



THE REPUBLIC REPUBLIC OF THE GAMBIA OF THE GAMBIA

THE GAMBIA NATIONAL STRATEGIC PLAN FOR THE FISHERIES SECTOR

2009 – 2013

(January 2009)

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List of acronyms

AU	African Union
CCLME	Canary Current Large Marine Ecosystem
CECAF	Fishery Committee for the Eastern Central Atlantic
COFI	Committee on Fisheries
COMHAFAT	Ministerial Conference on Fisheries Cooperation Among African States Bordering the Atlantic Ocean
CRODT	Centre for Oceanographic Research of Dakar Thiaroye, Senegal
DOF	Department of Fisheries
DOSFWR & NAM	Department of State for Fisheries, Water Resources & National Assembly Matters
DOSA	Department of State for Agriculture
ECOWAS	Economic Community of West African States
ERP	Economic Recovery Programme
ESP	Ecologically Sustainable Development
FAC	Fishery Advisory Committee
FAO	Food and Agriculture Organisation of the United Nations
HACCP	Hazard Analysis and Critical Control Points
ICCAT	International Commission for Conservation of Atlantic Tuna
IMR	Institute of Marine Research
IRD	Institute for Research and Development
MCS	Monitoring Control and Surveillance
MT	Metric Ton
MTP	Mid Term Plan
NaNA	National Nutrition Agency
NAAFO	National association of Artisanal Fisheries Operators
NORAD	Norwegian Agency for Development
NARI	National Agricultural Research Institute
NGO	Non-Governmental Organisation
OMVG	Organisation for the Development of the Gambia River Basin
PSD	Programme for Sustained Development
SAP	Strategic Action Plan
SRFC	Sub-Regional Fisheries Commission
TAGFC	The Association of Gambian Fishing Companies
UNDP	United Nations Development Programme
U. S. A.	United States of America
WTO	World trade Organisation
VDC	Village Development Committee

1. CONTEXT AND BACKGROUND

The Gambia is one of Africa's smallest coastal states with a coastline of about 80 km, stretching along the banks of the River Gambia, bordered on three sides by the Republic of Senegal and on the west by the Atlantic Ocean. It is located in the highly productive up-welling zone of the Atlantic Ocean and the Canary Current Large Marine Ecosystem (CCLME) region. The productivity of the marine and estuarine waters within the jurisdiction of the country is further enhanced by the huge annual influxes of nutrients from the river, fringed with mangroves on both sides up to hundred kilometres or more. However, the economy of The Gambia is agrarian, heavily dependent on the amount of rain falling during the wet season. After a series of drought spells in the mid 1970's and 1980's which resulted in decline in agricultural production and animal husbandry, the Government of The Gambia took the decision to turn to other economic sectors for redress.

The marine waters of the Gambia are considered to be rich in terms of abundance and diversity of fish species (over 500 marine species) according to the first survey of fisheries potentials conducted jointly by FAO and UNDP in 1964 and 1965.

The River Gambia has enormous freshwater resources that can sustain huge extraction for various irrigation schemes (Rice, aquaculture and horticulture). The freshwater zone of the river overflows is banks twice every month during spring tides with tidal amplitude reaching one metre (1.0m) or more in some places. This characteristic of the river has rendered the adjacent flood plains gravitationally irrigable, particularly in the Central River Division. This is quite a positive attribute for development of aquaculture along its bank.

A number of economic, social, institutional, physical and technical constraints are impeding the sustainable development, growth and management of the fisheries and aquaculture sectors. These constraints identified in the Gambia Medium Term Plan (MTP) developed by the Gambia Government in collaboration with the UNDP for the period 2005-2009 include: poor governance and management, inadequate scientific information for informed decision making, inadequate infrastructure, and limited control over the resources, poor product quality management, and low level of aquaculture development, low level of regional trade in fish and fishery products, inadequate skilled manpower and inadequate investment in the sector.

The Gambia's Fisheries Policy elaborated and adopted in 2007 seeks to contribute to the realisation of the development goals of the country and outlines the keys areas of intervention to safeguard the economic, social and environmental viability of the fisheries sector and increase the benefits for present and future generations.

In order to enhance attainment of the fisheries sector's potential to contribute to national socio-economic development, the Gambia Government decided to elaborate a 5 years Fisheries Strategic Action Plan. The primary objective of the Fisheries Strategic Action Plan 2009-2013 is to serve as a framework for the achievement of the objectives outlined in the Fisheries Policy 2007 for the management and development of the fisheries sector.

2. OVERVIEW OF THE FISHERIES SECTOR

Status of the fisheries resource base

The Gambia is endowed with abundant and diverse fish species which offer great potential to make substantial contribution to its socio-economic development.

However, The Gambia does not have the requisite financial, human, material and technical resources to conduct scientific surveys on its own and continue to rely on assistance provided by international institutions and organizations such as FAO and NORAD. Accurate and reliable information is available on the status of the pelagic fish stocks but very little information on the demersal fish stocks.

The first survey of fisheries potentials of Gambian waters conducted with the assistance of the FAO and UNDP in 1964 and 1965 indicated that the country is endowed with diverse demersal fish species, cephalopods, crustaceans and pelagics.

