



**WWF
Bhutan
Program**

**Annual
Report FY
09-10**



Foreword

The year 2009-2010 was a landmark year for conservation in Bhutan. In December 2009, Bhutan attended the Climate Change Conference in Copenhagen (COP 15) where it declared that it would forever remain a carbon neutral country serving as a net carbon sink. Bhutan also hosted the 16th SAARC summit in the capital of Thimphu, for the very first time this year, focusing on climate change as the central theme. At this platform, Bhutan sealed its efforts to combat climate change at the highest level by committing to establish a body to tackle inter-governmental decisions on the issue.

The summit in Thimphu ended with a 'joint declaration' and a 'statement on climate change' to address the adverse effects of climate change in the region and make organisations resilient and relevant for the people of south Asia. Further, SAARC countries agreed to establish an inter-governmental expert group on climate change to develop and monitor regional climate change policy development and implementation.

In February 2010, marking the beginning of the lunar calendar Tiger year, WWF coincidentally chose this year to highlight the Tiger and its conservation by initiating the "Year of the Tiger" campaign. The aim of this campaign is to double the current wild Tiger population by 2022, the next Tiger lunar year. WWF kick-started the Tiger year in Bhutan by hosting an awareness event in the capital Thimphu, where Tiger imprinted stamps and a Tiger report were simultaneously launched. At an international level, WWF Bhutan assisted the government with developing a National Tiger Recovery Program-Bhutan Chapter, which was presented at the Global Tiger Summit held in Russia.

In Royal Manas National Park, recent pictorial evidence revealed the presence of at least seven different tigers in the park. This discovery not only puts the park at the height of Tiger habitat sightings but also illustrates the park demands immediate attention in terms of conservation efforts.

To kick start wetland conservation in Bhutan, an inventory of high altitude wetlands was initiated for the first time in Bhutan. WWF is working with the Watershed Management Division of the Ministry of Agriculture and Forests (MoAF) to expedite Bhutan's membership into the RAMSAR Convention.



The co-management of Wangchuck Centennial Park has been fully realized with the placement of two field staff in the park headquarters. In Phibsoo Wildlife Sanctuary and Toorsa Strict Nature Reserve, conservation efforts are well into the second phase with most surveys (mammals, plants, birds and socio-economic) complete. These protected areas remained "paper" parks since their gazettelement in 1993, but with support from WWF Bhutan conservation activities they have progressed since 2009.



Scenario of the protected area in Bhutan:-

The Bhutan Biological Conservation Complex (B2C2) is comprised of five national parks, four wildlife sanctuaries, one strict nature reserve and a network of biological corridors. The newest and largest national park, Wangchuck Centennial Park (WCP) was declared in December 2008, measuring 4914 square km. WCP provides complete contiguous protection of the northern part of the country. In total, 51.44% of Bhutan's total land area now stands protected.

Bhutan is often looked upon as a conservation success, having been able to protect more than half of its total land area. However, at the same time, Bhutan has its own set of challenges to address. More than 80% of the population is still dependent on forestry resources. Rapid industrialization has led to an increase in the demand for timber. Excessive grazing by domestic animals and poaching have also depleted forestry resources. Further, a lack of environmental awareness, coupled with limited financial and technical capacity of authorities to address these threats, has further widened the gap. As a result, the very survival of some fascinating and rare species such as tigers, elephants, snow leopards and takins remains threatened, while pristine forests and water bodies are quickly being exhausted.



Forest & Climate Change:-

In Bhutan, a forest conservation program continues to be the largest program for WWF both in terms of scope and investment. The program is designed to protect, restore and promote the forests in Bhutan through policy advocacy and stakeholder partnerships.

In Bhutan, more than 70% of its land area is under forest cover. Apart from harboring a wide range of diverse species, forests are also home to communities who derive their basic living out of forest resources. Therefore, to develop a harmonious relationship, conservation programs aim to protect the landscape, wildlife species and local communities living in and around the forests.

