



Program Achievements: Alliance for Responsible Aquaculture (ARA)

Achievement	Date	About
500,000 fish helped	June 2021 to present	<p>We estimate to have helped 500,000 fish since the commencement of the ARA in June 2021. We helped these fish through improving water quality and/or curbing disease outbreaks at ARA ponds.</p> <p>Why it's important: These fish would have otherwise suffered from poor water quality for weeks before they would have likely died from asphyxiation or disease.</p> <p>Scrutiny: Each instance of a farm where we helped fish had to pass an impact threshold (see webpage section "How we define fish potentially helped") to make us confident in having helped these individuals. We introduced this threshold because we are not certain in our currently implemented welfare standards v1 being sufficiently impactful.</p>
71 fish farms enrolled	June 2021 to present	<p>To date, 58 farmers with a total of 71 fish farms (i.e., individual ponds) have committed to the ARA. This means that they adhere to a stocking density limit of 3,000 fish/acre and various water quality ranges that we identified as crucial for the well-being of Indian Major Carp.</p> <p>Why it's important: Farmers committing to the ARA's standard is the first step in our theory of change. Once they commit, we can help them implement welfare improvements and monitor their water quality. They also commit to not stocking above the density limit in the next production cycle, which reduces the number of fish farmed in a given pond.</p>



		<p>Images: Explaining the commitment, in conversation with new pond, Karthik meets a new ARA member</p>
<p>8 educational farmer events held</p>	<p>January 2022 to present</p>	<p>We began holding farmer events inviting internal and external speakers in January 2022. One third of the event attendees are existing ARA farmers, while two thirds are farmers who are not yet part of the ARA.</p> <p>Why it's important: The events help engage farmers more with the topic of fish welfare and practically show best management practices during training sessions at the pondside. Some of the non-ARA farmers attending join the ARA (and commit to the ARA standard) after the event.</p> <p>Images: On-field event 1 & 2; training event</p>
<p>MOU with CR Reddy College signed</p>	<p>March 2022</p>	<p>We signed an MOU with CR Reddy College of Science in Eluru, Andhra Pradesh to</p> <ul style="list-style-type: none"> - Advance fish welfare research by involving CR Reddy college students through paid internships. - Access CR Reddy's research resources (i.e., labs, literature, etc.). <p>Why it's important: Involving aquaculture and fisheries students early on helps us sensitize them to the topic of fish welfare. These students may later work in the industry and hold important offices in India's fisheries departments. Having access to a lab and scientific research facility also gives us more resources for conducting studies and credibility when presenting our study results to government officials.</p>
<p>MOU with Bhavi Aqua and Fish Farmers Producer Company Limited signed</p>	<p>March 2022</p>	<p>Bhavi Aqua and Fish Farmers Producer Company Limited joined our efforts to improve fish welfare and we signed an MOU in March 2022. Together, we are exploring traceability and marketing opportunities surrounding higher welfare fish.</p> <p>Why it's important: If we want to shift conventional production to higher welfare practices, we will need to create incentives for farmers to change their practices. One of the arguably best incentives is a shift in demand from procuring institutions. Working with Bhavi, we will explore developing a brand around higher welfare fish to</p>



		create a market for this product and ultimately shift industry demand towards higher welfare fish.
MOU with Gramodaya Trust signed	January 2021	<p>In January 2021, we partnered with Gramodaya Trust to build mutual local support for their programming and investigate improved aquaculture practices in the West Godavari district.</p> <p>Why it's important: Gramodaya Trust was our first organizational partner and introduced us to our very first ARA ponds.</p>

Notes

- At this point, the ARA mostly includes farmers. The [other members](#) are one [corporation](#), two nonprofit organizations, and one university. Our vision for the ARA is to include a variety of stakeholders in the aquaculture value chain. However, we decided to focus on farmers first because they are crucial for many of the other programs we run and because this is the only way right now we can directly help fish.
- See further program pictures [here](#).

Why would farmers want to join the ARA?

