# National Freshwater (Inland) Wild Capture Fisheries Policy for South Africa

Department of Forestry, Fisheries and the Environment | 2021







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#### **ACRONYMS AND ABBREVIATIONS**

COGTA Department of Cooperative Governance and Traditional Affairs

DEFF Department of Forestry, Fisheries and the Environment

DPWI Department of Public Works and Infrastructure

DTIC Department of Trade, Industry and Competition

DSBD Department of Small Business Development

DSI Department of Science and Innovation

DARDLR Department of Agriculture, Rural Development and Land Reform

DHSWS Department of Human Settlements, 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, 1998 (Act No. 18 of 1998)

NBA National Biodiversity Assessment (2018)

NWA National Water Act, 1998 (Act No. 36 of 1998)

NEMA National Environmental Management Act, 1998 (Act No. 107 of 1998)

NEMBA National Environmental Management: Biodiversity Act, 2004 (Act No. 10 of 2004)

SASCOC South African Sports Confederation and Olympic Committee

SEMA specific environmental management Act
SMME Small, Medium and Micro Enterprise

WRC Water Research Commission

#### **DEFINITIONS**

Aquaculture	Means the farming of aquatic organisms, including crocodiles, in
	controlled or selected aquatic environments (marine, brackish or
	freshwater),
	involving—
	(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 harvesting of cultured aquatic
	organisms; and
	(b) individual or corporate ownership of the stock being farmed,
	(a) and includes ranching but excludes stock
	enhancement.
Capture Fisheries	Means the sum of all activities undertaken to harvest a given fish
	resource from the waterbody.
Co-management	Means a governance approach where sharing of responsibility,
	between government as the regulating authority and fishers as the
	resource users, concerning the management of the inland fisheries
	resources is promoted and supported for the achievement of policy
	objectives for the sector.
Community	Means any group of persons that are a part of such a group who
	share common interests, and who regard themselves as a
	community.
Department	Means national department responsible for the management of
·	freshwater (inland) fisheries.
Ecosystem Approach to	An ecosystem approach to fisheries (EAF) strives to balance
Fisheries	diverse societal objectives, by taking account of the knowledge and
	uncertainties of biotic, abiotic and human components of
	ecosystems and their interactions and applying an integrated
	approach to fisheries within ecologically meaningful boundaries
	(based on FAO definition).
Freshwater aquatic	Means any animal, including its eggs and gametes, any plant
organism	or other living matter that lives wholly or predominantly in
	freshwater for all or part of its lifecycle, but excludes crocodiles,
	mammals, birds and any other organism prescribed not to be an
	aquatic organism for the purposes of this policy.
Freshwater fish	For the purposes of this document freshwater fish are fish species,
	both indigenous and exotic, which occur in inland freshwater bodies
	excluding estuaries.
Human rights-based	Means an approach to policy-making and development that uses
approach	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.
Inland fisheries	Means the capturing of living aquatic organisms from natural or
	man-made inland waters including small-scale and recreational
	fisheries, the associated value chains and service industries, but
	excludes activities undertaken on estuaries and aquaculture
	facilities.
Low technology or	Means fishing equipment, nets or vessels operated mainly by hand.
passive gear	
Morpho-edaphic index	An estimate of the potential fish yield is a water body based on
(MEI)	physico-chemical parameters such as a surface area, average
	depth at full supply level, temperature, electrical conductivity and
	total dissolved solids.
Precautionary approach	For the purposes of this document the precautionary approach is a
	negotiated set of agreed cost-effective measures and actions
	among fisheries 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.
Ranching	Means aquaculture activity in which a person intentionally releases
	aquatic organisms into an aquatic environment in which the aquatic
	organisms, owned by the ranching licence holder, are not controlled
	or confined, with the intention of harvesting them when they reach
	market size.
Recreational angler	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.
Recreational fisheries	Means all value chain activities and institutions associated with
	recreational fishing, including services and supplies, commercial
	angling charters, lodges and guides, and angler organisations.
Small-scale fishing.	Means the use of an inland fisheries resource 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 fisheries-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 fisheries value chain.
Small-scale fishers	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.
Culture based fisheries	Means the release of cultured fish into the aquatic environment for
	fisheries purposes.
Stocking	Means the release of hatchery reared or translocated fish for
	enhancing recreational or small-scale fisheries yields or for
	conservation purposes.
Traditional and customary	Fishing activities applied within a community according to the
fishing	traditional laws, culture and customs of the area for the purpose of
	satisfying personal, cultural domestic or commercial communal
	needs.

