

Shared Success

Some valuable lessons—a replicable model—on protection of aquatic resources and small-scale fisheries

The term co-management has been researched in Vietnam since the 1990s. A number of pilot projects have been conducted to find appropriate distribution and management sharing responsibilities between the government and the community. April 25, 2019, was a crucial milestone because a dramatic change came into effect that day: Decree No. 26 on the implementation of co-management of fisheries resources, via Article 10 of the Fisheries Law of 2017.

Binh Dinh is a province located on the central coast, with a 134-km-long coastline. Eighty per cent of the local fisher population—owning 6,115 vessels—benefits from small-scale fishing in both inshore and offshore areas; it contributes 10 per cent of the province's gross domestic product (GDP). However, overexploitation of fishery resources is now a major concern in the province due to its negative impacts on important ecosystems (like coral reefs and seagrass), and because it rapidly reduces incomes from fishing activities.

In order to improve the situation, on 16 May 2019, Decision No. 1636/QĐ-UBND on Implementation Plan of the Fisheries Law in Binh Dinh Province was issued. It mentioned co-management as a method in managing fisheries resources. This method was then applied in four communes, namely, Nhon Chau, Nhon Ly, Nhon Hai and Ghenh Rang, located in a 36,357-hectare Locally Managed Marine Area (LMMA), the Quy Nhon Bay. The pilot project for the co-management model was implemented with the support of the Centre for Marinelife Conservation and Community Development (MCD), the Binh Dinh Fisheries Sub-Department and the Binh Dinh Fisheries Association between January 2019 and May 2020, based on the ecosystem approach to fisheries management (EAFM), which

has been practised in this LMMA since 2017.

The implementation of the co-management practice in the Nhon Ly commune can be taken as a typical example for the Quy Nhon Bay LMMA. The management responsibilities are divided into six levels, starting with the People's Committee in Quy Nhon Province, down through the Inter-Communal Co-Executive Association, the People's Committees of various communes, fisheries co-management groups, core groups and community members. The core groups play a key role in gathering and unifying members and promoting

The core groups created units to protect the coral reefs and fisheries resources through frequent checks and annual monitoring...

their participation in managing the exploitation and protection of aquatic resources, and engaging in tourism and related activities in accordance with local government regulations. The core groups created units to protect the coral reefs and fisheries resources through frequent checks and annual monitoring reports in order to introduce timely adjustments to the management method.

First phase

The first phase of the implementation of the co-management plan began in January 2019. It first created a network to enhance community participation for the upcoming phases. The most important result of the first phase was reaching unanimous agreement among all the representatives from each

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MCD



Meeting on developing strategies to monitoring coral reefs. The 60 core members from the community groups were chosen to participate in identifying the negative impacts on coral reefs and benthic species

group, at all management levels, on the need to protect the coral reef ecosystem in Bai Dua.

After four months, the second phase was launched during which time core members were identified for implementation; a number of regulations, action and media plans were drafted. The 60 core members from the community groups were chosen to participate in identifying the negative impacts on coral reefs and benthic species. From those inputs, a draft plan of action for solutions was drawn up, not only for fisheries resource protection and exploitation activities but also to identify the beneficiaries from tourism and impress on them the importance of sustainable and responsible tourism in coastal areas, resulting in stable incomes.

The Bai Dua beach area is located in the Nhon Ly commune, which has high biodiversity, with the coral reef area estimated to cover about eight hectare. With a fairly dense distribution, these reefs offer a high diversity of species, shapes and colours—a beautiful marine landscape. The Nha Trang Oceanographic Institute's 2017 survey recorded 207 types of aquatic species in Bai Dua, including 11 species of seaweed, 87 species of hard coral, 23 mollusc species, 14 echinoderm species and 69 fish species. Bai Dua has some

of the highest species diversity in the whole Quy Nhon Bay area and is a spawning ground for big-fin squid, snails, lobsters and other species.

Bai Dua's co-management area was divided into three sub-areas for different economic purposes—namely, one, strictly protected area; two, fisheries exploiting area; and, three, area for tourism related to coral reefs—with correspondingly appropriate management methods prescribed. Besides this, two levels of conflict resolution and prevention mechanisms were drafted. The funds required annually were to be drawn from the Community Fund. But each member whose livelihood stood to benefit directly from the conservation efforts was supposed to contribute an additional amount.

Third phase

In June 2019, the third phase began to survey and identify areas overlapping with other projects within Bai Dua. The most important outcome of this phase was the creation of a localized map for protecting coral reefs in Bai Dua, a valuable document in the fisheries co-management process. The management responsibility for this area was handed over to the Nhon Ly community.

After the fourth phase of final consultations in July 2019 to identify

community groups and to draft regulations for protection and exploitation, the fifth phase was organized the following month. This aimed to seek approval for the list of core members in each community group, to put into action the draft plan schemes. Seventeen core members were elected to form a representative board for the community group.

It took nearly six months to finalize all legal records and documents. On February 4, 2020, the community co-management group was officially and legally recognized and handed over the rights to implement co-management and protection of the aquatic resources in Bai Dua.

After one year of implementing the co-management plan, about 329,000 tourists had visited the Quy Nhon Bay LMMA, a 6.2 per cent increase over the previous year. The total revenue was 6.1 billion Vietnamese dong (VND), equivalent to 42.9 million VND per capita; this was 18 times higher than in 2015. As one of the first models nationwide of co-management of fisheries resources in accordance with the Fisheries Law of 2017, it demonstrated that sustainable fisheries and ecotourism could co-exist, leading to a stabilization of incomes, an improvement of living standards, and protection of fisheries resources. Especially notable is that this successful model can be replicated in other areas—provided the crucial technical guidelines are followed.

In 2010, Nhon Ly was a fishing village where the main source of livelihood was fishing, primarily from coastal areas, and processing of aquatic products. Seventy per cent of community members made a living through fishing activities, 12 per cent through industrial construction, and 28 per cent through services and trade. By 2019, the structure of the village economy had shifted significantly: revenue from agriculture, forestry and fishery products decreased from 70 per cent to 42.49 per cent, while revenue from construction increased slightly to 14.82 per cent, and revenue from trade and services increased to 42.69 per cent.

The rapid and successful completion of six phases in just one year shows the high determination of local people and

related agencies, especially MCD, the Binh Dinh Fisheries Sub-Department and the Binh Dinh Fisheries Association. The positive outcome of the project offers a great opportunity for people to understand the importance of the co-management method for both the environment and the economy, especially when it is supported by detailed legislation. Nonetheless, it is still a considerable challenge to produce the right mix of appropriate management ability, stable funding, participatory initiatives and concrete legislation. Once this is achieved, the community is almost certainly on the way towards sustainable and responsible fisheries.

In May 2020, MCD coordinated with the Sub-Department of Fisheries in Binh Dinh Province to organize a conference on co-management sharing, recognizing the assignment of management and protection rights of aquatic resources in the LMMA Quy Nhon Bay.

At the conference, Nguyen Thanh Danh, the vice president of the Commune People's Committee and

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Head of the Representative Board, said that by successfully promoting and encouraging community member participation in protecting the coral reef ecosystem, they were able to collect two million VND per year per household for the community protection fund.

Valuable chance

Mai Thi Huong, Chairwoman of the Seafood Processing Co-operative in Nhon Ly and a member of the community co-management group, said: “Co-management is a valuable chance to build up sustainable livelihoods, educate the community on resource protection, reduce overexploitation and increase product value to generate income not only for the women but also for entire households.”

