AITC
A COALITION FOR THE CARE, PROTECTION AND CONSERVATION OF ANIMALS

ANIMAL PEOPLE

Animal Protection and Sustainable Development: An indivisible relationship

Animal People is a non-profit animal protection charity dedicated to raising public awareness of animal sentience and suffering, and to building connections among the animal welfare, rights, and conservation movements.

The **Animal Issues Thematic Cluster (AITC)** is a coalition of animal protection and conservation organizations advocating for the care, protection, and conservation of animals and biodiversity within the United Nations Sustainable Development Agenda. Members of the AITC include:

ACTAsia

Animal People, Inc.

African Network for Animal Welfare

Arc of Nubia

Arcus Foundation

Dr. Aysha Akhtar

Born Free

Brighter Green

The Brooke

Compassion in World Farming

Conservation X Labs

Cruelty Free International

The Donkey Sanctuary

Farm Animal Investment Risk & Return/Coller Capital (FAIRR)

German Speleological Federation

Global Animal Law

Green Faith

Innovation for the Development and the Protection of the Environment (IDEP)

The International Action Network on Small Arms (IANSA)

International Fund for Animal Welfare (IFAW)

The Jeremy Coller Foundation

Liberia Chimpanzee Rescue and Protection (LCRP)

Nonviolence International

One More Generation

The Orangutan Project

Rapad Maroc

Reacción Climática

Safina Center

S.P.A.R.E.

Robyn Stark

Thinking Animals United

Vier Pfoten / FOUR PAWS

A Well-Fed World

Welttierschutzgesellschaft

Wildlife Direct

World Animal Net

World Wildlife Web

Animal Protection and Sustainable Development: An indivisible relationship

Edited by

Wolf Gordon Clifton, Jessica Bridgers, and Maha Bazzi

Authored by

Jessica Bridgers *
Maha Bazzi
Amal El Bekri
Wolf Gordon Clifton
Janice Cox
Jenny Desmond
Tod Emko

Adeline Lerambert *
Angela Wright *
Mark Hofberg
Mia MacDonald
Aviram Rozin
Daniela Schrudde
Jackson Zee

Co-Leads of the Animal Issues Thematic Cluster of the NGO Major Group

Special thanks to

Suvidha Bhatnagar
Polen Cisneros
Ofir Drori
Nicole Forsyth
Keleigh Friedrich
Nico Hermanu
Joy Leney
Sheri Madsen

Audrey Martin
Varda Mehrotra
Dawn Moncrief
Josphat Ngonyo
Kartick Satyanarayan
Geeta Seshamani
Pei Feng Su

Table of Contents

Translating Science into Policy: Animal Welfare and Conservation as Cross-Cutting Issues to Accelerate Sustainable Development

Why Animals Matter to Sustainable Development

The seminal Brundtland Report of 1987 defines Sustainable Development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." It also established the three pillars of sustainable development that must be balanced: economic growth, social equity and environmental protection.

In 2015, the 2030 Agenda for Sustainable Development was adopted. The Agenda's founding document, *Transforming our world: the 2030 Agenda for Sustainable Development,* states, "**We envisage a world … in which humanity lives in harmony with nature and in which wildlife and other living creatures are protected.**"

While animal welfare and conservation have traditionally been seen as "developed" country concerns, there is increasing scientific evidence and recognition that these issues are intrinsically linked to human wellbeing. As knowledge of the link between human health and wellbeing, environmental protection, and animal welfare spreads, policy solutions are beginning to include animal considerations in order to improve the wellbeing of humans and the protection of the environment.

One Welfare is a multidisciplinary framework which "recognises the interconnections between animal welfare, human wellbeing and the environment," and "fosters interdisciplinary collaboration to improve human and animal welfare internationally." One Welfare brings together veterinarians, public health experts, conservationists and others to identify solutions to local, national and global problems by recognizing the links between animal, environmental and human wellbeing. One Welfare is also complementary to the widely accepted One Health concept which recognizes the interlinkages between human, animal and environmental health.

Image: Grant's gazelle in Nairobi National Park, courtesy Animal People, Inc. All rights reserved.   1

The One Welfare approach can be beneficial to sustainable development in many ways:

- Stemming biodiversity loss maintains and improves the essential services that a healthy environment provides to people, including clean air, water, food and climate stability, thereby protecting human health and wellbeing and improving agricultural production and food security.

- Strengthening animal health and welfare strengthens the livelihoods and resilience of millions of people across the world who depend on working livestock to support their lives and livelihoods through draught power in agriculture and transport.

- Humane spay, neuter and vaccination of stray dogs mitigates risk of rabies transmission to humans.

- Including animals in disaster response and risk reduction legislation improves survival and recovery outcomes for the entire community and can help reduce poverty, hunger and conflict.

Looking more in depth, the intensification of livestock production systems is linked to the spread of zoonoses and antimicrobial resistance, two grave threats to human health. Intensive production systems harm livelihoods by exacerbating low wages and poor working conditions, and by decreasing employment opportunities, thereby destabilizing rural economies. Intensive livestock production also harms the environment and accelerates biodiversity loss by forcing a transition to the production of monoculture crop and animal systems which rely heavily on chemical inputs and contribute significantly to climate change, pollution of waterways, air and soil, and are a key driver of deforestation. Transitioning to more humane, environmentally friendly production systems, as well as shifting towards plant-based diets in regions where meat consumption is excessive, can make a positive contribution to the achievement of a number of SDGs.

Image: pigs in intensive farm in West Bank, courtesy Animal People, Inc. All rights reserved.

Additionally, as intensive agricultural production and other factors speed the loss of biodiversity and wildlife, human health and environmental resilience are put at risk. Recent scientific studies demonstrate clear links between increased disease emergence and biodiversity loss over the past several decades. Much of this increase is associated with land conversion in highly biodiverse areas of the globe combined with higher human population density. In more urban and developed areas of the world with lower levels of biodiversity, there is an increase in auto-immune diseases. These scenarios demonstrate a definitive link between human health and biodiversity.

Toads and other amphibians prey on insects harmful to humans, but are especially sensitive to habitat loss

The recent Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) Global Assessment Report on Biodiversity and Ecosystem Services found that:

> *Current negative trends in biodiversity and ecosystems will undermine progress towards 80 percent (35 out of 44) of the assessed targets of the Sustainable Development Goals, related to poverty, hunger, health, water, cities, climate, oceans and land (SDGs 1, 2, 3, 6, 11, 13, 14 and 15). Loss of biodiversity is therefore a developmental, economic, security, social, moral, as well as an environmental issue.*

As the expanding global human population places land and wild animal populations under increasing pressure, protecting against biodiversity loss must be incorporated into development plans and strategies. The corollary is also true when incorporating animal welfare into development models: linking animal welfare into development plans and strategies can have a cross-cutting positive effect on human wellbeing and environmental protection.

Where Are Animals in Relevant Policy?

There are now important international policy streams dealing both with animal welfare and conservation. The 182 Member Countries of the World Organisation for Animal Health (OIE) have agreed to implement the OIE's animal welfare standards, which cover animals in research, working equids, dog population control, and animals in agriculture and aquaculture. At the same time, there are also several multilateral environmental agreements mandated to consider issues that either directly or indirectly touch upon animal welfare in the context of conservation, trade and development. These include the Convention on Biological Diversity (CBD), the Convention on the Conservation of Migratory Species of Wild Animals (CMS) and the Convention on the International Trade in Endangered Species of Wild Fauna and Flora (CITES). There are 196, 128, and 183 countries which have become Parties to these conventions, respectively.

Working camel in Tamil Nadu, India

In parallel to the growing body of scientific evidence for One Health and One Welfare, science is increasingly demonstrating that animals are indeed *sentient*. That is, they share with us the ability to experience pain, suffering, fear, distress and states of wellbeing. In 2012, a prominent international group of cognitive neuroscientists, neuropharmacologists, neurophysiologists, neuroanatomists and computational neuroscientists gathered at The University of Cambridge to sign the Cambridge Declaration on Animal Consciousness, stating that "the weight of evidence indicates that humans are not unique in possessing the neurological substrates that generate consciousness." This scientific understanding has important ethical and policy implications which are beginning to be reflected at the global, regional and national policy levels:

Wild scarlet macaws in Peru. Parrots are social, intelligent birds, and some species can even count and use tools.

■   The **World Organisation for Animal Health (OIE)** Global Animal Welfare Strategy states that the use of animals carries with it an "ethical responsibility to ensure any such use is humane, as defined through the OIE's international standards for animal welfare, in recognition of the sentience of animals."

■   The **Convention on the Conservation of Migratory Species of Wild Animals** has established a working group to better understand how animal culture and communication contributes to conservation. Former Executive Secretary of CMS, the late Bradnee Chambers, stated, "CMS is breaking new ground by looking at the issue of animal culture, social complexity, social learning and the role of individual and groups of individual animals as repositories of social knowledge. This pioneering work could have fundamental repercussions on how we approach conservation."

■   The **African Union** Animal Welfare Strategy for Africa states that "animals must be treated as sentient beings."

■   The **Treaty on the Functioning of the European Union (TFEU)** states that "the Union and the Member States shall, since animals are sentient beings, pay full regard to the welfare requirements of animals…"

■   Animal sentience has also been recognized in policy by New Zealand, Brussels and Mexico City.

Together, these recent scientific and policy developments indicate a significant change in the understanding of the linkages between humans, animals and the environment. There is now a unique opportunity to harness and build upon these developments in order to accelerate progress towards achieving the Sustainable Development Agenda.

What is Needed

Animal welfare and conservation are cross-cutting issues which, if positively addressed, can accelerate the implementation of the Sustainable Development Agenda. This can be accomplished by the incorporation of the care, protection and conservation of animals into global, regional and national sustainable development policies, plans and strategies.

What is in this Booklet:

This booklet will take a closer look at the connections between the welfare and conservation of animals and the Sustainable Development Goals (SDGs) under review at the 2019 High Level Political Forum (HLPF):

■ SDG 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.

■ SDG 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all.

■ SDG 10: Reduce inequality within and among countries.

■ SDG 13: Take urgent action to combat climate change and its impacts.

■ SDG 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.

■ SDG 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development.

In addition, for each SDG, this booklet provides examples of case studies showcasing successful projects which simultaneously address human and animal wellbeing problems, while contributing to the implementation of the SDGs.

