

1<sup>st</sup> Draft

# National Inland Fisheries Policy Framework for South Africa

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Department of Agriculture, Forestry and Fisheries

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forestry & fisheries

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## ACROYNMS and ABBREVIATIONS

COGTA	Department of Cooperative Governance and Traditional Leaders
DAFF	Department of Agriculture, Forestry and Fisheries
DEA	Department of Environmental Affairs
DPW	Department of Public Works
DTI	Department of Trade and Industry
DSBD	Department of Small Business Development
DST	Department of Science and Technology
DRDLR	Department of Rural Development and Land Reform
DWS	Department of Water and Sanitation
EAF	Ecosystem Approach to Fisheries
FAO	Food and Agriculture Organisation of the United Nations
MEI	Morphoedaphic index
MLRA	Marine Living Resources Act
NEMA	National Environmental Management Act
NEMBA	National Environmental Management: Biodiversity Act
SASACC	South African Sport Anglers and Casting Confederation
SASCOC	South African Sports Confederation and Olympic Committee
SMME	Small, Medium and Micro Enterprise
WRC	Water Research Commission

## DEFINITIONS

<p><b>Aquaculture</b> (based on DAFF draft Aquaculture Bill)</p>	<p>Means the farming of aquatic organisms in controlled or selected aquatic environments, involving:</p> <ul style="list-style-type: none"> <li>(a) a degree of human intervention in the rearing process to enhance production which may include propagation, breeding, regular stocking, feeding or protection from predators; and</li> <li>(b) individual or corporate ownership of the stock being farmed, and includes ranching (defined below).</li> </ul>
<p><b>Co-management</b> (based on DAFF Small Scale Fishing Policy)</p>	<p>Means a governance approach in which Government and a fishery user groups share the responsibility and authority for the management of an inland fishery resource.</p>
<p><b>Community</b> (based on DAFF Small Scale Fishing Policy)</p>	<p>Means any group of persons that are a part of such a group who share common interests, and who regard themselves as a community.</p> <p>(Small-scale fishing community is defined below)</p>
<p><b>Ecosystem Approach to Fisheries (FAO)</b></p>	<p>The FAO definition of EAF is as follows:</p> <p><i>“An ecosystem approach to fisheries (EAF) strives to balance diverse societal objectives, by taking account of the knowledge</i></p>

	<i>and uncertainties of biotic, abiotic and human components of ecosystems and their interactions and applying an integrated approach to fisheries within ecologically meaningful boundaries”</i>
<b>Freshwater fish</b>	For the purposes of this document freshwater fish are fish species, both indigenous and introduced, which occur in inland waters .
<b>Human rights based approach</b> (based on DAFF Small Scale Fishing Policy)	Means an approach to policy-making and development that uses the normative human rights framework and instruments as a guide for planning and for measuring the progress that is made towards achieving the objectives of that policy.
<b>Inland Fisheries</b>	For the purposes of this document Inland fisheries are fisheries on inland waters, but excluding estuaries - which fall under the jurisdiction of the Marine Living Resources Act of 1998. Inland fisheries include small-scale and recreational fisheries and the associated value chains and service industries.
<b>Low technology or passive gear</b> (based on DAFF Small Scale Fishing Policy)	Means fishing equipment, nets or vessels operated mainly by hand.
<b>Morpho-edaphic index (MEI)</b>	An estimate of the fish yield in a water body based on physico-chemical parameters such as surface area, depth, temperature.
<b>Precautionary Approach</b>	For the purposes of this document the precautionary approach is a negotiated set of agreed cost-effective measures and actions among fishery stakeholders, including future courses of action, which ensures prudent foresight, reduces or avoids risk to the resources, the environment, and socio-economic considerations, to the extent possible, taking explicitly into account existing uncertainties and the potential consequences of being wrong.
<b>Ranching</b> (based on DAFF draft Aquaculture Bill)	Means aquaculture in which aquatic organisms are intentionally released, without restriction, into the natural aquatic environment for the purpose of harvesting them when they reach market size with the intention of individual or corporate ownership of the ranched stock.
<b>Recreational Fisher</b>	A person who engages in fishing for pleasure or competition and is not dependent on the activity to meet primary income or basic nutritional needs. The catch is not generally sold or otherwise traded.
<b>Recreational fishery</b>	Means all value chain activities and institutions associated with recreational fishing, including services and supplies, commercial angling charters, lodges and guides, and angler organisations.
<b>Small-scale fishing.</b> (based on DAFF Small Scale Fishing Policy)	The term ‘small-scale fishing’ is now preferentially used in international (FAO, 2013b) and South African fisheries policy to describe a range of fishery activities, replacing terms such as ‘subsistence’ and ‘artisanal’ fishing. In this document, the DAFF definition of ‘small-scale fishing’ is adapted from the Marine Small-Scale Fishing Policy (DAFF, 2012a):  <i>‘Small-scale fishing means the use of an inland fishery resource</i>

	<i>on a full-time, part-time or seasonal basis in order to ensure food security and livelihood security. For the purposes of this policy, small scale fishing includes the engagement (by men and women) in ancillary activities which provide additional fishery-related employment and income opportunities such as;- pre- and post-harvest processes; beneficiation; distribution and marketing of produce; as well as participation in the recreational fishery value chain'</i>
<b>Small-scale fishers</b> (based on DAFF Small Scale Fishing Policy)	Means persons that fish or are engaged in small-scale fishing and ancillary activities to meet food and basic livelihood needs. They predominantly employ traditional low technology or passive fishing gear, usually undertake single day fishing trips, and are engaged in sale or barter or are involved in commercial activity.
<b>Culture based fishery</b>	Means the release of cultured fish into the aquatic environment for fishery purposes.
<b>Stock enhancement/ Stocking</b>	Means the release of hatchery reared or translocated fish for enhancing recreational or small scale fishery yields or for conservation purposes.

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## SECTION A: ANALYSIS OF THE SITUATION

### A 1. Introduction

South African inland fisheries resources have the potential to contribute to food security, job creation and economic development. However, the lack of a national policy to guide their sustainable utilization and development has hampered the development of the sector. While access to other public resources such as marine fisheries, minerals, water and land have thus far been subject to democratic era reform, inland fisheries have been overlooked. This policy is thus designed to align inland fishery governance with Constitutional requirements for a sustainable development approach to natural resource utilization for the benefit of all citizens.