Table 1. The roles of key stakeholders in the Nhon Ly co-management plan

No.	Stakeholder	Role
1	Department of Agriculture and Rural Development in Binh Dinh Province	Direct the Sub-Department of Fisheries to coordinate with other stakeholders and community groups to establish a co-management implementation plan that complies with the Law of Fisheries (2017) and Decree No. 26.
2	Sub-Department of Fisheries in Binh Dinh Province	Provide technical support for community groups in proposing and implementing co-management, protection and exploitation plans in the assigned areas, with appropriate targets regulated by the government; report to the Department of Agriculture and Rural Development and the Provincial People's Committee about the results obtained from the community groups for prompt and timely amendments.
3	Fisheries Association in Binh Dinh Province	Support consultations on establishing the co-management and plan; advise stakeholders on completion of the project.
4	People's Committee in Quy Nhon City	Consult stakeholders and approve the co-management profile; support and monitor the implementation of the co-management plan in the Nhon Ly commune.
5	People's Committee in Nhon Ly commune	Direct all relevant actors in the Nhon Ly commune to support community groups in submitting a co-management plan to the authorities for approval and subsequent implementation.
6	Community group	Represent the community; develop the co-management profile, and methods for operation and regulation of the co-management plan; elect and agree on the representative board for the community group.
7	Centre for Marinelifelife Conservation and Community Development	Facilitate stakeholder participation and implementation of the co-management plan, including forming advocacy groups, community groups, co-management plan regulations, and community communication and capacity-building schemes.

Tran Van Vinh, a representative from the Sub-Department of Fisheries in Binh Dinh, said: "The Nhon Ly commune is a coastal area with traditional features of diverse fisheries resources and high biodiversity; assigning management rights to the

applying the model, the selected area should have a high biodiversity, should not be vulnerable to anthropogenic impacts but provide important resource habitats as a source of livelihoods for communities. Importantly, it should be ensured that the area does not come under the management of any private-sector organization. If there is harmony between protecting ecosystems and developing livelihoods by raising community awareness and capacity, alongside clarifying the benefits and obligations of practising co-management, the living conditions and incomes of the coastal community can be raised. A sustainable financial mechanism should be identified at the early stages of co-management. In order to achieve these goals, the government should frequently update changes in the application of principles and policy in the co-management of ecosystems and fisheries resources.

Considering the remarkable outcome of the co-management model in the Nhon Ly commune, replication

A sustainable financial mechanism should be identified at the early stages of co-management.

community groups, also called co-management, is necessarily needed for more effective protection of fisheries resources, with responsibilities shared with the government as stipulated in the Law of Fisheries."

Through the preparation and implementation of the co-management model, MCD realized that in order to achieve a positive outcome from



The boundaries of the co-management areas were identified by the team members. The positive outcome of the project offers a great opportunity for people to understand the importance of the co-management method for both the environment and the economy

should be considered in other LMMAs, not only in Quy Nhon (Binh Dinh) but also along the central coast—for example, in Quang Nam and Khanh Hoa provinces—to improve the environment and the living conditions of coastal communities. Case studies and good practices from the Nhon Ly model could be identified and shared at national or regional workshops to disseminate and fine-tune the technical and legal aspects for an improvement of the model.

In the early stages, regular support from government bodies is the key to handling difficulties and limitations in management capacity. Fishers from nearby regions who exploit the fisheries resources of Bai Dua can also be involved in, or invited to, the community groups to expand their scale and internal capacity. Furthermore, to avoid problems in trading, the legal status of the community groups should be ascertained with strong support from the local government.

The voluntary Community Fund—inherently rather unstable—requires supplementary support from the collection of service fees from tourism and related services. ↴

For more



FAO - ICSF's Project: Small-scale fishing communities are better informed about co-managing local aquatic and coastal ecosystems and benefits of community-based MCS systems to deter, prevent and eliminate IUU fishing practices

<https://igssf.icsf.net/en/page/1090-Vietnam.html>

Vietnam: Learning from Warnings

<https://www.icsf.net/en/samudra/article/EN/80-4369-Learning-from-W.html>

Fisheries Co-management: Learning from Experience

<https://www.icsf.net/en/samudra/article/EN/82-4415-Learning-from-E.html>

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Learning from Experience

The fishing industry in south-central Vietnam relies on co-management and the ecosystem-based approach to fisheries management (EAFM) to sustain the health of coastal marine areas

Vietnam's 3,260-km coastline hosts a diversity of marine resources such as coral reefs and seagrass beds as well as more than 1,080 species of fish. The health of Vietnam's coastal and marine ecosystems is fundamental to the food security, livelihoods and social stability of more than 4 mn Vietnamese people who directly or indirectly benefit from the exploitation of marine resources.

Small-scale fisheries are abundant in Bind Dinh, located in the southcentral coast of Vietnam, making up nearly 40 per cent of the country's small-scale fishing fleet. Fishing is a common source of livelihood and income generation at the household level.

The health of Vietnam's marine and coastal ecosystems and, therefore, the sustainability of Vietnam's fishing industry, is compromised by illegal, unreported and unregulated (IUU) fishing activities. They include overfishing and destructive methods like trawling and the use of explosives. These prevalent illegal practices destroy and deplete near-shore aquatic resources. The negative effects of overexploitation are visible. For example, fishermen's earnings from fishing activities are at times not enough to cover costs. These challenges are intensified by weak enforcement of the Fisheries Law of 2017 and other regulations that prohibit IUU fishing.

National and international organizations are currently using co-management and an ecosystem-based approach to fisheries management (EAFM) to reduce the decline of coastal marine resources in Vietnam. They encourage sustainable development, protect the interests and rights of local communities and work toward removal of the 'yellow card' assigned by the European Commission.

Under the governance system called co-management, control over resources in a specified geographic area is shared between the state and community. It is part of the EAFM approach that integrates a balance of ecological wellbeing, human wellbeing and good governance into decision-making processes. EAFM helps valuable resources to replenish by protecting ecosystem stability and maximising ecological and social benefits in fishing areas. For this reason, EAFM has become common practice throughout Southeast Asia.

While fairly new in Vietnam, the national government supports the use of EAFM by agreeing to the Code of Conduct for Responsible Fisheries (CCRF) mooted by the Food and Agriculture Organization of the United Nations (FAO). Policies, legislation, and practical experience with EAFM remain limited in Vietnam, but the practice is gradually being implemented at the local level.

