CEPF Final Completion and Impact Report

Organization's Legal Name:	Indian Institute for Human Settlements
Project Title:	Replicating community managed fish conservation zones in free flowing rivers
Grant Number:	CEPF-113227
Hotspot:	Multiple
Strategic Direction:	1 Multiple
Grant Amount:	$49,998.64
Project Dates:	January 01, 2023 - December 31, 2023
Date of Report:	February 27, 2024

IMPLEMENTATION PARTNERS

We had three different partners involved with the implementation of this project. Foundation for Ecological Research, Advocacy and Learning (FERAL) was involved with coordinating and conducting field-based work in Manipur. FERAL conducted field surveys to document baseline data on fish population and River health. FERAL helped in mapping of identified FCZ site in Manipur. FERAL installed rain-gauge and water level recorders in the Manipur FCZ site for the monitoring of rainfall and stream-flows in the region. Researchers from FERAL conducted capacity-building workshops and trained local people and researchers in fish biology, taxonomy, fish sampling, and collecting hydrological data. FERAL was also involved with organising regional and National level workshops on FCZ and conducting field trips in the Western Ghats.
Dr. James Haokip from Sikkim University, Gangtok is from the project site and was involved with interacting with Village Chiefs and Village Council members and obtaining free, prior and informed consent from the stakeholders for the establishment of FCZ in their villages. He organised village-level meetings and explained to the stakeholders about the objectives and importance of the project. He was also involved with drafting FCZ rules and enforcement plans. He organised the FCZ inauguration event in Manipur.
Dr. Bashida Massar from St. Anthony's College, Shillong, coordinated the field work and organised village meetings and events in Meghalaya. She was involved with obtaining free, prior and informed consent from the stakeholders for the establishment of FCZ in their villages. She organised local field trips to the previous FCZ site and conducted capacity-building workshops for the local researchers and community members along with the researchers from IIHS. She conducted baseline surveys on fish populations and helped collect river health and hydrological data. She organised the FCZ inauguration event and helped with drafting FCZ rules.

CONSERVATION IMPACTS

Planned Long-Term Impacts: 3+ years (as stated in the approved proposal)

Impact Description	Impact Summary
This project will help raise the profile of sustainable capture fisheries as an alternative use of free-flowing rivers that can support livelihoods rather than the existing paradigm of abstraction of water from rivers or regulation for hydropower.	The project has established two community-managed Fish Conservation Zones (FCZs) in two River systems in Meghalaya and Manipur, which aim to conserve fish and other aquatic biodiversity and ensure local food security. The total area of the protected zone is ~4,900 sq.m in Meghalaya and ~18,654 sq.m in Manipur. The local people are witnessing a reduction in poaching activities in the FCZ. In the FCZ areas that were established in 2021, we have seen an increase in fish population and fish sizes and people are getting larger fish downstream of FCZs. Similarly, our surveys in Mahseer sanctuaries of Meghalaya suggest capturing larger and more fish outside the protected stretch of Rivers. A similar improvement in fish population is expected at the newly established sites in the coming years and people can benefit by capturing fish downstream of the FCZ. We have presented these findings at the regional and national level workshops and have created awareness among the policymakers on the importance of protected zones and capture fisheries. With further monitoring and fish population data, we expect to raise the profile of FCZ and sustainable capture fisheries in future. Our FCZ initiatives can serve as a policy demonstration model for wider replication in India.
This project will enable learning and experience of fish conservation to be shared across two global biodiversity hotspots, Indo-Burma and the Eastern Himalayas. The dissemination of project outputs through social media and news media will attract more ecologists to study the conservation science of river fisheries.	FISHBIO, with the support of CEPF, has successfully implemented community co-managed fish conservation zones (FCZs) in freshwater ecosystems in the Indo-Burma Hotspot. A knowledge transfer between FISHBIO and Indian research organizations and communities helped establish two community-managed FCZs in the states of Manipur and Meghalaya, part of the Eastern Himalayan biodiversity hotspot, in 2021. In 2023-2024, we managed to establish two more FCZs in North East India by sharing our knowledge, learning and experiences on establishing FCZs with villagers and regional researchers. Dissemination of project results through workshops, social networks and media has helped raise awareness of FCZs among other environmentalists and policymakers. As a result, communities from other villages in northeast India and conservationists and decision-makers from other Indian states approached the project team for help in establishing similar conservation models in their regions. We hope to help establish more FCZs in different parts of India in the coming years.

