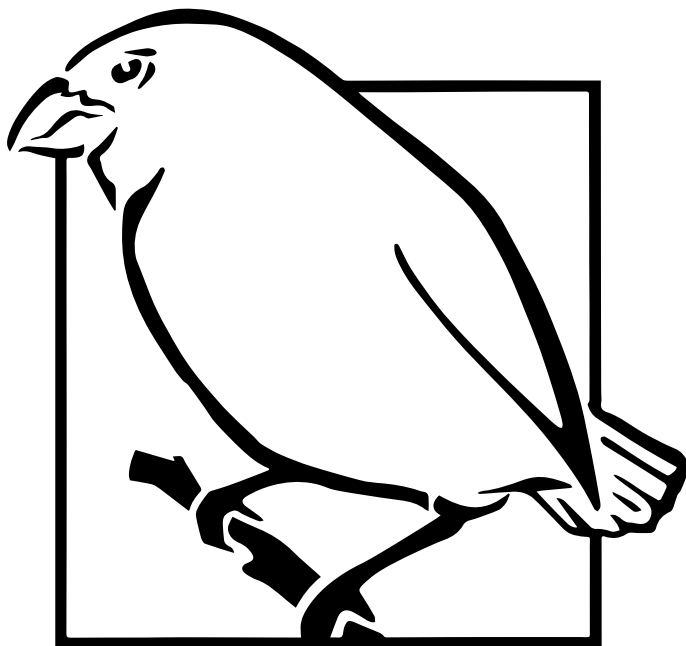


Newsletter

February 2019



*Dar Taliba students watering newly planted seeds in greenhouse,
Credit: Pommélien da Silva Cosme*



**DARWIN
INITIATIVE**

The Darwin Initiative supports developing countries to conserve biodiversity and reduce poverty. Funded by the UK Government, the Darwin Initiative provides grants for projects working in developing countries and UK Overseas Territories (OTs).

Projects support:

- the Convention on Biological Diversity (CBD)
- the Nagoya Protocol on Access and Benefit-Sharing (ABS)
- the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA)
- the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)

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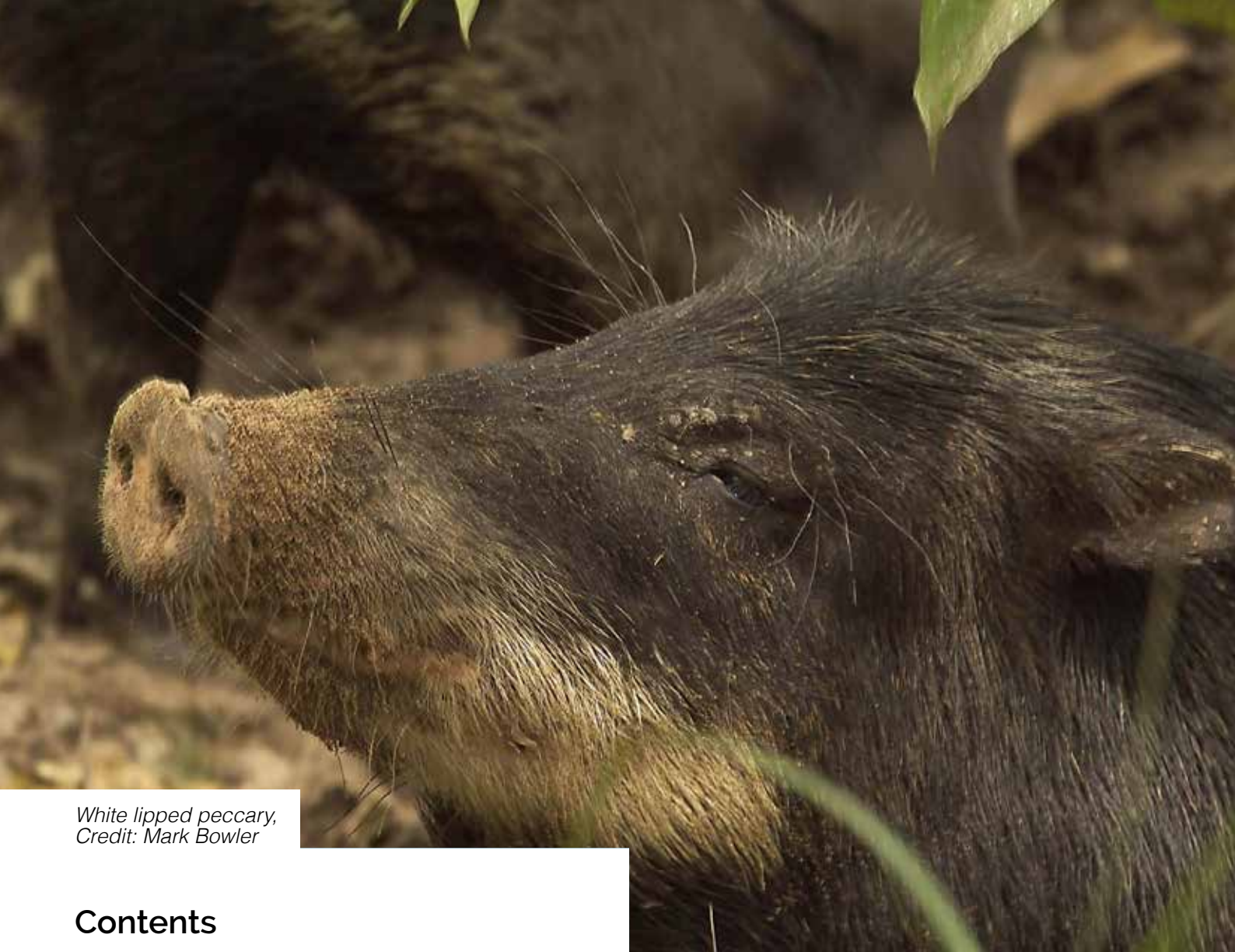
 darwininitiativeuk.wordpress.com


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*White lipped peccary,
Credit: Mark Bowler*

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*Conservation farming field day by
RAEBIA, Credit: Alex Sarmento*

Publicity and information about the Darwin Initiative

For more information on the Darwin Initiative please visit [gov.uk/government/groups/the-darwin-initiative](https://www.gov.uk/government/groups/the-darwin-initiative)

