

MALAWI'S LAKE CHIUTA FISHERIES: INTELLIGENT BURDEN SHEDDING THAT FAVORS RENEWABLE RESOURCES STEWARDSHIP

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Lake Chiuta is one of the two remaining large Malawian lakes in reasonable “health” from a fisheries perspective. The others have been seriously degraded (fished out) in a country which formerly depended very heavily on significant doses of fish protein in its children’s diets as a key input for proper physical maturation (Mkoka, 2003).

This paper analyzes productive “self-help” efforts by Lake Chiuta fishers to protect their lake from over-fishing and, far more innovative in the opinion of this author, central Government of Malawi (GOM) officials’ willingness to (a) recognize the positive nature of fishers’ renewed attempts at self governance, (b) build on the local institutional capital that those same fishers were constructing at the end of the last century, and support those local institutional arrangements in very creative ways that not only authorized fishers to make, monitor and enforce rules on fisheries governance and management, but simultaneously freed the GOM of two burdens (effective monitoring and enforcement) which clearly exceeded its capacity, while *continuing to provide essential minimum back-up support* (targeted dissemination of information about relevant new national legislation on fisher empowerment, occasional dispute resolution services, and minimal oversight – checks and balances – concerning fishers’ rules for resource governance and management (RGM). These events demonstrated, as well, fishers’ sense of rule of law concepts.

This research was conducted during one week in January, 2004 on Lake Chiuta in eastern Malawi by a team consisting of the current author (team leader), one American and two Malawian colleagues. This paper draws on field research results and works noted in the bibliography, especially those concerning Malawi Rift Valley fisheries.

A. Introduction

In 1997 the Government of Malawi (GOM) established a legal enabling framework for promising indigenous institutional arrangements in the fisheries sector. The Fisheries Conservation and Management Act (FCMA/1997) replaces the 1974 Fisheries Act.

The most important feature of the new Act, one that distinguishes it from previous fisheries legislation, is that it makes specific provision for a shared or co-management regime through the conclusion of a legally binding agreement between the government and a recognized fishermen’s body. All fishing areas that are not subject to a co-management agreement will continue to be managed by the Fisheries Department, in the way they have been in the past. (GOM/EAD, 2000, Vol. 2, Section 3.3 “The Fisheries Conservation and Management Act [1997]).

The Malawian Department of Fisheries (DOF), in common with most DOF agencies, currently suffers severe operating budget restrictions. The practical import of the FCMA

is to *encourage self-help*. If fishermen do not govern and manage their “own” fishery stocks, primarily by regulating harvesting (through restrictions that they enforce on fishing gear, seasons and places), and perhaps eventually by restricting access, they will likely see those stocks decline. This will happen because either they or “outsiders” intensify fishing pressure to the point where fish stocks can no longer reproduce themselves. The **survival watchwords** that flow from this situation are, thus, *self-reliance* and *sustainable, sustained stewardship*.

Institutional Innovations

The Lake Chiuta fisheries case, described immediately below, demonstrates in very pragmatic terms how, under certain technical and institutional conditions, Malawian fishers can make a critical contribution to sustaining a fishery and thereby to preserving their own livelihoods. Chiuta fishers have a clear grasp of their personal and family economic stake in this circumstance. They rely on the DOF for minimal but critical assistance in this regard; fishers take responsibility for the bulk of co-management activities: rule making, monitoring, enforcement, resolution of trouble cases, adjusting rules to take account of changing realities, mobilization of resources to “finance” their co-management activities, etc.

They do, however, expect ad hoc support from DOF personnel, particularly in terms of explaining to other GOM enforcement agencies that local fishers’ associations are officially authorized to apply laws that they themselves make. DOF personnel on Lake Chiuta thus provide a very low cost, but exceedingly important service in shielding fisher associations from unwarranted (and ultra vires) intrusion in their affairs by, e.g., the national police force. The latter, furthermore, seem when they appear in specific fishery trouble cases to be making good faith efforts to meet other citizens’ demands for protection against “piracy” – the preferred term owners of illegal nets use to characterize efforts by local fisher associations to enforce their regulation rules against utilization of the banned *nkatcha* net. This gear is a modified open water seine net; its systematic utilization pretty much guarantees over-fishing and elimination of local fish stocks.

Fishers who rely entirely on the DOF to shoulder these renewable natural resource (RNR) governance and management burdens, unavoidable now that their fisheries have come under pressure and are menaced by depletion, will likely, in short order, find themselves looking for a new line of work. But the area near Lake Chiuta offers few economically viable alternatives to fishing. Indeed, the very bleakness of this situation is what makes fishery RGM compelling for fishers; this, in turn, gives some hope that fishers *might* overcome similar challenges on a number of Malawi’s other major water bodies. But this outcome is by no means certain, for a series of technical reasons discussed below.

For Malawi’s fisheries the National Fisheries and Aquaculture Policy (NFAP), approved in 2001 (GOM/EAD, 2000, Vol. 2) is of relevance comparable to that of the Fisheries Management and Conservation Act, and its implementing rules and regulations. These rules build on a policy, of which:

The general objectives aim at monitoring and controlling fishing activities to enhance the quality of life for fishing communities by increasing

harvests within safe sustainable yields and to promote aquaculture as a source of income and to supplement fish supply from natural waters [GOM/EAD, 2000, Vol. 2, Section 3.2 “The National Fisheries and Aquaculture Policy (2001)].”

This policy legally recognizes significant institutional innovations. In particular it:

- Authorizes artisan fishers to make their *own rules governing access* to their fisheries and *regulating harvesting practices*, e.g., prohibitions on specific types of fishing gear, specification of dimensions of legal capture equipment, seasonal and place (fish sanctuary) restrictions, etc.

BOX 1: Beach Village Committees: Evolution

Contemporary Malawian beach village committees (BVCs) build on an indigenous fisheries tradition of institutional innovation. During the colonial era (and perhaps before), enterprising individuals would “clear” a lakefront beach, meaning remove reeds, weeds, rocks and other underwater hazards and impediments so that fishermen could land their dugouts in security and also fish beach seines in those areas without impediment. Those who created beaches charged fishers who used them a modest fee for access to the landing facility. Contemporary BVCs, now recognized by enabling legislation, are authorized to control access to fisheries, to license gear and to charge fishermen access fees for use of facilities (Wilson, 2003: 53-54, No. 6.)

- Recognizes officer holders of GOM-approved fisher organizations (e.g., Beach and River Village Committees [BVCs and RVCs]) as *law officers authorized by national legislation to enforce their own BVC and RVC regulations* (Wilson, 2003: 54).

- Authorizes fishers to “formulate and review fisheries regulations. (Wilson, 2003: 54 [No. 6 (2) (g)].

It should be noted in this regard that BVCs and RVCs are also required to enforce fishing regulations that have been approved and duly promulgated by the Malawian DOF. Among these are regulations pertaining to fish species and size, closed seasons, fish sanctuaries (closed areas, often spawning grounds); fishing gear size (e.g., mesh size, net length and height), type of fishing gear, stowage of same, and methods of fishing. (Wilson, 2003: 54: No. 6. [2] [d]).

- Authorizes fisher organizations to *retain fines imposed for infractions of their rules*.
- Authorizes fishers to create new levels of organization, e.g., area (sub-lake) and lake-level fishers associations based on BVCs and RVCs found in those jurisdictions, to facilitate integrated management of the fisheries within which they operate.

Fisher Collective Action Efforts: Lake Chiuta versus Lake Malombe

Lake Chiuta constitutes the success story of two Malawian fisheries cases analyzed in the report that underlies this paper.¹ Lake Malombe BVCs are, despite efforts to the contrary, subject to greater control by traditional authorities than seems appropriate. By contrast, BVCs on Lake Chiuta are consistently bottom-up in origin, self-organizing and largely fisher-driven in implementation. Lake Chiuta fishers consider their fisheries governance and management activities to be successful, in the sense that fish stocks are recovering and fishers are bringing home more fish of larger sizes. As fishers work the resource on a daily basis and must be presumed to know something about the condition of fish stocks, their verdict is critical.² Fishers report Chiuta contains more fish, of larger sizes, than it did when they initially organized their fisheries RGM institutions.

Fisheries Gear Enforcement Patterns and Fishery Health

Fishers' conclusion in this regard is singularly important because it confirms *that their investments of time and effort, and the risks and sacrifices that members of these locally initiated, GOM-approved fishermen's user groups accept are having their intended effects: the Chiuta fishery is in recovery*. One can speculate that this positive dynamic goes a long way towards convincing Malawian fishers on Lake Chiuta that they should pursue their fishery governance and management efforts. Indeed, a review of the trouble cases summarized below in Appendix 1 reveal that Malawian fishers resident on Chiuta continue to make efforts to suppress fishing on the lake with the all too potent *nkatcha* open water seine net. VBCs on Lake Chiuta were reported in 2003 to have seized 68 *nkatcha* nets over the preceding five years (August 1999-August 2003) or 13 nets/year on average, although the number of seizures per year varied significantly:

- 1999 = 8

¹ THOMSON, James et al. 2004. "Mali, Botswana, Namibia and Malawi: Institutional Aspects of Renewable Natural Resources Governance and Management through Special Districts; Final Report." Prepared for the United States Agency for International Development under the Biodiversity and Sustainable Forestry (BIOFOR) IQC Contract No. LAG-I-00-99-00013-00, Task Order No. 3. June.

² This is even more so the case as the DOF has not been able over the past few years to conduct scientifically-based monitoring of the evolution of Chiuta fisheries stocks. Indeed, DOF has long considered Lake Chiuta to be adequately governed and managed, with fishing pressure held in check by resident fishers' reliance on less-productive (potent) varieties of fishing gear, e.g., fish baskets (traps) that feature apertures large enough to enable fingerlings to escape from the traps, long lines baited with single or multiple hooks, and gill nets. None of these gear types approach the *nkatcha* net (a form of open water seine net; see Box 2, "Nkatcha Fishing Net Operations," p. 10, *infra*) in capture potential. Chiuta fishers' predilection for gears that involve less than maximum feasible capture potential can be viewed as a form of collective *stint*, or deliberate policy of leaving more of the fish stocks in their lake to reproduce themselves. This enlightened view of their long-term self-interest does not, however, guarantee that Lake Chiuta will remain a healthy fishery, despite fishers' current positive reports on the state of the resource (see comments above, pp. 3-4). If Chiuta fishers prove unable, either alone or in co-management actions with DOF officials, to curb *nkatcha* net incursions in the lake, either by resident Malawian or Mozambican fishers, or by Malawian migrant fishers, e.g., from Lakes Chilwa and Malombe, this would represent a *very serious threat* to the Lake Chiuta fishery, one of Malawi's last two viable big lake fisheries (the other being Lake Malawi).

- 2000 = 9
- 2001 = 3
- 2002 = 35
- 2003 = 13

Interestingly, these RGM co-policing efforts were shared fairly widely among VBCs that constitute the Lake Chiuta Fisheries Association (LCFA). Some VBCs have, it is true, distinguished themselves by the number of *nkatcha* nets they have confiscated. But this appears to reflect the fact that certain VBCs are based on islands located in the middle of the lake, where community members can easily monitor a wide sweep of water, identify prohibited fishing activities, and then mount enforcement sorties. The participation of other VBCs, even at a lesser level of intensity, can be taken as a proxy measure of members' interest in ensuring that all fishers respect VBC rules. It seems fair to conclude, at least provisionally, that VBC members consider these (their own) rules legitimate and are prepared to back that evaluation with potentially dangerous action, i.e., forcibly confiscating nets the VBC regulations classify as illegal. By their own report, the resulting intensity of monitoring and enforcement, at least vis-à-vis the use of *nkatcha* nets on Lake Chiuta, is producing the intended effect: "bigger fish, heavier catches."

B. Lake Chiuta Case Problem Statement: RNR Demand Exceeds Supply

Technically, Lake Chiuta can be characterized as *exclusively* an artisan fishery. No modern fishing rigs ply the lake (*modern* fishing rigs, as the term is used here, designate machine-operated capture equipment [e.g., open water paired-trawled seines, etc.]; in Malawi, such rigs can legally fish only in selected deep-water sections of Lake Malawi).

Economically, Chiuta is isolated, connected to comparatively distant urban markets via a network of laterite and blacktop roads, the first of which was constructed in 1985. Only then did this formerly subsistence fishery take on a partially commercial character (Wilson, 2003: 10). These market access constraints serve, even at present, to moderate economic demand for fish taken in the lake. The fishery is economically important, i.e., the DOF reported an annual catch of 2,000 tons of fish during the two decades from 1976-96, or 100 tons/year (Njaya, Donda and Hara: 3). This activity provides jobs and income to some (but not all) fishers, gear owners, fish processors and fish mongers, and others associated with the sector. Observers note that 90% of the Lake Chiuta catch is sold, first to wholesalers and then to retailers and consumers. Most (80-90%) fish traders are males (Njaya, Donda and Hara, [quoting Donda]: 5)

Politically, Chiuta constitutes an intriguing case. It sits astride the international boundary between Malawi (160 KM² – 80% of lake surface) and Mozambique (40 KM² – 20% of lake surface) and thus presents considerable potential for international tensions (already present) over fishery governance and management issues and difficult political challenges that, if they cannot be addressed successfully, will seriously undermine prospects for fisheries sustainability. Note that fishers of both countries tend routinely to ignore the international boundary on the lake.

