



REPUBLIC OF ZAMBIA

REPORT

OF THE

COMMITTEE ON AGRICULTURE

ON THE

**AUDITOR GENERAL'S REPORT ON THE SUSTAINABLE MANAGEMENT OF
FISH RESOURCES IN NATURAL WATERS**

FOR THE

**FIFTH SESSION OF THE ELEVENTH NATIONAL ASSEMBLY APPOINTED ON
24TH SEPTEMBER, 2015**

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REPORT OF THE COMMITTEE ON AGRICULTURE ON THE REPORT OF THE AUDITOR GENERAL ON THE SUSTAINABLE MANAGEMENT OF FISH RESOURCES IN NATURAL WATERS FOR THE FIFTH SESSION OF THE ELEVENTH NATIONAL ASSEMBLY APPOINTED ON 24TH SEPTEMBER, 2015

Consisting of:

Mr K Chipungu, MP, (Chairperson); Mrs A M Chungu, MP; Mr E T Chenda, MP; Mr V M Mooya, MP; Mr B Hamusonde, MP; Mr G Namulambe, MP; Mr A Sichula, MP; and Mr J Shakafuswa, MP.

The Honourable Mr Speaker
National Assembly
Parliament Buildings
LUSAKA

Sir

Your Committee has the honour to present its Report on the Report of the Auditor General on the Sustainable Management of Fish Resources in Natural Waters for the Fifth Session of the Eleventh National Assembly.

Functions of the Committee

2.0 The functions of your Committee, as set out in the National Assembly Standing Orders, are as follows:

- i. to study, report and make recommendations to the Government, through the House, on the mandate, management and operations of the Ministries of Agriculture and Fisheries and Livestock, departments and/or agencies under their portfolios;
- ii. to carry out detailed scrutiny of certain activities being undertaken by the Ministries of Agriculture and Fisheries and Livestock, departments and/or agencies under their portfolios and make appropriate recommendations to the House for ultimate consideration by the Government;
- iii. to make, if deemed necessary, recommendations to the Government on the need to review certain policies and/or certain existing legislation;
- iv. to examine annual reports of Government ministries and departments under their portfolios in the context of autonomy and efficiency of Government ministries and departments and determine whether the affairs of the said bodies are being managed according to relevant Acts of Parliament, established regulations, rules and general orders; and
- v. to consider any Bills that may be referred to it by the House.

Meetings of the Committee

3.0 Your Committee held three meetings to consider the Report of the Auditor General on the Sustainable Management of Fish Resources in Natural Waters.

Procedure adopted by the Committee

4.0 Your Committee requested written and oral submissions from the following stakeholders:

- i. Indaba Agricultural Policy Research Institute (IAPRI);
- ii. Food and Agriculture Organisation (FAO);
- iii. Aquaculture Development Association of Zambia (ADAZ); and
- iv. Ministry of Fisheries and Livestock.

Auditor General's Comments

5.0 The Auditor General reported that the Performance Audit Report on the Sustainable Management of Fish Resources in Natural Waters, was submitted for tabling in the National Assembly in accordance with the provisions of Article 250 (1) (c) of the Constitution of Zambia.

Background to the Audit

5.1 Fisheries are an important source of food, social and cultural benefits and contribute to rural development through employment, income generation and poverty reduction.

However, the fisheries sub-sector faces challenges such as overfishing, degradation of fish habitats and the use of destructive and unsustainable fishing methods such as the use of poisons, explosives and mosquito nets, among others, which have contributed to the depletion of fish stocks. It is for this reason that the Auditor General considered conducting a performance audit on sustainable management of fish resources in natural waters.

Motivation for the Audit

5.2 The performance audit on the management of fish resources was carried out following concerns raised by Members of Parliament in the House and media reports on overfishing, degradation of fish habitats and the use of destructive and unsustainable fishing methods such as the use of poisons, explosives and mosquito nets among others which have contributed to the depletion of fish stocks. Further, the development of the fisheries sector was identified by the Government in its budget for 2014, as one of the policies and strategies for consolidating growth and job creation and the Government intended to reposition Zambia as a net exporter of fish by promoting aquaculture development and improving infrastructure for fisheries research and marketing.