There are over 500 marine fish species which are usually classed as demersals and pelagics. The demersals include groupers, sea breams, grunts, croakers and snappers etc. The small pelagics group consists of the two sardinellas (*Sardinella aurita* and *Sardinella maderensis*), bonga and shad (*Ethmalosa fimbriata*), horse mackerels (*Trachurus trecae*, *Trachurus trachurus* and *Caranx rhoncus*) and mackerel (*Scomber japonicus*). Biomass estimates of the demersal fish resources in 1986 conducted by the Spanish Institute of Oceanography, as reflected in figure 1, was 43,645 tonnes. The 1986 survey was the most comprehensive survey of demersal fish resources. Estimates provided in 1995 were obtained from a partial survey of demersal stocks conducted during a survey that focused on pelagic fish species. The Gambia together with three coastal countries, namely; Morocco, Mauritania and Senegal have since 1995 been assisted with annual hydro-acoustic surveys of small pelagic fish stocks under the project, GCP/INT/730/NOR. This project is jointly implemented by the United Nations Food and Agriculture Organization (FAO) and the Norwegian Institute of Marine Research (IMR). Biomass estimates of fish stocks from these surveys are shown below in Figure 1.

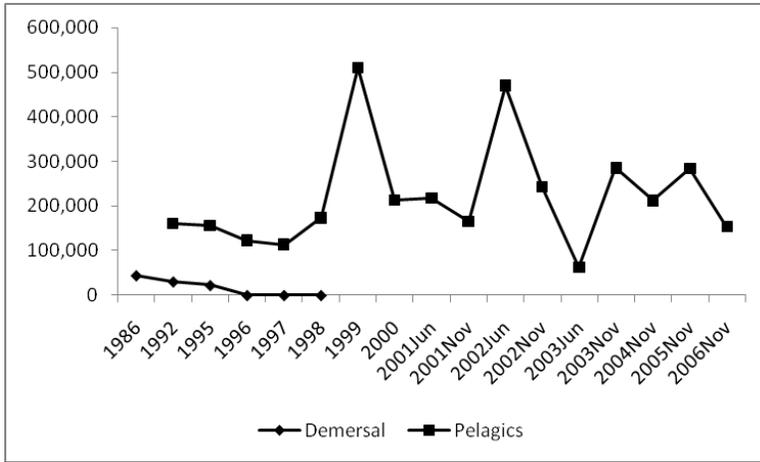


Figure 1: Biomass estimates of marine demersal and small pelagic fisheries resources

In 2004, the French Institute for Research and Development (IRD) in collaboration with the Fisheries Department concluded study of fish populations in the Gambia River which revealed that the brackish and estuarine portions of the river are very rich in terms of species diversity and abundance. It identified about 70 fish species within the river system and several of them, especially those belonging to Carangidae, Drepaneidae, Clupidae, Haemulidae, Polynemidae, Cichlidae, Scianidae, Cynoglossidae, etc, are of commercial significance. It is strongly believed that the fish resources of the River Gambia are still under-exploited and improvements in fishing technology and techniques will allow for increased fish landings in the inland artisanal fishery.

Socio-economic importance of the fisheries sector

Given its enormous potentials the sector can play a significant role in the social and economic development of The Gambia in terms of employment generation and poverty reduction particularly in the rural areas, food security and improve nutritional standards by providing affordable animal protein to the population, revenue generation and foreign exchange earnings through regional and international fish trade.

Two types of fisheries operate in the Gambia; small scale (artisanal) and industrial fisheries. These fisheries are distinguished by their mode of operation.

The industrial fishery is characterised by high capital investment and limited to the marine area while the artisanal fishery is dispersed and characterized by low capital investment and labour intensive activities.

The artisanal fisheries revolve around the use of small fishing crafts, consisting mainly of a fleet of 1,785 canoes (2006) operating in the waters of both the marine and the River Gambia. Locally, the number of artisanal canoes (35%) and fishermen (50%) has been increasing during the past two decades due, among others, to declining agricultural production. More rural people are taking up fishing and its related ancillary activities.

According to results of the last frame survey conducted by the Fisheries Department in 2006, over 200 000 people are directly or indirectly dependent on artisanal fisheries and its related activities for their livelihoods. The artisanal sub-sector provides direct employment to 6 104 fishermen (1 410 head fishermen and 4 694 assistant fishermen). Out of the 1 410 head fishermen, 805 were Gambians and 605 foreigners. There are an estimated 11 000 people as members of the head fishermen households. In addition to fishermen, fisheries operators include ancillary workers namely boat builders, fish processors, fish exporters/traders including fish retailers. In the coastal area, of the 416 fishermen, 249 are foreign nationals, mainly Senegalese compared to 167 Gambians. The inland area is dominated by Gambians.

The development of industrial fisheries has been relatively limited in the Gambia. It is interesting to note that, presently, all fishing vessels operating in Gambian waters are foreign owned. These vessels land their catches in foreign ports where the fish is processed, packaged and labelled as products originating from those foreign ports. The total catch by industrial fishing vessels in 2006 is estimated at nearly 3 000 tonnes (from catch data provided by observers posted onboard licensed fishing vessels). This represents a major economic loss for the country.

The number of vessels licensed to operate in Gambian waters in 2006, 2007 and 2008 were 24, 48, and 35 respectively of which approximately 67% operated within the Senegalo-Gambian Agreement on Maritime Fishing. The majority of these vessels spend limited time in Gambian waters because they usually possess licenses of both countries and target certain species where they occur. A reciprocal fishing agreement between the Gambia and Senegal has been in existence 1982 but Gambians have not been able to participate fully and reap the benefits being accorded due to the paucity of locally based fishing vessels.

It is also estimated that less than 2000 people are employed in the industrial sub-sector the majority of whom are factory workers (mainly women). It is a policy that 20 per cent of the crew of fishing vessels licensed to operate in the country must be Gambians. There are nine (9) fish processing factories but most of them operate intermittently due to insufficient supplies of raw fish materials, high energy cost and lack of working capital. As a result, the impact of their operations on the economy in terms of employment and foreign exchange earnings has been minimal.

The Artisanal fishery is the major supplier of food fish for the Gambian population and a source of raw fish materials for the fish processing establishments in the Gambia. The bulk of fish exports from the Gambia could be traced back to the artisanal fishery. It is only prudent to say that the major hard currency earners in the business of fisheries obtain fish supplies from the artisanal fisheries sub-sector.

