Workshop Report

Stakeholder Co-Design Workshop to Validate Community-Adapted Farm Management Guidelines and Business Models for Integrated Mangrove Aquaculture (IMA) Systems in the Sundarbans

November 2026

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Acknowledgments

CGIAR Climate Action Program drives the transition to low-emission, climate-resilient, and equitable food, land, and water systems in Africa, Asia, and Latin America. It advances science-driven investments, policies, and tools across five Areas of Work, consolidating CGIAR's climate offer with harmonized data and Portfolio-wide impact.

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Collaborating Centers

Contents

Background and purpose 4

Participation and format of workshop 6

Presentations and technical sessions 7

- Inaugural session 7
- Climate-resilient aquaculture in the Indian Sundarbans 7
- Soil and water quality parameters for sustainable aquaculture 7
- Draft community-adapted farm management guidelines for IMA 8
- Draft IMA business models 8
- MRV and carbon credits 9

Stakeholder feedback session 10

Key outcomes 11

Recommendations and way forward 12

Annexures 13

- Annexure 1. Photographs of the workshop 13
- Annexure 2. Participants information 15
- Annexure 3. Program schedule of the workshop 19

Executive Summary



The CGIAR Science Program on Climate Action seeks to accelerate climate action in food, land and water systems by generating evidence, innovations and partnerships that strengthen resilience, reduce greenhouse gas emissions and enable sustainable development. Within the Program, **Area of Work 4 (AoW4): Transitions** focuses on enabling pathways towards climate-resilient, low-emission and sustainable food, land and water systems. It emphasizes moving beyond individual technologies or practices towards integrated solutions that address the economic, institutional, financial and behavioral conditions required for change. Through co-design and engagement with farmers, public agencies, private-sector actors and other stakeholders, AoW4 aims to identify practical transition pathways and mechanisms for scaling climate solutions that are economically viable, socially inclusive and responsive to local contexts.

Integrated Mangrove Aquaculture (IMA) represents a nature-based approach that combines aquaculture production with the conservation, restoration and sustainable management of mangroves within the broader production landscape. Integrating mangroves with aquaculture systems has the potential to support multiple objectives, including maintaining aquaculture productivity, improving water and soil conditions, enhancing biodiversity and ecosystem services, strengthening resilience to climate-related stresses and contributing to carbon sequestration. However, realizing these benefits requires appropriate farm and water management practices, viable business and institutional arrangements, and incentives that make adoption attractive to farmers. There is therefore a need to develop IMA models that combine sound ecological and farm-management principles with economically viable and inclusive business models. Opportunities associated with ecosystem carbon accounting and potential carbon finance may provide additional incentives, but these require credible measurement, reporting and verification (MRV), appropriate methodologies, and careful assessment of transaction costs, benefit-sharing arrangements and market requirements.

Against this background, **WorldFish** and **International Water Management Institute (IWMI)**, in collaboration with **Sasya Shyamala Krishi Vigyan Kendra (SSKVK)**, Ramakrishna Mission Vivekananda Educational and Research Institute (RKMVERI), organized a co-design workshop on September 3, 2026. The workshop brought together farmers and other relevant stakeholders to

review, validate, and refine proposed approaches for implementing IMA under local conditions. It provided a platform for bringing together technical and scientific knowledge with farmers' practical experience and stakeholder perspectives, with particular attention to the feasibility of proposed farm-management practices and business models.

Specifically, the workshop aimed to:

- **Strengthen understanding of climate-resilient aquaculture**, including soil and water quality management and the integration and management of mangroves within aquaculture systems.
- **Present and validate the draft Farm Management Guidelines for IMA systems** through discussions with farmers and other stakeholders, with particular attention to their practicality, applicability, and potential constraints under local farming conditions.
- **Review proposed inclusive business models for IMA** and assess their feasibility, potential benefits, implementation requirements and relevance to different categories of farmers and other value-chain stakeholders.
- **Introduce the concepts of ecosystem carbon accounting, MRV and carbon credits**, and discuss the potential for mangrove-related carbon benefits to contribute to future financing of IMA, subject to appropriate methodologies, verification systems, institutional arrangements and carbon-market requirements.
- **Document stakeholder experiences, concerns and recommendations** related to farm management, costs, risks, institutional arrangements and market opportunities, and use these inputs to refine the proposed Community-Adapted Farm Management Guidelines and inclusive business models.

