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ANNUAL REPORT 20007 Indus for All Programme





Indus for All Programme WWF - Pakistan(2007)

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Indus for All Programme

WWF – Pakistan

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ACRONYMS

3M	Programme approach covering Marco, Meso & Micro levels
ADO	Assistant District Officer
AFP	Adventure Foundation Pakistan
AOI	Areas of Interest
C & A	Communications and Awareness Strategy
СВО	Community Based Organization
ССВ	Citizens Community Board
CCP	Cetacean Conservation Project
CHIP	Civil society Human and Institutional development Programme
CSO	Civil Society Organizations
CY	Calendar Year
DCO	District Coordination Officer
DCC	District Coordination Committee
DSS	Decision Support System
DVD	Digital Video Disc
EE	Environmental Education
EDO	Executive District Officer
EDRC	Environmental Data Resource Centre
ESRA	Education Sector Reform Assistance
GB	Great Britain
GEF	Global Environment Facility
GIS	Geographic Information System
GoS	Government of Sindh
GPS	Global Positioning System
GWDO	Global & Development Welfare Organization
HANDS	Health And Nutrition Development Society
ICIMOD	International Centre for Integrated Mountain Development
IESC	Indus Eco-region Steering Committee
IFPRI	International Food Policy Research Institute
IUCN	International Union for Conservation of Nature
IWMI	International Water Management Institute
KFWS	Karachi Fishermen Welfare Society
KWP	Karachi Water Partnership
LAST	Livelihood Asset Status Tracking System
LEAD	Leadership for Education And Development
LF	Log Frame
LNGO	Local Non-Government Organizations
MoU	Memorandum of Understanding
MoV	Means of Verification
MTDF	Medium Term Development Framework
МТ	Master Trainer
M&E	Monitoring & Evaluation
NGO	Non-governmental Organization
NRM	Natural Resource Management
OBS	Output- based Billing System
OWPRA	Organization for Welfare & Prosperity of Rural Areas
PC	Personal Computer
P&D	Planning & Development Department
PDF	Pakistan Development Forum
PES	Payment for Environmental Services

PFF	Pakistan Fisherfolk Forum
PIU	Programme Implementation Unit
PKR	Pakistani Rupees
PMU	Programme Management Unit
PPO	Policy & Planning Officer
PRM	Programme Review Meetings
PRSP	Poverty Reduction Strategy Paper
PSSSS	Pir Shaheed Syed Sibghatullah Shah
PWP	Pakistan Wetlands Programme
Q1	Quarter 1 (January - March)
Q2	Quarter 2 (April - June)
Q3	Quarter 3 (July – September)
Q4	Quarter 4 (August – December)
RNE	Royal Netherlands Embassy
SANDEE	South Asian Network for Development and Environmental Economics
SDF	Sustainable Development Foundation
SFD	Sindh Forest Department
SHAPE	Social Harmonic Awareness for Peace and Empowerment
SHEDO	Sindh Heath & Education Development Organization
SIDA	Sindh Irrigation and Development Authority
SM	Site Manager
SPD	Planning and Development Department, Government of Sindh
SPO	Strengthening Participatory Organization
TEV	Total Economic Value
ToR	Terms of Reference
TVO	Trust for Voluntary Organisation
UNFP	United Nations Population Fund
UNDP	United Nations Development Programme
VR	Village Representative
WED	World Environment Day
WPA	World Pheasant Association
WWF - P	World Wide Fund for Nature, Pakistan
WWF - I	World Wide Fund for Nature, International

EXECUTIVE SUMMARY

This narrative report presents progress of the Indus for All Programme during the first year of implementation (April-December 2007). A financial report covering the same period will accompany this document (Annex IV). Progress is reported at the level of sub-outputs complemented by tables comparing planned units to actual delivery. Key documents prepared during the first year of implementation, available upon request and, in most cases, to be posted on <u>www.foreverindus.org</u>, are provided as thumbnails in Annex I. Annex II and III provide the 2007 work plan and progress of activities within it, respectively. Annex V provides an overview of additional activities carried out during the first year of implementation, each designed to support and strengthen Programme objectives. Annex VI provides four activity maps, one for each Programme site. Results achieved and challenges faced under each of the four programme objectives are briefly outlined below.

An intensive process of selecting recognized experts/institutions coupled with close involvement of Indus for All staff enabled the delivery of reliable findings from the baseline studies (e.g., ecological and socio-economic assessments). Ensuring the required reporting standards and timely submission for a wide range of baseline reports continues to be a challenge. By end-December 2007, following a structured process of interventions for community mobilization and CBO capacity assessment, 11 CBOs across the four sites were formed and / or strengthened. Ensuring the formation of gender-balanced, cohesive, and representative CBOs are challenges that the team has managed and that will be instrumental for formation of remaining CBOs and signing of MoUs with all CBOs. A catalyst for strengthening relationships with communities and District Governments, targeted small-scale development interventions at all four sites contributed to improving living conditions of local people (e.g., mobile medical camps and livestock vaccination and treatment camps). This and analysis based on the baseline studies will place the Programme on the cusp of leveraging the poverty-environment nexus specific to each site to good effect in the coming years.

The Indus for All Programme has laid a strong basis for long-term cooperation between WWF-Pakistan and two key line departments, the Sindh Forest Department (SFD) and the Planning & Development Department, Government of Sindh (SP&D). Whereas a Memorandum of Understanding (MoU) with the SFD for provision of GIS satellite data was signed in July 2007, the Indus for All Programme assisted the SFD in conducting preliminary assessments to revive the SFD GIS Lab. A GIS Analyst was also hired and seconded for support to the SFD. To facilitate the integration of Indus Ecoregion priorities into the PRSP and MTDF, a Policy and Planning Officer has been seconded to SP&D with whom WWF-P will sign a MoU in January 2008. Moreover, detailed planning for conducting five economic valuations (1 each for Pai, Chotiari and Keenjhar and 2 for Keti Bunder) aimed at estimating the total economic value (in PKR) per hectare for selected ecosystems is underway as planned.

Both in terms of volume and diversity of activities, Objective C's focus on institutional capacitybuilding and awareness raising has been the most significant. A multi-stakeholder workshop was held to develop a comprehensive Communications and Awareness Strategy targeting eight groups of stakeholders. Apart from regular publication of the programme's quarterly newsletter, *Indus Forever*, a diverse range of promotional materials including brochures, pens, stickers and handbags have also been developed. Consultative workshops with media personnel, celebration of significant environment days at rural schools, sensitization of local women and promotion of sermons on Conservation and Islam encompass the bulk of the awareness raising activities carried out this year. Whereas work on collation of traditional ecological knowledge, manuals on environmental health and hygiene and training manuals on environmental education and advocacy and training of Master Trainers in Environmental Education has been initiated.

The Programme has been most successful in establishing an internal and external system for institutional support and coordination. Externally, three District Coordination Committees have been

established at the district level, a Sub-Committee for the IESC at the meso level and a Indus Ecoregion Steering Committee at the highest level. There was strong participation from a diverse background of stakeholders at all the meetings. Moreover, IESC members and other key stakeholders appreciated the first-hand experience of natural resources management issues gained at the two exposure trips to India and Nepal. Within the Indus for All Programme, a system for quarterly and annual review and planning meetings has been established. Internal planning is further supported by WWF-Pakistan's Programme Support Unit that periodically reviews and recommends changes for improvements in programme delivery. Apart from a week-long team building exercise and orientation to WWF-Pakistan at the beginning of the implementation phase, several staff members have already taken part in national and international trainings relevant to their area of work.

What are the challenges that lie ahead in 2008 and how does the Programme propose to address them?

Barring a few tangible Programme interventions, e.g., a school, wind energy units and medical and vaccination camps, the basic objective circumstances of the communities at the four sites is expected to remain unchanged. That is, we do not see, in such a short period, an improved physical, administrative and market integration of traditionally isolated communities, or, a reduced total/critical dependence on the local, fragile and diverse ecosystems in each site. The former set of transformations will be encouraged by the Programme's efforts to strike lasting multiple partnerships, a process that began in the Inception Phase in 2006. As regards the latter transformation, breaking sustenance strategies away from total and unsustainable natural resource base dependence is a central goal of the Programme and is proceeding according to plan.

In particular, by Q2 2008, the Programme will have reviewed its plan of action for multiple outputs. This will be done through a critical assessment of baseline environmental and socioeconomic data, contained in poverty-environment indicator and linkages reports. The review will assist in prioritizing interventions, improving activities within interventions, and determining roles of participating stakeholders for such sub-outputs as participatory livelihood and development plans to be developed by Q1 2009, or, the poverty environment manual. It will be essential to adopt such a review and path correction approach throughout up to 2012 considering the complex interaction of factors present at all four sites, namely: basic circumstances, driving forces, social responses to driving forces, and consequences that include environmental deterioration, overly rapid use of resources, and increased subsistence orientation.

Participatory NRM plans require preparatory development of ecological monitoring mechanisms and preparation in terms of developing an understanding with recently formed community based organizations and other key stakeholders including government. These organizations will have to be ready by Q3 2008 to collaborate on the establishment of NRM enterprises, requiring cooperation and capacity building work in the coming months. Next year will also see active facilitation of potable water and sanitation through intense partnership building and information and vision sharing work with relevant organizations. From start to finish, the delivery of energy infrastructure such as fuel efficient stoves is intensive work but not insurmountable as evidenced by the Programme's rapid deployment of wind energy units in 2007. The challenge in this case will be the scale and periodicity.

As the Programme is operating at micro but also meso and macro levels (3M approach), there will be continuous policy consultations and exchanges aided by policy briefs for Programme findings and outcomes. For example, the results of the 5 ecosystem valuation studies but also green accounting work will be both technical and pedagogically packaged for concerned P&D staff at the Planning Commission; but also packaged into briefs and properly received at the provincial level with the help of the Policy and Planning Officer deputed to the Planning and Development

Department, Government of Sindh (SP&D). The same is true of the consultative integration of environmental issues into the PRSP for which a working paper is being prepared for Q2 2008. As concerns institutional capacity and awareness, journalists will receive exposure visits; the Indus Forever newsletter will increase accessibility while deepening its coverage of PIU work and poverty environment and policy sections; and, master trainers training manuals will be completed by year's end, among others. In terms of improved alignment and collaboration, our understanding is that there will be emphasis during 2008 on local government, communities, and formal and non-formal CBOs / Citizen's Community Boards (See table 3 of the Programme's "Implementation Strategy" which lists roles, responsibilities and 3M levels at which partners will work, p.15, Annex VI of the Inception Report, May 2007). In short, strong demands will be placed on policies and institutional arrangements to become more inclusive of environmental concerns, especially those supporting the long-term Indus Ecoregion Conservation vision. It is essential to seize opportunities presented in 2008 at which time long-term macroeconomic and sectoral plans are still malleable and amenable to integrating up-scaled lessons from the Programme.

Summary of Output / Output based Billing System progress

Progress in CY07 (April to December 2007) is reported against planned sub-outputs / Output-Based Billing System (OBS). As the Programme's design is based on the OBS, measuring its progress is best done using the same format (See also Annex III: Detailed sub-output wise progress brief 2007).

