

Fate Snatched Away

Political turmoil following a military coup has robbed small-scale fisherfolk in Myanmar of their decade-long success in making democracy work for them

The governance of Myanmar's inland and coastal fisheries underwent reforms in favour of small-scale fisheries (SSF) and fishing communities in the period between 2010 and 2020. This happened through the promulgation of supportive laws, regulations and policies. Institutional mechanisms recognized the importance of SSF in the development of communities and in poverty reduction.

In line with the 2008 Constitution, management of freshwater fisheries and legislative power over them were decentralized to the sub-national levels of government. This resulted in significant changes in freshwater fisheries governance in several states and regions. There is a wider recognition of the SSF associations and

and aquaculture laws had departed from the framework of previous laws; they now included community co-management and the ecosystem-based approach to fisheries and aquaculture.

This positive course changed direction radically following the military coup of 1 February 2021. Local administrations have become dysfunctional, and there is now a polarization of views along political lines. This has undermined the community-based resource management mechanism. On 7 September 2021, the military-controlled State Administration Council (SAC) announced the abolition of community-based fisheries in the Ayeyarwaddy region. It removed Chapter 8 of the Ayeyarwaddy Region Fishery Law, 2018, which dealt with community fisheries. Following this announcement, fishing lots in Ayeyarwaddy were quickly sold through the older system of auctions that have historically favoured rural elites and cronies.

There are two types of fishery licences: one for lakes, ponds, and floodplain areas, and another for the use of fence nets and stow nets in demarcated areas in rivers. To date, more than 80 per cent of Ayeyarwaddy's community fisheries, accessed and managed by SSF associations and groups, have lost their tenure rights.

Telephone interviews with key village informants in October 2021 unveiled several theories for this policy change. One blamed it on the authorities reverting to the pre-democratic policies that focused on increasing revenue from natural resources, including fisheries. This led to a cascading effect: people have protested by not paying electricity bills and municipal taxes, and by boycotting products from companies related to the

The momentum created to reform state and regional fisheries governance, in turn, accelerated the reform of the central marine fishery and aquaculture laws

community-based management. A 2015 amendment to the Constitution added coastal fisheries governance to the list of decentralized government services.

Between 2014 and 2018, the coastal states and regions, including Ayeyarwaddy, Rakhine, Bago and Mon, all enacted fisheries laws that included a dedicated section on community-based fisheries, giving legal recognition to small-scale fisheries and fisher organizations.

The momentum created to reform state and regional fisheries governance, in turn, accelerated the reform of the central marine fishery and aquaculture laws. By 2020, the draft marine fishery



Father and son fishing in Mon state. Between 2014 and 2018, several coastal regions enacted fisheries laws that recognized community-based management by small-scale fishers and their organizations

military. This has resulted in declining income from tax collections for the de facto authorities after the coup.

Power and pelf

Other survey respondents mentioned that the Ayeyarwaddy fisheries law was amended in September 2021 with the support of private-sector fish collectors and large-scale operators, called *inn thar gyi*, in collaboration with the Department of Fisheries. It is reported that large-scale operators and traders have bought this year's fishing rights at a high price, even though half of the production season has already passed. In some areas, the *inn thar gyi* paid twice or thrice the annual price paid by SSF associations.

An SSF leader of Ayeyarwaddy gave an example: a leased fishery under community-based co-management paid Myanmar Kyat (MMK) 1.7 mn (or US\$960) to the government last year. This year, the same fishing ground was auctioned halfway through the fishing season; the winning bid was over MMK 8 mn (US\$4,500), more than four times the cost of the previous lease. The *inn*

thar gyi are willing to pay such a high price for only half a season because, it is suspected, they expect to get a longer-term lease at a preferential rate in the future.

Prior to 2012, fishery tenure rights depended on influential players—those within the communities with the power to control fishery market chains. Once an

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inn thar gyi had control over tenure and access rights, small-scale fishers looking to continue fishing had no choice but to purchase an informal sub-licence created by the influential operator. These sub-licences were commonly paid for in kind; the SSF had to sell the catch to the *inn thar gyi* at a rate below its market value. The large-scale fishing operators and traders dominated access to fishery, value chains and market

terms through such means, to the great disadvantage of SSF.

The interviewed SSF leaders confirmed that community-based co-management had reduced the strength of the bonded fishery value chain, even if it did not replace it entirely. Communities gained direct access to the fishing grounds through co-management, with reasonable and transparent taxation. With these access rights came the power to bargain for better market prices and terms. The leaders hold the view that SSF associations created a collective bargaining power for fishing communities. Further, security of tenure and access rights influenced the legal reform process.

The inconvenience of democracy

The cancellation of the legal basis for community rights in Ayeyarwaddy has angered the SSF. “The Department of Fisheries and the *inn thar gyi* never liked the emergence of SSF associations and community-based fisheries co-management. They always felt that SSF associations were challenging their power. And so now they have taken advantage of the political chaos to change the regulations, and are attempting to eliminate the SSF associations,” said an SSF leader.

Without tenure rights and a functioning community resource co-management mechanism, SSF organizations in Ayeyarwaddy will no longer be able to get the support of the communities from which they were formed. The reforms of the 2010s were shaped largely by emerging SSF associations, supported by non-governmental organizations (NGOs) and civil society organizations (CSOs) that actively lobbied for change. Without a strong network of SSF associations, it will be impossible to reshape fishery governance in the same way again.

Political polarization at the community level is also limiting SSF association engagement with their communities. The SSF associations related closely with the ousted government need to be careful in any community engagement or mobilization efforts; there is the risk of their leaders getting detained—or worse. In contrast, the associations

close to the new authorities may have managed to retain their access rights; but the wider community and other SSF associations might not trust them any longer.

SSF leaders in Rakhine, Bago and Mon are watching the situation in Ayeyarwaddy closely, concerned that the changes might intrude into their state or region. Rakhine leaders are hopeful. Given how critical fisheries is to Rakhine, and the large number of people dependent on the sector, the SAC may not push through legislative changes favouring businessmen—at least not until they have full control over other parts of the country. Given that Rakhine has recognized numerous traditional fishery norms and practices, the leaders believe that it may not be so easy to push through the changes as in Ayeyarwaddy.

Political churn, economic downturn

The changes in fisheries governance come at a time when SSF communities across the country are reporting reduced incomes due to the COVID-19 pandemic and political unrest. Since early 2020, the fisheries value chain has stagnated due to limited demand from export markets and the closure of border trade. Business is further constrained by limitations on money transfers and cash withdrawals after the coup. Advance payments and credit along the value chain have declined since the coup; most microfinance institutions have stopped new loans for fishing communities.

As a result, the value chain is severely disrupted, with higher logistical costs, especially for fuel prices, and travel restrictions and informal payment collections at checkpoints. SSF communities are getting lower market prices or poorer terms, which impacts incomes and livelihoods. Petty crime is said to be increasing and may be a consequence of unemployment or hardship. In Ayeyarwaddy, it is believed that the loss of fishing rights or reduced access will drive many SSFs to opt for other livelihoods or migrate due to distress.

Around Yangon city, most industries are still operating, including fish-processing plants. However, improved



Kyarr Phong fishery workers in Patheingyi district. These raft fisheries in Ayeyarwaddy and Mon states are notorious for labour exploitation, lack of safety measures and the confinement of workers at sea

labour standards, including maximum working hours, minimum wages, and work-safety measures, negotiated over the previous 10 years, are being discarded. The breakdown of the rule of law and an excess labour supply are providing opportunities for some private-sector businesses to neglect labour standards. Labour unions are no longer functioning in the absence of many of their leaders; some have been arrested, while others have gone into hiding.