Overall, the workshop was designed not simply as a dissemination event, but as a **co-design and validation process**. By bringing scientific evidence and proposed technical and business solutions into dialogue with local knowledge and implementation realities, the process sought to identify practical pathways for making IMA environmentally sustainable, economically viable and socially inclusive, while generating evidence on the conditions required for wider adoption and scaling.

Participation and format of workshop

Approximately 60 participants attended the workshop, including around 50 farmers practicing different forms of traditional aquaculture alongside agriculture, forestry and other livelihood activities. The participating farmers represented six community development blocks across the two districts of the Indian Sundarbans: Canning-I, Gosaba, Kultali and Patharpratima in South 24 Parganas, and Haroa and Hingalganj in North 24 Parganas. The workshop also brought together scientists and subject-matter specialists from SSKVK, along with representatives from non-governmental organizations.

The workshop provided a participatory platform to present draft technical recommendations, examine their relevance against farmers' practical experience and local conditions, identify implementation constraints, and gather suggestions for refining the proposed farm management guidelines and business models. It also enabled direct interaction between farmers and scientists and technical experts from the Farm Science Centre, allowing participants to discuss practical aquaculture challenges—including quality fish seed, feed management, disease management, and post-harvest losses—and exchange locally relevant solutions and technical advice.

The workshop was facilitated by the WorldFish team, with technical contributions from experts from WorldFish, IWMI and SSKVK. The programme comprised registration, an inaugural session, five technical presentations, two question-and-answer and stakeholder feedback sessions, and a concluding session. The format was designed to combine technical knowledge sharing with direct stakeholder interaction and feedback, ensuring that farmers' experiences and priorities were incorporated into the subsequent refinement of the IMA guidelines and inclusive business models.

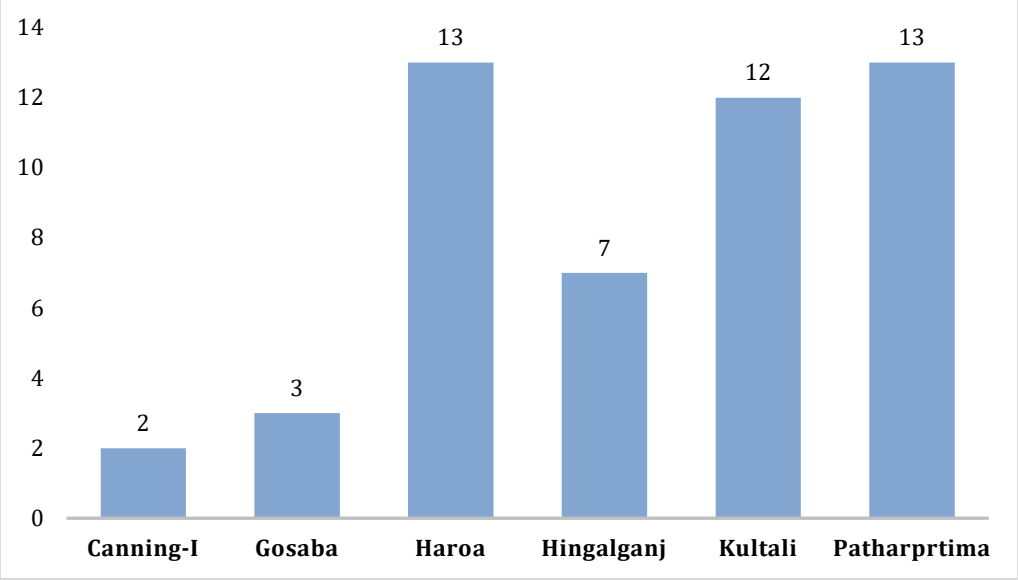

Figure 1. Farmers' participation across different blocks of the Indian Sundarbans.
Source: Author's creation.

