

**POVERTY AND POST HARVEST FISH UTILISATION
WORKSHOP, OCTOBER 8/9 2002**

WORKSHOP REPORT

DAY 1

Opening

The meeting was held at the Council for Scientific and Industrial Research (CSIR), Water Research Institute's conference room in Accra on the 8th and 9th of October 2002. An agenda for the meeting is shown in Annex 1. A list of participants is shown in Annex 2.

Mr Alabi Bortey from the Directorate of Fisheries (DoF) opened the meeting and his introduction was followed by the opening prayer, given by Mr Emmanuel Aryee, Regional Development Officer Fisheries, Greater Accra.

Ms Joana Akrofi provided an introduction to the Chair, Mrs Gladys Nerquaye-Tetteh, Senior Scientific Office of the Food Research Institute. Ms Akrofi highlighted Mrs Nerquaye-Tetteh's distinguished career in the food and fisheries sector, her extensive practical experience in addressing post-harvest sector issues and the recognition globally of her unique contribution to the sector particularly in association with the development and uptake of the *chorkor smoker*.

Welcome Address by the Directorate of Fisheries

Mr Daniel Quaynor, Deputy Director, Directorate of Fisheries gave the welcoming address in which he emphasised the importance of the sector to the economy of Ghana. He stressed that past interventions in the sector had addressed technical issues but had not always been successful at addressing poverty.

He described the evolution of the current Ghana Post-Harvest Overview and the support provided by the UK Government's Department for International Development (DFID). He said that the Overview will provide a one-stop-shop for public and private sector organisations involved in planning for and developing people's livelihoods in the fisheries sector and will provide new knowledge on poverty in the sector. This will address the need to understand such issues in order to make proper policy decisions and will contribute to the government's strategy for poverty reduction as laid out in the Ghana Poverty Reduction Strategy. Mr Quaynor also noted that the Overview will contribute to the evolution of new tools for the understanding post-harvest issues and for informing the implementation of the Code of Conduct for Responsible Fisheries. He also endorsed the linkages between the current research project and the DFID-funded, FAO-implemented, Sustainable Fisheries Livelihoods Programme.

Mr Quaynor restated the commitment of the Directorate to the support for fisheries livelihoods, wished participants a fruitful deliberation on the issues to be considered and welcomed them to the workshop.

Introduction to the Workshop by Mr Alabi Bortey

Mr Bortey introduced the aims of the project and the workshop. He summarised where the project had evolved to and what it intended to do next. In particular he focussed on the use of the Post-Harvest Overview Manual and its application to Ghana. He emphasised the need for the project to get feedback from practitioners on the Ghana Overview and that this was the aim of the first day of the workshop.

Introduction to the review of the Overview by Mr Ansen Ward (IMM Ltd)

Mr Ward outlined the following three presentations that were designed to summarise the contents of the Ghana Overview. The intention was to set the scene for the first working group task which would require participants to summarise and consolidate their comments and feedback on the draft GPHO. He also noted that the findings from the Ghana Overview and this workshop will contribute to the development of the Post-Harvest Overview Manual.

A review of the post-harvest sector and national development objectives by Mr Emmanuel Mensah (DoF)

Mr Mensah first described the post-harvest sector in the national context. He described the importance of the sector in terms of its support to the livelihoods of Ghanaians, indicating that it is estimated that 10% of the population rely on the fisheries sector for their livelihoods and that many people engaged in production are also involved in post-harvest activities. Mr Mensah also provided an insight into poverty within Ghana, both in general terms and in relation to the post-harvest fisheries sector. He highlighted the importance of the Ghana Poverty Reduction Strategy 2002 – 2004, before giving participants an overview of key quantitative and qualitative data on poverty in the country. Regional, occupational and gender differences related to poverty were described before attention was focussed on information that is available on poverty and the post-harvest fishery sector. A range of vulnerable groups in the sector were highlighted. These include: certain types of fishermen and processors, disabled, elderly, children, labourers and people living in difficult to access and remote communities. Many of these lack access to social amenities and include some of the Lake Volta communities.

On food security Mr Mensah emphasised the importance of fish in the diets of Ghanaians (both urban and rural), the important nutritional benefits of fish, the value of traditional processing and storage methods in distribution and the role of processed fish in ironing out seasonal fluctuations in supply. Key issues highlighted on employment were the fact that the sector provides a range of opportunities for the low skilled as well as investment opportunities for those with capital and entrepreneurial skills. Employment is said to be mainly in the informal sector and often seasonal. The important role fish mummies play in creating and sustaining employment was explained and the need for alternative employment opportunities was also mentioned. Mr Mensah rounded off his presentation by summarising the importance of the export sector to foreign exchange earnings, the fact that data on earnings does vary according to source, and how the fisheries sector contributed 230 billion cedis to GDP in 2000, approximately 4.9% of the total GDP.

A review of the supply, transformation and consumption of fish in Ghana and the key changes in the sector by Mr Ward

Following Mr Mensah's presentation Mr Ward summarised issues related to fish supply, transformation and consumption. In terms of supply, the six main sources were described as marine, Lake Volta, other inland fisheries, lagoons, aquaculture and imports. These were described in terms of types of fishing gear used, species, seasonality and key concerns. The thirteen main products produced by the post-harvest sector were described. Regional differences in product production were mentioned before major distribution flows of key products were highlighted. Factors related to fish promotion by the public and private sectors were then described followed by a summary of the main reasons why fish price varies. The reasons included seasonality of landings, type of fish species, landing time, processing method, input costs, fish quality and size. Before dealing with fish consumption Mr Ward summarised how ice is used, the use of insecticides during smoked fish storage and the causes of post-harvest losses. Participants were told that fish is still the cheapest source of animal protein and is consumed by the majority of Ghanaians from the rural poor to the urban rich.

The second part of Mr Ward's presentation focussed on the key changes which are occurring in the post-harvest sector and the impact these changes are having in terms of poverty, food security, employment, GDP and foreign exchange earnings.

Key changes with regard to supply are the decline in catch per unit effort from many fisheries, the fact that certain species are now rare and the size of fish is reducing. The introduction of community based fisheries management committees and licensing and the increasing importance of imports were also mentioned. Major changes connected to fish transformation are the:

- reduction in fuelwood supplies for smoking
- use of other fuels for smoking
- increased fresh and frozen fish distribution
- smoking activity adjacent to cold stores
- increased use of ice in some regions
- decrease in the levels of post-harvest losses
- encouragement of investment into the sector
- import country legislation becoming more stringent
- rising price of fish.