There are different categories of sub-outputs: some extend up to Programme-end (2012), others stretch over several years and a few will be completed in one year. Sub-outputs are also distinguished by their deliverables. Sub-outputs either have single or multiple activities / deliverables. The status of various sub-output categories is provided in the chart below.

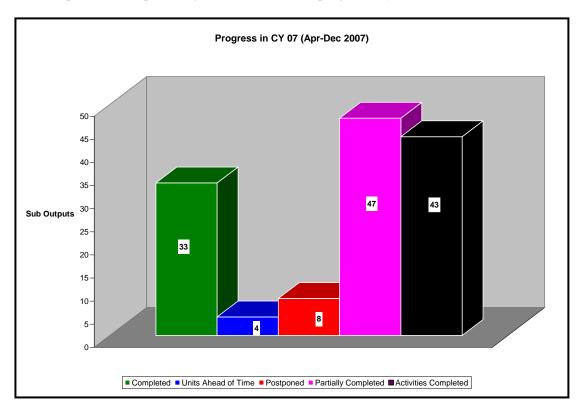


Figure 1: Progress by sub-output category for April – December 2007

In the chart, the "partially completed" category refers to sub-outputs that began in CY07, will end in subsequent years, and have whole *units* which were delivered in CY07. The "completed" category refers to sub-outputs for which the Programme total target has been achieved. The "postponed" category refers to sub-outputs that, based on ground realities, were moved ahead into the 2008 work plan. The "units ahead of time" category refers to sub-outputs characterized by delivery of units/activities planned for subsequent years but completed in CY07. In all such cases, the Programme team realized the importance of holding the concerned activity in the early stages of the Programme. This flexibility of the OBS system is a useful tool to apply where there are changing ground realities. The "activities completed" category refers to sub-outputs that are due to end in years subsequent to CY07 and for which all activities planned for 2007 were achieved.

In the narrative report that follows, OBS / sub-output level tables are provided systematically for all four Programme objectives. These tables present details of each sub-output including the number of planned units in 2007 for a particular sub-output, and the number of units delivered and balance units for the reporting period (April-December 2007). Explanatory notes are given in the remarks column. While they are helpful for quickly assessing progress, there is a limitation inherent in the tables. The tables only provide planned and completed units, but as mentioned earlier several sub-outputs were not to be completed in CY07 but to continue into the second year (CY08) or beyond. In this case, the tables report zero against the deliverable; however, a fair amount of activities have often already been completed under these sub-outputs in CY07. As long as the sub-output is not complete, the OBS progress report matrix will show zero as the deliverable.

PROGRAMME OBJECTIVE A

Community based Natural Resource Management in four priority areas contributes to improved livelihoods.

-1-

Outcome A.1 Improved understanding of dependencies, relationships and priorities of communities in relation to their dependency on natural resources

1.1 Sub output A.1.1.1 - 4 Socio-economic baseline assessments established in four sites

The primary information required to establish socio-economic baselines of four programme sites and one additional site Keti Shah has now been collected. Keti Shah was included following a decision by the Indus Ecoregion Steering Committee in its second meeting (12 April 2007) accepting a request made by the Secretary Forest and Wildlife Department for WWF – Pakistan to consider Keti Shah, owing to its riverine forest representativeness, as a fifth site for the socioeconomic and ecological baseline assessments. Structured household questionnaires, female questionnaires and villages' profiles were the principal instruments used in data collection, besides participatory rural appraisal methods. Approximately 1,300 questionnaires were completed as part of the survey. At present, the analysis of data is in progress and a final report will be available in Q1 CY08.

The main objective of the study is to establish a detailed socio-economic assessment using participatory rural appraisals in and around the selected project sites. The survey used the Sustainable Livelihood Model to map the assets of programme communities. The baseline will determine key livelihoods interventions of the Indus for All Programme by identifying relevant gaps and opportunities.

The survey used a two-stage cluster sampling method to select a representative sample of households. The method has two advantages over random sampling and stratified sampling: it is economical and suitable when selecting a sample for which the sampling frame of individual elements is not available. Villages and then households were purposively selected. Villages were divided into four categories: (1) less than 15 households (hamlets); (2) between 16 to 50 households; (3) between 51 to 200 households, and, (4) between 201 to 500 households.

L.F. / O.B.S		Apr-Dec 2007			
Code	Sub Outputs	Planned Units	Delivered Units	Balance Units	Remarks
A.1.2.1- 4	Conduct socio- economic assessment in all four sites	5	0	5	As planned, this sub output will be completed in Q1 CY08. Keti Shah was added as a fifth site

Table 1: Status of Output A.1.1 (Socio-economic baseline assessment established in four sites)

1.2 Sub output: A.1.2.1 - 4 Detailed ecological assessment using Indus Ecoregion Conservation Objectives in four sites

The first season of the ecological assessment has been completed in Chotiari, Keenjhar Lake, Keti Bunder, Pai Forest and Keti Shah. Preliminary results are available for most of the studies. The teams covered various disciplines, through a number of consultants, many from highly revered

government institutions such as Pakistan Natural History Museum, Zoological Survey of Pakistan, Mehran University of Engineering and Technology, University of Karachi, University of Sindh and University of Arid Agriculture, Rawalpindi. Apart from these, professional support was provided by the Sindh Wildlife Department, Sindh Forest Department, Sindh Irrigation & Drainage Authority and Zoological Survey Department of the Federal Ministry of Environment. Overall the assessments covered the following subjects:

- Ornithology
- Mammalogy (Large & Small mammals)
- Limnology
- Natural Vegetation
- Ichthyology (Fresh & Marine Fisheries)
- Herpetology

The survey for the second season (winter) was initiated in November 2007 and the teams are already in the field. The comprehensive reports of all the ecological assessments will be finalized in Q1 CY08. These reports will be instrumental to devise the site-specific natural resource management plans.

Number of Species Recorded	Chotiari	Keti Bunder	Keenjhar Lake	Pai Forest	Keti Shah
Birds	80	68	57	56	54
Mammals	14	14	9	8	8
Small mammals	22	15	21	13	8
Fish	51	85	48	0	0
Reptiles and amphibians	47	43	47	47	53
Plants	197	104	252	108	79

Table 2: Preliminary Results of Ecological Assessment – Summer Survey

Table 3: Status of Output A.1.2 (Detailed ecological assessment using Indus Ecoregion Conservation Objectives in four sites)

		Apr-Dec 2007			
L.F. / O.B.S Code	Sub Outputs	Planned Units	Delivered Units	Balance Units	Remarks
A.1.2.1 - 4	Conduct ecological assessment in all four sites	5	0	5	As planned, this sub output will be completed in Q1 CY08. Keti Shah was added as a fifth site

1.3 Sub output A.1.3.1 Conduct sensitivity survey

The purpose of this survey is to ascertain people's sensitivity level with respect to the Indus Ecoregion and associated natural resource issues, focusing on awareness and public opinion. The survey will also identify the potential role that the public can play in wetlands conservation and management in the country in general and the Indus Ecoregion in particular.

The activity is being jointly undertaken with the Pakistan Wetlands Programme (PWP) through a sub-contract to Gallup International, Pakistan. PWP is taking a lead role in conducting the nationwide opinion survey and the Indus for All Programme's part has been added into the PWP's contract to Gallup International on a cost sharing basis. Field work for this survey has been completed and the consulting firm's final report is expected by the first quarter of 2008.

Table 4: Status of Output A.1.3 (Environmental awareness detailed assessment established)

		Apr-Dec 2007			
L.F. / O.B.S Code	Sub Outputs	Planned Units	Delivered Units	Balance Units	Remarks
A.1.3.1	Conduct sensitivity survey	1	0	1	This sub output has been delayed and will be completed in Q1 CY08

1.4 Sub output A.1.4.1 - 5 Site specific poverty environment assessments looking at levels of poverty and environmental stress and examining linkages between poverty, environment and population change

The purpose of Poverty-Environment indicators is to address trends in poverty, population growth and compounding factors that can give rise to environmental degradation. Ideally these should be associated with measures of pressure – the factors producing environmental change – and response – the ways in which communities at the four Programme sites react to changing environmental trends. The indicators are addressed to policy makers to enable policy responses to patterns of deterioration ahead of major breaches to natural biological cycles of environmental assets.

The sub-output was contracted out in December 2007, as a package also including Poverty-Environment Linkage reports and a Poverty-Environment Manual, for completion in Q2 CY08, having been moved ahead by a quarter in order to ensure inclusion of socio-economic and ecological baseline findings (see preceding sections 1.1 and 1.2). Consultative meetings with communities and other stakeholders at the four sites are planned for the first quarter of 2008, after completion of a literature review and identification of any missing data based on a review of baseline assessments. A total of 24 indicators will be developed, 6 for each of the Programme's priority sites.

Table 5: Status of Output A.1.4 (Site specific poverty environment assessments looking at levels of poverty and environmental stress and examining linkages between poverty, environment and population change)

		Apr-D	ec 2007		
L.F. / O.B.S Code	Sub Outputs	Planned Units	Delivered Units	Balance Units	Remarks
A.1.4.1	Develop and document P-E indicators	1	0	1	As planned, sub output will be completed in Q1 CY08
A.1.4.2 - 5	Prepare P-E linkages reports for all four sites	4	0	4	As planned, these sub outputs will be completed in Q2 CY08

1.5 Sub output A.1.5.1 - 4 Sustainable use levels are defined for key natural resources

The determination of sustainable use levels is dependent on the outcomes of the detailed ecological and socio-economic assessments (final reports due in Q1 CY08). Preliminary data from the surveys indicate that the programme will focus on sustainable levels for mangroves (Keti Bunder), rangeland / livestock fodder (Chotiari Reservoir), fish species of economic value (Keenjhar Lake) and Grey Partridges and Hog Deer population (Pai Forest). Besides developing a baseline, information on specific natural resources and their respective areas has been collected by Natural Resource Management (NRM) Officers at each site; also, the GIS Analyst has processed the information for database preparation and map development.

		Apr-Dec 2007			
L.F. / O.B.S Code	Sub Outputs	Planned Units	Delivered Units	Balance Units	Remarks
A.1.5.1 - 4	Develop sustainable use levels for key NR components at all four sites	4	0	4	As planned, these sub outputs will be completed in Q4 CY08

Outcome A.2 New CBOs established and existing communitybased institutions strengthened

1.6 Sub Output A.2.1.1 - 8 New CBOs established and MoUs signed for programme Interventions

Realizing Programme objectives at the four sites requires coordinated collaborative actions with local institutions that are not only operational but well managed in terms of such key functions as record keeping, financial management, and project development. This sub-output aims to strengthen existing Community Based Organizations (CBOs) and to support communities to organize themselves and form CBOs independently in order primarily to achieve sustainable management of natural resources. In recognition of the poverty-environment nexus, activities in this sub-output are designed so that poor communities lacking economic and physical capital are provided with strengthened social capital – improved means of planning, managing and monitoring scarce assets – that would transform their sustenance strategy towards decreased resource extraction.