Presentations and technical sessions

Inaugural session

The workshop commenced with a welcome address and an overview of the workshop objectives by Dr. Sourabh Kumar Dubey, Scientist, WorldFish. The opening session outlined the context of aquaculture in the Indian Sundarbans, highlighting the region's exposure to cyclones, storm surges, salinity, erosion, and other environmental stresses, as well as the importance of strengthening the resilience and sustainability of small-scale aquaculture systems. The session introduced IMA as an approach that seeks to combine aquaculture production with the conservation and functional integration of mangroves. It also emphasized the purpose of the workshop: to bring together technical knowledge and farmers' practical experience to review and validate the proposed IMA farm management guidelines and inclusive business models.

Climate-resilient aquaculture in the Indian Sundarbans

Dr. Swagat Ghosh, Senior Scientist and Head, SSKVK, delivered the first technical presentation on Climate-Resilient Aquaculture in the Indian Sundarbans. The presentation provided the broader technical context for aquaculture in the Sundarbans region and discussed the major environmental and climatic stresses affecting productivity and income in the region. It highlighted the importance of improved farm management, risk reduction, and adaptive production practices in maintaining aquaculture productivity under changing climatic and environmental conditions. The session helped establish the rationale for considering mangrove integration as part of a broader approach to climate-resilient aquaculture in the Sundarbans.

Soil and water quality parameters for sustainable aquaculture

Dr. Monidipta Saha, Subject Matter Specialist, SSKVK, presented key considerations related to soil and water quality management in brackish water aquaculture systems. The session covered the importance of maintaining appropriate water and soil conditions for pond productivity, fish health and overall farm performance. The session highlighted the importance of routinely assessing and managing key parameters to ensure good farm management practices. The session was particularly relevant to farmers, as deterioration in soil and water quality can directly affect production, increase management costs, and contribute to production risks.

Draft community-adapted farm management guidelines for IMA

Dr. Bimal Kinkar Chand, Consultant, IWMI and WorldFish, presented the draft Community-Adapted Farm Management Guidelines for Integrated Mangrove Aquaculture Systems in the Indian Sundarbans. The presentation introduced the proposed management framework and invited stakeholders to assess its suitability for field-level application.

The proposed guidelines addressed key aspects of IMA planning and management, including: site selection and assessment; farm design and hydrological considerations; mangrove area allocation and integration options; mangrove plantation patterns and species selection; nursery establishment and early-stage management; aquaculture production and pond management; feed and fish health management; harvesting and post-harvest considerations; optional agri-horticultural diversification; monitoring and farm record-keeping; and risk management.

The presentation emphasized that IMA should be designed according to local site conditions rather than applied as a uniform model. A central principle of the proposed guidelines was to maintain a productive aquaculture system while ensuring that mangroves remain healthy, functional and manageable over the long term. The subsequent discussion provided an opportunity for farmers to consider the practicality of these recommendations in relation to their own farming conditions.

Draft IMA business models

Dr. Bimal Kinkar Chand, Consultant, IWMI and WorldFish, presented the draft business models for IMA systems, focusing on the economic feasibility and practical pathways for integrating mangroves into existing or modified aquaculture systems. The presentation considered how IMA could generate multiple benefits while remaining compatible with farmers' available resources, production practices, and investment capacity.

Three potential business pathways were presented:

Model 1: Upgrading existing silvofisheries/IMA ponds - A relatively low-risk entry pathway for farmers who already maintain some form of mangrove–aquaculture integration and require improvements in farm design, management and productivity.

Model 2: Conversion of existing brackish water ponds - A potential scaling pathway for conventional brackish water aquaculture farms where selected modifications could enable the integration of mangroves while retaining productive aquaculture functions.

Model 3: IMA with agri-horticultural diversification - A diversified production model for sites where physical and environmental conditions permit the integration of compatible agricultural or horticultural activities alongside aquaculture and mangroves.

The presentation also introduced the Business Model Canvas as a framework for examining key components such as value propositions, customers and markets, key activities, resources, partners, costs and potential revenue streams. Operational arrangements required for implementing the different IMA models were also discussed.

MRV and carbon credits

Dr. Sourabh Kumar Dubey, WorldFish, delivered the final technical presentation, “Understanding MRV and Carbon Credits: How Mangroves are Measured, Verified, and Linked to Potential Income Opportunities,” on behalf of IWMI.