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Co-management and EAFM have been priorities for Vietnam's Ministry of Agriculture and Rural Development (MARD) since the Fisheries Law 2017 and Decree No. 26/2019/ND-CP came into effect on January 1, 2019, and April 25, 2019, respectively. The revised law formally defines the concept of co-management, while Article 10 of the decree provides guidelines for implementing the law and regulations for co-management

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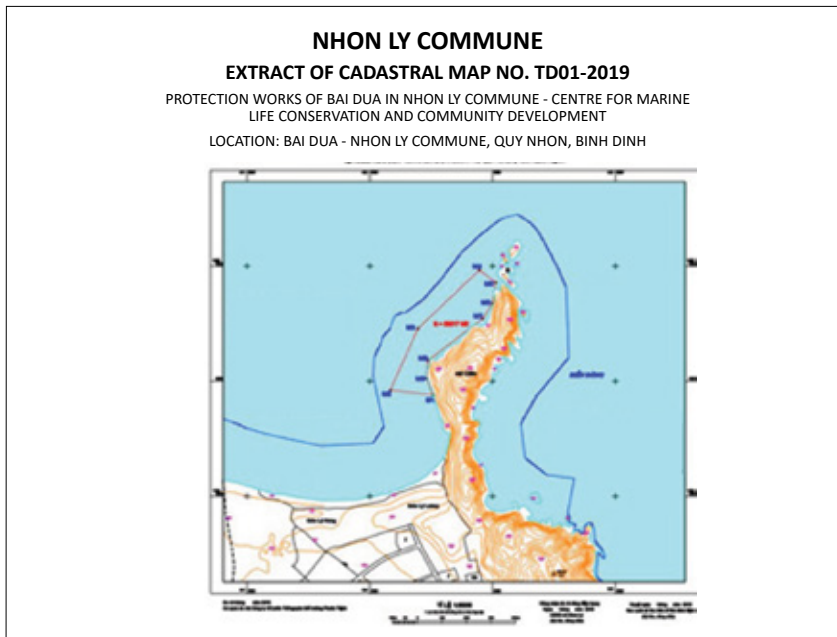


Figure 1: Map of Bai Dua Beach in Nhon Ly Commune, Quy Nhon LMMA, Binh Dinh

ecosystems in Locally Managed Marine Areas (LMMA) in the South Central Coast of Vietnam', is the title of the project implemented by MCD with the support of Hong Kong-based ADM Capital Foundation. It aims to strengthen institutional capacity, practice and policy development in coastal areas in South Central Vietnam by improving local capacity and experience with EAFM practices. Active from early 2017 through March 2020, this project intends to use EAFM to enhance the resilience of ecosystems and local communities, creating a model that could be used throughout the country. For instance, an EAFM plan for 2016-2020 was developed for the Quy Nhon LMMA in Binh Dinh province in the southcentral part of the country. Managed by Nhon Ly, Nhon Hai, Nhon Chau and Ghenh Reng communities, LMMA is home to a rich diversity of endemic species, including the orange-spotted grouper and the black sea cucumber, as well as 88 ha of coral reef, about 81 per cent of the coral reef in Binh Dinh's coastal area. The plan looks to reduce illegal fishing, protect important habitats, restore economically valuable fish populations, improve livelihoods, engage local communities in management and prevent overfishing, among other objectives.

Bai Dua has an estimated coral reef cover of 4.5 ha that offers a high diversity of species. According to Nha Trang Oceanographic Institute's survey in 2017, there are 207 types of aquatic species in Bai Dua. This number includes 11 species of seaweed, 14 species of echinoderm, 69 species of fish and 87 species of hard coral. The area is a spawning ground for many species such as bigfin reef squid, lobsters and snails.

Since 2016, there have been many tourism projects in Nhon Ly. It is estimated that 329,000 tourists visited the commune in 2018, a 6.2 per cent increase from 2017. The increase in tourism is creating jobs and improving the economic wellbeing of the residents; the total community revenue was 6.1 billion dong (42.9 mn dong per capita) in 2018, which is 18 times more than the revenue of 340 mn dong in 2015.

in the protection of fishery resources. The institutionalization of co-management through the highest form of legal documentation is a significant achievement.

The goals of Vietnam's Fisheries Law 2017 greatly align with the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines). These Guidelines are implemented in Vietnam by the Center for Marine Life Conservation and Community Development (MCD), with the support of the International Collective in Support of Fishworkers (ICSF). The SSF Guidelines are realized through improved policies, strategies

The Nhon Ly Community Organization is now legally recognized and responsible for the management, protection, exploitation, and development of aquatic resources in this area...

and initiatives, such as those in Bai Dua, Nhon Ly, Quy Nhon Locally Managed Marine Area (LMMA).

Co-management-in-law, EAFM in action

'Enhancing resilience of small-scale fishing communities and marine



Small-scale fishing in Nhon Ly commune, Quy Nhon City, Binh Dinh province. Fishing is a common source of livelihood and income generation at the household level and in Binh Dinh, 80 per cent of the workforce are fishermen

Bai Dua is a critical area for community livelihoods and is greatly impacted by human activities, especially unplanned and uncontrolled tourism development. Local people and commune authorities in Nhon Ly agree that Bai Dua needs to be co-managed and protected by the local community in order to safeguard valuable marine resources from depletion. This makes Bai Dua an ideal location to apply co-management in accordance with the Fisheries Law 2017.

Relevant activities in Southcentral Vietnam include annual community assessments of coral reef health following three training sessions conducted by MCD, the Fisheries Sub-Department and local community groups, with support from Cu Lao Cham MPA, in the month of May during 2017-2019; an awareness-raising workshop in Quy Nhon City on September 28, 2018, supported by ICSF; and a National Policy Workshop to develop a Co-Management Action Plan for the Protection of Fishery Resources and Reduction of Illegal Fishing on May 3, 2019, organized by the Directorate of Fisheries (D-Fish)

and MCD. These activities increased local capacity in and awareness of marine ecosystem and coastal resource conservation in Quy Nhon LMMA through community participation and policy development.

Strong support from community members and local authorities inspired MCD, the Sub-Department of Fisheries and the Binh Dinh Fisheries Association to support Nhon Ly commune in applying for recognition and assignment of rights to manage and protect Bai Dua's marine resources in 2019. Strong community support led to a high level of consensus on the management plan and operational regulations, including an agreement to contribute annually to a Community Fund to ensure the initiative's financial sustainability.

The community is developing the 'Plan for protection and exploitation of aquatic resources and tourism in Bai Dua' and the 'Regulation on operation of community groups'. The Plan notes the necessity of co-management; priority to protect aquatic resources; responsibilities, rights and power of the community and local authorities;

funding specifics; and zoning, patrol, supervision and coral reef protection teams.

The Regulation on Operation of Nhon Ly Community Representative Board for Aquatic Resource Protection consists of seven chapters and 32 articles that outline principles, objectives, organisational structure, operations, responsibilities, enforcement and powers of community organizations in co-management in accordance with Article 10.

Since the implementation of co-management, the commune has been able to further protect its resources by detecting illegal activities. The commune organized eight Border Guard patrols in 2018 wherein seven cases of off-line activity and one case of illegal diving were discovered.

Progress

Nhon Ly was the first locality in Vietnam to apply the co-management model under the Fisheries Law 2017. It is now also one of the few coastal communes selected to implement the Fishing Village Cultural Architecture Conservation Planning for Sustainable Community Tourism Development by the People's Committees of Binh Dinh Province and Quy Nhon City. The area has also been recommended to the Provincial Department of Tourism for a pilot community-based tourism model.

Participants at the two workshops in South Central Vietnam provided many recommendations to continue this progress, further improving co-management efforts and the Co-Management National Action Plan. Recommendations included increasing capacity and participation of community members; providing viable alternative livelihoods for fishermen; using science and technology to form comprehensive solutions; strengthening national and international collaboration; improving monitoring; creating specific, actionable objectives; using policy to encourage behaviour change; and developing localized action plans.