The excess labour supply has hit the raft fisheries in Ayeyarwaddy and Mon states. This sub-sector is notorious for labour exploitation, lack of safety measures, confinement of workers and their isolation at sea. It is reported that the basic salary for the raft workers remains unchanged at about MMK50,000 (US\$29) per month. The bonus on fish catches, however, has been reduced by 50 per cent. In the current context, the raft owner associations have set new payment rates and standards; the political chaos has freed them to exploit the workforce.

Shrinking incomes and livelihood hardships for SSF families are also

affecting the social development and education of children. Many respondents noted that the school dropout rate is very likely to increase in the future, especially among SSF communities. The recent changes in fishery governance in Ayeyarwaddy are undermining SSF communities as they struggle through this double crisis. In the coming months, many are expected to face food shortages. Therefore, humanitarian response and fisheries projects may soon need to address the issue of food security in SSF communities.

Short shift, shortchanged

The hard-fought gains in SSF rights over the past decade are disintegrating quickly and quietly in the Ayeyarwaddy state. The pattern may well get repeated soon in other states and regions. These changes signal a portentous return to the old system of allocating fishing grounds to influential persons, with the SSF seen merely as cheap and exploitable labour.

For the time being, there is not much to do to prevent this deterioration. As and when external

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Fishing in the Ayeyarwaddy River. Protesting the junta's policies, people have stopped paying electricity bills and municipal taxes, and boycotted products from companies related to the military

projects restart at the community level, they should do their best to protect and resuscitate community organizations supporting SSF fishers. Development programmes and projects in the future will need a high degree of adaptability to re-engage SSF communities. A flexible engagement will bring the best outcomes for SSF communities, addressing not only the immediate problems like food insecurity but also contributing to the sustainability of SSF organizations. This will retain the scope for re-shaping fisheries governance along democratic lines.

Even in 2018, the contradictory roles and responsibilities of Myanmar's Department of Fisheries, tasked with revenue collection from fisheries concessions as well as providing support and service to fisheries stakeholders, were a cause for worry. At the time, it was evident that the success of the community co-management experiment would determine the long-term fate of Ayeyarwaddy's small-scale fishers. Policy changes since February 2021 suggest that this experiment has unravelled, and revenue collection is now the more important role of

the Fisheries Department. Despite the significant gains SSF have made in organizing themselves to participate effectively in fisheries co-management over the past decade, their fate has been snatched away from their hands. For the time being at least, they have lost agency. ❧

For more

Confusion, Uncertainty

<https://www.icsf.net/samudra/confusion-uncertainty/>

The Tiger's Mouth

<https://www.icsf.net/samudra/the-tigers-mouth/>

Labour conditions in Myanmar's Kyar Phoung fishery

http://toobigtoignore.net/wp-content/uploads/2020/07/Yin-Nyein-et-al_Blue-Justice_final.pdf

Spreading the Net

A planned national network will share information and knowledge on the SSF Guidelines to a wider audience of fishery-related stakeholders

In Myanmar, limited access to natural resources and financial capital has resulted in many fisherfolk struggling to maintain even basic living standards. They are left with little opportunity to move out of poverty; this also undermines the sustainable management of fishing grounds. These uncertain conditions have driven the migration of small-scale fishing communities to work as casual labour

It soon became clear that community participation needs to be further improved if the objectives of the meetings and workshops conducted were to be achieved. At present, the contribution of several participants during discussions is weak, making it difficult to practically implement the action agenda in the field. Although the fishery co-management plan has been largely supported, there are emerging competing interests and incentives in the co-management system since the new Ayeyarwady Freshwater Fisheries Law was enacted in 2018 by the regional government. In most parts of the Ayeyarwady region, co-management practices are still quite new and, therefore, it is hard for the Department of Fisheries (DoF) to manage the new interests and incentives of various groups to implement legally-supported co-management. Furthermore, the limited capacity of department staff to implement the new law and policies due to personal motivations, conflicting interests and an ongoing power struggle between the regional/state governments and the Union DoF, hinders effective implementation of the fishery co-management system in the Ayeyarwady region.

Policy provisions

The new Ayeyarwady Freshwater Fishery Law (AFFL) provides a better framework for improving ecosystem conservation, increasing revenues, reducing corruption and supporting broader livelihood development. It provides for tender licences under Myanmar kyat (MMK) 4 million value to be allotted to community fisheries group without calling for auctions. These policy provisions have supported thousands of small-scale fisheries to gain access to resources; their impacts

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in cities as well as forced them to join the raft fishing industry as fishworkers.

To promote the rights of small-scale fisheries (SSF) in the delta, the Network Activities Group (NAG), a Myanmar-based non-governmental organization (NGO), worked on a project in 2018-2019 to strengthen the capacity of small-scale fishing communities by focusing on the SSF Guidelines with the help of the International Collective in Support of Fishworkers (ICSF). Five key activities followed, which are: one, review of the existing fishery co-management plans of the project's targeted zones; two, capacity need assessment and strengthening of Fisher Development Associations (FDAs); three, study on the working conditions of fishers and fishworkers of the kyarr phong (stow net) fishery; four, awareness raising; and, five, strengthening the capacity of FDAs and the Ayeyarwaddy Region Fishers' Network (ARFN) to raise issues related to kyarr phong fisheries in policy dialogue.

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Co-management training workshop, 22-24 December, 2018. The discussions focused on review the existing co-management plans for each fishing zone and the areas which needed to be developed, revised and modified were mapped out

are at several levels. As the result of the new legislation, 487 fisheries Tender Areas, 52 Common Fishing Grounds and seven Conservation Areas have been granted to the small-scale fishery communities.

However, the current fishery reform process continues to face several challenges in implementation, especially in the formalization of new institutions. Firstly, tenders with an auction floor price of over MMK4 million can only be obtained through participation in the auction system. The floor price of tenders keeps changing from year to year, based on the floor price calculation system that adds further uncertainty and hardship for fishers. For example, in 2017, the floor price of the Mya Sein Kan Tender was MMK3.9 million but in 2018 it was increased to MMK4.29 million, an increase of 10 per cent. As a result, the tender could not be allocated to the SSF because its floor price had gone over MMK4 million and could thus be allocated only through the auction system as per the government policy.

In effect, this meant that the SSF had to bid against more powerful and affluent outsiders for the rights. The

MMK4 million policy is an unwritten piece of legislation that depends mainly on changing political interests, especially with a new government due after 2020. It is likely that there will be a return to previous means of serving individual benefits rather than enabling co-operation under co-management arrangements. This could prove to be a discouraging factor for the long-term commitment to institutionalizing the co-management system and conservation practices.

Despite these challenges, the recent reforms in the governance of the freshwater fisheries sector in Myanmar are significant and provide lessons and guidance for the improved governance of other economic sectors. These lessons help to understand the impact of the new regulations, the social dynamics involved, and the revenue derived from co-management arrangements and practices. It is necessary to convince the fishing communities that co-management is for the long term. The DoF's role should be oriented more towards facilitating community fisheries management rather than controlling and collecting revenue, which has been its traditional function.

NAG



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Kyarr Phong (stow net) fishery study group meeting. The kyarr phong fishery has attracted greater attention in recent years as news about its unsustainable practices brought widespread media attention

The kyarr phong fishery has attracted greater attention in recent years as news about its unsustainable practices brought widespread media attention. The reality of the fishery remains quite appalling. Despite poor and often violent working conditions on the rafts, the government does not seem too keen to tackle the issue. The study of the ICSF-aided project reported that though the fishery is risky for both owners and workers, it has a powerful attraction because of its 'high-risk, high-reward' orientation. Although the salaries paid to the boat labourers are not large, another attraction draws people to take up the job: advance payment. Whoever works on the raft (excluding the workers on land and on the carrier boats) gets an advance payment, which can amount up to 10 times their basic salary. To be eligible for the advance, the worker needs to sign a contract prepared by the owner, though the written contract is waived where the owners trust the crew member. In

most cases, it is not the workers who avail of the advance personally but one of their family members, which may make it legally complicated; but it is a traditional practice all the same. The complex arrangements behind the advance systems have given rise to several accusations, including those of money laundering, labour exploitation and human trafficking.