Planned Short-Term Impacts: 1 to 3 years (as stated in the approved proposal)

Impact Description	Impact Summary
Baseline data on aquatic biodiversity of 2 rivers, Rymben-Borhir River in Meghalaya and Tuivang River in Manipur, covering ~10 km will be generated	We have conducted fish sampling in the Rymben-Borhir and Tuivang Rivers and recorded fish species found along the FCZ stretch of the Rivers. We could not conduct sampling outside FCZs due to high River-flows as our project period overlapped greatly with the rainy season. In Manipur FCZ, we caught a total of five fish species: Macrognathus morehensis (Nga-gul), Rasbora ornatus, Schistura sp., Barilius sp., and Puntius sp. Of these, Rasbora ornatus is a Vulnerable species as per the IUCN redlist. Most of the fish caught were smaller in size, with sizes ranging from 2 to 8 cm. In Meghalaya FCZ, we recorded three different fish species – Neolissochilus hexagonolepis (chocolate mahseer), Schistura sp., and Devario sp. The fish size ranged from 6 cm to 25 cm. Neolissochilus hexagonolepis is classified as a near threatened (NT) species by IUCN.
Fish conservation zones in two additional stretches of rivers, at Rimassar Village along Rymben-Borhir River in Meghalaya and at Sejang Theose village along Tuivang River in Manipur, will be demarcated and managed by local communities.	In Meghalaya, a Fish Conservation Zone along a 140 m stretch of Rymben River has been declared. This FCZ is managed by five village councils - Ri-massar, Nongtyngur, Lumwahniai, Nashain, and Lumpongsniang. A Fish Conservation Zone along a 750 m stretch of River Tuivang between L. Bongjoi and Moljol villages has been declared as FCZ in Manipur. FCZ committees consisting of village headmen and village council members have been formed which are managing and monitoring these FCZs.
Capacities of 4 villages, two each in Meghalaya and Manipur, will be enabled to aid conservation efforts.	Five villages in Meghalaya, Ri-massar, Nongtyngur, Lumwahniai, Nashain, and Lumpongsniang, and two villages, L. Bongjoi and Moljol, in Manipur, have established fish conservation zones in the river stretches passing through their villages. Through a series of participatory workshops and meetings, awareness of the importance of river systems, forests and the need to conserve these landscapes has been created among the villagers and local researchers and students. Through field visits to previously established FCZ sites villagers have witnessed dramatic changes in fish populations that could be achieved through the protection and conservation of a small stretch of river and they are willing to replicate these conservation action plans in their villages. They are now better informed and equipped to spread conservation awareness among other villagers. They are also trained in fish taxonomy and sampling and in monitoring stream levels and rainfall which could help them in

