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A decade of fisheries co-management
in Africa: Going back to the roots?
Empowering fishing communities?
Or just an illusion?

**Mafaniso Hara and
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A decade of fisheries co-management in Africa:
Going back to the roots? Empowering fishing
communities? Or just an illusion?

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1. Introduction

Since the 1950s, when the wave of decolonisation began to sweep through Africa, the continent has gone through several changing perspectives of ‘development’ approaches. Hyden (1993) characterises the discourse on development as having passed through four cycles: modernisation (1955–65), dependency (1965–75), popular participation (1975–85) and enabling environment (1985–). This moved the paradigm from development being measured purely in terms of economic stages of development to the wholesome term of human development (ibid.). More specifically, development should imply improving the readiness and ability of societies to ‘problematise’ issues. In other words, development becomes meaningful to people when they have a chance to wrestle with end/means relations in ways that are relevant to their own predicament. It was symptomatic of this shift that by the end of the 1980s terms such as *people-centred development* (World Commission on the Environment 1987), *sustainable development* (ibid.) and *sustainable livelihoods* (Chambers & Conway 1992) became increasingly common in development language.¹

Towards the end of the 1980s, several development co-operation agencies carried out evaluation of fisheries projects in order to draw lessons from the previous four decades of failures

in fisheries projects (Spliethoff et al. 1990). The main lesson was that the failures were attributable to the creation of interventions that did not take into account the special characteristics of capture fisheries, given the complexity of the fisheries sector, the special bio-ecological characteristics of fisheries and the prevalent low social and political status of fishing communities in terms of government priorities. The conclusion from this evaluation was that 'there was need for more careful and comprehensive preparation involving wider consultation and active participation of beneficiaries, flexible and phased approaches with emphasis on the development of human resources' (ibid:2).

The end of the Cold War era brought with it increasing demands from its traditional Western donors, led by the World Bank and the International Monetary Fund (IMF), for Africa to democratise and implement Structural Adjustment Programmes (SAPs). This also came at a time when there was a marked shift in the resource management paradigm towards participatory approaches, devolution of authority and decentralisation of powers. Thus by the early 1990s, *user participation* (and Participatory Rural Appraisal – PRA) had become almost a *given* requirement for donor-funded development projects. Given this context, the international donor agencies pressured African countries to introduce co-management or at least establish more democratic processes in the formulation of fisheries management objectives and the decentralisation of fisheries governance.

This paper provides an overview of co-management in Africa and the historical, political and paradigmatic reasons for the shift. The historical context is important when analysing the performance of the regime. The main reasons why co-management is being increasingly adopted in Africa are explained by analysing the objectives hereof. The paper evaluates what is meant by co-management in the African context using the variety of types of user involvement in practice and the standard continuum of possible arrangements under the co-management regime. Next, it will look at how co-management is being implemented, including whether it is achieving the objectives it is supposed to achieve. The final section will discuss and draw some lessons from the co-management experience on the continent.

The paper draws on experiences from southern Africa (Malawi, Mozambique, South Africa, Zambia and Zimbabwe), East Africa (Lake Victoria grouping – Kenya, Tanzania and Uganda) and West Africa (Benin, Congo, Ivory Coast, Senegal, etc.) where co-management arrangements in fisheries have been



or are in the process of being implemented.² In most of these countries, fisheries co-management is a relatively new approach that has only been formally introduced in the last five to eight years. The comparative analysis of the cases at this early stage could give indications of what seem to be the critical issues in the planning and implementation of fisheries co-management arrangements in Africa.

2. Reasons for adopting co-management

While the arguments and decisions leading to adoption of the co-management approach might vary in specific cases, the most common and powerful reason has been the failure of governments to effectively manage capture fisheries, resulting in over-exploitation (Hara, et al. 2002; Donda 1998; Jackson et al. 1998; Sowman et al. 1998; Horemans & Jallow 1998; Kponhassia & Konan 1998; Kebe 1998; Geheb & Crean 2000). In other cases, governments view co-management as a way of controlling fishing effort by establishing property rights for some groups in order to forestall future problems of over capacity. This is one of the major reasons on Lake Kariba (Hachongela et al. 1998; Machena & Kwaramba 1995), on Lake Nokoue in Benin (Atti-mama 1998) and Lake Chiuta in Malawi (Donda 2001). Co-management is also seen as a tool for conflict mediation among various stakeholders. This was the particular objective in Senegal (Kebe 1998), on Lake Kariba (Hachongela et al. 1998; Jackson et al. 1998), the Oliphants River (Sowman et al. 1998) and in Mozambique (Lopes 1998).

The implementation of Structural Adjustment Programmes (SAPs) in most African countries³ and changing economic development funding priorities in the donor community have made decentralisation and delegation of management responsibilities a very attractive proposition. Thus, user-participation or co-management has become mainstream in management of fisheries in Africa.