Legally, Lake Chiuta offers a striking example of bottom-up, largely user-provided RGM (including policing), in which the Malawian DOF plays only a limited but still *crucial* supporting role (Appendix 1 of this chapter presents an *incomplete* series of trouble cases that vividly illustrates the current nature and extent of fisher self-policing on Lake Chiuta). For this reason, we hesitate to describe Lake Chiuta as a full-blown case of *fisheries co-management*. It might be more accurate to designate it as a case of fisher self-governance and self-management, with modest, but absolutely crucial elements of government support at critical junctures.

From the perspective of Chiuta resident fishers, the fundamental problem facing their

communities is that of banning fish capture equipment so potent³ that it can threaten the capacity of the Chiuta fisheries, as a complex RNR, to reproduce itself. At the head of their list of unacceptable gear is the highly efficient *nkatcha* open water seine net, invented some years earlier by a Lake Malombe fisherman (for a description of how fishermen use the *nkatcha* net, see Box 2, this page). The *nkatcha* net has since *metastasized* – the analogy to the process by which cancer spreads would not appear to be too strong in the eyes of Chiuta fishers – into other Malawian lakes

Box 2 NKATCHA NET FISHING OPERATIONS

Lake Chiuta's clear, shallow waters lend themselves to efficient use of the *nkatcha* open water seine net. *Nkatcha* net operations rely on services of a diver who, as a member of the fishing crew (other members of which are divided between the two boats required to work this seine net), directs capture operations. He dives until he identifies a school of fish. After surfacing, he directs his crewmates to deploy the net to completely encircle the school. One boat anchors the net while the crew of the other pays it out following the diver's instructions. Once the net is in place the diver plunges to the bottom of the net and, using ties attached to the lower edge of the seine, entirely seals the net around the school. If the *nkatcha* net incorporates a sufficiently small mesh size, not even fingerlings escape the trap. This explains why this net's capture potential is so lethal and why, if a large number of crews use this gear consistently, even on a large lake, they can fairly rapidly deplete its fishery. While fish supplies last, however, *nkatcha* fishers can afford to sell their catch more cheaply than those who use less efficient capture gear, and so the former tend to earn more than the latter. *Nkatcha* nets create an additional source of friction: use of these seines stirs up the muddy bottom of the lake, which annoys members of lakeside communities who depend on Chiuta for their water supply.

(Chilwa, Chiuta and Malawi). Lake Chilwa migrant fishers who could no longer make a living on their over-fished home waters served as “*vectors* for the disease” when they took their *nkatcha* nets to other lakes, arriving on Lake Chiuta in the 1980s (Wilson, 2003: 10).

³ To reiterate, serious fisheries depletion in the Lake Chiuta case is not a hypothetical possibility or a lawyerly “tale of horrors.” Malawian fishers only moved to assert firm control over “their” resource when migrant Lake Chilwa fishermen introduced the *nkatcha* net on Lake Chiuta and quickly harvested so many fish that they threatened to crash the fisheries. Thus Chiuta fishers sought to combat what they considered to be a *clear and present danger*, and not some abstract, possible future threat to their livelihood.

If fishermen were allowed to use *nkatcha* nets in the clear waters of Lake Chiuta, they could very rapidly over-harvest its fish stocks and threaten the sustainability of the fishery (cf. Box 4.4, p. 8). But Chiuta *resident* fishers were simply not prepared to allow the *nkatcha* menace to destroy their livelihood.⁴ This broad consensus among Chiuta fishers led them to conceptualize, organize and systematically apply an effective ban on *anyone* using the open water *nkatcha* seine net (and eventually, even *nkatcha* beach seines) in their lake.

Lake Chiuta: Common Pool or Common Property Resource?

In pursuing this goal Malawian Chiuta fishers have in effect viewed Lake Chiuta as a *common pool* resource and, largely through their own efforts in creating appropriate institutional arrangements, have converted it from a common pool – open access – resource into a “quasi-” common property resource. Use of the term “quasi” here highlights the fact that Lake Chiuta fishers in effect make little attempt to control *access* to lake waters. Instead, they focus *their monitoring and enforcement attention* on regulating harvesting, particularly the kinds of capture equipment that are legally acceptable for use on Lake Chiuta, treated as a common property. Rather than devote time to trying to prevent others getting access to the lake they instead zero in with great rigor on identifying and seizing capture equipment defined as illegal on their lake.

In shifting to a modified form of common property management, Chiuta resident fishers have come to manage their home lake as a *global special district*. It *would appear* that this is a technically appropriate approach. Fish in Malawian lakes (principally cichlids, *Oreochromis* spp.) are mobile and not tied to a home ground (although they do have known spawning grounds, in swampy areas located at the southern end of the lake). This implies that one or a set of neighboring BVCs imposing a stint (restricting capture of fish *only* in the area under their control) would probably not enrich fisheries in their waters because any new increments of fish would move away to less populated waters. Assume, however, that fishers do accept a stint on catching fish in their home waters and that this self-discipline (intensified fisheries RGM) does foster creation of new increments of fish stock in those waters. Assume also that some of that growing stock does in fact move away to other parts of the lake. If so, other fishers – while themselves refusing to *stint* – could *ride free* on sacrifices accepted by fishers in the first set of BVCs. They would in effect “free ride” by themselves avoiding stinting behavior while scoring bigger catches from more abundant fish stocks found in neighboring or more distant waters. In consequence, it would appear that fishers *must* – because of what we assume to be the behavior of local fish stocks – manage the lake as an *undifferentiated*, unpartitioned, (quasi-) common property resource. Typically, efforts to *govern and manage common pool resources as common property resources* involve efforts to define *authorized* users and then to *deny access* to *unauthorized* users. Note that further research of a technical nature on behavior of fish stocks in Malawi’s major Lakes – Chiuta, Chilwa, Malombe and Malawi – might reject the assumption that fish regularly move to less crowded and

⁴ A potent factor that helped galvanize fishers permanently residing on Lake Chiuta in the face of the 1995 “invasion” by *nkatcha*-net-wielding migrant fishers from neighboring Lake Chilwa was the latter’s success in putting their greater earnings from the fishery to work in enticing local women as lovers and spouses (NJaya, Donda and Hara: 7).

thus richer habitat. It is also possible that Malawian fishers already know this to be the case, since they travel to fish in specific sites, which they consider to be rich in fish. In any case, Lake Chiuta fishers *behave as though they think that fish move around in an opportunistic manner*. They developed and now monitor and enforce *lake-wide* rules that restrict capture gear, thus operating as though fish search out better habitat in an opportunistic manner.

This technical problem is a common one in wildlife RGM (see in Thomson et al., 2004, the case studies concerning animal populations in Malawa's Nyika National Park and Vwaza Swamp Reserve). It is, furthermore, a vexing problem: the larger the scale of the special district to be managed, the greater and more complex the challenge. Were it possible to *partition* lakes and wildlife habitat into smaller units, and could the animals that range across those aquatic and terrestrial habitats be stabilized and compelled to respect partitioning limits, it would make it far easier to govern and manage such populations. Could animal populations be stabilized, user groups that *stinted* on their home territories (and also successfully excluded unauthorized users) could expect larger harvests over time. This would, in turn, make it easier to propagate norms of conservation because the process would incorporate a reasonable degree of equity: those who stint (accept short-term sacrifices in the amounts of fish or wildlife they harvest) might reasonably expect to harvest more over the longer term. With both free-riding by external actors and intra-group opportunism "defined away," virtue would be its own reward.

Developing and Financing Fisheries Institutional Capital

In developing institutional arrangements to monitor and enforce rules restricting capture techniques, Chiuta fishers have drawn in the first instance on pre-existing *local institutional capital*, later supplemented by two additional institutional innovations promoted by external actors. The old institutional capital now takes the form of Beach Village Committees (BVCs) (see Box 1, "Beach Village Committees: Evolution," above, p. 3).

The new institutional arrangements – the *Lake Chiuta Fisheries Association* (LCFA) and its two constituent *Area Fisheries Associations* (AFAs) – offer Chiuta fishers means to concert their actions for a more powerful overall effect. The phrase "offer...means" implies that these institutional innovations – in effect, *confederal* arrangements – are much a work in progress. The intriguing question is how Chiuta fishers will judge these arrangements in the final analysis. *In theory*, they represent useful, constructive additions to the panoply of institutional mechanisms that people have been developing over the last decade on Lake Chiuta. *In conception* they afford Chiuta fishers the means to concert their actions, to explore – collectively – adjustments and refinements in their institutional arrangements, to mobilize significant financial resources and to resolve, at modest cost, the trouble cases over fishing gear that continue to erupt from time to time on the lake. To exploit unmercifully the afore-noted cancer analogy, these institutional arrangements might be viewed as offering possibilities for *on-going, collective chemotherapy* that could enable Chiuta fishers to remain vigilant and to stay on top of and block spread of the *nkatcha net plague that formerly threatened Chiuta's fishery* (and, for that matter, other problems that might affect the future of their fishery). BVCs/RVCs, in coordination with the AFAs and LCFA, enjoy legal power to mobilize cash resources through sale of

licenses, collection of membership fees, imposition of fines, etc. (see Box 6, p. 17). The LCFA and AFAs offer to fishermen, others involved in the fishing industry who are BVC/RVC members, and DOF officials facilities within which they can engage in exchanges of information, e.g., concerning rule changes, DOF extension messages, fishers' concerns, etc.

Chiuta's current set of locally-generated and externally-induced institutions continue to evolve. It seems likely that *fishers will either consolidate them or allow them to wither and die depending on how useful they find them*. It also seems pretty clear that the GOM lacks the capacity to finance these arrangements. They will either become self-financing, because fishers collectively judge them useful, or they will die peacefully of neglect because Chiuta fishers cannot find the time, energy and financial resources necessary to maintain LCFA operations and those of the two AFAs and to add value through their operations. This issue, while far from being decided,⁵ has significant implications for the future of Chiuta's fishery. If resident fishers can finance operation of these institutions, e.g., through a modest additional tax piggy-backed on the existing semi-annual registration fee for boats and gear, or through a similar modest tax on the value of fish catches landed,⁶ it should be quite feasible to finance participation by LCFA and AFA officers in relevant meetings, etc. If Chiuta's fish increase in value because the enforced stint permits fish to mature and reach a size where they command higher market prices, it should be feasible for Chiuta fishers to finance LCFA and AFA operations through license and registration fees, perhaps supplemented by a local tax on the value of catches.

One could speculate that the current widespread BVC/RVC failure to collect license fees is less a function of fishers' poverty and more a question of their uncertainty about whether association officials will use the money thus mobilized for the intended purposes and, if they do, whether their participation in LCFA and AFA meetings will in fact add value by further upgrading Chiuta fisheries RGM. The same might explain the current lack of a local fiscal system.

⁵ John Wilson, long-time observer and practitioner involved with evolution of fisheries institutions in Malawi notes that fishermen recently *paid government DOF officials* to attend a meeting. [Personal communication, January, 2004]

⁶ Malian fishers in the village of Fatola on the Senegal River formerly financed their own social security system with such a tax. The system collapsed when the Manatali Dam further up the river was placed in operation and so significantly modified the natural river regime that weeds took over the entire river bed, making it impossible for fishers to use their existing nets to catch fish. Cf. Fatola fisheries case, Mali case studies, above.

Financing with Fines: A Trap?

It should be noted here that the tendency of Lake Chiuta fishers to rely on fines imposed on those who violate local capture rules (e.g., by employing *nkatcha* nets or beach seines on the lake) ***could turn into a significant point of institutional weakness***. The more effective is local monitoring and enforcement of locally generated rules regulating harvesting of fish in Lake Chiuta, the less attractive it becomes to try to *ride free* on other's sacrifices (sacrifices that take the form of willing, persistent compliance with local rules). Under such circumstances the likelihood of being caught and fined for using illegal gear is so great that illegal fishing can become a money-losing proposition.

This implies that the more effective local co-policing becomes, the fewer incidents of illegal fishing will occur. The lucrative fines associated with such events will likewise dwindle [for examples of fines for different infractions, see Box. 5. "Chiuta Fisheries Regulations ("By-Laws") and Penalties for Infringement," p. 15) Lake Chiuta VBCs will thus face a dilemma: either they will have to relax the quality of their policing to encourage illegal fishing and so revive the possibility of imposing fines to finance LCFA and AFA activities, or they will have to strengthen the resource mobilization system (fees for service, taxation of catches, etc.) authorized by existing enabling legislation (see Box 6, "BVC/RVC Regular Revenue Sources," p. 17) or create a new resource mobilization system that will provide the funds required to finance Chiuta fishers' institutions.