There are a couple factors that lead producers to want to transition:

- **Economic benefit:** The practices we are recommending (improved water quality and stocking densities) have some benefit for farmers: First, farmers are provided free of cost fortnightly water quality monitoring. Second, farmers broadly understand that the practices we're recommending lead to fewer diseases and lower mortality rates. We believe that stocking density reductions lead to a more stable operation for farmers: fewer fish, feed, and antimicrobials are needed (lowering expenses); less labor is needed; and farms are less likely to experience catastrophic disease outbreaks and die-offs, thus mitigating two issues that currently plague Indian aquaculture.



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- **Supportive field staff:** Our field staff live and work in the same or nearby communities as the farmers, and build up trust with them. They are there for the farmers when other people are not, such as when figuring out how to mitigate a disease outbreak.
- **Pride in doing the right thing:** Indian farmers take pride in their position as those who feed the country, and are held in high regard by Indian society. Many thus take pride in doing the right thing for animals and for society, and are interested in adopting best practices.
- **Corporate procurement:** We're currently working to establish market linkages such that corporations procure from farmers. This would incentivize farmers to transition practices, either because of the price premium corporations may pay for fish welfare or the stability of purchasing that they bring.
- **Government incentives:** Over the next few years, we hope to create government incentives (e.g., insurance subsidies solely for higher welfare farmers) that motivate farmers to transition.

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Program Achievements: Corporate Transitions

Achievement	Date	About
Fipola commits to trialing higher welfare fish.	July 2022	<p>Fipola, a large and quickly growing online and offline meat seller, committed to trialing higher welfare fish (for why we’re pursuing only trials right now, see Notes on our Corporate Strategy below).</p> <p>Why it’s important: This will be the first trial of a non-integrated, large supply chain being adopted to higher welfare fish in India (SAGE’s supply chain, mentioned below, is both small and integrated; Fipola does not operate any farms itself).</p> <p>Follow-up: We will be working extensively with Fipola, ideally in November or December [REDACTED] to successfully run the trial. This means identifying the best farms of our ARA and connecting them with Fipola, and also helping Fipola determine how to brand and price these fish [REDACTED]</p> <p>Links: Fipola’s commitment, full text and signed page of MOU. We expect to publish a blog post about this shortly.</p>
Roundtable event on fish welfare held with key corporate and other partners.	July 2022	<p>We held a roundtable event on improving fish welfare across the supply chain, to which we invited select corporations, farmers, chefs, and NGOs to get together in order to introduce them to the idea of actually making changes.</p> <p>Why it’s important: Corporations, chefs, and other key stakeholders don’t currently in India have a good understanding of what higher welfare fish is or why they should care. We’ve felt some reluctance on these points in fact when we’ve done our corporate outreach. This event helped us to overcome some of these hesitations—see the Fipola trial</p>



		<p>commitment above.</p> <p>Follow-up: After the event, the Chief Supply Officer of Captain Fresh, a large B2B seafood corporation [REDACTED] reached out (without solicitation) to our Managing Director on LinkedIn in large part it seems to signal renewed interest in working with us. Also, we are continuing to maintain contacts with the event's attendees and are considering some work with the chefs to propagate the idea of higher welfare fish being a good thing (Indian culture grants a great deal of value and respect to chefs).</p> <p>Links: See our blog post, as well as the following media pieces:</p> <ol style="list-style-type: none">i. Sakshi Newspaperii. Apodioniii. Supply chain Council of European Unioniv. Youtube videos: Video 1, Video 2, Video 3, Video 4
<p>SAGE is the first corporation in India to commit to improving fish welfare.</p>	<p>September 2021</p>	<p>SAGE, a Hyderabad-based sustainability brand that operates several cafes, committed to only selling fish that are raised in higher welfare conditions (e.g. lower densities, water quality monitoring). SAGE operates their own farm, which means that they have unusual levels of control for an Indian corporation over the farming practices.</p> <p>Scale: SAGE is very small, so we expect that this commitment will only affect at most hundreds of fish per year.</p> <p>Why it's important: Though it is small, this is the first time such a commitment for fish took place in India. This establishes some precedent to share with other corporations (e.g. we hosted our recent roundtable at SAGE's farm and could showcase the improvements SAGE had made).</p> <p>Follow-up: [REDACTED] [REDACTED] [REDACTED] they have readily allowed us continued</p>



