

BREAKING THE IMPASSE: Platform for Common Property Resource use The Aheme lake case, Benin¹

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1 Introduction

Natural resource use in developing countries, especially in West Africa, is a crucial problem. This situation is aggravated by poverty, an explosive population growth and mounting population pressure in increasingly scarce natural resource, which lead to their rapid depletion and degradation, conflicts over resources and impasse. In most of the cases, governments are struggling desperately to control the exploitation of natural resources.

Of particular interest is the situation with respect to the so-called Common Property Resources (CPRs) such as fisheries. CPRs are often used to refer to "unowned resources", to which no-one has unrecognized right of any kind and which is not property at all (McKean, 1992: 250). Herring (1990:100) defines the "commons" as a physical space of open or collectively controlled access, either as *res nullius* (open access) or as community-defined property. CPRs may be either community ownership, or user rights, or both (Chopra et al 1990: 24). The open-access condition is one where resources are the property of no-one and are available to everyone. It is therefore not strictly a property rights at all, nor is it a management regime since people use, opportunistically the resource, but do not manage them. The concept of CPR seems difficult to be defined and required empirical exploration. Then one could ask the following questions: who set the norms about CPR use? who will be eligible or not to use it? and what happen in the practice?

One of the more striking issue nowadays, as a result of severe CPRs use problems, is how can we achieve a sustainably managed resource? The most influential paradigm, the tragedy of the commons, has influence greatly the debate of CPR management. The Tragedy of the common predicts the degradation of CPRs to be expected when many individual use a scarce natural resources in open-access (Ostrom, 1990: 2). The N-Prisoners Dilemma considers the resource users as game player and they cannot negotiate among themselves to change the rule of the game and to secure more desirable outcomes (Wade, 1988: 202). The logic of collective action of Olson (1968) is an influential model of

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viewing many problems that resource users face when attempting to realize collective action. It emphasizes the difficulty of getting individuals to achieve a collective action because of the problem of free-riders, those who want to benefit without contributing.

This paper will tackle issues with a different perspective to explore the dynamic of stakeholders (potential resource users) as a starting point for the analysis of processes towards sustainably managed CPRs. Then, CPR use is a social activity, and effective management is best achieved by given a focused value for those who lived with them (Murphree, 1993:3). This implies a great deal with indigenous knowledge (cf Brokensha et al, 1980; Chambers, 1983; Richards, 1985; Röling & Engel, 1988; Warren, 1991, Dangbégnon & Brouwers, 1990, Dangbégnon, 1995). Reality is socially constructed through different processes of institutionalization and legitimation in a (rural) society (Berger & Luckmann, 1966). People have the capacity to process social experience with different representations or lifeworlds (Long, 1992). An attempt to resolve CPRs degradation in human society requires multiple perspectives (Linstone, 1989, Kline & Rosenberg, 1986; Woodhill and Röling, in prep), in a context of many uncertainties which will be difficult to predict (Funtowitiz & Ravetz, 1990). Collective agency, which means that stakeholders come together for consensus formation, is required. Knowledge and group dynamics are important ingredients in this strategy.

The development of soft systems thinking (Checkland, 1981) makes a room for improving the traditional view of the knowledge systems. The components of knowledge systems are not limited to researchers, extension workers and resource users, but include various stakeholders with different interests. Potential representatives of stakeholders and other actors can be identified to exert collective agency. This will be called platform for CPR use (cf Röling, 1993, 1994). It emphasizes on 'soft' knowledge system thinking, therefore the set of stakeholders, their networks and organizations, and other actors at higher levels of social aggregation (beyond resource users communities), result from the context of CPR use. The objectives of their action are (partially) the outcome of negotiation, accommodation, discussion and other processes by which they move from strategic behavior to more communicative behavior (cf Brand, 1990).

A platform for CPR as such does not exist. It is intellectual construct, a diagnostic framework which can help to analyze the complexity of CPR use situations. The analytical grid will focus on the nature of stakeholder; their appreciation of problems (Checkland & Casar, 1986); collective learning, decision making and efficacy; policy context. Problem appreciation about CPR use moves the analysis at the level of indigenous knowledge and ecological thoughts of local people, different interpretation of property rights which is common in rural societies (Benda-Beckmann, 1992), the actual state of scientific and understandings at higher level of social aggregation.

The paper will focus on a case study of a lake (Aheme lake) in Benin, the social construction of the lake: indigenous fishing techniques, property rights and resource use strategies; collective agency, conflicts over resources and impasse. Platform for CPR use will help to analyze the context and identify different barriers and opportunities for more sustainable resource use.

2 The Aheme lake and the fishing communities

The Aheme lake is located in the South of Benin and serves as a frontier (partially) between the Atlantic province and the Mono province (see map 1 in annex 1). It is about 24 km long and its surface is 78 square km during low levels of water and 100 square km at the periods of high levels of water (Dissou, 1986:68). The Aheme lake is between two plateaus of red soils called "*terre de barre*": the plateau of Comé and Bopa in the West, and the plateau of Allada in the East. The configuration of the lake is diverse: the Northern part is deeper compared to the South. It is connected to the sea through a complex edification (see figure 1 in annex 1). Such a configuration presents different bio-physical and ecological contexts for the fishing communities in terms of CPR use.

The nature of the Aheme lake has a methodological implication, it offers, due to the diverse ecological setting, "entry points" to the complex world of the stakeholders. Diving into this world helps to identify different methods, practices and tools for fishing; complex conflict situations; and to identify norms, rules and regulations historically and socially constructed, the question of their legitimacy through new circumstances. This strategy gave the first impression on the lake, how it is used and the stakeholders.

Different ethnic group such as Pedah, Aïzo, Mina, Fon etc. depend on this lake for their livelihood. More than 40 villages are established around its shore and it appears as one of the important natural resources with highly populated users in Benin. The villages which surround the lake were populated in 1970 about 41,000 inhabitants who earned their life with fishing activities (Pliya, 1980:xii). The density of the fishers on this lake is high (4.8 fishers/ha) compared to the density of the biggest lake of Bénin (the Nokoué lake) which has 2.8 fishers/ha (Pliya, 1980:xii). Nowadays the population of the surrounding villages of the lake is estimated to be 65,000 inhabitants¹ (from INSAE, 1992).

The fishing communities of the Aheme lake consists of different socio-cultural groups which present some similarities, especially, in the domain of popular spirituality (cf Merlo & Vidaud, 1984; Aguessy, 1984; Karl-August, 1984 and Pazzi, 1984). Pliya (1980) has identified the Pedah as the majority of the ethnic group around the lake following by the Aizo Gbessin and some minority groups like Toffin, Goun, Yoruba, Fon and Ouatchi in different villages around the Aheme lake see figure 2, annex 1).

