# INLAND SMALL-SCALE FISHERIES

## WFFP working group on inland fisheries

FORO MUNDIAL DE PUEBLOS PESCADORES
WORLD FORUM OF FISHER PEOPLES
FORUM MONDIAL DES POPULATIONS DE PÊCHEURS

# Introduction

## Why a WFFP Report on Inland Fisheries?

Until recently, the voices of millions of inland small-scale fishers, the primary users of freshwater resources and inland streams have been unheard. Indeed, the few studies around inland small-scale fishing, at an international level and at local national levels, have mainly been conducted by the academic and corporate sectors. Initially, the World Forum of Fisher People (WFFP) did not address the state and challenges of inland small-scale fisheries, even though inland fishing communities represent a significant part of WFFP and its constituency. This started to change in 2015, when a WFFP working group on inland fisheries was created, with the objective to consolidate and strengthen the voice of inland small-scale fishers within the organisation and beyond. Central to this was a Human Rights Based approach for the management of inland fisheries and to enhance food sovereignty for inland small-scale fishing communities.

WFFP organised a successful Inland Fisheries Exchange in South Africa to discuss the current state of inland small-scale fisheries globally and to inform and advise WFFP's political position regarding inland fisheries.

In June 2017, WFFP organised a successful Inland Fisheries Exchange at the Vanderkloof Dam in the Northern Cape Province of South Africa, in preparation for the workshop on Inland Fisheries to be held at the 7th General Assembly of the WFFP in November 2017. The Exchange was organised by the WFFP Working Group on Inland Fisheries, with the support of the WFFP international secretariat. The exchange was hosted by Masifundise and participants from local communities of Keurtijeskloof, Petrusville and Luckhoff, who fish at the Vanderkloof Dam. The international participants were Christiana Louwa, El Molo Forum (Kenya) and WFFP CC member; Md. Mujibul Haque Munir, COAST Trust, Bangladesh; Arthur Bull, Special Advisor to the WFFP CC, from the East Coast of Canada; Dawn Morrison, from the Working Group on Indigenous Food Sovereignty, from the Secwepemc nation, in the westernmost province of Canada.The purpose of the exchange was to discuss the current state of inland small-scale fisheries globally and to inform and advise WFFP's political position regarding inland fisheries.

The participants, both local and international, provided case-studies that focused on their local context, contributing to an overview of the characteristics of inland small-scale fishing and the challenges inland fishing communities face around the world. Such an overview led to the identification of key points of entry for actions, particularly within WFFP. As a result of the exchange, this report and a position paper about inland small-scale fishing have been produced.





# Why are inland fisheries not recognised?

The objective of this report is to contribute to and expand the knowledge base on inland small-scale fisheries, through inland small-scale fishing communities' own contributions, voice and vision.

In most countries around the world, almost all fisheries management policies are focused on marine fisheries, while inland fisheries are often confined to the informal or recreational fishing sector.

In fact, if inland fisheries are considered from the macro-economic perspective of neo-liberal capitalist institutions and national governments, then their economic value is relatively small. Globally, inland fisheries are mostly small-scale and make a limited contribution to national GDPs. However, this perspective completely overlooks the health and nutritional, cultural and social value of livelihoods based on inland fisheries.

Big gaps exist in the scientific knowledge on inland fisheries, for example, about half of the freshwater species are not biologically registered. Yet, these species exist and they are crucial to the livelihoods of the communities that harvest, eat, transform and sell them. They might not be subject of scientific nomenclature, but these species have traditional names and cultural values. The scientific and social value of these species is not considered, due to a lack of the communities' involvement in research. Furthermore, the language and procedure of science, when they are not rooted in the communities, alienate and silence them, not allowing fishers to be part of the conversations about their own livelihoods. This contributes in making the paradigm shift from a macro-economic approach to a livelihood approach challenging for inland small-scale fishers, who remain invisible in national and international policy. The objective of this report is to contribute to and expand the knowledge base on inland small-scale fisheries, through inland small-scale fishing communities' own contributions, voice and vision.

# Inland fisheries in the world: an overview

## Definition of inland small-scale fisheries

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The definition of inland fisheries used in academic and governmental institutions is the following: all the harvesting, fishing, hunting, aquaculture methods used on inland water bodies. Fishing is seen as an impact of humans on natural biodiversity. Researchers, governments and international institutions use this definition. Therefore, being familiar with it is important, as it is used by academics to study inland fisheries. However, this definition does not include fishing communities, and fishing is only described as a harvesting activity, not as a livelihood. It does not speak to the concept of food sovereignty and fishery value-chain. Cultural, nutritional, traditional and indigenous aspects of fisheries are not included in this definition. Furthermore, this definition only relates to science-based fishery management: nothing is said about traditional management and customary rights. The vision of small-scale inland fisheries offered by the western science is very fragmented, and this is one of the reasons why it failed to manage inland fisheries. As fisher people, we think that inland fisheries would be managed better if communities, that have customary practices and traditional knowledge, are primarily involved. However, most governments fail to meaningfully include customary rights in fisheries policies, and only rely on science-based management.

