An assessment on the viability and profitability of capture fisheries on sustainable livelihoods in marginalised rural areas of Zimbabwe: a case of Binga District in Matabeleland North Region

BY

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The study was conducted to investigate challenges affecting viability/profitability and sustainability of capture fisheries in marginalised communities of Zimbabwe with particular reference to Mlibizi fishing camps in Binga. Centrally the research sought to appraise participating communities on sound management systems of aquatic resources which enhances attainment of sustainable livelihoods in disadvantaged communities. To achieve this Sixty (60) respondents were randomly selected from a population of 300 fishing members drawn from four fishing co-operative groups in the area. These comprised both Kapenta and Gillnetters from the fishing site. The randomly picked participants were used for the purposes of generating primary data through group discussions and a simple Likert scale type of a questionnaire. The study also made use of secondary data which was gathered from relevant authorities such as the Parks and Wild Life Authority and partnering organisations such as the Zimbabwe's Communal Areas Management Programme for Indigenous Resources CAMPFIRE, the Environmental Management Authority EMA, as well as partaking Non-Governmental Organizations NGOs in the district. Generated data were subjected to descriptive statistics where frequency counts, means and percentages were used for purposes of analysis. Major findings of the research revealed that devolution of power is necessary to facilitate active participation of local communities in the management of their natural resources to unlock the potential that lies in them of generating meaningful gains to achieve desired outcomes for descent livelihoods in these marginalized communities. Thus the study opines that resource users need to be actively involved in policy formulation regarding management strategies and equity distribution of proceeds from such resources.

Key words: Aquaculture, Capture fisheries, Community management, Economic impacts, Poverty alleviation, sustainable management
Acronyms

CAMPFIRE Zimbabwe's Communal Areas Management Programme for Indigenous Resources
CITES Convention on International Trade in Endangered Species of Wild Fauna and Flora
EMA Environmental Management Authority
FAO Food and Agriculture Organization
FTLRP Fast Track Land Reform Program
GDP Gross Domestic Product
NGOs Non-Governmental Organizations
PFM Participatory Fisheries Management
ZAIP Zimbabwe Agriculture Investment Plan
SADC southern Africa development community
COMESA The Common Market for Eastern and Southern Africa
USAID United States Agency for International Development

2 Background to the Study

FAO, (2010) defines capture fisheries as the harvesting of naturally occurring aquatic living organisms from both the marine and fresh water environments. Daniel (2012) opines that capture fisheries fall into three distinguished categories based on the scale of operation and the intended outcomes of particular systems namely: industrial, small scale artisanal fisheries and recreational. From these empirical definitions it can be construed that capture fisheries means the harvesting of all kinds of fishes form the natural aquatic environments in which the organisms multiply and grow without human effort. In Zimbabwe it synonymous with the harvesting and exploitation of wild fisheries such as kapenta, bream and the tiger fish species dominant in the country’s man-made and naturally occurring water bodies.

Binga has great potential of transforming the lives of its inhabitants if the resource base the district is endowed with is tapped and channelled towards advancing the livelihoods of the local communities. It is however a sad scenario that as much of these resources are siphoned to generate income for national programs very little is left to benefit the local people, hence calling for a paradigm shift in the way such resources are managed and proceeds distributed. Capture fisheries have been a traditional source of food and economic activities for the Tonga and Shangwe people who inhabited in the south-western end of Lake Kariba’s southern shore for decades before being forced to relocate inland southwards when the Lake was built and its rising waters covered their traditional homes. The influx of people from
other regions during the fast track land reform intensified competitions on the exploitation of the district’s natural resources and according to the campfire report 2000 poaching of both aquatic and inland wildlife in designated sanctuaries became so rampant. It is regrettably noted that since then the harvesting of fish and production of locally based fish products, free from gmos started to diminish and for many years now fisheries activities are declining sharply in all fishing zones countrywide. And as productivity and viability of the enterprise continues to plunge the government and other stakeholders seem to be clueless in crafting and coming up with strategies to resuscitate and bring back vibrancy in the sector.

This has impacted negatively on the livelihoods of the rural populace as they have been left with no other options but to engage in illegal activities such as poaching and drug trafficking to eke a living. A poorly organised marketing structure compounded by liquidity crisis facing the country further weakens the confidence of those participating and the potential investors in the sector. FAO 2010 cited that poor performance of artisanal capture fisheries in developing nations has led to a marked fall in the viability and profitability of the enterprise hence impacting negatively on the livelihoods of those in the sector as the majority continue to live under the poverty datum line of their respective countries. Fisheries which are expected to be the engine house of sustainable livelihoods for the impoverished communities along the country’s water bodies have never made a significant contribution towards advancing the people’s standards of living but rather turned out to be a huge economic burden impacting negatively on food security, employment creation and the generating of income.

