

Vol.: 3 Issue: 2

Royal Society for Protection of Nature

www.rspnbhutan.org

June 2010

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Environmental Stewardship Award for RSPN's Founder



>> Her Royal Highness Ashi Chimi Yangzom Wangchuck conferred the award to Dasho Paljor J. Dorji

er Royal Highness Ashi Chimi Yangzom Wangchuck, the Royal Patron of the newly launched Bhutan Ecological Society awarded the Jigme Singye Wangchuck Outstanding Environmental Stewardship Award for Policy Leadership to Dasho Paljor J. Dorji.

Dasho Paljor J. Dorji, popularly known as Dasho Benji, is the founder of Royal Society for Protection of Nature, an only non-profit pioneer environmental organization in Bhutan. The RSPN, which was founded in 1987 now supplements the Royal Government's efforts in conserving Bhutan's flora and fauna diversity outside the protected area system.

The award is established for the first time in Bhutan with the launch of the Bhutan Ecological Society on 5 June, 2010 coinciding with the World Environment Day. The Society was launched by the Ugyen Wangchuck >> Contd.on page 3

RSPN launched "Manual on Climate Change and Health"



>> H.E. the Health Minister launching the manual

The Royal Society for Protection of Nature (RSPN) launched an educational manual titled, "Manual on Climate Change and Health" on 25 April 2010 in Taj-Tashi Hotel.

His Excellency Lyonpo Zangley Dukpa, the Minister for Health graced the occasion as the Guest of Honour. In his key note address to about one hundred fifteen participants from various sectors, he said that it was timely for RSPN to launch the book just before the 16th South Asian Association for Regional Cooperation (SAARC) Summit with the theme on climate change.

His Excellency commended the RSPN's efforts in supplementing the Royal Government in not only creating awareness on conservational issues, but in taking an active conservation role in the country. He urged to continue such initiatives. He said, "The publication will be more useful for common people to understand some basic terms of climate change," and would go a long way in climate change education. He added that the manual will benefit

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Eco-friendly Electrification in Phobjikha



>> Underground cable tunnel under progress

A s the long awaited grid electrification started in Phobjikha, RSPN and its stakeholders organized a mass awareness program for the community on 17 April 2010. The program was mainly intended to sensitize the community to the significance of electrification from an environmental perspective, to safety measures, and also to seek community cooperation during implementation of the work.

Eight years ago more than 500 households in Phobjikha valley depended on lighted mebchey (pine wood resin) and kerosene lamps as a source of light. As an initiative to promote alternative energy and to compensate for the absence of electric lighting in the area, the Royal Society for Protection of Nature (RSPN) initiated a pilot project from 2003 to 2005 which supported 198 households and 22 institutions with solar lighting systems. The project was financially assisted by the Washington based Solar Electric Lighting Fund (SELF) and the United Nations Environment Program (UNEP).

While there was a need for grid electricity in the valley, the sensitivity of the valley as a conservation area was an important concern both in the minds of the government and the RSPN. The environmentally friendly electrification required a huge investment that was beyond the capacity of the government. In the mean time, RSPN felt that the basic needs of the people should not be compromised in the process of conservation, and it continued to advocate and explore support for environmentally friendly electrification in the valley.

The dream became a reality when the Austrian government showed keen interest to support the electrification in Phobjikha in 2007, mainly in recognition of the significance of the area for conservation. The Department of Energy, Bhutan Power Corporation Ltd. and the RSPN

jointly underwent intensive planning, giving high priority to the environmental sensitivity of the area, particularly the black-necked crane. The project was planned in such a way that no electrical infrastructure would be exposed in the open, whereby the electric cable lines would be largely underground and those near the forest would be along the tree line. This will not only give fly-away routes to the birds but also maintain the aesthetic value of the valley. Further, to minimize the disturbances to the winter inhabitants, it was also a common understanding between the stakeholders that the execution of major works will be in the months of April to September when the cranes are not present.

Through such initiatives, RSPN hopes to spread the message that development can happen along with conservation if planned properly and with concerted efforts of various stakeholders. It is also hoped that this exam-

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RSPN launched "Manual on Climate Change and Health"

young people in better understanding the climate change and will help in adopting environmentally friendly practices by the young generations.