Pedah ethnic groups have migrated, after a tribal war, from the eastern part of the lake during the eighteen century to a small island of the lake called Mitogbodji (which means "Home of our ancestors"). At this place, they could protected themselves against ennemies. Life was difficult on the small island because it is isolated. From this place, they created some villages at the West shore of the lake include Guézin. The Pedah have started the fishing activities to survive. They found it very fruitful and adapted themselves to the situation. Historically, Pedah people were the first who organized themselves in local chiefdom to exploit the Aheme lake. Following, the Aïzo gbessin of the Allada plateau who were hunters has started their settlement in the north-east of the lake. They created some villages at the eastern side of the lake and had started agriculture and fishing activities.

According to local mythology and sacred places in the village Guézin of Pedah people, a hunter (not from Pedah ethnic group) had killed two panthers which terrified the inhabitants. He was appointed King of the Aheme lake (Dêh Zounon in local language) by the Pedah local chiefdom. The lake is under

the protection of different voodoo (representation of God): the voodoo Dagboehounsou in the village Houèdjro, Kpohon in Sèhomi, Kpassè in Houéyogbé and Tohonon in Kpindji. The Dêh Zounon supervised all the voodoo and his authority was extended to Pedah ethnic groups and all the inhabitants of the Aheme lake. The location of the voodoo is strategic. It helps the the Dêh Zounon to control the whole lake. This lake was governed in the past, before colonial times, by indigenous organisations with a strong influence of spirituality.

3 Indigenous fishing techniques, property rights and resource use strategies

Indigenous fishing techniques

The first is called Xha, a kind of fish barrier introduced in the south of the lake, is the invention of the Dêh Zounon. It is a trap designed with the branches of palm tree (*Elaeis guineensis*) and put in the water. The trap contains some bow nets to catch fish. The Xha had helped the Pedah to harvest more fish. The Pedah ethnic group of Guézin came to the agreement that the King Zounon would have the right to use the Xha system for his own needs. According to the fishers, the Xha can be designed only in the south where the lake is narrow (channel). In the past, the King gave permission to people, servants in his court, to design Xha. Actually there are some Xha people who are not the King Zounon relatives.

Second, a fisher had observed that at the place where the mangrove is the lake, there are more fish. The idea came from this fisher to experiment the technique which consists to set broaches in shallow water to attract a large number of fish in the case of the mangroves. This technique is called actually Akaja. It has been introduced and experimented in 1957-58 in the Aheme lake to increase its productivity. Akaja consists of putting the branches in the water as a trap for the fishes where they find a good ecological niche and increase in weight. The first Akaja in the Aheme lake were controlled by the government services (Water and Forests Services). The fishers were not allowed to use this technique. At the beginning, three *Akaja* had been designed in the lake. After 12 months or 18 months, the Akaja were destroyed by removing the branches in order to disseminate the stock of fish in the lake for all the fishers. The first experience was a success and the fishers took individually the initiative and developed it.

Other fishing devices and tools developed or introduced by the fishers are: Gbagbalulu (see annex ?), mandovi (fishing net with small mesh), and Tohounga (see annex 2).

Property rights and resource use strategies

The control of different activities on the lake was organized by the Deh Zounon. He was helped by some local priests at Houéyogbé, Sèhomi, Kpindji and Houèdjro. They formed a committee with the Zounon who is their "Chairman". They organized a meeting at a secret place, set rules about the way the lake should be used and made decisions about different ceremonies to be organised and financial contributions of each village ("Tota"). In Box 1, the agenda of rules set by the Zounon and his committee in the past.

Box 1: Rules set by the Deh Zounon and his committee

Those rules were.

- the "Djetowlé" (which consists of jumping in the lake from the boat when casting the net to catch the fish in the muddy bottom) is forbidden in order to protect the spawning ground of the fish;
- the Dobou-doboui which consist of chasing the fish by hand towards the fishing net in the water;
- the "Amèdjrotin" which consists of putting the broaches with leaves to attract the fish after decomposition;
- the use of "Mandovi" (fishing net with very small mesh) and "Djohoun" (fishing tool with more hooks);
- the fishers were allowed to practice fishing activities two days per week;
- nobody had the right to fish during the religious ceremony periods for the voodoo Dangboé-hounsou which can be schedule from 5 to 7 days.

The religious structure managed by the Deh Zounon has played a role in different dimensions of economic, moral and social life of the Pedah (protection of the environment, rules setting, sanctions, protection of the village, regulations, treat of different conflicts in the fishing communities). The authority of the Zounon was legitimized by all the fishers from the North to the South of the lake. The religious connotation embedded in his authority could help in the unification of the inhabitants of the lake due to the existence of some convergence in the religious rites and manifestations and the ethnic groups (cf Aguessy, 1984).

The context of the exploitation of the Aheme lake is also changing by: (a) the development of transportation and mobility facilities and the increase of the demand of fish; (b) the arrival of new comers in the fishing communities of the lake, as fishing activity is becoming a business; (c) the increase of the population of the fishing communities; (d) the loss of the influence of the Voodoo which had help to bring the fishers together for establishing law and regulations on the influence of spirituality; and (e) the development of the territorial administration which led to the absence of one potential authority for the Aheme lake (Pliya, 1980:120-121). The involvement of women in fishing activities has increased the pressure on the lake. Customarily, they did not practise fishing activities, they sold only fish. But actually, it is common to see them with their boat on the lake, catching crabs for selling and for home consumption.

The members of the Zounon family (extend family) considered the Aheme lake as an ancestral inheritance and different decisions would come from them. The Xha is a practice of the ancestors. The place where they designed the Xha is considered as a "farming field" and a private property of the Zounon kingdom. Nobody apart from the Zounon family had the right to fish near the Xha. Actually the legitimacy of the Dêh Zounon is not legitimated by most of the fishers. His authority is break down.

Some fishers had started their private Akaja. These new opportunities have led to the appropriation of different "plots" on the lake, source of different conflicts between the fishers. The struggle for the appropriation of the "plots on the water" has been very strong. Akaja design require investments. Some fishers were strategizing to get money and design Akaja. They did a network with some capitalists who were merchants, administrative bureaucrats or politician to get money in order to design Akaja (cf Pliya, 1980). In this way they could get a part of the catches when the Akaja was harvested. It was also one

way to involve more influent people who might help for eventual reactions against the *Akaja* system. At this time also, more fishers complained. The *Akaja* system has created a new group of the Aheme lake user who made more profit from the lake.

