

Newsletter Wet Notes

www.pakistanwetlands.org

January 2008

Wetlands

The Ministry of Environment's Pakistan Wetlands Programme

The monthly newsletter of the Pakistan Wetlands Programme (PWP) is published to inform donors, scientists, academics, researchers, environmentalists and environmentally concerned individuals of all qualifications and ages about the Programme, its projects and upcoming events while giving insights and updates on research, education, and habitat management activities. The PWP's objective is to conserve the globally important wetlands biodiversity in Pakistan while alleviating poverty. It is a progressive initiative of the Federal Ministry of Environment and is being implemented by the World Wide Fund for Nature, Pakistan (WWF P). It is funded by a consortium of national and international donors including, the Global Environment Facility (GEF), United Nations Development Programme (UNDP), the Royal Netherlands Embassy (RNE), WWF Global Network and the Pakistan Poverty Alleviation Fund (PPAF).

Articles in this Edition:

Traffic International in Pakistan
Left in the Dark
Solar Geysers

Also Lurking Inside:

Programme Updates
Public Events
Technical Innovations
(“Cool stuff”)
Interns Corner
Other News

Production Staff:

This edition of Pakistan Wet Notes was compiled and edited by Marriyum Aurangzeb, Coordinator, National Awareness-raising and Communications, PWP, Nauman Sajawal Khan, Assistant Coordinator, Kashif Haider Qutub, Awareness-raising Assistant and Fareeha Irfan Ovais, PWP consultant. Graphic Design by Fakhr-e-Alam.

Unless specifically credited, all photographs have been taken by members of the PWP Team and may be used, with proper acknowledgment, for any *bona fide* conservation purpose.



Traffic International in Pakistan for the first time.

Programme Updates

» In Full Swing

World Wetlands Day is celebrated across the globe each year to mark the signing of the Ramsar Convention on Wetlands on February 2nd, 1971, in the Iranian city of Ramsar. The theme for WWD 2008 is 'Healthy Wetlands, Healthy People' which emphasises the strong relationship between maintaining functioning wetland ecosystems and human health. This year the PWP, in collaboration with Capital Development Authority, plans to celebrate the WWD 2008, by organising a wide array of engaging and educational activities over a week-long 'Wetlands Gala'. The Gala celebrations are intended to raise awareness, and increase general understanding of the relationship between healthy wetlands and healthy people.

Wetlands conservationists, students of schools, colleges and universities, representatives from partner organisations throughout Karachi, Lahore and Islamabad as well as office bearers of key organisations and the stakeholders from the four regional complexes of PWP have been sent open

invitations to participate and celebrate the WWD 2008.

The nation-wide festive celebrations of the Gala will be inaugurated on February 2nd at Rawal Lake View Park in Islamabad and continue throughout the week with a *grand finale* at Islamabad Club on February 10th, 2008. Various activities have been planned to reach out to a diverse assortment of audiences. Public awareness messages will be published in newspapers, aired on radio and TV, advocating the importance of wise-use of wetlands. Moreover, posters and banners, etc., will be displayed in the prominent locations of Islamabad courtesy of CDA under outdoor Awareness Campaign for WWD 2008.

As part of the nation-wide celebrations, a 'Healthy Wetlands, Healthy People'- essay, arts, poetry, 3-D model exhibits, play performance and poster competitions will be held for students of primary and secondary schools in line with the theme for WWD 2008. Students from all major cities as well as the PWP's four designated complexes will be

Continued on page 2



Continued from page 1

eligible to participate in these competitions. Other awareness-raising activities will include advocacy walks, group discussions and seminars.

