



Government of Malawi
Department of Fisheries

NATIONAL FISHERIES AND
AQUACULTURE POLICY

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The Director of Fisheries
Department of Fisheries
Ministry of Natural Resources and Environmental Affairs
P.O.Box. 593
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Malawi

ABOUT THE DEPARTMENT OF FISHERIES

THE MISSION STATEMENT

The Department of Fisheries in Malawi provides the framework conditions and excellent services to enable national fisheries industry to satisfy local demand for fish, and increase the incomes of people dependent on fish. The Department is committed to collaborative management and sustainable use of aquatic resources.

OPERATIONAL OBJECTIVES

1. To promote capture fisheries and aquaculture in order to create the capacity of the local communities, in partnership with the Department of Fisheries, to manage and regulate the utilisation of the fish resources in Malawi.
2. To provide the information necessary for sustainable exploitation, management, conservation of biodiversity and investment in the fisheries sector through appropriate biological, technological, sociological and environmental research programmes.
3. To increase and sustain fish production from smallholder and large fish farming operations in order to improve fish supply in Malawi.
4. To provide guidelines and enabling environment for private sector participation in production, processing, distribution and marketing of good quality and safe product for local and export market.

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LIST OF ABBREVIATIONS

NGO	Non-Governmental Organisations
BVC	Beach Village Committee
R&D	Research and Development
SADC	Southern Africa Development Community
TA	Technical Assistant
EU	European Union
USA	United States of America

FOREWORD

The National Fisheries and Aquaculture Policy is an integral part of the National Development objectives to enhance overall government strategy of growth through poverty eradication. Fisheries resources important to Malawi since the vast majority of Malawians rely heavily on fish as source of food and employment. Therefore, the policy is essential in order for Malawi to meet the needs of the present, without compromising the ability of future generations to meet their own needs for fish.

Development of the policy has been guided by the government's commitment to ensuring sustainable natural resources base. Like many countries in the world, Malawi has endorsed the concept of sustainable living and sustainable use of natural resources. The objectives and strategies of the policy were reached through an exhaustive consultative process that took into account the needs of all stakeholders in the industry.

The policy aims at creating the capacity of the local communities, in partnership with the Department of Fisheries, to manage and regulate the utilisation of the fish resources in Malawi. Sustainable utilisation of the fisheries resources can only be achieved if scientifically sound information is available through participatory research and technology development.

Improving the efficiency of all aspects of the national fisheries industry calls for a business-oriented approach, as well as a strong involvement of the private sector. Therefore, the policy provides for guidelines and enabling environment for private sector participation in development of the fisheries industry. The policy has also put in place a good foundation for Malawi to take advantage of globalisation by providing guidelines for production, processing, distribution and marketing of good quality and safe fish and fishery products for local and export markets.

Issues of gender have been mainstreamed into the policy in order to facilitate the design of gender-adjusted development interventions. The roles played by women and the youth in fisheries development are enormous, therefore, mechanisms of their practical involvement in fish production, conservation, processing and marketing have been put in place.

In order to achieve better management of the fisheries resources, the policy also promotes co-ordination and collaboration with other sectors in dealing with multi-sectoral issues, which have an impact on the environment. This will ensure that efforts to resolve interrelated and conflicting multiple use of aquatic resources are not fragmented, overlapping or ineffective. I, therefore, appeal to all scientists, extensionists; private sector; donors, Non-governmental Organisations, and resource user-groups to support the Government in implementation of the policy in order for the country to realise optimal and sustainable utilisation of the fisheries resources.

.....
HARRY I. THOMSON MP.

MINISTER OF NATURAL RESOURCES AND ENVIRONMENTAL AFFAIRS

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The Department of Fisheries wishes to acknowledge the efforts made by numerous individuals from government departments; Non-Governmental Organisations; civil society; who worked tirelessly in contributing to the production of this policy document.

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The Department of Fisheries is especially indebted to the Minister of Natural Resources and Environmental Affairs, as well as the Secretary for Natural Resources and Environmental Affairs, without whose guidance, this policy document could have been impossible to produce.

Lastly, by no means the least, the Department of Fisheries expresses its profound gratitude to the United States Agency for International Development (USAID) by whose funding this Policy was prepared, through the NATURE Support Programme.

