Department for Environment Food & Rural Affairs





Darwin Initiative Main: Annual Report

To be completed with reference to the "Project Reporting Information Note": (<u>https://www.darwininitiative.org.uk/resources/information-notes/</u>)

It is expected that this report will be a maximum of 20 pages in length, excluding annexes)

Submission Deadline: 30th April 2024

Submit to: <u>BCF-Reports@niras.com</u> including your project ref in the subject line

Project reference	28-021
Project title	Improving coastal resilience and ecosystem services through biodiversity restoration (Philippines)
Country/ies	Philippines
Lead Partner	International Institute of Rural Reconstruction (IIRR)
Project partner(s)	Zoological Society of London (ZSL)
Darwin Initiative grant value	Julian Gonsalves, Ph.D.
Start/end dates of project	September 1, 2021 – August 31, 2024
Reporting period (e.g. Apr 2023 – Mar 2024) and number (e.g. Annual Report 1, 2, 3)	Apr 2023 - Mar 2024, Annual Report 3
Project Leader name	Julian Gonsalves, Ph.D.
Project website/blog/social media	https://www.facebook.com/iirrasia/
Report author(s) and date	April 28, 2024

Darwin Initiative Project Information

1. Project summary

The project Improving coastal resilience and ecosystem services through biodiversity restoration, also known by its acronym "ICORE," seeks to demonstrate how a small municipality can restore and improve coastal ecological resilience and reduce poverty. Mangrove and coastal ecosystems are being rehabilitated by creating more bio-diverse and multi-strata bio-shields, to support livelihoods and protect local communities from climate change risks. To reduce habitat destruction, fishing communities are being assisted to build their natural asset base in making shifts towards climate resilient agriculture, gender-sensitive and agro-biodiversity rich practices. The local government, universities, local schools, and the community are key actors and partners in these coastal ecosystems enriching efforts.

The project was designed to address five threats to biodiversity and society: a) loss of agricultural species and genetic diversity, b) illegal cutting of coastal tree species; c) unregulated coastal development, d) siltation and sedimentation, and e) climate change risks. By addressing these key threats, the project will contribute to the improvement of the condition of the following ecosystems: a) mangroves, b) seagrass beds, c) coastal saline rainfed lowlands, and d) coconut-based agro-ecosystems particularly family farms and homesteads. In the process, the project will help improve the quality of life and the resilience of the community with preferential options for women and youth.

The project rationale takes root in the fact that despite being one of the 17 megadiverse countries, poverty remains high in rural areas, particularly among fisherfolks and rural farmers. Guinayangan in the province of Quezon is a third-class municipality composed of 54 barangays (villages) with 45,155 people and a poverty incidence of 24.55% (2015 census). The project works in 14 coastal barangays within the municipality (Figure 1).



Municipality of Guinayangan

2. Project stakeholders/ partners

Partnering with the municipal local government unit (MLGU, or LGU) and people's organizations (POs) has been the cornerstone of this project. Through its activities, the project is already contributing towards improving natural resource management plans and processes at the municipal level. This has included study programs and visits to other municipalities in the country, the conduct of trainings and workshops for municipal staff, and community members (on environmental law, ecotourism site assessment, coastal monitoring and patrolling, planning and management of local conservation areas (LCAs) and seasonal planning). Activities spearheaded by civil society groups such as coastal cleanups and mangrove maintenance, highlighting the project's contribution to increasing awareness on the importance of mangroves among local government officials and the wider public.

The project also partners with national research institutions, universities, and individual consultants. These include the Cavite State University (CvSU) faculty (beekeeping and small livestock outcome studies), the University of Philippines-Institute of Plant Breeding (field gene banks of banana and fruit trees, as well as the designation of traditional biodiversity custodians in coastal areas), and the Bureau of Fisheries and Aquatic Resources (BFAR) (site assessments and water quality surveys for oyster farming). The IIRR has worked with the National Swine and Poultry Research Institute in the promotion of native breeds of livestock. In the remaining months of the project, a wider engagement of social scientists is planned for assessments of gender, biodiversity, and poverty reduction outcomes of various interventions.

3. Project progress

3.1 **Progress in carrying out project Activities**

Output 1: Total of 330 hectares of coastal areas with sparse mangrove cover rehabilitated, protected, and sustainably managed through community-led initiatives.

1.6.2. Beach forest outplanting by community groups has been conducted, and the total area planted is to be estimated

1.6.3. Monitoring and maintenance of mangrove continues, both through ZSL and IIRR staff as well as community members

1.10. LCA Management Plan adopted by Sangguniang Bayan (Municipal Council) through a municipal ordinance

1.11.5. Continuing foot monitoring and patrolling by the Bantay Dagat and Deputized Environment and Natural Resource Officers (DENROs)

1.13. Seven barangay-based mangrove biodiversity signboards have been installed during Y2; counter parting by the project for a view deck proposed by the MLGU is being explored for Y4

1.14. Soft-launching and opening of the boardwalk has not been completed; coordination with the MLGU is ongoing and the activity is planned for Y4

1.15. Monitoring and maintenance of mangrove eco-park is on-going through the MLGU in cooperation with the local community

Output 2: 700 hectares of coastal agroecosystems in 14 villages in Guinayangan are utilized for regenerative agriculture including promotion of agro-biodiversity.

2.5. Organizing and/or strengthening village-level interest groups is on-going through meetings facilitated by the project's community organizer.

2.10. End-of-season community workshops: synthesis of PAR outputs & learnings have not been completed and will be conducted in Y4.

2.12. Participatory rapid appraisal (endline assessment) has not been completed and will be conducted in Y4.

2.13. Cost-benefit case study on coastal regenerative agriculture focusing on ducks started in May 2023 in cooperation with the Cavite State University and will be submitted at project end

Output 3: Around 1,000 poorest households in 14 coastal villages with improved livelihood security and resilience resulting from regenerative agriculture and sustainable use of resources found in the designated multiple-use mangrove forests.

3.2. Field guide and protocols development workshop: livelihood & commodity prioritization exercise and value chains analysis have been completed.

3.3. Business planning and bookkeeping trainings conducted for enterprise-based groups

3.4. Investment readiness assessment was conducted on the existing enterprises as part of a prioritization exercise.

3.7. Monthly needs-based mentoring/meetings of enterprise-based groups facilitated by the project's enterprise specialist.

3.10. Case study on coconut by-products enterprise completed: *Making a case for coconut by product-based enterprises for the poor: from concept to community action*

Output 4: Knowledge and good practices derived from the project are shared widely to the public as well as to various agencies of the government within Guinayangan and in the province to mobilize policy, funding, and public support.

4.5. Roll-out of campaign strategy, particularly targeting youth and students ongoing, with multiple information activities conducted in schools and in project reforestation sites.

4.7.2 Annual progress review and reporting on the project has been done as part of IIRR's internal project review

4.8.1. Development of policy brief on coastal resources management for small municipalities.

4.8.2. Three sourcebooks have been published and shared online, serving as guides on coastal conservation, social inclusion, and agrobiodiversity. The development of 2 primers on stingless beekeeping, oyster enterprises and native pigs value chain support systems also ongoing

3.2 **Progress towards project Outputs**

Output 1. Total of 330 hectares of coastal areas with sparse mangrove cover rehabilitated, protected, and sustainably managed through community-led initiatives.

A total of 397.7 ha of mangrove forests within the municipality have been included in a Local Conservation Area (LCA).

The municipal ordinance designating the mangrove LCA has been approved as of June 2023 (Annex 4). This institutionalizes the LCA as a protected area that is co-managed by both the local government and the community. Another ordinance operationalizing the LCA's corresponding management plan has also been approved by the municipal council in March 2023 (digital copy yet to be provided by LGU). Further consultations with PO leaders and barangay officials showed that they would prefer to adopt the municipal-level mangrove management plan at the barangay level without modifications, instead of drafting their individual barangay management plans.

The project has completed mangrove outplanting in 10.6 ha in 7 barangays, including the originally identified 8.0 ha for reforestation, plus an additional 2.6 ha of enrichment planting. Monitoring quadrats have also been put up in all the barangays with reforestation activity, showing a mangrove seedling survival rate of 65.7%.

For the law enforcement component of the project, a monitoring and patrolling planning workshop for Bantay Dagat (Fish Wardens) and Deputized Environment and Natural Resource Officers (DENRO i.e., forest wardens). Patrolling equipment has already been distributed (radios, flashlights, life vests) to the teams, and the patrolling plan is expected to be fully operationalized starting 3rd quarter of 2023. Partnership with the Philippine National Police (PNP) and the Philippine Coast Guard (PCG) has also been established, with their role in law enforcement operations in coordination with the wardens defined. This partnership has resulted in the apprehension by the PCG and the Bantay Dagat of a person involved in illegal cutting of mangroves in Brgy. Aloneros. A Training of Trainers on Environmental law was also conducted in partnership with the NGO Tanggol Kalikasan for 20 community members who will help project staff in conducting environmental law awareness trainings in their respective barangays.