The session introduced participants to the emerging carbon market and the potential relevance of mangrove-associated carbon benefits to IMA systems. It explained the basic carbon-credit pathway, from carbon uptake and storage in mangrove biomass and soils to carbon assessment, monitoring, reporting, and independent verification under applicable carbon standards and mechanisms.

The presentation also introduced India's Carbon Credit Trading Scheme (CCTS) and highlighted the importance of a robust MRV system for demonstrating mangrove extent, condition and changes in carbon stocks. The four key components of MRV—monitoring, measurement, reporting and verification—were explained, including how field-based measurements and remote-sensing or satellite-based observations can complement each other in monitoring mangrove systems.

The session further outlined the potential roles of key actors in a carbon project, including farmers, NGOs or aggregators, project developers, MRV and technology providers, and independent verification bodies. Particular attention was given to the potential role of aggregators in bringing together multiple small farms or sites into larger projects, which could help reduce transaction, monitoring and verification challenges for individual smallholders.

The discussion also highlighted the importance of land status in relation to potential carbon-finance opportunities. However, the absence of relevant competent authorities limited the scope for a thorough discussion with farmers on land-status issues and their implications for eligibility and access to potential carbon revenues. Nevertheless, the session provided initial clarification on how land status could influence participation in carbon-finance mechanisms and the potential receipt of carbon-related revenues.

A key purpose of the session was to build awareness among farmers about carbon credits, carbon markets and the potential value of mangrove carbon. At the same time, the presentation clarified that carbon finance should be viewed as a potential supplementary value stream rather than an assured source of farm income. Its feasibility would depend on appropriate carbon-accounting methodologies, project eligibility, reliable MRV, independent verification, certification requirements, and prevailing market conditions.

Stakeholder feedback session

Two dedicated interactive feedback sessions were included in the workshop. The first, facilitated by Dr. Bimal Kinkar Chand, followed the presentations on the Farm Management Guidelines and IMA business models. The second, facilitated by Dr. Sourabh Kumar Dubey, followed the presentation on MRV and carbon credits.

The discussions provided farmers with an opportunity to relate the proposed IMA recommendations to their own farming experience and local conditions. Key areas of discussion included mangrove species selection, plantation methods, appropriate fish and shrimp species for stocking, management of overgrown mangroves, and maintaining an appropriate balance between mangrove coverage and aquaculture area within ponds. Participants also discussed the practical implications of the proposed farm management practices, including investment requirements, labor, production risks, and expected economic returns.

Building on these discussions, participants also considered the practicality of the proposed IMA business models under different farm conditions. Participants reviewed the main investment and operational cost requirements and provided indicative amounts for the relevant cost heads based on their field experience. The consultation did not identify a single universally preferred model. Model 1 was viewed as an immediate and practical entry point by farmers practicing silvofisheries/IMA, while Model 3 generated additional interest among farmers in Kultali because of the local experience with vegetable cultivation.

The MRV and carbon-credit discussion focused on improving farmers' understanding of carbon measurement, verification, and the potential role of carbon finance as an additional value stream for mangrove-integrated systems.

Key outcomes

- **Validation of draft community-adapted farm management guidelines:** Farmers and other stakeholders reviewed the draft IMA Farm Management Guidelines and assessed their practicality and relevance under local Sundarbans conditions, particularly based on farmers' existing aquaculture experience.
- **Linking technical and economic considerations:** Joint discussion of the Farm Management Guidelines and draft business models helped participants consider the technical requirements, investment, labor, risks, and potential returns associated with adopting and maintaining IMA systems.
- **Business model validation:** The discussion generated practical inputs on the investment and operational requirements of the proposed IMA business models. Model 1 emerged as a practical starting point, while Model 3 generated additional interest among farmers in Kultali, reflecting the local experience with vegetable cultivation.
- **Knowledge on climate-resilient aquaculture:** The workshop strengthened understanding of climate-resilient aquaculture practices and their relevance to the environmental and climatic conditions of the Indian Sundarbans.
- **Soil and water quality management in aquaculture:** The technical session highlighted the importance of soil and water quality monitoring and management for maintaining pond productivity, fish health, and reducing production risks.
- **Potential carbon finance:** Participants were introduced to carbon accounting, MRV and carbon-credit mechanisms, including the potential for mangrove-associated carbon benefits to provide an additional value stream for IMA. The session also highlighted the need for appropriate methodologies, MRV, verification, and applicable carbon-market requirements.
- **Participatory knowledge exchange:** The workshop facilitated two-way knowledge exchange between farmers and technical stakeholders. Farmers shared practical experiences and field-level challenges, while scientists, technical experts and other representatives provided technical and institutional perspectives, generating inputs for further refinement of the IMA guidelines and business models.