#### **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, 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 subjected to democratic era reform, inland fisheries have been overlooked. This policy is thus designed to align inland fisheries 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, marine resources governance is a national competency. The governance of marine fisheries is well established under constitutional legislation through the Marine Living Resources Act, 1998 (Act No. 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 currently not being fulfilled due to the lack of a guiding policy and empowering legislation.

#### A 3 Political Mandate

The lead department for the management and regulation of fisheries management is the Department of Forestry, Fisheries and the Environment.

Appropriate governance institutions and capacity are required for the Department 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, 1998 (Act No.36 of 1998), the National Government acting through the Minister responsible for South Africa's water resources is required to ensure that water is protected, used, developed, conserved, managed and controlled in a sustainable and equitable manner, for the benefit of all persons and in accordance with its constitutional mandate. As such, the department responsible for water resources, controls access to the inland waters on state property under its custodianship for the purpose of undertaking fishing activities. A system of Resource Management Plans (RMPs) is being implemented by the department responsible for water resources to manage the activities of multiple user-groups on inland waters.

Environmental management and the conservation of inland fish populations are undertaken in terms of the National Environmental Management Act, specific environmental management Acts and the provincial environmental Acts, ordinances and regulations.

A process of legislative review and harmonisation between the provincial and national departments responsible for the management of the environment, fisheries and inland waters will be required to align the existing legislation and mandates in respect of inland fisheries with Constitutional requirements and this inland fisheries policy.

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

Inland fisheries in South Africa is dominated by recreational and small-scale fishing for subsistence and livelihood purposes. Commercial inland fisheries equivalent in scale to South Africa's commercial marine fisheries to supply formal markets does 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 waterbodies 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 economic value are unknown. Most small-scale fishers are impoverished 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

traditional and 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, traditional and customary fishing practices and contributions to rural livelihoods are not recognised by the government and other stakeholders.

Resource user-conflicts are present in 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 marginalised at many waterbodies. 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 small-scale fishers' lack of capacity 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 Angling

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 related 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 job creation, 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 benefits from inland fish resources.

The recreational angling disciplines are diverse, including bank and boat angling, fly fishing and informal recreational/food fish angling. Angling is organised as a sporting code, affiliated to the South African Sports Confederation and Olympic Committee (SASCOC). Most recreational anglers are however not affiliated to any angling organisation.

Recreational angling is a popular activity on dams and rivers. The management of recreational fishing activities on public dams is in the process of being formalised by the DHSWS, through the compilation of

Resource Management Plans for the major public dams. Many recreational angling clubs enjoy rights of access to land and water-based activities on public dams through historical leases and contracts with the DHSWS.

Recreational angling 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 jobs and food security in rural areas.

Recreational angling is not recognised as a fisheries subsector which contributes to the economy and rural livelihoods. There is a need to clearly define and regulate recreational and small-scale fisheries user-rights and to establish sustainable resource management institutions. This includes addressing concerns expressed by the recreational angling subsector on the ecological effects of legal and illegal gill netting on fish populations and the improvement of regulatory management for recreational fishing and stocking. There is thus a need to recognise recreational angling as a fisheries subsector 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 fauna and flora.

The trout recreational fisheries subsector 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 viable culture-based fisheries, 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 fisheries incorrectly regarded as "commercial" fishing operations are in reality small-scale fisheries employing simple, manually operated gears such as treknets or gillnets.

#### A 4.5 Fisheries Management

In general, inland fisheries resources in South Africa are currently managed in terms of conservation and biodiversity objectives and are not sufficiently recognised as a livelihood opportunity, source of food security or as a contributor to the economy. Therefore, this inland fisheries policy provides 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.