It should be noted that decentralisation and delegation of authority for the management of natural resources is not new in Africa. The British had tried it under an approach that was called 'indirect rule' (Mamdani 1996) in their colonies in Africa.⁴ A similar system of decentralisation was also practiced by the French in their African colonies based on the '*cercle*' (ibid.). These approaches were based on authority being vested in local chiefs who were empowered to make by-laws and collect local

taxes as a basis for control in their local areas of jurisdiction. In Mozambique, the Portuguese tried to use the traditional leaders, the *mwenes*, for their own political and economic interests. Their functions were primarily to collect licence fees, taxes and dues from fishing communities (Lopes et al. 1998). Such approaches were contrary to what the colonialists practiced in their own countries, where centralised control was seen as the solution to the management of 'common property' resources.

On gaining independence, most Africa governments passed legislation putting the management of fisheries solely in the hands of government, mainly for reasons of wanting to have total political control (Hviding & Jul-Larsen 1995). The new states felt that they needed all the sources of power they could muster. To leave the control of important natural resources in the hands of partly competing political institutions at the local level was considered unacceptable (*ibid.*). The centralised approach was also well suited to the different political regimes that had succeeded colonial rule in Africa, whether they were socialist planned economies (leftist) as in Mozambique, Tanzania, Zambia and Zimbabwe or the autocratic rule which for many years was the situation in Malawi and Kenya (rightist) or under apartheid as practised in South Africa until 1994. In addition, the management problems and requirements for intervention at the time did not necessarily call for a consideration of the need for change in the management approach. Generally, the centralised approach was maintained in African countries after their independence mainly because this approach was being applied by industrialised countries, whose influence continued after independence through financial and technical aid and the Western training of African fisheries managers. In reality though, the ability of governments for practical intervention never really matched the laws in the statutes, due to budgetary constraints and the prevailing characteristics of African artisanal fisheries, which tend to be small-scale operations spread out through the coastal areas, whereby fishers usually land their catch in their home villages or constantly migrate following better catches.

The arguments for 'indirect rule' under the British or French colonial era were similar to those currently being used for decentralisation and devolvement of authority. Since government is far removed from the day-to-day aspects concerned with the exploitation of fish resources, its management interventions have usually been ineffectual. Given this context, it would be best to decentralise and devolve authority to the lowest possible level.



3. Objectives for co-management

While the primary stakeholders (the users and the state) in a co-management arrangement might share a broad common goal – the recovery and/or sustainable exploitation of the fishery, in order to enhance the socio-economic benefits of the user communities from exploitation of the resource – this commonality might not be explicitly reflected in the way co-management might be viewed as a strategy for achieving such a goal.

In the main, government objectives remain attempting to ensure biological sustainability of the resource and maintaining biodiversity (Hauck & Sowman 2001; Hara 2001; Geheb & Crean 2000; Machena & Kwaramba 1995; Hachongela et al. 1998). In this sense, governments see co-management as an alternative strategy for controlling fishers in the wake of evidence of mounting problems under the centrally directed regimes. Thus, the same existing regulations (technical regulations such as mesh size, net length and closed seasons) are reformulated under the *central* direction of the government, only this time with the supposed participation and support of fishermen under more democratic and transparent arrangements. The content and structure of the regulations though remains largely unchanged. Here, the concern is that inputs from fishermen, especially those that might seem contrary to government's conservation objectives, are usually ignored. What governments hope for is that the communities will take up responsibilities, especially those concerning the enforcement of regulations in their areas, a task that government itself has been unable to fulfil adequately. Thus, while the decision-making powers largely remain with governments, communities are being expected to implement the decisions with greater zeal.

Whereas most rural fisher communities might have fished for subsistence in former times, the integration of rural communities into the market economies has shifted fisheries exploitation into the realm of profit motives. The objectives of most fishers are clearly economic, other than just subsistence. The structure of fishing operations in most fishing communities, whereby a unit owner employs crewmembers or assistants, means that the decision-making at the operational level goes beyond the net owner. For most of the crewmembers or assistants, fishing is usually an economic safety net, enabling them to etch out a daily living. Who is a fisher and what their objectives for fishing are is, therefore, more diffuse and complex.

For fishing communities, the short-term economic objectives tend to be higher than long-term conservation objectives, given their dire economic conditions.

From the early 1990s, donors have demanded political democracy and transparency as essential conditionalities for development aid.

In addition, donor projects in the resource management sector have drawn inspiration from some precepts of the World Bank Structural Adjustment, including the notion that the central state should play a reduced role in directing and managing economic activity (Lawry 1994). The assumption is that local institutions are more accountable and have greater advantage over central state authority, since they function at a level where self-interest and responsibility for sustainable resource management are potentially greater. Co-management is expected to improve the efficacy of fisheries management, because it is assumed that acceptance of management measures will be higher when fishing communities have been involved in the decision-making process, and also the contents of management measures will be better reflected if users' knowledge has been included in their formulation (Jentoft 1994).

Thus, user-participation in resource management has increasingly come as one of the conditions for donor aid as it is believed that this will result in greater accountability. It is also seen as part of the general drive towards empowering the formerly disenfranchised populace.⁵ The main goal of donors can be stated as being to achieve the best possible use of their funds that would result in positive socio-economic outcomes for the target communities. Donors seem to believe that the subsidiarity principle commonly being applied in the West should also be applied in developing countries, and that political empowerment of user communities in the resource management process would result in improved resource management and thus positive economic effects on user communities.

