

Advancing the Leadership of SEAFDEC in Sustainable Inland Fisheries Governance in the Southeast Asian Region

JTF 6-2 Pillar III.
Promotion of sustainable development of inland fisheries in Southeast Asia

Andi Soesmono, Dina Muthmainnah, Ni Komang Suryati, Freddy Supriyadi, Aroef Hukmanan Rais, Sevi Sawestri, Nurwanti, Toru Shimoda, and Luky Adrianto

Keywords: inland fisheries management, blue transformation, governance, sustainable fisheries, food security

This article reviews the current state of inland fisheries in Southeast Asia and highlights the role of SEAFDEC/IFRDMD in leading regional efforts toward sustainable inland fisheries governance in Southeast Asia. Drawing on the achievements of the two projects in 2020-2024 supported by the Japan Trust Fund 6-2, IFRDMD promoted the importance of inland fisheries for food security and advocated for increased policy support to ensure their long term sustainability. Furthermore, IFRDMD also played a pivotal role in enhancing technical capacity, strengthening governance mechanisms, and promoting sustainable practices for inland fisheries management

across Southeast Asia. To showcase the results of its years of work, IFRDMD organized the “Workshop of Best Practices in Inland Fisheries Management” on 23 October 2024 in Palembang, Indonesia. At this event, IFRDMD presented the key achievements of its two flagship initiatives, entitled “Management Scheme of Inland Fisheries in the Southeast Asian Region” and “Sustainable Management of Anguillid Eel Fisheries in the Southeast Asian Region.” The Workshop underscored the critical contributions of inland fisheries to food security and the broader agri-food transformation, demonstrating a collective commitment to the sector’s long-term resilience.

The Southeast Asian region boasts vast natural inland water resources, including diverse river systems, lakes, and other freshwater bodies. As illustrated in **Figure 1**, these water bodies are distributed widely across the region, from major rivers like the Mekong to smaller floodplain lakes. Alongside artificial reservoirs, these waters present significant opportunities for sustainable inland fisheries development.

Between 2018 and 2022, inland capture fisheries production in Southeast Asia reached 3,073,523 MT in 2022, about 14.2 % of total production from capture fisheries and 6.5 % of the region’s total fishery output (**Table 1**). However, data collection and reporting for inland catches remain limited, particularly regarding species breakdowns, and much rural community harvest is consumed locally

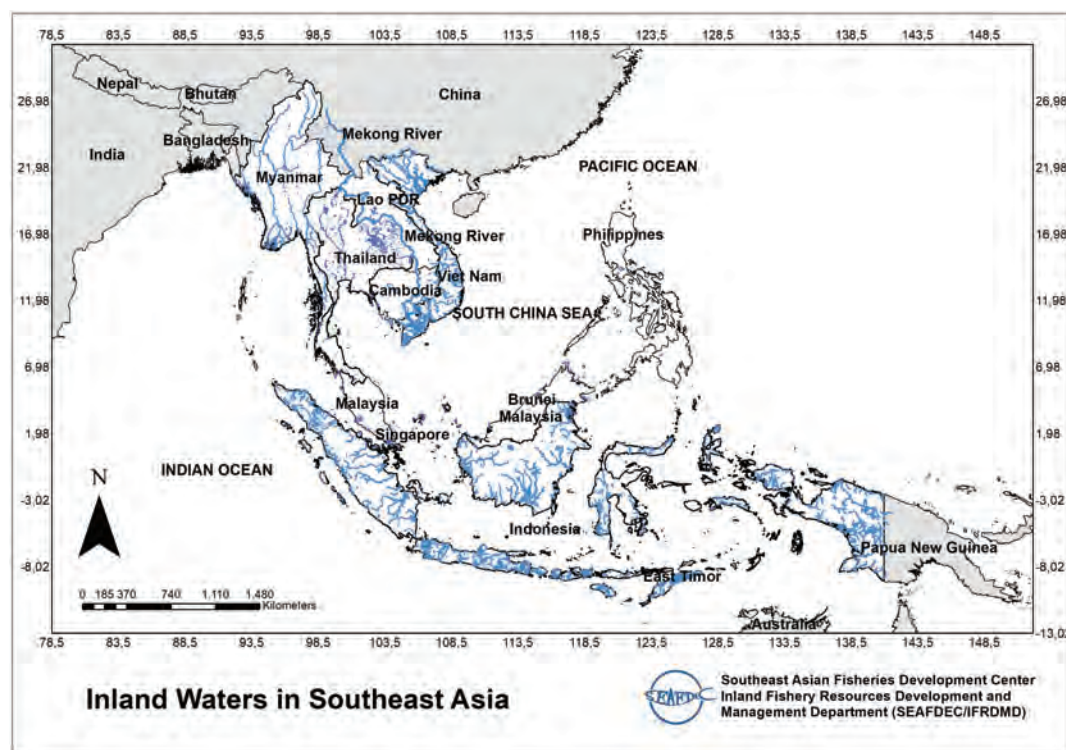


Figure 1. Distribution of inland waters in Southeast Asia (Muthmainnah *et al.*, 2019)