		<p>access to their farm and and have communicated with us; they have maintained ultra-low stocking densities [REDACTED] and they spoke glowingly at our roundtable about how well the fish were doing and how [REDACTED] they noticed an excellent taste improvement from the previous fish they had bought.</p> <p>Links: See our blog post, which includes links to SAGE's instagram post and the full commitment.</p>
SAGE trials more humane slaughter practices.	February 2022	<p>As part of their commitment and their positive relationship with us, SAGE trialed pre-slaughter stunning on their first batch of 24 pangasius fish.</p> <p>Scale: 24 fish had less horrific deaths, but we hope and expect that this process will be implemented to reduce the suffering of the thousands of fish we expect SAGE to farm over the coming years.</p> <p>Why it's important: This is the first time we're aware of more humane slaughter practices being implemented in India.</p> <p>Follow-up: We are working with SAGE to ensure that all their future fish are also stunned, training them how to do it so we will no longer need to be involved.</p> <p>Links: See the article in The Fish Site as well as our blog post.</p>

Notes

1. **General Corporate Outreach Strategy:** Our high-level corporate outreach process is as follows:
 - a. Identify promising corporations.
 - b. Outreach to them to assess interest.
 - c. If there is sufficient interest, get them to sign MOU to run trial of them selling higher welfare fish.
 - d. Run trial with corporation.
 - e. If trial goes well, get them to sign multi-year commitment (though still some uncertainty here about whether we'll be able to ask that their whole supply or just part be transitioned, etc.).



- f. Work with corporation to ensure implementation and compliance.
- 2. **Reason for trial runs:** We think running small-scale trial runs with these corporations is a necessary step because, as higher welfare fish has never been done before in India, there's still many uncertainties surrounding it on our end (e.g. how impactful are these improvements really—see our standard setting work; what the price changes, if any, will be; will there be a taste difference; will consumers actually value higher welfare; how much can corporations actually change conditions on farms that they hardly control; etc.). We think a trial run is a good way to resolve many of these uncertainties, and also to build a company's confidence in us and our concepts so that we might be able to get a stronger agreement out of them.
- 3. **Main challenge with corporate work: Lack of vertical integration:** This is a key difference between economies like India and economies like the US: Here, the supply chains for many industries, seafood very much included, are not at all integrated. This means that there's often several layers of middlemen between the farmer and the consumer, and companies have relatively less influence over how the animals were farmed. Part of the way we're overcoming this challenge is just to get corporations and their supplying middlemen to source from farms we already know are higher welfare (our ARA farms), but we also intend to figure out how we can get companies to influence more standards on the ground without us having to work one-on-one with each farmer.
- 4. **We are deliberately going slow with corporate work right now:** This is for several reasons:
 - a. It is generally unprecedented and we want to get it right (see reason #2).
 - b. We want to release our version 2 welfare standard before we get too involved with too many corporate supply chains, because we're less confident in our version 1 standard.
 - c. Some staffing changes on our end.
- 5. [REDACTED]



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Program Achievements: China

Achievement	Date	About
Aquatic Animal Welfare Forum co-hosted at the World Conference on Farm Animal Welfare	April 2022	<p>The World Conference on Farm Animal Welfare (WCAFAW) is an annual event hosted by the Food and Agricultural Organization of the United Nations (FAO) and the China Association for the Promotion of International Agricultural Cooperation (CAPIAC). Last year, the event organizer, the International Cooperation Committee on Animal Welfare (ICCAW), invited us to expand its program by adding an Aquatic Animal Welfare Forum—the first of its kind at this conference. We took the lead in organizing this forum and partnered with the RSPCA, who has long been active in China, to organize this historic forum. The event was live-streamed and at its peak 14,000 people were watching.</p> <p>Why it's important: China is home to almost 70% of the world's aquaculture, with an estimated 23 to 76 billion individual fish living on Chinese farms annually.</p> <p>[REDACTED] The Forum aimed at introducing this topic to a broad audience. We feel content about the outcome of the Forum, given its large attendance and engaging speakers.</p> <p>Other links: In preparation for the conference, ICCAW published several articles and interviews on aquatic animal welfare:</p> <ul style="list-style-type: none">- Article 1: Popular Science Aquatic Animal Welfare–The Future of Aquaculture- Article 2: Famous Chinese and foreign experts talk about aquatic animal welfare
Video short on fish	March 2022	In collaboration with ICCAW, we facilitated the production of the first-ever (as far



