

In the Hands of the Fishers Workshop #6  
Cameroon, West Africa  
May 4-9, 2003

## WORKSHOP BACKGROUND

The idea of IHOF workshops developed from a need Mr. Pisit Charnsnoh, **founder of Thailand's Yadfon Association**, saw as the serious lack of opportunity for fisherfolk from the region to share their experiences and learn from each other. He thought such an exchange would help empower local people to manage their own resources in a more effective and sustainable manner, while utilizing basic skills and what he termed "local wisdom" in the process. There were already forums that enabled government officials, scientists, academics and NGO leaders to meet but there was little or no opportunity for the fisherfolk themselves to communicate. IHOF workshops aimed to provide that much needed opportunity.

## WORKSHOP SUPPORT

The IHOF Workshop #6 held at Edea, Cameroon, was **co-sponsored** by the Cameroon Wildlife Conservation Society (CWCS) and the Mangrove Action Project (MAP). MAP's executive director, Alfredo Quarto participated as MAP's representative at the workshop<sup>1</sup>. This allowed participants from West Africa to become more personally familiar with MAP's network, while also giving Quarto the opportunity to interact directly with fisher & NGO leaders in order that MAP is better able to understand the problems and needs of coastal communities in West Africa.

## WORKSHOP OBJECTIVES

There were several objectives for this workshop; the **four** most important of which were fulfilled via this IHOF:

- 1.) To allow fisherfolk from the region to share ideas and experience regarding efforts to stop destructive fishing methods and other development practices that may threaten the livelihood of inshore fishing communities. It is believed this exchange would empower and support fisher leaders to become stronger and more effective leaders.
- 2.) To share experience in the form of case studies of co-management or community based coastal resources.
- 3.) To present ideas for alternative sustainable livelihoods that could be adapted by groups or individuals to suit the needs of fishing communities. (The innovative design of an improved fish smokehouse would be especially highlighted at this workshop.)
- 4.) To form a network amongst groups in the region to exchange knowledge, skills and support for sustainable management of coastal resources.

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<sup>1</sup> Pisit Charnsnoh of Thailand had planned to attend and share his wealth of knowledge about his work in Thailand, but unfortunately the workshop was scheduled right in the middle of the SARS epidemic scare, and he felt it unwise to travel from Asia to Africa at that time.

All four of these goals were met during this IHOF workshop. NGOs and fisherfolk leaders gathered from Cameroon, Senegal, Nigeria and Benin, sharing their ideas and discussing their specific issues, many of which found commonality among the others present.

Four delegates came from Senegal, three from Nigeria, three from Benin and 12 from Cameroon, as well as a few government officials and media representatives who were all interested in the workshop theme, and wished to attend as observers. This worked out well in helping us raise awareness as to the importance of mangrove forests and to spotlight both the problems affecting these coastal wetlands, as well as the solutions that could reverse further losses of these invaluable resources.<sup>2</sup>

On the first day of the workshop, the group of about 30 individuals met at the conference room of the hotel we were staying at. Each country representative presented **information** on her/his own area, spotlighting those problems negatively affecting the mangroves of their area. It was observed that each country had problems of urban expansion and logging which **were** destroying some areas of mangrove forest, as was the continuing severe drought and increasing salinization in such coastal zones found in Senegal. Oil pollution was blamed for large tracts of **mangroves** in Nigeria being destroyed or degraded by spills and fires. However, in each country the common thread that had brought us all together showed itself clearly running through the fabric of our workshop—open fire, fish smoking utilizing large quantities of mangrove wood by the coastal communities was a growing issue of concern.

One of the main objectives for having the workshop in Cameroon was to bring together delegates from various regions to witness firsthand the innovative design and construction of the so-called “improved fish smokehouse” which CWCS field coordinator Dr. Gordon Ajonina had been working diligently on for over 5 years. The idea for this smokehouse came during a meeting between Quarto and Ajonina in 1998 in Senegal at a Wetlands International conference held in Dakar. When Ajonina related that in Cameroon over 75% of the mangrove loss can be attributed to the traditional process of smoking fish, Quarto immediately thought of the use of the fish smokehouse concept in the Pacific Northwest which was originated by Native Americans and First Nations peoples in Canada.