Akaja users consider the lake as the property of nobody. Government representatives consider it as a state property. Then a police for the lake has been experiment without any success because of the difficulties to control the whole lake and the corruption of the police agents. In *Akaja* design area the fishers consider also the extension of the whole village in the lake as the property of all the fishers of this village.

The scene on the Aheme lake was more focused on *Akaja* and *Xha* system which led to the appropriation of its productive part and the conflicts between the fishers. In the same times, the fishers who did not practice *Xha* and *Akaja* used other fishing methods which were forbidden (Mandovi, Tohounga, Gbagbalulu). In this arena, some fishers, the administrative and state representatives had tried to exert a collective agency to negotiate an agreement towards sustainably managed CPR on the Aheme lake.

4 Collective agency, conflicts over resource and impasse

The initiative of the Xha people

In March 1990, the fishers' representatives of different villages and most of the important priests of voodoo of the lake and representatives of each village met at the place called Mitogbodji which has historical prerogative. The representatives of each village went there with some ideas about new rules and regulations concerning the lake. They presented it to the assembly. After discussion, they came to the agreement to maintain some points and rejected those which were not relevant for the Aheme lake nowadays. It is explain that the clue to set the law and regulation was that they refer to the existing ones and keep in mind what they would modify and which were not applicable nowadays (e.g. the legitimacy of the King Zounon). They took into account some new fishing techniques and methods which were not useful. After a negotiation through a strong debate as most of the fishers said, the assembly has set new law and regulations about the Aheme lake. The participants made the decision to create a committee called COGEHEN (Committee for the Management of the Aheme lake) for the implementation of their decisions (see Box 2).

In April 1990 another meeting has been organized in the village Guézin. At this meeting the election of the bureau of the COGEHEN by the representatives of the committee at each village level. This bureau consists of nine members: One president helps by a second president, one secretary helps by a second secretary, one treasury helps by a second treasury and three organizers. The priests of the voodoo of the lake (e.g. Dêh Zounon) are counsellors. At this meeting the *Akaja* users were not invited. The fishers in Guézin where the Dêh Zounon is living consider the lake as their property. In *Akaja* design area, mainly the fishers who were against *Akaja* were invited. An important decision made at Mitogbodji (see first decision in Box 2) was against *Akaja* users. At the public place of each village, groups of fishers (15 to 30 according to the size of the village) were appointed by the members of the COGEHEN for the implementation of decision.

The implementation of decisions after the creation of the COGEHEN, especially the remove of Akaja from the lake, has created conflicts with Akaja users. Some fishers were killed. Fisherwomen played a role during conflicts. One of them explained:

"One week, at least three days before the remove of the Akaja from the lake, the fishers who will participate are informed by the rulers of the movement in Guézin. At this period, we started saving money in Guézin and surroundings villages to buy food for the fishers during the removing of Akaja. One day before the movement, a big drum called Dangbé is played in order to inform the fishers that they can prepare themselves for tomorrow. The day of the struggle, Dangbé is played earlier in the morning and all the fishers against Akaja were on the lake with their boat, matches, guns, stones, arrows to remove Akaja and to react against possible attack. We followed the men behind with big boats carrying food for them".

Box 2: Law and regulations set at Mitogbodji

- 1) The design of Akaja is forbidden;
- 2) The use of small-mesh fishing nets like Mandovi and Gbagbalulu is forbidden,
- 3) The fishing method called Tohounga during the day is forbidden. The fishers are allowed to use this method from 6 hours p.m to 6 hours a.m. The number of fishing nets will not exceed 5;
- 4) The fishing technique called "Djohoun" during the day and at the place on the lake which is not deep is forbidden,
- 5) The fishing method called Gbodoego is forbidden;
- 6) The fishing method with hand called "Lohè" or Gbaha is forbidden
- 7) The space between the Xha for the boat circulation must be increased;
- 8) One day per week (from 6 hours p.m of every Saturdays to 6 hours p.m of every Sundays) is retained to not practice fishing activities (this day is called *TOSSE* = 'law of Water' or resting day for the lake);
- 9) Every 8th of January is used to commemorate the death of Mr Dansou Mèdého Avidjè (militant of COGEHEN) on the 8 th of January, 1990 during the removing of the *Akaja* from the Aheme lake. This day will be followed by one week resting of the Aheme lake called also *TOSSE*.

Penalties defined at Mitogbodji:

The fishers who do not respect those law and regulations will have to pay the following amends: 20 litres of Sodabi (local alcohol distilled from palm wine), 2 bottles of Royal Gin (imported alcohol), 6 bottles of bier, 6 bottles of youku (munerals), 4 chickens (or 1500 f cfa), 1 goat (or 3000 f cfa) and 10.000 f cfa (1 US dollard = 500 fcfa).

The initiative of the Akaja users

The approach of the Akaja users was similar to the case of the COGEHEN. It seemed that they got the idea after the creation of the COGEHEN. The emergence of their organisation started with two main activists, one at the eastern part of the lake and the second at the western part. They went in the village where there were many Akaja users, organised a meeting and supervised the election of the Village Bureau of Akaja users² (President, a secretary and a treasury). Each village committee came together, organised a meeting in the East and the West of the lake to elect their president. The results were that the principal activists were elected at the West and the East of the lake. All the Village Bureau of the

Akaja users organised a meeting in Kpago to elect the President of all the Akaja users. The fisher elected was at the East side of the lake (the main activist).

Once the president was elected, he organized a general meeting with all the Akajamen in Kpago. The discussion held resulted in an agreement that if the Xha was removed from the lake then, they would also remove their Akaja. After this consensus other issues should be negotiated. The decision they made at this meeting was the preliminary conditions for discussing with the Xha people. The President of all the Akaja users was illiterate but he had a large network with the administrative and political representatives.

In February 1992, a general assembly was held in Bopa. The Sous-prefet (district political authority) was at this assembly with the Commander of the local police of Bopa and some gendarmes. One Deputy of the parliament of Benin was interested in the assembly. Concerning the fishing communities, all the priests of voodoo, in different villages of the lake, were invited. The COGEHEN was at this meeting with their representatives. Each village around the lake sent their representatives (Chief of village, notables etc.).

At the beginning of the assembly the Sous-prefet of Bopa gave a speech and invited all the assistance to a mutual comprehension in the analysis of the problems related to the use of the lake which is destroyed. He presented the main objective of the meeting: *reflections on the problems of the lake in terms of how it could be safeguarded from being destroyed and conflict situations*. The priest of the voodoo in Sêhomi gave a speech to welcome the participants of the assembly and invited different representatives and "délégué" to give their opinion about the problem at stake.

