

INTERNATIONAL
A ROCHA
Conservation and Hope



INTERNATIONAL REVIEW
2016/17

Welcome to the Annual Review

A memorable year

2016 was a turbulent year around the world – unprecedented political change in western democracies, people movements on a vast scale, many visible and catastrophic consequences of climate change, and behind it all, the silent story of species loss at increasingly rapid rates. There has been no shortage of headlines carrying difficult news and so in this Review we wish to bring you some other, more hopeful stories.

There have been conservation successes, as there usually are when expertise, resources and deep motivation come together around well-designed projects. Many of our national teams can witness to this quietly hopeful trend among the species with which they work. As global decisions were made by governments, we saw that for the first time biodiversity targets and human development goals were integrated within the UN's Sustainable Development Goals (SDGs). We report how this resonates deeply with the approach we have followed for the last 35 years.

Meanwhile, on the ground

The expressions of A Rocha's vision are always profoundly local, as national teams decide on their own work programmes. Nevertheless, the



Grey-faced Petrel, *Pterodroma macroptera*, New Zealand. (Kristol Van Houste)

international nature of A Rocha means that we feel quite directly and immediately many of the underlying global issues that impact our environment and its capacity to support both human communities and wildlife. If you follow the work of our teams in Australia, our newest national organization, and New Zealand, you will know that a priority within their work plans is the eradication of invasive species. For our teams and partners in Peru and Uganda, climate change has caused major disruption during the past year. The rapidly rising trade in bushmeat has been very problematic in the areas where A Rocha Ghana is working, and they, along with our team in Nigeria, are tackling deforestation in several globally important sites where they are carrying out their field work.

A milestone year for several country projects

As we entered 2017 we passed some important milestones. A Rocha teams in Lebanon and France celebrated 20 years of steady and determined progress in restoring habitats and reversing degradation through long-term community engagement. Because places such as the Aammiq marshes in Lebanon, the Marais de l'Ilon in southern France, the Alvor estuary in Portugal and Minet in the UK look and function the way they do, in all their beauty and diversity, A Rocha is now frequently asked to bring our perspectives and experience to the wider conservation debate, as you will see in the following pages.

Our invitation

So now, encouraged by this progress, we look ahead. During the year we significantly widened the scope of our work in Asia and elsewhere, and moved into new areas of advocacy involving artists, musicians, the business community and yes, politicians. For all of this we will need God's wisdom and your support! Enjoy reading on...



Executive Director, A Rocha International (ARI)



Chris Naylor (Mel Ong)

The Aammiq Wetland is the largest remaining freshwater wetland in Lebanon. It was declared an Important Bird Area (1994) and a Ramsar Convention site (1999), and in 2005, it was designated, with Al Shouf Cedar Nature Reserve, a 'Biosphere reserve' by UNESCO. (Martin Bernhard)



Australia hits the ground running

With its connections to the Indigenous *Gringai* People and historic colonial buildings dating back to the early 19th Century, Tahlee – A Rocha Australia’s first associated project site – is rich in cultural associations. However, the inheritance of invasive plants from European settlement causes serious problems for people and wildlife alike. In March, a weed eradication program got under way to tackle the issues. This has opened up space near the foreshore, where a project has now begun to re-establish native vegetation to attract fauna, particularly Koalas *Phascolarctos cinereus* and birds. Meanwhile, over 100 bird surveys have been undertaken

in the tall eucalypt forest and estuary margins at Tahlee. 163 species of birds have been recorded, including 11 listed as vulnerable or higher on state or federal threatened species lists, notably the Globally Endangered Far Eastern Curlew *Numenius madagascariensis*. A second project, at Capernwray, also in New South Wales is re-establishing a nationally endangered woodland tree, Paddy’s River Box *Eucalyptus macarthurii*.

Far Eastern Curlew *Numenius madagascariensis* (Dick Daniels CC BY-SA 3.0.1)

A Rocha Australia established a Koala research program at Tahlee, led by student Tim Currie from Deakin University. This Koala, *Phascolarctos cinereus*, was found in March. (Bruce Watts).