Climate change and freshwater are two areas that WWF Bhutan ventured into recently. The freshwater program is mainly concerned with securing freshwater habitats, promoting water security and encouraging water stewardship. The climate change program focuses on mitigation, adaptation and, most importantly, mainstreaming climate change adaptation into conservation planning.



Provisional Park Headquarters in Sarpang

Phibsoo Wildlife Sanctuary (PWS):-

Conservation work first began in PWS in January 2009 with technical support from the Wildlife Conservation Division (WCD) under the Department of Forests and Park Services. Currently, the park is run by an interim office that has been established in Sarpang, which is about 35 km away from Phibsoo base camp. The main park headquarters is under construction

Vegetation, wildlife and socio-economic surveys of the project area are now complete, and a management plan for the park is currently being prepared.

Infrastructural support in the form of office supplies, handsets, etc. was provided to park staff. One 4WD pickup truck and three motor bikes were purchased to facilitate ease of movement to and from the base camp. Other developmental activities completed during the year include renovation of and compound fencing around the district guest house and base camp. Construction of the park headquarters will begin in the next phase of the project.

Stakeholder consultation meetings were held to sensitize local authorities and communities on the mandates of the park and broader conservation goals.



4WD pickup truck



Yearly road maintenance

Wangchuck Centennial park (WCP):-

For the first time in Bhutan, WWF started co-managing a park with the placement of three field staff in WCP.

To tap into the park's eco-tourism potential, the park successfully organized its first ever nomads' festival from 26th to 28th December, 2009. The festival brought together about 90 highlanders participating from eight different districts including: Haa, Paro, Thimphu, Gasa, Wangduephodrang, Bumthang, Trashiyangste and Trashigang.

To solve some of the transportation and communication issues experienced by field staff, two motorbikes and a 4WD pickup truck were purchased for the park.



Nomads' Festival

Royal Manas National Park (RMNP):-



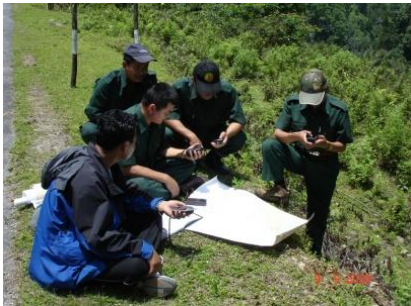
As RMNP shares its border with the neighboring country of India, it faces rampant trans-boundary issues such as overgrazing problems as well as illegal logging and poaching of non-timber products and wildlife. Internally, the park is also negatively impacted by issues such as human-wildlife conflicts, inadequate facilities for effective management and lack of capacity to carry out scientific research and management..

As a result, RMNP requires constant monitoring and strong communication efforts to combat these challenges. Communication tools were installed in the field range offices of Umling, Kanamakara, Gomphu, Manas and likewise in the headquarters in Manas during the past year.



Awareness campaigns

To help build capacity, RMNP park staff visited national parks and rehabilitation centers in Malaysia and Thailand to share and learn about human-wildlife conflict issues and remedial measures used to combat them. Park staff received training on park management, species conservation and sustainable livelihoods.



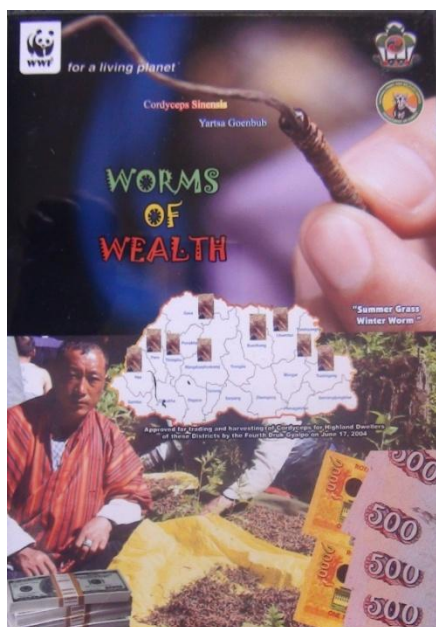
Trainings for field staff

Maintenance work was done at Manas and Umling range offices, and at Kanamakara. Most of the approach roads to the range offices were given a face-lift, with neglected areas cleared of unwanted shrubs and bushes, and waste bins installed. . This support will help facilitate better monitoring and tracking.

