



WWF

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WWF-Pakistan
Annual Report 2015



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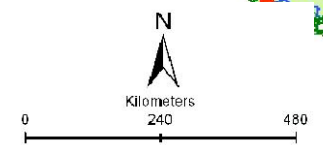
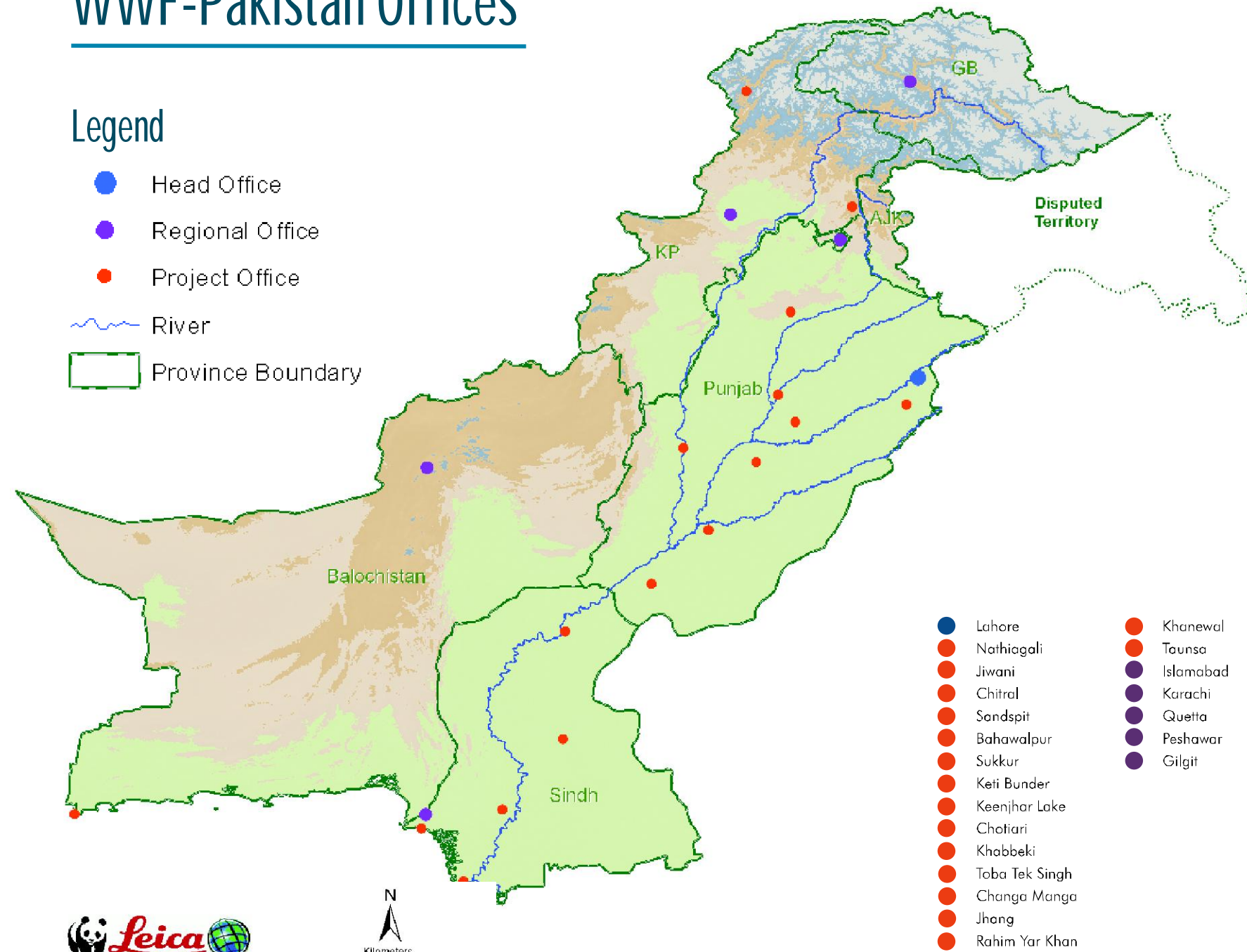


Dusky eagle owl

WWF-Pakistan Offices

Legend

- Head Office
- Regional Office
- Project Office
- River
- Province Boundary



Who We Are

WWF came into being in 1961 in Gland, Switzerland. Today it is the leading and most respected conservation organization in the world, with a global network active in over 100 countries.

WWF-Pakistan was established in 1970 and is now the leading conservation organization in the country and amongst the largest national offices in the WWF Network. In spite of Pakistan's challenges, WWF-Pakistan continues to grow both in size as well as outreach.

Our mission is to stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature, by:

- Conserving the world's biological diversity;
- Ensuring that the use of renewable natural resources is sustainable; and
- Promoting the reduction of pollution and wasteful consumption.

WWF-Pakistan carries out conservation work according to the Global Programme Framework which includes biodiversity and human footprint meta-goals. To maintain a living planet and secure clean water, food and energy for all, WWF is now evolving its conservation priorities into six Global Goals to enhance its impacts. WWF works through two meta goals that must be achieved by the year 2050, which are:

- The integrity of the most outstanding natural places on Earth is conserved, contributing to a more secure and sustainable future for all;
- Humanity's global footprint stays within the Earth's capacity to sustain life, and the natural resources of our planet are shared equitably.

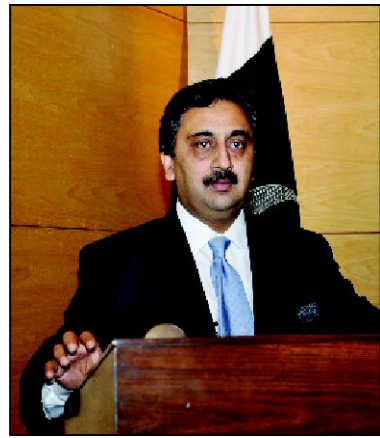
Our greatest responsibility is to lead the way in conserving Pakistan's rich natural diversity so that future generations can continue to benefit from them.



Autumn leaf, Skardu © Syed Mehdi Bukhari

A MESSAGE FROM Ahmer Bilal Soofi

President of WWF-Pakistan



I am indeed honoured and humbled that the WWF Board has reposed its confidence in me as the President of WWF-Pakistan. My illustrious predecessors include, among others, the visionary Syed Babar Ali and the indefatigable Brigadier (R) Mukhtar (currently Vice President Emeritus WWF-Pakistan). While it is no easy task to carry forward the work of such exceptional leaders, I am fortunate to have a robust and dedicated team at WWF, led by the dynamic Hammad Naqi Khan. I could not have asked or wished for a better team. I am also delighted to note that the new members to have joined the WWF Board have added unprecedented vigour to the organization. Without a doubt, all this gives me great hope and confidence for the present and the immediate future of WWF. The collective synergy and the passion of the entire WWF family will surely lead to marked progress towards the realization of WWF's vision and goals.

Thus far, among my initiatives as President, I have tasked a comprehensive assessment report of the implementation status of conservation related statutes by the federal and the provincial governments. The idea is to ultimately assist public stakeholders towards better compliance with the existing legal frameworks and structures related to conservation and the environment. Today, about 11 per cent of Pakistan's territory comprises of protected areas under various provincial legislation marked either as game reserves, wildlife parks or sanctuaries. Therefore, as one of our advocacy agendas, we must take up the pressing issue of implementation of the notifications of protected areas with the relevant functionaries in the federal and provincial governments.

As President of WWF-Pakistan, I remain firmly committed to preserving the wondrous diversity of Pakistan's wild species and spaces, and its environment for our succeeding generations.

Ahmer Bilal Soofi
President
WWF-Pakistan

A MESSAGE FROM Hammad Naqi Khan

Director General of WWF-Pakistan



This year, WWF-Pakistan saw three of its large projects successfully come to an end while achieving all key conservation initiatives and impacting ecosystems and communities to move forward in a sustainable way. As we seek to attract new donors and reengage with the current ones, we faced unprecedented challenges as most government aid agencies have shifted their priorities away from environmental conservation due to the region's geopolitical situation.

Our focus now is to further strengthen national fundraising and develop more partnerships with the corporate sector. Considering the government's priorities and constraints, I strongly feel that the local corporate sector can be stewards of nature conservation and environment protection in Pakistan. Therefore, WWF is looking to co-create solutions and implement impactful investments instead of philanthropic donations alone.

WWF-Pakistan also fully supports the global change programme to make WWF a truly global organization while ensuring that our national conservation programme is socially embedded and locally relevant. Our work is rooted in the philosophy that no matter how big we are or we become, we can't achieve our agenda alone. We must develop strong partnerships at all levels and with all stakeholders including other social and environmental non-governmental organizations; academia; as well as businesses and industry.

With time the challenges we face are increasing, but the support we are getting from all channels is becoming stronger too. And as we celebrate all our partnerships, it is important to remember that we have to continue this struggle for future generations. Even small successes will result in ensuring a healthy environment for the people of Pakistan. With the ongoing support of our donors, partners, members, Board and employees, WWF is better prepared than ever before for the challenges ahead.

Hammad Naqi Khan
Director General
WWF-Pakistan



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WWF-Pakistan



DONORS

WWF Network

Asia Pacific Growth Strategy (APGS)
WWF-Austria
WWF-Germany
WWF International
WWF-Netherlands
WWF-Sweden
WWF-Switzerland
WWF-UK
WWF-US
Smart Fishing Initiative (SFI)

Government and Aid Agencies

Marine Research Centre (MRC)
Department for International Development (DfID), UK Aid, United Kingdom
Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ)
European Union (EU)
Irrigation Department, Government of Punjab
Pakistan-Italian Debt Swap Agreement-Government of Italy and Government of Pakistan
Punjab Skills Development Fund (PSDF)

International and Development Organizations

Food and Agriculture Organization (FAO)
International Development Research Centre (IDRC)
International Centre for Integrated Mountain Development (ICIMOD)
Interchurch Organization for Development Cooperation (ICCO)
Marine Mammal Commission (MMC)
Solidaridad
The Dutch Sustainable Trade Initiative (IDH)
United Nations Development Programme (UNDP)

Corporate Sector

Coca-Cola Beverages Pakistan Limited
Fauji Fertilizer Company
IKEA
Rabobank
Nestlé Pakistan
Tetra Pak Pakistan

Trusts, Foundations and Others

Clemens and August Brenninkmeijer (C&A) Foundation
Hawk Conservancy Trust
Human Welfare and Nature Conservation Society (HWNCS)
Keidanren Nature Conservation Fund (KNCF)
Lahore University of Management Sciences (LUMS)
Ocean Park Conservation Foundation (OPCF)
Prince Bernhard Nature Fund
Save Our Seas Foundation
SysTem for Analysis, Research and Training (START)
The Coca-Cola Foundation

WWF-Pakistan's Ongoing Projects

This year, WWF-Pakistan continued its conservation work for Pakistan's priority species and places. While doing so the organization also expanded its work to newer projects such as facilitation of safe drinking water for underprivileged communities in Lahore, taking water stewardship to cotton growing areas of Punjab, and multiple avenues in marine research.

WWF-Pakistan implemented more than 40 diverse projects for the conservation of nature in this reporting period.



WWF-Pakistan's Ongoing Projects 2014 -2015

No.	Project Title	Donor
FORESTS		
1	Conservation of Chilghoza Forest Ecosystem through Natural Resource Based Livelihood Improvement in the Suleiman Range	Global Poverty Action Fund under the Department for International Development
2	Improving Sub-watershed Management and Environmental Awareness around Ayubia National Park (G200 - Western Himalayas) – Phase VI	The Coca-Cola Foundation
FRESHWATER		
3	City-wide Partnership for Sustainable Water Use and Water Stewardship in SMEs in Lahore, Pakistan	European Commission under the SWITCH-Asia Programme
4	Water Stewardship in Pakistan	WWF International
5	Improving Livelihoods of Fishermen Communities of the Central Indus Wetlands Complex, Pakistan through Effective Natural Resource Management	Global Poverty Action Fund under the Department for International Development
6	Environmental Baseline Survey and Monitoring of Rehabilitation and Modernization of Jinnah Barrage under Punjab Barrages Improvement Project-Phase II	Irrigation Department, Government of Punjab
7	Biodiversity Survey for Rehabilitation and Upgradation of Trimmu Barrage Under Punjab Irrigated Agriculture Investment Program (PIAIP)	Project Management Office (Punjab Barrages) Irrigation Department, Government of Punjab
8	Installation of Drinking Water Facilities in the City of Lahore for Local Communities	Coca-Cola Beverages Pakistan Limited

9 Alliance of Water Stewardship Standards Nestlé Pakistan

MARKET TRANSFORMATION / SUSTAINABLE AGRICULTURE PROGRAMME

10	Sustainable Cotton Production in Pakistan's Cotton Ginning SMEs	European Union under the SWITCH-Asia Programme
11	Pakistan Sugarcane Improvement Programme-II	Solidaridad
12	Pakistan Sustainable Cotton Initiative-III	WWF-Sweden, IKEA
13	Better Cotton Fast Track Fund (BCFTF) – Jhang, Sukkur/Ghotki, Rahim Yar Khan	The Dutch Sustainable Trade Initiative (IDH), Rabobank, Interchurch Organization for Development Cooperation (ICCO), WWF-Netherlands
14	Promotion of Water Stewardship in Cotton Growing Areas of Punjab, Pakistan	WWF-Sweden, IKEA
15	Exploring Possibilities of Organic Seed Cotton Production in Pakistan	Clemens and August Brenninkmeijer (C&A) Foundation

SPECIES

16	Gyps Vulture Restoration Project	Hawk Conservancy Trust
17	Conserving the Critically Endangered Gyps Vulture through Effective Habitat Protection and Community Based Livestock Management	Prince Bernhard Nature Fund
18	Conservation of the Indus River Dolphin and its Habitat in Pakistan through Community Participation	Ocean Park Conservation Fund, Fauji Fertilizer Company
19	Community Based Conservation of the Snow Leopard and Improved Watershed Management	WWF-US

20	Common Leopard Conservation Project	Human Welfare and Nature Conservation Society
21	Social, Economic and Environmental Development (SEED) Project in Central Karakoram National Park	Social, Economic and Environmental Development (SEED) Project under Pakistan-Italian Debt for Development Swap Agreement
22	Conserving the Snow Leopard and Alpine Wetlands – A Strategy to Manage Qurumbar National Park, Ghizer (Pakistan)	Keidanren Nature Conservation Fund (KNCF)

COASTAL / MARINE

23	Developing a Conservation Strategy for Mobulids in Pakistan through By-catch Assessment	Save Our Seas Foundation
24	Promoting Sustainable Tuna Fisheries in the Indian Ocean	WWF-Switzerland
25	Indian Ocean Skipjack and Bait Fish Management	WWF-Germany
26	Design Implementation of Creek Survey and Detailed Creek Survey Manual	Food and Agriculture Organization
27	Promoting the Conservation of Large Whales in the Northern Indian Ocean Focusing on the Arabian Sea Population of Humpback Whales	Marine Mammal Commission
28	Areas Beyond National Jurisdiction- By-catch in the Indian Ocean	WWF-US, GEF, Food and Agriculture Organization
29	Socio-economic Impact Evaluation for Indian Ocean Tuna Fisheries Improvement Project and Marine Stewardship Council Certification	WWF-Austria
30	Implementing Maldives Pole and Line Tuna Port Sampling Project and VMS/AIS Analysis within the Pakistani Gillnet Fleet	WWF-Germany, Smart Fishing Initiative (SFI)

CLIMATE CHANGE / ALTERNATE ENERGY

31	Preparation of Action Plan and Capacity Building for a National Forest Monitoring System (NFMS) for REDD+	Food and Agriculture Organization (FAO)
32	Disaster Risk Reduction and Climate Change Adaptation in South Asia	Systems for Analysis, Research and Training (START)
33	Building Capacity on Climate Change Adaptation in Coastal Areas of Pakistan	European Union
34	The Determinants, Impact and Cost Effectiveness of Climate Change Adaptation in Pakistan	International Development Research Centre, Lahore University of Management Sciences (LUMS)
35	Himalayan Climate Change Adaptation Programme (HICAP) in the Upper Indus River Basin, Pakistan	International Centre for Integrated Mountain Development (ICIMOD)
36	Enhancing the Value of Hydrological Resources for Livelihoods, Youth Employability and Resilience, an R&D Pilot in Gilgit-Baltistan, Pakistan	United Nations Development Programme (UNDP)
37	Skills for Biogas Plants	Punjab Skills Development Fund (PSDF)

Others

38	Integrated Approach to Skill Development and Provision of Sustainable Livelihoods in Chotiari, Sanghar	Community Development Project, Government of Sindh
39	Promoting Sustainable Agriculture through Green Skills for Rural Youth	Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH (GIZ)
40	Study to Determine the Percentage of Used Beverage Cartons in Mixed Paper Streams in Pakistan	Tetra Pak Pakistan

Forests

Pakistan, particularly in the last decade, has experienced extensive deforestation. WWF-Pakistan addresses the pressing need for the protection of forests through conservation and the maintenance of critical forest ecosystems of the country.

Forests

Chilghoza Forest Conservation and Livelihood Improvement in the Suleiman Range, Zhob, Balochistan

The project Chilghoza Forest Conservation and Livelihood Improvement in the Suleiman Range, Zhob, Balochistan, funded by UK Aid under its Global Poverty Action Fund, has been implemented in Zhob and Shirani districts. It aims to conserve Chilghoza forests and improve livelihoods through a community-based integrated conservation and development approach.

Under the project socio-economic, forest and wildlife surveys were conducted and forest conservation and management plans developed accordingly. To promote environmental education and awareness 10 nature clubs were established in different schools and 31 teachers trained through training workshops.

Three visits were also organized for policy and decision-makers to the project area. After consultation with stakeholders a long-term programme

for Chilghoza forest conservation and livelihood development has been prepared for the Suleiman Range.

Pre and post-harvest trainings were conducted to build capacity of Chilghoza nut collectors. As a result 50 community members were trained and 300 improved harvesting kits were distributed.

The target of carrying out plantation on 30 hectares was achieved and an additional 36 hectares were sown with Chilghoza seed. A further 16 hectares were bought under woodlots and an area of 30 hectares was fenced to stop grazing and encourage natural regeneration. To support progressive farmers, four nurseries with 40,000 forest and fruit plants were also set up.

To reduce pressure on forest for fuelwood, 150 fuel efficient stoves were distributed and 15 solar water heaters were installed. A vaccination campaign was carried out and 7,000 heads of livestock were vaccinated. To bring more land under irrigation and to provide water for livestock, six rainwater harvesting ponds and two irrigation channels were constructed bringing eight

hectares of additional land under irrigation, providing water to 5,000 livestock and supporting five hectares of land for vegetable cultivation and kitchen gardening.

A total of 58 demonstration plots of improved wheat varieties (37 plots on 3.5 hectares) and vegetables (20 plots) were established. Four different varieties of wheat were introduced on trial basis and 700 fruit plants were distributed to 55 farmers of the project areas. Fifteen landslides were also treated with bioengineering and engineering structures.

To enhance livelihood of less privileged communities dependent on forest resources, three Chilghoza processing units and two processing units for other non-timber forest products were established. Livelihoods were further supplemented through the distribution of 200 poultry units. About five hectares of land was brought under improved pipe irrigation system.

Social, Economic and Environmental Development (SEED)

WWF-Pakistan is an implementing partner in the Social, Economic and Environmental Development (SEED) project for the Central Karakoram National Park (CKNP). Spanning over five years, the project aims to sustainably manage the park and improve livelihoods of adjacent communities. Other partners include the Directorate of the CKNP; Aga Khan Rural Support Programme; Alpine Club of Pakistan; and Mountains and Glaciers Protection Organisation. WWF-Pakistan implemented various components focusing on community-based conservation including mass awareness; mobilization; participatory conservation planning; pasture and livestock management; and afforestation.

Under the project, WWF-Pakistan developed four village conservation and sustainable development plans for the CKNP pilot area.