The project has also partnered with the Earth Ranger team of the Allen Institute of Artificial Intelligence to implement a Geographic Information System (GIS)-based software solution as part of the coastal resource monitoring and patrolling plan. The effectivity of the system is currently being tested by project staff.

To further institutionalize coastal resource management, the Municipal Fisheries and Aquatic Resources Management Council (MFARMC) has also been reorganized through the Municipal Agriculture Office (MAO). New officers have been elected and are currently being engaged in mangrove and fisheries management.

A community organizer has been hired by the project to improve people's organizations' (POs) capabilities and ensure their sustainability even after the project ends. A total of 19 POs have been reached, but only 17 have been reorganized and are actively participating in the project's initiatives. 55 PO members were provided leadership and conflict management trainings spearheaded by the project's community organizer.

Dr. Jurgenne Primavera, Chief Mangrove Scientific Advisor of ZSL-Philippines, has compiled the initial results of her study on beach forest species, identifying 6 "super spreader" species (characterized by early reproduction and low seeding requirements) that the project is prioritizing for its reforestation initiatives. Beach forest nurseries have been set up in 4 barangays, with a total of ~1,500 seedlings from four species bagged. A total of 400 seedlings of *Barringtonia asiatica*, *Calophyllum inophyllum*, and *Milletia pinnata* have been outplanted by POs in public lands. Another 912 seedlings of *Casuarina equisetifolia* and *Canarium ovatum* have been distributed to POs, along with 7 resorts along the coastline.

An ecotourism site assessment for the municipality's coastal barangays was conducted by a consultant. Results of this assessment are presented in a report (Annex 5) and will form the basis for determining site development planning and product development by the LGU with the goal of providing alternative livelihood options for POs.

Output 2. 700 hectares of coastal agro-ecosystems in 14 villages in Guinayangan are utilized for regenerative agriculture including promotion of agro-biodiversity.

Ten of the 14 project barangays were considered targets for agro-biodiversity enrichment (fruit trees, shrubs and root crops), while the remaining 4 peri-urban barangays (with their limited land area and tenurial issues) were targeted through home/vertical gardens and small livestock interventions. The project has also promoted home gardens for climate-hardy, resilient, nutrient-dense indigenous vegetable biodiversity (both inter- and intra-species diversity). A total of 97 households in ten barangays received diversity kits (containing over 40 different species/cultivars).

The reintroduction of native chicken breeds (*Paraoakan*, *Daraga* and *Banaba* breeds) has been completed and was well received. This strategy targeting 3 specific barangays was done with the goal of setting them as future suppliers of these chicken breeds. In addition, 80 households in 12 barangays have also received one individual of *Banaba* chicken for upgrading the local native stock (characterized by non-descript populations that have been genetically degraded due to inbreeding). This e complements the other efforts to introduce Muscovy and Mallard duck breeds to 114 households in 10 barangays, mostly women.

These investments of the project have paid off and brought Guinayangan within the radar of the Bureau of Animal Industry (BAI) of the Department of Agriculture, with the National Swine and Poultry Research Institute further augmenting the project investments by distributing a new stock of the Quezon native breed of pigs. During that shipment they also brought 108 *Banaba* and *Paraokan* breeds to augment the three batches of native chickens provided by the project. Meanwhile, the MLGU has taken over from IIRR on these efforts. It has organized the growers into associations with some barangays specializing on one primary task (Cabong Norte will focus on breeding *paraoakan*, Arbismen on native chicken feed production, and Capulon Tulon for processing). In a last major contribution to the ICORE project, IIRR has provided a grinder, pelletizer and chopper to the group members in Brgy. Arbismen. They are using rice bran, copra, molasses and *Leucaena/Tricanthera* as basis for the low-cost feed formulation. These approaches are by design pro poor, low carbon footprint and addresses biodiversity conservation objectives.

The previously distributed native pig breeds (research station-sourced) have now grown to 40 cooperators, in 8 barangays. Another 41 cooperators have been given piglets in the pass on scheme. These native breeds, housing and feeding systems demonstrate that effective pro-poor, low-carbon footprint approaches for raising livestock (for additional income, high-protein food, and enhancing local food systems) can be undertaken in a culturally-appropriate and inclusive manner. IIRR has also commissioned a desk study on small-scale duck production with CvSU (co-supported by the One CGIAR ClimBeR initiative) to be initiated in May this year.

Fruit trees and bananas distribution were another effort to increase biodiversity in coastal areas in order to deliver on food, nutrition, ecosystem enhancement objectives. As of the reporting period, 188 households in 10 barangays are reporting at least 70 percent survival of the 3,537 fruit trees distributed (four species reported to be especially suitable to coastal agriculture: cotton fruit, calamansi, jackfruit and cashew).

Banana has proven to be a major income generating opportunity for coastal households. A total of 152 households in 9 barangays have received over 1,600 suckers of *latundan*, a valued dessert banana in the Philippines. These households also serve as local gene banks for this variety. In four of these barangays, ten individuals act as custodians of banana diversity, each with ten varieties including those from the Philippines national gene banks.

The project has partnered with cooperators in coastal areas who have received prior interventions from IIRR, and are by default conservationists with an already rich diversity of trees, shrubs, vines, and small livestock in their backyard. These 65 individuals (mostly women) in 12 barangays have been designated as biodiversity custodians and are encouraged to develop plant nurseries to further promote climate-hardy species for coastal areas.

These are resulting in biodiverse homestead systems under the dominant coconut-based systems that characterize the coastal areas. These are multi-strata and multi-canopy, and feature both intraspecies and interspecies biodiversity. By including small livestock within these systems, we are advanced towards close loop systems where increased nutrient and residue recycling (below ground carbon storage etc.). Overall, this is an effort to establish and demonstrate proof-of-concept sites on how conservation of vanishing biodiversity can be achieved by emphasizing sustainable use at community levels. This work has drawn the attention of the One CGIAR initiative on Fruits and Vegetables (FRESH) with visits by Dr. Danny Hunter of Bioversity International

Output 3. Around 1,000 poorest households in 14 coastal villages with improved livelihood security and resilience resulting from regenerative agriculture and sustainable use of resources found in the designated multiple-use mangrove forests.

A quarter of the 110 households provided with ducks via this project are already starting to sell eggs (raw or processed) thus demonstrating ways to augment local food systems and empower women economically. These outcomes will be reviewed by a group of university livestock experts and a report will be made available by the end of the project.

Two additional youth groups aside from those reported in Output 2 are now serving as production facilities for eggs and live chickens. These two group-based enterprises are co-funded by a London Stock Exchange Group (LSEG) project being implemented by IIRR. Incubators have also been provided to each of these two barangays to allow faster hatching of eggs and ensure sustainability of the enterprise.

A total of 70 households are currently involved in enterprise development. These households are engaged in the production of buli (*Corypha utan*) woven products, coconut by-products, nipa vinegar, and sweetened banana and jackfruit in jar. After an investment readiness assessment, it was found that the buli and coconut by-products enterprises are the most mature and ready to move forward (Annex 6).

These groups participated in the Guinayangan Agri-fair during the town fiesta in June 2023. All their products were market tested locally during this event. Total sales showed that coco peat, commonly used as used as a plant medium and soil fertility enhancers, had the most market potential. Nipa vinegar also came out as a favorite in the consumable products, although current production quantities by the group prevents large-scale distribution. Buli woven products were also popular, and the group now accepts orders for the different woven products especially now that these bags and baskets are being patronized by the local government as their packaging for tokens and giveaways to visitors and guests.

An intern from the University of the Philippines- Department of Agribusiness Management and Entrepreneurship assisted the project in finalizing the business plan of the youth group and a market/feasibility study for the coco by products and the buli woven products. A case study on coconut by-products enterprise has also been completed (Annex 7).

A project staff attended a regional oyster conference hosted by the University of the Philippines Marine Science Institute as part of improving technical capabilities for the oyster enterprise. BFAR Region 4A also conducted regular quarterly monitoring to check on the status of the oyster floating rafts already deployed in 3 project and 1 non-project barangays. The project provided a counterpart for the oyster enterprise by sponsoring trainings for fishers in 3 barangays.

A total of 11 cooperators have been provided stingless bee hives by the project. The Cavite State University's Bee Research, Innovation, Trade, and Extension Center (CvSU BRITE Center) has been continuously providing technical guidance both to project staff and the cooperators.