### A 2 Constitutional Mandate

In terms of the Constitution, fisheries governance is a national competency. The governance of marine fisheries is well established under constitutional legislation through the Marine Living Resources Act 18 of 1998. However, the constitutional imperative to “secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development” (Constitution, Section 24 b(iii)) in respect of inland fisheries is not currently being fulfilled due to the lack of a guiding policy and empowering legislation.

### A 3 Political Mandate

The political mandate for inland fisheries governance resides with the Department of Agriculture, Forestry and Fisheries (DAFF).

Appropriate governance institutions and capacity are required for the DAFF to carry out the mandate in respect of inland fisheries including:

- An inland fisheries policy.
- A legislated user rights framework.
- Cooperative governance arrangements.
- Monitoring control and surveillance arrangements.
- Inland fisheries management guidelines.
- Representative stakeholder institutions.
- Co-management arrangements.
- Organisational capacity to promote rural livelihood development based on inland fisheries resources.
- A fiscal budget and harmonised system of fishing license fees

In terms of the National Water Act (Act 36 of 1998), the Department of Water Affairs and Sanitation (DWS) is the custodian of South Africa’s water resources and is responsible for access to and the control of activities on public water works (dams) under its jurisdiction. As such, access to DWS public water works land and water for fishing activities is subject to DWS control. A system of Resource Management Plans (RMPs) is being implemented by the DWS to manage the activities of multiple user groups on public water works.

The Department of Environmental Affairs and the Provincial Departments of the Environment are responsible for environmental management and the conservation of inland fish populations in terms of the National Environmental Management Act and the provincial environmental Acts and Ordinances.

A process of legislative review and harmonisation between DAFF, DWS and DEA will be required to align existing legislation and mandates in respect of inland fisheries with Constitutional requirements and the inland fisheries policy.

## **A 4 Profile of inland fisheries in South Africa**

Inland fisheries in South Africa are dominated by recreational and small-scale fishing for subsistence and livelihood purposes. Commercial fisheries equivalent South Africa's commercial marine fisheries to supply formal markets do not exist due to the low productivity of inland waters.

### **A 4.1 Small-scale fisheries**

Small-scale fishing is present and growing on most inland water bodies and contributes to the food security and livelihoods of rural communities. It is however largely an informal activity, lacking formalised governance arrangements and institutions for stakeholder representation.

Small-scale fishing on most inland water bodies is an adaptive livelihood strategy and food security safety net but the total yield and value are unknown. Most small-scale fishers are poor and the role of fishing in their livelihood strategies is diverse, ranging from a part-time activity for food security to a full-time commercial occupation. Value chains for freshwater fish are short, with little value addition. The fish are generally sold fresh informally, or consumed by the family. Indigenous knowledge relating to customary fishing culture, gear, and common pool resource governance is present in some communities but is adapted to modern circumstances.

Small scale fishers have expressed concerns that their fishing rights, customary fishing practices and contributions to rural livelihoods are not recognised by government and other resources users.

Growing user conflicts are present on certain water bodies, arising from a lack of recognition of customary common pool rights, and the lack of capacity of communities to participate meaningfully in governance structures. This has resulted in small-scale fisher access to public waters and fish resources being marginalized on many water bodies. While small-scale fishing is tolerated by some of the authorities, and in some instances actively supported, in the absence of defined user rights, small-scale fishers remain vulnerable. Some communities experience conflicts with recreational anglers around gill netting, which is usually unregulated and presently regarded as illegal.

The lack of capacity of small-scale fishers to participate in governance institutions, and to know and assert their resource access rights, highlights the need for a developmental approach to small-scale inland fisheries.

### **A 4.2 Recreational Fishing**

The recreational angling sector has a substantial participation rate (estimated to be of the order of 1.5 million participants) and a significant economic impact through the tourism sector and angling supply value chains. It is therefore important that recreational anglers are recognised as important stakeholders in South African inland fisheries and that their interests are recognised in future fisheries development initiatives. The value chain associated with the recreational fishing sector has the potential to support rural food security through decent jobs, entrepreneurship and participation in the fishing linked tourism service sector. However, more can be done to ensure that this economic sector contributes to transformation and equitable socio-economic benefit from inland fish resources.

The recreational angling disciplines are diverse, including bank angling for carp, yellowfish and catfish, artificial lure angling for bass and other species, flyfishing for trout, boat angling and informal recreational/food fish angling. Angling is organised as a sporting code, affiliated to the South African Sports Confederation and Olympic Committee (SASCOC), under the South African Sport Anglers and Casting Confederation (SASACC). The Federation of Flyfishers of South Africa (FOSAF) represents the interests of flyfishers and is affiliated to TroutSA which is a DAFF recognised aquaculture producer association. Most recreational anglers are however not affiliated to any angling organisation.

Recreational angling is a popular activity on state dams and rivers. The management of recreational fishing activities on state dams is in the process of being formalised by the Department of Water and Sanitation, through the compilation of Resource Management Plans for the major state dams. Many recreational angling clubs enjoy rights of access to land and water-based activities on state dams through historical leases and contracts with the Department of Water and Sanitation.

Recreational fishing is widely practised by rural community members. Appropriate policies to promote greater participation by rural community members in the recreational angling value chain have the potential to create opportunities such as decent jobs and food security in rural areas.

Recreational fishing is not recognised as an fishery subsector which contributes to the economy and rural livelihoods. There is a need to clearly define and regulate recreational and small-scale fishery user rights and to establish sustainable resource management institutions. This includes addressing concerns expressed by the recreational fishing sector on the ecological effects of legal and illegal gill netting on fish populations, and the impact of the NEMBA Alien and Invasive Species Regulations, 2014 on recreational fishing and stocking. There is thus a need to recognise recreational fishing as a fishery sub-sector and to promote and manage the socio-economic components along with the biodiversity aspects.

#### **A 4.3 Culture Based Fisheries**

South Africa has a long history of stocking inland waters with fish species from government and private hatcheries in order to promote recreational and consumptive fisheries, aquaculture and the conservation of threatened species. Government hatcheries ceased stocking public waters with alien fish species in the 1980s due to a policy change to focus on the conservation of indigenous fish biodiversity.

The trout recreational fishery is largely based on the stocking of cultured fish from private hatcheries and generates substantial value through its linkage to the tourism value chain in rural areas.

Existing state hatcheries can be further developed to provide the necessary support to develop a viable culture-based fishery, where applicable.