Minimal organisational 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 provides the basis for the establishment of dedicated resources and capacity for the inland fisheries sector.

#### A 4.6 Fishing Permits and Licences

Inland fishing activities are currently regulated by the provincial departments responsible for environmental management in terms of their environmental Acts, ordinances and regulations. The provincially legislated system of inland fishing permits or angling licences 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 fishing permits and angling licences across the provinces, hence the need for a policy to harmonise the permitting system.

Revised inland fisheries permitting and licensing 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 fisheries resources and associated opportunities 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 environmental management regulations which may result in the exclusion of access by historically disadvantaged communities, insufficient information and education, insufficient

access to value chains and markets related to inland fisheries, insufficient resources and capacity to participate in associated value chains, and lack of capacity to participate in fisheries and aquatic resource governance institutions.

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

#### SECTION B. NATIONAL FRESHWATER (INLAND) WILD CAPTURE FISHERIES POLICY

#### **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 provide for the promotion of the economic and social benefits of inland fisheries based on a sustainable development approach.

#### **B 2 Purpose**

The purpose of the policy is to support and guide the sustainable development and management of the inland fisheries sector. This includes legislative reform and harmonisation, 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 and ensure that current fishers' livelihoods are protected.

The following legislation, policies and normative international guidelines are key informants of the development of this inland fisheries policy:

- Constitution of the Republic of South Africa, 1996
- National Environmental Management Act, 1998
- The National Water Act, 1998 and other relevant Specific Environmental Management Acts
- Marine Living Resources Act, 1998
- Provincial Acts, ordinances and regulations relevant to inland fisheries
- National policies and strategies including
  - o The National Development Plan 2030 (2013).
  - Policy for the Small-Scale Fishing Sector in South Africa (2012) promulgated under the MLRA, which aims to provide redress and recognition of the rights of coastal small scale fisher communities. This policy is an important recent development relevant to the development on an inland fisheries policy.
  - DAFF's Integrated Growth and Development Plan (2012).
  - Department of Human Settlements, Water and Sanitation's (DHSWS) Resource
     Management Plans for state dams (2014).

- DAFF's National Aquaculture Policy Framework (2013).
- Department of Trade, Industry and Competition's SMME and Small Business
   Development strategies.
- 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).

#### **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 and wetlands. Waters defined as marine environments in terms of MLRA, which includes estuaries are excluded from this policy;
- in all facets of the inland fishing value chain including small-scale fishing, recreational angling, and associated commercial activities; and
- by all parties with an interest in harvesting or capturing of freshwater aquatic organisms within
  the inland waters on state property in South Africa including fishers, suppliers, processors,
  marketers, consultants, tertiary and research institutions, environmental custodians, consumers,
  the general public and government departments and agencies.

#### **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, authorisations and prescribed regulations. Subsectoral groups will be recognised and represented including small-scale fishers, recreational anglers and pre- and post-harvest value-chain groupings.

#### B 4.2 Inland Fisheries are an Economic Subsector

Inland fisheries are recognised as an economic subsector to be governed in line with the constitutional requirements.

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

The policy is designed to achieve equitable access to inland fisheries 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 fisheries 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 Aquatic Animal Welfare**

Fishing activities will be undertaken with due consideration of animal welfare.

#### **B 4.7 Ecosystem Approach to Fisheries**

The inland fisheries 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 fisheries resources) as well as socio-economic benefits to humans (e.g., increased and equitably distributed wealth and sustainable livelihoods).

#### **B 4.8 Precautionary Approach**

To promote sustainable fishing, the "precautionary approach" to limit fishing effort will be adopted in instances where information about the resource status, ecosystem productivity and the impact of the introduction of alien fish species on biodiversity (including indigenous fish species and freshwater ecosystems) is insufficient to determine maximum sustainable harvest levels. This means that fishing should generally be permitted taking into consideration prevailing socio-economic and ecological 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 4.9 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 fisheries value chain includes associated services and supplies such as fishing equipment, accommodation, tour-guiding, publications, angling events, angling syndicate waters and property, and so on. The objective of the policy is to grow the recreational angling value chain and promote equitable participation and benefit from the subsector.