Managing the future

Despite the ongoing progress of the co-management model in Bai Dua, such as the increase of hard coral cover from 35

per cent in 2017 to 54 per cent in 2019. In Nhon Ly, fishing effort has decreased by 30 per cent since the households taking part in full-time fishing now have access to additional income from ecotourism. The area's coral reefs have become a popular tourist attraction. However, rapid tourism development has also caused increased water pollution from sewage; tourist boats and cruises to coral reef areas need to be regulated. These challenges must be overcome in Bai Dua and throughout Vietnam through further improvement of policies, strategies, and initiatives; implementation of co-management and EAFM; continued active participation of community members in planning, managing, protecting and exploiting marine resources in co-managed areas;

On 4 February 2020, the Nhon Ly Community Organization has been given the right to co-manage fisheries resources, pursuant to the Fisheries Law 2017. The Quy Nhon People's Committee passed Decision No. 445/QD-UBND approving the Plan for Protection and Exploitation of Aquatic Resources in Bai Dua sea area. The Nhon Ly Community Organization is now legally recognized and responsible for the management, protection, exploitation, and development of aquatic resources in this area, including consulting on relevant projects, patrolling and inspecting fisheries activities, preventing and handling violations, and establishing a Community Fund. 3

For more

<http://mcdvietnam.org/en/>
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https://igsf.icsf.net/images/ICSF_FAO%20PROJECT1/VIE%20002b_Vietnam_National%20policy%20%20Workshop%20report%20May%2031st%202019.docx

Workshop Report National Consultation on the Development of an Action Plan for the Co-Management and Protection of Fishery Resources and Reduction of Illegal Fishing, Hanoi, May 31st, 2019

Learning from Warnings

A recent Consultation Workshop discussed awareness and policy support to protect ecosystems, reduce illegal fishing and promote co-management in the central coastal region of Vietnam

Vietnam's fisheries sector plays an important role in the economic structure of the country. Marine capture fishery production continues to increase at an average rate of 9.07 per cent annually, whereas aquaculture activities increase at an average rate of 12.77 per cent per year. As reported by the General Directorate of Fisheries (D-Fish), in 2017 the total fish production reached over 7.28 mn tonnes, up by 5.6 per cent compared to 2016. The capture fishery production reached nearly 3.42 mn tonnes, up by 5.7 per cent, and aquaculture output reached over 3.86 mn tonnes, up 5.5 per cent, totalling in a farming area of 1.1 mn ha. Aquaculture production accounted for 53 per cent of total output in 2017, whereas in 2016 it was 54.2 per cent.

Capture fisheries is the primary provider for the food industry and employs more than 4 mn workers. However, capture fisheries in Vietnam continue to experience certain difficulties due to both objective and subjective conditions. On 10 May 2017, Vietnam was officially cautioned by the European Commission (EC) with a 'yellow card' for the effect the Vietnamese fisheries sector has caused on its marine ecosystems. On 23 October 2017, the European Commission issued the yellow card warning to Vietnam.

The Food and Agriculture Organization of the United Nations (FAO) has developed guidelines for small-scale fisheries in 2014 – the Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication (SSF Guidelines). Accordingly, compliance with the regulations is sought to be made transparent and accountable for the effective implementation of regulations in the fisheries sector, from central to

local levels, in line with international practices and regulations. There are many shortcomings in the policy, organization and monitoring of small-scale fisheries.

On 28 September 2018, the Center for Marinelife Conservation and Community Development (MCD) and the Department of Agriculture and Rural Development of Binh Dinh Province jointly organized a "Policy Consultation, Communication and Sharing Workshop on the Mitigation of Illegal Fishing, Co-management and Protection of Fisheries Resources in the Central Coast". The workshop was supported by

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the International Collective in Support of Fishworkers (ICSF) under a FAO-funded project on the implementation of the SSF Guidelines in nine countries, including Vietnam.

Reef ecosystems

The objectives of the workshop were to promote communication and awareness amongst stakeholders of illegal, unreported and unregulated (IUU)-related policy and co-management practices to reduce illegal fishing, and co-management of the living resources of the reef ecosystems.

The workshop was attended by 50 representatives from the D-Fish, the Binh Dinh Department of Agriculture and Rural Development, the Departments of Fisheries in the central provinces of Thua Thien Hue, Phu Yen and Binh Dinh, the Binh Dinh Fisheries Association, the

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Quy Nhon City People's Committee and commune council, community organizations of four Locally Managed Marine Area (LMMA) communes in Quy Nhon and representatives of fishing groups in the central areas of Cu Lao Cham and the Ly Son marine protected area (MPA).

Since the 1980s, many co-management models have been researched and tested...

The workshop featured policy consultations, communication and sharing of experiences on the mitigation of illegal fishing in the Central Coast to raise awareness of the need for compliance with the implementation of the revised Fisheries Law 2017. The discussions covered co-management of fisheries resources, mitigation of illegal fishery harvest, and action for planning policy in Vietnam. It was decided that the D-Fish would give further support to the localities to improve enforcement.

The main topics of the workshop were: (i) an overview of the central regions and local policies, programming and current action plans; (ii) the need for co-management awareness, minimization of illegal practices, and application of successful practical lessons in the coastal region of central Vietnam; and (iii) how to link policymakers, regulatory agencies, and fisher community organizations in activities to strengthen co-management, regulate exploitation and protect fisheries resources in order to minimize illegal practices.

According to D-Fish, IUU fishing is prohibited, but such activities are still prevalent. Illegal harvest must be prevented to reduce the decline of resources, allow for the advancement of sustainable development, and protect the rights and interests of the community. Co-management is a strategic solution for combating IUU fishing.

Actions against IUU fishing are supported by a range of international institutions and instruments, including

the 1982 United Nations Convention on the Law of the Sea (UNCLOS), the 1995 UN Fish Stocks Agreement (UNFSA), and the 1995 FAO Code of Conduct for Responsible Fisheries (CCRF). Vietnamese law also provides specific provisions on IUU fishing practices under the revised Fisheries Law of 2017, adopted by the National Assembly at its Fourth Session on 21 November (2017 or 2018?).

Between 2014 and 2018, Vietnam seized over 917 illegal fishing vessels in the waters bordering China and ASEAN and non-ASEAN countries. China, Indonesia and Cambodia are the three countries with the highest rate of detention of fishing vessels in Vietnam. The following are the efforts being made by Vietnam to combat IUU:

Co-management models

Role of co-management in the protection of fishery resources: Co-management is a management approach in which the state shares its rights and responsibilities with community organizations involved in the management of fisheries resources. The community organization is an organization in which members participate voluntarily, jointly manage, share the benefits and protect fishery resources in a distinct geographic area.

Since the 1980s, many co-management models have been researched and tested in the field of fisheries and aquaculture use and practice, and in different localities throughout the country, with the support and funding of international organizations, in collaboration with local governments. Co-management models have been implemented in the following localities: (1) Buon Triet, Easoup, Lak lake (Dak Lak), Tra O Lagoon (Binh Dinh), Son La, and Bung Binh Thien (An Giang); and (2) Quang Ninh, Hai Phong, Thanh Hoa, Nghe An, Ha Tinh, Quang Nam, Thua Thien Hue, Binh Dinh, Phu Yen, Khanh Hoa, Binh Thuan, Ben Tre, Soc Trang, and Ca Mau. The results of applying the co-management model of aquatic resources in some provinces resulted in D-Fish issuing Decision No. 67/QĐ-TCTS-KTBVN on 7 June 2010.