Speaking to the gathering, the Executive Director of the RSPN, Dr. Lam Dorji said that through such publications, RSPN hopes to promote the level of awareness on the causes and effects of the rapidly changing climate as it relates to the people's health more directly. The knowledge shared from the manual would definitely have a positive impact on what we practice - that which directly or indirectly triggers climate change. He urged the gathering to be mindful of everyday actions and to help in reducing the devastating effects on climate in every way possible. The publication, aimed at young adults, hopes to have greater impact on everyday lives of common people since it highlights the effects of climate change and global warming in simpler terms and relates how one's own activities affect the global climate. It also identifies some alternatives for reducing global warming by means of personal responsibility and initiatives.

The six chapters in the book introduce our youths to the basics of climate science, global warming and to the linkages between climate change and human health.

The manual was developed with financial support from World Health Organization (WHO) and has been distributed to schools, institutions and agencies free of cost. ple will help promote environmentally sensitive development in other parts of Bhutan as well.

The stakeholders present were the Wangdue Dzongrab, General Manager of Bhutan Power Corporation Ltd., Chief Forest Officer from Wangdue Division, representative from Nima Powers, Executive Director of RSPN, Geog representatives and other officials.

Sustainable Harvesting and Management of NTFPs

A three-day community training session on sustainable harvesting and management of non-timber forest products (NTFPs) and Ringshu was conducted for the communities of Passangphu and Maduwa villages in Kangpara geog (subdistrict) in Trashigang Dzongkhag.

Most families in Kangpara Geog depend on bamboo products as source of income. Bamboo, popularly known as "the poor man's timber," occurs in a great range of soil and climatic conditions and has a vital role in improving livelihoods, ecological and food security of humankind. Improper management and harvesting would threaten the sustainability of the bamboo supply. To overcome such consequences on the community, the training, both the theory and practicum was conducted in Panssangphu Community Primary School from 9 to 11 June 2010 with the following objectives:

- To understand ringshu and other nontimber forests products (NTFPs) and their habitats.
- To acquire sufficient skills for producing good seedlings, planting, tending, protecting, and harvesting of ringshu and other NTFPs.
- To evaluate the ringshu management group on plantation and management skills and regeneration of ringshu.
- To develop an action plan to rehabilitate ringshu in the ringshu conservation area
- To promote sustainable harvesting of NTFPs to improve livelihoods and income generation.
- To build the strength of the NTFPs group members on plantation development and the management of NTFPs.

To get updates on most recent activities of RSPN, please visit: **www.rspnbhutan.org**

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Environmental Stewardship Award for RSPN's Founder

Institute for Conservation and Environment (UWICE) based in Lamey Gonpa in Bumthang. The award will be conferred every three years for the outstanding leadership and contribution to the conservation of the country's environmental resources.

The award accompanied a total cash prize of Nu. 100,000 and a citation signed by the Royal Patron of the Bhutan Ecological Society and the Prime Minister of Bhutan. Dasho contributed the prize money back to the Bhutan Ecological Society.

Speaking at the award ceremony, Her Royal Highness said that although Bhutan had a negative carbon emission, we would still have to bear the consequences through no fault of our own. Coinciding with the event, Her Royal Highness also launched the digital publication of the Bird Songs of Bhutan.

Dasho Paljor J. Dorji is currently the special advisor to the National Environment Commission. He has also been appointed as the first founding President of the Bhutan Ecological Society.

Meanwhile, Mr Sonam Phuntsho from the Information and Communication Services in Ministry of Agriculture and Forests was awarded the Jigme Singye Wangchuck Outstanding Environmental Stewardship Award for Field Leadership for his unwavering interests and contributions to preserving the natural resources of Bhutan. Since the early seventies, he has planted more than 10,000 saplings, in addition to other active voluntary services.

5th Regional Research Workshop on Water Governance



>> Participants from South Asia and representatives from stakeholders in Bhutan

The fifth regional research workshop on "Globalization of Governance: Implications for Management of Water in South Asia" opened at Taj Tashi, Thimphu from 3-5 May 2010.

In his keynote address, His Excellency Lyonpo Dr. Pema Gyamtsho, who graced the opening event as the Guest of Honour, said that it is more timely and relevant to conduct such a regional conference on water related issues. He said that the water is the most urgent and important emerging issues, particularly in the South Asia region.