A Rocha on the World Stage

Once again, A Rocha was the only international Christian conservation organization present at the IUCN World Conservation Congress 2016. More than 10,000 leaders from government, civil society, indigenous communities, faith traditions, the private sector and academia from more than 180 countries gathered in Hawai’i. The theme, ‘Planet at the Crossroads’, reflected the critical moment that all agreed is now upon us as we seek to secure the future of a healthy and liveable planet for all its inhabitants.

The plenary on Spirituality and Conservation brought together leaders from six of the world’s spiritual traditions and saw A Rocha’s co-founder, Peter Harris, share a platform with powerful speakers such as Argentina’s Minister of the Environment, Rabbi Sergio Bergman. This session proved to be the most widely viewed of all in the weeks and months that followed the Congress – do watch Peter’s intervention if you haven’t yet seen it (www.arocha.org/en/people/peter-harris/). Peter described it as a privilege to explain how the biblical mandate elegantly resolves some of the dissonance that many hear when they try to discover why nature matters. A Rocha welcomes IUCN’s ongoing

commitment to build on the impact of this vital dialogue. It engages a far wider audience than that which is possible within secular or merely technical discourse, and as biodiversity is largely stewarded in the global south where religious views are universally held, this can only be very positive for all life on earth.



Peter Harris and other faith leaders at the WCC Hawai’i 2016 high-level session, ‘Connections: Spirituality and Conservation’, with Inger Andersen, Director General of the IUCN (far right). (IUCN/Eric McNatt)



IUCN
World
Conservation
Congress
Hawai’i 2016

Marine Update

New work in marine conservation

As well as bringing hope for the ocean itself, our marine programme, directed by lead scientist Dr Robert Sluka, has been addressing issues faced by those who live on its shores. In 2016, A Rocha International supporters donated over £23,000 to help both the young men and the marine life on the Kenyan coast.

He explains, 'The rock pools of Watamu Marine National Park are important as a nursery area for many species, some of which are only found in this habitat. Easily accessible from the beach, they are enjoyed by guests of nearby hotels and give a glimpse into the ocean's vast marine life. Local young men use the opportunity to show tourists around and sell them snorkelling trips and safaris. However, they often have limited knowledge, can cause damage to the habitat, and can become caught up in drugs and prostitution.' A Rocha Kenya's field study centre is just a few minutes' walk from these rock pools. It has an education facility and a Kenyan marine biologist, Peter Musembi. A Rocha works with the Kenyan wildlife authorities and local hotel managers to protect these habitats and has developed a training programme for guides, which will help provide more sustainable livelihoods for some of these vulnerable individuals.

Around the Mediterranean and in the UK we have also developed a programme to take action against microplastics using the latest scientific research and theological thinking to inform education, advocacy and conservation. The A Rocha marine team is now

working on creating a Microplastics Toolbox to allow people to assess microplastic pollution on their local beaches and waterways, equip them to advocate against plastic pollution and provide educational materials to spread the word even further.

Right: Dr Robert Sluka with marine team member Aline Nussbaumer and volunteer Emma Forrester surveying beaches in southern France for nurdles and testing changes to their microplastic sampling protocol. (Jo Calcutt)

Below: Experts suspect these juvenile fish found during surveys in Kenya by A Rocha are a species of sweeper fish (*Pempheris* sp.) that is new to science. (Dawn Goebbels)