On presenting this idea to Ajonina, the concept was immediately of great interest to him as a possible solution to the overuse of a rapidly diminishing mangrove forest resource. If this rapid rate of mangrove loss were not lessened, then Cameroon, like other W. African nations, would lose the majority of its coastal wetland, thus causing great hardships for both human and marine life. Ajonina’s grant proposal to build working models of an improved fish smokehouse was soon approved and funded by a foundation in Europe, and so work began in designing and building these demonstration models of improved smokehouse ovens for smoking the fish in a more sustainable fashion. Dr. Chuyong George Eyabi, a food preservation/ handling expert, worked with Ajonina on this new design, fitting it to the local cultural and economical

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<sup>2</sup> Sadly, the Ivory Coast delegates could not get their visas in time to join us, and their absence was sorely felt.

needs of the target communities found around Mounka, Cameroon, attempting in the process to ensure that the designs of this new smokehouse would be more easily accepted and assimilated by these local communities.

(See Appendix for report on smokehouses in Cameroon)

### Site Visits to View Demonstration Projects

On the third day of the workshop, the group was bussed to Mouanko , a small town near the mangrove coast where Dr. Ajonina's field office of CWCS was located. From the office, the group proceeded to the docks to take two long motorized passenger boats to outlying villages in order to view the fish smokehouses firsthand.

Mr. George Eyabi explained the design **features** of the improved smokehouses by comparing the two working models that the CWCS team designed and constructed that we visited on our field trips to the traditional smokehouse designs that were found abundant in each village. Nearly every family has its own traditional fish smokehouse built nearby their small family homes. In many instances these framed wooden plank buildings with thatched or tin roofs were the same size as, or even larger than, their owners' homes. The traditional smokehouses were able to smoke and process large quantities of fish, but needed larger quantities of mangrove wood to burn in the process. This increasing demand for mangrove wood was not sustainable, and so the nearby mangrove forests were dwindling, which in turn caused further declines in an already strained wild fishery. The effort to introduce the improve fish smokehouse to replace these so-called "traditional" smokehouses was meant to lessen the heavy pressures **on** the mangrove forests which otherwise were becoming increasingly degraded. This loss of mangroves was itself resulting in a spiraling decline in fish catches because the mangrove wetlands act as nursery grounds for a majority of the region's fish species.

Eyabi talked about the special design features of the CWCS design. One very important feature was the brick oven design that was integral to the entire improved smokehouse concept and improved functioning of the demonstration models. The brick ovens were built to ensure higher fuel burning efficiency, better heat and smoke circulation and enhanced overall efficiency in the fish smoking process itself.<sup>3</sup>

On the third day of the workshop, we first visited the adjacent villages of Yoyo 1 and Yoyo 2, where one model of smokehouse was established. The improved fish smokehouse design found there was simple in concept, but served the needs of the fish smoking process well. It was designed as a simple, inexpensive structure meant to fit the needs of a single family. The closed smoke processing system allowed the fish to be smoked in one third the time, utilizing over 40% less mangrove wood while preserving the fish for three to four times more time. These were all noteworthy achievements, deserving of much more support and international attention.

Another CWCS smokehouse design we witnessed on a visit that took place on the fourth day of the workshop at the village of Manoka. There we found a more

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<sup>3</sup> Please see the documents by CWCS that describe the improved smokehouse design which are included in this report.

advanced and elaborate building and oven design which served the needs of a village cooperative whereby cooperative members took turns, or shared, using the improved smokehouse. This larger building served a dual purpose for a group meeting hall built adjacent to the actual smokehouse structure itself and the fish smoking/ processing facility for the cooperative. This cooperative **effort** was viewed as quite an achievement by CWCS staff because it allowed a larger segment of the village to test out and benefit from the smokehouse functions, while putting much less pressure on remaining mangrove forest resources. It was hoped that this demonstration model would be soon seen as a good replacement for the wasteful and less efficient “traditional” smokehouses that were currently in popular use. If this model was seen as successful and more profitable for smoking fish by the rest of the community at Manoka, as well as nearby communities, perhaps a change in smokehouse design towards these more efficient models would transpire. This was the hope of both CWCS and MAP.