welfare released in China for the first time		<p>as we are aware) video short on fish welfare in China. The video shows interviews with our Fish Welfare Specialist, Dr. Marco Cerqueira, and our partner and Chinese Fish Welfare Expert, Prof. Lu.</p> <p>Why it's important: This video is in line with our goal to introduce the topic of fish welfare to a broader Chinese audience and engage local scientists in the discourse surrounding this topic.</p>
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Project Milestones

These are further away than the above achievements from actually reducing the suffering of fishes, but we still believe they are significant:

Literature review on fish welfare in China began	July 2022	<p>In order to bring light to the state of “welfare” research in Chinese academia, we started a literature review exploring existing Chinese publications in this space. The literature review will be done in cooperation with researchers from the Shanghai Ocean University.</p> <p>Why it's important: [REDACTED] here is a large number of Chinese (Cantonese) papers addressing the issue of fish welfare that, to our knowledge, no one has comprehensively explored yet. We want to get a better idea of where fish welfare science in China stands in order to a) identify promising welfare interventions, and b) determine what additional research, if any, is needed.</p>
One and three year strategies finalized	February-July 2022	After the successful organization of the WCFAW (see above), we saw the need for a rigorous strategy-planning process to evaluate our options for work in China. Throughout Q1 and Q2, we have spoken with local animal welfare advocates and



		<p>external advisors to determine our One and Three Year Plans. The goals of the plans reflect what we think are the most tractable solutions for helping fish in China:</p> <ul style="list-style-type: none"> • Build a strong partnership with ICCAW to raise awareness and start building local welfare standards for aquatic animals. • Conduct a literature review and priority species research in cooperation with Chinese academics. • Place aquatic animal welfare into the landscape of Chinese animal advocacy by working with local advocacy organizations. • Conduct (a) field visit(s) to identify fish farmers' understanding of welfare and the bottlenecks for aquaculture stakeholders in improving welfare. <p>Also see our blog post announcing these plans.</p>
Lu Chen, China Specialist onboarded	April 2021	<p>Lu Chen joined us as an intern in April 2021 while working on her PhD at the Freie Universität Berlin. She has since finished her PhD in fisheries anthropology and joined our team full-time in April 2022. Lu brings strong relationship-building skills and has enabled much of our work with ICCAW by tending this partnership.</p> <p>Why it's important: We strongly believe in the power of local people because they know best how to bring about change in their country. Lu spent her entire life before her PhD in China and has a deep knowledge of Chinese values and culture. Her ability to speak with our local partners in Chinese has proven extremely valuable: Shortly after onboarding Lu, our longer-term partner ICCAW invited us to co-host a conference forum with them. Particularly in a relationship-based country like China, having a Chinese national managing this program is essential.</p>
Stakeholders met	January 2021 to present	<p>To date, we have met 28 stakeholders in China, including representatives from academia, industry, nonprofit organizations, and certification schemes.</p> <p>Why it's important: With each new relationship built we learn more about the local landscape and refine our strategy on how to improve the lives of fish in</p>



		China. We also believe that a big part of our work is to build capacity for future advocacy work in China and connecting with local organizations is a crucial part of this.
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Unlike our India work, which is bottom-up, on-the-ground, and very focused on rigorously testing and evaluating particular welfare improvements on farms, our China work is much higher level, less on-the-ground, and much more reliant on local partners. If our India work is more similar to organizations that operate in the global poverty space, our China work is more similar to organizations that seek to shape institutional norms and national policies.