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**S.A. MAPILA
DIRECTOR OF FISHERIES**

EXECUTIVE SUMMARY

Introduction and overview

The fisheries sector is an important source for rural income, food security and import substitution and directly employs fisherfolk most of whom do not have alternative employment. In addition, it supports other people who work in fisheries related industries such as fish processing and marketing, boat building, engine repair and fishing gear supply. Aquatic resources have an important role to play in Malawi's development and we need to look carefully at our actions in order to enhance the benefits that may accrue. However, given its importance, a well-developed fishing industry, based on sound biological and socio-economic management principles, was lacking in Malawi. The strategies did not pay greater attention to underlying economic considerations resulting in stagnation in the development of the fisheries industry. This document represents an integrated policy framework for fisheries and aquaculture in Malawi; and it takes into account the community participation in the management of fish resources.

The Old Fisheries Policy and Strategy

The objective of the old Fisheries Policy aimed to maximising the sustainable economic yield of stocks in natural and man-made waters. Its secondary objectives were geared towards improving the efficiency of exploitation, processing and marketing and to promote investment in rural fish farming units. The above objectives and strategies were established in 1987 and reflected the orientation of the sector at the time. That orientation was mainly focused on the needs of the fish resources themselves and the Department of Fisheries was seen as the guardian of those resources.

Objectives of the new Fisheries Policy

The new policy National Fisheries and Aquaculture Policy aims at improving the efficiency of all aspects of the national fisheries industry, production and supply of existing fisheries products, as well as the development of new products to satisfy local demand and potential export markets.

The overriding constraint to be addressed when proposing a new development policy in Malawi, regardless of the economic sector, is alleviation of all pervasive poverty. Solving this problem depends on comprehensive development, and particularly on increased incomes and purchasing power. Alleviating poverty does not depend just on increasing the production of a balanced mix of foodstuff but also depends on increasing the distribution of the resources, either for direct food use or to provide benefits for the communities, when they are not consumed locally.

Institutional Framework

The Department of Fisheries shall work in close collaboration with the other stakeholders in conserving and managing fisheries resources. Where necessary, the Department may enter into agreement with other public organisations, communities, the private sector, and NGOs on specific conservation and management issues.

Legal Framework

For the implementation of this policy, there shall be an Act of Parliament on the Conservation and Management of fish resources, which shall be reviewed from time to time. This review shall take into consideration other legal instruments, particularly those having an impact on fisheries and aquaculture in order that they are harmonised.

Fisheries Sub-sectoral Policies

Broad national objectives and strategies are not sufficed in taking care of the needs of the fishing industry and aquaculture. The need for the emergence of a facilitating environment to promote management of the resources at user group level on an economic basis is realised. Sub-sectoral policies were developed for some areas in order to ensure progress by a supporting a demand-driven approach, institutional pluralism in the provision of support and services for resource users.

Fisheries Extension Policy

The policy goal is to support local communities and the private sector in the development of capture fisheries and aquaculture. While in the past major emphasis was placed on the use of enforcement to police fisheries regulation, the low effectiveness and high cost of this strategy in fisheries management has created the need for an extension approach which fosters greater community participation in fisheries management. The need to strengthen the extension service in order to implement an effective participatory management of the fisheries has been recognised. The importance of the role of women in fisheries development would be translated into women's practical involvement in fish production, conservation, processing and marketing.

Fisheries Research Policy

The policy goal is to provide the information necessary for sustainable exploitation, management, conservation of biodiversity and investment in the fisheries sector through appropriate biological, technological, sociological and environmental research programmes. The role and function of the research unit of the Department of Fisheries is to undertake relevant and problem-solving management oriented research programmes. Whenever necessary, the unit shall in collaboration with local or external organisations generate usable information and technologies required for the management, conservation and sustainable utilisation of fisheries resources in the various water bodies of Malawi.

Participatory Fisheries Management Policy

The policy goal is to establish and sustain the co-management of fisheries resources between the Department of Fisheries and key stakeholders (e.g. fishing communities, traditional leaders) in order to achieve sustainable exploitation of aquatic resources management for the artisanal fisheries. Participatory fisheries management is based on establishing effective local fishing community institutions that will work jointly with Government in fish resource management. This arrangement is intended to share rationally the responsibility and authority in managing the fish resources. This sharing of responsibility cuts across the entire community and will include the full participation of men and women with their capabilities as dictated by the local fisheries by-laws.

Fish Farming Policy

The policy goal is to increase and sustain fish production from smallholder and large fish farming operations in order to improve fish supply in Malawi. Malawi started developing fish farming in the early forties and since then there has been a continuous commitment to aquaculture development.