A further issue in this regard, alluded to above, concerns the utility, to Lake Chiuta fishers, of their Area Fishers Associations. The need for the LCFA – potentially a Lake-wide body - seems patent (at least to an outside observer). It provides a means to organize regular information exchanges among fishers and between fishers and state representatives. It also offers a framework to coordinate activities on the lake designed to conserve and enrich the fisheries and the local fisheries sector economy and associated jobs (fishers, gear owners, fish mongers, fish processors, transporters and the like). Finally, it offers a potentially efficient means to articulate fisher perspectives, and possibly to facilitate dialogue with Mozambican fishers with an eye to resolving disputes over the operational rule banning use of *nkatcha* nets in Chiuta waters, etc.

There are indications that the AFA's were created, as was the LCFA, in a somewhat top-down manner. That may not prove a fatal flaw insofar as the LCFA proves its utility in fishers' eyes and offers opportunities to adjust the institutional framework as they see fit (for example, DOF agrees to finance participation of its representatives in these activities, which would marginally reduce the financial burden involved in organizing meetings). On the other hand, fishers apparently believe that the AFAs were organized mainly to encourage traditional authorities (TAs) around the Lake to support fisheries RGM by cutting them into a share of the "profits" that fines assessed for violation of gear regulations represent.

- **Lake size and other relevant physical information (depth and implications for capture strategies)**

Chiuta is the smallest of Malawi's four major fishing lakes (in declining order of size, Malawi, Malombe, Chilwa and Chiuta). It covers 200 KM² (of which 40 KM² [20%] are situated within Mozambique, while the remaining 160 KM² (80%) lie in Malawi. It has a mean depth of five (5) meters (Wilson, 2003: 10). It is uniformly shallow (fishing dugouts and other lake craft are *poled* rather than paddled, a sure indication that most areas of the lake are shallow) and remarkably clear (many lacustrine communities in fact use Chiuta as their major source of potable water).

- **Number of Communities on Lake**

Lake Chiuta, on the Malawian side alone, counts 31 beaches, and probably an equivalent number of villages. On the Malawian side of the lake there are 11 BVCs, but none on the Mozambican shore. That area was much depopulated by armed struggle during the country's civil war, and fishers there have still not been organized, or organized themselves. The DOF's 1998 "Frame Survey" (an annual census of fisher numbers, beaches, gear types, etc.) reveals that of 917 fishers recorded that year, only 86 (9.3%) worked as crew members. Most own the gear they fish, including the dugout canoes typical on the lake. This reflects the success of BVCs, AFAs and LCFA in removing *nkatcha* fishers from the lake. The fishing gear that most Chiuta fishers use can be operated by a single person and does not require a crew to work it (Njaya, Donda and Hara: 6).

- **Lake-Relevant Technical Issues: Fish Species, Stocks, Gear Types and Numbers**

Lake Chiuta contains viable stocks of *chambo* (*Oreochromis* spp., particularly *O. shiranus*) (Wilson, 2003: 10). Fishers also exploit other fish species. They use many types of gear in capturing Lake Chiuta fish, including fish traps, long (trot) lines, hand lines and gill and (formerly open water *nkatcha* and beach seine nets). This last capture technique is so efficient in the clear waters of Lake Chiuta that its introduction in the late 1980s (See Box 2, p. 6, above, and Wilson, 2003: 10) spurred Chiuta resident fishers to embark on major efforts at collective action with the sole objective of *banning use of nkatcha seine nets anywhere on their lake*.

- **Market access**

Access to markets from Lake Chiuta is relatively limited.⁷ Communities bordering the lake on both the Malawian and Mozambican sides and located in its immediate hinterland constitute the relevant *local* market (Machinga, Ngokwe, Liwonde, Palaka, Phalombe). Access to more distant, but much larger *urban* markets in both Malawi (Zomba, Blantyre) and Mozambique is more difficult and costly, involving transportation and transaction costs over significant distances. Some of the fish caught in Chiuta and landed

⁷ Information in this paragraph appears in Njaya, Donda and Hara: 5, Table 2.

in Malawian communities are smoked and then sold to fishmongers who periodically visit the area to purchase fish supplies at wholesale prices. Malawian Chiuta fishers report they prefer to sell to consumers in their immediate communities because the latter pay higher prices than traders do. In addition, such sales avoid the transformation and transaction costs involved in selling fish in the closest urban markets.

A. History of Interventions

- **First interventions and objectives**

The DOF considered Lake Chiuta a fishery that fishers self-regulated through the gear they used. Thus the DOF did not impose any regulations limiting access or regulating harvesting by fishermen working that lake.

When the GTZ fisheries project decided to extend operations to Lake Chiuta, project personnel decided against adopting the *sitting fee* scheme that they had employed in their work on Lake Malombe (in which fisheries association members were paid to participate in association meetings; cf. Thomson et al., 2003, 185). This decision, in conjunction with a strong commitment to ensure that VBCs really would be *user* groups composed primarily of fishers, appears to have had the desired effect. Chiuta fishers at present finance their own participation in important meetings, rather than depending on DOF or a project to provide them with sitting fees, transportation allowances, etc. This self-help ethic appears both powerful and well anchored. It can occasion difficulties, e.g., temptations to assess higher fines against wealthier net owners in order to obtain funds to finance meetings but, on balance, the benefits of this principle probably far outweigh its inconveniences. Chiuta fishers are neither *dependent* on the DOF or on projects to conduct their activities, nor do they seem artificially “*immobilized*” by lack of outside funding. As they have never become accustomed to the “union wage” of sitting fees, the thought of “striking” to get it seems not to have occurred to Lake Chiuta fishers.

- **Fisheries Department and Project Staff Deployed**

The DOF has posted a single staff member to Lake Chiuta. This individual, Mr. Nixon K. Massi, is a DOF fisheries assistant (FA). His superiors visit the lake occasionally on supervision trips, but Massi appears left largely to his own resources. He apparently has no operating budget (he does not, for instance, seem to receive a regular allotment of fuel to operate his outboard motor or motorbike). His success in promoting better governance and management of Lake Chiuta’s fishery is thus the more impressive. His role has consisted largely of encouraging fishers to conduct their own monitoring and enforcement (policing) operations. As these activities frequently involve forceful confiscation of illegal *nkatcha* nets and occasionally involve physical confrontations, owners of illegal gear from time to time invoke police assistance in efforts to regain their nets without having to pay fines. In several of these situations Mr. Massi has convinced both Malawian and Mozambican police that Lake Chiuta fishers are acting in full compliance with Malawi’s laws regulating fisheries (this is in fact precisely accurate: cf. Wilson, 2003: 35, “Lake Chiuta Fisheries Association By-Law Regulations,” No. 1. This

has enhanced the authority of VBCs in the eyes of those who fish the lake, and has probably made it easier for them to co-police fishing operations.

The one exception here concerns the role of some Mozambican fishers and traditional authorities in refusing to comply with the fishing regulations that Malawian fishers resident on Lake Chiuta have established. Mozambican traditional authorities reportedly encourage Mozambican fishers to engage armed guards to protect them from Malawian co-policing fishers while they use the banned *nkatcha* net on the lake. Thus far no serious incidents (bloodshed or deaths) have arisen through altercations opposing Malawian fishers seeking to enforce their regulations and Mozambican fishers operating in violation of those regulations. Nonetheless, the potential for explosive incidents exists. Were such a confrontation to erupt, it could rapidly escalate into an international incident.

For this reason the Malawian DOF and donor-financed projects associated with the DOF have sought to include the Mozambicans in conferences, workshops and study tours designed to foster consensus on a set of formal (and working) rules that will elicit support and compliance from *all* fishers who use the lake. So far that goal has proven illusive, despite participation on several occasions by Chief Nsiya, a Mozambican senior traditional authority, in these dialogue activities. As the special districts team was unable to interview Mozambicans engaged either in fishing or in supporting fishers who work Lake Chiuta, we are ill-placed to present the Mozambican perspective.⁸ Nonetheless, the unresolved problem of establishing a set of generally accepted rules that restrict fish harvesting operations on Lake Chiuta may justly be considered a potential Achilles heel for the whole exercise. If Malawian fishers abandon their commitment to enforcing rules that limit capture gear and fishing times and places, Lake Chiuta will slip from its current status as a reasonably well governed and managed quasi-common property fisheries to that of a fully open access fisheries where unregulated harvesting is the only common rule. If the *working rules* that govern harvesting of fish in Chiuta were again to condone use of the *nkatcha* net on those waters, fishers using that potent capture gear would rapidly make short work of crashing a fishery now reportedly on the road to recovery.

Organization of Community Fisheries Management Institutions (how organized to conduct management/co-management)

Fishers on Lake Chiuta and a river that empties into the lake have organized a total of 13 Beach Village Committees (BVCs) and one (1) River Village Committee, grouped into two Area Fisheries Associations (AFAs) within the overarching Lake Chiuta Fisheries Association. The two AFAs have taken their names from those of the traditional authorities – Chiefs Ngokwe and Chikweo – who have jurisdiction, respectively, over the AFA areas controlled by their constituent BVCs and RVC.

⁸ We can speculate that Chief Nsiya and Mozambican fishers on the lake feel that they did not have sufficient opportunity to participate in crafting Lake Chiuta fisheries regulations and are therefore unwilling to support them. Other speculative explanations are also possible, but it serves little purpose to present them as we have no supporting data.

AFA Ngokwe (20 members)**9 BVCs and 1 RVC**

Rifune RVC	Aduwa BVC
Kalyolyo BVC	Ali-Chikwawa BVC
Njerwa BVC	Matipwili BVC
Moro BVC	Misala BVC
Big Chiuta BVC	Mthubula BVC

AFA Chikweo (20 members)**4 BVCs**

Small Chiuta Island	Njiriti
Mulambe	Nafisi

BVCs/RVCs all organize along a single constitutional model, as specified “...in the

First and Third Schedule of the Fisheries Conservation and Management Regulations (1999)” [Wilson, 2003: 14; cf. pp. 53-56 for text of Malawi’s 1997 Fisheries Conservation and Management Act (No. 25 of 1997) which contains these constitutional provisions].⁹ For a summary of BVC/RVC constitutional rules, see Boxes

BOX 3a. CHIUTA BVC/RVC CONSTITUTIONAL RULES

These constitutional rules (CRs) reflect local initiatives and experiences in the Lake Chiuta area. Membership rules provide for true *user* groups; they do not include traditional authorities (TAs), e.g., village headmen, group village headmen, senior chiefs and the like as some of these demonstrated during the organizational phase, by accepting bribes from Lake Chilwa *nkatchai* net fishers, that they could not be relied upon to represent the interests of Lake Chiuta fishers and to support their efforts to create an institutional framework for a sustainable fishery on the lake.

CR1: *Membership rules*: to become a member of a BVC or RVC, an individual must meet four criteria:

CR1a: fisherman or fish trader, or married to one or the other of the above;

CR1b: citizen born in the Lake Chiuta area, or there resident for the past five years, known to be of good behavior and with an interest in the fishery [i.e., a primary *stakeholder*];

CR1c: permanent resident [as specified under (2), above];

CR1d: 18 years of age. [Wilson, 2003: 23, Section 6.2]. (Con’t . on following page).

3.a (this page) and 3.b (following page).

⁹ Wilson notes that the GOM might have adopted an approach providing for individual registration by BVCs and RVCs of their constitutions, but points out that it was considered more appropriate to register constitutions of all subordinate organizations through their overlapping Area Fisheries and Lake Fisheries Associations. From the GOM perspective this offers two advantages: a reduction in the workload entailed in registering each primary fisher organization individually, and uniformity across fisher associations, e.g., a common constitution and, at least initially, common by-laws [Wilson, 2003: 15].

This approach may smack of rule imposition – except that, in the Lake Chiuta case, the uniform constitutional and operational rules were inspired by institutional arrangements (sets of rules) that Chiuta local fisher associations had themselves developed. Furthermore, the approach adopted does foster development of a uniform set of regulations (constitutional, decision-making and operational rules) for the Lake Chiuta fishery (and, similarly, for other Malawian fisheries). This, in turn facilitates treatment of each fishery – by its BVC/RVC members, by DOF FAs and other officers, as well as by GOM police officials – as a unified common property resource. This is clearly a judgment call, in terms of possible infringement of the principle of “bottom up fisheries management.” It is important to recognize, however, the palpable advantage of local-level uniformity in rules during a period (1995 on) when devolution of central government fisheries governance and management authority is underway [cf Njaya, Donda and Hara, n.d: 2; Wilson, 2003: 14]. This promotes clarity in enforcement – everybody plays by the same set of rules – which implies that monitors, enforcers and judges can reasonably assume that all fishers know the content of those rules. In this regard, see Box 5, p. 15, “Operating Rules and Penalties for Infringement.”

