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Flavouring Fish into Food Security

A Preliminary Assessment of the Integration of Fisheries and
Aquaculture into Food and Nutrition Policy Frameworks of
East and South Africa and Indian Ocean Countries

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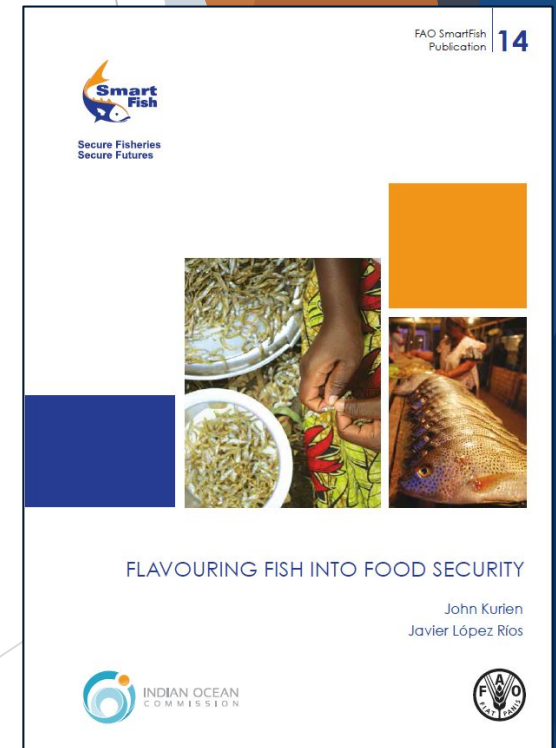


Objective of the study and coverage

- ▶ Preliminary assessment of the level and nature of integration of fisheries and aquaculture in food security/nutrition policies, strategies and plans.
- ▶ 20 countries of the ESA-IO region:



- Burundi
- Comoros
- Djibouti
- Dem. R. Congo
- Eritrea
- Ethiopia
- Kenya
- Madagascar
- Malawi
- Mauritius
- Rwanda
- Seychelles
- Somalia
- South Sudan
- Sudan
- Swaziland
- Tanzania
- Uganda
- Zambia
- Zimbabwe