In terms of fish consumption, amongst certain stakeholder groups the quantity of fish consumed is declining. As certain preferred species are less available consumers are now eating less preferred species, frozen fish is becoming increasingly important in the diets of the rural and urban poor and marketing and consumption of tilapia is now well established. Tilapia is now a popular fish with middle and high income consumers, particularly in urban areas.

Mr Ward pointed out that without more of an understanding of poverty, food security and employment, in terms of the post-harvest sector, it was difficult to make clear statements about the impact these changes are having. Nevertheless, it was said that the changes appear to be resulting in: lower levels of income from the sector; migration of people out of fishing communities; increasing reliance on non-fisheries sources of income; fish becoming relatively expensive and less affordable to low income consumers; employment opportunities being created in the fresh and frozen distribution sectors; and a reduction in employment in fish smoking in some areas.

A review of key institutions in the post-harvest sector by Mr Bortey

Mr Bortey introduced the diversity of institutions involved in the post-harvest sector and the interventions that they have been involved in. These can be grouped under four main headings:

- public institutions
- civil society institutions
- academic institutions
- external funding agencies

The public sector involves not only development agencies such as Ministry of Food and Agriculture, but also a wide range of research, quality control, environmental protection, and cross cutting agencies such as the Ministry for Women and Children Affairs and the Department of Community Development. The civil society institutions include representative bodies within the sector, groups concerned with specific issues such as the environment, women's issues, or more general community development NGOs. Academic institutions include those providing baseline information on food security, and social and economic aspects of the sector. External agencies providing funds for the post-harvest sector include international agencies such as the World Bank, FAO and the European Union; bilateral agencies such as DFID and JICA.

The interventions of these different agencies include poverty reduction strategies; resource management and conservation; fish processing, handling and distribution; credit and inputs; income diversification; and food security and fish consumption.

Group Task 1 introduced by Mr Jock Campbell (IMM Ltd)

Mr Campbell introduced the aim of the first group task. This concerned providing feedback from the participants on the Ghana Overview. Mr Campbell emphasised the importance of participation by a diversity of people in the content of the Overview if it was to be a fair and accurate representation of the sector. He asked the participants to consider the Overview in terms of:

- its accuracy
- the level of detail and coverage
- required corrections and changes

- omissions and possible sources of additional information
- quality of report presentation and possible improvements

The participants were then split into four groups and asked to spend about 1 hour 15 minutes on addressing these issues and then report back to the main group. The findings of the groups were then presented back to the main group and their findings were summarised by Mr Ward broadly as follows:

- the Overview is a comprehensive, representative and useful guide to the sector that goes much further than other studies
- there are some areas where more detail would be useful such as on different stakeholders, especially the poor
- there are some changes, corrections and omissions that need to be addressed
- there are some data that are not included because they are not available (some additional sources of information were provided)
- the presentation would be improved with photographs and case studies

Detailed comments are recorded in Annex 3.

Closing of the day

Mr Bortey closed the day by thanking everyone for their efforts and asking Mrs Komsoon of CEWEFIA to lead the group in a prayer.

The meeting closed at 1715.

Day 2

Introduction

The meeting was opened by a prayer given by Mrs Salome Anson of Ghana Winnie Women.

Recap of the previous days work by Mr Ward

Mr Ward recapped the events from the previous day and outlined the programme for day 2.

SWOT analysis by Mr Ward

Mr Ward introduced the concept of the SWOT analysis as a tool for us to look at the sector and begin to develop ideas for interventions. Mr Ward said that the SWOT analysis would lead into a presentation by Mr Mensah on the aims of future development of the post-harvest sector. This would be followed by Mr Campbell making a presentation on where ideas for intervention might be found and then group work to “brainstorm” on intervention ideas.

Mr Ward then discussed the contents of the SWOT analysis (see Annex 4). On the strengths side he emphasised the contribution of the sector to national development objectives, especially poverty reduction and food security. It was noted that the sector also provides much employment for many people, especially the poor. He also noted the strong involvement of women in the sector, their professionalism and their collaborative working practices. The diversity of species available and the different processing methods used produces a wide range of fish products that can satisfy the needs of many groups of people. Such diversity also goes to reduce supply fluctuations and risks. It was also noted that the demand for fish locally, regionally and globally was high. Mr Ward also noted the good institutional support for the sector in government, academic and NGO areas.

During ensuing discussions participants noted that:

- *institutional diversity could also translate into a weakness if these institutions did not work together.*
- *the post-harvest sector provides a strong social bond for women and their trading activities bring important products back to the fishing communities, especially other foodstuffs. This contributes strongly to local household food security.*
- *fish markets also bring women together and strengthen linkages between them.*
- *the sector was well covered by policies and policy instruments, even if these were not fully implemented.*
- *the linkages between different parts of the sector are not always straight forward, the example was given of the contribution of anchovies contributing to foreign exchange generation by being used as bait for tuna.*

Weaknesses in the SWOT analysis included a lack of detailed understanding of poverty in the sector, limited capacity to address post-harvest issues, especially at the district government level, and weak representation of poorer workers in decision-making processes. He also noted that workers were vulnerable to seasonal, low-paid, risky and sometimes dangerous work. A key issue was seen as the declining resource base due to over-exploitation, habitat destruction and pollution. Also some post-harvest practices contributed to fish loss and that road connections reduced access to markets. Such losses also contribute to falling short of international export standards and loss of foreign exchange. In addition the price of fish for poor consumers was increasing and malnutrition in the poor was believed to be on the increase. Whilst the emphasis on foreign markets did produce benefits, it was noted that not all foreign exchange was repatriated and some benefits were lost.