Evolution of fisheries sector development and management

Fisheries Management and policy

Following the first fisheries development interventions that led to the creation of the Fisheries Department in the late 1960's, policies intended to facilitate the development of a fisheries sector evolved over the course of two national 5 year development plans (1975 to 1980 and 1980 to 1985) when the Government defined development objectives for the fisheries sector as a guide to public sector interventions. The broad objectives were reviewed as part of the Economic Recovery Programmes (ERP), 1985–1989 and the successor Programme for Sustained Development (PSD) of the 1990's. The stated policy objectives were as follows:-

- To improve the institutional capacity for the management of the fisheries sector
- To improve the legal framework governing the fisheries sector
- To regulate industrial fishing with a view to making output consistent with a rational and sustainable approach to production
- To develop and expand small scale fishing and increase Gambian, especially female, participation in the sector
- To develop aquaculture
- To improve the economic environment surrounding the fisheries sector with a view to enhancing the sector's contribution to the national economy.

These policy objectives were revised in 1994 during the formulation of the Gambia Fisheries Strategic Plan 1994/95 - 2004. The Strategic Plan was based on the acknowledgement of the fact that the fisheries sector has enormous potentials and could make a significant contribution to the socio-economic development of The Gambia, as long as there is judicious management, rational and sustainable production methods and efficient utilization of existing fish stocks.

The revised national policy objectives for the development of the fisheries sector were as follows:

- To promote the rational and long-term utilization of fisheries resources
- To improve the nutritional standards of the population;
- To increase employment opportunities in the sector;
- To increase the net foreign exchange earnings from fisheries
- To expand Gambian participation in the sector.

The Fisheries Policy 2007, the first and only ever written detailed policy document, stipulates the following policy objectives as adopted by the Government:

- To effect a rational and long-term utilization of the marine and inland fisheries resources;
- To use fish as a means of improving nutritional standards of the population;
- To increase employment opportunities in the sector;
- To increase the net foreign exchange earnings;
- To increase and expand the participation of Gambians in the fisheries sector ;
- To develop aquaculture;
- To improve institutional linkages with other relevant sectors;

- To improve the institutional capacity and legal framework for the management of the fisheries sector, and;
- To strengthen regional and international collaboration in the sustainable exploitation, management and conservation of shared stocks and shared water bodies, promote bio-diversity maintenance and enhancement and prevent environmental degradation.

In adopting this policy document, the Government recognizes that responsible fisheries management is essential for the sustained development of the sector and its economic benefits as well as the welfare of its stakeholders. However, it is important to note that management must fully take into consideration disparate structures, production systems and norms of both artisanal and industrial fisheries sub-sectors.

The majority of Gambian fishermen are operating inland but mainly using poor fishing implements. Many of them are also part-time farmers. Policy direction in respect of these operators is therefore aimed at making credit available to them to procure better fishing boats, nets, outboard engines and ancillaries so as to enhance the efficiency of their operations. With dual occupations based on the wet and dry seasons, the inland fishermen can play a crucial role in food security and poverty reduction in rural areas by being highly efficient and productive operators after the farming season thereby impacting positively on both agriculture and fisheries sectors.

The **guiding principles** for fisheries management highlighted in the 2007 Policy for the formulation and implementation of programmes and for the management of resources focused on:

- Conservation and sustainable resource use;
- Global Responsibility;
- Responsible Fisheries management; and
- Collective Decision Making.

The Policy document also identifies the following areas: Marine Artisanal Fisheries, Monitoring Control and Surveillance (MCS), Access to Financial Resources, Fisheries Research, Human Resource Development, Inland Fisheries and Aquaculture, Inter-sectoral linkages, Gender, Youths and Fisheries Sector Development, Institutional Reforms, Fisheries Extension, Industrial Fisheries, Post Harvest and Quality Control, Fish Marketing, Sub-regional and International Cooperation and Sport Fishing

Fisheries Legislation

The fundamentals of Fisheries Legislation in the Gambia were laid down in the early 1970s when it was decided that the fisheries sector should form one of the sinews in socio-economic development. Several amendments were made since then, and to date, the Fisheries Act 2007 and Fisheries Regulations 2008 which are comprehensive documents with provisions covering both artisanal, industrial and aquaculture sub-sectors are serving as the legal basis for management of the resources. Numerous issues have emerged over the years in the artisanal and industrial

fisheries sub-sectors warranting the formulation of new legislation reflecting current realities and be able to address the needs and demands of long-term conservation and optimum utilization of the resources.

National, sub-regional, regional and international cooperation

While being highly committed to the sustainable development of the sector in view of its potentials to improve the livelihoods of fisheries operators and enhance the nutritional standards of the population, Government is also cognizant of the need to collaborate with international, regional and national organizations to address the numerous problems of conservation and protection of the aquatic environment. These problems are usually trans-boundary and global in nature.

In order to implement its policies for the sustainable development of the fisheries sector, The Gambia Government will reinforce its cooperation with all partners and stakeholders at the national, sub-regional, regional and international levels.

Cooperation will be pursued along two axes as follows:

- i) Reinforce the mechanisms for consultation and exchange in terms of management, surveillance, research and training in the area of fisheries. Training will be assured through:
 - ✚ Better coordination between the Department of Fisheries (DOF) and its extension services
 - ✚ Better coordination between the DOF and the professionals within the framework of the Fishery Advisory Committee (FAC), whose meetings will be held more regularly and the sub-committees set up will be more functional
 - ✚ Financial and material resources will be mobilised for the promotion of this participative approach within the FAC, which will play a major role in consultation and sensitisation of their members on matters of common interest for the fisheries and its economic and social development.