#### **B 4.10 Developmental Approach**

The policy is based on a developmental approach to contribute towards job creation and poverty alleviation, to maximize the potential economic and social benefits and to empower disadvantaged communities to participate and realise opportunities associated with inland fisheries resources.

#### **B 4.11 Good Governance**

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

#### **B 4.12 The mitigation hierarchy**

To ensure that the adverse impacts of inland fisheries on biodiversity are adequately mitigated, any such impacts must be avoided, or, where they cannot altogether be avoided, are minimised and remedied, as provided for in NEMA.

The most likely adverse impacts of inland fisheries on biodiversity are the impact of the introduction of alien fish on indigenous species and freshwater ecosystems, and the impact of the exploitation of indigenous fish species. The impacts on indigenous ecosystems and species can be avoided by avoiding introduction of alien fish species to environmentally sensitive freshwater ecosystems such as Freshwater

Ecosystem Priority Areas and fish sanctuaries (river reaches important for threatened indigenous fish species) (Nel, et al, 2011), or, where such introduction cannot altogether be avoided, putting in place strict regulatory measures to control the spread of alien fishes. The latter can be mitigated by avoiding the exploitation of threated indigenous fish species, or, where such exploitation cannot altogether be avoided, ensuring that permits are issued subject to strict permit conditions.

#### **B 5 Policy Objectives**

#### **B** 5.1 Developmental Fisheries Governance Institutions

Fisheries governance institutions will be established to optimize the socio-economic benefits of inland fisheries resources on an equitable and sustainable basis.

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

Interventions will be facilitated to promote:

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

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

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

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

Governance and management arrangements will be established to 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 fisheries resource management.

#### **B** 5.6 Institutional Arrangements

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

#### B 5.7 Legislation

Constitutionally aligned legislation providing for inland fisheries 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 fisheries governance including fisheries management services, development project support and research.

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

Government officials, small-scale fishers, recreational anglers and other value chain actors will be provided with the fisheries management skills to empower them in implementing fisheries 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:

- a) the drafting of national inland fisheries legislation under the Department's mandate;
- b) the reform and harmonisation of provincial legislation in respect of fisheries; and
- c) 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, Ordinances and Regulations. The Department will negotiate cooperative governance arrangements with the department responsible for the management of inland waters and provincial environmental departments in respect of harmonising existing environmental legislation with this fisheries policy's goals, fishing rights, fisheries 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 necessary authorisation such as registration as a resource user, a relevant license, right or permit.

National and provincial legislation will be promulgated to provide for permits and authorisations which may be issued to individuals, legal entities or community groups. Inland fishing permits and authorisations will continue to be issued in terms of provincial environmental Acts, ordinances and regulations, while the work surrounding the inland fisheries legal framework unfolds.

In the proposed national fisheries legislation, different categories of rights, authorisations, 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 fisheries 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 other factors. The number of permits per fishing category will be limited if this is necessary in order to ensure resource sustainability. The proposed legislation will also require relevant authorities to take into account special considerations when processing permit applications involving indigenous fish species that are vulnerable to overfishing. The relevant authorities will furthermore be authorised to issue permits subject to appropriate conditions.

Fish caught using recreational fishing permits may not be sold.

Small-scale fishers residing within the vicinity of a waterbody of interest will be prioritised for issuing of permits without unfairly discriminating against other resource-users.

Permit fees may be applicable.

An efficient and user-friendly registration and permitting system for all resource-user categories will be investigated to facilitate efficiency and ease of access by resource users.

#### **B 6.3 Resource Sustainability**

When a new fisheries 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 that sustainable harvest levels are maintained. This may include experimental pilot fisheries projects to obtain

data to determine optimal sustainable yields and to develop fisheries management plans and reference points which fulfil the desired ecological, social and economic objectives.

Based on ecological risk and/or stock assessment, social and economic criteria will primarily determine the recommended level of fishing effort as well as suitable gear type to be used. It is further recognised that most small-scale fishing is not subject to any form of active management, and that a formal fisheries 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 fisheries harvest data is available, morpho-edaphic indices (MEIs) may provide an initial indicative upper limit of the fisheries 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 year's data, the delegated authority in consultation with the co-management team will take decisions on appropriate catch rates or determine if any interventions are required.