While these enforced moves towards democracy and greater participation for the local communities are laudable, they have, in most instances, caught government officials and user communities unprepared. The former have had to accept to implement user participation in order to get the much needed money into their cash strapped budgets, while the latter are still suspicious as to why all of a sudden the government has turned round and is telling them that they have to participate in the management process, to the extent of being forcibly co-opted.



4. What passes for co-management in Africa?

There are quite a number of forms of user involvement in the management of fisheries that we find in Africa. Whether all these should be called co-management is a matter for debate. In South Africa, it is enshrined in the Constitution of 1996 and in other policies and legislation concerned with natural resource management that people must be involved in decisions concerning their lives and natural resources they are entitled to (Hauck & Sowman 2001) following democracy in 1994. The revision of apartheid-era laws and regulations thus goes through formal political processes aimed at making provision for inputs from stakeholders and the public. During apartheid, the commercial industry in South Africa had established arrangements with government that involved the exchange of information (Hutton & Pitcher 1998). The formation of formal structures was formalised by the Sea Fishery Act of 1988, which stated that the minister could recognise any industry body or interest group to advise and make recommendations to government (Hauck & Sowman 2001). A formal structure that has been put in place following the new Act of 1998 is the Consultative Advisory Forum, which is supposed to provide management advice directly to the minister. This forum is comprised of invited members from industry, the public and outside research institutions.

In countries that adopted socialism at independence such as Mozambique and Tanzania, co-operatives or 'villagisation' were practised. Engagement with government had emanated from this. On the Zambian side of Lake Kariba, the government's approach to limiting entry and engaging with fishermen was based on moving fishers into centralised villages. In Zimbabwe, co-management is based on the Communal Areas Management Programme for Indigenous Resources (CAMPFIRE) principles, which give 'appropriate authority' to Rural District Councils. In most of the countries in Africa, though, modern era user-participation has its basis in a new philosophy of sustainable rural development through the extraction and exploitation of 'their' natural renewable resources (Derman 1995; WCED 1987). The problem is for governments to ensure that this is achieved without endangering the biological sustainability of the resources. Most countries have revised their Fisheries Acts in order to provide for enabling legislation and provide for decentralisation and devolution of powers.

In almost all co-management arrangements in Africa,⁶ governments have the legal authority, but have voluntarily

decided to devolve some aspects of management to fishing communities according to very discrete and specific agreements concerning particular functions. This type of approach is the top-down, vertical 'contracting out' model as described by Berkes (1997), Sen and Nielsen (1996), Pomeroy et al. (1995) and Berkes et al. (1991).⁷ This model views power as moving from the state to communities. With the exception of a few cases such as Lake Chiuta in Malawi (Hara et al. 2002) and some inland Lakes in West Africa (Horemans & Jallow 1998). Most African co-management arrangements are top-down heavy (Sen & Nielsen 1996).

5. How has co-management been implemented?

The introduction of co-management arrangements in Africa has to a large extent been initiated as donor-funded projects,⁸ with the assumption that national departments could take over the activities at the end of the projects. This has not been without its problems, since in many cases the assistance has been short-term and the process has lacked flexibility, because of specific donor requirements that needed to be applied.

In most cases, organisation of user communities has been the first step of the implementation process. Government or NGOs representing the government have initiated and mobilised the communities for user involvement in the new management regime. New institutions are created, with the facilitation of these external agencies, usually using the Western democratic principles of electing committees as vehicles for participation. These community organisations in co-management arrangements have different names in different countries. In Malawi, they are called Beach Village Committees, in Zambia Fishing Village Management Committees, in Tanzania Beach Management Units or Management Committees, while in Zimbabwe they are referred to as Management Committees for Exclusive Fishing Zones (based on the specially demarcated areas of the inshore fishery by government). Although new institutional structures have been created, the local institutional structures based on traditional authority and customary law are in most cases still the basis for organisation of the fishing communities. A few exceptions can be found. In Zimbabwe, based on the principles of scientific socialism, the government sought to dilute the influence of traditional authority and, in



this context, the traditional authorities (chiefs) have been ignored or declared improper for the task. In the case of the Oliphants River project in South Africa, the 'coloured' community in question do not have traditional authority structures.

Hauck and Sowman (2001) point out that in South Africa most of the initiatives have been driven by external agents outside the responsible government department and that thus far there has been a lack of buy-in into the idea of co-management by government. This lack of total acceptance of communities as equal partners (or slow warming to the idea of co-management) by government fisheries management departments also largely applies to most of the other countries.

In general, the fact that, in most cases, community structures had been organised by or through the influence of agents from outside the communities has had a large bearing on the ownership of the process and the acceptability of the new committees intended to be representative bodies for communities in a co-management arrangement. In turn, the stability of the elected co-management structures has had great influence on the sustainability of the new regime.

6. Lessons from the African experience

Officially, most co-management arrangements on the continent have been going on for less than ten years. Most of them have been introduced and driven by governments and remain largely top-down. All the same, it is possible to start drawing some lessons concerning the African experiences with co-management arrangements meant to govern fisheries exploitation. In the discussion of lessons, focus will be given to objectives for co-management, issues related to participation and representation, the role of traditional authority and the institutional capacity for co-management.