The Executive Director of the RSPN, Dr. Lam Dorji welcomed the international participants and presenters and conveyed RSPN's honour to host such an important regional conference with support from Saci-WATERs, India. Acknowledging that water scarcity is becoming a global and common issue, he said that Bhutan has many things to learn from the experiences of her neighbour in preference to being complacent and that it is an appropriate time to organize such a workshop.

Expressing his gratification, the Executive Director of SaciWA-TERs, Dr. Dibya R. Kansakar said that they found it more appropriate to collaborate with RSPN as a new and emerging partner in Bhutan for a wider coverage in the region on the emerging water management issues. He said that the SaciWATERs were privileged to conduct 5th research workshop in Bhutan which has exemplary environment conservation

policies that provide a platform for interaction among the participating countries and individuals.

During the workshop, the presenters from the regional countries presented their research papers on the theme and discussed findings more relevant and pertinent to the lives of the people of the region.

The workshop was attended by around seventy participants from various stakeholders in Bhutan including participants from Bangladesh, India, Nepal and Sri Lanka.

IWRM Training Workshop for Water Professionals



>> The training on IWRM in session

onsidering the fact that water is becoming scarce and a source of conflict and competition even in Bhutan, the Royal Society for Protection of Nature in partnership with South Asian Consortium for Interdisciplinary Water Resources Studies (SaciWATERs) in India organized a three-day training workshop for the water professionals in Bhutan from 7-9 May 2010.

The training program was attended by about 26 partici-

pants and was aimed at delivering water- related issues and finding solutions both in terms of conceptual and contextual knowledge, as well as in building practical skills to confront water challenges in an effective way. The training cum workshop was organized with the following objectives:

- To understand the concept of integrated water resources management (IWRM), particularly in the Bhutan context and
- To develop a common understanding of watershed and management in the climatic, topographical and socio-political context of Bhutan.

The training was facilitated by the resource persons from Watershed Organization Trust (WOTR) and SaciWATERs, India and Bhutan.

RSPN observed 2010 World Environment Day in Sarpang



>> The officials visit the exhibitions stalls put up by students

The Royal Society for Protection of Nature in collaboration with Sarpang Dzongkhag Administration observed the World Environment Day 2010 on 5 June 2010 with a call to protect environment and its biodiversity. The main theme for this year's event was "Many Species. One Planet. One Future."

The Executive Director of RSPN, Dr. Lam Dorji, who attended from Thimphu to observe the event, informed the gathering about the crucial role that every individual can play in conserving the environment and the species. He expressed his appreciation for being able to partner with the Dzongkhag Administration and for working together in environment-related issues of concern to RSPN.

The head of the Environment and Disaster Management Division, Mr. Karma Rabten of UNDP-Bhutan office, Thimphu read out the message from the UN Secretary General Ban Ki-moon to the gathering to remind people over the world about the incredible life species on this earth.

Dasho Dzongda, the chief guest for the event, reiterated the significance of observing the event in Sarpang Dzongkhag. Highlighting the importance, the chief guest made a special mention of non-biodegradable waste including wrappers, soda and drink bottles, foam, plastic and many others which are of concern to the Dzongkhag.

To add to the variety for the event,

the students of Sarpang Higher Secondary School and Sarpang Lower Secondary School showcased exhibitions on biodiversity, ecosystem services, global warming and green energy, to name a few. Prizes were awarded to the winners as tokens of appreciation for their concern towards the environment. Cultural shows by the students kept the gathering going until the end of the program.

A similar celebration was also organized in Phobjikha Primary School under Wangdue Dzongkhag. As a commitment to this year's World Environment Day celebration, the school adopted the Nake Chhu to help environment conservation activities.

With financial support from RSPN, the school's Wetland Nature Club organized a one-day cleaning campaign along the riverside and the tributary streams on 4 June 2010 followed by a celebration with skits on environmental themes and with cultural shows the next day. The school took on the responsibility of monitoring the obvious pollution of the streams by limiting car washes in the wetlands and, proper waste disposal and by spreading awareness on the importance of wetlands to the community.