» **Survey of peatlands and peat burning in Yarkhun Valley**

The Northern Alpine Wetlands Complex of the Pakistan Wetlands Programme, is taking certain initiatives with the custodian communities and has developed a preliminary baseline report on the subject in collaboration with the *Chiantar Welfare Society* of Broghil. This report will help researchers obtain



A peat-burning stove in use.

pollution. They are better for the health of the community and also minimise the amount of peat extracted from the nearby peat lands. The fuel efficient



Peat being prepared for use as fuel.

background information about peatlands and peat burning in the area. As part of this initiative, the Pakistan Wetlands Programme and the *Chiantar Welfare Organisation of Broghil* distributed more than 100 fuel efficient stoves to the community living in the vicinity of Kurambar Lake. People from



Porters carrying fuel-efficient stoves.

this area are dependent on peat for fuel and use it for both cooking and space heating purposes. The fuel efficient stoves provided by our Programme are specially designed to burn peat more effectively, thereby reducing fuel consumption while emitting less

stoves were provided to households on a cost-sharing basis and the amount that each household contributed varied from 5% to 20% of the total cost depending on what they could readily afford. It is anticipated that this contribution by the Programme will help build a relationship of mutual confidence to pave the way for greater interaction between the PWP and members of this important wetland community.

» **Co-ordination meetings and presentation sessions held in preparation for Wetlands Day Celebrations, 2008**

The Northern Alpine Wetlands Complex contacted various educational institutions, NGOs and CBOs in the northern areas and North West Frontier Province districts of Swat and Chitral to discuss proposed activities for WWD 2008: Two introductory presentations were given to students of the City School Junior Branch in Swat about the significance of the Wetlands Day and the events that had been planned for this year meetings were also held with

the Deputy Commissioner of Ghizer District, officers from the Forest Department, local members of the Pakistan Air Force and the Tourism Department as well as local community-based organisations.

» **Meeting held with EDO Education Swat**

A meeting was held with Swati Executive District Officer, Education, to brief him about the Wetlands Programme, as well as discuss activities planned for students of educational institutions during this year's WWD celebrations. The EDO extended his full support and suggested establishing a formal partnership between the Department of Education and the School Outreach Programme.

» **Wetlands Management Committee (IWMC)**

The proposed Interim Wetland Management Committee held their third meeting at Makran Coastal Wetlands Complex site office. The session was attended by all eight members of the committee. Abdul Rahim, Site Manager of the MCWC, briefed the committee



members about the activities of the MCWC from June to December, 2007. This was followed by a discussion about the newly drafted work plan for 2008. Comments and suggestions made by the members were incorporated in to this workplan. The by-laws of the committee were discussed and it was suggested that an advisory body be constituted, headed by a chairman who would be appointed by the Inspector General of Forests.



Public Events

Course on Fire Management

Runaway fires are a common occurrence in the forests of the Punjab. Some of these blazes are started

amounts of garbage, such as fragments of polystyrene, pieces of nylon nets discarded by fishermen, plastic shopping bags, used mineral water



Participants in the fire management course.

naturally by lightning and others begin accidentally but some, unfortunately, are actually started deliberately. A basic course on *Fire Management* was organised at the Salt Range Wetlands Complex office with assistance of PWP's



Fire management course training tools.

Training and Capacity Building, Coordinator. Staff members of the Punjab Wildlife Department and Punjab Forest Department from the Mianwali and Bhakkar Districts attended the course. The training was very successful in equipping the participants with the necessary skills to control forest fires.

Beach-cleaning day celebrated at Astola Island

The Makran Coastal Wetlands Complex Site Office in Gwadar conducted a beach-cleaning activity at Astola Island on November 21st, 2007. At the time, a Programme field team was carrying out an ecological assessment and identifying immediate threats to the marine wetlands ecology of the region. During the fieldwork, it became apparent to the team that substantial

bottles, oil cans, fruit juice and milk cartons of different sizes, fused light bulbs and fishing net floats were piling up on the shoreline of the Island. The litter, inelegantly referred to in naval terms as *flotsam* and *jetsam*, had accumulated on the very same beaches used by endangered Green Turtles as nesting sites and in the same shallow waters where, just a few months ago, the PWP's field team discovered a living coral reef. Team members actually found dead turtle hatchlings entangled



Beach clean-up in progress.

in castaway fishing nets!

The PWP field team, under the supervision of Site Manager, Abdul Rahim, followed up immediately with an awareness-raising session for local fishermen, enlightening them on ways to avoid discarding garbage and further suggesting means of proper non-biodegradable refuse disposal. Rahim stressed that the garbage and discarded nets on the beaches were a growing cause of death for Green Turtles. He reminded the participants that the species were already globally

recognised as endangered.