At this meeting, the consensus was difficult to be achieved. The Xha people did not want to remove their Xha. During the meeting they were talking about the increase of the space between the Xha in order to facilitate the crossing of the boats. The Akaja users would remove Akaja if Xha people did for their Xha. In this way, Akaja users got the support of the authorities who assisted the meeting. The critical point of the negotiation was between Xha and Akaja and the final decisions moved to the wishes of the majority³.

Finally the Akaja users organised themselves and mobilized all the fishers who were against the Xha. They asked for help to the Sous-prefet of Bopa to implement their decisions. The soldiers were sent for their security during the removing of Xha. They invited their fellows to remove themselves their Akaja. They had started slowly⁴ when the Xha people redesigned again their Xha. The vicious circle was installed and the fishers were in difficulties to solve themselves their problems. The government made the decision to intervene.

Intervention of administrative and state representatives

The Akaja users were increasing the number of their *Akaja*, the Xha people thought their Xha is legitimated because of their ancestors' practices" while the fishers (the majority) who could not design Xha and Akaja were in difficult positions. They could not find fish for the daily consumption. In 1992, the government made a decision to solve current conflicts in "participatory way". The idea of the

reflection day (in french: "*Journée de réflexion*") came out. The directorate of fisheries got the responsibilities to prepare the meeting.

The preparation of the reflection day had started by the identification of the participants. Especially, in the fishing communities the question "who should be the representatives of the fishers?" was the crucial one for the directorate of fisheries. Some of the representatives of the fishers were chosen by the fishing agents. Particular attention was given to the priests of voodoo, the King Zounon, some old men in the fishing communities, the president of the Akaja users, some fishers who were favourable or against Akaja, the Bureau of the COGEHEN, the representatives of women. Apart from the fishing communities, the "*Association de Développement*" (local development association), all the *Chief of villages*, the Maires, the Sous-Prefets, the Prefets, the representatives of the ministries of rural development, internal affairs, and environment were invited.

In July 1992 all the participants were in Ouidah, a town where the meeting was held. This place was chosen for logistic facilities. At the beginning the Ministry of Rural development gave a speech. He invited the participants for constructive discussion during the meeting. He stated clearly that the Xha and Akaja should be removed from the lake. As he said, the main objective of the meeting was the negotiation of another way to use the lake. The participants were invited to give a speech concerning their wishes, raise important problems and in which way the lake could be used? The discussion was very fascinated by the fishers. Each group, coalition of fishers were defending their interests.

As it was explained, at this meeting only the Xha people were against the decision concerning the removing of their Xha. But the majority⁵ agreed that the Xha and the Akaja should be removed. The final decision was made by the assembly in this way. During the reflection day, the idea of the creation of the monitoring committee to implement the decisions which came out. The members of this committee were appointed (see Box 3). It would be coordinated by the Bureau of the monitoring committee (see Box 3) which had been created during the meeting.

The scene after the reflection day had been embedded in some hidden realities. The fishers were very clever. It was common for them to give a fish for the local bureaucrats and authorities. One way for them to anticipate on the situations where they could have expected. In Benin, the parliament election was scheduled at the beginning of February 1995. During the fieldwork (July-September 1994) the campaigns have started slowly. The organisations of the fishers (e.g. Akajamen) seemed to be interesting for the leaders of the political parties. They were the "evening negotiators" as one of the informant called them. They promised that if the fishers vote for them, they will get the official permission to design Akaja (in Akaja design area). With the losers (in the region where the majority were against Akaja) they promised that Akaja will be removed. Pliya (1980) discusses this issue by referring to the period of 1960s (before 1972) where the multipartism was experienced for the first time in Dahomey (actually Benin).

The initiative of the Xha people has failed because it is not at the optimum level of social aggregation where current issues of the lake are negotiated. Some fishers especially Akaja users were excluded. Akaja users had succeed to involve all the representatives of the fishing communities but a consensus could not be realized. Government intervention has failed because of the multipartism context of a

fragile democracy movement which did not help. Finally nobody has sufficient power to safeguard the lake. This leads to the situation of impasse. Can strategy be designed for breaking the impasse?

Box 3: Composition of the Monitoring Committee (MC) and the Bureau of the MC

Composition of the MC:

- * 16 representatives of the fishers
- * 5 representatives of the Notables
- * 1 representative of the syndicate of the fishers and craftsmen⁶
- * 5 representatives of the "Association de Développement"
- * 3 commanders of the "local police" in Mono and Atlantic department
- * 5 Sous-Prefets who were at the "Journée de Réflexion"
- * 2 General Directors of the extension organisation (Mono and Atlantic)
- * 2 representatives of the Ministry of Rural Development (MDR)
- * 1 representative of the Ministry of Interior, Security and Territorial Administration (MISAT)
- * 1 representative of the Ministry of the Environment, Habitat and Urbanism (MEHU)

Composition of the Bureau MC:

- * President Representative of the MDR
- * 1st Vice-President Representative of the MDR
- * 2nd Vice-President Representative of the MEHU
- * Members 2 representatives of the Association de Développement⁽¹⁷⁾

5 Platform for common property resource use

Can different categories of stakeholders be identified on the Aheme lake?

The social construction of the lake shaped multiple perspectives and interests, different representations and lifeworlds such as Xha people, Akaja users and other fishermen/women. Different categories of stakeholders can be identified according to their activities based on specific fishing techniques. However the conflicts helped to clarify more potential stakeholders who are the main activists. Given different perspectives, lifeworlds and categories of stakeholders from the social construction of CPR use, the most striking issue is the appreciation of "problem" related to the use of the Aheme lake.

Problem appreciation and key actors identification to exert collective agency

The appreciation of the problem of the Aheme lake by fishermen and women has revealed different understandings. The Xha people explained that the "Xha prevents the migration of the fishes from the lake to the sea as a result, it has a 'regulatory' role. They perceive Akaja as a practice which lead to the filling up of the lake and affect the population of fishes which need deep water for their ecological niche". The Akaja users appreciated the problem of the lake in relation to the use of Xha. According to them, "Xha practice has negative impact on the dynamics of fishes in relation to the complex 'lake-sea'.

The migration of fishes from the sea to the lake is stopped by the Xha. They could not catch in the lake some fish species (which migrate from the sea) such as, in local names, *Nongban* (*Elops lacerta*); *Kpankpan* (*Caranx carangus*) etc. While identifying the Xha as the main cause of the depletion of fish stock in the lake, the Akaja users find Akaja practice ecologically sound: attraction of more fish.

