villages and between different islands. Women have their own cultural ceremonies parallel to those of men, but while men successively acquire greater responsibility both in cultural and economic matters, the women's influence is more informal, through checks on the way men exercise authority. They may apply sanc-

tions in a number of ways including moving back to their natal village. The female head of the village also has a seat on the council of elders.

The ceremonies involve considerable investment for those being introduced into a new age-grade: both physically, by being removed from their normal social setting for up to several months at a time, and economically, through the requirements for ceremonial contributions (*grandessa*). The payment of *grandessa* is a ritualized presentation of local products or money. The goods involved will be partly consumed during the ceremonial occasion itself, but will also be used over time by the *ocotòs* and their immediate families and redistributed to others as part of the elders' fulfilment of social obligations and their attempt to maintain their status and influence.

The amount to be paid is decided by the elders, and people aspiring to a higher age-grade may struggle for a long period of time to collect sufficient goods and money. The demands, particularly those on the men, are heaviest on central ceremonial occasions like the transition from youth to manhood (*fana-do*) and from manhood to the status of elder (*orebok*), but as we shall see, demands are also made fairly continuously from the community at large. Though the actual obligations involved are rather obscure for outsiders, estimates indicate that the contributions may amount to as much as 50-75 per cent of the total cash expenditure of a household (Kristiansen 1988).

The articulation between traditional Bijagò society and external economic influences is presently manifesting itself in the very institution of transitional ceremonies and the payment of *grandessa*. As we have noted, moreover, these influences are primarily mediated through artisanal fishery, with its link to the national economic context and its inherent options for capital accumulation.

The processes of change in question represent a dual pressure on traditional institutions and relations. On the one hand they have altered the value system and socio-cultural aspirations particularly of the younger men. Ceremonial secrets do not have the same hold on people as their own cosmology changes, as they spend larger parts of their lives in socio-cultural contexts with other value systems and as they become economically less dependent on adhering to socio-cultural rules.

At the same time, new options for individual income generation have threatened the material basis of the age-grades and the power of the *ocotòs*. This has largely rested on the capacity to decide over land and tribute labour in agriculture formally through the oldest member of the land controlling *orega* clan in the council of elders. That agriculture has been the economic sector around which the socio-cultural institutions and ceremonies of the Bijagòs have been built has to do with its economic importance and the fact that the collective nature of agricultural operations easily lends itself to institutionalization.

The immediate response to the new situation on the part of the traditional powerholders has been to attach artisanal fishery and fishery income to the ceremonial cycle. Artisanal fishery has previously not been central for the socio-cultural life of the Bijagòs for reasons diametrically opposed to those which made agriculture important. The economic significance of fishing beyond that

of subsistence has been small, and the individual nature of the adaptation has not easily lent itself to collective action.

Demands on surpluses are now strong, as are the socio-cultural sanctions against fishermen not adhering to the norms and expectations. Sanctions are related to both a general normative pressure for gifts and contributions from relatives and other people not in a position to accumulate money, and for *grandessa* to *ocotòs*. In the former case the sanctions take the form of social and economic isolation, like not being allowed to share leisure time with people in the same age-grade and not receiving the necessary assistance in economic operations. And in the latter the sanctions are both of an economic nature (refusal of land allocation and apparently also of access to fishing sites) and cultural ones including witchcraft accusations. Fear of *korandes* and a belief in the power of the elders to inflict harm is still strong, even among the most "progressive" of the fishermen.

The implications of this situation for the Bijagò fishermen is that while they are trying to save and stave off demands, the rest of the population continue trying to get what they consider themselves entitled to given their conception of the norms of reciprocity. Most fishermen now argue that it is little use working hard and investing in fisheries as long as they live within the Bijagòs, as so much has to be used for non-productive ends. A normal line of events for younger fishermen having tried to invest in boat, motor and gear seems to be that the demands on surpluses makes it difficult if not impossible to maintain the means in productive shape and repay loans. Ultimately they give up, and either retreat to subsistence production or leave the sector altogether. At the same time, leaving the Bijagòs is still difficult. Besides the emotional and social problems of marginalization, most fishermen are dependent on family members or other relatives for crew and the insecurity involved in artisanal fishery still makes it pertinent to maintain access to land and other local resources should the need arise.