Impact Description	Impact Summary
	understanding stream dynamics and changes occurring in their surroundings, and conduct surveys on their own.
Capacities of about 10 local community members and local researchers will be built in the basics of fish taxonomy, biology and hydrology.	We conducted capacity-building workshops for researchers and communities at both FCZs. These workshops were aimed at improving the knowledge and skills of local researchers and communities in the basics of fish taxonomy, biology, and hydrology and enabling them to undertake fish sampling and hydrological monitoring on their own at these sites. workshop on the basics of fish taxonomy and biology was conducted in L. Bongjoi village, Manipur on 17th April 2023. This workshop was attended by around 25 villagers from L. Bongjoi and Moljol villages, three local field assistants, one field biologist and five local fishermen. In Meghalaya, a field-based hydrology monitoring workshop was conducted on 23rd April 2023. This workshop was attended by nearly 40 villagers from Ri-massar, Nongtyngur, Lumwahniai, Nashain, and Lumpongsniang villages, field assistants, local researchers and researchers from IIHS, Bengaluru.
Central government officials from the Ministry of Environment, Forestry and Climate Change, Department of Fisheries under the Ministry of Fisheries, and members of Niti Aayoga and regional officials from the Fisheries Department, Agriculture Department, and Forest departments from northeastern states of Meghalaya, Manipur, Assam, Arunachal Pradesh, Nagaland and Mizoram will be sensitised about community-managed fish conservation zones in free-flowing rivers.	We conducted two workshops, a regional workshop in Shillong, Meghalaya on October 9, 2023, and a National level workshop in Bengaluru, Karnataka on 1st and 2nd December 2023. We invited various people associated with policy and decision-making to these workshops. Nearly 35 researchers and policy-makers from North-East India and other Indian states attended these workshops and learned about the establishment, management, strengths and challenges of community-managed FCZs.

Unexpected impacts (positive or negative)?
The project was implemented in the north-eastern part of India. However, we managed to create awareness about FCZ and build appreciation for FCZ among civil society in other parts of India as well. We were approached by conservation practitioners and policymakers from the state of Maharashtra for the establishment of a similar community reserve in Maharashtra. The project team is now helping them in establishing a Fish Conservation Zone along the River Indrayani in Dehu.

PROJECT RESULTS/DELIVERABLES

Overall results of the project:
The project has successfully established two community-managed Fish Conservation Zones (FCZs) in two River systems in Meghalaya and Manipur. Fishing and other destructive activities have been prohibited in the FCZs and local people have noticed a reduction in poaching activities in the FCZ area. The total area of the protected zone in Meghalaya is ~4,900 sq.m and in Manipur is ~18,654 sq.m.

The project has also facilitated the transfer of knowledge on community-based fish conservation zones in North East India. The established FCZs could serve as a policy demonstration model for wider replication in the northeast and other parts of India. The project created awareness among nearly 35 researchers and policymakers on community-managed FCZs through two workshops organised in North East India and Bengaluru. Awareness about FCZ and appreciation for FCZ was built among civil society, researchers, and decision/policy makers through popular articles, videos and social media posts during the project period.
The project has empowered communities from 5 villages in Meghalaya and two villages in Manipur and 15 local researchers and students with knowledge and skills to monitor fish stocks and changes in river hydrology through a series of workshops. It has enhanced the capacities of communities from 5 villages in Meghalaya and two villages in Manipur and 15 local researchers in fish taxonomy, hydrology and managing fish conservation zones through capacity-building workshops.

Results for each deliverable:

Component		Deliverable		
#	**Description**	**#**	**Description**	**Results for Deliverable**
1.0	Transfer and sharing of knowledge across Fish Conservation Zones.	1.1	Report on training workshop in fish sampling techniques and stream hydrology in the two established FCZs for researchers and community representatives from newly identified sites.	Onsite training in fish sampling and monitoring and maintenance of water level recorders and raingauges were given to the village council members and other community participants at Manipur and Meghalaya. In Meghalaya, sampling protocols were established for the 'bamboo fishing rods and baits' method. In Manipur, communities were trained to use the 'drag net' method for fish sampling. We trained the researchers and communities in the use of 'photariums' for photography and identification and measuring of fish. The importance of monitoring stream levels and rainfall, and maintaining ecological flows in the streams was explained to the villagers during the workshop.
1.0	Transfer and sharing of knowledge across Fish Conservation Zones.	1.2	Report on learning from interactions with communities in villages of Meghalaya and Manipur who have successfully implemented FCZs	In March 2023, the village chiefs and village council members from the five villages, Ri-massar, Nongtyngur, and Lumwahniai visited Lapalang village where we established a Fish Conservation Zone in 2021 with the support from CEPF. The villagers walked along the FCZ stretch and were surprised to see the number and sizes of fish in these stretches. Lapalang villagers told about the success story and the recovery of the fish population in their Rivers. All the villagers from newly proposed FCZ sites expressed their interest in replicating FCZ in their area and improving the fish stock in their