- ii) Reinforce participatory management at the national and regional levels. The Department of State will put more emphasis on strengthening capacity for coordination and planning of activities
 - ✚ More emphasis will be Placed on sustained cooperation at the level of the SRFC, COMHAFAT, CECAF (FAO),
 - ✚ Continuous active participation at the international level will be maintained within COFI, CECAF, OMVG, ICCAT, ECOWAS, AU, WTO, ICO, etc.

At the bilateral level, regular monitoring and implementation of our obligations within the framework of the cooperation agreements will be assured. Particular attention will be accorded to the fisheries cooperation agreements with Senegal, Guinea, Guinea Bissau and Mauritania.

3. SWOT ANALYSIS (STRENGTHS, WEAKNESSES, OPPORTUNITIES AND THREATS) OF THE GAMBIAN FISHERIES SECTOR

- SWOT Analysis of the Gambian fisheries resource base in tabular form

Strengths	Weaknesses
Opportunities	Threats

- SWOT Analysis of the Gambia fisheries sector stakeholders

Strengths	Weaknesses
Opportunities	Threats

- SWOT Analysis of the Gambian fish catching sub-sector

Strengths	Weaknesses
Opportunities	Threats

- SWOT Analysis of the Gambian fish processing sub-sector

Strengths	Weaknesses
Opportunities	Threats

- SWOT Analysis of the Gambian aquaculture sub-sector

Strengths	Weaknesses
Opportunities	Threats

It is noted in the Gambia Fisheries Strategic Action Plan 1994 – 2004 that one of the reasons for the failure of the Gambia to realise the full benefits of its fisheries potential is that previous policies did not result in the industrial sector realising its full potential. This failure was been attributed to physical, technical, economic, institutional and social constraints facing the fisheries sector. Most of the donor assistance, mainly from Japan, the EEC, Italy and the FAO went to the development of the artisanal fisheries sub-sector. Many of these constraints still prevent the sector from making its full potential contribution to the socio-economic development of the country and the attainment of the objectives set for the sector.

OPPORTUNITIES

Nevertheless, the fisheries sector presents several opportunities that could be mobilised to accelerate the development and management of the resources in order to realise the full potentials for socio-economic development. These opportunities are related to the resource base, the existing and potential production systems, available infrastructure, and potential financing mechanisms.

Resource base and production systems

As indicated earlier, the Gambia is located within a zone of the Atlantic Ocean that is classified as one of the richest marine fishing zones of the world. However, as a result of inadequate technical and financial resources, regular comprehensive assessment of our fisheries resources, particularly the high value demersal resource, are not being conducted and thus up-to-date data is not readily available. There is, however, up to date information and data on the pelagic resources (figure 1).

The resources have been generally classified as high volume-low value pelagics and low volume and high value demersal species. It is therefore apparent that the greatest opportunities in the sector lie in the sustainable exploitation and utilisation of pelagic fish for local consumption and export.

Although the status of fisheries resources of the River Gambia and its estuary is not well known, studies indicate that there are several species of great commercial interest and the River presents considerable potential for aquaculture development. There are also huge potentials for oyster harvesting and oyster aquaculture in the marine and brackish waters of the river and its estuarine areas.

Infrastructural facilities

The community fisheries centres established at 15 fish landing sites along the Atlantic coast and in the inland sub-sector are very important as they offer enormous opportunities to the various communities. They have the potential to impact on the lives of the communities contributing to poverty reduction through increased landings particularly pelagic species and the creation of employment opportunities. Some of these community fish landing sites are provided with facilities such as ice making machines and cold stores for fish preservation and other essential social and financial services.

The proposed rehabilitation of three inland fish landing sites at Bintang, Tendaba and Albreda within the framework of the Gambia Artisanal Fisheries Development Project will enhance the contribution of these fish landing sites in fish production and preservation.

For the industrial sub-sector, the construction of the fisheries jetty in Banjul and the rehabilitation of the dock yard facility will provide the opportunity and impulse for improved performance. The competitiveness of the jetty and dockyard will attract fishing vessels to land their catches in the country, undertake dry-docking, maintenance and repairs and encourage more investments in the various aspects of the sub-sector. Some of the existing fish processing establishments are well-equipped and have the capacity to receive, process and store products for local marketing and export to markets in Europe, U. S. A., and elsewhere. With adequate fish supplies from vessels landing their catches at the jetty, these factories would be given the opportunity to operate optimally thereby increasing employment, local consumption, fish sales and foreign exchange earnings.

Potential financing mechanisms

The rapid growth of the banking system in The Gambia in recent years resulting from the opening of many new banks and financial institutions offer an opportunity for investment in the fisheries sector. Professional groups such as NAAFO, TAGFC, Community Fisheries Centres (CFCs) and individuals engaged in the sector now have greater chances to negotiate and be able to access funds for procurement of fishing equipment, machinery and materials or use these funds as working capital.

CONSTRAINTS

Full realisation of the sector's potentials to contribute in national development is currently constrained by issues such as weak production systems, inadequate infrastructure, high cost of energy and fuel, high interest rates on loans being charged by the banks and lack of adequate protection of the resources from illegal fishing.