The process of strengthening existing Community Based Organizations (CBOs) and supporting communities to organize themselves and form CBOs started in April 2007 and is on going in all four sites. MoUs have also been signed with existing CBOs (9) and new CBOs (4) during the reporting period. The remaining CBO formation and MoU signing has been planned in the second quarter of 2008, by which time their critical operating tasks and structural managerial functions will be reviewed, revived and tested for proper functioning. Accordingly, CBO receptiveness will increase towards fulfilling their part of the co-management agreement, i.e., the management of local natural resources. Developing such receptiveness requires that CBOs report positive experiences with joint

CBO-Programme development of commitments in different partnership areas and is instrumental in the formation of the remaining CBOs and signing of MoUs.

The following required steps for CBO formation were completed in 2007 at all four sites:

1. Area demarcation: Area demarcation has been completed at all four sites on the basis of natural resource dependence levels. This will help us to focus on the target community so that an effective initiative can be taken with the right stakeholders.

2. Mobilization meetings: Mobilization is a continuous process and successfully on going at all four programme sites. Averages of 6 to 8 meetings were held in every village to establish trust and to build confidence at community level. These meetings were aimed to introduce the Programme and facilitate the community process for identification of Village Representatives (VR). The VR identification (by community) is complete in all four sites. Two to three village representatives are selected from each village to form the CBO. The VR identification process was clearly communicated to the community, so that they could select the right people with the sprit and ability to lead the community. The CBOs are being established by clustering the villages, which has also been completed with the assistance of community members.

3. Assessment of existing CBOs: Existing local CBOs were also identified for programme partnership at all sites. A capacity assessment matrix was developed to assess the existing CBOs for the programme partnership. Priority is being given to those organizations that have roots in the community and are accessible to them.

4. Partnership dialogues and signing of MoUs: Dialogues concerning the role and specific commitments in different partnership areas of new and existing CBOs have been initiated. The responses are very encouraging at all four sites.

Table 7: Status of Output A.2.1 (New CBOs established and MoUs signed for Programme Interventions)

		Apr-D	ec 2007	· · · · · · · · · · · · · · · · · · ·	
L.F. / O.B.S Code	Sub Outputs	Planned Units	Delivered Units	Balance Units	Remarks
A.2.1.1 - 4	Mobilize community to form CBOs in all four sites	20	11	9	As planned, remaining units will be completed by Q3 CY08
A.2.1.5 - 8	Sign MoUs with existing and new CBO / CCBs for cooperation on programme interventions in all four sites	32	13	19	As planned, remaining units will be completed by Q2 CY09

Outcome A.3 Improved natural resource management in Keti Bunder, Keenjhar, Chotiari and Pai Forest

1.7 Sub output A.3.1.1 – 4 Conduct participatory situational analysis and threat analysis in all four sites

The Natural Resource Management (NRM) plans will be based on the results of the detailed ecological and socio-economic assessment (final reports due in Q1 CY08). In anticipation of these reports, ground work has included the development of site-wise strategic plans to guide both NRM plans and livelihood development plans. The process as a whole will be supported by the Participatory Situational Analysis and Threat Analysis, respectively, currently being conducted at each site. In-house consultation is now complete and key partners and stakeholders are being consulted at the site-level to obtain a consensus on the results of the exercise.

Table 8: Status of Output A.3.1 (Participatory natural resource management plan developed giving priority to four major ecosystems and at least two species of concern)

	Apr-Dec 2007				
L.F. / O.B.S. Code	Sub Outputs	Planned Units	Delivered Units	Balance Units	Remarks
A.3.1.1 - 4	Conduct participatory situational analysis and threat analysis in all four sites	4	0	4	As planned, these sub outputs will be completed in Q2 CY08

Outcome A.4 Improved livelihood security and contribution to equitable benefit sharing by creating conducive environment for better NRM practices

1.8 Sub-Output A.4.1.9 - 12 Conduct mobile medical camps at all four sites

Mobile medical camps were arranged at all four programme sites to provide medical facilities to the various communities. More than 4000 patients including men, women and children were provided free consultation, check ups and medicines. Table 9 below provides the number of patients treated at site camps.



Forest 21 September 2007

Site	Date	Camp Round	Total Patients Treated	Male	Female	Children
Keti						
Bunder	25.11.07	1st	293	53	87	153
	6.12.07	2nd	151	63	48	40
	15.12.07	3rd	433	117	101	215
		Site Total	877			
Keenjhar						
Lake	23.7.07	1st	49	2	14	33
	22.9.07	2nd	367	59	188	120
	4.12.07	3rd	52	4	27	21
	18.12.07	4th	576	144	214	218
		Site Total	1,044			
Chotiari						
Reservoir	17.6.07	1st	128	20	44	64
	30.10.07	2nd	297	35	52	210
	2.12.07	3rd	168	30	55	83
	7.12.07	4th	193	45	68	80
	6.01.08	5th	198	59	26	113
		Site Total	984			
Pai						
Forest	27.6.07	1st	780	317	463	0
	11.12.07	2nd	664	262	233	169
		Site Total	1,444			
		Grand Total	4,349			

Table 9: Mobile medical camps at four sites

1.9 Sub-Output A.4.1.13 - 16 Conduct Livestock vaccination and treatment camps at all four sites

A majority of the rural population at Programme sites own livestock. Livestock mismanagement but also the prevalence of disease has prevented the full use of this important source of livelihood. To address this issue, a livestock vaccination programme was initiated with the collaboration of district governments. The district government department of veterinary services provided the Programme with doctors, medicines and vaccinators while the Programme provided ground coordination of the initiative at each of the sites (see table 10).

The Programme considers camps to have been successful. Indicators in this regard include high



Image 2: Livestock Vaccination Camp

attendance which demonstrated demand, awareness, and satisfactory outreach of site offices to the community. Taking the example of Keti Bunder, not only were all vaccines used but additional supplies such as oral medication were successfully procured and administered where higher than anticipated demand had created a shortfall. In Pai forest, a target of 5,000 animals was set however the camp vaccinated a further 2,762 animals reflecting the extent or scale of the problem as well as the Programme's successful outreach and communication work.

Location	Total number Livestock Vaccinated in each site: Camp 1	Total number Livestock Vaccinated in each site: Camp 2
Keti Bunder	1,889	359
Keenjhar Lake	1,814	1,432
Chotiari Reservoir	1,960	14,058
Pai Forest	7,762	10,945
Total	13,425	26,794

	Table 10: Live	estock Vaccinatio	n camps at four sites
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 Table 11: Status of Output A.4.1 (Livelihood development plans implementation for four sites)

- <u> </u>		Apr-D	ec 2007		
L.F. / O.B.S. Code	Sub Outputs	Planned Units	Delivered Units	Balance Units	Remarks
A.4.1.9-12	Conduct Mobile medical camps at all four sites	8	8	0	Complete
A.4.1.13-16	Conduct Livestock vaccination and treatment camps at all four sites	8	8	0	Complete

1.10 Sub-Output A.4.2.1- 4 Access to potable water supply and sanitation facilities improved

This output is aimed at improving potable water and sanitation conditions at all four programme sites. The four programme sites are located in rural areas which lack proper potable water and sanitation facilities. The accessibility of these facilities will help improve health conditions, primarily. The poverty-environment nexus, and its population component, are clearly targeted in this suboutput. Insufficient potable water and sanitation facilities go hand in hand with low income levels and poor health; these in turn are associated with high time preference among the poor, a household decision that favours a greater number of children (as inputs to labour, as old age insurance, and to overcome odds given a high infant mortality rate), and, overall, sustenance strategies entirely focussed on local natural resources. Deliverables in this output are comprehensive site-wise water and sanitation plans developed in consultation with communities.

Site specific water and sanitation action plans have successfully been developed. Initially a format was developed to collect data on existing facilities at each village/settlement. Also communities were consulted by field teams for suggestions and options for improving water and sanitation facilities. In the second phase, which starts from Q1 CY08, a meeting will be held with identified collaborating partners to mobilize resources for the implementation of water and sanitation plans. Care will be taken in refining a strong baseline against which to demonstrate a 30% increase in facilities by 2012 as well as a focus on needs of women and children.

Table 12: Status of Output A.4.2 (Access to potable water and sanitation facilities improved)

		Apr-Dec 2007			
L.F. / O.B.S. Code	Sub Outputs	Planned Units	Delivered Units	Balance Units	Remarks
A.4.2.1 - 4	Access to potable water and sanitation facilities improved	4	0	4	As planned, these sub outputs will be completed in Q3 CY08

<u>Case Study 1: Setting the baseline for the future – detailed ecological</u> <u>assessments</u>

Background

One of the prominent outputs mentioned in the year one work-plan of the Indus for All Programme is the detailed ecological and socio-economic assessments that have been successfully carried out at all four of the Programme sites. These follow on from the rapid ecological and socio-economic surveys that were completed as part of the Programme's Inception Phase. The rapid assessments shed light on the salient livelihood features and recommended interventions as well as the level of biodiversity at each site and the main threats and potentials in this regard. This gave the staff some idea of what priorities should be given to which site.

The aim of the detailed assessments is to set a baseline for the future, an important means of assessing the effectiveness of interventions in the short-term and establishing quantitative parameters needed to measure the fulfilment of the long-term vision of the Indus Ecoregion Programme. Secondly, the data will be invaluable when developing the livelihood development plans and natural resource management plans.

Let us examine some of the results emerging from the first season (summer) of detailed ecological studies. These are interesting in the fact that it is obvious that there are still many aspects of biodiversity that we are unaware of in the eco-region. Below is an account of some of the unique and unexpected findings from the studies, both positive and negative.

Small mammals

In the environs of Keenjhar Lake, the survey team regularly trapped and released back the rare species of the spiny mouse, *Acomys cahirinus*. This rodent species is found in Egypt, Saudi Arabia, Iran, and in Pakistan's coastal areas of Balochistan as well as in the Khirther mountains. Historically the river Indus marks the eastern most limits for this species and it is nowhere to be found in the east of Indus River. Never has the spiny mouse been recorded so far east of its stronghold in Balochistan until now. In the Keenjhar area several specimens were caught from a small hill underneath the loose boulders. The area



Image 3: Spiny mouse

is just on the western bank of the river Indus so in this way that locality can be considered the last eastern limit for the distribution of this species.

Fish

 One interesting specimen recently caught at Keti Bunder was a Live shark-sucker (*Echeneis naucrates*) which is quite commonly found in the Arabian and Indian oceans. As can be seen in the photograph it is a remarkably adapted species with its elongated body, with the head flattened and bearing a sucking disc having 10-28 transverse movable laminas (thin sheets). It uses the sucking disc to attach itself to larger animals such as sharks, bony fishes, turtles or mammals.



• They act as cleaners to their hosts and also feed on leftovers. Though not exactly rare, the presence of this species does demonstrate the rich biodiversity and ecological uniqueness that the Indus ecoregion supports, which of course includes the marine component of the ecosystem.