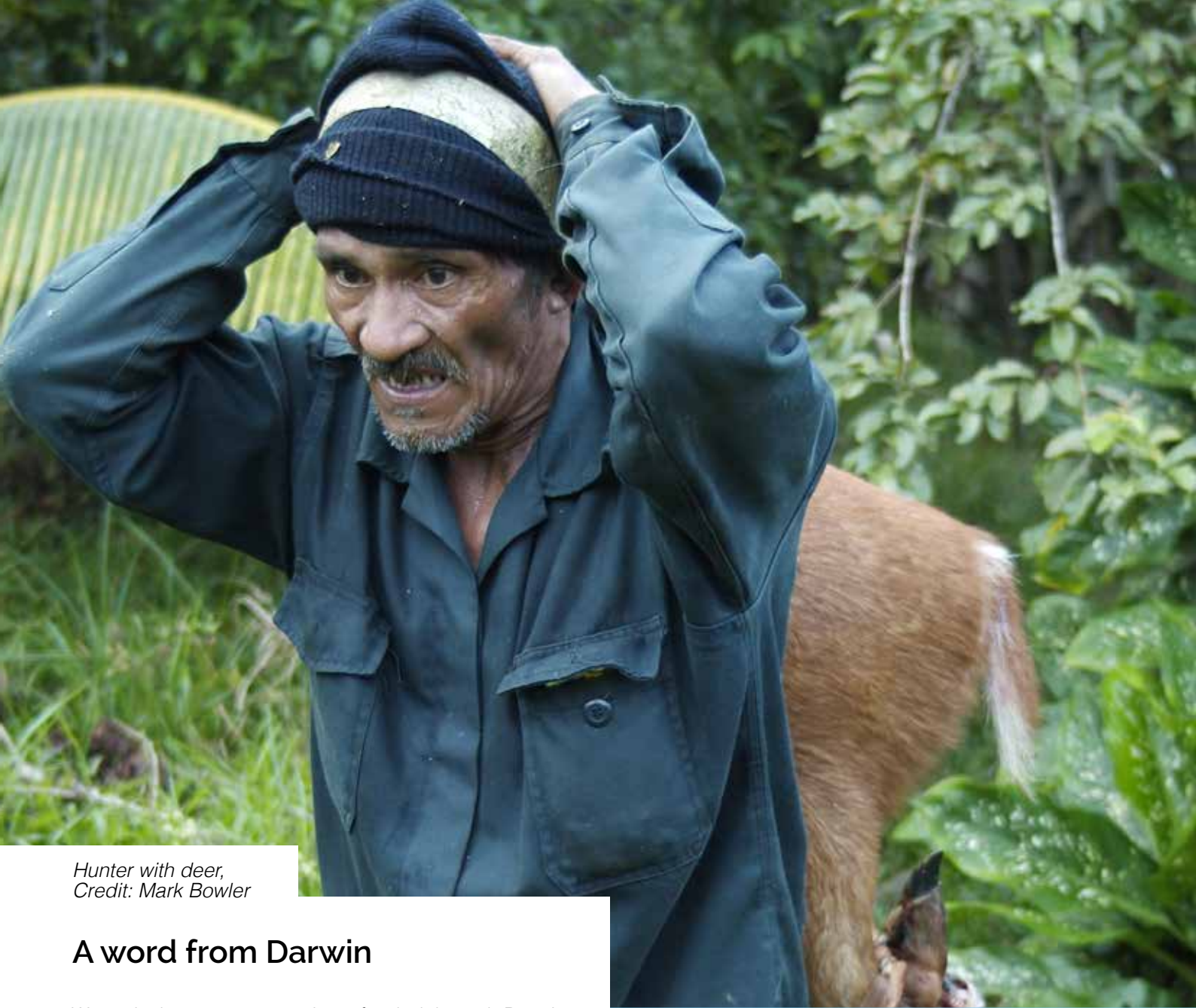
For further details about current and completed Darwin Initiative projects, including their final application forms, please visit [darwininitiative.org.uk](https://www.darwininitiative.org.uk)

We also have a blog, that includes news and thoughts on issues being tackled by the Darwin Initiative – both at the project and programme level. You can read it here [darwininitiativeuk.wordpress.com](https://www.darwininitiativeuk.wordpress.com)

We're also keen to share other Darwin project blogs. If you have a blog you'd like to share on our website, please get in touch at darwin-newsletter@ltsi.co.uk

Publicity and referencing Darwin Initiative

We kindly remind project leaders that if they are publicising their work then it is important that they make every effort to mention Darwin Initiative funding. This is important as it helps us to ensure the Darwin Initiative retains a high profile and secures continued Government funding.



*Hunter with deer,
Credit: Mark Bowler*

A word from Darwin

We actively encourage projects funded through Darwin to be collaborative and establish partnerships. The types of organisations which partner on Darwin projects vary from local NGOs to international universities to government departments but, whatever their status, partners can help projects achieve their aims.

Partner organisations can strengthen the outcome of a project through sharing their local knowledge, promoting local connections and offering support to the lead organisation. Partnerships play an important role in achieving success, and many projects have expressed that without the help of their partners they would not have been able to achieve their desired results.

In this edition of the newsletter we celebrate the relationships formed with local and global partners, stakeholders and communities and hear how these “Collaborations in Conservation” have enabled projects to reach and even exceed their goals.

A project in Samoa, through the combined effort of science, education and art have published a children’s book that could help bring an endangered species back from the brink of extinction.

Another project working in the Dja Faunal Reserve, Cameroon, has improved their relationship with the local community and are putting an end to illegal hunting through building trust and delivering on promises. And, in an effort to engage with the younger community and improve local knowledge on native plants, a project in the Moroccan High Atlas has collaborated with local partners and a local school to start a community garden. The stories from these projects and others really do act as evidence that team work can make the dream work!



Students in school garden during a planting session, Credit: Fabien Tournan

Co-creating an ethnobotanical school garden for Amazigh girls in the High Atlas, Morocco

The landscapes of the Moroccan High Atlas have been shaped by the close relationship between humans and the environment over the course of millennia. They are maintained by contemporary cultural practices that support a **regional biodiversity hotspot** and ensure ecological resilience. Through this project the Darwin Initiative co-funds Global Diversity Foundation's **High Atlas Cultural Landscapes Programme**, which seeks to strengthen these traditional practices while enhancing sustainable land-based economies and wellbeing.