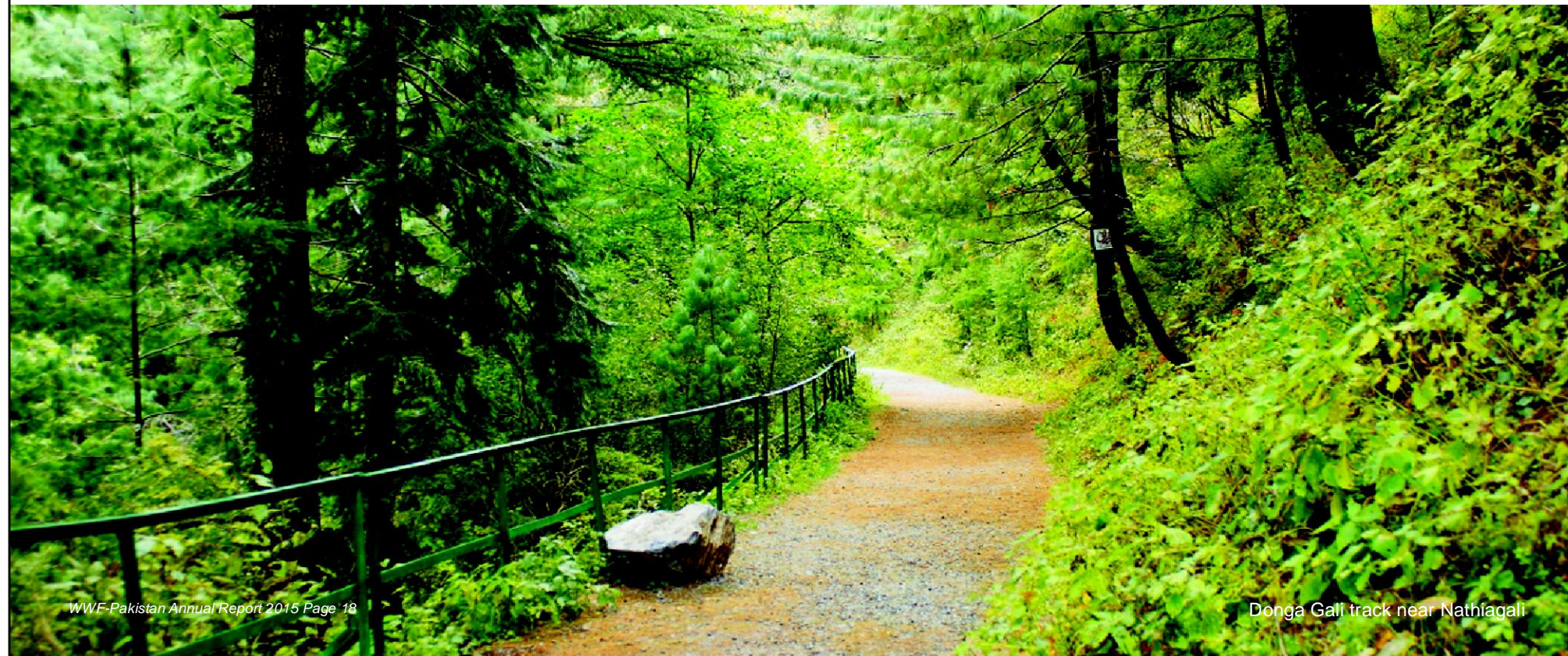
Survey questionnaires were designed and conducted in four target valleys of CKNP, covering almost 50 per cent of the total population (over 1,000 households). Draft plans were then developed, which proposed management issues and actions, as well as implementation mechanisms.

Improving Sub-watershed Management and Environmental Awareness in and around Ayubia National Park, WWF-Pakistan

As a part of the Western Himalayan Ecoregion, one of the top Global 200 Ecoregions, and sprawled over 3,312 hectares, Ayubia National Park (ANP) is located in the Galliat area of Pakistan, which faces a number of environmental problems including deforestation, water shortage and flash floods. The Western Himalayan Ecoregion is also the catchment area of the Indus River and provides 70 to 80 per cent of water from the melting of snow and glaciers and 20 to 30 per cent from rainfall to the Indus Delta. Erosion of this area is high thus watershed management is critical for its conservation. To address these problems and to improve sustained availability of clean water in springs and streams for local consumption as well as safe ecological flows, and for the conservation of biodiversity at the sub-catchment level, WWF-Pakistan is implementing a watershed management



Autumn in Gilgit © Ghulam Rasool / WWF-Pakistan



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Donga Gall track near Nathiaqali

182 million litres

of water replenished per year

to nature through improvement in

groundwater recharge in Ayubia National Park



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project with support from The Coca-Cola Foundation since November 2008. Project outputs include: sensitization and mobilization of stakeholders; introduction of improved agricultural practices which are beneficial to the health of the watersheds and livelihoods of the locals; storm water management and stabilization of critical slopes; improvement of vegetation cover in forest, grasses management of solid waste and wastewater; protection of natural springs and research on various aspects of watershed management.

In order to mobilize the community, the project established 10 village organizations including four specifically for women. A total of six trainings on community management skills were also provided to these CBOs.

The project provided facilitation to communities to develop conservation and development plans of five Union Councils. To create awareness among tourists, awareness material was displayed in 10 hotels. Clean up campaigns were also launched at Saif ul Malook Lake and Khanpur Dam including 10 campaigns launched with volunteers. An awareness and communications strategy of the project was also developed.

More nature clubs were established in the area, bringing the total to 80. Support was also provided to schools with the distribution of stationary, computers and awareness material. Students from local schools have been volunteering as eco-guards for some time and the third batch of 15 students

were trained this year to create awareness among tourists to take care of the park. To tackle the issue of solid waste management, trash cans were installed in schools and public places in the ANP, and at Saif ul Malook Lake.

Construction of gabion check dams, gabion flood control spurs, combined loose stone and live vegetation spurs, live flood control spurs, live brushwood check dams was also carried out. Landslides and land slips were also treated.

Flood Risk Management

A flood risk assessment study was conducted by the GIS laboratory to assess and analyse the risk and calculate the total damage in terms of money (PKR/m²). To achieve this, a GIS and remote sensing based multi-criteria scenario approach was used to calculate the risk extent at multiple levels. Assets, which were estimated in numbers, showed annual average damage per unit area and their distribution pattern was mapped. Risk zones were also developed to categorize the risk extent in terms of high, medium and low. Population data was acquired and analyzed to find inhabitants at different risk levels.

Rehabilitation and Up-gradation of Trimmu Barrage

Under the Punjab Barrages Rehabilitation project, the Asian Development Bank (ADB) is supporting the government to improve structure of barrages.

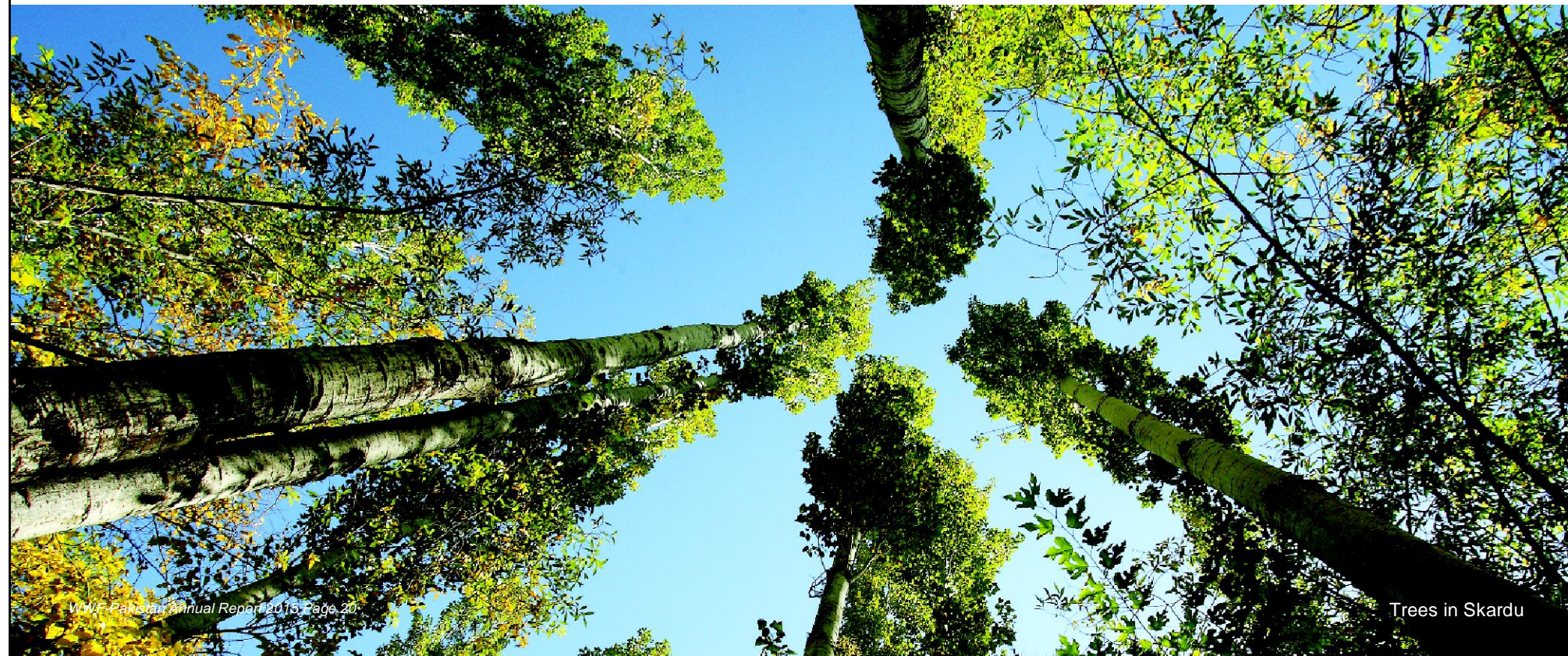
Baseline data and information were acquired from high resolution satellite imagery, ground truthing and other spatial resources to develop the ecological database that will be used to further assess the environmental conditions of Trimmu Barrage during and after the rehabilitation and modernization project. The GIS lab used as a tool to maintain, develop, and integrate the baseline information collected by different field scientists efficiently. Integration of multiple data layers will provide the foundation for long term GIS-based monitoring and development of a Decision Support System (DSS).

An estimated 2.7 million people could be

affected annually by
river-floods in Pakistan by
2030, according to the
World Resources Institute



Swat after 2010 floods © Ghulam Rasool / WWF-Pakistan



Saving the Ghost of the Mountains

Snow leopards are quickly disappearing; their global population has declined to between 2,000 to 4,000 individuals. Estimates suggest that there are only 200 to 400 of them left in Pakistan and human-wildlife conflict is a major threat to their survival.

Most communities in Gilgit-Baltistan are agro-pastoralist and depend mainly on agriculture and livestock farming for their sustenance. A survey conducted in Hoper Valley, a snow leopard habitat, showed that the major reason for livestock loss is predation by large carnivores such as snow leopards and wolves (76 per cent), followed by diseases (24 per cent). Of the total predation cases snow leopards are suspected to kill (86 per cent) animals. Snow leopard kills outside the pen were 55 per cent while inside the pen were 45 per cent. The economic loss of these attacks are PKR 3,000 per year out of an annual households income of PKR 45,000. To stop these retaliatory killings, human-carnivore conflict,



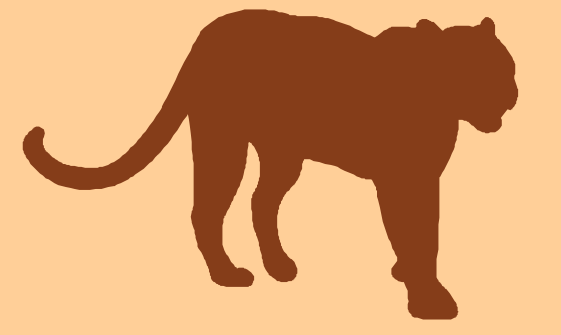
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Snow leopard, Hemis National Park, India
© National Geographic Stock / Steve Winter / WWF

mitigation plan, construction of predator proof corrals, livestock insurance schemes, livestock vaccination campaigns and awareness programmes to sensitize local communities.

After implementing the plan, recent studies indicate that losses of livestock due to diseases have decreased by 50 per cent, predation inside pens have declined by 40 per cent and offenses against the snow leopard have decreased by almost 90 per cent.



Freshwater

With the goal to conserve and sustainably manage freshwater habitats to benefit nature and people, WWF-Pakistan works to promote water stewardship and watershed management.

Freshwater

City-wide Partnership for Sustainable Water Use and Water Stewardship in SMEs in Lahore, Punjab

The project City-wide Partnership for Sustainable Water Use and Water Stewardship in SMEs in Lahore, Punjab, funded by the European Union, entered its final year in 2015. The aim of the project is to promote sustainable economic growth and development in Pakistan through the implementation of sustainable production and consumption practices, with a particular focus on water use and water management in high water using, cross-sectoral, urban-based small and medium-sized enterprises (SMEs). The target industrial sectors included textile, leather, sugar and paper and pulp.

During the reporting period the study *Situation Analysis of Water Resources of Lahore* was officially launched. Moreover, training of 75 SMEs of the target industrial sectors on best water management practices (BWMPs) was carried out in Faisalabad, Lahore and Sialkot which included sharing lessons from

the business case report followed by technical sessions highlighting environmental, economic and social gains of implementing relevant BWMPs. Training manuals on BWMPs were also distributed among the participants.

The study *Water Footprint of Key Industrial Sectors in Punjab, Pakistan*, based on data collected from audits conducted as a part of the project and business case has also been finalised. In addition, a documentary of the project is in progress.

In order to take stock of the economic and environmental gains of implementing BWMPs, validation audits were conducted and led to the substantiation and review of the business case. According to the updated business case, the project inspired a total investment of PKR 119.90 million by the target industrial sectors which resulted in savings of PKR 178 million. The project also helped industries reduce their water and energy footprint with a reduction in energy consumption of 6.6 MW per year in 35 SMEs.

On account of the energy savings achieved through the project, WWF-Pakistan was awarded the Energy Globe Award 2015. The award is a unique online campaign under the patronage of the the United Nations Educational, Scientific and Cultural Organization (UNESCO) in cooperation with the United Nations Environment Programme (UNEP).

Strategic Basin Assessment-Indus, Pakistan

WWF-Pakistan, in collaboration with the Commonwealth Scientific Industrial Research Organization (CSIRO), Australia has conducted a scoping study on the Ravi and Sutlej rivers, two eastern rivers of Pakistan. These rivers were allocated to India according to the Indus Water Treaty, signed in 1960. Under the agreement, WWF-Pakistan is assisting CSIRO in secondary data collection which includes published literature from different departments and organizations regarding water quantity and quality, socio-economic trends and environmental impacts of the rivers and their adjoining areas. The WWF-Pakistan GIS lab also mapped and monitored flood impacts on the livelihoods of the two rivers for the project.

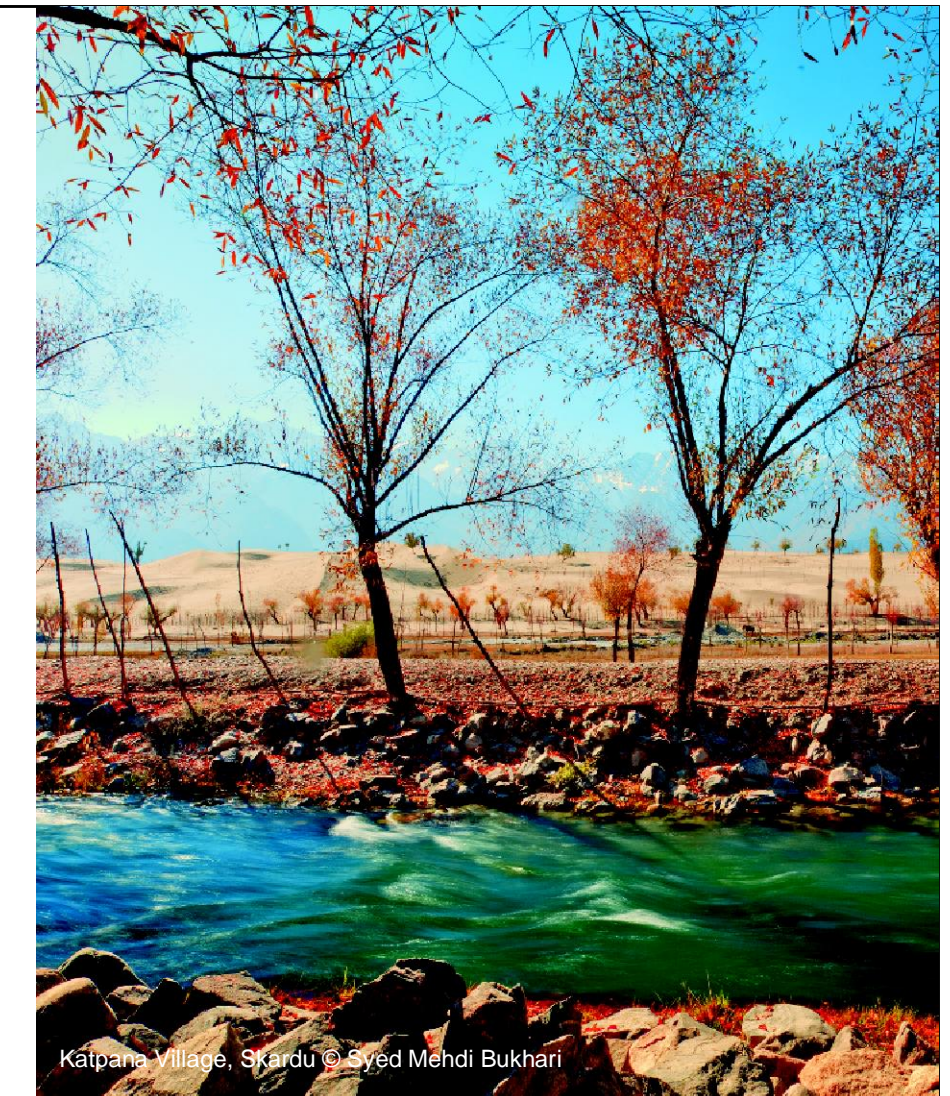
Alliance for Water Stewardship (AWS) Standards

WWF-Pakistan has partnered with Nestlé Pakistan to execute two projects to implement water stewardship standards. A Memorandum of Understanding (MoU) was signed between the two parties and WWF-Pakistan is now facilitating the implementation of AWS standards at the Nestlé plant site in Sheikhupura, which is currently in the data gathering and information exchange phase.

Improving Supply and Access to Safe Drinking Water in Low-lying Areas of Lahore

WWF-Pakistan has partnered with Coca-Cola Beverages Pakistan Limited (CCBPL) to provide better access to safe drinking water to marginal communities of Lahore. Through this partnership, water filtration plants will be installed in 15 low-lying communities.

The first filtration plant was installed in Basti Saidan Shah inside Pir Saidan Shah's *darbar*, a community space for the colony. A water testing survey was conducted prior to the installation of the filtration plant, which showed arsenic in levels higher than standards set by the World Health Organization. In addition, an awareness drive was also conducted consisting of various activities in local schools and capacity building seminars.



Katpana Village, Skardu © Syed Mehdi Bukhari



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Nagar Parkar



10 ppb is the safe limit of arsenic in drinking water, according to the WHO

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Market Transformation

The Sustainable Agriculture Programme is a holistic, scientific approach to socio-economic transformation that endorses and respects local knowledge and values for better ecosystem management. WWF-Pakistan, through this programme, aims to help make agricultural commodities part of a sustainable industry with a reduced footprint in priority ecosystems. Accordingly, projects are designed and implemented to contribute to WWF's global Market Transformation Initiative.

Market Transformation

Pakistan Sustainable Cotton Initiative (PSCI)

Since 2005, WWF-Pakistan and IKEA have collaborated under the Pakistan Sustainable Cotton Initiative (PSCI) for the widespread dissemination of better management practices (BMPs) in cotton growing areas of Bahawalpur, Lodhran, Rahim Yar Khan, and Toba Tek Singh districts in Punjab and; Sukkur and Ghotki districts in Sindh.

In this reporting period, WWF-Pakistan facilitated almost 37,000 smallholders and medium farmers, in the districts of Bahawalpur, Lodhran and Toba Tek Singh to implement the Better Cotton System (BCS) over an area of 126,000 hectares of commercial cotton cultivation. Almost 9,000 women were also trained in clean cotton picking as well as safe and healthy practices during farm work. As a result, over 250,000 metric tonnes (MT) of licensed Better Cotton was produced. The overall compliance rate of the PSCI project to the Better Cotton Standard was 94 per cent.

Farmers made better crop management decisions, which resulted in 26

per cent reduction in pesticide usage, 23 per cent reduction in fertilizer usage, and 12 per cent reduction in use of irrigation water. In Toba Tek Singh district there was a 25 per cent reduction in pesticide usage and 14 per cent reduction in fertilizer usage, but farmers who were implementing BWMPs used two per cent more irrigation water than control farmers. Project farmers in Bahawalpur earned around PKR 18,000 more per hectare than control farmers and in Toba Tek Singh project farmers earned PKR 26,000 more per hectare than control farmers. Ginning uptake of Better Cotton was 43 per cent in Bahawalpur and three per cent in Toba Tek Singh.

Better Cotton Farmer Support Programme

The Better Cotton Initiative (BCI) is a collaborative response to the need to tackle environmental and social challenges associated with cotton production, and to enable significant change towards a more sustainable future. WWF believes that the strong link between markets and cotton farmers is the key

to the success of BCI.