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
				rivers. They learnt about the management of FCZs, the rules and regulations, and villagers' perceptions about these FCZs. In Manipur, the site visit to the FCZ was not possible due to logistical reasons. However, Dr James Haokip organised interactions between villagers from newly identified sites, L. Bongjoi and Moljol, with villagers and researchers from Khengjang and Yangoulen on 15 April 2023. The villagers discussed the concept of FCZ, its formation, rules and regulations, monitoring and patrolling. They also discussed issues of illegal fishing and the possible ways of tackling it. Villagers also learnt about different fish species that are found in the FCZ and their IUCN status.
2.0	Build capacities of local community members and researchers in basics of fish taxonomy, biology and hydrology	2.1	Report on capacity building workshops conducted in newly identified FCZs at Rimassar and Sejang Theose villages.	We conducted capacity-building workshops for researchers and communities at both FCZs. These workshops were aimed at improving the knowledge and skills of local researchers and communities in the basics of fish taxonomy, biology, and hydrology and enabling them to undertake fish sampling and hydrological monitoring on their own at these sites. A workshop on the basics of fish taxonomy and biology was conducted in L. Bongjoi village, Manipur on 17 April 2023. This workshop was attended by around 25 villagers from L. Bongjoi and Moljol villages, three local field assistants, one field biologist and five local fishermen. In Meghalaya, a field-based

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#	Description	#	Description	Results for Deliverable
				hydrology monitoring workshop was conducted on 23 April 2023. This workshop was attended by nearly 40 villagers from Ri-massar, Nongtyngur, Lumwahniai, Nashain, and Lumpongsniang villages. A field-based hydrological monitoring workshop followed the fish taxonomy workshop. We discussed the importance of monitoring stream flows and rainfall. With the participation of villagers, the project team installed an acoustic sensor-based water level recorder and a tipping bucket rain-gauge in the newly identified sites. We trained participants in generating stream profiles and demonstrated different methods of measuring stream velocity.
3.0	Understanding the influence of Mahseer "Sanctuaries" established by the Government of Meghalalaya on overall fish fauna and hydro-ecological connectivity.	3.1	Report on field visits and survey in Mahseer "Sanctuaries" of Meghalaya in comparison to FCZs.	In April 2023, the research team visited 5 different Mahseer Sanctuaries located in the Garo Hills of Meghalaya, to understand the management, protection, community participation, and fish diversity in these Sanctuaries. During this visit, we discussed with village chiefs and officials from the Fishery Department, and we decided to conduct more rigorous samplings to understand the influence of these sanctuaries on fish diversity and the livelihoods of people after the rainy season. In October 2023, we surveyed a group of small, community-based sanctuaries located within the

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				Simsang River watershed in the East Garo Hills district of Meghalaya. The purpose of the survey was to gain a preliminary sense of the dynamics between community-based fish reserves and the local freshwater biodiversity and how fish communities respond to protection measures. We surveyed a total of four sanctuaries – two established fish sanctuaries, one proposed sanctuary, and one designated fish reserve. Based on testimonies from the community representatives and our preliminary survey, we found that the protected areas contained considerably more fish species and density than adjacent areas where fishing is unrestricted.
4.0	Identification of river stretches with high conservation value in consultation with local communities.	4.1	Report and maps on on aquatic biodiversity and hydrolgic health of the river systems in the extended stretches at sites - Rimassar and Sejang Theose.	The field teams have conducted rapid field surveys to map fish diversity before the establishment of FCZ in both River systems. The field teams have also mapped the river, and the location of deep pools, riffles, and tributaries along the newly identified FCZ stretch. A rapid river health assessment has been conducted along the identified FCZ stretches. The River systems within FCZs in Meghalaya and Manipur seem relatively healthy and clear. The catchment area is dominated by forest cover. However, in Manipur, most of the vegetation is secondary forest recovering from shifting cultivation. We observed a burned forest patch about a kilometre north of the FCZ site in Manipur. It