An investment readiness assessment was facilitated to assess and enhance the preparedness of groups that are taking on community enterprises to attract investments and support for their growth and sustainability. It looks at the different aspect from the organization/group level dynamics, to its management capacity, implementation of their operational system, problem solving etc. In this exercise, the native chicken production by the youth group and coconut by products came out as ready for investment and market partnerships if group strengthening on enterprise management will be continued.

Participatory Action Research (PAR) is currently being conducted with 250 households that are part of the oyster production in these barangays, with 268 male and 32 female participants.

Output 4. Knowledge and good practices derived from project are shared widely to the public as well as to various agencies of the government within Guinayangan and in the province to mobilize policy, funding and public support.

IIRR signed a MOA with Guinayangan Academy and an MOU with Guinayangan Elementary School. These documents affirmed the continued commitment of these institutions to the project's environmental education campaigns for elementary and high school students. Another MOA has also been signed with the CvSU BRITE Center highlighting the ongoing partnership between them and IIRR in the promotion of stingless beekeeping in ICORE sites.

Multiple mangrove planting/IEC activities have been conducted, several of which have been initiated by the Municipal Environment and Natural Resources Office (MENRO). These activities also included mangrove seedling maintenance by the youth, where they picked up trash from the reforestation areas and removed epiphytes on the mangrove seedlings. School-based IEC activities have been designed in cooperation with administrators to ensure these fit within their current curriculum.

To raise awareness on solid waste management and as part of the International Coastal Cleanup Day celebration, concurrent cleanup activities were conducted in all 14 project barangays in cooperation with the MENRO and the POs.

Two posters generated by the project were presented during the 17th Philippine Association of Marine Science Symposium last July 2023. The first poster presented the results of the mangrove community structure surveys spearheaded by ZSL, while the second presented the effects of COVID-19 on gleaning practices in the municipality of Guinayangan (Annexes 8 and 9).

Two primers, one on stingless beekeeping and another on oyster enterprise, targeting local government officials and trainers have been drafted and is in the process of being refined. The primers highlight the process of implementing these biodiversity-based livelihoods for mangrove and nearshore areas (Annexes 10 and 11).

3.3 **Progress towards the project Outcome**

0.1. Within 3 years, the current 300 has (Y0 baseline) of degraded mangrove forests in Guinayangan are rehabilitated, protected and sustainable managed; with an added 10% Darwin Initiative Main Annual Report Template 2024 7

expansion in forest cover, increasing total area to 330 hectares; resource management is done fully by fishers' organizations with 30% women membership.

The project has completed mangrove outplanting in 10.6 ha in 7 barangays, amounting to 35.3% of the targeted expansion area. This includes the originally identified 8.0 ha for reforestation, plus an additional 2.6 ha of enrichment planting. 17 POs whose average membership is made up of 28.8% women are fully engaged in the management of these mangroves.

0.2. Within 3 years, species diversity in coco-based family farms and homesteads located in 700 hectares of coastal agro-ecosystems has improved by 10%; increasing agri-based livelihood options for farming households by 20% (50% of which, managed by women) due to more available crops & animals as household assets.

Initial surveys show an increase from 1 to 6 types of crops and livestock for 66% of the cooperators. Detailed endline studies will further quantify the impact of the project.

0.3. By Y3Q3, 50% increased level of appreciation by coastal communities of biodiversity conservation as nature-based solutions to managing climate-change risks & vulnerabilities.

Existing information campaign and activities' impacts have yet to be quantified, and will be determined through endline surveys.

3.4 Monitoring of assumptions

Outcome Assumption 1: Host country remains politically stable and supportive to mangrove and agro-biodiversity conservation; policy environment and related legal frameworks remain unchanged during the project.

Comments: No change in assumption.

Outcome Assumption 2: Provincial and municipal policy environment continues to support environmental conservation despite growing demand for land use conversion for infrastructural development and agricultural plantations.

Comments: No change in assumption.

Outcome Assumption 3: Communities and local governments in coastal areas covering the 300 hectares of mangrove forests have agreed to support interventions to protect and conserve mangroves in their respective localities.

Comments: No change in assumption.

Outcome Assumption 4: Land-owners, farming households, and local government have collaborated to improve production systems and practices in 700 hectares coastal agroecosystems utilizing regenerative agriculture.

Comments: No change in assumption.

Outcome Assumption 5: Local government policy & decision makers are actively pursuing best options for increasing community resilience of coastal communities using participatory approaches.

Comments: No change in assumption.

Output 1 Assumption 1: Project incentives for women community members on seedlings collection, propagation, outplanting and maintenance of mangroves reforestation sites in place; Community groups applying learnings in mangroves conservation science.

Comments: No change in assumption.

Output 1 Assumption 2: Legislated policies & programs are in place: establishing LGU support to inclusive & participatory coastal governance; MFARMC implementing its mandates other than patrolling & law enforcement (e.g., planning & recommending fishery-related ordinances)

Comments: No change in assumption. Inactive POs and the MFARMC have been reorganized and is being actively engaged by the project in its initiatives.

Output 1 Assumption 3: Local government has allocated resources (human & financial) for engaging its constituents in participatory process of and inclusive coastal governance.

Comments: No change in assumption. The MLGU continues to allocate personnel and resources to assist in the implementation of project activities and continues to closely work with IIRR staff in planning for these activities.

3.5 Impact: achievement of positive impact on biodiversity and poverty reduction

The campaign raising awareness on the importance of mangroves and their ecosystem services coupled with the institutionalization of their protection are some of the aspects the project aids in the conservation of biodiversity.

Enterprise development from local natural resources (i.e. oysters) not only provides alternative income streams for the community, but also highlights the need to conserve the marine environment.

The distribution of native breeds of small livestock as well as different varieties of crops also contributes to the project's goal of conserving coastal agrobiodiversity. The increased number of cooperators (737 households) that received such input provides a larger base for scaling up and out.

4. Project support to the Conventions, Treaties or Agreements

The project supports the Aichi Targets through the following activities:

- Promotion of agro-biodiverse and sustainable agricultural practices through regenerative agriculture by continued distribution of different varieties of crops and livestock to farmer-fishers with the goal of reducing pressure on coastal resources (AT7, AT10, AT13, AT14).
- Increased awareness for biodiversity conservation through community meetings, trainings, and distribution of information materials (AT1).
- Identification of mangrove areas for conservation and rehabilitation to preserve species diversity, including the setup of nurseries in several barangays (AT11, AT13, AT15).
- Ensure ecosystem services are preserved through community engagement, specially of women and youth (AT14, AT1).

In response to the Philippine Biodiversity Strategic Action Plan (2015-2028), the project has contributed:

- A total of 10.6 ha has been reforested or rehabilitated, part of the declared 382.5 ha mangrove local conservation area. (Conservation Target #3).
- Genetic diversity of plants cultivated and farmed improved, starting with the different varieties of fruit trees, vegetables, and Roots, Tubers and Bananas (RTBs) being introduced. Genetic diversity base of small livestock was improved with the introduction of native pigs, two breeds of native chicken (*Banaba* and *Paraoakan*) and two species of ducks (Muscovy and mallard) (Conservation Target #4).
- Protection of existing mangrove and agro-biodiversity areas to preserve ecosystem services and support for local conservation area management planning (Ecosystem Services Target #7).

The project contributes to the Nagoya Protocol's goal of preserving genetic diversity through its promotion of species diversity (both inter- and intra-species) of fruits, banana, root and tuber

crops, and small livestock, as well as the identification of mangrove species to be prioritized for rehabilitation efforts.

5. Project support for multidimensional poverty reduction

The project's approach in addressing multidimensional poverty has not only been through economic empowerment through enterprises, but also through improving food security and nutrition, increasing community knowledge about the ecosystem services of mangroves and coastal agroecosystems, and the reduction of climate change threats through reforestation and promotion of climate-smart agriculture.

6. Gender Equality and Social Inclusion (GESI)

Please quantify the proportion of women on the Project Board ¹ .	67% of the project board (4 out of 6) are women
Please quantify the proportion of project partners that are led by women, or which have a senior leadership team consisting of at least 50% women ² .	The MLGU is led by a woman mayor, with 40% of the heads of offices (2 out of 5) regularly engaged by the project led by women.
	The ZSL leadership team is composed of 1 woman and 2 men.

GESI Scale	Description	Put X where you think your project is on the scale
Not yet sensitive	The GESI context may have been considered but the project isn't quite meeting the requirements of a 'sensitive' approach	
Sensitive	The GESI context has been considered and project activities take this into account in their design and implementation. The project addresses basic needs and vulnerabilities of women and marginalised groups and the project will not contribute to or create further inequalities.	
Empowering	The project has all the characteristics of a 'sensitive' approach whilst also increasing equal access to assets, resources and capabilities for women and marginalised groups	x
Transformative	The project has all the characteristics of an 'empowering' approach whilst also addressing unequal power relationships and seeking institutional and societal change	

While the project allows opportunities for those wanting to participate in its initiatives regardless of social status, priority is given to impoverished households, women and youth for livelihood initiatives. Access to trainings and resources for livelihood and enterprise development will hopefully address multi-dimensional poverty for these marginalized groups.