The Fisheries Law of 2017, an important milestone in institutionalizing co-management, formally defined co-

Table 1: Action plan for combating IUU

EC recommended actions in Vietnam	Actions to take place in Vietnam
a) Revise the legal framework	a) Develop and improve legal documents, including two Decrees of the Government, one Decision of the Prime Minister and nine guiding circulars of the Ministry of Agriculture and Rural Development (MARD)
b) Ensure implementation and enforcement	b) Strengthen direction, management and effectiveness in management of fisheries and IUU fishing
c) Ensure that full sanctions are enforced and monitored	c) Implement solutions that create practical changes
d) Overcome deficiencies in monitoring, control and surveillance (MCS)	d) Improve law enforcement capacity, requiring fishing vessels of length 15m or more to install cruise control equipment. From 1 January 2019, fishing vessels sailing on the sea must install 100 per cent cruise control equipment
e) Improve the registration and licensing system	e) Build a national database on management of fishing vessel registration and synchronous fishing permits at central and local levels.
f) Introduce a fishing vessel development policy	f) Announce the reserve of marine resources in order to reorganize fishing fleets in accordance with capacity, planning for offshore fishing up to year 2020 and a vision plan to 2030.
g) Ensure traceability of fishery products	g) Regulate and organize the control of raw materials originating from IUU, exploiting commercial ports for re-export, or for domestic sale; the MARD issued Circular No. 02/2018 / TT, dated 31 January 2018, which stipulates identification of the source of the fishery.
h) Aim for co-operation with other countries	h) Promote bilateral co-operation to prevent IUU fishing and illegal trade through establishment of hotlines, and through dialogue with other countries in the region for the sustainable use of marine resources. The government has ratified Vietnam's accession to the FAO Agreement on Port State Measures (PSA) and the UNFSA. Vietnam has also become a party to the Western Central Pacific Fisheries Commission (WCPFC).
i) Engage in data collection and reporting for RFMOs	i) Implement regulations on collection and reporting of fishery data by WCPFC and the Southeast Asian Fisheries Development Center (SEAFCEC)

management in Article 10. The efforts of D-Fish and other concerned parties such as MCD have included initiatives such as issuing regulations for the recognition and assignment of management rights to community organizations, in the following manner:

1. Through application for recognition and transfer of management rights to community organizations;
2. By issuing orders for recognition and transfer of management rights to community organizations;
3. By disseminating the contents of the appraisal dossier on community management;
4. By preparing dossiers of proposals for amending and assigning management rights to community organizations;
5. By issuing orders for amending and transferring management rights to community organizations; and
6. By making model decisions on recognizing and empowering

community organizations to implement co-management of fisheries resources, and in recognizing and transferring management rights to community organizations.

Regulations on community collaborators are meant to recognize them as individuals who voluntarily participate in the activities of community organizations.

The community needs to be organized periodically, based on reports on the results of the implementation of co-management in the protection of fisheries resources, and the main contents of the community organization report should be widely disseminated.

The Binh Dinh Department of Fisheries presented the results of its review and plans to minimize IUU fishing, including proposals and recommendations for action.

Binh Dinh has set up a representative office and three standing groups at the

fishing port to inspect fishing vessels that dock and enter the wharf. Weekly inspection teams that control the fishing on coastal and lagoon areas have dealt with 102 cases of fisheries violations, and imposed fines totalling approximately 121 million Vietnamese dong (VND) (1USD=23,290 VND). 566 numbers of MCS equipment were installed on board fishing vessels (511 on board vessels of under 24 m in length and 55 on board vessels of 24 m or over).

In Binh Dinh, 13 vessels and 107 fishermen were arrested in the first eight months of 2018, up from four vessels and 13 crew members in 2017. These vessels and fishermen have had their fishing rights temporarily suspended and their fishing licences cancelled for six months, under Decision No. 48/2010 / QD-TTg. A constant review of fishermen and foreign fishing vessels is underway. The Provincial People's Committee has directed the provincial police, and the provincial Border Guard Commands to co-ordinate with the localities in verifying and handling cases of violation.

With a coastline of over 134 km, this geographical area includes the bay, seaports, and natural creeks such as Quy Nhon, De Gi and Tam Quan. The province has 6,245 fishing vessels, with a total capacity of 1,786,631 horsepower (HP). The total number of employees engaged in fishing activities is 44,350 (in offshore fishing: 29,512; in coastal fishing: 14,838).

The total seafood catch in 2017 reached 223,000 tonnes, of which tuna made up 47,000 tonnes (big-eye, yellow-fin tuna from the Atlantic: 9,700 tonnes; squid: 22,000 tonnes; shrimp: 1,200 tonnes; and other marine fish of all kinds: 143,100 tonnes).

Fishing vessels operating without fishing permits, or with expired fishing permits, account for 46 per cent of fishing vessels in the whole province. The number of fishing boats is quite large (1,358 under 20 HP, accounting for 21.7 per cent of the total number of registered boats), and this abundance affects the coastal fishery resources.

The operation of fishing vessels in areas that are not regulated – often on a complicated basis (especially for trawlers) – has impacts on the resources. Some forms of fishing are prohibited,

such as using explosives, electric pulse fishing, cages, etc. To curb these practices, the province has reviewed the statistics of fishing vessels (MEANING?).

Binh Dinh will continue to carry out its plan to review registration and licensing. Quarterly, the fisheries stations will record the number of vessels in the area to synchronise data between local and grass-roots statistical offices. Strengthening co-ordination among the authorities responsible for handling fishing vessels is needed. Raising awareness about the law, and training staff to improve the management capacity of vessels are being undertaken. Besides implementing various measures to reduce IUU fishing in offshore areas, Binh Dinh is working to ensure strict control of unregistered trawlers to prevent depletion of fishery resources; enforce a ban on fixed net fishing; and control unlicensed diving.

Illegal fishing

Thua Thien Hue is known as the province that has implemented sustainable small-scale fisheries co-management to minimize illegal fishing in Tam Giang lagoon. Thua Thien Hue's Department of Fisheries has shifted the focus to management based on fishers rather than just fish. The regulation for management of lagoon fisheries has been issued as Article 5 (Decision No. 84/2016 / QD-UBND) and has achieved some successes, notably: Thua Thien Hue has implemented three parallel processes in its waters: a pilot model, institutional development and a management plan, and close community organization through formal fisheries associations at the grass-roots level, and development of sustainable fisheries co-management schemes at the provincial level. The synchronous implementation of the model has helped to rapidly develop the overall management plan, consistent with ecosystem and fishery considerations.

As a result, Thua Thien Hue has 7,000 members, and 65 official associations of the lagoon fisheries in 86 districts. The Fisheries Associations (FAs) have been granted 52 fishing rights. Fifty FAs in specific lagoon water bodies, in an area of over 16,000 ha, account for 74 per cent of the lagoon

area. Seven coastal fishing areas were chosen for pilot FAs. The whole province has 22 FAs, and fishing rights are allocated to the FAs by the provincial People's Committee. There are now 23 small-scale community-based marine conservation zones. The total protection area is 614.2 ha, accounting for 2.8 per cent of the Tam Giang-Cau Hai lagoon area. Assistance has been given by the state for the purchase of 20 community-based fishing boats for inspection and monitoring. A community fund of 3.25 bn VND was set up for the Loc Binh Fisheries Association in 2017. Clearly, emphasizing community-based management is the only way to streamline management activities, save costs and manage the fisheries for the sustainable development of aquatic resources, fishing communities and fisheries societies.

The Bai Huong Island sub-MPA, part of the Cu Lao Cham MPA, is a co-management model for marine resources protection and livelihood development of the local communities established in 2011, based on Decision No. 2614 /QD-UBND. The key management role lies with the community of Bai Huong village.