In a preliminary study carried out by the Office of the Auditor General, it was found that the Department of Fisheries faced challenges in carrying out surveillance and enforcement resulting in non-adherence to the fishing ban and the continued use of illegal fishing methods by fishers.

Audit Objective

5.3 The purpose of the audit was to assess whether the Ministry of Agriculture and Livestock (MAL) had implemented effective measures to promote sustainable management of fish resources.

Audit Questions

5.4 Based on the audit objective, the audit was designed to answer the questions as outlined below.

- i. To what extent has the MAL through the Department of Fisheries been effective in promoting sustainable management of fish resources?
 - Is there knowledge of fish biomass in natural waters to use as determination of levels of exploitation by Department of Fisheries?
 - Has the Department of Fisheries put in place effective measures to promote sustainable management of fish resources?
 - Have the management plans for the development of fisheries sub-sector been implemented?
 - What control measures have been put in place to ensure sustainable management of fish resources?

- ii. To what extent has the Department of Fisheries implemented monitoring, control and enforcement measures in order to achieve sustainable use of fish resources?
 - Are inspections planned for, executed and reported?
 - Has Department of Fisheries carried out surveillance and enforcement of the Fisheries legislation to promote sustainable fisheries resources?
 - Does Department of Fisheries have adequate manpower and financial resources to manage fish resources?

Audit Criteria

- 5.5 The performance of the Department of Fisheries was assessed against criteria drawn from:
- i. the *Fisheries Act No. 22 of 2011*;
 - ii. the Fisheries Regulations, 2012;
 - iii. the SNDP 2011-2016;
 - iv. the National Agriculture Policy 2004-2015;
 - v. the Strategic Plan 2014-2016;
 - vi. the Code of Conduct for Responsible Fisheries (CCRF); and
 - vii. the Best Practice from Food and Agricultural Organisation (FAO) on management of fish resources.

Consideration of Submissions on Matters Raised in the Audit Report

6.0 Your Committee received submissions from the identified stakeholders and the Controlling Officer of the Ministry of Fisheries and Livestock as stated below.

Consolidated Submissions by Stakeholders

6.1 Your Committee noted that all the stakeholders who appeared before it supported the Auditor General's findings and recommendations. However, the stakeholders made additional recommendations stated hereunder.

- i. The report of the Auditor General did not recognise any potential conflicts that might exist among different pieces of legislation governing the fisheries sector. For example, the *Fisheries Act No. 22 of 2011* and the *Animal Act No. 27 of 2010*, have several clauses that resemble one another hence it was difficult to decide which one took precedence. Also, the quality of the effluent, as defined by the *Environmental Management Act No. 22 of 2011*, conflicts with the optimal fish production water quality for aquaculture. There were many more Acts that might potentially conflict with the *Fisheries Act*.

A policy that was strictly for the fisheries sector was needed for the improved implementation of the prescribed measures. The National Agricultural Policy did not suit the unique features of the subsector especially the capture fisheries that encompasses resource management. This had resulted in mismatches and overlaps in the administration of the fisheries sector. Therefore, there was need to harmonise the policies that were in conflict to ensure effective management of prescribed measures.

- ii. There was need for the Government to increase funding to the fisheries sector in order to enhance the development of the sector in Zambia, especially with regards to enforcement of regulations both at landing sites and in the water. The Aquaculture and Fisheries Fund as provided for in the *Fisheries Act of 2011*, needed to be operationalised.

There was need for provision of credit facilities to help crowd-in smallholder farmers to participate in aquaculture. This was because aquaculture was capital intensive with regards to construction material of ponds and/or cages, purchasing of fingerlings and feed. In addition, aquaculture was knowledge intensive hence public and private extension systems needed to be enhanced. However, adequate funding needed to be provided to the Ministry of Fisheries and Livestock.