In order to demonstrate their determination to keep Astola Island clean and healthy, the team conducted a beach-cleaning activity with all the fishermen that use the Island as an anchorage and safe haven during southerly storms. They cleaned both the sandy beach and shallow water in



Trapped turtle hatchlings.

the vicinity of the coral reef. This activity lasted well into the night as the plastic bags and pieces of net had to be forcefully pulled out of the beach sand. Finally the waste was removed and safely disposed of, leaving the turtle nesting sites and the area around the unique coral reef in much better shape



Flotsam and Jetsam.

than it had been before the cleanup activity. Most importantly, the fishermen agreed to repeat this process on a regular basis in the future with Abdul Rahim's assistance.

By: **Abdul Rahim**, Manager Makran Coastal Wetlands Complex, Gwadar

Kallar Kahar Clean-up – a step in the right direction

On November 29th, 2007, the Pakistan Wetlands Programme's Salt Range Wetlands Complex site team organised a lake cleaning activity and advocacy walk at Kallar Kahar to raise awareness about the various threats to this and other important wetlands in the region.

The fragile ecosystem of Kallar Kahar is under pressure due to a range of factors. These include increased tourism activity after the construction of the M2 Motorway that now provides easy access to the lake from Punjab Province's major cities; and increased pressure after the commissioning of

Continued on page 4

Continued from page 3



Kallar Kahar students on the march.

several cement factories and other major construction projects in the surrounding areas.

The main message that was carried by the participants in the walk was that, if we want to conserve the wetlands of the Salt Range, the local communities must become more aware of their responsibilities to their environment. The walk started at the Tehsil Municipal Administration Office and was led by Malik Muhammad Ashraf, Nazim of Kallar Kahar, and Rana Shahbaz Khan, the Pakistan Wetlands Programme's local site manager. The event involved more than 480 people, including representatives of local government, NGOs and other Programme stakeholders, school children from the

Kallar Kahar Higher Secondary School and Science College, as well as media personnel. The participants displayed banners bearing slogans urging the community to take sustainable steps towards the conservation of the Kallar Kahar Wetland.

The cleaning activity concentrated on the lake margin, covering a distance of almost 3 km and ended at the Tourism Development Corporation of Punjab lake-side resort. The participating students were provided with disposable gloves and refuse bags for collecting and properly processing the waste that they removed from the banks of the lake. Malik Muhammad Ashraf, Nazim of Kallar Kahar, Asim Bahir Cheema, the District Wildlife Officer from Chakwal,



Local representatives lead the way.

Muhammad Aslam Bodla, the TDCP's Senior Tourism Officer at Kallar Kahar, Malik Mukhtar Haider, President of the Kallar Kahar Urial Conservation Organisation, and members of associated NGOs and the local community were all there to lend their support to the cause.

The participants gathered at the TDCP Resort after the walk to express their views. First to speak was the Nazim, Malik Muhammad Ashraf, who pointed out that conservation of these wetlands is our collective responsibility and that we must take steps to do so. Malik Iftikhar Ahmad Shahid, Principal of the Kallar Kahar Government Higher Secondary School, complimented the PWP on its initiative and said that he was pleased that his students were involved in the meaningful activities of awareness-raising and lake cleaning. Other valued participants representing the Government Departments, Community-based Organisations and NGOs also expressed their views and praised the initiative taken by the PWP as a step in the right direction.