The corporate system uses the gaps of this definition to create its own definition of inland fisheries, and control it, by considering inland water bodies as a commodity, and not as livelihood resource. They incorporate economic aspects to the scientific definition. Thus, inland fisheries become a terrain for a variety of business possibilities, such as tourism, recreational fishing, and conservation activities. Indeed, inland small-scale fisheries can also be an enemy for the corporate system and recreational fishers. When this is the case, the term “impact” is used to argue that inland

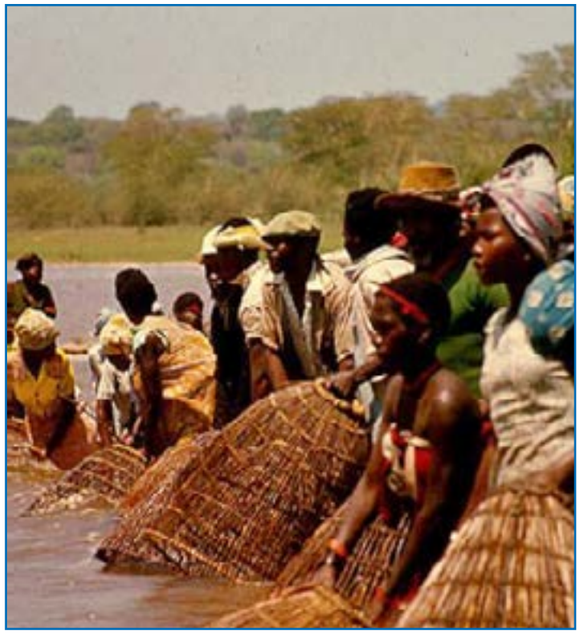


Inland Small-scale Fisheries

These definitions of the corporate system and recreational fishers are clearly against fishing communities, and they obviously neglect the social importance of inland fisheries. For inland small-scale fishers, the livelihood aspect of the fishery is crucial.

fisheries are destroying nature and overexploiting the resources. This discourse is used to criminalise fisher people and to put conservation frameworks in place, or to argue for industrialising inland water bodies for energy and irrigation used with dams, pipelines and other mega-projects.

In the same way, recreational fishers created their own definition to justify the recreational use of inland resources. They use a mix of the two corporate definitions: the conservation of inland water resources is very important and therefore only recreational fishing, which does not have a significant impact on the resource, can be allowed. When inland fisheries are considered as a hobby or a sport, the livelihood and food sovereignty impact that they can create is ignored and inland small-scale fishers are completely excluded. Cultural and Indigenous aspects of the fisheries are also lost, as the recreational fishers are usually not part of the fishing communities.



These definitions of the corporate system and recreational fishers are clearly against fishing communities, and they obviously neglect the social importance of inland fisheries. For inland small-scale fishers, the livelihood aspect of the fishery is crucial. Inland fishing communities consider fishing a traditional and sustainable way to provide food and a livelihood for their families. Controlling the fishing food system allow the communities to gain food sovereignty. The traditional aspect of inland fisheries is also important. Communities around the world, in particular indigenous people, have made use of freshwater resources for centuries, and they developed traditional ways of fishing, of transforming and selling the fish, and managing the fishery through their customary rights. In fact, these fishing communities are dependent on fish, and the sustainable management of the resource is vital to their survival.

Most of inland fisheries that occurs on rivers, ponds and lakes are small-scale in nature. Nonetheless, large lake fisheries are also part of inland fisheries, even if they could be compared to marine fisheries, particularly because of the existence of market-based commercial exploitation. It’s important to note that some eco-systems such as mangroves, lagoons, estuaries and brackish waters are difficult to categorise as inland or marine waters. Such eco-systems should be considered within their particular context on a case by case basis, depending on the fishers

themselves. Additionally, many inland fisheries interact with marine fisheries, particularly regarding the harvesting of migratory species such as eel or salmon. This sometimes create conflicts, particularly because the scale of exploitation of the resource can be very different between marine and inland fisheries. Pollution can also impact marine and inland waters, because of their inter-connexion.

In some countries, such as Bangladesh, aquaculture is considered part of inland fisheries. When aquaculture is small-scale and community based, it is extremely different from industrial aquaculture that threatens the livelihoods of fishing communities, particularly in the mangrove eco-systems, where lucrative, large-scale prawn aquaculture is practiced.

## Global picture of Inland fisheries in the world

Inland fisheries are almost entirely small-scale and most of Indigenous fisheries are inland fisheries. Most of the fishers use traditional fishing gear, such as hooks-and-line, traps, crowding and aggregating devices, and fixed and moveable nets. These gears are inexpensive and simple to operate, therefore, less than 1% of unused by-catch and discards are produced by inland capture fisheries. These fisheries are very different from industrial fishing, as they are labour-intensive, require minimum of technology, and the products are mostly consumed locally. Inland capture fisheries are an important resource for many rural communities, who do not have access to marine fishery products.

Freshwater fisheries have important roles in terms of nutrition, economy, culture, and recreation, and they are key components of eco-systems. Inland fisheries are a vital source of protein, essential fatty acids, minerals, and micronutrients, especially in developing countries. Inland fisheries also pro-vide riparian communities with a sense of identity, cultural recognition, and in some areas, spiritual and religious connections to the earth and their ancestors.