Most of the workers on the unregistered rafts have no personal documentation like the National Registration Card (NRC). They have to suffer extremely long working hours (minimum 12 hours a day) and brutal treatment from supervisors and owners. In addition, they have to deal with the common eventuality of natural disasters. Life-saving equipment like jackets are not provided to workers for fear that they will flee. Some runaways have found work under new owners on neighbouring rafts or boats. The prevailing labour shortage aids such recruitment.

Only limited quantities of food were provided on the boats and there was no purified drinking water available. The unsanitary conditions breed infectious diseases which can lead to death due to the lack of medical care. Although the owners pay compensation to the families of those who die on the rafts, the amount is not fixed and it is not certain whether it would be adjusted against the advance paid. The raft owners insist on waiting for six months, until the missing person is officially declared dead. To address this problem, a Raft Fishery Association comprising boat owners was established in 2016 in Pyapon Township of Ayeyarwady Region and in Yae Township of Mon State. But the association has no representation from the employee side. Any initiative to safeguard decent work in the kyarr phong fishery must take these factors into consideration.

Media exposes of the deplorable conditions in the fishery have forced the DoF and the Union Government to set up Investigation Committee. Clearly, engagement with the media will be key in future programme implementation and advocacy work. Progress on the proposed Marine Fishery Law is slow, despite sufficient ground-level information. There is a need to engage carefully with the government in the Marine Fishery Law development process; some interests in the government do not wish to see the law passed since it will lead to the decentralization of inshore areas, further weakening the power and influence of the DoF. Any focus on decent work in the fisheries is likely to make new enemies. However, given the magnitude of the issue for the livelihoods of thousands of fishworkers, NGOs and civil society organizations (CSOs) must engage at multiple levels to bring an end to these abusive and dangerous practices.

The SSF Guidelines can be a point of departure for amending the fishery laws and policies of Myanmar. The main priorities are: responsible governance of tenure; post-harvest activities and trade; promoting legal frameworks for SSF; strengthening fishery institutions and networks; and conservation for sustainable resource management. All

these themes ought to be reflected in amending or promulgating fishery laws and policies.

However, most stakeholders have limited understanding of the SSF Guidelines. Specific measures have now been undertaken by government agencies to impart knowledge on the guidelines. The Myanmar Fishery Partnership, formed in 2016 for technical co-ordination and exchange information among the Project Implementation Partners, does not have representatives of SSF and fishery communities. At the state and regional levels, fishery partnerships have since been formed, with at least 75 per cent

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representatives of SSF. Collective problem solving and knowledge sharing is now regularly carried out by development agencies.

In 2020 a National SSF Network was set up, initiated by NAG in close collaboration with international NGOs (INGOs) and CSOs. This network is anticipated to be the key platform in advocacy work for fishing rights and in sharing information and knowledge on the SSF Guidelines to a wider audience of fishery-related stakeholders in the near future. ↴

For more

Myanmar: Improved governance of small-scale fisheries and enhanced upholding of duties towards conservation and sustainable use of fisheries resources and decent work at the subnational levels

<https://igssf.icsf.net/en/page/1087-Myanmar.html>

Kyarr Phong Fishery: The Tiger's Mouth

<https://www.icsf.net/en/samudra/article/EN/75-4245-The-Tiger's-Mou.html>

Fisheries Governance: Confusion, Uncertainty

<https://www.icsf.net/en/samudra/article/EN/80-4372-Confusion,-Unce.html>

Network Activities Group (NAG)

nagmyanmar.org/

Confusion, Uncertainty

Ten years of freshwater fisheries governance reform in the Ayeyarwaddy region of Myanmar has led to greater democratization and decentralization, but problems remain

The decentralization of powers in the governing structures of the inland/freshwater fishery sector in Myanmar has brought about changes in fisheries governance, which can be characterized by three inter-related processes: movements of small-scale fishers (SSF) for greater fishing rights; multi-stakeholder engagement in the form of fishery partnerships; and policy reforms in fisheries co-management.

Following the decentralization of freshwater fisheries governance in 2008, the Ayeyarwaddy region passed a fishery law that recognized some rights of SSF, which were previously neglected in fishery legislation. The new fishery law of 2018 was promulgated to recognize the rights of SSF and the fishery co-management mechanism. In the intervening 10-year period, the fishery governance of the Ayeyarwaddy

economic liberalization of the fishery sector, introducing the open auction system to “any person.”

Successive governments followed the fishery regulations enacted under the 1905 Burma Fishery Act and granted exclusive exploitation rights to licence holders. During the military government period, the 1991 Freshwater Fishery Law was enacted, which enhanced revenue collection from the inland fishery sector. During the 1991-2010 decades, large numbers of open auction fisheries were demarcated as tender lots and allocated to private individuals. The process of privatization and provision of exclusive rights to individuals excluded many local SSF from accessing fishing grounds. The system led to a monopoly of fishing rights, to the advantage of business elites. Successive governments – of both the colonial and democratic periods – neglected the livelihood concerns of local SSF communities and regarded the fishery as a mere source of revenue. As a result, the poverty levels of SSF communities in the Ayeyarwaddy Delta increased massively over the period. Moreover, the higher prices for fishing licences contributed to the overexploitation of fishery resources and the decline in fish stocks. The livelihoods of SSF were thus worsened, pushing them into deeper levels of poverty. The result was increased conflicts between licence holders and SSF in the use of resources – and massive out-migration.

According to Schedule II of the 2008 constitution, the inland/freshwater fishery sector has been decentralized to the sub-national (state and region) levels, in terms of both legislative powers and revenue management. This has had several positive impacts. First, the democratization and decentralization process has narrowed the distance between SSF and policymakers. The

...the higher prices for fishing licences contributed to the overexploitation of fishery resources...

region gradually changed in positive ways, and the reforms of 2018 brought about significant improvements in SSF access to fishing rights. At the same time, the reform suffers from incomplete decentralization, irrelevant institutional design and divergent interests of the actors involved.

Even before the British colonial era, the inland fisheries sector of Myanmar was very productive and the British government introduced the auction system for the allocation of fishery leases in 1875, following the recommendation of Francis Day. In 1905, a new fishery act was promulgated that furthered the

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SSF have got opportunities to engage, and consult with, new policy actors and parliamentarians from their respective areas.

Second, the democratization process has led to greater freedom of association and media interaction; SSF now have the opportunity to establish their own organizations and initiate campaigns that demand direct access to fishing rights. This has also helped bring fishing rights issues into the public domain.

Third, improved access to communication has helped the SSF movement to access social and political processes, as well as to enhance communication and collective action among the SSF organizations.

Fourth, the democratization process has allowed non-state actors to work to strengthen civil society organizations and NGOs to campaign for a better governance system. Many of these non-state actors have been working in Ayeyarwaddy since the 2008 Nargis cyclone in areas like capacity building, organizational development, and advocacy actions.

Finally, the democratization and decentralization process created a new balance in institutional power, limiting the role of government in policymaking, and forcing it to engage with other stakeholders, especially with the SSF movement.

In 2011 the SSF sought to abolish the tender and lease fisheries system, and provide direct access to the resources. However, the movement failed for several reasons. First, the SSF organizations were small, and suffered from limited communication and collaboration amongst themselves.