The sub-MPA has organized training courses to educate the community about the conservation and sustainable use of fisheries resources. Among the main activities of the co-management group is monitoring and patrolling in the Bai Huong sub-MPA. In addition to preserving livelihoods, the MPA has collaborated with MCD on livelihood improvement and regulating fishing activities under the co-management plan. MCD supports bottom-glass coral viewing tours as an alternate source of livelihood. Tourism has allowed the local community to reap benefits during lean fishing seasons. MCD registers legal fishing gear in order to reduce overfishing and to manage the fisheries resources. Local fishers reported an increase in species diversity in 2018, compared to 2017. Further livelihood opportunities have arisen from associated activities like cooking classes and hospitality home stay services.

Illegal fishing, however, continues through the exploitative activities of trawlers and seines, at great cost to

coastal fisheries resources. In 2017, Cu Lao Cham handled 12 infringement cases, resulting in more than 20 mn VND in sanctions. Cham shows us that co-management will succeed only if there is consensus within the community for the conservation and sustainable use of fishery resources. Patrol supervisors should handle cases of illegal fishing resolutely, but with caution.

Assigning rights

An amendment in 2017 introduced the IUU issue into Section 6, Article 7 of the Fisheries Law 2017. Article 10 of the Law grants the district the prerogative to recognize and assign the right to manage fisheries resources in the area under co-management.

The co-management community organization is responsible for: (i) properly implementing the management plan; (ii) complying with the law on fishery activities, and inspection and examination by competent state agencies; (iii) co-ordinating with relevant authorities to

Tourism has allowed the local community to reap benefits during lean fishing seasons.

patrol, inspect, investigate, prevent and deal with violations in the assigned area; and (iv) reporting to competent state agencies on the operation of community organizations, according to regulations.

The following recommendations can mitigate IUU fishing and strengthen co-management in fisheries:

1. *Raise awareness about IUU fishing:* Use mass media information and communication systems to change the perception of target groups to comply with laws and regulations on sustainable use; organize media campaigns and advocacy through co-ordination between government and social organizations (including FAs); develop and implement communication programmes to reduce IUU fishing, at the provincial/district/commune level in line with national action plans.

MCD



Participants at the workshop in Quy Nhon, Binh Dinh province. The workshop was attended by 50 representatives and the discussions covered co-management of fisheries resources, mitigation of illegal fishery harvest, and action for planning policy in Vietnam

2. *Support efforts for livelihood development and employment for fishermen groups:* Fishery resources have been significantly reduced due to unsustainable capture fisheries and hence, developing activities for livelihoods and alternative income for fishermen should be accorded a high priority; impart technical training by experts for fisheries groups on sustainable harvesting techniques and post-harvest preservation; develop coastal tourism and vocational training for youth to reduce the pressure on natural resources; and provide access to necessary resources for livelihood enhancement (including information technology and marketing skills).
3. *Support the implementation of co-management regulations and capacity building of community groups in sustainable fishery practices:* Ensure capacity building/strengthening of community organizations involved in co-management, training support, and strengthening of facilitators' skills; support planning for the conservation and sustainable use of fishery resources and management of community organizations; and promote co-ordination at the central and local levels, by creating mechanisms for monitoring and evaluating, and effectively enforcing co-management regulations for sustainable fisheries.
4. *Strengthen surveillance systems, and traceability and product certification in accordance with regulations:* Strengthen the capacity of fisher groups to improve responsible fishing practices, and use of fishing gear and legal fishing grounds; enhance co-operation with the business sector to improve traceability, improve recording/reporting practices in fishing ports and fishing areas, and comply with market regulations and requirements; and provide technical assistance to improve local and national monitoring and reporting systems. 3

For more

<http://mcdvietnam.org/en/>
Centre for Marinelife Conservation and Community Development (MCD)

<https://sites.google.com/site/smallscalefisheries/events/myanmar>
National consultation workshop for Small-scale fisheries in Myanmar: Developing of Voluntary Guidelines Towards Securing Sustainable Small-scale Fisheries, 12-14 October 2012, Yangon, Myanmar

<http://mcdvietnam.org/en/>
Centre for Marinelife Conservation and Community Development (MCD)

Re-visiting the Law

The government of Vietnam seeks to empower the country's fishermen through the landmark passage of an amended fisheries law

Vietnam is home to one of the most diverse marine ecosystems in the world, providing habitats that include mangroves, coral reefs, seagrass beds and coastal lagoons for a wide variety of species. Because of this diversity (particularly in commercially valuable species) and its extensive coastline (over 3,000 km), an important sector of Vietnam's economy is fishing. However, its coastal fisheries are suffering under intense overexploitation. It is reported that the catch in areas of 50 m depth or less is two to three times higher than the maximum sustainable yield (MSY). This simply cannot be sustained. The country's fisheries sector is governed by a suite of legislation at both State and provincial levels. The strategic fisheries master plan, revised and adopted in 2013, has the overall aim to focus on value-added growth and sustainable development of the fisheries sector. As part of the re-structuring and reform strategies, the government also adopted the National Plan of Action (NPOA) in 2014 to reduce the fishing efforts as well as protect the fisheries resources. Part of that exercise involved revising the existing national policies and legal frameworks to ensure that sustainability played a more significant role.

The Centre for Marinelife Conservation and Community Development (MCD) is a local NGO working to address challenges facing Vietnam's fisheries sector. MCD is supporting a pilot programme of Ecosystem Approach to Fisheries Management (EAFM) in Binh Dinh Province in Central Vietnam, which advocated this approach to the government and has worked with the

Directorate of Fisheries to incorporate the appropriate components into the revision of Fisheries Law 2003. Integral to this approach is co-management, whereby the local fisher communities that rely on the fisheries for their livelihoods, work collaboratively with the government to manage the resource. Empowering these communities has proven to be successful in fisheries management in other jurisdictions in other countries, such as in parts of the Philippines.

On 21 November 2017, the National Assembly adopted the long-awaited amendment to the Fisheries Law, and the concept of co-management was

The co-management decree is being drafted to cover the most significant issues of recognized community groups and fishing rights...

sanctified as a legal document for the first time. Local community groups now have the legal recognition needed to effectively carry out marine resources protection at a local level, including the delegation of fishing rights. The law also integrates climate change, and the fight against illegal, unreported and unregulated (IUU) fishing, apart from strengthening management of marine protected areas (MPAs).

Fisheries governance

The government has clearly recognized that giving local communes more power to manage their own resources is the most effective way of managing them sustainably. Collaboration between national/local authorities and

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THAN THI HIEN



Small-scale fisheries in the small island of Quy Nhon City, Binh Dinh province, Vietnam, where fisher communities work collaboratively with the government to manage the resource

issues of recognized community groups and fishing rights in the protection and management of aquatic resources. The MPA regulations are being revised to include: (i) the management structure of an MPA; (ii) the co-ordination mechanism; and (iii) sustainable financing, including tourism fees in MPAs. Besides, there will be a focus as well on how to ensure biodiversity protection in the defined core and buffer zones of the MPAs.