The appreciation of the "problem" has revealed in-groups (category of stakeholders) shared understanding about what is (can be) the cause of the depletion of the lake. Problem appreciation by each categories is mediated by specific interests. This situation can make communication more difficult and negotiations very painful for professionals. The effect of Akaja and Xha on the Aheme lake is not really known by professionals at higher level of social aggregation, the directorate of fisheries, which is the main government national institution for the promotion of fisheries. But the evidence is that, when fishers use it the catch more fish. Obi (1994) describes Akaja as a kind of fish culture device: attraction of fish, natural feeding and rapid growth of fish.

The decision made about the Aheme lake by the political authorities and development officers at higher level of social aggregation seems to have no knowledge background support from the bio-physical scientists. The main focus was on the conflicting fishing methods and practices. Simple prohibition of local practices is not enough where there are multiple realities or worldviews and conflicts, especially in the absence of appropriate widely shared bio-physical knowledge about fish population dynamics in relation to fishing practices in the lake. Here, technical studies carried out together with fisher can help to make things visible and create a common reality of social reconstruction of the natural resource involved. This can form a basis for collective agency which moves beyond the common appreciation that fish stocks are dwindling.

Facilitation of collective learning and decision-making

The appreciation of the problem, the identification of conflicting interests groups of natural resource users and rapid information on the arena of intervention can help to identify key actors whose representatives can be on platform for collective learning and decision-making. Facilitation requires participatory processes in order to share knowledge, ideas, and skills for social reconstruction of the lake.

The initiatives of the fishers in the case of the Aheme lake reveal groups dynamic towards collective agency in the context of critical resource use. Social psychologists (e.g. Bandura, 1982: 143) argues that people do not live their lives as social isolates, many of the challenges and difficulties they face reflect group problems requiring sustained collective effort to produce any significant change. Collective agency is rooted in the strength of groups. It lies partly in people's sense of collective efficacy that they can solve and improve their lives through concerted effort in problematic situation. It offers the opportunity for facilitation of collective learning, consensus formation and decision-making.

Facilitation requires communication skills to grasp the meaning of indigenous knowledge during collective learning. Unfortunately, the main actor of the lake, at higher level of social aggregation, the directorate of fisheries and most of institutions concerned emphasises on one-side learning. They should evaluate together with key representatives if ~~fishers~~ the weaknesses and potentials of each fishing

practice and how can they affect the productivity of the lake. Kloppenburg (1991) calls this activity the reconstructive task, which is very difficult because it entails the identification and legitimation of alternative sources of knowledge production.

Information exchange for collective efficacy

Since collective learning for sharing perspective on a platform for decision-making about the Aheme lake will require scientific knowledge support and relevant other actors to make things visible, linkage and coordination activities become useful for problem solving strategies in the sense of Havelock (1986). Then, some fundamental questions can be asked: who has contact with whom? why? who can do what? or legitimated to do that?

The main problem of these institutional arena is the weaknesses of their linkage which is visible at the level of their activities segmented, not complemented each other. The principal extension organisation is interesting in fishing culture ("pisciculture") programme that is implementing at the western part of the lake. The fishers at the other side do not have any information about such opportunities.

The policy context

The resolution of difficult problem for example in the case of the Aheme lake moves to political level. In one side it is good that policy supports action, but too much involvement of politics can weaken the legitimacy of the main institutions in charge of fisheries management. Policies that work for platform for CPR must define the legal framework for taking actions, provide opportunities for social justice in terms of access to and control over resources. Decentralization for transferring statutory power for more active role of stakeholders.

6 Conclusion

The Aheme lake case is a very complex resource use situation. Fishers have developed through decenia several fishing methods and devices to cope with new circumstances. The Aheme lake is nowadays over-exploited in confusing statement of resource use negotiation, property rights claims, conflicts and impasse. What must count for exploring alternative strategies is our learning point for facilitation policies and support professional activities for useful intervention..

7 Reference

Aguessy, H. 1984 Convergence religieuses dans les sociétés Aja, Ewé et Yoruba sur la côte du Bénin. In: Medeiros de, F. (ed.) 1984 Peuples du golfe du Bénin (Aja-Ewé). Paris: Karthala.

Bandura, A. 1982 Self-efficacy mechanism in human agency. *American Psychologist*, 37(2): 122-147.

Benda-Beckman, F. von 1992 Understanding agrarian law in society. In: Benda-Beckman & Velde, M. van der 1992 Law as a resource in agrarian struggles. Agricultural University of Wageningen, The Netherlands: Wageningse Sociologische Studies 33.

- Berger, P.L. & Luckmann, T. 1966 *The social construction of reality. A treatise in the sociology of knowledge*. New York: Anchor Books.
- Brand, A. 1990 *The force of the reason. An introduction to Habermas theory of communicative action*. Sydney: Allen & Unwin.
- Brokensha, D.; Warren, D.M. & Werner, O. (eds.) 1980 *Indigenous knowledge systems and development*. London: University Press of America.
- Bromley, D.W. & Cernea, M.M. 1989 *The management of common property natural resources: some conceptual operational fallacies*. World Bank Discussion Papers 57, Washington D.C. The World Bank.
- Chambers, R. 1983 *Rural development: Putting the last first*. Longman: Harlow.
- Checkland, P.B. 1981 *System thinking, system practice*. Chichester: John Wiley.
- Checkland, P.B. & Casar, A. 1986 *Vickers' concept of an appreciative system: a systemic account*. *Journal of Applied System Analysis*, Vol. 13: 3-17.
- Chopra, K.; Kadekodi, G.K. & Murty, M.N. 1990 *Participatory Development: People and Common Property Resources*. New Delhi: Sage Publications India.
- Dangbégnon, C. & Brouwers, J. 1990 *Maize farmers' informal R&D*. *Ileia Newsletter*, 6(3): 24-25.
- Dangbégnon, C. 1995 *Towards Common Property Rights in Fishing Communities: a platform for negotiating sustainable resource use (the Aheme lake case, Benin)*. Unpublished M.Sc. Thesis. Wageningen Agricultural University.
- Dissou, M. 1986 *La republique Populaire du Bénin: Milieux naturels, régions, économie agricole régionale. Première partie: le Bas-Bénin*. Abomey-Calavi(Bénin): Projet UNB/UVA/ER.
- Funtowicz, S.O. & Ravetz, J.R. 1990 *Global environment issues and the emergence of second order science*. Brussels: EC, Directorate General for Science, Research Development.
- Havelock, R. 1986 *Modelling the knowledge system*. In: Beal, G.M.; Dissanayake, W. & Konoshima, S. (eds.) 1986 *Knowledge generation, exchange and utilization*. Boulder (Co): Westview Press.
- Herring, R.J. 1990 *Rethinking the Commons*. *Agriculture and Human Values*, 7(2): 88-104.
- INSAE 1993 *Deuxième recensement général de la population et de l'habitation, Fevr. 1992. Vol. 1, Résultats définitifs*. Cotonou: Ministère du Plan et de la Restructuration Economique
- Karl-Augustt, E. 1984 *Les populations du Mono Béninois (esquisse historique)*. In: Medeiros de, F. (ed.) 1984 *Peuples du golfe du Bénin (Aja-Ewé)*. Paris: Karthala.
- Kline, S. & Rosenberg, N. 1986 *An overview of innovation*. In: Landau, R. & Rosenberg, N. (eds.) *The positive sum strategy*. Washington (DC): National Academy Press.
- Kloppenborg, J.Jr. 1991 *Social theory and the De/Reconstruction of Agricultural Science: Local Knowledge for Alternative Agriculture*. *Rural Sociology* 56(4): 519-548.