In January 2010, WWF-Pakistan, as an implementing partner of BCI, initiated work in Rahim Yar Khan, Punjab and Ghotki and Sukkur districts in Sindh under the Better Cotton Farmer Support Programme funded by BCFTF.

During the 2014-2015 cotton season WWF-Pakistan facilitated 60,000 farmers in the project area to implement the Better Cotton System (BCS) over an area of 203,388 hectares of commercial cotton cultivation. Over 22,000 women were also trained regarding clean cotton picking and health and safety during farm work. Farmers made better crop management decisions which resulted in a 12 per cent reduction in use of irrigation water, 22 per cent reduction in pesticide usage and 16 per cent reduction in synthetic fertilizers usage without affecting the yield. This resulted in net economic benefit of 35 per cent for Better Cotton farmers. Over 500,000 MT of licensed Better Cotton was also produced.

Farmer Support Programme (Sugar Improvement Programme-II)

WWF-Pakistan launched the Farmer Support Programme (FSP) in 2012 in collaboration with Solidaridad. The goal of the programme is to add value to the sugarcane supply chain by supporting small scale farmers and farm workers and preparing them for BONSUCRO (Better Sugarcane Initiative) certification.

During the 2015 season, the project facilitated approximately 5,500 farmers in Jhang district over an area of 8,000 hectares of sugarcane cultivation. Farmers applied BONSUCRO standards on their farms and produced over 7,200,000 MT of sugarcane. The project facilitated farmers in setting up five sugarcane producer organizations which were registered with the Social Welfare Department. The project worked in collaboration with Shakarganj Sugar Mills, Kamalia Sugar Mills and Humza Sugar Mills. Farmers used 50 per cent less Diammonium phosphate (DAP) fertilizers, 25 per cent less urea fertilizer and increased farmyard manure production by 10 per cent. There was a reduction of 55 per cent in usage of pesticides and 15 per cent reduction in usage of water, as well.

Promoting Cultivation of Organic Seed Cotton in Pakistan

The project explores possibilities of long-term organic cotton production in Pakistan in order to improve farmer livelihoods and ensure sustainable improvement in the natural, financial, social and human capital available to cotton farmers. The project is being implemented in Winder, a small village 80 km northwest of Karachi in the fertile Lasbela district in Balochistan province where the land is mostly virgin and fertile. Today, cotton of the highest quality is being grown on 2,000 hectares of cultivated land.

A pilot was initiated with 500 farming families in order to grow organic cotton over an area of around 1,000 hectares. Best practices will be achieved by developing a cadre of master trainers for the widespread dissemination of organic cotton production principles. Farmers have also been helped in understanding the process of certification and engaging with stakeholders, supply chain partners,



Cotton pickers, Sukkur © Asim Hafeez / WWF-Pakistan

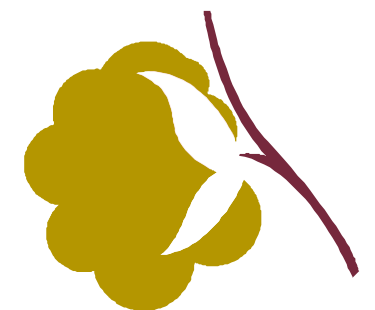


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Cotton heap, Mian Cotton Factory, Bahawalpur © WWF-Pakistan

Farmers made BMP

decisions which resulted in a **22 per cent** reduction in use of pesticide, and **16 per cent** synthetic fertilizer and **35 per cent** net economic benefits



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non-governmental organizations, trade bodies, and the government to identify opportunities to include supply chain linkages in organic cotton production.

Through training-of-trainer sessions 15 men and 13 women field facilitators were trained to implement the project. Twenty farmer field schools have been set up along with 20 demonstration plots. A baseline survey was conducted and water and soil samples were also analyzed in order to calculate the status of field and water. The project also provided a farm advisory service and a scoping study was also conducted to assess the current status of organic cotton in Pakistan.

Farmer field books were developed to collect data of project farmers and an internal assessment of farmers was conducted.

Sustainable Cotton Production in Pakistan's Cotton Ginning SMEs

The ginning of cotton involves direct environmental impacts, resulting mainly from high energy consumption and inefficient production processes. The SWITCH-Asia funded project Sustainable Cotton Production in Pakistan's Cotton Ginning SMEs (SPRING) seeks a sustainable future for the country's cotton sector and to promote environmental and resource efficiency, economic prosperity and improved working conditions by encouraging a switch to more sustainable practices in the ginning industry.

In its fourth year of implementation, the project has achieved its main objectives of completing three rounds of post-implementation audits of better ginning practices (BGPs) of 30 Level-I ginning SMEs to produce business case reports and cost benefits analysis reports.

In order to achieve a sustained impact among participating SMEs, the project's training approach incorporated on-site demonstrations. The customized, tailor-made training methodology has actively benefited ginning SMEs by upgrading the standards at their facilities. Participating SMEs also benefited from implementing economically and environmentally sustainable production practices requiring low cost modifications.

Technical gap analyses of 45 ginning SMEs were helpful in identifying processes and practices which needed improvement or modifications. The project team, along with technical resource persons and consultants, developed around 45 BGPs related to mechanical maintenance/condition improvement, production process improvement, electrical energy conservation and environment, health and safety conditions improvement for participating ginners and guided them to implement recommended BGPs.

So far, 200 Level-II ginning SMEs have received specialized training on different aspects of energy efficiency, mechanical efficiency, waste management, fibre quality preservation, occupational health and safety (OHS), etc.

In order to strengthen the collaboration among project stakeholders, quarterly project meetings were conducted whereas at the national level meetings of the National Stakeholders Council were also held. At the international level, WWF-UK and the Better Cotton Initiative (BCI) have engaged with various European brands and retailers in order to stimulate demand for Better Cotton products from Pakistan.

An online geo-database for the project was also created by the WWF-Pakistan GIS lab. Geospatial information on 45 SMEs was developed and shared in the form of keyhole markup language (KML) files and online maps.

Promotion of Agriculture Stewardship in Cotton Growing Areas of Punjab, Pakistan

This project aims to improve water management in order to maintain/restore water security, strengthen water stewardship and achieve sustainable poverty reduction. In the pilot phase of the project, Bahawalpur and Ahmad Pur, Bahawalpur district were selected as project areas.

This year, water user associations (WUA) were established at four outlets of distributaries of Ahmad Pur canal sub-division. A baseline survey of the project area was also conducted on all proposed sites. Comprehensive information regarding social and economic issues as well as issues related to irrigation water and crops were collected.

For capacity building, workshops were organized for the executive bodies and sub-committees of the WUA. These workshops trained farmers on better management practices (BMPs) for efficient use of irrigation water and to build capacity and minimize issues related to irrigation water management.

Demonstration plots were established at each selected site at the head, middle and tail portion of the water course, in which two BMPs i.e. laser levelling and sowing of cotton on bed and furrows were demonstrated. Data of applied irrigation and agronomic practices were collected and maintained.

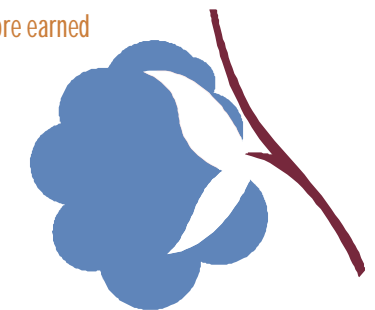
Four cut throat flumes were installed on each selected water course and will measure the discharge of water, seepage losses and the flow of irrigation water applied to demonstration and control plots.

Different BMPs of irrigation water were analyzed through practices at the field level and a comparison of traditional practices and better management practices was carried out.

PKR 26,000 per hectare more earned
by farmers growing

Better Cotton
in Toba Tek Singh as compared to

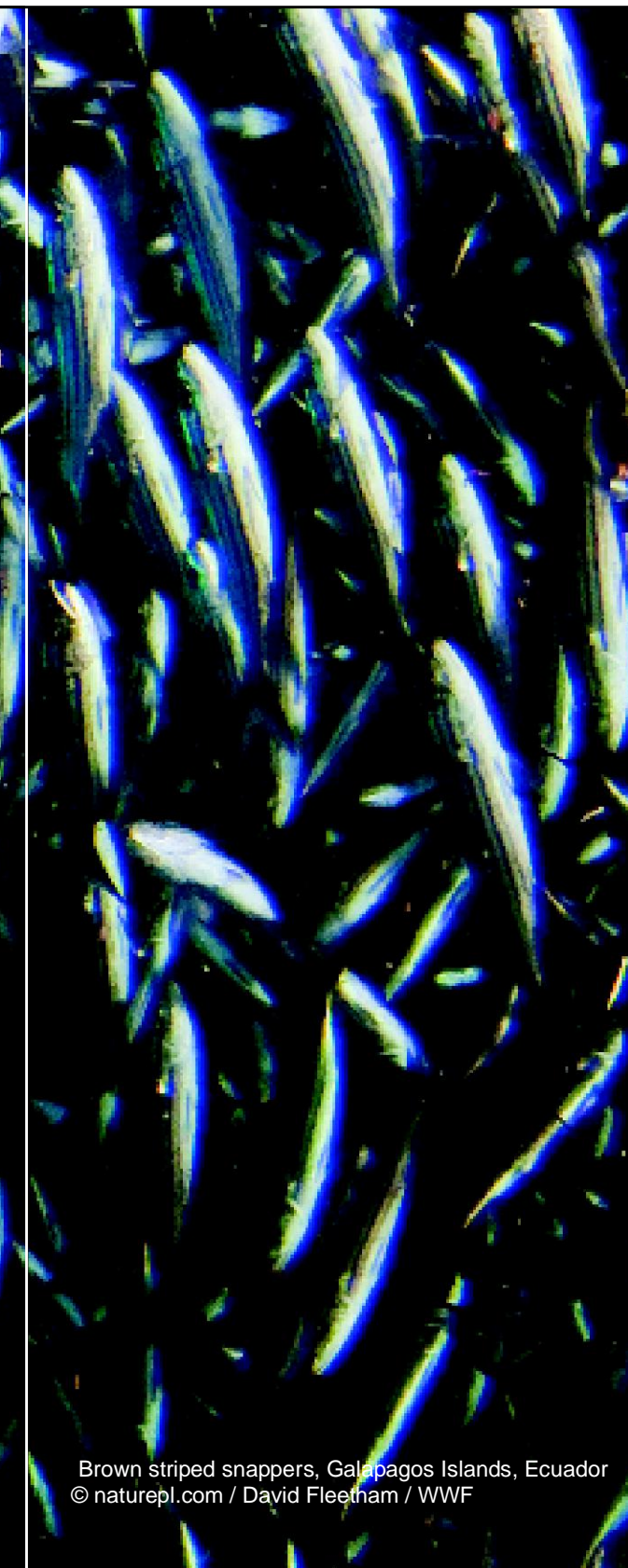
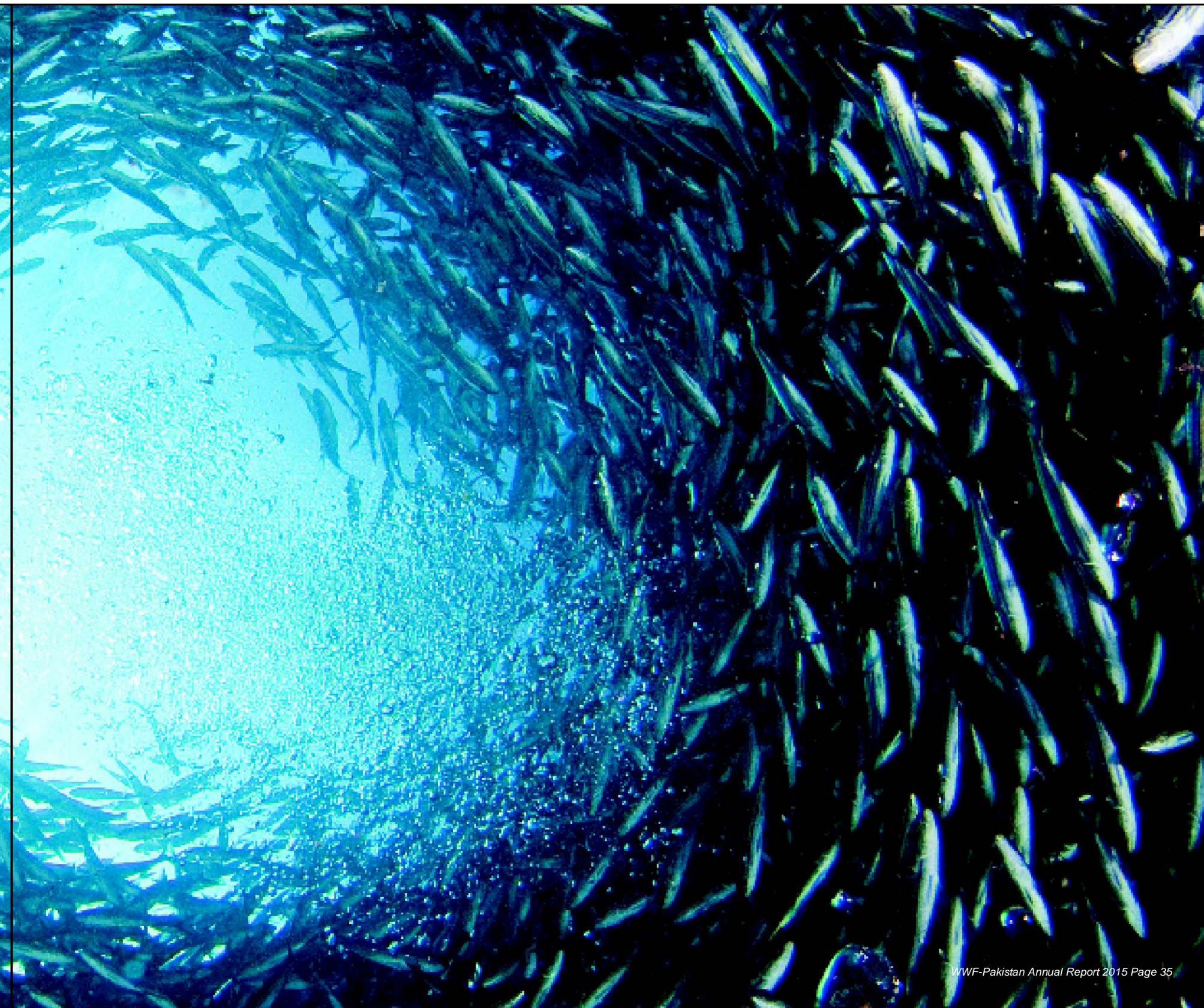
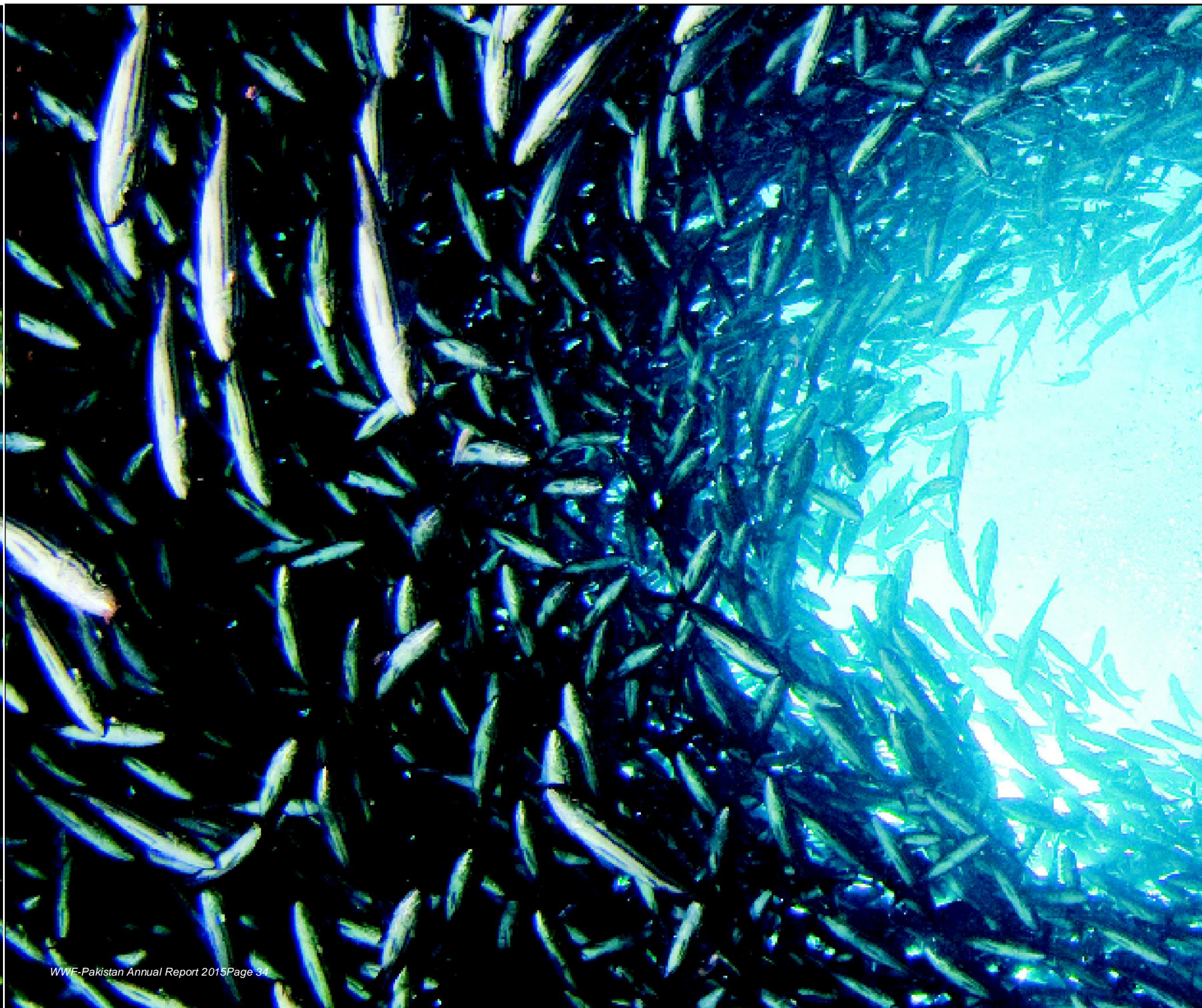
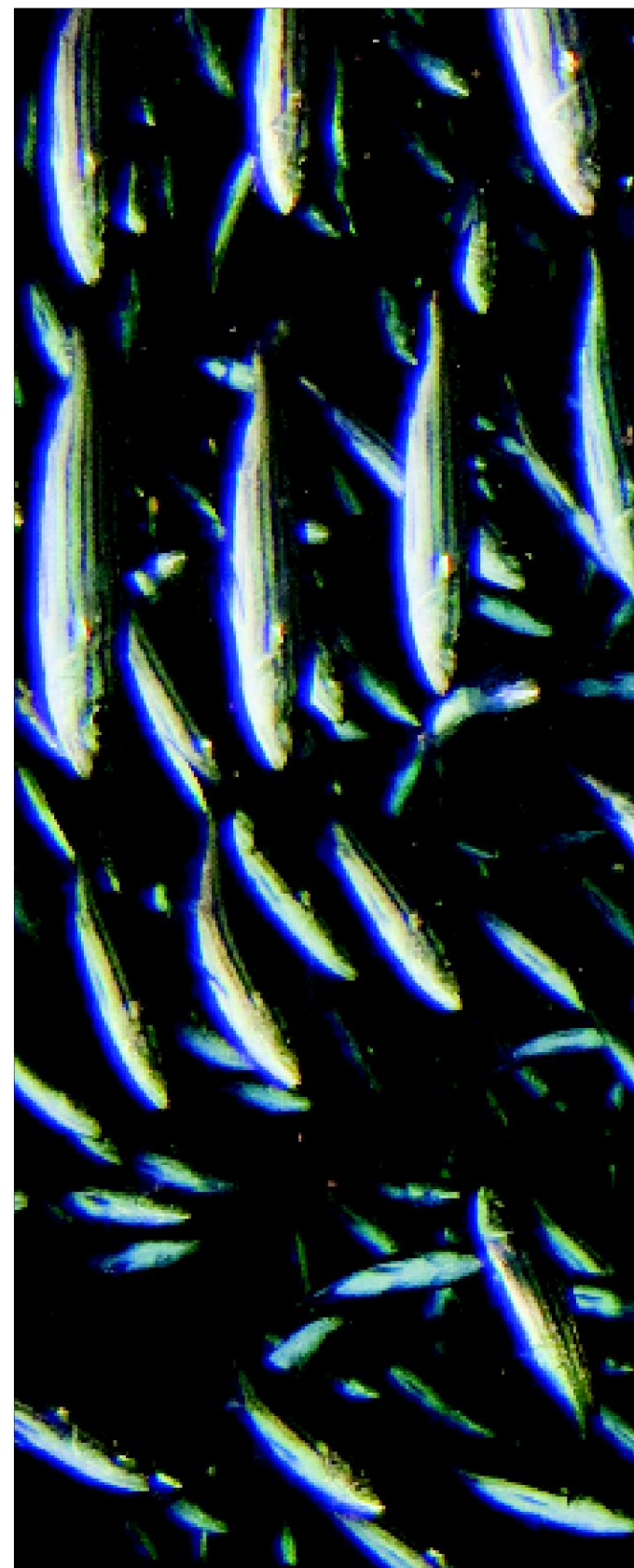
other farmers



Reducing By-catch in the High Seas

WWF-Pakistan, since January 2013, has been working with voluntary observers (mainly skippers) to collect fisheries data on-board tuna gillnet fishing vessels. Gillnets are commonly used to capture tuna and comprise of around 500 vessels. Limited information was previously available on the by-catch incidence of marine turtles, cetaceans (dolphins and whales), and shark species. In order to assess the magnitude of by-catch in gillnet fisheries, skippers were trained, who are now voluntarily helping in data collection.

