Illegal, Unreported & Unregulated Fishing as a Governability Problem: A Case Study of Lake Victoria, Tanzania

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International and regional cooperation – the key factor to keep up the fight against IUU fishing

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3rd Conference on IUU Fishing discusses latest developments and solutions

Where do we stand in the fight against IUU fishing in 2016? Progress has been made over the last years but more advances are needed to solve the problem. International and regional cooperation are crucial to end IUU fishing, especially in developing countries hardest hit by the Illegal practice. After a three-year break, more than 100 decision-makers, researchers, industry representatives, civil society groups and journalists came together at the Chatham House 3rd Conference on IUU Fishing to discuss the latest developments and solutions in combating IUU fishing, threatening sustainable fisheries, the marine environment and food security.

Estimating the Worldwide Extent of Illegal Fishing

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30% of all fishing activity worldwide.

Illegal, Unreported and Unregulated (IUU) Fishing

Illegal, unreported and unregulated (IUU) fishing is a major threat to declining fish stocks and marine habitat destruction. Globally, IUU fishing takes many forms both within nationally-controlled waters and on the high seas. While it is not known for sure how much IUU fishing is taking place, it is estimated that IUU fishing accounts for about 30% of all fishing activity worldwide.

More funding needed to fight illegal fishing – UN agency

24 June 2008 – The United Nations Food and Agriculture Organization (FAO) has appealed for $1 million for a project designed to help developing countries deny port access to boats involved in illegal, unreported and unregulated (IUU) fishing.

“Excessive fishing and the problem of illegal, unreported, underreported fishing are closely linked today.”
IUU fishing the wicked perspective

- Overfishing
- Habitat destruction
- Poor management
- Food insecurity
- Fish decline
- Loss of jobs
- Social conflicts
- Poverty
Interactive governance perspective

Wicked problem

- Natural
- Social
- Governance
Lake Victoria

Shared by Kenya (6% by area), Uganda (43%) and Tanzania (51%)
Impact of IUU fishing in Lake Victoria

- Reduced fish stocks & habitat destructions
- Economic losses
- Conflict between legal/illegaL fishers
- Threats to food security & nutrition
- Loss of jobs
Scope & nature of IUU fishing in Lake Victoria

- Illegal or misuse of fishing gears and methods
- Landing fish in non-gazetted landing site
- Fishing and trading fish without license
- Fishing during the closed or in closed breeding areas
Tackling IUU fishing in Lake Victoria

- Restricting the use of destructive fishing gears & methods.
- Controlling landing & trading of juvenile fish.
- Restricting fishing in breeding areas & closed seasons.
- Awareness campaign to fishers
Research questions

- Which fishing activities are considered damaging to the fisheries resources?

- What are the causes of IUU fishing?

- How can these knowledge be utilized to address IUU fishing?
Ijinga Island is located in Magu districts of Mwanza region.

The Island surface area is approx. 8.7km²

Main activities: Fishing, Farming, Livestock keeping & small businesses

Total number of 378 households

Population 2,516 (over 70% involved in fishing)
Research methodology

Survey questionnaire
- Pair comparison
- Causes of IUU fishing

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<thead>
<tr>
<th>IUU Fishing activities</th>
<th>Non-IUU fishing activities</th>
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<tbody>
<tr>
<td>Use of non selective fishing gears</td>
<td>Many fishers targeting single species</td>
</tr>
<tr>
<td>Fishing in breeding areas</td>
<td>Increased number of fishers and gears</td>
</tr>
<tr>
<td>Fishing without license</td>
<td>Fishing around breeding areas</td>
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<tr>
<td>Landing fish in non-gazetted site</td>
<td>Fishing for longer hours</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Respondents</th>
<th>Number</th>
</tr>
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<tbody>
<tr>
<td>Boat owner</td>
<td>30</td>
</tr>
<tr>
<td>Fishing crew</td>
<td>30</td>
</tr>
<tr>
<td>Processors/ Traders</td>
<td>30</td>
</tr>
<tr>
<td>Local residents</td>
<td>30</td>
</tr>
<tr>
<td>Managers/Scientists</td>
<td>30</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>150</strong></td>
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Respondents judgement on damaging fishing activities

Fishers/local residents (N=120)

- Using non selective fishing gears
- Fishing in breeding areas
- Fishing without license
- Increased number of fishers and gears
- Landing fish in non gazetted site
- Fishing for longer hours
- Fishing around breeding areas
- Many fishers targeting single species

Managers/Scientists (N=30)

- Using non selective fishing gears
- Fishing in breeding areas
- Increased number of fishers and gears
- Fishing around breeding areas
- Many fishers targeting single species
- Fishing for longer hours
- Fishing without license
- Landing fish in non gazetted site
Kendall Tau correlation analysis

\( H_0 \): There is no association between respondents on damaging fishing activities

\( H_a \): There is association between respondents on damaging fishing activities

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<tr>
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<th>Fishers/Local resident</th>
<th>Managers/Scientists</th>
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<tbody>
<tr>
<td>Fishers/Local residents</td>
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</tr>
<tr>
<td>Manager/Scientists</td>
<td>0.429</td>
<td>1</td>
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**Note:** 1= perfect association, 0= weak relationship

The correlation analysis shows a weak association between respondents

Siegel & Castellan 1988; Chuenpagdee 1998
Why use destructive fishing gears

Fishers/Local residents (N=120)

Managers/Scientists (N=30)

Number of respondents

Poverty

Legal fishing gears are expensive

Good returns from using small sized gears

Corruption

Inadequate regulation knowledge

Insufficient penalties/fines

Number of respondents

Poverty

Insufficient penalties/fines

Corruption

Inadequate regulation knowledge

Good returns from using small sized gears

Legal fishing gears are expensive
What we found

- There is a moderately high level of agreement among respondents about the most damaging fishing activities.

- However, some of the fishing activities considered IUU fishing by regulation are considered least damaging by fisheries managers/scientists. This disparity can contribute to selective enforcement of laws.

- There are some disparities between the respondents on the causes of IUU fishing.

- All these disparities contribute to governance and governability challenges in the lake, which offers some explanations why IUU fishing is persistent in Lake Victoria.
What needs to be done to address IUU fishing

We point that in order to effectively address IUU fishing, these observed mismatches need to be addressed through:

• Revising some of the policies and regulatory measures in the lake to conform to the knowledge of the stakeholders and the natural system.

• Applying multiple approaches to tackle the complex, but unique issues and concerns associated with IUU problem.

• Focusing on shared conservation understanding among respondents to help bolster support and enhance legitimacy to the laws.
Thank you