Second, the revenue from fisheries contributes to about 39 per cent of the total revenue collected by the regional government. Thus, the SSF demand for abolishing the tender and lease system was not acceptable to the regional government.

Thirdly, the fish collectors and leaseholders were powerful and influential at all levels of decision making, with some going on to become parliamentarians in the first parliament of 2011-2015. Hence, until 2013 the early movement of SSF was not successful. Later they built larger,



Cast net fishing in the flood plain of Kayin State, Myanmar. The 2018 freshwater fishery law of Ayeyarwaddy recognizes the rights of SSF and the co-management mechanism

more representative bodies in their respective townships. In 2014, the Ayeyarwaddy Region Fisher Network (ARFN) was established in which 21 SSF organizations from different townships of the Ayeyarwaddy region were involved. After that, advocacy efforts shifted from abolishing the tender and lease system to increasing equitable access to fishing rights through fisheries co-management. In this, they had the support of NGOs and non-state actors.

Major discussions

Informal and formal engagement mechanisms among the stakeholders were introduced to resolve resource use conflicts. The negotiations for fishing rights later led to multi-stakeholder engagements for fishery policy reform in Ayeyarwaddy region. In 2014, the Ayeyarwaddy Fishery Partnership (AFP) was established, which became the platform for the major discussions on inland fishery policy reform.

The 2012 fishery law focused primarily on formalizing revenue collection mechanisms from the regions' fisheries concessions, and reintroduced the auction system for better revenue generation from inland fisheries. However, the governance system remained in favour of large-scale fisheries. Worse, the auction system led to an escalation in fishing licence fees and increased the frequency and severity of resource use conflicts.

In early 2017, the Ayeyarwaddy Regional Government introduced a new policy that allowed a selective allocation of tenders directly to fishing community groups. This initiative was championed by the Regional Minister of Agriculture, who pushed through this policy, despite objections from powerful business interests. For the 2017-18 fishing season, more than 400 fishing grounds were allocated to community fisher groups. However, the ambitious and unconstitutional executive order forced the minister to resign.

The new minister and regional parliament continued to support the old policy and co-management initiatives. The fishery governance reform was accelerated by the promulgation of a new Ayeyarwaddy region freshwater fishery law in 2018. The new fishery law recognizes the fishing and livelihood rights of SSF, and the co-management mechanisms put in place.

Several challenges remain in the current fishery governance reform process. The first relates to the provisions of the constitution. Although the constitution allows for political, administrative and fiscal decentralization, it does not mandate the relevant institutional structures necessary to implement

the previous centralized management system, under which prices for tender and lease are to be increased by 10 per cent annually, even as fishery resources are declining.

The third challenge comes from the application procedure of the co-management system. Since most SSF communities are poor and most fisher families have low education levels, it is difficult for some SSF communities to make the first attempt to apply for co-management. Although the fishery law states that DOF officials should support SSF groups in preparing for co-management application, this aim is often hampered by inadequate organizational capacity, culture and practices.

The fourth challenge is related to the limited financial capacity of the SSF communities. Although the regional government provides the fishing rights at the floor price, SSF communities, in most cases, cannot afford to pay the fixed floor price. This leads them to remain indebted to private moneylenders or fish collectors in a relationship of bondage. Evidently, the influence of fish collectors or fishery business elites may negatively impact the co-management led by the SSF.

Finally, although co-management requires consultative efforts and long-term investments, the problem is that allocation of fishing rights to the community is designed annually, which leads to confusion and uncertainty for SSF in planning for fishing rights access in the future. ❧

...the institutional structure prevents the regional government's authorities from managing the collected revenue...

the decentralization. Though the Ayeyarwaddy region has its own constitutionally-sanctioned authorities to enact their fishery law, the regional government does not have full authority to control the Department of Fisheries (DOF).

Further, the constitution allows the regional government to collect revenue from inland fisheries, but the institutional structure prevents the regional government's authorities from managing the collected revenue and instead, sends them directly to the Union treasury. The second challenge is due to current practices derived from

For more

<https://dc.icsf.net/en/component/dcnews/articleDetail/11363-Myanmar--Develo.html>

Development could hurt Ayeyarwady River: environmentalists

https://unctad.org/en/PublicationChapters/aldc2017d2_ch08_en.pdf

Bangladesh, Cambodia, the Comoros, Mozambique, Myanmar and Uganda

The Tiger's Mouth

By enacting new legislation and policies on tenure rights, labour rights and fishing rights the unique *kyarr phong* fishery in the Gulf of Mottama, Myanmar, can be substantially improved

K*yarr* in Burmese means 'tiger' and *kyarr phong* literally means 'tiger mouth net'. It is the most abundant fishing gear in the Republic of the Union of Myanmar after bottom trawl, purse-seine and drift-net. The *kyarr phong* fishery—a bag net attached underneath a bamboo raft, both anchored together—is a unique fishery, an adaptation of stow-nets and stow-boats, originally used in large rivers for catching small prawns. It is now practised in the Gulf of Mottama (previously known as Martaban), between September and May, at a distance between 14 to 40 nautical miles from the low-water mark. The period June-August is the closed season.

Ayeyarwady, Salween and Sittang drain into the Gulf, carrying huge loads of sediment. The Gulf, according to a 2004 paper published in *Marine Geology*, is one of the largest mud belts in the world's oceans, measuring over 45,000 sq km during spring tide and about 15,000 sq km during neap tide. The sediments are loaded with minerals and nutrients favouring abundant fishery resources, comprising many tropical species. The mud belt, according to the National Institute of Oceanography (NIO), India, moves in sync with the tidal cycle every 14 days. The *kyarr phong* fishing operations are believed to be carried out in the 150-km belt along the edge of the turbid zone, roughly in an area the size of Belgium.

Although *kyarr phong* in the rivers of Myanmar have been reported, there seems to be no written account of *kyarr phong* fishery in the Gulf of Mottama. This fishery in waters beyond the 15-m isobath is believed to have started in the southwest of the Gulf of Mottama, off Pyapon, Ayeyarwady Division in the early 1970s. It was practised initially for a period of just two months a year. It is now a nine-month operation. In the early 1990s, *kyarr phong* owners from Pyapon started moving to the southeast of the Gulf, off Mawlamyine, in Mon State, where the fishing grounds are more gradual and better suited for *kyarr phong* operations. The movement of owners was further intensified post-Nargis since the impact of the cyclone was less pronounced in Mon state. There are between 5,000 and 10,000 bamboo rafts associated with this fishery currently in operation.

The bag nets associated with *kyarr phong* are fabricated from

The *kyarr phong* fishery—a bag net attached underneath a bamboo raft, both anchored together—is a unique fishery...

In spite of operating at such distances, these rafts fish entirely within the internal waters of Myanmar. The straight baseline—extending 222 nautical miles and the longest notified straight baseline in the world—closing the Gulf of Mottama between Alguada Reef (Pathein Light) and the Western Point of Long Island is over 150 nautical miles away from the apex of the Gulf. *Kyarr phong* came to the notice of the world when thousands of fishers perished on these rafts at sea in early May 2008 during Cyclone Nargis, at wind speeds of over 100 knots.

The Gulf of Mottama is shallow (less than 30-m depth), turbid and dominated by tides. The rivers

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polyethylene. Each bag net is about 20 ft to 30 ft long, with 0.25-inch mesh size (the legal mesh size for bag nets is 2 inches). It is operated attached beneath a 40-ft long and 15-ft wide unpowered raft made of 80-120 bamboo poles—totally biodegradable. The rafts are designed to withstand tropical storms of up to 45 knots wind speed. The rafts are towed to the fishing ground by a global positioning system (GPS)-enabled carrier boat, powered by a 100-hp Honda engine, once every year, in September. They are anchored at designated places at depths of 10 fathoms (nearly 20 m). In May, at the end of the fishing season, while the bamboo rafts are abandoned at sea, the fishing gear is taken back to shore to be reused in the next season.