For mangrove and beach forest conservation, women members of POs were prioritized in the outplanting efforts, with 62.1% of those participating in outplanting being women. These POs are

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¹ A Project Board has overall authority for the project, is accountable for its success or failure, and supports the senior project manager to successfully deliver the project.

² Partners that have formal governance role in the project, and a formal relationship with the project that may involve staff costs and/or budget management responsibilities.

28% women and are part of the project's conservation efforts. The MFARMC is composed of 10 men and 4 women (28.5% women membership).

7. Monitoring and evaluation

Semi-annual and annual reviews of the project as part of the IIRR's Environment Thematic Program were conducted. The M&E work is shared between IIRR, ZSL and the MLGU. Information is shared through regular online and face-to-face meetings between key personnel in the partner organizations.

No changes have been made M&E plan over the reporting period.

8. Lessons learnt

Municipalities that feature highly-varied coastal landscapes including upland, foreshore and seagrass areas provide special opportunities for ecosystems and biodiversity conservation, beach forest and mangrove conservation. The designation of protected micro-landscapes can serve as a powerful conservation and education tool, especially with support at the barangay level.

Mangrove reforestation activities must have readily available areas for reforestation with no conflicts in tenurial instruments. The number of abandoned yet titled fishponds within the municipality has greatly limited the extent to which the project can conduct reforestation activities. It can be self-sustaining if there are mechanisms incentivizing the raising of mangrove nurseries, outplanting and stewardship (i.e. paying communities to raise and plant mangroves). Government allocations for reforestation can play a part in this but can be sporadic. Tapping into CSR activities that involve mangrove reforestation is one way of ensuring sustainability for the community, and could be one way moving forward after the project ends.

Working with MFARMC, given its political nature as an LGU-mandated recommendatory body, can be challenging when ensuring neutrality within the communities. Their active role in coastal law enforcement however, since some members are part of the municipality's Bantay Dagat, cannot be disregarded and is something that can be further expanded moving forward.

Coastal agriculture can be a tool for addressing malnutrition and food insecurity among social sectors where under nutrition remains prominent. The introduction of small livestock (and other short-cycle economic activities) is invariably of interest to the poor and women in search for ways to build assets. Homestead-type diversified fruit tree-based agroforestry (short, medium, and long duration) targeting tenants is likely to receive the nod from landowners.

9. Actions taken in response to previous reviews (if applicable)

Regarding the conflicting figures presented for number of ha. identified for mangrove outplanting (7.9 vs. 7.99 vs. 10.6), actual mangrove reforested area is 7.99 (correctly rounded up to 8.0 for this report). The 10.6 ha mentioned includes the 8.0 ha of reforested areas, plus 2.6 ha of enriched forest areas.

This report addresses the reviewer's concern about presenting the complete indicators in the logframe to show progress.

10. Risk Management

The project has not had to address any new risks during the previous year.

11. Sustainability and legacy

At the municipal level, the institutionalization of mangrove and agrobiodiversity conservation and management through local ordinances, management plans, and staff and budget allocations ensure sustainability post-project.

The increased visibility of the project has caught the attention of neighbouring municipalities, with some expressing interest in having similar projects in the future. Staff from the neighbouring

municipality of Buenavista did a cross-visit to ICORE sites to see the progress of the activities and how these may be replicated in their municipality.

A gleaning study conducted as part of the project has raised awareness for the project, allowing IIRR to be part of a consortium of gleaning researchers within the Philippines. This hopefully translates to other conservation projects in Guinayangan focusing on the topic down the line.

These events show the project's potential for scaling up and out towards the other municipalities, using the lessons learned as a model.

12. Darwin Initiative identity

The Darwin Initiative and the UK government are highlighted as the funding source for this project in all its information materials and social media posts. The Darwin Initiative logo is prominently displayed per branding guidelines. The project area continues to be clearly designated as distinctly supported by the Darwin

The funding is recognized as a distinct project and is recognized as such by the local government, the community and other IIRR partners.

The project has partnered with ZSL, which has implemented Darwin Initiative projects within the country prior. With the project on its third year, there is also increased visibility within the local community and s already known in the Philippines, especially amongst science-based organisations and the academe.

The project posts activity highlights on the IIRR-Asia Facebook page, with emphasis on the project funding from Darwin Initiative and the Biodiversity Challenge Fund.

13. Safeguarding

Has your Safeguarding Policy been updated in the past 12 months?	No
Have any concerns been reported in the past 12 months	No
Does your project have a Safeguarding focal point?	Rico ,
Has the focal point attended any formal training in the last 12 months?	Yes. Institutional seminar on safeguarding facilitated by IIRR US office
What proportion (and number) of project staff have received formal training on Safeguarding?	Past: 100% [10] Planned: 0%
Has there been any lessons learnt or challenges on Safeguard Please ensure no sensitive data is included within responses. None.	ding in the past 12 months?
Does the project have any developments or activities planned coming 12 months? If so please specify. None.	l around Safeguarding in the
Please describe any community sensitisation that has taken p include topics covered and number of participants. None.	place over the past 12 months;
Have there been any concerns around Health, Safety and Se past year? If yes, please outline how this was resolved.	curity of your project over the

14. Project expenditure

Project spend (indicative) since last Annual Report	2023/24 Grant (£)	2023/24 Total Darwin Costs (£)	Variance %	Comments (please explain significant variances)
Staff costs (see below)				Salary Increase and Statutory Benefits
Consultancy costs				
Overhead Costs				
Travel and subsistence				
Operating Costs				
Capital items (see below)				
Others (see below)				
TOTAL	133,919.24	133,919.24	-100%	

Table 1: Project expenditure during the reporting period (1 April 2023 – 31 March 2024)

Table 2: Project mobilised or matched funding during the reporting period (1 April 2023 –31 March 2024)

	Secured to date	Expected by end of project	Sources
Matched funding leveraged by the partners to deliver the project ()			IIRR
Total additional finance mobilised for new activities occurring outside of the project, building on evidence, best practices and the project ()			

15. Other comments on progress not covered elsewhere

16. OPTIONAL: Outstanding achievements or progress of your project so far (300-400 words maximum). This section may be used for publicity purposes.

The ICORE project, designed and implemented by the IIRR, the Zoological Society of London, and the Local Government of Guinayangan, have brought public attention to the conservation of ecosystems in coastal tracts. Though the covered areas are still small, a few thousand household are engaged in some manner: it is one of the few initiatives that attempted successfully to address the conservation of agro-biodiversity (including vegetable and small livestock biodiversity) and coastal mangroves and seagrass areas in small coastal barangays. While the absolute areas are small, they are significant in terms of their biodiversity (23 species of mangroves). In the past, fruits, vegetables, and native animals are ranked low (relative to coconut and rice). These crops are now perceived to be of importance, largely the result of project interventions. With the focus on mangroves, agroforestry, and small livestock, women have more space for engaging in nutrition-sensitive economic activities (where fishing and coconut were typically the prevalent

male dominated enterprises). Though it's only just over two years, now a local movement to recognize the value of coastal natural resources is falling in place.

I agree for the Biodiversity Challenge Funds to edit and use the following for various promotional purposes (please leave this line in to indicate your agreement to use any material you provide here).