During the field trip to Yoyo 2, the participants had the unique chance to witness the construction of the brick oven for a single family model fish smokehouse that was being constructed to serve as a third demonstration model for use by the chief of the village. Eyabi explained to the group the steps necessary for completing this process.

Back at the conference center in Edea, the IHOF participants reviewed the information gleaned from the two field trips and issued a joint proclamation or statement for the IHOF workshop.

#### SOME POSITIVE RESULTS OF THIS IHOF WORKSHOP

1) The workshop provided a good chance to showcase the improved fish smokehouse design which Gordon Ajonina and George Eyabi had been working on since 1998 in an effort to greatly reduce the consumption of mangrove as fuel wood for smoking fish, as well as reduce the pollution from the traditional open fire fish smoking techniques. Upon visiting the sites where test model smokehouses were set up, we were able to give the technicians of this project some reasonably good design suggestions for improving upon their present design models. All participants were impressed with the possibility of reducing the use of mangrove wood for smoking fish via the improved smoke house designs demonstrated by CWCS..They also stated their intent to construct a demonstration fish smokehouse in their regions based upon the design they had witnessed in Cameroon.

2) The participants signed a final statement, or declaration, which they can now take to their various governments and media to help highlight the problems and hopefully alleviate mangrove loss in their own countries. MAP also took this signed resolution to Brazil for the next IHOF workshop, as the African participants offered their solidarity for the Latin American groups working to conserve their own region’s mangrove coastal zones.

3) A new and invigorated effort has resulted from the IHOF on the part of the participating NGOs to form the all-African equivalent of Redmanglar, which is the Latin American Mangrove Network. The African NGOs attending the IHOF have formed the African Mangrove Network (AMN) which will include both East and West African NGOs. This could potentially make MAP's efforts in linking with

African NGOs much more easy and effective in sharing information more widely and rapidly towards realizing common goals and objectives.

4) It is believed that there are continuing attempts to promulgate an expanded shrimp aquaculture industry in West Africa, MAP's help in advising on this matter is timely in helping to ensure the future of Africa's mangroves, especially if shrimp farming takes on new dimensions there. An alert and wary local NGO and local community-based movement will be important towards avoiding the serious pitfalls and environmental and social problems due to shrimp aquaculture experienced in Asia and Latin America because of an otherwise runaway shrimp farm industry expansion. This IHOF most definitely spotlighted the shrimp farm issues, and drew national and international attention in West Africa to these problems that might soon affect their coastal waters.

#### Some Problems with this IHOF Workshop:

Several problems in organization occurred during this IHOF that created some difficulties for all involved, including:

- delays in letters of invitation reaching intended participants in Ivory Coast;
- communications problems between French and English speakers before and during the workshop;
- higher costs than originally anticipated caused by unforeseen events, such as the cancellation of reservations at a much less expensive hotel for lodging the participants;
- the unexpected interest and involvement of uninvited government officials who wished to attend the workshop and stay on at the meeting site. (This created some problems of “protocol” in which it was somewhat a sensitive situation not to offend the attending officials whose support might be needed later by CWCS to implement their mangrove conservation programs on a wider scale.);
- our field site visits were shortened because of late starts in reaching these sites and problems of tidal fluctuations which forced us to leave before tides reached lower levels;
- some of our participants from Nigeria had airport travel problems leaving Nigeria, being forced to pay higher fees to leave than should have been the case and arriving late at the workshop site;
- cost overruns for this workshop exceeded our budget projections causing some unfortunate delays in reimbursement of visiting delegates. There should have been a tighter control on expenditures earlier on to ensure these overruns did not occur or at least better prepare the organizers for this problem. However, a big part of the problem was that our initial projections for cost of this IHOF were based on costs that were not fixed, and in fact increased over time—such as the airfare costs for international travel which rose dramatically and the hotel costs caused by the loss of a former reservation at another hotel.