- iii. For aquaculture to gain prominence as a solution to the unsustainable harvesting of fish in Zambia's natural waters, there was need to split the Department of Fisheries into two departments, i. e the Department of Capture Fisheries and the Department of Aquaculture. The Department of Capture Fisheries could be tasked with the responsibility of managing wild fish resources while the Department of Aquaculture could monitor aquaculture development.
- iv. The fisheries sector should integrate climate change into the current "precautionary approach" used by the Department of Fisheries. As long as climate change was not an integral part of fisheries management, the fisheries sector would continue to be vulnerable to climatic shocks, management practices would have no framework to adapt to the changes. This would consequently affect peoples' livelihoods that depended on the fisheries sector, e.g. the drying up of the Bangweulu complex.
- v. There was need to recognise the fisheries as a priority sector and scale up incentives especially in aquaculture to encourage production at small scale level. This could be done by intensifying research in the fisheries and aquaculture sector within the existing research institutions. Much of the focus had been on crops and livestock and less on fisheries.

Given the current funding and operational challenges faced by the Department of Fisheries, it was necessary that existing research institutes supplement work that was being done by the Department of Fisheries in acquiring biological and socio-economic data. Also, setting up an independent fisheries research institute in the future would help the fisheries department in data collection and analysis.

- vi. More information about the industrial fishers needed to be obtained as they also contribute towards the depletion of fish resources in the fishery areas.
- vii. A deliberate policy in helping fishers diversify their livelihoods, providing technical and financial help with practices they might already be involved in and improving extension services could help achieve sustainable management of fish resources in Zambia's natural waters.

Government Responses and the Committee's Observations and Recommendations

6.2 The following were the responses from the Government and your Committee's observations and recommendations on the queries.

Audit Query

a) Lack of Knowledge of Biomass in Fisheries

According to the *Fisheries Act*, the Department of Fisheries should assess fish stocks and collect statistics including details of catches. Fisheries management should be based on scientific evidence available in order to determine allowable catch and optimum utilisation.

Zambia's fish resources were multispecies and they were estimated at 400 species of which only fifteen were commercially exploited. According to the Department of Fisheries, most of the other species were of ecological importance to maintain biodiversity and clean the environment.

However, with the exception of Kapenta and Buka Buka, the Department of Fisheries did not have knowledge of the standing biomass of all the other fish species in the waters. The Department of Fisheries had not determined the biomass for the other fish species because the methods that existed to estimate biomass for demersal or the inshore fish species was environmentally unfriendly and had serious limitations when applied on large open lakes. These species, especially the commercially exploited, faced a risk of being depleted putting the sustainability of fish resources under question.

The knowledge of Kapenta biomass was outdated as the last conclusive study done for kapenta; a hydro acoustic study was done on the Lake Kariba in 1977, which determined the Kapenta biomass of between 20,000 to 30,000mt whilst the biomass for Kapenta on Lakes Itezhi-tezhi and Tanganyika had not been determined. Although a hydro acoustic survey was conducted in 2014, the analysis of the data collected had not been concluded as of March, 2015.

Consequently, the Department of Fisheries was unable to institute technical measures to control the harvest of fish from the natural waters for demersal or inshore fish species as there was no determination or estimation of the limit of how much fishers could take out as well as how much was to be left for regeneration.

Government's Response

The Controlling Officer submitted that the Department of Fisheries was conducting frame surveys, Gillnet Surveys and Catch Assessment Surveys with the view of estimating the biomass of fish and assessing the fishing effort in the different water bodies in Zambia. However, for these surveys to generate accurate information, there was need for consistency and timeliness. The same methodology had to be applied all the time and there was need to maintain specific minimum frequency or intervals within which surveys were carried out. The Department of Fisheries had embarked on a programme to estimate fish biomass through fish stock assessments. The report on the estimates of biomass for Lake Kariba had since been concluded and was available to the public.

Committee's Observations and Recommendations

Your Committee observes that the catch assessment surveys and frame surveys for most of the natural water fisheries are either out of date, not undertaken timely or their contents not disseminated widely. Consistent to the Auditor General's Report's findings, the national budget releases are also mainly for personal emoluments and Recurrent Departmental Charges at the expense of extension, research, monitoring, surveillance and control.

In light of this, your Committee recommends that adequate funding be released timely to ensure that surveillance activities are conducted on time. It also urges the Government to ensure that the Department of Fisheries has enough staff in terms of expansion and research services.

b) Fishing Effort in Fishery Areas – No Quota System in Place

According to the Department of Fisheries, there was no limitation of fishing effort in any of the fishery areas in Zambia. It was observed that fishing effort had been on the increase in fishery

areas. Zambia practiced 'open access' on its waters which is a system that gives access to anyone to fish with no limit on the number/length of nets or other types of gear to use and boats they can own.