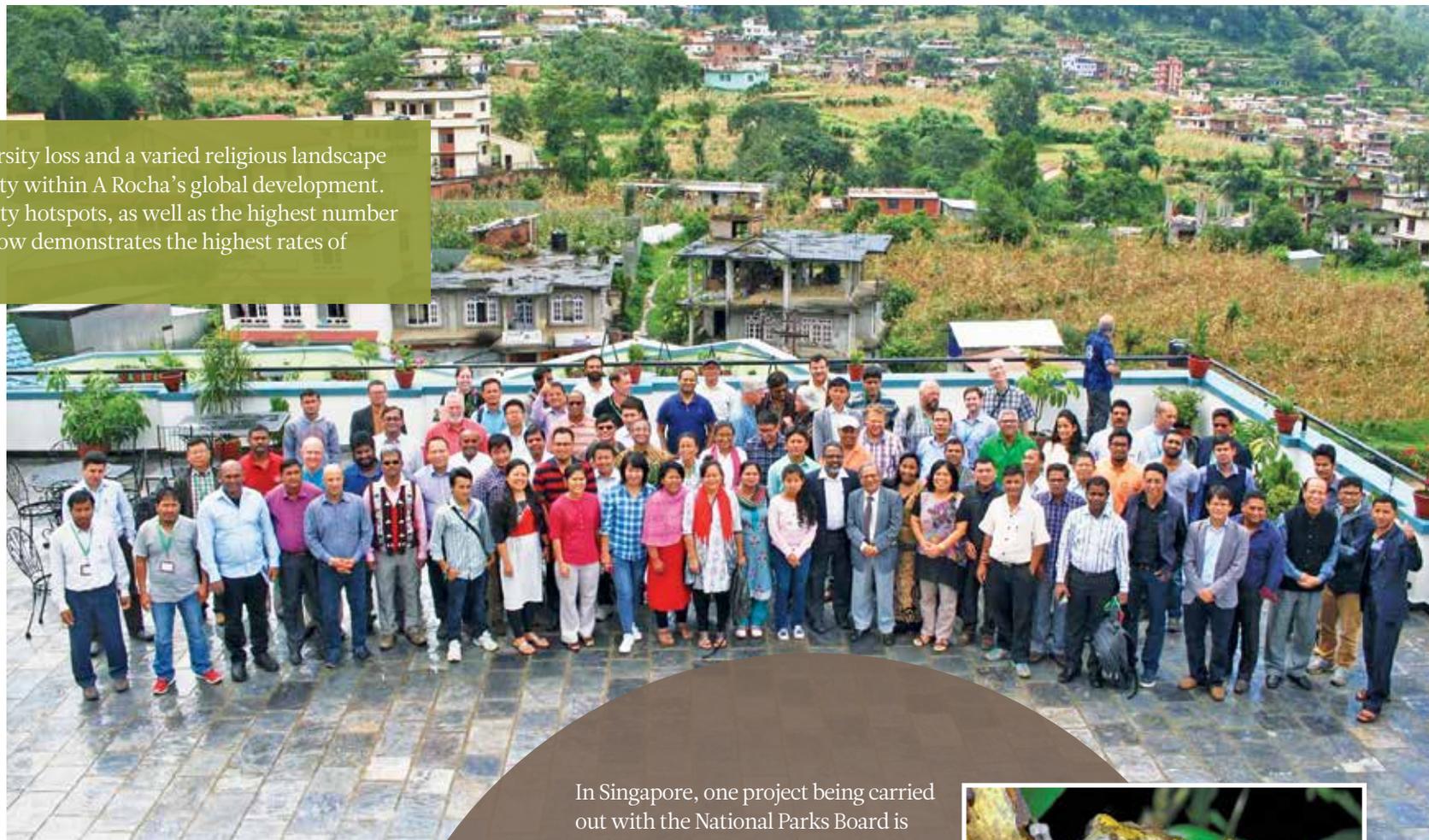


Nurdles are the building blocks of plastic products and now litter our beaches (Aline Nussbaumer)



Boat operators and young men of Watamu Beach receive training about caring for their marine habitat and gain new skills for a more sustainable livelihood. (Stanley Baya)

Planting seeds in Asia



The Lausanne/WEA Creation Care Network's South Asia conference on Creation Care and the Gospel near Kathmandu. (LWCCN)

Perhaps the area of the world where biodiversity loss and a varied religious landscape meet most directly is Asia, making it a priority within A Rocha's global development. It contains seven of the world's 25 biodiversity hotspots, as well as the highest number of species threatened with extinction, and now demonstrates the highest rates of habitat loss too.

