



# EFFECTIVE MANAGEMENT OF FISHERIES IN ZAMBIA RESEARCH REPORT

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# **INTRODUCTION**

Fishing is the lifeline of the people of Luapula province and the main economic activity for rural Zambians that live near the Fisheries. The Government, through the Ministry of Agriculture and Livestock, imposes an annual Fish Ban from 1st of December to the 28th of February. The Fish Ban is implemented to allow for the fish to breed and to allow for of replenishing the fish stock, as this is their peak-breeding season. However emerging reports from residents around Lake Mweru indicate that the Fish Ban was not being effectively implemented.

The Policy Monitoring and Research Centre (PMRC) team undertook a visit to Lake Mweru and Lake Bangweulu to investigate the reports. This research report is based on the findings after interaction and key informant interviews with relevant stakeholders.





ish is a very important part of the many Zambian's livelihood. Zambia contains 9 major fisheries¹ in Kariba, Tanganyika, Itezhi-tezhi, Bangweulu, Mweru Luapula, Mweru-wantipa, Kafue River, Zambezi River and Lukanga. The Fisheries sector is a key component of the Zambian economy as it is estimated that the sector supports more than 300 000 people, who derive their livelihood directly as fishers and fish farmers.² In 2007 the sector accounted for 1% of Zambia's GDP, which amounted to US\$109 million.³ This means that the Fishing sector in Zambia has the potential to contribute to the country's economic development.

An estimated 300 000 people derive their livelihood directly from fishing.

Fisheries Sub-sector accounted

1% of Zambia's GDP, which amounted to

US\$109 million



The sector is also key in poverty reduction and nutrition security as fish makes up 40% of animal protein in the diet of Zambians. Zambia contains approximately 15 million hectares of water in the form of rivers, lakes and swamps, and these provide the basis for extensive freshwater fisheries.<sup>4</sup> Most of these water bodies are accessible to those in the rural areas, and thus fish remains an important source of food as well as source of high nutritional value.

The economic and nutritional value of fish has led to general demand for fish in the country. In the recent past, demand has been higher than supply, with annual supply estimated at between 60,000 and 70,000 tones while domestic demand is estimated at 120 000 tones annually.<sup>5</sup> The excess demand thus entails that there is need for control and regulation in the Fisheries sector, and if left unchecked would lead to over fishing.

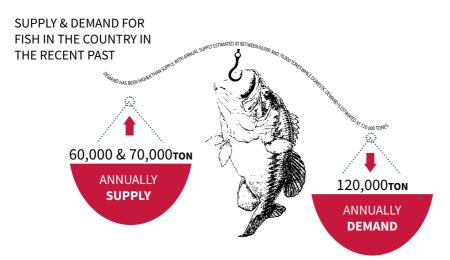
<sup>1.</sup> A fishery refers to water bodies designated by the Department of Fisheries as fishing areas.

<sup>2.</sup> The Status Of Fish Population In Zambia's Water Bodies, ACF/FSRP April, 2009.

<sup>3.</sup> World Fish Centre Policy Brief: Fisheries in Zambia, 2008. World Bank.

<sup>4.</sup> The Status Of Fish Population In Zambia's Water Bodies, ACF/FSRP April, 2009.

<sup>5.</sup> ibid



## The Ministry of Agriculture and Livestock

is responsible for the regulation of the Fisheries sector. At the operational level, the sector is managed by the Fisheries Department. The Fisheries Act of 1974 under the Laws of Zambia regulates the Fisheries Sector. In 2011, the Government passed the Fisheries Act. No. 22 of 2011 with the objective of improving the involvement of communities in fisheries management, promote development of the aquaculture sector.

The Ministry, through the Act, is mandated to carry out a Fishing Ban; this is implemented on an annual basis to allow for the fish to breed, regulating fish population in the water bodies. The Annual Fishing Ban is effective from 1st December to 28th February the following year. This was introduced to protect the breeding of the commercially preferred species (Tilapia species) whose breeding peaks during this period.<sup>6</sup>

## **General Objective**

• To establish the effectiveness of the implementation of the Fish Ban.

## **Specific Objectives**

- To determine the challenges faced by the Department of Fisheries in the implementation of the Fish Ban.
- To find out the perception of the Fishermen towards the Fish Ban.
- To establish the challenges faced by the Fishermen during the Fish Ban.
- To determine the impact of the implementation of the Fish Ban of the yields of fish.

# The State of Fisheries in Zambia

Fishing is the lifeline of the people of Luapula Province and it is also the main economic activity for rural Zambians that live near the Fisheries. The Government, through the Ministry of Agriculture and Livestock, imposes an annual Fish Ban from 1st of December to the 28th of February each year. The Fish Ban is implemented to allow for the fish to breed and to allow for of replenishing the fish stock, as this is their peak-breeding season. However emerging reports from residents around Lake Mweru indicate that the Fish Ban was not being effectively implemented.

