Darwin Initiative Main and Post Project Annual Report

To be completed with reference to the "Writing a Darwin Report" guidance: (http://www.darwininitiative.org.uk/resources-for-projects/reporting-forms). It is expected that this report will be a **maximum** of 20 pages in length, excluding annexes)

Submission Deadline: 30th April 2019

Darwin Project Information

Project reference	24-027
Project title	Applying business models to sustain socio-ecological resilience in coastal Philippines
Host country/ies	Philippines
Lead organisation	Zoological Society of London
Partner institution(s)	Local Government Units of the Municipality of Ajuy & Concepcion in Iloilo Province; Local Government Units of the Municipality of Ivisan, Province of Capiz; Local Government Units of the Municipality of Ibajay and Tangalan, Province of Aklan. Nigel Stansfield, President, EMEA, Interface Inc., UK
Darwin grant value	£399,584
Start/end dates of project	1st April 2017 – 31st March 2021
Reporting period (e.g., Apr 2018 – Mar 2019) and number (e.g., Annual Report 1, 2, 3)	1st April 2018- 31st March 2019 – AR2
Project Leader name	Heather Koldewey
Project website/blog/Twitter	www.zsl.org; www.net-works.com; @heatherkoldewey @morefishlessplastic
Report author(s) and date	Amado Blanco (National Project Leader), Gina Lopez (Financial report – Finance and Operations Manager), Heather Koldewey (International Project Leader).

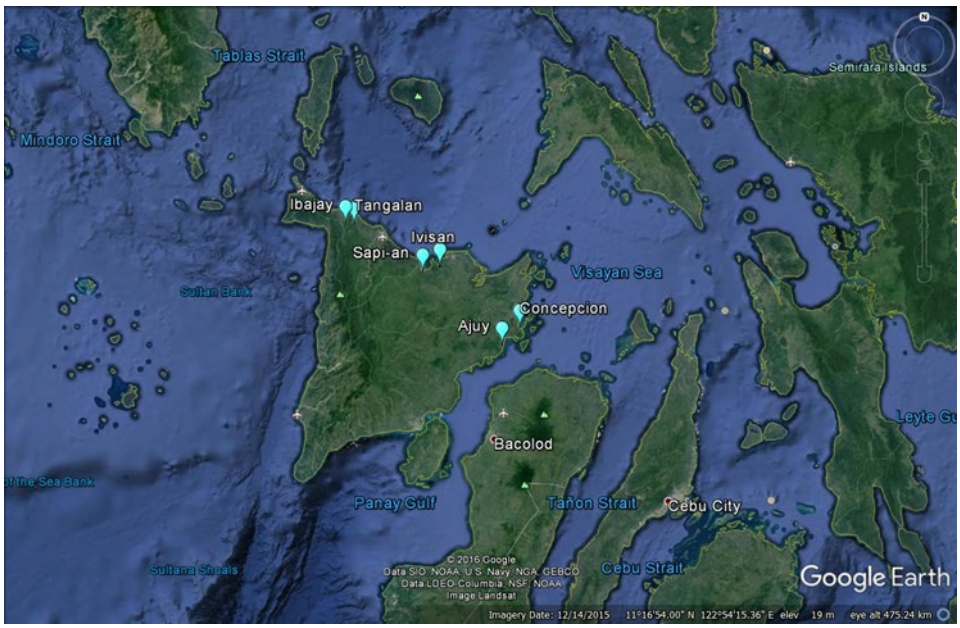
1. Project rationale

The Darwin Initiative supported innovative approaches to enhance socio-ecological resilience to disasters in the Philippines, including MMPAs and Net-Works™ (21-010). This project builds on these experiences and successes to build business models that break pervasive donor dependence in community-based marine conservation, creating fully scalable solutions.

The project addresses key issues that are predicting effectiveness of MPAs as biodiversity conservation and fisheries management tools: size, habitat composition, sustainability and enforcement. Under existing Philippines laws, coastal municipalities and cities are mandated to set aside at least 15% of municipal waters (i.e. 15 kilometres from general coastlines seaward). However, the total area declared protected at present remains very low at 0.5% because of their

small size (average 12ha of no-take zone). And, most of these MPAs are dominantly coral reefs. Mangroves, seagrass, mudflats, and other habitat types crucial to life cycles of fisheries resources are unprotected, leaving them highly vulnerable to conversion.

Financing to support effective management of MPAs in the long-term is also cross-cutting issue. A study suggests that only 12% of declared MPAs in the Philippines are effectively enforced. All the rest exist as paper parks mainly because of the lack sustainable financing and lack of community buy in. This project is aiming to catalyse a new generation of MPAs that are bigger (i.e. with at least 200-ha. NTZ), diversified in terms of habitat types, and financially sustainable. ZSL has demonstrated through the Net-Works business model there are alternative options to help secure access for sources of financing for MPA management in the long-term. Through the diversification of the Net-Works business model, we are aiming to support these idealised MPAs through the income generated by the business model itself, veering away from conventional donor-dependent set up. During the first year we introduced the term iMPA which describes the 'ideal MPA' (but also interpreted as innovative, inclusive, improved) to describe these MPAs that are bigger in size, better managed and enforced, and sustainably financed using the Net-Works business model. We have therefore phased out the term MMPA (which referred to Mangroves in MPAs) which did not properly reflect this improved approach. The project is implemented in three bay-scapes in three provinces on Panay Island in the western Visayas, Philippines and targets local communities and local governments within these sites (map below) and businesses through global supply chain development. The target communities live below the Philippines' poverty line and are extremely vulnerable to declining marine resources and increasing typhoons. Our interventions aim for these community members, especially women, to have diversified livelihoods, access to fairer and inclusive markets, and a mechanism and opportunity to engage meaningfully in conservation activities.



2. Project partnerships

Key project partners include local government units (LGUs) of Ibajay and Tangalan in Aklan, Ivisan in Capiz, and Ajuy and Concepcion in Iloilo. We now have formal memoranda of agreement (MOA) with four LGUs, three of which were signed in Year1 and the fourth in Year2. Signing of the MOA with our fifth LGU partner has been stalled by local political dynamics in the lead up to the barangay elections in May 2018 and forthcoming national and local elections in May 2019. Nonetheless, while we are pursuing the MOA signing, our team were still able to implement essential on-site activities, including conduct of biological surveys in partnership with a Peace Corps volunteer and follow-through VLSA mentoring. We work closely with 25 village LGUs in 14 iMPA sites we have selected. We intensified collaborations with existing people's organizations (POs) and 52 VSLAs (excluding youth groups) we have organized and mentored across 14 sites by engaging them directly in processes related to iMPA spatial planning and legislative advocacy. The POs include:

1. Barangay Pedada Fisherfolks Associations (BPFA), in Ajuy
2. Talotoan Farmers and Fisherfolks Association (TAFFA) in Concepcion
3. Tambaliza Small Fishers Association (TASFA) in Concepcion
4. Association of of Igbon Savers for Sustainable Fisheries (AsiSUF), in Concepcion
5. New Balaring Mangrove Association (NewBAMA), in Ivisan,
6. Barangay Agustin Navarra Environmental Conservation Association (BANECA), in Ivisan
7. Basiao Oyster Farmers Association (BOFA), in Ivisan
8. Bugtong-bato Fisherfolk Association (BFA), in Ibajay
9. Naisud Mangrove and Aquatic Organization (NAMAO), in Ibajay
10. Salvacion Responsable kag Uswagon nga Mangingisda, Concepcion
11. Asosasyon Sang Mangingisda sa Malangabang, Concepcion
12. Punta Buri MPA Fisherfolks Association, Ajuy

We advanced our collaborations with national government agencies, mainly the Department of Agriculture-Bureau of Fisheries and Aquatic Resources (DA-BFAR) and the Department of Environment and Natural Resources (DENR). In Year2, we continued to enrol beneficiary seaweed farmers to the DA-BFAR subsidized insurance program for small-scale seaweed farmers, which is implemented by the Philippine Crop Insurance Corporation. The Ajuy-Concepcion bay-scape is part of the Visayan Sea, where DA-BFAR is leading multi-stakeholder efforts to put this important fishery resource governed through an ecosystem approach to fishery management. ZSL has supported this initiative by sharing available biological and socio-economic information on sites where we are active or has history of work and participation in consultative planning exercises. DENR (through its Biodiversity Management Bureau or DENR-BMB) was a partner in convening the 3rd National Mangrove Conference. ZSL and DENR-BMB are also principal partners in our new German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) funded project, which is match funded to Darwin and has selected two Darwin-assisted sites in Ajuy-Concepcion bay-scape as centres of learning.

We continue collaborating with the Southeast Asia Fisheries Development Centre (SEAFDEC) to access training, technical support, and high-yielding tissue-cultured seaweed plantlets. However, our efforts to formalize our partnership with SEAFDEC has been affected recently by staff restructuring and departure of key seaweed farming expertise. The MOA we have drafted has yet to be signed by SEAFDEC. In order to ensure that we receive the technical expertise required to make the project a success we have developed and signed an MOU with the Integrated Services for the Development of Aquaculture and Fisheries (ISDA) Inc, which consists of former SEAFDEC employees and contains the world-leading seaweed farming scientists, most notably Dr Anne Hurtado. Dr Hurtado and ISDA will provide the much-needed seaweed farming expertise to help increase seaweed farming productivity of our beneficiaries and training in the implementation of more climate resilient seaweed farming methods. SEAFDEC is continuing to supply new and improved seedlings that demonstrate much higher growth rates that existing stocks.

We are coordinating with local and international NGOs, such as Adventist Development and Relief Agency or ADRA, Conservation International-Philippines, and World Vision-Philippines. ADRA supported the crucial early implementation phase of the newly-established Tambaliza iMPA, through financial support for procurement of boundary markers. ADRA was a key partner in planning and legislation of Punta Buri iMPA in Ajuy.

ZSL remains very active in the network of non-profit organizations catalysing the formation of VSLAs. Together with other catalyst organizations, we are actively supporting World Vision in planning and organizing the upcoming 4th national VSLA summit in May 2019.

ZSL has a new collaboration with NGOs for Fisheries Reform through the USAID Fish Right project which is looking at our northern Iloilo sites as possible learning sites.

3. Project progress

3.1 Progress in carrying out project Activities

Output 1 – Effective iMPAs

ZSL now has memoranda of agreement (MOA) with 4 of the 5 targeted municipalities, with the signing of the MOA with Municipality of Concepcion, Iloilo in May 2018 (*see **Annex 4***). MOA with

the 5th municipality has been delayed because of local political dynamics between municipal political leaders and community leaders. The MOAs form an important component of the free and prior informed consent (FPIC) at the municipal level.

We reported in Year1 that community and organizational profiling were already completed. Baseline socio-economic surveys were done in three priority sites inYear2, with locals trained and mentored to do field enumeration. Students from a local state university were trained and tapped to do data entry. Initial data analysis will be done when data checking is completed.

The 14 iMPAs, covering 25 fishing villages, were selected following participatory processes, which include series of multi-stakeholder consultations. *See updated complete of iMPA sites in* ***Annex 5***. Rapid habitat assessments had to be all completed in Year1 to inform site selection and prioritization. Our biologists conducted standard biological surveys in Tuad Reef, which is being proposed as expansion area of the no-take zone of Ivisan Fish Sanctuary and Reserve. A US Peace Corps volunteer helped fund the field surveys (see ***Annex 6***). In year 2 we completed the spatial planning processes to ensure that each iMPA included a no-take 'replenishment' zone that included an average of 200ha per village (i.e. iMPAs that covered two villages have a replenishment zone of at least 400ha, see ***Annex 7***).

The focus of year 2 has been to advance three of the 14 iMPA sites as demonstration sites for the other iMPAs to follow. As the most advanced within the iMPA process, Tambaliza has been leading the way, with Punta Buri and Salvacion-Malangabang closely following.

Tambaliza's iMPA was officially created with the passing of an ordinance in Year 1. In Year 2, the mayor of Concepcion, Iloilo issued Executive Order No. 43 to formally organize the Tambaliza iMPA management council and authorise them to manage the MPA (see ***Annex 9***). Since its organization, the iMPA council and its working committees have been holding regular meetings. We facilitated and extended technical guidance to the Tambaliza management council in preparing a 5-year management plan (see ***Annex 10***). We also assisted the Tambaliza local enforcement and patrol team in formulating its operational plan (see ***Annex 11***).

The ordinance legally creating the Punta Buri, Ajuy iMPA was approved by the municipal government in February (see ***Annex 12***). We are working with the office of the mayor of Ajuy, Iloilo for the issuance of the executive order that will formalise and authorise the management council of the newly-declared Punta Buri iMPA in Ajuy.

The draft ordinance for the Salvacion-Malangabang, Concepcion iMPA was endorsed by the village councils of Brgy. Salvacion and Brgy. Malangabang (see ***Annex 13***). It was already presented to the municipal council for first reading, the first step to comply with the three mandatory readings before an ordinance can be approved. If approved, this will be our model site for a co-managed iMPA where two villages would form a single body to manage an iMPA that covers two communities. However, strong lobbying from commercial/illegal fishing interests against bigger MPAs has delayed ordinance approval at the municipal level, despite endorsement by the villages, and forms the focus of attention for the beginning of Year 3 once national elections have passed.

ZSL had cost-sharing agreement with an NGO partner for the fabrication and installation of marker buoys to delineate the no-take zones and outer boundaries of the buffer zones of the newly created Tambaliza iMPAs. These marker buoys are not made of the traditional Styrofoam which degrade and cause plastic pollution, and are designed to be more sustainable, longer-lasting and more identifiable as MPA markers than other buoys. More than 40 units of these marker buoys were fabricated and installed to demarcate the no-take zone and buffer zones. Please see ***Annex 14*** for photos of fabrication and installation of MPA buoys).

We engaged a GIS specialist to do parcellary mapping (subdivision of area into smaller lots) of the ecological seaweed farming zones of the Tambaliza iMPA, designating individual farm locations that meet our environmental standards (see ***Annex 15***). Parcellary mapping of newly-

approved Punta Buri iMPA was done alongside spatial planning and zonation prior to ordinance approval (see ***Annex 16***).

We prepared a draft of the iMPA guardhouse building plan design (see **Annex 17).** We are still exploring modifications that are climate-smarter and more suitable for the second function as drying facility for seaweeds, working with industry partners to ensure that the facilities are fit for purpose for producing the highest quality material. Also, Tambaliza iMPA is huge and locations of the ecological seaweed farming zones are not all proximate to the identified construction site. We need to balance accessibility and strategic positioning considerations and are currently going through consultations on this with the community.

We have secured the funding to build the guardhouses for Tambaliza, Punta Buri and Salvacion-Malabang. We will use match grants from the Waterloo Foundation and National Geographic Society to leverage equity from local government units and village savings and loan associations (VSLA) Environment Funds. We have rescheduled actual construction in Q3 of Year3.

A round-table discussion among municipal officials and village stakeholders from five assisted municipalities was held in March 2019 to provide a venue for sharing best practices in MPA management and enforcement and leveraging the demonstration sites to facilitate development of the other iMPA sites. ZSL discussed the biological basis supporting our advocacy for bigger MPAs and explained the role of eco-friendly seaweed farming in the iMPA approach. *See **Annex 8** for photos taken during the iMPA Roundtable Discussions.* The iMPA roundtable discussions and learning visit to Tambaliza participated by municipal and village officials, leaders of partner VSLAs and people's organizations was our first attempt to form a social network of community-based MPA managers, and has driven interest in the iMPA approach (***see Annex 18***). This enabled us to lay initial legal foundations for other iMPAs in the pipeline (i.e. Igbon, Talotoan, Polopina in Concepcion and Luca-Pedada-Bay ang, Silagon, Pantalan Nabaye, Nasidman, and Pili-Malayuan in Ajuy), with their inclusion as potential MPA sites in the Ecosystem Approach to Fishery Management (EAFM) Plans and in the Municipal Fisheries Ordinances of Concepcion and Ajuy towns. In theEAFM approach, DA-BFAR declares specific fisheries ecosystems or fishing grounds as managed fishing areas to be co-managed by all component local governments, witch support from DA-BFAR. We convened consultations in Silagon, Ajuy to facilitate community consensus building on location, size, and initial zonation of proposed iMPA (see ***Annex 7***).

We organized a total of seven new VSLAs (Pedada -1, Bay ang -2, Igbon -1, and Balaring -3) in Year2. Total VSLAs organized in a span of two years is now 14 and all have adopted the Environment Funds. Social marketing outreach activities were conducted. Beach clean-ups remained dominant. During the International Coastal Clean-up day, 5 partner VLSAs joined Grade 4-6 elementary pupils in support of a school organised activity in Pedada, Ajuy to collect plastic marine debris on the beach. In Balaring, Ivisan, 46 VSLA and people's organization members did the same beach clean-up. In these two sites alone, a total of 3-km stretch of shoreline was cleaned. Our partner VLSAs in Tambaliza. conduct beach clean-up drives. Clean-up used fishing nets continued in at least seven villages in Iloilo.

We designed and conducted Values Formation Training for Village Agents identified within VSLAs who act as iMPA champions within our social marketing campaign. (see ***Annex 19***).