During ensuing discussions participants highlighted that:

- *there are a lack of linkages and coordination between agencies in the sector and this could lead to conflict between different development strategies.*
- *whilst women worked well together they were not well represented in decision-making processes (through for instance a national-level institution) and the linkages between groups were not strong.*
- *current health and hygiene standards in retail and landing sites were not as good as they should be.*
- *taxes were being collected from the sector but not used for the development of the sector.*
- *current levels of taxation were leading to adverse changes in the industry but that recent institutional changes in the organisation of the administration of the fisheries sector should be adequate to allow these issues to be resolved.*
- *there are concerns about numeracy and literacy of workers in the sector and the lack of written record-keeping was a key issue.*
- *in some areas land scarcity for fuelwood production was a growing problem, and wider land scarcity was causing urban migration from fishing communities.*
- *there are difficulties of implementing existing laws to ensure sustainable resource use.*
- *tourism was developing and this was conflicting directly with post-harvest activities.*
- *concerning the current status of fish supply in the sector, some participants felt that supply was actually falling.*
- *there are problems of foreign exchange repatriation and it was noted that recent changes in the banking system should assist in overcoming these problems.*

- *the increase in fish prices was leading to increased malnutrition in poor consumers.*
- *that there are difficulties with the provision of credit and ensuring repayment, it was also noted that credit is sometimes provided at the wrong time of the year when it is less useful to traders and ends up being used for consumption.*
- *there are changes in the credit recovery system to increase the legal obligation to repay.*
- *the potential use of traditional social practices to ensure debt recovery.*

Mr Ward noted, however, that there were considerable opportunities in the sector. This included a wide diversity of academic and civil society skills to understand wider poverty issues that could be applied to the sector and the potential of the Ghana Poverty Reduction Strategy to guide support for poverty reduction approaches. The diversity and experience of representative bodies in fisheries generally provide a template for better representation of the post-harvest sector. He also noted that whilst stabilised fish supplies could maintain current contributions of the sector to the economy, increases in supply were possible through better resource management, use of under-exploited resources, habitat restoration, aquaculture expansion and increased fish imports. A strong infrastructure development programme in the country also provided opportunities for linking post-harvest infrastructure needs to this. It was recognised that there was also a widespread global knowledge of post-harvest technical issues, sustainable fuelwood production, and alternative livelihoods that could be tapped by the sector. Whilst access to some international markets was difficult, regional markets provided options for expansion.

During discussions participants felt that:

- *networking between women in the sector also provided opportunities for the development of future collaborative work.*
- *the extensive experience in rural banking and the knowledge of the sector could be combined to provide a more post-harvest focused lending institution.*

Mr Ward noted that there were also threats that faced the future of the sector. These included further decline in fish supplies and a spiral of increasing poverty for some involved. It was likely that this would be, in part, fuelled by continued migration in to the sector by those displaced from other sectors. Once in fisheries there were few viable alternatives for those wishing to leave or wishing to diversify their livelihoods into other areas. Reductions in the supply of fish, combined with increasing demand, is also likely to further reduce the food security of poor consumers. He noted that decreasing availability of fuelwood was also likely to threaten the livelihoods of traditional processors, and increase the cost of producing traditional products thus further threatening food security of poor consumers. Whilst imports of fish can stabilise supplies they may threaten local producer prices. Participants also noted that there was a low budgetary allocation for research in post-harvest issues and thus solutions to many problems were not being found.

During discussions participants felt that:

- *international trade legislation was biased against Ghana.*
- *tourism was seen as a growing threat to coastal communities.*
- *if aquaculture developed further it could further reduce the availability of cheap fish (which might be used for fish feed) for poor consumers.*
- *the increasing expansion of fishing capacity combined with the use of illegal fishing gear was seen as a major threat to the sustainability of the sector.*
- *there is an increasing threat of conflict between industrial and small-scale fishers.*
- *there were real gaps in knowledge about the sector and it was felt that there was also low budgetary support for research in post-harvest issues.*

In summary Mr Ward noted that the participants agreed with the main points of the analysis and had added some valuable issues and clarified others. These additions have been included in the description of the SWOT analysis in Annex 5.

The post-harvest sector and national development objectives by Mr Mensah

Mr Mensah summarised some key problems in the fisheries sector and presented some of the intervention areas that government is currently engaged in to address these issues. He noted that the participation of the community was being encouraged through such initiatives as co-management where the roles and responsibilities for making management decisions and enforcement of those decisions is shared with communities.

He pointed out that the main objective of Government in respect of the post-harvest sector is the reduction of post-harvest losses and the storage of excesses to ensure food security. He noted that current strategies involve ensuring improved fish quality, better landing sites, adopting international standards of fish quality, the development of new products, compliance with EU standards for export, the use of fish boxes in the artisanal sector, credit provision for fish processors and traders, and improved employment opportunities especially in the lean season.

The discussion from the participants focussed on the:

- need for a representative body for the post-harvest fisheries sector
- greater integration of the post-harvest sector in the community resources management committees
- existence of conflict in the sector, not only at sea, but also on the beaches
- sanitation problems of beaches and markets
- issues concerned with the enforcement of laws in the sector

- need for better linkages between the post-harvest sector, community health workers and the district assembly
- concerns about the legal status of some by-laws developed by communities
- concerns about the level of Government resources to implement enforcement
- issues to do with credit delivery and poor debt recovery
- potential for using traditional institutions to enforce loan recovery
- need to move away from problem identification towards solutions
- recognition that the decline of the harvesting side is central to the post-harvest sector
- need for a national workshop to discuss problems in detail and decide on appropriate solutions.

Developing Options for Change by Mr Campbell

Mr Campbell followed up on the point from the last discussion on the need to move forward and start to address solutions. It was recognised that a meeting like this could not find answers to all the problems but it could begin the process. Crucial to that process was participation by all people in the sector and the workshop participants were a good cross-section of the industry who would have a diversity of ideas. He also mentioned that the Government should not be expected to address all of these problems in isolation and that there is a need for improved partnerships between government, the community, private sector, NGOs and academics to identify and implement change. Mr Campbell then went on to explain the second group task aimed at “brainstorming” solutions to the weaknesses and threats identified in the SWOT analysis. He then provided guidance on areas where inspiration for ideas might come from. These included:

- The Code of Conduct for Responsible Fisheries
- What has worked well in fisheries in other countries
- What has worked previously or elsewhere in fisheries in Ghana
- What has worked well in other sectors
- The coping and adaptive strategies of the people in the sector

Group Task 2 introduced by Mr Campbell

Mr Campbell then asked the groups identified the previous day to form and to review weaknesses or threats in the light of the available strengths and opportunities in the sector, with a view to coming up with intervention ideas that a range of institutions could use to address the issues faced by the sector. The participants were then split into four groups and asked to spend about 1 hour 30 minutes addressing these issues and then report back to the

main group. The findings of the groups were then presented back to the main group and their findings covered a diversity of technical, socio-economic and institutional intervention ideas. Annex 6 provides the complete list of ideas.