Image: young orangutans in Kalimantan, Indonesian Borneo. Courtesy Animal People, Inc. All rights reserved.   5

Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

Unsustainable exploitation of the Earth's resources, anthropogenic climate change and other forms of environmental damage owe largely to cultural beliefs in human supremacy over nature. Most ecosystems and animals are controlled by people trained in disciplines that tend to teach that a natural ecosystem has a value of zero until it is developed for human industry. Further, those with the least access to education often see consuming all their region's animal and ecological resources as the only path to survival. However, science has long discredited the notion of human supremacy, instead demonstrating humans' cognitive similarities, ecological interdependence, and biological relationships with other organisms.

In order to develop peaceful and stable societies and halt environmental degradation, it is important that education is used to ensure positive societal and environmental outcomes. Education is fundamental to the achievement of any form of societal progress, as changing the way people think is the only way to permanently change the way they behave – as individuals, governments, or institutions; toward one another, animals, or the environment.

While there is much talk about "quality education," this is generally interpreted as education designed to pass exams and secure work. Truly effective education would also reach learners' hearts and hands, as well as develop their minds. Education does not yet effectively teach learners how to "flourish," or build values and empathy.

Target 4.7 aims to ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development. The field of Humane Education is a tried and tested vehicle for relieving the shortfalls of traditional education and which holds unique potential in contributing to Target 4.7.

The Academy of Prosocial Learning defines humane education as follows:

"Humane education encourages cognitive, affective, and behavioral growth through personal development of critical thinking, problem solving, perspective taking, and empathy as it relates to people, animals, the planet, and the intersections among them. Education taught through the lens of humane pedagogy supports more than knowledge acquisition, it allows learners to process personal values and choose prosocial behaviors aligned with those values."

Because development will not be sustainable unless future citizens develop values and empathy and are willing to take action to make the world a better place, humane education must be integrated into curriculums at every academic level, from young childhood up through university. It is also important to work with the private sector to develop economic incentives and models that highlight the long term benefits of a humane and sustainable world which is best for society, business, people and animals. Doing so will yield immense benefits not just for animals, but for environmental protection and peaceful relations between humans as well. For example, children taught to treat animals with compassion also display improved self-esteem and altruistic behavior toward other people. Conversely, exposure to animal cruelty can result in emotional desensitization and increased likelihood of committing violent crimes.

Humane education programs that highlight topics such as animal intelligence and ecological interdependence help to combat the global environmental crisis at its source, producing a better informed populace equipped to enact responsible policies for a sustainable future. Humane education also fosters personal growth and improved interpersonal relations, as confirmed by assessments of specific humane education programs.

Humane education program run by Bali Street Dog Foundation in Bali, Indonesia circa 2005

Improving Malawi schools with humane education

Problem for People

Primary school in Malawi has been free since 1994, yet students still face severe obstacles to learning. Schools are overcrowded, with over 100 pupils per classroom. Rote methods of teaching are standard, detracting from individual growth and motivation. Drop-out rates are extremely high, with only 35% of children completing primary school. Humane education – which teaches respect for all living creatures – can improve learning and reduce harmful behaviors. However, humane education is not part of traditional curricula in Malawi, and remains rare even in developed countries.

Problem for Animals

In Malawi, there is little access to veterinary care, and low awareness of animal welfare issues, such as spay/neuter and vaccination for companion animals or proper care for working equines. Neglect, abuse, and maltreatment of animals result when people do not understand animals' needs or ability to suffer, or are unaware of wider issues, such as inhumane treatment of animals in agricultural production. Promoting knowledge of, and compassion toward, other creatures can drastically improve animals' health and welfare.

Location

Lilongwe and Dedza, Malawi

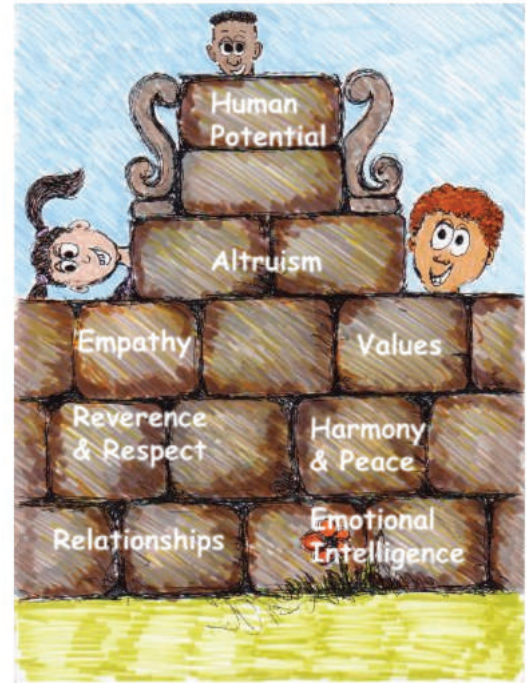## Dates

2016-2017 (pilot project)

Parties Involved

World Animal Net, the Lilongwe SPCA, RSPCA, Intercultural Center for Research in Education (INCRE), the Centre for Education Training and Research at the University of Malawi (CERT), Link Community Development (LINK), Lilongwe Urban and Dedza Rural district education authorities

Solution

World Animal Net's Malawi pilot project was developed using lessons and pedagogy designed to inspire positive attitudes, values, and action through the exploration of a wide range of issues including social justice, human relationships, the environment, and animal welfare. In developing the program, key values and qualities important to happiness and wellbeing were also identified and included: compassion and kindness, altruism and service, values, wisdom, and harmony with nature. A special unit on fulfilling human potential was also added.

The result is a foundation course of 20 lessons in a comprehensive Teacher's Guide, pulling together international "best practice."

Visual from lesson developed for project

"Animal Parliament" activity in which students imagine the perspectives of other species

The pilot was subjected to full professional monitoring and evaluation. Monitoring included reporting of the outcomes of each lesson and monthly feedback interviews. Evaluation included baseline and final reports from both teachers and learners, and assessed a broad range of outcomes including: educational and class behavior, wellbeing, social skills, and qualities such as harmony with nature, compassion, kindness and altruism/service.

Because many countries face the same educational challenges, the pilot project was intended to be broadly applicable to enable replication in other country contexts.

Outcomes

■ Improved school attendance – 78% of teachers said that the pilot project definitely contributed to enhanced student attendance in school.

■ Improved levels of care and compassion for animals – 75% of teachers said pilot project participation enhanced the levels of care and compassion for animals among students.

■ Strengthened the level of respect and awareness for nature and the environment – 72% of teachers said that participating in the lessons enhanced students' levels of respect and awareness for nature and the environment.

■ Improved learners' social skills – 69% of teachers said that the pilot project enhanced how students interact with classmates.

■ Improved the level of kindness and compassion in the class – 59% of teachers said that participating in the lessons improved student levels of kindness and compassion.

■ Toolkit and Teacher's Guide created from project can be used to develop similar humane education interventions in schools and institutions worldwide, as well as monitoring and evaluation tools for future projects.

SDG Targets Met

4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes.

4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development.

Other SDGs Involved

Teaching compassion in primary schools

Problem for People

Childhood experiences with animals strongly influence behavior toward other people. Children taught to treat animals kindly are kinder toward humans too; on the other hand, children who witness animal cruelty are 8 times more likely to commit violent acts themselves. Many children in modern China lack healthy models for developing interpersonal skills. Only children in well-off families may be overly coddled, while in rural regions, 61 million "left behind children" live without any regular interaction with parents.

Problem for Animals

Human impact on animals in China has increased in recent years. Pet keeping has become popular, with Chinese people spending $25 billion per year on 92 million dogs and cats. The number of farm animals in China tripled between 1980 and 2010. China is the world's largest hub for wildlife crime. However, as of 2019 there are no animal welfare laws in mainland China. Educating people to care for animals voluntarily is necessary in the absence of legislation, and to motivate passage of new laws.

Location

People's Republic of China

Dates

2012 to present

Parties Involved

ACTAsia, participating school districts across China

Solution

ACTAsia's Caring For Life (CFL) curriculum teaches children in primary school to treat animals, the environment, and other people with respect and compassion. Based on UNESCO's "Four Pillars of Education" (Learning to Know, Learning to Do, Learning to Live Together, and Learning to Be), CFL consists of 60 units spanning all six years of Chinese primary school. Every year includes lessons in the following five subject areas:

1. The Web of Life

Students learn about the ecological relationships between living creatures and humans' impact on the environment.

2. Sentience

Students learn what it means to be "sentient" – to feel pleasure, pain, and emotions – and why others' feelings matter.

3. Care and Respect

Students learn the importance of respecting other people, and how to care for animals, especially pets.

4. Interacting with Others

Students learn how to safely and responsibly interact with people, animals, and the natural world.

5. Emotional Intelligence

Students cultivate empathy and learn how to make responsible moral decisions in their personal lives and in the world.

Outcomes

■ A three-year evaluation of the CFL program found significant gains in pro-social behavior, empathy, and concern for the environment among participants, along with reduced disruptive behaviors, relative to a control group (Samuels 2018).

■ Caring For Life has now been introduced to 140 schools across 19 provinces of China.

■ Some 78,000 students participated in CFL programs between 2012 and 2018.

■ ACTAsia recognized by the Government of China as one of the "Top 10 Most Influential Organizations in China" in 2016.

■ As of 2019, preparations are underway to introduce Caring For Life curricula in Pakistan, Nepal, and Cambodia.

SDG Targets Met

4.2 By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education.

4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development.

4.A Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all.

Other SDGs Involved

Helping veterinarians to help animals

Problem for People

Veterinary professionals in developing countries frequently struggle due to limited education and training. Existing programs often do not cover animal welfare, restricting professionals' ability to effectively reduce animal suffering. Without animal welfare training, vets also cannot fully educate farmers, breeders, and others economically dependent on animals how to properly care for them, resulting in financial loss due to preventable health issues. Veterinary professionals without comprehensive training are poorly equipped to contain zoonotic diseases threatening both animal and human lives.

Veterinary students and donkey at Visele College of Animal Health in Arusha, Tanzania

Problem for Animals

Domestic animals cannot flourish if there are too few vets to tend their needs, or if veterinary professionals are not properly educated to care for them. Without understanding animal welfare, vets may not notice when animals exhibit signs of suffering; overlook or misdiagnose conditions of which pain is a symptom; or carry out euthanasia unnecessarily or inhumanely. Animals suffer needlessly if veterinary professionals cannot properly advise their keepers on housing, nutrition, hygiene, and other needs.

Location

Germany (administration), The Gambia, Liberia, Malawi, Tanzania, Uganda, Rwanda (planned), Sri Lanka (past), Romania (past)

Users from 52 countries have registered for online learning material.