Output 2 – TURFs (all indicators due in Y2)

The aggregate area of TURF zones in the buffer areas of the two iMPAs already legally established (i.e. Tambaliza, Concepcion and Punta, Buri, Ajuy) is 1,245 ha. TURF zones of six iMPAs in the pipeline are already charted. We still need to work with communities to start plotting TURFs zones of the other 6 iMPA sites. But, as generally practiced, buffer zones normally extend 50-100 meters from the boundaries of NTZs outward and these will form the TURFs. We are expecting modifications as we advance into the participatory spatial planning. Installation of marker buoys to delineate different management zones, including TURFs and regulated use zones, in Tambaliza iMPA was completed in October.

We extended guidance and technical support in formulating the 5-year management plan of Tambaliza iMPA, which included initial discussions on the formulation of implementing rules and regulations of the different management zones We have a draft building plan for the dual-purpose guardhouse. We are still exploring more climate-smart designs that also meet quality standards of a potential market for dried seaweeds. We have existing grants we can use to leverage co-financing arrangement with local governments and communities.

ZSL is now an implementing partner of the USAID-funded Fish Right project, which covers Concepcion and Ajuy municipalities. We are working with Fish Right and our co-implementers to build agreement on the use of a common approach to fish catch baseline data collection. One agreement is the use of the recent baseline data collected by the Philippines' Department of Agriculture-Bureau of Fisheries and Aquatic Resource (DA-BFAR) National Stock Assessment Program (NSAP). ZSL staff are waiting for the Fish Right training on the NSAP, which we are planning to use in TURFs zones in Darwin-assisted iMPA sites. After our staff were trained on fishing gear inventory, we trained and contracted local enumerators to conduct fishing gear inventory in Darwin-assisted sites in Ajuy and Concepcion.

Output 3 – Diversified Net-Works business model

Our team organized seven new VSLAs in Year2. With the seven organized in Year1, the project has already organized a total of 14 new VSLAs. By end of Year2, the project assisted a total of 58 VSLAs (including youth VSLAs) across the 14 iMPAs. Fifty (50) of the total VSLAs we are supporting adopted our EF innovation. Their total recorded EF as of their current cycles is £1,246.

Twelve (10 females and 2 males) VSLA village agents are active in 6 sites, 7 of whom had formal training and 5 received on-the-job coaching from a peer VSLA agent. Ten agents are based in Iloilo, one in Capiz, and one in Aklan. All seven new VSLAs formed in Year2 were organized by the agents. Thirty-three adult VSLAs (no youth/kid VSLAs) are linked to the Net-Works nets supply chain. A total of 5,300 kg of used fishing nets collected from sites in Northern Iloilo were exported for recycling to Aquafil in Slovenia in September, providing income of £5,156. A total of 1,375 kilos of nets were collected in April 2018 to March 2019.

A total of 22 VSLA members from 4 communities submitted letters of interest to engage in ecological seaweed farming. Of the 22, 21 already received skills training in seaweed farming. Net-Works earned £870 in income from the pilot trading of 910 kg of dried seaweeds from small pilot farms trialling our eco-seaweeds approach in project-assisted communities. We have recently secured the necessary funding to scale-up the production of seaweed following our eco-seaweed methods in three of the sites, which will help generate additional capital for scaling up in the other villages.

Output 4 – Plan Vivo for blue carbon

As per the earlier change request, we have suspended the Plan Vivo component of the work whilst we further develop the science-base that is needed for blue carbon to make a meaningful contribution to mangrove conservation activities. We are engaging Dr. Clare Duncan to undertake the following, and she is contributing towards a revised LogFrame for this Output based on completing the necessary science:

- Establish baseline carbon stocks & identify additionality quantification methodology
- Review Philippines governance & tenurial systems facilitating blue carbon project creation
- Consolidate ZSL Philippines monitoring data
- Establish ZSL Philippines mangrove site monitoring systems and data management system needs
- Establish collaborative linkages across Philippines-based blue carbon projects & science

Dr Duncan has just secured a two year AXA Research Fellowship (from August 2019) which will enable her to progress this research alongside this project going forward in collaboration with ZSL.

We managed to carry out community-level social preparatory activities to strengthen mangrove conservation activities. Our team reorganized the Naisud Aquatic and Mangrove Organization (NAMAO) and Bugtong Bato Fisherfolks Association (BFA) to strengthen the two people's organizations. The two groups have seats in the Mangrove Eco-Tourism Board of Ibajay as community stewards of the 54-ha. Katunggan It Ibajay. The two people's organization discussed a plan to reorganize the Protect the Mangroves of Naisud and Bugtong Bato or AMLIG KANABU, which was responsible for the management of their mangrove forests. They have endorsed to the Municipal Council an ordinance updating the eco-park users' fee rates.

Output 5 – Breaking donor dependence.

We are managing supply chains of two commodities: used nets and ecologically produced seaweeds. We have four staff who are directly involved in managing these supply chains. We now have four staff responsible for planning and logistics for shipment/export and farming systems development in Panay and Bohol iMPA sites. Additionally, we are working with two international experts to help secure favourable relationships/forward buying agreements with relevant industry partners. We have one new industry partnership in advanced stages of negotiation with an agreement in final stages before signing.

We also have a boat service facility to support transport of both nets and dried seaweeds. When the boat is not used for supply chain related trips, other field staff use it for community organizing and extension of technical assistance. For its 5-month operations, the service boat earned a net income of £384.

Net-Works is the first project to be funded by the IUCN's Blue Natural Capital Financing Facility (BNCFF). BNCFF provides us business support services, which range from business plan development, advice on appropriate legal structure, improving financial performance of nets recycling, and seaweed marketing and business planning.

ZSL successfully hosted the 3rd National Mangrove Conference in April 2018. ZSL also conducted the 8th mangrove Training of Trainers in July, with 23 participants from national government agencies (e.g. BFAR), local government units, academe, private sector and NGOs. The 3- day Basic Mangrove and Beach Forest Training Course covered basic mangrove and beach forest taxonomy and ecology, species identification and practicum on mangrove nursery establishment and rehabilitation. The remaining 2-day session included workshops in conducting the actual BMBFTC.

The project team also supported the 9th and 10th Mangrove and Beach Forest Training of Trainers, which were attended by trainees from national government agencies such as BFAR and DENR.

3.2 Progress towards project Outputs

Output 1 – Effective iMPAs

We further innovated our MMPA concept into iMPA, which features bigger no-take zone, diverse habitat coverage, integration of ecological seaweed farms, and rights-based access to regulated fishing zones. Overall we are in advanced stages of progressing three demonstration iMPAs, two of which are already legally recognised and in advancing implementation, and one of which is in the final stages of legalising. We have leveraged these, particularly Tambaliza, as a learning site to progress the legal framework for iMPAs in a further 6 sites (making total of 9 iMPAs), and have drafted spatial plans for all of the 14 proposed iMPAs. We are on track for reaching our target of 14 iMPAs.

FPIC has been completed in all sites. We now have memoranda of agreement with four of the five partner municipal governments in three bay-scapes. Local political dynamics in the fifth municipality is stalling the signing of the MOA.

Village profiles have been completed.

Exchange visits to Tambaliza have been completed.

Governance structures have been legalised in Tambaliza, and executive order is in process for Punta Buri. Initial organising of relevant social infrastructure (e.g. POs and VSLAs) have been

undertaken in all sites. 29% of Tambaliza members are women. 38% of the Punta Buri iMPA management council are women. >80% of VSLA members are women, and these VSLAs are linked to the iMPA management councils.

Our iMPA social network has been established and has had its first roundtable meeting, which was participated by 43 males and 9 (17%) females

MPA MEAT has yet to be completed, but is on track.

Baseline surveys and Village Agent training for social marketing have been completed and social marketing campaigns are ongoing.

Output 2 – TURFs (all indicators due in year 2)

TURFs of the first two legally declared iMPAs are nearly three times the size of no-take 'replenishment' zones, reaching 1,245ha combined.

Marker buoys were installed to define zonal boundaries of Tambaliza iMPA. We have grants from Waterloo Foundation and National Geographic Society we can use as leverage local resources for the procurement and installation of boundary marker buoys for Punta Buri and Salvacion-Malangabang iMPAs

Allowable and prohibited activities inside buffer zones and managed fishing areas are defined in the approved ordinance (*proposed for Salvacion-Malangabang). Once the 5-year management plans are in place, we will assist the management councils in the development and adoption of the implementing rules and regulations. We will model the process in Tambaliza and Punta Buri iMPAs.

We have a draft building plan and design for the dual-use MPA guardhouse. We are also considering other options that are more climate-smart. A potential major market for dried seaweeds may not buy seaweeds exposed to rainwater, which we are also considering in the designing the seaweed drying component of the guardhouse. We already have the funding to build the guardhouses.

Twenty-nine percent of management council members in Tambaliza iMPA are women. The council has a Local Enforcement and Patrol Team that carries out daily patrols. We have assisted the formulation of operational plan of this team (see ***Annex 10***). So, far 14 cases of apprehensions have been reported by the team. We donated essential communication and GPS gadgets and patrol boat to the management council. VSLAs have pooled their EFs to procure a small auxiliary chase boat for the enforcement and patrol team. The ordinance of the newly-declared Punta Buri MPA requires at least 30% women membership in the management council.

We have conducted fishing gear inventories in Iloilo towns, which include Ajuy and Concepcion, and are receiving training from the USAID funded Fish Right project in CPUE methods, which we will employ to monitor fish catches from TURF zones.

Output 3 – diversified Net-Works model

Forty-six VSLAs, including seven new groups formed in Year2, are now contributing the Environmental Funds to support iMPA implementation or beach clean-ups and mangrove conservation, in areas where we are still working out their legal declaration. In Tambaliza, existing VSLAs contributed £for the procurement of an auxiliary chase boat that the enforcement and patrol team can use. In the past, it is uncommon for poor community members to make cash donations for MPA management. Five VSLAs in Punta Buri were organize by another partner NGO. After an orientation on the ZSL EF innovation, the VSLAs in Punta Buri decided to set up EFs in their VSLAs.

We have 12 active Village agents across all project sites. All 14 new VSLAs we have formed in the last two years are already outputs of the agents.

Thirty-three of the 58 VSLAs we are assisting are actually collecting used fishing nets. We are also linking VSLAs organized by other partners (e.g. Adventist Development and Relief Agency) to the supply chain.

Twenty-one local fishers have been trained in seaweed farming, 12 of them are now actually engaged in farming., following the ecological farming methods we introduced. We already traded

close to 1 ton of dried seaweeds that our assisted farmers produced. Using funds from the National Geographic Society and Blue Nature Capital Financing Facility, we are targeting to scale-up production of 60 seaweed farmers in Year3 following our eco-seaweeds methods.

We shipped to Slovenia 5,493 kilos of used nets collected from Net-Works sites in Iloilo. We collected a total of 1,320 kilos in Year2. We rolled out pilot implementation of Trash for Health (T4H) campaign, which incentivizes household, school, and community level proper management of residual wastes. Piloted in two villages in Concepcion, T4H delivers basic health services to households, schools, and communities when they earn agreed for points for the volume of residual wastes they feed into the municipal materials recovery facility. Tambaliza collected a total of 1.5 tons of residuals through the T4H scheme. The municipal solid waste management office delivers these residuals to a facility of an NGO that recycles them to school chairs. Thus far, Concepcion has received 45 units of plastic school chairs as an incentive for residuals delivered to the facility. The municipality enacted a plastics ordinance in 2018 and T4H has been adopted for town-wide implementation

Output 4 – Plan Vivo for blue carbon

We had to reassess how we approach this component. We now have a better grasp of the science required for us to advance this. Dr. Clare Duncan will be conducting field work in the first quarter of Year3 to start addressing the research gaps we only recognized in the homestretch of Year1. We also conducted organizational development interventions leading to the reorganization of two partner community organizations in Aklan. In line with our accepted change request earlier in Year 2 we will shortly be updating the LogFrame for this Output (through a further Change Request) with the plan for advancing the science that Dr. Duncan has been developing and has been awarded a two year AXA Fellowship to progress from August 2019.

Output 5 – Breaking donor dependence.

Diversification of Net-Works as a business model involves development of a pipeline of commodities and ensuring strategic focus on one commodity at a time. As advised by our corporate partner, we are focused on developing ecological seaweed farming. We conducted successful trial seaweed planting in Concepcion and Ajuy and seaweed farming zones are already part of approved spatial plans. We already trained the initial batch of farmers and piloted our eco-seaweed farming methods, and with resources from the National Geographic Society, Julius Baer Foundation, and Blue Nature Capital Financing Facility, we are more poised to take seaweed farming to reach scale. The farms we assisted have been affected by sea temperature linked “ice-ice” disease and a typhoon. We are now working with the top seaweed scientist in the country to help us develop more climate-smart farming systems, more resilient to “ice-ice” and tropical storms. Linking up our seaweed farmers to insurance services has meant that our seaweed farmers were more resilient and these losses did not have such a negative impact on them.

We now have a small team to focus on the seaweed supply chain, on both production and trading aspects. Our Julius Baer Foundation grant enabled us to employ a more experienced person who will be our main in-house technical specialist on seaweed farming and trade. This team will receive advice from a regionally recognized seaweed scientist we are engaging. Through incomes from the business model, we are supporting the salary of Finance Assistant who also handling recording and monitoring financial transactions and earnings of the business model

We earned (gross) from the export of more than half a ton of nets to Slovenia, earning (gross) from initial sale of dried seaweeds. We have already concluded that nets will not deliver us significant income because of low volume. We are expecting and developing seaweeds to become our main income centre in Iloilo.

3.3 Progress towards the project Outcome

- **Indicator 1 –** Increase number of iMPAs. Two of the 14 targeted iMPAs are already legally established, with the enactment of their supporting municipal ordinances. Punta Buri iMPA in Ajuy, Concepcion was declared in Year 2 and has no-take zone of 217 has. Legally created in Year1, the Tambaliza iMPA in Concepcion has a no-take zone of 205 has. If not for commercial fishing lobby, Salvacion-Malangabang iMPA in Concepcion would have been the third site legally declared by end of Year2.

The 14 iMPA sites encompass a total of 25 fishing communities, all of which have tentatively defined both locations and sizes of their no-take zones. The other sites we are targeting in Concepcion (i. e. Igbon, Talotoan, and Polopina) and Ajuy (i.e. Silagon, Pantalan Nabaye, Nasidman, Luca-Pedada-Bay ang, and Pili-Malayuar) are incorporated in the recently adopted CRM/EAFM Plans of Concepcion and Ajuy as targets sites of MPA expansion or creation in the two municipalities (see ***Annexes 20, 21, 22,*** and ***23***).

- **Indicator 2 –** Halt or reverse declines. Standard biological baseline surveys were conducted in Tambaliza iMPA by our team of biologists. They also performed baseline habitat surveys in ecological seaweed farming zones of Tambaliza iMPA, employing a new survey tool we are also testing (see ***Annex 24***). The team also carried out standard biological surveys in Tuad Reef, which is proposed expansion area of the no-take zone of Ivisan Fish Sanctuary and Reserve in Ivisan, Capiz (see ***Annex 6***). We reported that rapid habitat assessment surveys were already undertaken in all sites during Year 1. In Year 1, more thorough habitat surveys were conducted in the Ajuy-Concepcion bay-scape sites, were the three priority and secondary iMPA sites are located.

- **Indicator 3 –** Set baseline. Five local research assistants from three priority sites of Tambaliza, Salvacion-Malangabang in Concepcion and Punta Buri in Ajuy were trained to conduct field enumeration of the baseline socio-economic surveys. By end of August, field interviews were all completed. Student volunteers from a nearby state university were trained and mobilized to do data entry, hopefully introducing them to field of conservation. Data analysis and reporting will be done after in-house data-checking is completed. Additionally, we trained locals on fishing gear inventory methods. Some of our Iloilo sites were covered by the surveys.

- **Indicator 4 –** Livelihoods diversified. Legally declared ecological seaweed farming zones in Tambaliza iMPA and Punta Buri iMPA were subdivided into 1/8-ha. economic family size farm lots (see **Annexes *15*** and ***16***). Three (3) seaweed farmers in Tambaliza and five seaweed farmers in Igbon availed of production loan assistance amounting to £3,813. A total of 22 seaweed farmers signified interest to participate in our ecological seaweed farming. Twenty-one (21) of them were already trained. Nets recycling was also expanded to Punta Buri, tapping VSLAs organized by another NGO partner as social infrastructure for the nets recycling.

- **Indicator 5 –** Diversified Net-Works business model. Five thousand four hundred ninety-three kilos of used fishing nets collected from Darwin sites in northern Iloilo were exported to Aquafil in Slovenia in September 2018, generating £4,950 in gross income. Total used fishing nets collected between April 2018 to March 2019 is 1,375 kilograms.

  Nine hundred ten (910) kilos of dried seaweeds (or 6.3 tons fresh) produced by VSLA members in three assisted communities were sold to a local seaweed trader, generating £910 in gross income. Dried seaweeds collected from three iMPA sites actively farming seaweeds in Year 2 was 627 kilograms (or 4.3 tons fresh).

  We accessed funding from the Julius Baer Foundation, National Geographic Society, and Blue Nature Capital Financing Facility to support expansion of farming in Year3.