Mr Campbell then summarised the feedback by saying that many of the problems identified in the SWOT analysis seemed to have straightforward solutions and in many cases the laws, policy and other mechanisms were in place but the detail of how to implement these mechanisms was not. It was noted that a meeting of this duration could only begin to touch on the complexity of addressing this issue and much more discussion was needed to get down to the detail of implementation. He noted the task of addressing all these issues could not be done by any one institution and that partnerships were a vital part. Partnerships with the community would depend on building up their capacity in terms of skills, awareness, knowledge and empowerment to effectively participate. There was also a need for stronger partnerships across sectors and between the centre and the District Assemblies. Regional trade and climate change also made international partnerships important.

Closing remarks

Mr Ward restated the aims of the workshop: the validation of the draft GPHO and development of foundations for intervention. He emphasised the fact that these objectives were met and summarised the findings of the group work on both days of the workshop and that this had provided very positive outcomes which the project would learn from. Mr Ward said that the workshop had given the project the capacity to finalise the GPHO and plan the next stage of the project. He then thanked CSIR for allowing the use of their facilities, Mrs Gladys Nerquaye-Tetteh for chairing the sessions, Mr Alabi Bortey for organising the workshop and contributing directly to many of the sessions, Mr Emmanuel Mensah for providing various perspectives of the sector, Mr Quaynor for providing the Directorate of Fisheries' welcome speech, and the other DoF staff who had helped with workshop preparation.

The Chairperson, Mrs Gladys Nerquaye-Tetteh, then thanked IMM for arranging the workshop, and Mrs Doris Yeboah then formally thanked all the participants for their efforts and commitment at the workshop and said how useful the workshop had been in looking at the post-harvest sector. The meeting was closed with a prayer by Mrs Matilda Bahu of Adabaraka Fish Mongers.

Annex 1: Agenda of the Workshop

DAY1

TIME	ACTIVITY	FACILITATOR
08.30 – 09.00	Registration	
09.25	Opening Prayer	
09.30	Chairperson Introduction	Joana Akrofi
	Chairperson Opening Remarks	
09.35	Welcome Address	Directorate of Fisheries
09.40	Self introductions, Introduction to Workshop Objectives and Project Recap	AB
09.50	Development of the Post Harvest Overview – How, What, Who, Where.	AW
10.15	Summary of GPHO	AW/AB/EM
10.45	Break	
11.00	Summary of the GPHO	AW/AB/EM
11.30	Working Groups prepare feedback on the GPHO draft	JC intro
12.30	Lunch	
13.30	Working Groups prepare feedback on the GPHO draft.	
15.00	Break	
15.15	Group Presentations and discussion	JC
16.45	Day 1 closing remarks	DoF

DAY2

TIME	ACTIVITY	FACILITATOR
09.00	Recap Day 1	AB
09.15	SWOT analysis and discussion	AW
10.45	Break	
11.30	The Post Harvest Sector and Meeting National Development Objectives	Mr Mensah, Directorate of Fisheries
12.00	Developing Options for Change	JC
12.30	Lunch	
13.30	Working group task.	JC
15.00	Group feedback and discussion.	JC
15.30	Break	
15.45	Group feedback and discussion.	DoF
16.30	Closing Remarks & Workshop close	DoF

Annex 2: List of Participants and Contact Details

Name	Designation/Organization	Postal Address	Telephone / fax	Email
Samson Mahu	National Inland Canoe Fishermen Council	PO Box 01699, Osu, Accra	27510610, 027 7410761	
Victoria Churchill Koomson	Central and Western Fishmongers Improvement Association (CEWEFIA)	PO Box EL25, Elmina	042 32310, 36025, 024 278377	cewefia@yahoo.com
Joana D Akrofi	Directorate of Fisheries	PO Box 630, Accra	776071, 0208118207	jakrofi@yahoo.com
Doris Yeboah	Directorate of Fisheries	PO Box 630, Accra	776071/2 776005	Fax: ncusflp@ghana.com
David Eli	Technical Services for Community Development (TESCOD)	PO Box DS 1469, Dansoman AR, Accra	308146	tescod2@yahoo.com
Lydia Sasu	Development Action Association (DAA)	PO Box 10479, Accra North	315894	daa@africaonline.com.gh
George Awudi	Friends of the Earth, Ghana	PMB GPO, Accra	512311-2	foeghana@africaonline.com.gh
Alabi Bortey	Assistant Director, Operations Officer Sustainable Fisheries Livelihoods Programme (SFLP), Directorate of Fisheries	PO Box 630, Accra	776071-2	ncusflp@ghana.com
Gladys Nerquaye-Tetteh	Senior Research Scientist	Box M20, Food Research Institute, Accra	502884; 500470	

Alhaji Jallow	Senior Fisheries Officer, Food and Agriculture Organization Regional Office for Africa	Box GP 1628, Accra	675000, ext 3193, fax 668427	Alhaji.Jallow@fao.org
Emmanuel Mantey Mensah	Head of Marine Fisheries Management Division, Directorate of Fisheries	PO Box 630, Accra	776071-2	
George Hutchful	Deputy Director, Directorate of Fisheries	PO Box 630, Accra	776005	georgeh7@hotmail.com
Mrs Salome Anson	Ghana Winnie Women (GWW)	UPCI Box 7455 Accra North, Accra	310039	
Nii Abeo Kyerekuanda	Executive Secretary, Ghana National Canoe Fishermens Council	Box 14867, Accra	662873	
Comfort Addo	Development Action Association (DAA)	PO Box 10479, Accra	315894	daa@africaonline.com.gh
Kow Tetteh	NICFC/Volta lake Islands	Zonal secretariat, Tapa Abotoase		-
Matilda Bahu	Adabaraka Market Fish Mongers		245617	-
E N Aryee	RDO(F) - GAR, RADU - GAR	CO 160 Tema	022 202327	-
Matilda Quist	SMS (F) - DADU GAR	CO 160 Tema	022 20237	-