6.1 Conflicting objectives: Conservation vs. economic subsistence

In the African cases we have investigated, co-management seems to be a government-driven initiative with underlying conservation objectives. Governments generally perceive co-management as an alternative strategy to pursue the same old conservation objectives. Thus, the government approach is rather instrumental, based on co-opting users into the process,

without really relinquishing management authority and control of decision-making power. Governments hope to achieve better outcomes in terms of sustainable patterns of fisheries exploitation by changing the time preference for exploitation of fish resources within communities from short- to long-term through user participation in the management process. The expectations for involvement within communities might not be the same as governments', is seldom so and is more likely to be contradictory.

Most people in fishing communities, especially where income from fishing is vital for their livelihood, focus on economic objectives. In most cases, the effects of poverty and lack of alternative economic opportunities for the communities, due to the overall macro-economic situation in Africa, drives up their rate of time preference to the point where only daily consumption matters. The question then becomes whether co-management alone can change their economic strategies. This has been stated as one of the main problems on Lake Malombe (Hara et al. 2002) and Lake Victoria (Geheb & Crean 2000).

This last factor highlights the fact that achieving sustainable exploitation of the fisheries in most water bodies is likely to be dependant on the broadening of economic opportunities and general economic development in the rural communities concerned. The point is that as populations grow and economic needs increase, pressure on fisheries is bound to increase from the horizontal growth of effort, unless alternative outlets in terms of employment outside the fishery can be created. In this sense, one cannot separate fisheries management issues from economic development issues.

Jul-Larsen et al. (2002) have emphasised the need for caution about the general assumption that there is a need to control effort in some small and medium fresh water lakes in the SADC region, because in the case of Lakes Chirwa, Mweru and Kariba, there are no clear links between the level of fishing effort and the biological resilience of the resource and ecological systems. There is very little biological evidence to support the need for control of fishing effort. Thus, the use of co-management to meet conservation concerns might be misconceived on the part of government.

6.2 Property rights, exclusion and limited access

It has been common from a government perspective that co-management has been seen as a vehicle for establishing or ensuring property rights for local fishing communities to fish



resources. Granting property rights has been one of the major reasons for adopting co-management for many fishing communities. The underlying perception is that better resource management can be promoted through policies that give the communities stronger incentives for sound resource use through reforms that extend clear property rights to them. Having acquired exclusive rights, it is expected that fishing communities would limit access and thereby fishing effort. Whereas in the past community members had been free to enter and leave the fishery, limited entry proposes that a specific group of individuals should have exclusive rights to the resource with the ability to keep others out. In the face of shrinking job markets, dependency on natural resources to meet basic needs is increasing. In most instances, communities have been adamant about the proposal to introduce limited entry and limited access, due to the implications of these as forms of privatisation of a common pool resource in which everyone has historically been free to fish. Secondly, fishing communities have felt that this would risk them being excluded from other areas to which they seasonally migrate during the closed season as a 'tit-for-tat' by other communities from those areas (Hara et al. 2002; Geheb & Crean 2000; Horemans & Jallow 1998). In this context, propositions aimed at limiting entry or access have been difficult to implement. In the words of Brox (1992:232):

the Common Property Theory exposes the tragic potential of natural resources being free and accessible to all, but it easily prevents one from seeing that commons involve opportunities which are far from being tragic for the people involved, but rather necessary for the maintenance of local communities. Of special importance are the opportunities that common resources like fish offer to anybody looking for subsistence or resources that can be turned into cash.

Brox's observation can never be far from the reality of the situation in Africa, and is supported by Jul-Larsen et al. (2002) in their study of small and medium freshwater lakes in southern Africa.

Thus, the link between fisheries and the general economy and the former's ability to act as a sink for excess labour from the fishing community is becoming clear. So long as employment opportunities in the other sectors of the economy remain low⁹ and fisheries continue to act as the major economic sector in rural areas, limiting entry to fisheries is going to be difficult, if not impossible. Here also is a warning that any new management regimes, whether co-management or any other

type, which bring any unpalatable changes to the existing social and economic order of the fishing communities might be unimplementable even if they made sense to governments' biological conservation objectives. In any case, official government worries about limiting effort as a management objective might be misconstrued in some of the small water bodies in the SADC region, as Jul-Larsen et al. (2002) have demonstrated. The authors show that in some of these water bodies there might be no reason to control effort and that the importance of such resources lies in their ability and resilience to act as a buffer for absorbing the socio-economic needs of constantly changing local macro-economic situations of the dependent communities, without endangering the productivity of the resource in question.