Table 1. Inland capture fishery production of the Southeast Asian countries in 2022 by quantity (MT) (SEAFDEC, 2025)

Country	Inland capture production (t)	Total capture production (t)	% of inland capture production to total capture production	Total fishery production (t)	% of inland capture fishery production to total fishery production
Brunei Darussalam	...	16,178	...	21,198	...
Cambodia	402,205	527,405	76.3	858,005	46.9
Indonesia	462,970	7,489,396	6.2	22,265,453	2.1
Lao PDR	72,420	72,420	100.0	217,420	33.3
Malaysia	8,189	1,316,604	0.6	1,890,286	0.4
Myanmar	1,648,552	5,046,344	32.7	6,248,422	26.4
Philippines	175,352	1,989,352	8.8	4,338,604	4.0
Singapore	...	207	...	4,952	...
Thailand	105,735	1,385,492	7.6	2,386,671	4.4
Viet Nam	198,100	3,862,600	5.1	9,031,165	2.2
Total	3,073,523	21,705,998	Ave: 14.2	45,262,176	Ave: 6.5

Table 2. Production of major species from inland capture fisheries of Southeast Asia in 2022 by quantity (MT) and value (US\$ 1,000) (SEAFDEC, 2025)

Common name	Quantity (t)	Percentage of total quantity of inland capture production (%)	Value (USD 1,000)*	Percentage of total value of inland capture production (%)	Value/quantity (USD/t)**
Misc. fishes	2,323,335	75.6	2,984,343	55.9	1,605
Striped snakehead	73,318	2.4	198,185	3.7	2,714
Nile tilapia	67,732	2.2	117,472	2.2	1,752
Tilapias <i>nei</i>	52,185	1.7	82,167	1.5	1,576
Cyprinidae	45,547	1.5	53,515	1.0	1,641
Silver barb	32,196	1.0	44,138	0.8	1,393
Climbing perch	29,895	1.0	71,072	1.3	2,384
Freshwater molluscs <i>nei</i>	26,082	0.8	5,356	0.1	205
Torpedo-shaped catfishes <i>nei</i>	23,474	0.8	40,370	0.8	1,730
Natantia decapods <i>nei</i>	20,958	0.7	171,877	3.2	8,201
Snakeskin gourami	20,929	0.7	26,802	0.5	1,281

*Data not available from Cambodia, Lao PDR and Malaysia

**Computation of price excludes corresponding quantity production from Cambodia, Lao PDR, and Malaysia

and seldom recorded. Unclassified freshwater fishes (*Osteichthyes nei*) contributed the most to inland capture fisheries in 2022, accounting for 75.6 % of the region's total production (**Table 2**). **Figure 2** shows the freshwater fish species that are economically important in Southeast Asia.

Yet, major river systems such as the Mekong face intense competition for water, driven by hydropower and irrigation projects tied to broader economic development. While such infrastructure is often unavoidable, it underscores the urgency of advocating for inland fisheries through improved data and information gathering, so that policymakers and stakeholders in other sectors fully appreciate the contribution of fisheries and can coordinate high level interventions to safeguard these

resources. At the same time, cross river infrastructure can fragment aquatic habitats and disrupt the natural “flood pulse” critical for fish spawning and larval dispersal. To mitigate these impacts and preserve biodiversity, features like fish passes or fishways can be installed to reconnect upstream, downstream, and lateral migrations.