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Program Achievements: Philippines

Achievement	Date	About
Local farmer engagement program completed	January to June 2022	<p>We ran a farmer engagement project in Carmen, Cebu—a community our surveys in January and February identified as promising to work in, mainly for having serious yet solvable welfare issues. The main objectives of this project were to a) learn what it will take to effectively help fish on the ground in the PH, b) set a positive precedent there for future fish welfare work, and c) reduce the suffering of some fish.</p> <p>Key outcomes achieved:</p> <h3>Fish Helped</h3> <p>We potentially improved the lives of 10,000 fish through direct farmer engagement work, and may improve the lives of an additional 100,000 through the enforced implementation of the Municipal Ordinance (see <i>Improved Practices</i> below).</p> <h3>Improved Practices</h3> <ul style="list-style-type: none">• Community level: Through FWI's intervention, the local government is working to enforce the implementation of the Municipal Fisheries Management Ordinance, particularly¹:<ul style="list-style-type: none">○ 15-meter spacing between cages○ Reduced number of active farms in the bay• Individual level:<ul style="list-style-type: none">○ 1 farmer reducing stocking densities from 150 fish/m³ to 37 fish/m³.

¹ As of this writing, the extent to which the ordinance will be enforced is unclear. We will post an update on our site about this in early 2023.



		<ul style="list-style-type: none"> ○ 5 farmers began observing their fish during hand-feeding to adjust feeding amount and minimize feed waste that would lead to poorer water quality. ○ We introduced the practice of record keeping (an important aspect of many welfare improvements) to farmers, 3 of whom have adopted it. ○ 2 farmers agreed to more frequent cage cleaning. Implementation, as it often does in these contexts though, remains uncertain. <p>Stakeholder Engagement</p> <ul style="list-style-type: none"> ● Industry Regulation: Through FWI's intervention, the local government is now requiring fish cage operators to undergo training on best management practices, a policy that was previously unobserved. Farmers who obtained a certificate by attending FWI's seminar on Fish Cage Operation and Management are eligible for a fish farming license. This seminar was hosted in direct partnership with the local government, which fully funded the food, drinks, and equipment for the 2-day event. ● Collaboration: In partnership with the Municipal Agriculture Office of Carmen, Cebu, we presented in an Agri-Fishery Stakeholder Forum attended by over 60 participants. ● Cleaner Waters: After discussions with FWI in town hall meetings, polluting boat shops committed to properly managing their effluent waste. <p>For more information and pictures, see our webpage The Philippines in Focus.</p>
Completed internship program	March to December 2021	<p>We ran a part-time internship program, which achieved the following outcomes (roughly in descending order of significance):</p> <ol style="list-style-type: none"> 1. Capacity building: Trained Chiaw, who later became our Program Manager for the farmer engagement project. In large part because of her work with us, Chiaw, a talented Filipino/Taiwanese person, has now changed her career trajectory to focus on alleviating aquatic animal suffering (she is currently getting her Master's in Animal Studies at NYU). <ol style="list-style-type: none"> a. We also supported the skill development of another promising intern, Pia, and worked with several talented volunteers.



		<ol style="list-style-type: none">2. Ran webinar with government stakeholders: We conducted a webinar to highlight the importance of fish welfare. The 250 attendees included representatives from the Bureau of Fisheries and Aquatic Resources, Bureau of Animal Industry, and academic institutions such as the University of the Philippines.3. Learned more about local conditions: We interviewed several new farmers that we thought might be interested in working with us later (unfortunately, none of these particular partnerships later materialized).
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Notes on our Philippines Strategy

1. **Currently on pause:** We have currently put our Philippines project on pause, primarily for the following reasons:
 - a. We feel that we will be able to have a greater impact by focusing more of our resources, particularly our higher level management, on our work in India. We want to ensure that our India work has succeeded (right now it is still more in a learning stage than a scale-up stage) before we focus on projects more seriously elsewhere (China, given its strategic importance and value of maintaining relationships, is an exception here).
 - b. Chiaw, our PH Program Manager, is leaving to do her Master's in Animal Studies at NYU (however, as we discussed though above, this is probably a good outcome for the world).
2. **Broader vision of helping fish in lower income Asian farms:** Our farmer engagement project in the Philippines showed us that, though the species and farming systems used there are vastly different than those in India, the welfare issues faced by fish bore many similarities: Stocking densities are often too high, disease and high mortality rates are common, and feeding is conducted in a way that leads to further issues (specifically, how much feed that goes into the farm is not properly measured). These similarities hint at a broader vision for helping fish in such operations: As we determine how to solve these issues effectively and at scale, we can likely use some of the same techniques (tailored to local contexts of course) to help fish across the region. For instance, one idea we have here is developing an app for farmers that tells them how much feed to give, based on fish weight, water quality data, and other inputs.