Government still considers the artisanal sub-sector as crucial due to its role in poverty reduction through the provision of employment, income, and cheap protein food for the population. Consequently, assistance to the development of this sub-sector continues and it is still registering successes in terms of its contribution to the socio-economic development of the country. However, a host of constraints which are physical, technical, financial, social and institutional continue to impede significant growth and development of the sector. Some of these constraints are as highlighted below:

3.2.1 Physical Constraints

The most pertinent physical (infrastructure) constraints are:

- Absence of a fishing port
- Lack of sufficient industrial fishing vessels registered and/or based in The Gambia

- Inadequate infrastructural facilities for proper fish handling, processing and storage in the artisanal sub-sector
- Insufficient fish distribution and marketing centres that cater for the artisanal operators
- Lack of adequate refrigerated vehicles and other transportation facilities to cater for distribution and marketing of artisanal fish and fishery products
- Weak protection of fisheries resources due to inadequate monitoring, control and surveillance of the territorial waters and beyond
- Insufficient feeder roads for easy access to the inland fish landing sites.
- Existing industrial companies are unwilling to form joint ventures among themselves and initiate project or 'shed off' shares to other entrepreneurs.
- Industrial companies are reluctant or unable to improve capacity for effective financial management of their factories.

Lack of a fishing port has been one of the perennial constraints to the development and attainment of the full potential of the sub-sector. Some of the existing fish processing establishments are well-equipped and have the capacity to properly receive and process fishery products for local consumption and for the export markets in Europe, the U. S. A. and elsewhere. Thus, the constraint to the development of the industrial sub-sector due to the lack of a fishing port will be somewhat eliminated.

3.2.2 Social Constraints

- Difficulties in recruiting, training and retaining Gambians in artisanal fisheries
- The majority of Gambians operating inland are par-time fishermen/farmers and do not realise the full benefits of commercial fishing
- Most artisanal fishermen operating within the productive coastal zones are foreigners and migratory thereby hindering fish supplies and causing huge increases in prices of fish and fishery products
- The most vulnerable group in the artisanal sub-sector are women operators (fish processors and vendors) who are yet to be adequately empowered to enhance the effectiveness of their operations
- Inadequate sensitisation of Gambian youths to dispel the notion that artisanal fishing is a low grade, unrewarding occupation
- Lack of community participation in enforcement of regulations to prevent and eliminate harmful fishing practices.

3.2.3 Institutional Constraints

The importance of having the appropriate legal and institutional framework in place to ensure sustainable development and utilisation of the fisheries resources has been recognised by the current Government. As far as the legal aspects are concerned, Government's commitment to address the situation is evidenced by the number of legal instruments developed and adopted by the Government in the past few years such as the Fisheries Policy 2007, Fisheries Act 2007, the

Fisheries Regulations 2008 and soon to be adopted Fishery and Aquaculture Products Regulations.

However, there still remain a number of legal constraints to be addressed for example, there is no specific legal framework for the development and management of inland fisheries and aquaculture.

The constraints relating to the institutional aspects remain and the most pertinent ones include the following:

- ✦ Absence of a structure specifically dedicated to the development of inland fisheries and aquaculture
- ✦ Weak mechanism for inter institutional coordination with regard to the target objectives
- ✦ Weak methods of implementing policies
- ✦ Inadequate quality human resources for research, surveillance, fish quality control and hygiene services, management, aquaculture and inland fisheries development
- ✦ Absence of a reliable system for the analysis and monitoring evaluation (information system)
- ✦ Weak human capacity and lack of a policy on continuous training of Fisheries Department personnel
- ✦ Inadequate budgetary provision limits the capacity of the fisheries Department to carry out research extensively and mobilise extension staff for monitoring, control and surveillance of artisanal operations
- ✦ Weak organisational and administrative structures of professional groups such as NAAFO and TAGFC

3.2.4 Technical Constraints

Some of the important technical constraints are:

- Absence of enough nationals with technical competence to man fishing vessels as skippers and engineers;
- Inadequate (absence in the case of inland sites) repair and maintenance services/facilities for machinery, equipment and fishing crafts in the artisanal sub-sector;
- High cost of fuel and energy;
- Fishing materials, particularly for individual vessels, are not available in the country;
- Packaging materials manufacturing plants are non-existent;
- Shortcoming in quality control practices and lack of knowledge in quality assurance, particularly HACCP, in both industrial and artisanal sub-sectors;
- Inadequate knowledge of the biology, population dynamics and annual sustainable yield of demersal stocks and riverine resources.

3.2.5 Financial Constraints

- Lack of adequate access to micro-finance facilities for artisanal operators;

- Prevailing high interest rates at the commercial banks are unfavourable for the development of especially the industrial sub-sector.
- Lack of access to working capital and long term lending.

4. THE STRATEGIC PLAN

This Strategic APlan is designed to address, as a necessity, the issue of sustainable use of the country's fisheries resources. Integrated fisheries management through application of the broader principles of ecosystem-based management through the application of Ecologically Sustainable Development (ESD) will be promoted. As an alternative to capture fisheries and by way of alleviating poverty and facilitating improvement of the nutritional standards of the population, viable aquaculture development will be facilitated in keeping with the recently adopted Strategic Framework for Sustainable Aquaculture Development in The Gambia.

Priority will be accorded to directing efforts at encompassing fisheries research and management activities into the evolving state-wide natural resource management framework.

In order to optimise the social and economic returns of the resources, accelerated efforts will be needed to facilitate and ensure the promotion of value added export oriented fisheries products. The facilitation of increased participation of nationals (youth and women) in the fisheries sector for employment opportunities and effective participation and ownership will also be redoubled to boost production, especially in the pelagic fishery.

In order to achieve the objectives set for the fisheries sector as enshrined in the National Vision and Mission Statement, the SAP will have to establish the appropriate institutional capacity and legal framework for the management of the sector.