Component		Deliverable		
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				is important to stop slash-and-burn agriculture in the catchment area to maintain the River healthy and for the success of FCZ. In both Rymben and Tuivang River, we caught very few species of fish. We also observed that the fish were of smaller size. The local fisherfolks said that earlier they used to get large-size fish but now the size of fish has reduced. They also said that they have to spend more time now to catch fish. With the establishment of FCZ, people hope to find more number of larger fish in future in both sites.
5.0	Understanding the importance of capture fishery as a source of livelihood and the cultural importance of fish.	5.1	Reports on participatory surveys .	We mostly implemented unstructured interview surveys to collect information on capture fisheries. In Meghalaya we surveyed Ri-massar and Lumwahniai villages in East Khasi Hills and in Nengmandalgre and Raptikgre Villages in East Garo Hills. In Manipur, we did interview surveys at L. Bongjoi and Khengjang Villages, in Chandel district. Our participants were village chiefs and village council members, fishermen and members of women groups. Our survey suggests that capture fishery is not practised on a commercial basis in Meghalaya and Manipur field sites. However, people fish for domestic use and it meets the protein requirements of the families. Capture fishing is an important recreational activity for the local communities.

Component		Deliverable		
#	**Description**	**#**	**Description**	**Results for Deliverable**
6.0	Establish Fish Conservation Zones in newly identified river stretches which will be managed by local communities.	6.1	Compliance report to CEPF on social safeguard policies including free, prior and informed consent with Scheduled Tribe (ST) people.	We obtained free, Prior and Informed Consent from the village chiefs and village council members prior to the implementation of the project. Formal consent letters were obtained in both English and local languages from the village chiefs. The FCZ stretch was identified in a participatory manner and villagers themselves decided on the location and size of FCZ. During the village meetings which were chaired by the village chiefs, all village council members and other stakeholders including women were made aware of the project objectives and grievance mechanism process. The contact details of PI, local partners and CEPF regional implementation team and the grant director were printed as posters and made available in the headman's house and at community centres. Our Co-PIs explained the institute's Gender-sensitivity and anti-harassment policies to the villagers during village meetings.
7.0	Build capacities of local communities to aid conservation efforts.	7.1	Report on participatory workshops with local communities on conflict resolution and protocols for enforcement and monitoring of FCZs.	Our field teams led by Dr. Bashida Massar in Meghalaya and Dr. James Haokip in Manipur conducted workshops and group discussions with local communities on FCZ conflict resolution and developing rules and enforcement protocols in the two Fish Conservation Zones (FCZs). The workshops were held in Meghalaya in October and December months. In the October workshop, Dr. Massar discussed setting up of FCZ

Component		Deliverable		
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				committee and drafting FCZ rules. The FCZ committee with inputs from the project team finalised the rules for Lumwahniai FCZ during this meeting. A second workshop for developing rules and enforcement protocols in Lumwahniai FCZ was conducted by Dr. Massar on 27 December 2023. In Manipur, soon after the identification and initial survey of the FCZ site, ethnic violence erupted in the state which prevented us from travelling to the field site. The first workshop/meeting on drafting FCZ rules was conducted over conference phone calls. The second workshop/group discussion was carried out in December 2023. Dr. James Haokip met the village headmen and FCZ committee members and discussed FCZ monitoring, penalty and enforcement. The villagers informed that two villagers are regularly patrolling the FCZ site.
6.0	Establish Fish Conservation Zones in newly identified river stretches which will be managed by local communities.	6.2	Report and map of newly established Fish Conservation Zones in the Eastern Himalayas	In Meghalaya, five village councils have agreed to establish a Fish Conservation Zone along a stretch of River Rymben that passes through their villages. These five villages are Ri-massar, Nongtyngur, Lumwahniai, Nashain, and Lumpongsniang. Through a series of village meetings Dr. Bashida Massar and her team, obtained free, prior and informed consent from all the village chiefs and village council members to establish FCZ along the Rymben River. After multiple site visits and