Richmond Quartey	AFO, MFRD	Box BT 62 Tema		-
Hawa B Yaqub	FA, MFRD	Box BT 62 Tema		-
A Y Sabah	RDO(F) - C/R, MOFA	Box 507, Cape Coast	042 32998/32557	-
L I Braimah	Head Fisheries, Volta Lake Fisheries	PO Box 4, Yeji		-
Joseph Yeboah	AFO, MCSD	PO Box 630, Accra		-
L A Kumah	RDO (F) Ashanti, MOFA	PO Box 3820, Kumasi	051 - 29896 / 29881, fax 26358	-
Nana K Condua	Chief Fisherman, GNCFC, Abuesi	Abuesi, Western Region		-
Forgive Kwashie	Fish Processor, Tema U Compound	U Compound Tema New Town		-
Charity Gakpo	Fish Processor, Tema U Compound	U Compound Tema New Town		-
D Quaynor	DDF, DoF	PO Box 630, Accra	772997/020 8160820	-

T K Insaidoo	RDO Fisheries, MOFA	Box 309, Takoradi	031 31211/46867	-
Peter Dadson	Executive, National Fishermens Association of Ghana		020 8150820	-
Carl Fiati	Senior Programme Officer, Environmental Protection Agency	Box M326	664697/8	cfiati@epaghana.org , cfiati@hotmail.com
R O A Osae	M D Liwon Enterprises Ltd	PMB C1 Tema		-
Francis Akorlor	RDO Volta Region, MOFA	Box HP 165 Ho	091 26585 / 28871	-
Mary Forfoe	Fish Processor, Tema U Compound	U Compound Tema New Town		-
J Ayettey	Assist Agricultural Economist, SRID	Box M37, MOFA, Accra		-
C E Frompong	Senior scientific Officer, Ghana Standards Board	PO Box MB 245, Accra	500065/66	-
Jock Campbell	Integrated Marine Management Ltd	The Innovation Centre, University of Exeter, Rennes Drive, Exeter, EX4 4RN, UK	Tel: +(0)1392434143, 262355 Fax: +(0)1392 433645	J.Campbell-IMM@exeter.ac.uk
Ansen Ward	Integrated Marine Management Ltd	The Innovation Centre, University of Exeter, Rennes Drive, Exeter, EX4 4RN, UK	Tel: +(0)1392434143, 262355 Fax: +(0)1392 433645	A.Ward-IMM@exeter.ac.uk

Annex 3: Group Findings from Task 1 – Feedback on the Overview

TASK 1: FEEDBACK ON THE DRAFT GHANA POST HARVEST FISHERIES OVERVIEW

AIM:

Drawing on the wide range of experience and knowledge of participants, this working group task is designed to capture participants thoughts and comments on the draft Ghana Post Harvest Overview document. The results of the task will be used during the finalisation of the Overview. .

ACTIVITY:

As a group discuss the answer to each of the 5 questions below. Spend no more than 20 minutes on each question and please record the key points from your discussion on a flip chart. Each group should nominate a spokesperson and note taker. The spokesperson should prepare to present the group results in a plenary.

1. Do you think the document is a true representation of the post-harvest fishery sector – if not why not?
2. Are there any aspects of the document or of the sector mentioned in the draft Overview that require more detail, if so what are these?
3. What corrections are required in terms of the information presented?
4. a) What information is missing from the document that would be helpful for end users?
b) In what reports, documents or from whom would this information be available?
5. In terms of the presentation of information, how could this be improved?

Timing:

15mins introduction

100 mins group work (20 mins per question)

Each group presentation 20 mins including discussion

Groups may be asked to make a presentation on just one question or all. And should be prepared for the latter.

Task 1 - Participants Feedback on the draft Ghana Post Harvest Overview

1. Do you think the document is a true representation of the post-harvest fishery sector – if not why not?

A good document and good representation of the sector. Not too technical.

Good start in documenting facts and broad issues on ph sector. More comprehensive than anything else published on sector. Nevertheless there is scope for improvement – see below.

2. Are there any aspects of the document or of the sector mentioned in the draft Overview that require more detail, if so what are these?

a) The role of women and children in the sector is not highlighted enough. A relevant case study would highlight these issues more strongly.

b) Cross border trade and management

c) A clear definition of fish mummies and mongers.

d) Per capita consumption should be broken down to:

Inland 3.7 kg

Marine 20-25kg

e) Volta lake p15 shows increases in production and then text highlights a decline this needs explaining.

f) P25 live catfish on domestic market needs to be explained – does this occur? (clarify)

g) Include references in text

h) Links between health sector incl policies and post harvest sector.

i) Causes of changes not adequately captured

j) Marketing information services not captured

k) No mention of stevedoring from the industrial sector

l) Impact of interventions not adequately covered

m) Information on cold store locations and capacities

n) Lagoons contribute to coastal marine production e.g in beach seine operations.

o) Market list to include;

Agbogbloshi G Accra

Sakamaman G Accra

Engleshi amanfro G Accra

These are fresh fish markets.

p) More accurate figure for the Volta lake production figure is required Tab 7

q) Ghana Export Promotion Council mentioned as involved in promotion.

r) P40 – is the change in the impact of both forex and employment positive or negative?

3. What corrections are required in terms of the information presented?

p8 – last sentence under poverty & environmental degradationaccess to fuelwood is not a major cause of deforestation.

p6 – poverty in Ghana come before PH fisheries and poverty reduction.

P11 1st line shd read – fish is expected to contribute about 60% of protein intake

P42 – para 3 last sentence not correct

P49 – Yeji project income generating activities – ceramics, snail farming, mushroom cultivation, soap and cosmetics, tie dye, batik, woodlot, orchard development

On poverty mention that certain categories of women e.g. fish traders are far richer so don't mention only poor women (e.g. classify different types of women in terms of poverty)

P 26 inshore fisheries fish not frozen

P31 para 4 – quality with species not only processing method.

Inland fisheries overexploitation is in relation to Volta lake and lagoons not rivers, dug-outs and reservoirs (these are underexploited)

Disparities in import values, there is a need to involve CEPS and the agencies to collaborate on this.

Another issue affecting price is the way in which women pack and present their wares.

Due to inexhaustible list of credit providers they should be catergorised into groups.

Resmoking is due more to the need to extend the shelf life of fish rather than shortage of fish due to varying market days.

Explain cow dung usage for smoking fish

Single chamber chorkor rather than half chorkor.

P15 discrepancies in Table 6&7.

4.

a) What information is missing from the document that would be helpful for end users?

Transshipment of catches by local fishers depriving people who invest into fishing expeditions of expected incomes.