- Linstone, H. 1989 Multiple perspectives on technology diffusion: insights and lessons. Laxenburg (Austria): International Conference on Diffusion of Technology and Social Behaviour, June 14-16.
- Long, N. & Long, A. (eds.) 1992 *Battlefields of knowledge: the interlocking of theory and practice in social research and development*. London: Routledge.
- McCay, B.J. & Acheson, J.M. 1987 Human ecology of the commons. In: McCay, B.J. & Acheson, J.M. (eds.) *The question of the commons: The culture and ecology of communal resources*. Tucson: University of Arizona Press. pp. 1-34
- Mckean, M. 1992 Success on the commons. *Journal of theoretical Politics* 4(3): 247-281.
- Merlo, C. & Vidaud, P. 1984 Dangbé et le peuplement Houéda. In: Medeiros de, F. (ed.) 1984 *Peuples du golfe du Bénin (Aja-Ewé)*. Paris: Karthala.
- Messick, D.M. & Brewer, M.B. 1983 Solving social dilemmas, a review. In: Wheeler L. & Shaver, P. (1983). *Review of personal and social psychology*, 4: 11-44.
- Murphree, M.W. 1993 *Communities as resource management institutions*. London: Gatekeeper Series 36, IIED.
- Obi, A. 1994 *Indigenous Knowledge Systems and Sustainable fish production in West Africa*. Paper presented at WAFSRN General Symposium on Indigenous Knowledge Systems and Participatory Research for Natural Resource Management and Sustainable Agriculture in West Africa. June 20-22, Cotonou.
- Olson, M. 1978 *La logique de l'action collective*. Paris: PUF
- Ostrom, E. 1990 *Governing the commons. The evolution of institutions for collective action*. Cambridge: University Press.
- Pazzi, R. 1984 *Aperçu sur l'implantation actuelle et les migrations anciennes des peuples de l'aire culturelle Aja-Tado*. In: Medeiros de, F. (ed.) 1984 *Peuples du golfe du Bénin (Aja-Ewé)*. Paris: Karthala.
- Pliya, J. 1980 *La pêche au Sud-Ouest du Bénin. Etude de géographie appliquée sur la pêche continentale et maritime*. Paris: ACCT.
- Richards, P. 1985 *Indigenous agricultural revolution. Ecology and food production in West Africa*. London: Hutchinson.
- Röling, N. & Engel, P. 1988 *IKS and knowledge management: utilizing indigenous knowledge in institutional knowledge system*. Washington: Academy for International Development, 15-16 dec.
- Röling, N. 1993a *Platforms for decision making about Ecosystems*. Key note address for 17 year anniversary conference of conference of the WAU, 'the future of the Land' held at the IAC. Wageningen, August (to be published) in the proceedings of the conference.
- Röling, N. 1994 *Creating Human Platform to manage Natural Resources: First result of a research programme*. Proceedings of the International Symposium on System Oriented Research in Agriculture and Rural Development, Montpellier, France, 21-25 November :391-395.

Warren, M.D. 1991 Using indigenous knowledge in agricultural development. World Bank Discussion Papers 127. Washington D.C.: The World Bank.

Wade, R. 1988 Village republics: economic conditions for collective action in South India. Cambridge: Cambridge University Press.