There are plenty of freshwater resources in the world's tropical and sub-tropical regions and this is where most of the world's inland fish is caught. More than 90 per cent of inland water bodies are situated in Asia and Africa.

Inland fisheries' economic, social and environmental value has to be understood and effectively conveyed, for them to be considered in decision-making and governance processes. Decision makers need timely information on the status of inland fish production, but also on the economic, nutritional and societal contributions provided by inland fisheries.





## Landings and Value of inland fisheries

The global catches from inland waters have been increasing over the last decades. Nevertheless, it is unclear whether this reflects an actual increase in catches or simply the introduction of better means of data monitoring. FAO reported 11.9 million tonnes of freshwater fish have been harvested in 2014. Thus, the value of these fisheries to rural communities and small-scale fishers is also underestimated. FAO and the World Bank have estimated that the global monetary value of inland fisheries is over US$9 bn.

More than 60 million people rely on inland fisheries for at least part of their livelihood and about half of them are women. An estimated 71 low-income countries produce about 80 per cent of global inland capture fishery production, nearly 7 million tonnes. An estimated 470 million people will be impacted by irrespon¬sible dam development and water management.

## Eco-system and environment

There are 780 million global hectares of lakes, reservoirs, rivers, and other wetlands worldwide. Over half of the world's inland fishery catch is not identified to species or even on family level. Eighteen percent of the catch is comprised of 314 reported species, but 55 per cent of these are simply not identified. Inland fisheries can be extremely biodiverse and it is now increasingly evident that freshwater eco-systems and their fisheries are under threat from habitat loss, pollution and unsustainable fishing practices: 65% of world's rivers are under medium to high levels of threat. 15,000 fish species can be found in inland and brackish waters (but only 257 species are reported as caught to FAO). For example, we can count 1,100 different aquatic species in the Mekong river; 2,500 species in the Amazon river; 1,073 species in the Eastern Himalayan region.

In a world where there is already strong competition for freshwaters (water extraction for agriculture is expectedto double by 2050), the fisheries sector will have to prove that freshwaters must be managed for fisheries, as well as for irrigation, hydro-electric power generation and other uses. Too often fisheries are left out of policy discussions on how water is managed. In fact, about 10% of the world's freshwaters are abstracted annually for human use: 70% for Agriculture, 20% for industry uses and 10% for domestic use. To give an idea, some rivers have so much water abstracted that they don't reach the sea, and a 100% increase in water withdrawal is expected by 2050. Hydropower development and navigation are other uses modifying aquatic habitats, waterway connectivity, and flow regimes. Around 90% of the inland waters that are not withdrawn for human use, are still subject to pollution, loss of habitat and degradation of water quality.

While the status of marine fisheries is mainly influenced by fishing pressure, the status of inland fisheries is mainly dependant on the quantity and quality of freshwater and diversity of fish habitats—all of which are mostly influenced by factors external to the fisheries, such as human intervention, that degrades the environment.

The human population is expected to exceed 9 billion by 2050, increasing the demand for freshwater and

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stressing freshwater eco-systems. Current national institutions and systems of governance are generally ill-equipped to deal with these increasing pressures on inland eco-systems and specific policies are lacking.

## Nutrition and health

Inland capture fisheries provide essential proteins, micronutrients, vitamins and fats for millions of people, particularly in developing countries. Most of the inland fisheries catch is made up of carps and other carp-like species, tilapia, Nile perch, mussels, crustaceans and hilsa shad. Many of the species are quite small and may be eaten whole, providing a rich source of micronutrients and adding important quality to diets that may otherwise be relatively poor. For example, a small fish the size of your index finger can provide the daily iron and zinc required for a small child.





# Challenges and opportunities for inland fisheries: the clusters

After defining and building an overview of inland fisheries globally, the working group analysed the main issues, challenges and opportunities related to inland fisheries. Importantly, this was done using the framework on indigenous epistemology that aims to build a point of view or counter-narrative rooted in the idea that the question you ask will determine the change you get. Thus, issues and challenges have been identified as points of entry to the understanding of inland fisheries, and the pattern surfaced were clustered in points of intersection, presented below. The points of intersection represent key potential that can be used to bridge the gaps in the knowledge on inland fisheries.

## Impact on the environment

One of the main differences between marine and inland fisheries, is that the latter's fishing pressure has far less impact on the environment. Climate change impacts inland fisheries globally: water is warming; salinity is increasing in freshwater bodies in proximity of coastal areas; the level of water in inland bodies is decreasing. These impacts endanger freshwater species, and reduce the fishing areas. The political solutions currently offered to fight against climate change does not take in account fishing communities, and the increasing the threats they face. Industrial developments, particularly dams and pipelines, have a direct impact on inland fisheries: destruction of inland water bodies, pollution, endangering of species and displacement of communities. Tourism is a particular case of the threats caused by development. Particularly the development of big tourism complexes for

recreational fishing has similar impact of industrial development, but this sector claims that nature conservation is important and that inland small-scale fishers are dangerous for the environment. Large-scale aquaculture directly affects inland fisheries, polluting water bodies, introducing parasites and invasive species, and creating competition on the market. Industrial agriculture and urbanisation also have similar polluting effects on the inland water bodies. The interconnection between the inland and marine waters creates linkages between the threats impacting these two environments, mutually affecting each other, particularly regarding industrial development, pollution and migratory species.