Problems relating to storage that affect quality of product e.g power outage
Document should be able to determine the contribution of the ph sector to national poverty
Amount of fuelwood used per annum
GNPC, CEDECON, FFAD are organizations which also did work on gas for smoking before GRATIS.
When did the premix committee come under the office of the president?
Fuel is not only determinant of price so need to broaden to cover other inputs which affect price.
P46 IDAF project focus was on improvement of living standards of fisheries folks (e.g. alternative income generation)

Additional Institutions

P44 Academic – KNUST – renewable natural resources, UDS – Tamale (clarify)
UoG – Dept Oceanography and Fisheries, Dept of Zoology
WIAFAD (clarify)
BoG – Bank of Ghana
GNPC – Ghana National Petroleum Corporation
CEPS – Customs Excise Preventative Service
CEDECON – Central Regional Development Corporation
FFHC/AD – Freedom From Hunger Campaign / Action for Development
Home Science Department of UoG

b) In what reports, documents or from whom would this information be available?

Contact:

Irene Odotei – World Bank project socio-economic reports

Ellen Borteye-Doku - ISSER

TESCOD – document on fish mummies

Full Frame survey – Lake Volta from DoF

P 46 Improving financial services for renewable natural resource development in Ghana (UoG, Univer Reading, DFID 1996)

Premix secretariat.

5. In terms of the presentation of information, how could this be improved?

Update data – e.g. cold store data p25

Include pictures

Analysis of poverty within sector should be part of the current situation

Charts

Graphics

Annex 4: SWOT analysis

SWOT DIAGRAM OF THE GHANA POST-HARVEST FISHERIES SECTOR

STRENGTHS

- Provides a diversity of employment opportunities for many people including the poor
- Low barriers to entry, low skill and labour intensive thus providing opportunities for the poor
- Provides livelihood options for women
- Major contributor to food security in all parts of the country
- Significant contributor to foreign exchange and GDP
- Diversity of species providing many employment options in harvesting, processing and trade
- Diversity of species and harvesting methods provide alternative harvesting strategies
- Numerous sources of supply reducing supply risks
- Diversity of processing methods to meet market needs and reduce supply fluctuations
- Efficient marketing and distribution system, and entrepreneurial professionalism in the p-h sector
- Innovative approaches to sector difficulties
- Post-harvest work promotes networking and partnerships for efficient work
- High demand for fish locally, regionally and internationally
- Dried pelagics provide all-year cheap food for poor consumers
- Good institutional support for the sector in research and development
- Multitude of governance mechanisms for the sector

OPPORTUNITIES

- A diversity of academic and civil society skills to understand poverty in the post-harvest sector
- The potential of the p-h sector to contribute more to poverty reduction by being more fully and explicitly incorporated into the Ghana Poverty Reduction Strategy
- Stabilised fish supplies could maintain current employment, income and food security for many poor people
- Fish supplies can be increased through improved resource management, expanded exploitation of under-utilised stocks, habitat restoration, aquaculture expansion, stocking and increased imports of cheap fish
- The potential to benefit from existing infrastructure policy on feeder road development by raising the profile of p-h needs
- Considerable experience in sustainable fuelwood production that can be tapped for fish smoking
- Considerable local, regional and global experience in improving fish processing, handling and storage methods to improve fish quality and working conditions that can be considered for wider use locally
- Emerging local, regional and global knowledge and experience in alternative income opportunities that could be applied to the p-h sector
- Expanding local, regional and global markets for fish products with varying access requirements willing to pay good prices
- The potential to capture greater fiscal benefits from exports
- Good experience of representative bodies in fisheries that could be translated into similar mechanisms for increasing the involvement of the poor in the sector

WEAKNESSES

- Involvement of the poor as workers and consumers in the sector not well understood
- Employment tends to be seasonal
- Employment for many is low paid and unhealthy
- Much of the work is outside the formal sector
- Not all forex is repatriated, imported production inputs are increasing in cost
- Fish supply static due to over-exploitation of resources, and habitat destruction and pollution of aquatic environment
- Unpredictability of supply due to fluctuations in some fish stocks and seasonality of supply not matched to demand
- Limited representation of poorer p-h workers in the decision making processes
- Local government support to the sector is weak in some areas
- Poor road access to some sites
- Some processing, storage and handling practices generate losses in product and product value
- Fish smoking contributes to deforestation and tree biodiversity loss
- Increasing price of fish for poor consumers
- Institutional capacity to deal with poverty in the p-h sector is low
- Vulnerability of export products to foreign quality controls

THREATS

- Future decline in supplies of fish as a result of over-exploitation, habitat destruction, and pollution
- Downward spiral of resource degradation leading to greater poverty
- Increasing migration into the p-h sector further reducing incomes
- Poor people forced to remain in the sector due to a lack of viable alternative livelihood options for people wishing to leave or diversify incomes
- Food security of the poor decreasing as fish prices rise
- Forex loss if fish quality and quantities fall
- Income loss due to the vagaries of world fish prices
- Supply shortages reducing the ability of exporters to satisfy continuity of supply requirements of foreign markets
- Fish smoking becoming more difficult and expensive if fuelwood supplies decline
- Changes in demand for certain types of processed fish may threaten livelihoods of traditional processors
- Increased imports and fish from aquaculture decreasing price of domestic caught fish

Annex 5: SWOT ANALYSIS DESCRIPTION

An analysis of the post-harvest sector of Ghana, looking at the Strengths, Weaknesses, Opportunities and Threats (SWOT analysis) reveals critical elements about the sector. This is outlined below.

Strengths of the sector

The post-harvest sector's contribution to achievement of national development objectives, especially to employment, poverty reduction and food security, is significant. Employment caters for a wide diversity of people in different jobs; many of the jobs have low entry requirements in terms of capital and skills and are labour intensive. This provides employment for many poor people. There is also strong involvement of women in the post-harvest sector balancing the male dominance of the harvesting sector. Many of the women have high levels of professionalism and their collaborative working practices provide for division of labour and economies of scale, and creates strong social bonds. The extensive trading practices of the women not only foster links between them, but also bring them into contact with women from other food commodity post-harvest sectors from different parts of the country. Food purchased at distant markets increases food diversity and security back in their home villages.