Component		Deliverable		
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				village meetings a new site near Lumwahniai Village was selected by all five villagers in September 2023. This new site was mapped and measured by the field team. This new site is around 140 m long, with an average width of 35 m. This new FCZ was declared on October 7, 2023. A Fish Conservation Zone along a 750 m stretch of River Tuivang has been identified between L. Bongjoi and Moljol villages in Manipur. Dr James Haokip, co-investigator from Sikkim University, has obtained free, prior and informed consent from all the village chiefs to establish FCZ along the Tuivang River. An inauguration event was held on January 3, 2024, where the village headmen from L. Bongjoi and Moljol signed the agreement letter declaring the identified site as a Fish Conservation Zone.
8.0	Build awareness of policy and decision makers on Fish Conservation Zones.	8.1	Report on workshops conducted at Bengaluru and North East and feedback from the participants.	We conducted two workshops, a regional workshop in Shillong, Meghalaya on October 9, 2023, and a National level workshop in Bengaluru, Karnataka on 1st and 2nd December 2023. These workshops aimed to build awareness among policy and decision-makers on the conservation of River Systems through community-managed FCZs. Nearly 35 researchers and policy makers attended these workshops and learned about community-managed FCZs.

Component		Deliverable		
#	Description	#	Description	Results for Deliverable
8.0	Build awareness of policy and decision makers on Fish Conservation Zones.	8.2	Popular article on FCZs in Eastern Himalayas.	Our project and its outcomes were covered by media in English and vernacular languages. We intend to write a few more popular articles about this project in the coming days.
9.0	Build appreciation for fish conservation zones in civil society	9.1	Statistics on the reach of social media campaign	Social media is a great platform for documenting and sharing the journey of the project team and the communities and the success stories of establishing FCZs with civil society from not only India but with anyone located anywhere in the world. A social media page on Instagram titled SavingFish (https://www.instagram.com/savingfish/) was created as part of the CEPF project 'Saving the Fish from Mekong to Meghalaya'. This page provides basic information about the project and FCZ and it had 112 followers. Instead of creating a new social media page, we used the same page to post our journey in establishing FCZ in newly identified sites in Meghalaya and Manipur. There are 125 people following the Instagram page SavingFish now. We have posted a total of 28 posts on this page that covers various activities carried out in Meghalaya and Manipur FCZ sites. There have been around 406 likes across all the posts on this page.
10.0	Monitoring FCZs	10.1	Report on fish population and river health.	Fish conservation zones (FCZs) aim to provide refugia for the survival and persistence of aquatic biodiversity. FCZs also aim to ensure food security for the local communities in the long run. Continuous monitoring of aquatic

Component		Deliverable		
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				resources is essential for evaluating the success of the conservation initiative and also for developing management and utilization plans for the FCZ. Establishing baseline data on fish population and stream health is a first step towards the monitoring of FCZs. We sampled the streams and documented fish species caught during these samplings. We installed water level recorders and rain gauges to monitor trends in stream levels and rainfall in the landscape. We intended to conduct two samplings, pre and post-establishment of FCZ. However, given the short duration of the project, the period was not sufficient to see any notable changes in fish species over the duration of the project.

Tools, products or methodologies that resulted from the project or contributed to the results:
During the workshops, we had the opportunity to interact with researchers working on fish and river conservation. We are creating a working group to perpetuate the Community Conservation Models in India. One of the main objectives of this group will be to monitor the River profile, dynamics and pollution levels of major Rivers in India. For this, we are working on developing telemetered devices and loggers. Implementation of this will help in the better management of our Rivers.