Program Achievements: Standard Setting

Achievement	Date	About
Identified dissolved oxygen as the most promising welfare problem for FWI to focus on.	February 2022	<p>Informed by the 6SQUID methodology and data (e.g.) from the Alliance for Responsible Aquaculture, we created a list of all the key welfare issues facing Indian major carp in Andhra Pradesh. From this, after consultation with our team and external experts, we decided that dissolved oxygen was the most promising from both an impact and tractability perspective (see our scoring and reasons for picking dissolved oxygen)</p> <p>Why it's important: Determining the most important welfare issues allows our team to focus on the issues that have the greatest chance of reducing the most fish suffering.</p>
Completed stakeholder surveys on change mechanisms for dissolved oxygen and identified a shortlist.	March 2022	<p>After identifying dissolved oxygen as the most important welfare issue, we created a longlist of change mechanisms that can promote better dissolved oxygen levels. From this, we conducted a survey of farmers and our ground staff to create a shortlist based on what they believed would be impactful and implementable.</p> <p>Why it's important: The opinions of those with a better understanding of the facts on the ground allows us to avoid idealistic and impractical standards.</p>
Mapped the causal chain of dissolved oxygen issues and identified poor feed management as the principal cause.	April 2022	<p>Our team evaluated various potential causes of poor dissolved oxygen and compared them to data from the Alliance for Responsible Aquaculture. From there, after consultation with experts, we created a hypothetical causal chain that identified feed as the primary cause of poor dissolved oxygen. This causal chain functions under the belief that poor dissolved oxygen is being caused by excess phytoplankton in the pond (who unbalance dissolved oxygen), which in turn are being promoted by the high nutrient levels caused by poor feed management. We also produced crucial</p>



		<p>considerations for each step of the causal chain, which built the foundations for our future research.</p> <p>Why it's important: Earthen pond systems form an entire complex ecosystem of planktons, bacteria, and wildlife, as well as the fish stocked. Properly building standards for farmed Indian major carp, therefore, requires an understanding of the full causal chain that creates welfare problems.</p>
Completed an in-depth observational research project to test the hypothesis that feed is the primary cause of poor dissolved oxygen.	June 2022	<p>In order to start to stress test our hypothesis that poor feed management is causing poor dissolved oxygen, we conducted three weeks of intensive measurements in two ponds. As of this writing, we are still waiting for the final conclusions from our data analyst, though the findings were used to create an updated understanding of the relationship between phytoplankton and pond color.</p> <p>Why it's important: This was a first step toward validating the causal chain that forms the underlying assumption of excess feed reduction as a change mechanism for improving fish welfare (see our upcoming test).</p>
Completed a pretest with one farmer to refine the methodology for our full feed quantity efficacy test.	July 2022	<p>In order to evaluate the protocol for our upcoming test on reducing excess feeding, we worked with one farmer over three weeks to trial our methodology.</p> <p>Why it's important: This has helped to assess the trajectory we are on and set us up for a full test in the upcoming months, which we expect to be a critical step for deciding version 2 of our welfare standard.</p>

Notes

Due to the lack of precedent for fish welfare work in earthen pond systems for Indian major carp, FWI has found that there is significant upfront work to be done in evaluating different improvements. As such, more of our time and energy has been



diverted into field research than we initially expected. We hope though that this time will pay dividends, both through giving FWI a strong foundation for our welfare standards and through the foundational research that other organizations can use in the future.

We hope that our work will contribute to a day where there are as established welfare improvements for carp in India as there are for chickens in the US and Europe.