Gono (2006) observed that most of the country’s small and medium fishery enterprises were facing profitability challenges as they were failing to access viable markets locally and as such the sector was failing to expand due to cash flow challenges. FAO (2012) also cited that the declining output of capture fisheries were detrimental as they posed serious threats on the viability and future of the sector. The general under performance was attributed to bad management practices of capture fisheries compounded by poor corporate governance which has failed to realise the significant role of fisheries on boosting the country’s gross domestic product. The dismal performance of those in capture fisheries has therefore been a major concern for disadvantaged communities as they have never generated meaningful rewards from the venture. And unless proper attention is given to productivity, viability and profitability of capture fisheries, the quest for a sustainable livelihood of the rural communities of Binga will remain a nightmare as people’s lives continue to plunge into the deeper waters of poverty.
To have noticeable positive results in the fisheries sector the Government of Zimbabwe needs to integrate aquaculture into the country’s existing farming systems so as to enhance rural agricultural development, employment and income generation through additional and diversification of off-season production activities aimed at boosting levels of disposable incomes among families and improve food security and nutrition situations in such areas. A well-planned capture fisheries sector can unlock the potential of the enterprise hence can become recognizable vehicle for development programs and facilitate job creation, smooth household income flows, and increased farm efficiency and sustainability at village level. It is therefore imperative that the study sought to explore viability challenges facing artisanal capture fisheries upsetting their sustainability and explore opportunities likely to reverse the current situation and restore sanity in sector. The study which was conducted in Binga district of Matabeleland north province examined the virtues of community management of capture fisheries and interrogated its potential as a panacea for employment and a stable source of income for fishing communities in Zimbabwe.

2.1 Statement of the Problem.

Binga is regarded as one of the most under developed and marginalised districts of Zimbabwe though a centre for fishing, boating & cultural activities and endowed with abundant resources in terms of both aquatic/marine and inland wildlife and manmade recreational facilities the generality of the inhabitants of the area continue to live in abject poverty with low levels of yearly disposable incomes due to unemployment as the area is not industrialised, and high vulnerability to food insecurity and diseases as the area lies under ecological region 5 where rain-fed agriculture is a nightmare. It is imperative that capture fisheries need to be considered the only option which can overturn the current sorry status of a district with a rich natural resources base but ranked the poorest in Zimbabwe. It is critical that for communities to derive meaningful benefit from the resources well-planned strategies need to be put in place to unlock the potential of such enterprises so that they become a recognizable vehicle for development programs and facilitate job creation, smooth household income flows, and increased farm efficiency and sustainability at village level. It is therefore of essence that the study sought to explore viability challenges facing artisanal capture fisheries upsetting their sustainability and explore opportunities likely to reverse the current situation and restore sanity in sector. The study focused on fishing sites at Milibizi fishing camp in Binga district of Matabeleland north province and virtually examined the virtues of community management of capture fisheries and
interrogated their potential as a panacea for employment and a stable source of income for fishing communities in Zimbabwe.

2.2 Research Questions

- In furtherance of the foregoing, the research focused primarily on answering the following four questions:
- How do people in marginalized communities perceive the significance of capture fisheries as a developmental tool in their areas?
- What challenges are affecting the viability and profitability of capture fisheries as a means of attaining sustainable livelihoods in rural communities?
- What management strategies can be put in place to boost productivity and viability of capture fisheries in Zimbabwe’s disadvantaged rural communities?

3 Methodology

The study’s main thrust was to establish and explore viability challenges facing artisanal capture fisheries, upsetting their sustainability and search for opportunities likely to reverse the current situation and restore sanity in sector. To achieve this, Sixty (60) respondents were randomly selected from a population of 300 fishing members drawn from four fishing co-operative groups in the area. These comprised both Kapenta and Gillnetters from the fishing site. The randomly picked participants were used for the purposes of generating primary data through group discussions and a simple Likert scale type of a questionnaire. The study also made use of secondary data which was gathered from relevant authorities such as the Parks and Wild Life Authority and partnering organisations such as the Zimbabwe’s Communal Areas Management Programme for Indigenous Resources CAMPFIRE, the Environmental Management Authority EMA, as well as partaking Non-Governmental Organizations NGOs in the district. Generated data were subjected to descriptive statistics where frequency counts, means and percentages were used for purposes of analysis to come up with informed conclusive deductions from the findings.

4 Results and Discussions

4.1 Perceptions on significance of capture fisheries as a developmental tool in local communities
Figure 4.1: Responses on capture fisheries improving livelihoods

Basing on the presented findings in figure 4.1 above 57% of the respondents indicated that capture fisheries did not improve the livelihoods of the people while 43% said it did. This is contrary to the observations by FAO (2011) as it cited that capture fisheries contributed to the livelihood of the people particularly in marginalised areas of in developing nations where artisanal capture fisheries is practised. These statistics above however imply that the respondents were not satisfied with the assertion that capture fisheries improve livelihoods. Further probing revealed that most fishers shunned the business as they were facing viability challenges due to huge capital investment cost associated at the initial stages of the venture.