3.4 Monitoring of assumptions

Project Summary	Risks and Assumptions	Comments on Status
Outcome Community-based conservation effectively protects 15% of bay-scape waters in three pilot bay areas (thereby meeting national and CBD targets), fully sustained by a diversified Net-Works business model that enhances socio-ecological resilience and reduces dependence on donor funding.	▪ Municipal and barangay local government units supportive. All have shown support to date;	Municipal and barangay LGUs remain very supportive. We now have formal agreements with four the five partner LGUs. The LGUs where the priority iMPAs are located have fully supported our technical recommendations on the design and legal framing of the iMPAs. National elections have meant that we cannot progress so much with LGUs in recent months, and in one LGU where the politics is more difficult we have yet to sign the MOA.
	▪ Further natural disasters, particularly tropical storms, typhoons and earthquakes do not hinder significantly project sites or activities. However, we were surprised how much conservation work the communities were willing to do even in the immediate aftermath of Typhoon Haiyan.	No strong typhoon hit the area in Year2. One was forecasted to affect northern Iloilo, prompting our on-site technician and farmers to prematurely harvest their crops. Warm sea surface temperature induced 'ice-ice' disease in seaweeds, causing us to be more calculating on scaling.
	▪ Revenues in the business model can be made to match the costs of ongoing MMPA support – which depends on both increasing supply and price of goods, and finding efficient ways to reduce costs – something that we have already shown we are very effective at with Net-Works.	Plans to scale seaweed production to a commercial level in three pilot sites did not completely materialize in Year2. Legislation of the 2nd and 3rd priority sites did not happen on schedule and we can only phase in seaweed farming once the legal basis and farming zones are secured. But, we now have the financing to support at least 60 farmers in Year3. Also, we need to strongly demonstrate seaweed farming can generate a reliable income source for local fishers. Local fishers are used to fishing income and are not always willing to try new things. Nonetheless, we traded more than a ton of dried seaweeds in Year2, have trained 21 people and have had formal expressions of interest from many more. The first challenge is the early adopters and once people can see the benefits we expect many more to follow suit.
	▪ Presence of active People's Organizations engaged in Coastal Resource Management/fisheries management with high conservation awareness	Existing people's organizations in three priority sites have been the strongest supporters of the spatial plans and the municipal legislations we drafted together with the technical working groups. In Aklan, two partner POs revived a multisectoral body for the management of a mangrove forest and proposed the amendment of the users fee tariffs of an existing mangrove eco-park. Overall community buy in to the iMPA concept has been very strong,

	▪ Receptivity of stakeholders to a new approach to conservation through business models.	enabled through our social marketing tactics. In fact it has often been stronger than internal buy-in –with a major learning being that it is the NGOs and implementers that have been too afraid to attempt larger MPAs rather than the concerns of the communities! Most communities have been very receptive to the idea of a new generation of MPAs that are bigger, diversified, and sustainable that ZSL is advocating. We should take note, however, that we have seen the strong evidence of commercial- illegal fishing lobby against the type of MPAs we are now promoting. Commercial fishing is illegal within 15km of shore, but they still hold a strong influence over local government. As a result the LGU proposed a reduction in size of the NTZ of Salvacion-Malangabang iMPA. This is something we are working on changing by ensuring better representation of community interests at the LGU level to counter the illegal lobbyists.
Output 1 Effective community-based management of 17 MMPAs across the 3 bay-scapes:	▪ Local champions can be found which has always been possible in previous communities although sometimes can be complicated by underlying political agendas. ▪ Community-level support for conservation is motivated by shared experiences with similar communities. We have found previously that cross-visits are highly effective but only when they are well planned with defined objectives, clear structure and follow up. ▪ Engagement and support from local government is secured throughout the project. Following the national elections in April 2016, government should be stable for 3 years but level of bureaucracy and time around MPA ordinances can vary depending on the village and LGU officials.	Assumption still valid. The ranks of VSLA members provide a venue for spotting potential local champions. Our community organisers monitor VSLAs for any concerns around them becoming politicised but this has not been an issue to date. We have already started developing Tambaliza iMPA in Concepcion as a learning site. It recently hosted the first wave of learning visitors of municipal officials and community leaders from the other 13 iMPA sites. Our project with GIZ will invest resources to fully development (including documentation and publication of knowledge production) Tambaliza iMPA as a very good centre of learning. As learning centre, it will showcase iMPA establishment processes and VSLAs as social infrastructures for sustainable financing, emphasize income generation roles of nets recycling and seaweeds. The barangay level elections on 14 May 2018 decelerated community social processes in Punta Buri and Salvacion-Malangabang. While leadership transitions at the village level may have implications, it can be offset by stronger collaboration with non-elected municipal officials. Our partnership with non-partisan POs also minimize the impact of political

	▪ Boundaries between municipalities are defined or can be resolved, especially where they may affect MPA establishment.	leadership transitions at the community level. While Ibajay and Tangalan municipalities have unresolved boundary issues, the villages have expressed openness to co-management options. But, to be safe, project will not operate in areas that may unintentionally recognize the validity of territorial claim of one LGU partner. Our decision to drop Sapian as a site lessens possible entanglement in boundary related dynamics between two LGU partners
Output 2 Integrated Territorial Use Rights for Fisheries (TURFs) introduced within MMPAs (creating TURF-reserves or replenishment zones) in two bay-scapes to align fishers' incentives with sustainability and MPA management.	▪ Communities can reach agreement on location of buffer zones and managed fishing areas. Often these are a mechanism for implementing existing (unenforced) laws on fishing gears. ▪ Improved diversity of function of MPA guardhouses will enhance enforcement of no-take zones and illegal fishing activities through additional surveillance and active engagement of fishers. ▪ Women engage as fish/forest wardens which may be facilitated through training specific women's enforcement teams as successfully applied in South Africa and Nepal. ▪ CPUE electronic recording system currently used in collaborative ZSL projects in Mozambique apply in a Philippines context or can be adapted. Good understanding of fisheries in the Philippines, staff expertise, and connections with fisheries experts and existing data (USAID projects) should facilitate this.	Assumption still valid Assumption still generally valid. It is worth noting, however, that we have seen a situation where seaweed farms may not be proximate to what may be considered strategic placement for the MPA guardhouse. How we approach the case of Tambaliza will set up a good precedent. Assumption is still generally valid. There are positive signs. For instance, two of the newly-deputized fish wardens in Ajuy are women. Secondly, a local woman (Nanay Helen) in Tambaliza has been enforcing a portion of the MPA near her residence This is highly possible, given the popularity of ICT gadgets in the Philippines. We have started using open data kit (ODK) in collecting VSLA data. We need to learn successful applications in fisheries monitoring.
Output 3 Diversified Net-Works business model supports environmental management and biodiversity conservation, and clears up marine debris.	▪ Available conservation/ environmental champions suitable as village agents ▪ Viable markets for plastic waste other than nylon	A total of 12 VSLA agents are active by end of Year2 and we have started providing them with values re-orientation inputs to prepare them to assume bigger roles as marine conservation or iMPA local champions There are existing local scrap buyers buying other recyclable plastics, which are already segregated at the household and VSLA levels. We send residual plastics to the Municipal

		Materials Recovery Facility, which delivers residuals to a facility that recycles them to school chairs.
	▪ Net-Works systems and M&E are robust enough to convert to a private code. Sharing of the toolkit, current data collection methods and results through a series of meetings with FLOCert (leading experts and behind Fair Trade certification) have suggested this is the case. ▪ BFAR issue seaweed farming permits according to their current guidelines.	Interface had advised us in Year 1 that they no longer require FLOCert certification and that it would therefore be a waste of resources. We are still open to this idea of necessary for other private sector collaborations – but it has to be driven by the market and meet their needs. Local government units have the authority to issue farming permits. We enrolling our seaweed farmers to a BFAR-subsidized crop insurance program for seaweed farmers. We are assisting farmers and VSLAs so their members can meet the eligibility guidelines.
	▪ Sustainable seaweed farming methods are adopted by families and not undermined by existing accepted practices e.g. use of polluting plastic ties.	As reported in Year1, use of multi-use PE ropes is not generating buy in from local farmers, claiming the small PE ropes can cause lesions on the seaweed plantlets. The method that will be introduced by Dr. Anne Hurtado will replace soft ties with PE ropes. We are hoping the farmers will be more convinced when they hear it from the country's top seaweed scientist, and we plan to undertake cross-visits to specific major production areas where they are accustomed to using PE ties.
	▪ Loss of seaweed production due to weather/disease is within contingency parameters set within the business model (based on scientific research and extensive discussions with key stakeholders).	We plan to keep farm size to be supported initially at 1,250m^2 size so much of it can be covered by the government-subsidized crop insurance, while ZSL explores other cheaper insurance options. Dr. Hurtado will also explore climate-smart farming options for our assisted communities.
Output4 Plan Vivo certificates for blue carbon in MMPAs from mangroves and seagrasses provide a mechanism for increased protection of coastal greenbelts and sustainable financing for coastal communities.	▪ Stable land tenure is existing or can be established for project sites ▪ Community agreement and buy-in to implement Plan Vivo ▪ Project is validated and verified under the Plan Vivo Standard. ▪ Plan Vivo and ZSL are able to secure buyers for each tonne of CO2e generated from the project ▪ Market price for tradeable carbon remains fairly stable and high therefore project costs are offset and communities benefit from income.	As indicated in the Year1 report, we realised our assumptions were not completely accurate. There are four assumptions and risks that we have identified. Our approach to tackle this is detailed in reporting on Output 4, and will entail the need for a change request. a. The largest carbon stocks for mangroves are in the soils. Currently these are not eligible as the scientific understanding of soil carbon fluxes in mangroves is in its infancy. b. The concept of additionality means that we have to create a baseline before project implementation started, which is more challenging in our sites than anticipated given our long history of working in the area. It also means

		that potentially a much smaller proportion of area is eligible for Plan Vivo than we initially envisaged where baselines may show that the condition of mangroves was already improving. c. With both of the above combined, our current best estimate is that income from Plan Vivo, once established, would be too small to cover the costs of ongoing verification work that is required. Thus, it does not constitute a sustainable business model and would create additional donor dependency which is against one of the primary objectives of this project. A fundamental assumption was that Plan Vivo provided a sustainable source of finance for supporting mangrove conservation in the long term that could reduce donor dependency, which at the current moment does not appear to be the case. d. Additionally, stable land tenure is required, but based on our experiences it takes 6-7 years to secure a community-based forest management agreement with DENR.
Output 5 Break donor dependence and create financially sustainable community-based management	▪ Efficient approaches to MMPA management can be developed to ensure costs are within the scope of resources available within business models and local government resources. ▪ Funds can be accessed to the right level to support MMPAs sustainably by Yr4. We already have a strong track record with existing business models and counterpart funding from local government.	We are trying to ensure the cost of supporting the management of thee iMPAs is kept at very manageable range, without also compromising longevity. For instance, we are keeping the cost of building iMPA guard to affordable range and design is climate-smart to reduce recurring maintenance cost. We are using modest funds we have from other existing grants to leverage local resources, setting up precedent for cost-financing. So far costs are coming in below initial conservative projections that were used in forecast P&L models. The municipalities of Concepcion and Ajuy have legally committed (through the budgetary provision of the ordinance) to allocated at least PhP200,000 annually for Tambaliza and Punta Buri iMPAs. The annual funding commitments of the *barangay* LGUs are also provided for in the approved ordinance.

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

The two iMPAs that are already legally established have total area of 1,722 ha (853 ha. in Tambaliza and 869 in Punta Buri) and combined no-take zones of 422 hectares contributes to the Philippine Biodiversity Strategy and Action Plan 2014-2025 in contribution to achieving the

Aichi Biodiversity Targets and the CBD targets for marine biodiversity protection. These iMPAs cover mangrove, seagrass and coral reef habitats, maximising the biodiversity protected which we are monitoring through biological surveys. This new generation of bigger and habitat-diverse MPAs is in the top 3% in the country in terms of size and around 50 times larger than the average MPA size (16 times larger than the average no-take zone size), so this project offers the potential for transformational difference in community-managed MPAs in the Philippines. The ProCOAST project that ZSL are now co-implementing with GIZ with matched funding to Darwin is developing Tambaliza iMPA as centre of learning and will promote the iMPA model, along with other best practices, its replication in at least 30 municipalities in central Philippines. Widescale replication of our approach to the thousands of MPAs that exist in the Philippines currently will significant shift the dial in terms of proportion of municipal waters protected, which at <1% is well below the nationally mandated target of 15%.

Our capacity building approach have taken three forms: environmental training including enforcement and mangrove and beach forest training; supporting VSLAs that address poverty with Environment Funds to enhance community capacity to manage their own resources, and; developing a detailed manual for replicating the iMPA approach. For VSLAs, the average annualised returns on assets are 33% and 67% of ZSL-Philippines supported VSLA members are women helping address poverty and gender equity. Many VSLA members avail of loans and investing VSLA savings to support livelihood activities, suggesting the multiplier effects of VSLAs.

4. Contribution to the Global Goals for Sustainable Development (SDGs)

G1.5 [By 2030, build the resilience of the poor and those in vulnerable situations and reduce their exposure and vulnerability to climate-related extreme events and other economic, social and environmental shocks and disasters]

- A total of 54 VSLAs (excluding 4 youth VSLAs) provide families with access to basic financial services (savings and credit) and social funds. Information from post-Haiyan accounts showed that poor families that are linked to VSLAs rebuilt damage houses faster than those who were not linked to VSLAs.
- The 14 iMPA sites (two legally declared) we aim to establish and strengthen have diversified habitat components. Most of them have mangrove forests that we will rehabilitate using community-based approaches developed and employed in previous Darwin grant (21-010). These mangrove forests increase resilience in poor fishing communities through coastal greenbelts that can protect them from strong winds, waves, and surges (documented in scientific research with grant 21-010 Duncan et al., 2016 doi: 10.1016/j.marpolbul.2016.05.049).

G8.10 Strengthen the capacity of domestic financial institutions to encourage and expand access to banking, insurance and financial services for all.
G12.2 [By 2030, achieve the sustainable management and efficient use of natural resources]

- The 58 VSLAs or community banks we have catalysed provide 1,257 individuals with access to saving and credit facilities, as well as basic insurance through the social fund.
- Most of these villages are very remote and poor and considered non-bankable by the formal financial institutions, particularly as saving amounts per week are small and communities are remote.

G12.5 [By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse]

- By end of Year 2, we exported a total of 5,493 kilograms of used fishing nets to Slovenia and collected 1.3 tons of discarded nets after the shipment.
- We have successfully piloted in Concepcion, Iloilo, the Trash for Health campaign, which expands the scope of our plastics recycling to include types of plastics. Concepcion has integrated the Trash for Heath campaign in its newly-enacted municipal plastics ordinance and plans to enact a municipal ordinance to adopt the scheme in all barangays in the municipality. We have established a link with an NGO facility that converts residual plastics

into school chairs, which is also addressing the inadequacy of school chairs in island primary and elementary schools.

G13.1 [Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries]

- The 58 community banks we have catalysed will help 1,257 individual members become more resilient.
- Our approach of diversifying the habitat composition (including mangroves and seagrass beds) of iMPAs will make communities and MPAs more resilient through improved ecosystem services provided by those habitats.
- The iMPAs we are assisting are considered and recognized by local government unit partners as disaster preparedness interventions

G14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution

See also comments for G12.5 above

G14 [Share of marine areas that are protected]

G14 [Fraction of fish stocks overexploited and collapsed (by exclusive economic zone]

G14.2 By 2020, sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and take action for their restoration in

- iMPA Tambaliza and Punta Buri are legally established, currently the two biggest actively enforced multi-use managed marine areas in the Ajuy-Concepcion bay-scape
- iMPAs of Tambaliza and Punta Buri are around 50 times larger than the average MPA in the Philippines, with No-Take Zones of 16 times the average size. They are in the top 3% in terms of size (total of around 1,500 MPAs in the Philippines).
- Legislations have budgetary provisions to ensure management has access resources to support basic MPA management activities
- We have identified iMPA sites in 12 other sites and all of them will have at least 200-ha. no-take and diversified habitat coverage
- Communities area ware and now appreciate why nets recycling and eco-seaweeds are important for the long-term financing for MPA management

G14.4 By 2020, effectively regulate harvesting and end overfishing, illegal, unreported and unregulated fishing and destructive fishing practices and implement science-based Management plans, in order to restore fish stocks in the shortest time feasible, at least to levels that can produce maximum sustainable yield as determined by their biological characteristics

- iMPA design requires designation of TURFS, regulated fishing zones, and seaweed farming zones. Total buffer zone and managed fishing areas of is 1,295 ha.
- We accessed grants from Adventist Development and Relief Agency and National Geographic Society to build local capacities in law enforcement. We have already trained local enforcement units on the SMART marine and provided them with basic communication (e.g. mobile phones) and GIS support equipment (e.g. laptop and GPS gadget)
- We conducted training to deputize local fish wardens to improve enforcement and reduce illegal fishing and assisted two local government unit partners formulate operations manuals for their deputized fish warden operations. They already reported 14 cases of apprehensions.
- The local government units of Ajuy and Concepcion have officially adopted their Coastal Resource Management / Ecosystem Approach to Fisheries Management Plans promoted by the Philippine Bureau of Fisheries and Aquatic Resources
- ZSL is actively supporting the Visayan Sea fisheries ecosystem level initiative of the Bureau of Fisheries to put the Visayan Sea under a management regime that considers itas one fisheries ecosystem
- We are currently in talks with Oceana for possible partnership focusing on anti-illegal fishing campaigns.