A Rocha International's Churches and Theology Director, Dave Bookless, spent some time in Asia this year. He explains, 'When it comes to faith, all the world's major religious traditions arose in Asia and the Middle East. As people link their beliefs about the beauty and value of creation to their environmental practice, the potential for positive impact on what Christians know as creation is enormous. Christians are found right across Asia and few have been aware of just how significant they are where unique ecosystems exist and where the pressures on biodiversity are so acute.'

Samuel Chiu, our East Asia Projects Coordinator, leads our engagement programme and travels extensively throughout the region, meeting Christian leaders and speaking at events and conferences. One that was particularly moving was held in Kathmandu as nearly 100 delegates from India, Nepal, Pakistan, Sri Lanka and Bangladesh gathered to learn more about creation care. Elsewhere small but significant initiatives are underway, particularly in Hong Kong and the Philippines.

In Singapore, one project being carried out with the National Parks Board is led by A Rocha film-maker Melissa Ong. She, together with a small group of committed young volunteers, has been collecting data since February 2016 on the diversity of amphibians in urban parks. The aim is to encourage citizen science and an appreciation of the frogs and wildlife that live just metres from hundreds of thousands of local residents on this densely populated island.



Although a fairly common frog whose loud deep calls are familiar, many had never seen the Banded Bullfrog *Kaloula pulchra*, prior to volunteering. (Prarthini Selveindran)

Gifts with a Difference

Shop online at
shop.arochoa.org

Last year A Rocha International launched a new online gift catalogue. We called it Gifts with a Difference because every item purchased on behalf of a friend or family member benefits over-worked women in Uganda, some of the world's rarest birds in Kenya or vulnerable children in Peru. In the first three months we sold 122 gifts, which impacted 616 lives and have either planted or protected 2690 trees.

Beneficiaries at the A Rocha Uganda compound.



(A Rocha Uganda)

We have just produced a printed version of the catalogue too. It's perfect for passing around your church, and sharing with friends. Visit shop.arochoa.org/catalogue to order copies or download the pdf (available in multiple currencies).



Dakatcha Woodlands in Kenya is an important habitat for the Globally Endangered Clarke's Weaver *Ploceus golandi*. Through Gifts with a Difference, farmers are being equipped with beehives and training to generate income by using local, natural resources, without over-exploiting the forest. (Colin Jackson)



Angella Galiwango lives in Naguru, one of Kampala's slums. She is looking delighted with her new fuel-efficient cook stove. Because the cook stoves help cut the harmful emissions produced by open fires, she can now cook food for her family in a healthier indoor environment. It will save money and trees too, as fuel-efficient cook stoves can use 30-50% less fuel. (A Rocha Uganda)



Evans Kaddu collects water for his family from a nearby stream. It is rather unwholesome until he pours it into his bio-sand filter (BSF). As well as cleaning the water, the BSF saves hours of time spent boiling water and precious money previously spent on charcoal. Because a BSF is used by an average of five families, each filter can save £700 and 15 days per year that would otherwise be spent boiling water - as well as save 15 trees from being cut down for charcoal. They can also greatly reduce infectious diseases such as cholera, dysentery and diarrhoea. (A Rocha Uganda)

These children from Kungu Church of Uganda Primary School have just learned how to grow their own vegetables in sack gardens. Now, even when space is limited or where flooding is frequent, the children can have access to a healthier diet. It's also a great opportunity to get closer to nature. (A Rocha Uganda)



Improving habitats for wildlife and people

Staff and volunteers at Brooksdale, A Rocha Canada's centre in the Little Campbell watershed in southern BC, have continued to improve habitat and raise awareness of threatened species such as the Salish Sucker *Catostomus* sp and the Oregon Forestsnail *Allogona townsendiana*. The centre hosts thousands of day visitors and hundreds of residents during the year, and so upgrading and extending are the order of the day.