The open access meant that the quota system of managing fish resources was not practiced in Zambia. According to the Department of Fisheries, the quota system was not practiced because the system would be information intensive as daily data on location and fish caught by all fishers would be needed. Further, there would be a challenge of who to apportion a quota to and the basis to use to do so. According to the Programme for Luapula Agriculture and Rural Development (PLARD) in Luapula Province, quotas raised issues of equity in fisheries resource exploitation and utilisation that may not be easily addressed because of the social-political organisation among individuals, communities and traditional leaders.

The failure to limit the fishing effort resulted in overfishing in fishery areas. Information gathered from fishery areas indicated that there was stock overfishing which relates to a particular species, environmental risks relating to overfishing of all fish species and recruitment type of overfishing which involves catching of fish even before it breeds.

i) **Production against Fishing Effort**

An analysis of fish production and fishing effort was carried out. Historical production of fish in Zambia from 1974 to date showed a steady increase and so was the production per fishery. However, in the case of Mweru Wantipa, production reduced drastically in the early 1990s.

Government's Response

The Controlling Officer submitted that currently, Zambia operated an open access system of fisheries management. This system emphasised compliance to fisheries regulations and not the number of fishers for a fishery. The monitoring of fishing effort in the fishery areas was done through Frame Surveys and Catch Assessment Surveys. As at the end of 2015, Frame Surveys had been conducted in all fisheries except for Lukanga.

The Department of Fisheries was now conducting surveys aimed at informing the management measures in each of the fishery areas. The Department of Fisheries had also started consultative processes with key stakeholders to determine the best way to change the management strategies for fish resources in Zambia. On the excess number of rigs on Lake Kariba, the problem was being addressed by devolving the licensing from Chilanga headquarters to the districts.

Committee's Observations and Recommendations

Your Committee observes that the lack of limitation of fishing effort in any of the fishery areas in Zambia has resulted in overfishing in fishery areas. It also observes that the increase in the number of rigs on Lake Kariba by 722 instead of the recommended 240 rigs is a source of concern.

Your Committee, therefore, recommends that corrective measures be employed which will ensure that the fishing effort is brought to acceptable levels and the correct number of rigs is maintained at Lake Kariba.

c) **Ineffectiveness in Implementing measures in Place**

During the period under review, the Department of Fisheries had developed measures to prevent and reduce the non-sustainable use of fish resources such as licensing, fishing ban, restrictions on fishing gear and restrictions on fishing methods, among others. The Department of Fisheries also introduced aquaculture to mitigate reduced productivity in the conventional fisheries sectors. Even though the Department of Fisheries had these measures in place, they continued to face challenges in promoting sustainable management of fish resources.

Government's Response

The Controlling Officer submitted that the *Fisheries Act No. 22 of 2011*, provides for the management of fisheries resources using several strategies which include development of Fishery Management Plans (FMP) for all fishery areas and control measures, namely; licensing of fishers, annual fishing ban, restriction of fishing gear and methods, protection of breeding sites and; regulation of landing sites.

i) **Fisheries Management Plans (FMPs)**

According to the *Fisheries Act*, the Department of Fisheries should have an FMP for the conservation and management of fish and development of the fisheries management area. However, a review of documents revealed that none of the fourteen fishery areas had FMPs in place though three areas namely Mweru-Luapula, Bangweulu and Kafue Flats had draft plans which remained unapproved since 2013.

The result of not having the plans in place hindered Department of Fisheries' intention of managing fish resources on a co-management basis with the community.

Government's Response

The Controlling Officer submitted that the Department of Fisheries had so far developed three Fishery Management Plans for the Kafue Flats, Lake Bangweulu and Lake Mweru Luapula. The FMP for Kafue had been approved while the FMPs for Mweru Luapula and Bangweulu were still undergoing revisions so as to include the identified fish breeding areas after which they would be submitted to the Minister for approval. Government was still mobilising resources to develop FMPs for other 11 fishery management areas. The development of FMPs was a consultative process which involved all key stakeholders such as other line ministries, NGOs, traditional leaders, Village Management Committees (VMCs), Zone Management Committees (ZMCs) and Fishery Management Committees (FMCs).