(BVC/RVC members are required to acquit themselves of certain fees and levies (see

BOX 3b. CHIUTA BVC/RVC and LCFA CONSTITUTIONAL RULES (con't.)

CR2: Officer Recruitment Rules: Each BVC/RVC recruits the following eleven officers, who must all be members of the BVC or RVC within which they serve and, in addition, nominated by two percent (2%) of the members of the organization.

CR2a: chairman and vice chairman

CR2b: secretary and vice secretary

CR2c: treasurer and vice treasurer

CR2d: five council members

CR3: Terms of Service: All officers serve voluntarily, but are entitled to reimbursement for expenses incurred while serving (Wilson, 2003: 32, No. 16).

CR4: Members' Rights:

CR4a: members are entitled to use fishery resources in accord with BVC/RVC by-laws, rules and regulations and with any relevant laws in force in Malawi.

CR4b: members who have paid their fees and licenses (Box 4.5, next page) are entitled to vote at all regular and general meetings.

CR4c: members are entitled to elect officers of their BVCs, RVCs, AFAs and the LCFA.

CR5: Authority to Control Access: BVCs and RVCs are, by reason of the GOM "National Fisheries and Aquaculture Policy Supplement Chambo Restoratio Policy, approved 23 July 2003, to have exclusive fishing zones and authority to regulate access to and fishing in these zones, in order to protect their fisheries. (Wilson, 2003: 9).

CR5: Amendment: the LCFA constitution can be amended by 2/3 majority vote of the annual general meeting of the Fisheries Association.

CR6: Rule-Making/Modification Authority: BVCs/RVCs can make and modify by-laws [presumably by majority vote] that they judge necessary for the governance and management of Lake Chiuta fishery RNR. They are, likewise, entitled to appoint persons to monitor and enforce those rules, and to impose sanctions in cases of infraction.

CR7: Enforcement: BVC/RVC monitors and enforcers are authorized to *apply rules and sanctions to anyone fishing within the jurisdiction of their unit.*

CR8: Disputes: traditional authorities are to hear appeals from any BVC/RVC decision.

Box 5,
page 16),
which are
meant to
provide
each

Box 4. Chiuta BVC/RVC DECISION-MAKING RULES

DR1: BVC/RVC Committees (officers plus committee members) have authority, after consultation with members, to make and modify operational rules relevant to governance and management of Lake Chiuta resources within their BVC/RVC jurisdictions (see Box 6., page 17).

BVC/RVC with an operating budget, supplemented in part by revenue from fines assessed for violations of fisheries harvesting and other regulations pertaining to the sustainable use of Lake Chiuta's fish resources.

By comparison with Lake Malombe VBCs, Lake Chiuta fisher organizations are true user

Box 5. CHUITA FISHERIES OPERATIONAL RULES (“BY-LAWS”) AND PENALTIES FOR INFRINGEMENT

These operational rules (ORs), which Chiuta fishers developed initially over the course of 1995 in response to the threat they perceived “outsider” Lake Chilwa fishers were posing to their fishery, all tend to reduce capture potential and thus the effective level of demand for Lake Chiuta fish.

OR1: prohibition of four kinds of nets: (a) *khoka la nkacha* (open water seine net); (b) *khoka la pansi* (beach seine nets) [fine for use: 15,000-30,000 MK, net to be returned once fine paid]; (c) mosquito nets, use of which is prohibited in both the lake itself and all its tributary rivers [infractions sanctioned by MK600 fine]; and (d) *mkwakwaza* (scoop nets), use of which is again prohibited in both the lake itself and all its tributary rivers [infractions sanctioned by fine of MK500];

OR2: minimum mesh size in permitted nets (gill nets, minimum mesh 2.5”) and fish trap (*miano yamagalange*) openings (0.5”) [infractions punishable by fine of 500 MK];

OR3: minimum legal length (6”) for important local species “chambo” (*Oreochromis sp.*), with the understanding that sub-legal length fish must be released; and

OR4: corresponding prohibition on killing, trading or holding *chambo* less than 6” in length.

OR5: no poisoning of fish in any waters, particularly influent rivers.

OR6: every immigrant fisherman must register with BVC which governs beach where he is based [infractions punishable by fine of 200MK].

OR7: every immigrant fisherman must produce a transfer letter from his former BVC introducing him to his new one [infractions sanctioned by fine of 200 MK].

OR8: any fisher or fish trader found guilty of stealing gear or fish will be expelled from beach where s/he is registered.

OR9: illegal gear is subject to sanction without regard to its country of origin (Malawi or Mozambique).

groups, with a membership heavily weighted towards and indeed dominated by fishers. Chiuta VBCs appear relatively homogenous in composition, and seem to reach consensus with relative ease given members’ shared professional interests in maintaining the lake fisheries. Fishers in Chiuta VBCs, moreover, demonstrate a commitment to enforcement, exemplified by a willingness to take physical risks in confiscating illegal gear, against which the relative inertness of Lake Malombe VBCs pales by comparison. The heterogenous nature of the latter – a combination of housewives, farmers, fishmongers, gear owners and the odd fisherman crew member – probably goes a long way towards explaining their inability to take action, or even agree on a common program.

The Lake Chiuta VBCs also demonstrate a high level of *self-governance*. In these associations, fishers make the rules, and monitor, apply and enforce them (Box 4., CRs 7-8). They do rely on traditional authorities (TAs) for assistance in resolving disputes that they cannot handle locally (Box 4., CR 9), but in general, driven by a shared, intense interest in conserving the fishery, they take charge of their own affairs, and make and implement their own decisions. Again, in sharp contrast, Lake Malombe VBCs appear dominated by traditional authorities, *flaccid* rather than *robust* as organizations and, from the perspective of fishery RGM, unproductive.

Box 6. BVC/RVC REGULAR REVENUE

SOURCES (Wilson: 2003: 34-35)

OR6: 50MK membership fee, payable upon joining;

OR7: 50MK fishing “levy” payable January 1 and July 1 of each year (effectively a semi-annual fishing license).

OR8: 150MK fish trading levy the first time a trader visits an BVC or RVC jurisdiction.

OR9: 250MK ferry boat levy, payable annually to the BVC or RVC where the ferry (typically a plank boat) is based.

OR10: Gillnet license fee, payable annually to the DOF on January 1 at the rate published by GOM in the official gazette. An agreed percentage of that amount is to be retroceded by DOF to the Lake Chiuta Area Fisheries Association by 31 March, which in turn is to distribute that amount among its member BVCs/RVCs.

In conclusion, the fishers of Malawi’s Lake Chiuta and the GOM’s Department of Fisheries appear to have laid a solid foundation for continued, effective fisheries RGM on the lake (and potentially other lakes in the country, assuming local fishers are prepared to accept the costs (and risks) of self-governance. The foundation addresses the critical issues of sustainable RGM, i.e., according to resource users the authority to make, modify, monitor, and enforce rules governing access to and harvesting of fishery resources, and resolve any disputes resulting from these activities.

The key innovation incorporated in the GOM strategy lies in the willingness to deputize BVC/RVC leaders as *national police officers* for purposes of enforcing their own rules in the lake area controlled by each association. By transferring to fishers the burdens of monitoring and enforcement, the GOM both recognizes its own inability to provide adequate services in those areas, and simultaneously vests in those with the greatest long-term interest in fisheries governance and management a powerful tool to achieve that end. This, in turn, empowers fishers to act in ways that discourage conflict, by confiscating illegal fishing gear.

But, as noted, weak points exist in this set of institutional arrangements. The very most serious weakness turns on relationships on Lake Chiuta between Malawian and Mozambican fishers, particularly as a traditional Mozambican chief appears committed to encouraging “his” fishers to pursue a free rider strategy that will make a mockery of Malawian Chiuta fishers’ efforts to govern and manage their lake for sustainable use. If the chief is willing to encourage his ex-guerrilla partisans to protect Mozambican fishers using the banned *nkatcha* net on Lake Chiuta, he might generate conflicts that could potentially escalate into an international war between Malawi and Mozambique.

The genius of this innovation of deputizing users to enforce the *national* laws that simply afford the force of formal law to users own institutional arrangements lies both in the economy in state expenditures that it entails and, as important, in the on-the-job training it affords Malawian fishers interested in practicing the skills of self-governance. To place this opportunity in context, it should be noted that President Hastings Banda (a.k.a. “the Dental Dictator,” who earned his dental degree from the University of Indiana medical school), for years ran a very sterile polity in which *he* made the rules, the first of which was that *he* made the rules, with the logical second rule being that Malawians should avoid any efforts at self-governance.

Malawians are currently “in recovery” from this period of authoritarian imposition of avoidance of things political. The Chiuta fishers are making the most of the new opportunity and many in the new generation of Malawian politicians seem intent on support their RGM initiatives. If other fisher groups on other Malawian lakes and users of other types of renewable resources follow their lead, Malawians could offer a very positive example to a large number of other African countries. But that, of course, depends on politicians’ – and GOM technicians’ – “political will” to voluntarily abandon sources of rents by transferring governance authority to resource users.

APPENDIX 1. MALAWIAN - MOZAMBIKAN LAKE CHIUTA FISHERIES TROUBLE CASES

[**N.B.:** except where otherwise indicated, information in this appendix was copied from *Lake Chiuta nkatcha open water seine net trouble case* notes made over the period 2000-2003 by Mr. Nixon K. Massi, Technical Assistant (TA), Department of Fisheries (DOF), Njerwa DOF Office, Lake Chiuta. These accounts are supplemented in parts by oral information Mr. Massi supplied at Njerwa on 23-24 January 2004 to James T. Thomson, USAID special districts case study team leader.]

Mr. N.K. Massi, who arrived at Njerwa Fisheries Office during the course of 1998, recorded in this log only the most serious of violations of Lake Chiuta fishers' regime of rules establishing restrictions on capture gear, times and places. These major cases involve confiscation of *nkatcha* nets that occurred during the four-year period from August 1999 – August 2003. They do not reflect the full extent to which Lake Chiuta Malawian fishermen have monitored and applied fishing gear restrictions in Lake Chiuta waters during these years. Other restrictions specify a legal minimum size of two (2) inches for openings in bamboo fish traps. Traps incorporating undersized openings are markedly cheaper than *nkatcha* nets. Yet the minimum wage in Malawi is 100 MK/day, so that seizure even of a single fish trap represents the loss of a day's labor. Undersized traps are just as illegal as *nkatcha* nets and Malawian fishers do reportedly confiscate them when they find them in use on Lake Chiuta.

Data included in the Nixon K. Massi case record concerning six key points is summarized below:

1. ***Beach Village Committees (BVCs) involved in fisheries regulation enforcement actions*** in each case involving forcible confiscation of an illegal *nkatcha* net;
2. ***Trouble case numbers*** that reference the case write-ups; these appear below;
3. ***Number of seizures conducted by each BVC***. In all cases, if more than one BVC participated in an *nkatcha* net seizure, each participating BVC is credited with its proportional share of the seizure so that Table totals reflect actual totals of nets seized. (See also Point 5, below);
4. ***The total amount of fines assessed in all seizures in which a BVC was involved*** (this data is incomplete either because it does not appear in all cases in the original record or, more frequently, because nets remain confiscated and no fine has, to date, been assessed); and (current) location of the net in question, e.g., at DOF Mangoche office, with Mr. Massi, or with LCFA officials;
5. ***Net owner's nationality***: the number of Malawians and Mozambicans whose nets were seized (insofar as this information appears in the original record or was supplied orally by Mr. Massi), as well as cases where owner nationality remains uncertain. In all instances, if more than one BVC participated in the seizure, each participating BVC is credited with its proportional share of the "nationality" of the net owner so that Table totals reflect actual nationalities of owners involved in illegal fishing;
6. ***Notes on anomalous cases***, e.g., owner of seized net invokes police assistance; disgruntled owners of seized nets confiscate other goods; fishers seizing illegal net illegally confiscate other goods as well; cases of physical violence; etc.
7. ***Total number of net seizure trouble cases per year***.

Lake Chiuta Conflicts and Violence at Likanye Island and Muhara Areas from
2 January 2004

[Copy of letter Massi wrote 7 January 2004 to the District Fisheries Officer, Zomba; editor notes and comments in square brackets].

On 2nd January 2004 Mozambican chief Nsiya brought eight fleets of boats with *nkacha* nets [a potent form of open water seine, utilization of which in Lake Chiuta's waters threatened to destroy the fishery in the 1990s] to Likanye Island [located in Mozambican territorial waters] plus two armed soldiers and more *nkacha* fishermen. They abused, beat and stressed Malawian (small scale) fishermen and businessmen on the Island and at Muhara [village on the Mozambican side of the lake].

Chief Nsiya confiscated eight bags of fish and three people (fishers) [and took them] to Muhara. The three fishers were released on 3rd January at 3 a.m., but departed Muhara without their bags of fish.