Inland fisheries as key pillar of Blue Transformation

Complementing regional efforts, the *Blue Transformation* is a global initiative led by the United Nations Food and Agriculture Organization (FAO), aimed at sustainably feeding the world through aquatic foods, including fish, shellfish,

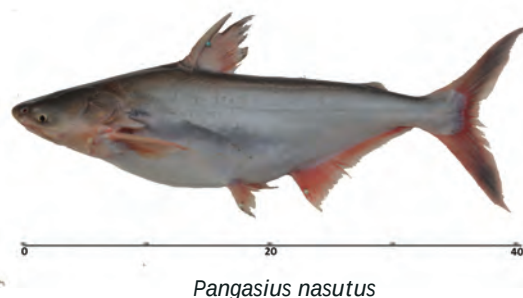
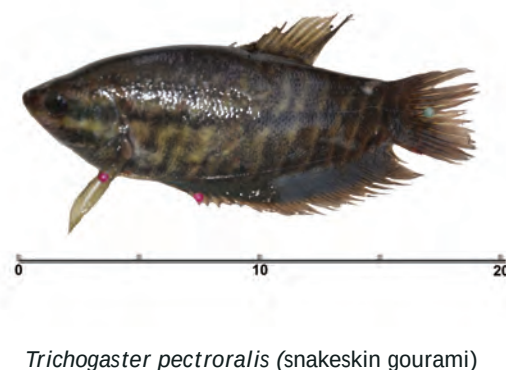
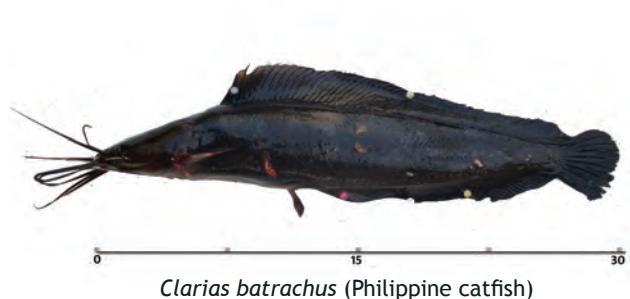


Figure 2. Economically important freshwater fish species in Southeast Asia

and algae. This initiative calls on countries, agencies, and communities to harness both traditional and innovative tools and practices to maximize the sustainable contributions of marine and inland food systems to global food security, nutrition, and affordable, healthy diets.

Inland fisheries form the bedrock of Blue Transformation in Southeast Asia by supplying vital nutrition and supporting the livelihoods of millions. Freshwater fish from rivers, lakes, floodplains, reservoirs, dams, and wetlands contribute an affordable source of high quality protein and essential micronutrients, such as omega 3 fatty acids, vitamins A and D, and minerals like calcium and phosphorus, that are often scarce in rural diets.

For many remote communities, particularly those with limited access to markets or alternative protein sources, inland

fisheries serve as a critical safety net against malnutrition. Beyond direct consumption, the sector underpins complex local economies: fishers, boat builders, net makers, processors, traders, and market vendors collectively rely on the predictable flow of inland catches for income and employment. In total, more than 600 million people across Southeast Asia engage with or depend upon inland fisheries at some point in their livelihoods.

Yet these essential social and economic benefits are increasingly under threat. Unregulated or excessive harvest, often driven by rising demand from urban centers has led to overfishing in many river basins, reducing average catch sizes and shifting species composition toward hardier, less valuable fish. Illegal, unreported, and unregulated (IUU) fishing further exacerbates stock depletion, as enforcement capacities struggle to monitor sprawling waterways.

Meanwhile, rapid habitat degradation caused by dam construction, irrigation expansion, deforestation, and land use conversion interrupt the natural flood pulse that inland fish species depend upon for spawning and juvenile development. These disturbances not only fragment crucial migratory corridors but also alter water quality and flow regimes, making traditional fishing grounds less productive. Climate change compounds these pressures: more extreme droughts and floods, shifting monsoon patterns, and rising temperatures undermine both fish recruitment and the stability of communities that harvest them.

Indonesia offers a leading example of how policy innovation and community engagement can help reverse these trends. Over the past decade, the government has introduced tighter licensing requirements and reformed its inland fisheries regulations to mandate co management arrangements, bringing local fishers and village authorities into decision making bodies. Pilot projects in Sumatra and Kalimantan have equipped community monitors with handheld data loggers and GPS enabled smartphones, enabling near real time tracking of catch volumes, species composition, and spawning migrations. Perhaps most noteworthy are recent investments in habitat reconnection: on the Kampar River in Riau Province, a series of low head fishways was installed to bypass irrigation weirs, restoring upstream access for glass eels and other migratory species. Within twelve months, glass eel recruitment upstream of the fishways increased by 20 percent, demonstrating the tangible ecological and socio economic returns of targeted infrastructure interventions.