#### **A 4.4 Commercial Fisheries**

No large-scale, mechanised commercial fishing equivalent to South Africa's marine fisheries exist on South African inland waters as the productivity of inland waters is too low to support such operations. The few existing permitted 'commercial' fishing operations are in reality small-scale artisanal fisheries employing simple, manually operated gears such as trek- or gill-nets.

#### **A 4.5 Fisheries Management**

Inland fisheries resources in South Africa are currently managed in terms of conservation and biodiversity objectives and are not recognised as a livelihood opportunities, source of food security or as a contributor to the economy. Therefore the inland fishery policy will provide for a balance between

managing ecological sustainability and the social and economic benefits based on a sustainable development approach.

As inland fisheries are individual user based, small-scale, and geographically heterogeneous, a devolved, cooperative governance approach based on “co-management” is most appropriate.

Little organizational capacity and no dedicated budgets to support inland fisheries development currently exist. The lack of public sector human capacity, skills and budgets to develop and manage inland fisheries is a primary constraint to the establishment of appropriate institutional and organisational structures to promote a developmental approach to inland fisheries based on co-management. Therefore the policy will provide the basis for the establishment of dedicated resources and capacity for this sector

#### **A 4.6 Fishing Permits**

Inland fishing activities are currently regulated by the Provincial Environmental Departments in terms of their environmental acts and ordinances. The provincially legislated system of inland fishing permits has fallen into disuse in most provinces, however, resource users are nonetheless subject to provincially determined harvest and gear restrictions. There is currently a lack of consistency with the issuing of permits across the provinces, hence the need for a policy to harmonise the permitting system.

Revised inland fishery permit arrangements will be required to achieve the ecological, social and economic objectives of this policy.

#### **A 4.7 Historical Inequity in Participation in Inland Fisheries**

It is recognised that legacies of inequity persist in terms of access to inland fishery resources and associated opportunity due to various forms of historical and current exclusion of historically disadvantaged communities. These include the lack of rights of access to fishing waters and fish resources; conservation based environment management regulations which may result in the exclusion of access by historically disadvantaged communities; lack of information and education; lack of access to value chains and markets; lack of resources and capacity to participate in value chains; lack of capacity to participate in fishery and aquatic resource governance institutions.

The inland fishery policy is thus designed to promote equity of access and empowerment of historically disadvantaged groups to participate in inland fishery value chains.

## SECTION B. NATIONAL INLAND FISHERY POLICY FRAMEWORK

### B 1 Inland Fisheries: Opportunity for South Africans

Inland fisheries provide an opportunity for socio-economic benefits including, jobs, rural livelihoods, food security, SMME opportunities and economic development based on the small-scale fishing and recreational fishing value chains.

The inland fisheries policy recognises and will promote the economic and social benefits of inland fisheries based on a sustainable development approach.

### B 2 Purpose

The purpose of the Inland Fishery Policy is to guide the sustainable development of inland fisheries. This includes legislative reform and harmonization, the definition of access rights, criteria for ensuring sustainable harvest levels, government organisational structure and capacity, cooperative governance and co-management arrangements and the empowerment of rural communities to participate equitably in sustainable resource use.

The following legislation, policies and normative international guidelines inform the development of the inland fisheries policy :

- **Republic of South Africa Constitution Act (No 110 of 1983)**
- **The National Water Act (No 36 of 1998)**
- **National Environmental Management Act (No 107 of 1998) and specific environmental management acts.**
- **Marine Living Resources Act (No 18 of 1998)**
- **Provincial Acts and Ordinances relevant to inland fisheries**
- **National policies and strategies** including
  - The National Development Plan 2030 (2013).
  - Policy for the Small Scale Fishing Sector (2012).
  - DAFF's Integrated Growth and Development Plan (2012).
  - Policy for the Small-scale Fishing Policy (2012)
  - Department of Water and Sanitation's (DWS) Resource Management Plans for state dams (2014).
  - National Aquaculture Policy Framework (2013).
  - Department of Trade and Industry's SMME and Small Business Development strategies..
- **Aquaculture Bill of 2016.** Draft bill by the Department of Agriculture, Forestry and Fisheries.
- **International guidelines** including the Food and Agriculture Organisation's (FAO) Guidelines for Responsible Fisheries, Ecosystem Approach to Fisheries (EAF) and Voluntary Guidelines for Securing Small-Scale Fisheries and Voluntary Guidelines for Tenure in Agriculture, Forestry and Fisheries (FAO 2010, 2012, 2013).
- **Policy for the small-scale fishing sector in South Africa.** An important recent development, relevant to the development on an inland fisheries policy, was the promulgation of the DAFF's *Policy for the Small-Scale Fishing Sector* under the MLRA, which aims to provide redress and recognition of the rights of coastal small scale fisher communities (DAFF, 2012b).

### B 3 Scope of the Policy

This policy is intended for use:

- Within the Republic of South Africa in respect of public inland waters, including rivers, dams, lakes, wetlands. Waters defined as marine environments in terms MLRA, which includes estuaries, are

excluded from this policy.

- In all facets of the inland fishing value chain including small-scale fishing, recreational fishing, and associated commercial activities.
- By all parties with an interest in inland fishing in South Africa including fishers, suppliers, processors, marketers, consultants, tertiary and research institutions, environmental custodians, consumers, the general public and government departments and agencies.
- To guide the stocking of fish from hatcheries into public water bodies for fishery purposes. (The stocking of fish into public waters for aquaculture grow out is provided for in terms of the National Aquaculture Policy Strategic Framework and Aquaculture Bill).

## **B 4 Policy Principles**

### **B 4.1 Inclusivity**

All South African citizens have the right to fish on inland waters subject to the applicable access rights, permits and prescribed regulations. Sub-sectoral groups will be recognised and represented including small-scale and recreational fishers and pre- and post-harvest value chain groupings.

### **B 4.2 Inland Fisheries are an Economic Sub-sector**

Inland fisheries, including recreational fisheries, are recognised as an economic sub-sector to be governed in terms of the Department of Agriculture, Forestry and Fisheries' national fisheries mandate.

### **B 4.3 Equitable Access to Freshwater Aquatic Resources**

The inland fishing policy is designed to achieve equitable access to inland fishery resources through interventions that empower historically disadvantaged groups to participate and share meaningfully in the benefits of inland fisheries.

### **B 4.4 Transformation**

Transformation processes to achieve racial and gender representivity in inland fisheries will be promoted.

### **B 4.5 Sustainable Development**

Inland fishery governance will be guided by the Constitutional principle of 'sustainable development', that is, 'to secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development'.