Human Resource Development Policy

The policy goal is to develop capacity, knowledge and skills by providing appropriate training programmes for the Department of Fisheries and user communities in Malawi and in the SADC region. The Department of Fisheries stresses the importance of training as a method to develop and maintain skills in the public and private sectors of the fishing industry.

Enforcement Policy

The policy goal is to maintain effective fisheries inspections, as well as supporting local fisheries management authorities in the enforcement of fisheries management measures in order to control the exploitation and to ensure sustainable utilisation of fish resources. Monitoring and controlling of fishing activities by government is necessary in order to ensure that fishing laws and regulations are complied with.

Riverine and Floodplain Fisheries Policy

The policy goal is to promote sustainable utilisation of fish resources in the riverine, floodplains and wetlands. To complement fish production from Malawi's lakes, there is a need to assess the sustainable and appropriate utilisation of rivers, adjacent wetlands and floodplains. Although local communities exploit the fish resources in riverine and wetlands, there is a need for sound management strategies to ensure sustainable utilisation.

Fish Marketing Policy

In order to promote production, processing, distribution and marketing of good quality and safe fish and fish products for local and export markets, the policy aims at promoting post-harvest technologies that ensure improved fish products. Through research, technologies must be developed for effective and low cost fish processing methods. The policy also aims at helping the fish producers in Malawi to take advantage of globalisation, by developing quality control standards for fish and fish products.

Private Sector Investment Policy

The policy provides guidelines and an enabling environment for promoting investment in the fisheries and fish farming industry in order to improve fish production. A number of strategies have been put in place, including facilitating access to relevant information on investment by potential investors; and facilitating access to investment capital by potential investors.

1. Introduction and overview

Like many countries in the world, Malawi has endorsed the concept of sustainable living and sustainable use of natural resources. Sustainable living marks a commitment by people to meet the needs of the present without compromising the ability of future generations to meet their own needs. Aquatic resources have an important role to play in Malawi's development and we need to look carefully at our actions in order to enhance the benefits that may accrue.

The fisheries sector is an important source for rural income, food security and import substitution and directly employs fisherfolk most of whom do not have alternative employment. In addition, it supports other people who work in fisheries related industries such as fish processing and marketing, boat building, engine repair and fishing gear supply. At present an estimated number of at least 200,000 people are employed in the fishing industry.

However, given its importance, a well-developed fishing industry, based on sound biological and socio-economic management principles, was lacking in Malawi. The strategies did not pay greater attention to underlying economic considerations resulting in stagnation in the development of the fisheries industry.

This document represents an integrated policy framework for fisheries and aquaculture in Malawi. The objectives and strategies were reached through an exhaustive consultative process that took into account the needs of all stakeholders in the industry and on community participation in the management of fish resources.

2. The Old Fisheries Policy and Strategy

The objective of the old Fisheries Policy aimed at maximising the sustainable economic yield of stocks in natural and man-made waters. Its secondary objectives geared towards improving the efficiency of exploitation, processing and marketing and to promote investment in rural fish farming units. The strategies outlined in the document inter alia emphasised research to identify under-utilised fish resources especially in the offshore waters of Lake Malawi, as well as the promotion of aquaculture development particularly in the Central and Northern regions of Malawi.

The above objectives and strategies were established in 1987 and reflected the orientation of the sector at the time. That orientation was mainly focused on the needs of the fish resources themselves and the Department of Fisheries was seen as the guardian of those resources.

In recent years the emphasis has moved towards a concern for the needs of people, and the fish resources are now seen more in terms of their contribution to a stream of sustainable benefits for the fishing community itself and for the wider national community.

The above policy did not elaborate on how the objectives would be achieved:

- In its endeavour to maximise yields from the fish stocks, priority areas were not clearly defined. In addition, strategies on how incomes and employment would be increased, how markets would be improved and fish supply distributed to deficient areas and low-income groups, were not developed.

- social and economic benefits to be derived from the fisheries sector were not specified. Benefits of economic growth did not reach the majority of the fishing population.
- environmental issues were not considered in the planning of the utilisation and management of fisheries resources.

