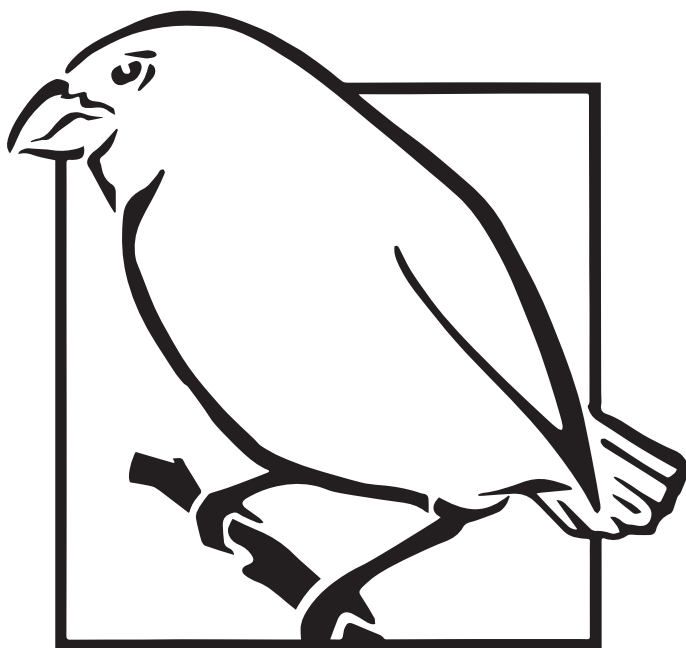


# Newsletter

June 2017

Credit: Cousteau Society



**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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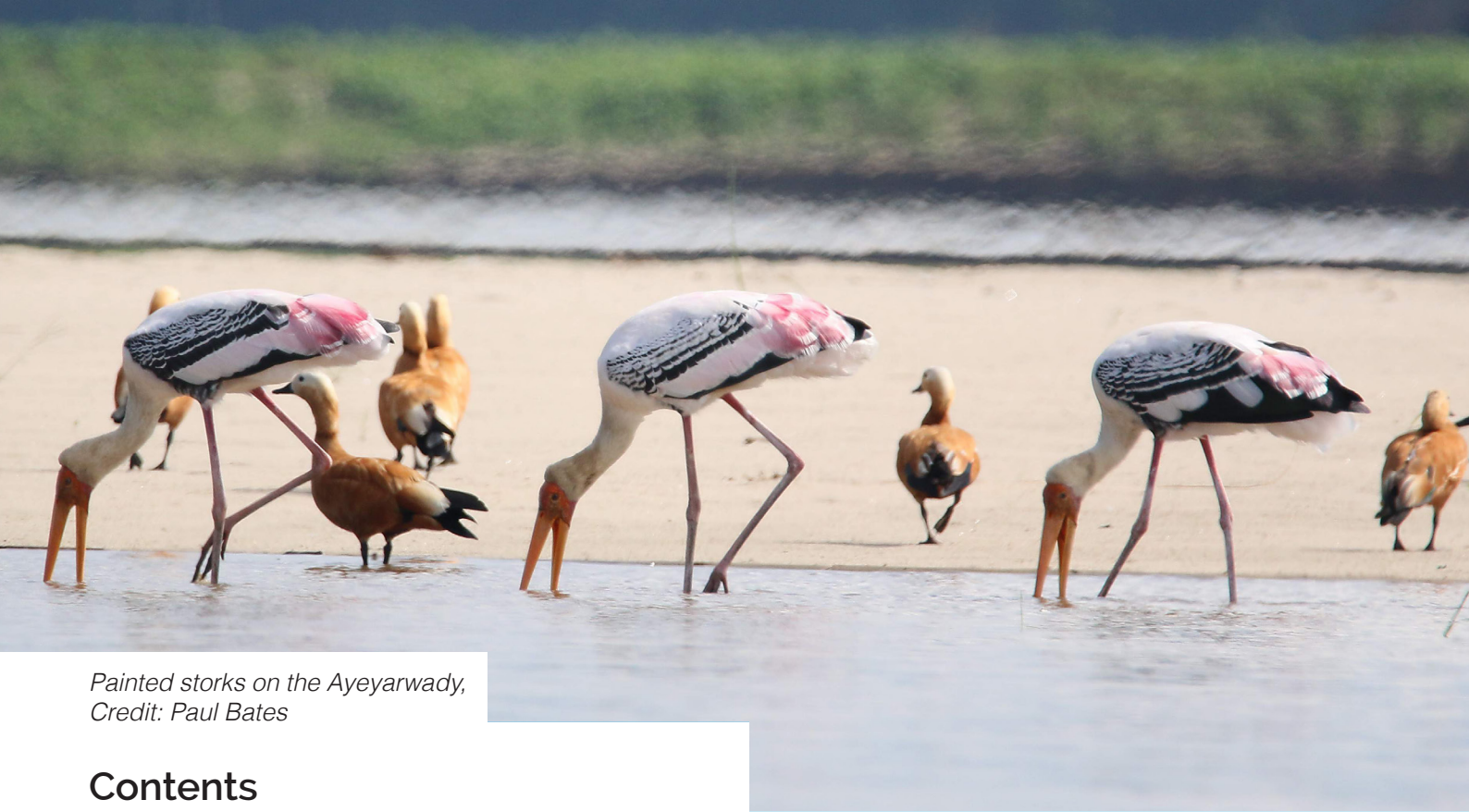
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*Painted storks on the Ayeyarwady,  
Credit: Paul Bates*