Chief Nsiya said he wants fishers to use *nkatcha* seine nets in the area. He was allegedly given money (bribes). His intention is to reach and join illegal fisher people [based at] Nabwazi Island [in the swampy Malawian shore region on the southwestern side of the lake].

Due to lack of fuel I [Malawian DOF TA Nixon K Massi] could not personally come to present this in detail. The Mozambican leader plus illegal fishermen [i.e., Mozambican fishers intent on using *nkatcha* nets to fish in Lake Chiuta] want to invade Big Chiuta Island armed with rifles and burn it [the extreme eastern edge of Big Chiuta lies within Mozambique]. This was reported to me by the Lake Chiuta Association Chairman, Likanya fishers plus many more from the Island.

I reported to police the same day, who then came in the morning of 3rd January 04 to meet some fishermen from the Island. I, with the police officer, went to Chief Ngokwe and there concluded [that] Chief Ngokwe [should] write to Chief Nsiya [inviting him] on 7th January for discussions. On 7th January 2004 [Chief Nsiya failed to attend the] meeting at Chief Ngokwe's headquarters.

Present [at that meeting] were:

- Chief Ngokwe
 - Lake Chiuta Fishers Association Chairman [Mr. Mainala]
 - BVC members from Big Chiuta Island
 - Fishermen from Likanya Island
 - Sub-Inspector of Police Mr. A.T. Chipayo
 - Malawi Department of Fisheries – Mr. N.K. Massi and Mr. Chilumba.
- The day's conclusions: after discussing amongst ourselves (Malawians) we agreed that:
1. Chief Ngokwe [should] take up the matter with the District Commissioner in Machinga, and
 2. The Police Officer [should] handle it with Machinga Police, through the Nselema [Police Post].

1. Findings

Several points arise in the case record below, and in the table following the cases that summarizes them:

1. Insofar as nationalities can be determined with certainty, these 47 *major gear* (*nkatcha* net) cases involve more Malawian and fewer Mozambican net owners.
2. Nonetheless, the fact that Lake Chiuta sits astride the Mozambique/ Malawi border and so consists of transboundary waters increases the complexity of governing and managing Chiuta's fisheries. Malawian fishers resident on the Lake have made substantial efforts at fisheries governance and management and, in these endeavors, have received significant political and legal support from their national government. But, as the incident detailed in the text box on the preceding page makes clear, *two* polities are involved in governance of Chiuta fisheries. Some Mozambican actors do not accept GOM decisions, policies, laws, rules and regulations as binding.

3. Monitoring and enforcement are *entirely* implemented by Lake Chiuta fishers, organized in user groups, the *Beach Village Committees* (BVCs). By comparison with Lake Malombe BVCs, in which those not connected with the fishing industry (traditional authorities, housewives, etc.) outnumber and dominate individuals directly connected with the fishing industry (i.e., crew, gear owners, fishmongers, fish processors), Lake Chiuta BVCs can be considered *models of user organization*.
4. By collaborating with and supporting Lake Chiuta BVCs at critical points, the Malawian DOF achieves intensified monitoring and enforcement at negligible cost. This set of framework institutional arrangements, articulated in a national fisheries policy, law and implementing rules and regulations, has arguably consolidated an effective, though still fragile, fisheries management system for Lake Chiuta.
5. The DOF technical assistant (TA) assigned to Lake Chiuta, N.K. Massi, prepared and maintained the record of cases. These, it should be noted, involve only “major” violations, i.e. fishing with the open water (*nkatcha*) seine nets. Mr. Massi has also provided the bulk of DOF support for Lake Chiuta BVCs, intervening from time to time primarily to assure Malawian police forces that BVC fishers are acting *in accord with state policy* and *under state authority* when they seize illegal fishing gear. This may seem a *minor* point and indeed, *it is*, in terms of the effort that TA Massi expends to “put in a good word,” advise national police, community police, traditional authorities (village headmen, group village headmen, senior chiefs, etc.) and BVCs on appropriate ways to seek resolution of disputes. Nonetheless, this very low key support lends an essential air of authority to fishers’ policing of the lake. It appears that this is *absolutely essential* if co-policing along these lines is to function both *effectively* (achieves the desired effect of dissuading all fishers from pursuing illegal fishing strategies¹⁰) and *efficiently* (effective policing at very low cost).
6. TA Massi also promotes a degree of uniformity in application of regulations within the Lake Chiuta fisheries special district. That predictability is precious. It lends to the whole system a semblance of “rule of law” characteristics. These presumably enhance system credibility in the eyes of all actors regulated by the system. It clearly enhances the authority of the BVCs and their office bearers, who are, by national legislation, “deputized” to apply fisheries regulations.
7. This system would presumably benefit from continuing uniformization, as well as from support for conflict resolution innovations already underway that reduce both costs of solving disputes and delays in resolving cases. These objectives could be achieved in two ways: better publication and dissemination of the results of dispute resolution, and greater involvement by the Lake Chiuta Fisheries Association in resolving net seizure and other disputes related to the application of fisheries regulations.
8. Regulations are local in origin, and can be modified by the BVCs that apply them. This creates an opportunity for adjustment in light of realities, e.g., if fines are considered either inadequate to dissuade use of illegal gear, or too heavy.
9. The modified “bounty hunter” system incorporated in the Lake Chiuta fisheries regulations creates both important incentives to encourage monitoring and

¹⁰ To be effective, user group co-policing must carry out monitoring for rule violations, enforcement (sanctioning of violations) and dispute resolution (settling conflicts that arise concerning enforcement proceedings or outcomes) in ways that are broadly perceived to be regular, reliable and intense, and therefore, taken together, achieve the desired effect of dissuading illegal behavior.

enforcement, and significant risks involving temptations to use the fisheries policing system to mobilize resources that BVCs and especially other fisher organizations require to finance their operations. Cf. cases Nos. 9 and 11, where fines for the identical offense, using illegal gear (*nkatcha* nets) varied between 2,500 MK and 3,000 MK. Risks and incentives are well illustrated by Case No. 47 (cf. Appendix 1), involving Njerwa BVC. BVC members seized an illegal net in August 2003. The LCFA had scheduled its annual general meeting (AGM) for December 2003, while the Ngokwe AFA planned to hold its AGM in late January 2004. It is likely that all those present at the trial knew that the defendant was a wealthy man. LCFA and Ngokwe AFA representatives realized the case offered an easy means to resolve their financial difficulties. It was initially proposed that the net owner defendant be fined MK15,000; he demurred, saying he could not afford such an amount; the associations then reduced the fine to MK10,000, which the defendant accepted. The proceeds of the fine were distributed as follows: the LCFA received MK2,500, the Ngokwe AFA received MK2,500. And the Njerwa BVC that apprehended the offender received MK5,000—most of which was divided among patrol members who caught the offender. (R. Kanaan interview with DOF T.A. Massi, 24 Jan. 2004, Njerwa, Lake Chiuta, Malawi).

10. Developing a low-cost, reliable, credible dispute resolution system for processing fisheries cases that arise on Lake Chiuta continues to pose a challenge. As noted in Points 8. and 9., above, fisher organizations have strong incentives to impose large fines, both to finance their activities and to reward BVC fisher crews who monitor and enforce (seizing banned fishing gears). To that extent, they function as *judges in their own causes*. The *conflicts of interest* that characterize these procedural/structural situations make them institutionally (and legally) suspect. But the other obvious candidates to judge fisheries cases, traditional authorities (group village headmen, senior chiefs and the like) have also shown that they can cede to temptation from time to time (e.g., Chiuta fisheries bribery scandal). DOF staff might play a dispute resolution role, but they lack the resources to do so. They are not present on the ground as are fisheries association office bearers and chiefs. They would be subject to the same temptations that fishers and chiefs confront. Furthermore, their scarce resources are arguably better devoted to maintaining a presence in the immediate neighborhood of the fisheries (e.g., TA Massi and comparable DOF staff posted on other lakes) and conducting a variety of fisheries monitoring tasks.
11. Given the constraints and risks just highlighted, the present approach to resolving disputes seems the most appropriate. But this system could be strengthened by two kinds of activities. First, judges in fishery cases, be they fisher organization (BVC) office bearers or chiefs, could presumably benefit from training that would enable them to become thoroughly familiar with fisheries regulations and fine schedules for rule violations. This could be buttressed by a publicly approved, widely disseminated system of allocating proceeds of fines among BVC members, and BVC, AFA and LCFA treasuries. If it were held appropriate, e.g., at a meeting of the LCFA and with input from the DOF, that judges should be awarded something for their efforts in dispute resolution (e.g., “court costs”), a schedule should be publicly established for such payments. This would have the advantage of putting everyone on notice that (a) such payments were *legal, and not bribes*. This is a point of considerable importance for the overall authority and credibility of the dispute resolution system. It relates closely to fisher-based RGM on Lake Chiuta – of which dispute resolution is

undeniably a fundamental part. Such an approach would also (b) establish clear limits on court costs. This would in turn reduce the temptation judges face to impose costs and fines that enrich them personally. Were the schedule of court costs and fines broadly disseminated and widely known, any judge who attempted to extract larger payments would risk a challenge from the abused litigant. DOF commitment to this scheme, and *to sanctioning any judge found to have violated it*, e.g., by stripping that individual (traditional authority or fisheries organization office bearer) of authority to hear any cases in future, might help encourage the required probity in dispute resolution proceedings.

12. Fisheries case judges could also be required to issue receipts for fines collected, and to maintain accounts indicating how funds collected are allocated. To support this system, the DOF might for instance insist that the secretary or secretaries of any BVCs/RVCs involved in a particular case as enforcers sign documents as an indication that they approve the settlement.
13. BVC office bearers should be trained in dispute resolution and empowered to hear “lesser” cases (none of which, be it noted, are recorded in the record below), e.g., use of illegally-sized fish traps and other prohibited gear.
14. BVC secretaries could be trained to keep simple records of such “minor” cases, how they are processed, fines assessed, their allocation, etc.
15. Effort should be devoted to disseminating information about trouble cases at all levels (BVCs and RVCs, fisheries organizations, TAs, DOF, national police, etc.), and their resolution. This would help convince both fishers resident on the lake and immigrants that the rules are *in fact* being effectively monitored and applied. That knowledge would help justify compliance. If fishers do voluntarily accept the discipline in harvesting and make the sacrifices that the rules impose, they can do so assured that free riders (rule violators) will not benefit greatly from their illegal attempts to exploit the fisheries. On this point see Ostrom, 1991: 69-82. She describes monitoring and enforcement activities on a variety of long-enduring [500-1,000 years plus] farmer-managed irrigation systems. In this same regard, see also Ostrom: 185-87, summarizing the problems involved in users developing *credible commitments* to comply with their own rules and the crucial role of *monitoring* in convincing users that complying with RGM rules is rational. This argument holds only if other users are known – because monitoring is reliable and violations are not numerous – to be complying with the rules. Such an outcome would in turn presumably inspire further social pressure encouraging compliance with BVC rules.
16. With voluntary compliance, framed and supported by occasional back-up enforcement and effective information dissemination comes enhanced capacity to modify the fisheries management regime in light of experience. Chiuta fishers at present report increasing catches on Lake Chiuta. That result is the most pragmatic tribute to their efforts at fisheries self-governance and self-management, and presumably confirms in fishers’ minds the utility of their efforts as well as reinforcing their commitment to continue with those efforts.
17. Finally, fishers should probably devote more effort to devising resource mobilization systems that produce the small amounts of cash they need to fund their association activities. A variety of locally-based public finance systems could be imagined, including the gear licensing, registration and membership (access) fees already provided for in the GOM/MNREA/DOF 1999. “Fisheries Conservation and Management Regulations.”

An alternative, or complementary system could involve a small tax (e.g., one or two percent [1-2%] levied by each BVC on the value of catches landed at its beach). Such a system could provide supplementary financing for BVC representatives' participation in Area and Lake Chiuta Fisheries Association activities, for paper and pens to maintain case, dispute resolution and other types of essential records, for information dissemination concerning RGM activities through, e.g., periodic mimeographed newsletters, etc. It should be backed by taxation of intermediate activities in Malawi's fisheries supply chain, e.g., similarly modest taxes levied on fish mongers and fish processors. Several desirable consequences might be imagined from such a locally-based public finance system:

- It would give all fishers both a claim and a standing incentive to exercise *voice* (Hirschman: 3-5) in deliberations and activities of their BVCs and Associations, promoting higher levels of fisher involvement and thus greater accountability of BVC office bearers in those activities.
- It would enable BVCs, the critical RGM operational units in the Lake Chiuta fisheries *special district*, to acquire the means to carry out their activities and thus contribute, reliably, to sustainable governance and management of "their" resource.
- It would increase BVC, AFA and LCFA autonomy vis-à-vis the DOF in ways that can be expected to enhance fisher self-reliance, the robustness of debates about fisheries governance and management issues, etc.
- By tying taxation to catch values, critical importance of governing and managing Lake Chiuta to ensure a long-term, sustainable source of cash flows for the local economy would be highlighted, as well as the reasonable policy demand that all associated with the fisheries industry contribute to this effort.
- It would showcase opportunities for local revenue mobilization that would enable fisher communities to "cross-subsidize" other activities (public goods and services such as boat and gear repair and perhaps even an insurance fund [cf., in this regard, the case study of fisheries governance at Fatola, on the Senegal River in Mali, among the *special district* cases included in the Mali country study of this report], primary schools, public health clinics, potable water supplies, etc.) that they desire, and to contribute matching funds to complement monies made available by GOM agencies, international donors, NGOs, etc., interested in promoting local development.
- By reducing fishers' need for DOF-based financing, such an approach would, at the margin, contribute to freeing funds for DOF personnel to conduct scientific and technical activities that constitute *critical complements* to fishers' own efforts to support sustainability of the Lake Chiuta fisheries. Among such activities could be counted the DOF's Annual Frame Survey that monitors fishing pressure on Malawi's major fisheries, catch values, etc.