### **B 4.6 Ecosystem Approach to Fisheries**

The inland fishery policy is based on the FAO's 'ecosystem approach to fisheries' which aims to increase the contribution of fisheries to sustainable development through considering ecological constraints (e.g. habitat protection and restoration, pollution reduction and waste management, sustainable harvesting of fishery resources) as well as socio-economic benefits to humans (e.g. increased and equitably distributed wealth and sustainable livelihoods)

### **B 4.7 Precautionary Approach**

To promote sustainable fishing, the 'precautionary approach' to limit fishing effort will be adopted where information about the resource status and ecosystem productivity is insufficient to determine maximum sustainable harvest levels. This means that fishing should generally be permitted taking into consideration prevailing socio-economic considerations,. Fishing effort levels should be set within the known productive capacity of the system until more robust information is available to determine sustainable harvest limits.

#### **B 4.8 Value chain approach**

Inland fisheries sector governance and sector support is based on a value chain approach in order to maximize the socio-economic benefits. Public and private sector interventions that enhance the value of inland fisheries will be promoted.

Small scale fishers require assistance to enter both the informal and formal markets. Where necessary and possible fishers will be assisted with both resources and technical support to reduce post harvest losses, meet phyto-sanitary requirements and achieve their marketing objectives. Furthermore, the branding of fish from small scale fishers could be developed to ensure their distinction in the market.

The recreational fishery value chain includes associated services and supplies such as fishing equipment, accomodation, guiding, publications, angling events, angling syndicate water and property, and so on. An objective of the policy is to grow the recreational angling value chain and promote equitable participation and benefit from it.

#### **B 4.9 Developmental Approach**

The inland fisheries policy is based on a developmental approach to maximize the potential economic and social benefits and to empower disadvantaged communities to participate and realise opportunities associated with inland fishery resources.

#### **B 4.10 Good Governance**

A 'good governance' approach will be implemented for inland fisheries based on consultation, co-management, openness and transparency, responsibility and accountability, effectiveness and efficiency, participation of all stakeholders, coherence, and adaptability/ responsiveness.

### **B 5 Policy Objectives**

#### **B 5.1 Developmental Fishery Governance Institutions**

Fishery governance institutions will be established which maximise the socio-economic benefits of inland fishery resources on an equitable and sustainable basis.

#### **B 5.2 Equity and Transformation**

Interventions will be facilitated to promote:

- Equity of access to inland fishery resources.
- The empowerment of historically disadvantaged persons and communities to participate in inland fishery opportunities.
- Transformation of participation in the recreational fishery to include previously disadvantaged groups in value chain opportunities.

#### **B 5.3 Growing Inland Fishery Value Chains**

The inland fishery policy will facilitate an enabling environment for resource users to realize opportunities to develop the value chains associated with inland fishery resources.

#### **B 5.4 Sustainable Fisheries Management**

Governance and management arrangements will be established which ensure that inland fisheries are ecologically, socially and economically sustainable.

#### **B 5.5 Co-management**

Co-management structures and processes will be established for participative, sustainable inland fishery resource management.

### **B 5.6 Institutional Arrangements**

Institutional arrangements providing for cooperative governance will be established between mandated government departments, user groups and other stakeholders.

### **B 5.7 Legislation**

Constitutionally aligned legislation providing for inland fishery governance and use rights will be promulgated.

### **B 5.8 Public Sector Organisational Capacity**

Appropriate organisational arrangements and capacity will be established within mandated national and provincial departments to support inland fishery governance including fishery management services, development project support and research.

### **B 5.9 Trained Officials and Resource Users**

Government officials and small scale, recreational fishery representatives and other value chain actors will be provided with the fishery management skills to empower them in implementing fishery management and development projects on specific water bodies.

## **B 6 Policy Implementation Focus Areas**

### **B 6.1 Legal and Regulatory framework**

A legal review will be undertaken to provide recommendations for 1) the drafting of national inland fisheries legislation under the DAFF mandate, 2) the reform and harmonization of provincial legislation in respect of fisheries and 3) transitional arrangements.

Until national legislation is promulgated, inland fisheries will continue to be governed in terms of the cooperative governance provisions of the NEMA and the provincial environmental acts and ordinances. The DAFF will negotiate cooperative governance arrangements with the DWS, DEA and Provincial environmental departments in respect of harmonising existing environmental legislation with inland fishery policy goals, fishing rights, fishery management, research, monitoring and compliance.

### **B 6.2 Inland Fishing Access Rights and Authorisations**

All South African citizens have the right to fish on inland waters subject to registration as a resource user and a relevant permit.

National and provincial legislation will be promulgated to provide for permits which may be issued to individuals, legal entities or community groups. Inland fishing rights and authorisations will continue to be issued in terms of provincial environmental acts and ordinances until national fishery legislation is promulgated.

In the proposed national and provincial fishery legislation, different categories of rights, authorizations, licenses and permits will be provided for including:

- Small-scale fishing.
- Traditional and customary fishing.
- Recreational fishing.
- Recreational fishing charter/ guiding.
- Stocking of hatchery reared fish into public waters for fishery purposes

The duration of permits will be determined based on the nature of the activity, need to secure investment, status of the resource, redress and so on. The number of permits per fishing category may be limited if required to ensure resource sustainability.

Fish caught on recreational fishing permits will not be sold.

Small scale fishers will need to reside near the dam / river where the permit is issued to qualify.

Permit fees may be applicable.

An efficient and user friendly registration and permitting system for recreational and small-scale fishing will be investigated to facilitate efficiency and ease of access by resource users.

### **B 6.3 Resource Sustainability**

When a new fishery development or fishing technique is proposed which will increase harvest levels in a natural system (such as a river or wetland), the precautionary approach will be used to ensure sustainable harvest levels are maintained. This may include experimental pilot fishing to obtain data to determine optimal sustainable yields and to develop fishery management plans and reference points which fulfill the desired ecological, social and economic objectives.

Where the ecological risk is low, for example, fishing that targets alien species or in altered environments such as dams which do contain species of biodiversity concern, social and economic criteria will primarily determine the recommended level of fishing effort. It is further recognised that most small-scale fishing is not subject to any form of active management, and that a formal fishery management approach will only be justified on water bodies that require active intervention to manage different resource user groups and to optimize the social and economic benefits of different forms of fishing.

To develop a new fisheries in altered environments such as dams, where little or no biological and fishery harvest data is available, morpho-edaphic indices (MEI's) may provide an initial indicative upper limit of the fishery productivity of a water body. In these fisheries, the yield of the first year should be set at a maximum of 50% of the MEI. Based on the initial years data, the delegated authority in consultation with the co-management team will take decisions on appropriate catch rates or if any interventions are required.