Committee's Observations and Recommendations

Your Committee observes that the lack of FMPs in most of the fishery management areas has resulted in the failure of managing fish resources on a co-management basis with the community.

In light of this, your Committee recommends that measures must be put in place to ensure that the fisheries management plans in the remaining fishery areas are implemented without undue delay.

ii. **Control Measures**

- **Licencing of Fishers**

Licencing of fishers was one of the control measures used by the Department of Fisheries to regulate fishing activities in the fishery areas. The legal requirement in fishery areas is that every person who intends to engage in fishing should obtain a licence. There is, however, no limitation on the number of licenses available; anyone who wants to engage in commercial fishing can obtain a licence from the Department of Fisheries.

The Department of Fisheries stated that failure to enforce the Fisheries Regulations was attributed to the dual roles extension staff have to play which includes extension services and enforcement of Fisheries Regulations.

Government's Response

The Controlling Officer submitted that the Ministry was in the process of establishing a Licencing Unit which would establish a new structure which would be mandated with enforcing the fisheries regulations. The unit structure had been submitted to PSMD for consideration. The unit would also improve the information and data management and collection of data for research and monitoring purposes.

Committee's Observations and Recommendations

Your Committee observes that there is a reduction in the number of fishers paying for licences. Your Committee, therefore, recommends that the Ministry puts in place measures to ensure that fishers comply with licensing requirements.

- **Fishing ban**

One of the measures the Department of Fisheries had put in place was an annual fishing ban which coincided with the peak breeding period for most fish species in Zambia. However, a review of documents revealed that despite extensive sensitisation on the importance of the fishing ban, fishers were not observing the ban.

Government's Response

The Controlling Officer submitted that the development of the FMPs would include the identification of breeding areas in all the fishery areas. The identified fish breeding areas would be gazetted after which measures to protect them would be instituted. Successful protection of the breeding areas would be conducted after amending the *Fisheries Act* and Regulations through the enactment of Statutory Instruments so that the implementation of the fishing ban would be targeted at the breeding areas as opposed to the blanket fishing ban currently being implemented. These amendments to the fisheries legislations were ongoing and being enacted on a fishery by fishery basis. The Ministry also started embarking on alternative livelihoods such as small livestock rearing and aquaculture in order to reduce the over dependency on fishing in fishery areas.

Committee's Observations and Recommendations

Your Committee commends the Ministry for embarking on alternative livelihoods for the fishing communities to reduce the overdependence on fishing. However, it observes that

the lack of regulations has left the breeding areas unprotected thereby leading to a depletion of fish resources.

In light of this, your Committee recommends that the Ministry expedites the amendments to the *Fisheries Act* and Regulations to ensure that breeding areas are identified and gazetted.

- **Restrictions on Gear and Fishing Methods**

One of the control measures the Department of Fisheries had put in place was the restriction on the fishing methods fishers were allowed to use and to this effect, sensitisation of the fishers was carried out. However, despite efforts by the Department of Fisheries to sensitise the fishers on the damage caused by the restricted methods, fishers still continued to use the prohibited methods. The Department of Fisheries was particularly concerned with the use of mosquito nets, potato sacks (commonly called sefa-sefa or chikukula), weirs, explosives and poisons. These methods impacted negatively on the fish as they disturbed breeding sites, migration routes and indiscriminately killed fish.

A review of the Annual Reports from the Provincial and District fisheries offices, however, revealed that fishers were still using the prohibited methods of fishing in areas such as Lealui, Kalabo, Chambeshi, Bangweulu swamps, Chirundu/Chiawa and Shibuyunji, Mongu, Sinazongwe, Itezhi-thezi, Namwala, Samfya and Siavonga. Site visits carried out in seven fishery areas namely; Mweru-Luapula, Bangweulu, Lusiwashi, Lukanga, Itezhi-tezhi, Kafue Flats and Kariba revealed that generally, fishers were not adhering to the controls set by the Department of Fisheries with the exception of Itezhi-tezhi where there was some measure of adherence.