G14.5 [By 2020, conserve at least 10 per cent of coastal and marine areas, consistent with national and international law and based on the best available scientific information]

- ZSL has 12 potential iMPA sites in the pipeline and all of them are capable of producing at least 200-ha NTZ
- Standard biological surveys are done to inform MPA establishment processes

G14.a [Increase scientific knowledge, develop research capacity and transfer marine technology, taking into account the Intergovernmental Oceanographic Commission Criteria and Guidelines on the Transfer of Marine Technology, in order to improve ocean health and to enhance the contribution of marine biodiversity to the development of developing countries, in particular small island developing States and least developed countries]

- Standard biological surveys conducted in the sites in Concepcion and Ajuy, informing the preparation of Coastal Resource Management/Ecosystem Approach to Fisheries Management Plans
- CRMP planning done in coordination with LGU partners, providing opportunities for the coaching and mentoring
- We organized the 3th National Mangrove Conference and 9th and 10th Mangrove and Beach Forest Management Training of Trainers in Year2.

G14.b Provide access for small-scale artisanal fishers to marine resources and markets

- Integration of the TURFs, regulated fishing zones, and eco-seaweed farming zones in the iMPA Tambaliza. Approved municipal ordinances of Tambaliza and Punta Buri iMPAs secure preferential fishing privileges to community members who are active in iMPA implementation.
- Net-Works has set up a supply chain of dried seaweeds. We have already sent sample of the seaweeds our communities are producing to potential corporate buyer in the UK. We are also in conversation with a big potential market for dried seaweeds.
- New sites with significant volume of discarded fishing nets will be linked to the used nets supply chain. We already replicated nets recycling in Punta Buri, tapping VSLAs organized by other NGOs as on-site partners.
- All iMPA sites we have identified have potential eco-seaweed farming zones.

5. Project support to the Conventions, Treaties or Agreements

This project is focused on contributing to national action plans and programs to support the country's achievement of the Convention on Biological Diversity, Aichi Biodiversity Targets and Sustainable Development Goals. The project includes strategies and approaches anchored on the broader framework of Integrated Coastal Management (ICM) implemented in Key Biodiversity Areas, including (i) supporting local populations to develop and implement remedial action in degraded areas where biological diversity has been reduced and rehabilitating degraded ecosystems; (ii) adopting measures to avoid or minimise adverse impacts on biological diversity (Articles 8 & 10). The Net-Works™ model also encourages the involvement of coastal communities in the management and benefit-sharing from the sustainable use of biological diversity (Article 8), and is an economically and socially sound measure for incentivising conservation and sustainable use of components of biological diversity (Article 11). Net-Works™ is designed to support community-based protected areas, which can contribute to the protection targets under CBD only when they achieve scale. This is already demonstrated by the first two iMPA being two of the largest in the Philippines.

These strategies will contribute to the achievement of the Philippine Biodiversity Strategy and Action Plan 2014-2025 in contribution to achieving the Aichi Biodiversity Targets:

- Terrestrial Ecosystems, Priority Strategy 1- Protect and conserve existing natural habitats and pursue restoration of the functionality of degraded habitats (supporting Aichi Targets (AT) 1, 2,5,11,14,15,19)
- Terrestrial Ecosystems, Priority Strategy 3 – Conserve and protect natural ecosystems to improve the resilience of vulnerable communities (supporting AT 1,2,15,19)
- Aquatic Ecosystems (Freshwater/Marine), Priority Strategy 5- Implement habitat rehabilitation programs and strengthen collaboration among relevant agencies and

stakeholders on land and water use, resource extraction, ecosystem restoration, law enforcement and sustainable livelihoods (supporting AT 1, 2, 5,6,10,11,15).

We involved the UK Ambassador to the Philippines in the 3rd National Mangrove Conference. His Excellency Ambassador Daniel Pruce was invited as one of the keynote speakers in the conference, though he could not but he assigned a senior officer to speak on his behalf. The country director of ZSL in the Philippines had discussions with Ms. Kat Coballes of the British Embassy in Manila to explore the national replication of the 2018 IWT Conference that our country director attended in London. The Embassy approved our small grant application to hold a national IWT conference in the Philippines. However, dues to very tight schedules, we could not mobilize the approved grant within the timescale of the Embassy.

6. Project support to poverty alleviation

Conduct of socioeconomic surveys have been completed in three priority iMPA sites (Tambaliza, Punta Buri, and Salvacion-Malangabang) to generate socio-economic profiles of these focal communities. We also conducted fishing gear inventory to gain a deeper understanding of their fishing activities. To date, the 58 VSLA/community banks we have catalysed and mentored have 1,257 members. These individuals continue to access to financial services (savings and credit) and social funds from the community banks. Results of our initial analysis suggest that members use loan availed from their VSLAs to support livelihoods and address basic needs, including education and health.

We have provided 21 local fishers with skills training in ecological seaweed farming that provides access to a new livelihood. By end of Year2, 12 families were engaged in farming seaweeds. Nearly 1 ton of dried seaweeds have been traded, generating £870 in gross income. The combined ecological seaweed farming zone of the Tambaliza and Punta Buri iMPAs is 45 hectares, enough to provide 258 fishing families with 1/8-ha economic family size farm each. The National Geographic Society, Julius Baer Foundation, and IUCN BNCFF have provided us funding to help develop the productivity of the eco-seaweed farming zones.

We earned £4,948 from the nets we exported to Slovenia in 2018. About a third of the earning represents community income.

Previous research (Hill et al., 2011) identified that risk was a key barrier that prevented fishers from diversifying their livelihood options e.g. starting seaweed farming. We have therefore facilitated insurance coverage of 21 seaweed farmers under government crop insurance schemes that is already available to e.g. rice farmers. This helps reduce risk and increase access for poor people into new income generating options.

7. Project support to gender equality issues

Our project team is an equal gender split, with women represented in roles across leadership, technical, management and support roles.

The VSLA membership (1,257) has been well documented to be primarily female (81%) and therefore women will see direct benefits from this increased economic resilience and access to financial services. VSLA has remained a key tool we have focused since Year 1 to engage women in the project. Another focal area has been the role of women in decision making in marine resource management, particularly as they can be marginalised in the location and controlled activities in MPAs.

The Tambaliza iMPA management council has 29% women representation. Women represents 38% of total nominees to the Punta Buri iMPA management council. On the other hand, ten of the 12 active VSLA agents are women.

8. Monitoring and evaluation

Detailed one-year operational plans are prepared based on the Project Logframe and implementation timetable at the onset of the financial year. The yearly operational plans are the

basis for preparing monthly sub-team and individual work plans. Sub-teams and individuals submit accomplishment reports based on approved monthly workplans. Team managers and project manager track progress of targets by reviewing the monthly reports. Progress of project implementation is reported quarterly to the senior management team of ZSL Philippines.

In 2017, the in-country Darwin project team with guidance from UK-based colleagues reviewed the indicators and monitoring system to ensure methodologies are standardised. This helped build consistency and capacity among the team and streamlined the number of indicators. Surshti Patel and Hazel Panes are tracking agreed indicators to agreed timelines e.g. VSLA indicators are submitted monthly, MPA biological monitoring annually. We have established templates for qualitative data and informal storytelling that have allowed us to generate a series of blogs that give more descriptive outcomes of the project e.g. **http://net-works.com/2017/04/26/net-works-community-banks-sag-young-savers-story/**

In Year2, completed biological and socio-economic surveys and waste plastic characterization, using both photomapping method and initially inventory of plastic waste packing outputs of the community-level variety stores, in identified iMPA priority sites in Ajuy-Concepcion bay-scape.

9. Lessons learnt

What worked well this past year?

- Working with multi-sectoral technical working group is proven effective
- Tapping our biologists to discuss in easily understandable terms the scientific basis for bigger MPAs
- Use of GIS map supported spatial planning facilitates community-level consensus building
- Use of popular (e.g. highly visual) presentations in discussion technical concepts, such as home ranges, fecundity, improves understanding
- Leveraging project resources to fast-track complementary actions by municipal governments
- Uptake of the concept of iMPAs by communities – and particularly the larger size of the MPAs and associated No-take 'replenishment' zones. Our approach and concepts for encouraging uptake are working well.
- Organizing discussions to promote effective MPA management such as the iMPA Round Table Discussion, Site visits
- Facilitation and assistance in development of policies and management plans (EAFM, MPA Management Plans, MPA ordinances)
- Building effective national and international collaborations

What didn't work well this past year?

- Optimizing use of ODK in VLSA Reporting
- Not recognizing the fact that there is strong commercial-illegal fishing interests affecting efforts to set bigger MPAs
- Internal mindset shift in relation to the essential role of social enterprises in sustainable financing for MPAs. This is a big shift from traditional community organising practices in the Philippines.
- Sustained outreach activities and availability of materials focusing on bigger MPAs, seaweed farming in primary and secondary sites and LGU partners and recommending bodies
- Timely transition of staff and hiring of replacements

If you had to do it again, what would you do differently?

- Adopting a set of priority sites and at the same time adopting pipeline of secondary and tertiary iMPA priorities at later stage – a pipeline of sites for phasing in is more realistic. A phasing should have been agreed earlier on. Developing sites simultaneously is very hard.
- Focus on the development of a very compelling success story/proof of concept of a new idea (e.g. seaweed farming) as early as possible for changing internal mindsets.

- Collect and develop standardized workshop/training guidelines from best practices in MPA management to inform and established standard documents (Management Plans, Enforcement Plans, PO Strategic Plans)
- Establish baseline bio-physical, socio-economic, plastics etc. as early as year 1

What recommendations would you make to others doing similar projects?

- Changing the mindset of communities to try a different approach is often easier than changing the mindset internally, especially when you are dealing with large teams. It may be productive to invest more time internally than externally! However, we have found that with the first few successes then we have rapidly gained internal support for the approach.
- Gain support of municipal governments at the onset of the project
- Convince the local chief executives to formally create TWGs for each iMPA and set aside resources for the operations of the TWG.
- Commercial-illegal fishing interest of keeping size of MPAs to small cannot be underestimated. Recognize this as reality early on
- Generating community consensus on location and spatial plans and legal declaration are the easier aspects. Implementation and enforcement are more challenging given the fact that communities do not have history of managing bigger MPAs, not to mention the seemingly lukewarm support of the LGUs for the full enforcement. Special focus on enforcement, even during the establishment stage, is very essential
- We have observed that local perception on dependability and sufficiency of income they derive from existing fishing activities drives adoption or partial shift to a new livelihood option. Fishers in Tambaliza still think they earn good income from blue swimming crab fishing, and as it is the only thing they know then there is resistance to change. In most fishing communities, “wait and see” is very common. People adopt a new idea when they actually see it already working. Unfortunately, the model seaweed farms we assisted since Year1 were impacted by typhoons and climate induced “ice-ice” disease, making it harder to create the buy-in. This provide the context for engaging Dr. Anne Hurtado, which is aiming to introduce more climate-resilient farming systems, and the use of exchange visits further afield where seaweed has been ongoing for longer. Despite the challenges we now have a very large number of people that have formally expressed interest in participating.
- Invest on outreach and social marketing campaigns that include decision makers and recommending bodies

How are you going to build this learning into the project and future plans?

- We will definitely adopt our learning in iMPAs that are still in our pipeline
- We are developing an iMPA tool kit and we will make sure we will incorporate all this learning in the kit

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

Feedback from the Year 1 report were as follows, with notes made on how these have been addressed:

- The role of women in decision making in marine resource management is particularly important as they can be marginalised in the location and controlled activities in MPAs. Is the project able to develop an indicator specifically with this in mind to present a strong body of evidence for gender equality in reporting?

  In the newly approved Punta Buri iMPA ordinance, it is already stipulated that women representation in the management council should be at least 30%. The Punta Buri ordinance will be our template for secure legal basis for women participation in management. It is worth noting that the Philippines is the seventh most gender equitable country in the world, and engaging women is not something that we have struggled with in comparison to our experiences from other countries. Many of the POs

are led by women, and VSLAs have >80% female membership. The environment pouches and role of VSLAs in the management of the MPAs provides a powerful platform for women to engage, as well as providing mechanisms for accountability back to the women who have made the largest contribution to the finances of the MPA management councils.

- The project notes 'this helped build consistency and capacity among the team and streamlined the number of indicators' which are tracked to agreed timelines. The reviewer notes that the project should comment on its progress against these timelines when reporting. This could be in the form of a gantt chart.

  We are working on streamlining the indicators in our Year 2 change request, which we aim to submit after so we can have stronger/more realistic indicators for the Blue Carbon component in line with the comments made in our accepted CR in Year 1.

- The identity of this project is not entirely clear to the reviewer. Clarification in the next AR in the form of attribution against the logframe activities would be beneficial in assisting with this clarification. Specifically, where match funding has had to be attained to complete activities, and what proportion of attribution can be given to Darwin would be useful for review purposes moving forwards.

  This project has a clear identity within the Philippines. The project falls under the Net-Works™ initiative, and is focused on building out and proving the iMPA concept (explained in year 1 AR and the current AR). Delivery of iMPA in 14 sites (25 villages) was always going to cost a lot more than the amount budgeted in Darwin. We have secured matched funding from: the National Geographic Society, American Chemistry Council, Turing Foundation, Waterloo Foundation, and the Julius Baer Foundation. The project hinges on the Darwin Initiative proposal which provides the bulk of funds and is all framed around the Darwin Initiative proposal and funding.

  Details of matched funding to Darwin funds are provided above. The reviewer is right that there are significant costs to implement in the proposed number of communities. Darwin is central to supporting the staff and activity costs for much of that. The biggest additional costs come from the seaweed farming element. It costs roughly PhP6million per site to scale up seaweed farming to a level where it can break donor dependence and deliver both social and environmental gains. So far we have secured that funding for five sites. Additionally, we have secured a key partnership with the IUCN's Blue Natural Capital Finance Facility (BNCFF), being the first project accepted by the facility (https://bluenaturalcapital.org/campaigns/net-works/). With BNCFF's support we are preparing to become impact investment ready by the end of next year, and we are already in advanced discussions with a number of non-traditional donors who can help us scale up the seaweed farming activities. Furthermore, we are actively exploring opportunities with partners in the finance sector to create a financial mechanism to support seaweed farmers, that would ultimately allow us to scale well beyond the sites proposed in the Darwin Initiative. Currently we are on track with our targets for securing the requisite funding and implementing iMPA at the scale proposed in the Darwin proposal.

- The project has not commented on its interactions with the CBD focal point, and should do so if appropriate in its next AR.

  National engagement is reported in this report.

- Is the project able to collect gender disaggregation data to aid reporting?

  We have template for attendance/registration in training/workshops. We have gender disaggregated VSLA data (as presented in this report). We have not yet been able to implement an efficient system that allows us to collate gender disaggregated data for all of the training/workshops data for donor reporting, because of the sheer number of trainings and meetings that we undertake and the challenge of avoiding double dipping between donors. We are looking at ways to improve this when operating at scale without taking implementing staff out of the field for long periods of time.

- Difficulties with Plan Vivo and other outputs have been highlighted. Changes that signficantly impact indicators and activities will need to be reflected in the logframe, and should be discussed with Darwin through a change request.

  A change request was submitted after the Year 1 annual report where these changes were discussed.

  We are planning another Change Request to make changes to the logframe that will act on the issues raised in the previous CR. We have a scientist coming out in May who will be examining the activities that need to be undertaken and we will use this to update the indicators and activities.

- Please comment on exit strategy when reporting.

  This is reported in Section 12.

11. Other comments on progress not covered elsewhere

None

12. Sustainability and legacy

The project has been promoted at the following events: Department of Science and Technology circular economy workshop; regional workshop of the International Textile Research Institute, National Geographic regional strategy development workshop in Hong Kong; National Geographic coverage – both in film and online article; invitation to and presentation at the World Ocean Summit in Abu Dhabi; invitation to and presentation at the East Asia Seas Congress in Iloilo. UNDP SmartSeas Partners Meeting in Davao, Participation on the CleanSeas Pilipinas campaign strategy building and launch and at the World Economic Forum in Davos. As a result of increasing awareness of the project we were also invited to APEC circular economy platform in Taiwan, although it was not possible to attend.

As part of the ProCoast Project we will be working with GIZ to promote the iMPA approach in 30 municipalities. GIZ and the German government haves elected iMPA as one of the approaches that they wish to promote – which is an indication of the increasing interest.

Our planned exit strategy is to reduce dependence on donor funding and shift to business model support. We believe that it is not feasible to completely exit and leave communities – that has driven the cycles of boom and bust in marine conservation evident in the Philippines with only 12% of MPAs being rated as sustained. An effective business model can allow a small and dedicated local team to provide ongoing support. So far, whilst we are developing the revenue streams we believe that this strategy is still valid.

13. Darwin identity

The Darwin logo and UK Aid logo has been clearly displayed on all presentations that we have given (See section 12 and Annex 27).

The Darwin Initiative identity and logo features in ZSL's website project pages and Net-Works website (see list below). The project also has a social media presence and has been publicised through both personal twitter accounts; @ZSLMarine (8,761 followers); @FishNotPlastic (2,338 followers) and re-posted via @OfficialZSL (29.7k followers) which tags the Darwin Initiative in relevant posts, as well as the Facebook pages of ZSL Marine and Freshwater and Net-Works and ZSL Mangrove and Beach Forest Rehabilitation and Conservation.