Building on these national successes, SEAFDEC’s Inland Fishery Resources Development and Management Department (IFRDMD) has crystallized a regional Blue Transformation agenda aligned with the ASEAN Resolution and Plan of Action on Sustainable Fisheries for Food Security Toward 2030 (RES&POA 2030). First, the agenda promotes responsible aquaculture, particularly of high value species such as the Anguillid eel, to relieve pressure on wild stocks and diversify income sources. Second, it calls for enhanced data collection and monitoring frameworks, integrating community based observations with remote sensing and standardized catch reporting to inform adaptive management. Third, SEAFDEC advocates for transboundary cooperation on migratory species, recognizing that rivers such as the Mekong traverse multiple jurisdictions and require harmonized policies to protect shared stocks. Finally, the department champions ecosystem restoration through habitat connectivity measures, installing fish passes, rehabilitating riparian zones, and re flooding historical floodplains, to rebuild the natural infrastructure that underpins fisheries productivity.

Taken together, these concerted efforts underscore why inland fisheries must be elevated to a central pillar of Blue Transformation. By safeguarding freshwater ecosystems and empowering local stakeholders with tools, policies, and

incentives, Southeast Asian nations can secure the long term ecological integrity of their waterways while sustaining the nutrition and livelihoods of rural communities.

Role of SEAFDEC/IFRDMD in the sustainability of inland fisheries management in Southeast Asia

Recognizing this potential, SEAFDEC Inland Fishery Resources Development and Management Department (IFRDMD) is committed to promoting responsible inland fisheries management to ensure these waters continue to support food security and alleviate rural poverty. Through IFRDMD, SEAFDEC works closely with the ASEAN Member States to strengthen relevant policies and management frameworks based on the Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2030 (RES&POA-2030) (Box 1). These initiatives prioritize community engagement, sustainable practices, habitat restoration, and interagency

Box 1. Provisions on inland fisheries management in the Resolution and Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2030 (SEAFDEC, 2020)
POA no. 40 Establish and implement comprehensive policies and supporting legal and institutional frameworks, and adopt ecosystem approaches to inland fisheries management that devolve co-management responsibilities to the local authorities and stakeholders, strengthen the rights of communities, and promote rights-based fisheries
POA no. 41 Enhance awareness of the importance of inland fisheries for local food security, and the importance of rehabilitating and restoring habitats for migratory inland aquatic animals, restocking indigenous aquatic species to enhance productivity (with monitoring and evaluation of restocking programs) and encouraging culture-based inland fisheries, where appropriate
POA no. 42 Monitor the impacts, and mitigate the negative impacts of invasive/alien species on the inland ecosystem and biodiversity
POA no. 43 Strengthen inter-agency coordination (national/ sub-regional) on multiple-use water resources of the wetlands/ flood-plains to sustain inland fisheries, mitigate conflicts among users and also encourage better coordination to address transboundary inland fisheries management issues
POA no. 44 Promote Research and Development (R&D) to understand the migration patterns, spawning grounds and seasons, and nursery grounds of important inland aquatic animals; and ensure the sustainability of inland fisheries by maintaining health of the ecosystem, particularly the inter-connectivity of habitats and the specific management needs during the dry season
POA no. 45 Monitor and assess the impacts of the construction/ operations of man-made structures that could alter the water ways and affect migration and spawning of aquatic animals, particularly those at risk of overexploitation, and develop mitigating measures and appropriate conservation and management measures for such impacts through consultative processes that may involve collaboration with regional organizations

Box 1. Provisions on inland fisheries management in the Resolution and Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2030 (SEAFDEC, 2020) (cont'd)

POA no. 46 Encourage coordinated planning and management on the use of inland water bodies including rivers, floodplains, wetlands, etc. through (i) resource enhancement programs; (ii) inland fisheries management programs; (iii) environmental impact assessment of structures on the aquatic resources; and (iv) restocking of indigenous and/or commercially-important aquatic animals species taking into consideration concerns on genetic diversity; and build/improve the capacity of human resources and institutions in the implementation of such programs

POA no. 47. Formulate guidelines to promote the use of practical and simple indicators for inland/floodplain fisheries within the national inland fisheries management framework, to facilitate (i) timely local level fisheries management decisions with due respect to the large number of people/farmers that take part in fishing; (ii) dialogues to ensure that the inter-connectivity of fish migration path is kept as a tool for management/conservation measures; and (iii) adaptation to the effects of climate change within water bodies

collaboration to ensure the resilience of inland fisheries amidst environmental and socioeconomic challenges.