Foundational to this programme is our focus on capacity-building, particularly for the younger generation. We collaborate with local partners to actively engage local communities through offering training sessions on plant commercialisation and sustainable agricultural practices.

One of our core training grounds is the **ethnobotanical school garden at Dar Taliba**, an all-girls boarding house in the Ourika Valley which was set up to enable students from remote villages to continue their education beyond primary school.

What started out as a modest school garden has grown into a multifunctional garden and outdoor training space for students to develop new skills and knowledge in plant conservation, plant uses, permaculture techniques, beekeeping and indigenous practices.

The garden also provides organic herbs, fruits and vegetables, which are used to prepare school meals for the 142 girls currently in residence - at least 15 of whom

are able to attend Dar Taliba thanks to the funding from the Darwin Initiative.

Today's success of the Dar Taliba school garden is the result of strong partnerships built during the co-creation of this green space, including collaboration with the students who were actively involved throughout its construction process. In 2016, the Moroccan Biodiversity and Livelihoods Association (**MBLA**), a local non-profit that implements integrated in-situ and ex-situ conservation measures through community-based research, provided invaluable input in identifying

“ The garden also provides organic herbs, fruits and vegetables , which are used to prepare school meals for the 142 girls currently in residence ”

the first steps of reviving the old school garden. We have also been long-time partners of the Association de Bienfaisance pour le Développement du Bassin de l'Ourika (**ABDBO**), the Moroccan association dedicated to rural girls' education that established the Dar Taliba boarding house in 1998.

Together, we elaborated a strategy for the creation of the garden with the direct involvement of the students. We then began working with a team of local permaculture design specialists, **Radiant Design**, who created a multifunctional garden using permaculture principles.



Students during a distribution of vegetables and medicinal plants after harvesting, Credit: Pommélien da Silva Cosme

This garden now includes a plant nursery, green house, ethnobotanical garden, vegetable garden, aromatic and medicinal plant garden and a recreational space for students to study.

Once the permaculture design was in place, local partner and hydrology consulting firm RESING installed a brand-new drip irrigation system to support the year-round growing and maintenance of the 6,000m² garden. Consistent water availability enables new and more sustainable cultivation of local crops, especially as summers continue to warm.

In 2017, all of our partners' hard work and joint efforts were rewarded when the Dar Taliba students started to spend a lot of their time in the garden. We continued to work with MBLA and Radiant Design, using the space to deliver weekly permaculture trainings.

Since then, the students have been learning more about indigenous plant botany and sustainable agriculture techniques while practicing new skills such as seed saving, making **organic fertiliser** and **composting**.

Through these capacity building activities, the girls are rediscovering their local cultural heritage related to plants and actively engaging in local biodiversity conservation efforts. They also have begun engaging in their traditional knowledge and practices when they return home to their communities, setting the stage for the long-term sustainability of our programme.

For more information on project 24-010 please click [here](#).



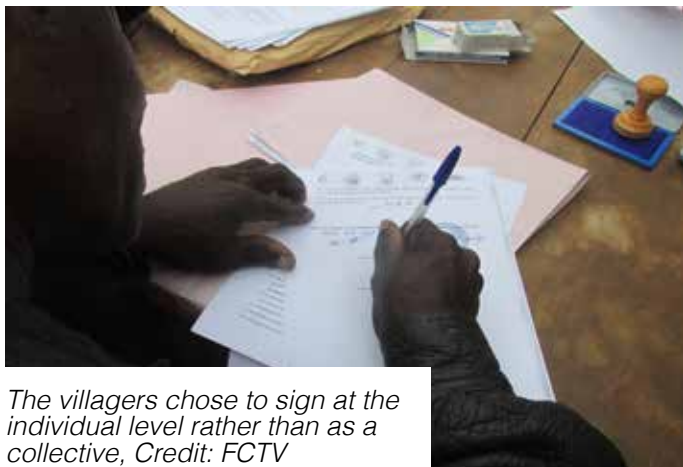
Manfred Epanda (AWF) presenting the format of the signing of REA to Ekom villagers, Credit: FCTV

Managing expectations in development and conservation

Ask anyone who has been working in international development or wildlife conservation in the past thirty years what the main challenges of working with the rural poor are, and the chances are that they would list managing expectations in their top three.

With the introduction of integrated conservation and development projects, participatory processes and trying to find 'win-wins' for people and wildlife has come the recognition that if people are being asked to modify their working practices, then they should receive some sort of benefit. What the benefits actually are, the amount of time they take, and the value of the benefits are areas where often there is a difference in perception between the 'donor' and the 'beneficiaries' and the direction they are heading.

This can often be the case when well-resourced NGOs interact with people living in poverty and aim to change situations based on principles of 'doing the right thing'.



The villagers chose to sign at the individual level rather than as a collective, Credit: FCTV

All very admirable, but in order to change, people need options, and incentives. It can't just be stick and no carrot, as outlined in the excerpt from an **article** written by Dr. Carl Robinson on why partnerships fail.

“ assertive partners will do what they think needs to be done and the less assertive will resent those decisions and actions because they weren't consulted. The upshot is that frequently the partners go in opposing directions that meet their own needs but not the strategic needs and direction of the partnership

”
- Carl Robinson

The situation gets worse if expectations of the benefits are not met. In our experience, engaging with a community that has been a 'partner' in interventions where local communities felt 'let down' or promised more than what was actually delivered, is a far harder task than working with people who have no previous interactions with well-meaning NGOs.

One model that we increasingly rely on is based on working under some sort of agreement. We can call them 'Conservation Partnerships' or 'Reciprocal Environmental Agreements' the idea being - that if we're asking for change, we need to pay. The payment is rarely monetary



*REA were signing for alternative protein source support (effective fishing and cocoa production)
Credit: FCTV*

based, but from the very beginning of the project we are clear about what we want to see happen and what the benefits will be if people engage. Working under written agreements is part of the process because it helps to deliver clarity, responsibility, and commitment to action – from both the donor and the beneficiary.

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We know this will not completely solve the problem of illegal hunting, but it's a start based on a clear understanding of what each party expects from one another

The people living in the northern buffer zone of the Dja Faunal Reserve (DFR) have had many years' experience of working with Government agencies and NGOs, all looking to stop illegal hunting. Almost all of these interactions have been around conflict. Yes, it's true that people have been breaking the law; it's illegal to hunt anything in the DFR, or set snares, or take out trees.