The stocking of hatchery reared fish to enhance recreational and small scale fisheries purposes will be permitted based on ecological risk and fishery management arrangements agreed between the relevant authorities and stakeholders in terms of relevant legislation. These stockings if undertaken could have cost recovery implications to the end users. The DAFF will be responsible for the permitting and management of the stocking of alien species for fishery purposes under authority devolved by the DEA in terms of the NEMA and NEMBA.

### **B 6.4 Maximising Economic and Social Benefits**

The DAFF will play a developmental role to maximise the equitable social and economic benefits from inland fisheries, particularly for historically disadvantaged rural communities. Interventions governing inland fisheries will be based on a developmental approach that addresses the needs of disadvantaged communities.

The inland fishery policy is based on a value chain approach in order to maximize the socio-economic benefits. Public and private sector interventions that enhance the value of inland fisheries will thus be promoted. For example:

- Equity of access to fishery resources for rural communities and capacity building to participate in all levels of the associated value chains.
- Facilitation of value chain partnerships to empower members of fishing communities to add value to their catch through post-harvest activities such as processing, product development, food safety and market access.
- Access to opportunities for historically disadvantaged individuals in the recreational fishing value chain, particularly the service related aspects of the tourism facilities and public areas associated with recreational fishing.

### **B 6.5 Inland Fisheries Cooperative Governance and Co-management**

The DAFF will convene appropriate cooperative governance structures and processes with mandated government departments and fishery stakeholders.

The DAFF and Provincial Departments of Agriculture will convene the establishment of inclusive 'Co-management Committees' to implement fishery governance at the provincial level. Capacity building and support will be provided to disadvantaged fisher groups to participate in co-management structures.

### **B 6.6 Research and Monitoring**

To ensure sustainable utilisation, inland fishery research and monitoring will be undertaken as required in order to provide inland fishery management advice and to draft fishery management plans. This will include:

- Biological research on fish populations to inform sustainable fishery harvest levels and the possible implications for biodiversity and ecosystem functioning.
- Social research to understand the social benefits from inland fisheries, fisher behavior and their social institutions in order to promote the empowerment of user groups through co-management and capacity building.
- Economic research to understand the economic benefits from inland fisheries and how to optimize the potential value of inland fisheries and to ensure that economic development is inclusive.
- Understanding of other environmental aspects affecting fisheries including monitoring of fish health and factors affecting public health.

### **B 6.7 Inland Fisheries Development Support**

Due to the context of rural poverty, inland fishery governance requires development interventions to address issues of equity and capacity in order for communities to realise livelihood opportunities based on inland fisheries. This includes empowering small-scale fishers to understand their rights, form representative stakeholder groups and participate in fishery development and co-management processes.

Where appropriate fishing communities and potential partners will be provided with assistance by government and NGO partners to develop livelihood, job and SMME opportunities associated with the small-scale fishing and recreational fishing value chains. This will include support to become organised and formalised into business entities, develop infrastructure, participation in the associated service industries and to maximise post-harvest value.

Training and skills development initiatives will be promoted to empower fishers to realize opportunities associated with inland fisheries in specific contexts.

### **B 6.8 Transformation and Broadening of Participation**

Inland fishery policy implementation will take into account the historical inequity in access to inland fisheries resources and will promote development interventions that empower historically disadvantaged rural communities to access and realize opportunities within inland fishery value chains.

Rights of access to public water bodies and fish resources (including rights of access across public land) must be provided for marginalized communities. Where disadvantaged communities are excluded from access to particular water bodies or fish resources due to historical rights or leases over public land and water granted to other resource users, such leases may be subject to review in order to promote equity of access to public resources.

### **B 6.9 Capacity building**

The lack of human capacity and skills to manage inland fisheries is a primary constraint to promoting a developmental approach to inland fisheries based on co-management. Capacity will be established within national, provincial and local government departments to support inland fishery services including co-management facilitation, extension and research.

Government officials will be provided with training in inland fishery management and will be provided with a “toolbox” of management resources and skills to address the inland fishery development opportunities and challenges on specific water bodies.

Small-scale fishing communities and recreational fishers will be provided training and capacity building interventions as required to participate in inland fishery co-management and development.

### **B 6.10 Monitoring and Enforcement of Authorization Conditions**

The mandated departments responsible for fisheries, environment and water will monitor and enforce authorization conditions for access to fish resources, public waters and land.

In the transition period preceding the promulgation of national inland fishery legislation, prosecutions in terms of provincial environmental acts and ordinances should only be implemented as a last resort in resolving inland fishery violations and conflicts. The co-management committees established for local fisheries will be the primary instrument to resolve disputes and achieve consensus on legal compliance and enforcement of authorization conditions.

Confiscation of unauthorised fishing gear by competing resource users is illegal and undermines the building of the cooperative governance of inland fisheries. Illegal activities must be reported and dealt with through the co-management committees and relevant enforcement agencies.

## **B 7 Institutional Arrangements**

### **B 7.1 Intergovernmental Relations**

The DAFF will promote cooperative governance arrangements with other departments and public sector agencies with mandates relevant to inland fisheries governance. A close working relationship will be established in respect of the regulation of the sector between DAFF, DEA, DWS, and the Provincial Departments of Agriculture, Environment and other relevant agencies. The provincial departments of agriculture will play the main operational role in a developmental approach to promoting rural livelihoods based on small-scale fishing.

Cooperative governance arrangements to accommodate the mandated roles of the Department of Water and Sanitation, the Department of Environmental Affairs, Department of Transport, Department of Cooperative Governance and Traditional Affairs, Department of Public Works, Department Land Reform and Rural Development, provincial environmental departments, local authorities and traditional authorities will be defined.

The provincial departments of agriculture may be the delegated authority to issue authorisations and permits.

### **B 7.2 Inland Fishing Sub-sector Representation**

Fishery sub-sector associations form the basis of cooperative governance and are required to facilitate communication, consultation, and government support. In the case of small-scale fisher groups, the DAFF in association with provincial departments of agriculture will facilitate and recognise the establishment of representative associations. Fishers from any common fishing activity or interest may form an association and apply to DAFF for recognition. Associations will be broadly categorized as:

- Small scale fishing associations
- Recreational fisher associations
- Civil society and other interest groups (for example, advocacy groups, NGO's and suppliers of equipment and services)

Guidelines for the constitution and recognition of fisher associations will be provided by the DAFF.