Parties Involved

VETS UNITED; parent organizations Welttierschutzgesellschaft (WTG e.V.) and Welttierschutzstiftung (WTS); local partner NGOs and institutions of higher education

Dates

2015 to present

Solution

The VETS UNITED program, established by German NGOs Welttierschutzgesellschaft (WTG e.V.) and Welttierschutzstiftung (WTS), raises animal welfare standards worldwide by increasing the knowledge and skills of veterinary professionals.

VETS UNITED partners with local NGOs and universities, colleges, and training centers to integrate animal welfare into veterinary curricula. Methods vary by location. For example, at University of The Gambia and Gambia College, VETS UNITED delivers lectures on animal welfare directly to students; while in Tanzania, Uganda, and Liberia, VETS UNITED also trained college lecturers to integrate lessons into their own teaching.

Following establishment of animal welfare curricula in a given location, partner organizations continue to monitor for long-term success, through engagement with alumni networks and evaluation of animal care.

VETS UNITED also offers a free online Animal Welfare Course for people working or training to work in the animal health field, continuously updated to reflect best practices.
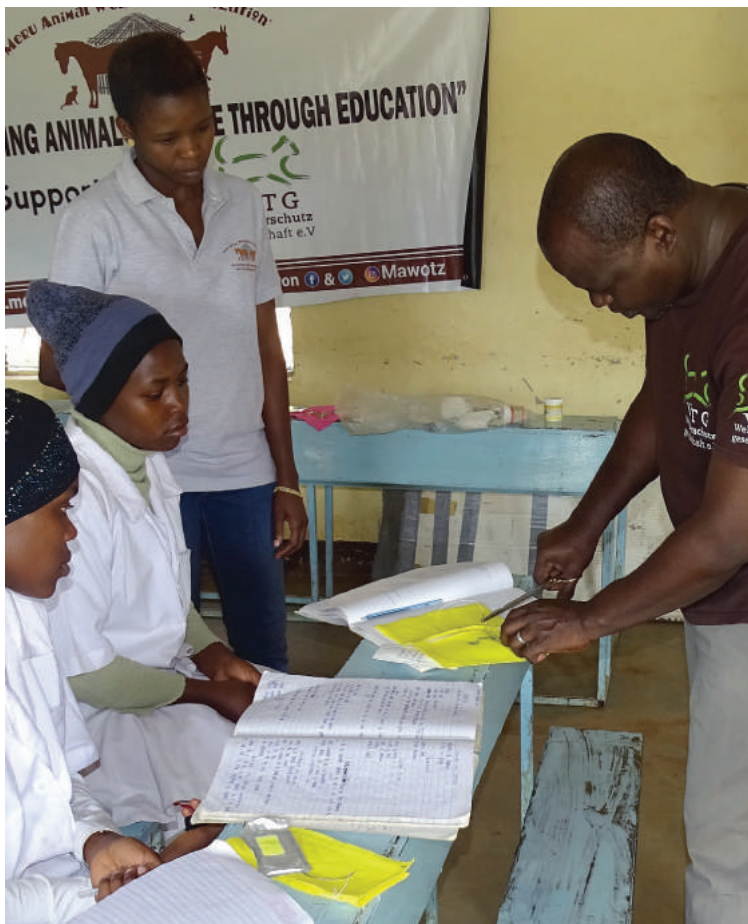
Lesson in suturing at Visele College of Animal Health

*Veterinary student suturing a dog after neutering*

Outcomes

- 1,849 veterinary professionals and students reached in 2018, a record number so far.

- Evaluation study in The Gambia showed improved animal health and welfare in work districts of livestock assistants with VETS UNITED training.

- Animal welfare course expanded to six colleges in Tanzania, with a total of 1,200 students being trained per semester nationwide.

- VETS UNITED animal welfare module officially accredited in The Gambia and currently passing last stages of accreditation in Uganda and Malawi.

- Scholarships provided to 24 socioeconomically disadvantaged students in The Gambia and Malawi, enabling them to become veterinary professionals.

- Continuous Professional Development projects starting in Uganda and Rwanda in 2019.

SDG Targets Met

4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship.

4.B By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing states and African countries, for enrollment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programs, in developed countries and other developing countries.

4.C By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing states.

Other SDGs Involved
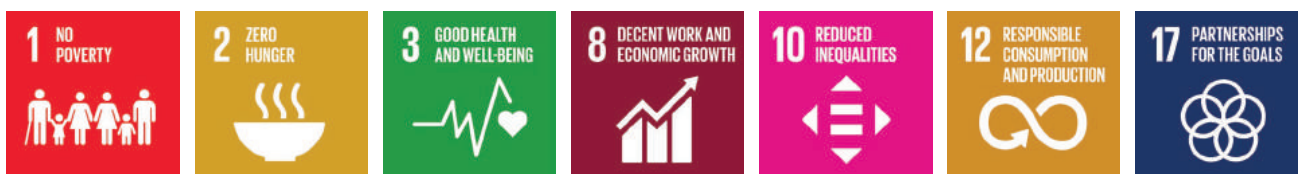
Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

600 million of the poorest people in the world rely on animals for their livelihoods. Through agriculture and tourism, animals are fundamental to economies around the world. However, trends towards industrialized animal production, dwindling wildlife populations and agro-crime pose a grave risk not only to animals, but to the people and economies that rely on them. Trade in animal products, for example, the donkey hide trade, have resulted in the decimation of donkey populations across entire regions such as Africa. Communities who rely on these animals for draught, traction and transport for selling goods at market are left without the means of achieving their livelihoods. Furthermore, continued reliance on GDP as the main indicator of economic growth is at odds with the achievement of environmental and social well-being needed for sustainable development.

Target 8.8 calls to "Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment." Yet the spread of intensive animal agriculture is not only inhumane to animals and environmentally harmful, it also results in unsatisfactory working conditions, relatively high levels of occupational hazards, including traumatic injuries and infections, as well as low wages and reduced employment. Intensive livestock systems also are highly reliant on vulnerable

migrant populations, intensifying poor labor conditions in the sector.

Target 8.9 aims to "devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products." Nature-based tourism is a substantial driver of the tourism sector. Eighty percent of all trips to Africa are for wildlife viewing. In 2018, gorilla trekking, which draws thousands of visitors yearly to Rwanda, helped create a majority of the 350,000 tourism-related jobs that year. Without stemming the global loss of wildlife and biodiversity, this incentive for tourism will also dwindle, making it impossible to meet this target. Additionally, if not properly developed at the community level, nature-based tourism can fail to deliver benefits to local communities and those furthest behind.

On a broader level, the pursuit of economic growth, as measured by GDP, is a key driver of social inequality, resource use and environmental degradation. The landmark new report from the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) documents the effect of economic growth on nature as another stark reminder of the rapid degradation of the earth. The IPBES Chair, Sir Robert Watson, said: "The health of ecosystems on which we and all other species depend is deteriorating more rapidly than ever. We are eroding the very foundations of our economies, livelihoods, food security, health and quality of life

worldwide." Unlimited economic growth simply cannot be sustained in a world with finite resources.

Many industries depend on animals for their ability to provide inclusive and decent employment to billions of people. If the conservation, protection and welfare of animals are ignored, and GDP continues to be prioritized, this will have dire consequences on the future for those furthest behind.

To achieve Target 8.8, governments must do more to ensure that agricultural production systems make a positive contribution to sustainable livelihoods and decent work. This means that disincentives for intensive systems which contribute to poor labor, environmental and animal welfare outcomes must be implemented. These can be in the form of removal of unfair incentives such as subsidies to these forms of production, internalizing externalities and by strengthening and enforcing labor policies. On the other hand, small-scale, high welfare, agroecological production provides local food security and labor opportunities. Small-scale systems, when well-managed, can also produce development opportunities for rural populations. This type of production can be supported by improving extension services and training, providing financial incentives, and enabling smallholder access to markets. Further, implementing good practices for animal welfare can bring significant benefits to the agricultural sector, including opportunities in market differentiation and segmentation, production, national reputation and trade, as well as livelihoods, sustainability and development. Policies to fight agro-crime and protect communities from theft must also be

implemented to ensure communities have the means to strengthen their livelihoods.

Strengthened implementation and enforcement of, as well as eliminating gaps in conservation policy will enhance opportunities for nature-based tourism. Additionally, increasing protected areas for wildlife and ecosystems, as well as improving protection enforcement in existing areas, is key. Policies will also need to ensure that well-regulated wildlife viewing is humane and ethical, and does not negatively impact habitats, species or the well-being of individual animals. Developing ecotourism plans with community involvement ensures that local communities reap the benefits from this sector.

Governments must shift from a single-minded focus on economic well-being, as measured by GDP, towards other more qualitative aspects of development and well-being. "Through 'transformative change', nature can still be conserved, restored and used sustainably." This transformative change requires "*a fundamental, system-wide reorganization across technological, economic and social factors, including paradigms, goals and values*." The 2017 NGO Major Group position statement put it well: "Notions of development based entirely on economic growth present a myopic view of progress and must be discarded, and corporations must be held to account for their social and environmental records. We call for a new development paradigm which furthers the well-being of humans, nature and animals, and which sees as its ultimate aim the achievement of equity and justice, to 'leave no one behind.'"

Creating jobs saving wildlife in Borneo

Problem for People

More than 15 million people live in Kalimantan, or Indonesian Borneo. Many depend on forest ecosystems for subsistence and income, with little access to education or alternative livelihoods. These communities are vulnerable to forest fires, used deliberately to clear land for crops (especially oil palm) but which often spread out of control. In 2015, forest fires caused some 500,000 respiratory tract infections across Indonesia, and in October 2015 released more carbon dioxide into the atmosphere than all economic activity in the U.S. or China.

Problem for Animals

Deforestation threatens many species of animal, including the critically endangered Bornean orangutan. Orangutans are highly intelligent, and mothers care for their young longer than any other non-human animal. 1 in 6 Bornean orangutans live in areas already marked for oil palm cultivation, and the species' population has declined by up to 71% since the 1960s. Orangutans who survive land clearing by logging or fire often return to their former habitats, where they may be killed to prevent crop damage or captured for sale into the wildlife trade.