Technical Innovations ("Cool stuff")

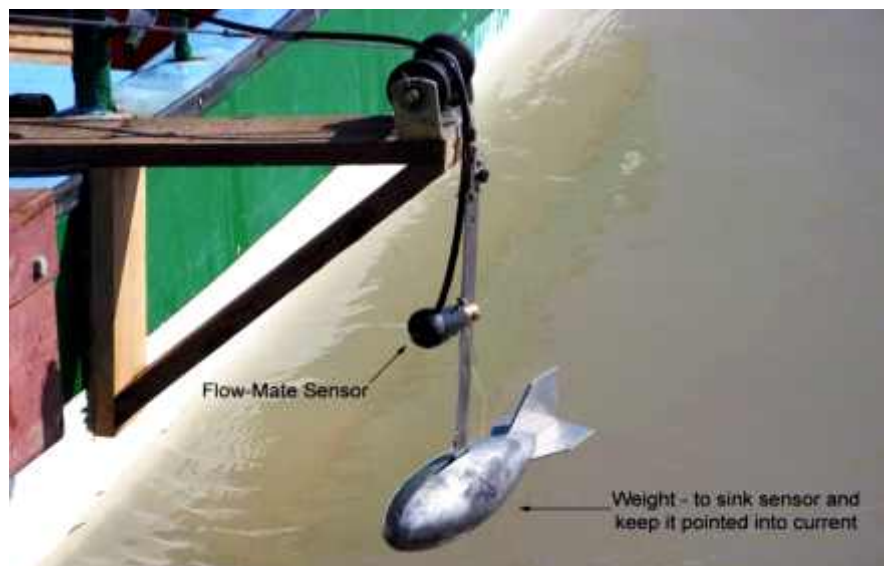
Going with the flow....

It is almost always surprising to witness the extent to which wetlands provide habitat to a diverse variety of creatures. This is because, Wetlands, like all biomes, are varied and contain innumerable niches that are exploited by their inhabitants. To better understand wetlands and their associated bio-diversity, it is important to be aware of the various qualities of water such as depth and speed and direction of flow. Animals have vastly different preferences: crocodiles prefer to live in the shallow waters of swamps, while dolphins make their home in the deep waters of the ocean. Measuring water velocities, flow and other characteristics of the water in wetlands is, however, not a simple matter.

The Pakistan Wetlands Programme

uses an ingenious device called the Marsh McBirney *Flo-Mate* to calculate water velocity or water speed and direction of flow i.e. the amount of water that passes a point in a given

time. This device utilises Faraday's Law that states that a conductor moving through a magnetic field produces a voltage. The magnitude of this voltage is directly proportional to



Measuring water velocity.

Continued on page 5

Continued from page 4

the speed at which the conductor is moving through the magnetic field. The Flo-mate has a special sensor which contains an electromagnetic coil. This coil produces a magnetic

using the relative voltage measurements.

A team of Pakistan Wetlands Programme scientists recently used a *Flo-Mate*® to measure water velocities on the Indus River as part of their

that it kept the sensor pointed into the current, was attached to the sensor.

The water speed needed to be measured at several depths in order to estimate the average velocity in the water column. Water velocity in a river is seldom constant, even at the same point, but tends to pulse – growing more rapid and then slowing again in cycles. The water velocity at a point must, therefore, be measured for 30 seconds or more to estimate the average velocity at that point. When the sensor has been lowered to the correct depth, the *Flo-Mate*® computer determines the average velocity of the water at that point. The results of many such measurements may be used to produce a map of the river channel showing areas of high and low water speed. This technical information about water velocity is being used to characterise dolphin habitat and to help conserve the riverine areas, thereby contributing to the protection of where Indus River dolphins are found, thereby contributing to the protection of this unique species and the heritage it represents for Pakistan.



Muhammad Samiullah Khan, PWP's Research Assistant, using the Flo-Mate.

field and when water which is a conductor, flows past the sensor, it produces an electric voltage that is measured by the sensor. The speed of the water can then be calculated

efforts to understand and conserve the Indus River Dolphin. The device was lowered into the river from a research boat using a wire cable. A streamlined weight, shaped in such a way

Model Solar Geyser Installed at SRWC

There are many wetland dependent communities living in remote areas of our country that do not have access to household energy in the form of electricity or gas. Such people are dependent on fuel wood, obtained from nearby forests, or even peat for use in heating and cooking. In the Salt Range Wetlands Complex, the night-time temperature often plummets to below zero in winter. In the absence of any other energy source, the inhabitants of the Salt range understandably resort to using wood from hillside forests to heat water for cooking and washing. The PWP is investigating ways of providing an alternate source of energy to these communities, thus reducing their dependence on the natural forests, while at the same time improving the health and hygiene of the inhabitants, by providing easier, cleaner, access to hot water.

