



COMMITTEE FOR INLAND FISHERIES AND AQUACULTURE OF AFRICA

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TOWARDS A CIFAA STRATEGY FOR INLAND FISHERIES OF AFRICA: ISSUES AND IMPROVED INFORMATION

I. Background on establishment of a strategy

The imbalance between food supply and growing populations is a global challenge that is affecting how fisheries, particularly inland fisheries, are managed. In the context of the African Region, where considerable portions of marine catch are destined to external markets, this increasing demand for fishery products places ever greater pressure on the Region's vital, but often poorly monitored, inland fisheries covering major and minor, trans-boundary and domestic aquatic ecosystems.

The Fifteenth Session of CIFAA acknowledged that in most African countries, although inland fisheries is a very important source of food and livelihood, the contribution of inland fisheries resources to the economies of the respective countries has not been properly assessed, and may even be underestimated. Sustainable or even enhanced management of these essential resources requires effective and functional management schemes that can be affected at local, national and regional levels. Accordingly, the Committee agreed to establish an ad hoc Working Group to develop a CIFAA inland fisheries strategy:

“The Committee agreed that a strategy for inland fisheries in Africa is needed and agreed to establish an ad hoc Working Group to develop a CIFAA inland fisheries strategy following a similar process to that followed by the CIFAA ANAF ad hoc Working Group. It was also agreed that the CIFAA strategy would be more relevant if linked to the NEPAD Action Plan for the Development of African Fisheries and Aquaculture. As appropriate, other high-level documents demonstrating the priorities identified by African countries would also be useful to the Working Group. Cameroon, Côte d'Ivoire, Uganda, Ghana, Nigeria, Zambia and Chad volunteered to be members of the Working Group to draft the elements of the strategy that could be presented at the 16th session of CIFAA. Namibia, presently an observer, will become a member of the group once it formalizes its membership to CIFAA¹.”

¹ Report of the CIFAA XV.

To help inform and facilitate the work of the ad hoc Working Group, a survey was conducted by sending a questionnaire (in English and French as appropriate) to FAO Representatives of CIFAA Member countries and others (Annex A). The questionnaire presented information on a FAO Strategy for Fisheries and Aquaculture in Africa (SFAA) and sought input as to its appropriateness for a CIFAA Strategy for Inland Fisheries of Africa (CSIFA).

Recognizing that proper assessment of the production from inland fisheries will be a key element in the strategy, an audit of inland fisheries in select African countries was conducted (CIFAA/XVI/2010/Inf.); general results are included herein.

II. Strategy for Fisheries and Aquaculture in Africa as a model

FAO, with assistance from Sweden, has developed a discussion document for a Strategy for Fisheries and Aquaculture in Africa (SFAA) that has the following goal:

Substantial additional human benefits are delivered from available inland aquatic resources while achieving sustainable exploitation, and restoration where necessary, of these resources.

The SFAA is consistent with the NEPAD Action Plan and contains the following specific elements relevant to inland fisheries:

- Creating the political will - collection and dissemination of improved knowledge on inland fisheries and their vital role and contribution to food security;
- Improving fisheries governance;
- Sustaining and restoring fishery resources through implementation of Ecosystem Approach to Fisheries (EAF) within integrated catchment and basin management systems, including transboundary management bodies;
- Enhancing the value of inland fisheries through post-harvest management and trade.

The current task is to take these basic principles and translate them into practices and actions that can be realistically implemented at fishery level.

III. Results of the Survey

The results of the survey sent to FAO Representatives of CIFAA Member countries and others in order to assess its appropriateness for a CIFAA Strategy for Inland Fisheries of Africa (CSIFA) are presented below¹ (numbers correspond to questions on the survey; parenthetical values are averages of ratings given by respondents).

1. Inland fisheries are extremely diverse and range from small-scale subsistence fisheries to industrialized commercial fisheries. In order to develop an appropriate strategy for inland fisheries, it will be necessary to define what types of inland fisheries are to be addressed and at what priority. The survey indicated that artisanal fisheries (score of 1.5 out of 5, where 1 is highest and 5 lowest priority) and commercial fisheries (1.8) were the top priorities for the strategy. Subsistence fisheries (2.6) were next, followed by recreational fisheries (4.0) and then ornamental fisheries (4.5).
2. The goal from the SFAA, *Substantial additional human benefits are delivered from available inland aquatic resources while achieving sustainable exploitation, and restoration where necessary, of these resources*, was generally acceptable for a CSIFA, but could be modified slightly.