Consultations with the communities and stakeholders of the park were done to sensitize them on the benefits of proper conservation practices

Thrumshingla National Park (TNP):-

For the last six years, WWF’s assistance to Thrumshingla National Park has focused mainly on infrastructural development, including the construction of a head office, range offices and warden offices. WWF has also equipped these offices with basic equipment like computers, library resources, photocopiers, cameras, GPS, camera traps and communication facilities. Over the years, training on resource management, GIS, leadership, wildlife management, research skills, information analysis and sustainable livelihood management has also been provided to TNP staff.



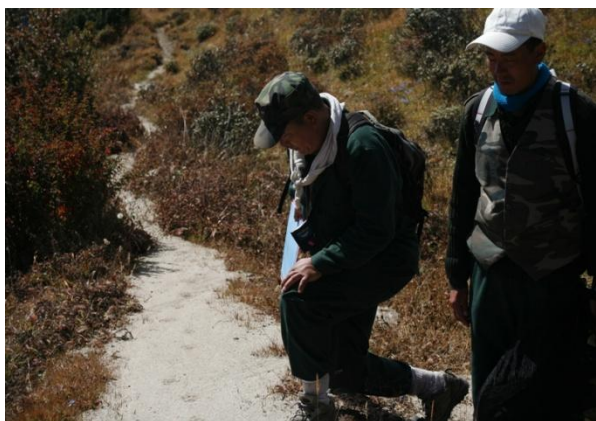
With the legalization of *Cordyceps* harvesting in 17th June, 2004, collection of *Cordyceps* from their natural habitat has increased manifold thus bringing communities an alternative income generation opportunity. However, in this process, mismanagement has led to unhealthy and unsustainable extraction. Therefore, it was observed that helping communities develop a better sense of sustainably managing the natural resource was very important for its longevity. A video documentary was prepared capturing both the positive and negative impacts of *Cordyceps* collection on communities and the environment.

Toorsa Strict Nature Reserve (TSNR):-



The Toorsa project is well into its second year of implementation with four rounds of surveys (mammals, plants and socio-economic) complete. Survey findings are currently being compiled into a report by the Wildlife Conservation Division.

Enumerators were supplied with the latest field gear to obtain accurate data from the field. Likewise they also received training on sound methodologies to be adopted while conducting such biodiversity surveys.



Mammal survey

Stakeholder consultations were held for six geogs (blocks) of the park where communities were sensitized on the project goals. Many expressed their happiness with the reserve being operational and looked forward for the long-term benefits it would bring to the community in terms of alternative livelihood opportunities, human-wildlife conflict solutions, etc.

Biological corridors: -



National level workshop

Last year, WWF worked with the government to help develop a framework that will not only operationalize Bhutan's system of wildlife corridors but also harmonize corridors with other protected areas and developmental activities.

Several regional workshops held in Mongar and Punakha districts were attended by important stakeholders of the protected area system. Resolutions derived from these meetings were gathered and documented into a draft corridor framework which was presented during a national workshop held in May 2010 in the capital, Thimphu, where all stakeholders were once again assembled. The framework has been endorsed by the Royal Government of Bhutan.

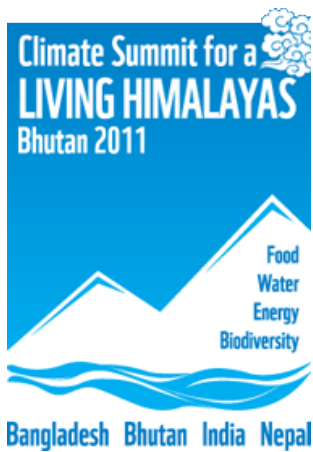


Regional level workshop at Punakha

Key recommendations in the framework are as follows:-

- (1) Recognize Biological Corridors as units of the Protected Area system rather than a part of it.
- (2) Operationalize all Biological Corridors by 1st January, 2017

The framework is a science-based, collaborative framework that will be used to develop a management plan for biological corridors. It will also look into the boundaries of the corridors as there have been several changes with the inclusion of three corridors in the Wangchuck Centennial Park boundary. The framework will help planners take into consideration other conservation characteristics like species, climate change, and river systems. The framework will also provide guidelines to handle issues related to hydroelectric projects, electric transmission lines, growing human populations, overgrazing and livestock-human conflicts, and establishing community forest centers in biological corridors.