Nake Chhu, literally meaning "Black river," is a significant small river that gently meanders through the wetlands of the Phobjikha valley. According to the local folk lore, the stream spiritually represents a serpent due to its slow, meandering nature. This river is a tributary source of the Kisona Chhu that joins the Punatsang Chhu also known as the Sunkosh River. The Nake Chhu is fed by the small brooks and streams that get filtered through the wetlands, an important habitat for the endangered black-necked cranes that migrate to Phobjikha every winter.

LCSG completes Water Source Protection



>> RSPN and Sarpang Dzongkhag officials handed over project to the community

oinciding with the World Environment Day 2010, the Executive Director of RSPN handed over two projects, both on water source protection to the beneficiaries under Shompangka Geog in Sarpang Dzongkhag.

The two projects, Darapakha and Jesi

Kholsi water source protection projects were carried out by the Local Conservation Support Group (LCSG) of Shompangkha Geog after considering the degradation of two sources and upon seeing the water shortage for the communities.

When asked about the importance and

the need to protect the water sources, the chairman of LCSG said, "They have not realized the need until they found that the water source was diminishing for the last few years, particularly in winter. Since nothing could survive in absence of water, they have realized the need for the protection of those water sources that were there for many decades."

The LCSG members were grateful to the dzongkhag administration for the support and guidance without which the projects would not have been successful.

RSPN is equally indebted to the staff of Sarpang Dzongkhag for their proper management of the LCSG project fund. The lead behind was Mr. Langa Dorji, the Dzongkhag Environment Officer. As mandated, Mr. Langa played a catalytic role in issues related to environment and was the motivating factor when it came to LCSG activities. "The project was successful with support from Dasho Dzongda, Dasho Dzongrab and all other staff," said Mr. Langa.

The projects were funded by RSPN as a means of building Local Conservation Support Group. RSPN today has LCSG in six Dzongkhags and has plans to establish for the remaining 14 Dzongkhags.

CBNRM project protects Tsho-gonpa lake



>> Local communities contributed the labour for fencing

The RSPN field office in Wamrong carried out the Tshognopa Lake Protection under the Community Base Natural Resource Management (CBNRM) project with community participation to address the importance of water-source protection.

With such timely interventions, it is ex-

pected to enhance the conservation of the environment and the revival of the lake which at the moment is on the verge of drying up due to inappropriate resources extraction in the catchment area.

The objective of the activity is to ensure the local people and to instill in them a sense of awareness and responsibility for a planned water-source management. It further addresses the importance of the relationship between a healthy environment and better livelihood. The activity is also targeted for community preparedness and building the community's responsibility in developing a systematic water-source protection through proper management of natural resources, plantation in the degraded catchment areas and water catchment protection.

The existing lake measuring approximately 30 meters by 15 meters in the area has little water and is covered by falling leaves and undergrowth bushes from all sides. The small patch of forest around the existing lake falls under cool broadleaved forest with many species. In general the upper canopy coverage is about 70% to 90% dominated by Castonopis spp. while the lower canopy is dominated by Beilschmiedia, Symlocos and Rhododendron. Good signs of wildlife such as barking deer, wild boar and squirrels, in addition to several insects and bird species were also observed during the plantation and fencing of the lake in this patch of forest.

Eco-bags for Thimphu Shoppers



>> The Director, Department of Trade launched the eco-friendly bags

The Royal Society for Protection of Nature (RSPN) in collaboration with the Clean Bhutan Steering Committee members launched the non-plastic shopping bags with the brand "ecobags" on 12 June 2010 at the Centenary Farmers Market in Thimphu.

The eco-bags that attracted a praiseworthy number of people from all walks of life were produced as part of the research findings on poly-plastic bags. Low cost and easy availability of Eco-bags is now expected to provide alternatives to the shoppers and reduce the use of plastic carry bags under the Clean Bhutan Program. The main objective of such initiative is to overcome the increasing environmental issues from the disposal of the plastic carry bags.

Happy Green deSigns', a local youth group has been identified to promote and sell the bags to the public at the Centenary Farmers Market. Over time, this group will produce varieties of bags at affordable prices.

The Director of Department of Trade, who was present as Guest of Honour, reminded the gathering about the harmful and adverse effects of plastics as they not only litter the landscapes due to poor bio-degradable quality, but kill animals and have several health hazards.

The eco-bag was developed with financial support from the Programme for South-South Cooperation.