Many of these threats are caused by global neo-liberal capitalism and its notion of development, in which economic growth is the main goal, and environmental and social externalities of such development are not taken into account or they are regarded as collateral effects, and thus not a priority. Opposite to this neo-liberal development paradigm, inland small-scale fisheries have a strong agroecological component, that helps small-scale fishers to preserve the eco-system they depend upon.

## Nutrition and holistic health

Inland small-scale fisheries are very important for communities to reach food sovereignty. In terms of nutrition, inland communities often not have access to marine fish or other animal proteins, thus fishing provides them with very important protein intake. This is particularly important for children, as the nutrients and vitamins contained in fish help to avoid growth issues. Nevertheless, the health and nutritional value of inland fisheries goes beyond nutrition. Freshwater species are also used as medicine, and are very important for the health of the community. For some indigenous nations, the health of the freshwater eco-systems and their species are used as an indicator of holistic indigenous health, highlighting a strong connection between the health of the environment and the wellbeing of the people that live in it. In this sense, inland small-scale fisheries and the concrete uses of aquatic species contribute to the 'health sovereignty' of the communities, in particular indigenous communities that rely on inland fishing.

## Biodiversity, cultural heritage and knowledge

Inland fishing communities have a deep knowledge of the environment they depend on for their livelihoods. This knowledge is about harvesting techniques, conditions to fish, transformation and sale of the products, but often the cultural importance of nature for fishing communities is forgotten, in particular the deep link indigenous communities have with nature. Spirituality and traditions are strongly linked with water bodies, fishing gears, and aquatic species. These traditions are extremely important for communities: they create a feeling of unity, and they are the base of communities' resources management practices. If recognised, protected and applied, communities' knowledge would be crucial in improving global knowledge about inland fisheries and the protection of the freshwater eco-systems' biodiversity. This will require changes in methodologies for research





and creation of knowledge: inland small-scale fishing communities have to be actively involved not only in the data collection and in the carrying out of the research, but also in determining research agendas and priorities, with methodologies and languages adapted to fishing communities.

The knowledge of biodiversity, harvesting techniques and the cultural and religious wisdom connected to inland fishing represent the agroecological elements practiced by inland fishing communities, which allows them to create links between culture, knowledge, health, nutrition and environment and to gain food sovereignty. Small-scale fishing community-based research projects could reduce data gaps and improve the global knowledge and understanding of inland fisheries

## Gender and generations

As in the marine sector, the role of women in inland fisheries is extremely important. Besides carrying out crucial functions as caregivers, women are involved in many aspects of the fishery, in particular in pre- and post-harvesting activities. However, women's work and contributions is often underplayed and considered an extension of their domestic tasks. The gender power dynamics create a situation in which women generally work longer hours in both paid and unpaid work, while having less privileges, rights and say in the decision-making processes. This affects the food sovereignty and livelihood opportunities for the fisheries, as the potentials resulting from women's meaningful inclusion in the decision-making are often missed. Gender dynamics also affect the ability of future generations of being considered and inherit healthy fisheries and overall eco-systems.

## Human and people rights and responsibilities

The recognition for human and people's rights and responsibilities is central to the struggle of inland-small-scale fishers. This means that fishers' collective rights are strongly connected with their collective and individual responsibilities. For fishing communities, a fishing right is not only an individual right to fish, but a collective human right to food, sustainable livelihoods and preservation of traditional cultural practices and way of living. In the same way, individual and collective responsibilities do not only relate to the respect the fishing management rules established by the government, but they also speak to the active participation in the community's life, and particularly the involvement in the traditional community-based fishing management systems put in place by the community. This also means accepting the community rules of compliance and its sanctions. Rights and responsibilities are thus linked to traditions,

inheritance and relations between people and places, and have also to take in account socio-political realities. Alliances and relationships with other small-scale food producers are very important to improve the recognition of collective and individual rights and responsibilities for inland small-scale fishers.

## Policy, planning and governance

When it comes to policies on inland fisheries, extensive voids exist both at national and international level. When policies are in place, they often focus on environmental conservation or are based upon marine fisheries management, failing to recognise the peculiar character of inland small-scale fisheries. Inland fishers need adaptive and consultative policies to manage their fisheries. Adaptive policies allow for flexibility and changes, that will offer prompter solutions that small-scale fishing communities face. Consultation and involvement of the fishing communities in the decision-making regarding the management of inland water bodies is necessary, as small-scale fishers, who are the primary users of the resources have the right to control their own food systems and determine the decisions that will affect their livelihoods. Thus, the multi-stakeholder approach that is proposed by international and national institutions as a corner stone of the management of inland fisheries is rejected.

The lack of understanding of indigenous and customary practices and how they drive the community management of the fishery is another crucial challenge affecting the viability of policies governing inland fisheries. To change the western-centred paradigm of fisheries management, governments must develop cross-cultural capacities and instruments that include indigenous and traditional knowledge and language, reflecting the socio-political realities in which policies will be applied. In fact, the techno-bureaucratic framework instituted within governments fail to understand the complexity of bio-diversity and cultural heritage and to support sustainable, community-based management of fisheries.