Climate Summit Secretariat:-

During the 16th SAARC summit held in the capital, Thimphu, one of the most important outcomes was a commitment to establish a forum where participant countries could develop and agree on a road map for adapting to climate change impacts in the southern face of the Eastern Himalayas.

To carry out this work, a Living Himalayas Climate Summit is being planned for October 2011 in Thimphu. The summit is aimed at garnering political commitment at the highest level in support of a 2011 Summit Declaration. Some of the summit objectives are as follows:-

Signing and endorsement of a 10 year road map for climate change adaption in the eastern Himalayas sub-region.

Securing all alpine forests and grasslands in the eastern Himalayas temperate region.

Obtaining pledges from partner countries and institutions to fund resources for the implementation of the road map.

Creating and operationalizing regional adaptation expert groups which will advise government on emerging concerns and risks.

Following these broad objectives, a 2011 Living Himalayas Climate Summit Secretariat has been established in Thimphu to plan and keep track of the pre- and post processes behind the summit in October 2011. The summit will focus on four countries in the southern slope of the Himalayas, namely Bangladesh, Bhutan, India and Nepal.

High Altitude Wetland Conservation in Bhutan:-

The project 'Saving Wetland Sky High' (SWSH) is a WWF regional approach for the conservation of high altitude wetlands in the Himalayas. Under this program, WWF completed a high altitude wetland inventory in Bhutan, in collaboration with the Ugyen Wangchuck Institute for Conservation and Environment (UWICE). The project identified wetlands with global importance in Bhutan for accession into the RAMSAR Convention. As a signatory to the RAMSAR Convention, wetlands in Bhutan will have added value to gain better protection and financial and technical assistance for the conservation of wetlands and associated cultural values and biodiversity in Bhutan.

A national consultation workshop on wetland conservation was also conducted in Thimphu with participants from the regional WWF program offices, RAMSAR Secretariat office and the Royal Government of Bhutan. This first ever wetland workshop held in Bhutan discussed current trends in wetland conservation and issues related to the development of a road map for future conservation activities. The forum also offered a platform for stakeholders from Bhutan to learn more about the RAMSAR Convention.

Species:-

The mandate of the Constitution of Bhutan has been built in such a way that it becomes favorable for WWF to achieve conservation success. Article 5 of the Constitution states that, at all times, the country shall maintain 60% forest cover. Nevertheless, due to rapid socio-economic development taking place in the country, it has been and will be increasingly difficult to strike a balance between conservation and developmental activities. Throughout 2009-2010, WWF Bhutan's species program focused on addressing issues such as human-wildlife conflict, illegal transboundary trade and poaching.

The year 2010 was chosen as the Year of the Tiger (YoT). With as few as 3200 tigers left in the wild, WWF initiated the YoT campaign with the aim of doubling the current population by the year 2022 (Tx2). Thereafter, concerted efforts will made to boost a healthy Tiger population and, while doing so, conserve other species as well.





Endorsement of the National Tiger Recovery Program

National Tiger Recovery Program (NTRP):-

Bhutan is probably the only country in the world that has recorded the movement of Tigers from their usual sub-tropical habitat to an elevation as high as 4100 m above sea level (masl).

The current population estimate of 67-81 adult tigers (~ 115-150 in total) is based on five nationwide surveys and analysis of sign data (Bhutan Tiger Action Plan 2005).

A nationwide survey using camera-trapping and occupancy or distance surveys is being planned to get more recent and accurate figures. The first batch of camera trapping exercises has already begun in Royal Manas National Park.