Trained observers, within the first six months of the project, have successfully released hundreds of marine turtles from tuna gillnets. The majority of these have been olive ridley and green turtles. In the past 30 months, under the auspices of this project besides turtles, 15 whale sharks, one Indo-pacific humpback dolphin, one Arabian common dolphin, one Longmans beaked whale, four manta rays, and three



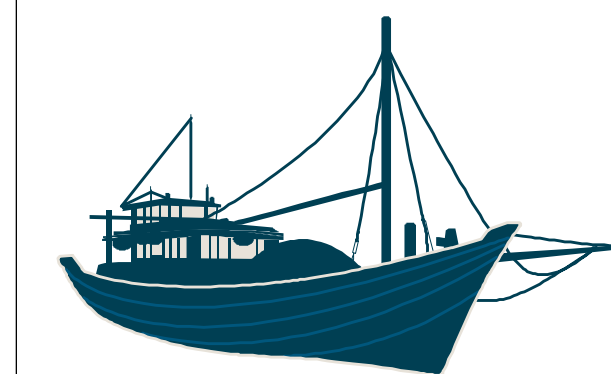
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Brown striped snappers, Galapagos Islands, Ecuador
© naturepl.com / David Fleetham / WWF

sunfish have been successfully and safely released.

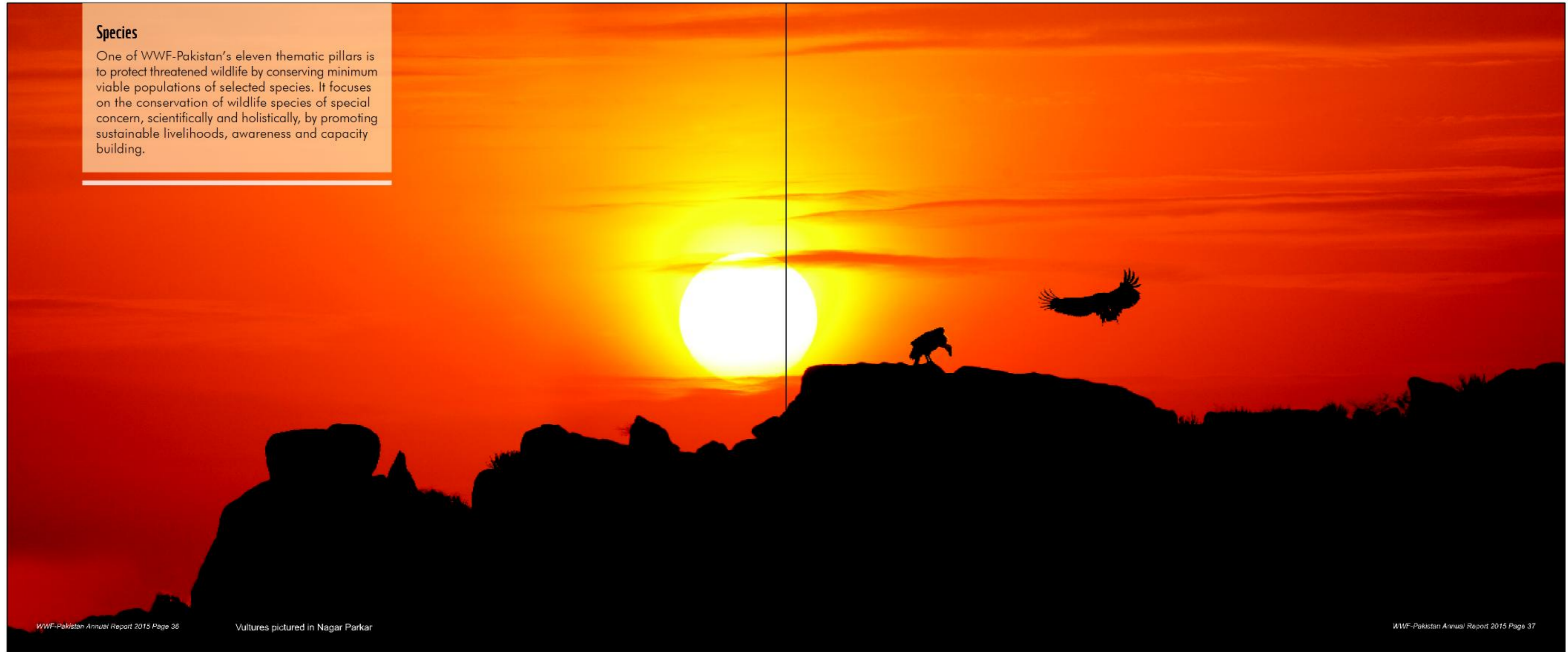
The project continues to systematically collect valuable information on tuna fishing operations and by-catch species, especially turtles and other cetaceans, and sharks.



WWF-Pakistan carried out a sailing voyage from Dubai to Karachi with the objective to highlight the unique marine ecology of the region and record sightings of significant marine wildlife. The expedition stopped in Gwadar on its way to Karachi.

Species

One of WWF-Pakistan's eleven thematic pillars is to protect threatened wildlife by conserving minimum viable populations of selected species. It focuses on the conservation of wildlife species of special concern, scientifically and holistically, by promoting sustainable livelihoods, awareness and capacity building.



Species

Gyps Vulture Conservation Project

The Gyps genus vultures were once very common in the Indian subcontinent. In the late 1990s the populations of three Gyps vultures; the white-backed vulture (*Gyps bengalensis*), the Indian long-billed vulture (*Gyps indicus*) and the slender-billed vulture (*Gyps tenuirostris*); started declining dramatically. A decline of 95 per cent was observed in the population of white-backed vultures (*Gyps bengalensis*) in India, Pakistan and Nepal (published literature suggests that this species has now declined to 99 per cent) and they are now classified as *critically endangered* according to the International Union for Conservation of Nature (IUCN) Red List.

Diclofenac Sodium, a non-steroidal anti-inflammatory drug (NSAID), used as a pain killer for livestock, is the main cause of mortality in Gyps vultures. When vultures feed on the carcasses of animals treated with this drug, they ultimately develop visceral gout causing kidney failure which leads

to their mortality. WWF-Pakistan's initial surveys under the Vulture Safe Zone (VSZ) project indicate that Ketoprofen, Fluxinin and Aceclofenac are available in Pakistan. WWF-Pakistan has recorded human formulations of Diclofenac (local as well as imported) available in Nagar Parkar, an area which has the last remaining breeding population of two *critically endangered* Gyps vultures.

WWF-Pakistan is implementing *ex-situ* and *in-situ* conservation efforts to save the *critically endangered* white-backed vulture under its Gyps Vulture Conservation Project. While the *ex-situ* facility in Changa Manga is maintaining a safe population of *Gyps bengalensis* and helping in raising awareness, *in-situ* conservation is carried out in Nagar Parkar, Sindh to monitor and protect the two *critically endangered* Gyps vulture species within the Vulture Safe Zone. WWF-Pakistan has conducted four comprehensive Gyps vulture population assessment surveys from the year 2011 which show a gradual increase in the number of active nests of white-backed vultures. Recent survey data showed that the number of active nests of the white-backed vulture

increased from 12 to 31 in 2015, similarly the active nests of the long-billed vulture increased from 172 in 2011 to 183 in 2015 (active nest are those where an egg or chick are present as well as an attending pair). In 2011 a survey of Azad Jammu and Kashmir (AJK) reported no white-backed vultures, however, 60 were reported in 2015. The survey also recorded the Egyptian vulture, which is also *endangered*. There were 584 in Nagar Parkar in 2015 and 160 in AJK.

The VSZ project, supported by the Prince Bernhard Nature Fund, is assisting Parkar Foundation, a local CBO, in conservation initiatives at the local level. As a result a livestock assessment was conducted, consultative community awareness raising sessions were arranged and meetings with veterinary and para-veterinary staff were also organized. The project is also lobbying to ban other harmful NSAIDS.

Indus River Dolphin Conservation Project

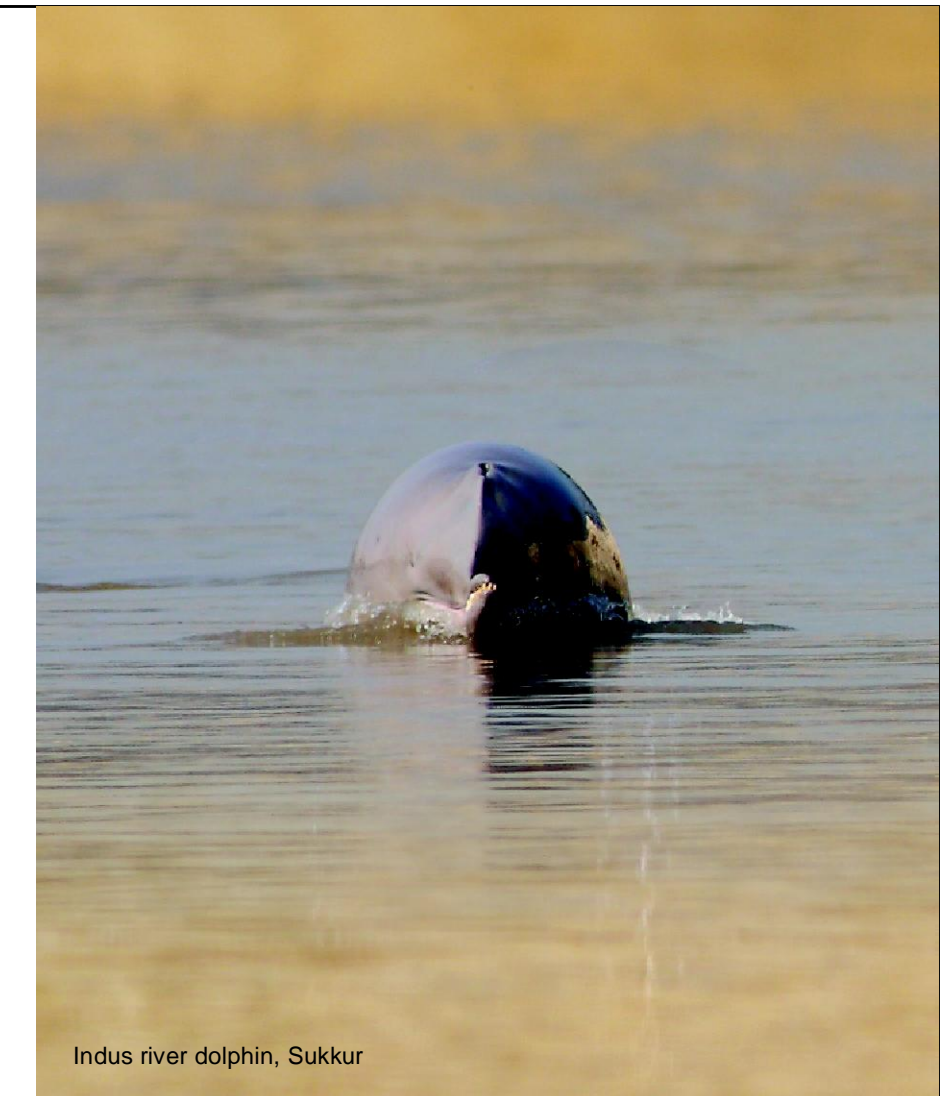
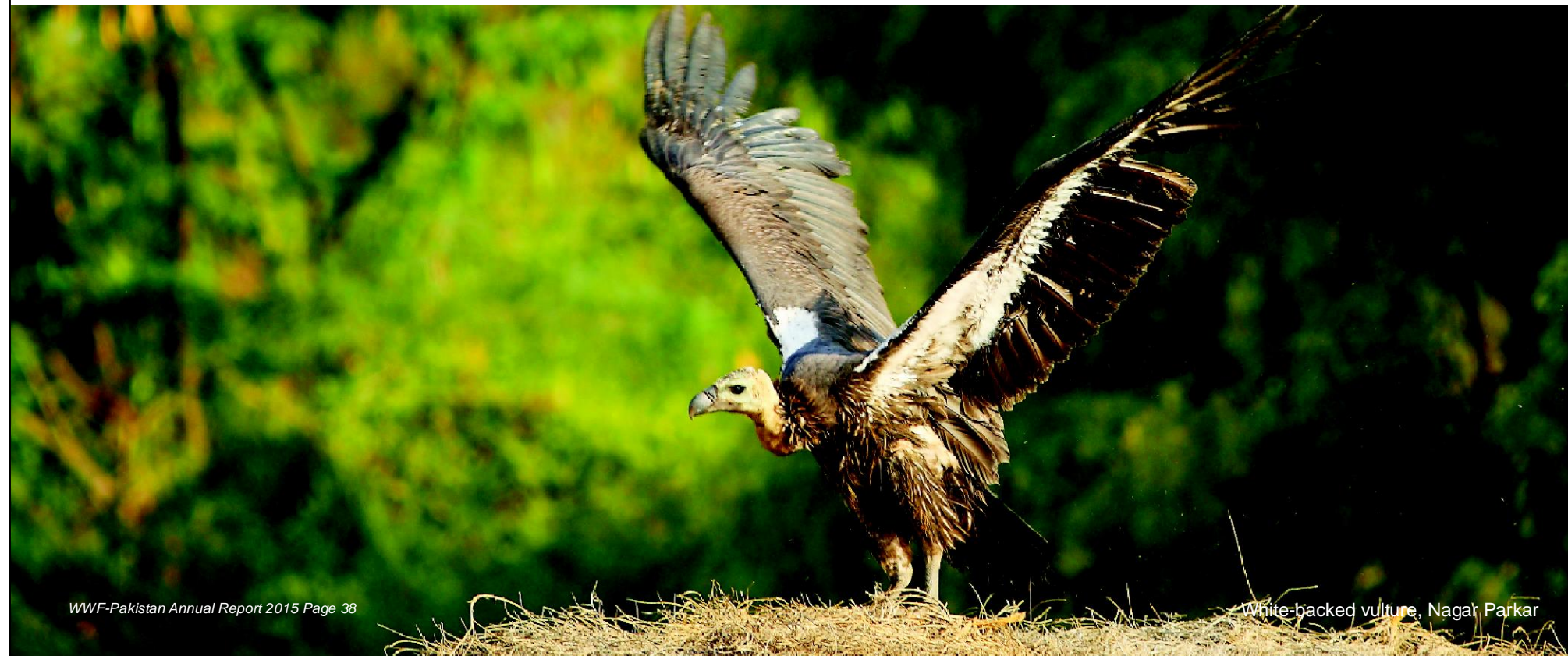
The Indus river dolphin (*Platanista gangetica minor*) is one of the most threatened species of freshwater cetaceans, found in the Indus River in Pakistan. It is designated as *endangered* in the IUCN Red List. According to WWF-Pakistan's survey conducted in 2011, the estimated population of the Indus river dolphin is about 1,452 animals present between Chashma and Kotri barrages. WWF-Pakistan is conserving the species under its Indus River Dolphin Conservation Project between Guddu and Sukkur barrages in Sindh province. This stretch of river, about 200 km, is notified as the Indus Dolphin Game Reserve and holds the highest population of Indus river dolphins; about 857 individuals.

The Indus River Dolphin Conservation Project was partly supported by the UK Aid-funded project implemented in the Central Indus Wetlands Complex and aimed to continue activities to improve timely rescue of canal stranded dolphins. A dolphin rescue team also monitored the river stretch for stranded dolphins during the high flood season and canal monitoring was carried out during sudden canal closures due to extreme weather as well. A total of 117 dolphins have been rescued since 1993.

This year, WWF-Pakistan rescued two stranded dolphins during the low flow season whereas one stranded dolphin had moved into the main channel from a fishing area along the Indus River. WWF-Pakistan also conducted awareness raising sessions to enhance understanding of local communities about the environment. Eco-tourism was promoted by organizing dolphin watching boat safaris in the Indus Dolphin Game Reserve. The Dolphin Conservation and Information Centre, Sukkur also played an important role in disseminating information about the ecological importance of the Indus River.

Community Based Conservation of the Snow Leopard and Improved Watershed Management

In 2012, WWF-Pakistan initiated the project Community Based Conservation of the Snow Leopard and Improved Watershed Management, funded by USAID



Indus river dolphin, Sukkur

117 number
of dolphins rescued since 1993



through WWF-US. The goal of the project is to galvanize greater understanding and action at the local, national and regional levels across snow leopard range countries to conserve this endangered species. The project also connects snow leopard conservation to a broader set of environmental, economic, and social issues with consequences for Asia's future sustainability, namely local livelihoods, water and food security, and climate change adaptation.

In 2014, the local community was mobilized to sustainably use natural resources. Six awareness raising campaigns were initiated on the impacts of climate change on local livelihoods and the ecological importance of the snow leopard and other wild fauna and flora.

A detailed study on human-wildlife conflict in the project area was conducted and certain mitigation measures were also taken. A predator proof corral was constructed by local communities and livestock vaccination campaigns were also carried out. More than 10,000 livestock heads were vaccinated for PPR and pox in addition to the administration of medication for Mange.

To better understand the species and its interactions, four surveys on the snow leopard and its prey population were conducted in the project area using the SLIM system for the leopard and the direct observation method for the Himalayan ibex. An area of more than 250 km² was surveyed using 50

transects in different habitat sites i.e. ridge line, valley bottom, cliff base, hill side, terrace and stream bed.

For watershed management, 10,000 fast growing multi-purpose trees were planted in addition to the cultivation of alfalfa seeds on barren and agricultural lands. A joint watch-and-ward system was also initiated, which is proving effective and illegal activities are monitored by guards deployed in the project area.

Common Leopard Conservation Project

WWF-Pakistan launched the Common Leopard Conservation Project in January 2012 with financial support from the Human Welfare and Nature Conservation Society (HWNCS). The project involves research and creating awareness in collaboration with the University of Siena, Italy and Walkabout Films Private Limited. It conducted scientific research into the common leopard food habits, home range and population (using camera traps, radio collaring and genetic analysis), created awareness by developing a documentary and short features to understand the socio-economic impacts of the leopard and evaluated changes in the prime leopard habitat using Geographical Information System.

A 50-minute documentary in Urdu, Hindko and English along with 10

short features on various themes and five one-minute web clips for awareness were completed in 2014, which are used to educate the local community about the leopard. Two year data of the radio collaring of an adult male leopard, collared on 1 September 2013, showed that its home range occupies an area of about 91 km² and there is no difference between seasons. The leopard used forest patches for its movement and stay. The camera traps have helped in recording individual leopards and the presence of other species in the Ayubia National Park (ANP).

Community training sessions continue to be conducted to provide information on disease management and livestock husbandry as well as awareness raising sessions in schools to highlight the ecological importance of the common leopard with mitigating measures to reduce the chances of leopard attacks on humans and livestock. Conflict management initiatives were also taken to diffuse issues related to leopard attacks.

Students of the Lahore American School donated a sum of PKR 25,000 to the project, which was used for the purchase of medicines for a community-led veterinary dispensary. The dispensary aims to control losses of livestock caused by disease which tend to be more than those from leopards.