The project has featured in blogs and articles such a the Darwin Initiative newsletter (May 2018 http://www.darwininitiative.org.uk/assets/uploads/2018/05/Darwin-Newsletter-May-2018-IDB-FINAL.pdf) which was shared via Net-Works and ZSL Marine and Freshwater Facebook and Twitter pages; and ZSL's blog for World Wildlife Day 2019 (https://www.zsl.org/blogs/conservation/far-from-the-shallows-just-some-of-the-amazing-ways-were-working-for-wildlife) which was shared via ZSL Official Facebook and Twitter pages.

The Darwin logo/identity is displayed on the following websites:

- Net-Works website http://net-works.com/about-net-works/partners/
-ZSL website Net-Works project page https://www.zsl.org/conservation/regions/asia/net-works
- ZSL website Philippines Mangroves page
https://www.zsl.org/conservation/regions/asia/rehabilitating-mangroves-in-the-philippines

14. Project expenditure

Table 1: Project expenditure during the reporting period (1 April 2018 – 31 March 2019)

Annex 1: Report of progress and achievements against Logical Framework for Financial Year 2018-2019

Project summary	Measurable Indicators	Progress and Achievements in 18/19	Actions required/planned for next period
Impact Community-based marine protection in the Philippines enhances resilience to natural disasters while helping meet national targets (15%), fully sustained through business models, reducing donor dependency and building sustainability.		• 14 iMPA sites (8 of which are clusters of 2 or more barangays) selected after structured biophysical and socio-economic assessments. In Y2, team focused on setting up 3 focal sites (Tambaliza, Salvacion-Malangabang, and Punta Buri). Two sites legally declared by end of Y2. • All sites will have at least 200-ha. no-take zones, a significant leap from current average size of MPAs in the Philippines • All sites will cover at least two habitat types • While seaweed farming still needs to scale, all sites have potentials for ecological seaweed farming • iMPA Infographic and branding documents illustrate and explain the generation of MPAs we are establishing through this project.	[redacted]
Outcome Community-based conservation effectively protects 15% of bay-scape waters in three pilot bay areas (thereby meeting national and CBD targets), fully sustained by a diversified Net-Works business model that enhances socio-ecological resilience and reduces dependence on donor funding.	**0.1** Increase number of MMPAs from three to 15, each of minimum 200 ha, totalling 15% of bay-scape waters (out to 3km) by Yr 4 (minimum of 3,400ha (17 villages; 200ha each) of no-take zone).	Of the 14 sites selected in Y1, we have prioritized development of three model sites or bright spots in Y2. The three sites include Tambaliza, Punta Buri, and the clustered site of Salvacion-Malangabang. Tambaliza iMPA in Concepcion was legally declared in Y1. Punta Buri iMPA was legally established in January 2019, with a total area of 868 ha., including a 217-ha. no-take zone. (***Annex 12).***	

		Draft municipal ordinance Salvacion-Malangabang, Concepcion iMPA has been already endorsed by two villages and by the Technical Working Group created by the local chief executive. It was already presented to the municipal council for first reading. A strong commercial-illegal fishing lobby is stalling the passage of the ordinance. The proposed iMPA has a total area of 900 ha., including a 450-ha. no-take zone. for the latest draft of the ordinance. (***Annex 13***) In Igbon, Concepcion, community consultations were conducted to build agreement on the emerging iMPA spatial plan. The mayor of Concepcion issued an executive order creating Technical Working Group to design the spatial plan and draft the iMPA ordinance in consultation with key stakeholders. In Ajuy, Iloilo, the communities of Silagon and Pantalan Nabaye have advanced to community level discussions on the proposed iMPAs. Validation of eco-seaweed farming zones was also done by the team's technical specialist. In February 2019, our seaweed technical specialist conducted ground-truthing of proposed seaweed farming sites in Bugtong Bato Ibajay, Jawili,Dumatad and Afga in Tangalan, Aklan, and in Balaring and Basiao in Ivisan, Capiz. New spatial plans especially for clustered sites were presented to partners in Ibajay and Tangalan. Community presentations on the new spatial plans were also held in Talotoan, Igbon and Polopina in Concepcion and in Luca-Pedada-Bay-ang cluster in Ajuy. (***Annex 7)***	

		ZSL was a key technical partner in preparing the Coastal Resource Management /Ecosystem Approach to Fisheries Management (CRM/EAFM) Plans and Municipal Fisheries Ordinance amendments in Concepcion and Ajuy, Iloilo. ZSL iMPA target sites have been incorporated as municipal MPA targets through their inclusion in the CRM/EAFM Plans (***Annexes 20 & 21***). These officially adopted plans provide the policy basis that will allow us and our community partners to easily pursue legal declaration of individual iMPAs after completing the detailed spatial planning and ordinance formulation. The CRM/EAFM plans were adopted by Ajuy and Concepcion LGUs on 14 January 2019 and 29 October 2018, respectively. ***(Annexes 22 & 23)***	
	0.2 Halt or reverse declines in key marine species and habitats (mangroves, seagrasses, coral reefs and indicator invertebrate/fish species) within three bay-scapes by Yr 4, having established baselines at new sites by Year 2.	Our field biologists conducted our standard biological surveys in Tuad Reef, which is the proposed expansion area of the no-take zone of Ivisan Fish Sanctuary and Reserve in Ivisan, Capiz ***(Annex 6).*** Standard biological baseline surveys were also conducted in Tambaliza iMPA (***Annex 24***). Our biologists also conducted baseline habitat surveys in the ecological seaweed farming zones of the Tambaliza MPA, employing that new survey tool we are still testing ***(Annex 25)***	
	0.3 Set baselines in Yr1 through survey of stratified selection of households and achieve an	Five Local Research Assistants from three priority sites of Tambaliza, Salvacion-Malangabang in Concepcion and Punta Buri in Ajuy were trained to	

	average 20% improvement in locally-defined household wellbeing indicators (including subjective, material style of life, income and food security) by Yr4 (n=25,000 households total, min of 500 sampled in stratified selection)	conduct of the Baseline Socio-Economic Survey. By end of August, field interviews were 100% completed in Punta Buri, Salvacion, Malangabang, and Tambaliza. We partnered with the Northern Iloilo Polytechnic State College - Ajuy Campus for encoding of data generated through household surveys.	
	0.4 Livelihoods diversified from an average of 2.0 occupations per household in Yr 1 to 2.5 in Yr 4 (n=25,000)	Legally declared ecological seaweed farming zones in Tambaliza iMPA and Punta Buri iMPA were subdivided into 1/8-ha. economic family size farms. (***Annexes 15 & 16***) Three (3) seaweed farmers in Tambaliza and five seaweed farmers in Igbon availed of production loan assistance amounting to PhP255,519 or £3,813. A total of 22 seaweed farmers signified interest to participate in our ecological seaweed farming. Twenty-one (21) of them were already trained.	
	0.5 Business model from the diversified Net-Works business model and Plan Vivo supporting a small local team of Community Organisers and Biologists by Yr 4 to sustain community-based conservation activities and the supply chains, as reflected in Darwin budget.	5,493 kilos of used fishing nets collected from Darwin sites in northern Iloilo were exported to Aquafil plant in Slovenia in September 2018. Total used fishing nets collected between April 2018 to March 2019 is 1,375.4 kilograms Nine hundred ten (910) kilos of dried seaweeds produced by two partner communities were sold to a local seaweed trader, generating PhP61,000.00 in gross income. Dried seaweeds collected from three iMPA sites actively farming seaweeds in Year 2 was 627.4 kilograms.	
Output 1.			

1. Effective community-based management of 17 MMPAs across the 3 bay-scapes : ▪ Pedada and Ajuy Bay, Iloilo Province linked to Concepcion Bay and Concepcion Islands, Iloilo (2 LGUs - Pedada and Ajuy) ▪ Sapian Bay, Capiz Province (involving 2 LGUs - Ivisan and Sapian) ▪ Ibajay-Tangalan Bay, Aklan Province, (2 LGUs – Ibajay and Tangalan)	**1.1** Free Prior Informed Consent (FPIC) obtained from all relevant barangays by Yr 1, as a measure of community support and engagement.	With the memorandum of agreement (MOA) with the Local Government Unit of Concepcion, Iloilo signed in May 2018 (***Annex 4***), ZSL now has formal agreements with four municipal governments (i.e. Ibajay and Tangalan in Aklan, Ajuy and Concepcion in Iloilo). However, local political dynamics in Ivisan, Capiz is stalling the signing of the MOA.
	1.2 Village (barangay) profiles completed using Rapid Rural Appraisal approaches by Yr 1 that establish resource management needs and capacity at each site.	Village profiles were completed and reported in Y1 annual report.
	1.3 Exchange visits completed to existing MMPAs within each bay-scape by Yr 1 to enthuse and educate community champions and provide practical demonstration of conservation interventions.	ZSL decided to innovate further the MMPA into iMPA approach, which features bigger no-take zone, diverse habitat coverage, integration of ecological seaweed farms, and rights-based access to regulated fishing zones. We are developing the Tambaliza iMPA as model and learning site. A small grant from the National Geographic Society was tapped to support a round-table discussion on iMPA in Concepcion Iloilo last March 2019. The keynote speaker of the round-table discussion was Mayor William Angos of Cortes Surigao del Sur who shared best practices in coastal resource management. The town where Angos is mayor was the first ever *Malinis at Masaganang Karagatan* (Clean and Productive Sea) awardee in 2016. The activity was participated by LGU and community stakeholders from iMPA sites in Ibajay and Tangalan Aklan, Ivisan Capiz and from Ajuy and host municipality of Concepcion. The last leg of the activity was a cross-visit to Tambaliza iMPA, which coincided with first year anniversary of its legal declaration. Participants were able to interact with the MPA Management Council and observed its unique physical set up and the murals painted by elementary and high school students in Tambaliza. (***Annex 26***)
	1.4 Appropriate governance structures for 17 MMPAs (defined by municipal ordinances) with equitable membership (at least 50% women and representing major social groups within each community) established or strengthened and meeting at least monthly by Yr 3.	The MPA Management Council of Tambaliza iMPA was formally created with the issuance of Executive Order (***Annex 9***) by the mayor of Concepcion, Iloilo. The draft of Punta Buri iMPA ordinance stipulates 30% women representation in the management council, which is an improvement of the Tambaliza iMPA ordinance and will be the new model ordinance for iMPAs in the pipeline. We are now working with the mayor's office of Ajuy, Iloilo for the issuance of the executive order that will be the legal basis for the formation of the management council for the newly-declared Punta Buri iMPA.
	1.5 Participatory site selection for 12 new MMPAs and municipal ordinances obtained for these by	The municipal ordinance of Punta Buri, Ajuy iMPA (***Annex 12***) was enacted in January 2019. The municipalities of Concepcion and Ajuy also formally adopted the Coastal Resource Management/Ecosystem Approach to Fisheries

	Yr 2, with total area equating to 15% of bay-scape waters.	Management Plans our team facilitated and technically supported. The approved CRM/EAF Plans have included sites ZSL and partner communities are targeting to declare as iMPAs under the Darwin project. In Ivisan, Capiz, we worked with the Peace Corps in conducting standard biological surveys on a proposed additional no-take zone of the Ivisan Fish Sanctuary and Reserve. (***Annex 6)***
	1.6 One MMPA social network composed of local People's Organization POs/MPA Management Councils (MMCs), and VSLAs established and meeting bi-annually in each bay-scape for experience sharing and cooperation by Yr 2. At least 50% women participating in decision making in the social network.	The iMPA round-table discussion and learning visit to the model Tambaliza iMPA was also intended to provide a venue for peer-to-peer interactions among MPA managers across all project sites (***Annexes 8 & 18***) Female membership in Tambaliza MPA management council is 29% (16 females and 38 male). In Punta Buri, proposed MMC composition has 22 (38%) female and 35 male members.
	1.7 All MMPAs pass the criteria for Philippines MPA Effectiveness Assessment Tool (MEAT) level 1 ("MPA is established – with participatory process, adoption of management plan, and appropriate legislations and governance) by Yr 2 and MEAT level 2 ("MPA management is effectively strengthened") achieved in all MMPAs by Yr 4, from level 0 or 1 and on track for level 3 (which can only be achieved after 5 years of operation).	Punta Buri was the second legally declared iMPA. The draft ordinance of the 3rd proposed iMPA is now under review by the municipal fisheries council and the municipal council. We provided the MPA Management Council of Tambaliza technical support in the drafting of its first 5-year MPA management plan, which includes an enforcement and patrol operational plan. (***Annex 10***.)
	1.8 15 VSLAs (see output 3) contributing their environment funds to appropriate management committees and management committees leverage funds from municipal LGUs to sustain management activities by Yr 2.	In addition to the 7 VSLAs the team organized in Y1, 7 new VSLAs were organized in Year 2, making the total number of VSLAs organized by the project 14. All VSLAs adopted the Environment Fund innovation pioneered by ZSL**.** Fourteen assisted VSLAs in Tambaliza agreed to pool their EFs so they could donate a small patrol or chase boat the iMPA enforcement can used. One VSLA organized by a partner NGO (ADRA) has started adopting the EF innovation.
	1.9 Social marketing campaign delivered across each bay-scape	The Tambaliza iMPA was launched during the Fishers and Farmers Day celebration in May 2018. iMPA social marketing materials (e.g. 30 posters, 200 stickers, 30 t-shirts) were disseminated during the event, which adopted the theme "Working Together for the Seas" These iMPA social marketing and other

	by Yr 2 with baseline set in Yr 1 and willingness to pay for community-based marine conservation increased 50% by Yr 4 (or to minimum of PhP100 p.a. where baseline is PhP0) – indicating increased support for conservation due to pro-poor design and successful social marketing. **1.10** Peer reviewed paper submitted for publication on ecological impacts of project's MMPAs by Yr 4.	ZSL knowledge products were also displayed during the Ajuy Fishers and Farmers Day on September in Ajuy. (***Annex 26)*** The Punta Buri iMPA was launched in February 2019. iMPA materials (35 shirts, 200 stickers) were disseminated and a commitment tarp was signed by the participants to publicly announce their dedication to the management and protection of the MPA. [Year4 Target]
Activity 1.1 1.1 Project presentation and consultation meetings towards generation of Free Prior Informed Consent from municipal and barangay (village) governments and people's organizations		We now have memoranda of agreement with four partner municipal governments, with our MOA with the Municipality of Concepcion, Iloilo signed in May 2018. Draft MOA with the Municipality of Ivisan, Capiz underwent revisions after consultations with communities and government officials. Local political dynamics has protracted the final signing of the MOA.
Activity 1. 2 1.2 Community (barangay) and People's Organization (PO) profiling using existing RRA tools		[Completed and reported in Y1]
Activity 1.3 1.3 Socio-economic household baseline survey and report generation		Five community members were trained as local research assistants in May 2018. The surveys are already completed. In November, survey results were encoded by student interns from a local state university. Encoding has been completed and our M&E Specialist is now processing the data for analysis.
Activity 1.4 1.4 Participatory site selection for 12 new MMPAs through: 1.4.1 Coastal resource and habitat assessments and reporting		Standard biological surveys conducted in project sites in Ivisan and Concepcion. Biophysical survey was conducted to assess condition of three main habitat types (corals, seagrass and mangroves). Survey in Ivisan aimed to assess the suitability of Tuad Reef as additional no-take zone of the Ivisan Fish Sanctuary and Reserve. The survey was done in collaboration with a US Peace Corps volunteer, who provided funds for the survey. Locals also assisted in conducting seagrass and mangrove community structure surveys. (***Annex 6)***

1.4.2 GIS mapping	Parcellary mapping of designated eco-seaweed farming zones in Punta Buri iMPA was completed alongside overall spatial planning **(*Annex 16*).** Meanwhile, parcellation of eco-seaweed farming zones in Tambaliza iMPA was undertaken a few months after enactment of the municipal ordinance. (***Annex 15)***
Activity 1.5 1.5 Exchange/learning visits of community leaders/champions to existing Mangrove in MPAs (MMPAs) within each bay-scape	A round-table discussion attended by municipal officials and community stakeholders from 5 municipalities covered by the project was held in March 2019 in Concepcion, Iloilo to provide a venue for sharing of best practices and experiences in MPA management. One of our biologists made a simple presentation on the scientific basis why we need bigger MPAs. Another staff also discussed the role of eco-friendly seaweed farming in sustainable MPA management. Mayor William Angos of Cortes Surigao del Sur also shared with inspiring passion best practices and insights on MPA governance. The mayor has been a very strong national champion for MPAs. The roundtable discussions and learning visit was participated by 52 (9 females and 43 males) municipal officials, fisher leaders, and community leaders (***Annexes 8 & 18***)
Activity 1.6 1.6 Establishment or strengthening of governance structures of MMPAs with equitable membership 1.6.1 MMPA Management Council (MMC) formation and profiling 1.6.2 MMPA Management Council meetings 1.6.3 MMPA management planning 1.6.4 MMPA demarcation and zoning 1.6.5 MMPA ordinance drafting, lobbying and approval by municipal governments	Tambaliza management council was formally created with the issuance of Executive Order No.43, series of 2018 by the municipal mayor of Concepcion. (***Annex 9)***. The council has been holding regular meetings since their formal organization. Our team facilitated the formulation of the first 5-year MPA Management Plan of Tambaliza. (***Annex 10)***. This draft still needs to be reviewed by the Tambaliza MMC for polishing and adoption. A Community Organizer and a Field Biologist regularly attend council meetings to provide technical guidance and help facilitate resolution-building of emerging issues and challenges, such as infringement of the MPA rules and regulations. The Punta Buri iMPA supporting municipal ordinance was signed by the mayor of Ajuy on 29 January 2019 after the final review of the project team and the municipal council (***Annex 12***)
Activity 1.7 1.7 MMPA infrastructure establishment 1.7.1 MMPA marker buoys	Marker buoys to delineate boundaries of different zones of Tambaliza iMPA were fabricated. The buoys were deployed and installed in October 2018 through