File Type (Image / Video / Graphic)	File Name or File Location	Caption including description, country and credit	Social media accounts and websites to be tagged (leave blank if none)	Consent of subjects received (delete as necessary)
				Yes / No
				Yes / No
				Yes / No
				Yes / No
				Yes / No

Annex 1: Report of progress and achievements against logframe for Financial Year 2023-2024

Project summary	Progress and Achievements April 2023 - March 2024	Actions required/planned for next period
<i>Impact</i> Climate resilience and local community well-being in Guinayangan, Philippines improved through community-based mangrove rehabilitation and agro-biodiversity conservation in coastal agriculture supported by effective legal mechanism and law enforcement action.	The project has effectively promoted agrobiodiversity coupled with mangrove conservation, while providing means for alternative livelihood streams through its enterprise initiatives. Institutionalization of management of coastal resources through legislation and management planning is being implemented at the municipal level, in cooperation with community groups.	
Outcome		
Community-based management of coastal zones and agro-biodiver livelihood options, and increases community resilience in 14 coasta	sity in agriculture effectively enhances mangrove ecosystem ser I communities in Guinayangan, Philippines	vices, provides sustainable
Outcome indicator 0.1. Within 3 years, the current 300 has (Y0 baseline) of degraded mangrove forests in Guinayangan are rehabilitated, protected and sustainable managed; with an added 10% expansion in forest cover, increasing total area to 330 hectares; resource management is done fully by fishers' organizations with 30% women membership.	The project has completed mangrove outplanting in 10.6 ha in 7 barangays, amounting to 35.3% of the targeted expansion. This includes the originally identified 8.0 ha for reforestation, plus an additional 2.6 ha of enrichment planting. An area of 397.7 ha has been designated as a Local Conservation Area, with supporting legislation recognizing it and its attendant management plan. Included in this LCA are the 10.6 ha of mangrove outplanting and enrichment sites.	Monitoring and maintenance of reforestation areas Endline mangrove community structure survey
	average women membership of 28.8%.	
Outcome indicator 0.2, Within 3 years, species diversity in coco- based family farms and homesteads located in 700 hectares of coastal agro-ecosystems has improved by 10%; increasing agri- based livelihood options for farming households by 20% (50% of which, managed by women) due to more available crops & animals as household assets.	To be determined in endline surveys	Endline surveys
Outcome indicator 0.3. By Y3Q3, 50% increased level of appreciation by coastal communities of biodiversity conservation as nature-based solutions to managing climate-change risks & vulnerabilities.	To be determined in endline surveys	Endline surveys

Output 1. Total of 330 hectares of coastal areas with sparse mangrove cover rehabilitated, protected, and sustainably managed through community-led initiatives				
Output indicator 1.1. By Y3Q1, outplanting efforts (50% of which done by women) using appropriate species selection and science- based techniques within the 330 hectares target for rehabilitation area is completed with 40% survival rates.	Outplanting efforts covering 10.6 ha of mangrove forests have been completed, with 62.1% of planters involved women. Monitoring surveys show an average of 65.7% survival rate for outplanted seedlings across all sites.	Endline mangrove community structure and outplanting monitoring surveys		
Output indicator 1.2. By Y3Q3, 14 village level and 1 MFARMC level mangrove management plans promulgated where at least 30% of women participated in the deliberations and approval.	17 POs have been engaged and are actively participating in mangrove management activities. Consultations with PO leaders and barangay officials showed that they would prefer to adopt the municipal-level mangrove management plan at the barangay level without modifications.	Further engagement of MFARMC in mangrove conservation planning		
	The MFARMC is made up of 14 members, 4 of which are women (28.5%)			
Output indicator 1.3. By Y2Q3, 330 hectares of mangrove officially declared "local conservation areas" as legislated by the LGU.	397.7 ha of the municipality's mangrove forests have been designated as a Local Conservation Area, with supporting legislation recognizing it and its attendant management plan.			
Output indicator 1.4. By Y2Q3, a legislation by the LGU promulgated with accompanying support program to 3 appropriate sites for: 1) research and education, 2) ecotourism and 3) associated sustainable livelihood.	The ordinance implementing the Guinayangan Mangrove LCA management plan has been approved the MLGU. This plan covers all the mangrove conservation areas, although there is no designation of use/function zones.	Workshop on LCA zonation		
Output indicator 1.5. By Y2Q3, 14 village-level Mangrove Protection Associations ("Bantay Gubat") established in the coastal barangays totalling 140 members trained on coastal law enforcement, deputized and resourced by Y2Q2.	8 DENROs have been deputized and 12 community members joined a Training of Trainers on environmental laws.	Environmental law training for 120 community members		
Output 2. 700 hectares of coastal agro-ecosystems in 14 villages in Guinayangan are utilized for regenerative agriculture including promotion of agro-biodiversity.				
Output indicator 2.1. By Y3Q3, 30% of households have adopted farming practices following regenerative agriculture principles	A total of 2,268 households or 98.1% of the targeted 30% of coastal households (2,312) have adopted regenerative agriculture practices.	Engage LGU to promote animal husbandry and (low-cost) feed management		
		Promotion of regenerative agriculture methods (in the context of El Niño)		
		Endline assessment in cooperation with International Livestock Research Institute through the CGIAR ASEAN Biodiversity initiative to		

		document impact of livestock distribution		
Output indicator 2.2. By Y3Q3, 30% of households increased species diversity of their farms by 20%	To be determined in endline surveys	Endline surveys		
Output indicator 2.3. By Y1Q3, 14 community and women groups formed, capacitated for participatory action researches to generate gender-sensitive in multiple benefits on technological approaches	17 POs with 28.8% women membership have been reorganized and revitalized, and are participating in mangrove and agrobiodiversity conservation activities	Recruitment of more women members to project initiatives		
Output indicator 2.4. By Y3Q4, knowledge sharing dissemination events reaching 30% of households in coastal agro-ecosystems.	In progress. Priority was given to 4 barangays that scored low on the baseline KAP study through a "Bakhawmustahan" IEC event.	Similar IEC events in the remaining 10 project barangays.		
Output indicator 2.5. By Y2Q4, 30% of coastal farming households from Y0 baselines incorporated native plants and animals (Quezon breed of native pig, Camarines chicken, Philippine mallard duck)	2,268 households have received native plants and livestock, amounting to 29.5% of the total farming households in the 14 coastal barangays.	Continuation of give back scheme for livestock		
Output indicator 2.6. By Y3Q2, 14 village level community and women groups are scaling up the extension services and engaged the government support.	17 POs are engaged by the project and are leveraging municipal resources for agriculture, fisheries, and other livelihoods services	Further PO engagement to strengthen them and formulate project exit strategies		
Output 3. Around 1,000 poorest households in 14 coastal villages visuationable use of resources found in the designated multiple-use r	with improved livelihood security and resilience resulting from reg nangrove forests	generative agriculture and		
Output indicator 3.1. By Y2Q4, community and women's groups have identified 3 prioritized agri-fishery commodities with high market demand and potential for enterprise and developing operational plans.	Oysters, buli products, coconut by-products, and native chickens have been identified as potential commodities. Business plans have been developed by POs for oyster, native chicken, and coconut by-products.	Refinement of PO business plans		
Output indicator 3.2. By Y3Q1, 1 municipal level value-chain enterprise masterplan for 3 different prioritized agri-fishery commodities with market links developed with community and women's group.	Investment readiness assessment for 4 commodities (coconut by-products, native chicken, banana and jackfruit preserve, buli products) have been completed.	Presentation of investment readiness assessments and business plans to the MLGU to serve as basis for the enterprise masterplan		
		Distribution of ten barangay- based biochar drums as part of PAR		
Output 4. Knowledge and good practices derived from project are shared widely to the public as well as to various agencies of the government within Guinayangan and in the province to mobilize policy, funding and public support.				
Output indicator 4.1. By Y3Q3, the Guinayangan MEMC is actively engaged in educating around 5,000 students and youth	A total of 1,424 students have been reached by the project's IEC activities. PO and women leaders are actively	Additional IEC activities for youth to reach 5,000 targets		

about the importance of the municipality's mangroves and coastal agro-ecosystems through on-site conservation education activities; community and women's groups are serving as knowledge resource in the process.	participating as focal persons for conservation awareness activities, such as coastal cleanups and mangrove maintenance.	Further engagement of school administrators in IEC planning and activities
Output indicator 4.2. By Y3Q3, local government and the MFARMC, together with community and women's groups have synthesized their learnings on the importance of rehabilitating and enhancing mangroves and coastal agro-ecosystems and are actively sharing their experiences to the general Guinayangan populace and neighbouring coastal municipalities.	The MFARMC has been reorganized in cooperation with the MLGU, and is an integral part of mangrove management planning.	Further mobilization of MFARMC in mangrove conservation activities
Output indicator 4.3. By Y3Q4, at least 2 community representatives in each of the 14 villages assume a wider role in leading local community-based management and education efforts.	28 of the 34 PO presidents and vice-presidents are actively participating in the project's conservation and information activities.	LGU recognition of community champions

Annex 2: Project's full current logframe as presented in the application form (unless changes have been agreed)

Project summary	SMART Indicators	Means of verification	Important Assumptions			
Impact:						
Climate resilience and local community well-being in Guinayangan, Philippines improved through community-based mangrove rehabilitation and agro-biodiversity conservation in coastal agriculture supported by effective legal mechanism and law enforcement action.						
Outcome: Community-based management of coastal zones and agro-biodiversity in agriculture effectively enhances mangrove ecosystem services, provides sustainable livelihood options, and increases community resilience in 14 coastal communities in Guinayangan, Philippines	0.1. Within 3 years, the current 300 has (Y0 baseline) of degraded mangrove forests in Guinayangan are rehabilitated, protected and sustainable managed; with an added 10% expansion in forest cover, increasing total area to 330 hectares; resource management is done fully by fishers' organizations with 30% women membership.	 0.1.1 Site monitoring and assessment reports; 0.1.2 Resource inventory outputs; 0.1.3 Mangroves management plans; Municipal ordinances 	Host country remains politically stable and supportive to mangrove and agro- biodiversity conservation; policy environment and related legal frameworks remain unchanged during the project. Provincial and municipal policy environment continues to support environmental conservation despite growing demand for land use conversion for infrastructural development and agricultural plantations. Communities and local governments in coastal areas covering the 300 hectares of mangrove forests have agreed to support interventions to protect and conserve mangroves in their respective localities.			
	0.2. Within 3 years, species diversity in coco-based family farms and homesteads located in 700 hectares of coastal agro-ecosystems has improved by 10%; increasing agri-based livelihood options for farming households by 20% (50% of which, managed by women) due to more available crops & animals as household assets.	 0.2.1 Livelihood and agro-ecosystems profiling reports; 0.2.2 Coastal regenerative agriculture portfolio documentation; 0.2.3 Agri-fishery development/investment plans 	Land-owners, farming households, and local government have collaborated to improve production systems and practices in 700 hectares coastal agro- ecosystems utilizing regenerative agriculture.			