The stocking of hatchery reared fish to enhance recreational and small-scale fisheries purposes will be permitted based on the outcome of appropriate environmental impact assessments or risk analyses conducted in terms of relevant environmental legislation, and fisheries 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 Department will be responsible for the permitting and management of the stocking of alien species for fisheries purposes under authority devolved in terms of the NEMA and SEMAs.

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

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

The inland fisheries 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 fisheries 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 angling.

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

The Department will convene appropriate cooperative governance structures and processes with mandated government departments and fisheries stakeholders.

The provincial departments leading inland fisheries management in their respective provinces will convene meetings for the establishment of inclusive 'Co-management Committees' to implement fisheries 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, Development and Monitoring

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

- Biological research on fish populations to inform sustainable fisheries harvest levels and the possible implications for biodiversity and ecosystem functioning.
- Social research to understand the social benefits from inland fisheries, fisher behaviour 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, water quality and quantity, and factors affecting public health.

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

Due to the context of rural poverty, inland fisheries 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 fisheries 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 optimise post-harvest value.

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

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

Inland fisheries 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 realise opportunities within inland fisheries value chains.

Rights of access to public water bodies and fish resources (including rights of access across public land) must be provided for marginalised 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 and provincial departments, as well as local government to support inland fisheries services including co-management facilitation, extension services and research.

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

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

#### **B 6.10 Monitoring, Evaluation and Enforcement**

The mandated departments responsible for fisheries, environment and inland water management will monitor compliance and enforce authorisation-conditions for access to fish resources, public waters and land.

In the transition period preceding the promulgation of national inland fisheries legislation, prosecutions in terms of provincial environmental Acts, Ordinances and Regulations should only be implemented as a last resort in resolving inland fisheries 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 authorities.

#### **B6.11 Food Safety Monitoring**

The Department will, in consultation with the departments responsible for health and trade, establish product quality and safety programmes for freshwater fisheries foods which conform, as far as possible, with relevant local standards and requirements and, as far as possible, with international standards or requirements.

#### **B 7 Institutional Arrangements**

#### **B 7.1 Intergovernmental Relations**

The Department 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 management and regulation of the sector between the Department, the

national and provincial departments responsible for the management of inland waters and provincial departments leading inland fisheries management in their respective provinces. The provincial departments leading inland fisheries management in their respective provinces 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 provincial and national departments responsible for management of water, environment, transport, cooperative governance and traditional affairs, public works and infrastructure, agriculture, land reform and rural development, local government and traditional authorities will be defined.

The provincial departments leading inland fisheries management in their respective provinces may be the delegated authority to issue authorisations and permits.

#### **B 7.2 Inland Fishing Subsector Representation**

Fisheries subsector 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 Department, in association with provincial departments leading inland fisheries management in their respective provinces will facilitate and recognise the establishment of representative associations. Fishers from any common fishing activity or interest may form an association and apply to the Department for recognition. Associations will be broadly categorised as:

- Small scale fishing associations
- Recreational angling 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 Department.

Chairpersons or persons delegated in writing by the chairperson of the fisher associations they are representing will participate in the Provincial and National Working Groups for Inland Fisheries (see B 7.4 Sector Coordination).

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

The Department and provincial departments leading inland fisheries management in their respective provinces will encourage and facilitate the establishment of inclusive fisheries co-management

committees on waterbodies requiring active management. The co-management committees will include relevant government departments, fisheries user groups and other relevant stakeholders.