In late 2018, after 16 months of discussions with the villagers that live alongside the DFR, agreements were signed that committed both sides of the party to various obligations. One of the very first things we had to do in order to show that we were genuine in our understanding of their circumstances was to deliver benefits.

In return for agreeing to shift from hunting, we have taught them how to grow cocoa and market it so that they can earn an income. We have given them new fishing materials and taught them about water safety so that they can obtain more animal protein from fish, rather than just bushmeat.

”
 We know this will not completely solve the problem of illegal hunting, but it's a start based on a clear understanding of what each party expects from one another.

For more information on Project 24-005 click [here](#). For official videos and photos from the signing ceremonies click [here](#).



*Tana Delta aerial view,
Credit: J. Nyunja*

Collaborations in the conservation and development of Tana Delta

The successes so far recorded in the implementation of the Darwin Initiative funded project in the Tana Delta can be attributed to collaborations and partnerships with diverse stakeholders ranging from community institutions and individuals to officials from both national and county Governments. In some cases, project outputs looked complex with the target environment being as unique and diverse as the political and ethnic interests of the community. Over the past ten years that Nature Kenya has worked in the Tana Delta, we have realised that forging lasting partnerships with all stakeholders is the only way to achieve meaningful impacts on the implemented interventions. Partnerships have promoted local ownership of project initiatives ensuring sustainability beyond the project's lifetime.

For this project, collaboration started right at the beginning, when various baseline surveys were carried out. Nature Kenya worked with scientists from the Institute of Primate Research to collect baseline data on biodiversity; primarily focusing on the Tana River Red Colobus and Tana River Mangabey but also looking at the various trees and animals important for the conservation of the Delta.

The socio-economic and household wellbeing index survey was also carried out in collaboration with



The main objective of the project is to set up a multiple use community conservation area to safeguard biodiversity and community livelihoods



scientists from the Kenya Forestry Research Institute with enumerators drawn from local communities and with local government administrators ensuring proper mobilisation. The results from this survey were so impressive that an abstract on the findings was submitted to the Forests and Livelihoods: Assessment, Research, Engagement (FLARE) symposium in Denmark.

The main objective of the project is to set up a multiple use community conservation area (CCA) to safeguard biodiversity and community livelihoods. An ecosystem services assessment for the CCA was conducted in collaboration with communities, Kenyatta University and the National Museums of Kenya.

Data collated from the ecosystem services assessment is being presented in a scientific paper that is currently being written for submission to a peer reviewed journal. Nature Kenya partnered with the National Museums of

Kenya to develop the initial maps that were presented to local communities and County Governments of Tana River and Lamu to show the extent of the proposed CCA area.

Presentation of maps helped in building consensus among various interests and as a result the CCA was expanded to include areas that stakeholders felt had been left out of the original proposal. An interim CCA management committee made up of 24 people was formed with national, county and community level interests being adequately represented. The committee is co-chaired by Kenya Wildlife Service and the County Governments of Tana River and Lamu.

Nature Kenya partnered with the Water Resource Authority to train Water Resource Users Associations at the community level in governance and formulation of sub-catchment management plans. We collaborated with the Kenya Forest Service and the Tana River County Department of Environment to train Community Forest Associations (CFAs) and provided support which allowed them to register officially and strengthen their governance structures.

Through the funding provided by the Darwin Initiative, Nature Kenya supported communities to initiate climate smart agriculture farming using shade nets and drip irrigation kits. The County Department of agriculture supported farmers through their extension officers.

The Constituency Development Fund which is administered through the local Member of Parliament's

office supported farmers that Nature Kenya is working with by providing seeds.

The project is encouraging pastoralists to engage in goat keeping enterprises supported by the County Departments of Veterinary and Livestock production with impressive results. The livestock production department has also been crucial in their increased engagement with beekeepers, ensuring that production is increased along with the improvement in the quality of the products.

“
The project is encouraging pastoralists to engage in goat keeping enterprises supported by the County Departments of Veterinary and Livestock production with impressive results
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The fish farming enterprise is anchored in the Department of Fisheries who provide technical support on appropriate siting of ponds, pond construction, stocking and fish rearing. The collaboration developed with the local communities through their umbrella organization, the Tana Delta Conservation Network has worked diligently to ensure that project efforts are directed and coordinated for success.

For more information on project 24-013 please click [here](#).



Farmers in group discussion in Hurara, Credit: Nature Kenya



South Atlantic Horizon Scanning team at workshop in Cambridge, Credit: Helen Roy

Collaboration of 163 experts led to predictions of impacts of invasive non-native species across 14 UKOTs

The UKs 14 Overseas Territories (UKOTs) represent a diverse set of biological regions with fabulous species, habitats and people. The Centre for Ecology & Hydrology has been delighted to be involved with two projects working with the UKOTs, and are happy to share the incredible collaborations and experiences we have had over the last two years.

“ Invasive non-native (and native) mosquitoes were identified as a major threat to human health and well-being ”

The first UKOTs project our team led was funded through the Darwin Plus: DPLUS056 in 2017 Assessment of current and future Invasive Alien Species in Cyprus (<http://www.ris-ky.eu>). Along with our project partners, the Joint Services Health Unit (JSHU), British Forces Cyprus and the University of Cyprus we investigated current and future threats from terrestrial and aquatic invasive non-native species using historic data, field surveys and horizon scanning (Roy et al. 2014, Roy 2015).

A horizon scanning workshop brought together scientists from Cyprus and across Europe to generate a list of species considered to impact biodiversity, ecosystems and human health. In addition, the project team developed and undertook surveys for native and non-native invasive species across the Western Sovereign Base Area (SBA) in Cyprus alongside the review and collation of historic data to assess the current threats.

The information we gathered was presented and discussed with regional experts (including scientists and natural historians from across Cyprus) through a capacity-building workshop in August 2017, that enabled us to better understand the monitoring priorities for biological recording in the SBAs and across wider Cyprus. Understanding changes in species distribution and abundance is underpinned by high quality biological recording.

Invasive non-native (and native) mosquitoes were identified as a major threat to human health and well-being. Therefore, in the following year (April 2018), a workshop was organised looking at the challenges regarding vector-borne disease management within SBAs and beyond, with a focus on the impacts of invasive non-native species.

This workshop relied on collaborations among international and regional experts and together they



Participants at a capacity building workshop in Cyprus, Credit: Helen Roy

contributed to better understanding around vectors of diseases.