Inland waters, including rivers, lakes, floodplains, and reservoirs, among others, should be managed using a catchment or ecosystem approach that engages multiple sectors and stakeholders, and that reflects the appropriate management authority at the local, national, sub regional, or regional levels. These issues and concerns are key priorities

Box 2. Functions of SEAFDEC/IFRDMD (Pongsri *et al.*, 2019)

IFRDMD was established to serve as a center for providing guidelines for the proper development and management of inland fishery resources of the SEAFDEC Member Countries, which consist of freshwater, saline water and mixture of both, and distributed throughout the land such as rivers, lakes, floodplains, reservoirs, wetlands, estuaries, and inland saline systems. The properties of such resources are dominated by permanent, seasonal or intermittent occurrence of flooding and are used for fisheries and related livelihoods. Specifically,

IFRDMD is tasked to establish partnership with relevant organizations, such as Mekong River Commission, to mobilize and extend research results to the Member Countries; develop guidelines on basic data collection for routine monitoring activities of different types of inland habitats; provide the tools for assessment and management of inland fisheries resources that could be applied in the region; monitor the state and levels of exploitation of inland fishery resources in the region; provide scientific basis for proper development and management of inland fishery resources to the Member Countries; and serve as regional forum for cooperation and consultation on research, conservation and management of inland fishery resources among the Member Countries.

Moreover, IFRDMD also coordinates and implements programs to improve the capability of the Member Countries in the development, management, and conservation of inland fishery resources, through a master plan that covers the necessary programs of activities to be undertaken for sustainable inland fisheries.

of IFRDMD, whose activities are aligned with promoting the sustainable development of inland fisheries throughout the Southeast Asian region (**Box 2**).

As an innovative approach that combines artificial *refugia* structures with habitat restoration and community-based management to maintain ecological connectivity and enhance inland fish populations, SEAFDEC/IFRDMD and the Research Institute for Inland Fisheries and Extension (RIIFE) initiated the Special Area for Conservation and Fish *Refugia* (SPECTRA) model at Patra Tani Village, Indonesia in 2020 (**Figure 3**). Coupled with comprehensive data compilation



Figure 3. SPECTRA site in Patra Tani Village, Indonesia where innovative approaches to inland fisheries conservation are being showcased

and analysis, such measures helped sustain healthy fish populations and productive inland fisheries across the region (Pongsri *et al.*, 2015).

In 2020–2024, IFRDMD implemented two projects, entitled “Management Scheme of Inland Fisheries in the Southeast Asian Region” and “Sustainable Management of Anguillid Eel Fisheries in Southeast Asian Region” with support from the Japanese Trust Fund (JTF) 6-2. The project “Management Scheme of Inland Fisheries in the Southeast Asian Region” developed comprehensive management frameworks for inland fisheries to balance resource conservation with community needs across Southeast Asia. Moreover, the project “Sustainable Management of Anguillid Eel Fisheries in Southeast Asian Region” advanced the strategies for the sustainable harvesting and management of anguillid eels, a valuable resource in the region’s inland waters. **Table 3** and **Figure 4** illustrate the study sites of the two projects across Southeast Asia which represented a range of inland aquatic ecosystems in the region and formed the foundation for data collection, management framework development, and implementation of training and information dissemination activities to support sustainable inland fisheries management.

The key achievements of the two Projects were showcased during the “Workshop of Best Practices in Inland Fisheries Management” organized by SEAFDEC/IFRDMD in Palembang, Indonesia on 23 October 2024 (**Figure 5**). The Workshop included a session to build a common understanding and strengthen support for sustainable

Table 3. Study sites in Southeast Asia for inland fisheries management projects implemented by SEAFDEC/IFRDMD in 2020–2024

ASEAN Member States	Study sites
Cambodia	Phnom Penh, Kampong Cham, Siem Reap, Kampong Thom, Kampong Chhnang, Pursat, and Battambang
Indonesia	Aceh, West Sumatra, Riau, Bengkulu, South Sumatra, Lampung, West Java, Central Java, Yogyakarta, East Java, Bali, Central Sulawesi, South Sulawesi, East Kalimantan, North Kalimantan, and Maluku
Lao PDR	Vientiane, Nam Xouang, Nam Hum, Nam Ngum, and Vang Viang
Malaysia	Negeri Sembilan, Pahang, Putrajaya, Penang, and Sabah
Myanmar	Patheingyi, Mandalay, Naypyitaw, and Yangon
Philippines	Manila, Santa Ana, Mindanao, Cagayan, Iloilo, Tigbauan, General Santos, Davao, Cotabato, and Tagaytay
Thailand	Bangkok, Ubon Ratchathani, Pasak Chonlasit, Hat Yai, Satun, Trang, and Libong
Viet Nam	Phu Yen, Binh Dinh, Hanoi, Ho Chi Minh, and Binh Thuan

inland fisheries in Southeast Asia focusing on the Blue Transformation initiative, which promotes a sustainable and inclusive aquatic food system. The highlights of the Workshop session were the critical role of inland fisheries in bolstering food systems, linking local food security with the broader