Fire patrol team transporting firefighting supplies

Female orangutan at Samboja Lestari rehabilitation center

Location

Kalimantan, Indonesia, on the island of Borneo

Dates

1991 to present

Parties Involved

Borneo Orangutan Survival Foundation (BOSF); PT. Restorasi Habitat Orangutan Indonesia (PT. RHOI); Natural Resources Conservation Agencies (BKSDAs) of East and Central Kalimantan

Solution

Borneo Orangutan Survival benefits people and wildlife alike by promoting sustainable livelihoods for communities in Kalimantan, reducing dependence on economic activites that degrade or destroy natural orangutan habitat. Strategies are tailored to the specific needs of each community, as determined by CNAs (community needs assessments) consisting of two main parts:

Participatory Rural Appraisal engages local people in evaluating their own needs, through focus groups, storytelling, mapping, and other methods.

Socio-economic surveys are conducted by BOS personnel to generate hard data on social and economic factors and community impact on wildlife habitat.

Potential solutions to a community's needs may include:

- Direct employment with BOSF, whose programs also include orangutan and sun bear rescue and rehabilitation, forest restoration, habitat protection, and ecotourism.

- Assistance developing strategies for sustainable livelihoods given local assets and constraints, such as fruit and vegetable farming, waste collection, or handicrafts.

- Providing training and resources to conduct fire patrols and land restoration, protecting community and natural surroundings from destruction.

Staff at Samboja Lestari, Borneo Orangutan Survival's orangutan and sun bear rehabilitation center and ecolodge, in 2015

Outcomes

- 396 rescued orangutans successfully released into the wild, and counting, since 2012. 515 rescued orangutans and 61 sun bears currently in BOSF's care.

- Nearly eight square miles of native forest restored on formerly degraded land at Samboja Lestari. More than 1,778 square miles of forest managed by BOSF total, in cooperation with government and PT. RHOI, a company established by BOSF.

- 427 staff employed directly by BOSF across all programs at end of 2018.

- Community development programs conducted in 12 villages near orangutan habitat in Central and East Kalimantan as of 2017.

- Micro credit development program started by BOSF in Timpah Village, Central Kalimantan, is now self-funded by the community.

SDG Targets Met

8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavor to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead.

8.5 By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value.

8.9 By 2030, devise and implement policies to promote sustainable tourism that creates jobs and promotes local culture and products.

Local community members growing seedlings for reforestation in Mawas Conservation Area

Other SDGs Involved

| 1 NO POVERTY | 2 ZERO HUNGER | 3 GOOD HEALTH AND WELL-BEING | 10 REDUCED INEQUALITIES | 11 SUSTAINABLE CITIES AND COMMUNITIES | 12 RESPONSIBLE CONSUMPTION AND PRODUCTION | 13 CLIMATE ACTION | 15 LIFE ON LAND |

Reduce inequality within and among countries

Oppression of human populations and exploitation of non-human animals have often been closely linked. For example, economic desperation may drive marginalized people to adopt livelihoods that exploit animals, such as wildlife poaching and trafficking and low-wage, high-risk employment such as slaughterhouse work.

Target 10.2 aims to empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status. Intensive agricultural systems correlate with negative effects on wealth distribution. In the United States, industrialized agriculture has resulted in lower relative incomes for farm workers and greater income inequality and poverty. Further, the agricultural sector in most countries is highly reliant on migrant labor – in California, for example, almost 90% of workers are migrants. Workers in the intensive animal production sector struggle to live above the poverty level and provide a decent quality of life for their families, despite the fact that their jobs are often associated with high rates of physical injury and psychological trauma. This reliance on vulnerable populations, especially migrants, is common to the animal agriculture industries of many countries, and perpetuates abuses in the sector. Exploitative industries employ millions of people and hundreds of thousands of animals in hazardous conditions, for example, the brick-making industry which is the backbone of urban development throughout South Asia. Despite the impact of such industries on human and animal

welfare, as well as their environmental impact, owners are rarely held to account.

Exploitation of wildlife is also closely tied to economic inequality. A 2017 survey of poachers in Tanzania found that nearly 80% cited shortage of food and/or income as their major reasons for poaching, while 96% stated they would give up poaching if alternative livelihoods were available.

Target 10.3 aims to ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard. Discriminatory policies exist in both the agricultural and hunting industries. Various policies force family and small-scale farmers to face vulnerable futures due to the rise in industrial agriculture. Corporate concentration of agricultural inputs, production, processing and distribution, known as vertical integration, has increased substantially in recent decades, giving these corporations a major advantage over small to medium-sized farmers. Many agricultural subsidies provide further unfair price advantages to large enterprises. Producers are also not held responsible for external costs such as social and environmental impacts of their production practices, including pollution, which harms local communities and often uses taxpayers' resources if and when addressed.

The current food and farming system leads to unfair competition and inequalities between countries as well. For example, United States agribusiness corporations have exported food at

artificially low prices, widening the economic divide between the global North and South.

Alternatively, certain wildlife "sustainable use" policies rely upon and exacerbate existing inequalities. For example, the benefits of trophy hunting for local economies are commonly exaggerated. The hunter advocacy group Safari Club International's own statistics show that trophy hunters account for less than 2% of tourist expenditures in the countries they visit, and around 0.03% of total GDP. Meanwhile, encouraging trophy hunting while prosecuting poaching aggravates racial inequality, particularly in nations like South Africa and Zimbabwe with painful histories of racial discrimination. Legal trophy hunting upholds a de facto system which rewards wealthy trophy hunters who kill wildlife for sport, while punishing poor local communities who hunt for food or economic survival.

While Target 10.4 calls for the adoption of policies, especially fiscal, wage and social protection policies to progressively achieve greater equality, industries that profit off the exploitation of animals, such as animal agriculture and the hunting industry, are economically and politically powerful, and can easily utilize their influence in government to obstruct progressive reforms and regulations. Conversely, the human groups most negatively impacted by these same industries – Indigenous people and racial and ethnic minorities – typically lack adequate representation in government. While there are signs that the tide of public opinion is shifting against trophy hunting and intensive animal production, animal agriculture and the hunting industry remain profitable and politically powerful.

Policies can be adopted which invest in training and support for smallholder farmers and enable

them to compete more successfully with large agricultural enterprises. Ensuring that corporations pay the full cost of their production impacts, such as environmental pollution, as well as the elimination of subsidies to harmful industries can also help level the playing field.

Wage floors and worker safety and wellbeing protections can help reduce labor abuse of vulnerable populations. Business owners and managers should be held to account for the welfare and well-being of both the employees and animals on which they depend. Working in partnership or through consortia-based approaches to highlight cross-cutting issues leads to more comprehensive action plans for tackling abuses in exploitative industries, as well as creating more momentum around the movement.

Governments, regulators and corporations must provide adequate training for people working in animal farming, transport and slaughter. This will help increase their competence and skills, make their jobs more rewarding and ensure animals are treated humanely, benefiting both humans and the animals under their care. The implementation of good animal welfare agricultural practices will also increase the competitiveness of smallholders in the market.

Policies which promote sustainable local livelihoods and food security can play a role in stemming wildlife poaching and crime. Furthermore, policies which alienate local communities from their land and resources and privilege use to wealthy, foreign interests should be lifted.

Empowering a former bear dancing tribe

Problem for People

The Kalandars are a nomadic people indigenous to India, Pakistan, and Afghanistan. Historically, Kalandars worked as court entertainers, and "bear dancing" has long been their main trade. Yet without economic diversification, Kalandars fell into poverty in modern times, using dancing bears to beg from tourists or barter for food from other rural communities. Poverty exacerbates other inequalities in Kalandar society, including lack of education and exploitation of women and girls, who until recently were often married off as young as 12 to reduce families' financial burden.

Problem for Animals

The sloth bear is a vulnerable species found only in India, Nepal, and Sri Lanka. Sloth bears used for dancing are poached from the wild as cubs, and their mothers typically killed. Poachers formerly sold as many as 200 cubs annually to Kalandar bear handlers. Captive bears have their muzzles pierced and a rope threaded through the wound; when they "dance" it is actually a pain response to their handler tugging the rope. Bears are also controlled via castration and removal of their canine teeth, to reduce aggression and prevent them from fighting back.

Location

India

Dates

2002 to present

Parties Involved

Wildlife SOS; partner organizations International Animal Rescue, One Voice, and Free the Bears; state governments and forest departments of Andhra Pradesh, Haryana, Karnataka, Madhya Pradesh, Rajasthan, Uttar Pradesh, Chhattisgarh, and West Bengal

Solution

Wildlife SOS' Kalandar Tribal Rehabilitation Project seeks to break the link between poverty and wildlife exploitation, ending reliance on bear dancing and other activities harmful to wildlife by providing sustainable development to Kalandar communities. Services include:

Alternative livelihoods. Kalandar men who voluntarily surrender their dancing bears receive training to work in other professions – as farmers, drivers, mechanics, craftsmen, shopkeepers, etc. – and are eligible for startup funding and coaching to launch their own businesses.

Right: Kalandar man working as a toy merchant with seed funding from Wildlife SOS

Women's empowerment. Wildlife SOS fosters gender equality and community prosperity by providing livelihood support for women, assistance with health and hygiene, advocacy on behalf of widows, and funding adult women's marriage costs to dissuade child marriage.

Left: Kalandar women employed making bags and merchandise for sale by Wildlife SOS

Community Support. Services provided on a community level include improving infrastructure and access to clean water and electricity, applying for government healthcare and subsidies, supplying emergency assistance, supporting elder care, and funding education for both boys and girls.

Right: stationary distributed to Kalandar children at the beginning of each new school year

Outcomes

- 628 sloth bears voluntarily surrendered by their handlers. Last bears surrendered in 2009, with no known cases of bear dancing in India since.

- Over 3,000 Kalandar families and 10,000 individuals in eight states assisted via Tribal Rehabilitation Project since 2002.

- 40% of Wildlife SOS' own workforce now consists of Kalandar employees.

- Typical salaries for Kalandar men doubled before and after Wildlife SOS intervention, from $800 to $1600 per year.

- Over 2,000 women provided livelihood assistance. Kalandar women in Karnataka now fully financially independent, following training in spice grinding and manufacture of snack foods and banana thread.

- Nearly 6,500 Kalandar boys and girls enabled to graduate primary and secondary school to date.

SDG Targets Met

10.1 By 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average.

10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status.