The diversity of species available and the different processing methods used produces a wide range of fish products that can satisfy the needs of many groups of people. Such diversity also goes to reduce supply fluctuations and risks. The diversity of species supplied also fosters inter-linkages within the sector e.g. anchovies are used for bait in the tuna fishery and thus indirectly contribute to export earnings.

There is high and increasing demand for fish locally, regionally and globally providing a range of outlets for products and reducing market risks. Whilst fish generally plays a key role in food security in all parts of the country, some fish play a specific role in food security of poor consumers e.g. smoked and dried pelagics provide all-year cheap food for poor consumers.

The sector is provided with good institutional support in the areas of research and development and is provided with an extensive framework of policies and laws. There are also a range of institutions concerned with governance in the sector.

Weaknesses of the sector

Whilst poverty is well understood in Ghana generally, there is a lack of detailed understanding of poverty in the post-harvest sector, both in terms of those employed within the sector and poor consumers of fish. There is also limited capacity to deal with poverty-related issues within the sector. At the district government level, there is also limited capacity to understand and address post-harvest issues more generally.

Although there is a diversity of governance mechanisms in the sector these have not translated into good representation of the poorer post-harvest workers in decision-making processes. Whilst women in the sector work well

together the linkages between groups were not strong and do not translate into a coordinated national body.

Whilst there are many institutions that are concerned with the post-harvest sector (from the perspective of fuelwood management, trade, fishing, poverty) coordination between them is not always as well developed as it might be and policy conflicts can exist.

Although the sector provides much employment for the poor, this is often seasonal, low-paid, risky and sometimes dangerous or unhealthy work. Where people wish to leave the sector there are few viable and sustainable alternatives that offer a better livelihood and so they remain stuck in the sector.

Much of this work is also outside of the formal sector and the benefits to the wider economy are not fully understood, captured in the statistics or well documented. Limited numeracy and literacy of workers in the sector also affects the production of written record-keeping that might facilitate better understanding of the sector.

Development in the post-harvest sector is, in part, constrained by a lack of investment capital. This is closely linked to credit availability and use. There have been major difficulties with ensuring repayment of loans made by the formal sector to people in the post-harvest sector with the result that there is now considerable resistance to lending. Repayment difficulties are compounded if credit is provided at the wrong time of the year when it is less useful to traders and ends up being used for consumption.

A key weakness of the sector is the declining resource base due to over-exploitation, habitat destruction and pollution of the aquatic environment. Whilst laws and regulations exist to deal with these issues there are real problems with enforcing them over many landing sites and environments. These problems mean that supplies to the sector are static, and for some types of fish, are declining. Supply difficulties are compounded by the unpredictability of supply resulting from fluctuations in stock abundance of some species and because of the seasonality of supply not being matched to market demand. Sector-specific taxation is also reported to be causing changes in fish landing practices that are affecting access to fish by encouraging the movement of fish further outside the formal sector.

Supply difficulties are further affected by fish loss from poor post-harvest practices and difficult market access for some traders. Low levels of sanitation and unhygienic practices at the beach and at the markets further reduce benefit flows from the sector as a result of product quality loss. In many parts of the country poor feeder road access limits the movement of fish to markets, especially during the wet season. Such losses also contribute to products falling short of international export standards with the resultant loss of foreign exchange. In addition the price of fish for poor consumers is increasing and malnutrition in the poor is believed to be on the increase. Whilst the emphasis on foreign markets does produce benefits, not all foreign exchange is repatriated and some benefits of foreign exchange generation are lost to the wider economy.

Much of the fish landed is converted into smoked fish and this uses substantial quantities of fuelwood. This contributes to deforestation and, to an extent, to local biodiversity loss where particular species are targeted. Traditionally processors gathered fuelwood from local lands but much of this is being converted to other purposes and fuelwood availability is falling. This is linked to wider land scarcity issues generated by encroaching industries such as tourism, that were contributing to urban migration from the fishing communities.

Opportunities for the sector

Although little is understood about poverty in the post-harvest sector there is a wide diversity of academic and civil society skills that understands wider poverty issues and this could be applied to the sector to increase understanding of post-harvest poverty. In addition the Ghana Poverty Reduction Strategy provides a valuable framework for addressing poverty that could be directly applied to poverty in the post-harvest sector and to guide support for poverty reduction approaches.

The diversity and experience of representative bodies in fisheries generally can provide a template for better representation of stakeholders in the post-harvest sector in the future. In addition the existing networking and linkages between women in the sector could be built upon to create a more formal institution for their representation.

Stabilisation of fish supplies at current levels does offer the opportunity of maintaining current contributions of the sector to the economy. In addition, increases in supply are possible through better resource management, use of under-exploited resources, habitat restoration, aquaculture expansion and increased fish imports. These could increase the opportunities for food security for poor consumers and employment for poor workers. Existing legislation offers a framework for this to be done and greater use of community structures and processes offers the potential to enhance enforcement.

Feeder road constraints to market access, whilst a significant problem, can be incorporated into the existing infrastructure development programme in the country if the importance and benefits of such developments can be shown.

Many of the specific issues faced by the sector in Ghana are common to other countries and there is a widespread local, regional and global knowledge of post-harvest technical issues, sustainable fuelwood production, and alternative livelihoods that could be tapped into by the sector. The extensive experience in rural banking and the good knowledge of the sector could be combined to provide a specific post-harvest focused lending institution designed to address the particular needs of the sector. There is also scope for incorporating traditional community-level systems for improving the management of credit.

Whilst access to some international markets was difficult, other international, regional and local markets provided options for expansion.

Threats facing the sector

The main threat to the continued contribution of the sector to the achievement of national development objectives is that of decreasing supplies of fish as a result of further over-exploitation, habitat destruction and pollution. This is likely to contribute to a spiral of increasing poverty for some involved that will stimulate them to further add to environmental problems. Increasing conflict between industrial and small-scale fishers is likely to arise as a result of this. The downward spiral is also likely to be fuelled by continued migration into the sector by those displaced from other sectors. Once in fisheries there are few viable alternatives for those wishing to leave or wishing to diversify their livelihoods into other areas.

Reductions in the supply of fish, combined with increasing demand, is also likely to further reduce the food security of poor consumers. Decreasing availability of fuelwood is also likely to threaten the livelihoods of traditional processors, and increase the cost of producing traditional products thus further threatening food security of poor consumers. Whilst imports of fish and further aquaculture development can help to stabilise supplies they may also threaten local producer prices. In addition the demand for cheap fish for aquaculture feed may also further reduce the availability of cheap fish for the poor consumers.