Reptiles and amphibians

• Reptiles have become increasingly popular as pets all over the world and every year

thousands of animals enter the exotic pet trade, many of them exported from this part of the world. One of the surveyors very recently noticed a drastic decline in the population of some lizards and snakes compared to earlier reports. He attributes this decline to the large number of nomadic snake charmer tribes, locally known as "Jogis" involved in illegal smuggling of geckos, turtles, tortoises and snakes, known to be pets in various countries of the world. These Jogis receive a handsome amount from the agents positioned in various areas of Sindh, Punjab and Balochistan. During the recent



ecological assessment the surveyor met one of the families (comprising of about 100 members) who are involved in the collection of reptiles. At the time of the visit the group were in possession of an astounding 321 specimens of Fat-tailed gecko, 151 specimens of Flat-tailed gecko, *Teratolepis fasciata* and 96 specimens of Chain sand boa. The illegal live reptile's trade, in fact, is a dilemma and a question mark for the Government agencies and NGOs involved in conservation of biodiversity. No one knows from what period these and hundreds of other Jogis started this illegal trade of live reptiles and how much damage has been caused to reptile's biodiversity by such activities. The practice continues unabated and unchecked and there seems to be no constraint for them to wipe out every reptile species.

Birds

During a recent trip by the consultant of marine the accompanying staff member fisheries. observed two large birds sitting on one of the islands in Keti Bunder. On closer inspection they were identified as Greater Adjutant Storks (Leptoptilos dubius). These birds are classified as vulnerable in IUCN's / Birdlife International Red Data Book. Not only that, but they have also been reported absent from Pakistan since the 1960s. This discovery is significant for Keti Bunder since many of the water-birds once found in the creeks no longer visit. It may be possible that species such as Greater Adjutant Storks have been overlooked in the past, but at five to six feet tall, it is probable



that these birds are very occasional visitors. Still, their presence is still an encouraging sign. Keti Bunder has been classified as a Wildlife Sanctuary (north and south) and is also part of the Indus Delta Ramsar site. If more refuge can be provided in areas such as Keti Bunder for these prehistoric looking birds, as well as other migratory birds, Keti Bunder may once again reclaim some of its status of an area of outstanding ecological importance.

By: Rab Nawaz, Natural Resource Management Coordinator, Indus for All Programme

PROGRAMME OBJECTIVE B

Improved natural resources and livelihoods through mainstreaming of poverty-environment linkages at policy, planning and decision making levels.

- 2 -

Outcome B.1 Improved forest cover and fish stock achieved through governments' commitment (in line with Indus Ecoregion Programme) resulting in secured livelihood

2.1 Sub-Output B.1.1.1 - 3 Conduct Forest Monitoring training

This output has been outsourced to WWF GIS Lab who have developed two modules one entitled "introduction to GIS" and the other entitled "Remote Sensing and Monitoring through GIS". These modules have been developed based on experiences gained by WWF through years of conducting training for different stakeholders and government including Forest and Wildlife Departments.

2.2 Sub-Output B.1.1.4 - 5 Support provided to Sindh Forest Department (SFD) in maintaining existing riverine and mangrove cover

Under this sub-output, the Programme's objective is to facilitate partners in government to maintain the existing cover of riverine and mangrove forests through building staff capacity in the area of forest monitoring and survey techniques; conducting of joint habitat surveys; procurement of satellite data and equipping of the SFD with required GIS technology. The joint work, capacity building, information sharing, and provision of technology is focused on GIS tools needed to effectively monitor and detect change in forest cover (among other natural resource variables), socio-economic variables, and their interactions; and, to identify problems and assess possible solutions to both design and operational processes.

B.1.1.4.1 Draft a MoU in collaboration with SFD, pursue process and have it signed

An MoU between WWF-Pakistan, Indus For All Programme, and the SFD for the provision of GIS satellite data has been developed and was signed on 28 July 2007.

The MoU covers institutional cooperation in general but also contains specific GIS clauses. The former is spelled out in detail and relates to cooperation on development of livelihood plans, NRM plans, and other programme outputs requiring piecemeal inputs of GIS data; however, this also relates to cooperation in developing decision support systems for the three districts, including an environmental and social atlas for intensive GIS data inputs. The GIS specific clauses cover a joint mechanism with the Pakistan Wetlands Programme for sharing geo-spatial information with



partner organizations, in-service trainings for incumbent GIS personnel of the programme and partner organizations, and provision of raw and processed satellite data that will include hard and soft copies of maps/data forms that were developed/used during surveys to assess biological, ecological and spatial parameters.

Preparations are underway for remaining activities under Output B.1.1. The Areas of Interest (AOI) for GIS procurement have been flagged in exchanges and are expected to be agreed without difficulties. Also GIS data developed for the different programme outputs is being classified and compiled in a system that will facilitate procurement and sharing. This includes indexed hard and soft copies with back-ups on CDs. Procurement and sharing of maps, their protocols and Programme reports are expected to commence shortly.

2.3 Sub-Output B.1.1.5 Revive GIS Lab

B.1.1.5.1 Assess needs of GIS Lab

A preliminary assessment of GIS laboratory needs has been successfully completed. In this regard, specific equipment needs and measures required to revive the GIS lab were identified in a formal meeting held on 26 October 2007 between Programme Management Unit staff (Coordinator NRM, GIS Analyst) and the Chief Conservator of Forests, Sindh, Dr. Lekhraj Kella, and the Divisional Forest Officer (Direction), Hyderabad, Mr. Riaz Wagan. According to Mr. Jan Muhammad Soomro, Divisional Forest Officer (Planning), Hyderabad, the laboratory was established in 2000 and closed in 2002 and no use has since been made of the existing 3 plotters and 2 digitizers. The principal measures identified to revive the laboratory included the hiring of a supervisor for the laboratory.

As a follow up to the meeting, quotations were obtained for GIS laboratory equipment (e.g., work stations, normal system, A2 size printer, A3 size digitizer) and for related technology (e.g., portable DVD, GPS cards tablet, GPS, and Aster and Spot satellite data). The quotations have been approved by the Programme Management Unit; purchasing and handing over of equipment to SFD have taken place.

An initial visit was made to Hyderabad on 26 October 2007 and based on the quotations and discussions held on 13 December 2007, the proposal was discussed and approved. The proposal outlines major activities for completion of sub-output B.1.1.5 including purchasing and installation of PC(s), system(s), printer(s), scanner(s), GPS unit(s), and data storage unit(s). The GIS services that the laboratory will provide for the SFD include: establishment of GIS-based spatial data layers (generic profiles) for monitoring of forest cover and management of spatial database in view of future mapping; development of GIS-based mapping and monitoring of existing flora and distribution and habitat mapping of fauna; and, training for the Foresters.

2.4 Sub-Output B.1.1.6 Train GIS Analyst

The GIS Analyst joined the Programme on 9 May 2007 after approval of his ToRs by the SFD. The analyst continues to be supervised by both the Coordinator Natural Resource Management in Karachi and the Focal Person Geographical Information System. His short term deputation to WWF's GIS Laboratory in Lahore took place from 21 - 26 May 2007 during which time he learned to use new GIS software such as "Arc GIS 9.0" and contributed to the development of the Programme's GIS work plan. The analyst has actively contributed to programme outputs implemented throughout 2007 and is being deputed from 1 December 2007 to SFD GIS Lab, Hyderabad. From 1-11 October 2007 the Analyst participated in the International Centre for Integrated Mountain Development (ICIMOD), Kathmandu, Nepal, "Regional Training on Spatial Analysis Concepts, Tools, and Application of Geo-Informatics for Protected Area Management".

2.5 Sub-Output B.1.1.7 Upper and Lower Indus Riverine Habitat Surveys

The purpose of this sub output is to prepare a detailed study of riverine forest ecosystems comparing upstream Sukkur and downstream Kotri regions. In particular, the study investigates the causes of ecosystem degradation and ways in which the lost habitat can be restored.

The Sindh Forest department identified three riverine forest sites for this study viz. Keti Shah riverine forest at Upstream Sukkur and Kathore and Hayat Gaho riverine forests at downstream Kotri. Consultants were contracted to prepare the aforementioned study and a copy of its draft is available upon request (see thumb nail annex I). The total riverine area is 84, 9841 hectares of which 29% is under forests (2.3% is reserved for productive forests). Rainfall is mostly during the monsoon season from June to August, the rest of the year is almost dry which makes it unfavourable for the vegetation to flourish. It has been suggested that extreme temperatures in the areas limit decomposition and that several fungi of the habitat cause damage to leaves, trunk and roots of riverine species. The report further explains the riverine



Image 8: Consultants conducting field research in Keti Shah – an upstream Sukkur forest

forest ecosystem and the ecological succession and regeneration activities. The concluding section of the report outlines site-specific recommendations covering climatic, social, political, economic, edaphic, and biotic factors, among others, based on first-person expert observations made while conducting the study. In their opinion, development strategies for different uses, situations and levels should be framed for the growth and establishment of tree cover in the riverine forests of Lower Indus Basin of Pakistan.

		Apr-Dec 2007			
L.F. / O.B.S Code	Sub Outputs	Planned Units	Delivered Units	Balance Units	Remarks
B.1.1.4	Provide GIS satellite data to SFD	1	1	0	Complete
B.1.1.5	Revive GIS LAB	1	1	0	Complete
B.1.1.6	Train GIS analyst (Man months)	9	9	0	Target for 2007 met
B.1.1.7	Upper and Lower Indus Riverine Habitat Surveys	3	0	3	The target as planned, will be achieved by Q1 CY08

Table 13: Status of Output B.1.1 (Support provided to Sindh Forest Department (SFD) in monitoring existing riverine and mangrove cover)

Outcome B.2 Environment mainstreamed in natural/provincial policies and sectoral development planning

2.6 Output B.2.1 Economic valuation studies for at least 5 selected ecosystems

Under this output, the Programme's objective is to monetize the environmental services associated with ecosystems present in the Programme's four sites. After monetization, previously missing values will be incorporated into policy analyses, including cost benefit studies and assessments of stocks of natural capital required for modification of national income accounts.

An expatriate consultant was hired for the study in September 2007. Focus group and key informant meetings were held prior to the consultant's visit at all four sites to pre-test and record problem areas for implementation of surveys associated with some methodologies. The scope of the studies and the selection of methodologies were also broadly agreed prior to the consultant's field visits (4-12 November 2007).

In terms of scope, 2 ecosystems (coastal and agricultural) were selected in Keti Bunder, while one ecosystem was identified in each of Pai (forest), Keenjhar (freshwater), and Chotiari (rangeland). Analytical boundaries have been recorded in GIS maps after consultations between PMU and the consultant during his visit in November 2007. A total economic value (TEV) expressed in rupees per hectare will be estimated for each ecosystem.

In terms of methodologies, the direct use values will be calculated using the "Market Value" approach for which a pilot survey is planned in December 2007; indirect use values will be generated using "Replacement Cost / Preventative Expenditure" methods and "Choice Experiments" for which surveys are planned in the first quarter of 2008 and which, owing to their format, would



Image 9: Dr. Ben Groom, Focus Group, Kharioun, Keti Bunder, 5.11.07

additionally enable PES feasibilities and empirically test observed poverty-environment linkages; and, indirect use values will be generated using off-site surveys employing the "Contingent Valuation Method".