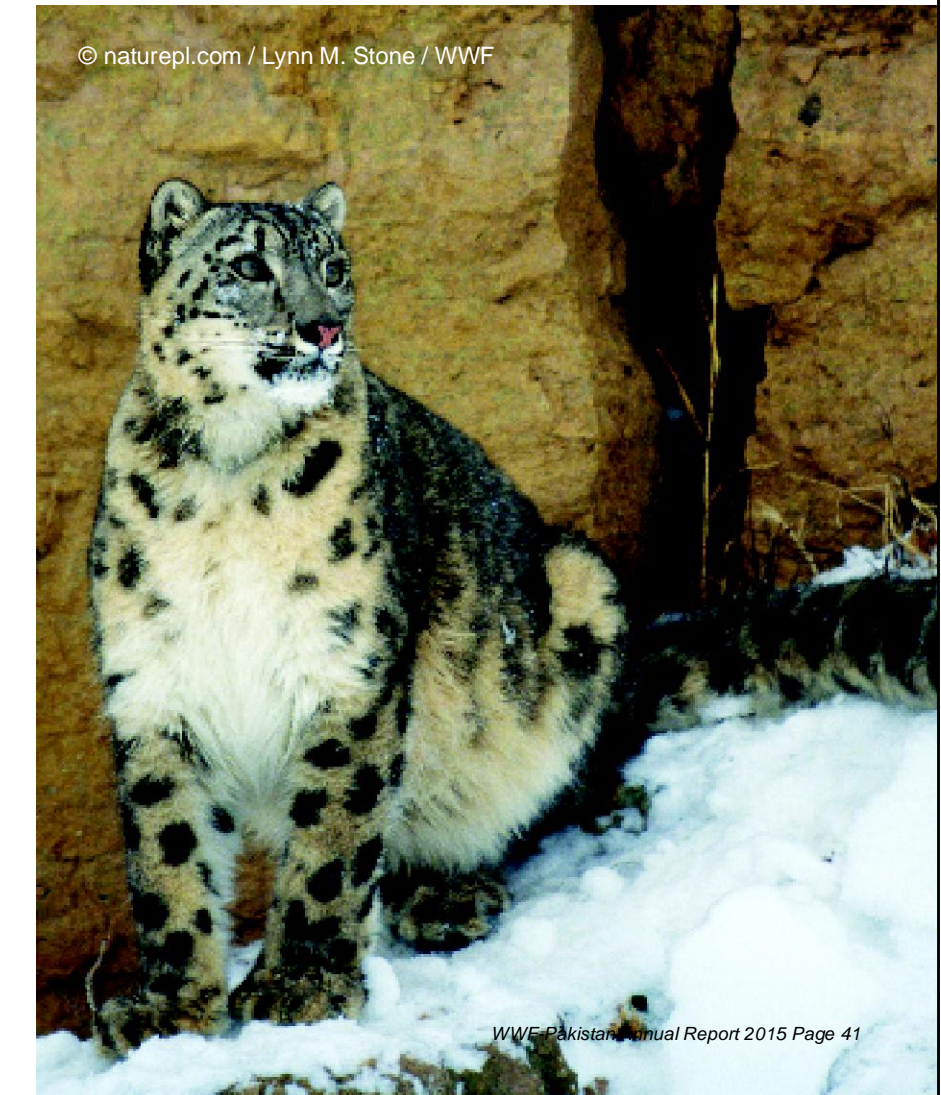
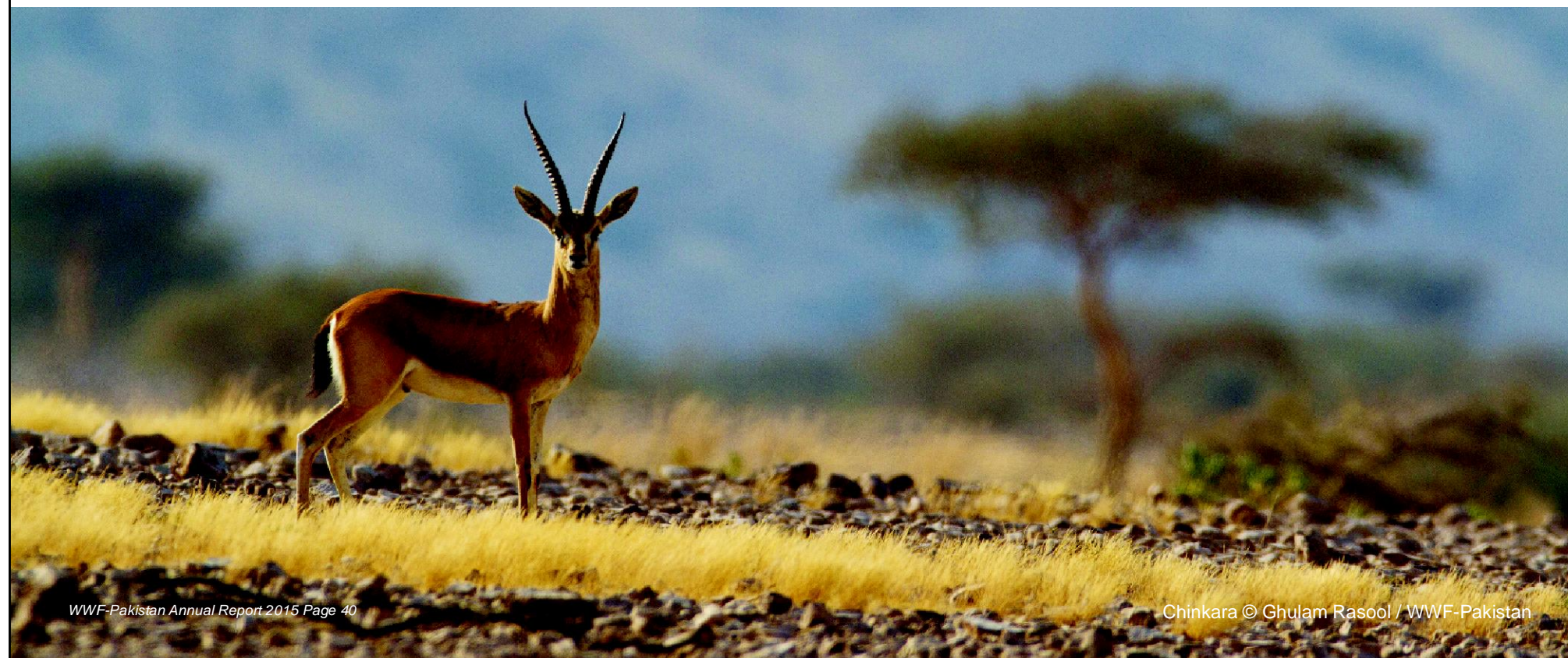
Conserving the Snow Leopard and Alpine Wetlands, a Strategy to Manage Qurumbar National Park, Ghizer District

The project, funded by Keidanren Nature Conservation Fund (KNCF), is being implemented in collaboration with the Gilgit-Baltistan Forest, Wildlife and Parks Department and communities residing near the Qurumbar National Park (QNP). The project aims to conserve the snow leopard population and alpine ecosystem through improved planning and management of QNP, Ghizer district.

Three consultative meetings with the staff of Forest and Wildlife departments and members of the Qurumbar Social Welfare, Conservation and Development Organization were conducted to introduce the project. Researchers from Karakoram International University; Mountain Agricultural Research Centre; WWF; Forest, Wildlife and Environment Department reviewed and consolidated available literature on the park, and recommended key research to be incorporated in the management plan.

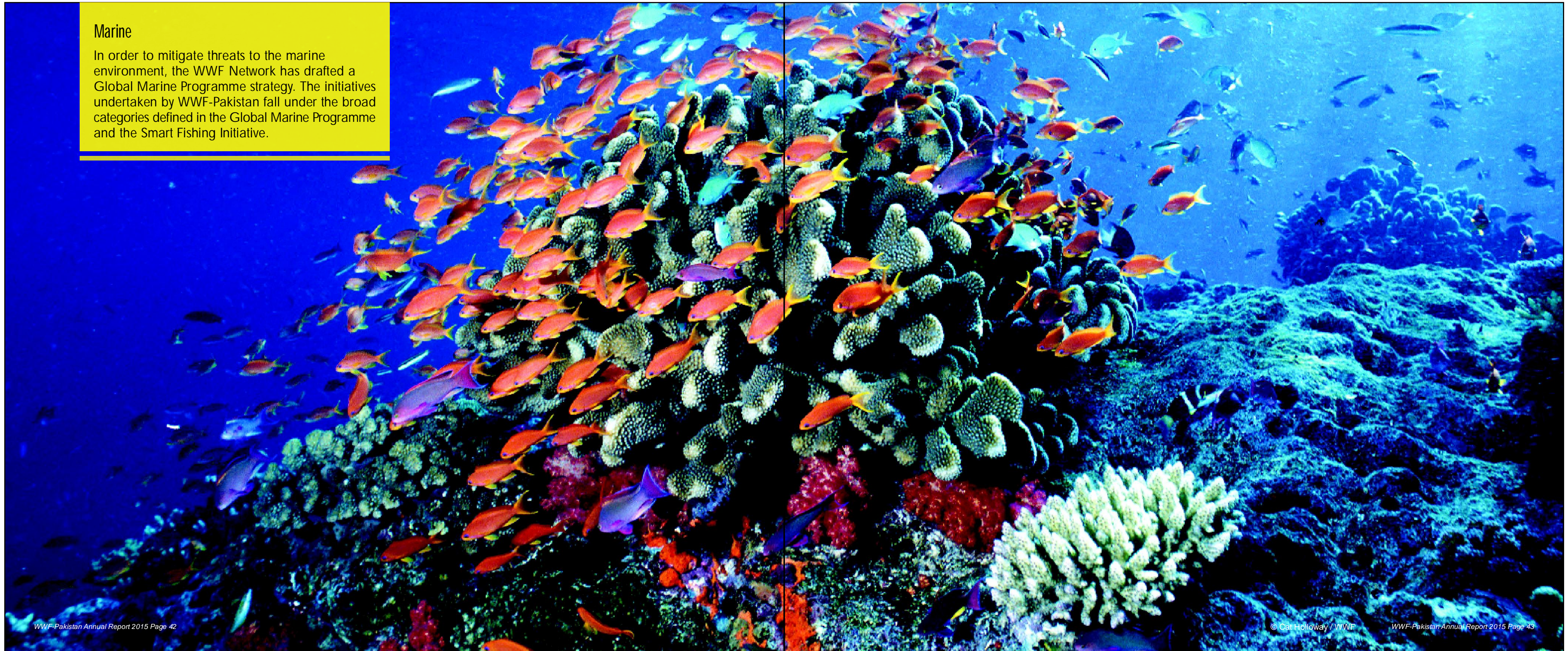
A Terms of Partnership (ToP) was signed by WWF, the Park Authority and the custodian communities for implementation of the project and its resources. The communities also passed a resolution to coordinate and collaborate with the project, WWF and the Wildlife Department. A draft management plan of the park has also been developed.

91 km²
home range of
Pakistan's first collared
male common leopard



Marine

In order to mitigate threats to the marine environment, the WWF Network has drafted a Global Marine Programme strategy. The initiatives undertaken by WWF-Pakistan fall under the broad categories defined in the Global Marine Programme and the Smart Fishing Initiative.



Marine

Sindh and Balochistan's Creek Habitat (Fisheries Resource Assessment Project)

The Fisheries Resource Assessment Project (FRAP), led by WWF-Pakistan from January 2013 to the spring of 2015 aimed to take stock of fisheries and types of marine habitats along the coastline of Pakistan. As a result of the assessment the Marine Fisheries Department is now in a position to evaluate which habitats require more urgent conservation investments.

An unprecedented component of the project was a three-month long survey carried out in five localities, most of which were in Sonmiani Bay (Miani Hor), Balochistan. Its findings helped practitioners determine species diversity present in Pakistan's coastal creeks and showed productivity of creek fisheries to be 50 kg of catch per fishing outing on average in Sonmiani for a medium to large-sized boat as compared to Sindh creeks where total catches for the sampled year were 89 kg.

The project was supported by several partners and stakeholder organizations besides WWF-Pakistan and the Marine Fisheries Department who financed the project. Implementing partners included the United Nations Food and Agriculture Organization (FAO); National Institute of Oceanography (NIO); Pakistan Space and Upper Atmosphere Research Commission (SUPARCO); Centre of Excellence in Marine Biology (CEMB); Geography Department, Karachi University; Balochistan Fisheries Department and community based organizations of Sonmiani Bay.

Transforming Markets with Responsible Governance

In order to build the capacity of fishermen and key stakeholders governing Pakistan's marine resources, WWF-Pakistan held consultative dialogues and shark-themed workshops. Bearing in mind the worrying decline in Pakistan's shark population, a national plan of action (NPOA) was drafted as a result

of the consultations. The plan will serve as a roadmap for the Arabian Sea's future shark conservation and gillnet by-catch reduction programmes, among others.

Reducing By-catch - Areas Beyond National Jurisdiction

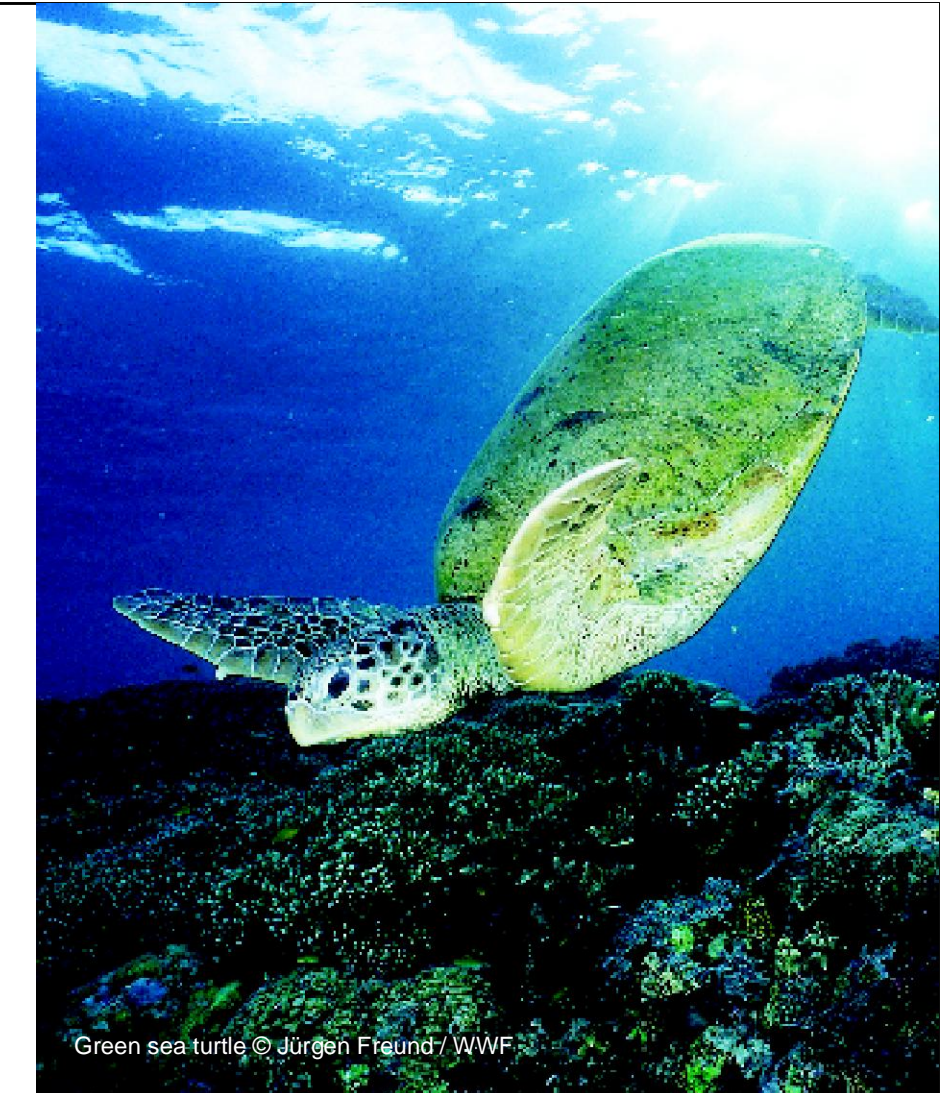
Another marine project led by WWF-Pakistan and initiated in January 2015 is based in the Northern Indian Ocean. While the project covers such topics as satellite monitoring capacity and data collection, WWF-Pakistan is responsible within the project for piloting by-catch reducing demonstration projects in Pakistan, Iran, and Oman.

Within the first six months, hundreds of turtles were released from tuna fishers' nets along the coast of Pakistan. Besides these turtles, a majority of which were olive ridley and green turtles, several whale sharks, two dolphins, two manta rays, two sunfish, and one whale were also released alive. The project continues to systematically collect valuable information on tuna fishing operations and by-catch species, especially turtles, cetaceans, and sharks. The Areas Beyond National Jurisdiction project was carried out in collaboration with the United Nations Food and Agriculture Organization and the Global Environment Facility.

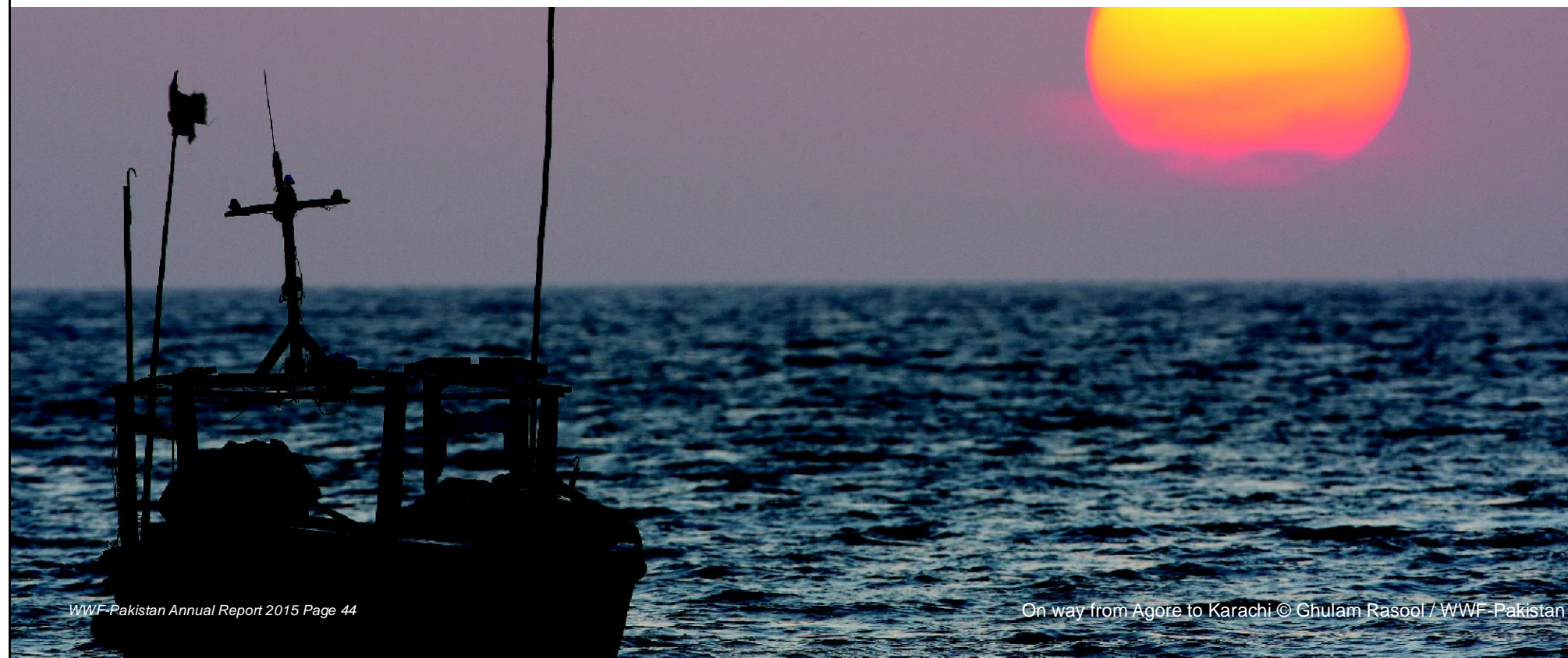
WWF-Pakistan Sets the Pace for Fisheries Institutions in the Region

WWF-Pakistan is strengthening Northern Indian Ocean fisheries conservation institutions, as well as financing and supplying technical input to fishers in order to improve their market access opportunities. The principal instruments being used to open marketing channels in Japan, the US, and European markets are Fisheries Improvement Projects (FIPs) and Marine Stewardship Council Certification (MSC), both under WWF International's Smart Fishing Initiative (SFI) and WWF Network funded projects.

The region will soon benefit from improved management regimes in areas where these are most required, such as providing support to Regional Fisheries Management Organizations (RFMO), in this instance the Indian Ocean Tuna Commission (IOTC) and the Indian Ocean coastal states. States such as India, Mauritius, the Maldives, Tanzania, Kenya, Seychelles, Mozambique, Sri Lanka, La Reunion islands, Indonesia, Malaysia, Madagascar, Oman, Thailand, Djibouti, Sudan, and Iran, will be provided data on tuna fisheries and associated by-catch. In this context, WWF-Pakistan collaborated with the Emirates Wildlife Society in association with WWF (EWS-WWF) office in organizing an Arabian humpback whale workshop to develop conservation and management measures and protection. The working group recommended regional data collection which will help address illegal, unreported and unregulated fishing.