PORTFOLIO INDICATORS

Portfolio Indicator Number	Portfolio Indicator Description	Expected Numerical Contribution	Expected Contribution Description	Actual Numerical Contribution	Actual Contribution Description

GLOBAL INDICATORS

Protected Areas

Protected areas that have been created and/or expanded as a result of the project. Protected areas may include private or community reserves, municipal or provincial parks, or other designations where biodiversity conservation is an official management goal.

Name of Protected Area	WDPA ID*	Latitude	Longitude	Country	Original Total Size (Hectares) **	New Protected Hectares ***	Year of Legal Declaration or Expansion
Lumwahniai Fish Conservation Zone		25.20502	91.937944	India	0	1	2023
L.Bongjoi-Moljol Fish Conservation Zone		23.986785	94.130238	India	0	2	2024

*World Database of Protected Areas

**If this is a new protected area, 0 should appear in this column

*** This column excludes the original total size of the protected area.

Key Biodiversity Area Management

Key Biodiversity Areas (KBAs) under improved management—where tangible results have been achieved to support conservation—as a result of the project.

KBA Name	KBA Code	Size of KBA	Number of Hectares with Improved Management

Production Landscapes

Production landscapes with strengthened management of biodiversity as a result of the project.

A production landscape is defined as a site outside a protected area where commercial agriculture, forestry or natural product exploitation occurs.

Name of Production Landscape	Latitude	Longitude	Hectares Strengthened	Intervention

Benefits to Individuals

- **Structured Training:**

Number of Men Trained	Number of Women Trained	Topics of Training
22	9	Fish biology, Taxonomy, Fish Sampling methods, River health assessment, rainfall and stream level data collection and monitoring, basic mapping and data management.

- **Cash Benefits:**

Number of Men – Cash Benefits	Number of Women – Cash Benefits	Description of Benefits

Benefits to Communities

View the **characteristics** column below with the following corresponding codes:	View the **benefits** column below with the following corresponding codes:
1- Small Landowners	a. Increased Access to Clean Water
2- Subsistence Economy	b. Increased Food Security
3- Indigenous/ Ethnic Peoples	c. Increased Access to Energy
4- Pastoralists / Nomadic Peoples	d. Increased Access to Public Services
5- Recent Migrants	e. Increased Resilience to Climate Change
6- Urban Communities	f. Improved Land Tenure
7- Other	g. Improved Use of Traditional Knowledge
	h. Improved Decision-Making
	i. Improved Access to Ecosystem Services

Community Name	**Community Characteristics**							**Type of Benefit**								**Country**	**Number of Males Benefitting**	**Number of Females Benefitting**
	1	**2**	**3**	**4**	**5**	**6**	**7**	**a**	**b**	**c**	**d**	**e**	**f**	**g**	**h**	**i**			

Characteristics of "Other" Communities:

Policies, Laws and Regulations

View the **topics** column below with the following corresponding codes:			
A- Agriculture	E- Energy	I- Planning/Zoning	M- Tourism
B- Climate	F- Fisheries	J- Pollution	N- Transportation
C- Ecosystem Management	G- Forestry	K- Protected Areas	O- Wildlife Trade
D- Education	H- Mining and Quarrying	L- Species Protection	P- Other

No.	**Name of Law**	**Scope**	**Topics**														
			A	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**N**	**O**	**P**

"Other" Topics Addressed by the Policy, Law or Regulation:

No.	Country/ Countries	Date Enacted/ Amended	Expected impact	Action Performed to Achieve the Enactment/ Amendment

Companies Adopting Biodiversity-friendly Practices

A company is defined as a for-profit business entity. A biodiversity-friendly practice is one that conserves or uses natural resources in a sustainable manner.

Name of Company	Description of Biodiversity-Friendly Practice	Country/Countries where Practice was Adopted

Networks and Partnerships

Networks/partnerships should have some lasting benefit beyond immediate project implementation. Informal networks/partnerships are acceptable.