Another significant challenge in the governance of inland fisheries is the management of trans-boundary water bodies, which are a significant part of freshwater globally. This pertains both to inter-state water bodies and inter-provincial water bodies. To secure the sustainable management of trans-boundary water bodies, cooperation among governments and policy concertation is fundamental. Interconnection between marine and inland waters have also to be taken into account in policies, particularly in assessing the impacts on marine and inland fisheries on each other.

International institutions and instruments can play a crucial role in lobbying for policy challenges at the national level. Instruments such the International Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security (Tenure Guidelines) and the International Guidelines for Securing Sustainable Small-scale Fisheries in the context of Food Security and Poverty Eradication (SSF Guidelines), developed thanks to the efforts of WFFP and its allies, should

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be implemented in national fisheries policies and be used by fishing movements, challenging their governments and advocating for sustainable and equitable fisheries.

## Intrusion of other interests, water and land grabbing

The intrusion of other interests in fisheries lead to the global phenomenon of land and water grabbing, an issue faced by small-scale fishing communities and other small-scale food producers around the world. Land and water grabbing is supported through an economic model which considers natural resources as mere commodities and financial asset. Grabbing is facilitated by the multi-stakeholder approach to natural resources management, promoted by governments and international institutions.

In the context of inland fisheries, the actors involved in land and water grabbing are the same that are involved in ocean grabbing. They often claim that the privatisation of waters is a means to preserve environment and that their proposed use of the inland waters is the most efficient and economically viable. The most relevant of such developments are the construction of tourism facilities, (in particular for recreational fisheries), dams and other industrial projects, protected natural areas and aquaculture. These sectors are lucrative, and states often provide policy frameworks that facilitate land and water grabbing, with no real protection for communities. At an international level, the multi-stakeholder approach provides them a good basis to control the natural resources legally.

The Tenure Guidelines and the SSF Guidelines, among other international instruments, provide a means to fight against water and land grabbing, in recognition of the human rights of small-scale fishers and other small-scale food producers. Building alliances with other social movements and international organisations that recognise and promote the human rights of small-scale food producers is also an important instrument in the struggle for inland small-scale fishers.

## Social justice

Social justice is regarded as the concluding and most inclusive cluster, being the goal and the drive for the struggle of inland small-scale fishing communities, being an umbrella that simplifies all the solutions of fisher people to fight against the challenges they face. For inland small-scale fishing communities all over the world, social justice means control over food, poverty alleviation, access to education and housing. Access to land and water as a human right plays also an important part in achieving social justice. Fishers want to be recognised, decolonised and decriminalised. Food sovereignty, agroecological practices and education about the food systems are also an important feature of social justice. Alliances, relationship with other small-scale food producers could help to build social justice in inland fisheries.

# **South Africa:** How apartheid Legacy created criminalisation of inland small-scale fishers, the case of the Vanderkloof Dam


## South African inland fisheries: the influence of apartheid

In South Africa, inland fisheries have been completely overlooked. Currently there isn't any policy at the national level that regulates inland fisheries and in the past 40 years, freshwaters have been mainly managed in terms of environmental conservation. The only type of inland fisheries that is widely recognised is recreational angling, that is mainly practiced by the white minority. Small-scale fishers are not recognised and are often criminalised. For this reason, no significant data exist about inland fisheries in South Africa, making inland SSF invisible. Nevertheless, inland fisheries existed historically and played a significant role in the livelihood strategies of communities. In some areas, customary and traditional fishing practices exist and carry important cultural and social values.

## Vanderkloof Dam: the struggle to assert fishers' human rights

Vanderkloof Dam in the Northern Cape Province constitutes a case study that explains the challenges faced by traditional and small-scale inland fishers in South Africa. Fishers make use of what is called is the kraal fishery, a traditional fishing method, that consists of ponds (called kraals) that due to the tidal effect created by the dam get filled with water and fish. While the fish is still alive and the water in the kraals goes down, fishers select only the bigger fish to sustain themselves and earn a living, the smaller fish are let go to sustain the resource. The kraals are used by more than one-hundred small-scale fishers from the towns around the Vanderkloof Dam, which is one of the largest artificial lakes in South Africa. Fishers have been using this fishing method for hundred of years, and since the dam was built in the 1970's they started to build their kraals in the dam. However, up until 2 years ago, fishers were constantly criminalised by the officials who manage the dam on behalf of the government, the police and the owners of the tourism facilities in the area, while recreational fishers could fish at the dam and use boats, to their hearts' content.

This is the result of unresolved inequalities of Apartheid, that perpetuates a situation for which black communities, who fish to put food on the table have poor access to freshwater, while mostly white recreational fishers enjoy extensive use of the resources and are provided with facilities. Furthermore, recreational fishers actively contribute to the criminalisation of small-scale fishers, lobbying at every level against their activities, arguing that they do so to protect indigenous fish species and the environment. In Vanderkloof, recreational fishers are opposing the recognition of the kraal fishery, arguing that they do so to protect the large mouth yellow fish (which for them is a trophy fish).