A demonstration model solar geyser has recently been installed at the PWP's Office in Naushera. The geyser, provided by Solar Energy, Inc., Islamabad, consists of two components: an insulated water tank and an array of special glass tubes with a total capacity of 135 litres. After being heated in the glass tubes by sunlight, the water flows into the insulated water tank where it may remain warm for over 24 hours. To ensure an optimum performance, the glass tubes of the geyser should be placed in the open, away from any shadow caused by a nearby wall or building. The best orientation for the heater in the Salt Range is to the south to allow maximum sun from morning to evening.

Ahmad Khan, Programme Manager Regional Programmes.



An assembled solar water heater.

Left in the Dark



A portrait of failure.

Several years ago, the Government of Pakistan, in collaboration with a private sector company, inaugurated Pakistan's first solar villages in *Narian* and *Khorian*. These hamlets are among an estimated 40,000 or more villages in Pakistan without access to electricity and this was a pilot project



Solar panel installed on the roof of the mosque

to assess the feasibility of using solar power to provide an alternate source electricity to village homes. The aim was to establish a model village by providing an alternate source of energy that was clean, renewable and cost effective for the 600 or so people living *Narian* and *Khorian*. Alas, things did not work out as planned. The project failed within a few years after its initiation and the villages were 'left in the dark' – with no electricity, just as had been the case before the project.

As the PWP plans to introduce alternate energy sources to remote village homes around the wetland complexes of the country, a team from PWP and WWF-P arranged a visit to *Narian* and *Khorian* to learn from the successes and failures of providing electricity using solar power, and ascertain why the project at these so called solar villages was such a failure.

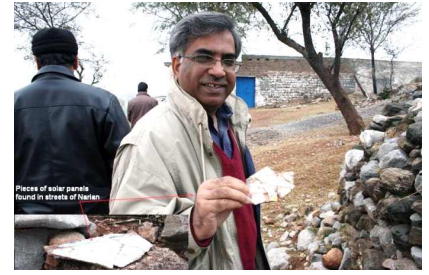
The PWP team was dismayed to see that the solar energy system installed in these two villages was in a shambles and all efforts made for uplift of the community had failed. The solar panels were either damaged or intentionally broken and pieces of these costly panels were even seen lying on the roadway. Of course there was no electricity, the desalination plant was ruined, the local community park destroyed, and the public toilets apparently never been opened after the inauguration ceremony. The computers installed in the mosques were missing, possible stolen, the solarvoltaic units in homes were malfunctioning due to



Damaged solar street lighting.

degraded batteries. In effect, the entire investment of Rupees 3.9 million had come to virtually nothing at all.

The PWP team members arranged meetings with representatives of the local community. It emerged from these talks that the installation of the solar panels and the consequent electrification of the villages had been undertaken without any significant community involvement. There was no planning, no strategy for sustainability of the project and no



A wry smile from WWF's Dr. Ejaz Ahmed.

monitoring system had been developed. The villagers, having made no financial contribution, appeared to take the entire project for granted and no one shouldered responsibility for its operation or maintenance.

The moral of the story is clear: community involvement and participation are essential for success of a project, especially at the monitoring and maintenance stage. Moreover, some monetary contribution from the community ensures that they have a sense of ownership and responsibility towards the smooth running of the project in the long-term.

Interns Corner



Just one month into my internship, I have worked on a number of fund-raising and awareness-building activities. The most interesting aspect of my work at PWP lies in the variety of tasks

that I am assigned and the different professionals that I meet along the way. Preparations for the week-long Wetlands Gala 2008 celebrations included the writing of sponsorship proposals and press releases, as well as meeting representatives from various government departments and multi-national companies. I already feel that I have learned new negotiation techniques and the means to identifying opportunities where there would otherwise be closed doors.

What I find most enjoyable, besides the work itself, is interacting with my colleagues at the PWP. As I come from a Western background, there have been many lively discussions and exchanges on the religion, culture and politics of Pakistan and the West. Most importantly, I have been made to feel very welcome in this office and in this country. For that, I will always be grateful.