Program Achievements: Government Outreach (India)


Achievement	Date	About
Partnership signed with the Andhra Pradesh Fisheries Department	August 2022	<p>Just the week prior to submitting this to ACE, we were recognized¹ by the Andhra Pradesh Fisheries Department as an NGO working with fish farmers in the region. All the recognised (currently 32) non-profits receive draft policies from the state government for feedback before implementation</p> <p>Other evidence of the Fisheries Department's support of FWI India:</p> <ul style="list-style-type: none">• The Assistant Director of Fisheries from a prominent aquaculture region named Eluru urged farmers to adopt higher welfare practices at a training event conducted for farmers.• The regional head of the National Bank for Agriculture and Rural Development (NABARD) advocated for decreasing suffering in aquaculture and promoting chemical free production at an FWI training event for farmers. <p>Why it's important: Andhra Pradesh is a state that is home to about 37% of the country's farmed fish, making it the largest producer of fish in the country. The state's Fisheries Department thus has the potential to improve the lives of billions of fish.</p> <p>[REDACTED]</p>

¹ Note that this agreement was made by the Eluru District Fisheries Department on behalf of the Andhra Pradesh (state) Fisheries Department, which is the norm for such partnerships.






Minor Achievements / Project Milestones

These are further away than the AP Fisheries Department partnership above from actually reducing the suffering of fishes, but we still believe they are significant as they allow us to build working relationships with prominent government officials:

<p>Submitted report on "Live Fish Sales at the Ghazipur Fish Market Delhi" to the Development Department, Government of the National Capital Territory of Delhi</p>	<p>June 2022</p>	<p>We were invited by the Development Commissioner/Secretary of the Development Department, Government of the National Capital Territory of Delhi, to visit the Ghazipur Fish Market, a large market where live fish are sold, and make a report of our observations. The Assistant Secretary of the Ghazipur Fish Market accompanied FWI on this visit in September 2021.</p> <p>Our report covered the ground realities observed at the Ghazipur fish market and our recommendations included improvements in water quality, stocking densities, infrastructure, and slaughter/stunning.</p> 
<p>Submitted comments and objections on "The Draft Indian Marine Fisheries Bill 2021" to the Indian Ministry of Fisheries</p>	<p>June 2022</p>	<p>We met with the Joint Secretary (Marine Fisheries & CVO) of the Fisheries Department, Government of India and submitted comments and objections on "The Draft Indian Marine Fisheries Bill 2021" to the Ministry of Fisheries, Animal Husbandry and Dairying, Government of India.</p> <p>Some of the comments we made included:</p>



		<ul style="list-style-type: none">• Objecting to parts that promoted recreational fishing. For this we relied on India’s legal framework that protects animals from unnecessary pain and cruelty under The Prevention of Cruelty to Animals Act, 1960; The Constitution of India, and judgments of The Supreme Court of India.• Requesting a ban on bottom trawling and other particularly harmful methods of fishing.• Requesting increased efforts to reduce fish and marine mammals killed as bycatch. <p>Why it’s important: Although FWI focuses on aquaculture, we also stand against the abuse and exploitation of ocean-caught fish. Our comments, we believe, slightly increase the likelihood of the Fisheries Department adopting policies that are less harmful for such individuals.</p>
		



Modes of Government Collaboration

Our government work is still at an early stage and we are testing out the potential of various avenues to scale up our welfare improvements. Our two main avenues are listed below:

Knowledge Partnerships

As knowledge partners, we will soon be advising government entities on policy drafts, and in some cases will be part of policy change deliberations.

- We recently became listed knowledge partners with the Andhra Pradesh state Fisheries Department—see more above.

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Implementation Partnerships

As implementation partners, we or our partners would be funded by the government to take up projects that improve the welfare of fishes. Policy implementation is often difficult in India, but there is a [strong precedent](#) of nonprofits and government entities working together for improved implementation. As the organization advocating for welfare-oriented regulation and diversion of subsidies to only higher welfare practitioners, FWI could be positioned to partner with government entities to implement fish welfare projects successfully. We continue to explore this avenue, although its exploration is at an earlier stage than that of being knowledge partners.