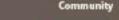


The Fisheries sector is a key component of the Zambian economy as it is estimated that the sector supports more than 300 000 people, who derive their livelihood directly as fishers and fish farmers. In 2007 the sector accounted for 1% of Zambia's GDP, which amounted to US\$109 million.

# \*\*\*\*\*\*\*\*\*\*\*\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

+300,000 People

Derive their livelihood directly from fishing





## US\$109 million

In 2007 the sector accounted for 1% of Zambia's GDP

# Supply Vs D

Annually Supply 7 vs Annual Dema tonne

### Fish Production

Fish production levels from Capture and Aquaculture fisheries in metric tonnes

| Year              | 2010   | 2011   | 2012   |
|-------------------|--------|--------|--------|
| Capture Fisheries | 76,396 | 69,364 | 76,214 |
| Fish Farming      | 10,291 | 10,533 | 12,988 |

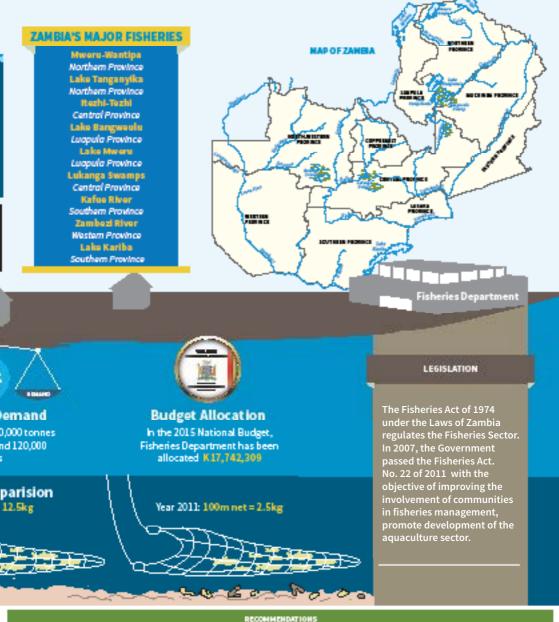
# Fish Catch Com



#### CHALLENGES

- Illegal fishing methods (incorrect net sizes) e.g. use of no squito nets for fishing.
   People setting in designated breeding areas where the fish ban is implemented throughout the year.
- The use of anchor boots that remained stationed of the water body for longer periods of time
  - Pencia norma Peor suffing levels, 2 fisheries extension officers are responsible for 1000
- 5. The Department of Fisheries (DOF) does not have a prosecutor, thus all errorg
- doers are set free and not charged. This has encouraged to the fishernen to continue breaking the law.
- 6 DOF dited that their research revealed that in 1996 a 100 meter net would fatch 12.5 kg of fish but as of 2011 the same 100 meters net can only fatch 2.5 kg. This reduction in catches per unit has also led to a decrease in Fishermen from 21,000 in 2000 to 38,000 in 2011.
- Lack of economic diversification (for continued incomes during the fish ban).
   This implies that most of the community only focuses on finishing as their main economic activity.





#### RECOMMENDATIONS

- PMRC urges the Government to increase resources to the Department Fisheries in the form of human and financial resources. This will enable the Department to effectively carry out the implementation of the Fish Ban as well as their other core activities.
- PMRC encourages Government to actively engage with Traditional leaders in thermanagement of Fisheries located in rural areas and around chiefdons. Traditional Leaders play an important role in community sensitization and behavioural change of people in rural areas.
- PMRC urges the Government to set up a division within the Department of Flaheries that will be tasked with the enforcement of the law pertaining to Flaheries. This Division can be based on a similar concept to the Zambia Wildlife Authority (ZAWA) to ensure effective enforcement.
- PMRC further urgs: government to put in place measures to effectively
  monitor and provides urveillance of fishing activities so as generate accurate
  data and statistics that can be used to improve the sector.

#### **METHODOLOGY**

The research design consisted qualitative methods of data collections. The main sources of data were primary sources and these included key informant interviews with stakeholders. The research coverage was Luapula Province, which contains **two of Zambia's largest fisheries: Lake Mweru and Lake Bangweulu.** The data collection was done in four districts: Samfya, Mansa, Nchelenge and Lunga. Key informant interviews were conducted with District Commissioners, District Administrative Officers, Fisheries Department Offices and representatives from the Fishermen's Association.

## **MAJOR FISHERIES**

MWERU-WANTIPA

**TANGANYIKA** 

ITEZHI-TEZHI

**BANGWEULU** 

#### **LAKE MWERU**

LUKANGA

KAFUF RIVFR

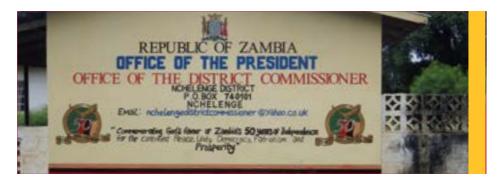
ZAMBEZI RIVER

**KARIBA** 





Participants included: District Commissioner, District Administrative Officer (DAO), Fisheries Officer, Fisheries Association President and Secretary, Community Radio Journalist.