Annex 1 : Map and Figures

Map 1: Republic of Benin

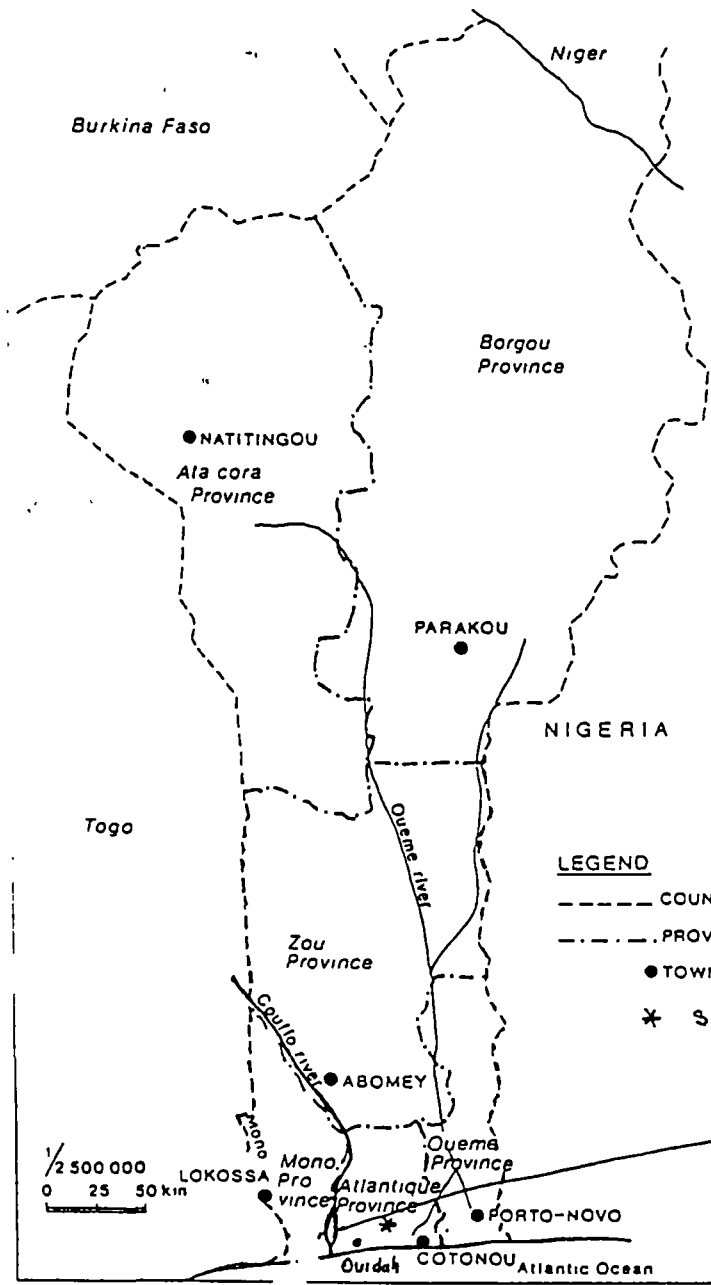
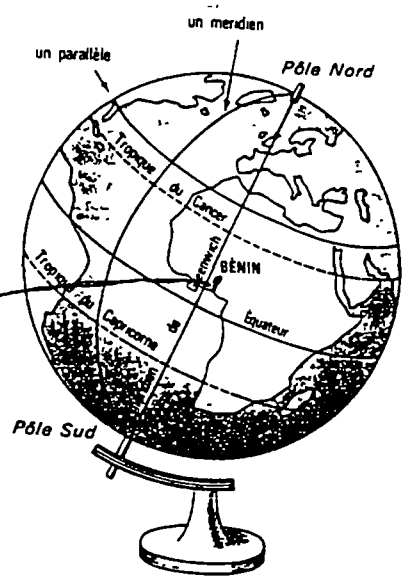
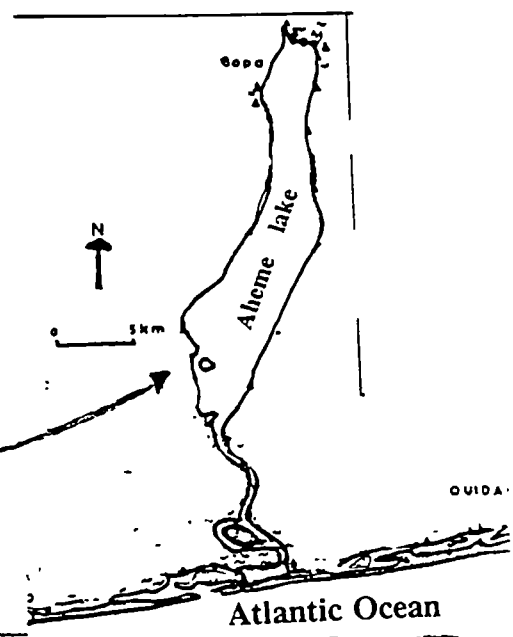


Figure 1: Configuration of the Ahome lake (for the villages around the lake; see page 25)



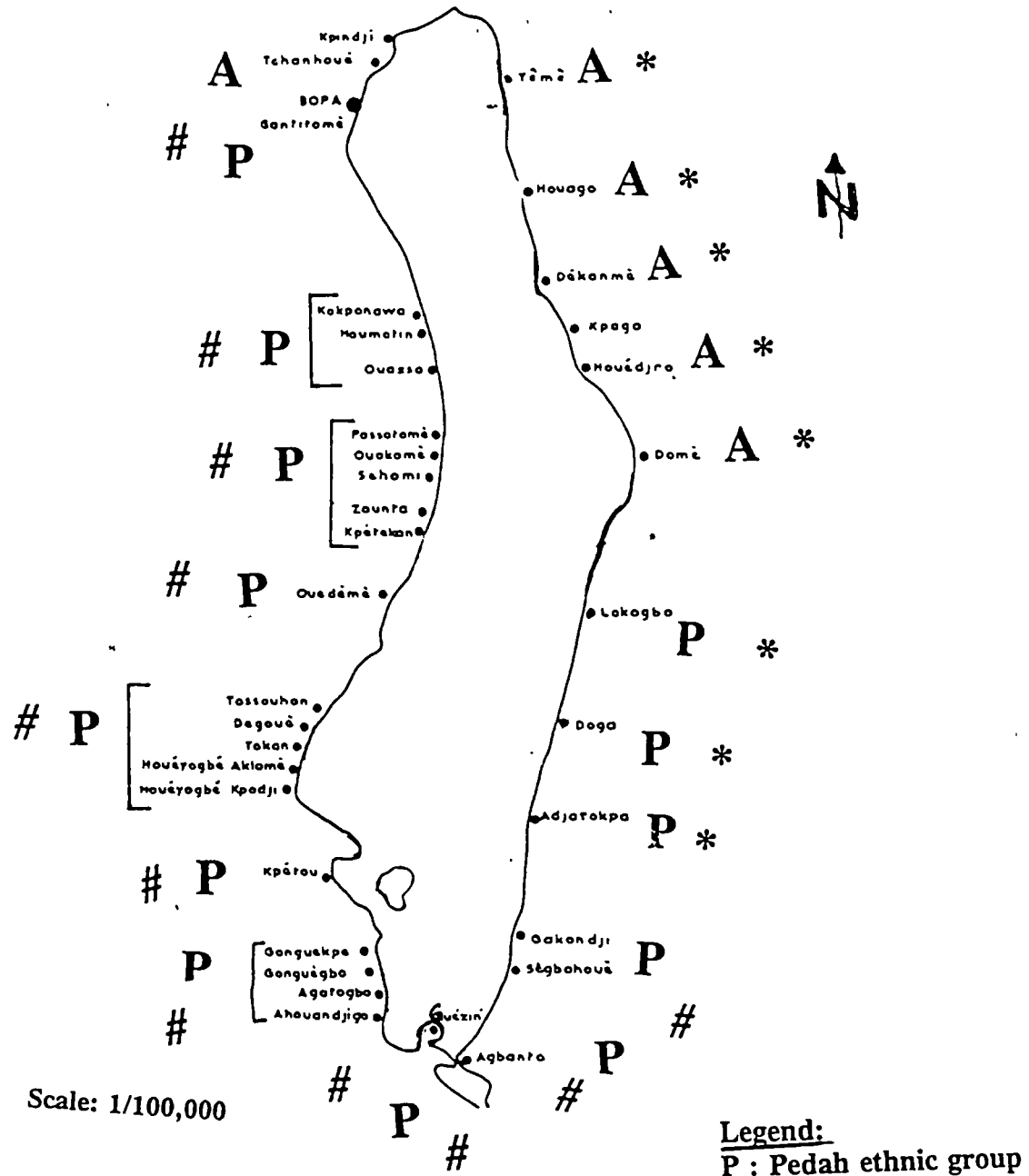
1/2 500 000
0 25 50 km

LEGEND
 - - - COUNTRY BORDER
 - - - PROVINCIAL BORDER
 ● TOWN
 * sahè

Atlantic Ocean

Figure 3: Some (important) ethnic groups' around the Aheme lake and their principal activity