Once the law is implemented, co-management groups will be required to create their own fishery management plans in accordance with the details set out in the decrees and guidelines, with help from provincial and commune-level authorities. The Directorate of Fisheries will develop an action plan to support the co-management and community groups over the coming year, and help mobilize the available financial, human and technical resources. ¶

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communities is essential. Over the coming year (until implementation on 1 January 2019), the next steps include: (i) communication and education so communities understand the amended law's benefit; (ii) development of under-law documents (decree, circulars, guidelines); (iii) policies to support fisheries management at both national and local levels, including factoring in financial resources, human resources and technical resources; and (iv) enforcement, implementation and monitoring of laws and regulations. MCD is continuing to work with the Directorate of Fisheries, and has co-hosted workshops to inform stakeholders of the implications currently impacting both the co-management decree and the regulations on MPAs. The co-management decree is being drafted to cover the most significant

For more

<http://mcdvietnam.org/vietnam-government-empowers-fisherman-in-landmark-passage-of-amended-fisheries-law/>

Vietnam Government Empowers Fisherman in Landmark Passage of Amended Fisheries law

<https://www.icsf.net/en/samudra/article/EN/63-3800-Small-scale-hop.html>

Small-scale Hopes

<http://mcdvietnam.org/en/>

Centre for Marinelife Conservation and Community Development (MCD)

Depending on Mangroves

Integrated shrimp-mangrove farming systems offer a solution for protecting mangroves and improving livelihoods in Vietnam

Ca Mau Province, located in the Mekong Delta, is the southernmost of Vietnam's Provinces and has the highest remaining area of mangrove forests—it contains almost half of the remaining mangrove forest in Vietnam and 70 per cent of remaining mangrove forest in the Mekong Delta. It is estimated that Ca Mau has around 64,500 ha of mangrove forest, classified as production, protection or special-use forests.

Protection forests are under the management of forest

The provinces of the Mekong Delta contain about 740,000 ha of aquaculture, equivalent to three-quarters of the total aquaculture area in Vietnam, and produce about 1.7 mn tonnes of fish and 370,000 tonnes of shrimp, equivalent to three-quarters of the total farmed shrimp. Of the 12 provinces that comprise the Mekong Delta, Ca Mau is the leader in terms of area and output of shrimp cultivation, contributing about one-third of the delta's farmed-shrimp production.

Within the coastal zone, shrimp aquaculture is located along the coast and in estuaries and waterways near the coast where there is brackish water.

Shrimp aquaculture was introduced in Ca Mau in the early 1980s due to suitable natural conditions and the abundance of seed. The main aquaculture model in this period was traditional extensive aquaculture in the south of Ca Mau, where brackish and marine water could be easily accessed.

The potential income source that shrimp provided soon became evident, which led to large-scale expansion of shrimp farms. Because of its high economic return, shrimp farming has been promoted to boost the national economy, to provide a potential source of income for local communities and to alleviate poverty.

Mangrove destruction

This period witnessed widespread destruction of mangrove forests in the south of the province. Since the turn of the century, there

The area of mangrove forest has declined significantly primarily due to in-migration...rice cultivation, the overexploitation of timber...and shrimp farming.

management boards (FMBs) and are maintained to protect streams and soils, prevent soil erosion, and mitigate natural disasters.

However, the mangrove area has been dramatically reduced. It is estimated in the early 1970s, the mangrove forest in Ca Mau province covered approximately 200,000 ha. The area of mangrove forest has since declined significantly, primarily due to in-migration, the expansion of rice cultivation, the overexploitation of timber for construction and charcoal and, more recently, the expansion of shrimp farming.

The Mekong Delta provides ideal natural conditions for aquaculture and is home to most of the aquaculture in Vietnam.

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have been growing requirements and efforts to protect the remaining mangrove areas. The government is under pressure to balance wider aspirations of an export-led economy with the need to conserve the remaining mangrove forests. Against these competing agendas, integrated shrimp-mangrove systems have emerged as an opportunity to maintain production while ensuring a minimum forest cover.

Integrated shrimp-mangrove farming can be considered a traditional form of extensive aquaculture that has been practised along the Ca Mau peninsula since the early 1980s.

Although making up only 15 per cent of the total pond area in the province, integrated shrimp-mangrove systems have remained attractive to farmers and policymakers alike, given their protection of mangrove forests.

Farms are characterized by a dependence on mangroves for shrimp reproduction and food, and resulting in a relatively high share of income from crabs and fish. The farms are also inherently stable and resilient and more resistant to shrimp disease.

The shrimp-mangrove integrated farming system is characterized by a highly structured geometrical pattern. These shrimp farms are primarily 'extensive' aquaculture farms where integrated shrimp-mangrove production is practised. Shrimp ponds tend to be around 5 ha in size each, and are surrounded by small dikes that control the water level. Within the ponds, the remaining mangrove forests are typically replanted in a row.

The forest lands are allocated or contracted out to farmers, normally for 50 years, requiring them to adequately protect certain areas of mangroves. If this is not the case, the contract will not be renewed.

The SNV Mangroves and Markets project (MAM) aims to reduce the pressure on the mangrove areas by working with local authorities, companies and farmers to introduce

economic incentives for sustainable use and stronger protection. The project will work the Nhung Mien Forest Management Area.

To successfully conduct the project in Vietnam's Mekong Delta, MAM has three main partners and recently signed an agreement to promote organic shrimp production with the Minh Phu Seafood Company.

This private shrimp-processing and exporting company ranks second in Vietnam and fifth on shrimp values and shrimp production worldwide. Minh Phu Seafood Corp has collaborated with MAM to support the certification process at household levels and launch awareness raising for local households in Nhung Mien.

Given the ability to access an ensured market through the collaboration with Minh Phu, MAM project will also be able to give incentives to maintain mangrove forest cover. For the time being, the SNV's beneficiaries in Ca Mau sell their shrimp products to local collectors with considerably lower than committed certified prices from Minh Phu.

Officially, MAM partners with the various government authorities and institutions of Vietnam: the Departments of Agriculture and

SNV / NETHERLANDS DEVELOPMENT ORGANIZATION



Shrimp harvesting in Nhung Mien province of Vietnam. Integrated shrimp-mangrove systems have emerged as a productive opportunity

SNV / NETHERLANDS DEVELOPMENT ORGANIZATION



Timber from mangroves being transported in the Mekong Delta of Ca Mau in Vietnam. Mangrove forests are habitats for diversified fauna and flora

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Rural Development, as the project owner, local FMBs, the Forestry Department, the Department for Aquaculture, and the Quality Control of Agriculture, Forestry and Fishery products.

Another partner is the International Union for Conservation of Nature (IUCN), which has recently listed many mangrove reptiles on their Red List.

The abovementioned mangrove forests and Melaleuca forests have formed diversified fauna and flora with high biodiversity values, which are also home to some endangered animal species. Twenty two mangrove species (*Rhizophora apiculata* and *Avicennia alba*), which have been discovered in the region, are home for many bird species.

MAM's project manager Thuy Nguyen Thi Bich and her team aim to protect those 74 bird species belonging to 23 families, including some rare species such as white storks, sandpipers, pelicans, Indian storks, herons and black-headed ibis.

In addition, there are 17 species of reptiles belonging to nine families, and five species of amphibians belonging to three families, 14 species of shrimp, 175 species of fish belonging to 116 breeds and 77 families, and 133 species of plankton.

Fortunately, the coastal protection forests of Ca Mau province and the alluvial area of the Mui Ca Mau National Park are areas with suitable conditions for reproduction and development of marine creatures in their larval stage.

Sustainable mangrove restoration and sound shrimp production are meant to enable lasting conditions to access markets and improve the livelihoods of forest-dependent communities. To support the abovementioned 600 households in sustainable shrimp production, the FMB strives to reach the Naturland certification in 2013 and 2014.