Through this two-year project, that ends in March 2019, we have created a range of freely available resources and materials that are used by both visitors and staff at the Akrotiri Environmental Education Centre as well as anyone who visits our project website.

In 2018 our team at the Centre for Ecology & Hydrology began working on a UK Government funded project through support from the Non-Native Species Secretariat to undertake horizon scanning and biosecurity workshops across all 14 UKOTs. This provided an excellent opportunity to extend the horizon scanning methods developed through our Darwin Plus project DPLUS056 to all UKOTs to derive lists of invasive non-

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We have worked with over 150 people, through the Darwin Plus Initiative and the UK Government funded project linking to the inspiring work within these regions
 ”

native species that could have adverse impacts.

We linked the outcomes through a workshop to consider approaches for enhancing biosecurity particularly by considering options for managing the pathways of arrival for these species through Pathway Action Plans. These plans identify the most likely pathways of arrival for a species and then document pathway-based mitigation to reduce the risk of arrival of that species.

Our project team with collaborators from around the world worked with biodiversity experts from the UKOTs in order to develop the priority lists and develop Pathway Action Plans in collaboration with the regional experts and guided by the biosecurity teams.

These workshops have demonstrated the incredible value of collaborations and networks in undertaking the complex task of making predictions about non-native species that could threaten these incredible places



Oli Prescott and team working with the Biosecurity team, Credit: Helen Roy

in the future. It has been exciting to see the outcomes from these collaborative workshops being put into practice within the UKOTs through enhanced biosecurity guidance and awareness raising. Additionally, combining horizon scanning with biosecurity Pathway Action Planning improves knowledge exchange and network development. Such approaches could be effective across other island states.

The Centre for Ecology & Hydrology, along with our project partners, will be addressing drivers of ecological change in Lake Akrotiri SBA, Cyprus through the new Darwin Plus project DPLUS088 to continue to build on the work of our initial Darwin Plus project.

Alongside remote sensing, hydrological surveys and plant assessments, our team will work with civilian and military personnel to develop an accessible document advising on Pathway Action Plans and biosecurity for SBAs in Cyprus. The document will be relevant for other UKOTs and will include a Code of Practice for Managing Mosquitoes in Wetlands.

These projects are intrinsically linked through a network of stakeholders working across common global

challenges around INNS. We worked with experts from policy, environmental and research Government departments, representatives from biosecurity departments, education centres, universities, NGOs and the volunteer biological recording community. We have worked with over 150 people, through the Darwin Plus Initiative and the UK Government funded project linking to the inspiring work within these regions.

It has been a great privilege to foster networks with people working around the world on the invasive non-native species and biosecurity. The collaborations will continue in the future and we are looking forward to sharing the outcomes of this project in many different ways.

For more information on the Centre for Ecology & Hydrology's initial project, DPLUS056, click [here](#).



Professor Roy talking to children from Jamestown School St Helena, Credit: Helen Roy



Miss Samoa 2018 reading to school children, Credit: Jane Vaafanga

Can a story save the little dodo?

The Manumea or the little dodo is the last of its kind, found nowhere else in the world apart from Samoa. The national bird of Samoa is seen by locals and visitors to the Pacific nation every day on the 50 sene coin and \$20 tala note, yet it is a rare sight in its natural forest habitat. The Manumea is often referred to as the 'princess of the forest' and is one of the rarest birds in the world and is considered as critically endangered on the IUCN Red List.

Research funded through this Darwin project has allowed scientists and researchers from the Samoan Government Ministry of Natural Resources and Environment and local conservation NGOs to undertake research to determine the reasoning behind the disappearance of this symbolic bird.

“
To prevent species' decline, the science needed to be in the hearts of everyone

”
- Rebecca Stirnemann

Unfortunately, the results from this critical study were not as wide reaching as was originally anticipated and the scientific publication did not attract many readers.

“
they combined science, education and art and through dedication and teamwork were able to publish "Mose and the Manumea"

”
The complex jargon and lengthy nature of the publication meant that the information was not easily shared with a wide audience - a solution was needed. Project leader Dr. Rebecca Stirnemann summed up the dilemma – “To prevent the species' decline, the science needed to be in the hearts of everyone”. Because the aim of the study was to prevent a further decline in species numbers, the results needed to be accessible to everyone and in a format that was suitable for both adults and children in the community.

Aiming to create awareness around the decline of Samoa's national bird, as well as increase literacy among Samoan children and adults, the two authors - Rebecca Stirnemann and Jane Va'afusuaga - joined forces to write “Mose and the Manumea”. Prior to the publication of the book, the authors contemplated making a poster or a brochure but decided to write a children's book that would be available in both Samoan and English.



Artist's impression of the Manumea,
Credit: Rothman

It was important to the authors that the beauty and colours of the Pacific Island were accurately represented in the story and artist Christina Brady was recruited to the team as the illustrator. As a team they combined science, education and art and through dedication and teamwork were able to publish "Mose and the Manumea".

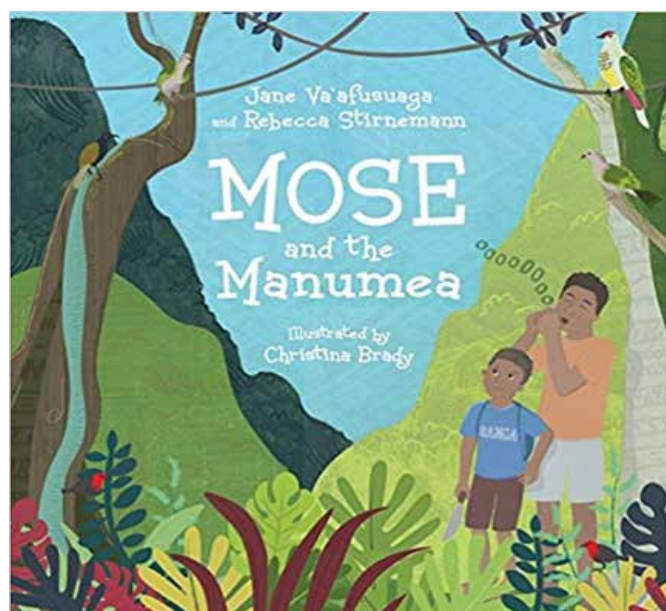
“
It was important to the authors that the beauty and colours of the Pacific Island were accurately represented in the story

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The creation of the book is the true definition of collaboration. Author Jane is a school teacher and even the children in Samoa helped. In order to make a book that children would love the authors made several visits to local schools and had 8-10 year olds critique the text and help shape the book. The book is complete and has been published by Little Island Press and is a prime example of the success that can occur through collaboration. The book will fund active conservation on the ground to save the iconic species.