Bamboo and cane feasibility study

bamboo and cane feasibility study for Samtse and Sarpang dzongkhags was carried out by the Royal Society for Protection of Nature in collaboration with the Social Forest Division (SFD) and with financial and technical support from SNV (Netherlands Development Organization), from 1 April to 17 May 2010 to assess the potential, and provide specific recommendations for bamboo and cane development that would optimize income generation for the local community.

The study with the local communities of both dzongkhags and bamboo traders of nearby Indian market estimated that the existing bamboo pole production in Samtse and Sarpang is close to the target as planned by the One Geog Three Products (OGTP) as outlined in the Tenth Five Year Plan. The study indicated that the current annual bamboo-pole production in 14 gewogs (subdistricts) within Samtse Dzongkhag is estimated to 50,000 poles; while the estimated bamboo pole production in 6 gewogs in Sarpang Dzongkhag is about 20,000 poles.

Bamboo plays very important roles for the local people. Many households plant bamboo for protective purposes such as wind breaks, fencing, prevention against landslides, and soil erosion control. Bamboo is used them for construction of houses, sheds, weaving products, tools, and flag- poles. On an average, a household with one or more bamboo clumps in private registered land (PRL) consumes 40 to 50 bamboo poles per year, while a household without bamboo clumps buys about 10 to 15 poles in a year.

Cane resources are mainly available in government reserved forests (GRF) but they have not been managed properly. Cane harvesting was improperly carried out due to lack of any guidelines and monitoring. As a result, there is a drastic decrease in cane resource in GRFs. Poorly managed cane collection is also damaging to forests as people cut down other trees in order to harvest the cane. For this reason, Sarpang Dzongkhag has banned cane exploitation since July 2009. Local people mostly collect cane for domestic consumption while little is being sold for the purpose of income generation.

WORD SAFARI

In this edition, we have compiled some terminologies related to energy from *Enery Statistics Manual* published by International Energy Agency (IEA).

Find and encircle the texts highlighted in bold letters. We have encircled one to help you get start with.

- **Biofuels** : Biofuels cover bioethanol, biodiesel, biomethanol, biodimethylether, bio-oil.
- **Black liquor** : This is a recycled by-product formed during the pulping of wood in the paper making industry.
- **Crude oil** : Crude oil is a mineral oil of natural origin comprising a misture of hydrocarbons and associated impurities, such as sulphur.
- **Ethane** : A naturally gaseous straight-chain hydrocarbon (C2H6) extracted from natural gas and refinery gas streams.
- **Natural Gas Liquids** (NGL) : NGL are liquid or liquefied hydrocarbons recovered from the natural gas in separation facilities or gas processing plants.
- **Orimulsion** : Emulsified oil made from water and natural bitumen
- Liquefied **Petroleum Gases** (LPG) : LPGS are light paraffinic hydrocarbons derived from the refinery processes, crude oil stablisation and natural gase processing plants

R	S	Ρ	В	Е	А	Ρ	Ν	Н	С
Ι	L	Н	L	Ι	В	Е	Α	R	Y
Α	Κ	Α	А	Т	R	Т	Т	0	R
С	Т	Α	С	R	Κ	R	U	Ν	0
R	Е	М	Κ	М	D	0	R	L	S
U	F	Т	L	G	0	L	Α	F	Ρ
D	Ν	Ν	Ι	S	Е	Е	L	Α	Н
Е	S	Т	Q	Α	Ρ	U	G	L	Е
0	С	Е	U	Α	Ν	М	Α	Н	R
Т	Е	S	0	Ν	R	G	S	0	Е
L	R	Т	R	G	S	Α	L	R	G
σ	Е	0	Н	Υ	Е	S	Ι	Е	Е
S	В	R	F	Α	Α	Е	Q	R	А
Т	Ν	Ι	D	Н	Ν	S	U	Ι	S
Ι	Т	М	0	Ι	Ι	Е	Ι	Q	Т
Q	S	U	Ρ	F	Н	Ι	D	0	А
S	U	L	Е	Α	U	Ι	S	Х	R
Е	F	S	L	0	U	Е	Е	0	U
W	Ι	Ι	Е	Т	Ι	Ν	L	Y	G
W	0	0	Ι	М	U	L	S	Ι	0
S	М	Ν	Ν	Х	V	С	Ζ	G	Е