Output 1 Total of 330 hectares of coastal areas with sparse mangrove cover rehabilitated, protected, and sustainably managed through community-led initiatives.	 0.3. By Y3Q3, 50% increased level of appreciation by coastal communities of biodiversity conservation as nature- based solutions to managing climate- change risks & vulnerabilities. 1.1. By Y3Q1, outplanting efforts (50% of which done by women) using appropriate species selection and science-based techniques within the 330 hectares target for rehabilitation area is completed with 40% survival rates. 	 0.3.1 KAP baseline survey results; endline surveys 0.3.2 Local Disaster Risk Reduction and Management Plan 1.1.1 Mangrove community structure (MCS) survey reports 	Local government policy & decision makers are actively pursuing best options for increasing community resilience of coastal communities using participatory approaches. Project incentives for women community members on seedlings collection, propagation, outplanting and maintenance of mangroves reforestation sites in place; Community groups applying learnings in mangroves conservation science.
	1.2. By Y3Q3, 14 village level and 1 MFARMC level mangrove management plans promulgated where at least 30% of women participated in the deliberations and approval.	1.2.1 MFARMC Accomplishment reports;1.2.2 Community-level mangroves management plans	Legislated policies & programs are in place: establishing LGU support to inclusive & participatory coastal governance; MFARMC implementing its mandates other than patrolling & law enforcement (e.g., planning & recommending fishery-related ordinances)
	 1.3. By Y2Q3, 330 hectares of mangrove officially declared "local conservation areas" as legislated by the LGU. 1.4. By Y2Q3, a legislation by the LGU promulgated with accompanying support program to 3 appropriate sites for: 1) research and education, 2) ecotourism and 3) associated sustainable livelihood. 1.5. By Y2Q3, 14 village-level Mangrove Protection Associations ("Bantay Gubat") established in the coastal barangays totaling 140 members trained on coastal law enforcement, deputized and resourced by Y2Q2. 	 1.3.1 Municipal and village ordinances; 1.3.2 Fisheries sector annual plans 1.4.1 Municipal ordinance 1.5.1 Training documentations and annual plans of deputized Bantay Gubat; 1.5.2 Annual accomplishment reports of MFARMC 	Local government has allocated resources (human & financial) for engaging its constituents in participatory process of and inclusive coastal governance.
Output 2		2.1.1 Agro-biodiversity resources inventories & mapping reports;	On-site evidence-base of multiple benefits of location & context specific

700 hectares of coastal agro- ecosystems in 14 villages in Guinayangan are utilized for regenerative agriculture including promotion of agro-biodiversity.	 2.1 By Y3Q3, 30% of households have adopted farming practices following regenerative agriculture principles 2.2. By Y3Q3, 30% of households increased species diversity of their farms by 20% 2.3. By Y1Q3, 14 community and women groups formed, capacitated for participatory action researches to generate gender-sensitive in multiple benefits on technological approaches 2.4 By Y3Q4, knowledge sharing dissemination events reaching 30% of households in coastal agro-ecosystems. 	 2.2.1 Regenerative agriculture case studies and/or outcome harvesting outputs Regenerative agriculture case studies and/or outcome harvesting outputs 2.3.1 Documentations of capacity building activities; 2.4.1 Community and women's groups activity reports. 	regenerative agriculture practices are established; Local governments and key national agencies (DA, DENR, BFAR) are intensifying implementation of related programs (e.g., organic agriculture, agroforestry, climate- resilient agri-fishery value chains) to build on farmers' interests in farm diversification to pursue government's vision of transforming Quezon province into a progressive agriculture hub.
	2.5. By Y2Q4, 30% of coastal farming households from Y0 baselines incorporated native plants and animals (Quezon breed of native pig, camarines chicken, Philippine mallard duck)	2.5.1 Reports on population sampling and estimation studies	Coastal households fully understand the value and roles of agro-biodiversity conservation in sustaining agricultural production; project and government partners are rolling out support programs (e.g., Philippine Native Animals Development Program).
	2.6. By Y3Q2, 14 village level community and women groups are scaling up the extension services and engaged the government support.	2.6.1 Agri-fisheries development and investment plans	Local government's agriculture office has incorporated regenerative agriculture scaling in its investment plans.
Output 3 Around 1,000 poorest households in 14 coastal villages with improved livelihood security and resilience resulting from regenerative agriculture and sustainable use of resources found in the designated multiple-use mangrove forests	3.1. By Y2Q4, community and women's groups have identified 3 prioritized agrifishery commodities with high market demand and potential for enterprise and developing operational plans.	3.1.1 Value chain analysis outputs;3.1.2 Enterprise development plans	Project and government support prioritized towards emerging practices with significant conservation& gender contributions (e.g., native livestock/poultry production, backyard gardening, root and tuber crops production, and community-savings & credit associations); community and women's groups have adopted an entrepreneurship mindset in pursuing

			sustainability of ecosystems conservation initiatives.
	3.2. By Y3Q1, 1 municipal level value- chain enterprise masterplan for 3 different prioritized agri-fishery commodities with market links developed with community and women's group.	 3.2.1 Livelihood profiling outputs; 3.2.2 Municipal ordinances on local economic development and investments promotion 	Local government has adopted nature- based solutions as an important guiding principle in planning and developing the local economy and its sectors.
Output 4 Knowledge and good practices derived from project are shared widely to the public as well as to various agencies of the government within Guinayangan and in the province to mobilize policy, funding and public support.	4.1. By Y3Q3, the Guinayangan MEMC is actively engaged in educating around 5,000 students and youth about the importance of the municipality's mangroves and coastal agro- ecosystems through on-site conservation education activities; community and women's groups are serving as knowledge resource in the process.	4.1.1 Status and accomplishment reports on conservation education	Administrators and decision-makers have included conservation education for students and youth as a key activity for Schools and youth organizations.
	4.2. By Y3Q3, local government and the MFARMC, together with community and women's groups have synthesized their learnings on the importance of rehabilitating and enhancing mangroves and coastal agro-ecosystems and are actively sharing their experiences to the general Guinayangan populace and neighboring coastal municipalities	4.2.1 Documentation of knowledge sharing and scaling events	Local champions have emerged and well capacitated as resource persons in inclusive and participatory coastal governance.
	4.3. By Y3Q4, at least 2 community representatives in each of the 14 villages assume a wider role in leading local community-based management and education efforts.	4.3.1 Local government-recognized community champions	Project partners from local governments and community groups are incentivized to share their experiences and performing as champions in coastal governance.
Activities (each activity is numbered acc	ording to the output that it will contribute to	wards, for example 1.1, 1.2 and 1.3 are con	ntributing to Output 1)
Mobilization and Project Inception I. Staff recruitment and contracting II. Team composition and refinement of p III. Set-up field office IV. Purchase of equipment	roject plan		

Output 1: Total of 330 hectares of coastal areas with sparse mangrove cover rehabilitated, protected, and sustainably managed through community-led initiatives.