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Credit: SECS

## Publicity and information about the Darwin Initiative

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

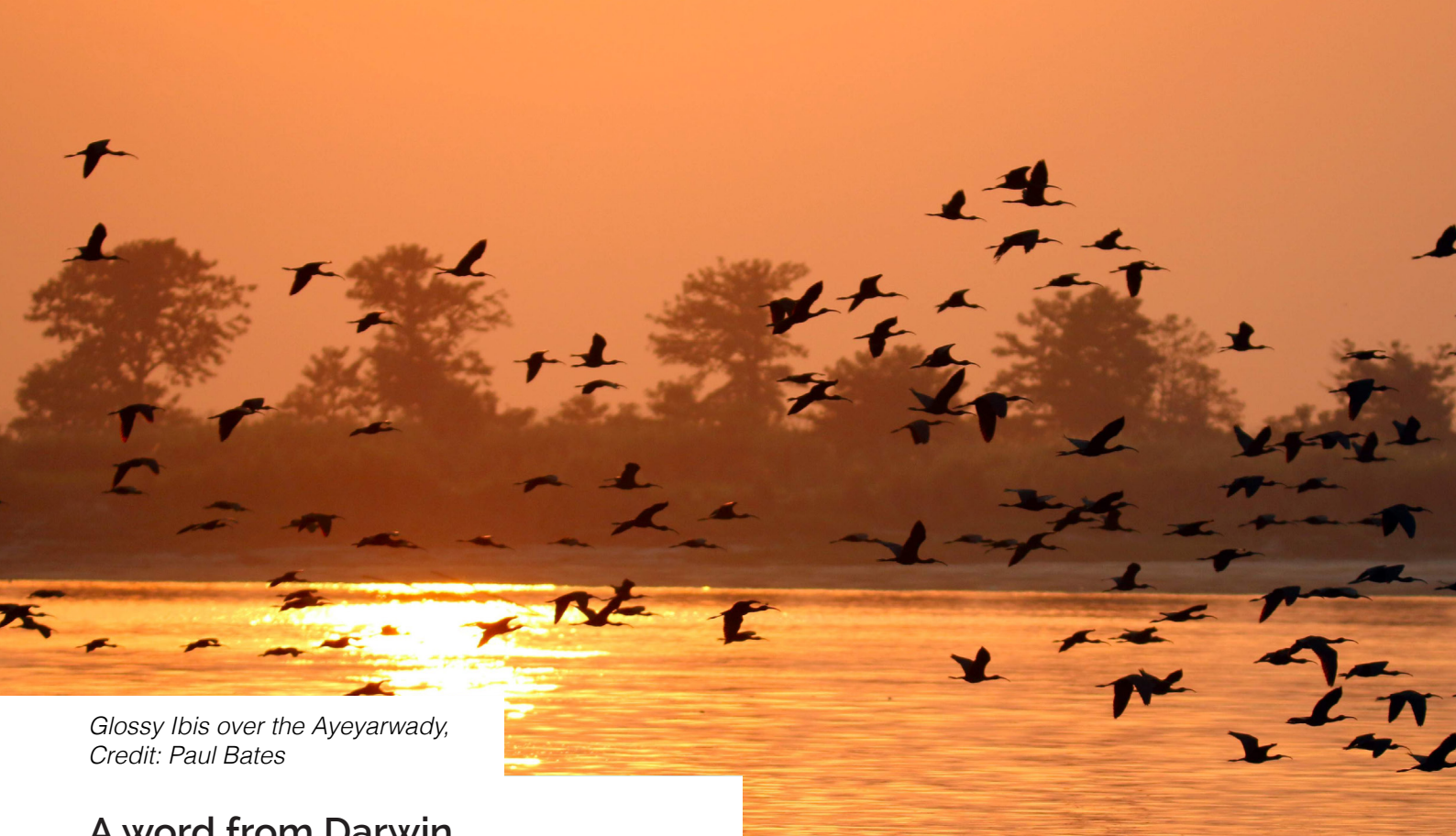
We also have a blog, that includes news and thoughts on issues being tackled by the Darwin Initiative – both at the project and programme level. You can read it here [darwininitiativeuk.wordpress.com](http://darwininitiativeuk.wordpress.com)

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](mailto: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 to secure continued Government funding.





*Glossy Ibis over the Ayeyarwady,  
Credit: Paul Bates*

## A word from Darwin

May 22nd was the International Day for Biological Diversity, and the theme for 2017 was "**Biodiversity and Sustainable Tourism**". To tie in with this, we invited articles from Darwin projects on the theme of Sustainable Tourism.

Underpinning the success and sustainability of many aspects of tourism internationally is the natural environment, from the landscape to the species level. Conservation of nature and biodiversity is therefore crucial to their continuation. Revenue from tourism can help support communities living in poverty near protected areas or reliant on a depleting natural resource, and may offer a potential solution to conservation funding gaps.

However, there is a risk that high levels of, or uncontrolled practices in, tourism can do more harm than good to the natural environment. Projects must therefore ensure that they consider the sustainability of new tourism ventures so that the potential benefits can continue into the future.

In this newsletter we hear from projects working across the world – including Myanmar (Burma), Madagascar and St Helena. Although their context and approaches to sustainable tourism may differ, we hope that their stories and lessons will resonate with all our readers.

We have also recently written a **blog** on this topic. If you would like to write a guest blog for the Darwin blog, please feel free to get in touch:  
[darwin-newsletter@ltsi.co.uk](mailto:darwin-newsletter@ltsi.co.uk)

We would like to take this opportunity to congratulate all of the new Darwin projects funded since the last edition of the newsletter! Round 23 saw a record breaking number of main project applications at Stage 1 - 426 in total. 77 applications were brought through to Stage 2, and 30 new main projects successfully received funding! In addition, this round will also fund 10 scoping projects, 1 fellowship, and 1 post project. This brings the total number of projects funded under Darwin to 1,055.

We recently held our first ever webinar for new Darwin and Illegal Wildlife Trade Challenge Fund projects on "Financial, administrative, and technical reporting". The webinar was a real success and we are keen to hold similar events in the future to keep engaged with Darwin projects and partners based overseas.

Our New Projects Workshop on "Reporting, communication and lesson sharing" was held at ZSL London Zoo on 31st May 2017. It gave Darwin and Illegal Wildlife Trade Challenge Fund projects the opportunity to explore common themes and challenges, and to learn from the experiences of existing projects.