Government's Response

The Controlling Officer submitted that the Fisheries Regulations had prescribed the legal fishing gear and methods. Failure to effectively effect restrictions on fishing gear was a result of low staffing levels in the Department of Fisheries, making it difficult for their presence to be felt as well as the dual roles of the staff. However, the Ministry had realised the inadequacies and was strengthening the fisheries establishment by recruiting more extension staff and strengthening the collaborative management structures by sensitising the communities on the negative impact of destructive fishing methods. The Ministry would also establish a unit to strictly enforce the fisheries regulations.

Committee's Observations and Recommendations

Your Committee observes that the Department of Fisheries is seriously understaffed to carry out its functions of sensitising the communities effectively.

Your Committee recommends that the Department of Fisheries should embark on a recruitment exercise for staff and in addition, engage the communities to get involved in the management of fisheries as this creates ownership of the resources. The Government is further urged to expedite the establishment of the unit to enforce the fisheries regulations once finalised.

- **Breeding Sites**

As part of its efforts to manage the fish resource, the Department of Fisheries had identified certain areas as breeding sites where fishers were not allowed to undertake any fishing activities or to settle. The Department of Fisheries was required to legalise the identified areas by way of issuing a Statutory Instrument which should be gazetted in the Government gazette.

However, a review of documents revealed that fishers had settled in some identified breeding areas and were actually undertaking fishing activities in those areas. A case in hand was Mifimbo in Nchelenge which is a gazetted breeding site where about 2,000 people had settled. Other breeding areas namely Kansungwa, Mwatishi, Mulundu, Luche, Nkomba and Lukwesa on Mweru-Luapula and Chipepo Lagoon and small Kariba on Lake Kariba among others, had been identified but they had not been gazetted making it difficult for the Department of Fisheries to enforce any restrictions.

Government's Response

The Controlling Officer submitted that the development of the FMPs included the fish breeding sites. The process involved consultative meetings with communities and traditional leaders so as to generate Statutory Instruments, which would result in the gazetting of the sites and protecting the sites in collaboration with the communities and other law enforcement agencies.

Committee's Observations and Recommendations

Your Committee observes that breeding sites are very important and the communities need to be sensitised on the importance of these areas. In light of this, your Committee recommends that sensitisation of the communities on the importance of the breeding sites be intensified. Your Committee further urges the Government to generate Statutory Instruments to gazette the breeding sites.

- **Regulations of Landing Sites**

Although the Act requires landing sites to be gazetted, none had been gazetted as of June, 2015; consequently, fishers were operating from informal landing sites. Informal landing sites were observed in the fishery areas that were visited.

The recording of fish catches was also a challenge for the Department of Fisheries. Low staffing levels were identified as one of the causes of not being able to collect data from fishers because the Department of Fisheries could not be at every landing site where fishers landed their catches. Water transport was also a challenge as they did not have reliable motorised boats to conduct patrols.

Efforts to have artisanal fishers submitting returns had also not worked largely because of lack of compliance and also because of low literacy levels in fishing communities. Although VMC structures were in place, there were no extension officers at VMC level. It was stated that in order to do this, the staff strength needed to be strengthened and FMCs needed to be gazetted to provide for increased monitoring and enforcement. The current status was that fish happened to be landed at any time anywhere.

Government's Response

The Controlling Officer submitted that the regulation of landing sites was important for the collection of catch data. The failure to regulate landing sites was as a result of the lean staffing in the Department of Fisheries as well as inadequate resources. The Department was, therefore, constructing fish freezing facilities in Machiya in Mpongwe District, Itzhi-tezhi and Chipepo in Gwembe District. The Department had also increased the number of extension officers by recruiting and replacing staff.

Committee's Observations and Recommendations

Your Committee observes that non-implementation of the landing site provisions of the Act negatively affects the collection of statistics and programmes to monitor the quantity of the fish landed. This means that even post-harvest losses data cannot be consistently recorded. Your Committee also notes that the Department operates with a lean staff and inadequate resources.

In light of this, your Committee recommends that staff numbers be strengthened and boats and other accessories be procured as a matter of urgency. Your Committee further recommends that landing sites be gazetted urgently and that the Government should intensify the sensitisation of communities on the observance of landing sites.