“Mose and the Manumea” is available on [Amazon](#) and all royalties are donated to the conservation of the Manumea by the authors.

For more information on project 21-001 please click [here](#).



The cover and illustration of "Mose and the Manumea", Credit: Christina Brady



Black Devon wetlands,
Credit: D. Palmar

Built on collaboration: new good practice principles to achieve No Net Loss for people and biodiversity

The interface between economic development and conservation is rapidly changing, meaning that achieving sustainable economic growth that meets human needs and not only preserves, but also enhances the environment is a major challenge.

Governments, businesses and lenders worldwide are adopting a 'No Net Loss' (NNL) or 'Net Gain' (NG) objective for biodiversity. This is often achieved through a hierarchy of mitigation measures that starts

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We developed new international good practice principles for Governments, NGOs and academic organisations involved in economic development projects seeking to achieve NNL/NG of biodiversity

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with avoiding, then minimising and finally remediating biodiversity loss.

To address residual biodiversity losses, NNL approaches require that these losses be quantified and then offset (as the last stage of the mitigation hierarchy) by commensurate gains in biodiversity. The aim is to demonstrate that gains in biodiversity are equal to, or greater than, the losses incurred from the project. NNL/NG outcomes can affect communities because society relies on, uses and values biodiversity. However, these social impacts associated with NNL/NG outcomes are often not adequately considered.

This is where our project – *“Achieving No Net Loss for communities and biodiversity in Uganda”* – comes in.

We developed new international good practice principles for Governments, NGOs and academic organisations involved in economic development projects seeking to achieve NNL/NG of biodiversity. Sixteen principles were established for addressing the negative social impacts on people that arise from losses and gains in biodiversity, while also maximising opportunities for NNL/NG to generate positive social outcomes. One of



Lapwing flock flying in front of oil refinery, Credit: D. Palmar

our aims in developing the principles was to encourage closer, collaborative working between all stakeholders involved with biodiversity NNL/NG projects. In particular, focusing on the involvement of ecological and social specialists who often work in silos throughout the lifecycle of a development project. These principles are the product of a huge collaborative effort, with representatives from over 15 organisations generously giving up their time to attend workshops and provide comments on draft versions.

The initial ideas and drafting of the principles were undertaken by three Darwin Initiative project partners (Oxford University, Wild Business Ltd, Balfour Beatty), with significant input from Bangor University, who contributed additional funding for the principles. Other key international organisations were contacted for their input and to gauge their interest and support for the principles. We were overwhelmed by the positive responses, enthusiasm and support for the principles!

In general, the social impacts of conservation initiatives and economic development are widely discussed but a gap exists when it comes to evaluating the social impacts of biodiversity NNL/NG.

“

In general, the social impacts of conservation initiatives and economic development are widely discussed but a gap exists when it comes to evaluating social impacts of biodiversity NNL/NG

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The consensus was that these principles would be extremely useful in addressing this gap and represent a change in thinking, promoting NNL/NG strategies that aid poverty alleviation and help improve outcomes for local people, especially for the rural poor who rely on biodiversity for their livelihoods.

The draft principles were refined through extensive external consultation with a wide range of international stakeholders, including representatives from government agencies, NGOs, businesses, consultancies and academia. We held four workshops to introduce the key ideas behind the principles and to gain feedback and advice from attendees. Workshops were held in: Cambridge, UK (hosted by the UNEP World Conservation Monitoring Centre), Kampala, Uganda

“

Overall, they aim to bridge the gap between ecological and social aspects of biodiversity NNL/NG and aim to ensure that these projects generate sustainable and equitable outcomes.

”

(hosted by Nature Uganda), Oxford, UK (hosted by University of Oxford) and London, UK (hosted by Balfour Beatty).

We also held a BBOP webinar, which was attended by more than 80 international stakeholders. In addition, 21 people kindly provided written comments on draft versions of the principles. In particular, seven international organisations and working groups offered significant support and input: National Environment Management Authority (Uganda), International Institute for Environment and Development (IIED), BBOP, IUCN, The Biodiversity Consultancy, the SNAPP (Society

and Nature for People Partnership) working group on compensatory conservation and the COMBO Project (Conservation, impact mitigation and Biodiversity Offsets in Africa).

The principles were published in November 2018 and launched at a symposium in Oxford as well as at the final conference of the Business and Biodiversity Offsets Programme (BBOP).

Overall, they aim to bridge the gap between ecological and social aspects of biodiversity NNL/NG and aim to ensure these projects generate sustainable and equitable outcomes. We expect that the principles will need to undergo further refinement when tested in the field and we welcome any feedback!

For more information on project 23-019 please click [here](#).



Household in Democratic Republic of Congo,
Credit: V.F. Griffiths



A village in the Moyen-Bafing National Park, Credit: WCF

Community actions for a better management of natural resources as part of the Moyen-Bafing National Park creation in Guinea

In Guinea, the creation of the Moyen-Bafing National Park (MBNP) represents a real challenge for the conservation of the unique biodiversity and the socio-economic development of the local human populations. The Wild Chimpanzee Foundation (WCF) and the Guinean Office of Parks and Reserves (OGuiPaR) started the development of community actions for sustainable and integrated management of natural resources. These actions aim at fighting poverty in the region and restoring the connectivity of landscapes degraded by human activities such as deforestation and slash and burn agriculture.

To restore the functionality of the Moyen-Bafing ecosystem, the Darwin Initiative supports WCF and OGuiPaR through this project in the implementation of Land Management Plans (LMP). These LMPs are based on a participatory approach that consists of involving and supporting the local communities of the proposed MBNP in sustainable natural resource management. This programme aims to introduce Farmer Management Natural Regeneration (FMNR) to local farmers in the future park.

The aim of this agroforestry technique is to convert shifting agriculture into innovative and sustainable farming systems to combat land degradation and to increase the productivity and yield of local crops. Participatory and agro-ecological diagnoses of the

“ This innovative project is beginning to sustainably protect the environment of this region, for the survival of critically endangered chimpanzees and local human populations facing the adverse consequences of climate change

”
- *Christophe Boesch,*
WCF Founder and President

Moyen-Bafing production systems were undertaken by WCF-OGuiPaR in six villages in the area.