4.1 Vision and Mission

The vision of the Government of the Gambia as contained in the 2007 policy document is:

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- ✚ *The sustained development of the fisheries sector and the economic benefits as well as the welfare of its stakeholders guided by a policy framework which recognizes that responsible fisheries management is essential for ecologically sustained development.*

This vision is reflected in the mission statement of the Fisheries Department which reads:

- ✚ *To plan, manage and develop the fisheries sector in The Gambia with the cooperation and collaboration of local, national and international institutions; formulate fisheries policy and legislations; provide advice, assistance and service to fisheries operators and businesses irrespective of gender or creed and to institutions at both national and international levels; protect and develop local fisheries industries ; develop aquaculture ; facilitate provision of credit, infrastructure machinery and equipment for operators in the sector; cater for research, technology development and technology transfer; promote training in fisheries management and development; promote joint venture agreements/arrangements; monitoring, control and surveillance of all fisheries*

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related activities on land and within the fisheries waters of The Gambia with the ultimate objective of achieving significant reduction in poverty through increased food security, increased employment opportunities and enhanced revenue and foreign exchange earnings by way of sustainable management, exploitation and utilization of fisheries resources, having due regard for the protection and conservation of the biological diversity of species and preservation of the environment.

4.2 Objectives and strategies for the period 2009 – 2013

The objectives and strategies for the development of the fisheries sector, as already stipulated in the national Fisheries Policy, are to be pursued within the framework of the SAP during the five years period. The matrix of the Action Plan outlines six objectives selected for implementation as a matter of priority. The key areas for action and the strategic partners and responsible institutions are also identified.

Objective 1: To promote sustainable exploitation of fisheries resources

Strategies

- i) Provide an enabling environment for diversification into the harvesting of unexploited and under exploited stocks.
- ii) Regulate estuarine shrimp fishery (increase net mesh size) and introduce closed fishing areas/fishing seasons; limit entry especially foreign fishermen).
- iii) Provide infrastructural facilities and promote sensitization campaigns to increase Gambian participation in marine artisanal fisheries
- iv) Maintain ban on beach seine net, and the use of ‘dumo’ nets
- v) Introduce fish size limitations of the most common species being caught in Gambian waters.
- vi) Fisheries management plans

Objective 2: To enhance effective participation of young men and women at all levels in the fisheries sector, including fisheries management and administration, trade and investment.

Strategies

- i) Support and facilitate skills development and improved knowledge of young men and women in the fisheries sector.
- ii) Facilitate the access to finance and appropriate technologies for use by young men and women fisheries operators and investors.

- iii) Encourage the formation of fisheries associations within the artisanal fisheries sub-sector.
- iv) Sensitize fishing communities on gender related issues and encourage participation of women in co-management systems.

Objective 3: To effect meaningful contribution to food security and livelihoods' improvement for the rural population.

Strategies

- i) Promote the development of aquaculture (commercial and small-scale, and oyster culture).
- ii) Facilitate the establishment of mariculture production systems of high value, exportable species (e.g. Crustaceans).
- iii) Maintain the biodiversity of inland fisheries ecosystem.
- iv) Promote fish production, preservation, processing and marketing of captured and cultured fish

Objective 4: To develop the human resources in the fisheries sector

Strategies

- i) Assess the manpower and training needs of the Fisheries Department;
- ii) Facilitate and support the training of auxiliary fisheries extension workers and data collectors to have general knowledge in fisheries management;
- iii) Support and facilitate skills development and improved knowledge of women in the fisheries sector and other related sectors;
- iv) Promote an appropriate incentive scheme in terms of remuneration and other conditions of service for fisheries personnel;
- v) Promote thematic training workshops and seminars on poverty reduction, fisheries planning, and management and appropriate technologies;

- vi) Promote and support capacity building in the industrial fisheries sub-sector, particularly with regard to improving products quality, hygiene and sanitation in fish processing establishments; and,
- vii) Promote fisheries studies in the curricula of Lower Basic, Upper Basic, Secondary and Tertiary institutions.

Objective 5: To generate scientific information for decision-making in management and development of the fisheries sector.

Strategies

- i) Strengthen the fisheries planning function within the Ministry of Fisheries
- ii) Ensure research is commissioned in a strategic fashion with the use of a research plan
- iii) Facilitate the conduct of adaptive fisheries research within appropriate institutions in the country;
- iv) Collaborate with relevant agencies/institutions responsible for the monitoring and control of aquatic pollution and other environmental hazards;
- v) Disseminate research findings to all stakeholders to enable them collaborate in formulating and implementing Management measures and development plans;
- vi) Enhance collaborative research and information exchange with national and international research institutions;
- vii) Strengthen the fisheries database with proper equipment, capacity building and funding to attain applicable results in the analysis of such data;
- viii) Conduct catch and stock assessment surveys;
- ix) Conduct resources surveys on all categories of fish stocks; and
- x) Undertake cultural and socio-economic research studies in fisheries.

Objective 6: To enhance the production and marketing of quality fish and fisheries products consistent with the national food and SPS quality assurance framework

- i) Ensure internationally accreditation for microbiological testing
- ii) Ensure GMP, HACCP and traceability system prevail along the fish value chain

- iii) Ensure that national standards are developed for fish and fish products in line with Codex standards
- iv) Ensure fisheries regulations are reviewed/updated in line with international norms
- v) Ensure there is an operational fish inspection and certification system

4.3 Use the value chain analysis approach for determining needed interventions in the sector

4.4

4.34.5 Activity matrix for the Strategic Plan (TEAM)

The logical framework presents the matrix of the Strategic Action Plan indicating the set objectives, the planned activities to achieve the objectives, the expected outputs. The matrix is developed based on the objectives and strategies identified in the Fisheries Policy 2007.