1.1. Project Inception meeting-workshops towards MoA signing with LGU, POs, DA, DENR, DepEd, and BFAR to agree on implementation roles and resource-sharing mechanisms

1.2. Baseline bio-physical assessment, and spatial mapping of mangroves; and identification of rehabilitation areas using MCS survey

1.3. Trainers Training on Mangrove and Beach Forest Rehabilitation and Conservation in ZSL Panay learning sites including development of in-situ mangrove rehabilitation plan

- 1.4. Organizing and/or strengthening coastal people's organizations (POs)
- 1.5 Formation or strengthening of Local Mangrove co-management body (comprised of LGU, POs, DENR, other key stakeholders)
- 1.6. Review and execute in-site mangrove rehabilitation and conservation plan
- 1.6.1 Establishment of on-site community nurseries
- 1.6.2 Mangrove outplanting by various groups following science-based protocols
- 1.6.3 Monitoring and maintenance
- 1.7. Workshops by Mangrove Co-Management Body to draft municipal ordinance to establish the Local Conservation Area
- 1.8 Filing and lobbying of draft municipal ordinance to create the mangrove LCA
- 1.9 LCA Management Planning-workshop following approval of ordinance
- 1.10 Adoption of LCA Management Plan by Sangguniang Bayan
- 1.11 Formation, training and deputation of Community Forest Guards/Bantay Gubat
- 1.11.1 Identification, composition and orientational meetings
- 1.11.2 Basic law enforcement training following the DENR Wildlife Enforcement Officers (WEO) Training including safety and security, safeguarding rights of offenders and SOPs in patrolling.
- 1.11.3 Deputation of Bantay Gubat by LGU and DENR
- 1.11.4 Provision of basic enforcement equipment and paraphernalia
- 1.11.5 Continuing foot monitoring and patrolling
- 1.12 Mangrove Eco-Park Management Training and Planning-Workshop (including management plan documentation)
- 1.13. Construction of mangrove boardwalks and other facilities
- 1.14 Soft-launching and opening
- 1.15 Monitoring and maintenance of mangrove ecopark
- 1.16. Post-baseline mangrove assessment using MCS survey

Output 2: 700 hectares of coastal agroecosystems in 14 villages in Guinayangan are utilized for regenerative agriculture including promotion of agro-biodiversity.

- 2.1. Community meetings and project implementation workshops with coastal POs and village councils
- 2.2. Participatory rapid appraisals and field assessments
- 2.2.1. Field profiling of farming practices, landscapes and resources
- 2.2.1. Population sampling and estimation studies of key indicator species
- 2.2.3. Deskwork: developing coastal agri-fishery profile; and gender-differentiated baselines
- 2.3. Formulation of strategies for inclusive regenerative agriculture practices in coastal agroecosystems.
- 2.3.1. Meetings & dialogues with government agencies and other NGOs (e.g., Phil. Native Animals Development Program, Organic Agriculture program, AMIA)
- 2.3.2. Planning workshop with technical experts

2.4. Writeshops: field guides and protocols development (participatory action research [PAR] protocols, technological guides & extension materials, social learning approaches)

2.5. Organizing and/or strengthening village-level interest groups

2.5.1. Community-level prioritization exercises: identifying best-bet regenerative agriculture practices (technologies to most likely provide multiple benefits)

2.5.2. Community meetings: formation of interest groups to carry out PAR, planning meetings

2.5.3. Community trainings: PAR protocols, social learning approaches

2.6. Municipal-level seasonal climate advisory workshops and planning during start/end of rainy and dry seasons.

2.7. Participatory development and management of innovations funds for regenerative agriculture promotion

2.7.1. Workshop: setting up of funds management system

2.7.2. Community meeting: orientation on funds utilization and management; prioritization exercises for fund utilization

2.7.3. Roll-out of fund: support to PAR, establishment of community-based production support facilities (e.g.

nurseries, propagation/breeding centers, water harvesting facilities)

2.7.4. Fund utilization monitoring meetings & site visits

2.8. 2 cycles of Season-long PAR by interest groups (onsite experiments/testing, status updating, data

gathering and analysis, knowledge synthesis)

2.9. On-site farmer-to-farmer social learning events (roving workshops, field visits, learning exchanges, harvest festivals).

2.10. End-of-season community workshops: synthesis of PAR outputs & learnings.

2.11. Regenerative agriculture appreciation workshops for partners: share learnings and generate policy & program support.

2.12. Participatory rapid appraisal (endline assessment).

2.13. Cost-benefit case studies on coastal regenerative agriculture practices.

2.14. Writeshop: synthesis of project outputs and learnings; publish outputs in international R&D platforms (e.g. CCAFS)

Output 3: Around 1,000 poorest households in 14 coastal villages with improved livelihood security and resilience resulting from regenerative agriculture and sustainable use of resources found in the designated multiple-use mangrove forests.

3.1. Participatory rapid appraisal and field assessments

3.1.1. Livelihood & socio-economic assessment

3.1.2. Stakeholders' analysis

3.1.3. Deskwork and writeshop: coastal livelihood & socio-economic profile and baselines

3.2. Field guide and protocols development workshop: livelihood & commodity prioritization exercise & value chains analysis

3.3. Organizing and orientation workshops for enterprise-based groups: participatory value chains analysis, entrepreneurship, agro-enterprise development.

3.4. Prioritization exercise: identify agri-fishery commodities/products for value chain enhancement and enterprise development.

3.5. Participatory value chains assessment

3.6. Multi-stakeholder dialogues and needs assessment workshops.

3.7. Needs-based mentoring and training of enterprise-based groups on value chains and enterprise development.

3.8. Quarterly multi-stakeholder meetings to monitor implementation of partnership agreements among value chain actors.

3.9. Rapid appraisal: livelihood & socio-economic assessment (endline)

3.10. Case studies on coastal value chains & enterprises development; publish outputs in international R&D platforms

Output 4: Knowledge and good practices derived from the project are shared widely to the public as well as to various agencies of the government within Guinayangan and in the province to mobilize policy, funding and public support.

Darwin Initiative Main Annual Report Template 2024

4.1. Participatory stakeholder mapping of key actors in facilitating behavioural change.

4.2. Knowledge, attitudes and perceptions (KAP) baseline survey.

4.3. KAP workshops

4.3.1. Baseline analysis and needs assessment

- 4.3.2. Participatory development of behaviour change models and strategies.
- 4.4. Writeshops: multimedia materials development using project-derived outputs and learnings.
- 4.5. Roll-out and refinement of campaign strategy, particularly targeting youth and students.
- 4.6. Meetings with school administrators and socio-civic organizations (e.g. faith-based, interest groups) for conservation education campaigns.
- 4.7. Impacts and outcomes documentation
- 4.7.1. Outcome mapping workshop; M&E protocols development
- 4.7.2. Annual progress review and reporting
- 4.7.3. Outcome harvesting study: capturing contributions to municipal-level changes and development
- 4.7.4. Writeshop & publishing of outcome harvesting outputs in R&D platforms.
- 4.7.5. External monitoring & evaluation mission

4.8. Writeshops:

- 4.8.1. Development of policy briefs
- 4.8.2. Development of field operational guides/manuals.
- 4.9. National-level policy workshop

Annex 3: Standard Indicators

Table 1 Project Standard Indicators

DI Indicator number	Name of indicator using original wording	Name of Indicator after adjusting wording to align with DI Standard Indicators	Units	Disaggregation	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
OUTCOME LE	VEL				1	1	•		
DI-B05	Within 3 years, mangrove resource management is done fully by fishers' organizations with 30% women membership.	Within 3 years, mangrove resource management is done fully by fishers' organizations with 30% women membership.	People	Organizations; Female membership		889	358	1247 (28%)	30%
DI-D01	Within 3 years, the current 300 ha (Y0 baseline) of degraded mangrove forests in Guinayangan are rehabilitated, protected and sustainable managed	Within 3 years, the current 300 ha (Y0 baseline) of degraded mangrove forests in Guinayangan are rehabilitated, protected and sustainable managed	Area, hectares	Protected/ non-protected areas			397.7	397.7 (133%)	300
DI-D10	Within 3 years, species diversity in coco-based family farms and homesteads located in 700 hectares of coastal agro- ecosystems has improved by 10%	Within 3 years, species diversity in coco-based family farms and homesteads located in 700 hectares of coastal agro- ecosystems has improved by 10%	Area, hectares	Types sustainable agriculture practices.	70			70 (10%)	700
DI-D11	By Y3Q3, 50% increased level of appreciation by coastal communities of biodiversity conservation as nature-based solutions to managing climate- change risks & vulnerabilities.	By Y3Q3, 50% increased level of appreciation by coastal communities of biodiversity conservation as nature-based solutions to managing climate- change risks & vulnerabilities.	People	Gender	578	958	815	2,351 (102%)	2,312
DI-D16	Within 3 years, increasing agri- based livelihood options for farming households by 20% (50% of which, managed by women) due to more available crops & animals as household assets.	Within 3 years, increasing agri- based livelihood options for farming households by 20% (50% of which, managed by women) due to more available crops & animals as household assets.	Households	Income			2,268	2,268 (147%)	1,540