The Salish Sucker (*Catostomus* sp.) — is an endangered species, listed under Canada's Species at Risk Act, and found in only eleven watersheds in the Fraser Valley and at least four in Washington State. (Andrew Baylis)

The annual Green Gala - held every year in Vancouver to raise funds - brought out 300 people for a remarkable evening of conversation and song. The event took shape around a conversation between Canadian literary giant Margaret Atwood and A Rocha Canada co-founder Leah Kostamo. Ms Atwood reflected on her MaddAddam trilogy and her childhood in Northern Quebec, where she spent most days free to explore and enjoy the natural world. The impromptu highlight of the evening came as Margaret sang the Mole Day Hymn from her novel *Year of the Flood*. The whole evening celebrated the common ground on which A Rocha Canada's work has been so securely built.



Together in the Harvest, released in September, is a continuation of the wonder and hope found on the first album, *From Smallest Seed*.

Together in the harvest

It was evident that music would also be a core element of the vision when A Rocha's work began to take root in Nashville five years ago. A group of professional musicians began hosting song-writing retreats in 2013 and two albums have now been produced, with a third on the way. The latest is *Together in the Harvest* in which artists tell the story of God's work in their place and community. To listen and download visit arocha.us/arts



Leah Kostamo, Margaret Atwood, Graeme Gibson and Markku Kostamo take a tour of A Rocha Canada's Brooksdale Environmental Centre in Surrey, BC.

Nigeria's growing vision for Creation

A Rocha International's Associated Project, Eden Creation Care Initiative, is based in Jos and helps communities protect areas important for their biodiversity. Based around Rennajj fish farm, they have provided Farming God's Way training to 80 local farmers and formed conservation clubs in seven schools. In February 2017 Peter Harris visited the team in Jos for two weeks of lectures and speaking in universities, churches and seminaries, one of which has now developed a sustainable management plan for its extensive campus. The growing team are also working with forest communities in Taraba State and believe that their vision has the potential to shape the landscape itself. After his visit Peter said, 'I was deeply impressed by the quality of the leaders I met and their evident eagerness to respond to what was a new message to many. There is a sense of actual crisis in nearly all the classic environmental areas - ranging from population (set to reach 450 million by 2050 when Nigeria will be the third most populous country in the world) to deforestation, widespread and massive pollution, erosion, climate change and biodiversity loss.' But encouragingly, the vibrant Christian church, now thought

The team in Nigeria introduced conservation agriculture, 'Farming God's Way', to farmers of the Latiya and Gura-Topp communities in November.



to have more resources than the national government, is becoming increasingly alert to creation care issues, and several real commitments were made in the meetings that were held. We now need to support this young initiative as its leaders continue to build capacity.

Rare find at Foxearth Meadows

Foxearth is A Rocha UK's nature reserve dedicated to dragonflies and damselflies, the UK's only nature reserve specifically managed for this spectacular group of flying insects. It had a very special visitor this year - the Variable Damselfly *Coenagrion pulchellum* - which hasn't been seen in the region since the end of World War II.

According to the British Dragonfly Society (BDS), the Variable Damselfly is an uncommon species with a scattered distribution across mainland Britain. Despite being well known from a handful of sites, the species' distribution still remains 'something of a mystery still to be unravelled', said the BDS.

A Rocha UK Conservation Director Andy Lester is thrilled about the discovery. 'It's exciting news for a site that's recently been labelled as one of the best places to see dragonflies in the UK by BBC Wildlife magazine,' said Andy.



Variable Damselfly *Coenagrion pulchellum* at Foxearth Meadows Nature Reserve. (A Rocha UK)

Relief work in Peru



Peru team undertakes flooding relief work

When torrential rain caused catastrophic flooding and landslides in Peru, a state of emergency was declared in several areas with the northern coast experiencing the worst flooding in 30 years. 100 lives were lost and more than 140,000 people made homeless, with a further one million people affected.

Ramón Casana, Projects Director at A Rocha Peru, explains, 'Relief work is not our usual work but we were compelled to help communities in our project areas of La Libertad.'

We donated kitchen supplies for four communal kitchens set up in response to the flooding, each providing food on a daily basis to around 120 local people.

Funding was boosted by several A Rocha organizations around the world, enabling us to respond to the urgent needs of communities.'

As the frequency of extreme weather events increases, A Rocha's work to address the effects of climate change becomes ever more important.