For those who couldn't make it on the day, all presentation materials and the proceedings are available on the **Darwin website** (including a recording of the webinar!).

Good luck to everyone as they get their projects started!





A fisherman shapes his boat,  
Credit: Emma Gibbons

## Transitioning to sustainable livelihoods – a seaweed farmer’s perspective

“Before I started seaweed farming through this project, I used to sell charcoal for a living”, Madam Pierrette says matter-of-factly, “But now I don’t have to”. She pauses to speak to one of her children, who silently pokes a spoon into a large cooking pot and stirs it vigorously. Like most families in the region, she still cooks with charcoal though - it is the only cooking fuel available to families in the rural southwest of Madagascar, as in many communities across sub-Saharan Africa.

As demand for charcoal grows, burning of the regions’ famous Spiny Forest, home to endemic plants and animals like the mouse lemur, becomes a source of livelihood for many. The low cost associated with charcoal means that vast quantities are required to make a living. And, as a consumable, there is always demand for charcoal resulting in an ever increasing burden on the forest to provide. The removal of stabilising trees allows terrestrial sediments to become airborne, where they are swept out to the ocean. In the last decade there has been a marked filling in of the coastal lagoonal system, and smothering of coral reefs by terrestrial sediments. This in turn, influences the other source of income for Pierrette’s family, fishing.

“We moved here about 15 years ago so my husband could fish and I could sell his catch”, she says. “There were more fish then, bigger fish, and less competition”,

she continues, indicating her neighbours with her hands. “Sometimes I still go to Ambolomailake [a nearby village] to sell fish, but I don’t make much money. With seaweed farming, I have money”. Pierrette started seaweed farming two years ago, through a Darwin Initiative funded program targeting poverty alleviation and biodiversity conservation. “When I started farming seaweed, it was a new activity here, and I didn’t know what it was”, she says. “But the materials were free, so I started. Otherwise I never would have done it. Now I have money to send my children to school in Toliara [the capital of the region]”. I want them to finish high school and get a job”.

Pierrette is one of many people in the region who have taken up aquaculture as a sustainable livelihood, after witnessing the rapid decline of fisheries. “We are Vezo. If we don’t have another activity, we should fish”, she says. ‘Vezo’ is a derivative of the verb meaning to row. To be Vezo is to make your living from the ocean. In this respect, marine aquaculture is still considered a Vezo activity. “It fits in with our life”, Pierrette decides.

As well as providing aquaculture materials, training and access to markets, the Darwin Initiative programme also incorporates direct conservation activities for marine turtles, such as a tag-and-release programme, the implementation of the region’s first seagrass protected areas, and community capacity building through skills





*Bags of charcoal awaiting transport to the market, Credit: Emma Gibbons*

development and practical training. However, it is the poverty alleviation aspect which has the greatest benefit for rural communities. Now in the final year of the program, aquaculture activities have been introduced to seven communities in the region, and over three hundred families are engaged. The progression from seaweed farmer to qualified technician provides an avenue for professional development, making aquaculture a potential career choice, rather than an activity of no alternative.

Aquaculture has proven to be a sustainable, reliable and more profitable form of income than extractive activities like fishing and charcoal production. The regular income from this activity allows parents to feed, clothe and educate their children. "Things are easier now", Pierrette says. "I want seaweed farming to be the main activity in my life."

For more information on project 21-018, click [here](#) or contact Project Leader Emma Gibbons, [emma@reefdoctor.org](mailto:emma@reefdoctor.org)



*Pierrette checks her drying seaweed, Credit: Emma Gibbons*





Baskets for sale, Credit: Dilys Roe

## Spinach soup, gorillas and cow dung baskets – what’s the connection?

Tourism in Uganda is critical for generating revenue for conservation of Mountain Gorillas and other species and habitats. At Bwindi Impenetrable National Park in Southwest Uganda, tourist numbers have increased from 1,300 a year in 1993 to around 20,000 today. International tourists pay US\$600 per head to track gorillas and the Uganda Wildlife Authority shares US\$10 per permit sold with local people in recognition of the importance of their support for conservation. But beyond this, local benefits from gorilla tourism – such as jobs or sales of local products and services – are very limited.

There are a number of reasons for this. Many handicrafts, for example, attract only limited sales because they are poor quality or undesirable - baskets coated with cow dung are not exactly on many international tourists’ shopping list. Community-based enterprises are scruffy, which fails to give tourists confidence in their quality or safety. And low levels of skills limits job prospects or enterprise opportunities. As a result, despite Bwindi being a top tourist attraction, local economic development is extremely limited. Relationships between local people and the park are poor, and poaching, snaring and other forms of illegal activities continue. This poses a significant threat to the park and to the long term conservation of the Mountain Gorilla.

To start addressing this problem, the International Institute for Environment and Development (IIED), Institute for Tropical Forest Conservation (ITFC), Responsible Tourism Partnership (RTP) and International Gorilla Conservation Programme (IGCP) are working together to develop new or improved local tourism products and services that meet the stated needs and interests of tourists, tour operators and lodges.

During a scoping visit in February 2016, we identified a number of micro-enterprises that, with support to improve their quality and better links to markets, could make a significant contribution to local economic development. Examples include a Batwa woman who was approached by a neighbouring lodge to grow spinach for soup and subsequently set up a market garden. With support from our project, she and other Batwa women will be increasing the quantity and range of vegetables they produce and the number of lodges they sell to.