Name of Network/Partnership	Year Established	Country/ Countries	Established by Project?	Purpose
A working group for River Monitoring	2023	India	Yes	This is an informal group of researchers, conservation practitioners, and policymakers to discuss and address river and fish-related conservation and management issues in India. The network also aims at popularising community-managed conservation reserves

Name of Network/Partnership	Year Established	Country/ Countries	Established by Project?	Purpose
				and documenting all existing freshwater community reserves in India.

Sustainable Financing

Sustainable financing mechanisms generate funding for the long-term (generally five or more years). These include, but are not limited to, conservation trust funds, debt-for-nature swaps, payment for ecosystem services (PES) schemes, and other revenue, fee or tax schemes that generate long-term funding for conservation.

Name of Mechanism	Purpose	Date Established	Description	Country/ Countries	Project Intervention	Delivery of Funds?

Globally Threatened Species

Globally threatened species (CR, EN, VU) on the IUCN Red List of Threatened Species, benefitting from the project.

Genus	Species	Common Name (English)	Status	Intervention	Population Trend at Site
Rasbora	ornata		VU	Species habitat protection as a result of the establishment of a Fish Conservation Zone	Unknown

LESSONS LEARNED

We found that Community-managed fish conservation Zones (FCZs) are ideal for the protection and conservation of rivers and their resources in areas that are governed largely by local people. Most of NortEast India comes under tribal states, where the land and its resources are governed and managed by people. Hence, our conservation model can be replicated in other parts of NorthEast India.
During our project, we came across individuals who opposed the implementation of the project in their villages. However, such disputes were handled efficiently by the village chief and his council during the village meetings. Hence, strong leadership at the village level is essential for the success of community-managed projects. A similar lesson was learnt by the project team during the field surveys in other sanctuaries that are established in Meghalaya. The field surveys in Mahseer sanctuaries of Meghalaya also revealed that government support to the communities in the form of infrastructures, salaries to the patrolling team and recognition of community efforts by setting up awards can also boost the community efforts towards conservation.
Finally, for the successful implementation of such a conservation initiative, local partners play a crucial role. Dr Bashida Massar and Dr James Haokip were from the local communities and knew the local language and customs. This helped to a great extent in convincing the local leaders and people to implement community-managed fish reserves in their villages.

SUSTAINABILITY/REPLICATION

One of the greatest challenges is to ensure people continue to show an interest in FCZ and continue monitoring FCZs. It is essential to create awareness among the local people on the importance of forests and catchment areas for maintaining the health of Rivers and securing food resources. We have done this during the village meetings and educated people about the conservation of forests, rivers and other natural resources.
Developing a sense of 'pride' among people through recognition of their conservation efforts at regional and national levels could help greatly in sustaining these conservation initiatives. Local communities recognise the role of FCZs in ensuring food security in the long run and they are willing to conserve smaller stretches of Rivers as FCZs. Continuous, year-round financial backing from the government and other conservation organisations would be greatly beneficial for the sustained operation of such protected areas and help in replicating these models in other parts of India.
FCZs have the potential to be a part of the state and national-level fishery policies which could help in the sustainability and replicability of these models. In certain states like Karnataka and Meghalaya, Community-managed Fish Reserves have been a part of regional fishery policies. However, not many people are aware of such provisions in the local laws. Tapping into these existing provisions at policy levels and a wider publicising of FCZs can help in the replicability of the FCZ project.

ENVIRONMENTAL AND SOCIAL SAFEGUARDS/STANDARDS

ADDITIONAL COMMENTS/RECOMMENDATIONS

FCZs have the potential to be a part of the fishery policies which could help in the sustainability and applicability of these models across India. In the next phase, the project can explore the opportunities and tap into existing provisions in the laws to include FCZs in the state-level fishery policies across a few selected states and implement the project in these parts.

ADDITIONAL FUNDING

Total Amount of Additional Funding Actually Secured (USD)	
Breakdown of Additional Funding	

INFORMATION SHARING AND CEPF POLICY

CEPF is committed to transparent operations and to helping civil society groups share experiences, lessons learned and results. For more information about this project, you may contact the organization and/or individual listed below.

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