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

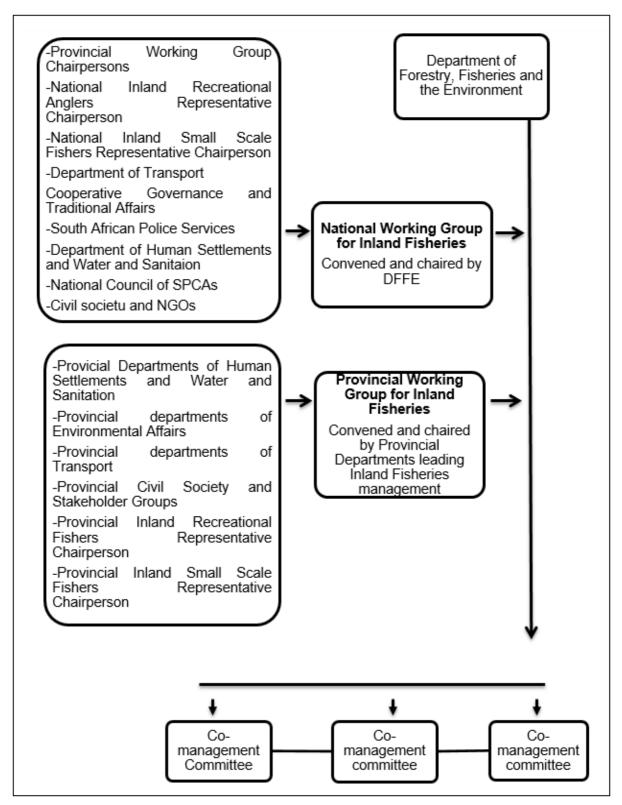
#### **B 7.4 Sector Coordination**

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

Fisheries management on local waterbodies will be dealt with by local co-management committees convened by the provincial departments leading inland fisheries management in their respective provinces. The Department, in partnership with the provincial departments leading inland fisheries management in their respective provinces will provide terms of reference and institutional support for the setting up of co-management committees.

The Provincial Inland Fisheries Working Group will be convened by the provincial department leading inland fisheries management in each province. Representatives of the government departments with mandates relevant to inland fisheries matters, fishing interest groups and other stakeholders will participate on the Provincial Inland Fisheries Working Group. The Provincial Inland Fisheries Working Group will deal with all matters relevant to implementation of the policy in their respective provinces.

The National Inland Fisheries Working Group will be convened by the Department. The National Inland Fisheries Working Group will monitor and review inland fisheries policy implementation and provide policy guidance to the Provincial Inland Fisheries Working Groups.



**Figure 1:** The proposed organisational structure for inland fisheries cooperative governance indicating the Provincial and the National Inland Fisheries Working Group.

#### **SECTION C: POLICY IMPLEMENTATION**

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

A policy implementation plan will be developed once the policy has been approved by Cabinet. The policy will be implemented by the Department through a series of engagements and pilot projects with the provincial departments leading inland fisheries management in their respective provinces, relevant national and provincial departments, resource users and other relevant 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 Inland Fisheries Working Groups. The information will be fed to the National Inland Fisheries Working Group and evaluated. Additional project-specific progress monitoring and evaluation exercises will be undertaken as required.

The National Inland Fisheries Working Group will submit an annual policy implementation report to the Deputy Director-General responsible for Fisheries Management within the Department.

#### C.4 Policy Review

This 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 reviewed 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 fisheries 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 fisheries governance references are provided as background to the policy.

#### A 1. Overview

South Africa lacks a national policy to guide the sustainable utilisation and development of inland fisheries resources. Consequently, existing inland fisheries 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 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 of 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, fisheries 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 national policy to guide optimal resource utilisation and development interventions are required.

South Africa's inland fisheries policies date as far back as the late 19th century when legislation and comprehensive institutional support was put in place to develop the economic and recreational potential of inland waters. By the mid-20th century, this support included state hatcheries, fisheries associations, provincial inland fisheries 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 of alien fish species, inland fish resource management has been framed by the biodiversity conservation

mandate of the provincial environmental management agencies. Minimal attention has been given to the social and economic potential of inland fisheries in the democratic era, but this changed when the then Department of Agriculture, Forestry and Fisheries was assigned the responsibility to manage and regulate the inland fisheries sector in 2009.

The inland fishing policy is thus designed to align inland fisheries 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 fisheries governance with recommendations for policy development (Britz *et al.*, 2015; Tapela *et al.*, 2015).