1.7.2 MMPA guard house construction	January 2019. Thirteen (13) units of 55-gallon used drums, 16 units of 120-L drums and 14 units of clustered bamboo poles were deployed. From February to March 2019, the management council with support from our field staff deployed 21 single unit bamboo poles in nearshore zones of the MPA. Marker buoys in Tambaliza iMPA were fabricated, with cost-sharing arrangements with local governments, communities, the Adventist Development and Relief Agency, and ZSL grant from the Waterloo. (***Annex 14***) Some buoys were missing due to theft and drifting due to rough seas. As a response, the council intensified patrol sorties when they received the patrol boat donated by ZSL through another grant. The Law Enforcement, Apprehension and Patrolling Committee recovered two lost units of 120-L drums. They enhanced the design of the buoys by reinforcing the drums with stainless frames and by using iron bars to connect and anchors and buoys to minimize incidence of drifting. The council used as frames materials provided by the fisheries bureau. The re-deployment of 15 replacement buoys began in February 2019. Resources from Waterloo Foundation grant were tapped to procure replacement buoys. Seven cases of apprehensions were formally endorsed to the municipal government, with 2 compromise settlement of fines amounting to Php 45,000 already documented A team member prepared a draft of the iMPA guardhouse building plan***. (See Annex 17).*** We plan to explore a more appropriate and "smart" design for the MPA guard house. Two options are being considered: floating and fixed near-shore. We have on-going conversation with a major international market for our dried seaweeds, which prefers that seaweeds should not be exposed to rainwater. We have allocations from the Blue Nature Capital Financing Facility to engage an engineer to help us the design the dual-purpose guardhouse. Estimated total Environmental Funds generated by the CoMSCAs is estimated at PhP**101,408.00.** There are 14 existing VSLAs in Tambaliza, 2 of which are youth VSLAs. The VSLAs pooled in their Environment Funds and donated PhP20,000.00 to the management council for the procurement of auxiliary chase boat. The VSLAs cover cost of snacks and drinks of regular coastal clean-up drives in Tambaliza.
Activity 1.8	

1.8 MMPA social network established composed of local POs/MMCs and VSLAs 1.8.1 Annual meetings in each bays-cape for experience sharing and cooperation	We facilitated the formal creation of the first MPA management council (Tambaliza iMPA MMC) and we are in the early stage of forming the council of the newly-declared Punta Buri iMPA in Ajuy, Iloilo. We are aiming to initiate social networking once the councils of iMPAs in our priority sites will have been set up. We organized an iMPA round-table discussion with various stakeholders, including municipal agriculture officers, village officials, and representatives of people's organizations. We invited a national MPA champion (municipal mayor of Cortez in Suigao del Sur) to share best practices in coastal resource management and to inspire our project partners. Participants also joined a learning visit to Tambaliza iMPA, where they had mutually enriching interactions with officers and members of the MPA management council.
Activity 1.9 1.9 Annual conduct of MPA Management Effectiveness Assessment Tool (MPA MEAT)	[No related progress in first half of Year 2]
Activity 1.10 1.10 Formation/strengthening of VSLAs	A total of seven (7) new VSLAs were organized in Year2. All new VSLAs adopted the Environment Fund innovation of ZSL.
Activity 1.11 1.11 Roll-out Social Marketing campaign across each bay-scape	VSLAs are active in local conservation campaigns, including coastal clean-up drives funded by their Environmental Funds. In September, 4 VSLAs and a partner people's organization joined a campaign to clean-up half a kilometre of beach. Another VSLA partner joined teachers and Grades 4-6 pupils of the Pedada Elementary School in collecting marine debris on the shorelines during the International Coastal Clean Up Day. A meeting with VSLA agents in Concepcion and Ajuy was organized in September to discuss the project's outreach toolkit and revive regular meetings designed to provide continuing inputs on environmental. In October 2018, 46 VSLA and PO members in Balaring, Ivisan participated in the clean-up of 0.5km of coastline. They collected 4 sacks of trash, which included 35 food wraps, 12 plastic bottles, 2 soda cans, 2 plastic cups/plates and 2 abandoned fishing gears. Thirty (30) VSLA and grade school students from Pedada, Ajuy participated in the clean-up of 2.5 km coastline in October 2018. Seven sacks of trash were gathered – 108 food wraps, 116 plastic bottles, 35 glass bottles, 148 plastic bags, 18 cups/plates, 39 fishing gears and 54 meters of rope. Village Agents in Concepcion and Ajuy were convened in October 2018 to review progress of VSLA organizing and monitoring in their respective sites. A draft of our standard iMPA outreach kit was presented and discussed with the village

		agents. The willingness to expand their roles from VSLA monitoring and organizing to becoming local champions to assist in outreach activities and in communicating iMPA messages was generated. In February, Values Transformation Training was conducted to begin the process of transforming agents into local champions (***Annex 19***).
Activity 1.12 Preparation and submission of publication on ecological impact of MMPAs		Year 4
Output 2. **2**. Integrated Territorial Use Rights for Fisheries (TURFs) introduced within MMPAs (creating TURF-reserves or replenishment zones) in two bay-scapes to align fishers' incentives with sustainability and MPA management.	**2.1** Buffer zones and managed fishing areas around MMPAs identified and established as part of MMPA ordinances and planning by Yr 2, of at least the same size (200ha) as the no-take zone at 17 MMPA sites. **2.2** Rules on who can use these buffer zones and how, under what conditions, any benefit sharing arrangements, and how this is enforced included in appropriate management plans by Yr 2 and being implemented by Yr 3. **2.3** Appropriate MMPA guardhouses designed to include opportunities to improve fisheries operations (e.g. seaweed drying platforms) by Yr 2 and implemented by Yr 3. *2.4* Participation in MMPA management (number of people participating in patrols, attendance at monthly management committee meetings, proportion of apprehensions resulting in prosecutions) established at a minimum of 50% by Yr 2 and maintained >90% of capacity by Yr 4, including increasing # women fish/forest wardens in communities. *2.5* Catch per unit effort (CPUE) electronic recording system in place by the end of Y1 and data shows CPUE greater for fishers in	The first iMPA (Tambaliza) we set up in Y1 has buffer zone-TURFs of 83 ha. We have fabricated marker buoys to define different management zones, including TURFs. The Punta Buri iMPA has a buffer zone-TURFs of 517 ha (see p.6 of ***Annex 5)***. We are currently extending technical support to the Tambaliza management council in formulating a 5-year iMPA management plan, which includes initial drafting of the implementing rules and regulations of buffer zones. Our community organizer in Tambaliza prepared a draft plan and design of the MPA guardhouse with seaweed drying platform. We have available resources from current grants we have with Waterloo Foundation and and National Geographic Society to leverage equity from local governments and VSLAs. The approved Punta Buri municipal ordinance stipulates that 30% of MMC members shall be women. (See p.30 of ***Annex 12)***. ZSL is an implementing partner of the USAID assisted Fish Right project, which also covers the municipalities of Concepcion and Ajuy. We are now working with Fish Right project management office and other implementing partners on

	buffer zones and managed fishing areas than fishers outside by Y4.	building agreement how to approach fish catch baseline data. There has been an agreement to use baseline data collected recently by the Bureau of Fisheries and Aquatic Resources National Stock Assessment Program (NSAP). Fish Right provide us resource so we could conduct the fisheries inventory (fishers and gear inventory). ZSL will train with FISH Right on the NSAP and fisheries inventory methodologies and we will also implement these methods in our sites. Through the above-mentioned partnership, Fishing Gear Inventory was conducted for 4 coastal municipalities and Roxas City, Capiz and 11 municipalities in Iloilo, which is part of the Visayan Sea cluster of LGUs. The inventory started with the training of Local Enumerators in October, which was organized by the project team. The survey started in November and was completed by 15 December 2018. Ajuy and Concepcion were among the municipalities included for the survey in Iloilo province
Activity 2.1 2.1 Identification and demarcation of buffer zones for TURF areas		The aggregate buffer-TURFs zone of the two legally established iMPAs (i.e. Tambaliza, Concepcion and Punta, Buri) is 1,245 ha. Buffer zones of six of the 12 iMPAs in the pipeline are already identified and charted. We are still expecting modification of the zonation as we advance into participatory spatial planning process. Installation of marker buoys to delineate the different management zones, including the TURFs, in Tambaliza iMPA was completed in October (see pages 1 & 6 of ***Annexes 7***).
Activity 2.2 2.2 TURFs governance and management planning		A 5-year Tambaliza MPA management plan has been drafted. (see ***Annex 10***)
Activity 2.3 2.3 Registration of fishers participating in TURF		As mentioned earlier, Ajuy and Concepcion were covered by the fishing gear inventory supported by the USAID-funded Fish Right project. We helped organize the training and the actual field surveys
Activity 2.4 2.4 Construction of seaweed drying platforms in MMPA guard houses		As already mentioned, we have a draft building plan for the dual-use guardhouse. (See Annex xx – Smith's). We are still considering other designs to also meet the requirement of a potential buyer of the seaweeds we will be producing. We will use grant resources from Waterloo Foundation and National Geographic Society to leverage co-financing from local governments and VSLAs. A spot in Tambaliza is already identified where the structure will be constructed.
Activity 2.5		

2.5 Fish catch/CPUE monitoring in TURF and control areas		We agreed with the USAID-funded Fish Right project to share tools, capacity building, and collaboration in CPUE baseline monitoring. At the municipal level, catch baseline data generated by the Bureau of Fisheries and Aquatic Resources (BFAR) National Stock Assessment Program will be used as the baselines on fish catch. We intend to use the Fish Right baseline survey tool in communities where we have iMPAs to generate CPUE baselines specifically from the Darwin assisted sites. In October, we initially trained with them in fisheries inventory (survey of fishers and gears) in our sites in northern Iloilo.
Output 3. Diversified Net-Works business model supports environmental management and biodiversity conservation, and clears up marine debris.	**3.1** 15 VSLAs with environment pouch contributing funds to support MMPA management by Yr 1.	In addition to the 7 VSLAs organized in Year1, 7 new VSLAs were organized by end of Year 2. Thus, the total number of VSLAs organized by the project is now 14. Including pre-existing VSLAs, 50 VSLAs across all project sites are now adopting the Environment Fund innovation of ZSL**.**
	3.2 15 Village agents (one per barangay) trained and replicating VSLAs from the parent VSLA by Yr 2. At least 50% women trained as village agents.	We have 12 active VSLA villages agents, of whom 10 are based in northern Iloilo, one in Capiz, and one in Aklan. Ten agents are females and only 2 are males. From October 2018 to February 2019, four regular meetings were held, participated by up to 19 village agents from Aklan, Ivisan, Ajuy, Concepcion and Guimaras. Two (2) record keepers' orientation were held to further assist record keepers in data recording. Regular meetings included updating on VSLA organizing and monitoring, submission of monitoring sheets and coaching on the use of monitoring booklets. The regular meetings also served as venue for the on-the-job training for agents to become full-pledged village agents.
	3.3 All VSLAs collecting discarded fishing nets and selling them into the supply chain by Yr 2.	Excluding two dissolved VSLAs and 4 VSLA for kids, 33 adult VSLAs have links to Net-Works supply chain of used fishing nets. We have recently expanded nets supply chain to Punta Buri, tapping an existing VSLA organized by another partner as local buying partner.
	3.4 Private code for assurance of the nylon and seaweed supply chains developed and fully tested by Yr1 demonstrating transparent and sustainable supply chain.	As reported by end of Y1, Interface decided that they did not require a private code and that we link up with FLOcert to understand the requirements.
	3.5 24 families trained and actively farming 6ha of seaweed per community for 7 communities by Yr2 following social and environmental criteria and meeting assurance standards.	We have already trained a total of 21 VSLA members in seaweed farming, three of whom were trained in May 2018. Eight (8) VSLA members in Igbon, 1 in Talotoan, and three in Tambaliza (or a total of 12 individuals) were farming seaweeds in Y2. Seaweed farmers in Igbon used crop insurance claims from typhoon damage to re-start and the two in Talotoan used what they could salvaged from the "ice-ice" as seedling for reviving their farms. Three farmers in Tambaliza received production support from ZSL they could use to fully develop their 1/8-ha farms. We are using small grant we have from National Geographic Society to start up the first 10 units of 1/8-ha. eco-

		seaweed farms. We have also successfully conducted trial planting of seaweeds in Punta Buri. We also supported SEAFDEC's trial outplanting of tissue cultured high-yielding seaweed cultivars.
	3.6 A minimum of 50 families farming a minimum of 25ha of seaweed per community within 7 communities by Yr4, generating 3,000 tonnes of dry seaweed p.a. that meets assurance standards for Net-Works Social and Environmental criteria and supports MMPAs. Technical specifications developed for the community-level production of blue carbon and marine PET (plastic in bottles) by Yr 2	The seaweed farming method we are promoting involves the use of PET bottles as flotations. Concepcion Municipal Solid Waste Management Office donated PET bottles to ZSL for distribution to seaweed farmers are flotations. Twelve (12) VSLA members are now actually farming seaweeds. We integrated two questions on plastics in the ZSL socio-economic survey tool. To further characterize plastic wastes, we piloted conduct of community store surveys to determine the types volume of plastic packaging the use in their business operations Net-Works generated PhP61,000 or £870 in income from trading of dried seaweeds produced initially by members of two assisted VSLAs.
	3.7 At least 50% of VSLAs producing and selling at least three new products into the supply chain by Yr 3, with 100% selling at least one product by Yr 3.	
	3.8 Total of 100 tonnes of ocean-bound plastics (including nets and other materials) diverted into the supply chain from the three bay-scapes by Yr 4.	1.5 tons of residual plastics were collected in Tambaliza through the Trash for Health (T4H) scheme. Tambaliza National High School and Elementary School also participated in the collection. The Municipality of Concepcion formally organized the Trash for Health Technical Working Group by issuing EO No. 50 (See ***Annex 28)*** Tambaliza was awarded with a medical mission, P40,000 to be released in July and 100 chairs (made of plastics) will be delivered to the schools. 5,493 kilos of used fishing nets collected from sites in Northern Iloilo were exported to Aquafil in Slovenia in September. 1,375 kilos of used fishing nets collected in Year2.
	3.9 Proportion of beach quadrats with plastics present reduced from 60% to 40% by Yr 4 at all sites.	A survey on discarded nets and plastic (including photoquadrat survey of marine debris) was conducted in Punta Buri Ajuy in November 2018. This led to the orientation of CoMSCA groups (assisted by ADRA and endorsed to ZSL for the adoption of the Environmental Fund and sustainable enterprise) on net-buying last February 2019. Currently there are 5 CoMSCA groups formed by ADRA in the community and are supportive of the iMPA interventions being implemented. Finalization of the agreement with CoMSCA groups and provision of buying funds

		for nets are to be installed by Year 3. Seaweed trial farming has been successful as well on the proposed eco-seaweed area of the MPA.
Activity 3.1. 3.1 Setting up of environmental funds of formed/strengthened VSLAs, including profiling and databasing		Seven (1 Igbon, 2 in Bay-ang, 1 in Pedada, 3 in Ivisan) new VSLAs were organized in Y2. All new VSLAs adopted the Environment Fund innovation of ZSL. The community organizers haves also started integrating Sustainability funds for new and old VSLAs. We also introduced the VSLA Environment Fund innovation to the VSLAs organized by the Adventist Development and Relief Agency.
Activity 3.2. 3.2 VSLA village agents training and replication		Twelve (12) VSLA village agents are active in 6 sites, of whom 7 had formal training and 5 received on-the-job coaching by an active VSLA agent.
Activity 3.3 3.3 Discarded fishing nets collection/recycling through Net-WorksTM supply chain undertaken by VSLAs ??		Excluding two (2) dissolved VSLAs and 4 VSLAs for kids, 33 adult VSLAs were linked to the supply chain of used fishing nets. A VSLA in Punta Buri is now buying used nets from local fishers.
Activity 3.4 3.4 Development and test-run of private code for assurance of nylon and seaweed supply chains		No related progress during the period.
Activity 3.5 3.5 Training on seaweeds farming and implementation among 50 target families in 7 communities		A total of 22 VSLA members from 4 communities submitted letters of interest (LOI) to engage in ecological seaweed farming. Of the 22, 21 already received training in seaweed farming.
Activity 3.6 3.6 Development of technical specifications for community-level production of blue carbon?? and plastics		No related progress during the period.
Activity 3.7 3.7 Production and selling of 3 new products by VSLAs into the supply chain		Net-Works generated PhP61,000 or £870 in income from trading of dried seaweeds produced by two assisted VSLAs.