6.3 Level of participation

The practical adaptation of co-management in Africa has been to involve fishing communities in the implementation process – a rather instrumental approach to co-management. In a few cases, fishing communities/user groups have been consulted in the decision-making process concerning determination of technical regulations such as gear type restrictions (minimum mesh size and maximum length of seine or gill nets), closed seasons and protected areas. However, the knowledge base for these management decisions has been 'scientific knowledge' provided by government departments. The justification or reasoning behind such knowledge is seldom clearly explained to fishers. In addition, the scientific rationale for the applied technical regulations remains questionable (Jul-Larsen et al. 2002). Thus, it is clear that governments generally do not perceive co-management as a means of introducing more democratic principles into fisheries management, but as an instrument for reaching their own management objectives more efficiently through involving communities in the implementation and monitoring activities. Governments have generally not been prepared to include the setting of management objectives as part of the co-management process and the determination of what knowledge from fisher communities should be included in the management decisions. In the fishers' experience, the government always sets the rules and regulations and has the responsibility for enforcement. In summary, most co-management arrangements in Africa exclude fishing communities from the decision-making process regarding who should participate in making the operational rules, which the co-management arrangements were supposed to be about



(Sverdrup-Jensen & Nielsen 1998). Unless users are genuinely allowed and empowered to participate in the setting of management objectives on equal terms with government, co-management cannot really be considered as a serious institutional innovation. If co-management is put forward as a process of empowerment and self-determination, communities might believe that it will lead to powers of decision-making, including decisions that might be contrary to those of government.

Control and law enforcement continues to be mainly undertaken by government departments. In some such cases, as in Malawi, one of the arguments for co-management was to make the BVCs responsible for enforcing operational rules in conjunction with the Department of Fisheries. Apart from governments' willingness to devolve responsibility for this type of task, another problem has been the capacity and willingness on the part of local communities to undertake such tasks.

Irrespective of the type of political system that has been in place in the past, fishers' trust in government authorities has always at best been moderate. Fishers have hardly ever found themselves at the winning end of relationships with government. Therefore, wherever initiatives to establish co-management have been taken by government authorities, these have been met with profound scepticism from fishers, who, with good reason, are suspicious of the motives and sincerity of government authorities when they propose collaboration and the sharing of management responsibilities. Thus, unless governments show willingness to build trust and bring about the democratisation of the processes of fisheries governance, the incentive to give collaborative management arrangements with government a try is likely to decline.

Although some governments are genuinely trying to introduce real institutional changes, one still finds that in most instances fishing communities are not legally empowered, and their negotiating position versus that of governments' is still comparatively weak. As Chirwa (1998:69) points out: 'The local user communities are the recipients rather than the initiators of decisions. They, themselves, are managed, together with their resources.' This statement seems to be applicable to most of the examples of co-management from Africa and serves to emphasise the need for enabling legislation regarding co-management or operationalising such legislation where it exists, in order to empower user groups. Governments generally seem reluctant to devolve power and bestow legal rights and authority for fisheries management to user groups. Devolution of

management authority is obviously a sensitive issue for most governments and one that does not seem to be easily resolved, as it requires changes in laws, policies and administrative procedures, a process that can be both cumbersome and time-consuming.

The issue of scale is crucial, and not all problems and issues can be solved at the local level. The African experiences support this argument. It appears as if the scale issue is somewhat easier to deal with in small freshwater lake fisheries such as in Lakes Nokoue, Mweru and Chiuta, whereas it is more complicated in the large freshwater lakes like Malawi and Victoria or marine fisheries, e.g. the shrimp fishery in Mozambique or the pelagic fishery in South Africa. The latter fisheries are good examples of resource systems being too large to be controlled entirely by a few communities. Fisheries (co-)management institutions must, therefore, be able to address problems of resource access and distribution above local level. One of the solutions to this problem of scale lies in the issue of representation (Mikalsen 1998). This, however, raises a new set of problems related to the mechanisms that could ensure genuine representation, in order to avoid alienation between communities and management. The fact that the co-management institutions (local committees) exist within nested systems compounds the problem. The African examples clearly indicate that local communities have difficulties in getting their views articulated through the different layers of the decision-making hierarchy in larger-scale environments. In addition, the local communities, as in the case of the Mozambican shrimp fishery and the pelagic fishery in South Africa, are up against very well-organised associations representing larger integrated companies. Thus, local communities are often at the losing end when decisions are taken.

6.4 The role of traditional authority

As explained above, African co-management institutions have generally been established at the local level and most often have been closely linked to existing traditional power structures. Traditional power systems in Africa play a very prominent role in relation to resource exploitation. In African fisheries co-management arrangements, traditional authorities serve as the link between the government and communities/user groups. As a consequence, co-management arrangements are in many cases rooted in traditional customs, practices and beliefs, religious institutions and myths that influence the decision-making process.



It can be argued that the heavy involvement of traditional authorities in co-management arrangements adds a twist to an arrangement that, in the strict Western understanding, should be between direct users and government. On the other hand, such tripartite arrangements build upon and involve institutions that are considered legitimate by fishing communities. To use a Weber terminology (Selznick 1992), the legitimacy of this type of co-management arrangement is likely to be based on a combination of traditional and charismatic authority. The sustainability of such an arrangement will, to a large extent, rely on the personality of the chief and how his subjects regard him. In order to make co-management arrangements able to apply sanctions on their own at local level, they often will need the civil and customary power structures that reside in traditional authorities. In any case, traditional leaders and elders have historically been, and are still, highly respected in rural areas.