Recommendations and way forward

Based on the workshop objectives, technical sessions and stakeholder interactions, the following actions are proposed:

- Incorporate relevant stakeholder feedback into the next version of the IMA Community-Adapted Farm Management Guidelines, with emphasis on aquaculture and mangrove species selection and plantation design.
- Further refine the IMA business models using evidence and stakeholder feedback on initial investment, recurring costs, labor requirements, expected returns, market access, risks and management responsibilities, while considering the differing suitability of the models across farm contexts.
- Continue participatory validation and field-level testing of the guidelines and business models under different IMA and aquaculture conditions in the Sundarbans.
- Develop practical training and communication materials for farmers, producer groups and community organizations based on the validated guidelines.
- Further assess the institutional and technical requirements for carbon accounting and MRV, including the feasibility of aggregation across small farms and the requirements for verification and certification.
- Treat carbon finance as a potential supplementary revenue stream, subject to demonstrated carbon benefits, appropriate methodologies, MRV, verification and prevailing market and regulatory requirements.
- Maintain engagement with farmers, government agencies, research institutions, NGOs and other relevant actors during subsequent piloting and scaling stages to ensure that IMA systems remain technically appropriate, economically viable and socially inclusive.

Annexures

Annexure 1. Photographs of the workshop



Formal inauguration of the stakeholder co-design workshop.



Dr. Sourabh Kumar Dubey, WorldFish, introducing the workshop and outlining its objectives.



Dr. Swagat Ghosh, Senior Scientist & Head, SSKVK, delivering a presentation on climate-resilient aquaculture in the Indian Sundarbans.



Dr. Monidipta Saha, Subject Matter Specialist, SSKVK, presenting key soil and water quality considerations for sustainable aquaculture.



Dr. Sourabh Kumar Dubey, WorldFish, presenting the Sundarbans aquaculture context



Dr. Bimal Kinkar Chand, IWMI and Worldfish, presenting the draft IMA Farm Management Guidelines and proposed business models.



IMA farmer Safikul Gazi from Haroa Block sharing his field experience, supporting peer-to-peer learning among participants.



Community member Muktoram Sardar from Kultali Block sharing experience from IMA pilot implementation and mangrove conservation.





Participants engaging in the technical sessions and stakeholder discussions.



Participants engaging in the technical sessions and stakeholder discussions.



Group photograph of participants of the stakeholder co-design workshop.

Annexure 2. Participants information

Sl	Name	Gender	Designation	Address	CD Block
1	Arup Karmakar	M	Farmer	Bodra Deuli, Canning, South 24 Parganas	Canning-I
2	Biswajit Biswas	M	Farmer	Bodra Deuli, Canning, South 24 Parganas	Canning-I
3	Avik Mandal	M	Farmer	Kumirmari, Gosaba, South 24 Parganas	Gosaba
4	Manggal Mandal	M	Farmer	Kumirmari, Gosaba, South 24 Parganas	Gosaba
5	Biswajit Mondal	M	Farmer	Kalidaspur, Gosaba, South 24 Parganas	Gosaba
6	Najibul Sardar	M	Farmer	Madartala, Gopalpur, Haroa, South 24 Parganas	Haroa
7	Safikul Gazi	M	Farmer	Gopalpur, Haroa, North 24 Parganas	Haroa
8	Salauddin Baidya	M	Farmer	Kripalpur, Matia, Haroa, North 24 Parganas	Haroa
9	Zahangir Ali Mondal	M	Farmer	Matia, Haroa, North 24 Parganas	Haroa
10	Mijanur Rahaman	M	Farmer	Bireswar, Haroa, North 24 Parganas	Haroa
11	Asikbilla Molaa	M	Farmer	Pukuria, Haroa, North 24 Parganas	Haroa
12	Akramul Gazi	M	Farmer	Bireswar, Haroa, North 24 Parganas	Haroa
13	Najemul Gazi	M	Farmer	Bireswar, Haroa, North 24 Parganas	Haroa
14	Ajij Sardar	M	Farmer	Gopalpur, Haoroa, North 24 Parganas	Haroa
15	Saiful Mondal	M	Farmer	Bireswar, Haroa, North 24 Parganas	Haroa