These diagnoses led to the appointment of 12 volunteer farmer-leaders that would implement the FMNR programme in their villages. The sustainable commitment of these leaders in this development programme will greatly contribute to the implementation of LMPs through accompanying measures for the populations bordering the park.

In conjunction with the FMNR process and other food systems, local communities are engaged in a project focused on forest protection and reforestation. In fact, the identification of the degraded and protected landscape zones is essential in the implementation of LMPs. In May 2018 the first step was initiated within several villages

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The creation of the MBNP does not only benefit local communities but encourages a greater understanding and identification of the flora and fauna species in the region

of the future park, outreach missions have helped to strengthen community involvement and mobilisation in this landscape restoration project.

A working group has been set up in each village to accompany the entire reforestation and forest regeneration process. These working groups with the support from their communities, proposed a list of degraded sites to be reforested, the sites were then confirmed by WCF-OGuiPaR during two field missions and based on satellite image analysis. Several community agreements of principles for forest protection were negotiated and signed by the target villagers.

The creation of the MBNP does not only benefit local communities but encourages a greater understanding and identification of the flora and fauna species in the region and their conservation status.

A flora inventory was carried out in January 2018 by WCF, in collaboration with the Royal Botanic Gardens (Kew Gardens) and the National Herbarium of Guinea. This study found a rare plant species in the future park, named *Lebbiea grandiflora*.

”

This aquatic species has been listed as critically endangered by IUCN and according to the British scientists, may be lost in two years due to mining and hydroelectric activities in the area.

Therefore, it is essential for the population of the MBNP to implement an adequate management plan that limits the impacts of human activities and restores the connectivity of degraded landscapes.

Thanks to the Darwin Initiative, support for local communities in the Moyen-Bafing landscape restoration process is becoming more concrete. Darwin funding will allow WCF and OGuiPaR to continue and intensify their actions for the protection of the environment and the development of rural communities in the MBNP.

For more information on project 24-018 please click [here](#). Further information on the Wild Chimpanzee Foundation can be found [here](#).



Group of reforestation participants in Laafa-Boube, Credit: WCF



Champion farmer talking to Lac farmers, Credit: Alex Sarmiento

Local partners fill the gaps in community reforestation efforts in Timor Leste

Timor-Leste is still one of the poorest countries in Southeast Asia. People and the environment are recovering from decades of colonial occupation, war and deforestation. A Darwin project led by Charles Sturt University in Australia is supporting community led reforestation by integrating agroforestry, farmer managed natural regeneration (FMNR), biodiversity conservation and carbon payments through an internationally recognised carbon accreditation scheme. Two communities in central Timor Leste have been planting trees since 2012 with an Australian NGO (Group Training Northern Territory) but required new expertise to achieve the integration of new techniques.

We invited local partner organisations World Vision Timor Leste and RAEBIA (Resilient Agriculture and Economy through Biodiversity in Action) to assist with farmer and field staff training and provide follow up support where required. World Vision pioneered the technique of FMNR in Timor Leste where pruning and mulching are used to regenerate native forests for sustainable use. Jess Gusmao from World Vision firstly introduced FMNR to our project farmers on site followed by a bus trip to another district where farmers had been practicing FMNR for several years. Four farmers are now trialling the technique on their natural forest areas with regular monitoring by our field staff.

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They generously gave their time to do a bird, reptile and small mammal survey, and found an unidentified rodent species!

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We were fortunate to learn that RAEBIA had introduced conservation farming techniques in two of our six project villages. Mateus Maia kindly provided background information on the two villages and conducted field days for the other four villages to learn about terracing, soil conservation, horticulture and saving seeds. Farmers now know which families they can go to for advice and assistance with learning these new techniques.

A new partner, Conservation International, joined our project last year after we learnt they were conducting biodiversity research training and needed suitable sites. They generously gave their time to do a bird, reptile and small mammal survey, and found an unidentified rodent species! Our field staff gained valuable understanding and skills in wildlife research techniques for future surveys. We will continue to work with our local partners. They have made a real difference to farmer learning, field staff capacity and on-ground impacts.

For more information on project 24-025 please click [here](#).



AMA team and ZSL in Mozambique, Credit: Ana Pinto

Securing coastal livelihoods and conserving marine biodiversity through international partnerships

Overfishing, unsustainable fishing practices and growing populations in coastal areas have taken their toll on marine resources in Cabo Delgado, north of Mozambique. Marine resources are critical to coastal communities and the Our Sea Our Life project is committed to supporting community-run marine protected areas and to developing sustainable mechanisms to finance the management by Community Fisheries Councils (CCPs).

Our Sea Our Life is a collaborative project led by the Zoological Society of London, Associação do Meio Ambiente (AMA), Universidade Lúrio (UniLúrio), Coastal Ocean Research and Development in the Indian Ocean, East Africa (CORDIO East Africa), Faculdade de Ciências Sociais e Humanas – Universidade Nova de Lisboa (NOVA FCSH) and Univeristy of Aveiro (UA).

This partnership brings together global and regional expertise in marine conservation. The first phase of Our Sea Our Life (2013-2018) successfully piloted a scalable Locally Managed Marine Area (LMMA) model in eight villages in Cabo Delgado, with an associated sustainable financing mechanism, protecting 500ha of no-take zones and more than 4,000ha of sustainably used zones. It has addressed unsustainable fishing practices by local and

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The success of phase one of Our Sea Our Life would not have been possible without the project's partnerships and partner's local knowledge

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migrant fishing communities through co-management plans with enforcement by CCP members and law enforcement agencies.

Phase two of the project will expand and replicate the LMMA model into other provinces in northern Mozambique. The success of phase one of Our Sea Our Life would not have been possible without the project's partnerships and partner's local knowledge.

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The partnership with AMA has been key for the project's success so far, and the continued collaboration with AMA will ensure that the project continues to work towards building a robust LMMA hub in northern Mozambique

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Our Sea Our Life's implementing partners, AMA, have been invaluable to the project. During phase one of the project AMA's efforts in marine co-management with communities around Cabo Delgado gained great recognition. AMA are now part of a consortium of organisations with international experience aiming to achieve marine conservation through co-management.

The AMA team have thrived by combining their local knowledge, through knowing the people and culture, with scientific knowledge from the project partners and have been able meet local expectations with a long-term vision - making them a true asset for the project!