3. Objectives of the new Fisheries Policy

The overriding constraint to be addressed when proposing a new development policy in Malawi, regardless of the economic sector, is alleviation of all pervasive poverty. Solving this problem depends on comprehensive development, and particularly on increased incomes and purchasing power. Alleviating poverty does not depend just on increasing the production of a balanced mix of foodstuff but also depends on increasing the distribution of the resources, either for direct food use or to provide benefits for the communities, when they are not consumed locally.

In pursuit of the above, the Department of Fisheries aim is to improve the efficiency of all aspects of the national fisheries industry, production and supply of existing fisheries products, as well as the development of new products to satisfy local demand and potential export markets.

The general objectives aim at monitoring and controlling fishing activities to enhance the quality of life for fishing communities by increasing harvests within safe sustainable yields and to promote aquaculture as a source of income and to supplement fish supply from natural waters.

The new fisheries policy focus on public and political awareness on the stakes associated with the judicious development and management of the sector, on ecological understanding of the resources and the economic

forces behind their exploitation. It promotes the exploitation of stocks in deeper waters, which currently are not in danger of being over-fished, and takes into consideration its possible income earning and employment potential for the small-scale fisheries and incorporates the socio-cultural and socio-economic conditions prevailing in the sector by using participatory approaches. This will allow the different interest groups, be they industrial or artisanal, fisheries or aquaculture, to interact with the legislative and executive government authorities more efficiently in the management of resources.

This policy also promotes co-ordination and collaboration with other sectors in dealing with multi-sectoral issues, which have an impact on the environment. This will ensure that efforts to resolve interrelated, causative issues involved in the multiple use of aquatic and water resources and in the management of fish resources are not fragmented, overlapping and ineffective.

4. Management and Implementation

4.1 Institutional Framework

The Department of Fisheries shall work in close collaboration with the other stakeholders in conserving and managing fisheries resources. Where necessary, the Department may enter into agreement with other public organisations, communities, the private sector, and NGOs on specific conservation and management issues.

4.2 Legal Framework

For the implementation of this policy, there shall be an Act of Parliament on the Conservation and Management of fish resources, which shall be

reviewed from time to time. This review shall take into consideration other legal instruments, particularly those having an impact on fisheries and aquaculture in order that they are harmonised.

4.3 Funding

Government acknowledges the fact that appropriate conservation and management of fisheries resources requires adequate funding. Consequently it commits itself to provide adequate funds to the sector. To supplement funds provided by the Central Government, the Fisheries Fund will be used, as provided for by the Section 22 of the Fisheries Conservation and Management Act (1997).

5. Fisheries Sub-sectoral Policies

Broad national objectives and strategies are not sufficed in taking care of the needs of the fishing industry and aquaculture. The need for the emergence of a facilitating environment to promote management of the resources at user group level on an economic basis is realised. Sub-sectoral policies were developed for some areas in order to ensure progress by a supporting a demand-driven approach, institutional pluralism in the provision of support and services for resource users:

- Extension
- Research
- Participatory fisheries management
- Fish farming
- Training

- Enforcement
- Riverine and floodplains fisheries
- Fish Marketing

5.1. Fisheries Extension Policy

The strategies available to the Department of Fisheries in protecting or managing the fisheries resources include those of extension, research and enforcement of fisheries regulations. While in the past major emphasis was placed on the use of enforcement to police fisheries regulation, the low effectiveness and high cost of this strategy in fisheries management has created the need for an extension approach which fosters greater community participation in fisheries management. The need to strengthen the extension service in order to implement an effective participatory management of the fisheries has been recognised.

In Malawi, artisanal or small-scale fishing is one of a more diverse food production and income generating activities. Fisheries and aquaculture are supported more often in the framework of integrated rural development. The importance of the role of women in fisheries development would be translated into women's practical involvement in fish production, conservation, processing and marketing.

The Policy Goal

To support local communities and the private sector in the development of capture fisheries and aquaculture.

Objective 1.1 To mobilise communities to participate and to play an active role in fisheries management and fish farming (aquaculture).

- Strategies:
- 1.1.1 Facilitate formation of fisheries management institutions e.g. Beach Village Committees (BVCs).
 - 1.1.2. Train community groups (e.g. BVCs) to conduct formalised meetings (agenda, procedure, and record keeping for the User Group Committee as well as for the Department of Fisheries) on all aspects of fisheries management.
 - 1.1.3. Promote and facilitate the introduction of fish farming in rural communities.

Objective 1.2: To improve effectiveness and efficiency of the extension service.