16	Shaniyas Mondal	M	Farmer	Sardarati, Haroa, North 24 Parganas	Haroa
17	Majarul Gazi	M	Farmer	Bireswar, Haroa, North 24 Parganas	Haroa
18	Safikul Islam Gazi	M	Farmer	Bireswar, Haroa, North 24 Parganas	Haroa
19	Avijit Barman	M	Farmer	Swarupkati, Hingalganj, North 24 Parganas	Hingalganj
20	Sanjit Barman	M	Farmer	Swarupkati, Hingalganj, North 24 Parganas	Hingalganj
21	Manoranjan Baidya	M	Farmer	Swarupkati, Hingalganj, North 24 Parganas	Hingalganj
22	Arabinda Barman	M	Farmer	Swarupkati, Hingalganj, North 24 Parganas	Hingalganj
23	Monojit Barman	M	Farmer	Swarupkati, Hingalganj, North 24 Parganas	Hingalganj
24	Subhash Mandal	M	Farmer	Swarupkati, Hingalganj, North 24 Parganas	Hingalganj
25	Muktoram Sardar	M	Farmer	Dakshin Garankati, Kultali, South 24 Parganas	Kultali
26	Haridas Mondal	M	Farmer	Dakshin Garankati, Kultali, South 24 Parganas	Kultali
27	Bablu Sardar	M	Farmer	Dakshin Garankati, Kultali, South 24 Parganas	Kultali
28	Asok Sardar	M	Farmer	Dakshin Garankati, Kultali, South 24 Parganas	Kultali
29	Rahamatullya Gharami	M	Farmer	Dakshin Garankati, Kultali, South 24 Parganas	Kultali
30	Bhagirath Das	M	Farmer	Dakshin Garankati, Kultali, South 24 Parganas	Kultali
31	Gopal Ghosh	M	Farmer	Dakshin Garankati, Kultali, South 24 Parganas	Kultali

32	Sukdeb Das	M	Farmer	Dakshin Garankati, Kultali, South 24 Parganas	Kultali
33	Sanat Maiti	M	Farmer	Garankati, Kultali, South 24 Parganas	Kultali
34	Dipankar Haldar	M	Farmer	Garankati, Kultali, South 24 Parganas	Kultali
35	Basanta Ghosh	M	Farmer	Garankati, Kultali, South 24 Parganas	Kultali
36	Nimai Haldar	M	Farmer	Dakshin Garankati, Kultali, South 24 Parganas	Kultali
37	Sudip Gharami	M	Farmer	Dakshin Raipur, Patharpratima, South 24 Parganas	Patharprtima
38	Tuhin Subhra Das	M	Farmer	Keorakhali, Patharpratima, South 24 Parganas	Patharprtima
39	Santanu Choudhury	M	Farmer	Dakshin Raipur, Keorakhali, Pathar Pratima, South 24 Parganas	Patharprtima
40	Sagar Gayen	M	Farmer	Keorakhali, Patharpratima, South 24 Parganas	Patharprtima
41	Gautam Halder	M	Farmer	Keorakhali, Patharpratima, South 24 Parganas	Patharprtima
42	Sabir Hossain Gayen	M	Farmer	Keorakhali, Patharpratima, South 24 Parganas	Patharprtima
43	Gopal Chandra Das	M	Farmer	Keorakhali, Patharpratima, South 24 Parganas	Patharprtima
44	Arun Das	M	Farmer	Keorakhali, Patharpratima, South 24 Parganas	Patharprtima
45	Pratul Das	M	Farmer	Keorakhali, Patharpratima, South 24 Parganas	Patharprtima
46	Prahallad Moyra	M	Farmer	Keorakhali, Patharpratima, South 24 Parganas	Patharprtima
47	Rabindranath Halder	M	Farmer	Keorakhali, Patharpratima, South 24 Parganas	Patharprtima