#### Summary Evaluation of IHOF #6 in Cameroon

Overall, despite the problems encountered, this IHOF was a success. Those attending felt inspired by the concepts and working models of the improved fish smokehouse, as well they were glad to have the chance to share their ideas and bring up their

particular problems their groups are dealing with in their own regions while looking for workable solutions, such as was represented by the smokehouse project of CWCS.

The formation of the African Mangrove Network was also looked at as a very positive, progressive movement towards further unification of the African groups working on mangrove conservation and restoration issues. A next IHOF workshop in Africa that would further these goals was planned for sometime early next year to be hosted by one of the groups in Senegal, WAAME, which is led by Abdoulaye Diame who also was selected as the interim secretariat for AMN.

MAP is very pleased to have had the opportunity to bring these good organizations and their associate fisherfolk members together to achieve the above mentioned goals, thus furthering our own network's objectives of linking both NGOs and fisherfolk to ensure positive solutions are found to otherwise oppressive environmental and social problems. We would therefore like to thank the contributors to this IHOF workshop from CWCS personnel who helped organize such to those other NGOs and fisherfolk who attended, as well as our funders from Conservation, Food and Health; the IUCN Netherlands, TRP; and ICCO for their generous support of the IHOF process.

## Appendix: Background on the Problem of the Conventional Smokehouses of Cameroon

From the report by Gordon Ajonina of CWCS:

“Cameroon Wildlife Conservation Society (CWCS), a national conservation NGO, has been working in the Douala-Edea Reserve since 1997 within the framework of developing a community based conservation management plan for the reserve one of Cameroon most threatened nature reserves located along the Atlantic coast at the Gulf of Guinea between Douala and Kribi coast for some 100km coastline. With a surface area of 160,000ha, the reserve has one of the country largest expanses of mangrove forests covering more than 16,000ha about 7% of Cameroon’s mangrove forests.

Situated along major bays, rivers and creeks that characterize the area especially rivers Wouri, Sanaga and Nyong. The adjoining lowland dense tropical humid forest harbors diverse fauna resources of conservation importance especially elephants, antelopes, chimpanzees, monkeys, crocodiles, manatees, sea turtles. Numerous birds' species also abound...”

“Although, the reserve acquired a protected area status since its gazzement in 1932. Government neglect through an ill-equipped conservator and one game guard to ensure the management of the reserve subsequently led to rapid encroachment into the reserve as more than 60 villages are now resident in the reserve since 1930s. The mangrove area is occupied by over 20 villages and fishing camps with a population of more that 5600 (57% of the reserve population) in some 1074 households with household size of 5.3 persons. More than 70% of this resident population are foreign nationals from Nigeria, Ghana, Benin and Niger Republics with Nigeria alone having more than 60% of the total population, a greater proportion is mostly migratory following the fishing period that spans from November to April.”

“Apart from pollution threats from surrounding agro-industrial companies and petroleum exploitation activities and urbanization, the mangroves in the area are under threats from fishing activities as over 500 tonnes of fish catch are smoked annually using mangrove wood. An impact assessment carried out by CWCS, between 1998 and 2000 supported by Netherlands Committee of IUCN and the Netherlands Organization for International Development Cooperation (NOVIB), showed that mangrove wood extracted for fuelwood, construction of smoking platforms, kitchens and sleeping houses, contributed to an annual loss of 180,000m<sup>3</sup> (127,000 stems) or 140ha representing, a decline of 0.9% of total reserve mangrove forest with a wood consumption rate of 230m<sup>3</sup> /household/year (161 stems/year), and 35m<sup>3</sup>/person/year (25 stems/year). Fuelwood use for fish smoking accounted for more than 99% of the total annual wood turn over rate.”

“Women mostly harvest fuelwood and smoke fish. The fish is mostly smoked on platforms implanted in very low efficiency kitchen characterized by great loss of heat energy and circulation of smoke, with negative health problems such as: breathing and sight difficulties, headache, general fatigue and inhalation of poisonous wood gases as well as occurrence of occasional fire accidents.”

(From the report written by Dr. Gordon Ajonina, **Saving Cameroon fish smoked houses: CWCS community based approach in Douala-Edea Mangroves**, 2001)