Sloth bear climbing at Wildlife SOS sanctuary in Agra, Uttar Pradesh

Other SDGs Involved

1 NO POVERTY 3 GOOD HEALTH AND WELL-BEING 4 QUALITY EDUCATION 5 GENDER EQUALITY 8 DECENT WORK AND ECONOMIC GROWTH 15 LIFE ON LAND

Take urgent action to combat climate change and its impacts

Biodiversity forms the delicate web of life and backbone of viable ecosystems on which humanity depends for subsistence, security, health and wellbeing. Climate change is already having a negative impact on animals and their habitats. Likewise, the loss of animal and plant species can alter the composition of ecological communities, which in turn can harm ecosystem functions and weaken the services nature provides to people, including the provision of clean water and air. Biodiversity loss also poses a serious risk to global food security by undermining the resilience of many agricultural systems to threats such as disease and climate change.

The recent Global Assessment spearheaded by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) sheds light on the strong relationships between climate change, the loss of biodiversity and human wellbeing. The landmark study identifies climate change as one of the major direct drivers of species extinction – third after changes in land and sea use and overexploitation. It also reveals that climate change is projected to greatly increase the number of species under threat, by exacerbating other drivers of biodiversity loss. Conversely, species loss also exacerbates climate change, by undermining the integrity of the same natural systems that can help to mitigate global warming.

The increase in both frequency and intensity of natural disasters, resulting in extreme temperatures, rising sea levels, wildfires, prolonged droughts and floods, is severely affecting both domesticated and wild animals. The IPBES assessment estimated that a million animal and plant species may be at risk of extinction due to growing human pressures in the coming years, while the 2018 Living Planet Report highlighted that global populations of wild vertebrates decreased by 60% globally over the past 40 years.

The decline in biodiversity will undermine progress toward 80% of SDGs as well as other goals, including those specified in the Paris Agreement adopted under the United Nations Framework Convention on Climate Change, and the 2050 Vision for Biodiversity.

From shrinking habitats of keystone species to increased resource scarcity driving human-wildlife conflict, changes in climate and its adverse consequences will become even more acute in years to come, compromising the wellbeing of both humans and non-human species.

Tolerance to environmental changes varies from one species to another, but many are unable to cope with the rapid pace of climate change, through either evolutionary or behavioural processes. Some mammals have very specific climatic adaptations, such as requirements for snow, sea ice, or temperatures within a narrow range for hibernation. Some have distributions that are dependent on climate. Climate change can also alter a species' food supply or its reproductive timing, thereby affecting its fitness. A recent study also suggests that climate change could "raise stress levels" of endangered

mountain gorillas, compounding other ongoing threats including hunting, habitat destruction and the impacts of nearby human conflicts.

Human-driven climate change is also a major contributor to insect loss. A recent study found that global warming contributed to a staggering 98% decline in Puerto Rico's tropical rainforest insect population between 1976 and 2013. This loss of insect species has devastating impacts on animals who rely on them as a food source. The loss of pollinating insects and those needed to keep soils healthy also has catastrophic consequences for agriculture.

Agriculture and land-use change (land clearing and fertilization for crop and livestock production) are responsible for around one quarter of all greenhouse gas emissions, with animal-based food production contributing 75% of that, or 14.5% of all greenhouse gases. Intensive agriculture has increased food production at the cost of material and non-material contributions from nature. In addition, it damages both animal welfare, as more animals are subjected to intensive rearing systems, and human health in countries where animal-based foods are overconsumed.

According to the Food and Agriculture Organization of the United Nations (FAO), more than 800 million people are suffering from hunger, regularly not getting enough food to conduct an active life. Meanwhile, the World Health Organization (WHO) estimates that almost 2 billion people are overweight and around 650 million are suffering from obesity. As the global human population is projected to rise to 9.2 billion people by 2050, this will require a 60% increase in global food production, using current production and distribution systems. As meat intensive "western diets" are becoming increasingly popular in the developing south,

emissions from the livestock sector are projected to increase even faster in the near future. If food-related emissions are to decrease and global temperature rises are to be maintained below 2°C to achieve the Paris Agreement targets, a significant reduction in meat and dairy consumption is key.

Furthermore, a recent report by the International Labour Organization (ILO) warned that up to 80 million jobs are at risk of being lost by 2030 due to climate change, with farmers "set to be worst hit by rising temperatures." These losses will impact not only the people working in the agriculture sector but also the very animals they depend on for their livelihoods. Unless animal agriculture in itself is recognized and dealt with as a major contributor to rising temperatures, climate change and its deleterious effects on humans and animals cannot be mitigated.

According to the IPBES assessment, "feeding the world in a sustainable manner, especially in the context of climate change and population growth, entails food systems that ensure adaptive capacity, minimize environmental impacts, eliminate hunger, and contribute to human health and animal welfare."

The global dialogue on reducing greenhouse gas emissions in animal agriculture has thus far failed to adequately consider animal welfare in climate change mitigation strategies. Intensive animal production systems not only pose myriad risks to the environment and public health, but also encourage the overconsumption of meat and dairy products to unsustainable levels which will only continue to amplify the sector's already substantial contribution to climate change.

However, agriculture can become a contributor to the mitigation of and adaptation to climate change, and can support biodiversity

conservation, while also improving livelihoods and safeguarding human health. There is potential for climate mitigation through improved manure and land management, and by reducing the overall number of animals farmed through reductions in food waste and the adoption of less meat-intensive diets. An increase in the amount of plant-based proteins in western diets and a reduction in the consumption of resource-intensive animal products is key to feeding an increasing world population, while limiting the impact of agriculture on climate change.

Concrete actions that governments, farmers and consumers can take include promoting agro-ecological solutions and practices, supporting agrobiodiversity, consuming locally-sourced, diverse and seasonal foods, removing the massive subsidies to the livestock sector and implementing fiscal tools such as taxation and internalizing externalities. These actions will increase community and ecosystem resilience to climate change, improve dietary health, and increase food security while improving the welfare of animals.

Animals are not only affected by climate change but they are also critical to the efforts to mitigate its impacts. Healthy ecosystems enable adaptation to climate change, while poor animal welfare and the loss of animals and plants exacerbate the negative impacts of climate change. Healthy ecosystems are imperative for the earth's capacity to sequester and store carbon, and there is ever increasing evidence that animals play a key role in the maintenance of critical ecosystems.

Mammals play dominant roles in many ecological contexts. Large herbivores, such as elephants and gorillas, play a particular role in distributing seeds to regenerate forests. A study on the role of the western lowland gorilla in seed dispersal in tropical forests showed that the depletion of this critically endangered keystone species constitutes a major threat for the remaining forest habitats, and all of the species that rely on them.

Stabilizing the climate is only possible over the long-term by ensuring the health and protection of animals and their habitats. The biodiversity and climate change crises are inseparable. It is not possible to address these pressing sustainability issues in isolation from one another.

Protecting biodiversity can make substantial contributions to climate change mitigation and adaptation, but current efforts to stem global temperature rises can have negative impacts on biodiversity. Nature-based climate solutions are claimed to offer 37% of the cost-effective carbon dioxide mitigation needed between now and 2030. However, nature-based climate solutions will not automatically translate into good biodiversity outcomes (e.g. the large-scale deployment of bioenergy plantations and afforestation of non-forest ecosystems), hence the need to take into account the best available science and evidence.

Climate change has important implications for conservation priorities and approaches. While addressing historic threats to species such as habitat loss and overexploitation, it is becoming increasingly clear that it is necessary to understand how climate change also harms various species, and why these species are key to mitigating the impacts of climate change.

Promoting plant-based diets across India

Problem for People

Consumption of animal products has historically been low in India. However, meat consumption is rising at about 8% per year. Producing one kilogram of chicken releases seven times more greenhouse gas emissions than a kilogram of lentils, while a kilogram of mutton releases 24 times more GHGs and requires twice as much water as lentils. Rising demand for animal agriculture, one of the top two sources of GHGs globally, increases India's contribution to climate change, while aggravating food and water insecurity and climate-related disasters such as droughts, floods, and heat waves.

Protesting for climate action

Chicken awaiting slaughter in Mangalore

Problem for Animals

There are more than 500 million animals currently farmed for food across India. Many are raised in intensive or "factory" farms, which maximize output at the cost of animal welfare, often requiring antibiotics to survive until slaughter in such overcrowded and unsanitary conditions. Although cow slaughter is banned in many states, cows are commonly exported to slaughterhouses in neighboring states or countries, making India the world's largest exporter of beef. Climate change imperils wild ecosystems in India, such as coral reefs in the Lakshadweep Islands, which have already declined 40% since 1998.

Location

India

Dates

2013 to present

Parties Involved

Federation of Indian Animal Protection Organisations (FIAPO) and 125+ member NGOs; food companies collaborating via Corporate Engagement program

Solution

The Federation of Indian Animal Protection Organisations (FIAPO) strives to reduce both greenhouse gas emissions and suffering of farm animals via dietary change, promoting plant-based (vegan) alternatives to meat, dairy, and eggs. FIAPO targets both ends of the food supply chain with two separate yet complementary campaigns:

The **Living Free** campaign educates consumers about the impacts of their diets on the environment, animal welfare, and human health, while advocating plant-based diets as a more sustainable alternative. FIAPO supports local activists in conducting Living Free activities, offering a toolkit of fifteen different methods including leafleting, video screenings, virtual reality, and children's activities.

The **Corporate Engagement** program works with restaurants and other food companies to promote plant-based offerings. FIAPO reaches out to businesses individually, tailoring its strategies to fit each company's market niche, brand image, corporate values, and the beliefs of its owners and major employees. Collaborations range from replacing single ingredients to creating full vegan menus.

FIAPO activists leafleting

Sharing footage of animal suffering in intensive farms

Outcomes

- Since launch in 2013, Living Free has reached more than one million people in 77 cities.

- Assessment of Living Free outreach methods found significant rates of change:

  o 4.26% of leaflet recipients in a college classroom setting reported lifestyle changes two months afterward, of whom 75% had reduced or eliminated their consumption of animal products.
  o By contrast, 4.4% of control group had changed from a vegetarian diet to eating meat two months later, showing effectiveness of FIAPO intervention at not only motivating positive change but dissuading harmful change.
  o 13.12% of video outreach recipients and 32.09% of virtual reality recipients showed increased concern or intent to change lifestyle immediately afterward.

- As of June 2019, 22 food companies have introduced new plant-based alternatives to animal products as a result of FIAPO corporate engagement.

SDG Targets Met

13.3 Improve education, awareness-raising and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.

Other SDGs Involved

Saving cows and communities from floods

Problem for People

Climate change is already increasing the severity of extreme weather events. In August 2015, unusually heavy monsoon rain caused massive flooding across Myanmar, killing 132 people and displacing 1.6 million. The agriculture sector, 37.8% of Myanmar's GDP, was especially hard hit, with 1.29 million acres of farm land flooded and more than 242,000 farm animals drowned. Although the government of Myanmar has made strides improving its disaster management system, it remains dependent on foreign and NGO funding for most of its recovery efforts.