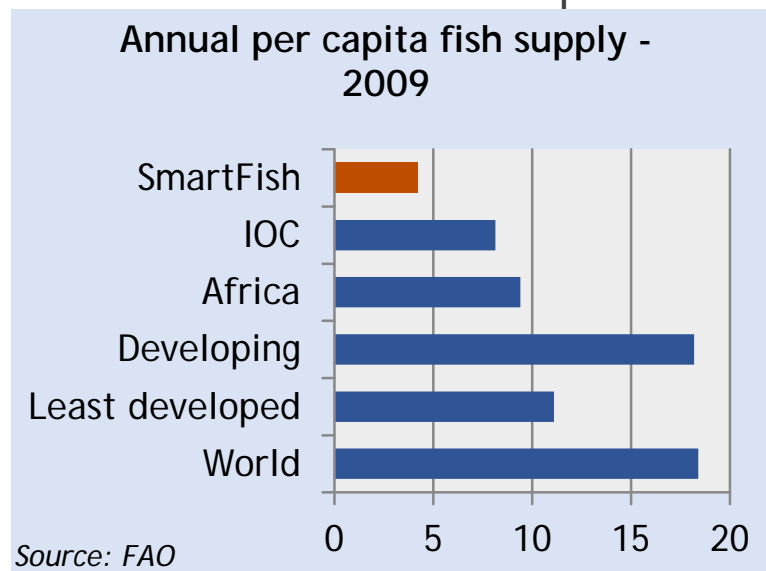




Background to the study



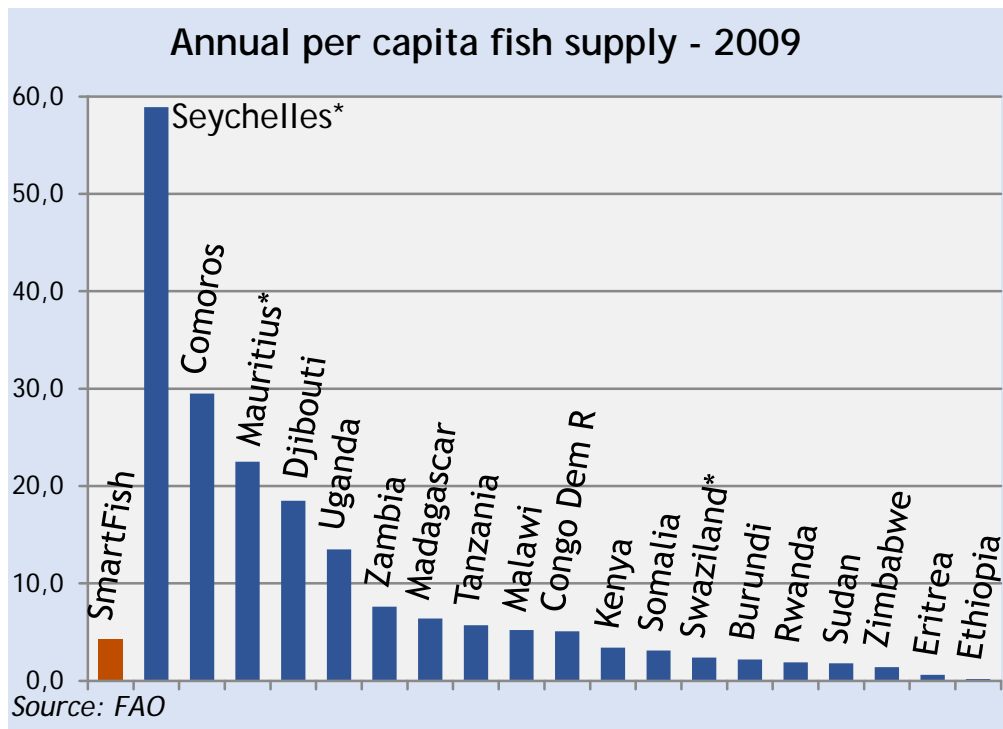
- ▶ High level of undernourishment in the region, affecting one of every four Africans (2008).
- ▶ Food security is affected both directly and indirectly, with low increase of food supply and not fast enough pace of poverty reduction.
- ▶ Countries in the ESA-IO region count with large aquatic resources (both coastal and inland), providing potential for further expansion
- ▶ The region has one of the lowest fish consumption of the world:



- ▶ Enhancing food security is a pillar for sustainable human development, and this leads to higher food security.
- ▶ Policy making is “terrestrial”, centred on cereals, pulses and meats. Fish and its role is not always recognised - *often a policy blind spot*.

Importance of fish at a national level

- ▶ In some countries, fish seems to have almost no relevance in dietary habits, but in other, particularly the island and coastal nations, fish products have a leading role in food consumption, and account for a significant part of protein intake.



Rank	Country	Fish/Animal Proteins	Fish/Total Proteins
1	Comoros	70.2	20.2
2	Seychelles*	46.8	21.4
3	Congo Dem R	39.6	6.0
4	Djibouti	33.8	9.0
5	Uganda	33.3	8.2
18	Zimbabwe	3.4	0.8
19	Eritrea	2.5	0.3
20	Ethiopia	1.0	0.1



Dimensions to be assessed and methodology

- ▶ Potential for fisheries to play a role in food and nutritional security.
- ▶ Need to enhance the role of fisheries in food security.
- ▶ Scope to raise awareness about the role of fisheries in food security.
- ▶ Level of integration of fish and fisheries into food security (and mismatch between the importance of fisheries and the inclusion in policy papers).



Selection of countries to focus initial future interventions in terms of fisheries, food security and policies

- ▶ Selection of indicators related to food security and fisheries
- ▶ Assessment of policies
- ▶ Questionnaires filled by national fisheries officers



Weighted and added to reach scoring for each country and REC



Sources of information



- ▶ Nearly 100 policy documents and briefs
 - ▶ 89 at national level;
 - ▶ 10 at regional level
- ▶ 26 questionnaires filled by national fisheries officers
- ▶ Information on 36 variables gathered from sources that allow comparability
 - ▶ Statistical databases (WB, FAO, ADB)
 - ▶ Fishery specific
 - ▶ General data related to the four pillars of food security
- ▶ Information and results are restricted to the time periods analysed.