As measured by reference to the detailed micro-activities work plan, progress on this sub-output is satisfactory. Direct use survey enumerators will be trained in January 2008 based on 5 questionnaires that are already completed, with sampling and training modules also completed. Already a chapter in a forthcoming International Food Policy Research Institute (IFPRI) book on applications of Choice Experiment valuation methodology has been offered to the Programme. Also the presentation of results of the 5 valuation studies is slated by WWF International through their participation in the 10th Conference of the Parties of the RAMSAR Convention. The quality of the research involved is attested to by the awarding of a grant by the Management and Advisory Committee of the South Asian Network for Development and Environmental Economics (SANDEE) for a spin off (Random Utility Model) Travel Cost Method study for Keenjhar Lake. The involvement of SANDEE will strengthen peer review of the Indus For All Programme's 5 ecosystem valuation studies. These steps, among others, are positively strengthening the mainstreaming of valuation results into Pakistan's economic planning process.

		Apr-Dec 2007			
L.F. / O.B.S Code	Sub Outputs	Planned Units	Delivered Units	Balance Units	Remarks
B.2.1.1 - 5	Conduct Ecosystem-based valuations	5	0	5	As planned, these sub outputs will be completed in Q4 CY08

 Table 14: Status of Output B.2.1 (Economic valuation studies for at least 5 selected ecosystems)

2.7 Output: B.2.5 Priority environmental issues integrated into PRSP and MTDF

Under this output, the Programme's objective is to develop a policy environment that will help implement the Indus Eco-region Conservation Programme for the next 50 years. The concentration will be on incorporating poverty-environment concerns and approaches into sector development plans after documenting linkages and lessons from the local levels and up scaling these to the provincial and national levels. Activities under this sub-output fall into two broad categories, respectively designed to: (a) to develop capacity and liaison within the Planning and Development Department, Government of Sindh (SP&D); and, (b) to produce a working paper owned by stakeholders making recommendations on priority environmental issues to address in sectors, identifying relevant poverty-environment linkages, and identifying channels by which to institutionalize feedback on these issues into the PRSP and MTDF plans.

B.2.5.1 - 6 Provide technical assistance to the SP&D

The Programme hired and deputed a Policy and Planning Officer (PPO), WWF-Pakistan, with the Planning and Development Department, Government of Sindh (SP&D) with effect 18 October 2007. The Officer's main responsibilities are to create an enabling environment through which WWF-Pakistan and SP&D can jointly contribute to the objective of incorporating poverty-environment concerns and approaches into MTDF, PRSP Sindh Vision 2030 sector development plans.

PMU has already begun briefing the Policy and Planning Officer on schedules and means to incorporate Programme targets into departmental plans. The Planning Officer for his part is advising on the process accompanying PRSP and MTDF, SP&D's involvement in this regard, ways of incorporating poverty-environment indicators into PRSP and MTDF, and reception and assimilation of environmental valuation results and national income accounting practices. The PPO has coordinated several meetings between the Additional Chief Secretary, Chief Agriculture and Chief Poverty of SP&D and Indus for All Programme.

A MoU between SP&D and WWF-Pakistan for the mutual extension of technical and institutional support with clauses of the Indus for All Programme's objectives was drafted. The signing of the MoU extended beyond CY07 due to proper clarification of legal implications associated with the document. The matter was clarified at the 2nd Sub-Committee Meeting on 10 October 2007. It is expected that it will be signed by January 2008.

B.2.5.2 Develop poverty-environment working paper for PRSP

As far back as May 2007 a strategy was developed for incorporation of poverty-environment issues in PRSP. The strategy included obtaining advice and steering assistance from Dr. Kauser Malik, Member Planning, Federal Planning Commission of Pakistan, also a Board Member of WWF, on the notification of a Committee on Environment in the PRSP Secretariat to enable continuous and dynamic inputs during PRSP development. Exchanges were initiated between the Director General of WWF-Pakistan and Dr. Kausar Malik at the time.

The PMU conducted an analysis of the summary of PRSP-II (25.4.07), entitled "Ensuring a Demographic Dividend: Unleashing Human Potential in a Globalized World", a day after its release at the Pakistan Development Forum (PDF) on 26 April 2007. The analysis focused on references to water supply, distribution and management; PRSP's strategy to capitalize on the "demographic dividend" which is an essential component of the poverty-environment nexus; energy conservation and demand measures; and, the passing reference to poverty-environment linkages early in the document but the patent absence of such approaches in PRSP's Pillar VII "Targeting the Poor and the Vulnerable".

The above analysis and forthcoming poverty-environment linkages and indicator reports (due in Q1 CY08) based on the ecological and socio-economic assessments will form the core of the working paper for PRSP and the consultative process surrounding it. A comprehensive literature review is under way and an outline of the paper is ready.

Table 15: Status of Output B.2.5 (Priority environmental issues integrated into PRSP and MTDF)

		Apr-Dec 2007			
L.F. / O.B.S Code	Sub Outputs	Planned Units	Delivered Units	Balance Units	Remarks
B 2.5.1	Provide technical assistance to SP&D (Man months)	3	2.5	0	Target for 2007 met
B.2.5.2	Develop poverty environment working paper for PRSP	1	0	1	As planned, this sub output will be completed in Q2 CY08

Outcome B.3 Poverty environment linkages incorporated in Taluka and district planning

2.8 Output B.3.4 Interactive social and environmental digital atlas developed for all Indus Eco-region districts and designed as a decision-support tool for three districts (Thatta, Nawabshah, Sanghar)

The purpose of this output is to support decision-making processes in Thatta, Nawabshah and Sanghar districts through a tool, a social and environmental digital atlas that would improve understanding of environmental and social aspects of the entire Indus Eco-region. The resulting Decision Support System (DSS) will be operative at the district level while the digital atlas will operate at the eco-region level. It will almost certainly consist of a web-based query system with multiple inputs, options and would be updated through a user access system.

After the conceptual framework for the DSS is discussed among the GIS analysts and feedback obtained on a multi-disciplinary basis, the technical, functional and communication infrastructure architecture of the system will be subsequently prepared by a web developer.

Table 16: Status of Output B.3.4 (Interactive social and environmental digital atlas developed for all Indus Eco-region districts and designed as a decision-support tool for three districts (Thatta, Nawabshah, Sanghar)

		Apr-Dec 2007			
L.F. / O.B.S Code	Sub Outputs	Planned Units	Delivered Units	Balance Units	Remarks
B.3.4.1	Develop Indus Ecoregion environmental and social atlas	1	0	1	As planned, this sub-output will be completed in Q1 CY08
B.3.4.2 - 4	Develop Interactive district decision support systems (DSS) Thatta, Sanghar & Nawabshah	3	0	3	As planned, these sub- outputs will be completed in Q1 CY08

As stated earlier in the section covering B.1, the ToRs for GIS procurement were successfully prepared and the MoU which covers the atlas preparation was signed in December 2007. Collation of data and development of a template for the atlas is in progress.

The Indus for All Programme GIS team has to date prepared a flow chart identifying layers for digital maps that together make up the DSS in its entirety. These proceed from demarcation of administrative boundaries, demarcation of land use and land cover, socio-economic profiles, hydrology, water divisions/use patterns, typonyms and topography, demographic information, infrastructure (e.g., for health, education, etc.), drainage and the forest master plan.

<u>Case Study 2: Partners' commitment to Indus for All Programme: actions</u> <u>rather than words</u>

The "Indus for All Programme" has been formulated by WWF – Pakistan to implement the first 5 years of the 50 years Vision of the Indus Eco-region Conservation Programme. The Indus Eco-region Conservation Programme was developed in collaboration with the Government of Sindh and other stakeholders for long term biodiversity conservation and livelihood improvement in the River Indus Eco-region.

The Indus Eco-region lies in the southern part of Pakistan in the Sindh province and harbours a diverse range of biodiversity from deltaic habitats in the south, riverine eco-systems along the River Indus and desert areas in the periphery. The eco-region partially or fully covers over 18 districts.

The above goal of the Indus for All Programme has been designed in light of WWF - Pakistan's extensive experience of working with local communities, realizing that only after engaging them in natural resource management and advocating for environment supporting policies can they achieve lasting change on the ground. The Indus for All Programme spans six years to achieve the overall objective of managing natural resource in the lower Indus Basin that will ultimately contribute to improved livelihood and sustainable development.

To achieve this objective, WWF – Pakistan first identified that it needs to work at a micro, meso and macro levels, after which it identified a number of partners at each level to gain support for various interventions, policy change and coordination of diverse stakeholders. Every partner in the viewpoint of Indus for All has its unique standing and importance; however, local communities,

provincial government and non-government allies stand high because of their direct role at site level Indus for All Programme, during the current phase, operates at four sites of Indus Ecoregion representing critical ecosystems in Thatta, Sanghar and Nawabshah districts. During the planning stage, it was foreseen that district governments and the local communities will take joint ownership of this programme by notifying Districts Coordination Committees (DCCs) under the chairmanship of the concerned District Coordination Officer (DCO). It was further envisaged that representatives of the local government departments, Community-Based Organizations (CBOs) and Local Non-Government Organization (LNGOs) will become an integral part of the DCCs. At meso (provincial) level, the Indus for All Programme is overseen by the Indus Ecoregion Steering



Image 10: Second Meeting of the Indus Eco-region Steering Committee held on 12 April 2007, Karachi

Committee, chaired by the Additional Chief Secretary (Development) of the Planning and Development Department, Government of Sindh and represented by five provincial secretaries of the most relevant departments such as Forestry and Wildlife, Environment, Fisheries, Irrigation and, Finance, Heads of Coastal Development Authority and Sindh Irrigation and Drainage Authority are also members of the committee as are representatives from the academia, Sindh Chamber of Commerce and, Planning Commission of Pakistan, and civil society organizations such as Pakistan Fisher Folk Forum, IUCN and, UNDP Small Grants Programme.

The Indus Ecoregion Steering Committee was notified and started functioning before the inception phase of the Indus for All Programme and within first four months of the implementation phase, all the three DCCs were notified, their first meeting held and some decisions at local level were taken. This willingness of the provincial government departments and local communities to share their resources to make this programme a success is demonstrated in the following developments.

Example: Conservation Information Centres

Indus for All Programme envisioned establishing four Conservation Information Centres, one each

at its programme sites. The objective is to provide information and create awareness about nature conservation and promote actions about stewardship of natural resources among communities. It was thought these centres will not only enhance environmental and nature conservation awareness but will also promote alternate livelihood sources of local communities who could one day, take over the running of these centres. It is planned that CBOs will be engaged in nature friendly interventions such as eco-tourism, organizing nature camping and adventure touring for schools and visitors and, promoting local crafts.



Image 11: Meeting with DCO, Sanghar

To establish these centres, the Programme needed a piece of land at each of the four sites.