Problem for Animals

15 million cattle live in Myanmar, most of whom are used as draught animals for agricultural tasks such as plowing, threshing, and transport. Myanmar is home to two native breeds of cow: the red Shwe Ni and the white Pyar Sein. Some 20,000 cattle were killed during the 2015 floods. Unlike other domestic animals, cows are too large to take refuge in stilted structures. Cows who manage to escape drowning remain vulnerable to infectious diseases spread by contaminated water, and crippling hoof rot from having to swim or stand in water for extended periods.

Aftermath of August 2015 floods in the Ayeyarwady region of Myanmar

Location

Ingapu Township, Myanmar
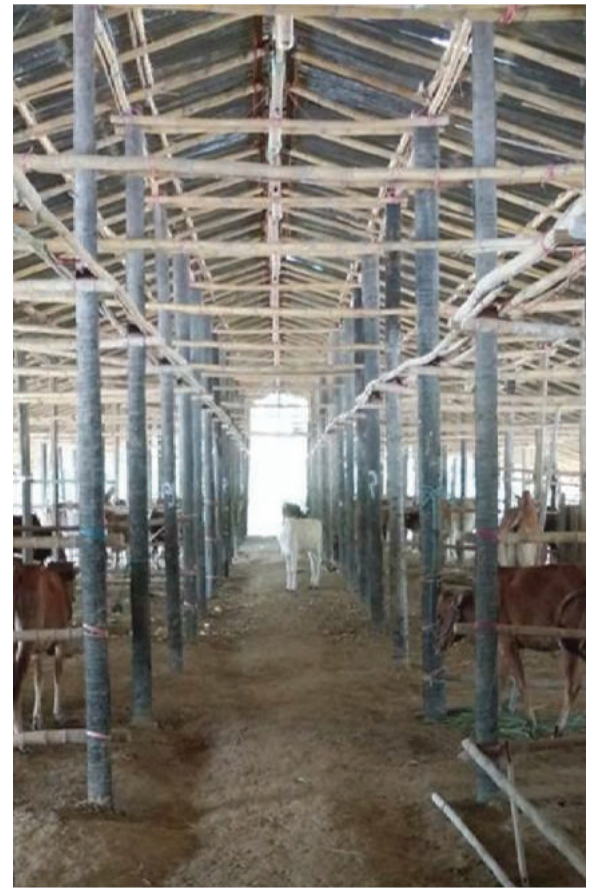
Dates

2015 to present

Parties Involved

International Fund for Animal Welfare (IFAW); partner groups Giving a Future Animal Aid and Myanmar Veterinary Association; Ingapu Township Animal Disaster Risk Reduction Committee; Government of Myanmar Livestock, Breeding and Veterinary Department

Solution

Following the August 2015 floods in Myanmar, the non-profit International Fund for Animal Welfare (IFAW) partnered with Giving a Future Animal Aid and Myanmar Veterinary Association to provide emergency aid to farmers in caring for their animals. The Safeland Project was conceived in consultation with local stakeholders at Ingapu Township, as a means of reducing animal suffering during future disasters.

The Safeland was designed as an earthen mound where cows could be taken for refuge during floods. Construction began in January 2016 in the area of Ingapu Township worst hit by the 2015 floods, with the Livestock, Breeding, and Veterinary Department (LBVD) assisting in purchasing land. Local workers were employed to build the structure, with guidance from an IFAW engineer. The Safeland was completed in June 2016, with a housing capacity of up to 400 cows. Improvements were made in 2017, including a sturdier entry ramp and the addition of an indoor shelter and pump to supply clean drinking water.

Inside the Safeland

Farmers leading their cows to refuge on the Safeland during 2016 floods

Outcomes

■ Large enough to shelter up to 400 cows, the Safeland substantially reduced animal deaths and economic losses in Ingapu Township during the 2016 monsoons relative to 2015.

■ Farmers now able to pool funds for feeding animals housed on Safeland during floods, reducing costs compared to caring for them individually.

■ In 2018, IFAW finished construction of two additional Safeland projects in Ayeyardwady region of Myanmar. Government of Myanmar LBVD also constructed a separate Safeland of its own.

■ Four new Safeland projects under construction by Government of Myanmar Livestock, Breeding and Veterinary Department in 2019, for a total of ten nationwide.

SDG Targets Met

13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.

13.B Promote mechanisms for raising capacity for effective climate change-related planning and management in least developed countries and small island developing states, including focusing on women, youth and local and marginalized communities.

IFAW's second Safeland location

Other SDGs Involved

1 NO POVERTY

3 GOOD HEALTH AND WELL-BEING

8 DECENT WORK AND ECONOMIC GROWTH

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE

11 SUSTAINABLE CITIES AND COMMUNITIES

17 PARTNERSHIPS FOR THE GOALS

Fighting emissions with food forests

Problem for People

Climate change aggravates food and water insecurity worldwide, often in tandem with other forms of environmental destruction. In India, unsustainable farming and urban growth have degraded land and depleted aquifers, worsening droughts and leading to acute shortage of water. In Haiti, deforestation to produce charcoal erodes soil, polluting rivers, degrading land, and reducing agricultural yields. In Kenya, deforestation and overexploitation of land for animal grazing, combined with repeated droughts, have placed over one million people at risk of severe hunger.

Ricord's iguana, critically endangered in Haiti

Girl playing in river at Sadhana Forest India

Problem for Animals

Demand for animal products is growing in India, increasing the number of animals in farms as well as accelerating water use and climate emissions. In May 2019, record drought required the government to feed and water 850,000 cattle in the state of Maharashtra alone. Deforestation in Haiti has displaced species like Bicknell's thrush, while food insecurity drives hunting of critically endangered animals like Ricord's iguana. In some regions of Kenya, up to half of all farm animals have died in recent droughts, which also imperil wildlife as waterholes and vegetation dry up.

Location

Tamil Nadu, India; Sud-Est department, Haiti; Samburu County, Kenya

Dates

2003 to present (India), 2010 to present (Haiti), 2014 to present (Kenya)

Parties Involved

Sadhana Forest; international sponsors A Well-Fed World, Plenty Food, and Ahimsa Eco Solutions; local partner organizations India Green and Wild (India) and GPLA (Gwoupman Popile Pou Lavni Ansapit) (Haiti); United Nations bodies UNDP (United Nations Development Programme), UNCCD (United Nations Convention to Combat Desertification), and UNFCCC (United Nations Framework Convention on Climate Change)

Solution

Sadhana Forest is a volunteer-based organization that aims to restore forest cover in environmentally degraded areas, with campuses in India, Haiti, and Kenya. At each campus, volunteers plant indigenous trees and other vegetation, yielding the following benefits:

Habitat restoration. Planting forests of native plant species creates space for native ecosystems to recover and flourish – such as the 91 bird species of India's Tropical Dry Evergreen Forest – and prevents soil erosion, improving the quality of surrounding land and water.

Right: Samburu women at tree planting workshop held by Sadhana Forest Kenya

Building food security. Plant species are selected to create "food forests," which from forest floor to canopy can yield up to seven layers of different foods, such as the Maya nut in Haiti, which stores up to five years and produces 100 times more nutrition than corn per acre.

Left: Maya nuts collected at Sadhana Forest Haiti

Combating climate change.
Sadhana Forest plants oxalogenic trees, which sequester carbon permanently into the soil as limestone. Sadhana Forest also combats climate change by promoting plant-based diets, as plant foods produce only a fraction the emissions of animal products.

Right: planting a tree at Sadhana Forest Haiti

Outcomes

- 2016 study supported by Sadhana Forest found that a single Maya nut tree can sequester 267 kilograms of carbon dioxide from the atmosphere per year, and a one hectare plantation 106,800 kilograms (Rowley et al. 2016).

- 35,000 plants of 170 different indigenous species planted on 28 hectares (70 acres) in Tamil Nadu, India.

- 55,000 trees planted in and around Anse-à-Pitres in Haiti, with potential capacity to feed 50,000 to 70,000 people once mature.

- 3,000 Samburu villagers in Kenya trained to plant and care for food bearing trees around their own homesteads.

- Across all campuses, Sadhana Forest hosts 1,500 volunteers and trains and is visited by over 10,000 people annually.

- Sadhana Forest Kenya accredited as an observer to the Conference of Parties (COP) to the United Nations Convention to Combat Desertification (UNCCD) and United Nations Framework Convention on Climate Change (UNFCCC).

SDG Targets Met

13.1 Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.

13.3 Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.

Shikra hawk in Tropical Dry Evergreen Forest of Tamil Nadu

Other SDGs Involved

| 1 NO POVERTY | 2 ZERO HUNGER | 3 GOOD HEALTH AND WELL-BEING | 6 CLEAN WATER AND SANITATION | 7 AFFORDABLE AND CLEAN ENERGY | 11 SUSTAINABLE CITIES AND COMMUNITIES | 12 RESPONSIBLE CONSUMPTION AND PRODUCTION | 15 LIFE ON LAND |

SUSTAINABLE DEVELOPMENT GOAL #16

Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

Conflict, crime and corruption represent major roadblocks to achieving prosperity and making progress on all Sustainable Development Goals. Ending poverty and hunger, or enhancing people's quality of life in a country ridden by violence and instability is virtually impossible. SDG 16 is scarcely referenced alongside protection of the natural world. Yet, strong institutions, effective governance frameworks, and peaceful and inclusive societies are all instrumental to addressing environmental challenges, including the degradation of ecosystems and climate change, which both drive and are driven by the dramatic loss of wildlife.

According to UN Environment, in the past 60 years, 40% of conflicts have been tied to natural resources. The problem is particularly acute in developing countries, as under-resourced governments often lack the capacity to effectively regulate the exploitation of their natural assets.

The Global Assessment Report on Biodiversity and Ecosystem Services, released recently by the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES), highlighted that one million species are threatened with extinction; overexploitation represents one of the key drivers of species decline; and the current global response is insufficient and "transformative changes" are needed to restore and protect nature.

Animals are negatively affected by injustice, trafficking, and corruption. Wildlife crime, and particularly the illegal wildlife trade (IWT), is increasingly recognized as transnational organized crime, worth an estimated USD 23 billion each year, making it the fourth largest illegal global trade (after drugs, counterfeiting and human trafficking). Driven by rising demand, wildlife crime is often facilitated by corruption and weak governance. Studies also show that wildlife crime is exacerbated in countries where corruption is widespread.