- Strategies:
- 1.2.1 Elaborate and implement annual workplans.
 - 1.2.2 Design, test and introduce a monitoring and evaluation system for extension service.
 - 1.2.3 Set clear rules and guidelines for the use of equipment (transport, etc.) to improve co-ordination between different sections of the department.
 - 1.2.4 Identify areas of co-operation with other extension services and co-ordinate activities if and when feasible.

Objective 1.3 To distribute extension messages on fisheries and on environmental issues to sensitise the fishing communities.

- Strategies:
- 1.3.1 Produce extension messages based on needs assessment meetings and information collected in fishing communities.
 - 1.3.2 Form an Extension Content Committee responsible for the production and publication of extension messages.
 - 1.3.3 Test different methodologies for the transfer of extension messages.
 - 1.3.4 Identify and address relevant environmental issues.
 - 1.3.5 Conduct regular field trips to support capacity building in fishing communities.
 - 1.3.6 Promote and support private investment in fish farming and capture fisheries.

Objective 1.4 To motivate extension personnel to improve effectiveness by establishing functional personnel development plans.

- Strategies:
- 1.4.1 Formulate clear job descriptions for all personnel of the extension service.
 - 1.4.2 Institute an effective regular in-service programme based on assessed needs.
 - 1.4.3 Conduct general refresher courses for extension personnel.

- 1.4.4 Organise up-grading courses for extension staff.
- 1.4.4 Improve district and inter-departmental co-ordination and co-operation.
- 1.4.5 Conduct regular monitoring meetings at all departmental levels (National, Regional, District) to improve flow of information and supervision.

Objective 1.5 To review research priorities to address actual fishing community needs/problems and to make use of indigenous fisheries knowledge.

- Strategies:
- 1.5.1 Organise special village meetings with research and extension personnel to identify areas of research required by communities to support participatory fisheries management or fish farming.
 - 1.5.2 Conduct biannual review meetings with research and extension personnel at regional level to improve information and co-operation.
 - 1.5.3 Conduct annual meetings for research and extension to exchange information and to develop joint work programmes based on actual needs.
 - 1.5.4 Invite representatives of community management institutions to participate in annual meetings for research and extension to exchange information and also develop joint work programmes based on actual needs.

5.2. Fisheries Research Policy

The role and function of the research unit of the Department of Fisheries is to undertake relevant and problem-solving management oriented research programmes. Whenever necessary, the unit shall in collaboration with local or external organisations generate usable information and technologies required for the management, conservation and sustainable utilisation of fisheries resources in the various water bodies of Malawi.

The Policy Goal

To provide the information necessary for sustainable exploitation, management, conservation of biodiversity and investment in the fisheries sector through appropriate biological, technological, sociological and environmental research programmes.

Objective 2.1 To promote the implementation of demand-driven, service oriented research focusing on problems identified with the stakeholders in the fishing industry.

- Strategies
- 2.1.1 Identify research programmes for the fishing sector with the stakeholders (local fishing communities).
 - 2.1.2 Review research activities regularly in collaboration with other section of the Department of Fisheries and other stakeholders.
 - 2.1.3 Participate in joint meetings with extension officers and representatives of the fishing industry as outlined under objective 1.5.

2.1.4 Develop a mechanism that allows external peer reviews of research programmes and projects.

2.1.5 Publish research results timely and regularly.

Objective 2.2 To provide reliable information on the status of exploited fish stocks, economic and environmental parameters including noxious aquatic weeds in all water bodies.

Strategies: 2.2.1 Conduct monitoring programmes for the various important fisheries in both deep and shallow waters.

2.2.2 Distribute quantitative information on the status of the fisheries resources to local communities and other stakeholders.

2.2.3 Recognise multi-species and multi-user interactions in the formulation of management advice.

2.2.4 Prepare and update annually the Management Plan for all fisheries in Malawi.

2.2.5 Encourage cross-sectoral initiatives and determine areas of conflict between sectors (e.g. tourism and fisheries) in developing the fisheries management systems.

2.2.6 Carry out investigations aimed at establishing and updating appropriate management systems and techniques that can be used as a basis for sustainable utilisation of shallow and deep-water fish resources.