Representatives of fisher associations will be included in the Provincial and National Working Groups for Inland Fisheries (see B 6.4 Sector Coordination).

### **B 7.3 Co-Management Committees**

The DAFF and Provincial Departments of Agriculture will encourage and facilitate the establishment of inclusive fishery co-management committees on bodies of water requiring active management. The co-management committees will include relevant government departments, fishery user groups and other stakeholders.

Guidelines for constituting co-management committees and conducting co-management meetings will be provided by DAFF.

### **B 7.4 Sector coordination**

In recognition of the fact that the inland fishery mandates span multiple role players, a formal cooperative governance working group structure will be established for inland fishery sector coordination (Figure 1).

Fishery management on local water bodies will be dealt with by local co-management committees convened by the Provincial Departments of Agriculture. The DAFF in partnership with the Provincial Departments of Agriculture will provide terms of reference and institutional support for the setting up of co-management committees.

At Provincial level, a Provincial Inland Fishery Working Group will be convened by the Provincial Department of Agriculture in each province. Representatives of the government departments with mandates relevant to inland fishery matters, fishing interest groups and other stakeholders will sit on the working group. The Provincial Working Group will deal with all matters relevant to inland fishing policy implementation in the Provinces.

At national level, the National Working Group for Inland Fisheries will be convened by the DAFF. The working group will monitor and review inland fisheries policy implementation and provide policy guidance to the Provincial Working Groups.

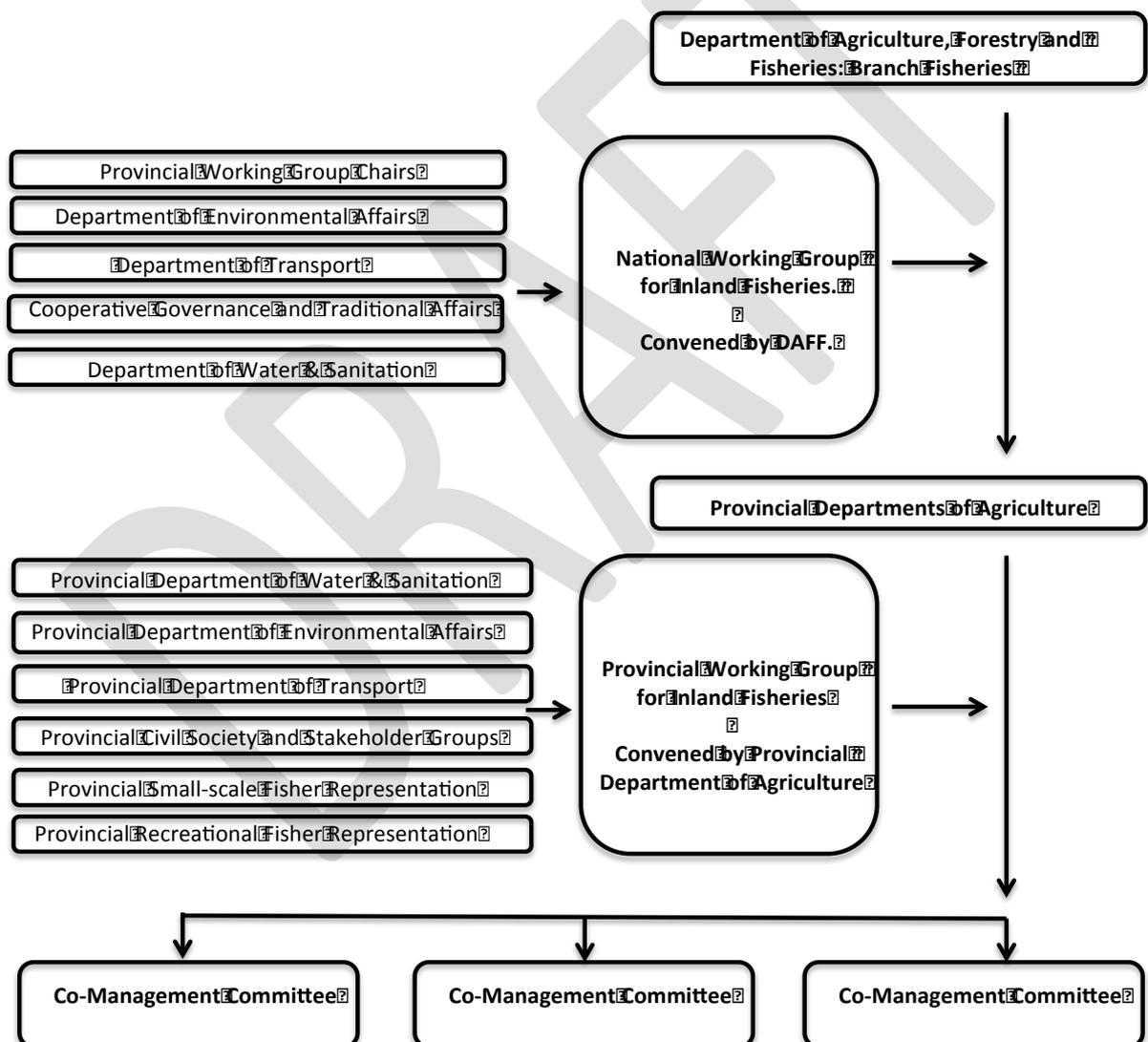


Figure 1. Proposed organizational structure for inland fishery cooperative governance.

## **SECTION C: POLICY IMPLEMENTATION**

### **C.1 Policy Implementation Plan**

A National Inland Fishery Policy implementation plan will be developed once it has been approved by Cabinet. The policy will be implemented by the DAFF through a series of engagements and pilot projects with the Provincial Departments of Agriculture, relevant National and Provincial Departments, resource users and stakeholders.

### **C.2 Resources Requirement**

A detailed analysis of resources, human capacity and funding to implement the policy will be performed. This will include provision for cooperative governance arrangements, capacity building, infrastructure, monitoring and research, stakeholder engagement and pilot projects.

The viability of implementing a system of inland fishing permit fees will be investigated.

### **C.3 Monitoring and Evaluation of Policy Implementation**

A policy implementation plan with measurable indicators will be developed which will be monitored by the Provincial Working Groups. The information will be fed to the National Inland Fishery Working Group and evaluated. Additional project-specific progress monitoring and evaluation exercises will be undertaken as required.