Owners of *kyarr phong* units do not participate in fishing, although some are involved in fabricating bamboo rafts. They are, however, involved in deciding the fishing spots. All of them are members of various *kyarr* associations. All operations in this fishery along the value chain are undertaken by hired workforce. Towards procuring labour, an advance payment system is in place (normally, five months' wages) to fishers as well as to women fishyard workers who shell dried shrimp.

The most productive days for *kyarr phong* fishery are the sixth to ninth days and the 12th to 15th days before, and the sixth to ninth days and the 12th to 15th days after, the full moon. The bulk of the harvest is thus taken during 144 days in a fishing season of nine months. Sixty-four days during September and December, and 16 days in the month of April, are particularly considered the best fishing season. (Interestingly, September-December is the season when surface currents in the Bay of Bengal are moving counter-clockwise).

When it comes to the fishing operation, the bottom panel of the bag net is anchored to the sea floor together with the raft. The top panel is attached to the raft. The bag net mouth is held vertically open against the tide (the tidal range during the spring tide is nearly 7 m and during

neap tide it is nearly 3 m)—like the mouth of a tiger. The net is emptied every six hours or so from the cod end right beneath by drawing it onto the raft. The bag net site is changed two or three times during a fishing season.

About 10,000 tonnes of fish are reportedly harvested in this fishery every year. The mainstay of *kyarr phong* fisheries is the rich shrimp resources that are gathered in the bag net, boiled using mangrove wood and dried on the raft. In addition to shrimp, Bombay duck, pomfret, grenadier anchovies, ribbon fish, seabass, *hilsa* shad, trevally and several other species are harvested. The carrier boats take the boiled and dried shrimp, iced high-value species like seabass and *hilsa* shad, along with others to the landing sites, several times a month. *Kyarr phong* owners sell boiled and dried shrimp to dry-fish merchants for export to China, Malaysia, Thailand and Singapore after shelling it using women's labour. Other species are also exported or sold in the domestic market. Shrimp wastes are converted to pelleted feed for export to Vietnam. *Kyarr phong* operations are believed to be very profitable for fish traders and owners.

The carrier boats that tow the rafts to the fishing ground and transfer the harvest from the rafts to landing sites also bring provisions, ice,



The *kyarr phong* fishery—a bag net attached underneath a bamboo raft, both anchored together—is now practised in the Gulf of Mottama between September and May

mangrove wood and water to the anchored rafts, several times a month. Officially, there are about 349 bamboo rafts for operating *kyarr phong*. But according to U Han Tun, Chief Executive Officer, Myanmar Fisheries Federation, there are between 5,000 and 10,000 such rafts and bag nets in

There are about 20,000 to 40,000 fishers at work on rafts and another 4,000 to 7,000 workers working on carrier vessels.

operation, along with 600 to 1,200 carrier boats. A raft and bag net together would cost about five million MMK (US\$4,000)—two million MMK (US\$1,500) for the raft and three million MMK (US\$2,500) for the bag net (2016 prices) (1,200 MMK is equal to a US\$).

All *kyarr phong* units are expected to pay royalty on marine fisheries under Schedule Five, Myanmar Constitution (2008) to the Union/Region/State government. This includes water transportation tax, fishing gear tax, fresh fish tax and income tax. The carrier boats, depending on their size and area of fishing, are expected to pay a licence fee. If small and fishing in the inshore area (from the low-water mark to 10 nautical miles), a boat, on the one hand, has to pay 15,000 to 30,000 MMK (US\$12.5 to US\$25) as annual license fee to the Region/State government. Large boats, on the other hand, fishing in the offshore fishing area (the area from the 15 isobath in the internal waters out to the limit of Myanmar's exclusive economic zone or EEZ) have to pay an annual licence fee of 100,000 to 300,000 MMK (US\$80 to US\$250) per boat to the Union government.

The rafts are normally in clusters of eight that operate in a fairly labour-intensive manner. Each cluster and its carrier boat employ about 40 fishers—mostly Buddhist Burmese in origin. A raft in the same cluster is at a minimum distance of 100 m from other rafts. A minimum distance of

three nautical miles is maintained between different clusters.

There are about 20,000 to 40,000 fishers at work on rafts and another 4,000 to 7,000 workers working on carrier vessels. Excluding women fishworkers engaged in fish processing on land, *kyarr phong* employs a maximum of 50,000 fishers—all men and mostly unskilled. More than 50 per cent of this workforce comprises internal migrants. Each raft has about four workers living almost continuously on it during the fishing season of nine months. The fisher in charge of the raft is called *oo si* and he is assisted by *kyan kyin lote thar*, a skilled fisher and two *lote thar*, or unskilled fishers. (On some rafts the crew size is three, especially in the Mon state). The cluster of eight rafts and associated gear form a unit under a skipper called *oo si choke*, or chief of the unit, who is stationed on the carrier boat. He supervises the operations of the rafts in his cluster and, sometimes, even supervises an additional cluster. While the unskilled workers are reportedly from the dry zone, spread across Sagaing, Mandalay and Magway Regions, the skilled workers and supervisors are reportedly from the delta region of Myanmar. The age of workers is stated to range between 18 and 56 for men and between 18 and 40 for women fishyard workers. About half the population of unskilled workers have no prior exposure to marine fishing.

Basic salary

Regarding payment, a *lote thar* and *kyan kyin lote thar* are paid a basic monthly salary of about 50,000 to 60,000 MMK (US\$42 to US\$50). The *oo si* is paid 60,000 to 70,000 MMK (US\$50 to US\$58). The fishers, over and above wages, also receive a 10 per cent bonus based on the quantity of shrimp processed on the rafts, especially if it is above a certain threshold. Together with commission, these fishers earn between 120,000 to 130,000 MMK (US\$100 to US\$108), per month. The *oo si choke*, however, receives between 500,000 MMK to

700,000 MMK (US\$416 to US\$583) per month in payment (as of November 2016).

There is radio communication between *oo si choke* and the cluster of rafts. The *oo si choke* also keeps in touch with owners over a mobile phone, and owners, in turn, are in contact with dry-fish traders in Yangon. Although working continuously in offshore fishing grounds for nine months, there does not seem to be any protection afforded to fishers on these rafts. Existing labour laws do not apply to fishers. The *kyarr phong* owners issue identity cards to fishers. Until recently there was no written contract of work but, of late, annual written contracts are drawn with fishers and fishyard workers. There is no off-season allowance for workers. Although exposed to tropical storms and cyclones, fishermen receive no training in sea safety. Many fishers on rafts do not even know how to swim, nor are they supplied with life jackets or lifebuoys.

After taking an advance on wages, some migrant fishers have been reported to have deserted from the *kyarr phong* without completing their term of employment. Other than the *oo si choke*, anyone can desert. The frequency of desertion has increased and is in tandem, on the one hand, with a fall in labour supply to precarious *kyarr phong* operations, post-2008 Nargis, and on the other hand, with an increase in the number of *kyarr phong* units, especially in the Mon state, in response to good shrimp harvests after the cyclone. Shortage of labour has made it easy for the runaways to find work on rafts under a new ownership. The owners also find it difficult to aggregate sufficient number of workers at the beginning of the fishing season. In fact, most of the *kyarr phong* owners have a different set of migrant workers each season. Sea safety is further compromised due to desertion because the owners fear that workers, if supplied with sea safety equipment, will escape. Desertion from work place is not only confined to fishing operations,

but also to fishyards processing *kyarr phong* landings. In some yards, additional fortifications are made to prevent women workers from running away.