In 2015, the Northern Cape Government initiated a project aimed to assess the potential of the dam to sustain fisheries which can help to improve food security to previously (and arguably still) disadvantaged communities around the dam. A co-management structure was established to manage the project and thanks to the support of Masifundise, the kraal fishery was included as the process and is now fully recognised. Challenges still exist as the national recreational fishing associations are directly involved in lobbying against the institutionalisation of the kraal fishery. The fishing communities, due to their historical dispossession faced under Apartheid rule, face many social issues. Nevertheless, with the help of Masifundise, communities are getting organised to assert their human rights and to engage with the government at the provincial and national level.

The case of the Vanderkloof kraal fishery is informing the national government, which is currently developing a national inland fisheries policy. While this is an important development, inland small-scale fishing communities have a long fight ahead to be recognised as primary rights holders in the inland fisheries sector, in line with the human-rights approach to fisheries.

# **Kenya:** How traditional management should be included in the policies to preserve the fishing resources, the case of Turkana Lake


El Molo is the traditional fishing community of Turkana Lake; it's the smallest tribe in Kenya, settled on the south-east of the Turkana Lake. They depend on fishing, their indigenous knowledge and the natural resources for their survival. For El Molo people, fishing is life, there is no alternative.

## The lack of inland fishing policy

In Kenya, the fisheries policies are mainly formulated for marine fisheries and with no community participation. The narrative has always been centred on ocean or marine fisheries, leading to the formulation of blanket policies that cover both marine and inland fisheries. Policies are mainly written by outsiders who have never lived fisheries. In 2016, the fisheries policy was reviewed, but they only added the word inland in the pre-existing policy, without any substantial provisions leading to increased recognition for inland fishers' rights. The governance framework are conflictual and has many contradictions, for example, the policy speaks to conservation and management of Lake Naivasha's breeding grounds, but at the same time the government promotes tourism and industrialisation around the lakes. This policy was formulated without the involvement of fishers, fishing communities or their organisations and it does not cover their rights, interests and traditional knowledge. The small-scale fishing language is lacking in the policy. Consequently, conflicts exist between government and fishing communities.

After sustained advocacy and lobbying from fisher organisations and representatives, we see this as a starting point for change. El Molo people's representatives are using the SSF guidelines, their status as a minority and the Kenyan Constitution to lobby for a policy that will recognise traditional ways of managing fisheries.

At Turkana Lake, the fishery is traditionally managed by the elders within the community. To support the management of this fishery, the future inland fishing policy should recognise the customary fishery management practices used by the El Molo people.

## The traditional fishery management

At Turkana Lake, the fishery is traditionally managed by the elders within the community. These management traditions are communicated orally, and elders teach them to the rest of the community.

The two principal ways of managing the fishery are rotational fishing and migratory fishing. These methods consist of fishing certain species according to the season and moving between fishing grounds based on fish availability. The elders' decisions are based on the season, the weather, the wind, the moon and the waves, which help them to know where, what and how to catch fish. Those that do not comply with the traditional rules are punished by the elders and banned from fishing for a certain period.

To support the management of this fishery, the future inland fishing policy should recognise the customary fishery management practices used by the El Molo people. The lack of recognition and appropriate inland fisheries policy, which recognise traditional knowledge and customary management practices is an issue that the majority of inland small-scale fishers face globally and one of the key struggles for the fishers' social movements.

# **Bangladesh:** a country with extensive inland fisheries, beautiful fishing policies and very weak implementation

## Bangladesh: one of the first countries to recognise inland fisheries

Although Bangladesh is a small country, it has a big population of 160 million people, with a density of more than 1000 people/km2. Bangladesh is endowed with natural gazes, very fertile land, and extensive inland water bodies: about 700 rivers are flowing all around the country. However, Bangladesh is also a very poor country, and one of the most disaster-prone of the world.





## Bangladesh: one of the first countries to recognise inland fisheries

Bangladesh is the fifth largest producer of freshwater fish in the world. In total, 20 million people are engaged in fisheries, 10% of them are women. Capture fisheries and aquaculture occur on the 4 million ha of inland water bodies. In total, 260 species are caught. Fishers are supplying 60% of the total protein to the country. In the past, 80% of fish production used to be from artisanal capture fishery, but now 55% of the fish is from aquaculture production, 28% from inland capture fisheries, and 17% from marine capture fisheries.

## Issues and challenges faced by inland small-scale fishers in Bangladesh

During the last 40 years, significant changes occurred in the fisheries sector. The proportion of harvested fish decreased from 80% to 28% of the total fish production. Now, aquaculture is the main mode of fish production. Some species have disappeared and some new foreign species are produced. Some waterbodies are reduced. Climate change is also having a big impact on fisheries, affecting sea levels, salinity in coastal areas, increasing water temperature, leading to extinction of fish species.

In socio-economic terms, most of fisheries are labour intensive rather than capital intensive; most of the fishermen use rods and lines. In the same way, aquaculture practised in the communities is entirely small-scale. Some fishers have to sell their labour in advance, to middlemen or boat owners, who advance them money to live. Women are mostly involved in fish processing. Fish drying is an important activity, with a big market.