Although the capacity exists to generate much new knowledge about the sector, low budgetary allocation for research in post-harvest issues is likely to limit this in the future.

Annex 6: Task 2 Results – Intervention Ideas Generated by Participants

Weaknesses

1. Involvement of the poor as workers and consumers in the sector not well understood

Conduct research studies on the involvement of the poor in the post-harvest sector

2. Employment tends to be seasonal

Introduce alternative livelihoods for both sexes in the sector e.g. aquaculture, fish imports, undertake woodlot cultivation, bee-keeping, mushroom farming, handicrafts making, cosmetics and batik making, vegetable cultivation etc, during the off-season

Provide continuous supply of fish from other sources e.g. frozen imports, aquaculture production

3. Employment for many is low paid and unhealthy

Improve sanitation at landing sites

Increase access to capital to prevent eroding of profits through high interest on credit

Training in alternative economic activities and credit to undertake these activities

Encourage the education of fisherfolk children

4. Much of the work is outside the formal sector

Organise stakeholders into groups using NGOs at local regional and national levels

Fisherfolk to be encouraged to form co-operatives and to work under a common umbrella

5. Not all forex is repatriated, imported production inputs are increasing in cost

Laws on repatriation should be enforced

Stakeholder groups should organise funds to import directly

Premix fund (bank)

Effective monitoring and regulation of earnings from fish exports

6. Fish supply static due to over-exploitation of resources, and habitat destruction and pollution of aquatic environment

Regulations and by-laws on the exploitation of fisheries resources should be enforced (Act 625)

Develop and implement sound fisheries resource management policies

Effective monitoring of fishing grounds

7. Unpredictability of supply due to fluctuations in some fish stocks and seasonality of supply not matched to demand

Store excess during major season

Import frozen fish

Encourage aquaculture

8. Limited representation of poorer p-h workers in the decision making processes

Improve credit awareness and organise poor post-harvest workers

Identification and mobilisation for empowerment of the poorer post-harvest workers

The involvement of participants in the sector in policy making and implementation at all levels

9. Local government support to the sector is weak in some areas

Create awareness and advocacy for District Assemblies to pay attention to and support the sector

Give representation to stakeholders

Identification and mobilisation for empowerment of the poorer post-harvest workers

The involvement of participants in the sector in policy making and implementation at all levels

10. Poor road access to some sites

DA and central government should improve access roads

Develop strong lobby and advocacy capabilities to demand extension of the road networks to all sites

11. Some processing, storage and handling practices generate losses in product and product value

Educate and introduce improved handling and processing methods

FLAC awareness and education

Improve handling, processing and storage infrastructure e.g. ice making plants and insulated refrigerated containers close to landing communities

Educate on improved processing, storage and handling techniques

12. Fish smoking contributes to deforestation and tree biodiversity loss

Creation of woodlots

Landowners should be encouraged to go into fuelwood production

Consider sawdust, coconut husk, etc as alternatives

Testing the use of LPG

Encourage the use of the Chorkor smoker

Promote the use of energy efficient smoking technologies

13. Increasing price of fish for poor consumers

Improve the standard of the living of the poor

Introduce other sources of cheaper protein

14. Institutional capacity to deal with poverty in the p-h sector is low

Build capacity

15. Vulnerability of export products to foreign quality controls

Strive to meet the standards

Improve local standards

Encourage sub-regional and regional trade

Threats

1. Future decline in supplies of fish as a result of over-exploitation, habitat destruction, and pollution

Natural resource management

Enforcement of fisheries laws and regulations e.g. mesh size, control light fishing and use of bamboo

Sustained education of fishers e.g. biology of fisheries and regulations

Implement fisheries management plans

Involvement of the communities in the management of the resources e.g. SFLP experiences

Enhance MCS activities at sea and on lakes

Station MCS staff on the Volta Lake

Involve locals in MCS operations and ultimately divest MCS operations to the locals

Regulate entry into the fisheries through licensing

Use of energy saving methods in fish processing

Check chemicals etc. used in fishing

Regulate charcoal burning on Lake Volta

Introduce alternative sources of energy for domestic uses and fish processing e.g. LPG

Tree cover restoration e.g. woodlots

Check activities of trawlers, beach seiners etc which destroy fish habitats

Empower local authorities to enforce by-laws

Recommendations in the FMP on over-exploitation by industrial vessels should be enforced

Intensified education

Non-fishing in the 30m zone by industrial vessels

Enforce regulations on discharges into the aquatic environment

2. Downward spiral of resource degradation leading to greater poverty

Increasing migration into the p-h sector further reducing incomes

Responsible and sustainable exploitation

3. Poor people forced to remain in the sector due to a lack of viable alternative livelihood options for people wishing to leave or diversify incomes

Formal education promotion

Vocational skills development e.g. masonry, carpentry

Promotion of income generating activities e.g. salt mining, poultry, agroforestry etc.

Promotion of population control methods

Establish a fisheries revolving loan scheme

4. Food security of the poor decreasing as fish prices rise

Promote household rearing of livestock, snail and other sources of protein

Promotion of good storage practices to ensure longer shelf life

Access road provision

Train processors to adopt HACCP and other quality standards

Promote purchase of quality fish locally

Create awareness on quality fish processing

Educate traditional processors in changes in market preferences

Restrict fish imports to lean fish season

There should be coastal area management approach and integrated development strategy (tourism)

Increase budget allocation for data collection, research etc.

On Volta Lake use trees which are not easy to use for charcoal for reforestation e.g. teak

Sustainable management of resources

Take steps to improve production from lagoons and rivers

Vigorously promote aquaculture

5. Forex loss if fish quality and quantities fall

Education and training on quality control

6. Income loss due to the vagaries of world fish prices

Explore regional and sub-regional markets

7. Supply shortages reducing the ability of exporters to satisfy continuity of supply requirements of foreign markets

Responsible fisheries utilisation

8. Fish smoking becoming more difficult and expensive if fuelwood supplies decline

Develop more wood lots in fishing communities/ gas stoves/ chorkor ovens

9. Changes in demand for certain types of processed fish may threaten livelihoods of traditional processors

Education on new processing techniques

10. Increased imports and fish from aquaculture decreasing price of domestic caught fish

Enforce government policy on fish importation