TROUBLE CASE TABLE KEY:

BVC: Beach Village Committee: on Lake Chiuta, a self-organized, self-governing fisher user group authorized by national legislation to apply local (BVC) regulations governing access to and harvesting of fish in Lake Chiuta.

LCFA: Lake Chiuta Fishers Association whose Chairman, Mr. Mainala, has decided some cases and imposed fines.

MK: Malawian Kwacha (February 2004: 107 MK = \$1 US

TA: Traditional authority, e.g., a senior chief with legal jurisdiction to resolve trouble cases by imposing fines

#: Number

Table 10. Lake Chiuta *Nkatcha* Seine Net Trouble Cases, (August 1999-August 2003)

<i>BVC Name</i>	Case Numbers (#) and Case Dates	No. of Nkatcha Nets seized	Fine Totals (MKs), disposition of nets	Net Owner Nationality			
				Malawian	Mozambican	Uncertain	Notes on nkatcha net seizures
Aduwa	#37 15 Dec. 02	1	Nets sent to DOF/Zomba	1			Seizures conducted jointly with Kalyolyo BVC; each credited with one nkatcha net, and one owner
Ali-Chikwawa	#45 26 July 03	1	Net deposited with LCFA; though owner beaten during seizure, LCFA still fines him 2,500 for using illegal gear	1			Net owner beaten, lodges complaint with Ngokwe police; DOF TA Massi supports legal fishers' seizure
Big Chiuta Island	#1 19 Aug. 99	#1 =1	#1: legal fishers destroyed illegal net, returned remnants to owner; no fine, no compensation			#1=1	Big Chiuta Island Malawian legal fishers confronted illegal fishers over gear restrictions; first legal fishers, then net owner reported incident
	#2 24 Aug. 99	#2=3	#2: nets sent to DOF/Zomba; TA Kawinga fined three owners 2,500 MK/net [= 7,500 MK total] and ordered nets returned to owners			#2=2	

<i>BVC Name</i>	Case Numbers (#) and Case Dates	No. of Nkatcha Nets seized	Fine Totals (MKs), disposition of nets	Net Owner Nationality			
				Malawian	Mozambican	Uncertain	Notes on nkatcha net seizures
Big Chiuta Island (con't)	#8 15 Apr. 00	#8=3	#8: 15,744 MK total (three fines of 6,248 MK/net, minus 3,000 MK returned to owner of net damaged during seizure)	#8=1	#8=2		
	#28 8 Sept. 02	#28=1	#28: net sent to DOF/Zomba			#28=1	#8 Big Chiuta BVC reduced a Mozambican's fine by 3000 so he could repair his torn net
	#36 5 Dec. 02	#36=1	#36: BVC seizes net transported on lake without DOF authorization			#36=1	
	#39 15 Dec. 02	#39=.5	#39: no information			#39=.5	
							Big and Small Chiuta BVCs conduct seizure jointly (each credited with half net, half nationality)
Chitundu	#40 20 Mar. 03	1	No information	1 [?]			
Kalyolyo	#29 27 Sept. 02	2	#29: 3,000 MK (BVC fined net owners 1,500 MK each for use of illegal gear, returned nets to owners)	#29=2			#37: Seizures conducted jointly with Aduwa BVC; each credited with one nkatcha net, one net owner
	#37 3 Dec. 02	1	#37: nets sent to DOF/Zomba	#37=1			

BVC Name	Case Numbers (#) and Case Dates	No. of Nkatcha Nets seized	Fine Totals (MKs), disposition of nets	Net Owner Nationality			
				Malawian	Mozambican	Uncertain	Notes on nkatcha net seizures
Likanya Island ¹¹	#3 30 Aug. 99	#3=1	#3: net sent to DOF/Zomba; TA Kawinga later fined owner 2,500 MK [and DOF returned net (?) cf. #2 above)]			#3=1	
	#20 22 June 02	#20=1	#20: net sent to DOF/Zomba		#20=1		
	#21 19 June 02	#21=2	#21: one net sent to DOF/Zomba; owner of second paid 3,000 MK fine for fishing illegal gear and reclaimed net		#21=2		
	#43 24 May 03	#43=1.33	#43: total of four nets taken in this seizure and deposited with Moro BVC	#43=.67	#43=.67		
	#44 30 May 03	#44=.33	#44: Owner regains net after invoking Malawian police assistance.	#44=.33			#44: Likhanya, Misala, Moro BVCs seized net for transport without DOF authorization, and other goods belonging to net owner; most of goods returned after Nselema police intervened on net owner's complaint to help him regain net and goods; Mr. Massi and LCFA chairman Mainala participated in negotiations
Matipwiri	#15 30 Apr. 02	1	BVC fined two net owners 2,500 MK each for fishing illegal gear (Moro and Matipwiri BVCs each credited with one net)	1			Joint action conducted by Moro and Matipwiri BVCs (each credited with one net and one owner)

¹¹ Likanya Island lies in Mozambican waters within Lake Chiuta. No BVC entitled "Likanya Island" figures in the Malawian DOF Fisheries "Annual Frame Survey" (GOM/MNREA/DOF, 2000). This case does not appear to involve a BVC. Malawian national fishers residing on Likanya Island might have acted independently to apply Malawian regulations against illegal use of the banned *nkatcha* net in Lake Chiuta waters where they were fishing. Or, Mozambican nationals resident on Likanya might have organized themselves as a BVC and now function as such, even without official recognition. The first seems more likely: T.A. Massi's notes on the case make no reference to a BVC, recording only that "Fishermen from Likanya Island confiscated a seine net from Mr. Bobo..." The same phrasing occurs in other cases referring to Likanya Island, e.g., Nos. 3, 20 and 21.

<i>BVC Name</i>	Case Numbers (#) and Case Dates	No. of Nkatcha Nets seized	Fine Totals (MKs), disposition of nets	Net Owner Nationality			
				Malawian	Mozambican	Uncertain	Notes on nkatcha net seizures
Misala	#5 18 Dec. 99	#5=.5 (half of net seized)	#5: Net deposited at DOF Njerwa; 1,250 MK (half of 2,500 MK fine LCFA imposed for fishing illegal gear)			#5=.5	#5: Misala and Mthubula BVCs jointly seized net
	#17 5 May 02	#17=.5 (half of net seized)	#17: net sent to DOF/Zomba	#17=.5			#17 Misala and Moro BVCs jointly seized net (each credited with half net, half owner)
	#19 22 June 02	1	#19: net sent to DOF/Zomba	#19=1			
	#30 11 Oct. 02	1	#30: net still impounded, after DOF TA Massi convinces Malawian police to drop case as unfounded		#30=1		#30: Mozambican and Malawian police involved; DOF TA Massi defends Misala fishers' action
	#33 12 Nov. 02	1	#33: Net sent to DOF/Zomba	#33=1			#33: net owner is Malawian living in Mozambique
	#34	2		#34=2			
	17 Nov 02	1.33		#43=.67	#43=.67		
		.33	#44: net and most of other seized goods returned to owner without fine	#44=.33			#44: Likhanya, Misala and Moro BVCs seize net for unauthorized transport, and other goods of net owner; net. Most of goods returned after Nselema police intervened on net owner's request; DOF TA Massi and LCFA chair Mainala participated in negotiations
	#43 24 May 03						
	#44 30 May 03						

BVC Name	Case Numbers (#) and Case Dates	No. of Nkatcha Nets seized	Fine Totals (MKs), disposition of nets	Net Owner Nationality			
				Malawian	Mozambican	Uncertain	Notes on nkatcha net seizures
Moro	#6 1/16/00	1	BVC [?] fines owner 3,000 MK for using illegal gear and 200 MK for insulting confiscating fishers, plus 570 MK for damaging other fishers' gear	#6=1			
	#14 20 NOV 01	1	Net sent to DOF/Zomba, (with two others also seized that day [11/20/2001] by Njerwa BVC); TA Nsiya, powerful Mozambican chief, intervened to have nets returned without fines to owners		1		#14: before their nets returned, Mozambican net owners allegedly retaliated [for this "act of piracy"] by organizing seizure in Mozambique of Malawian goods (fish, bags of maize, etc.)
		1	BVCs fined two net owners 2,500 MK each for fishing illegal gear (Moro and Matipwiri BVCs each credited with one net)	2			#15: joint action conducted by Moro and Matipwiri BVCs
	#15 30 APR 02	2	BVC fined two net owners 2,500 each for using illegal gear	1			
		.5	Net sent to DOF/ZOMBA	.5			
		1+1+4+.33			1		#43: Moro & Misala BVCs, and Likanya fishers jointly seize 4 nets (each group credited with 1.33 nets seized); Mozambican illegal fishers retaliated by seizing goods in Mozambique belonging to Malawians not involved with net seizures.
	#16 5/03/02	#43 = 1.33	#43: four nets now deposited with Moro BVC #44: net returned to owner after he invokes police	#43=.67 #44=.33	#43=.67		# 44: Moro, Misala and Likhanya BVC fishers impound net for transport without DOF authorization and other goods belonging to net owner; most of .67goods returned
	#17 [5/05/02]						
	#18 [5/29/02]						
	23, 43, 44						

BVC Name	Case Numbers (#) and Case Dates	No. of Nkatcha Nets seized	Fine Totals (MKs), disposition of nets	Net Owner Nationality			
				Malawian	Mozambican	Uncertain	Notes on nkatcha net seizures
Mthubula	#5 18 Dec. 99	.5 (half of net seized)	1,250 (half of 2,500 fine assessed by LCFA)			#5=.5	.5 (action conducted jointly with Misala BVC)
Njerwa	#4 8 Sept. 99	2	#4: nets deposited at DOF Njerwa; owners each fined 2,500 MK for using illegal gear, plus 3,076 MK for damaging Njerwa fishers' gill nets			#4= 2	
	#9 20 Apr. 00	2	#9: LCFA fines owners 3,000 MK each for using illegal gear and 3,200 MK each for damaging other fishers' gill nets			#9= 2	#9 involves two instances of <i>gear conflict</i>
	#10 15 Sept 00	2	#10: Both net owners fined 2,000 MK for using illegal gear (no information on who levied fine)		#10=2		#10: one net owner appears to be a <i>recidivist</i> (cf. #6 above and #14 below)
	#11	1	#11: Njerwa BVC fined owner 2,000 MK for using illegal gear		#11=1		
		1	Net sent to DOF/Zomba, where it remained as of January 2004		#14=2		#14 [cf. discussion of #14 under Moro BVC, above]
		1	Net sent to DOF/Zomba	#35=1			
	#14 20 Nov. 01	1	#47: owner fined 10,000 MK for using illegal gear				#47: LCFA and Ngokwe AFA ¹² reduced fine from 15,000 to 10,000, of which LCFA received 2,500, Ngokwe AFA 2,500, and Njerwa BVC 5,000
	#35 19 Nov 02						
	#47 14 Aug. 03						

¹² LCFA and Ngokwe AFA needed funds to finance their Jan. 2004 annual general meetings. The fine was negotiated with that end in view, once the net owner said that he could not afford 15,000. This case highlights the danger of (re)distributive justice when fishers' associations become judges in their own causes.