The Bangladeshi government has a clear plan to improve the fisheries sector, some of the goals are to increase open water body fish Production by 20% and 45% in aquaculture production, to increase Hilsha production by 20% (Hilsha contributes 11% to the total fish production), per capita fish intake by 60 grams per day (it is now about 53 grams, to raise employment of youth, to involve 25% women in fisheries, and to increase income of fishers by 20%.

There are about 12 to 15 laws and regulations regarding fisheries. However, as Munir from COAST Trust explained; "Bangladesh has the most beautiful laws, but the implementation of these laws is poor". While there are lot of laws governing fisheries, there is no recognition of fish-workers and small-scale fishermen, only large-scale fisheries are recognised. The government provide support for rich, influential fishermen, but not for fish-workers. Subsistence fishers are also considered fishermen. Therefore, all the different fishing sectors are clustered into one, when it would be useful to use different terms to describe the different type of fishing activities.

Inland fisheries are very closely linked to agriculture: most of the agricultural lands, especially the paddy fields, are used for fishing during the rainy season, so the farmers are also seasonal fishers. However, the excessive use of pesticides has dangerous consequences for the fish and the fishers.

Land grabbing is also a serious concern. Every year Bangladesh loses around 1% of its agricultural land, and during last few decades, 155000 fishermen were forced to change their profession, due to land loss and urbanisation. The rapid population growth creates a demand for additional housing, roads, factories and other services and infrastructures. Development activists are protesting, but the government is posed with a dilemma, do we protect the environment or foster development and modernisation?

There are lots of social programmes, supporting pregnant women, widows, freedom fighters, female students and the elderly. Fishworkers are usually poor, but there is no special programmes in place to act as a safety net to protect them. The health and education situation in fishing communities is also not of the best, the government has a programme to put in place community clinics, but officials only come to collect their salaries every 2 months, and then disappear. In places where no health facilities are in place, COAST Trust provides medicines, providing a service that is outside their mandate, a responsibility that that government should take care of. In education, it is no different, in some areas, there are no schools and children start fishing at an early age to support or provide income for their families. Financially, the agricultural sector is more protected. There are large farmers' banks, but no banks for fishers exist. At the same time, SSF are suffering from a lack of finance, and if they are in need of extra income they are forced to sell their work in advance to the boat owners. After that, they are forced to sell all the fish for a very low price to the same person.

To save the national fish Hilsha (River Shad), the government declared closed fishing seasons in some areas during specific periods. During the closed season period, fishing is banned and the government applies it strictly. During the closed seasons only registered fishermen are financially compensated by the government, but it seems that the government is not fair in providing compensation, since some do not benefit from it, since they cannot earn a living.





## **Canada:** How indigenous culture should allow communities to raise food sovereignty, the case of the Secwepemc nation


Canada is one of the countries with the largest number of lakes and rivers globally. Most lakes and rivers are situated within traditional indigenous territories, in which the inland fisheries are small-scale. Indigenous fisheries are an important source of food and livelihoods. Many species are caught, such as white fish, salmon, eels and smaller fish.

### The Secwepemc nation: an indigenous inland fishing culture, endangered by Canada laws

The westernmost province of Canada, British Columbia (BC), is home to 27 Nations of Indigenous peoples and 8 out of 11 major Aboriginal languages. Most of the indigenous nations have never surrendered to the colonial government, and continue resisting to this day. The Fraser Basin is the largest of 5 major river systems in the province and wild salmon are the most important source of protein in all the 5 major river systems in the province of BC. The First Nation Health Authority recognises wild salmon as an indicator of health in Indigenous communities, and the federal governments recognise the food, social and ceremonial values of wild salmon.

Indigenous biodiversity and cultural heritage is linked to wild salmon in the Fraser River Basin. Salmon feeds bears, eagles, wolves, the forest and the agricultural soil, and it's the most important food protein source for the Secwepemc nation. It is the most important indigenous food, to achieve food sovereignty of indigenous people. Throughout thousands of years, indigenous communities developed sophisticated harvest strategies and cultural practices around salmon. Salmon gives indigenous people the ability to respond to their own needs, and their livelihoods and culture are entrenched with the migration of the salmon, which goes to the sea and come back to the 400 tributaries of the Fraser Basin. The Secwepemc people identify themselves in relation to wild salmon and its migratory nature, "as people of the land with a water who flows to the ocean".

Indigenous people are the care takers of salmon's spawning grounds, and inter-tribal relationships are improved where the salmon live. Hunting, fishing, farming, gathering in field, forest and water, follows the migration of salmon. Indigenous people resisted through the practice of traditional inland fisheries, despite government having made them invisible in the fisheries governance and management. Thanks to the intervention of the Supreme Court of Canada, the law recognises the nutritional, social and cultural value of the indigenous wild salmon fisheries. However, this recognition is not implemented yet, as there is no policy to support these rulings. Working within a techno-bureaucratic system, linked to Canadian imperialism, is a challenge. Right to food for indigenous people is connected to traditional governance systems and cultural practices. In the imposed colonial government, indigenous people are not participating and their traditional management of food production is not considered.