¹ At the time of writing, 12 countries had responded: Benin, Botswana, Burundi, Cameroon, Congo Democratic Republic, Guinea, Madagascar, Malawi, Niger, Sudan, Togo and Zimbabwe.

3. The survey indicated that the elements of SFAA were appropriate for inclusion in a CSIFA. All respondents rated, *Creating the political will – collection and dissemination of improved knowledge on inland fisheries and their vital role and contribution to food security*; as absolutely essential (1.5) ('1' being absolutely essential for inclusion and '10' being completely unnecessary);, *Improving fisheries governance* (1.6) and *Sustaining and restoring fishery resources through implementation of EAF* (1.7) were judged as very essential; *Enhancing the value of inland fisheries through post-harvest management and trade* was also judged to be necessary (2.4). Other elements not included on the survey submitted by respondents included: *Support to subsistence fishers including women, support easy access to credit facilities, estimating value of inland fisheries, establishing a budget and transboundary fisheries management*.
4. In regard to Member countries' main needs for an inland fisheries strategy and achieving the elements of the CSIFA, respondents rated *Financial assistance* as first (2.1), followed by *Capacity building* (2.2), *Institutional strengthening* (2.4) *Technical support* (2.6), *Improved infrastructure* (2.9) *improved information* (3.3) and *Political stability* (5.0). Whereas most of the responses for a given need were similar, the responses for *Political stability* varied greatly (from 1-10) and probably reflected the current level of political stability in an area. *Improved collaboration with neighbouring states* was not included on the survey, but a respondent felt it necessary.
5. Respondents presented a variety of reasons that prevent countries from more fully developing inland capture fisheries. The responses have been grouped and summarized in Table 1.

Table 1. Conditions preventing full development of inland fishery sector

<i>Condition</i>	<i>Number of responses</i>
Governance, policies, regulations, management plan and laws are non-existent, outdated or irrelevant to inland fisheries	10
Lack of capacity, training, and technology transfer	6
Insufficient attention to fish quality, food safety and fresh fish transport	6
Insufficient communication and exchange of information	6
Poor management, enforcement, monitoring and surveillance	6
Lack of information	5
Lack of political will	4
Competition from marine sector	2
Lack of organization in the fishing sector	2
Illegal, unregulated and unreported fishing	2
Remoteness of fishing areas/villages	2
Lack of adequate funding and credit	2
Lack of water bodies	1
No tradition of fish consumption	1
Poor water level management	1

6. Respondents further presented numerous topics important for the Working Group to consider in developing a CSIFA that have been grouped and summarized in Table 2.

Table 2. Additional topics important to consider in developing a strategy

<i>Topic</i>	<i>Number of responses</i>
Increased collaboration and common fishing policy	4
Increased research and application of results	4
Marketing and promotion of inland fish	3
Institutional strengthening and dedicated Fisheries/Aquaculture Department	3
Improved infrastructure and access/links to fishing areas	2
Livelihood diversification	1
Protection of inland fisheries	1
Safety for small scale fishers	1

IV. Information: key element of the strategy to improve inland fishery statistics

A key element of a strategy for inland capture fisheries in Africa is to develop means to improve the information on the sector. This will then help build support and political will to move the sector forward. Toward this end, an audit of inland capture fisheries of Africa was prepared; main points and conclusions are included here and in CIFA/XVI/2010/Inf. for consideration by the Committee.

The audit examined three general views, which are often contradictory: a) the “inland fisheries are doomed” view; b) inland fisheries catches are reported as rising; and c) more fish are being caught than are recorded.

Doomed scenario

The foundation of this view in Africa, as elsewhere, is the large number of threats to inland aquatic systems. Principal among these are:

- Bad fishery management;
- Water abstractions;
- Land drainage;
- Dam construction;
- Pollution/eutrophication;
- Climatic variability/change;

Inland fisheries catches are reported as rising

In contrast to the “doomed” scenario, catches are still recorded as rising at a linear rate of increase of about 3.7% per year in Africa. However, lack of good information makes interpretation of this trend difficult.