<i>BVC Name</i>	Case Numbers (#) and Case Dates	No. of Nkatcha Nets seized	Fine Totals (MKs), disposition of nets	Net Owner Nationality			
				Malawian	Mozambican	Uncertain	Notes on nkatcha net seizures
Njiriti	#27 3 Sept. 02	2	#27: No fines levied; nets held by LCFA]	2			
	#31 19 Oct. 02	5	#31: TA Chikweyo levies significant fines of 5,300/net for total of 26,500	5			
	#32 20 Nov. 02	1	#32: spotlights violence potential: illegal fishers beat up a legal Njiriti fisher in the BVC boarding party that tried to confiscate net	1			#32 Malawian police at Nayuchi border post, invoked by illegal fishers, jailed legal fishers, then reported to superiors, who reversed decision, jailed two illegal fishers for a week at Nselema
	#46 28 July 03	1	#46: net first held at BVC Njiriti; after police intervention, TA Chikweo proposed transferring it to LCFA; still there pending trial	1			#46: net owner invoked Malawi police to force return of his net; BVC member asked police to invoke DOF TA Massi; they did, and turned case over to DOF and LCFA
Simora Chiuta	#25 15 Aug. 02	2	#25: no fines levied and nets returned without charge at Mozambican TA Nsiya's request, on DOF decision		2		#25: Decision to return nets taken at DOF/IUCN workshop for Malawian and Mozambican fishers held ?? in Mangochi, Malawi
	#26	1	#26: no fine; net sent to DOF/Zomba	1			

<i>BVC Name</i>	Case Numbers (#) and Case Dates	No. of Nkatcha Nets seized	Fine Totals (MKs), disposition of nets	Net Owner Nationality			
				Malawian	Mozambican	Uncertain	Notes on nkatcha net seizures
Small Chiuta	#13 4 Sept 01	1	#13: BVC seized net, levied 3,000 MK fine for unauthorized net transport	#13=1			#13: BVC advised that LCFA should attend trials [to ensure procedures respected]
	#38 15 Dec 02	1	#38: no fine levied; net sent to DOF/Zomba		#38=1		
	#39 15 Dec 02	.5	#39: no information			#39=.5	#39 Seizure conducted jointly with Big Chiuta
	#41 18 Apr 03	3	#41: seized nets deposited at LCFA Chairman Mainala's home, Misala;	#41=2	#41=1		
	#42 30 Apr 03	1	#42: seized net deposited at LCFA Chairman Mainala's home, Misala	#42=1			
Mozambicans confiscated Malawian dugout canoes at Muhara village 23 March 2000	#7 23 March 2000	4 canoes	Property returned to Malawian fishers 11 April 2000 after VH Chikumba negotiates their release				
Malawian fishers confiscate <i>nkatcha</i> nets from Malawian fishers living in Mozambique	12.	<i>Nkatcha</i> nets	Mozambican VHs try to recover nets confiscated from Malawians living in their villages	(number uncertain)			
DOF, Police, BVC members patrol Chiuta	22,	5		5			
Mozambican VH tries to reclaim <i>nkatcha</i> net for Malawian residing in his community	24,	1	Mr. N.K. Massi refuses to surrender confiscated net; Mozambican party fire guns on returning to Mozambican side of Lake				

2. CASES: Written Accounts [verbatim copy of N.K. Massi's case records]

1. **19 August 1999: One Net Confiscated from Mr. Nasiyaya Rumala at Big Chiuta Island.** Malawian fishermen from Big Chiuta Island damaged Mr. Rumala's net. The illegal fishers, Mr. Rumala included, became involved in a confrontation with legal fishermen at the island over fishing gear regulations; the legal fishers became angry and destroyed Mr. Rumala's illegal seine net. They cut his net into pieces and then gave it back to him. Mr. Rumala did not initially complain about the incident; rather, legal fishers from Big Chiuta Island reported it. Mr. Rumala subsequently also reported the incident. Mr. Rumala received no compensation.
2. **24 August 1999: Three Seine Nets Confiscated.** Big Chiuta BVC fishers confiscated two nets from Mr. Nasiyaya Rumala (he owned many nets), and another from Jawadu Ullard. The District Fisheries Officer took the three nets to Zomba on 30 August 1999. Rumala and Ullard went to the N'Taja Police; the police came to the Fisheries Department Office at Njerwa to meet with Fisheries Department Technical Assistant N.K. Massi and Mr. Mainala, chairman of the Lake Chiuta Fishery Association (LCFA) and collect the nets. As the nets were already in Zomba, despite police/DOF negotiations on 31 August, the police failed to recover the illegal nets for their owners. The net owners were later tried by Senior Chief Kawinga at Chief Ngokwe's headquarters (7 km inland from Njerwa on the shores of Lake Chuita. [Mr. Massi's oral recollection: Senior Chief Kawinga fined the net owners 2,500 MK/net and allowed them to recover their nets.]
3. **30 August 1999: One Seine Net Confiscated.** Fishermen from Likanya Island confiscated a seine net from Mr. Bobo, whom they found fishing with illegal gear. The net was sent to Zomba Fisheries Office on the same day, i.e., 30 August 1999. Senior Chief Kawinga judged Mr. Bobo and several others (see entry above, 24 August 1999) at Chief Ngokwe's headquarters seven km inland from Njerwa Fisheries Office on Lake Chiuta. [Mr. Bobo paid a 2,500 MK fine.]
4. **8 September 1999: Two Seine Nets Confiscated.** Njerwa BVC members confiscated two nets and brought them to Njerwa Fisheries Office. The net owners, Mr. Yohane Jailosi and Mr. Neko, were latter charged 3,076 MK each for having damaged Njerwa BVC fishers' gill nets while operating their seine nets, plus 2,500 MK fine each for fishing with illegal gear. [*Gear conflict trouble case*]
5. **18 December 1999: One Seine Net Confiscated.** The combined forces of Mthubula and Misala BVCs confiscated a seine net from Mr. Makumba, and brought it to Njerwa Fisheries Office. On 9 January 2000 the Lake Chiuta Fisheries Association Chairman, Mr. Mainala, fined Mr. Makumba 2,500 MK for illegal fishing.
6. **16 January 2000; One Nkatcha Seine Net Confiscated.** Moro BVC confiscated a seine net from Mr. J.M. Phungu [see below, entries Nos. 10 (15 September 2000) and 14 (20 November 2001)]. He was charged the same day 3,000 MK for using an illegal *nkatcha* net and 570 KM for damaging other fishers' gears, plus 200 MK for abusing the committee (when he was caught, he told the BVC members that they were "very

stupid.”) [*Beginning of Mr. J.M. Phumgu’s bad year, in which he lost three illegal nkatcha seine nets*] [*Gear conflict trouble case*]

7. **23 March 2000: Mozambicans (Not Fishermen) at Muhara Village Snatched Four Malawian Dugout Canoes.** The dugouts were returned to their owners on 11 April 2000. The Malawian Village Headman Chikumba (now GVH Chikumba) went to Mozambique and negotiated the return of the four dugouts in discussions with the Muhara village chief.
8. **15 April 2000: Big Chiuta Fishermen confiscate three *Nkatcha* seine nets.** Owners were Mr. Meki Abdu, Mozambican, Mr. Kalidoso, Mozambican, and Mr. Chome Chinkono, Malawian. On 20 April each of the three was charged 6,248 MK. Mr. Kalidoso failed to collect his net because it was badly torn, so the Big Chiuta BVC decided to take pity on him by returning to him 3,000 MK so that he could repair his net. [*rare instance of empathy and moderating punishment*]
9. **20 April 2000: Njerwa BVC Confiscated Two Nets.** The owners of nets in question were: Mr. Dickson Dayi Ngalinje and A.F. Walusa. The Lake Chiuta Fisheries Association tried them on 5 May 2000 and charged each of them 3,200 MK for damaging gill nets, plus 3,000 MK for operating (illegal) *nkatcha* nets. [*Gear conflict trouble case*]
10. **15 September 2000: Njerwa BVC Confiscated Two *Nkatcha* Seine Nets.** The owners were Mr. J.M. Phungu, Malawian [cf. entry No. 6, above, in which Moro BVC confiscates an *nkatcha* seine net from one J.M. Phumgu and fined him 3,000 for using illegal gear, plus other costs], and Kamwana, Malawian. On 18 September 2000 they were tried and charged 2,000 MK for operating illegal *nkatcha* nets.
11. **17 September 2000: Njerwa BVC Confiscated a Seine Net.** They took the net from Kaerama Mitambo, Malawian. He was charged 2,000 MK on 18 September 2000 for using an illegal *nkatcha* seine net.
12. **22 September 2000: Two Mozambican Village Headmen Approach Mr. Massi to Recover *Nkatcha* Nets Confiscated from Malawians Living in Their Mozambican Villages.** The Mozambican headmen threatened Mr. Massi, who refused to turn over the nets, that if he did not return them within two days they would retaliate, including possibly sending soldiers to Njerwa. Nothing happened.
13. **4 September 2001: Malawian Fined for Transporting an *Nkatcha* Seine Net from Mozambique to Malawi without Documentation Authorizing Him to Transport the Net.** [When a fisherman wants to transport a net from one area to another, the Malawian Fisheries Department will, upon request, furnish him with a *laissez-passez* letter that authorizes him to move the gear.] Mr. Manessi Shaibu was the individual involved. Small Chiuta BVC members confiscated his net. The BVC fined him 3,000 MK. *They were later told that whenever they have such cases they should make sure that a representative of the Lake Chiuta Fisheries Association attends the trial.*

14. **20 November 2001. Moro BVC Confiscates Two Seine Nets.** Moro BVC members confiscated a net from a Mozambican, Mr. Mandebvu; Njerwa BVC on that same day confiscated a net from two Malawians, Mr. G. Mitambo, and Mr. J.M. Phungu [*see entries above, Nos. 6 (16 January 2000) and 10 (15 September 2000), both concerning Mr. J.M. Phungu; if all three involve the same individual he is clearly not only a wealthy man by local standards, but a recidivist, which raises interesting questions about incentives to use the **nkatcha** seine net.* If Mozambican gear owners find it that profitable, it suggests that it will be difficult to discourage them from using it, which in turn implies that Mozambicans will continue to pose a serious threat to the sustainability of the Lake Chiuta fishery]. The nets were taken to Zomba. Those nets remained in Zomba for a long time. The Mozambicans reacted to these net seizures by confiscating goods (bicycles, bags of maize, fish, etc.) of any Malawian traveling to their country across Lake Chiuta. The Mozambican nets were eventually returned to the owners through TA N'Siya after negotiations, and no fines were levied. [TA N'Siya is a powerful Mozambican traditional chief whose jurisdiction extends to parts of both Lake Chiuta and Lake Chilwa. He evidently supports Mozambican fishers who want to employ *nkatcha* nets. He has been involved in negotiations with Malawians about the Lake Chiuta gear restrictions on a least one occasion. One might speculate that his opposition to the gear restriction regulations stems from his sense that the Malawians imposed these by unilateral action and that they failed to accord him the opportunity in a timely manner to participate in crafting these regulations. *In fact, the Lake Chiuta gear restrictions originated in the self-help/self-defense initiatives of Malawian fishers who organized to combat what they considered to be the destruction of "their" fishery by other Malawian (Lake Chilwa) fishers who first introduced the **nkatcha** net on Lake Chiuta waters, in a move that seriously disturbed social relationships in Lake Chiuta Malawian villages.*¹³]
15. **30 April 2002: Moro and Matipwiri BVCs Confiscated Two Seine Nets.** The owners were Mr. Winedi, Malawian, and Mr. Mabuto, also Malawian, The BVCs, without anyone present from the Lake Inciuta Fisheries Association, charged them 2,500 MK each for operating illegal nets.
16. **3 May 2002: Moro BVC Confiscated Two Seine Nets.** Owners were: Mr. Mandevu, Mozambican and Kanjera, Malawian. They were charged 2,500 MK for operating illegal nets. [Mandevu may be recidivist; cf. entry above for November 20, 2001, concerning a Mozambican, Mr. Mandebvu. The two may be one and the same individual.]
17. **5 May 2002. Moro and Misala BVCs Confiscated One Seine Net.** The owner was Mvula Robert, Malawian. The net was taken to Zomba.

¹³ John Wilson (personal communication, 19 January 2004) reports that when the Lake Chilwa migrant fishers introduced the *nkatcha* seine net to Lake Chiuta, they rapidly caught more fish and earned more money than the Lake Chiuta resident fishers. Their comparatively greater wealth enabled them not only to purchase more beer, but to enjoy more success in wooing local women. This gives some measure of the potential depth of emotional commitment of the Lake Chiuta Malawian fishers to ridding their waters of *nkatcha* seine nets. While some of the latter responded by acquiring and using *nkatcha* nets to compete with Lake Chilwa migrant fishers, the majority of Lake Chiuta fishers rallied to the on-going collective effort to ban outright any use of the *nkatcha* net in the Lake Chiuta fishery.

18. **29 May 2002. Moro BVC Confiscated a Seine Net.** Mr. Kanjera, Malawian, was the owner. On 19 June 2002, legal fishers went to Little Chiuta Island and burned the shacks of illegal fishers operating from that island. The latter, enraged, came to Njerwa to conduct a demonstration and said that the nets that had been confiscated should be burned. They burned four (4) nets at the Misala BVC Chairman's house, where those four nets were being kept. [*Cf. handwritten case entered below, date uncertain, May/June 2002 [?], which appears to provide additional background on this incident.*]

19. **22 June 2002: Misala BVC Confiscated a Net.** The owner was Mr. Makumba, Malawian. The net was taken to Zomba.