“ Feedback from the lodges has been positive too – an order for vegetables from a poachers-turned-market-gardeners’ enterprise was agreed at our last visit in February before training had even begun! ”

Elsewhere in Bwindi, a women’s craft cooperative will be trained by artist Sanaa Gateja from **Kwetu Africa** to produce baskets in shapes, sizes, colours and patterns that appeal to an international audience. And former poachers who are now embarking on bee-keeping will benefit from product development from **Golden Bees**, a commercial honey producer. A further element is the development of a Gorilla Friendly™ eco-label, developed in collaboration with the **Wildlife Friendly Enterprise Network**. Products and services under the label will follow three key principles: they must be high quality; be produced by people living within a 2 km radius of the park’s boundary (the poorest zone); and be produced in a way which does no harm to gorillas or to their habitat.





Ugandan gorilla mask carvings, Credit: Dilys Roe

A key feature of the project is that it directly engages with the private sector including with lodge owners/managers and national and international tour operators. The aim is that they direct their clients to the new and improved products and services and, ideally, include them in their itineraries. The project is in early stages but has already attracted the Uganda Tourist Board's attention and a growing network of tour operator partners. Feedback from the lodges has been positive too – an order for vegetables from a poachers-turned-market-gardeners' enterprise was agreed at our last visit in February before training had even begun! It's early days but signs are positive that this project will help harness the potential of tourism for both local economic development and conservation.

For more information on project 23-032, click [here](#) or contact Project Leader Dilys Roe, [dilys.roe@iied.org](mailto:dilys.roe@iied.org)



"Elderly craft shop", Credit: Dilys Roe





Credit: Cousteau Society

## Promoting sustainable tourism in Sudan's marine World Heritage site

In July 2016, Sudan's Marine Protected Areas (MPAs) - Sanganeb Atoll Marine National Park and Dugonab Bay and Mukkawar Island National Park - were inscribed as a **UNESCO Natural World Heritage site**. This is the first natural World Heritage site in Sudan and the first marine World Heritage site in the Red Sea and wider Arabian region. The Darwin Initiative (DI) project team supported the national nomination process by providing data and organising a workshop at UNESCO headquarters. The new international status will likely attract more interest in Sudan as a potential tourist destination and more visitors. To prepare for this, our DI project has been helping Sudan to plan ahead and promote sustainable and fair tourism for the MPAs.

Sudan is not a high-profile tourist destination but the country has a special reputation among the international SCUBA dive community. Between 2500 and 4000 divers come to Sudan every year from Europe and occasionally the USA. The special reputation of Sudan as an elite destination among the dive community started in the early 1960s when the legendary Captain Jacques Cousteau filmed the documentary "The World Without Sun" and launched the Conshelf II experiment in Sudan to test whether humans could endure living underwater for extended periods of time. Sudan has managed to sustain this reputation due to the quality of the diving experiences, the abundance of marine wildlife, but also partly due to the small number of live-aboard dive boats operating in this challenging location.

In recent years, the number of live-aboard boats has started to increase; from the 8 locally based boats that were operating in 2000 there are now 15 boats, including 7 boats that visit seasonally from outside Sudan. While this number is still low compared to other destinations, the increase is proving to be a source of tension and poses a real threat to biodiversity conservation and the sustainability of this sector. The small number of locally based dive boats has been operating under a long-agreed informal set of guiding principles. However, newer boats bringing clients to Sudan are not obligated to follow these rules. To address this issue, the DI project has been working to support the dive operators to establish a formal code of conduct. As part of this process, the DI project has designed a series of Best-Practice Guidelines for encounters with marine wildlife for both the dive boat operators and their clients.

“ the increase [in tourism] is proving to be a source of tension and poses a real threat to biodiversity conservation and the sustainability of this sector ”

The DI project also identified a need to increase the link between the dive operators and the local communities. As international tourism is mainly boat-based, and the local communities are not easily accessible, there are limited opportunities for them to benefit from this potentially lucrative stream of foreign income.

Establishing appropriate mechanisms through which the dive boats can interact with the local communities is challenging but paramount to ensuring that the communities benefit from tourists visiting their areas. To deepen understanding of the concept of sustainable tourism among national stakeholders, the DI project provided a 3-day “Sustainable Tourism Training Workshop” at the Red Sea University in Port Sudan. The workshop enabled participants to learn more about principles of sustainable tourism, including ecotourism. It highlighted the importance of ethical and responsible tourism and how these concepts can bridge development and conservation.

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Establishing appropriate mechanisms through which the dive boats can interact with the local communities is challenging but paramount to ensuring that the communities benefit from tourists visiting their areas

Currently we are preparing for an expert to visit the communities to engage local fishermen in low impact ecotourism activities, such as manta watching.

While international tourism in the Red Sea State revolves around the live-aboard dive boats, Port Sudan and Dungonab Bay and Mukkawar Island National Park are also becoming increasingly important destinations for national tourists, particularly for people coming from the capital Khartoum. However, there is a lack of awareness of the marine environment and conservation issues among the general population as demonstrated by the stalls along the seafront in Port Sudan. These stalls target national visitors and sell marine mementoes including shells, corals, turtle carapaces, and dried baby shark and other fishes. To sensitise the general public about the wealth of marine biodiversity and flagship species in Sudan, the DI project prepared a poster exhibit jointly with our local partner SUDIA. The exhibit has been displayed at various events and has been very well received.

This article was written by Lisa George (SUDIA) and Rebecca Klaus (Cousteau). For more information on project 21-019, click [here](#) or contact Project Leader Tarik Chekchak, [t.chekchak@cousteau.org](mailto:t.chekchak@cousteau.org)



Poster exhibit on marine diversity and flagship species in Sudan, Credit: SUDIA





*Making bags for tourists,  
Credit: Paul Bates*

## Community-based nature tourism: a report from the Ayeyarwady River, Myanmar (Burma)

The objective of this UK-Myanmar project looked simple on paper – ‘To develop two new rural destinations on the Ayeyarwady River for niche tourists interested in Myanmar’s cultural and natural heritage’. The destinations (only accessible by boat) were situated at Hsith and Myitkangyi villages, respectively 45 and 60 km upstream of Mandalay and the aim was: to help (1) alleviate poverty in the two village communities; (2) conserve the Irrawaddy River dolphin (*Orcaella brevirostris*) and other river wildlife; (3) preserve the culture of the fishermen and women who have traditionally fished cooperatively with the dolphins.