It is, however, not without its problems that co-management arrangements in Africa are closely linked to the traditional authority system. Empowering user groups has created tensions between traditional authorities and the co-management institutions in their areas (Hara et al. 2002; Jackson et al. 1998). In addition, traditional authorities view the process of democratisation with suspicion (with good reason on their part), because it most likely undermines their authority. This will have direct impact on the resiliency of the co-management institutions. Co-management initiatives may change perceptions within the fishing community and the government on what are considered to be legitimate management institutions. A major challenge for co-management in Africa is how to include the traditional institutions. It is obvious that they cannot remain in the driving seat if co-management is concerned with empowerment of communities. At the same time, they are also too important to be excluded, as this would undermine the virtues of co-management arrangements.

6.5 Capacity of local communities and governments for co-management

Not all tasks that are inherent in a co-management arrangement can be undertaken by community organisations in all situations. In many cases, fishing communities may neither be willing to, nor capable of, taking on general or specific fisheries management responsibilities/tasks. Furthermore, not all elements of fisheries management can, or should, be allocated to the communities, due to the fact that the incentive(s) – economic, social and/or political – to undertake major fisheries management

responsibilities may not be present within the community. In cases such as Lake Malombe, where initially the incentives were seen as being monetary, and these could not be sustained because they were being drawn from short-term donor project funds, willingness to accept responsibilities on the committees declined. Another problem is related to the low levels of education and poor organisation among fishing communities. Thus, capacity-building of the communities and self-sustenance have been found to be important when it comes to successful introduction of co-management. Thus, it is crucial that key-persons or resources¹⁰ are not withdrawn before institutions have matured and the regime has taken root. Where this has happened, such as in the Lake Malombe and Oliphants River, it has been observed that the arrangement has been increasingly under strain and appears to be moving towards collapse. The lack of capabilities and/or aspirations among fishing communities to participate in the fisheries management process might also explain the lack of participation of true fishers in the decision-making process in some of the cases studied. As stated by Pinkerton (1989), strong local institutions with human and financial capacity are a precondition for co-management. In most small-scale fisheries in Africa, such self-reliant institutions for management purposes are difficult to find or create.

Support for co-management initiatives from governments seems to be inadequate. One reason for this might be that there has not been real adaptation in the organisational structures of government departments to cope with the change in concept and philosophy from centralised management towards co-management. The shift to co-management from centralised regimes creates new demands on government with respect to the type of support that they need to provide to fishing communities. The situation is complicated due to the fact that most departments were built and geared around attempting to ensure biological sustainability of fisheries resources. Their duties have mainly been seen as biological research to come up with regulations, top-down delivery of extension messages and enforcement of regulations. As emphasised by Donda (2001), it is a problem that government departments and their fisheries research and extension have not been re-organised as part of the process. Fisheries departments in Africa have usually recruited people from natural sciences, with no or very few economists or social scientists. Although the need for new types of skill is widely recognised, very little has been done to broaden the skill base of fisheries departments.

One of the reasons for this is that government departments are being asked to downsize under SAPs. This means that it has



not been easy to create new positions that would accommodate the required people with the requisite skills and qualifications. It has thus not been easy to re-orientate departments, especially when such dramatic change means re-organisation, change in management philosophy, new ways of interacting with fishing communities and the possible threat to the jobs of existing staff. It, therefore, means that there is usually no clear link between the organisational structure of the responsible departments and resources (human and financial) at their disposal to match the requirements for the facilitation and implementation of the new regimes.

7. The challenge for the future of fisheries co-management in Africa

The implementation of co-management in Africa does not seem to differ from what is going on in other parts of the world. Institutions regulating access to fisheries had in many – if not most – cases been in place long before modern concepts of fisheries management were developed (Hviding & Jul-Larsen 1995). The problems that African fishing communities are facing are, therefore, not necessarily a result of an absence of management institutions, but rather the result of the inadequacy of these institutions to deal with the evolving social, economic and political systems and situations. Revitalisation of such existing institutions might not, therefore, necessarily lead to solutions to the problems. The institutions may have lost their significance exactly because they were set up to solve other problems and are inadequate to deal with the present situation. The basic challenge to governance of African fisheries seems to be how to establish and maintain co-management institutions (norms and rules guiding decisions, including a formal framework for decision-making) that will enable both government and communities to deal with the new challenges and complexities that come with the responsibilities for sustainable exploitation of their fisheries resources, nested in modern economic systems increasingly influenced by the effects of SAPs and globalisation.

The modern approaches to fisheries' management, including some variations of co-management, have developed within the modern rationality of industrialised societies. This approach is inherently unable to address the present problems of fishing communities in general and in Africa in particular, due to the

ways objectives are defined and limitations in the knowledge on which they are based. The overriding problem is the differences in objectives for fisheries management between government and fishing communities, and the fact that this aspect is seldom addressed. What we observe in Africa is the instrumental type of co-management approach, which does not differ significantly from the centralised management approach. If co-management in an African context continues to be instrumental, it is likely that the regime will lead to the detriment of relations between government and fishing communities, because the frustrations among the latter are likely to increase due to the lack of real and genuine empowerment, as expected at the local level, and the lack of government support as promised. We have observed the first signs of collapse of what was considered a successful co-management arrangement on Malombe in Malawi, according to Donda (2001) and Hara (2001), because when co-management was launched it created huge expectations of genuine participation and empowerment. In practice, though, the adoption of co-management seems to be turning out to be business as usual for governments, as no real institutional reforms are adopted and carried through.