Chotiari Wetland Complex:

Chotiari Reservoir is 30 km away from Sanghar and has a picturesque landscape with

the hamlets of fishermen, herders and agropastoralists scattered around this beautiful countryside. Sindh Irrigation and Development Authority (SIDA) is the custodian of Chotiari Reservoir. When the programme intended to establish a Conservation Information Center at Chotiari, SIDA gave a piece of land on the bank of Bakar Lake, Forest Department provided timber for its assembly and local communities took part in construction. The Indus for All Programme will furnish this with the required furniture and install displays and information corners. Local CBOs will then run this centre with the support of the



Centre at Chotiari

Programme team. The Information Centre was established representing local architect just in one month. This combined effort of all these stakeholders reflected a unique sense of partnership in this case.

• Pai Forest:

Pai Forest is situated along the Karachi – Sukkur Highway, 5 km away from Sakrand town. It is a protected area that provides habitation to Grey partridges and Hog deer within a 1,933 hectare forest. An old rest house is situated inside Pai Forest along with living-quarters for the forest guards. When requested, the Sindh Forest Department handed over a three room building to establish the Conservation Information Centre after necessary renovation by the programme. A local CBO stepped forward not only to help in managing this centre in future but also raised a small potted nursery to promote tree plantings in the neighbouring communities.



Image 13: Grey Partridge at Pai Game Reserve

• Keti Bunder:

Keti Bunder is a historic small town and a port in the Indus Delta about 200 km South-east of Karachi. It is mainly occupied by the fishermen communities and serves as a gateway to the Arabian Sea. Keti Bunder displays immense ecological and economic importance while being a wildlife sanctuary and harbouring mangrove forests and associated fauna. When requested, Sindh Forest Department agreed to handover a two-room residence for establishing a Conservation Information Centre. The Indus for All Programme will shortly start renovating this building to ultimately establish the centre.



Image 14: Local fisherfolk at Keti Bunder

• Keenjhar Lake:

At this famous lake in Thatta district, the provincial Fisheries department has given its consent to handover a piece of land for establishing Conservation Information Centre. Currently, a survey is underway to evaluate one potential site near the Fisheries department's offices along with others for constructing the Information Centre. UNDP Small Grants Programme, another important partner of the Indus for All Programme has also shown its interest in cost sharing for establishing this centre.



All these commitments from the critical partners convey one message; they are not only very keen in conservation our dwindling natural resources but also willing to involve local people in managing these for their ultimate wise-use on sustainable grounds. Government departments, that did not involve local communities in co-management so far, have accepted their stake which reflects a positive attitude change thus lighting a beacon in the darkness that prevailed until recently.

By: Rab Nawaz, Natural Resource Management Coordinator, Indus for All Programme Dr. Ghulam Akbar, Team Leader, Indus for All Programme

PROGRAMME OBJECTIVE C

Improved institutional capacity and awareness for sustainable management at various levels.

والف الدس فارآل

- 3 -

Outcome C.2 Capacity of District government built for assessing environmental impacts of medium to large scale infrastructure projects and development plans

3.1 Output: C.2.2 Capacity of local governments built for planning, implementation and monitoring of NRM programmes

Under the devolution plan forest, wildlife and fisheries have been made a local government subject. Prior to which senior officials at the provincial level were in charge of developing and implementing NRM programmes. Under the current devolved set up, district officers are stationed to oversee and monitor the operations pertaining to their respective departments and districts. This sub-output aims to develop the capacity of local government officials in the target districts, *i.e.* Nawabshah, Sanghar and Thatta in planning, implementing and monitoring of natural resource management (NRM) and related programmes.

C.2.2.1 Build Capacity of local government to plan, implement and monitor NRM Programmes at Thatta.

A two-day training programme was developed and conducted on 29 - 30 January 2007 for the district government officers of Thatta in "Planning, Implementation and Monitoring of Natural Resource Management programmes". A total of 10 participants representing Fisheries, Irrigation, Agriculture, and Poultry departments of district government Thatta attended the event including three field staff members of the Indus for All Programme's Implementation Unit Keenjhar Lake. The sessions were facilitated by the following resource persons: Dr. Lekhraj Kella (Retd), Chief Conservator of Forests Sindh; Dr. Ghulam Rasool Keerio, (Retd.) Conservator of Forests, Sindh; Ali Muhammad Khan Dehlavi, Programme Economist, Indus for All Programme; Ghulam Qadir Shah, Manager Conservation WWF



Image 16: NRM programme management training for district officials, Karachi

Sindh Programme; Aslam Jarwar Site Manager, Indus for All Programme; and, Mustafa Abbassi, GIS Analyst, Indus for All Programme. The training aimed to enhance understanding of the participants regarding planning, implementation and monitoring of NRM programmes with focus on fisheries, forest, wildlife, land and water resources. The following modules were delivered during the training:

- 1. Natural Resource Management Programmes (The concept, approaches and application);
- 2. Fisheries Management (Inland and Marine Fisheries);
- 3. Forest Management (Riverine forests, Mangrove forests)
- 4. Wildlife Management (Wild animals and migratory birds)
- 5. Land and Water Resource Management
- 6. Application of GIS in NRM Programmes
- 7. Applying livelihood approach to NRM
- 8. Community-based Conservation Programmes; and
- 9. Resource Planning and Evaluation.

Table 17: Status of Output C.2.2 (Capacity of local governments built for planning, implementation and monitoring of NRM programmes)

		Apr-Dec 2007			
L.F. / O.B.S Code	Sub Outputs	Planned Units	Delivered Units	Balance Units	Remarks
C.2.2.1	Build capacity of local government to plan, implement and monitor NRM programmes at Thatta	1	0	1	Target for 2007 met (Held in January 2008 due to political circumstances)

Outcome C.3 Enhanced awareness of local, provincial and national environmental issues among stakeholder groups

3.2 Output C.3.1 Traditional knowledge on NRM documented for awareness raising at four priority sites

The Programme endeavours to document traditional ecological knowledge encompassing the traditional practices and solutions to various Natural Resource Management (NRM) problems. This knowledge can be effectively utilized to raise awareness of the stakeholders about the age old, locally adapted practices to environmental problems. Under this output the following tasks have been accomplished:

C.3.1.1 Collect information on Traditional Ecological Knowledge

Collection of information on traditional ecological knowledge in the Indus Ecoregion is in progress and according to the Programme's operational plan the sub-output will be accomplished by Q2 CY08. It covers practices, knowledge, skills, legends, folklores and other mythical, cultural and spiritual aspects of resource use patterns in the Ecoregion. The information is being collected through literature review, personal communication with the identified knowledgeable personalities in the Ecoregion, visits to libraries, study centres and academic and research institutions, focus group discussions with specific resource-user groups such as mat makers, nomads etc, and through field observations. A preliminary synopsis on traditional ecological knowledge has been developed.

Table 18: Status of Output C.3.1 (Traditional knowledge on NRM documented for awareness raising at four priority sites)

		Apr-Dec 2007			
L.F. / O.B.S Code	Sub Outputs	Planned Units	Delivered Units	Balance Units	Remarks
C.3.1.1	Collect information on Traditional Ecological Knowledge	1	1	0	As planned sub output will be completed in Q2 CY08. 2007 target met

3.3 Output C.3.2 Awareness raising programme for at least 8 social groups conducted by project end

The Communication and Awareness Strategy of the Indus for All Programme has identified various target groups to be addressed under the Programme for promoting positive behaviours and actions towards their environment. The target groups have been identified as government officials, representatives of civil society and community based organizations, media personnel, religious leaders, youth, students and teachers, women and general public. A variety of awareness programmes have been formulated and carried out to promote awareness amongst those target groups. The following activities have been carried out under this output during the year 2007.

C.3.2.1 Revise the Communication and Awareness Strategy for the Indus Ecoregion

To deliver the component of communication and awareness in an efficient and effective manner, the Programme, during its inception phase has developed a "Communication and Awareness Strategy". The main objective is improved institutional capacity and awareness amongst stakeholders at different levels about sustainable environmental management of the Indus Ecoregion.

During the reporting period the strategy was reviewed and shared with the key stakeholders for their input and suggestions. In this regard a consultative workshop was organized for the key stakeholders to revise the Communication and Awareness Strategy on 21 November 2007 at Wetlands Centre, Sandspit, Karachi. The Workshop involved 30 representatives from different stakeholder organizations including the government, media, civil society organizations, and the representatives of communities. The stakeholder representatives through group discussions and brainstorming sessions critically reviewed various components of the strategy. They commented on the Problems (what to communicate) the People/target audience (whom to Communicate), the Tools and Process (How to Communicate) and the Plan (strategic interventions). The consultative process ensured the stakeholders input and also enhanced their ownership for the Programme's Communications and Awareness Strategy.

By incorporating the consultative workshop's proceedings the strategy has been revised and circulated to all stakeholders. It will be finalized and printed by March 2008.

C.3.2.2 Motivate and facilitate selected academic / research institutions in the Indus Ecoregion to develop C & A action plan by incorporating the issues of the Indus Ecoregion

The following two academic / research institutions were selected for contributions to site-level communications and awareness plans:

Technical University of Berlin, Germany

Muhammad Husnain is a PhD student studying at the Institute of Landscape Architecture and Environmental Planning, Technical University of Berlin, Germany. He is working with Prof. Dr. Wolfgang Wende, head of the institute. Husnain is working on the 'Role of Mitigation Banking in Conservation of Biodiversity' and has approached WWF Pakistan to help him with his research. After consultation with the Indus for All Programme, Pakistan Wetlands Programme and WWF Management, it was decided that he should focus on Chotiari Reservoir

Mitigation banking is newly developed method to sustain the ecological resources and is usually a relatively large site where an ecological habitat is created or restored and this habitat will replace altered or degraded ecosystems from several nearby sites. Banking is one method of implementing

mitigation policies that has received considerable attention and interest recently. In USA, it is used to compensate for the loss of valuable functions of wetlands that contribute to a healthy environment. Mr. Husnain will be returning to Pakistan later in 2008 to start his research.

Oxford University, UK

After the successful implementation of a research collaboration last year where two M.Sc. students from Oxford University, UK carried out their research in PWP programme sites, the initiative between Oxford University, WWF Pakistan and Government College Lahore is being applied to Sindh. This programme is aimed at exposing Oxford students to the challenges and rewards of carrying out research in a developing country. The Indus for All Programme has therefore planned to accommodate two students in 2008 under the same programme. These students will focus on Keenjhar Lake and the following topics have been incorporated into the prospectus of the research programme:

- **Pollution and livelihoods:** industrial discharge from upper stream Kotri into the Kalri -Baghar feeder has supposedly affected the water quality of Keenjhar Lake which may have negatively affected the fish production of the lake. This research will use existing as well as fresh data to establish a link, if any, between degrading water quality and livelihood security of the resident communities.
- **Tourism and biodiversity:** the polluting effects of unplanned tourism in water bodies such as Keenjhar Lake has an unknown repression on the resident and migratory biodiversity. This study will use existing ecological assessment and socioeconomic data to establish correlations, if any between water-quality, disturbance and biodiversity richness at Keenjhar Lake. There will be strong element of Geographical Information System as part of the study.

The prospectus has been circulated within Oxford University and students have been given a deadline of March 2008 to apply.