So how did we do? On the positive side, the destinations are up, running and beautiful; average spend per tourist (in the village) is currently between \$28 and \$36 and all money spent in the village stays in the village (this, in village communities where a typical wage is about \$3/day). That said, the villages are remote and visitor numbers at 190 were perhaps at the lower end of our original expectations. However, in the last six months, the villages received 13 inspection tours from 41 individuals representing 10 private sector travel companies and after extensive marketing by the project’s UK and Myanmar staff, interest amongst tour companies is very encouraging and supportive for the 2017-18 season.

Meanwhile, there are many positive messages to take away from our experience so far. Numerous workshops and training programmes have sparked

amazing creativity amongst the villagers, resulting in a spectacular range of handicrafts: everything from funky, off-the-wall artefacts made from recycled cement bags, to beautiful carvings from drift wood, and jams and chutneys made from local fruits. There are distinctly branded bags of peanuts and spices, and locally produced honeys, to name but a few. Each month, new ideas from the villages lead to new products in the visitor centre shops – this is wonderful! Furthermore, talks are currently in progress to market the products elsewhere in Myanmar and on-line through a supplier in Yangon. We are also hopeful that a luxury Mandalay hotel will buy for its clients’ breakfasts the very tasty mango jam.

The project has also led to increased community pride - pride in the remarkable culture of the fishermen and women, who have for generations fished co-operatively with the Irrawaddy River dolphins. Tourists pay 10,000 Kyat (approximately \$7.50) per person to learn from the fishermen how to cast a traditional fishing net. The training takes place both on land and on the river, and is very popular. Alternatively, they can go on a fishing tour and capture for themselves this timeless, photogenic activity.

With increased community and cultural pride, comes civic pride. For three years the project team has emphasised the importance of the environment and of waste management. Workshops in the villages involved almost 1,000 children. They included talks and visual displays as well as games, colouring competitions, and competitive litter collections! These workshops



brought the school children, the school teachers and a broad range of parents into the project. Hosted at the school and in the monastery, they have enabled the greater community to learn about the project aims and understand its relevance.

Although some benefits are relatively easy to measure, others are more subjective. Civic pride is one of them but so too is a change in mind-set of some of the village youth. For better, or for worse, the villages have become part of the global economy. Through the **project's website** and through the **marketing of tour agencies** they are visible throughout the world. As with all aspects of globalisation, there are positives and negatives but one of the positives is the opportunity it provides for the young. The world has come to them. To some extent, they are now living in a global village, where on any particular day, the sound of French, German, English or Spanish might be heard. They are living in a village where local guides, men and women from the village, interact with an international, well-educated audience. The guides inform the visitors about the village school, the agriculture, the monasteries, and their way of life. In return, the visitors bring a sense of importance to the village. It is also inspiring for the villagers to know that their handicrafts will end up in Paris or Picardy, in London, Berlin or Madrid. It leads to a different perspective.

And what of the challenges? This project illustrated that in this instance poverty alleviation and biodiversity conservation are totally complementary. Like the fisherfolk, the visiting tourists love seeing the critically endangered dolphins, which are often sighted in the river opposite the destinations. However, being complementary does not mean that they are the same. Well managed and well directed poverty alleviation can lead to excellent long term benefits for nature.

“  
the visiting tourists love seeing the critically endangered dolphins, which are often sighted in the river opposite the destinations  
”

Without doubt, the project raised awareness of the importance of the conservation of the dolphin, and associated wildlife, with the local communities of the Ayeyarwady, with the tourists, and most importantly with decision makers in the ministries in Nay Pyi Daw. It highlighted the threats to the dolphin and raised its profile (and value) as a charismatic species that draws international tourism to the river.

In the long term, having the support of the communities and decision makers is essential for meaningful dolphin conservation but so too is controlling upstream pollution and sedimentation, increasing the dwindling supply of fish and the eradication of illegal gill nets and electro-fishing.

So, is the dolphin in a better position today than it was three years ago? Yes. We have raised awareness, identified and reported on threats, trained 112 local tour guides and boat captains how to observe dolphins without disturbing them. We have trained 72 nature tourism guides and park rangers and most importantly we have shown to the decision maker and the local communities that the dolphins are not only of intrinsic and spiritual interest but also of economic benefit.



*On the village tour with Peanut sorters in Myitkangyi, Credit: Paul Bates*

The real test of the project is not today's or tomorrow's results but its long term impact. In February, 2017, when we presented our results to the Minister of Hotels and Tourism, he was so enthusiastic that he immediately presented us with a donation of \$5000 to begin Phase 2, overnight Bed and Breakfast accommodation at the two destinations. We believe that with such enthusiastic support from the government, from the communities, from private sector tour companies and from our own project team, there is a bright future for nature tourism on the Ayeyarwady and for the magical, charismatic Irrawaddy River dolphin.

Project website: [www.destination-ayeyarwady.com](http://www.destination-ayeyarwady.com)

For more information on project 21-012, click [here](#) or contact Project Leader Paul Bates, [pjjbates2@hotmail.com](mailto:pjjbates2@hotmail.com)





Kibale tourism,  
Credit: Miguel Leal

## Guilt-free travel, saving forests and helping poor farmers

There is a growing uneasiness among tourists flying to distant exotic destinations to have a once in a lifetime experience, for example having a close encounter with the mountain gorillas in Uganda. More and more, tourists want to travel with an easy conscience and one way of doing this may be to offset their carbon footprint.

Most tourists are unaware how cheap it is to compensate their carbon footprint; for example, a return trip from Amsterdam to Entebbe in Uganda only costs 10 USD! This is nothing on top of the 2,000 USD tourists pay for their package. **Matoke Tours**, a Uganda-based Dutch tour operator, is offering this opportunity to its clients. Better still, by booking through Matoke Tours, they are helping protect the rainforests in Uganda.