Ramón Casana Araujo (Projects Director) and Aracely Gonza Carnero (La Libertad Project Field Officer) bring disaster relief items to the families.

Providing environmental education in a refugee crisis

According to the UN refugee agency, there are now 65.6 million forcibly displaced people worldwide. But, they are far from evenly distributed. The tiny country of Lebanon hosts the greatest number when compared to its own population, with a staggering 183 refugees per 1000 inhabitants. A Rocha Lebanon has been working close to the Syrian border, in the Bekaa Valley, for 20 years.

National Director of A Rocha Lebanon Martin Bernhard explains, 'Syrian refugees continue to arrive in the country putting local services and the environment under strain – in some towns, the populations have doubled. But the security situation continues to improve and that's meant we have been able to develop two reforestation projects on the overgrazed barren hillsides close to urban communities. Reem, our Environmental Education teacher is able to go into schools to teach about how we can care for and protect the environment. She also takes groups of children, including many refugee children, into the Qab Elias restoration project, complete with its thriving community of plants and animals, and helps the students connect with the wonders of the local wildlife – birds, butterflies, frogs, and other marvels of creation that are still able to thrive when they are given the chance.'



A Rocha Lebanon's new woodland restoration project includes a garden, nature trail and play area in the Bekaa Valley. It provided employment for two refugees who helped plant a labyrinth with 200 Lavender bushes. (Martin Bernhard)



The garden flourishes and attracts wildlife and the curiosity of refugee children who are led by Reem, our Environmental Educator. (Martin Bernhard)

Securing livelihoods and biodiversity



Working with the Sustainable Development Goals (SDGs):

All around the world, A Rocha's scientific research, environmental education and community-based conservation projects are contributing to the SDGs. As a conservation organization, we focus mainly on SDGs 13, 14 and 15. Often, however, a project relates to numerous SDGs where our work makes a difference. Here are some highlights:

Atewa Range Forest Reserve is internationally recognized for its gloriously diverse wildlife. Over 570 butterfly species have been recorded, more than at any other site in West Africa; mammals include the threatened Geoffroy's Black-and-White Colobus monkey, Royal Antelope, Bushbuck, Black Duiker, Brush-tailed Porcupine, mongooses, genets, civets, squirrels and pangolins.

The forest is of exceptional importance for amphibians, with a third of those recorded being at risk of global extinction. Atewa also contains the headwaters of three river systems, providing clean drinking water for five million Ghanaians, as well as sustaining local industries and agriculture.

But the forest is threatened by a range of human activities. Illegal logging and hunting are widespread. Unlicensed small-scale gold mining pollutes the water sources of downstream forest edge communities. Since the hills hold significant bauxite deposits, large-scale commercial mining has been an ever-present threat for decades that has come to the fore with recent proposals to mine the hills.

Deputy National Director Daryl Bosu explains, 'Most of all, we're concerned about all the damage bauxite mining will cause. We are concerned about the impact not only on the ecology of the region but also on the water supply which would affect millions of people.'

Since 2013, A Rocha International and A Rocha Ghana have been working together to assess the threats, strengthening the case for protecting it as a National Park and addressing some of the problems of logging and mining. Dr Jeremy Lindsell, Director of Science and Conservation, added, 'We have been encouraging uptake of nature-based livelihoods such as farming Grasscutters (Cane Rats) to replace wild-caught bushmeat, and growing a native spice called Grains of Paradise to diversify farmers' income.

We have also interviewed many miners who see no other way of earning an income. So we are planning to work with a local vocational training institute to reskill miners, giving them and the forest a better future. Ultimately the local communities and the traditional leadership want to see the forest turned into a National Park, which would afford it greater protection against unsustainable development and we are trying to help this to happen.'

White-bellied Pangolin in camera trap



A Rocha International has been working with A Rocha Ghana to use camera traps in Atewa forest for monitoring and recording the species living there. This photograph caused particular excitement for A Rocha's Science and Conservation team, because it confirmed the presence of a species for which we lacked firm evidence in Atewa: a White-bellied Pangolin. (A Rocha International)



SDG 13 Climate action:
Climate change affects every sphere of A Rocha's work. We are working to combat climate change and its impacts.