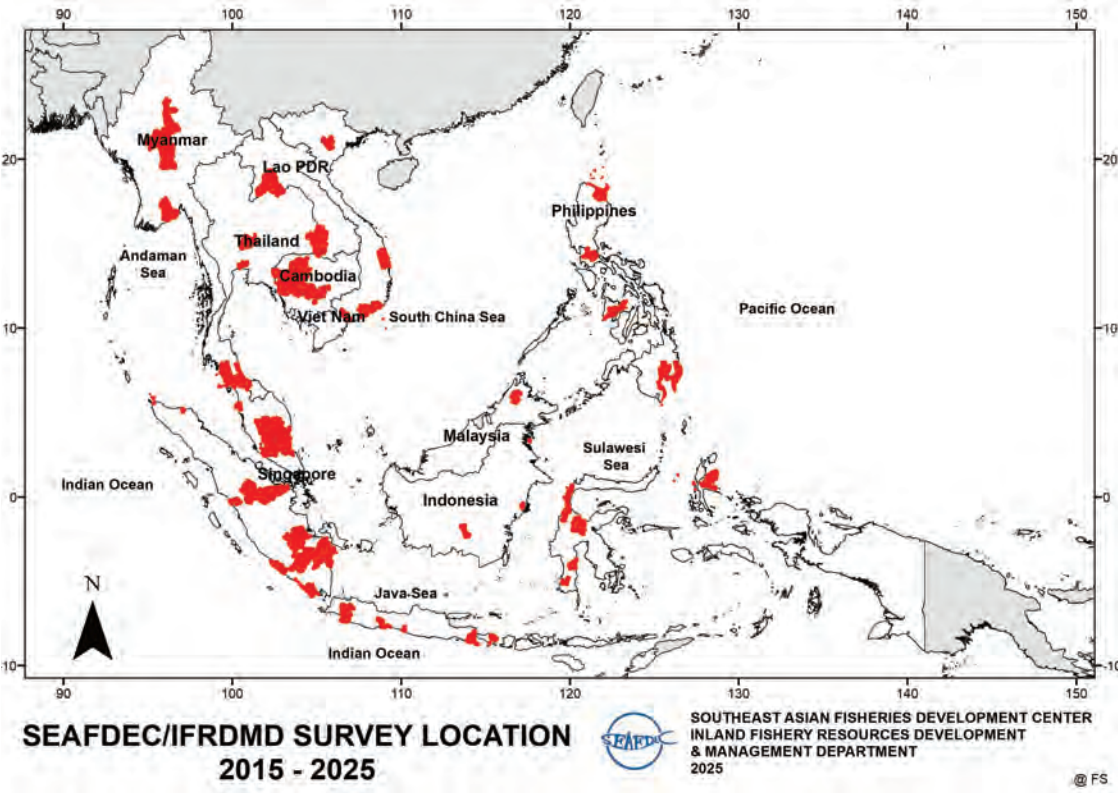


Figure 4. Study sites in Southeast Asia for inland fisheries management projects implemented by SEAFDEC/IFRDMD in 2020–2024



Figure 5. Participants in the “Workshop of Best Practices in Inland Fisheries Management,” organized by SEAFDEC/IFRDMD in Palembang, Indonesia, on 23 October 2024 which brought together representatives from the ASEAN Member States, government agencies, academia, and international organizations to share experiences and promote sustainable inland fisheries management practices

global Blue Transformation goals; potential and challenges for aquatic food security in Southeast Asia, advocating for collaborative ASEAN regional policies; and role of inland fisheries in the national food security, addressing both policy and environmental challenges in Indonesia. Finally, the Workshop underscored the need to integrate inland fisheries into regional Blue Transformation strategies, emphasizing their importance for food security, sustainable development, and climate resilience. The collaborative forum reaffirmed the commitment to sustainable inland fisheries, laying the groundwork for strategies that prioritize community well being and ecosystem health across Southeast Asia.

Transformative inland fisheries and freshwater ecosystem governance

To secure the long term sustainability and resilience of inland fisheries and freshwater ecosystems, we must adopt truly transformative governance. At the heart of this transformation lies an expanded Blue Economy framework, one that integrates marine and freshwater resources, breaks down sectoral silos, and invites all stakeholders (government agencies, private sector, communities, and researchers) to co design solutions. Within this holistic approach, inland fisheries become a key source of “blue food” and an engine for creative economy innovations that leverage ecosystem services such as nutrient cycling, flood mitigation, and cultural heritage.