#### RESEARCH FINDINGS

- It was evident that all stakes understood the Fish Ban Policy, its implementation and its period of implementation.
- Key challenges identified included reduced funding to the Department of Fisheries (DOF) that resulted in poor implementation of the ban.
- It was also noted that DOF officers were not trained to enforce of the law and as such face hostility and lack protection from hostile fishermen during implementation.
- The Fisheries Association (FA) also highlighted that Fisheries is not prioritised in the Ministry of Agriculture and Livestock and is overshadowed and under funded, with most of the funds being allocated to agricultural Activities. The FA further cited Luapula province as having a total of **20 Fisheries workers** while the Agriculture had a total of **186 workers**. This confirms the assertion that the Agricultural Department is allocated twice as much resources as the Fisheries Department for the year 2015: Fisheries department K17, 742,309 and Agricultural Department K 32,605,031, with further sums of money allocated for Agriculture in each province.<sup>7</sup>

#### FISHERIES DEPARTMENT



#### AGRICULTURAL DEPARTMENT



<sup>7.</sup> Research by the Fisheries Department Nchelenge (Nyimbili, 2011 and Kapasa, 1996).

The Fisheries Department enacted a core management strategy that involved the
local community to help manage the fisheries. Village (Fisheries) Management
Committees (VMC's), comprising of volunteers from the community were
instituted. These committees are constituted to assist the local offices of
DOF in implementing policies. However it was highlighted that this program
was ineffective as there was little incentive for the VMC's as they worked on a
voluntary basis.

# The DOF highlighted several challenges faced by their officers, and these included:



 Illegal fishing methods (incorrect net sizes) e.g. use of mosquito nets for fishing,



2. People settling in designated breeding areas where the fish ban is implemented throughout the year.



3. The use of anchor boats that remained stationed of the water body for longer periods of time



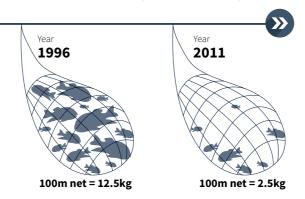
4. Poor staffing levels, 2 fisheries extension officers are responsible for 1000 villages.



5. The Department of Fisheries does not have a prosecutor, thus all wrong doers are set free and not charged. This has encouraged to the fishermen to continue breaking the law.



6. DOF cited that their research revealed that in 1996 a 100 meter net would fetch 12.5 Kg of fish but as of 2011 the same 100 meters net can only fetch 2.5 Kg. This reduction in catches per unit has also led to a decrease in Fishermen from 21,000 in 2008 to 18,000 in 2011.8



Research by the Fisheries Department Nchelenge (Nyimbili, 2011 and Kapasa, 1996).



7. DOF highlighted that most of the fishermen were not registered and there was no form of licensing for the small-scale fishermen thus it is difficult to regulate the fisheries.



8. Lack of economic diversification (for continued incomes during the fish ban). This implies that most of the community only focuses on finishing as their main economic activity.



9. The Nchelenge DAO informed the team that the Government had put in place measures to provide Marine soldiers that would work in collaboration with Immigration and Fisheries officers. The Zambia army on 18th of February approved to create a marine camp for soldiers that was to be situated at the former Kala refugee camp.<sup>9</sup>

#### CONCLUSION

The research findings indicate that all stakeholders have a clear understanding of the Fish Ban policy. However the findings also reveal that the lack of enforcement in the implementation of the Fish Ban contributes to the fishermen's lack of adherence to the policy. Traditionally the people of Luapula are fishermen by trade and the lack of diversified economic activities poses a further challenge in the implementation of the Fish Ban. The poor implementation of the Fish Ban is as result of several challenges faced by the Department of Fisheries. These challenges include insufficient funding, inadequate staffing, lack of enforcement officers and lack of financial resources to the support initiatives such as the Village (Fisheries) Management Committees (VMCs).

#### RECOMMENDATIONS

- PMRC urges the Government to increase resources to the Department Fisheries in the form of human and financial resources. This will enable the Department to effectively carry out the implementation of the Fish Ban as well as their other core activities.
- 2. PMRC encourages Government to actively engage with Traditional leaders in the management of Fisheries located in rural areas and around chiefdoms. Traditional Leaders play an important role in community sensitization and behavioural change of people in rural areas.
- 3. PMRC urges the Government to set up a division within the Department of Fisheries that will be tasked with the enforcement of the law pertaining to Fisheries. This Division can be based on a similar concept to the Zambia Wildlife Authority (ZAWA) d to ensure effective enforcement.

<sup>9.</sup> http://www.mwebantu.com/2015/02/18/zambia-army-splits-commando-unit-in-ndola/sthash.Z2Y72mbZ.dpuf

## **Unlocking Zambia's Potential**

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