Green sea turtle © Jürgen Freund / WWF



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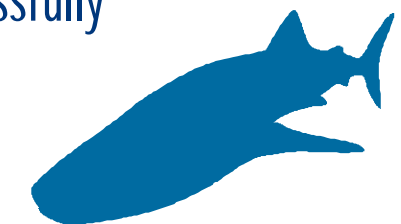
On way from Agore to Karachi © Ghulam Rasool / WWF Pakistan

3 whale sharks successfully

released by WWF-Pakistan

trained fishermen in

October 2014



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Climate Change

Over the past two decades, climate change has emerged as a global threat, transcending political boundaries. Although a low contributor to greenhouse gas emissions, Pakistan faces a significant threat due to rising global temperatures. Keeping this in mind, WWF-Pakistan's climate change adaptation programme is one of its many initiatives based on this thematic pillar. We aim to reduce the consequences of climate change on ecosystems and biodiversity and to promote sustainable development in the country.

Poverty Environment Linkages

Improving Livelihoods of Fisher Communities of the Central Indus Wetlands Complex, Pakistan

Funded by the Department for International Development (DfID) under the Global Poverty Action Fund (GPAF) for a period of three years, the project focused on improving the livelihoods of at least 2,000 fishermen households (approximately 16,000 people) in three areas by addressing the poverty-environment nexus. The project was implemented in selected areas of the Central Indus including two protected areas: Taunsa Barrage Wildlife Sanctuary and the Indus Dolphin Game Reserve, which are also designated as Ramsar sites (wetlands of international importance).

All interventions introduced among communities not only reduced pressure on natural resources but also increased savings in terms of money, time, fuel wood and health related expenditures. Adoption of management plans, involvement of stakeholders and developing disaster resilient communities

has created a positive impact. In addition, raising awareness, protecting floodplains through plantations and the introduction of best management practices in agriculture and riverine habitats have been some of the key components of the project. As far as alternative livelihood opportunities are concerned, sustainable fishing practices and provision of livestock and poultry have effectively addressed poverty-environment related issues.

Kitchen gardens in the CIWC project communities are helping women put organic food on their tables as they are sustainable and environment friendly, and provide an alternative to those who would otherwise partake in illegal fishing, hunting or logging.

Fish restaurants are empowering fishermen to fish sustainably, aspire to better livelihood opportunities and serve hygienic food to their patrons.

Rural fisher communities are using biogas plants as an alternate livelihood resource, as a clean energy resource, and as a community building component. Biogas plants produce a steady odourless flame that is beneficial in cooking

and heating purposes. Biogas plants limit the need for logging trees and burning firewood or coal to run stoves and heaters.

Fuel-efficient stoves are helping community women slowly move away from using fuel wood, which is usually illegally logged in riparian areas, damaging habitats and the environment.

Community based organizations (CBOs) are helping fisher communities live sustainably and overcome livelihood challenges. These CBOs have developed a sense of camaraderie amongst the fishermen communities, making them partners in their own progress. CBO members hold regular meetings and discuss issues, successes and failures to achieve bigger targets in the future for collective betterment.

Empowered communities have been organized and trained to ensure sustainability well beyond the official project deadline. Boat-making trainings have encouraged many CBO members to make decorative models of boats with legally sourced wood that are sold as souvenirs.

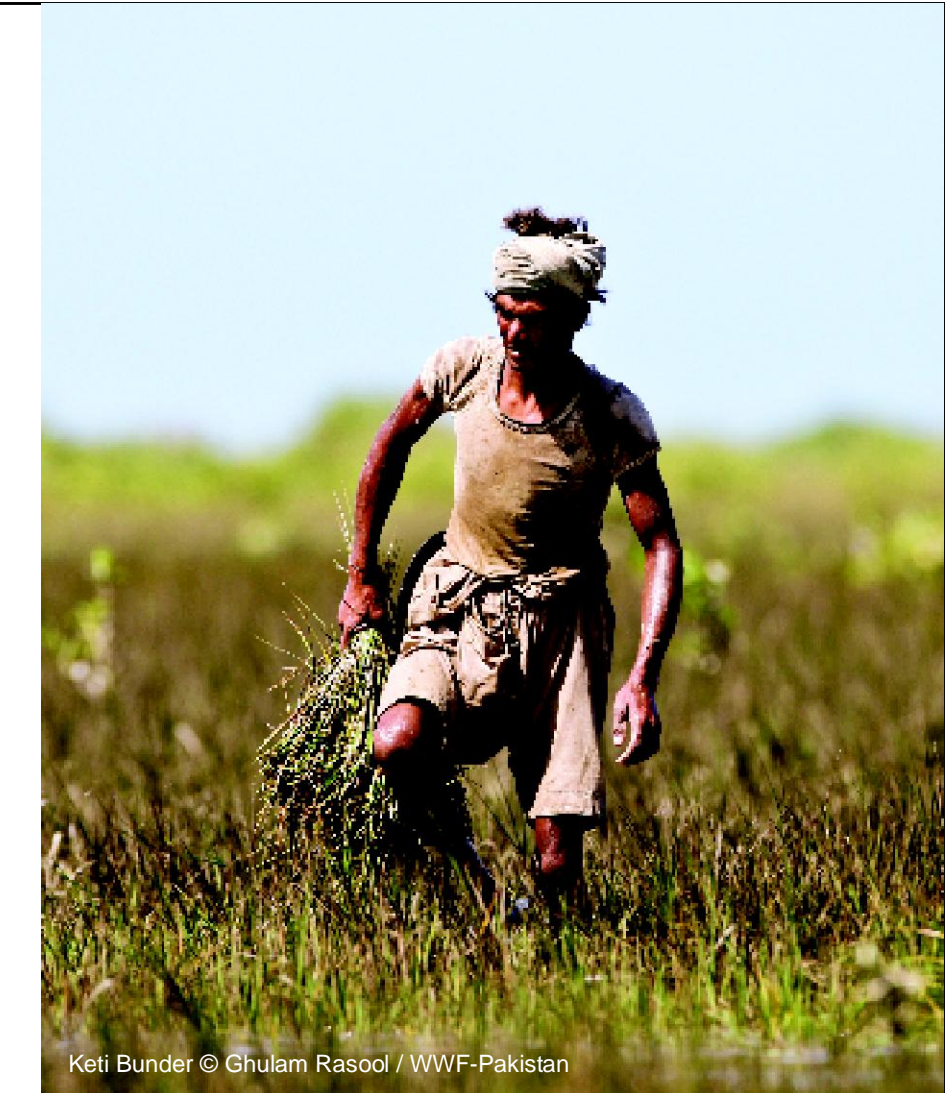
Fishermen have been educated about legal sized nets to avoid catching juvenile spawn of fish in the Indus River. Discarded illegal nets are now used creatively such as to protect fruit trees from stray animals.

Provision of ice boxes on fishing boats to preserve the catch of the day is also benefitting fisher communities.

Women's skill development was a challenge that has been turned into a livelihood opportunity in the project sites. Vocational training centres (VTC) are highlighting the excellent handiwork in sewing and embroidery made by women of fisher communities. Partnerships between the project VTC and other government and private training institutes encouraged women to adopt this livelihood option.

Project interventions are encouraging fishermen to view mammals and birds in their area as allies in their progress. Fishermen have been sensitized to protect species of special concern such as the *endangered* Indus river dolphin and have been trained to rescue them. Illegal hunting of local and migratory birds was rampant but now the community does not hunt unnecessarily and advises other villagers or visitors against the practice.

The establishment of the Taunsa Information Centre at Taunsa Barrage and the uplift of the Dolphin Information Centre in Sukkur will further help in sustaining conservation and developmental efforts beyond the end of the project through capacity building and awareness among the communities.



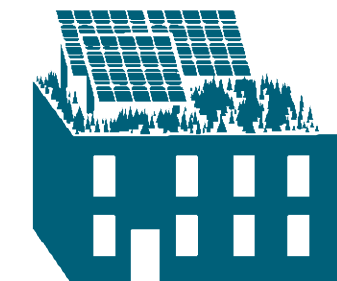
Keti Bunder © Ghulam Rasool / WWF-Pakistan



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Nagar Parkar

16,000 community members benefited through improved livelihood initiatives.



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Climate Change

Building Capacity on Climate Change Adaptation in Coastal Areas of Pakistan (CCAP)

WWF-Pakistan completed its five-year coastal climate change adaptation project in December 2015. During the duration of the project, stakeholders sought to learn, apply, and now boast new techniques to bolster resilience.

In the aquaculture, livestock, marine fisheries, and agriculture sectors, stakeholders such as fishers, farmers, planners and policymakers have learned ecosystem-based adaptation methods. Some significant contributions of the project for planners are query-able databases, maps, baselines, vulnerability assessment studies, and sector forecasts of impacts and their costs. Farmers for their part are equipped with manuals and new curriculum, and participate in low-cost, high-return climate field schools which CCAP argues are to be preferred to investments in expansion of water reservoir capacity and canal lining. Coastal and inland fishers have learned several lessons, including

reinvesting crab fattening proceeds to construct elevated homes for those living in delta creeks. Land cover / land use change trends were also studied in the selected area of Keti Bunder and Kharo Chann talukas under the project.

By the start of 2016, as part of the exit strategy WWF-Pakistan's partners will work to ensure stakeholders apply adaptations in view of future hazards. They will continue to assist coastal fishers and farmers of Sindh and Balochistan to seize opportunities and challenges thrown up by slow onset transformations such as earlier plantation dates, reduced monsoon days, or higher night-time temperatures.

Enhancing the Value of Hydrological Resources for Livelihood, Youth Employability and Climate Resilience in Gilgit-Baltistan, Pakistan

The project aims to promote high efficiency in the use of water resources for

food production and domestic consumption; develop high value crops based on natural endowments and market opportunity; and hedge against crop / market failure, and conserve the regenerative capacity of the natural resource base.

Ten new varieties of high yielding fruit trees, cereal and fodder crops, most suitable to the temperate climate of Gilgit-Baltistan (GB), were imported. Four research farms of the Mountain Agricultural Research Centre (MARC) were restocked with true-to-type imported plant material. One technology on high efficiency irrigation (HEI) was established at MARC for demonstration purposes.

A Geographic Information System (GIS) based map of agro-ecological zones of GB with a report on recommended domains for each zone was also developed. Six value chains were established for mountain agricultural produces and four pilot sites for multiplication of certified planting materials were also selected.

Himalayan Climate Change Adaptation Programme

The Himalayan Climate Change Adaptation Programme (HICAP) is a five-year programme aimed at enhancing resilience to change, particularly climate change, through improved understanding of vulnerabilities, opportunities and potentials for adaptation, and the development of strategies and policies based on scientific/evidence-based knowledge in five river sub-basins in the Himalayan-Karakoram-Hindukush region. The programme is supported by the governments of Norway and Sweden and promoted jointly by the International Centre for Integrated Mountain Development (ICIMOD), GRID-Arendal, Norway and CICERO, Norway. In Pakistan, the programme is being implemented in the upper Indus Basin covering the areas of Hunza, Gilgit and Chitral.

The project collected socio-economic and ecological data from research sites including Naltar Valley and Gilgit/Rakaposhi valleys, Nagar. Research was conducted to understand existing mechanisms on payment for ecosystem (PES) services (or incentive-based mechanisms) in the upper Indus. Research was also carried out on climate impacts on the ecosystem and livelihoods focusing on a rangeland ecosystem.

Valuation of ecosystem services in both sites was carried out to collect primary data. In addition, a pilot PES was introduced at one site linking it to valuation work. Community or site level consultations were conducted in order to understand the local context on ecosystems and climate change.

A national level workshop on Ecosystem Based Adaptation in Pakistan: Policies and Practices was also organized as well as a workshop on Policy Dialogue on Climate Change, Ecosystem and Livelihoods. A policy deficit analysis was carried out on climate change, ecosystem management (both central and provincial) and a roundtable policy discussion on water-forests-livelihoods in the upper Indus region was conducted.



Astola Island © Ghulam Rasool / WWF-Pakistan

A WWF-Pakistan study shows that
adaptation measures
can reduce the impacts of
climate change
and improve food security



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Keti Bunder © Ghulam Rasool / WWF-Pakistan

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Mission: Conservation

Poverty and environmental degradation are strongly interlinked, particularly in developing countries like Pakistan and WWF-Pakistan works to improve management of the country's natural resources while ensuring better livelihoods for the rural poor. The project Improving Livelihoods of Fisher Communities in the Central Indus Wetlands Complex (CIWC) focused on sustainable livelihood options. One of the biggest challenges that fishing communities face is low fish catch. A survey identified that the mesh and weave of nets used is usually too small to allow juvenile fish spawn to pass through safely while still catching good sized adult fish.

Through the project, fishermen were taught about the life cycle of fish species, which added to their previous knowledge. Members of participating CBOs discarded their small mesh nets en masse and procured new legal sized nets to catch only bigger fish, preferably of six inches or more.

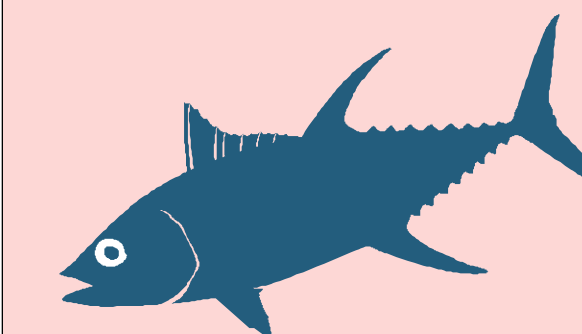


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Jhelum River near Bhera

Many fishermen discarded illegal nets, while others chose to use the nets as protective barriers, vegetable carriers or sling bags. Approximate 200 legal sized fishing nets were distributed among fishermen while trainings on sustainable fishing practices were also conducted. A sustainable fishing zone has also been established at Taunsa Barrage Wildlife Sanctuary.



Impact assessment studies show a 77 per cent reduction in the use of illegal nets, against a target of 30 per cent under the project, achieved through the provision of legal sized nets and sensitization of fishermen.

Poverty Environment Linkages

WWF-Pakistan's conservation efforts involve working with communities to safeguard the environment. This thematic pillar stresses the need to establish poverty-environment linkages for the economic uplift of communities.



Poverty Environment Linkages

Improving Livelihoods of Fisher Communities of the Central Indus Wetlands Complex, Pakistan

Funded by the Department for International Development (DfID) under the Global Poverty Action Fund (GPAF) for a period of three years, the project focused on improving the livelihoods of at least 2,000 fishermen households (approximately 16,000 people) in three areas by addressing the poverty-environment nexus. The project was implemented in selected areas of the Central Indus including two protected areas: Taunsa Barrage Wildlife Sanctuary and the Indus Dolphin Game Reserve, which are also designated as Ramsar sites (wetlands of international importance).

All interventions introduced among communities not only reduced pressure on natural resources but also increased savings in terms of money, time, fuel wood and health related expenditures. Adoption of management plans, involvement of stakeholders and developing disaster resilient communities

has created a positive impact. In addition, raising awareness, protecting floodplains through plantations and the introduction of best management practices in agriculture and riverine habitats have been some of the key components of the project. As far as alternative livelihood opportunities are concerned, sustainable fishing practices and provision of livestock and poultry have effectively addressed poverty-environment related issues.

Kitchen gardens in the CIWC project communities are helping women put organic food on their tables as they are sustainable and environment friendly, and provide an alternative to those who would otherwise partake in illegal fishing, hunting or logging.

Fish restaurants are empowering fishermen to fish sustainably, aspire to better livelihood opportunities and serve hygienic food to their patrons.

Rural fisher communities are using biogas plants as an alternate livelihood resource, as a clean energy resource, and as a community building component. Biogas plants produce a steady odourless flame that is beneficial in cooking

and heating purposes. Biogas plants limit the need for logging trees and burning firewood or coal to run stoves and heaters.

Fuel-efficient stoves are helping community women slowly move away from using fuel wood, which is usually illegally logged in riparian areas, damaging habitats and the environment.

Community based organizations (CBOs) are helping fisher communities live sustainably and overcome livelihood challenges. These CBOs have developed a sense of camaraderie amongst the fishermen communities, making them partners in their own progress. CBO members hold regular meetings and discuss issues, successes and failures to achieve bigger targets in the future for collective betterment.

Empowered communities have been organized and trained to ensure sustainability well beyond the official project deadline. Boat-making trainings have encouraged many CBO members to make decorative models of boats with legally sourced wood that are sold as souvenirs.

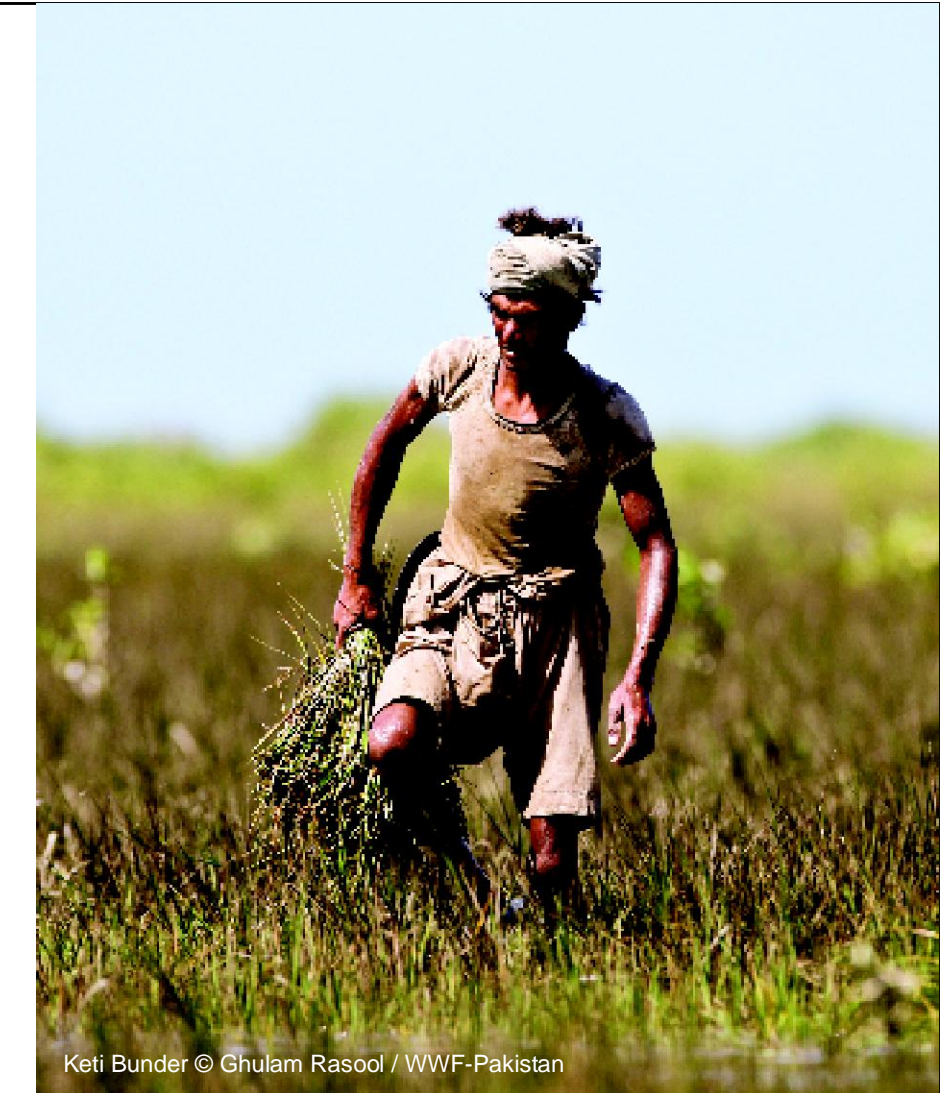
Fishermen have been educated about legal sized nets to avoid catching juvenile spawn of fish in the Indus River. Discarded illegal nets are now used creatively such as to protect fruit trees from stray animals.

Provision of ice boxes on fishing boats to preserve the catch of the day is also benefitting fisher communities.

Women's skill development was a challenge that has been turned into a livelihood opportunity in the project sites. Vocational training centres (VTC) are highlighting the excellent handiwork in sewing and embroidery made by women of fisher communities. Partnerships between the project VTC and other government and private training institutes encouraged women to adopt this livelihood option.