Central to effective governance is the preservation of biodiversity at the ecosystem, species, and genetic levels. Healthy, connected habitats maintain the ecological processes, migrations, spawning, growth, that underpin fish productivity. When a river’s floodplain is intact, or a dam is retrofitted with fish passages, populations remain robust and fisheries yields more predictable.

Because inland systems are inherently socioecological, we must manage them as complex adaptive systems. In practice, this means mapping out the “action situations” where people and nature interact, fishers harvesting spawning runs, managers opening floodgates, communities regulating gear, and designing policies that respond to those dynamics rather than imposing one size fits all rules.

To support these multi layered interactions, we need policy integration (aligning fisheries, water, land use, and development policies) and functional integration (ensuring national, provincial, and local institutions share a common vision and data). Only then can decision makers move seamlessly between river basins, stakeholder forums, and technical working groups.

A multi incentive system complements integration by offering a menu of rewards and motivations: from top down regulations and subsidies for ecological infrastructure, to bottom up grants for community monitoring, to market based certification schemes that value sustainably caught freshwater fish. Tailoring incentives to each river’s social, economic, and ecological context encourages local ownership and innovation.

Finally, adaptive and inclusive innovation rounds out the governance toolbox. Emerging technologies (satellite monitoring, environmental DNA surveys) help managers detect shifts in fish populations. Creative economy platforms (aquaculture tourism blends, value added processing) boost incomes. Crucially, inclusive processes ensure that small scale fishers, women’s groups, and indigenous communities share equitably in both the risks and the rewards of these new approaches.

Transformative steps toward inclusive, sustainable, and resilient inland fisheries

Building on the governance foundations above, a coordinated regional strategy is essential for raising awareness, mobilizing resources, and driving tangible change in inland fisheries. This strategy hinges on four mutually reinforcing action streams:

1. **Institutional and community partnerships:** Governments, academic institutions, NGOs, and international bodies must forge formal alliances with fishing communities. Joint working groups can co design management plans, share data, and pilot innovations, creating a feedback loop between research and practice.
2. **Education and public engagement:** Embedding inland fisheries in both formal curricula (schools, universities) and informal channels (community workshops, radio programs) builds a broad-based understanding of their role in food security and ecosystem health. Complementary awareness campaigns, featuring local success stories, short documentaries, and fish festival events, help shift public attitudes and consumer choices toward sustainably sourced freshwater fish.
3. **Grassroots capacity building:** Targeted training equips local fishers with sustainable techniques (selective gear use, no take spawning zones), data collection tools (GPS enabled catch logs, mobile apps), and business skills (value added processing, cooperative marketing). Empowered communities become active stewards of their waterways rather than passive beneficiaries.
4. **Policy advocacy and resource mobilization:** Concerted lobbying at national and ASEAN forums is needed to institutionalize inland fisheries within food security, climate resilience, and rural development policies. This includes securing dedicated budget lines for ecosystem restoration (fishways, riparian reforestation), research grants for adaptive management, and incentives for private sector investment in freshwater aquaculture and processing.

Together, these steps form a roadmap that translates high level governance principles into on the ground impact. By deepening partnerships, educating stakeholders, strengthening local capacity, and embedding supportive policies, Southeast Asia can ensure that inland fisheries deliver inclusive, sustainable, and resilient benefits, for both people and the ecosystems on which they depend.

Conclusion and Way Forward

Drawing on the discussions above, the following forward looking actions are recommended:

- Strengthen the role of SEAFDEC as the leading regional platform for research, policy development, and knowledge exchange on inland fisheries governance, ecosystem restoration, and sustainable utilization.

- Enhance collaboration among governments, international bodies, academia, and local communities, with SEAFDEC coordinating actions throughout Southeast Asia.
- Prioritize investment in inland fisheries by mobilizing national and international resources to support scientific innovation, community-based management, and market development.
- Integrate inland fisheries into national development agendas, aligning with strategies on food security, climate resilience, and rural economic growth, with technical support from SEAFDEC.
- Expand education and outreach initiatives led by SEAFDEC/IFRDMD to raise the awareness of the critical role of inland fisheries in achieving Blue Transformation and sustainable agri-food systems.

This shared commitment underscores that sustainable inland fisheries management is essential not only for securing nutrition and livelihoods but also for maintaining freshwater ecosystem health and strengthening long-term socioeconomic resilience. With continued leadership, regional coordination, and technical innovation, SEAFDEC/IFRDMD remains at the forefront of transformative efforts to support the future of inland fisheries in Southeast Asia.