This unique offset scheme emerged as a collaboration between Matoke Tours and the Wildlife Conservation Society (WCS) who manage the Murchison-Semliki REDD+ project in western Uganda. REDD+ projects aim to **R**educe greenhouse gas **E**missions from **D**eforestation and forest **D**egradation, and have the potential to simultaneously mitigate climate change, protect biodiversity and alleviate poverty. Most of the deforestation in Uganda is caused by slash-and-burn farming. Farmers clear and burn forests so that they can grow crops, which they keep for their families or sell in order to pay for school fees. With funding from the Darwin Initiative, WCS has been able to train farmers in conservation farming. This farming practice allows the

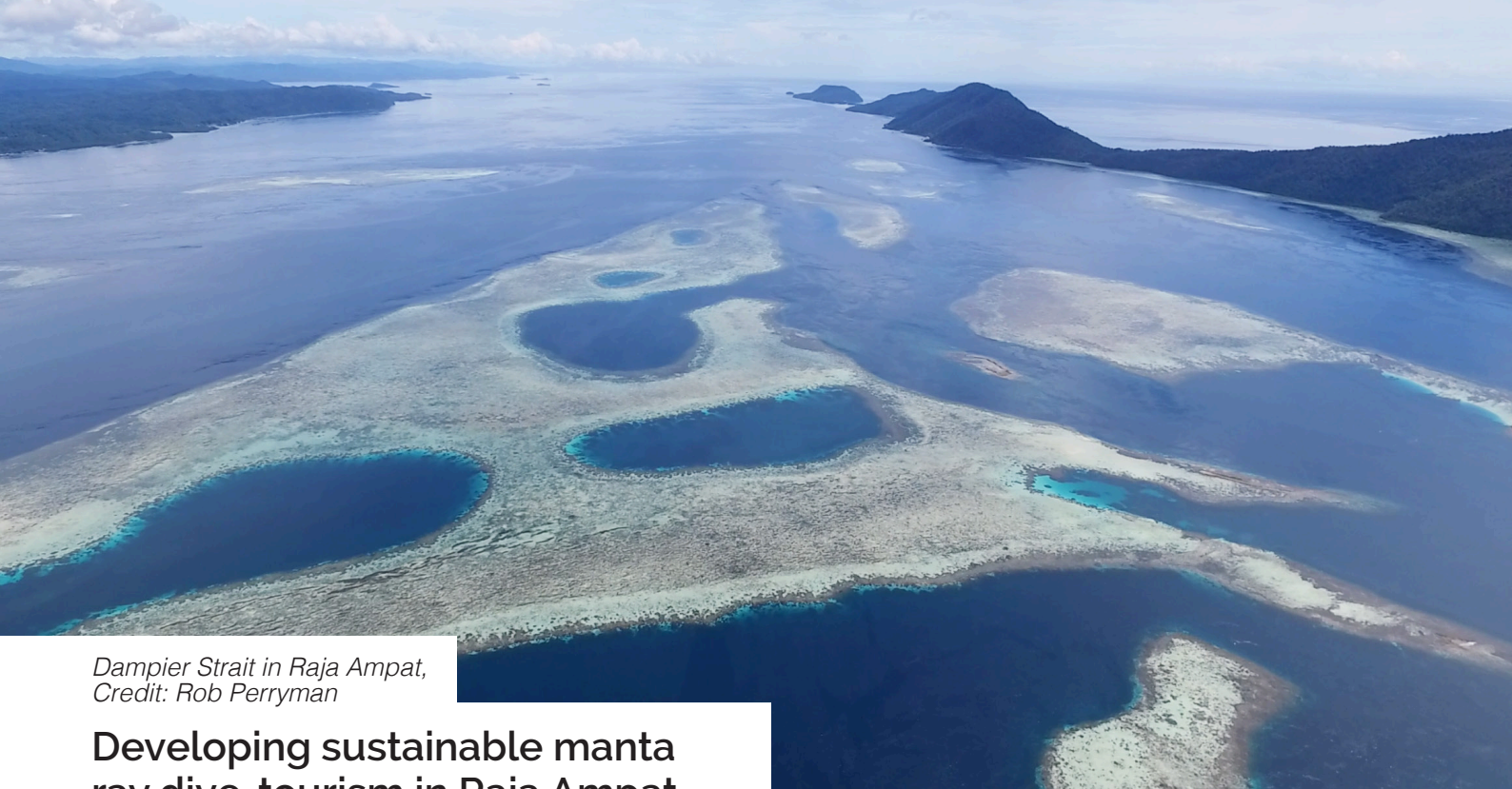
farmers to grow more food and for longer periods, hence avoiding the needs to clear new forest in the future.

“ With funding from the Darwin Initiative, WCS has been able to train farmers in conservation farming. This farming practice allows the farmers to grow more food and for longer periods, hence avoiding the needs to clear new forest in the future ”

As the Murchison-Semliki REDD+ project stops deforestation, it generates carbon credits which can be used to offset the carbon footprint from tourists flying to Uganda for their once in a lifetime experience. In addition, they are helping poor farmers and saving forest habitat for chimpanzees and endemic birds. So, a simple act of improved farming is directly contributing to eco-tourism while farmers receive some extra cash from the carbon credits.

For more information on project 22-011, click [here](#) or contact Project Leader Miguel Leal, [mleal@wcs.org](mailto:mleal@wcs.org)





*Dampier Strait in Raja Ampat,  
Credit: Rob Perryman*

## Developing sustainable manta ray dive-tourism in Raja Ampat, Indonesia

Manta ray dive-tourism is a growing industry in Indonesia, worth an estimated \$11m per year. Its development is important to local economies in areas where healthy populations of manta rays persist, such as the Raja Ampat Regency of West Papua, Indonesia.