- **Aquaculture**

According to the Department of Fisheries, the intent of introducing aquaculture as an alternative livelihood in fishery was to reduce fishing pressure off the natural waters. The Department of Fisheries offered technical support to individuals who wanted to engage in fish farming such as site selection, pond construction and pond management and also provided fingerlings to farmers that were vulnerable in an effort to promote aquaculture. However, the Department of Fisheries faced challenges that included inadequate capacity to offer fish farmers extension services due to low staffing levels. Non-availability of transport was also highlighted as one of the major causes for the Department of Fisheries not being able to carry out monitoring visits. It was also observed that fish farmers were not issued with licences contrary to the Fisheries Act which states that persons engaging in aquaculture should be issued with a licence. Licences were not issued by the Department of Fisheries because the aquaculture regulations were not in place to guide the issuance of licences.

Government's Response

The Controlling Officer submitted that the Department of Fisheries had identified aquaculture as an alternative system of ensuring availability of fish in Zambia because of the abundant water resources that were available. Furthermore, engagement in aquaculture would help ease fishing pressure on the water bodies. For this reason, the Department of Fisheries had been conducting sensitisations and trainings of communities on the fish farming around the country. Stakeholder consultations had been intensified resulting in the review of the draft National Aquaculture Development Plan (NADP). The Department of Fisheries had also used the various shows and exhibitions to inform people interested in fish farming

Committee's Observations and Recommendations

Your Committee commends the Ministry for introducing aquaculture as an alternative livelihood in fishery areas. However, it observes that the Department of Fisheries has not been able to issue licences to fish farmers because aquaculture regulations are not in place.

In light of this, your Committee recommends that as a matter of urgency the Government finalises the aquaculture regulations, improve staffing levels and provide transport for staff in the aquaculture unit.

iii. Aquaculture Research

Aquaculture research was hampered by the lack of equipment. Physical inspections carried out at Fiyongoli research unit showed that the unit did not have a laboratory to carry out research. The unit also lacked equipment required to carry out aquaculture research such as microscopes, water checkers, plankton nets among others.

Government's Response

The Controlling Officer submitted that aquaculture research was conducted in order to develop the sub-sector. The process of upgrading the aquaculture research stations in the country was ongoing. At Fiyongoli, a station cited in the audit report, a laboratory was catered for in the 2015 budget and tenders had been completed in January, 2016. The Department was awaiting response from Ministry of Finance regarding the construction of an office block which would incorporate a laboratory. Laboratory equipment was procured using assistance from the PLARD project and Recurrent and Departmental Charges (RDCs) while a room was being used as a laboratory as the Department awaited the construction of the laboratory.

The Controlling Officer also submitted that the Department of Fisheries had five established aquaculture research stations in Chipata, Chilanga, Mwekera, Mansa and was in the process of establishing another one in Chinsali.

Committee's Observations and Recommendations

Your Committee observes that laboratory facilities in the fishery sub-sector are inadequate to cater for the needs of the emerging farmers. Your Committee also observes that research has not been prioritised in the fishery subsector.

In light of this, your Committee urges the Government to expedite the construction and equipping of research laboratories in the fishery sub-sector and also increase on the manpower to man the research stations.

d) Staffing

According to the 2014 Departmental staff establishment, the Department of Fisheries had an establishment of 2,347 staff comprising 1,468 professional and technical staff and 879 support staff. As of November, 2014, the Department of Fisheries had 430 employees against the approved establishment of 2,347 employees resulting in understaffing of 1,917 thus operating at 18.3% staffing capacity.

Government's Response

The Controlling Officer submitted that the staffing levels in the Department of Fisheries were very low. The Department of Fisheries had been pushing for the recruitment of staff to fill the vacant positions. Since the performance audit of 2015, more than 100 vacant positions had been filled while another 115 extension staff had been recruited by the Department. During the same period, staffing levels in the Department of Fisheries had increased from 432 to 535. However, in spite of the increase in staff numbers, the Department of Fisheries was still understaffed compared to the mandate it had and the staff establishment. In order to strengthen law enforcement, the Department of Fisheries was establishing an inspectorate, which would be responsible for conducting fish patrols and inspection of fish on the markets.