ACTIVITY MATRIX OF THE FISHERIES STRATEGIC PLAN 2009 – 2013

Specific Objective	Strategies	Performance Indicators	Priority Actions	Responsibility & Partners	Estimated Cost	Expected Outcome
1. To promote sustainable exploitation of fisheries resources.	- Provide an enabling environment for diversification into the harvesting of unexploited and under exploited stocks.	- Increased employment opportunities for Gambian Youths. - Increased fish Production.	- An appropriate incentive scheme in terms of access to credit and other conditions of service for fisheries operators will be promoted. - Promote fish production preservation, processing and marketing of captured fish.	DOSFWR & NAMS Fisheries Dept, Micro Finance Institutions, local banking institutions and Donors	\$50,000.00	. Significantly increased fish catch landings for domestic fish supply and consumption, and for export. - Youth participation in the artisanal production of pelagic species and inland fishing increased
	- Regulate coastal and estuarine shrimp fishery (increase net mesh size) and introduce closed fishing areas/fishing seasons; limit entry especially foreign fishermen).	- Illegal, unreported and unregulated fishing reduced.	- Conservation measures and actions using the co-management approach.	Fisheries Dept. The Gambia Navy, Governors Office, Chiefs, Alkalos, Fishing Communities, VDCs and NGOs.	\$75,000.00	. Improved MCS reduced poaching and illegal fishing activities/practices. - Reduced capture of juvenile species - Biological status of shrimps and by-catch

						stocks enhanced
	- Provide infrastructural facilities and promote sensitization campaigns to increase Gambian participation in marine artisanal fisheries	- Improved food security. - Reduced poverty.	- Establish three new community fisheries centres and rehabilitate three centres for artisanal fisher folks by 2013.	Fisheries Dept., Governors Office, VDCs, Fishing Communities (artisanal fisher folks) and DONORS	\$600,000.00	- New Community Fisheries Centres established and more nationals visibly engaged in the artisanal marine fisheries sub-sector. - Increased availability of fish and fishery products countrywide for consumption. - Household revenue earnings of operators increased to enable procurement of needed non-fish items.
	. Maintain ban on beach seine net, and the use of dumo nets. - Introduce fish size limitations of the most common species being caught in Gambian waters.	- Awareness and sensitization activities to promote responsible fisheries implemented.	- Government actions / measures to implement new regulations will commence in 2009.	Fisheries Dept. The Gambia Police, Governors Office, Chiefs, Alkalos, Fishing Communities, VDCs and NGOs	\$30,000.00	- Ban on beach seines, 'Dumo' nets and other destructive gears well-entrenched - Use of nets with allowed mesh sizes established - Total length of most common species being caught comply with regulations - Capture and landing of

						undersize fish reduced
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Specific Objective	Strategies	Performance Indicators	Priority Actions	Responsibility	Estimated Cost	Expected Outcome
2. To enhance effective participation of young men and women at all levels in the fisheries sector, including fisheries management and administration, trade and investment.	- Support and facilitate skills development and improved knowledge of young men and women in the fisheries sector. .	Young Gambians involvement in fish production, processing and marketing increased.	. Implementation of fisheries training programmes in fish production, processing, basic business skills for young men and women.	Fisheries Dept, Micro Finance Institutions, Fisher folks, NGOs, NYSS, GAMJOB and VDCs.	\$60,000.00	- Number of trained young men and women in fisheries related activities such as management, handling, fishing techniques, processing and marketing increased.
	- Facilitate the access to finance and appropriate technologies for use by young men and women fisheries operators and investors. - Encourage the formation of fisheries associations within the artisanal fisheries sub-sector.	- More money available for investments in the fisheries sub-sector.	. Government actions\measures to initiate discussions with financing institutions and local banking institutions to establish lines of credit for private operators in the fisheries sub-sector and to agree on low interest rates on fisheries development loans.	DOSFWR&NAM, Fisheries Dept. Banks and Donors.	\$150,000.00	- Private Gambian entrepreneurs investment in the industrial and artisanal fisheries sub-sectors increased

	<p>- Sensitize fishing communities on gender related issues and encourage participation of women in co-management systems.</p> <p>..</p>	<p>- More women integrated in the fisheries sub-sector as equal partners and beneficiaries.</p>		<p>Fisheries Dept., NGOs, Fisher folks and VDCs.</p>	<p>\$10,000.00</p>	<p>- Fisheries operators are collectively enabled to address issues that are particularly related to fisheries development and easy access to loans.</p> <p>-Active involvement of women fisheries operators in the planning, implementation and evaluation of fisheries development projects in fishing communities increased and they are motivated to take active responsibility in the management of these projects.</p>
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Specific Objective	Strategies	Performance Indicator	Priority Actions	Responsibility	Estimated Cost	Expected Outcome
3.To effect meaningful contribution to food security and livelihoods' improvement for the rural population.	- Promote the development of aquaculture (commercial and small-scale, and oyster culture).	-Trial ponds constructed and established by 2013.	-Construction of trial ponds for fish culture and mariculture within the rural areas.	DOSFWR&NAM, Fisheries Dept., NARI, DOSA.	\$ 250,000.00	. Dependence on exploitation of marine stocks reduced by aquaculture development.
	- Facilitate the establishment of mariculture production systems of high value, exportable species (e.g. Crustaceans). - Maintain the biodiversity of inland fisheries ecosystem.	- Domestic fish supply and consumption increased and incomes of rice farmers; commercial supplemented	Govt. actions\ measures to encourage private investment in commercial aquaculture and Government to reactivate small-scale aquaculture	Fisheries Dept., Farmers, NGOs and AOGFC.	\$20,000.00	.- Foreign exchange earnings from aquaculture significantly increased from export of aquaculture products. -Sustainable oyster production (through rack-culture system) established - Destruction of mangroves reduced; - Local supply of oysters increased to meet demands of hotels and restaurants, and possibly export demand