Bhutan is one of the thirteen Tiger range countries (TRC) participating in the Global Tiger Initiative (GTI) to be held in Russia. GTI is a ministerial level conference where the Heads of States of the TRCs will come together to brainstorm adaptation and mitigation efforts to double the present Tiger population by 2022. Each TRC prepared a national Tiger Recovery Program (NTRP) that will go on to become a voice for the Tiger.



Stakeholder meeting for preparation of National Tiger Recovery Program

Some of the prioritized points in the NTRP documents are to:-

- Propose revisions to current protected areas systems, where Tigers have been observed beyond current boundaries.
- Reduce community dependence on forest resources as this will ultimately affect Tiger habitat.
- Build the capacity and skills of implementers to carry out scientific research and study key species.
- Develop a sustainable financing mechanism, to allow long-term planning and implementation.

Conservation of Asiatic Elephants:-

The survey to assess the quality of elephant habitat was conducted in Gedu, Samtse, Sarpang and Phibsoo areas. Enumerators from different forest offices in the districts received training on the use of GPS and data collection using standard templates.

Field equipment was purchased and supplied in different Elephant focal points in Samtse, Gedu, Phibsoo, Lhamoyzingka, Phibsoo, Sarpang and Mans. Water holes and saltlicks in the areas were also maintained. This support will help expedite elephant recordings.

Suitable native fodder species including grasses (Napier and *Churumpho*) and trees (Willow, Magnolia, Banana, Bamboo, Ficus, etc.) were planted in Gedu over approximately two hectares.



Training workshop on population assessment and habitat management of Elephants

Training was conducted by WWF and Project Elephant, India for 32 field staff (from Sarpang, Samtse, Samdrupjongkhar, Gedu, national parks) from 12th-14th November, 2009 in Phuentsholing and Gedu. The training mainly focused on elephant population assessment and habitat management in Bhutan. The training also included other topics such as: 1) elephant population census; 2) distribution mapping; and 3) human-elephant conflicts that included preparation of GIS based baseline maps, grid maps, threat mapping and conservation planning and field data collection.

Two informants, one from Gedu and Samdrupjongkhar territorial divisions, have been recruited to provide information and intelligence on poaching activities under the respective jurisdictions. This activity is being tested on a pilot basis and the efficacy of having informants will be ascertained by the end of the project duration. From their appraisals, the continuation of similar activity or replication of it in other locations will be also decided.



Training workshop on data collection and survey of Elephants

Human Wildlife conflict management: -

Conflicts between humans and wildlife are of huge concern for farmers across the country. Time and again, incidences of wild animals destroying crops and fields are heard often. Among all trespassers, Asian elephants are observed to be the most rampant. Due to these mishaps, villagers face huge financial setbacks thereby creating a hostile environment.

A 4.5 km long solar electric fence at Singey geog was completed and no new incidences of elephant attacks have been reported since.

At another site at Nganglam Dungpa, Pemagatshel, a demonstration was held to showcase the impact of live fencing as an alternative means to protect crops from elephants and other wild animals. The purpose of the project was to grow various thorny plants at the nursery and distribute them to farmers to plant and grow around their fields to curb wildlife intrusion. Almost one acre of land was cleared and fenced to provide nurseries for thorny plants to be distributed, free of cost, to farmers residing in identified hotspots.



Community consultation meeting



Solar electric fencing

Sustainable livelihoods:-

Sustainable Livelihood programs have been created to develop a mutual understanding between conservation of biodiversity and economic development of local communities. This is done by offering alternative livelihood opportunities to the communities. Integrated Conservation and Development Programs (ICDPs) have been adopted across the country as a tool to achieve biodiversity conservation while fulfilling the aspirations of the people living in and around protected areas in Bhutan.

As part of project, WWF Bhutan produced a short documentary video on sustainable harvesting of *Cordyceps*, also popularly known as *Yartsa Goenbub*, “worms of wealth” in Bhutan.. This audio visual piece will help educate highlanders on sustainable harvesting.

To attain maximum benefit, most sustainable livelihood programs are linked with other programs like forest preservation or species protection. In Bhutan there is a huge concentration of human settlements in protected areas. Therefore, it has been observed that ICDPs cannot be done in isolation. They need to be tied to the broad mandates of the parks and/or with the protection of species habitat.