- 2.2.7 Involve fishing communities in data collection and research programmes relevant to fisheries management (fishery and environmental monitoring).
- 2.2.8 Prepare and regularly update management plans for all economically important fish resources.
- 2.2.9 Review quality of national fisheries statistical data collecting systems and improve if necessary.
- 2.2.10 Publish annual fisheries statistics timely.
- 2.2.11 Elaborate a policy paper for the Mbuna fish stocks (management, conservation and utilisation).
- 2.2.12 Establish and maintain together with extension a register of fishers to enable controlled entry into the fisheries.
- 2.2.13 Monitor the extent to which aquatic weeds have spread, especially water hyacinth, in the aquatic environment of Malawi and introduce biological and other control measures.
- 2.2.14 Initiate multi-sectoral approach on control measures of water hyacinth.
- 2.2.15 Initiate community participation in the control of water hyacinth in close co-operation with extension services active in the affected areas.

Objective 2.3 To provide information about under-exploited resources to the fishing sector.

Strategies: 2.3.1 Co-ordinate and conduct research activities aiming at identifying and reassessing under-utilised resources.

2.3.2 Co-ordinate and conduct exploratory surveys on unexploited fish stocks in all waters of Malawi.

2.3.3 Co-ordinate and conduct research and experimental development (R&D) studies for the development of appropriate technology for fishing methods and fish processing and marketing.

2.3.4 Co-ordinate and conduct research in taxonomy and ecology to identify fisheries management related problems early.

2.3.5 Co-ordinate and conduct collaborative research in areas of outstanding scientific interest.

2.3.6 Ensure timely dissemination of research and survey results of and to all parties interested.

Objective 2.4 To establish an information system to quantify impact of pollution etc. on the fisheries resources.

Strategies: 2.4.1 Conduct aquatic ecology studies on all vulnerable aquatic habitats for management information.

- 2.4.2 Study impact of soil erosion (siltation) on aquatic habitat.
- 2.4.3 Initiate national actions for implementation according to international conventions in Malawi.
- Objective 2.5 To provide socio-economic information about fishing communities.**
- Strategies: 2.5.1 Conduct baseline, household, marketing and fishing gear inventory surveys to broaden knowledge about fishing communities and the small scale fishing sector.
- 2.5.2 Analyse marketing and input supplies data regularly to identify problem areas and market potentials for fish products.
- 2.5.3 Identify potential for additional income generation (products and services) for the fishing sector.
- 2.5.4 Co-operate with NGOs and other institutions involved in socio-economic research.

5.3 Participatory Fisheries Management Policy

Participatory fisheries management has proved to be the most appropriate method to manage the fish resources in the lakes of Malawi. Participatory fisheries management is legislated by the new Fisheries Conservation and Management Act. Participatory fisheries management is based on establishing effective local fishing community institutions that will work jointly with Government in fish resource management.

This arrangement is intended to share rationally the responsibility and authority in managing the fish resources. This sharing of responsibility cuts across the entire community and will include the full participation of men and women with their capabilities as dictated by the local fisheries by-laws.

Policy Goal

To establish and sustain the co-management of fisheries resources between the Department of Fisheries and key stakeholders (e.g. fishing communities, traditional leaders) in order to achieve sustainable exploitation of aquatic resources management for the artisanal fisheries.

Objective 3.1 To achieve the active participation of local fishing communities in the management of the fish resources.

- Strategies:
- 3.1.1 Identify key stakeholders in the small scale-fishing sub-sector.
 - 3.1.2 Promote the formation of local fisheries management authorities (e.g. BVCs) and higher level entities.
 - 3.1.3 Strengthen the capacity of local fisheries management authorities to enable them to participate effectively in fish resource management.
 - 3.1.4 Harmonise strategy with other community committees (forest, agriculture, water, etc.) and co-ordinate activities with other extension services.

- 3.1.5 Establish and uphold distinct boundaries for fishing areas for local fisheries management authorities.
 - 3.1.6 Elaborate together with local fisheries management authorities appropriate fisheries management plans (objectives, measures and regulations in line with the Fisheries Act).
- Objective 3.2 To provide legal instruments and procedures for the participation of local fisheries management authorities in the management of the fish resources.**
- Strategies:
- 3.2.1 Conclude agreements for fisheries management plans between the Department of Fisheries and local fisheries management authorities.
 - 3.2.2 Support local fisheries management authorities to participate in enforcement, research and monitoring activities.
 - 3.2.3 Review fisheries subsidiary legislation in consultation with other relevant organisations.
- Objective 3.3 To develop and maintain the capacity to monitor, support and conduct research on participatory fisheries management within the Department of Fisheries.**
- Strategies:
- 3.3.1 Monitor enforcement activities of Government and local fisheries management authorities.