- We protect and restore tropical forests, resulting in reduced emissions of carbon from forest loss.
- We undertake climate change-related research which enhances knowledge for adaptive management.
- We promote ecosystem-based Farming God's Way which results in changes from destructive practices to a sustainable form of agriculture.
- We present a Christian perspective on climate change to raise the profile of faith communities and their active role in the world of conservation.



SDG 14 Life below water:
A Rocha is working towards the goal of ensuring the sustainable use of the ocean, seas and marine resources.

- We study, protect and restore wetland and marine habitats to enhance their conservation status.
- We study marine pollution and raise awareness to reduce it.



SDG 15 Life on land:
All our A Rocha Organizations work towards the goal of ensuring the conservation, restoration and sustainable use of 'Life on Land', be that in forests, wetlands or drylands.

- We introduce measures to reduce the impact of invasive alien species to boost biodiversity and reduce non-native pest populations.
- We monitor, study and protect over 200 species threatened nationally or globally to reduce threats and reverse population declines.
- We work with landowners to encourage conservation, restoration and sustainable use of their lands.
- We study freshwater ecosystems to work towards their conservation, restoration and sustainable use.

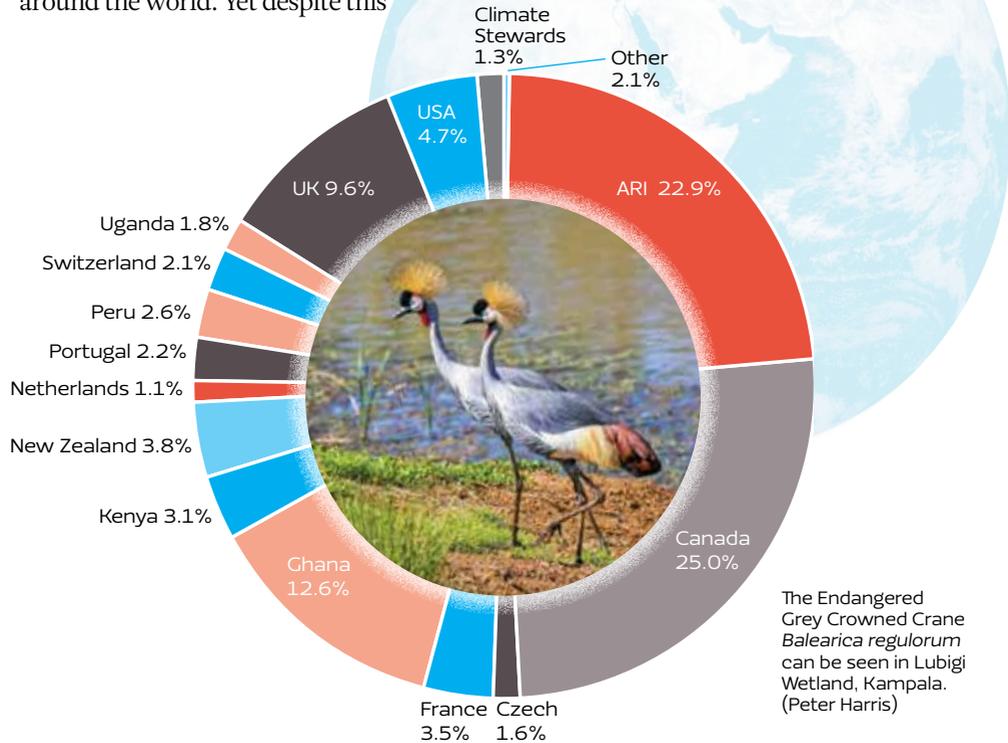


Gold mining in Atewa Forest (Jeremy Lindsell)

A Rocha's global income

Because of the generosity of so many individuals, churches and trusts who are an essential part of A Rocha's work, our global income rose by 3% in 2016 to just over £4.6m. This has allowed us to increase the impact of our programmes on species, habitats and communities around the world. Yet despite this

global growth, some A Rocha organizations (Kenya, Peru, France and A Rocha International) saw a reduction in their income. So with your continued support we could do even more: the greatest need is regular funding for our core costs.