ICDPs in Wangchuck Centennial Park:-

WWF Bhutan and WCP have been collaborating with the Tourism Council of Bhutan (TCB) since the inception of a co-management approach to promote eco-tourism in the park. It has been observed that the potential for the park to excel in eco-tourism is immense, as Bumthang is one of the top tourist destinations in the country.

Despite having such pristine landscape to their advantage, benefits are often reaped only by a select few, while local communities may be left high and dry. Therefore, together with the park staff and TCB, WWF Bhutan has initiated a project that not only develops facilities catering to the requirement of tourists but also develops ownership skills.

Construction of basic sanitation facilities have already begun. Households were also trained in food management (storage, catering, production of fresh vegetables, etc). The benefits of eco-friendly tourism are expected to uplift the livelihood of more than 100 households from Nasiphel, Zobjethang and Chokhor areas.

Developing basic sanitization facilities in home stays in Wangchuck Centennial Park



ICDPs in Thrumshingla National Park:-

To strengthen the capacity of field staff, WWF funded a post graduate diploma course for one Assistant Forest Officer. He has now successfully finished his course in Wildlife Management from Kasetsart University, Thailand. With his knowledge, he will be able to assist the park and the Forest Department in research, statistics, GIS and overall planning and policy making.

The Rodungla Trail in TNP was chosen as a site for field testing the eco-tourism framework for national parks in Bhutan. Training for eco-guides and other community service providers was provided, while trials, camping facilities and home stays were developed along the trek route.

Three bio-gas plants were installed in Ungar village. The communities will be able to enjoy the benefits of alternative energy, such as less drudgery, proper hygiene and zero consumption of wood for fuel. Consultative meetings were held with community members to familiarize them with the new technology. An implementer for the bio-gas plant project was sent to the neighboring country of Nepal for field sharing experiences with the technology.

Alternative Energy Technology:-

WWF's alternative energy interventions in the kingdom can be traced back to the early 2000s whereby electric cookers were imported from the neighboring country of India and distributed. This initiative was started because Bhutan has always reported a very high consumption of fuel wood (perhaps one of the highest in the world-approximately 1.2 tons per capita-UN 2000). Moreover, with the mushrooming of several hydropower plants in the country, electricity was found to be a relatively cheaper alternative.



Therefore, WWF began the process of switching conventional cooking methods to electric models. To date, WWF's alternative energy reach can be seen in more than 15 districts across the country, including within government organizations (armed forces), schools and institutions (with boarding facilities) and monastic bodies.

Another noteworthy achievement in this area was the establishment of Bumthang Manufacture Works, a private enterprise that not only fabricates electric cookers and but also provides maintenance services thus making the technology cheaper and more accessible. A field survey revealed that a set of three cookers can save up to two truckloads of fuel wood per month and 60% of expenses.

In the last year alone, 19 sets of such cookers were supplied to six monasteries in six different districts of Gasa, Bumthang, Samdrupjongkhar, Lhuentse, Tsirang and Wangduephodrang. These cookers are expected to improve the sanitation conditions of these monasteries immensely and reduce up to 90% of fuel wood consumption. Another long-term benefit includes reduced drudgery for the cooks.

Dorjibi Weaving Association, Bumthang:-

An outlet shop was completed and handed over to the community in June 2009. The shop plans to house a coffee café in its second phase. Staff members were trained in book keeping skills. Brochures and leaflets to support the center will also be prepared soon.

By way of commercializing locally-produced products, the community will be able to earn sustainable income thus reducing their dependence on forest resources.



Members of the Dorjibi weaving association

Scholarship program:-

Support to students from economically disadvantaged families continues to be provided. Forty-five students are studying in different schools within Mongar, Lhuentse and Bumthang districts.

Roof Top Rain Water Harvesting Project

Pemagatshel district in eastern Bhutan is facing an acute water shortage as most of its water sources like springs and ponds have dried up. Although the district has rich land resources and good climatic conditions for agriculture, lack of water restricts them from greater yields.