- 3.3.2 Report cases of corruption and make recommendations.
- 3.3.3 Investigate the effects of by-laws.
- 3.3.4 Describe conflict areas between all stakeholders and elaborate recommendations (sharing or exclusion).

5.4 Fish Farming Policy

Malawi started developing fish farming in the early forties and since then there has been a continuous commitment to aquaculture development. Experimental aquaculture is carried out at fish farm stations in Domasi in Zomba district, Mzuzu in Mzimbe district and Kasinthula in Chikawa district.

The Policy Goal

To increase and sustain fish production from smallholder and large fish farming operations in order to improve fish supply in Malawi.

Objective 4.1 To solve problems related to fish farming and the management of small water bodies through bio-technical research.

Strategies: 4.1.1 Recommend suitable management strategies for achieving optimum fish growth and fish production at different production intensities.

- 4.1.2 Recommend broodstock and hatchery management strategies.
- 4.1.3 Develop protocols for the management and conservation of the genetic diversity of farmed fish (significance of endangered endemic species).
- 4.1.4 Improve existing species through genetic selection, inbreeding and crossbreeding.
- 4.1.5 Establish collaboration between aquaculture and capture fisheries extension and research to exchange information and experiences.
- 4.1.6 Develop protocols to integrate fish farming into agriculture.

Objective 4.2 To develop adaptive/appropriate recommendations for fish farming

- Strategies:
- 4.2.1 Identify indigenous species for different climatic as well as agro-ecological zones for different scale of operations through on-farm research.
 - 4.2.2 Prepare economic analysis for different scales of fish farming enterprises (small to large fish farms) and advise farmers accordingly.
 - 4.2.3 Assess productivity of reservoirs and small water bodies and test stock enhancement, management and utilisation.

4.2.4 Investigate socio-economic feasibility of the management of reservoirs and small water bodies.

Objective 4.3 To encourage farmers to adopt fish farming as source of subsistence and income.

Strategies: 4.3.1 Create awareness about potential of and encourage fish farming.

4.3.2 Establish demonstration farms for integrated fish farming.

4.3.3 Co-operate with agriculture extension officers to broaden knowledge about target group behaviour.

4.3.4 Introduce and support participatory extension.

4.3.5 Monitor and evaluate fish farming extension regularly to analyse limitations and constraints in fish farming practice.

4.3.6 Co-operate closely and regularly with research projects and programmes on fish farming and exchange findings.

5.5 Human Resource Development Policy

The Department of Fisheries stresses the importance of training as a method to develop and maintain skills in the public and private sectors of the fishing industry.

The Policy Goal

To develop capacity, knowledge and skills by providing appropriate training programmes for the Department of Fisheries and user communities in Malawi and in the SADC region.

Objective 5.1 To develop and provide a broad range of demand-driven courses for fisheries, co-management and aquaculture to support user communities.

Strategies: 5.1.1 Identify training needs for user communities based on built-in procedures with extension services, fishing communities, fishing industry and the Malawi Government.

5.1.2 Conduct tailor-made training courses for personnel and user communities.

Objective 5.2 To encourage collaboration at national, regional and international levels in areas of training, research and consultancies for the fishing sector.

Strategies: 5.2.1 Promote staff and student exchange visits and attachments.

5.2.1 Encourage information exchange at all levels.

5.2.2 Establish and promote linkages with other training, extension and research institutions at national, regional and international level.

5.2.3 Participate actively in national, regional and international level meetings, seminars and workshops.

5.2.4 Ensure the assignment of counterparts for training to TA staff.

Objective 5.3 To ensure appropriate knowledge, skills and attitudes for fisheries personnel.

Strategies: 5.3.1 Conduct pre-service courses.

5.3.2 Conduct in-service courses.

5.3.3 Evaluate and review training programme regularly.

5.3.4 Implement courses on actual issues in fisheries, aquaculture and environment to develop and strengthen capacity in development and management.

Objective 5.4 To develop and maintain high quality training standards.

Strategies: 5.4.1 Recruit suitable and qualified staff to become trainers.

5.4.2 Provide appropriate training for faculty personnel.

5.4.3 Provide incentives for trainers in line with government regulations.

5.4.4 Improve access and use of up-date information and knowledge on new technologies and practices.

5.4.5 Develop a strategy for peer review and accreditation.

5.6 Enforcement Policy

Under co-management systems, monitoring and controlling of fishing activities by government is needed to ensure that fishing laws and regulations are complied with. The Fisheries Enforcement Unit is sometimes assisted by Navy and Police during coastal patrols to carry out this task.