The National Biodiversity Assessment (2018) (NBA) notes that the majority of South Africa's freshwater ecosystems are degraded and threatened by, *inter alia*, changes to the hydrological regime (flow of water), water quality, loss of natural habitat, invasive alien species and the over-exploitation of species.

The NBA states that approximately 30% of the 118 indigenous freshwater fish species are threatened. Freshwater fish species are the most threatened taxonomic group in South Africa. One of the biggest pressures on indigenous freshwater species is predation by alien fishes. It is therefore important that stocking of freshwater ecosystems with alien fish species is done in a risk-averse and precautionary manner.

It is also stated in the NBA that the exploitation of indigenous fish species is currently not a pressure on those species given the relatively low development of South Africa's inland fisheries. The development of fisheries in South Africa involving the exploitation of indigenous fishes should take into consideration the fact that most large indigenous species are characterised by long-lived, slow-growing and late-maturing traits, making them vulnerable to overexploitation.

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 to provide for the management of inland fisheries.

Inland fish populations are currently managed as concurrent national and provincial competencies in terms of Part A of Schedule of the Constitution, which concurrently mandates for "nature conservation" and "environment" as managed in terms if provincial legislatures and national legislature. This mandate was, until the 6<sup>th</sup> administration, 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 constitutional mandate as provided for by section 24(b)(iii) 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.

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 Department 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 fisheries resources is currently undertaken broadly in terms of the National Environmental Management Act (NEMA) by the provincial environment and nature conservation authorities, while the Department of Human Settlements, Water and Sanitation (DSWS) and various other authorities regulate activities on public dams. The only specific legislative provisions governing the use of inland fish resources are rudimentary fishing "effort control" rules prescribed in the provincial Acts, Ordinances and Regulations, where some of them 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 regarded as illegal. This has led to growing conflicts between resource 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 fisheries 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 Fisheries Management branch of the then Department of Agriculture, Forestry and Fisheries (DAFF), the branch responsible for developing the fisheries production sectors.

#### 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" fisheries policies (De Young *et al.*, 2008; DAFF, 2012).

The reform of marine fisheries 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 trade-offs 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 then 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 is designed to address the need to develop the sustainable utilisation of inland fisheries for optimal social and economic benefit. In order for the Department to implement this mandate, in concert with other relevant national and provincial departments and role-players, a policy to guide sustainable resource use is required. The scope of the policy includes access rights, legislative reform and harmonisation, sustainable resource management, livelihood development, co-management arrangements and capacity building.

The NBA is also relevant for inland fisheries. A relevant finding from the NBA is that the majority of South Africa's freshwater ecosystems and a relatively large percentage of its indigenous freshwater species, are threatened. Given that the development of inland fisheries in South Africa's freshwater ecosystems has the potential to have adverse impacts of biodiversity, this policy recognises that any such impacts should be mitigated. Properly functioning ecosystems are crucial for the maintenance of ecosystem services on which inland fisheries rely to be sustainable.

#### A 5 Global Context

#### A 5.1 Fisheries Governance

Governance norms for fisheries management have been greatly advanced in recent years in order to address the overexploitation of fish stocks around the world, which is mainly caused by open access and poorly defined property rights as a result of weak governance of the sector (World Bank, 2004). The development of supporting governance institutions is therefore of key importance to the successful

implementation of fisheries 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 alleviation 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 fisheries 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 fisheries governance to recognise the rights of small-scale fishers and protect their livelihoods (FAO, 2013).

The Food and Agriculture Organisation of the United Nations published 'Guidelines for Securing Sustainable Small-Scale Fisheries' which is a landmark document reflecting the international shift to recognising 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 fisheries 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 Department'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 angling 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, fisheries policy has historically not recognised recreational angling as a fisheries subsector in its own right, as the catch tonnage and value is not formally recorded in fisheries 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 fisheries subsectors alongside commercial and small-scale fisheries.

The organised sports angling community has indicated its intention to approach the Department 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 5.4 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 fisheries incorrectly regarded as 'commercial' fishing operations are in reality small-scale fisheries employing simple, manually operated gears such as treknets or gillnets.

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