DI Indicator number	Name of indicator using original wording	Name of Indicator after adjusting wording to align with DI Standard Indicators	Units	Disaggregation	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
DI-D12	Added 10% expansion in mangrove forest cover, increasing total area to 330 hectares	Added 10% expansion in mangrove forest cover, increasing total area to 330 hectares	Area, hectares	Reforested areas			10.6;	10.6 (35%)	30 ha
OUTPUT LEVI	EL				1	1			
DI-A03	By Y3Q3, local government and the MFARMC, together with community and women's groups have synthesized their learnings on the importance of rehabilitating and enhancing mangroves and coastal agro-ecosystems and are actively sharing their experiences to the general Guinayangan populace and neighboring coastal municipalities	By Y3Q3, number of community and women's groups along with the local government and the MFARMC, that have synthesized their learnings on the importance of rehabilitating and enhancing mangroves and coastal agro-ecosystems and are actively sharing their experiences to the general Guinayangan populace and neighboring coastal municipalities	Number	People's Organizations		14	3	17	14
DI-A03	By Y1Q3, 14 community and women groups formed, capacitated for participatory action researches to generate gender- sensitive in multiple benefits on technological approaches	By Y1Q3, 14 community and women groups formed, capacitated for participatory action researches to generate gender-sensitive in multiple benefits on technological approaches						(121%)	
DI-B06	By Y3Q2, 14 village level community and women groups are scaling up the extension services and engaged the government support.	By Y3Q2, 14 village level community and women groups are scaling up the extension services and engaged the government support.							
DI-B01	By Y3Q3, 14 village level and 1 MFARMC level mangrove management plans promulgated where at least 30% of women participated in the deliberations and approval.	By Y3Q3, 14 village level and 1 MFARMC level mangrove management plans promulgated where at least 30% of women participated in the deliberations and approval.	Number	Management plans; Gender			7	7 (50%)	14

DI Indicator number	Name of indicator using original wording	Name of Indicator after adjusting wording to align with DI Standard Indicators	Units	Disaggregation	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
DI-B04	By Y2Q4, community and women's groups have identified 3 prioritized agri-fishery commodities with high market demand and potential for enterprise and developing operational plans.	By Y2Q4, community and women's groups have identified 3 prioritized agri-fishery commodities with high market demand and potential for enterprise and developing operational plans.	Number	Type of sustainable livelihoods		8		8 (267%)	3
DI-B04	By Y3Q1, 1 municipal level value- chain enterprise masterplan for 3 different prioritized agri-fishery commodities with market links developed with community and women's group.	By Y3Q1, 1 municipal level value-chain enterprise masterplan for 3 different prioritized agri-fishery commodities with market links developed with community and women's group.	Number	Enterprise masterplan				0	1
DI-B07	By Y2Q3, 14 village-level Mangrove Protection Associations ("Bantay Gubat") established in the coastal barangays totaling 140 members trained on coastal law enforcement, deputized and resourced by Y2Q2.	By Y2Q3, 140 members trained on coastal law enforcement, deputized and resourced in 14 village-level Mangrove Protection Associations ("Bantay Gubat")	People	Gender		8; all male	12;	20; all male; (14%)	140
DI-B07	By Y3Q4, at least 2 community representatives in each of the 14 villages assume a wider role in leading local community-based management and education efforts.	By Y3Q4, at least 2 community representatives in each of the 14 villages assume a wider role in leading local community- based management and education efforts.	People	Community- based			28	28; (100%)	28
DI-B10	By Y2Q4, 30% of coastal farming households from Y0 baselines incorporated native plants and animals (Quezon breed of native pig, Camarines chicken, Philippine mallard duck)	By Y2Q4, 30% of coastal farming households from Y0 baselines incorporated native plants and animals (Quezon breed of native pig, Camarines chicken, Philippine mallard duck)	Households	Type of livelihood	460	379		839 (121%)	694
DI-C This work has drawn the	By Y2Q3, 330 hectares of mangrove officially declared "local	By Y2Q3, 330 hectares of mangrove officially declared	Area, ha	Identified/ Protected		397.7		397.7 (121%)	330

DI Indicator number	Name of indicator using original wording	Name of Indicator after adjusting wording to align with DI Standard Indicators	Units	Disaggregation	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
attention of the One CGIAR initiative on Fruits and Vegetables (FRESH). 08	conservation areas" as legislated by the LGU.	"local conservation areas" as legislated by the LGU.							
DI-C15	By Y3Q4, knowledge sharing dissemination events reaching 30% of households in coastal agro-ecosystems.	By Y3Q4, knowledge sharing dissemination events reaching 30% of households in coastal agro-ecosystems.	Number	Type of activity	476	478		954 (137%)	694
DI-C15	By Y3Q3, the Guinayangan MEMC is actively engaged in educating around 5,000 students and youth about the importance of the municipality's mangroves and coastal agro-ecosystems through on-site conservation education activities; community and women's groups are serving as knowledge resource in the process.	By Y3Q3, the Guinayangan MEMC is actively engaged in educating around 5,000 students and youth about the importance of the municipality's mangroves and coastal agro- ecosystems through on-site conservation education activities; community and women's groups are serving as knowledge resource in the process.	People	Gender		551; 187 male, 364 female	793; 635 male, 158 female	1,344 (27%)	5,000
DI-D03	By Y2Q3, a legislation by the LGU promulgated with accompanying support program to 3 appropriate sites for: 1) research and education, 2) ecotourism and 3) associated sustainable livelihood.	By Y2Q3, a legislation by the LGU promulgated with accompanying support program to 3 appropriate sites for: 1) research and education, 2) ecotourism and 3) associated sustainable livelihood.	Number of instruments	Policy typology (Local, National Policy); Typology of biodiversity provisions.	0	0	0	0	1
DI-D11	By Y3Q3, 30% of households have adopted farming practices following regenerative agriculture principles	By Y3Q3, 30% of households have adopted farming practices following regenerative agriculture principles	Households			2,268		2,268 (96%)	2,312

DI Indicator number	Name of indicator using original wording	Name of Indicator after adjusting wording to align with DI Standard Indicators	Units	Disaggregation	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
DI-D11	By Y3Q3, 30% of households increased species diversity of their farms by 20%	By Y3Q3, 30% of households increased species diversity of their farms by 20%	Households			2,268		2,268 (96%)	2,312
DI-D12	By Y3Q1, outplanting efforts (50% of which done by women) using appropriate species selection and science-based techniques within the 330 hectares target for rehabilitation area is completed with 40% survival rates.	By Y3Q1, outplanting efforts (50% of which done by women) using appropriate species selection and science-based techniques within the 330 hectares target for rehabilitation area is completed with 40% survival rates.	People	Gender				62% women participa tion; 65.7% survival rate	50% women participation; 40% survival rate
DI-D16	Within 3 years, increasing agri- based livelihood options for farming households by 20% (50% of which, managed by women) due to more available crops & animals as household assets.	Within 3 years, increasing agri- based livelihood options for farming households by 20% (50% of which, managed by women) due to more available crops & animals as household assets.	Households	Income			2,268	2,268 (96%)	2,312

Table 2Publications

Title	Type (e.g. journals, best practice manual, blog post, online videos, podcasts, CDs)	Detail (authors, year)	Gender of Lead Author	Nationality of Lead Author	Publishers (name, city)	Available from (e.g. weblink or publisher if not available online)
Achieving Nutrition, Livelihood and Ecosystem Conservation Objectives in Coastal Areas: A Role for Small- Scale Aquaculture	Book	Gonsalves, J., Raymundo, D., Monville Oro, E., Rosimo, M. 2023	Male	Indian	International Institute of Rural Reconstruction, Silang, Cavite, Philippines.	
Fostering Participation and Socially Inclusive	Book	Gonsalves, J., Raymundo, D., Monville Oro, E., Rosimo, M. 2023.	Male	Indian	International Institute of Rural Reconstruction,	

Title	Type (e.g. journals, best practice manual, blog post, online videos, podcasts, CDs)	Detail (authors, year)	Gender of Lead Author	Nationality of Lead Author	Publishers (name, city)	Available from (e.g. weblink or publisher if not available online)
Approaches Among Coastal Communities					Silang, Cavite, Philippines.	
Conserving Agro Biodiversity: Useful Concepts and Practices for Coastal Areas	Book	Gonsalves, J., Raymundo, D., Monville Oro, E., Rosimo, M. 2023.	Male	Indian	International Institute of Rural Reconstruction, Silang, Cavite, Philippines.	

Annex 4: Approved LCA Municipal Ordinance

Annex 5: Guinayangan Ecotourism Site Assessment Report

Annex 6: Investment Readiness Assessment Report

Annex 7: Coconut By-products Case Study

Annex 8: Gleaning poster presentation

Annex 9: Mangrove community structure poster presentation

Annex 10: Draft Stingless Bee Primer

Annex 11: Draft Oyster Primer

Annex 12: Photodocumentation of Activities

Annexes 4-12 can be accessed through the shared folder:

https://drive.google.com/drive/folders/1qdSXeOzjGA1ZNgkwh0Ave-Kej6XplxTV?usp=drive_link

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