I look forward to completing my internship here at the PWP and hope that I can contribute my share towards fund-raising for a worthy cause: the conservation of wetlands in Pakistan.

Other News

The *Indus for All* Programme presented a two-day training course to build the competency of District Officers in planning, implementation and monitoring of Natural Resource Management programmes. The training was conducted on January 29th and 30th for the District Government officers of Thatta.

The course aimed to enhance the knowledge and understanding of the participants about various NRM programmes. Information was provided about the importance, present status

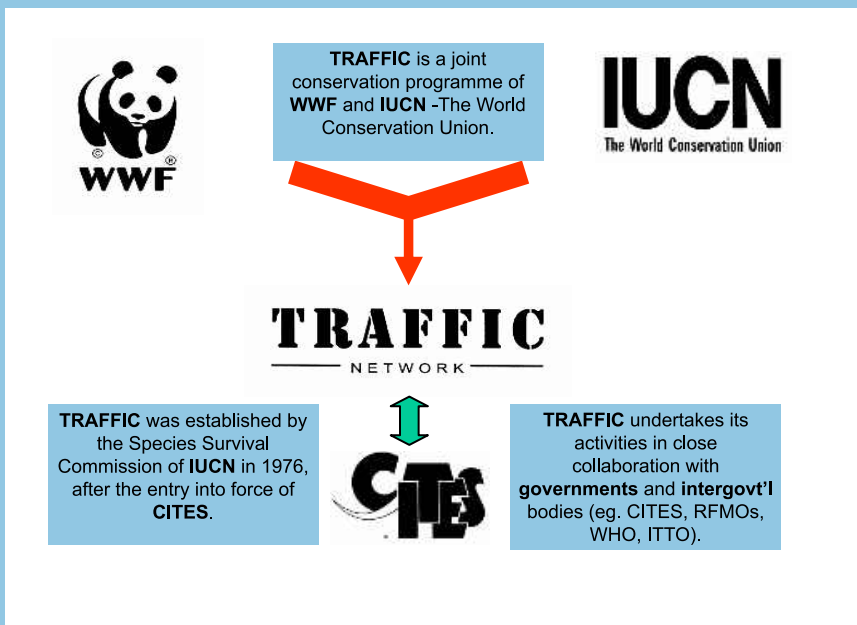
and sustainable management of the diverse natural resources of the Indus Eco-region with a focus on fisheries, forests, wildlife as well as land and water resources. Different concepts and approaches of participatory Natural Resource Management were discussed and the potential role of the District Officers in contributing towards these efforts was elaborated.

Mr. A B Kalhoro, Director General, of the Coastal Development Authority, was the Chief Guest at the concluding ceremony. He said that the current

system of devolution offers opportunities for government departments to work with the communities at the grass roots level and reiterated that District Officers could make a substantial contribution towards NRM provided that they have the necessary skills and knowledge. He praised the efforts of *Indus for All Programme*, *WWF-P* for providing this learning opportunity and expressed the hope that the trained officers would utilise the acquired skills and knowledge in their respective departments.

Muhammad Zafar Khan, Manager Communications and Environmental Education, *Indus for All Programme's*, WWF Pakistan.

TRAFFIC INTERNATIONAL in Pakistan



The Global Programme Coordinator of TRAFFIC International, Roland Melisch, was invited by the Pakistan Wetland Programme to visit the country to discuss the issue of illegal wildlife trade affecting the populations of key species. A seminar was organised in Islamabad, which was attended by participants from the Ministry of Environment, various Forest and Wildlife conservation agencies, NGOs and other relevant partners. Dr. Bashir Ahmad Wani, Inspector General Forests, and Richard Garstang, the National Programme Director of the PWP, welcomed Mr Melisch and highlighted the role that

TRAFFIC could play in contributing to the conservation of biodiversity in Pakistan.