Activity 3.8 3.8 Biophysical survey data collection of marine plastics using photo-quadrat method		Waste characterization using photomapping method conducted in 4 sites (Tambaliza,Salvacion-Malangabang and Punta Buri); in Ajuy-Concepcion bay-scape Sari-sari/variety store inventory (50% completed) were conducted in 3 sites (Tambaliza,Punta Buri and Malangabang); initial analysis on waste characterization results suggests that we need additional samples from said sites for analysis to be more robust.]
Output 4. Plan Vivo certificates for blue carbon in MMPAs from mangroves and seagrasses provide a mechanism for increased protection of coastal greenbelts and sustainable financing for coastal communities.	4.1 At least 106.5ha of mangrove forest areas in MMPAs (output 1) with approval granted by the LGU for stable tenure (e.g. CBFMAs granted) at two of our focal bay-scapes by the end of year 1. 4.2 Ecosystem service pools identified and baselines established, and alternative scenarios i.e. business as usual determined at our two focal bay-scapes by the end of year 1. 4.3 Different project interventions identified and finalised through community consultations across two focal bay-scapes (i.e. REDD, sustainable use zones, reforestation) by the end of yr1 for submission under Plan Vivo. Confirm and implement ZSL's empirical research findings (Thompson et al 2014; Duncan et al. in prep) that suggest we have a mean of $14-43K tradeable carbon per annum at our two focal bay-scapes based on current market VCS prices for Plan Vivo Standard by the end of year 2.	*[No related progress]*

	4.4 Community-based management groups/ VSLAs established to implement and manage routine project activity, benefit sharing mechanism and report to the co-ordinator (ZSL) at both the focal bay- scapes by the end of year 2 with at least 50% women involved in project management	[Year3 target]
	4.5 At least 106.5 ha mangrove area protected within the MMPAs under a financial sustainability mechanism through carbon financing across two focal bay-scapes (Tangalan Bay, Aklan and Pedada Bay, Ajuy, Iloilo) by the end of year 3.	[Year4 target]
	4.6 Approved Verified Carbon Standard methodology for Tidal Wetland and Seagrass Restoration VM0033 used to map carbon potential at 3 bay wide ecosystems for inclusion in Plan Vivo by the end of year 4.	
Activity 4.1. 4.1 Community consultation and key stakeholder meetings carried out to develop Project Idea Note and submitted to Plan Vivo		
Activity 4.2. 4.2 Technical specifications developed including the identification of viable carbon pools, other ecosystem services and development of carbon accounting methodologies		
Activity 4.3. 4.3 Socio-economic surveys and participatory mapping conducted to inform sustainable use zones/payment mechanisms		
Activity 4.4. 4.4 Community monitoring groups and potential nursery groups identified and trained, and monitoring plans co-developed		

Activity 4.5. 4.5 Community mangrove forest registered/approval granted from relevant authorities	
Activity 4.6. 4.6 Management body/people's organization for Tangalan Bay project area identified and established	Reorganization of Naisud Aquatic and Mangrove Organization and Bugton Bato Fisherfolks Association has been conducted as part of strengthening efforts for the two people's organization and assistance is still ongoing. Election of new set of officers was concluded in Bugtong Bato and Naisud. NAMAO (originally set for 15 September but was moved to October due to Typhoon Ompong) and BFA (22 July 2018) The two groups are part of the Mangrove Eco-Tourism Board of Ibajay as community stewards of the 54-ha. Katunggan It Ibajay. After the re-organization of BFA and NAMAO in Ibajay, the two People's Organization sat down to re-organize AMLIG KANABU (Protect the Mangroves of Naisud and Bugtong Bato) which was formerly responsible for the management of the Katunggan It Ibajay and composed of officers and members of the two groups. Sworn by Vice- Mayor Solidum last 11 January 2019, the newly elected Officers of the PO alliance started working with the LGU for the management of the eco-park. Recently they have endorsed to the Municipal Council a request for an ordinance updating the fees for the use of the eco-park. They have also arranged catering services as well as other amenities between the two organizations to provide income and to involve its members.
Activity 4.7. 4.7 Payment for ecosystem services (PES) agreement template developed through community consultation	
Activity 4.8. 4.8 Project Design Document developed and technical specification finalised and submitted to Plan Vivo	
Activity 4.9. 4.9 Project reviewed and validated by Plan Vivo	No related progress
Activity 4.10. 4.10 Project registered under the Plan Vivo Standard	Year3
Activity 4.11 4.11 Project registered with the Market Environmental registry	Year3

Activity 4.12 4.12 Plan Vivo piloted and first annual report submitted to Plan Vivo triggering issuance of certificates		Year4
Activity 4.13 4.13 Ongoing biological and socio-economic monitoring and second annual report submitted to Plan Vivo		Year4
Activity 4.14 4.14 Approved Verified Carbon Standard methodology for Tidal Wetland and Seagrass Restoration VM0033 trialled for expansion of Plan Vivo to include seagrass and compared to current methods		Year4
Activity 4.15 4.15 Potential PDD amendment document submitted to include seagrass		Year4
Output 5. **5.** Break donor dependence and create financially sustainable community-based management	5.1 Establish a business model for managing the revenues and costs associated with the supply chain for goods and services from communities (outputs 3 and 4) by Yr 1. 5.2 Recruit a small and local team at each bay-scape to maintain the supply chain and provide technical support to communities in MMPAs by Yr 2. 5.3 Build the capacity of the local support team to manage the supply chain and support MMPAs through Training of Trainers in Net-Works, mangroves and MMPAs by Yr 3. 5.4 Revenues from the supply chain generate around PhP80,000 (£1,333) monthly per bay-scape through new products to support the salaries and field activities of a small and local technical support team to maintain the supply chain	ZSL is developing 1/8-ha. economic family-sized farms. This means in an iMPA site with 10 ha. of seaweed farms, 80 individual farm lots or 80 VSLA members can be initially be assisted. We have prepared Profit and Loss projections for the 1/8-ha. economic size family farms, which provides the basis for hub level P&L preparation. With the possible change in farming method, we are expecting modifications in the P&L. Our grant from the Julius Baer Foundation has allowed us to employ full-time a more experienced technical specialist on seaweed production and trading. Income from the business model also supports the salary of a Finance Assistant to focus on tracking recording and monitoring income from nets recycling. We have also engaged a top-notch seaweed scientist to assist in climate-smarting our production systems and in formation and training of our pool of trainers, which will combine our staff with local seaweed farmers. Net-Works generated PhP61,000 or £870 in income from trading of close to 1 ton of dried seaweeds from VSLA members in 3 communities we trained and financed to produce seaweeds. We struggled a bit in scaling the scale of farming since the crops of the initial batch farmers we assisted were damaged by a typhoon and later by “ice-ice” disease, which is associated with increasing seawater temperature. We also had limited funding to support a good number of farmers. In Year 2, we were able to access grants from the Julius Baer Foundation, National Geographic Society, and the IUCN-hosted Blue Nature

	and provide technical support to MMPAs by Yr 4.	Capital Financing Facility (BNCFF), which has resources to production loan assistance.
Activity 5.1. 5.1 Recruitment of small local teams at each bays-cape to maintain the supply chain and provide technical support to communities in MMPAs		We are presently managing supply chains of two commodities: used fishing nets and seaweeds. We have three staff who are directly involved in managing these supply chains. One staff is based on-site and handles both seaweeds and nets. While the two are based in Cebu and Bohol, providing support in terms planning and logistics for shipment/export and farming systems development. We are also operating a self-liquidating boat service facility to support transport of both nets and dried seaweeds. When the boat is not being used for supply chain related trips, our community organizers and field biologists also use the boat on relatively affordable service fees. For 5-month operations alone, the service boat earned a net income of £383.
Activity 5.3. 5.3 Capacity building of local support teams to manage the supply chain and support MMPAs 5.3.1 Training of Trainers on Net-Works business model 5.3.2 Training of Trainers on mangroves in MPAs		We are the first project to be funded by the IUCN Blue Nature Capital Financing Facility. BNCFF has provided us business support services, which range from business plan development, advice on appropriate legal structure, improving financial performance of nets recycling, and carrageenan marketing and business planning. ZSL hosted the 3rd National Mangrove Conference in April. ZSL also conducted the 8th mangrove Training of Trainers in July. The training was participated by 23 paying participants from national government agencies (e.g. BFAR), local government units, academe, private sector and NGOs. The training included a 3-day Basic Mangrove and Beach Forest Training Course (BMBFTC), which included basic mangrove and beach forest taxonomy and ecology, species identification and practicum on mangrove nursery establishment and rehabilitation. The remaining 2-day session included workshops in conducting the actual BMBFTC. It also showcased ZSL knowledge products on mangroves and IEC materials on Dugong and seagrass conservation and the #oneless campaign of ZSL for the elimination of single-use plastic bottles. The learning sites include *Katunggan IT Ibajay in Aklan*, Pedada Ajuy and Katunggan Eco-park in Leganes and the beach forest nursery of Chief Mangrove Scientific adviser Jurgenne Primavera. Members of the team supported the conduct of Mangrove and Beach Forest Training of Trainers #9 and #10, which were attended by partners from national government agencies such as BFAR and DENR.

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

Project summary	Measurable Indicators	Means of verification	Important Assumptions
Impact: Community-based marine protection in the Philippines enhances resilience to natural disasters while helping meet national targets (15%), fully sustained through business models, reducing donor dependency and building sustainability. (Max 30 words)			
Outcome: (Max 30 words) Community-based conservation effectively protects 15% of bay-scape waters in three pilot bay areas (thereby meeting national and CBD targets), fully sustained by a diversified Net-Works business model that enhances socio-ecological resilience and reduces dependence on donor funding.	**0.6** Increase number of MMPAs from three to 15, each of minimum 200 ha, totalling 15% of bay-scape waters (out to 3km) by Yr 4 (minimum of 3,400ha (17 villages; 200ha each) of no-take zone). **0.7** Halt or reverse declines in key marine species and habitats (mangroves, seagrasses, coral reefs and indicator invertebrate/fish species) within three bay-scapes by Yr 4, having established baselines at new sites by Year 2. **0.8** Set baselines in Yr1 through survey of stratified selection of households and achieve an average 20% improvement in locally-defined household wellbeing indicators (including subjective, material style of life, income and food security) by Yr4 (n=25,000 households total, min of 500 sampled in stratified selection) **0.9** Livelihoods diversified from an average of 2.0 occupations per household in Yr 1 to 2.5 in Yr 4 (n=25,000) **0.10** Business model from the diversified Net-Works business	0.1 Municipal ordinances. GIS of bay-scapes with MMPAs plotted. 0.2 Catch per unit effort (CPUE) surveys, Underwater Visual Census (UVC) surveys, photoquadrat surveys, remote sensing (using free satellite images and established ZSL methodologies, Duncan et al., 2016) on habitat changes, especially for mangroves/beach forests. 0.3 Household surveys using our tried and tested socioeconomic M&E protocol with mobile data entry of a stratified sample of 500 households at beginning, middle and end of project. 0.4 Analyzed MPA Management Effectiveness Assessment Tool (MEAT) Reports completed at beginning, middle and end of project. 0.5 Business plans, MMPA management plans and budgets, Plan Vivo Projects Register and Project registration certificate, income from products in Net-	▪ Municipal and barangay local government units supportive. All have shown support to date; ▪ Further natural disasters, particularly tropical storms, typhoons and earthquakes do not hinder significantly project sites or activities. However, we were surprised how much conservation work the communities were willing to do even in the immediate aftermath of Typhoon Haiyan. ▪ Revenues in the business model can be made to match the costs of ongoing MMPA support – which depends on both increasing supply and price of goods, and finding efficient ways to reduce costs – something that we have already shown we are very effective at with Net-Works. ▪ Presence of active People's Organizations engaged in Coastal Resource Management/fisheries management with high conservation awareness ▪ Receptivity of stakeholders to a new approach to conservation through business models.

	model and Plan Vivo supporting a small local team of Community Organisers and Biologists by Yr 4 to sustain community-based conservation activities and the supply chains, as reflected in Darwin budget.	Works supply chain, environment funds within VSLAs, counterpart funding committed from local government.	
Outputs: **1**. Effective community-based management of 17 MMPAs across the 3 bay-scapes : ▪ Pedada and Ajuy Bay, Iloilo Province linked to Concepcion Bay and Concepcion Islands, Iloilo (2 LGUs - Pedada and Ajuy) ▪ Sapian Bay, Capiz Province (involving 2 LGUs - Ivisan and Sapian) ▪ Ibajay-Tangalan Bay, Aklan Province, (2 LGUs – Ibajay and Tangalan)	**1.11** Free Prior Informed Consent (FPIC) obtained from all relevant barangays by Yr 1, as a measure of community support and engagement. **1.12** Village (barangay) profiles completed using Rapid Rural Appraisal approaches by Yr 1 that establish resource management needs and capacity at each site. **1.13** Exchange visits completed to existing MMPAs within each bay-scape by Yr 1 to enthuse and educate community champions and provide practical demonstration of conservation interventions. **1.14** Appropriate governance structures for 17 MMPAs (defined by municipal ordinances) with equitable membership (at least 50% women, and representing major social groups within each community) established or strengthened and meeting at least monthly by Yr 3. **1.15** Participatory site selection for 12 new MMPAs and municipal ordinances obtained for these by Yr 2, with total area	**1.1** ZSL Ethics approval, FPIC forms. **1.2** Village profile reports and data. **1.3** Exchange visit activity reports and participant lists. **1.4** New MMPA ordinances, MMPA management plans, MPA Management Council Profile, criteria from Coral Triangle MPA Network implementation manual achieved **1.5** Coastal resource and habitat assessment reports and GIS maps **1.6** Infrastructure e.g. marker buoys, guardhouses **1.7** MMPA social network registered with list of members, meeting minutes and action plan **1.8** MEAT assessments submitted to national MPA Science Network **1.9** VSLA savings books, savings loans taken, environment fund savings and annual share outs **1.10** Social marketing plan, interview responses, evaluation data **1.11** Peer reviewed paper	**2** Local champions can be found which has always been possible in previous communities although sometimes can be complicated by underlying political agendas. **3** Community-level support for conservation is motivated by shared experiences with similar communities. We have found previously that cross-visits are highly effective but only when they are well planned with defined objectives, clear structure and follow up. **4** Engagement and support from local government is secured throughout the project. Following the national elections in April 2016, government should be stable for 3 years but level of bureaucracy and time around MPA ordinances can vary depending on the village and LGU officials. **5** Boundaries between municipalities are defined or can be resolved, especially where they may affect MPA establishment.

	equating to 15% of bay-scape waters. **1.16** One MMPA social network composed of local People's Organization POs/MPA Management Councils (MMCs), and VSLAs established and meeting bi-annually in each bay-scape for experience sharing and coorperation by Yr 2. At least 50% women participating in decision making in the social network. **1.17** All MMPAs pass the criteria for Philippines MPA Effectiveness Assessment Tool (MEAT) level 1 ("MPA is established – with participatory process, adoption of management plan, and appropriate legislations and governance) by Yr 2 and MEAT level 2 ("MPA management is effectively strengthed") achieved in all MMPAs by Yr 4, from level 0 or 1 and on track for level 3 (which can only be achieved after 5 years of operation). **1.18** 15 VSLAs (see output 3) contributing their environment funds to appropriate management committees and management committees leverage funds from municipal LGUs to sustain management activities by Yr 2. **1.19** Social marketing campaign delivered across each bay-scape by Yr 2 with baseline set in Yr 1 and willingness to pay for		

	community-based marine conservation increased 50% by Yr 4 (or to minimum of PhP100 p.a. where baseline is PhP0) – indicating increased support for conservation due to pro-poor design and successful social marketing. **1.20** Peer reviewed paper submitted for publication on ecological impacts of project's MMPAs by Yr 4.		
2. Integrated Territorial Use Rights for Fisheries (TURFs) introduced within MMPAs (creating TURF-reserves or replenishment zones) in two bay-scapes to align fishers' incentives with sustainability and MPA management.	**2.6** Buffer zones and managed fishing areas around MMPAs identified and established as part of MMPA ordinances and planning by Yr 2, of at least the same size (200ha) as the no-take zone at 17 MMPA sites. **2.7** Rules on who can use these buffer zones and how, under what conditions, any benefit sharing arrangements, and how this is enforced included in appropriate management plans by Yr 2 and being implemented by Yr 3. **2.8** Appropriate MMPA guardhouses designed to include opportunities to improve fisheries operations (e.g. seaweed drying platforms) by Yr 2 and implemented by Yr 3. **2.9** Participation in MMPA management (number of people participating in patrols, attendance at monthly management committee	2.1 TURF areas defined on GIS maps with approved municipal ordinances 2.2 TURF rules documentation and MMPA management plans with list/directory of registered TURF users 2.3 Kg of seaweed dried per month on guardhouses 2.4 Patrol records, apprehensions and fines records 2.5 CPUE data	▪ Communities can reach agreement on location of buffer zones and managed fishing areas. Often these are a mechanism for implementing existing (unenforced) laws on fishing gears. ▪ Improved diversity of function of MPA guardhouses will enhance enforcement of no-take zones and illegal fishing activities through additional surveillance and active engagement of fishers. ▪ Women engage as fish/forest wardens which may be facilitated through training specific women's enforcement teams as successfully applied in South Africa and Nepal. ▪ CPUE electronic recording system currently used in collaborative ZSL projects in Mozambique apply in a Philippines context or can be adapted. Good understanding of fisheries in the Philippines, staff

	meetings, proportion of apprehensions resulting in prosecutions) established at a minimum of 50% by Yr 2 and maintained >90% of capacity by Yr 4, including increasing # women fish/forest wardens in communities. **2.10** Catch per unit effort (CPUE) electronic recording system in place by the end of Yr 1 and data shows CPUE greater for fishers in buffer zones and managed fishing areas than fishers outside by Yr 4.		expertise, and connections with fisheries experts and existing data (USAID projects) should facilitate this.
4. Diversified Net-Works business model supports environmental management and biodiversity conservation, and clears up marine debris.	**4.1** 15 VSLAs with environment pouch contributing funds to support MMPA management by Yr 1. **4.2** 15 Village agents (one per barangay) trained and replicating VSLAs from the parent VSLA by Yr 2. At least 50% women trained as village agents. **4.3** All VSLAs collecting discarded fishing nets and selling them into the supply chain by Yr 2. **4.4** Private code for assurance of the nylon and seaweed supply chains developed and fully	**3.1** VSLA Profiles in ZSL VSLA M&E database • No. of VSLAs • No. of village agents • No. of environment pouches • total amount loaned • No. of loans/loan use • Total amount of environment funds • Agreement on environment pouch expenditure 3.2 Directory of village agents with contact details. 3.3 Net quantities and sales records 3.4 Technical specification document included in Net-Works Toolkit	▪ Available conservation/ environmental champions suitable as village agents ▪ Viable markets for plastic waste other than nylon ▪ Net-Works systems and M&E are robust enough to convert to a private code. Sharing of the toolkit, current data collection methods and results through a series of meetings with FLOCert (leading experts and behind Fair Trade certification) have suggested this is the case.