	<p>- Promote fish production, preservation, processing and marketing of capture and cultured fish</p>	<p>- Collaboration between private entrepreneurs, private economic operators and District authorities to establish the fish distribution and marketing networks established.</p> <p>- Private sector participation in pelagic fishery increased.</p>	<p>. Government actions\measures is to seek funding for the construction and establishment of cold storage depots and the marketing outlets</p> <p>- Government to encourage private investment in industrial pelagic fishing</p>	<p>DOSFWR&NAM, Fisheries Dept. Donors and TAGFC.</p> <p>Fisheries Dept., and TAGFC</p>	<p>\$15,000.00</p> <p>\$5,000.00</p>	<p>. Cold storage depots and fish marketing outlets in major inland growth centers established.</p> <p>- Acquisition of fishing, processing, storage and transportation facilities for inland operators attained.</p> <p>- Availability of fresh in rural communities through production of pelagic fish increased</p> <p>- Rural nutritional standards improved.</p>
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Specific Objective	Strategies	Performance Indicator	Priority Actions	Responsibility	Estimated Cost	Expected Outcome
4. To develop Fisheries Department's human resources	- Assess the manpower and training needs of the Fisheries Department;	Institutional strengthening and capacity building of Fisheries Dept. and its personnel to meet Dept's mandate achieved.	All actions / measures to become effective in 2009.	DOSFWR&NAM and Fisheries Dept.	\$10,000.00	- Capacity and efficiency at Fisheries Department improved
	- Facilitate and support the training of auxiliary fisheries extension workers and data collectors to have general knowledge in fisheries management; - Promote an appropriate incentive scheme in terms of remuneration and other conditions of service for fisheries personnel;	Capacity of fisheries extension workers and data collectors to meet Dept's mandate built.	All actions / measures to become effective in 2009	Fisheries Dept. DOSFWR & NAM, Development Partners	\$10,000.00	- Capacity and efficiency at Fisheries Department improved

	- support and facilitate skills development and improved knowledge of women in the fisheries sector and other related sectors;	Women empowered to play effective roles in fisheries development and management.	Implement training programmes in fish catching, processing and basic business skills.	Fisheries Dept. and Women's Bureau	\$20,000.00	-Active involvement of women fisheries operators in the planning, implementation and evaluation of fisheries development projects in fishing communities will increase and motivate them to take active responsibility in the management of these projects
	Promote and support capacity building in the industrial fisheries sub-sector, particularly with regard to improving products quality hygiene and sanitation in fish processing establishments.	Capacity built in the areas of quality control and products development.	Training on quality control, standards and development of value added fish products	Fisheries Dept. and NANA.	\$10,000.00	Improved capacity of industrial operators to better manage their undertakings and participate effectively in co-management systems.

Specific Objective	Strategies	Performance Indicator	Priority Actions	Responsibility	Estimated Cost	Expected Outcome
5. To generate scientific information for decision-making in management and development of the fisheries sector and improvement of fishing community livelihoods.	- Facilitate the conduct of adaptive fisheries research within appropriate institutions in the country.	The Dept. conducts fisheries research	-Capacity building in fisheries research -conduct basic research	Fisheries Dept.	\$25,000.00 \$25,000.00	Adaptive fisheries research undertaken and results aid management decisions
	. Conduct resources surveys on all categories of fish stocks.	Conduct trawl and hydro-acoustic surveys	-conduct Demersal and pelagic fish stock surveys	Fisheries Dept., SRFC, CRODT, Regional Fisheries Research Institutions	\$250,000.00	. the surveys provide reliable and timely scientific information on the status of the fish stocks
	. Conduct catches and stock assessment surveys.	Conduct Fishery independent and dependent fish stocks assessment	-Conduct catch assessment survey -Assess status demersal and pelagic fish stocks assessment	Fisheries Dept.,	\$10,000.00	Status of marine resources known
	Strengthen the fisheries database with proper equipment, capacity building and funding to attain applicable results in the analysis of such data.	Dept. extends collection of fisheries and fisheries - related data, - Data processed and computerized in appropriate	-Training of staff in fisheries data (biological, economic, social, etc.) collection -Training in IT-purchase of hard and soft wares	Fisheries Dept. DOSWR&NAM, Fisheries Dept.	\$10,000.00 \$50,000.00	Enhanced capacities in fisheries data collection and analysis Competence in IT built

		format				
	- Enhance collaborative research and information exchange with national and international research institutions.	-Dept. collaborate with national and international institutions	-Establish links with national and international research institutions -Exchanges of experiences -Study tours	DOSFWR&NAM, Fisheries Dept. DOSFWR&NAM, Fisheries Dept.	\$20,000.00 \$100,000.00	Links between relevant national and international institutions established and information exchanges taking place
	- Disseminate research findings to all stakeholders to enable them collaborate in formulating and implementing	-Dept Exchange information, expérences, etc.	-Establish scientific advisory committee -establish a forum for consultation	DOSFWR&NAM, Fisheries Dept., NARI Fisheries Dept	\$60,000.00 \$5,000.00	Consultative group comprising of scientists and other stakeholders established and functional
	- Collaborate with relevant agencies/institutions responsible for the monitoring and control of aquatic pollution, environmental.	Collaboration with relevant government and non-government organization in environmental matters	-establish links with relevant institutions	DOSFWR&NAM, Gambian Navy, Fisheries Dept.	\$10,000.00	Collaboration between relevant institutions in relation to environment operational
	- Undertake periodic surveys to establish the potentials and biomass levels of the target fisheries (marine and	Conduct of estuary and river resources survey	Training in estuary and river resources survey	Fisheries Dept.	\$12,000.00	Status of Estuary and river resources known

	inland).					
	- Undertake cultural and socio-economic research studies in fisheries.	Conduct socio-economic studies	All actions / measures to become effective in 2009	Fisheries Dept.	\$50,000.00	Provide grassroots information for Fisheries Planners, Directors and Stakeholders for Fisheries Development.