Therefore, a water collection method successfully implemented in the neighboring country of Nepal is being tried and tested in Sumar village within the district. Rain water harvesting is an efficient way to utilize water from rooftops and runoff by storing it in huge containers fed by a series of connecting pipes. During drought conditions, the stored water can be tapped and used wisely. Training on rain water harvesting was completed in several communities.



Major stories in 2010- At a glance:-

WWF's produced document bags awards:-

Thorthormi, a glacial lake situated 4428 meters above sea level in Lunana (northern Bhutan) would have been at major risk of glacial lake outburst flooding (GLOF) had it not been for mitigation work carried out by the government. Experts say that further enlargement of Thorthormi Lake will cause it to merge with Raphstheng Lake, another vulnerable lake, 80 meters below. Together, an inevitable outburst could release up to 53 million cubic meters of water and debris causing havoc throughout the entire Pho Chu basin and downstream as well. This worst case scenario is forecasted to be even more devastating than the 1994 outburst of Lugge Lake that killed about 20 people and caused significant property damage.

To avert disaster, the government plans to reduce the water level of Thorthormi Lake by five meters over the next five years. This is expected to be achieved by constructing artificial walls and channels to drain water, thereby lowering water levels.

WWF's communication unit, in collaboration with the Bhutan Broadcasting Service, produced a 30 minute documentary entitled "The Cost of Climate Change-Thorthormi Lake". The documentary recounts the mitigation work being carried out amidst harsh climate conditions in the cold mountain range. The documentary went on to win the best entry in the environment category at the 2010 national media awards held in Thimphu. It also won the United Nations Correspondents Association (UNCA) global prize for climate change in 2010.

Year of the Tiger:-

On 13th of February, WWF Bhutan, in collaboration with Department of Forests and Park Services, Ministry of Agriculture and Forests (MoAF), initiated a joint campaign to spread word and increase awareness of the Tiger among the general public. The day paved the way for a yearlong dedication to the survival of this species, with the launch of a set of special Tiger Lunar stamps. A pictorial exhibition on Tiger conservation in Bhutan was also showcased.

The event was graced by the Minister, MoAF, Lyonpo Dr. Pema Gyamtsho. Many government officials, members of parliament and the general public, along with the media, witnessed the event at the center of the capital city of Thimphu.



16th SAARC Summit:-

Eight countries participated in the 16th SAARC Summit held in the capital of Thimphu from 28th - 29th April, 2010. This year's summit theme was climate change. Some of the major resolutions derived from the summit include:-

Leaders of SAARC countries agreed to establish an inter-governmental expert group on climate change, who will meet at least twice a year to develop and monitor regional climate policy development and implementation. Leaders also decided to plant ten million trees in member states over the next five years as part of a reforestation campaign.

Leaders also expressed their determination to promote the use of green and low-carbon technology.