When Our Sea Our Life started in 2013, AMA's team had only one person with experience in co-management for marine conservation. Now AMA is made up of a team of ten hardworking individuals. Throughout phase one, AMA worked extremely hard to motivate the target communities of the project to establish LMMAs in their local areas.

Remarkably, AMA recently shared with us that they have finally been able to motivate the young fishers of Quirinde village (the social group the project has found to be the most reluctant to establish LMMAs) to establish their first permanent no-take zone, meaning that AMA has succeeded in working towards the establishment of

LMMAs in all six of the project's target communities.

Thanks to the support from the Darwin Initiative and the project partners involved, Our Sea Our Life already alleviates the pressure on marine resources in Cabo Delgado. The partnership with AMA has been key for the project's success so far, and the continued collaboration with AMA will ensure that the project continues to work towards building a robust LMMA hub in northern Mozambique for its next phase - we are sure AMA will become a national reference point for Mozambique in co-management for marine conservation!

For more information on project 25-024 please click [here](#).



AMA field staff and ZSL planning implementation of Our Sea Our Life Phase two, Credit: ZSL



Indigenous community in co-managed national reserve, Credit: Pablo Puertas

Certifying peccary pelts in Peru

In the Peruvian Amazon local communities are involved with sustainable wildlife use through community-based wildlife management. The green labelling of wildlife with local communities in the Peruvian Amazon has promoted sustainable wildmeat hunting and wildlife habitat conservation. Darwin Project 'Certifying Peccary Pelts in Peru: Catalysing Community-based Wildlife Management' was a collaboration between DICE-University of Kent, Fund Amazonia-Peru, WCS, the Peruvian Natural Resources Service (now SERFOR), and local participating communities between 2006 and 2010. The purpose of this project was to catalyse community-based wildlife management in the Peruvian Amazon through the implementation of a pilot programme for green labelling peccary pelts.

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Certified communities have greatly reduced their hunting of animals such as primates and tapirs and have set limits on hunting of animals appropriate for wild meat

Green labelling of peccary pelts began during the Darwin project in the Tamshiyacu-Tahuayo Regional Community Reserve and has continued since then.

The programme is now in its tenth year and hunting in participating communities has become more sustainable through:

- Following guidelines for sustainable use
- The implementation of a wildlife management plan
- Hunting the appropriate species
- A decline in hunting of vulnerable species
- Regular evaluations of sustainable hunting levels
- The introduction of community hunting registers
- Having wildlife habitat conservation (*Fang et al. 2008*)

Peccary pelts are legally sold by subsistence hunters in the Peruvian Amazon and are a by-product (less than 10% of meat value). The green labelling of the pelts provides economic incentives for local people to implement more sustainable hunting. Peccary pelts are exported under CITES Appendix II regulations and Peruvian authorities adjust regional hunting quotas depending on scientific wildlife monitoring.

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The green labelling scheme is functioning well, local communities have set up sustainable wildlife management and green labelled peccary pelts have been moving through the chain of custody and within



Hunter with peccary pelts,
Credit: Pablo Puertas

a rapid expansion of regional community conservation areas and increasing indigenous territories. This is resulting in a green rural economy with sustainable wildlife use as an important component.

At around the same time that peccary green labelling began, the number of community protected areas increased from two to eight. The protected area strategy in the Peruvian Amazon of Loreto has resulted in protected areas being managed by local people and their direct involvement in the incorporation of sustainable wildlife use programmes.

These include the co-management of National Reserves (32,300 km²) and Regional Community Conservation Areas (22,000 km²) that total 83% of protected areas in Loreto (Asner *et al.* 2016). Indigenous territories (104,000 km²) are also areas of wildlife management

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Community, co-managed, and indigenous areas continue to expand with three new regional conservation areas and numerous indigenous territories currently in progress
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the past decade have been sold to the European leather market. Certified communities have greatly reduced their hunting of animals such as primates and tapirs and have set limits on hunting of animals appropriate for wild meat hunting such as peccaries, large rodents and deer.

As a result of the green labelling scheme there has been a reduction in the overall amount of hunting within the community with the targeting of vulnerable species like primates and tapir being reduced by 96% and other species by 37%. Local people are receiving economic benefits from the green labelling with a non-labelled pelt fetching around £2 and a labelled pelt around £4 and communities are selling on average 50 peccary pelts per year.

Government policies have supported the community approach by setting regional community conservation areas, the co-management of national reserves with local communities, and by setting large numbers of indigenous territories (Blackman *et al.* 2017). The policies in Peru permit wildlife management by local people and management plans are based on current approaches to sustainable use.

The combination of local people's desire to set up sustainable wildlife use and the government's willingness to promote wildlife management and community conservation has created a synergy that is resulting in

and coupled with the community and co-managed protected areas they make up 46% of the Loreto Region. Community, co-managed, and indigenous areas continue to expand with three new regional conservation areas and numerous indigenous territories currently in progress.

The most important result of the community-based green labelling was the expansion of the scheme to include sustainable wild meat. For the past four years the Peruvian Protected Area Service (SERFOR) has set up a green labelling programme for wildmeat from the community co-managed Pucacuro National Reserve. Following similar guidelines as above, indigenous communities are now selling sustainably hunted wildmeat to high-end restaurants in the capital, Lima. Several other regional community conservation areas are developing wildlife management plans for similar green labelling.

For more information on project 15-029 please click [here](#).



Awah Khinjem from FCTV and Manfred Epanda from AWF at the signing of REA in Ekom, Credit: FCTV

Newsletter Contacts

The Darwin Initiative Secretariat (Defra)

The Darwin Secretariat is based in Defra and includes Claire Millar, Fiona Charlesworth, Siriol Leach and Shaluki Perera.

If you have any general queries about how the Darwin Initiative operates please e-mail us at darwin@defra.gsi.gov.uk

For any queries on project applications or existing projects please contact our Darwin Administrators (LTS International) at darwin-applications@ltsi.co.uk or darwin-projects@ltsi.co.uk

This newsletter is produced quarterly. To include an article on your project please contact us at darwin-newsletter@ltsi.co.uk

The UK Government's Darwin Initiative aims to promote biodiversity conservation and sustainable use of resources around the world including the UK's Overseas Territories. Since 1992, the Darwin Initiative has committed over £153 million to 1,123 projects in 159 countries.