20. **22 June 2002: Likanya Fishermen Confiscate a Net.** Mr. F. Mbalure, Mozambican, was the owner. The net was sent to Zomba.

21. **19 June 20002: Likanya Island Fishermen Confiscated Two Nets.** The owners were Veriti Inazio, Mozambican and Mr. Rebanga, also Mozambican. The first net was sent to Zomba; Mr. Rebanga was fined 3,000 MK for operating illegal gear.

22. **25 July 2002: Fisheries Department Patrols with Serema Policemen and a Mixture of BVC Representatives.** They confiscated nets from the following owners: Jafari Suwedi, Malawian, Mr. Kusala Namarere, Malawian, Moussa Dixon, Malawian, Meki Abdou, Malawian. On the way back from Nafisi, another net was confiscated at Thubula from Mr. Mthalika, [Malawian] of Kunawanga Village, of Chief Ngokwe's jurisdiction. All the nets were sent to Zomba. [*Isolated case of co-policing – DOF TA and VBC representatives.*]

23. **6 August 2002: Moro BVC Confiscated One Net.** The owner was Mr. Walusa, Malawian, The net was taken to Zomba on 10 August 2002. No fine was levied, and the net remains in Zomba. [*Cf. entry above for 20 April 2000, involving another net owner named Mr. Walusa. Possibly this Mr. Walusa is the same individual, and thus a recidivist. See also entry for 8 August 2002, immediately below*]

24. **8 August 2002: Village Headman Thomas, Mozambican, Came to Njerwa Fisheries with Intention of Reclaiming Net Belonging to Mr. Walusa, Malawian.** [Mr. Walusa, although Malawian, was living in Mozambique.] The Village headman came with a letter from Chief N'Siya of Mozambique asking for the net to be given to Village Headman Thomas. Mr. N.K. Massi, Fisheries Department Technical Assistant posted at Njerwa Office, refused to surrender the net. After failing to collect the net, VH Thomas' group, upon reaching their beach on the Mozambican side of Lake Chiuta, fired guns at 18:45, with the evident intent of threatening the Malawians. [*Mozambican have been willing to resist Malawian Lake Chiuta regulations by hiring private "security guards" who appear, in most cases, to be either retired Mozambican soldiers or ex-resistance fighters who still have access to weapons.*]

25. **15 August 2002: Simora Chiuta BVC Confiscated Two Nets.** The owners were: Mailosi Kachambo and Mr. Kalidoso, both Mozambicans. Nets were returned to their

owners without charge after a discussion between Chief N'Siya and Principal Fisheries Officer Friday Jack N'Jaya; the discussion occurred in Mangochi at a workshop organized by the Fisheries Department, sponsored by IUCN, for Malawian and Mozambican fishers from Lake Chiuta.

26. **31 August 2002: Simora Chiuta BVC Confiscated a Seine Net.** Owner: Asama, Malawian. The net is currently in Zomba. No trial, no fine.
27. **3 September 2002: Njiriti BVC Confiscated Two Nets.** Owner Mwala Patelo and Balaundi T. Phiri, Malawians. Net[s are] currently in hands of Lake Chiuta Fisheries Association.
28. **8 September 2002: Big Chiuta BVC Confiscated One Seine Net.** Owner: Mr. Mwasama. The net is in Zomba.
29. **27 September 2002: Kalyolyo BVC Confiscated Two Nets.** Owners: Mr. Mabvuto and Mr. Namagowa, both Malawians. The nets were returned to owners after the BVC fined them 1,500 MK each.
30. **11 October 2002: Misala BVC Confiscated One Net.** Owner: Mr. Chidule John, Mozambican. Mr. Chidule went to Nayuchi Police (i.e., Malawian police, whom he contacted after having spoken with Mozambican police at the [Nayuchi] border post on Mozambican/Malawian boundary); he exaggerated the incident, saying that Malawian fishermen had commandeered his net and beaten and killed some of his crew members. He, or the Mozambican police, did this to incite the Malawian police to repossess the net forcibly from Misala BVC members. When the Nayuchi Malawian police officers heard this account they reported it to their head office in Machinga District, Malawi. Then a group of Malawian policemen came to Njerwa Fisheries Station to discuss the case with Mr. N.K. Massi, Fisheries Technical Assistant posted at Njerwa. Mr. Nixon informed them that he had received no reports of anyone having been beaten or killed, but if they wished to continue investigating they should do so. The Malawian police concluded that the Mozambicans wanted to "confuse them." [At that point the Malawian police evidently dropped the case.]
31. **19 October 2002. Njiriti BVC Confiscated Five Seine Nets.** These five nets all belonged to Malawians:
 1. Longolola, Mphonde Village
 2. W. Malaya, Ponderani Village
 3. Frank Mwenda, Ponderani Village
 4. Mr. Seven, Ponderani Village (net in seven and one-half bundles)
 5. Jonathan Nchere, Likhonyowa Village

TA Chikweyo charged each of them 5,300 MK for using illegal fishing gear, for a total fine of 26,500 MK [*\$241, a considerable sum of money in a country where the minimum wage is 100 MK/day*].

32. **20 November 2002: Njiriti BVC Confiscated One Net.** Owner was Mr. Lafuled KUWIRI, Ponderani Village, Malawian. His net is currently in Zomba.

Remarks: the net was in the hands of Nselema Police because of violence that occurred during the confiscation. One of the legal fishermen in the boarding party was badly beaten; three legal fishers were taken to Nayuchi Police by the *illegal seine netters*, led by Mr. Machaya and Mr. Kachasu. Mr. Kuwiri was not among the group that went to the police. The Nayuchi Police, Malawians, reported it to their superiors in Nselema, who went to the Nayuchi Police and upbraided them for siding with the illegal fishers. They went to release the legal fishers who were held in custody at Nayuchi and then arrested Mssrs. Machaya and Kachasu, jailing them for one week at Nselema. Mr. Kuwiri's net is now in Zomba. [*Case indicates the potential for escalation in confrontations over locally-enforced restrictions on fisheries gear in Lake Chiuta. Violence is not limited only to Malawi/Mozambican confrontations over fisheries gear. Cf. entry above (date uncertain, May/June 2002)*]

33. **12 November 2002: Misala BVC Confiscated a Net.** Owner: G. Kanyoza, Malawian living in Mozambique in Somanje Village, Chief Mzozomera's jurisdiction. Net is now in Zomba.
34. **17 November 2002: Misala BVC Confiscated Two Nets.** Owners: Mr. Bigula and Mr. Makumba, both from Malawian Senior Chief Kawinga's jurisdiction.
35. **19 November 2002: Njerwa BVC Confiscated One Seine Net.** Owner: Mr. Chipojola, Malawian, of Naphiwa Village, in TA Kawinga's Jurisdiction. The net is in Zomba.
36. **5 December 2002: Big Chiuta BVC Arrested Individual for Transporting Seine Net without Proper Authorization.** Big Chiuta BVC members arrested Mr. Madison Meja [nationality uncertain] for passing with a Seine Net without a Laissez-Passez Letter from Fisheries Department Authorizing Him to Move the Net.
37. **15 December 2002: Aduwa and Kalyolyo BVCs Confiscated Two Seine Nets.** Owners: Mr. Mukholi, of Naphiwa Village, and Alfred Chiwaya, Mchererange Village, both located in TA Kawinga's jurisdiction, Malawi. Nets are in Zomba.
38. **15 December 2002: Small Chiuta BVC Confiscated One Net at Bobo.** Owners: Ouszenio Petrol, of Somanje Village, TA Mzozomera, Mozambique; net is in Zomba.
39. **15 December 2002: Big and Small Chiuta BVCs Confiscated One Seine Net.** Owner: Issa Mabuka. Big and Small Chiuta BVCs provided, respectively, nine and five fishers in the boarding party that confiscated the net.
40. **20 March 2003: Chitundu Fishermen Confiscated Seine Net near Chitundu.** Owner: Mr. Ajalu Sanudi, Mlaluwere Village, TA Chikweo, Malawi.
41. **18 April 2003: Small Chiuta BVC Confiscated Three Nets.** Owners: Mr. Angoni Allan, Malawian, Mr. Kachambo Chekenra, Muhara Village, Mozambique, and Mr.

Kondwani Rabana, Nawanga Village, TA Ngokwe, Malawi. Nets are retained by the Lake Chiuta Fisheries Association at Misala (home of Fisheries Association Chairman Mr. Mainala).

42. **30 April 2003: Small Chiuta BVC Confiscates One Seine Net.** Owner: A. Mekaniko of Mkaku Village, TA Chikweo, Malawi. The net is currently in possession of Mr. Mainala of Misala, chairman of the Lake Chiuta Fisheries Association.
43. **24 May 2003: Moro BVC, Likanya Fishers and Misala BVC Confiscate Four (4) Seine Nets.** The four owners of these nets were:
- Mohaman Buwa, Chisoni Village, TA Mambo, whose jurisdiction lies near Zomba, Malawi
 - Gusto Kanyoza, Howa Village, TA Mkhanyela, Mozambique
 - F.B. Mangani, Chitembe Village, TA Mkhanyela, Mozambique
 - Jimmy Josaya, Rukhwi Village, TA Mzozomera, Malawi
- These illegal fishers initiated confrontations with Malawian legal fishers. Led by Mssrs. Saddam Felish Pedro, Chibvomerezi and Jumo, all Mozambicans, they confiscated goods of Malawian in Mozambique who were clearly not involved in the conflict. The four nets are currently in the possession of Moro BVC. [*This interaction, and particularly the Mozambicans' seizure of goods owned by Malawians but situated in Mozambique may indicate that the Mozambican fishers view efforts by Malawian fishers to ban use of **nkatcha** seine nets on Lake Chiuta as acts of **piracy**; their seizure of Malawian goods might be interpreted as simple exercises in a piratical game of tit for tat. If so, the implication is that Malawian government officials, particularly Fisheries Department staff, must still convince Mozambican fishers and officials that their rules restricting gear are reasonable.*]
44. **30 May 2003: Three BVCs Confiscate a Net in Transit without Authorization.** Misala, Moro and Likhanya fishermen confiscated a net whose owner, Mr. Chinguwa, of Naphuto Village, Malawi, had not procured a laissez-passer letter from the Malawi Department of Fisheries. The same fishermen also confiscated some other goods belonging to Mr. Chinguwa (which was clearly an illegal action). On 21 June 2003 police from the Nselema post came to collect Mr. Chinguwa's seine net for him. Mr. N.K. Massi went with LCFA Chairman Mr. Mainala, and members of the BVCs in question. After discussions with Nselema police, the fishers returned Mr. Chinguwa's net to him, along with most of the goods that they had seized. A few of those goods were by then missing, but the police accepted the restitution as adequate. Mr. Chinguwa precipitated police involvement by lodging a complaint to contest the seizure of his net and goods.
45. **26 July 2003: Alli Chikwawa BVC Confiscated a Net.** The owner, Mr. Sidreck ("Amalani") Josephy, of Nselema Village, Malawi. During the net confiscation action, confrontations erupted between BVC members and illegal fishers and Mr. Josephy was beaten. Later, Mr. Josephy lodged a complaint with the N'Gokwe Community Police. The Community Police invited Mr. N.K. Massi to advise them. The latter recommended that they not return the confiscated net to its owner but

rather, that they turn the matter over for judgment to the LCFA. The Association fined Mr. Josephy 2,500 MK for using illegal fishing gear.

46. 28 July 2003: Njiriti BVC Confiscates a Net from Mr. Seven, Poderani Village, Malawi. Mr. Seven (Malawian) resides in TA Kowinga's jurisdiction. He reported the incident to the Malawian Nayuchi Police post, and allegedly sought to corrupt them. Three armed Malawian police came to Njiriti to compel Njiriti BVC to return Mr. Seven's net to him. One of the Njiriti BVC members, a quick-witted individual, told police that the BVC would return the net, but only in the presence of Mr. Massi, Fisheries Department Technical Assistant. He told the police to wait while he went to fetch Mr. Massi. The police said that they did not have time to wait and, if it were impossible to resolve the situation immediately, they would deal with it another day. After three days, the police were informed by a BVC member that they should return to the village to discuss the issue. The police did not, however, return to Njiriti; instead, they sent Mr. Seven by himself to discuss the matter with BVC members. The latter had, in the meantime, invited Mr. N.K. Massi to attend the meeting. Mr. Massi attended and discussed the situation with Mr. Seven. TA Chikweo was available and advised Mr. Seven to wait until he received a message from the LCFA indicating whether he could have a trial concerning his net. The Chikwea Area Fisheries Association still has the net.

47. 14 August 2003. Njerwa BVC Confiscates a Seine Net. The N'Gokwe Area Fishers Association charged the owner, Mr. Ayami White Walusa, Malawian, 10,000 MK for the offense.

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