The MAM partnership with the Minh Phu Seafood Company also mandates all certified shrimp products to be bought by the company itself, which will improve the incomes of those 600 households by 10 per cent or more by early next year. In terms of protecting mangroves from illegal deforestation for shrimp ponds, the standards set

Box 1

Vietnam's fisheries production

The aquaculture area of Ca Mau accounts for nearly 300,000 ha, with the total output of aquatic products reaching 363,000 tonnes. In 2012 the shrimp farming area was more than 265,000 ha, and production reached 126,000 tonnes, accounting for 38 per cent of the country's total shrimp farming area. Of this, 5,000 ha are for intensive shrimp farming, 22,000 ha for improved extensive shrimp farming, nearly 238,000 ha for extensive farming (including 176,453 ha of extensive shrimp farming), 22,600 ha for mangrove-shrimp farming, and 40,000 ha for shrimp-rice farming in the four coastal districts of Phu Tan, Dam Doi, Nam Can and Ngoc Hien.

The total annual aquaculture production reaches about 255,000 tonnes per year on average, including products like shrimp, crab and different species of fish, which are the province's strength.



Box 2

MAM's focus

The MAM project focuses on four main components:

- The mangrove–shrimp farming model for sustainable supply of mangroves
- Restoration of mangroves in coastal protection zones
- Accessing climate finance (shrimp production standards, rehabilitation, climate change adaptation or CCA services)
- Recommendations for national policy: legal basis for mangrove Payments for Ecosystem Services (PES)

by Naturland, the Netherlands-based organic agriculture /aquaculture/ seafood certifier, require at least 40-50 per cent of mangrove area to be set aside for local shrimp farms every year.

MAM provides a good opportunity to support households at a local level and restore Ca Mau's mangroves in the coastal areas. MAM will also emphasize capacity building for related stakeholders, local authorities, and the forestry and aquaculture sector on resource management.

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For more

www.snworld.org/en/sectors/redd/cases/MAM

**Mangroves and markets:
Supporting mangrove protection
in Ca Mau Province, Vietnam**

en.wikipedia.org/wiki/C%C3%A0_Mau_Province

Ca Mau Province, Viet Nam

Small-scale Hopes

A national consultation workshop on sustainable development of small-scale fisheries in Vietnam was held recently in Hanoi

A national consultation workshop on sustainable development of small-scale fisheries in Vietnam, and the international guidelines on sustainable small-scale fisheries proposed by the Food and Agriculture Organization of the United Nations (FAO) was held during 1-2 November 2012 in Hanoi.

The workshop was organized by the Department of Capture Fisheries and Resources Protection

participation in sustainable fisheries management.

Vietnam's fisheries sector plays an important role in the country's economic development, in labour and income generation, and in food security and poverty alleviation, both in urban and suburban areas. There are around 4.7 mn Vietnamese workers in the fisheries sector, involved in capture, aquaculture, fish processing and allied services. In 2011, the country's total fisheries production was 5.2 mn tonnes, and exports of fish products were valued at US\$6 bn, accounting for 24.44 per cent of agricultural exports and 6.34 per cent of total exports.

The Hanoi workshop focused on four primary areas:

- sharing of information on small-scale fisheries in Vietnam, including the roles, issues and challenges relevant to specific human-development needs, fishery-based livelihoods in inland and marine regions, food security, poverty alleviation and sustainable use of fishery resources
- contributing to the proposed guidelines of FAO on small-scale fisheries through the opinions of stakeholders in the context of Vietnam
- strengthening the knowledge and capacity, and improving the roles, of civil society organizations in the development of sustainable fisheries
- enhancing co-operative networks among government agencies and fisheries associations, and creating opportunities to enable them to participate in decision-making processes

The topics covered at the workshop dealt with the challenges that small-scale fisheries and fishers in Vietnam face...

(DECAFIREP) of the Ministry of Agriculture and Rural Development (MARD), in co-operation with the Centre for Marinelife Conservation and Community Development (MCD) and the Vietnam Fisheries Society (VINAFISH), with support from the International Collective in Support of Fishworkers (ICSF).

Sixty participants from national and local authorities, fisheries organizations and associations, non governmental organizations (NGOs) and fishermen representatives attended the workshop.

The topics covered at the workshop dealt with the challenges that small-scale fisheries and fishers in Vietnam face, namely, the lack of financial resources; unstable production; environmental impacts (including from natural disasters and climate change); market-led approaches; and limited

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At the Hanoi workshop, participants discussed key issues related to registration and safety, value chain, gender and climate change, and how to improve benefits for small-scale fishers. They also proposed solutions and recommendations for sustainable fisheries management.

Throughout the workshop, participants stressed the importance of small-scale fisheries in terms of policy development. Although Vietnam has in place policies on small-scale fisheries, such as the Fisheries Law and other important legislation, gaps still exist in the implementation of these policies at the local level, which are needed to sustain the communities' livelihoods and protect natural resources.

Emphasizing the significance of the Hanoi workshop for the sustainable development of Vietnam's small-scale fisheries, the MCD presentation on the key policy recommendations led to interesting panel discussions. Tran Cao Muu, General Secretary of VINAFIS, said: 'Small-scale fisheries play a large role in creating jobs and exploiting coastal resources locally and globally. FAO and Vietnam, therefore, share common concerns about the direction and organization of activities of the sector. In our framework, effective solutions have been raised to ensure civil rights and prevent destructive fishing. Innovation is suggested to rehabilitate coastal resources, help the transition of economic systems, and create a model for the production value chain and co-management that will ensure a more sustainable development of Vietnamese small-scale fisheries'.

According to statistics presented at the workshop, as of 2011, there were around 128,000 fishing vessels in the country, with a total capacity of 6.4 mn vessel capacity units (VCUs), which employed millions of people. Production from the small-scale fisheries sector accounted for about 69 per cent of the total annual fisheries production. Small-scale fishers have targeted species like shrimp, crab, octopus and squid for export.

Chu TienVinh, the former Deputy Director of the General Department of Vietnam Fisheries, said that it was necessary to develop the fisheries sector into one that could produce competitive branded goods of high quality and repute so that the traditional fisheries sector could be transformed into a modern one. Research on environmental resources, and gathering time-series data on coastal fishing activities were the basic inputs needed for production planning in each region. It is also important to re-organize production at sea and develop co-operative models of fisheries management and production, while simultaneously enhancing the role of women in fisheries, it was stressed.

Nguyen Quang Vinh Binh, Vice President of the Fishery Association in Thua Thien Hue province in central Vietnam, where lagoons are located, said: "Fishery associations should have access to fishing rights, so that they are able to manage fishing activities. Fishery associations should re-organize fishing grounds in a way that can sustain the traditional fishing areas of people and families who are members of the association. At the same time, they can facilitate and provide support for fishermen who legally practise fishing in a creative, well-organized and effective

NGUYEN DUC HIEU



Nguyen Thu Hue, Director, MCD, Nguyen Quang Vinh Binh, Vice President, Fishery Association, Thua Thien Hue province, Tran Cao Muu, General Secretary, VINAFIS, and Chu Tien Vinh, Former Deputy Director, General Directorate of Fisheries, MARD

NGUYEN DUC HIEU



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Inaugural session of the national workshop on FAO IGSSF, held at Hanoi, Vietnam, during 1-2 November 2012

way. Fishery associations also have the right to eliminate members who repeatedly make serious mistakes in disregarding the rules of the organization or who engage in activities that adversely affect the natural environment and aquatic resources. In the Thua Thien Hue province, there are about 6,000 members organized into 65 official fishery associations. Of those, 22 have been given fishing rights by the district authorities, and about 10,000 ha and seven fishery associations are involved in the management of fishery conservation areas”.

The outcome of the Hanoi workshop is expected to be shared widely in the run-up to the international FAO workshop in Rome in 2013. 3

For more



www.minrol.gov.pl/eng/

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