The most immediate critical threat to African elephants, rhinos, apes and other endangered wildlife is large-scale poaching, coordinated by organized criminal networks which traffic these animals or parts and products derived from them, whether for jewellery, traditional medicines, trophies, pets or wild meat. Demand for ejiao, a gelatin produced from boiling donkey hides which is popular in Chinese medicine, has created a crisis in Africa where thousands of donkeys are being stolen, smuggled and slaughtered to meet the increasing demand for their hides. The donkey population in China was reduced from 11 million to 5.4 million in 2016, encouraging China to import donkey meat and hides from Africa, especially Kenya, which has already seen a sharp decline in its donkey population.

Every year, millions of wild animals are brutally shot, trapped, poisoned and mutilated, or kept in appalling conditions and traded by criminal networks often relying on connections with

corrupt political, military and border point agents and other facilitating networks to get their 'product' from source to market.

Emblematic species are not the only victims of this trade. In reality, millions of individual animals belonging to thousands of species are subject to borderless criminal activities. In its World Wildlife Crime report, the United Nations Office on Drugs and Crime (UNODC) recorded through the World WISE database more than 164,000 seizures of wildlife products derived from nearly 7,000 species, across 120 countries, for the period between 1999 and 2015. Further, wildlife crime is becoming increasingly sophisticated with criminals using complex technology and weaponry, non-traditional trade routes and increasing levels of violence.

Despite it being a thriving business posing a serious threat to biodiversity, the rule of law and sustainable development, many countries continue to fail to recognize wildlife crime as a serious crime. Challenges include a deficiency in legislation, insufficient law enforcement, weak prosecutorial and judiciary capacities, lack of expertise and capacity to effectively investigate and prosecute wildlife offenses, low-level penalties that fail to deter wildlife criminals, lack of coordination between relevant competent authorities, and a lack of adequate intelligence-sharing between countries. In most cases, wildlife crime investigations fail to extend beyond seizures. As a result, cases are often not prosecuted and assets and financial resources are rarely confiscated and recovered. The 2018 OECD report *Governance Frameworks to Counter the Illicit Trade* found that those wildlife crimes that are successfully prosecuted are typically penalized through relatively light sentences, and that pursuit of charges for associated crimes which may carry heavier penalties, such as corruption or money laundering, is lacking.

Even as illegal wildlife trade has grown into one of the largest forms of transnational organised crimes worldwide, institutional frameworks to combat it have remained weak and disorganised. The burden is largely carried by under-resourced management authorities unaccustomed to addressing serious transnational crime.

IWT-related corruption is widespread across multiple sectors, agencies, individuals and activities at various levels of public administration. It can include wildlife, customs and police officials who are bribed for information pertaining to the movement of animals or patrols or to obtain hunting licences. Corruption can extend into the political and judicial spheres, resulting in the obstruction of prosecutions, with poachers and wildlife traffickers often being released without any due process.

While the global community now broadly recognizes corruption as a key enabler and facilitator of IWT, and the fact that corruption and IWT inhibit progress towards achieving SDG 16 (as well as SDG 15.7 and 15.c), efforts to effectively address corruption to date have been wholly inadequate.

Another contributing factor to IWT-related corruption is the complex legal status of many wildlife "products," resulting in legal and illegal products being mixed freely and creating

loopholes by which illegally traded animal products can be laundered into the trade.

The international illicit trade in live great apes would not be possible without corruption, and African elephant poaching in conflict zones suggests that corruption, rather than conflict, is the primary enabler of elephant poaching.

The complexity of addressing wildlife crime in the broader context of political and social instability means that in order to achieve SDG 16, governments must treat wildlife crime as a human security issue, enhance legal provisions for dealing with corporations and organized crime, strengthen prosecution and judiciary capacities, as well as scale up their efforts to prevent, identify and address the institutional and governance gaps, while tackling corruption.

Law enforcement authorities and the judiciary must set the example by ensuring that the rule of law is respected. Wildlife traffickers often use a variety of smuggling techniques, infrastructure or routes that are used for the trafficking of drugs, people, weapons, counterfeit goods and other forms of contraband. There is a need for immediate and powerful law enforcement that deploys the sorts of tools, techniques and penalties used to combat other serious crimes.

A strong legal framework is a key step to ensure that there are clear definitions of illegal activities for wildlife crimes. Wildlife crimes need to be considered as predicate offenses for corruption and money laundering, and all the legal tools available to prosecute offenders and recover the proceeds of wildlife crime need to be made available to and utilized by

prosecutors and judges. Likewise, providing training for judges on environmental crime as well as on ethical and anti-corruption issues is also key.

Law enforcement efforts alone will not be sufficient. Public education efforts to emphasize the importance of wildlife, reduce demand for wildlife products, alongside other crime prevention efforts and the establishment of properly paid, trained and equipped civil services, are very important. The use of technology and standardization of procedures may also reduce corrupt activities.
In addition, processes to enable the investigation and facilitate prosecution and punishment of offenders need to be expedited, so they provide credible deterrence. Tougher penalties, both monetarily and in terms of prison time, need to be applied. Independent audit bodies with the power to review government action (or lack thereof) and to monitor illicit financial flows should be employed to uncover and address corrupt activities. There also needs to be better recognition of the potential for the criminal proceeds from IWT to fuel conflict and terrorism.

Cracking down on wildlife crime in Africa

Problem for People

Wildlife crime flourishes as a result of corruption within the legal system, and is symptomatic of larger shortcomings in ethical governance and reliable law enforcement. Armed militias and terrorist groups use wildlife trafficking to fund their operations, and wildlife traders often participate in other illegal industries such as narcotics and human trafficking. More than 70% of wildlife rangers across Africa report life-threatening encounters with poachers, and nearly 600 rangers were murdered between 2009 and 2016.

Problem for Animals

Wildlife crime is a major driver of the global crisis in biodiversity. Poaching killed over 100,000 elephants between 2014 and 2017; has driven four subspecies of rhino to extinction since 2010; and reduced global shark populations by some 90% over the past fifty years. Wildlife crime harms many more organisms than those actually traded alive or dead; for example, it takes the killing of 10 adult chimpanzees on average to obtain a single chimp baby for sale as a pet.

Location

Cameroon, Republic of Congo, Gabon, Guinea, Togo, Benin, Senegal, Uganda, Ivory Coast, Burkina Faso

Dates

2002 to present

Parties Involved

EAGLE Network and member NGOs:

LAGA (Cameroon), PALF (Republic of Congo), AALF (Gabon), GALF (Guinea), EAGLE Togo, AALF Benin, EAGLE Senegal, EAGLE Uganda, EAGLE Ivory Coast, and EAGLE Burkina Faso

Solution

EAGLE (Eco Activists for Governance and Law Enforcement), a network of NGOs across 10 African countries, takes a fourfold approach to combatting wildlife crime. Outside involvement in the enforcement of wildlife protection law at every stage safeguards against corruption within government institutions.

1. Investigations

Undercover EAGLE agents infiltrate the wildlife trade, identifying key players and collecting evidence of criminal activity.

2. Operations

EAGLE partners with law enforcement officers to conduct sting operations against wildlife traffickers.

3. Legal follow-up

Legal advisors assist authorities in bringing charges, advise prosecution, and ensure that prison sentences are served in full.

4. Media exposure

Media team runs coverage of successful prosecutions in news outlets, maximizing deterrent effect against future crime.

Ivory, pangolin scales, and reptile skins seized in January 2019 raid

EAGLE Network legal team

Outcomes

■ LAGA, founding member of EAGLE Network, achieved first ever prosecution of a wildlife trafficker in central and western Africa, in Cameroon in 2003.

■ 181 wildlife traffickers arrested in 2018, including 35 in Cameroon. 156 successfully prosecuted in 2018. Over 2,000 total since 2003.

■ Over 1,300 kg. of ivory, 1,800 kg. of pangolin scales, 26 intact big cat skins, 41 turtle shells, and 22 python skins seized in 2018.

■ Four live chimpanzees, two mandrills, and 150 live birds rescued in 2018.

■ Convention signed with customs department of Cameroon in March 2019 to collaborate in fighting transboundary crime.

SDG Targets Met

16.4 By 2030, significantly reduce illicit financial and arms flows, strengthen the recovery and return of stolen assets and combat all forms of organized crime.

16.5 Substantially reduce corruption and bribery in all their forms.

16.6 Develop effective, accountable and transparent institutions at all levels.

Pangolin, or scaly anteater, rescued from wildlife trade

Other SDGs Involved

Safe housing for abuse survivors with pets

Problem for People

1 in 3 women and 1 in 4 men suffer domestic violence during their lifetime. Up to 48% of survivors have delayed leaving their abusers rather than abandon their pets. Animal abuse correlates strongly with domestic violence, and the National Coalition Against Domestic Violence reports that abuse of women and children is often discovered during animal cruelty investigations. Exposing children to animal cruelty can result in desensitization to violence, making them more likely to abuse both animals and people themselves.

Problem for Animals

Domestic violence correlates strongly with animal abuse in the same household. 71% of pet-keeping women in shelters report their abusers having threatened, injured, or killed a family pet. Reports are common of animals, especially dogs, intervening to protect abuse victims, putting them at heightened risk of collateral or retaliatory injury. Since most domestic violence shelters do not allow animals, victims may be forced to abandon their pets with their abuser in order to save themselves.

Location

United States, Canada

Dates

2007 to present

Parties Involved

RedRover (formerly United Animal Nations); partner organizations Sheltering Animals and Families Together, GreaterGood.org, and Rose Brooks Center; Nestle Purina PetCare company; participating domestic violence shelters and victim assistance organizations

Solution

RedRover, formerly United Animal Nations, operates three programs to help victims of domestic violence escape abusive situations and find safe haven with their pets:

Safe Escape Grants
help survivors cover the cost of their pets' boarding and veterinary care while staying at a domestic violence shelter that doesn't allow pets.

Safe Housing Grants
help domestic violence shelters to house survivors' pets, by building pet housing on or off-site or partnering with a pet boarding facility.

SafePlaceforPets.org
is a searchable online database of domestic violence programs survivors can use to find safe housing with their pets.

RedRover partners with a number of other organizations in order to conduct its programs. Sheltering Animals and Families Together (SAF-T) advises shelters in providing pet housing, GreaterGood.org builds and retrofits facilities, the Rose Brooks Center collaborates with training and operations, and Purina's Purple Leash Project funds additional expenses related to animal care.