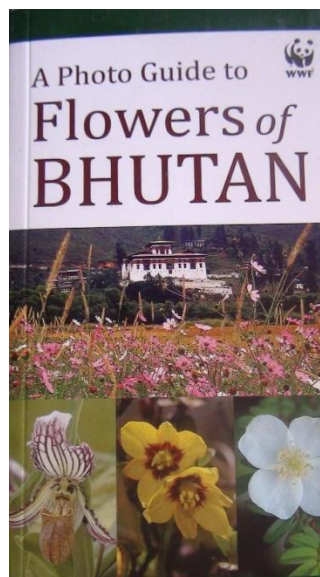
“Where Worlds Collide” book launched:-



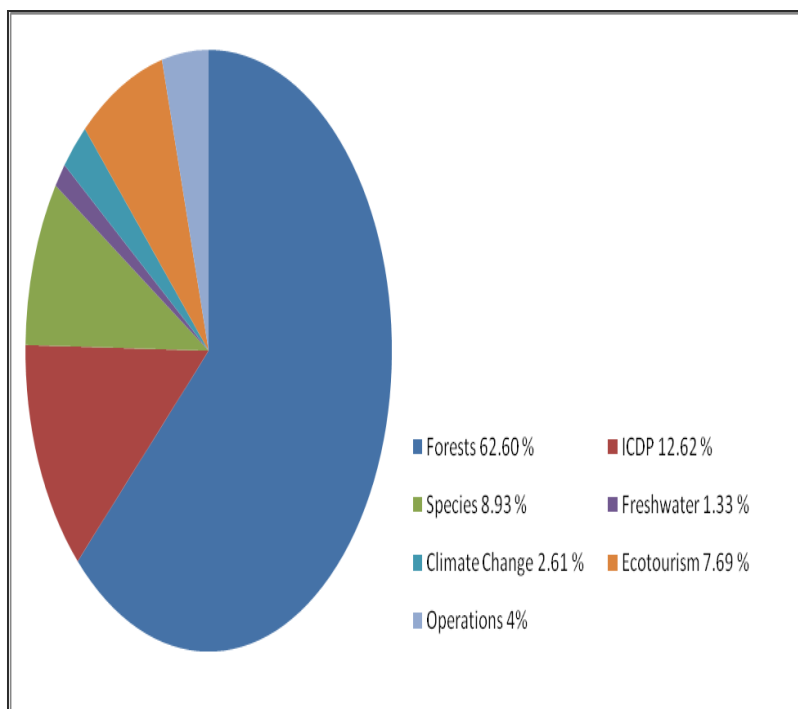
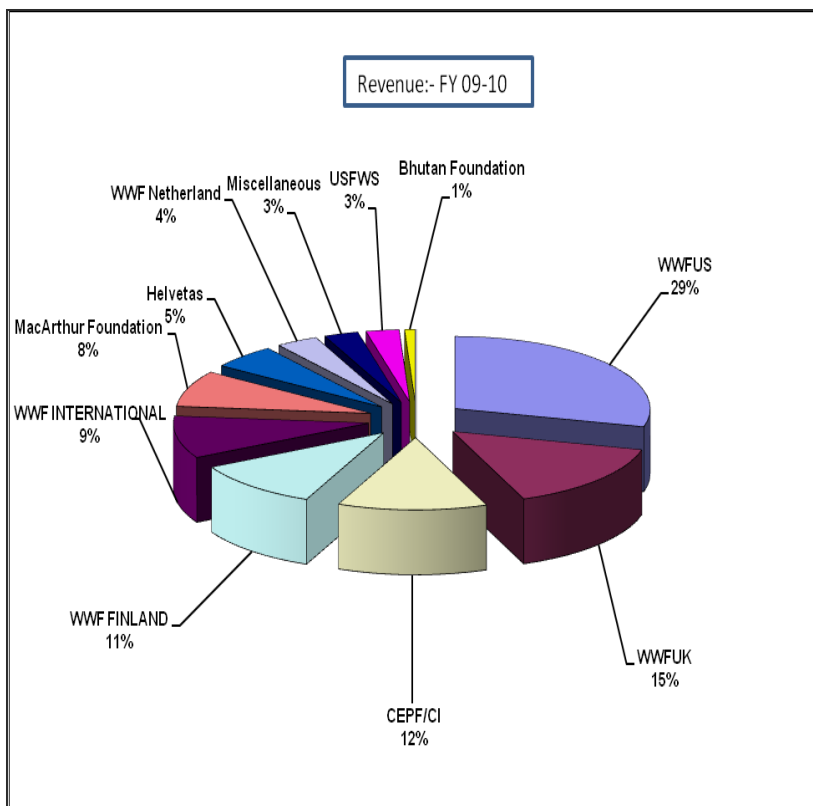
The Eastern Himalayas book “Where Worlds Collide” was launched by the Secretary of the Ministry of Agriculture, Dasho Sherab Gyeltshen, on 10th August, 2009. The book brings to light the innumerable species that have been discovered in the Eastern Himalayan region in the past decade.

“A Photo guide to Flowers of Bhutan” book published:-

The book highlights more than 400 flower species, complete with pictures and taxonomy data of the species, its genera and its family tree. The book gives pictorial illustrations and uses simple text that will provide users with useful information on Bhutan's floral richness.



Financial Report 2009-2010





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