Project interventions are encouraging fishermen to view mammals and birds in their area as allies in their progress. Fishermen have been sensitized to protect species of special concern such as the *endangered* Indus river dolphin and have been trained to rescue them. Illegal hunting of local and migratory birds was rampant but now the community does not hunt unnecessarily and advises other villagers or visitors against the practice.

The establishment of the Taunsa Information Centre at Taunsa Barrage and the uplift of the Dolphin Information Centre in Sukkur will further help in sustaining conservation and developmental efforts beyond the end of the project through capacity building and awareness among the communities.



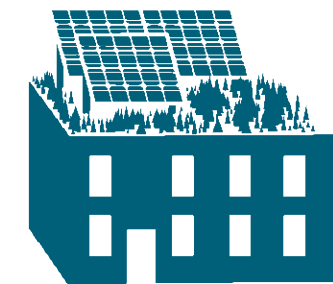
Keti Bunder © Ghulam Rasool / WWF-Pakistan



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Nagar Parkar

16,000 community members benefited through improved livelihood initiatives.



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Conservation Highlights 2014 - 2015

WWF is a global force in the world of nature conservation. Pressure on the natural environment is accelerating, with rapid, unpredictable shifts in political and economic power. Therefore, to maintain a living planet and secure clean water, food and energy for all, WWF will take actions that contribute to achieving the following six goals by 2025:

1. The world's most important fisheries and ocean ecosystems are productive and resilient, and improve livelihoods and biodiversity
2. The world's most iconic and endangered species are secured and recovering in the wild
3. The integrity of the world's most important forests, including their benefits to human well-being, is enhanced and maintained
4. Freshwater ecosystems and flow regimes in key river basins provide water for people & nature
5. A global shift towards low carbon and climate resilient future is achieved
6. Sustainable food systems conserve nature and maintain food security These goals will be delivered only through the effort of many institutions but with a critical role played by our offices, in countries and in the field, with an increased focus on drivers and pressures.

WWF-Pakistan's conservation successes in 2014-2015 contribute to WWF's Global Goals.

Deosai plains, Skardu

Forests



WWF-Pakistan facilitates KP department in billion tree tsunami plantation programme

As part of the Green Growth Initiative, the government of Khyber-Pakhtunkhwa (KP) aims to plant one billion trees, and increase forestland by 22 per cent over a period of five years under their Billion Trees Tsunami Afforestation Campaign in the province. For this purpose, WWF-Pakistan provided support and facilitation to the office of the Provincial Secretary, Forestry, Environment and Wildlife Department.

Food



WWF-Pakistan's report titled climate change Adaptation in the Indus Ecoregion

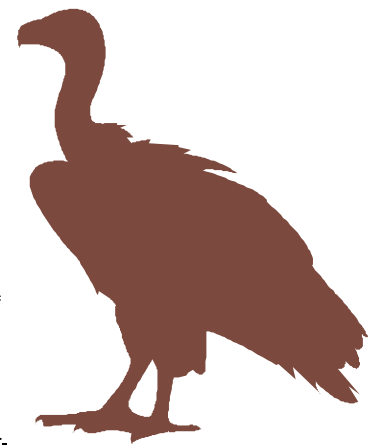
A micro-econometric study of the Determinants, Impact and Cost Effectiveness of Adaptation Strategies was launched. The report was produced in collaboration with the London School of Economics and Political Science (LSE) and the Lahore University of Management Sciences (LUMS) and highlights the impact of climate change on Pakistan's agriculture and food security.

One of the key findings of the study is that climate change will likely have a large cost on agricultural productivity in Pakistan. In particular, by 2040 assuming a 0.5 degrees Celsius increase in average nationwide temperature, an 8 to 10 per cent loss is expected across all crops corresponding to PKR 30,000 per acre. The report findings also suggest that productivity of cotton and wheat crops (but not rice) can be increased by up to 49 to 52 per cent if 5 on-farm adaptation measures are carried out.

Wildlife

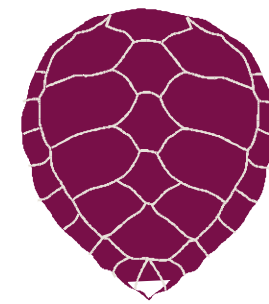
International vulture day organized

WWF-Pakistan celebrated International Vulture Awareness Day at Lahore College for Women University (LCWU). In the late 1990s the populations of three Gyps vultures; the white-backed vulture (*Gyps bengalensis*), the Indian long-billed vulture (*Gyps indicus*) and the slender-billed vulture (*Gyps tenuirostris*) started declining dramatically. A decline of 95 per cent was observed in the population of white-backed vultures (*Gyps bengalensis*) in India, Pakistan and Nepal (published literature suggest this species has now declined to 99 per cent) and are classified as *critically endangered* according to the International Union for Conservation Nature Red List.



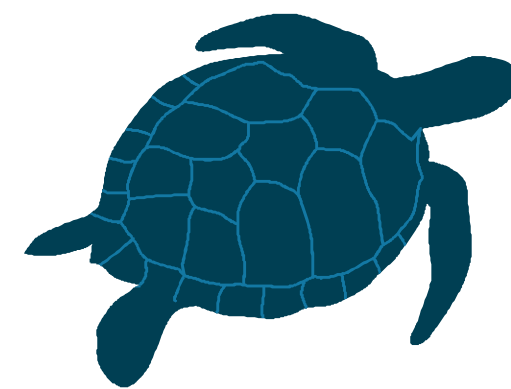
Smuggled turtles brought home to Sindh from China

WWF-Pakistan with the support of Sindh Wildlife Department has successfully retrieved 200 black pond turtles illegally poached and smuggled to China. The Chinese authorities were instrumental in confiscating the consignment of hard-shell turtles arriving from Pakistan. That was the first time that the animals have been recovered alive from the poachers and repatriation of the turtles has taken place.



Offender could get up to 14 year imprisonment in turtles case

A hearing was held at the Malir Court, Sindh on the turtles smuggling case and the court had ordered the release of 218 black spotted turtles which had been confiscated at Jinnah International Airport. The Sindh Wildlife Department in collaboration with WWF-Pakistan released these turtles into their natural habitat in Haleji Lake, Thatta.

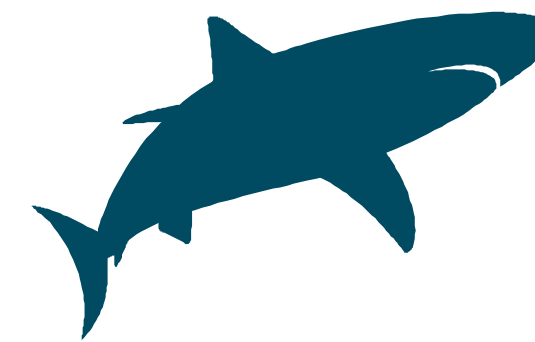


Oceans

Three threatened whale sharks saved by WWF-Pakistan trained fishermen

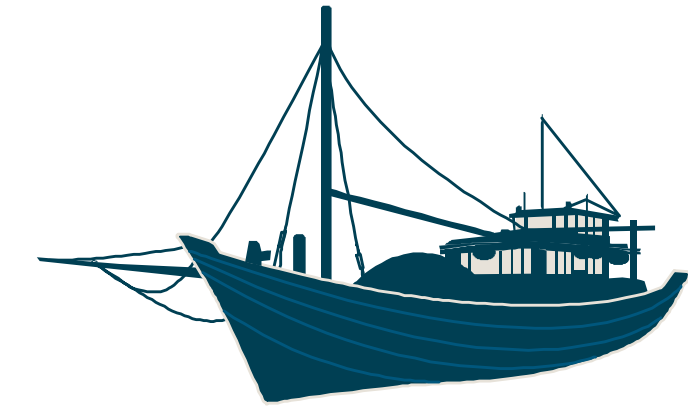
Fishermen trained by WWF-Pakistan successfully released three whale sharks in the offshore waters of Pakistan. A large whale shark, 18 feet long, got entangled in the tuna gillnet in the offshore waters off Ghora Bari, while two other whale sharks weighing 10 and 14 feet respectively were entangled and released by the fishermen in the offshore waters near Shumal Bundar, off Pasni, Pakistan.

Whale shark and its products are included in the Appendix-II of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) putting its export under strict regulatory control.



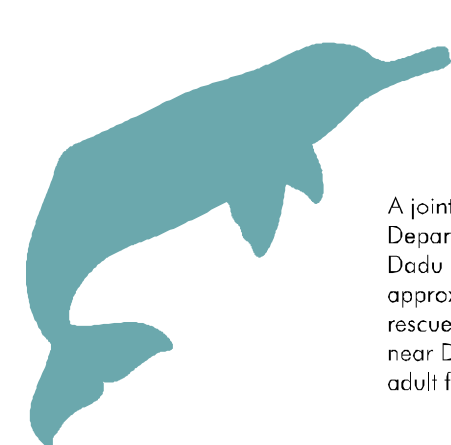
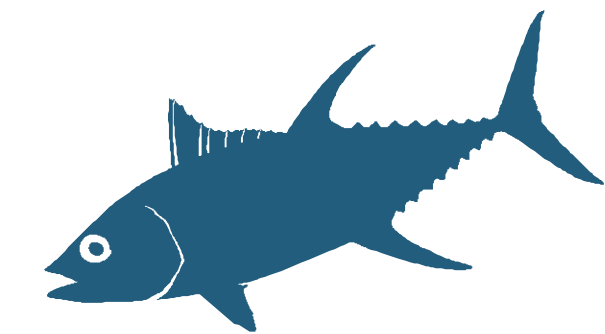
Marine species rescued by WWF trained fishermen

Throughout the year WWF trained fishermen rescued ecologically important marine species. In October alone Longmans beaked whale and Arabian common dolphin were rescued in two separate events.



WWF-Pakistan conducted fisheries survey

As a part of the Fisheries Resource Assessment Project (FRAP), a three-month long survey was carried out in five localities, most of which were in Sonmiani Bay (Miami Hor), Balochistan. The productivity of the creek fisheries totals catches of 50 kg per fishing outing on average in Sonmiani for a medium to large-sized boat as compared to Sindh creeks where total catches for the sampled year were 89 kg.



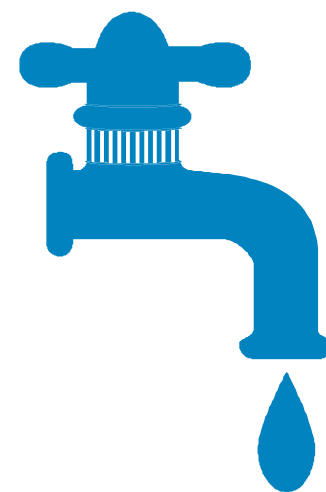
Adult female Indus river dolphin rescued

A joint team of WWF-Pakistan and the Sindh Wildlife Department rescued a female Indus River dolphin from Dadu canal near village Bashir Arain, district Dadu approximately 200 km away from Sukkur Barrage. The rescued dolphin was released back into the Indus River near Dadu Moro Bridge. The rescued dolphin was an adult female, 112.7 cm in length, weighing about 32 kg.

Water

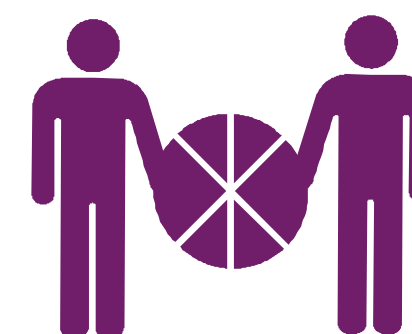
Construction of water filtration plant starts

The first water filtration plant under the project Increasing Supply and Access to Safe Drinking Water in Lahore, Pakistan funded by Coca-Cola Beverages Pakistan Limited, was installed in Basti Soidan Shah. The project aims to increase the supply and access to safe drinking water in low lying areas of Lahore. The project plans to increase clean drinking water supply by installing drinking water plants for communities.



Climate and Energy

WWF-Pakistan receives Energy Globe Award 2015



The Energy Globe Award is a unique online-campaign under the patronage of the United Nations Educational, Scientific and Cultural Organization (UNESCO) in cooperation with the United Nations Environment Programme (UNEP) which aims to educate people about the economical use of resources through best practices.

WWF-Pakistan's City-wide Partnership for Sustainable Water-use and Water Stewardship in SMEs in Lahore, Pakistan project has helped industries reduce their water and energy footprint through the implementation of Best Water Management Practices. The water related energy efficiency has resulted in the reduction of 6.6 MW per year in 35 pilot SMEs.

This year the environmental prize received over 1,500 project submissions from 177 countries. WWF-Pakistan's project was recognized as the best in Pakistan.

Partnering with the Panda

This year WWF-Pakistan continued its engagement with the corporate sector, schools, the government and other stakeholders at the national level. The organization was able to establish strategic partnerships with its three-fold objective of awareness raising, Corporate Social Responsibility and fundraising.

Partnering with the Panda

Green Office Initiative

This year, WWF-Pakistan's Green Office (GO) Initiative has been able to secure 14 new offices in the network. These include Mobilink head office, Islamabad; Fatima Fertilizer Company Limited (FFCL), Sadiqabad plant site office; Mahmood Group of Industries, Multan; Marketing International Limited Karachi; Gatronova Private Limited, head office Karachi; Engro Zarkhez Limited, Karachi; Sadaqat Limited, Faisalabad; Alkaram Textile Mills Limited, Karachi; Nestlé Pakistan, Kabirwala plant office; Soorty Enterprises Private Limited, Karachi; Midas Safety Inc.; Prime Safety Limited Karachi; Serena Business Complex, Islamabad and Sapphire Finishing Mills Limited, head office, Lahore.

Currently, the Green Office provides lighting audits for its local network offices in collaboration with Philips Pakistan Limited.

In the reporting period different GOs reduced about 550 metric tonnes

of carbon emissions. These include Engro Corporation and Fertilizers Limited head office Karachi; Qarshi Industries, head office, Lahore; Engro Foods Limited, head office, Karachi; Mobilink Lahore office; Unilever Pakistan, head office Karachi; Institute of Business Administration, Sukkur and Engro Powergen and Engro Polymers head office, Karachi.

The Green Office initiative also focused on employee engagement and conducted environmental training workshops on rainwater harvesting, safety and health at work, product life cycle assessment, carbon foot printing, and climate change and its effects.

Pakistan Environmental Reporting Awards

The ACCA-WWF environmental reporting awards were established to recognise those organizations which report on the environmental, social and economic impacts of their operations.



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Green School students of Al Murtaza Academy, Hunza © Hamza Malik / WWF-Pakistan

The joint winners for 2015 Best Sustainability Report were Atlas Honda Limited and ICI Pakistan Limited. The award for Best Environmental Report went to Hinopak Motors Limited and the runner up was K-Electric. Citation for the First Integrated Report in Pakistan was awarded to Engro Corporation Limited and the Commendation Award for Environmental Reporting (unlisted) was presented to Qarshi Industries Private Limited.

Spellathon

Launched in 1996, Spellathon is a nationwide environmental spelling competition which engages students from grade one to nine.

Sui Northern Gas Pipelines Limited (SNGPL) partnered with WWF-Pakistan for the fourth time to promote Spellathon and enable more than 60,000 students to participate in the programme. WWF-Pakistan and SNGPL also conducted awareness raising lectures in schools on natural gas conservation.

The Spellathon campaign was also supported by Surf Excel (Unilever) this year and almost 50,000 students across Pakistan were engaged through this collaboration.

In order to expand outreach to less privileged schools and students, customized Spellathon activities were carried out for 5,000 students in the Korangi area of Karachi with monetary support of Karachi Youth Initiative. SNGPL also supported this initiative by funding 20,000 students.

Travelling Nature Carnival

The Nature Carnival is designed to engage and advocate the cause of environmental conservation to the general public. WWF-Pakistan organized the annual carnival in Karachi with the participation of over 150 institutions and more than 20,000 participants. GlaxoSmith Kline Pakistan (Horlicks) was the exclusive sponsor for the second successive year.

Tree-a-Thon

A tree plantation campaign was initiated to plant 2,000 saplings of indigenous species in different locations. Major supporter were Golden Harvest, Pakistan Petroleum Limited, Gadoon Textiles, Thal Engineering, Unilever Pakistan, Engro Polymer and Chemicals Limited, Agility Logistics, Crescent Steel and Allied Products, UBL-Funds Manager, MUFG-Bank of Tokyo, Coca-Cola Beverages Pakistan Limited and International Industries Limited.

Corporate Employee Engagement

To increase corporate support for conservation, WWF-Pakistan initiated the Employee Engagement Programme. This year a number of environmental workshops were organized for various corporations in Pakistan including Engro Polymer and Chemicals, Crescent Steel, Allied Products, Agility Logistics, UBL-Fund Managers, MUFG- Bank of Tokyo, and Coca-Cola Beverages Pakistan Limited.



Students at Wetland Centre, Sandspit © WWF-Pakistan

550 metric
tonnes of carbon emissions
reduced by Green Offices



Earth Hour

Earth Hour is WWF's most celebrated campaign globally which takes place on the last Saturday of March each year. It is the world's largest volunteer action to switch-off all unnecessary lights for an hour, symbolizing a commitment to bring positive change.

The main sponsor of Earth Hour 2015 was Qarshi Industries (Private) Limited. A candle lighting ceremony was held at Qarshi University, Lahore. Co-sponsors of the campaign included Pak Electronic Limited (PEL), Karachi Electric Supply Company (KESC) and Tetra Pak Limited. For the second consecutive year PEL organized an event at its factory inviting employees and their families to participate in Earth Hour. Tetra Pak Limited has also supported WWF-Pakistan for the last three years.

Renowned celebrities Saeed Ajmal, Saba Hameed, Hamza Ali Abbasi, Noor Ali, Ayesha Omar, Ayesha Khan and Deepak Pervani were WWF-Pakistan's official Earth Hour ambassadors.

Earth Hour was celebrated in various public and private organizations in solidarity for the cause. Candle lighting ceremonies were held at the Sindh Assembly, while Khyber-Pakhtunkhwa and Balochistan Assembly also took part by switching off all necessary lights. Other public offices that participated included Capital Development Authority, Civil Aviation Authority and the

Federal Directorate of Education. Engro Foods Sahiwal plant, Engro Dairy Farm Nara, Pearl Continental Rawalpindi, Roots School System, and Beaconhouse School System also conducted activities.

Geo News and Radio 1 FM91 were official media partners of Earth Hour.

Individual Membership Programme

WWF-Pakistan realizes that no change is possible without individual participation, and that each person has the power to make a difference. That is why special emphasis is given to the Individual Membership Programme which enables individuals to contribute to the conservation of the country's natural resources and support WWF's mission. With its ambitious efforts, through social media and an in-house call centre, 6,500 individuals registered to become members and to support the cause.

Green School Programme

WWF-Pakistan's Green School Programme (GSP) is a structured environmental awareness initiative that gives students and teachers regular insights into the country's current ecological threats and overall environmental challenges

faced at the regional and global level.

The year was a milestone for the GSP in sustaining key partnerships. Al-Murtaza Academy, Hunza entered the second year of partnership with participation of the entire school. Other schools that continued their participation include: Daud Bandagi School, Okara; The Citizens Foundation; Lahore Grammar School (LGS), 55 Main; LGS, 31 FCC; LGS, 1A1; Beaconhouse School System (BSS), Garden Town Campus; BSS, Johar Town girls campus; BSS, Johar Town junior campus; International School of Choueifat; Cathedral School, Model Town; Jadeed Dastgir Ideal High School, Gujranwala and Message Grammar School, Lahore.

Students from over 26 campuses of Roots Millennium School (RMS) also participated in the programme. After three successful years, four branches of BSS including the Primary Branch F-7/2, Primary F-7/3, Senior Branch Gulrez Rawalpindi and Margalla campus Islamabad renewed their Green School agreements. BSS Kharian and Jhelum also became part of the Green School network this year.

The schools which were part of the GSP southern network included Dawood Public School; L'Ecole for Advanced Studies; The City School, Gulshan Junior E; BSS, Gulshan Cambridge; BSS, North Nazimabad Cambridge; The City School, North Nazimabad Boys; MIDasia Foundation Academy; BSS, KG III PECHS; Keystone Academy; The City School PECHS Boys; BSS Gulshan Middle 1; BSS, Gulshan Middle 2; Bahria Foundation College, Gulshan Campus; BSS, Jubilee Campus; and The City School, PAF Chapter.

International Eco-Internship Programme

WWF-Pakistan's International Eco-Internship Programme (EIP) is a youth outreach programme which aims to provide environmental education to students from grade seven to university level across Pakistan.

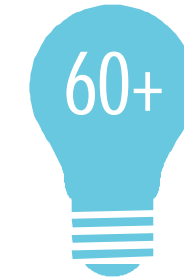
This year the International EIP was sponsored by SNGPL for the second consecutive year. Lotte Chemicals was also one of the main sponsors and Radio 1 FM 91 was the radio partner for the internship programme.