RedRover team building on-site pet housing at a domestic violence shelter

RedRover team member with a survivor's dog

Outcomes

- 264 people with 210 animals provided safe housing through Safe Escape grants in 2018. 1,152 people and 955 animals helped through Self Escape grants since 2007.

- $598,000 awarded in Safe Housing grants from 2012 to 2018, enabling 83 domestic violence shelters to provide pet housing on or off-site.

- In 2018, pet housing opened at domestic violence shelters for the first time in three states: Connecticut, Delaware, and Nebraska. 44 out of 50 U.S. states now have pet-friendly safe housing.

- 657 programs with pet housing in the U.S. and Canada listed on SafePlaceforPets.org as of December 2018.

On-site cat housing facility funded and built by RedRover at Sojourner Center in Arizona

SDG Targets Met

16.1 Significantly reduce all forms of violence and related death rates everywhere.

16.2 End abuse, exploitation, trafficking and all forms of violence against and torture of children.

16.3 Promote the rule of law at the national and international levels and ensure equal access to justice for all.

Other SDGs Involved

3 GOOD HEALTH AND WELL-BEING

5 GENDER EQUALITY

10 REDUCED INEQUALITIES

11 SUSTAINABLE CITIES AND COMMUNITIES

17 PARTNERSHIPS FOR THE GOALS

Strengthen the means of implementation and revitalize the global partnership for sustainable development

The SDGs are human-centric and thus overlook the central importance of nature and animals to our world and our humanity. However, excluding the care, protection and conservation of animals as an interlinked and cross-cutting issue negatively contributes to the effective and full implementation of the Sustainable Development Agenda.

Animals are integral to the livelihoods and wellbeing of communities all around the world. With the world population increasing by 83 million people annually, we face many challenges in terms of humanity's reliance on and interdependence with animals. These include, but are not limited to, a greater demand for food, increased use of land and water and multiplying impacts of livestock on the environment. One of the biggest challenges we face is the limited awareness of the importance and value of animals in society and how crucial animal welfare and conservation are to the effective implementation of the SDGs.

Target 17.14 aims to "Enhance policy coherence for sustainable development." Animal welfare standards and guidelines are officially promulgated through international policy streams, such as the OIE animal welfare standards, as well as through national legislation and private standards. Improving animal welfare contributes significantly to improved environmental and human wellbeing outcomes. There are currently 182 countries that have agreed to implement the OIE animal welfare standards. Further, development policies of Parties to the CBD, CMS and CITES must be consistent and mutually reinforcing of existing obligations under these conventions. If care is not taken to ensure that development policies and strategies are coherent with agreed animal welfare standards and MEAs, countries will not reap the benefits to sustainable development that are concomitant with improved animal welfare and conservation practices. In order for the three dimensions of sustainable development to be achieved (economic, social and environmental), there needs to be coherence between animal welfare and conservation policies on international and national levels, as well as effective implementation and enforcement of these policies.

Target 17.16 aims to "Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries." Animal welfare and conservation NGOs possess a wealth of knowledge, expertise, best practice and other resources that are currently underutilized in sustainable development. These NGOs can partner with governments and competent authorities to facilitate the incorporation of animal welfare and conservation into development policies and strategies, in order to fully harness the benefits

and synergies of these issues for sustainable development.

To achieve policy coherence, it is important to draw from the OIE animal welfare standards and include them in national development plans and policies, including through training and capacity building. Development policy and strategy must also take into account obligations under various MEAs like CBD, CMS and CITES. It is also crucial to incorporate these standards and obligations when evaluating policy coherence to ensure that policies developed are mutually reinforcing.

Through partnerships with NGOs involved in the care, protection and conservation of animals, governments and competent authorities can gain a better understanding of the obstacles to SDG implementation and how to overcome them, and accelerate implementation of the 2030 Agenda, by incorporating the care, protection and conservation of animals into development strategies and plans.

The Animal Issues Thematic Cluster (AITC) is a coalition of NGOs bringing expertise from around the world on a wide range of issues, from improving animal welfare in agricultural development to biodiversity conservation. These NGOs are ready and willing to work with governments and other stakeholders to ensure that animal welfare and conservation are effectively included in policy and planning, in order to harness the full benefits of these cross-cutting issues to the implementation of the Sustainable Development Agenda.

Animal Issues Thematic Cluster members at 2018 High Level Political Forum

Promoting animal protection across Africa

Problem for People

The future of people and animals is closely intertwined across Africa. Theft of donkeys to supply illegal trade in hides imperils their keepers' livelihoods. "Bush meat" from wild animals is a major food source for many communities, but can also transmit diseases like HIV and Ebola. Animal agriculture is growing in many countries, yet livestock are major drivers of climate change. African governments vary widely in animal welfare legislation, policy, and enforcement, leaving much of the burden to local and international NGOs.

Boys with donkeys and cattle in Egypt

Zebra with legs entangled in illegal wire snare outside Nairobi, Kenya

Problem for Animals

Intensive or "factory" farms, which maximize output at the expense of animal welfare and sanitation, supply most animal products in South Africa, and are spreading in Ghana, Botswana, Kenya, and other countries. Africa's 19 million working equines and camels suffer widely from poor treatment and lack of veterinary care. Infrastructure development brings economic opportunity, but without careful planning and oversight, can damage ecosystems and accelerate hunting, logging, and poaching of endangered species to supply illegal markets abroad.

Location

Kenya, Ethiopia

Dates

Ongoing conference series, October 2017 to present.

Parties Involved

Africa Animal Welfare Conference (AAWC); co-organizers Africa Network for Animal Welfare (ANAW) and U.N. Environment (UNEP); African Union – Inter-African Bureau for Animal Resources (AU-IBAR); Government of Kenya and Government of Ethiopia

Solution

In July 2017, the African Union endorsed an Animal Welfare Strategy for Africa. The Strategy was developed by AU-IBAR in collaboration with the OIE, FAO, and several NGOs, including Africa Network for Animal Welfare (ANAW), based in Nairobi, Kenya. In order to promote the Animal Welfare Strategy for Africa and unite stakeholders in implementing its goals across the continent, ANAW partnered with U.N. Environment to organize the Africa Animal Welfare Conference series.

The inaugural AAWC was held October 2-3 2017 at the United Nations Complex in Nairobi with the following three primary objectives:

1. To develop a critical mass of sensitized civil society organizations and animal welfare stakeholders who can champion and support the animal welfare agenda in Africa.

2. To identify gaps and challenges facing animal welfare policy implementation across Africa and provide an opportunity for adoption of resolutions for animal welfare implementation across the continent.

3. To generate an effective and well-informed caucus of animal welfare stakeholders cognizant of existing policies and legislation in most African countries that would then be in a strategic position to interrogate and influence discussions within governments and intergovernmental organizations on animal welfare and environment.

Kamar Yousuf of U.N. Environment speaking at 2018 Africa Animal Welfare Conference

Josphat Ngonyo, founder of ANAW, listening to presentations (foreground)

Outcomes

- 283 delegates attended AAWC in 2017, and 259 in 2018. Delegates came from over 25 nations across Africa and overseas, and included representatives from government agencies, NGOs, private companies, academic institutions, and others.

- Detailed, actionable recommendations and resolutions for promoting animal protection across Africa drafted at both 2017 and 2018 conferences.

- 2018 conference included a special workshop on animal law, including education and training for law students, precedents and strategies for prosecuting cruelty and wildlife crime, and advocacy for new legislation.

- Third AAWC conference to be held September 2-4 2019 at the United Nations Economic Commission for Africa in Addis Ababa, Ethiopia.

SDG Targets Met

17.9 Enhance international support for implementing effective and targeted capacity-building in developing countries to support national plans to implement all the sustainable development goals, including through North-South, South-South and triangular cooperation.

17.14 Enhance policy coherence for sustainable development.

17.16 Enhance the global partnership for sustainable development, complemented by multi-stakeholder partnerships that mobilize and share knowledge, expertise, technology and financial resources, to support the achievement of the sustainable development goals in all countries, in particular developing countries.

17.17 Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships.

Delegates at the 2018 Africa Animal Welfare Conference

Other SDGs Involved

Further reading

Animal Issues Thematic Cluster

More information on the relationship between animal protection and conservation and sustainable development, including bibliographies for each each section of this document, can be found on the AITC website:

https://animalissues.info

Animal People

Animal People offers a free online platform, the Animal People Forum, for people who care about animals to learn about animal protection issues worldwide and publish their own stories and perspectives:

https://animalpeopleforum.org

More on the projects discussed in this book

Case Study 4A

World Animal Net project website:
http://worldanimal.net/our-programs/humane-education/humane-education-pilot-project

Case Study 4B

ACTAsia's website:
https://www.actasia.org/

Samuels, William Ellery. "Nurturing kindness naturally: A humane education program's effect on the prosocial behavior of first and second graders across China." *International Journal of Educational Research* 91 (2018), 49-64.

Case Study 4C

Vets United website:
https://welttierschutz.org/en/vets-united

Case Study 8A

Borneo Orangutan Survival website:
https://orangutan.or.id/

Case Study 10A

Wildlife SOS website:
https://wildlifesos.org/

Case Study 13A

FIAPO website:
www.fiapo.org

Case Study 13B

Safeland project website:
https://www.ifaw.org/projects/safelands-project-myanmar

Case Study 13C

Sadhana Forest website:
https://sadhanaforest.org/

M.C. Rowley, H. Estrada-Medina, M. Tzec-Gamboa, A. Rozin, G. Cailleau, E.P. Verrecchia, I. Green. "Moving Carbon Between Spheres, the Potential Oxalate-Carbonate Pathway of *Brosimum alicastrum* Sw.; Moraceae." *Plant and Soil* 412:1-2, 465-479.

Case Study 16A

EAGLE Network website:
http://www.eagle-enforcement.org/

Case Study 16B

RedRover Relief website:
https://redrover.org/relief/

SafePlaceForPets.org:
https://safeplaceforpets.org/

Case Study 17A

AAWC website:
https://www.aawconference.org/

African Union. *The Animal Welfare Strategy in Africa*. Nairobi, Kenya: AU-IBAR, 2017.

The care, protection, and conservation of animals plays an essential role in sustainable development worldwide.

This handbook includes background and case studies for the six Sustainable Development Goals reviewed by the United Nations' High Level Political Forum in July 2019.