More fish are being caught than are recorded

There is a widespread opinion that much of the catch from inland fisheries is unrecorded. This is mainly because of the diffuse and small-scale nature of individual fisheries where there are no definable landings and much of the catch goes directly into domestic consumption.

The audit noted the following possible sources of error in the collection of inland fishery statistics:

- Inadequate data collection systems;
- Selective data collection;
- Double counting of landings;
- Confusion with aquaculture; and
- Political pressure.

The audit covered the period 1950 - 2007 for the top 20 producing countries in Africa accounting for 94% of the total inland catch in 2006. The audit revealed that thirty-seven percent of countries reported catches as still rising, 28% as falling, and 35% as stable. The reported catch from about 72% of countries is judged to need some clarification before these trends can be fully understood. Particular clarification is needed for the Sahelian zone countries as catches are reported as rising there despite negative climatic conditions. Clarification is also needed for the Congo basin where a historic lack of data collection makes it impossible to estimate the true production and any trends in catch.

The audit pointed out several shortcomings concerning information on inland fisheries:

- Failure to report yields for individual water bodies, makes it impossible to track the history of catches by major river basin or by international lake or reservoir.

- There is a lack of reporting on effort or numbers of fishermen. Many countries report considerable increases in numbers of fishermen over the reporting period, and even over the last ten years in supplementary literature. In many cases this increase seems to be associated with linear increase in extrapolated catch which is impossible to verify.
- Reporting by species group is poor. The main failing here is the failure of countries to record even the most limited of species information., either not responding or overusing the “other species nei” category.

Improved information was reported as being required:

- to formulate management policies,
- to assess environmental impacts,
- to qualify and verify the nominal statistics,
- to establish the precise status of the stocks in various member countries and
- to determine the impacts of other uses of water and landscape on inland fisheries.

Conclusions from the audit

There is a paradox in the Sahel (Lake Chad basin, Upper and middle Niger and Senegal rivers) where almost all riparian countries (Senegal, Mali, Niger, Chad, Cameroon, Nigeria) reported increasing catches despite an apparently deteriorating aquatic environment. There is a crucial lack of data from the Congo Basin, probably the major inland fisheries resource of the continent.

Data suggest inland waters are more productive than previous models predict. Is this information correct and should existing models be updated?

There is a need to evaluate the impact of dams, both with regard to upstream reservoir fisheries and their impacts on catches downstream. This is especially urgent in view of the possible resurgence in interest in large scale hydroelectric projects.

Sources of information need to be expanded. There is a need to know more about the methods countries are using for their direct sampling of catches at landings and markets to be able to interpret the degree to which the figures that are collected are representative of the country as a whole. Additionally, indirect assessment of catches through fish consumption surveys are being increasingly used although not widespread in Africa¹

In many cases, trained specialists are rare both internationally and nationally. Thus training and coordination are needed at all levels from the study of the biology and ecology of the resource to the collection of statistics on the fishery.

In conclusion, the potential and future development of inland capture fisheries of Africa can not be fully assessed until clarification is given on the above mentioned areas relating to the reported statistics. Hence, there is a need for further information to interpret the trends in inland fisheries in Africa and to resolve the paradox of apparently threatened resources and ever growing catches. Incorporating these concerns should be considered as an essential element in a strategy for inland fisheries of Africa.

V. Other considerations for a strategy for inland fisheries of Africa

Whilst the need for improved management of inland fisheries is apparent, and the central role of clear and functional strategies for achieving this improved management equally evident, the practical realities in implementing these actions are challenging; requiring close and efficient intra-regional collaboration including possibly the sharing of technical and human resources. Recent efforts in regional

¹ Horte K.G., 2007. Consumption and yield of fish and other aquatic animals from the Lower Mekong basin. MRC Technical Paper 16. MRC, Vientiane. 87pp.

collaboration on problem solving may provide some guidance as to how this necessary collaboration could be structured and function.