It is, then, in the socio-cultural institution of age-grades that we find the main obstacle to increased efforts and investments in artisanal fisheries among the Bijagòs. For a person wanting to get more involved in the sector the socio-cultural demand for shares in the surplus production and the social costs involved in neglecting the expectations inherent in the age-grade system are still too significant for increased investments to be carried through. And the elders, who are in a position to make the necessary investments and maintain viable operations, are really not interested. They have finally reached the stage in life when they may rest and count on the support of others.

#### notes

1. The Bubaque project - initiated in 1979 and the largest of the seven artisanal fishery projects in Guinea-Bissau - is mainly financed by the Swedish International Development Authority (SIDA).

2. The total number of marine artisanal fishermen in Guinea-Bissau has been estimated to be 6000, the number of canoes 1200, and the number of motorized canoes 240 (Tvedten, I., H. Båge et al. 1989).

3. Official exchange rate \$1.00 = 650 PG.

4. Age-sets are also categories based on age, but here one remains in the same age group as it becomes progressively more senior rather than moving up a ladder of categories.

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## Book Reviews

McCAUGHAN, Michael and John APPLEBY (Eds.) *The Irish Sea: aspects of maritime history*. Belfast/Cultra: The Institute of Irish Studies, the Queens University of Belfast/The Ulster Folk and Transport Museum, 1989.

This book contains fifteen papers presented at the Irish Sea maritime history conference organised by its joint-publishers the Institute of Irish Studies, Queens University of Belfast, and the Ulster Folk and Transport Museum, Cultra, Country Down which was held at the museum in September/October 1986. They prove to be a fascinating collection which ranges chronologically from the Vikings, through the Middle Ages and subsequent centuries to the present day. The subjects cover Irish trade with the rest of the British Isles and the Continent, smuggling and piracy, the fishing industry and shipbuilding, as well as a case study on an Armada wreck and an account of the maritime records in the Public Record office of Northern Ireland. Given such a varied selection few readers could fail to have their interest aroused or to be given a new perspective on Irish maritime history.

The first six essays progress from a geographical description of the Irish Sea itself through to the nineteenth century thus making the collection something of an unified historical account. Given the number of papers and the variety of subjects it would be invidious to select one or two for detailed attention. My eyes were opened to the extent of Irish trade with Europe in the fourteenth and fifteenth century and to the bulky nature of some of the commerce - but each reader will respond to the papers according to their own particular interests and prior knowledge. I am sure that few will be disappointed. I felt that the one shortcoming in terms of content was the brevity of some papers, fifteen papers in less than 150 pages of printed text (excluding footnotes, etc.,) means that some papers are very brief indeed.

It was, perhaps, this occasionally too brief treatment of some subjects which left me reflecting on the purpose and benefits of the widespread practise of publishing conference papers as a book. Clearly such papers are an invaluable indication of the content and direction of the latest research which has not been, and may not be, published separately, or would be published in specialist journals not readily available to a wider readership. The number of contributors represent a great deal of research experience and their sources can provide invaluable references to the sources available for study. They can provide a guide and starting point for new students and researchers and as such brevity is not necessarily a defect. Indeed, many of these papers provide a bibliography and footnoted sources which indicate where and how the topic can be followed-up.

It is, however, in this area that I have some minor criticisms of the book. I was left with dissatisfactions which more editorial intervention might have prevented. Time and again I wished for a map, perhaps even more than one. All history has its geographical element, and maritime history more than most, and although one can always go to an atlas and find places, for those not intimately familiar with the small ports of Ireland a map or two would have clarified a great deal. Given the huge span of papers perhaps the desire for an introductory essay would be asking too much, but a consolidated bibliography would have been welcome. As it is, a "Select Bibliography" on pages 163-64 refers only to chapters two and three, which two chapters, along with chapter fifteen give no footnotes to their sources.

Nevertheless, to raise such issues is to ask for what was not included, what is there