	tested by Yr1 demonstrating transparent and sustainable supply chain. **4.5** 24 families trained and actively farming 6ha of seaweed per community for 7 communities by Yr2 following social and environmental criteria and meeting assurance standards. **4.6** A minimum of 50 families farming a minimum of 25ha of seaweed per community within 7 communities by Yr4, generating 3,000 tonnes of dry seaweed p.a. that meets assurance standards for Net-Works Social and Environmental criteria and supports MMPAs. Technical specifications developed for the community-level production of blue carbon and marine PET (plastic in bottles) by Yr 2 **4.7** At least 50% of VSLAs producing and selling at least three new products into the supply chain by Yr 3, with 100% selling at least one product by Yr 3. **4.8** Total of 100 tonnes of ocean-bound plastics (including nets and other materials) diverted into the supply chain from the three bay-scapes by Yr 4. **4.9** Proportion of beach quadrats with plastics present reduced from 60% to 40% by Yr 4 at all sites.	3.5 Business plans, VSLA records in M&E database, kg and price records through sales and return on investment reports, transport/export permits in supply chain. **3.6** kg of plastic waste collected from project sites, kg of plastic recycled into viable product. **3.7** kg of seaweed produced per family per month. **3.8** Biophysical survey data from of beaches using our tried and tested photoquadrat method for detecting the abundance of marine plastics	▪ BFAR issue seaweed farming permits according to their current guidelines. ▪ Sustainable seaweed farming methods are adopted by families and not undermined by existing accepted practices e.g. use of polluting plastic ties. ▪ Loss of seaweed production due to weather/disease is within contingency parameters set within the business model (based on scientific research and extensive discussions with key stakeholders).
4. Plan Vivo certificates for blue carbon in MMPAs from mangroves and seagrasses provide a	**1.1** At least 106.5ha of mangrove forest areas in MMPAs (output 1) with	4.1 Project registration certificate, Payment for Ecosystem Services	▪ Stable land tenure is existing or can be established for project sites

mechanism for increased protection of coastal greenbelts and sustainable financing for coastal communities.	approval granted by the LGU for stable tenure (e.g. CBFMAs granted) at two of our focal bay-scapes by the end of year 1. **1.2** Ecosystem service pools identified and baselines established, and alternative scenarios i.e. business as usual determined at our two focal bay-scapes by the end of year 1. **1.3** Different project interventions identified and finalised through community consultations across two focal bay-scapes (i.e. REDD, sustainable use zones, reforestation) by the end of yr1 for submission under Plan Vivo. Confirm and implement ZSL's empirical research findings (Thompson et al 2014; Duncan et al. in prep) that suggest we have a mean of $14-43K tradeable carbon per annum at our two focal bay-scapes based on current market VCS prices for Plan Vivo Standard by the end of year 2. **1.4** Community-based management groups/ VSLAs established to implement and manage routine project activity, benefit sharing mechanism and report to the co-ordinator (ZSL) at both the focal bay- scapes by the	agreement in place and copy of issuances. 4.2 Project design document 4.3Agreements/ signed documents 4.4.Technical specification document 4.5. Technical specification document 4.6. Meeting minutes/Constitutions and By Laws /Local Community Organiser contracted 4.7 Survey results and amended Project Design Document	▪ Community agreement and buy-in to implement Plan Vivo ▪ Project is validated and verified under the Plan Vivo Standard. ▪ Plan Vivo and ZSL are able to secure buyers for each tonne of CO2e generated from the project ▪ Market price for tradeable carbon remains fairly stable and high therefore project costs are offset and communities benefit from income.

	end of year 2 with at least 50% women involved in project management **1.5** At least 106.5 ha mangrove area protected within the MMPAs under a financial sustainability mechanism through carbon financing across two focal bay-scapes (Tangalan Bay, Aklan and Pedada Bay, Ajuy, Iloilo) by the end of year 3. **1.6** Approved Verified Carbon Standard methodology for Tidal Wetland and Seagrass Restoration VM0033 used to map carbon potential at 3 bay wide ecosystems for inclusion in Plan Vivo by the end of year 4.		
5. Break donor dependence and create financially sustainable community-based management	5.1 Establish a business model for managing the revenues and costs associated with the supply chain for goods and services from communities (outputs 3 and 4) by Yr 1. 5.2 Recruit a small and local team at each bay-scape to maintain the supply chain and provide technical support to communities in MMPAs by Yr 2. 5.3 Build the capacity of the local support team to manage the supply chain and support MMPAs through Training of Trainers in Net-Works, mangroves and MMPAs by Yr 3.	**5.1** Business models **5.2** Contracts **5.3** Training workshop reports, attendance sheets, evaluations and follow up assessments **5.4** Local government annual budget allocation, Barangay/PO resolutions for budgetary request, Municipal Annual Investment Plans	▪ Efficient approaches to MMPA management can be developed to ensure costs are within the scope of resources available within business models and local government resources. ▪ Funds can be accessed to the right level to support MMPAs sustainably by Yr 4. We already have a strong track record with existing business models and counterpart funding from local government.

	5.4 Revenues from the supply chain generate around PhP80,000 (£1,333) monthly per bay-scape through new products to support the salaries and field activities of a small and local technical support team to maintain the supply chain and provide technical support to MMPAs by Yr 4.		

Activities (each activity is numbered according to the output that it will contribute towards, for example 1.1, 1.2 and 1.3 are contributing to Output 1)

1. Effective community-based management of 17 MMPAs across the 3 bay-scapes (Pedada and Aju Bay and Concepcion Bay); Sapian Bay; and Ibajay-Tangalan Bay/Sibuyan Sea)

- 1.1 Project presentation and consultation meetings towards generation of Free Prior Informed Consent from municipal and barangay (village) governments and people's organizations
- 1.2 Community (barangay) and People's Organization (PO) profiling using existing RRA tools
- 1.3 Participatory site selection for 12 new MMPAs through:
  - 1.3.1 Coastal resource and habitat assessments
  - 1.3.2 GIS mapping – Dalton? 40% time for data management incl bio etc.
- 1.4 Exchange/learning visits of community leaders/champions to existing Mangrove in MPAs (MMPAs) within each bay-scape
- 1.5 Establishment or strengthening of governance structures of MMPAs with equitable membership
  - 1.5.1 MMPA Management Council (MMC) formation and profiling
  - 1.5.2 MMPA management planning
  - 1.5.3 MMPA demarcation and zoning
  - 1.5.4 MMPA ordinance drafting, lobbying and approval by municipal governments
- 1.6 MMPA infrastructure establishment
  - 1.6.1 MMPA marker buoys
  - 1.6.2 MMPA guard house construction
- 1.7 MMPA social network established composed of local POs/MMCs and VSLAs
  - 1.7.1 Annual meetings for experience sharing and cooperation
- 1.8 Annual conduct of MPA Management Effectiveness Assessment Tool (MPA MEAT)
- 1.9 Formation/strengthening of VSLAs
- 1.10 Roll-out Social Marketing campaign across each bay-scape
  - 1.10.1 Undertake willingness to pay survey for community-based marine conservation
- 1.11 Preparation and submission of publication on ecological impact of MMPAs

2. Integrated Territorial Use Rights to Fisheries (TURFs) introduced within MMPAs (creating TURF-reserves or replenishment zones) in two bay-scapes to align fishers' incentives with sustainability and MPA management

2.1 Identification and demarcation of buffer zones for TURF areas
2.2 TURF governance and management planning
2.3 Registration of fishers participating in TURF
2.3 Construction of seaweed drying platforms in MMPA guard houses
2.4 Fish catch/CPUE monitoring in TURF and control areas

3. Diversified NetWorks™ business model supports environmental management biodiversity conservation, and clears up marine debris
3.1. Setting up environmental funds of formed/strengthened VSLAs, including profiling and databasing
3.2. VSLA village agents training and replication
3.3. Discarded fishing nets collection/recycling through NetWorks™ supply chain undertaken by VSLAs
3.4. Development and test-run of private code for assurance of nylon and seaweed supply chains
3.5. Training on seaweeds farming and implementation among 50 target families in 7 communities
3.6. Development of technical specifications for community-level production of blue carbon and plastics
3.7. Production and selling of 3 new products by VSLAs into the supply chain
3.8. Biophysical survey data collection of marine plastics using photoquadrat method

4. Develop and pilot a Plan Vivo certification for blue carbon in MMPAs from mangroves and seagrasses.
4.1 Community consultations and key stakeholder meetings carried out to develop Project Idea Note and submitted to Plan Vivo

4.2. Technical specifications developed including the identification of viable carbon pools, other ecosystem services and development of carbon accounting methodologies.

4.3 Socioeconomic surveys conducted to inform sustainable use zones/payment mechanisms

4.4 Community nursery/monitoring groups identified and trained and monitoring plans developed

4.5 Community mangrove forest registered/ approval granted from relevant authorities

4.6 Management body/Peoples Organisation for Tangalan Bay Project area identified and established

a. Payment for Ecosystem Services (PES) agreement template developed through community consultations
b. Project Design Document developed and technical specification finalised and submitted to Plan Vivo

4.9 Project reviewed and validated by Plan Vivo

4.10 Project registered under the Plan Vivo Standard

4.11. Project registered with the Market Environmental registry

4.12 Plan Vivo implemented at the community level and first annual report submitted to Plan Vivo

4.13 Approved Verified Carbon Standard methodology for Tidal Wetland and Seagrass Restoration VM0033 trialled for expansion of Plan Vivo to include Seagrass and compared to current methods.

2. Break donor dependence and create financially sustainable community-based management

2.1 Recruitment of small local teams at each bayscape to maintain the supply chain and provide technical support to communities in MMPAs
2.2 Capacity building of local support teams to manage the supply chain and support MMPAs
    2.2.1 Training of Trainers on NetWorks™ business model
    2.2.2 Training of Trainers on mangroves in MPAs

Annex 3: Standard Measures

Table 1 Project Standard Output Measures

Code No.	Description	Gender of people (if relevant)	Nationality of people (if relevant)	Year 1 Total	Year 2 Total	Year 3 Total	Total to date	Total planned during the project
Established codes								
2	1x MSc project (Uni of Oxford) 2x MSc projects assigned to Uni of Exeter students (artificial reefs and faunal diversity in mangroves) 1x MSc Uni of Exeter (testing drone mapping of iMPAs)	F M F F	1x UK 1x UK 1x India 1x UK	1 complete 2 in progress	2 1 (in progress)		3	
6A	Mangrove and Beach Forest Training of Trainers		Filipino	46	220		266	
6A	National Mangrove Conference		Filipino		239		239	
6A	Seaweed farmers training	15 M; 2 F	Filipino	17	4		21	
6A	iMPA Roundtable Discussion and Learning Visit	43 M; 9F	Filipino		52		52	
9	MPA management plans			1			1	
10	Community manual flipchart for Mangrove and Beach Forest rehabilitation			1			1	
10	Translated Community Based Mangrove Rehabilitation Manual into 2 local languages				2		2	
14B	13th December 2018. Heather Koldewey. Christmas	3 M: 1 F	UK Filipino	9	7		16	

	Conservation Lecture and inaugural Professor lecture. 'Ocean optimism in a sea of plastic'. University of Exeter, Penryn campus 16th October 2018. Heather Koldewey: Plenary speech 'Ocean optimism in a sea of plastic' at the European Union of Aquarium Curators annual conference, The Deep, Hull. 10th September 2019. Heather Koldewey: Opening plenary 'A Changing Planet: A quest for solutions to save the ocean'. NERC DTP conference, Imperial College, London. 16th July 2018. Heather Koldewey: Opening presentation 'Ocean optimism in a sea of plastic'. Surfers Against Sewage Ocean Plastic Solutions Day (with HRH Prince of Wales and the Duchess of Cornwall attending in part), St Agnes, Cornwall. 11th – 15th June 2018. Heather Koldewey participant in							

	two panel discussions 'Planet or Plastic' and 'Igniting Change' at National Geographic Explorers Festival, Washington DC, USA. June 2018. Godof Villapando. Net-Works for the International Marine Conservation Congress, Malaysia. 2nd June 2018. Heather Koldewey: Addressing issues of marine debris and poverty alleviation in coastal communities. World Environment Day workshop on marine litter, New Delhi, India. **27th April 2018.** Nick Hill presenting Net-Works which was selected as a finalist for the St Andrews Prize for the Environment. **19th February 2018**. Heather Koldewey and Godof Villapando. Visiting Professors Public Lecture and Roundtable: International Wildlife Trade. Event organised by British Embassy in the Philippines.							

	Ateneo de Manila University, Manila, Philippines. **14th February 2018.** Heather Koldewey. Plenary speech at International Year of the Reef launch at Princes International Sustainability event with VIPs, business leaders and HRHs Prince Charles and Prince Harry. **22nd January 2018.** Conservation for Communities. Workshop 'Sharing best practice in marine conservation and research' organised by CIIMAR (Interdisciplinary Centre Of Marine And Environmental Research - University of *Porto*) and ZSL, Portugal. **13th December 2017**. Heather Koldewey. Opening Plenary speaker. Perspectives on reef conservation. European Coral Reef Symposium, University of Oxford, UK. **5th December 2017**. Heather Koldewey. MSc Conservation and Ecology students lecture and workshop, University of Exeter,							

	Cornwall campus. **16th October 2017** – Nick Hill presented Net-Works in a lecture to Exeter University 2nd year students studying Marine Vertebrate Conservation. **26th July 2017.** Heather Koldewey. Keynote speaker. Marine Ecology and Conservation Network conference, University of Exeter Penryn campus. **27th April 2017**. Guest speaker – Pew Bertarelli Global Ocean Legacy The Science and Culture of Marine Conservation on Rapa Nui, Easter Island, Chile.							
22	1 pilot sites 1) Tambaliza, Concepcion 2) Salvacion-Malangabang, Concepcion 3) Punta Buri, Ajuy		Filipino	3			3	17
23	Match funding grants secured from a) National Geographic and b) Adventist Development and Relief Agency c) BNCFF; d) ProCoast							

Table 2 Publications

Title	Type (e.g. journals, manual, 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)
Faunal diversity in different mangrove habitats in the Philippines	MSc Thesis	Shruti Suresh, University of Exeter. MSc Conservation & Biodiversity.	F	Indian	University of Exeter	
How effectively artificial reefs mimic natural coral reef communities in the Philippines	MSc Thesis	Fergus Cunningham	M	UK	University of Exeter	
Satellite remote sensing to monitor mangrove forest resilience and resistance to sea level rise.		Duncan, C.; Owen, H.J.F.; Thompson, J.R.; Koldewey, H.J.; Primavera, J.H; Pettorelli, N.	F	UK	Methods in Ecology and Evolution **, 9 (8) pp. 1837-8152.**	10.1111/2041-210X.12923.
Community-based Mangrove Rehabilitation Manual translated and published in two local languages: Hiligaynon and Akeanon	Manual	Primavera, J.H., Savaris, J.D, Bajoyo, B., Coching, J.D., Curnick, D.J., Golbeque, R., Guzman, A.T., Henderin, J.Q., Joven, R.V., Loma, R.A. and Koldewey, H.J.	F	Philippines	ZSL Philippines	www.zsl.org/mangroves
Proceedings of the 3rd National Mangrove Conference	Proceedings	Loma, R.A., Coching, J.D., Calanda, V., Montilijao, C.	F	Philippines	ZSL Philippines	www.zsl.org/mangroves

Annex 4 Onwards – supplementary material (optional but encouraged as evidence of project achievement)

Checklist for submission

	Check
Is the report less than 10MB? If so, please email to Darwin-Projects@ltsi.co.uk putting the project number in the Subject line.	
Is your report more than 10MB? If so, please discuss with Darwin-Projects@ltsi.co.uk about the best way to deliver the report, putting the project number in the Subject line.	X
Have you included means of verification? You need not submit every project document, but the main outputs and a selection of the others would strengthen the report.	X
Do you have hard copies of material you want to submit with the report? If so, please make this clear in the covering email and ensure all material is marked with the project number. However, we would expect that most material will now be electronic.	
Have you involved your partners in preparation of the report and named the main contributors	X
Have you completed the Project Expenditure table fully?	X
Do not include claim forms or other communications with this report.	