Almost 6,200 Eco-Interns were certified this year and all leading nationwide schools, colleges and universities participated in the programme. Partners include Kinnaird College for Women, University of Veterinary and Animal Sciences, Lahore American School, Beaconhouse School System, ROOTS International, The City School, The Educators and Lahore Grammar School. Students from universities in Islamabad including Islamic University, SZABIST, NUST and Bahria University participated in the Eco-Internship. The community service format of the programme for university students was initiated for the first time this year which required students to take part in various projects including clean up drives and helping zoo management improve the conditions in which animals are kept.

Karachi Youth Initiative sponsored 100 students for an exposure trip to WWF-Pakistan's Chotlari Wetland Centre. Other exposure trips took place at WWF-Pakistan's Wetland Centre at Sandspit Beach, Karachi, where students for various educational institutions such as DHA Suffa University, SZABIST, Beaconhouse School System, and Commecs College participated.

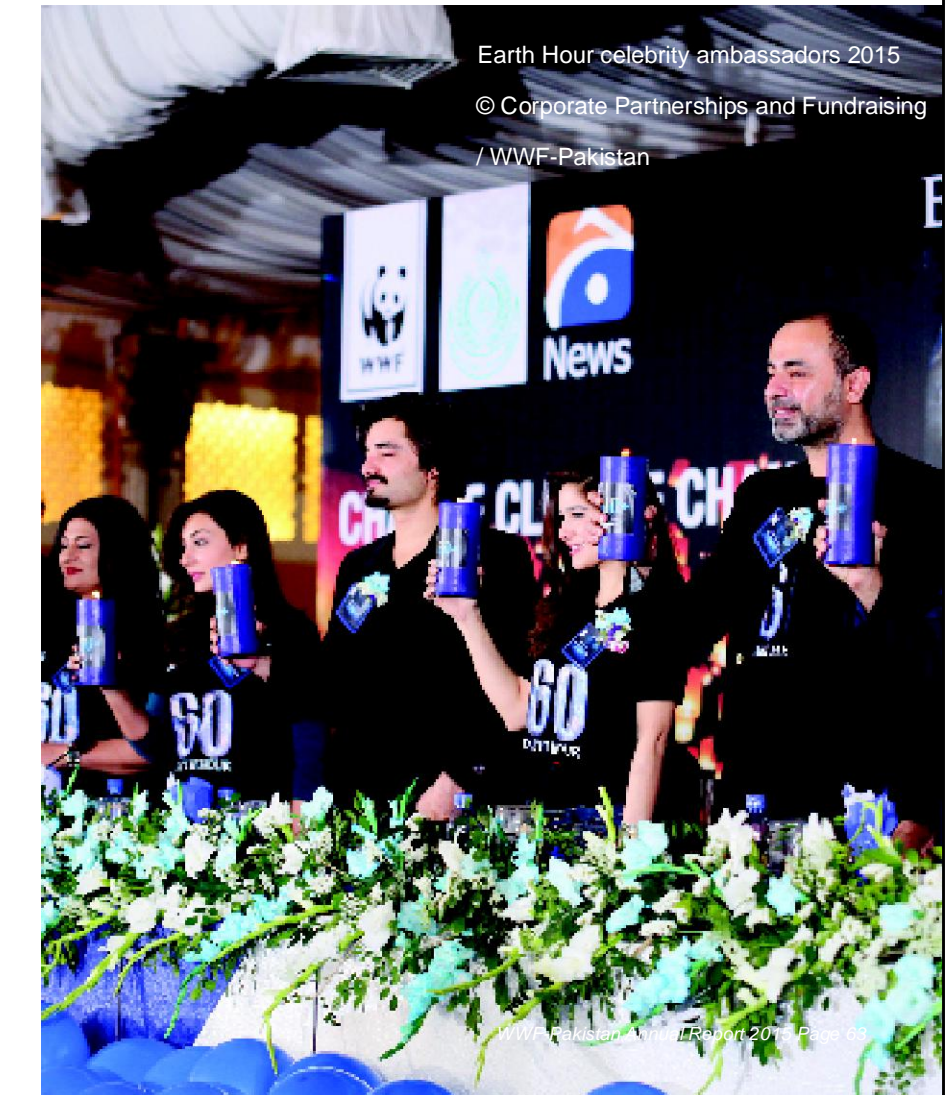
On 28 March 2015

millions of people across 170 countries and 1,200 landmarks switched off their lights for one hour



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Corporate engagement activity, Wetland Centre, Sandspit © WWF-Pakistan



Earth Hour celebrity ambassadors 2015
© Corporate Partnerships and Fundraising
/ WWF-Pakistan

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Scientific Committee

The Small Grants Programme, managed by WWF-Pakistan's Scientific Committee, addresses environmental issues by providing technical and financial support, empowers communities, and promotes environmental research. The grant supports innovative conservation initiatives for priority species and ecosystems.



Scientific Committee

Small Grants Programme

Since 1986, the Small Grants Programme (SGP) has supported grassroots level organizations and researchers to strengthen efforts to conserve threatened and endangered species, and high priority ecological areas covering forests, freshwater and marine ecosystems and to reduce the impact of human activities on ecosystems. Under the programme more than 450 projects have been successfully completed with an award of PKR 71 million. The Scientific Committee (SC) comprises of eminent scientists from diverse backgrounds who administer the Small Grant Programme.

During this year the SGP supported 10 new projects which ranged from small community-based wildlife conservation projects to multifaceted scientific research which contributed significantly to the conservation of species and their habitats. The SGP funded two scientific studies which focused on the current distribution, population status and potential threats to threatened

and endangered species such as the Punjab urial and Indian rock python. This year the project provided funds of PKR 6 million.

The SGP acknowledges the role of academia in the promotion of scientific research. Therefore two research projects were awarded to universities in Lahore to conduct baseline surveys on butterflies in the city and to explore ecological linkages and the socio-economic impacts on the habitats of pond areas at Rasool Head Works, Jhelum River.

The SGP also supported the publication of *Mangroves to Mountains*, which is a compilation of environmental articles, ranging from saving mangroves on the coastline to conserving national parks in the high mountains. A grant was also awarded to Parkar Foundation, a community based organization from Nagar Parkar, Sindh to build capacity and enhance local stewardship among the communities. Other research studies include: conserving the Western tragopan and its habitat in the Jagran Valley, Azad Jammu and Kashmir and conserving the remaining population of native fish

species in the cold waters of Gilgit-Baltistan through commercial harvesting of carnivorous trout fish species by the Department of Fisheries, Gilgit-Baltistan.

Human-wildlife conflict is a serious obstacle to species conservation and is becoming more prevalent with increasing human population. Realizing this need, the SGP provides financial support to identify human-wolf conflicts and seek possible solutions for the conservation of this species through community mobilization, education and awareness in Dera Ghazi Khan.

Further, a number of exemplary initiatives made successful contributions in determining the conservation status of threatened and endangered species and other component of ecosystems.

The Pakistan Forest Institute, Peshawar completed an extensive study on climate change and its impacts on insect fauna of Thandiani Forest, Abbottabad. Other projects include optimization of biomass production on a pilot scale and a survey project to assess the current status of *critically endangered* Gyps vultures in Nagar Parkar, Sindh and the *endangered* Egyptian vulture in Azad Jammu and Kashmir.

Young Ecologist Programme

Under the Young Ecologist Programme, three PhD research studies were funded from the University of Punjab. The studies include biomonitoring of Soan River using insects as water quality indicators, assessing the biodiversity of spider fauna in the Salt Range of Pakistan and studying community dynamics of ectomycorrhizal fungi in moist temperate forests.



A dry Brazil nut tree © WWF / Dado Galdieri



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La-Digue Island, Seychelles, Africa © Syed Mehdi Bukhari



PKR 71 million
given in grants by the
Small Grants Programme
since 1986

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Corporate Donors

Exclusive Members

WWF-Pakistan's Exclusive Members make donations of PKR 100,000 and above.

1. Beaconhouse School System
2. Unilever Pakistan Limited

Premier Members

WWF-Pakistan's Premier Members make donations of PKR 25,000 to 99,000.

- | | |
|---|---|
| 3. AGP (Private) Limited | 29. Mitsubishi Corporation |
| 4. Amreli Steels (Private) Limited | 30. Mitsui & Co. |
| 5. Anis Ahmad & Brothers | 31. Nakshbandi Industries Limited |
| 6. Automotive Spares & Accessories (Private) Limited | 32. Naurus (Private) Limited |
| 7. BASF Chemicals and Polymers Pakistan (Private) Limited | 33. Nestlé Pakistan |
| 8. Bestway Cement | 34. Orix Leasing Pakistan Limited |
| 9. BASF Pakistan (Private) Limited | 35. Oxford University Press |
| 10. BSN Medical (Private) Limited | 36. Packages Limited |
| 11. Century Paper & Board Mills | 37. Pak Arab Pipeline Company Limited |
| 12. Cherat Cement | 38. Pakistan Beverage Limited |
| 13. Crescent Steel and Allied Product | 39. Pakistan Cables Limited |
| 14. EFU Life Assurance Limited | 40. Pakistan Petroleum Limited |
| 15. English Biscuit Manufacturers (Private) Limited | 41. Premier Agencies/ pharmEvo |
| 16. Engro Polymer & Chemicals Limited | 42. Sanofi-Aventis Pakistan Limited |
| 17. Fauji Fertilizer Company | 43. SGS Pakistan (Private) Limited |
| 18. Golden Harvest | 44. STRIVE |
| 19. Hotel Jabees | 45. Samira Fabrics (Private) Limited |
| 20. Ibrahim Fibres | 45. Tapal Energy Limited |
| 21. Indus Motor Company Limited | 46. Tapal Tea (Private) Limited |
| 22. International Industries Limited | 47. Thal Engineering |
| 23. International Power Global Development Limited | 48. Tri-Pack Films Limited |
| 24. Lucky Cement Limited | 49. Tetra Pak Pakistan Limited |
| 25. Jahangir Siddiqui & Co. Limited | 50. United Energy Pakistan Limited |
| 26. Jubilee Insurance Company Limited | 51. Vikor Enterprises (Private) Limited |
| 27. MIMA Leathers (Private) Limited | |
| 28. Mirpurkhas Sugar Mills Limited | |

Regular Members

WWF-Pakistan's Regular Members make donations of PKR 10,000 to 24,999.

52. ACCA
53. Avari Hotel Lahore
54. Dr Masood Homeopathic Pharmaceuticals
55. Haseen Habib Corporation (Private) Limited
56. J.D.W. Sugar Mills
57. Kot Addu Power Company
58. Malik Auto & Agricultural Industries
59. Pak Kuwait Textile Limited
60. Popular Chemical Works ((Private) Limited
61. Samin Textile Limited
62. Shahtaj Sugar Mills Limited
63. Shezan International Limited
64. Siddiq Leather Works (Private) Limited
65. Siddiq Renewable Energy (Private) Limited
66. Sufi Group of Industries

Balance Sheet

as of June 30, 2015

FUNDS	2015 Rupees	2014 Rupees
General Fund		
1001 The Nature Trust ⁽¹⁾	64,028,547	56,142,661
Scientific Committee Fund ⁽²⁾	15,003,983	15,003,983
Restricted Funds ⁽³⁾	7,383,338	11,614,934
	56,221,296	45,895,965
Total Funds	142,637,164	128,657,543
REPRESENTED BY:		
Fixed Assets ⁽⁴⁾	57,149,313	73,511,398
Investments ⁽⁵⁾	131,610,264	94,637,898
Current Assets	307,391,300	387,970,829
Total Assets	496,150,877	556,120,125
Current Liabilities	299,687,074	356,335,064
Liabilities against Assets Subject to Finance Lease	1,070,625	4,939,199
Employee Retirement Benefits	52,756,014	66,188,319
Total Liabilities	353,513,713	427,462,582
Total	142,637,164	128,657,543

Based on accounts audited by A.F. Ferguson & Co. Chartered Accountants, a member firm of the PwC Network.

- 1001 The Nature Trust is an endowment fund.
- The Scientific Committee Fund is a small grants fund for researchers, scientists and community based organizations. Money raised from national fundraising is used to fund different small projects with a maximum funding of PKR 300,000 annually per project.
- Restricted funds are received from various donors such as Government and Aid Agencies, the WWF Network, Corporates, and Trusts and Foundations to execute specific projects.
- Fixed Assets are stated at cost less accumulated depreciation. Depreciation is charged on the historical cost of an asset over its estimated useful life.
- Investments: The money set apart and kept unutilized, and invested in financial institutions in short term and long term investments. Investments are stated at cost. Income from investments is recognized when the right to income on such investments accrues.

Income and Expenditure

for the year ended June 30, 2015

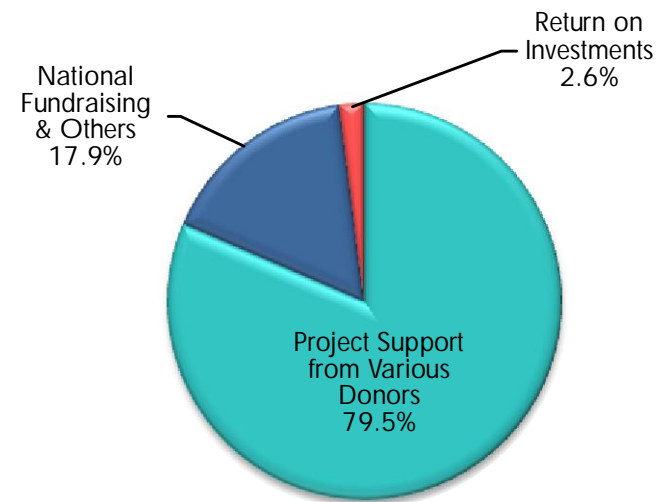
INCOME	2015 Rupees	2014 Rupees
Project Support from Various Donors ⁽¹⁾	564,087,417	619,274,668
National Fundraising & Others ⁽²⁾	126,884,523	125,607,628
Return on Investments	18,317,162	15,732,375
Total Income	709,289,102	760,614,671
EXPENDITURE		
Global Programme Framework ⁽³⁾		
Species	26,557,327	42,716,415
Freshwater	100,926,022	146,868,563
Commodities	246,948,474	223,545,757
Energy / Carbon	16,849,427	20,911,411
Places	8,072,334	9,532,200
Priority Drivers	11,618,471	26,017,270
Others	107,405,242	68,133,615
Non Global Programme Framework ⁽⁴⁾		
Conservation, Information, Education & Public Policy	55,552,502	91,025,319
Fundraising	63,183,795	54,740,509
Administration	44,836,541	42,027,205
Depreciation	19,423,521	20,707,198
Total Expenditure	701,373,657	746,225,462
Surplus for the Year	7,915,445	14,389,209

Based on accounts audited by A.F. Ferguson & Co. Chartered Accountants, a member firm of the PwC Network.

- Project Support from Various Donors includes funds accrued from donors such as Government and Aid Agencies, the WWF Network, Corporates, and Trusts and Foundations during the financial year.
- National Fundraising and Others includes the donations generated through various campaigns such as Spellathon, Nature Carnival, Earth Hour, Earth Day, Individual Membership Programme, Eco-Internship Programme, Green School Programme and Corporate Engagement among others. It also includes the funds received for management of services.
- The WWF Network organizes global conservation efforts into a Global Programme Framework which focus the conservation programme around two meta goals;
 - Biodiversity conservation covering priority places and species;
 - Reduce ecological footprint, impact of people on the natural environment.
- Non Global Programme Framework reflects the expenditures incurred on projects initiated to address national conservation priorities.

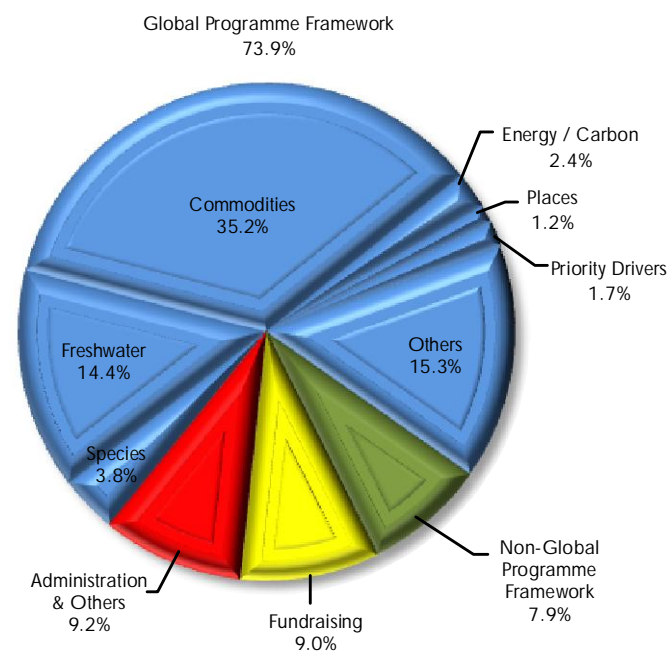
Income

For Financial Year 2015

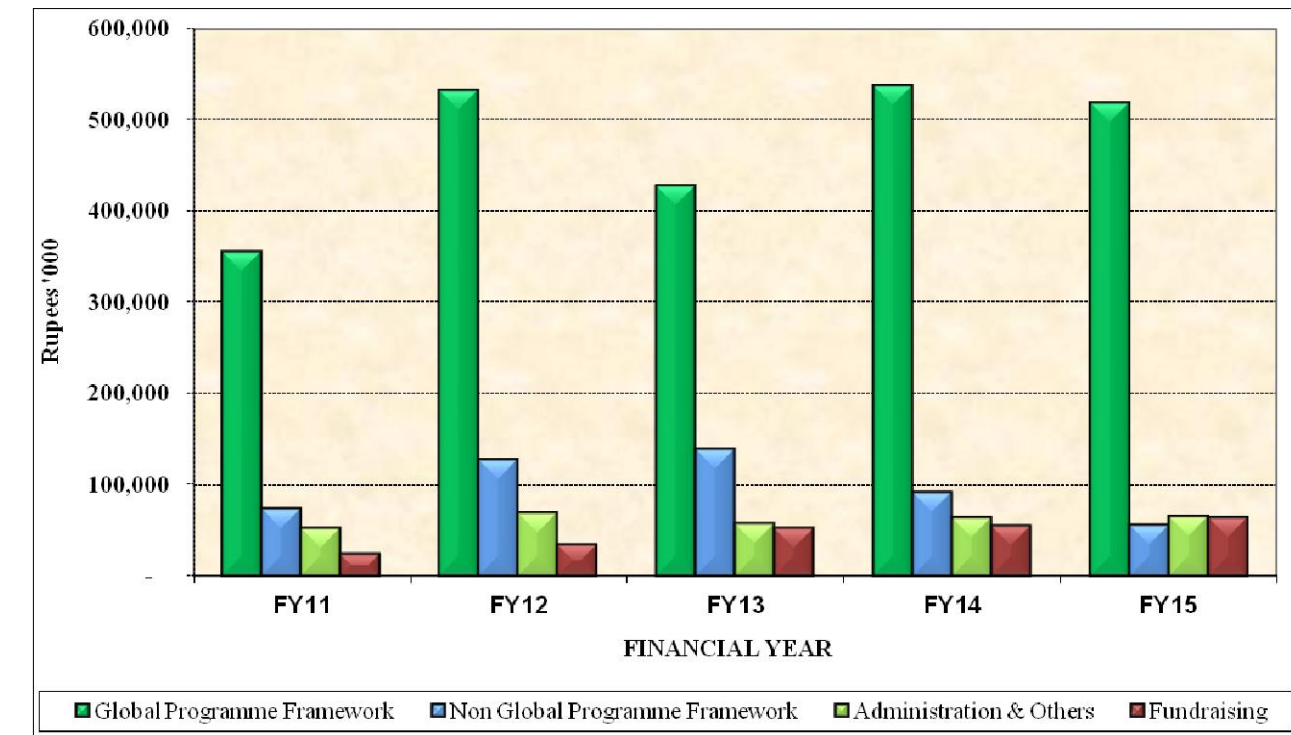


Expenditures

For Financial Year 2015



Expenditures for Last 5 Years (PKR in 000s)



WWF-Pakistan came into being in 1970, and has been working to conserve Pakistan's natural resources ever since.

The organization works through 22 offices, including five regional offices, and a team of close to 300 dedicated staff members.



Our greatest responsibility is to lead the way in conserving Pakistan's rich natural diversity so that future generations can continue to benefit from them.

WWF-Pakistan carries out conservation work according to the Global Programme Framework which includes biodiversity and human footprint meta goals.



Why we are here:

To stop the degradation of the planet's natural environment and to build a future in which humans live in harmony with nature.

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