With the support of the Darwin Initiative, Marine Megafauna Foundation (MMF) is working closely with local dive resorts and local government in Raja Ampat to make sure that the development of manta ray dive-tourism is sustainable.

Our major concerns are the potential for tourists to disturb manta rays' natural behaviour, the impact of unrestrained development on the local environment, and the impact of the livelihoods of local people.

As part of a Darwin Initiative scoping project, we have held several meetings and workshops to discuss tourism development in the region with local people, and, in consultation with local dive resorts, we have designed and distributed codes of conduct for interacting with manta rays. We have also been involved in the building of a guard post and staff training at one of the most heavily-dived manta ray sites in Raja Ampat. The post has been popular with local communities as it offers employment to 8 local people, who will work as 'manta guardians' for the Raja Ampat regional government. The post is now operational and we are starting to see benefits including the reduction of boat speeds in the area and adherence to no-entry zones where manta rays are known to feed near the surface.

We hope to continue with this project and plan to increase our involvement by undertaking intensive monitoring at several different sites where manta rays are known to congregate. Our work is always closely integrated with local institutions, and we are now collaborating with the University of Papua, in Manokwari, West Papua, to develop a full-scale manta ray research programme in the region, including scientific research on the benefits and problems associated with increasing tourism in an area that until recently remained pristine.

This collaboration will enable young Papuan students to have opportunities working with our scientists so that in the future they might lead efforts to protect local wildlife. We hope that by working together with a wide range of stakeholders our project will help the area to retain its natural beauty and wonder for future generations to enjoy.

For more information on this scoping project, please contact Project Leader Rob Perryman, [rob.perryman@marinemegafauna.org](mailto:rob.perryman@marinemegafauna.org)



*Manta ray natural behaviour from the air, Credit: Rob Perryman*





*Folkloric activities linked to the sustainable tourism investment plan in Antavolobe, Credit: Naritiana Rakotoniaina*

## Mutually supportive implementation of the Plant Treaty and the Nagoya Protocol in Benin and Madagascar

The Darwin Initiative's project 'Mutually supportive implementation of the Plant Treaty and the Nagoya Protocol in Benin and Madagascar' is supporting the development of linked-up national to community level policies and mechanisms.

At community level, the project is supporting four 'pilot' communities (two in each country) to develop community biodiversity registries, community access and benefit-sharing protocols, and community conservation/sustainable use investment plans. Some of the designed investment plans consist of the implementation of community seed banks, the establishment of a botanical garden of medicinal plants and the promotion of sustainable tourism. This last idea stemmed from one of the Madagascan communities, based on the conviction that promoting sustainable tourism has the potential to increase the sources of income of the community while conserving and adding value to the natural resources and local cultures.

The site identified for the development of sustainable tourism is located in Antavolobe, 150 km east of Madagascar's capital Antananarivo. Antavolobe forms part of the Ankeniheny Zahamena Forest Corridor. It is one of the largest vestiges of the dense, evergreen moist forest of eastern Madagascar and is of major biological importance and boasts rich biodiversity, with various species of birds, amphibians, reptiles and lemurs. It also contains more than 250 species of plants, 34% of which are endemic.

This isn't the first attempt at developing sustainable tourism in the area. In the past, 400 hectares of forest were delineated, some touristic routes were traced and developed, and an interpretation centre was built with the support of the Government's Environmental Program. However, the site is still quite unknown. Therefore, to increase potential users' awareness about the diversity and richness that characterize the area, the investment plan designed by the community under the Darwin Initiative project has set some priority actions: to search funds for improving the access to the forest; to carry out marketing and communication campaigns to promote sustainable tourism in the site; and to improve the organization of the local communities in their potential roles in later stages of implementation of the designed plan.

A similar project is being undertaken in the area surrounding one of the Benin sites. Located in the Southern Agricultural Research Center of Benin (CRA-Sud), about 65 km North of Cotonou, the Niaouli relic forest covers an area of almost 170 hectares and represents one of the last vestiges of all the vegetation cover of South Benin. Aiming at promoting sustainable ecotourism for the conservation of the Niaouli forest, the project is focused on the establishment of a 'viewpoint' and on the organisation of guided tours and the provision of environmental education.

For more information on project 22-017, click [here](#) or contact Project Leader Michael Halewood, [m.halewood@cgiar.org](mailto:m.halewood@cgiar.org)





Tourist lake tour on Lake Ossa, Credit: ZSL

## Promoting ecotourism for manatee conservation in the Lake Ossa wildlife reserve

Lake Ossa is the largest inland lake in Cameroon and one of the key hotspots for freshwater biodiversity in the Congo basin. The Reserve is an important site for the African manatee, but also a source of important fish resources that sustains the livelihood of surrounding communities. Thanks to the funding received from the Darwin Initiative, the Zoological Society of London (ZSL) has worked in partnership with the conservation service (MINFOF) as well as local communities, authorities, private sector and NGOs to develop collaborative management practices to protect the Lake Ossa endangered fauna and conserve its fragile ecosystems into the future.

As a part of this effort, local actors encouraged ZSL to address the issue of tourism development, as tourism is broadly seen locally as a lever of local development. Indeed, ecotourism in Lake Ossa could have great potential to generate incentives for conservation among fisher communities, as the reserve is easily accessible from the main cities of Douala and Yaounde.

Local actors decided to join forces to draft a local tourism plan. The plan includes codes of best practice for boat tours to manatee hotspots that are respectful to this vulnerable species (for example, by avoiding high speeds), the organisation of tourist excursions, and the development of camping and picnic activities. Communities, especially fishery management committees and young fishers interested in tourism, participated in the development of the plan that received the contributions of the private sector and members of the board of the council of Dizangue. Also, we supported the conservation service in the development

of a draft MoU template, so that potential private sector developers can have clear guidelines to respect the reserve's biodiversity and collaborate with local communities in case new developments arise.