In addition to the strategic approaches to enhanced regional collaboration developed through the CIFAA ANAF ad hoc Working Group, several regional fishery bodies dealing with inland fisheries have developed strategic plans that may provide useful information toward the development of an inland fishery strategy for Africa. The Lake Victoria Fisheries Organization (LVFO)¹ strategic vision is to:

foster a common systems/resource management approach amongst the Contracting Parties in matters regarding Lake Victoria, with the goal of restoring and maintaining the health of its ecosystem, and assuring sustainable development to the benefit of the present and future generations.

More specific goals include:

1. A healthy Lake Victoria Ecosystem and Sustainable Resources
2. Integrated Fisheries Management
3. Coordinated Research Programmes
4. Information Generation, Flow and Exchange
5. Institutional/Stakeholder Partnerships.

An interesting example from outside the region that might be used as a reference is the case of the Mekong River Commission. The Commission produced a strategic plan for 2006-2010, and has recently revised it for 2011-2015 towards more effective use of the Mekong water and related resources for poverty alleviation while protecting the environment². The overall goal of the MRC is “To Support the Member States for More Effective Use of the Mekong's Water and Related Resources to Alleviate Poverty while Protecting the Environment”. The Strategic Plan contains four goals:

1. To promote and support coordinated, sustainable, and pro-poor development
2. To enhance effective regional cooperation
3. To strengthen basin-wide environmental monitoring and impact assessment
4. To strengthen the Integrated Water Resources Management capacity and knowledge base of the MRC bodies, National Committees, Line Agencies, and other stakeholders.

Thus, there are several general and specific aspects that could be included in a strategy for inland fisheries of Africa. For example in addition to the above, a CIFAA strategy could inter alia i) include an agreement with AU/NEPAD that would be signed-on-to by members; ii) develop templates for national strategies; iii) focus on trans-boundary resources, or iv) a combination of all. Additionally, the strategy could be reviewed and updated as necessary.

It will be important for the Working Group to develop an overall strategy that CIFAA can endorse and on which Members can work towards implementation.

VI. Requested Action by the Committee

The 16th CIFAA Session is invited to review the present document and CIFAA/XVI/2010/Inf., and discuss and advise on the following:

- provision of further input into the responses from the questionnaire (Annex A) as to their validity and their appropriateness for a strategy for inland fisheries in Africa;

¹ http://www.lvfo.org/downloads/LVFO_Strategic_Vision.pdf

² http://www.unescap.org/EDC/English/Commissions/E66/E66_INF4.pdf

- the schedule and immediate duties of the *ad hoc* Working Group to develop a CIFAA inland fisheries strategy;
- the results of the audit and how to improve information on inland fisheries of Africa;
- are the conclusions of the audit acceptable and what changes or additions, if any, are needed to make the audit suitable for publication?;
- identification of elements of the audit of African inland fishery statistics that are appropriate for inclusion in strategy for inland fisheries in Africa;
- identification of other elements to be included in an inland fishery strategy, e.g. strategic vision and goals;
- provision of any additional information to assist the Working Group in developing a strategy for inland fisheries in Africa.

CIFAA XVI QUESTIONNAIRE

DEVELOPMENT OF A CIFAA STRATEGY FOR INLAND FISHERIES IN AFRICA (CSIFA)

1. Inland fisheries are extremely diverse and range from small-scale subsistence fisheries to industrialized commercial fisheries. In order to develop an appropriate strategy for inland fisheries, it will be necessary to define what types of inland fisheries are to be addressed and at what priority. Please prioritize (1 being the highest priority and 5 being the lowest) the following types of inland fisheries in regards to their importance in an inland fishery strategy for your country:

Type of Inland Fishery	Priority (1-5)
Subsistence fisheries	
Artisinal fisheries	
Commercial fisheries	
Recreational fisheries	
Ornamental fisheries	

2. Is the goal below from the SFAA acceptable for a CSIFA:

Substantial additional human benefits are delivered from available inland aquatic resources while achieving sustainable exploitation, and restoration where necessary, of these resources.

Please circle one:

- a) **Yes**, it is acceptable as is;
- b) It is partially acceptable and should be modified slightly;
- c) **No**, it is completely unacceptable.

2. What elements of the SFAA should be included in a CSIFA? Please rate the elements from 1-10 with 1 being absolutely essential for inclusion and 10 being completely unnecessary. It is possible to rank all elements the same if they are judged equally essential.