Established owners of *kyarr phong* are of the view that there should be no further addition of units since there are already too many at work. Although there are some fears of declining catches in Pyapon, there are no such fears in Mawlamyine where the owners are of the view that “the deep pools in their undulating fishing grounds are for fish and the shallow grounds are for fishers”. These pools provide sufficient protection, in their view, to breeders and juveniles.

Suggestions for improving *kyarr phong* fisheries include extending the closed season from three months, replacing mangrove firewood with other sources, and promoting value addition and further diversification of export markets for dry shrimp. From a sea-safety perspective, however, the annual fishing season can definitely be shortened by a month from September to May to September to April. The month of May, according to the Myanmar Department of Meteorology and Hydrology—based on analyzing landfall of cyclones between 1887 and 2005—is the month with the highest number of cyclones crossing the Myanmar coast.



YIN NYEIN

There are about 20,000 to 40,000 fishers at work on rafts and another 4,000 to 7,000 workers working on carrier vessels. Owners of *kyarr phong* units do not participate in fishing

YIN NYEIN



The carrier boats that tow the rafts to the fishing ground and transfer the harvest from the rafts to landing sites also bring provisions

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From a socio-ecological perspective, the *kyarr phong* fishery is welcome since, unlike bottom trawling, it is a passive, labour-intensive, unpowered fishing operation, which does little damage to the sea bottom and does not cause destruction of marine biological diversity. Considering the shortage of labour in this fishery, the number of units, however, can definitely be scaled down to better utilize the available workforce.

From the perspective of decent working and living conditions on what is manifestly a hazardous work environment, there are concerns with regard to meeting minimum requirements for work on a raft continuously for eight months (minimum age, medical examination, basic training in sea safety, etc.), conditions of work (inclement weather, cyclones, etc), accommodation and food, occupational safety and health protection, and medical care and social security.

Improving conditions of work, including enhancing wages and incentives, providing better conditions of life on rafts at sea and more frequent access to land, and imparting training in sea safety in line with good practices can indeed mould a responsible workforce and arrest the issue of desertion from the workplace.

A comprehensive co-management approach to *kyarr phong* by enacting new legislation and policies on tenure rights to the internal waters of the Gulf of Mottama, combined with interlocking rights and duties in relation to work in fishing, could assist in integrating sea safety and decent work into a new framework for conservation and sustainable use of fisheries resources. It could very well be based on the Voluntary Guidelines for Securing Sustainable Small-scale Fisheries in the Context of Food Security and Poverty Eradication; the Voluntary Guidelines on the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security and the Work in Fishing Convention, 2007. Such a framework can promote responsible fisheries and labour, and protect the lives and livelihoods of thousands of fishers engaged in the precarious *kyarr phong* fisheries in the Gulf of Mottama and their families in the hinterland. 3

For more

[iucn.org/news/gulf-mottama-navigating-muddy-waters](https://www.iucn.org/news/gulf-mottama-navigating-muddy-waters)

Gulf of Mottamma: Navigating Muddy Waters

myanmar.helvetas.org/en/projects/clcmgomp/

Community Led Coastal Management in Gulf of Mottamma

nagmyanmar.org/

Network Activities Group

Potential for Transformation

As a country in transition, Myanmar is seeking to unlock the potential of its fisheries and aquaculture sector for inclusive growth, improved livelihoods, and better food security

Myanmar is a country in transition, having elected its first civil government in more than 50 years in November 2015. It is now over 200 days since the new government has taken office and the transition away from military rule will not be simple. The country faces many challenges and is one of the poorest and least developed in Southeast Asia. In the fishery sector, these challenges involve balancing the demand for fish in international and domestic markets against declines in fish stocks, increasing fishing pressures and aquatic habitats under risk.

In April 2016, at the Pyin Oo Lwin workshop, Myanmar's leading institutions, researchers and practitioners in fisheries and aquaculture came together with international experts to support the new government in finding the path that would best fulfill the potential of the fisheries and aquaculture sectors. The key resulting message from this workshop is that while there is an enormous potential for fisheries and aquaculture to sustainably and significantly increase their contribution to Myanmar's economy and societal well-being, there is an impending need for transformation in the governance and management of these sectors. These changes are needed to bring about positive and profound impacts on the livelihoods and food security of fishing communities and fishworkers and also to contribute to meeting Myanmar's international commitments to achieving the United Nation Sustainable Development Goals (SDGs).

Myanmar has a population of just over 51 mn of whom 70 per cent

are engaged in agriculture, including fisheries. The fisheries sector, comprising offshore, coastal, inland fisheries and aquaculture, is vital for national food security, income generation and export earnings. Fisheries and aquaculture are an important part of primary production and represented 8 per cent of the country's gross domestic product (GDP) in 2014-2015. During this period, fisheries and aquaculture produced 5.3 mn tonnes of fish and exported over 350,000 tonnes valued at US\$480 mn. In 2014, fisheries directly employed more than 3 mn people and 12 mn people are estimated to

...there is an enormous potential for fisheries and aquaculture to sustainably and significantly increase their contribution to Myanmar's economy and societal well-being...

be indirectly involved in the sector in transporting, trading and processing fish and fish products.

Over 70 per cent of the fish harvested is consumed nationally and it is estimated that an average of 21 kg per person is consumed per year, accounting for almost half the animal-source food consumed and making fish and fish products second only to rice in the national diet.

Fisheries governance

Despite the importance of the fisheries sector to national food security, income generation and export earnings, fishery governance remains weak. A recent analysis of the effectiveness of fisheries governance across 28 countries that represent 80 per cent of the global catch scored

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GARETH JOHNSTONE



A fisherwoman at Thongwa fish market, Yangon, Myanmar. Fish is an extremely important component of the Myanmar diet, and demand is growing quickly as the country urbanizes and incomes rise

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Myanmar is the lowest. Successive governments have failed to recognize the importance of fisheries to the rural economy, and policies and laws remain focused on revenue capture and meeting centrally planned production targets.

Fisheries management is limited by current fisheries policies and suffers from inadequate data, weak institutional capacity and insufficient experience of using science and local knowledge to develop sustainable and responsible fisheries. The government reported increasing fish production from 0.83 mn tonnes in 1994 to 5.05 mn tonnes in 2013-2014, figures that reflect centrally planned targets and not actual production, as evidenced from recent stock assessments and consumption surveys. As a consequence, important fish-producing areas (rivers, rice paddies, reservoirs, irrigation canals, wetlands, estuaries, coastal and offshore marine areas) are at risk.

As the country opens up and attracts more domestic and foreign investment, the government and sector stakeholders will need to make decisions about how the fishery

sector develops in order to meet growing demands. Myanmar has the 'late-mover advantage' and can benefit from learning from the many lessons of its neighbours and capitalize on and incorporate international experiences and best practices in its planning. Understanding the current status and the key drivers of change for fishery and aquaculture resources is fundamental in helping the new government, sector stakeholders, businesses and fishing communities make informed choices to sustain and increase the contribution of fisheries and aquaculture to rural development.

The Pyin Oo Lwin workshop brought together fishery managers from the government and researchers and practitioners from universities, private sector and NGOs with international experts to facilitate an assessment and evaluation of the fishery and aquaculture sectors.

Opportunities

The workshop provided a platform for discussion and debate and identified key drivers of change and the opportunities and challenges facing fisheries and aquaculture in

Myanmar. The output is a collective analysis and synthesis of the fishery and aquaculture sector using the best available data. The deliberations produced a set of policy briefs outlining possible futures and suggested pathways for sustaining and increasing the contribution of fisheries and aquaculture to Myanmar's development. Fishery policy briefs were produced for aquaculture, offshore, inshore and freshwater fisheries. Data were also collated to reflect how Myanmar can respond to achieving the SDGs in the fishery sector and how to place the sector in the global context and assist the new government to better understand how fisheries and aquaculture can be optimized in achieving national and international development goals.