Assessment of dimensions (1)



► Potential

- The fish availability per capita per year (kg/person/year).
- The per capita GDP at purchasing power parity (USD/person/year).
- The water supply coverage (percent of population).
- The sanitation coverage (percent of population).
- The female literacy above 15 years (percent of women).

Countries with higher potential for F&A to play a role in food security

Seychelles (V.High)

Mauritius (V.High)

Comoros (High)

Uganda (High)

Zambia (High)

Swaziland (High)

Kenya (High)

Countries with lower potential for F&A to play a role in food security

Eritrea

Djibouti

Dem. Rep. Congo

Ethiopia

Somalia



Assessment of dimensions (2)



► Need to enhance the role of F&A in food security

- Fish availability (kg/per capita/year)
- Food availability (kCal/per capita/year)
- Vitamin A Deficiency Prevalence (% Pop)
- Undernourishment (% Pop)
- People living below poverty line (% Pop below USD 1 daily)

Countries with higher need to enhance the role of F&A

Burundi
Dem. Rep. Congo
Eritrea
Ethiopia
Kenya
Madagascar
Malawi
Rwanda
Tanzania
Zambia
Zimbabwe

[Potential]



Combination of potential + need

Kenya	High potential + need
Zambia	
Burundi	Medium potential + need
Madagascar	
Malawi	
Rwanda	
Tanzania	
Zimbabwe	
Ethiopia	Low potential + need
Dem. Rep. Congo	
Eritrea	



Assessment of dimensions (3)

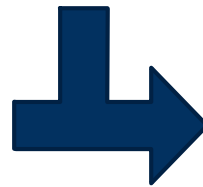


► Scope to raise awareness

- Population density
- Female literacy (above 15 years)
- Mobile phone line per 100 inhabitants
- Paved roads (% total)
- Existence of awareness programmes (from questionnaires)
- Publicity about fish in mass media (from questionnaires)
- Fish consumption

Countries with high scope to raise awareness about the a role of F&A in food security
Kenia
Malawi
Rwanda
Tanzania
Zambia
Zimbabwe

[Potential + Need]



Combination of potential + need + scope	
Kenya	High potential + need + scope
Zambia	
Malawi	Medium potential + need + scope
Rwanda	
Tanzania	
Zimbabwe	



Assessment of dimensions (4)



▶ Integration

- ▶ At a national level: 89 policy papers reviewed
- ▶ At regional level: 10 policy papers reviewed
 - ▶ National Food Security Plans, Fisheries Development Plans, etc.
 - ▶ International Organizations Plans: UN Development Assistance Framework, FAO National Mid-Term Priority Framework, FAO Country Programming Framework, CAADP
 - ▶ Other donors activity planning documents
 - ▶ Focus on documents no older than 5 years, and available for public access (mainly online)
- ▶ Attention was given to the reference/inclusion of F&A in policies, and viceversa, inclusion of food security issues in F&A policies
 - ▶ Fisheries is present in all countries but 21% of country documents make no reference to F&A
 - ▶ 64% deal specifically with food security, of which 35% make no reference to F&A



Assessment of dimensions (5)



► Integration (2)

- Fish availability per capita
- Fish share in animal protein
- Fisheries employment
- Fisheries in policies
- Fish in food security policies

Ranking of countries with regard to current level of integration of fish into food and nutritional security

1	Seychelles
2	Comoros
3	Tanzania
4	Malawi
5	Uganda
6	Kenya
7	Djibouti

Ranking of countries with regard to current level of integration of fish into food and nutritional security

14	Burundi
15	Sudan
16	Swaziland
17	Eritrea
18	South Sudan*
19	Ethiopia
20	Zimbabwe



Assessment of dimensions (6)



► Inconsistency between importance and presence of fisheries in policy

- Fish availability per capita
- Fish share in animal protein
- Fisheries employment
- Fisheries in policies (-)
- Fish in food security policies (-)

Ranking of countries with regard to mismatch between importance of fisheries and presence in food security policies

1	Comoros
2	Seychelles
3	Djibouti
4	Mauritius
5	Malawi
6	Rwanda

Ranking of countries with regard to mismatch between importance of fisheries and presence in food security policies