4.2 Challenges affecting viability and profitability of capture fisheries in rural communities

<table>
<thead>
<tr>
<th>Responses</th>
<th>Percentages (%)</th>
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<tbody>
<tr>
<td>Poor</td>
<td>71</td>
</tr>
<tr>
<td>Good</td>
<td>9</td>
</tr>
<tr>
<td>Seasonal</td>
<td>20</td>
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Figure 4.2: Challenges affecting viability and profitability of capture fisheries. Table 4.2 above shows that 71% of the participants indicated that the market was poor while 9% said it was fairly good. 20% viewed the market to be seasonal. It was established during the field work that the majority of the respondents indicated that the market for the fish after catch was poor as they had to travel to far away urban centers such as Bulawayo, Harare and Beitbridge in an effort to access rewarding markets. Implying that there is need to restructure the marketing system of fish and fish products in the country so that artisinal fish farmers become active participants in the main stream of the country’s economy.

4.3 Management strategies to boost productivity and viability of capture fisheries in Zimbabwe’s disadvantaged communities

Figure 4.3: Management strategies to boost productivity and viability of capture fisheries in rural communities.

Figure 4.3 shows that fishers in the study area are aware of the recommended management practices which can boost productivity and viability of capture fisheries in rural communities. The figure above illustrates that 40% of the participants were of the opinion that women should be actively involved in capture fisheries and...
other community projects earmarked to generate income for community development as they are perceived as better managers and custodians of local resources. However 25% of the respondents cited that to boost production players in the local fish industry have to establish an association that will cater for their interests in terms of fish marketing as they fear that the existing marketing systems were exploitative as they had limited bargaining power for their perishable product. They echoed that lack of refrigerated facilities at their fishing sites was forcing them to trade their product at meager prices forcing communities to remain in abject poverty. 20% advocated for induction of youths in to community income generating projects as they were energetic and had the proficiency to manage businesses. 15% of the participants were however adamant that value addition war the route to go as apart from turning their fish into various products it would also improve the shelf life of their produce hence prolonging the active period of income generation or marketing season of their produce.

5 Conclusions and Recommendations

5.1 Conclusions

Binga like the rest of the Zambezi valley had been in to fishing, hunting and gathering for decades, these have been central to the livelihoods of the local tribes as sources of food and income through facilitating bartering with tribes from the overcrowded communal areas into those marginal zones which previously were sparsely populated other regions. The implementation of land reforms in Zimbabwe which witnessed high influxes of new settlers, with varied cultures and life styles from other regions however ushered in a new dimension to the native people’s lifestyle. The Tonga’s way of life and cultural values were completely overturned by this event. The influx of people into these marginal areas affects the development of existing programmes aimed at sustainable utilisation of natural resources. In addition, it shows that the huge influx of people into the valley has tended to affect the development of a community-based natural resource management project which was starting to benefit the Tonga people. Such an exodus caused unnecessary pressure on aquatic resources in the river system. The extent of the pressure was so fatal in some cases as it resulted in the depletion of both aquatic and inland resources. In some cases policies crafted by the government to reorganise and resuscitate the fishing industry faced resistance and poor adoption as the communities preferred policies which had their input, and captured the concept of indigenous technologies in the management of their resources as cited by Chisango and Maposa 2016. It was therefore established that participation of local communities in resource conservation would boost management and productivity of artisanal ventures in these marginalised rural communities.
5.2 Recommendations

- Central government should harmonize legislation of aquaculture and fisheries management and conservation to eliminate contradictions in the management and development of capture fisheries. It has to mandate appropriate authorities such as rural district councils and traditional structures to manage and develop fisheries under their jurisdiction for the benefit of their entire communities.

- Zimbabwe Parks and Wildlife Authority should uphold participatory holistic management systems which involve a wider range of stakeholders to facilitate the understanding of various interrelationships between aquatic ecosystems, hydrology, household socioeconomic issues and resource use patterns.

- Fishing communities need to participate in policy making and consultative forums so that their views are captured and, be co-opted in to policy making frameworks. Funds generated by fisheries in particular districts should be used to fund district and ward level fisheries management operations.

- On wide scale poaching, Zimbabwe should work with neighboring countries to enhance biodiversity conversation in the region through drawing up and implementing transboundary management agreements; set up mechanisms that promote the integrated management and sustainable use of shared natural resources, including exchange of information on shared natural resources.

- The government should nurture and enforce appropriate international protocols that are designed to promote sustainable aquatic/fisheries management and development to which the country is a signatory or member state.

- There is need to create an enabling environment through enactment of legislation that facilitates the establishment of fisheries management institutions and structures at local village/community level to ensure effective participation of local communities and be able to tailor strategies ideal to local situations, but in consonance with national policy.

- Government has to be gender sensitive, hence promote the
involvement of women at all levels of aquatic/fisheries resources management to achieve equitable resource distribution and utilization to curb poverty and famine among rural families.

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