Element	Rating (1-10)
Creating the political will – collection and dissemination of improved knowledge on inland fisheries and their vital role and contribution to food security;	
Improving fisheries governance;	
Sustaining and restoring fishery resources through implementation of EAF within integrated catchment and basin management systems, including transboundary management bodies;	
Enhancing the value of inland fisheries through post-harvest management and trade.	
Please add any other element(s) you feel necessary	

3. What are your country's main needs in regards to an inland fisheries strategy and achieving the elements of the CSIFA. Please rate the following with '1' being the most important and '10' being the least important.

Needs	Rating (1-10)
Capacity building	
Technical support	
Financial assistance	
Improved infrastructure	
Institutional strengthening	
Improved information	
Political stability	
Please list any other needs	

4. What has prevented your country from more fully developing inland capture fisheries?

If you feel the sector is fully developed, please indicate YES here _____

Please write your response here: _____

5. Please list any other items that you feel are important considerations that may assist the working in developing a CSIFA.

a) _____

b) _____

c) _____

d) _____

e) _____

Accra, le 27 mai 2010

Cher Membre du CPCAA,

STRATEGIE POUR LES PECHES ET L'AQUACULTURE EN AFRIQUE

QUESTIONNAIRE D'ENQUÊTE

La Quinzième session du CPCAA a “reconnu que dans la plupart des pays, bien que les pêches continentales aient été une source très importante de nourriture et de moyens de subsistance, la contribution des ressources des pêches continentales aux économies respectives de ces pays n'a pas été correctement évaluée, et pourrait même avoir été sous-estimée. En outre, le Comité a identifié un certain nombre de contraintes et de problèmes clés à surmonter aux niveaux politique et institutionnel avant que les pêches continentales ne puissent avoir l'impact envisagé.” Le Comité a également “convenu de mettre en place un groupe de travail *ad hoc* pour élaborer une stratégie du CPCAA pour les pêches continentales.”

Le Comité a convenu qu'une stratégie pour les pêches continentales en Afrique est nécessaire et a décidé de mettre en place un groupe de travail *ad hoc* pour élaborer une stratégie du CPCAA pour les pêches continentales en suivant le même processus que celui du groupe de travail *ad hoc* du CPCAA pour ANAF. Il a été également convenu que cette stratégie du CPCAA serait plus appropriée si elle était liée au Plan d'Action du NEPAD pour le Développement des Pêches et Aquaculture Africaines. Au besoin, d'autres documents de haut niveau démontrant les priorités identifiées par les pays africains pourraient également être utiles au groupe de travail. Le Cameroun, la Côte d'Ivoire, l'Ouganda, le Ghana, le Nigéria, la Zambie et le Tchad se sont portés volontaires pour être membres du Groupe de Travail pour rédiger les éléments de la stratégie qui pourrait être présentée à la seizième session du CPCAA. La Namibie, actuellement observateur, deviendra membre du groupe une fois qu'elle aura formalisé son adhésion au CPCAA.

Pour contribuer à informer et faciliter le travail du Groupe de travail *ad hoc*, les informations suivantes ont été fournies, ainsi qu'un questionnaire succinct. Les résultats du questionnaire seront présentés lors de la prochaine session du CPCAA. Les membres sont invités à fournir des informations supplémentaires à la XVIème Session afin d'assister le Groupe de travail dans la formulation d'une stratégie du CPCAA pour les pêches continentales.

Stratégie pour les pêches et l'aquaculture en Afrique

La FAO a développé une Stratégie pour les Pêches et l'aquaculture en Afrique (SFAA) dont l'objectif est le suivant :

Des bénéfices humains supplémentaires considérables sont générés par les ressources aquatiques continentales disponibles tout en réalisant une exploitation durable, et une restauration de ces ressources s'il y a lieu.

La SFAA est en harmonie avec le Plan d'Action du NEPAD et contient les éléments spécifiques suivants sur les pêches continentales :

- Créer la volonté politique – collection et dissémination du savoir amélioré sur les pêches continentales et leur rôle et contribution essentielles à la sécurité alimentaire ;
- Améliorer la gestion des pêches ;
- Appuyer et restaurer les ressources en pêches à travers la mise en œuvre d'une Approche écosystémique des pêches (AEP) au sein des systèmes de gestion intégrée des bassins versants, y compris les organes transfrontaliers de gestion ;
- Améliorer la valeur des pêches continentales à travers la gestion post-récolte et le commerce.

