Integrating Subsistence Fisheries in Local Food systems
Case study of Palma district

Mozambique

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Mozambique
The structure of presentation

1. Overview of Mozambique and fisheries sector
2. Case study of subsistence fishing
   A. The study area
   B. The scope of the study
   C. Methodology
   D. Results
   E. Conclusion and Lessons being learned
Mozambique

- Location: South east Africa (border with Tanzania, Malawi, Zimbabwe, South Africa and Indian Ocean)
- Population: 25 million
- Coastal long: 2.700 km
- Administrative division: 11 provinces and 128 districts.
- Fisheries industry: Industrial (211), semi-industrial (358), artesanal (400.000)
- Total catch: 243.000 (in 2015), 85% from artesanal fisheries
- Imported fish: (aprox. 45.000 Ton in 2012)
- Percapita consumption (fish): 10.4 in 2012
Recent institutional reforms on fisheries sector

- In 2015, the new government created the Ministry of Sea, Inland Waters and Fisheries,
- The government has approved a new fishing law in 2013. In this Law subsistence fishing is defined as non commercial and secondary activity.
- Fisheries policy defines subsistence fishers as one of the policy priority groups. But recommends that subsistence fishing is better to be kept as it is now until market conditions are created.
- The government has also approved a Gender Strategy, a Fisheries Master Plan and Artesanal Fisheries development Strategy. All these policy tools put food security and gender equity on top of priorities.
- The government has made critical efforts in creating institutional spaces and supporting mechanisms for food security in the context of fisheries governance at district level.
- The question remains, however, how to reach the vulnerable fishing groups, like the fisherwomen who are already marginalized in several dimensions of community governance?
Research objectives and questions

Objectives

1. Characterize subsistence fishing and the ways it participate on food security.
2. Identify the existing opportunities and barriers for its integration in local food systems

Questions being asked

1. What are their activities and motivations for their involvement in fisheries activities?
2. How are they structuring and managing their activities?
3. To what extent their initiatives are reflected and included in the fisheries development processes?
4. What lessons can be learned from these realities?
The case study area

- Location: Northern Mozambique
- Population: 52,000
- Fishing:
  - Commercial-Artesanal: 1,527 (70% = Male)
  - Artesanal-subsistence: 5,674 (70% = Female)
- Fishing gear:
  - Commercial: The majority are immigrants using purse nets, beach seines and gillnets.
  - Subsistence: the majority are natives using harpoons, spear guns, traps, hand collection, mosquito net.
Methodology

1. Areas covered: Palma, Quirinde and Olumbi bays
2. Participatory Research Approach was the core methodology.
3. Information was collected by combining three techniques:
   • Focus groups – Women and Men, Women alone, community leaderships.
   • Routine observations – Home (selected households), during operations
   • Value chain - Mapping
   • In-depth interviews with the fishers and informal networks
Finding 1: Women participation in what is officially known as subsistence fishing is significant and official data are not capturing the real

1. Collection by hand, harpoons, mosquito nets, traps and home made spear guns are the most important fishing methods
2. Open beach, estuaries, coral reefs and islands are most important fishing areas
3. Boats are used for fishing and for reaching fishing areas of difficult access
4. Mosquito net users can fish in groups of 5 to 25 women. A decade ago, mosquito net fishing was considered a family fishing practise. Today the net has been improved, is much more bigger and belongs to an owner who employ others and pay a salary in kind.

<table>
<thead>
<tr>
<th></th>
<th>Women</th>
<th>Men</th>
</tr>
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<tbody>
<tr>
<td>Mosquito nets</td>
<td>463</td>
<td>236</td>
</tr>
<tr>
<td>Traps</td>
<td>52</td>
<td>227</td>
</tr>
<tr>
<td>Hand line</td>
<td>433</td>
<td>433</td>
</tr>
<tr>
<td>Harpoons</td>
<td>202</td>
<td>491</td>
</tr>
<tr>
<td>Hand collection</td>
<td>841</td>
<td>1175</td>
</tr>
<tr>
<td>Others</td>
<td>1558</td>
<td>2589</td>
</tr>
</tbody>
</table>
Finding 2: Subsistence fishing is not just for consumption, it is also a business

- Subsistence fishers fish for sale, not for immediate consumption.

<table>
<thead>
<tr>
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<th>Commercial records in Tons (2013)</th>
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<tbody>
<tr>
<td>Shrimp</td>
<td>42.50</td>
</tr>
<tr>
<td>Octopus</td>
<td>321.10</td>
</tr>
<tr>
<td>Lobster</td>
<td>12.30</td>
</tr>
<tr>
<td>Sea cucumber</td>
<td>31.20</td>
</tr>
<tr>
<td>Squid</td>
<td>600.17</td>
</tr>
<tr>
<td>Oyster</td>
<td>440.50</td>
</tr>
<tr>
<td>Crab</td>
<td>100.30</td>
</tr>
<tr>
<td>Fish from Open sea</td>
<td>1380.82</td>
</tr>
<tr>
<td>Fsh farming</td>
<td>1.88</td>
</tr>
<tr>
<td>Total</td>
<td>2.954.3</td>
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- Subsistence fishers are the main suppliers of seafood to the local markets and elites (hotels, construction companies, etc.).

- Subsistence fishers’ products are distributed through the same fish chains with the commercial products (Map 1: MEP, 2015)
Finding 3: Subsistence fishing is very connected to other livelihood portfolios.

1. Different from commercial, subsistence fishers are connected not only to fishing, but crop farming, trade and fish trade

2. Fishing, constitutes one of the source of income invested in other activities

3. Cash crops constitutes an alternative in times of fishing crisis

4. This complex livelihood system requires managerial skills and discipline on time allocation – women are demonstrating to be good on that.
Finding 4: Subsistence fishers and especially women are excluded from all formal spaces of participation sharing. The women are creating their own spaces

- Subsistence fishers face serious barriers to get access Credits, decision making, through formal mechanisms

- Subsistence fishers are using informal networks to:
  - Set commercial arrangements with local buyers (Hotels, private companies, elites, etc.)
  - Organize informal credit and saving systems (PCR)
  - Make innovations on their operations

<table>
<thead>
<tr>
<th></th>
<th>Total CBOS</th>
<th>Male members</th>
<th>Female members</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fisheries Community Councils (fisheries co-management)</td>
<td>3</td>
<td>87%</td>
<td>13%</td>
</tr>
<tr>
<td>Fishing producer and traders' associations (income generation)</td>
<td>3</td>
<td>73%</td>
<td>27%</td>
</tr>
<tr>
<td>Village leaderships</td>
<td>27</td>
<td>93%</td>
<td>7%</td>
</tr>
</tbody>
</table>
Final remarks

1. The three great policy opportunities:

   a. **Formalize intertidal fishing** – incorporating management planning. Leaving subsistence fishing to the mercy of market opportunities increase its vulnerability

   b. Rescue the women business managerial skills – giving them other alternatives.

   c. Informal networks already implemented by the fisherwomen are useful entry points for policy innovation

   d. **Apply the livelihood perspective and maximize** the connections subsistence fishers are building with diverse livelihood portfolios.
Key condition: inter-sectorial alignment

Currently each sector contains:
A development policy approach,
Gender strategy,
Community involvement strategy,
Working principles, procedures and culture
Thank you very much