The Policy Goal

To maintain effective fisheries inspections in order to support local fisheries management authorities in the enforcement of fisheries management measures in order to control the exploitation and to ensure sustainable utilisation of fish resources.

Objective 6.1 To maintain an effective fisheries inspectorate in order to support local communities in the formulation and enforcement of fisheries regulations and by-laws.

- Strategies:
- 6.1.1 Hold regular meetings with local fisheries management authorities.
 - 6.1.2 Encourage the participation of local fisheries management authorities in patrols.
 - 6.1.3 Encourage local fisheries management authorities to issue fishing licenses.
 - 6.1.4 Establish a mechanism to monitor compliance with fisheries regulations and guidelines.

5.7 Riverine and Floodplain Fisheries Policy

To complement fish production from Malawi's lakes, there is a need to assess the sustainable and appropriate utilisation of rivers, adjacent wetlands and floodplains. It must be recognised that these areas are the driving forces for production through direct organic and inorganic inputs into aquatic ecosystems and facilitation of migration and spawning in fish and other aquatic vertebrates and the provision of nursery areas. Although local communities exploit the fish resources, no research has deliberately focused on these water bodies. This has led to lack of management information for these resources, which may lead to either over exploitation or under utilisation.

Policy Goal

To promote sustainable utilisation of fish resources in the riverine and adjacent floodplains and wetlands in recognition of the commitment of Malawi to maintain biodiversity and the need for co-operation and co-ordination with other institutions.

Objective 7.1 To manage the fisheries in the riverine and adjacent floodplains and wetlands based on sound understanding and knowledge of the biology of target species and the impact of harvesting to the eco-systems.

- Strategies: 7.1.1 Undertake research to understand the eco-systems in the riverine and adjacent floodplain and wetland habitats.
- 7.1.2 Perform stock assessment for fish species important for human consumption in the ecosystems.
- 7.1.3 Undertake research to understand breeding ecology of fish species in the ecosystems.
- 7.1.4 Assess productivity levels in the ecosystems under various conditions.
- 7.1.5 Recommend management procedures for these ecosystems, while taking into account multi-species and multi user interactions.

Objective 7.2 To involve riparian communities in the sustainable management of the riverine environment and adjacent floodplains and wetlands.

- Strategies: 7.2.1 Evaluate suitable measures to involve riparian communities in the sustainable exploitation of the ecosystems.
- 7.2.2 Record the catch and effort of full and part time fishermen in the riverine and adjacent floodplains and wetlands.
- 7.2.3 Apply the co-management approach practised in the lakes of Malawi to the riparian communities.

5.8 Fish Marketing Policy

The Policy Goal

To promote production, processing, distribution and marketing of good quality and safe fish and fish products of Malawi for local and export markets.

Objective 8.1 To promote post-harvest technologies that ensure improved fish products.

Strategy 8.1.1 Develop effective and low cost fish processing methods.

8.1.2 Introduce improved fish processing and packaging techniques to fish processors.

8.1.3 Promote use of improved fish processing techniques.

Objective 8.2 To promote quality control standards for fish and fish products.

Strategy 8.2.1 Disseminate market information on fish and fish products.

8.2.2 Develop quality standards that ensure safe products and comply with the Malawi Bureau of Standards and standards set for the EU and the USA.

8.2.3 Disseminate information on fish quality standards and promote quality control measures and ensure that fish and fish products comply with regulations.

5.9 Private Sector Investment Policy

Policy Goal

To provide guidelines and an enabling environment for private sector participation in the development of the fishing industry.

Objective 9.1 To promote investment in the fisheries and fish farming industry in order to improve regular supply of fish.

Strategies: 9.1.1 Facilitate access to relevant information on investment by potential investors.

9.1.2 Facilitate access to investment capital by potential investors.

9.1.3 Promote growth of the local fisheries industry by encouraging joint ventures with foreign companies.

9.1.4 Provide incentives for private investment in the fishing industry.

Objective 9.2 To improve the marketing system for fish and fish

Products

9.2.1 Collect and disseminate market information on fish and fish products.

9.2.2 Facilitate the involvement of the private sector in the marketing of fish and fish products.

9.2.3 Encourage the development of fish marketing infrastructure.