Action requise des Membres

Il est demandé aux Membres du CPCAA de remplir le questionnaire ci-dessous et de le soumettre avant le **30 juin 2010** au Secrétariat du CPCAA. Des copies peuvent être envoyées à la Boîte Postale 1628, Accra, Ghana ou par l'intermédiaire du bureau de la Représentation de la FAO de votre pays à John Moehl, RAFT. Les copies électroniques peuvent également être envoyées à l'adresse suivante John.Moehl@fao.org avec copie à CIFAA16@gmail.com.

Meilleures salutations.

John Moehl
Secrétaire technique du CPCAA

QUESTIONNAIRE DU XVIème CPCAA

FORMULATION D'UNE STRATÉGIE DU CPCAA POUR LES PÊCHES CONTINENTALES EN AFRIQUE (CSIFA)

1. Les pêches continentales sont extrêmement diverses et varient de la pêche artisanale à la pêche industrielle. En vue de formuler une stratégie appropriée pour les pêches continentales, il sera nécessaire de définir les types de pêches continentales à traiter en priorité. Veuillez indiquer par ordre de priorité (1 étant la plus haute priorité et 5 la plus basse) les types suivants de pêches continentales en fonction de leur importance dans une stratégie de pêche continentale pour votre pays :

TYPES DE PÊCHES CONTINENTALES	PRIORITÉ (1-5)
Pêches de subsistance	
Pêches artisanales	
Pêches commerciales	
Pêches de loisir	
Pêches ornementales	

2. L'objectif ci-dessous est-il acceptable pour une CSIFA :

Des bénéfices humains supplémentaires considérables sont générés par les ressources aquatiques continentales disponibles tout en réalisant une exploitation durable, et une restauration de ces ressources s'il y a lieu.

Veuillez en entourer un :

- ❖ OUI, IL EST ACCEPTABLE TEL QUEL
- ❖ IL EST PARTIELLEMENT ACCEPTABLE ET DEVRAIT ÊTRE LÉGÈREMENT MODIFIÉ
- ❖ NON, IL EST COMPLÈTEMENT INACCEPTABLE

3. Quels éléments de la **SFAA** devraient être inclus dans une **CSIFA** ? Veuillez classer les éléments de 1-10 avec '1' comme absolument inclus et '10' comme absolument superflu. Il est possible de classer tous les éléments au même rang si vous estimez qu'ils sont d'importance égale.

ÉLÉMENT	ORDRE (1-10)
Créer la volonté politique – collection et dissémination du savoir amélioré sur les pêches continentales et leur rôle et contribution essentielles à la sécurité alimentaire	
Améliorer la gestion des pêches	
Appuyer et restaurer les ressources en pêches à travers la mise en œuvre d'une Approche écosystémique des pêches (AEP) au sein des systèmes de gestion intégrée des bassins versants, y compris les organes transfrontaliers de gestion ;	
Améliorer la valeur des pêches continentales à travers la gestion post-récolte et le commerce.	
Veuillez ajouter tout autre(s) élément(s) que vous jugez nécessaire	

4. Quels sont les besoins principaux de votre pays en matière de stratégie des pêches et de réalisation des éléments de la CSIFA. Veuillez classer les éléments suivants, de 1 à 10 (avec 1 comme le plus important et 10 le moins important).

BESOINS	ORDRE (1-10)
Renforcement des capacités	
Appui technique	
Assistance financière	
Infrastructures améliorées	
Renforcement institutionnel	
Informations améliorées	
Stabilité politique	
Veuillez ajouter tout autre besoin que vous jugez utile	

5. Qu'est ce qui a empêché votre pays à développer les pêches continentales plus pleinement ?

Si vous jugez que le secteur est complètement développé, veuillez indiquer OUI ici _____

Veuillez écrire votre réponse ici : _____

6. Veuillez énumérer tout autre élément que vous considérez important et qui pourrait contribuer à développer une CSIFA.

a) _____

b) _____

c) _____

d) _____

e) _____