Undesignated income for A Rocha International (ARI) and the total income for the National Organizations. ('Other' refers to organizations with an income of less than 1%: Australia, Brazil, India, Lebanon, South Africa and our Associated Project in Nigeria.)



A ROCHA INTERNATIONAL'S INCOME

A Rocha International's income

The chart shows ARI's income sources and highlights the importance of individual donors. Despite a growth in the number of smaller regular donors, fewer large one-off donations meant that income was 9% lower than in 2015.

The proportion of ARI's income from trusts has increased from 8% to 14% due to a substantial donation to fund core costs from a US Foundation. The A.G. Leventis Foundation has continued to fund conservation work in the Atewa Range Forest Reserve in Ghana, which is under increasing threat due to bauxite mining. This grant has allowed us to partner with A Rocha Ghana and others

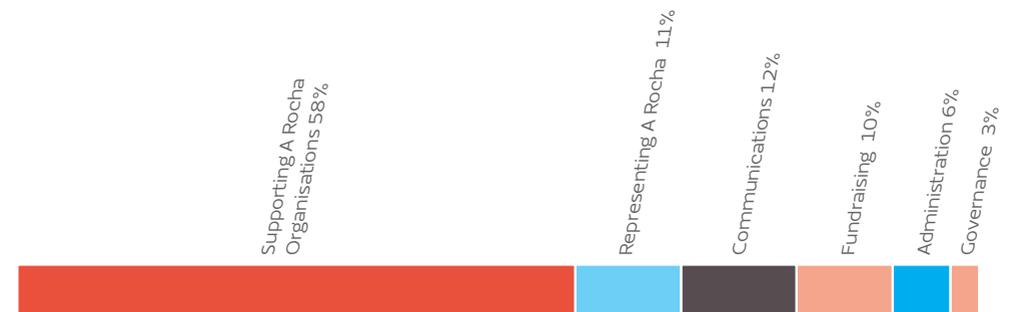
(Ghana Wildlife Society, Permian Global, Ghana's National Herbarium and the Forestry Commission), as well as obtain substantial additional funding from IUCN Netherlands for A Rocha Ghana's work.

Smaller grants were received to fund a microplastics project in France and marine projects in Europe and Africa.

A Rocha International's expenditure

The breakdown of expenditure shows that 69% of ARI's expenditure was supporting A Rocha National Organizations, advocacy and representing A Rocha globally at scientific conferences, activities and church events in many countries.

Students of Berom Community Secondary School at Rennaji Fish Farm, Eden's main conservation project near Jos, Nigeria. A Rocha's first associated project. (Eden Creation Care Initiative)



A ROCHA INTERNATIONAL'S EXPENDITURE

Our AMAZING teams ...

Interns 45

Volunteers 841

Staff 144(FTE)



2016

the A Rocha
year in numbers

...have done
AMAZING
work in 2016...

SPECIES CONSERVATION

103

Number of species on IUCN's Red List monitored or studied

119

Number of species studied that are threatened or at risk nationally



ENVIRONMENTAL EDUCATION

1,006

Number of activities eg. assemblies, camps, school group visits

26,343

Number of participants



HABITAT PROTECTION

229,568

Number of hectares for which we advise, have management control or responsibility

887,841

Number of hectares of other land areas benefitting from our research and conservation



THEOLOGICAL EDUCATION

535

Number of speaking engagements at churches and conferences

22,178

Number of participants



A Rocha International 89 Worship Street, London, EC2A 2BF.
Tel: +44 (0)300 770 1346 E-mail: international@arocha.org
Registered Charity No. 1136041 Company Registration No. 6852417

www.arocha.org

facebook.com/arocha.international

twitter.com/arochaint

www.instagram.com/arochaint

INTERNATIONAL
A ROCHA
Conservation and Hope