Myanmar's offshore fisheries are those beyond 10 nm from the shore to the limit of the exclusive economic zone (EEZ). More than 1.4 mn offshore and inshore fishers are registered in Myanmar and the offshore fleet is composed of over 2,700 vessels, which is widely considered to exceed the carrying capacity of target stocks. Data from recent ecosystem surveys found that offshore fish stocks have been depleted by up to 80 per cent since 1979, exposing Myanmar's people to significant economic, food security, nutrition and environmental risks. The ecosystem decline has not been aided by outdated and weak laws and policies and by inadequate management and institutional capacity. Accurate or reliable offshore fisheries production statistics do not exist, due to official adjustments made to landings statistics. The official production statistics put the total annual marine harvest at 2.85 mn tonnes during 2014-15, which is likely a gross overestimate of the real landings volume.

In spite of these challenges, Myanmar's fisheries can be rebuilt and long-term economic, social and environmental benefits derived by improving the laws, policies, partnerships, management and institutional capacities. Modernizing

the laws can enable fisheries regulation to monitor and sustainably manage Myanmar's stocks. Adopting and implementing the 2016 National Plan of Action (NPOA) to deter, combat and eliminate Illegal, Unreported and Unregulated (IUU) fishing (NPOA-IUU) would ensure the effective implementation of fisheries management, and contribute to securing legal and safe working conditions to minimize existing human-rights transgressions. Under an improved legal framework, stock recovery and increased value capture can be achieved.

Inshore fisheries are those areas less than 10 nm from the shore. Nearly half (48 per cent) of Myanmar's population live in coastal states and regions and the inshore fisheries support the livelihoods of millions of Myanmar citizens who are among the most marginalized, poorest and most vulnerable people in society. Coastal fishers use small-scale gears to target numerous species (fish, molluscs and crustaceans) and women play a vital role in inshore fisheries, particularly in fish processing, with locally

Accurate or reliable offshore fisheries production statistics do not exist, due to official adjustments made to landings statistics.

processed fish products providing a major nutritional component of the Myanmar diet, particularly in upland regions.

Poor policy

In recent years, the capacity of inshore fisheries to support viable livelihoods and contribute significantly to local economies has come under threat. There is an overharvest of stocks combined with insecure tenure and competition. The sustainability of inshore fisheries is threatened by multiple uses and users of the coastal resources. There is inadequate policy recognition of the importance of inshore fisheries and poor policy alignment between Union, state and

Box

Key messages from the Pyin Oo Lwin fisheries workshop

Myanmar's fisheries

- Enormous potential exists to increase fisheries contribution to Myanmar's economy and well-being.
- Transformation can be facilitated through improvements to fisheries legislation, policies, management, knowledge, institutional capacities and partnerships.

Offshore fisheries

- Offshore stocks are depleted and require rebuilding plans.
- Offshore management can be improved through integrated ecosystem-based and spatial planning.
- A National Plan of Action (NPOA) to deter, combat and eliminate IUU fishing needs to be adopted and implemented.

Inshore fisheries

- Coastal communities can be empowered and strengthened through co-management.
- Closer alignment of Union and state/regional agencies and institutions can improve inshore fisheries management and law enforcement.

Freshwater fisheries

Better knowledge about the fishery is needed to ensure its sustainable exploitation.

- Integration of agriculture, irrigation and fisheries under a single ministry will provide the opportunity to address conflicts and help integrate land and water management.

Aquaculture

- Employment can be generated and rural growth stimulated through a competitive aquaculture sector led by small farmers and small and medium enterprises (SMEs).
- Farmers should be allowed to choose how to use their agricultural land.
- Regulation can be improved, institutional and human capacity strengthened, and infrastructure built.

The Pyin Oo Lwin workshop was funded by the Australian Center for International Agricultural Research (ACIAR) and involved participants from the Myanmar Department of Fisheries (DoF), Myanmar Fishery Federation (MFF), WorldFish, Michigan State University (MSU), World Conservation Society (WCS), University of Arizona, Stockholm Resilience Center, Trade Development Program (EU), Food and Agricultural Organization (UNFAO), Pyoe Pin Program, Network Activities Group (NAG) and CUSO International. The process of developing the policy briefs stimulated the formation of the Myanmar Fisheries Partnership (MFP), a collation of national and international organizations that is supporting the Myanmar government to strengthen effective collaboration for the sustainable development of Myanmar's fisheries and aquaculture sector.

local institutions. To reverse these trends, there is a need to empower and strengthen communities through effective co-management and to harmonize laws and policies that secure the contribution of inshore fisheries to food security and development. Fisheries boundaries need to be better defined, particularly as they vary between states and regions and there is need for better national fisheries statistics as currently there are no species-specific

data collected on catch and effort. These actions should to be aligned with key development principles, including working through partnerships and striving for greater gender equality.

Freshwater fisheries are those in freshwater bodies such as rivers, streams, ponds and lakes of permanent or temporary nature. In 2015, Myanmar's freshwater fisheries yielded 1.5 mn tonnes, which represents 28 per cent of the total national fish production and is reportedly the largest freshwater fishery in Southeast Asia. Freshwater fisheries provide employment to 1.5 mn people and 27 per cent of the fresh fish is consumed nationally. There are two management regimes for inland fisheries—(a) leasable fisheries where exclusive exploitation rights of delimited water bodies are auctioned, and (b) open fisheries for which fishing gear licences are issued by the Department of Fisheries. There is growing evidence of a rapid reduction in the catch per fisher (catch per unit effort) and in the abundance of high-value fish species.

The freshwater fisheries in Myanmar are economically significant and important to livelihoods and food security. There are significant threats to the resource base and increasing domestic demand for fish calls for the development of improved laws, management initiatives and people-centered approaches. These include strengthening the knowledge base of the resource with specific monitoring of target species such as hilsa as current data are not detailed enough to inform management. Improving the existing fish-production systems (open fisheries, leasable fisheries) through co-management and developing new fish-production systems in the irrigation reservoirs. Land-use conflicts between farmers and fishers need to be addressed and can be resolved by optimizing the recent integration of the agriculture, irrigation and fisheries sectors under a single ministry, which can help to integrate land and water management. Improvements to the contribution of fisheries to food

security and livelihoods at the state/regional level is necessary and can be addressed by influencing the emerging new region and state legislation on freshwater fisheries.

In Myanmar aquaculture has been growing quickly at a rate of 9 per cent per year since 2004, and contributes 21 per cent of the fish consumed nationally. Farming fish generates average profits five to ten times higher than rice and other agricultural crops, and more than twice as much employment per acre as paddy farming. Aquaculture is very concentrated geographically, with 90 per cent of inland fish ponds located in the Ayeyarwady Delta, close to the main commercial centre, Yangon. A single species (rohu), accounts for around 70 per cent of the fish produced in Myanmar, with shrimp, a high-value crop grown mainly for export, contributing 5.6 per cent of production, with opportunities for growth.

Fish is an extremely important component of the Myanmar diet, and demand is growing quickly as the country urbanizes and incomes rise. Aquaculture is ideally placed to meet this demand, while also raising farm incomes and creating employment. Myanmar has several policy options that could help to unlock the full potential of aquaculture's contributions to rural growth and national food supply. These are: regulatory reforms that allow small farmers to use their agricultural land for aquaculture; improved access to farm inputs and technologies; and greater access to the knowledge and services needed to support sectoral modernization.