48	Ratan Halder	M	Farmer	Keorakhali, Patharpratima, South 24 Parganas	Patharprtima
49	Sandip Gharami	M	Farmer	Keorakhali, Patharpratima, South 24 Parganas	Patharprtima
50	Krishnendu Dey	M	NGO	Chaltaberia Ganaunnyan Sangstha, Hingalganj, North 24 Parganas	Hingalganj
51	Arkaprava Mandal	M	Researcher	IISER Kolkata, Nadia	
52	Sudeshna Panja	F	KVK Officials	SSKVK, Sonarpur, Kolkata	
53	Tapas Mondal	M	KVK Officials	SSKVK, Sonarpur, Kolkata	
54	Monidipta Saha	M	KVK Officials	SSKVK, Sonarpur, Kolkata	
55	Abhijit Ghosh	M	KVK Officials	SSKVK, Sonarpur, Kolkata	
56	Dr. P Kundu	M	KVK Officials	SSKVK, Sonarpur, Kolkata	
57	Shibdas Mondal	M	KVK Officials	SSKVK, Sonarpur, Kolkata	
58	Dr. Swagat Ghosh	M	KVK Officials	SSKVK, Sonarpur, Kolkata	
59	Dr. Bimal Kinkar Chand	M	IWMI and WorldFish	Kolkata	
60	Dr. Sourabh Dubey	M	WorldFish	Odisha	

Annexure 3. Program schedule of the workshop

PROGRAM SCHEDULE

Time	Session	Particulars of Topic	Speaker
09:30-10:00 AM	Registration & Refreshments	Participant registration and distribution of workshop materials	-
10:00-10:15 AM	Inaugural Session	Welcome, workshop objectives, and opening remarks	Dr. Sourabh Kumar Dubey, Scientist, WorldFish
10.15-10.45 AM	Technical Session I	Climate-Resilient Aquaculture in the Indian Sundarbans	Dr. Swagat Ghosh, Senior Scientist & Head, Sasya Shyamala KVK
10:45-11:15 AM	Technical Session II	Soil and Water Quality Management for Sustainable Aquaculture in the Sundarbans	Dr. Monidipta Saha, Subject Matter Specialist, Sasya Shyamala KVK
11:15-11:30 AM		Group Photographs	
11:30-12:00 PM	IMA Guidelines	Draft Community-Adapted Farm Management Guidelines for Integrated Mangrove Aquaculture (IMA) Systems in the Indian Sundarbans	Dr. Bimal Kinkar Chand, Consultant, IWMI and WorldFish
12:00-12:30 PM	IMA Business Models	Draft Business Models for Integrated Mangrove Aquaculture (IMA) Systems in the Indian Sundarbans	Dr. Bimal Kinkar Chand, Consultant, IWMI and World Fish
12:30-01:00 PM	MRV & Carbon Finance	Understanding MRV and Carbon Credit Systems for Integrated Mangrove Aquaculture (IMA) Systems in the Indian Sundarbans	Dr. Avinandan Taron (online), Researcher, IWMI & Dr. Sourabh Kumar Dubey, Scientist, WorldFish
01:00 -02:00 PM		Lunch Break	
02:00-3:30 PM	Stakeholder Consultation & Validation	Stakeholder Feedback on Draft IMA Farm Management Guidelines and Business Models: questions and discussion; group-based review; identification of practical, technical, institutional, and market-related issues; recommendations for refinement and implementation	Facilitated by Dr. Bimal Kinkar Chand, Consultant, IWMI
3:30-4:00 PM	Concluding Session	Summary of key recommendations, agreed actions, and way forward	Dr. Sourabh Kumar Dubey, Scientist, WorldFish
		End of Workshop	



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