As a follow up of this effort, the council of Dizangue's board agreed to open a tourism office. Various promotion and awareness raising activities were organised. This attracted the interest of national television (CRTV) who did a documentary about the project and tourism in the lake. Also, the Regional Delegation of the Ministry of Tourism provided oversight and support during the whole process. For example, they organised the launch of the tourism season with an excursion to Lake Ossa and the Douala-Edea Reserve, with more than 60 representatives from hotels and travel agents from Douala in attendance.

Tourism is generally seen as a lever of sustainable development, wetland conservation, and as an excellent way to educate larger Cameroonian audiences on the values of conservation. However, experience tells that uncontrolled development and informal guiding can be a threat both for manatees and for the social fabric of local communities. The plan developed with the help of this project provides a management framework that could anticipate those threats. Local partners have already committed resources through other donors to continue supporting the implementation of the tourism plan through trainings and capacity building on tour guiding and conservation.

For more information on project 21-017, click [here](#) or contact Project Leader Chris Ransom, [chris.ransom@zsl.org](mailto:chris.ransom@zsl.org)





*Walking the Peaks,  
Credit: Edward Thorpe*

## Mapping St Helena's biodiversity and natural environment

Over the past few years, the announcement of St Helena's new airport has pushed the island up the ranks to be one of the most sought-after holiday destinations in the world. The island has so much to offer: stunning landscapes, amazing marine life, a friendly local community with a unique way of life and remarkable history, lots of outdoor activities, and a rare biodiversity – St Helena hosts one third of the UK and its Overseas Territories' endemic species, all squeezed into just forty-seven square miles.

Today, the island has been challenged to welcome 29,208 tourists annually by 2042, in contrast to the 959 who landed via the RMS St Helena cargo liner in 2015.

Since 1502, St Helena has suffered from human impact with an irreversible loss of resources and biodiversity. The arrival of a higher volume of tourists to the island has the potential to increase ecosystem degradation; there is the risk of more litter, soil erosion and compaction, higher levels of water usage, invasive species introduction, pressures on biosecurity, and much more.

Governmental and non-governmental organisations have been working together to protect this irreplaceable island natural heritage. To ensure a boost of tourism to the island is sustainable, they will need tools to monitor the

long-term impact on ecosystems and estimate the best tourism carrying capacity.

Darwin Plus project DPLUS052 is aiming to create new up-to-date detailed maps of the natural environment and biodiversity on St Helena, including habitats and soils, giving a clear image of where invasive and native habitats are, as well as transition zones and areas in development. It will provide specific information such as type of substrate, soil moisture content and compaction, plant species location, slopes, habitat exposure etc. - data that can help measuring tourism influences on St Helena ecosystems.

In order to create the best possible maps, the project consulted public, private and third sector organisations to ensure that the maps and data produced show the most useful information to help manage the effects of increased tourism. Organisations will be able to use the maps produced by the project as a tool to assess the changes between now and the future. The project intends to establish a 'living map' to facilitate future updates and allow people to update the maps and data easily for long-term perspective.

For more information on project DPLUS052, click [here](#) or contact Project Leader Derek Henry, [derek-henry@enrd.gov.sh](mailto:derek-henry@enrd.gov.sh)





*Pete Carr surveying Île Vache Marine, Credit: CCT*

## First successful invasive rat eradication in the Chagos Archipelago

The tiny island of Vache Marine in the Chagos Archipelago of the British Indian Ocean Territory has recently made history as the first island in the territory to successfully eradicate invasive black rats.

In 2014 the Chagos Conservation Trust (CCT) received a Darwin Plus grant for its Île Vache Marine Restoration Project. The project, in partnership with the British Indian Ocean Territory Administration, aimed to restore the ecosystem of the island by eradicating invasive black rats.

“We know that globally invasive black rats have had a devastating impact on oceanic island ecosystems by suppressing populations of native animals and preventing regeneration of native plants” said Pete Carr, CCT trustee and project leader.

Throughout the Chagos Archipelago, invasive black rats, accidentally introduced from ships in the 1700s, have been recorded as present on 26 islands, absent from 20, and their status uncertain on the remaining nine.

“The success of eradicating invasive black rats from Île Vache Marine is the initial step of a long-term strategy to eradicate these invasive alien predators from all of the affected islands within the British Indian Ocean Territory, in line with the Administration’s conservation management framework“

Île Vache Marine lies within a designated Strict Nature Reserve in the British Indian Ocean Territory Marine

Reserve. In close vicinity are three designated and two proposed IUCN classified Important Bird Areas. However, it was infested with rats and therefore inhospitable for threatened marine turtles and internationally important seabirds. Rats eat turtle and bird eggs, hatchlings, nestlings, and adult animals, completely suppressing population levels.

“Studies of the island have recorded that despite it being near to internationally important populations of breeding seabirds, only miniscule numbers of four species of seabird have ever been recorded as breeding on the island.”

With support from the British Indian Ocean Territory Administration, Pete and Dr Grant Harper, biodiversity restoration specialist, completed an expedition to the island of Vache Marine in April and found no sign of invasive black rats remaining and increased seabird numbers.

Île Vache Marine can now officially be declared as rat free using the internationally recognised minimum period before declaration of rat free status of two years.

“Successfully eradicating the black rats has, and will continue to, increase biodiversity on the island that provides a safe haven for seabirds to nest and contributes to a healthy ecosystem more widely.” said Pete.

For more information on project DPLUS011, click [here](#)





*Aung Ko Toe gives a cooking class in Myitkangyi, Credit: Paul Bates*

## Newsletter Contacts

### The Darwin Initiative Secretariat (Defra)

The Darwin Initiative Secretariat (Defra) The Darwin Secretariat is based in Defra and includes Claire Millar, Fiona Charlesworth, Jacqueline Tumwine, Sally Cunningham 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](mailto: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](mailto:darwin-applications@ltsi.co.uk) or [darwin-projects@ltsi.co.uk](mailto: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](mailto: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 £140 million to 1,055 projects in 159 countries.