If co-management in Africa moves towards genuine participation and empowerment it is likely to challenge the objectives of mainstream international conventions for fisheries management, such as the 'Code of Conduct for Responsible Fishing' or the 'precautionary approach for fisheries management'. These conventions attempt to remove all uncertainties with respect to stock estimation and fisheries management implementation, so as to protect the fish stocks, without taking real cognisance of the needs or wishes of fishing communities. The approach taken in these international conventions is very similar to the conventional fisheries management approach that is increasingly being discredited. In this context, the international decision-making arenas might have underestimated the limitations of these conventions when it comes to how they are to be related to the intended empowerment of fishing communities through co-management. In an African context, and many places elsewhere, a balance between conservation and socio-economic concerns has to be struck. If not, these conventions are likely to be more harmful than helpful. Co-management that results in empowerment can actually facilitate this process, because governments are likely to be confronted with, and forced to address, the impact of international conventions on the livelihoods of fishing communities, when the communities participate in the



definition of management objectives for specific countries, locations or fisheries.

This experience could assist national governments to present and balance various objectives when they participate in forums where decisions on such international conventions and agreements are made. The empowerment of fishing communities through co-management should be seen as a way of giving fishing communities a chance to influence their own future and to cope with the impacts of phenomena such as globalisation, competing use of coastal environments and other fisheries related issues. Empowerment through the co-management approach is likely – to a higher degree than previous or present management approaches – to positively influence overall management objectives, even in cases where these objectives might differ from those set by governments.

An important lesson to be drawn from implementation of co-management in Africa so far is that co-management should not be seen as a question of ‘constructing’ local institutions that can co-operate with government authorities in managing fish resources. That kind of approach was what had been attempted by the colonial powers under ‘indirect rule’. Co-management ideally implies a process of mutual adaptation for both government and fishing communities for the co-ordination of the existing access-regulating mechanisms (and the underlying mutual interests they represent) through some form of coherent mediating systems. Any management regime is political in the sense that it is bound to include some and exclude others from access to valuable resources. This points to a dilemma that does not seem to have been adequately touched upon in the co-management literature: who is a fisher and who is not and, therefore, should be excluded? In most African fisheries, the fishers normally have complex organisational structures. For example, in the case of Lake Malombe, it is common to find that most gear owners do not actively participate in the actual fishing. They employ crewmembers (Hara 2001; Hara et al. 2002). Within the crews, there are specialist roles such as divers or those who are expert in searching for fish shoals or simply those who are heads of crew. These various roles determine the way benefits are shared and also who takes what type of decision. While the gear owner might make strategic decisions, he is usually powerless when it comes to making operational decisions. Furthermore, lack of security of tenure for the crewmembers means that there is usually great fluidity in terms of movement in and out of crews and fishing units. Also, some people participate in fishing during particular times of the year

only, such as when farming is out of season. An added twist is the relationship between gear owners and crewmembers and traders who might provide them with capital or loan the fishers money during times of stress. In such complex organisational webs, who are fishers and their level of influence on decisions and fishing activities is never that clear-cut.

What is clear is that in the African context, most people within fishing communities or in the vicinity of fish resources are (potential) fishers. If they are not fishing at a specific given time, it might simply be that they have better socio-economic opportunities elsewhere. The cases we have reviewed show that there are good reasons to maintain things this way. Co-management systems have had a tendency to define fishers on the basis of who are present at a specific moment and a specific place in question. This is not likely to be a very helpful definition or starting-point for analysis. Malasha (2001) shows that when various groups of the local population on the Zambian part of Lake Kariba were able to establish an alliance of interests to effectively stop newcomers entering the fishery, it happened as an outcome of a government initiative for co-management. Since then the number of fishers has fallen dramatically, which might mean that probably a large amount of people have lost a valuable opportunity to make a living.

8. Lessons learnt

In this final section, we will try to distil some lessons to be learnt from the implementation and the current status of co-management in Africa. While the experiences might not have been very encouraging up till now, they raise some important issues and provide valuable lessons about co-management that need to be addressed in the African context.

Co-management has been applied and implemented instrumentally by governments. This has created a situation whereby the process, in contrast to the intention, has not lead to empowerment of the local fishing population. The incentives for co-operation are primarily on the side of government, where fishers/fishing communities have realised that they continue to be recipients of instructions rather than equal partners in the decision-making process. A good example is that government departments and their fisheries research extension services have not been reorganised, and the inputs to be accommodated by government have not been changed as a result of the



changes in emphasis towards a more social and economic fisheries management (Donda 2001).

In an African context, the control of people seems to have been a more important concern than considerations for the resources. Co-management, in many cases, has been going back to the roots and, at most, differs only slightly from what the colonial powers attempted under the label of 'indirect rule'.