Roland Melisch, briefed the participants on the history of TRAFFIC, its regional activities, details of the joint WWF-P and IUCN programmes and the overall purpose of establishing a wildlife trade monitoring network. He presented estimated figures for the illegal wildlife trade in or related to Pakistan. He also described some of the international trade routes and gave examples of the species involved. The ways and means of effectively controlling the illegal trade in live animals and their parts,



Continued from page 7

such as musk pods, freshwater turtles, etc were also discussed. It was suggested that a training and capacity-building programme be initiated for government officers from the Customs Department and government wildlife conservation agencies to curb the illegal wildlife trade in the country.

During the course of discussion, the possibility of establishing a TRAFFIC office in Pakistan as well as providing access to TRAFFIC

publications and awareness-raising materials was discussed. Dr Ejaz Ahmad, Deputy Director General of WWF-Pakistan endorsed the urgent need of establishing a TRAFFIC

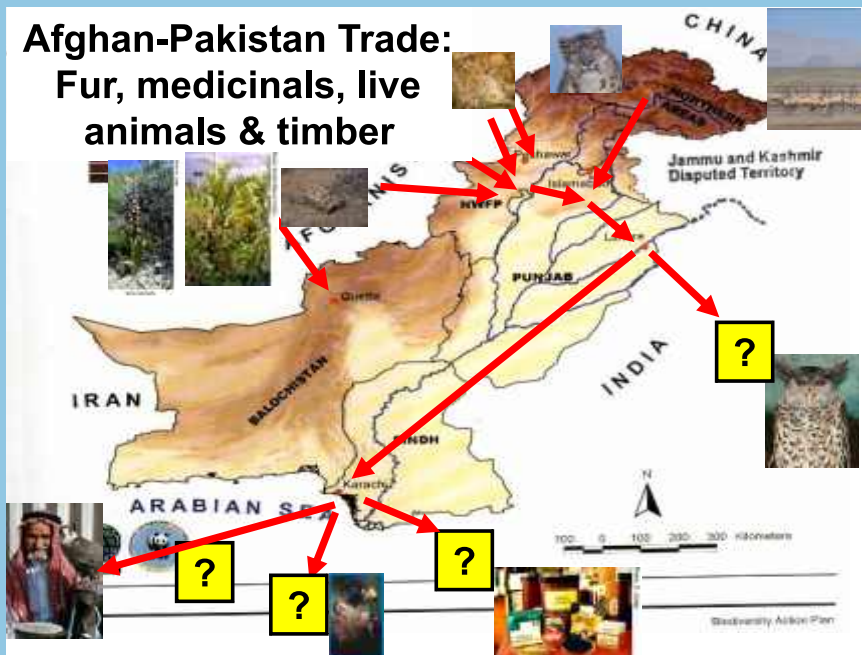
presence in Pakistan and highlighted the fact that several species, some critically endangered continue to be illegally traded.

The participants of the seminar agreed that most of the problems faced by the country in protecting biodiversity and controlling the illegal trade could be solved by enhancing mutual coordination and collaboration among wildlife protection agencies and non-government organisations. Richard Garstang, offered the services of the programme for providing a platform for this collaboration and emphasised the significance of stopping the illegal trade in wetland species. To further control the illegal trade, it was recommended that the Federal CITES legislation that is still in the process of development, be finalised and implemented as soon as possible.



Wildlife Trade, a truly global phenomenon

Afghan-Pakistan Trade: Fur, medicinals, live animals & timber



The Pakistan Wetlands Programme's Site Offices

Northern Alpine Wetlands Complex
House #1, Street # 1, Afsarabad,
Saidu Sharif,
Swat.
Phone: 0946-729682

Central Indus Wetlands Complex
House # 84, B-2, Omer Block,
Abbasia Town,
Rahim Yar Khan.
Phone: 068-5002602

Makran Coastal Wetlands Complex
Bungalow # M-74 Phase -1,
New Town Housing Project,
Gwadar.
Phone: 086-4211500.

Salt Range Wetlands Complex
Mohallah Iftakharabad,
Dhaka Road , Naushera,
District Khushab.
Phone: 0454-209100.

Nas Regional Operations Base
NLI Colony, Near Imamia Eid Gah,
Shahrae Quaid-e-Azam, Jutial,
Gilgit.
Phone: 05811-55658