Committee's Observations and Recommendations

Your Committee observes that, despite the increase in the staffing levels, the Department continues to be seriously understaffed.

In light of this, your Committee recommends that Treasury Authority be sought to fill the vacancies in the Department, as a matter of urgency for it to carry out its mandate effectively.

e) **Transport**

Inadequate land and water transport was another challenge that the Department of Fisheries faced. The Department of Fisheries at the district level falls under the District Agriculture Coordinating Office (DACO) and as such, the control of resources such as motor vehicles were directly under the DACO. A visit to the districts revealed that DACOs only had one vehicle that would have to be shared among the departments under the DACO. This had an impact on the implementation of planned Monitoring, Control and Surveillance (MCS) in the districts. For instance, a total of eight vehicles were available for Luapula Province. Only two vehicles were in good condition. Mwense only had one vehicle shared with the Ministry. This resulted in the Department of Fisheries not being able to carry out extension visits and delays in conducting activities.

Mwense also did not have water transport and relied on water transport donated to the VMCs by PLARD.

Government's Response

The Controlling Officer agreed that the Department of Fisheries faced the challenge of land and water transport to conduct MCS activities. The Department of Fisheries had put in place a plan to progressively solve the challenge of land and water transport. In the 2015 budget, the Department of Fisheries allocated K4.8million and K1.4m towards the procurement of motor vehicles and motorbikes, respectively. The tenders had been concluded and the contract for motor vehicles awarded to the successful bidder. The process of procurement was still going on.

Committee's Observations and Recommendations

Your Committee observes that the amounts allocated for procuring transport are not adequate considering the gravity of the problem. Your Committee further observes that there is no mention of procurement of water transport.

In light of this, your Committee recommends that the Ministry should increase its budgetary allocation to procure water and land transport for the Department.

f) **Funding**

MCS activities were not achieved as per target due to inadequate and untimely funding. Activities such as the fishing ban were also affected due to late disbursement of funds.

The Department of Fisheries was not funded fully for capture research and capture extension services. Interviews conducted revealed that surveillance and enforcement were not achieved as per target due to inadequate funding. Surveillance and enforcement goes on throughout the year to curb all illegal fishing activities.

Government's Response

The Controlling Officer submitted that the Ministry totally agreed with the findings regarding the inadequate and untimely funding towards Monitoring, Control and Surveillance for fisheries management.

The Department of Fisheries had progressively increased the allocation of human and financial resources to the management of fisheries. This was aimed at improving the transfer of information on management of resources to the communities; increasing participation of communities in fisheries management and engaging communities in alternative livelihoods, including fish farming so as to reduce the over-dependence on natural fisheries. The inclusion of financing for fish farming in the Fisheries and Aquaculture Development Fund was expected to contribute to the realisation of the set goals. Furthermore, the participation of key stakeholders in the management of fisheries resources as imbedded in the *Fisheries Act No. 22 of 2011*, was expected to contribute to effective implementation of MCS activities.

Committee's Observations and Recommendations

Your Committee commends the Government for the significant increase in the allocation of human and financial resources to the management of fisheries. However, it observes that this is still not adequate to meet the various challenges.

In light of this, your Committee recommends that the Government should increase the budgetary allocation to the Department of Fisheries.

CONCLUSION

7.0 Your Committee is grateful to you, Mr Speaker and the Clerk of the National Assembly for the support rendered to it during the consideration of the Report of the Auditor General on the Sustainable Management of Fish Resources in Natural Waters.

Your Committee is also indebted to all the witnesses who appeared before it for their cooperation in providing the necessary memoranda and briefs.

K Chipungu, MP
CHAIRPERSON

March, 2016
LUSAKA

APPENDIX I

List of Officials

National Assembly

Mr S C Kawimbe, Principal Clerk of Committees

Ms M K Sampa, Deputy Principal Clerk of Committees

Mr F Nabulyato, Committee Clerk (SC)

Mrs M K Siwo, Assistant Committee Clerk

Ms C Mtonga, Stenographer

Mr C Bulaya, Committee Assistant

Mr M Chikome, Parliamentary Messenger