The National Inland Fishery Working Group will submit an annual inland fishery policy implementation report to the Deputy Director General: Fisheries Management Branch of the Department of Agriculture Forestry and Fisheries.

### **C.4 Policy Review**

The present policy is a high level guide that will evolve and expand as legislative and other institutional arrangements are put in place. The policy will be subject to review as required by circumstances, political mandates and national priorities, and will be comprehensively reviewed within five years.

## **D. CONCLUDING REMARKS**

This policy highlights the need for an integrated multi-departmental and multi-stakeholder approach to enable a sustainable development approach to the inland fishery sector. This policy recognises the need for development interventions to promote redress of the legacies of historical disadvantage experienced by rural communities and to grow the value chains associated with inland fisheries.

## APPENDIX: BACKGROUND POLICY CONTEXT

The following contextual information and fishery governance references are provided as background to the Inland Fishery Policy.

### A 1. Overview

South Africa lacks a national policy to guide the sustainable utilization and development of inland fishery resources. Consequently, existing inland fishery access rights and governance arrangements are fragmented and not informed by the country's equality, economic, livelihood development and food security goals.

The absence of an equitable inland fishing governance framework, with defined user rights and socio-economic goals, excludes rural communities from the full potential of livelihood and economic opportunities linked to freshwater aquatic natural resources. The economic, social and food security value of inland recreational and small-scale food fisheries are not recognised, nor are their socio-economic contributions formally recorded. The lack of clear social and economic goals for inland fisheries with defined user rights, precludes the mandated government departments and stakeholders from governing resource use equitably. This situation stands in contrast marine fisheries, which are governed by Marine Living Resources Act of 1998, and which provides for commercial, small-scale and recreational fishing rights, institutional arrangements, fishery management procedures and funding. At present, freshwater aquatic resource management mainly addresses ecological sustainability through biodiversity conservation measures and recreational fishing controls. If optimal social and economic benefit from inland fisheries is to be achieved, particularly in terms of rural livelihoods and food security, a policy to guide optimal resource utilization and development interventions is required.

South Africa's inland fisheries policies date as far back as the late 19<sup>th</sup> Century when legislation and comprehensive institutional support was put in place to develop the economic and recreational potential of inland waters. By the mid-20<sup>th</sup> century, this support included state hatcheries, fishery associations, provincial inland fishery departments (in the former Cape and Natal Provinces) and the *Joint Provincial Inland Fisheries Advisory Board* to coordinate policy and management (Britz, 2015). In the 1960s, attempts to promote fisheries for commercial and livelihood purposes were made during the dam-building era as part of the "homelands" development policy. Since the mid-1980's, when a policy decision was taken for provincial conservation departments to stop promoting fisheries based on the stocking alien fish species, inland fish resource management has been framed by the biodiversity conservation mandate of the provincial environmental management agencies. Little attention has been given to the social and economic potential of inland fisheries in the democratic era, but this changed with the DAFF announcement in 2012 that it was extending its national fishery mandate to inland fisheries:

*'... DAFF anticipates creating a policy and programme on inland fisheries. The development of inland fisheries involves developing more economic opportunities around generally existing fish stock within freshwater bodies and rivers; in the South African context, the main target is storage dams, of which there are over 3000 around the country...The job creation potential of such an initiative is in the tens of thousands, most likely without requiring massive investment. Another virtue of this development is that it has particular potential to promote job creation within the former homelands, where many storage dams have been built, and where their recreational and fish-harvesting potentials have been especially neglected. Most dams in South Africa are under the jurisdiction of the Department of Water Affairs, while the fish in these dams are under the Department of Environmental Affairs; the development of an inland fisheries policy will therefore require close collaboration with these two departments.'* (DAFF, 2012)

The inland fishing policy is thus designed to align inland fishery governance with Constitutional requirements for a sustainable development approach to natural resource utilisation. Achievement of this goal requires a review of the current governance arrangements, stakeholder inputs and legislative reform where needed. A recent Water Research Commission scoping study on inland fisheries provided a comprehensive review of inland fishery governance with recommendations for policy development (Britz *et al.*, 2014; Tapela *et al.*, 2014).

As inland fisheries are largely informal with minimal governance arrangements, the primary policy task is to identify and put in place governance arrangements including empowering legislation, institutional arrangements and funding.

## **A 2 Constitutional Mandate**

In terms of the Constitution, fisheries are a national competency. This mandate has historically been limited to marine fisheries through constitutional legislation in the form of the Marine Living Resources Act of 1998. No equivalent constitutional legislation has been promulgated which provides for the management of inland fisheries.

Inland fish populations are currently managed as concurrent National and Provincial competencies in terms of the Constitutional Schedule 4 mandates for 'conservation' and 'environment'. This mandate is carried out by the national Department of Environmental Affairs and the provincial environment and conservation agencies which primarily manage the conservation of fish biodiversity and the environmental sustainability of fish populations. The Constitution section 24b(iii) mandate to "secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development" in respect of fisheries is however not currently being fulfilled due to the lack of a guiding policy.

The gap in fulfilling the national constitutional mandate for fisheries governance thus needs to be addressed through a coherent policy and legal framework which defines appropriate cooperative governance arrangements.

## **A 3 Political Mandate**

The political mandate for inland fisheries governance resides with the Department of Agriculture, Forestry and Fisheries.

In the absence of a policy and an empowering act - equivalent to the Marine Living Resources Act, the use of inland fisheries for livelihood, food security or economic purposes is not provided for. Thus appropriate governance institutions and capacity are required for the DAFF to carry out its mandate. These include:

- An inland fisheries policy.
- Cooperative governance arrangements.
- A legislated user rights framework.
- Monitoring control and surveillance arrangements.
- Inland fisheries management guidelines.
- Representative stakeholder institutions.
- Co-management arrangements.
- Organisational capacity to promote rural livelihood development based on inland fisheries resources.
- A fiscal budget and harmonised system of fishing license fees

The management mandate for the sustainable use of inland fishery resources is currently undertaken in terms of the National Environmental Management Act (NEMA) by the provincial environmental and nature conservation authorities, while the Department of Water and Sanitation (DWS) and various other authorities regulate activities on dams. The only specific legislative provisions governing the use of inland fish resources are rudimentary fishing “effort control” rules prescribed in the provincial environmental acts and ordinances, which have their origin in pre-democratic era policies to provide for recreational fishing and biodiversity protection. While small-scale fishers from local communities are generally regarded as having a legitimate claim to fish, in the absence of a supporting rights-based governance framework, their activities are usually unmanaged and often illegal. This has led to growing conflicts between water users on a number of impoundments.