Based on the past experiences and the present challenges for African fisheries management, it is generally accepted that institutional reforms in the governance structures for fisheries management are required, and co-management is considered the way forward. The major challenge for fisheries co-management in Africa is to improve the knowledge base for management, and we argue that participation of the fishing communities is a precondition for this. Communities are also important in the quest to implement reliable monitoring systems. Based on the experiences from Africa, it is clear that the way forward on this continent is to move away from the classical management paradigm towards a more pragmatic and adaptive approach to management. As it is, co-management looks like advanced 'social engineering', influenced by donor agencies and NGOs without any genuine involvement of the direct users in the process. Co-management becomes an illusion. However, this would not be so if co-management is modified to a mutual adaptation, where one tries to establish a convergence between government policies and the local institutional structures. We are aware, given the institutional landscape in Africa, that this not going to be an easy task, but rather a long-term process with a lot of 'muddling through'. Based on African experiences, we argue that co-management in the region needs to be a learning process for each specific fishery, with specific tailor-made design needed in each context.

Finally, it is important to emphasise that it will be a troublesome exercise, without any guarantee for success. It is the only realistic alternative route, though, to follow in order to improve the efficacy of fisheries management in Africa.

Empowering user groups/fishing communities raises the question of whether these groups can act as independent participators, their organisation having been facilitated by government. In addition, to what extent are government agencies shirking or abrogating responsibilities in the delegation of some powers – but not others – to user groups? In Africa co-management and user participation are also seen as part of the introduction of political pluralism. The question then

is: Is the real objective to enforce participatory democracy or to achieve better fisheries management?

What should the objectives of co-management be? Institution and capacity building? Can co-management achieve the objectives of all role-players, given that these might not always be exactly the same and often contradicting? How can the balance between government conservation objectives and the socio-economic needs of fishing communities be achieved? What is understood to be *sustainable exploitation* by the various role players anyway? These are some of the questions that implementation of co-management in Africa raises and governments, donors and researchers must wrestle with. Until we start finding bold answers to them, co-management appears more an illusion than the empowerment of fishing communities.

Endnotes

1. In the early 1990s, the World Bank also adopted participatory approaches to project identification, development and implementation (World Bank 1994). This followed the dismal failure of the Integrated Rural Development Programme, that it had launched in 1970, which was based on a top-down interventionist approach (Keare 2001).
2. The cases-studies from southern Africa and West Africa are mainly drawn from volumes based on workshop proceedings of the Institute of Fisheries Management and Coastal Development (IFM)/International Centre for Living Aquatic Resources Management (ICLARM)/National Aquatic Resource Systems (NARS) Co-management Research Project by Viswanathan (ed.) forthcoming, and Normann et al. (eds) 1998. Those for East Africa are based the experiences of the Lake Victoria Fisheries Research Project Phase II, Geheb & Crean (eds) 2000. In addition, specific analysis of emerging initiatives in South Africa (Hauck & Sowman 2001) are included.
3. South Africa is the only country of the countries from which these case-studies are drawn that is not officially implementing SAPs.
4. Hara (2001) and Malasha (2001) elaborate attempts at applying 'indirect rule' in the specific cases of fisheries administration in Malawi (then called Nyasaland) and Zambia (then called Northern Rhodesia) respectively by the British colonial governments.



5. According to Lawry (1994), Western donors argue that better resource management will result from policies that extend clearer property rights to users and give greater authority to local institutions, believed to be more accountable to the public.
6. These arrangements primarily involve small-scale fisheries. Except for co-management of the South African hake fishery (Hutton et al. 1998), we have not found any well-documented examples of co-management in the industrial fisheries, although the authors are aware that consultative arrangements are in place in some countries, e.g. the shrimp fishery in Mozambique.
7. Berkes (1997) points out that all these are variations of Arnstein's (1969) 'ladder of public participation'.
8. The Lake Malombe project in Malawi had been funded from several sources, namely the German Technical Foundation (GTZ), the United Nations Development Programme (UNDP), British Overseas Development Administration and a World Bank loan (Hara 1998; Scholz et al. 1998). On Lake Kariba the co-management project came under the Zambia/Zimbabwe SADC Fisheries Project, funded by the Norwegian Agency for Development Co-operation (NORAD) and the Danish International Development Agency (Danida) (Hachongela et al. 1998). The Lake Victoria Fisheries Research Project was funded by the European Development Fund (Geheb & Crean 2000). In Mozambique the implementation of co-management in Moma/Angoche districts was part of Nampula Artisanal Fisheries Project, funded by the International Fund for Agricultural Development (IFAD) (Lopes et al. 1998). While in West Africa, the initiatives came under the Integrated Development of Artisanal Fisheries in West Africa (IDAF), funded by Danida (Horemans & Jallow 1998). Hauck and Sowman (2001) point out that in South Africa most of the initiatives had been funded by external agencies.
9. In most rural areas of Africa, the levels of formal employment remain low. Usually, people rely on seasonal agriculture for food and income. The rate of unemployment in such areas is extremely high, usually in excess of 50%.
10. One of the major problems with the implementation of co-management in Africa is that, in most cases, this is being done as donor-funded projects of limited duration. Where government cannot take over the funding of the activities, it has been common to observe that the activities are collapsing, leading to serious problems in the long-term

success of the regime. The solution to this is long-term commitment of human and financial resources for the establishment of the new regimes

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