C.3.2.5 Organize the launching ceremony of the Indus for All Programme

Having completed its 9-month inception (July – March 2007) and begun implementation activities, the Indus For All Programme held its launch on 29 August 2007 in Karachi. The formal initiation of the Programme and the website of Indus Eco-region Programme (<u>www.foreverindus.org</u>) was carried out by the chief guest, Mr. Ejaz Ahmad Qureshi, Chief Secretary Sindh. Those attending included Programme beneficiaries and other stakeholders from Thatta, Sanghar and Nawabshah communities.

The keynote address of the Chief Secretary Sindh assured, on behalf of the government of Sindh, full support to the Indus For All Programme, outlined the dire need for pragmatic actions to address poverty and livelihood issues, and emphasized the need for community involvement in local development projects. In the address of the Additional Chief Secretary (Dev), P&D Department, complementarities were pointed out between the Programme and Sindh Vision 2030 in the areas of poverty alleviation, forest management, environmental education and awareness, water management, and introduction of alternate energy technologies.



Image 17: Fred Smiet, First Secretary, Royal Netherlands Embassy Pakistan, speaking at the Launch Ceremony

Participants were presented with an extensive display and distribution of information materials and were delighted by renowned Wildlife artist Dr. Ahsan

Qureshi's art exhibition (painting of birds of Pakistan) as well as installations portraying the rich culture, natural resources and livelihoods at all four Programme sites. This ensured that the event did the minimum to enhance the Programme's visibility among the stakeholders and general public.

A day prior to the launching ceremony, a team of around 30 members from WWF-Pakistan, Government of Sindh, and media were taken to an exposure visit at Keti Bunder. During the visit, two wind energy units and a new school designed to serve 20 households, all newly established by the Programme, were inaugurated.

C.3.2.6 Develop, launch and maintain forever Indus Website

The website of the Indus Ecoregion, <u>www.foreverindus.org</u> was developed by WWF-Pakistan and formally launched during the launching ceremony of the Indus for All Programme on 29 August 2007.

The website aims to raise awareness about the Indus Ecoregion and the Indus Ecoregion Programme. The website is divided into two parts, the Indus Eco-region and the Indus For All Programme. Its concept is that it should go beyond any project and also include links to other web applications such as Decision Support Systems of the Indus Eco-region.

The website is also a platform for those wishing to be registered in the "Friends of Indus Forum" where they may advocate for conservation and livelihoods development within the Indus Eco-region. By the year end, the website had 12, 8503 hits which shows the keen interest of the web browser (see table 19).



Table 19: Usage Statistics for foreverindus.wwfpak.org

Summary Period: Last 12 Months Generated 20-Jan-2008 18:02 CST

	Summary by Month										
Month		Daily	Average			Monthly Totals					
WOITH	Hits	Files	Pages	Visits	Sites	KBytes	Visits	Pages	Files	Hits	
<u>Jan 2008</u>	857	662	86	44	1068	933754	887	1731	13256	17153	
<u>Dec 2007</u>	941	752	73	39	1308	1319114	1235	2276	23339	29198	
<u>Nov 2007</u>	1049	789	61	34	1335	1616413	1041	1838	23670	31485	
<u>Oct 2007</u>	655	529	21	15	713	741483	490	655	16406	20317	
<u>Sep 2007</u>	333	225	11	6	154	368229	201	338	6765	10014	
Aug 2007	569	185	19	7	62	255371	228	596	5742	17644	
<u>Jul 2007</u>	66	31	6	2	41	15787	69	200	975	2056	
<u>Jun 2007</u>	53	5	47	0	12	827	9	574	65	636	
Totals	Fotals				5250978	4160	8208	90218	128503		

C.3.2.7 Produce and disseminate quarterly newsletters

Exceeding the target of 3 newsletters, 4 quarterly issues of "*Indus Forever*" (Volume 1) have been produced in 2007 since an issue (Jan-Mar 2007) was also released during the Programme's Inception Phase (July 2006 – March 2007). This level of performance

was made possible by rapid concept development, editorial board establishment, and immediate testing and establishment of all composition, typesetting, printing and distribution procedures.

The newsletter "*Indus Forever*" has quickly become a branded product of the Programme. Published quarterly the newsletter aims to keep the stakeholders, other concerned organizations and individuals informed about the Indus Ecoregion Programme. The main segments of the newsletter include Editorial, Poverty-environment Watch, Policy Monitor, Programme highlights, glimpses from the Programme Implementation Units, Human Resource news and other news. The "other news" intends to highlight the contemporary conservation efforts in the Ecoregion made by other stakeholders.

The newsletter is widely circulated to all stakeholder organizations including government agencies, academia, NGOs, civil society organization and community-based organizations. It has also been



made available on websites of WWF – Pakistan and Indus Ecoregion Programme.

3.2.12 Conduct consultative workshop with media personnel

On 13 December 2007, the Indus for All Programme organized a workshop on environmental journalism for journalists of Sanghar district. The purpose of the workshop was to sensitize the journalists about the environmental issues and the significant role of media in highlighting those issues. A total of 32 journalists attended the workshop held at Darbar Hall, district Sanghar. The workshop attempted to develop a common understanding amongst the participants on what, how and when to report about the environment and natural resources. Through group discussions and brainstorming sessions the journalists identified environmental issues of the area and the Programme team helped them prioritize those issues. They also developed individual plans to highlight those issues in various given circumstances. For example, what would be their approach if they are facing hardships to visit any far-flung problem area to ascertain on-ground situation etc.

C.3.2.13 Arrange journalists exposure visit to Chotiari

On 12 December 2007 the Indus for All Programme organized an exposure visit for selected journalists of Sanghar district to the significant wetlands sites of the district including Chotiari Reservoir. The purpose of the visit was to sensitize journalists about the major environmental issues of the area through a hands-on experience and exposure. In this connection, the journalists were taken to Khorandi Lake at Deh Akro. The lake is a Ramsar Site and a natural habitat for Marsh crocodiles. A total of 23 journalists attended the exposure trip.



Image 20: Journalists Exposure Visit to one of a Ramsar Site in Sanghar District

The journalists were also taken to the Head Jamrao Canal (water channel diversion head) which is the starting point of Ranto Canal carrying water for Chotiari Reservoir. As the concluding point of the exposure trip, the journalists were taken on a boat ride through Chotiari Reservoir itself and visited selected villages there.

In the evening, a traditional gathering called "Mach Kachehri" was held at Baqaar, a village near the reservoir, where the journalists deliberated on site-specific environmental issues in an informal atmosphere. They also discussed the role of media in sensitizing the public about those issues. The Indus for All Programme staff facilitated the discussion.

C.3.2.15 Arrange journalists exposure visit to Keenjhar

An exposure visit to Keenjhar Lake was organized by WWF – Pakistan, Indus for All Programme, in collaboration with the local NGO Global & Development Welfare Organization (GWDO) on 9 January 2008 at the Fisheries Community Hall. A total of 20 participants from the local media, 3 GWDO participants and 8 individuals from the Programme attended the event. The basic objective was to promote environmental journalism and highlight the issues related to the local environment. The journalists were introduced to the Programme and were sensitized to the problems and issues related to Keenjhar Lake. They were also encouraged to promote environmental journalism in Thatta district.

C.3.2.17 Design, develop and disseminate fact sheets

A fact sheet was developed on the "status of Palla Fish in Sindh". This fact sheet presents information about the importance of Palla fisheries in Sindh and its migration through upstream Indus River. Major threats associated with Palla fisheries along with the historical trends in fish catch and future interventions to conserve this important fish type have also been discussed. The Programme has disseminated the fact sheet amongst the key stakeholders.

C.3.2.23 Sensitize resource-user groups through workshops in Chotiari

A workshop titled "Sensitization of Herdsmen at Chotiari in Livestock-Rangeland Management" was organized by Programme Implementation Unit Chotiari Reservoir in village Allah Dino Behan (Awad) district Sanghar on 12 November 2007. The workshop benefited 47 local herdsmen from 15 villages of the Programme area. The workshop aimed to sensitize resource-user groups (livestock herders) of Chotiari Wetlands Complex in livestock-rangeland management.

The workshop was divided into two major sessions. The first session was designed to cover different aspects of animal production and health. The resource person, Professor Habib Haider Laghari informed the farmers about the factors causing low productivity of animals such as unavailability of forages and legume grasses, malnutrition, inbreeding, frequent occurrence of infectious and parasitic diseases, delayed breeding and long calving intervals, role of middle man, improper vaccination and low standard of vaccines and non-professional personnel working for animal treatment. Remedies and curative measures were also suggested.

The second session "Rangeland Management" was designed with following outlines which were discussed thoroughly.

- □ Range Management (Definition, Types, Importance, Existing Condition, Causes and Effects of rangelands degradation).
- Grazing Management (Controlled Grazing "Rotational and Deferred")
- Range Improvement Techniques (Grazing Season, Fencing and Re-seeding)

Farmers were informed about the deleterious effects on rangelands caused by excessive grazing. The concept of stall feeding was also discussed at length.

C.3.2.25 Sensitize resource-user groups through workshops in Keenjhar

On 8 August 2007 a workshop was held in PIU Keenjhar Lake site office to discuss issues related to fisheries in Keenjhar. The workshop was facilitated by Dr. Rajab Memon and Mr. Aslam Jarwar including 6 other participants. Discussions were held regarding pressures on the fisheries trade. The participants claimed that increase in the population of adjacent villages has increased pressures on the resources. Water pollution was considered to be among the major reasons disturbing the ecosystem leading towards reduction of the fisheries production as well as other natural resources. Suggestions for the improvement of fish resources and alternative options of livelihoods at Keenjhar were made by the participants. A second workshop was held on 12 September 2007. A total of 21 individuals participated in the discussions and presentations made, especially Mr. Zakrio Katiyar, Mr Ramzan Ujjan, Mr. Allah Bachayo, Mr. Juman and Mr. Lal Bux actively participated.

C.3.2.27 Develop manual for environmental health and hygiene issue

A manual has been developed to enable the resource persons to facilitate the women's awareness workshops on environmental health and hygiene related issues. The manual is entirely in Urdu and carries simple and interactive sessions to enable rural women to understand environment; natural resources; ecosystem; poverty-environment linkages and health and hygiene related topics.

C.3.2.28 Sensitize local women to environmental health and hygiene issues at Chotiari

The Programme in collaboration with Chotiari Development Organization (CDO) Village Chotiari & Sindh Heath & Education Development Organization (SHEDO) Sanghar organized a day-long Workshop on Environmental Health and Hygiene in Village Chotiari, District Sanghar on 30 October 2007. The workshop was held at Government Primary School Sodho Khan Mallah. This workshop provided an opportunity for 57 rural women from villages of Chotiari, Phulel, Dogiryoon, Bagaar and Panehal to have an understanding and to be introduced to the basic concepts of natural resource management (NRM) in the area. Environmental health and hygiene related topics and role of women in community-based NRM were discussed through group discussions, brainstorming, and pictorial presentations.