In order to achieve equitable and sustainable use of South Africa’s inland fish resources, a constitutionally aligned policy is required to guide fundamental reform of the existing inland fishery governance arrangements. Specifically, the current biodiversity-based management of inland fish resources needs to be expanded to incorporate social and economic goals.

A significant institutional change in this direction was the designation of the inland fisheries mandate to the Department of Agriculture, Forestry and Fisheries (DAFF), the national department responsible for developing South Africa’s primary production sectors. The DAFF carries out its governance mandate in concert with stakeholders through the DAFF system of producer associations (DAFF, 2010). An immediate challenge is thus to establish representative bodies for the inland fishing stakeholder groups.

#### **A 4 Policy context**

South Africa has established principles flowing from the Constitution and international environmental agreements to guide policies for sustainable and equitable natural resource use. South African environmental legislation is founded on the constitutional principle of ‘sustainable development’. In other words, the economic and social needs of people need to be placed at the center of environmental governance within a framework of sustainable resource use. Implementing a sustainable development approach to natural resource use remains a governance challenge, as a balance is required between ecological, social and economic considerations. Environmental managers, who have a mainly ecological training, have tended to overlook social and economic aspects required to achieve sustainable fisheries utilisation. In recent years, significant progress has been made internationally and in South Africa to developing more ‘human centred’ fishery policies (De Young *et al.*, 2008; DAFF, 2012).

The reform of marine fishery policy in the post-Apartheid era has yielded valuable lessons on what is required to achieve restitution and social justice. This experience has shown that it is insufficient to racially transform an existing industry without addressing the legacies of exclusion of historically disadvantaged fisher communities from resource use. This approach mirrors international trends to not viewing fisheries narrowly in terms of economic efficiency, but seeing them more broadly as important providers of social goods including cultural, livelihood and food security benefits. Policy guidance is thus required on how to approach tradeoffs between existing economic interests and the imperative to address legacies of poverty and inequity experienced by historically disadvantaged groups that have been caused by exclusion from access to natural resources, education and opportunity.

An important development, relevant to the development of an equitable inland fisheries policy, was the promulgation of the DAFF’s Policy for the Small-Scale Fishing under the Marine Living Resources Act which aims to provide redress and recognition of the rights of coastal small scale fisher communities

(DAFF, 2012). This policy provides useful experience, principles and some lessons for governing inland small-scale fisheries.

The inclusion of Inland Fisheries into the mandate of the Department of Agriculture, Forestry and Fisheries (DAFF) is designed to address the need to develop the sustainable utilisation of inland fisheries for optimal social and economic benefit. In order for the DAFF to implement this mandate, in concert with other relevant national and provincial departments and roleplayers, a policy to guide sustainable resource use is required. The scope of the policy includes access rights, legislative reform and harmonization, sustainable resource management, livelihood development, co-management arrangements and capacity building.

## A 5 Global Context

### A 5.1 Fishery Governance

Governance norms for fisheries have been greatly advanced in recent years, as weak governance, which results in open access and poorly defined property rights, has been attributed as the main cause of overexploitation of fish stocks around the world (World Bank, 2004). The development of supporting governance institutions are therefore key to the successful implementation of fishery property and access rights institutions.

### A 5.1 Inland Small-scale Fisheries

Globally, inland fisheries are mainly small-scale in nature and are increasingly being recognised as significant contributors to food security, poverty reduction and income generation. Due to the informal subsistence and artisanal nature of most small-scale fisheries, the socio-economic contribution production is often not captured in national statistics such as the gross domestic product (GDP). Consequently, the sector has historically been overlooked by fishery policy makers, who have focused mainly on promoting large scale industrial fisheries to generate rents which can be used by the state (Béné *et al.*, 2010). Concerns have arisen in recent years around the marginalisation of poor, small-scale fishers in favour of industrial fisheries and other competing interests such as tourism, agriculture, property development (Béné *et al.*, 2010). This has led to international efforts to reform fishery governance to recognise the rights of small-scale fishers and protect their livelihoods (FAO, 2013).

The Food and Agriculture Organisation of the United Nation's recently published '*Guidelines for Securing Sustainable Small Scale Fisheries*' is a landmark document reflecting the international shift to recognizing the important socio-economic role that small-scale fisheries play (FAO, 2013). The guidelines recognise that addressing the poverty and marginalization that small-scale fishing communities experience is central to fishery policy interventions:

*'...the constraints to and challenges in achieving sustainable development in small-scale fishing communities include their often remote location, limited access to social and other services as well as markets, low levels of education and inadequate organisational structures which make it difficult for them to make their voices heard. Many small-scale fisheries are effectively unregulated, unreported and poorly monitored, especially in developing countries and inland water areas. Customary practices for allocation and sharing of resource benefits that generally used to be in place in small-scale fisheries have often been eroded because of centralized fisheries management systems, technology development and demographic changes'. (FAO, 2013).*

The FAO guidelines for small-scale fisheries have informed the DAFF's 'human centred' approach to

developing South Africa's marine small-scale fishing policy and the current inland fishing policy.

### **A 5.3 Inland Recreational Fisheries**

Recreational fishing has a massive global participation rate with an estimated 10.6% of all people participating in recreational fishing in countries with reliable statistics participating (Arlinghaus & Cooke 2009).

In most countries, fishery policy has historically not recognised recreational fishing as a fishery sub-sector in its own right, as the catch tonnage and value is not formally recorded in fishery production statistics. This has led to an underestimation of the ecological, social and ecological impacts (positive and negative) and value of recreational fisheries (Cooke and Cowx, 2004). In recent years, there has been a growing recognition of the economic, socio-cultural and ecological importance of recreational fishing as part of the global fisheries sector (Arlinghaus *et al.* 2013). International efforts are under way to formally record the value of recreational fisheries and to create institutions to manage them as fully fledged fishery sub-sectors along side commercial and small-scale fisheries.

The organised sports angling community has indicated its intention to approach the DAFF to obtain recognition of recreational angling, in order to develop appropriate governance and management arrangements, and to realise the economic potential of the industry (Britz, *et al.*, 2015).

### **A 6.3 Commercial Fisheries**

No large-scale, mechanised commercial fishing equivalent to South Africa's marine fisheries exist on South African inland waters as the productivity of inland waters is too low to support such operations. The few existing permitted 'commercial' fishing operations are in reality small-scale artisanal fisheries employing simple, manually operated gears such as trek- or gill-nets.

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