The Pyin Oo Lwin workshop and policy briefs can contribute to the national dialogue and strategic development as the Myanmar government shapes a new vision for the fishery sector. The policy briefs provide guidance on the integration of national fisheries obligations into wider regional and international planning processes and frameworks. The SDGs offer a tangible link to global policymaking and provide the international context for evaluating

the contribution of Myanmar's fisheries to the national economy and societal well-being. The SDGs help broaden discussions and address questions on the possible futures and suggested pathways for sustaining and increasing fisheries contribution to rural development. The assessment identified a total of 12 out of the 17 SDGs where Myanmar fisheries and aquaculture can directly contribute to achieving these goals.

The political transition period provides a window of opportunity for the government to revitalize the fisheries sector through actions such as restoring fish stocks and habitats, ensuring decent employment and labour conditions, and providing transparency in revenue raising and licensing. Myanmar's government will need to address these multiple challenges and opportunities in collaboration with national and international organizations. Currently, the sector is experiencing a steady growth in development support and is providing excellent opportunities to invest and build partnerships that are targeted at working with government to fulfill national and international development goals. Sustained engagement by government agencies is critical to this process and has the potential to transform the sector and to allow the fisheries sector to fully contribute to Myanmar's development. 

For more

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A New Beginning

A consultation organized in Myanmar to discuss the FAO guidelines for small-scale fisheries proved significant

The consultations for the guidelines of the Food and Agriculture Organization of the United Nations (FAO) on small-scale fisheries (SSF) have been rather extensive. In the case of Myanmar, they have also provided a possibility for the SSF community to participate in the process. It was also a first-time opportunity for the International Collective in Support of Fishworkers (ICSF) to interact with the fishworkers of Myanmar.

fishers were from the marine sector, there were a few from the inland fishery—nearshore and brackishwater fishers as well as aquaculturists, mainly from the MFF.

Having got involved with fishing communities in the delta region after the Nargis cyclone, NAG was ideally placed to do the organizational groundwork for the consultation. As elsewhere, the small-scale fishery of the delta is different from the fisheries of the two neighbouring regions. Since this was the first time the fishers of these regions were getting together, it was felt important for them to not only interact with one another but also to understand the specificities of the small-scale fisheries of each region. Hence the consultation shunned formalities and grand speeches and got down directly into serious work in the form of discussion groups. That was the pedagogy for the first two days—a series of group discussions followed by feedback at plenary sessions, concluding in responses from a panel of selected and representative participants.

The four sessions focused on the following themes:

- Definition of SSF
- Problems and challenges faced by SSF
- Legislative provisions for SSF
- Proposals to sustain livelihoods of fishing communities

Wider understanding

Through discussions and feedback, the entire group gained a wide understanding of the fisheries of the different coastal regions. While all the fishers are expected to obtain fishing licences, it was revealed that in one

...a series of group discussions followed by feedback at plenary sessions, concluding in responses from a panel of selected and representative participants.

The Myanmar consultation was organized jointly by the Myanmar Fisheries Federation (MFF), the National Activities Group (NAG) and ICSF in Yangon between 12 and 15 September 2012. It brought together 35 fishworkers (including five women) and their organizations from the three coastal States (administrative regions) of Myanmar. The participants also included 10 parliamentarians (including one woman) as well as non-governmental organizations (NGOs) like Oxfam, Green Earth and the Myanmar Livestock Group and the local FAO Programme Chief who participated on all three days. On the final day there were members who represented the State and national departments of fisheries and other concerned people from Yangon. The local press was well represented too. While the majority of the

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region fishing grounds were tendered out, leading to large-scale operations of fixed bag-nets that require the hiring of smaller-scale fishers to carry the catches to the shore. As a result, access to the common fishing grounds was limited for the family of the smaller-scale fishers who fish for subsistence.

Another issue was the control of fish catches by the traders who either lease out the fishing grounds or advance capital for fishing operations. They also control prices and marketing networks. Direct access to markets is another major issue as there are no cold-chain facilities and distances to the large towns are considerable. Although closed seasons exist, the coastal fishers complain that large foreign and other deep-sea vessels are not controlled, and they also fish within the inshore waters, raising conflicts with local fishers and limiting their fish catches.

The consultation found it difficult to concretize what actually comprises SSF. According to some participants, it only included the very small boats

using 8-hp outboard engines and operating in the nearshore waters. But there were also mini-tractors and larger boats of 50 hp that carried catches of the fixed bag-nets, and others that used hooks-and-line and gillnets, all of which operated within the territorial waters and were owner-operated with hired crew. Why should these not be included in SSF, some wondered. Even as the consultation opened up an area of discussion, it will take time for some form of clarity to settle on the issue.

On the third day of the consultation, a larger group that included members of the fisheries department gave inputs, which were followed by presentations from selected participants of the earlier sessions. The resultant feedback proved to be excellent: A local parliamentarian spoke of the need to think anew of fisherpeople having social, political and economic rights. A local community-based organization stressed the right to organize, a right not yet institutionalized in Myanmar's legislative framework.

AUNG KYAW KYAW



The participants for the three-day workshop included 10 parliamentarians as well as NGOs, the Myanmar Livestock Group and the local FAO Programme Chief


Fishers articulated their problems. MFF outlined its role as a national platform for all fisher organizations.

These discussions pointed to the focus of future fisheries governance. From the discussions at the consultation, it appeared that Myanmar's Fisheries Department was handicapped in relation to fisheries as it had no mandate other than issuing and renewing fishing licences. No development programmes have been undertaken for SSF, and no details of fisheries budgets are available for public scrutiny. National budgets seem to allocate only the salaries

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present at the consultation showed great interest in understanding these issues and how governance could be made more democratic and people-oriented, given the fact that most of them are critical of how the military regime of the past has dealt with the national wealth and resources of the country.

In that sense, the Myanmar consultation was opportune. Despite the fact that the country has been under a rather controlled regime for the last few decades, the level of discussion at the consultation was in no way indicative of a lack of freedom of expression. Despite linguistic and ethnic differences, the overall atmosphere was one of positive interaction.

At the end of the consultation, the fishers and parliamentarians parted only after exhorting NAG to organize many more similar processes at the regional level to impart information to people so that they could organize themselves locally too. The Myanmar consultation was thus successful in highlighting issues related to SSF and in instilling a commitment to address them more seriously. 

of departmental personnel. As elsewhere in the region, aquaculture in Myanmar—both brackish- and freshwater—is gaining importance, but there was not much discussion on the issue at the consultation.

NAG made two presentations on the history of fishing rights in Myanmar, which revealed the new framework required for governance of fisheries. On behalf of ICSF, this writer presented the FAO process for the SSF guidelines, which received positive responses, since most of the participants had not yet heard about them. The presentation was followed by a lively panel discussion on questions that emerged from the floor.

Since the 2011 elections, Myanmar has been going through a process of democratization. Since fisheries is a district/regional subject, local districts are busy creating their own fisheries laws within the framework of the national law. Unfortunately, as Myanmar has been rather isolated during the last two decades, the issues of customary rights, rights to livelihood and the role of the State towards the unorganized sectors are not concepts that greatly influence contemporary debates on legislation. Nonetheless, the parliamentarians

For more

www.apfic.org/uploads/2012_myanmar_legal

A review of Myanmar Fisheries Legislation, with Particular Reference to Freshwater Fisheries Legislation

www.fao.org/fi/oldsite/FCP/en/MMR/profile.htm

FAO Fisheries Profile – The Union of Myanmar

www.ide.go.jp/English/Publish/Download/Vrf/pdf/433.pdf

Trends of Development of Myanmar Fisheries with Reference to Japanese Experiences