15	Tanzania
16	Ethiopia
17	Sudan
18	Somalia
19	South Sudan*
20	Swaziland



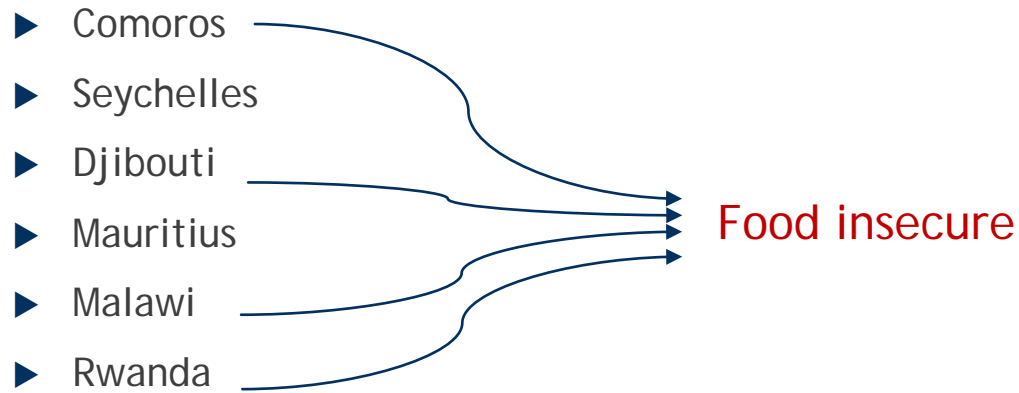
Conclusions and key findings

- ▶ Fisheries and aquaculture are often omitted from food security policies (35%)
- ▶ Broad definition of agriculture that includes agriculture, livestock, poultry, forestry and fisheries in policies. - Loss of specificity.
- ▶ Policies usually do not reflect the importance of fisheries for food security, even in island nations.
- ▶ Fishing communities are considered as some of the most vulnerable to food insecurity.
- ▶ Poor involvement of fishery officers in policy design is likely.
- ▶ Need for better information on the contribution of fisheries to :
 - ▶ Economic activity
 - ▶ Income generation
 - ▶ Food security
- ▶ Need for disaggregated information for different regions/communities at country level
- ▶ African countries are endowed with high value wild fishery resources as well as a potential for aquaculture of many species with demand in the international and domestic markets.
- ▶ F&A perceived as export activity that allows purchase of other food items.
- ▶ Development of production and trade would require sound management and regulations.
- ▶ This study is time-constrained, future performance should be assessed.



Conclusions and key findings (2)

- ▶ Six countries where fish plays an important role but this is not appropriately reflected in policies were identified, and where advocacy and first activities should be focused:



- ▶ Poor integration of fisheries in these countries could worsen food security situation, or,
- ▶ Improvement of integration would have the higher impact on the food security at national level.
- ▶ Some of these have the higher potential for improvement.
- ▶ Diversity of current status of countries allows to design activities for further replication in other countries.
- ▶ At regional level, for the RECs, fisheries do not seem a priority. All RECs have high need of enhancement of the role of F&A, with medium potential in most of the cases.



Recommendations



- ▶ Emphasis on capacity building and greater involvement of fishery officers in policy making.
- ▶ Promotion of production (mainly aquaculture). Improve supply, stability and indirect contribution.
- ▶ Monitoring, control and surveillance of fishing activities, for sound management and sustainable exploitation, in particular transboundary resources.
- ▶ Financial support for better access to adequate infrastructure and equipment, can contribute to reduce post-harvest losses.
- ▶ Special focus on small-scale/artisanal fisheries and aquaculture.

This sector has specific vulnerabilities and also has a direct impact on households livelihoods. In some countries it is the only way of exploitation.
- ▶ Strengthening of regional organizations involved in resource management and trade regulations.
- ▶ Improvement of information systems.
- ▶ Training and equipment of fishermen and aquaculture producers in post handling and quality aspects of fishery products.
- ▶ Improvement of marketing to facilitate access to food and quality.
- ▶ Role of women must be specially considered in policy design. Key players in marketing and processing, and strong contributors to the production process.



Thank you!

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