## Issues faced by indigenous inland fishing communities

The main challenges are connected to industrial development, such as dams, mining, pipelines, urban development, which are degrading the eco-system and displacing small-scale fishers. Recreational fishery is another major threat. Most of inland fisheries are not commercial, and based on small-scale, local markets and are not acknowledged by the national government, which manages the fisheries. Few policies exist, but they are not specific to inland fisheries, and mainly focus on science-based environmental protection. Many inland water bodies are trans-boundary, situated between provinces or crossing the borders with the US, creating political complexity. Nevertheless, the biggest challenge is the absence of a SSF movement. There are lots of fishermen organisations, but very few include inland fisheries. Indigenous people struggle and movements are not connected in a country-wide network.

## The working group on indigenous food sovereignty: working to foster solutions to the issues faced by inland indigenous fishing communities

The working group on indigenous food sovereignty tries to understand how to address specific issues for people to assert their right to fish and have their own indigenous food, to which they can add value and contribute to their income, and enjoy the cultural, traditional and biological value of the salmon. The group is trying to provide a model for the other indigenous nations on how to take control of their food system and lobby the government. Western scientific-based management is failing to manage the wild salmon, and it does not take into account the beauty and the culture of this species. The working group organised a wild salmon caravan to celebrate and educate communities around the issues of wild salmon. These types of actions also contribute in revitalising tribal relationships. The objective is to put in place cross-cultural relationships in a decolonised way, in which the indigenous knowledge and traditions are not only recognised and respected, but primarily inform the fisheries management systems.

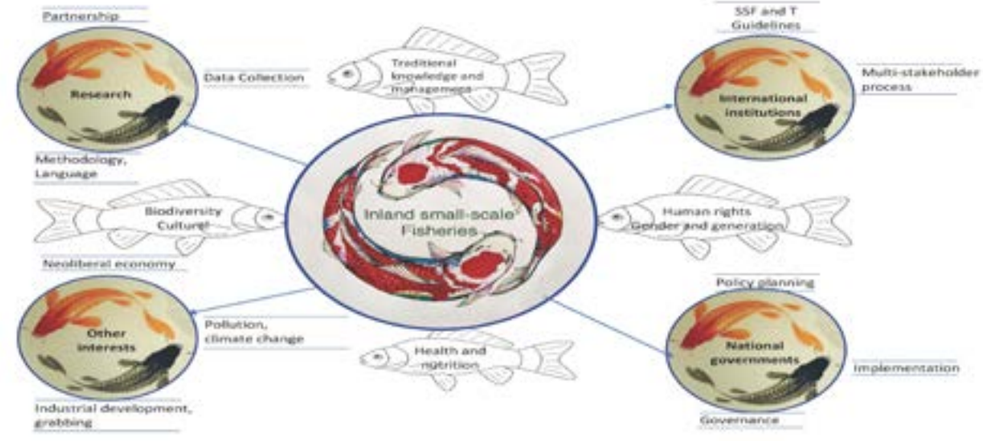
> Indigenous people are the care takers of salmon's spawning grounds, and inter-tribal relationships are improved where the salmon live. Hunting, fishing, farming, gathering in field, forest and water, follows the migration of salmon.





# Conclusion

## What would success look like?




This graphical representation of challenges and opportunities (points of entry) connected in clusters (points of intersections) aims to represents the political, social and cultural complexities and connections within inland fisheries.

Within the diversity that characterises inland small-scale fisheries globally, a common aspect is that fishing communities are able to successfully manage their resources. To enable inland small-scale fishers to fulfil their human rights, governments must take in account communities' traditional knowledge, customary rights and tools such as the Tenure and SSF Guidelines in their policies, implementing them at a national level. At the same time, other interests (tourism, industry, agriculture) have to be managed according to the human rights approach to fishery, so that they do not threaten inland fishing communities' wellbeing. This would allow inland fishing communities to control their own food systems, preserve biodiversity and raise Food Sovereignty. Inland fisheries will contribute to improve health and nutrition for the entire population, and particularly for children.

In future, it will be crucial to better record knowledge on global inland fisheries and make it accessible, so that it becomes a tool that supports communities in their struggle for recognition at the national and international level. Similarly, an evaluation of the contribution of inland small-scale fisheries to food security, employment, nutrition, livelihood, social security, and the protection of biodiversity would be important in advancing the idea that such contributions are essential beyond economic terms.

The values of Food Sovereignty and sustainable livelihoods will lead and shape future struggles aimed at the recognition of inland small-scale fishers' rights. In particular, these principles will help to differentiate and highlight the importance of inland small-scale fisheries when compared to the recreational fisheries, pointing out that fishing for fun or sport on a Sunday simply cannot be compared to the economic, social and cultural values of putting food on the table for your family and your community.

With this report, the argument is made for WFFP to take a leading role in enhancing the struggle of inland fishing communities: the solidarity and support of the global social movement and its members, connected and united by the centrality that fishing play in our livelihoods will strengthen the position of inland small-scale fishers in asserting their rights.

# ACKNOWLEDGEMENT AND FURTHER READING

## Even if this report is the result of an exchange, some articles were used by the participants and they can help the reader to go further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