Acknowledgments

This article is under the projects “Management Scheme of Inland Fisheries in the Southeast Asian Region” and “Sustainable Management of Anguillid Eel Fisheries in Southeast Asian Region” implemented by the SEAFDEC Inland Fishery Resources Development and Management Department (IFRDMD) with support from the Japanese Trust Fund 6-2. *Mr. Andi Soesmono* and *Mr. Toru Shimoda* were the Lead Technical Officers of the Projects, respectively.



Mr. Andi Soesmono (left) and Mr. Toru Shimoda (right)

References

- BAPPENAS. (2023). *Indonesia blue economy roadmap 2045*. Ministry of National Development Planning/National Development Planning Agency (BAPPENAS).
- FAO. (2022). *The state of world fisheries and aquaculture 2022: Towards blue transformation*. Food and Agriculture Organization of the United Nations. Rome
- Muthmainnah, D., Makmur, S., Rais, A. H., Sawestri, S., Supriyadi, F., & Fatah, K. (2019). *The features of inland fisheries in Southeast Asia*. Editor: N.N. Wiadnyana, L. Adrianto, V.T. Sulit & A. Wibowo. IPB Press. Bogor.
- Pongsri, C., Prisantoso, B. I., Sulit, V. T. & Tongdee, N. (2015). Harnessing the Potentials of Inland Fishery Resources in Southeast Asia: Role of SEAFDEC/IFRDMD. *Fish for the People* (13)3, 19–24.
- SEAFDEC. (2020). *Resolution and Plan of Action on Sustainable Fisheries for Food Security for the ASEAN Region Towards 2030*. Southeast Asian Fisheries Development Center, Bangkok, Thailand; 23 pp.
- SEAFDEC. (2025). *Fisheries Statistics Summary 2022*. <https://www.seafdec.org/stat2022/>

About the Authors

Mr. Andi Soesmono is the Chief of SEAFDEC/IFRDMD. He is the Senior Policy Analyst of Agency of Fisheries Extension and Human Resources Development, Ministry of Marine Affairs and Fisheries, Indonesia. Email: chief@seafdec.id

Dr. Dina Muthmainnah is the Section Head of Research and Development, and the Special Departmental Coordinator of SEAFDEC/IFRDMD. She is the Senior Policy Analyst at the Research Institute for Inland Fisheries and Extension, Ministry of Marine Affairs and Fisheries, Indonesia. Email: dina.muthmainnah@seafdec.id

Ms. Ni Komang Suryati is the Unit Head of Biology and Resource Assessment of SEAFDEC/IFRDMD. She is the Junior Policy Analyst at the Research Institute for Inland Fisheries and Extension, Ministry of Marine Affairs and Fisheries, Indonesia. Email: komang_nks@yahoo.com

Mr. Freddy Supriyadi is the Unit Head of Fishery, Limnology and Resources Enhancement of SEAFDEC/IFRDMD. He is also the Junior Instructor of Research Institute for Inland Fisheries and Extension, Ministry of Marine Affairs and Fisheries, Indonesia. Email: freddy.supriyadi86@gmail.id

Mr. Aroef Hukmanan Rais is the Unit Head of Fisheries Policy and Management of SEAFDEC/IFRDMD. He is also the Junior Instructor of Research Institute for Inland Fisheries and Extension, Ministry of Marine Affairs and Fisheries, Indonesia. Email: aroefhr@gmail.com

Ms. Sevi Sawestri is the Staff of Library and Dissemination Unit of SEAFDEC/IFRDMD. She is also the Junior Instructor of Research Institute for Inland Fisheries and Extension, Ministry of Marine Affairs and Fisheries, Indonesia. Email: sawestri@yahoo.co.id

Ms. Nurwanti is the Section Head of Administration and Finance of SEAFDEC/IFRDMD and the Junior Human Resources Analyst of Research Institute for Inland Fisheries and Extension, Ministry of Marine Affairs and Fisheries, Indonesia. She is a doctoral candidate in the Public Administration program at Sriwijaya University, Palembang, Indonesia. Email: nurwanti.dewangga@gmail.com

Mr. Toru Shimoda is the Deputy Chief of SEAFDEC/IFRDMD. He belongs to the Japan Fisheries Research and Education Agency (FRA). Email: deputy_chief@seafdec.id

Dr. Luky Adrianto is a Professor of Faculty of Fisheries and Marine Sciences of IPB University, Bogor, Indonesia. Email: lukyadrianto@apps.ipb.ac.id