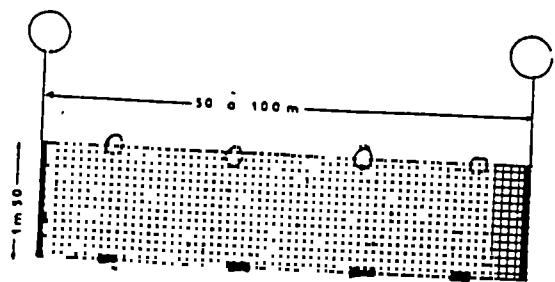
[* There are other ethnic groups in minority: Sahoué, Toffin, Mina, Fon, Ouatchi]



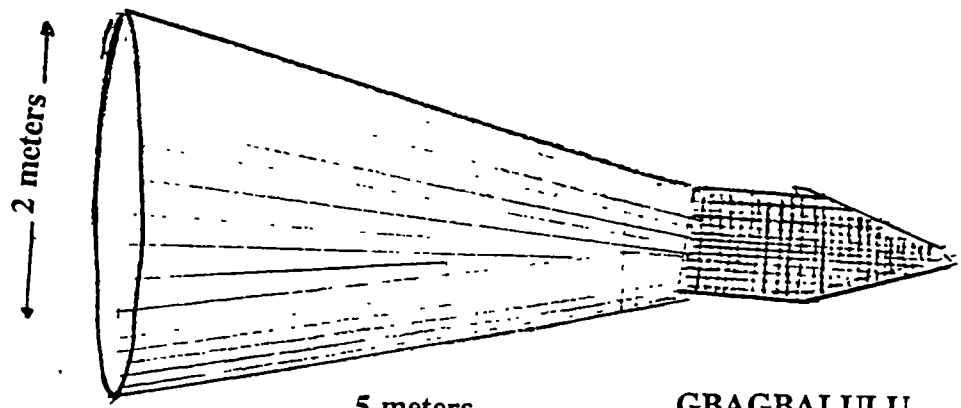
Source: Adapted from Pliya (1980)

Scale: 1/100,000

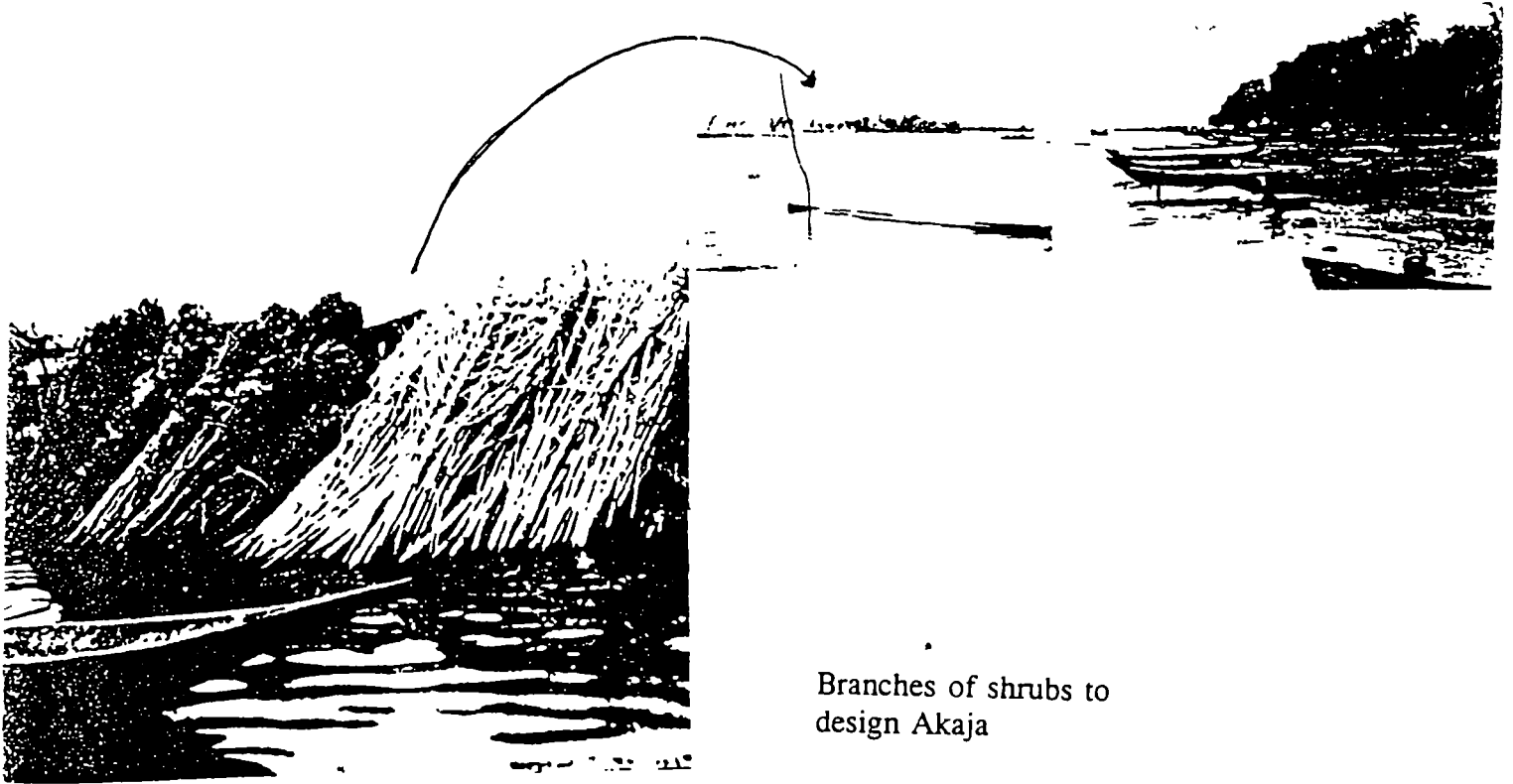
Annex 3: Fishing tools



TOHOUNGA



GBAGBALULU



Branches of shrubs to design Akaja



Some lines of Xha in the lake (Guezin)