Image 21: Women Awareness Workshop at Chotiari

C.3.2.29 Sensitize local women to environmental health and hygiene issues at Keti Bunder

A one-day women awareness workshop on "Environmental Health and Hygiene" was held on 8 November 2007 in Rural Health Centre Project Office Hall at Keti Bunder. About 31 women from Keti Bunder Village attended the workshop. Dr. Imtiaz Ali Khuwaja and Lady Health Visitor Ms. Shahnaz Soomro of Rural Health Project and two PIU staff facilitated the workshop sessions. The workshop aimed at enhancing the understanding of local women about natural resource issues and health and hygiene related problems in the area. Environmental health and hygiene related topics and role of women in community-based NRM were discussed through group discussions, brainstorming, and presentations.



Image 22: Local women attending the workshop in Keti Bunder

C.3.2.30 Sensitize local women to environmental health and hygiene issue at Keenjhar Lake

A workshop on environmental Health and Hygiene was held on Tuesday, 27 November 2007 in Khudhayon village, Jhampir. Dr. Shazia, Family Planning Officer, from the Population Welfare Department and Nazia Bano, Environmental Education Officer, Indus for All Programme conducted the workshop which was attended by 35 participants mostly comprising of house wives. The objectives of this workshop were to help local women understand local environment, natural resources and associated problems and threats. They were also provided with information about some key issues about personal and domestic health and hygiene and some simple ways to solve those issues. The workshop also provided them with ways and means to mitigate environmental problems and to manage natural resources. The women were made to realize and fulfil their role in natural resource management. Some of the modules delivered in this workshop were natural resources, importance of natural resources in our lives, diseases caused by poor hygiene conditions, domestic and personal hygiene in the light of Islam.

C.3.2.31 Sensitize local women to environmental health and hygiene issue at Pai Forest

In order to raise awareness amongst the local women about environmental health and hygiene related issues, a one-day workshop was held on 21 September 2007 at village Haji Kerio. Female Community Development Officer - Pai Forest facilitated the workshop sessions. Twenty-two participants attended the workshop including 12 women representatives from a local CBO named Aurat Development Organization and 10 women from adjacent villages. The activity resulted in enhanced awareness about the importance of healthy environment and better hygienic conditions in human life.



workshop in Pai Forest

C.3.2.36 Training Manual for Youth groups on environmental education and advocacy

A training manual has been developed to train youth groups in environmental education and advocacy methods. The manual contain modules such as "Understanding environment and natural

resources; Natural resource degradation and its impact on human life; Natural resource conservation; and Role of youth in natural resource conservation."

C.3.2.39 Youth greening activities at Keti Bunder

A youth greening activity was held in Jar Waro, Keti Bunder on 6 September 2007. 36 youth members comprising of 16 males, 12 females and a number of schoolchildren attended the event. The main objective of the youth greening activity was to sensitize youth groups about the importance of natural resources and their conservation and to create a sense of ownership towards the environment. The youth greening activity included mangrove plantation and their long term conservation. It is hoped that through this activity the youth can educate various members of their community about safeguarding the environment. The outcome of this activity was that the participants valued and realized the importance of natural resources and become part of practical efforts towards nature conservation.



Image 24: Youths sowing mangrove seedlings

C.3.2.41 Youth greening activities at Pai forest

A youth greening activity was organized on 2 December 2007 at villages Mari Alam and Mari Jalbani in Nawabshah. The aim was to sensitize youngsters regarding natural resource conservation and involvement of youth in conservation activities in the area. Two youth groups of the said villages conducted the activity. During the first half of the day, 1000 plants were planted in both villages and in the later half of the day, a cricket match was held between the two youth groups. Commentators reiterated the importance of forest and wildlife in their commentary during the match. Mass awareness was generated by the event as at least a few hundred spectators came to enjoy the event.



Image 25: Youth group at the youth greening activity

C.3.2.42 Develop master trainers' Training Manual

The sub-output, "development of Master Trainers' Training Manual" has been sub-contracted to Sindh Programme which is due to be accomplished by fourth quarter 2008. Other activities planned under this sub-output have been conducted, which include development of a MoU, meetings with the Sindh Education Department and the signing of the MoU with Sindh Education and Literacy Department planned in first quarter 2008.

C.3.2.43 Train Master Trainers in Environmental Education at Thatta

Under this sub-output only the identification of schoolteachers to be trained as master trainers was planned activity during the reporting period while the whole output is due to be accomplished by the end of 2008.

A total of 67 teachers have been initially identified from district Thatta to be nominated for the training of master trainers in environmental education. Those include 37 from Keti Bunder and 30 from the Keenjhar lake site of the Programme. The identified teachers would be further short-listed

at the time of final selection for the training. Moreover, a total of 59 schools and colleges have been identified in the district for the implementation of environmental education component of the Indus for All Programme. These include 24 from Keti Bunder and 35 from Keenjhar Lake site of the Programme.

The identification of schools and teachers from district Thatta has been made after several formal and informal meetings with EDO Education, ADOs Education, Principals, Head teachers, and the respective school administrations.

C.3.2.44 Train Master Trainers in Environmental Education at Sanghar

Under this sub-output only the identification of schoolteachers to be trained as master trainers was planned activity during the reporting period while the whole output is due to be accomplished by the end third quarter 2008.

An official nomination of 30 schools including 11 Government High Schools, 15 Government Primary Schools and 4 Private Schools for Environmental Education (EE) activities and 16 teachers to be trained as EE Master Trainers have been received from Executive District Officer Education Sanghar. In order to present the programme component of EE and develop an understanding to select the schools as well the nomination of teachers to be trained as Master Trainer from the targeted areas, more than seven formal and informal meetings and telephonic conversations were made with concerned government officials. The informal individual meetings with all nominated teachers were conducted to asses their willingness and motivation to be trained and work as master trainers in environmental education.

C.3.2.45 Train Master Trainers in Environmental Education at Nawabshah

Under this sub-output only the identification of schoolteachers to be trained as master trainers was planned activity during the reporting period while the whole output is due to be accomplished by the end of 2008.

The data of 1 Government High School, 1 Government Middle School and 14 Government Primary Schools have been acquired. 34 teachers have been assessed and their profiles have been developed. Two meetings were held with Executive District Officer Education, Nawabshah, and one meeting was held with District Education Officer (Elementary), Nawabshah. In order to present the programme component of environmental education and develop an understanding to select schools along with nominating teachers to be trained as Master Trainers from the targeted area, a number of informal meetings, telephonic conversations and written correspondence has been on going with concerned government officials. The data of the remaining schools, profiles of remaining teachers and their final selection will be complete in January 2008.

C.3.2.52 Conduct Nature Study Camps at Thatta

The Indus for All Programme sponsored three schoolchildren from District Thatta to participate in the National Children Mountain Conservation Meet 2007. The event was organized by Adventure Foundation Pakistan in Kaghan Valley during 1 to10 July 2007.

Nomination of students was made by EDO Education Thatta from Governement High School, Jaffer Helayo and Government Higher Secondary School, Jhampir. Besides having the unique experience of nature camping and meeting children from all parts of the country, the event proved to be an effective source for the children to demonstrate and enhance their skills to interact with natural environment.

C.3.2.55 Celebrate significant Environment days in schools at Thatta

To mark the World Habitat Day, the Programme Management Unit at Keti Bunder organised a seminar on Wednesday, 3 October 2007. The theme of the seminar was "Keti Bunder! A Safe City is a Just City" focused on raising awareness of the students, teachers and general public about environmental degradation in Keti Bunder.

About 150 participants attended the event. Those included both male and female community members, students, teachers, local representatives of Union and Taluka Councils of Keti Bunder, head of the villages, social activists, politicians, male and female youth groups, religious leaders and government officials.



Image 26: Young girls planting a tree during the world environment day celebrations

Another environmental awareness programme was organised with Government High School, Jhampir at Fish Seed Hatchery, Chilya on Tuesday, 6 November 2007. A total of 76 participants attended the programme including 29 students accompanied by 4 teachers, along with 7 youth representatives, 2 officials from the fisheries department and 3 WWF- P staff members. The aim of this activity was to create awareness about the environment by involving the participants in a plantation activity. Most importantly the teachers and students were sensitized about the environment of Keenjhar Lake. The day was considered a success since 300 trees were planted by the students along with motivating the youths of the area and students to form nature clubs. The students were also introduced to a fish hatchery which was considered as a novel experience for them.

C.3.2.56 Celebrate significant Environment days in schools at Sanghar

Keeping in mind the importance of Environmental Days Celebrations to raise sensitization towards environmental issues and provide opportunities for individuals and community to focus on their local environmental problems, Chotiari Reservoir team in collaboration with EXPLORER Social Research and Development Organization organized an Environmental Awareness Programme on 27 November 2007 with an active involvement of School Community.

A large group of around 350 students and teachers from 7 Government and Private Schools around Chotiari Reservoir showed their efforts and interest together to make this event an enormous and effective



Image 27: Students at the world environment day, Sanghar

environmental improvement initiative. During this one day activity, a nature walk was organized through Chotiari Reservoir embankment to observe nature and bird watch. Apart from this 6 tableau's and skit performances by 4 different schools, highlighted the importance of environment, 8 speeches on the theme "Environment Poverty Relationship" to create an understanding and sensitization towards environmental threats in local and global perspectives and 8 singing performances on cultural songs were performed.

In addition to the above activity an in-house seminar on World Environment Day, 2007 was organized by Dhartee Dost Sanghat (an NGO) at the Conference Hall, Site Office Chotiari. The seminar was chaired by Taluka Nazim (Sub Divisional Administrator) Sanghar and the speakers

comprised of individuals from existing NGOs/CBOs representatives, college professors /lecturers, media representatives and Chotiari PIU representatives. On the same day a tree plantation activity at Government Pir Shaheed Syed Sibghatullah Shah (PSSSS) Degree Collage was also carried out to mark the World Environment Day, 2007, trees were planted in the compound of college by PMU members with college management.

C.3.2.57 Celebrate significant Environment days in schools at Nawabshah

The PIU Nawabshah organized an awareness-raising programme on "Melting Ice: A hot topic", the theme for World Environment Day-2007, celebrated on 5 June 2007 with the joint efforts of Volunteers of Society for Social Harmonic Awareness for Peace and Empowerment (SHAPE) Nawabshah. 122 participants attended this participants programme. The represented local government, academia, and community members and schools. Students from Al Mustafa Public School and Foundation Public School presented skits on the global warming. This programme was helpful in creating awareness among local stakeholders about the harmful effects of global warming and climate change.



Image 28: One of the speakers at World Environment Day 2007 celebrations at Nawabshah

Speaking on the occasion, stakeholders raised their concerns over unfavourable climate changes caused by global warming. The event was covered by the local print and electronic media which helped widely disseminate the message of the World Environment Day 2007.

C.3.2.58 Promote sermons on conservation and Islam at Chotiari

A Consultative Workshop with Religious Leaders on "Conservation and Islam" was held at PIU Office Chotiari Reservoir Sanghar on 18 December 2007. This workshop was held to incorporate Islamic teachings on conservation of environment in sermons of Mosque Imams and other religious leaders. This will positively support increased sensitization towards the environment and the attitudes of people. A group of 17 religious leaders from different villages of Chotiari Wetland Complex of different Schools of Thought participated in the workshop with their interest to make the workshop an interactive one. Naveed Soomro from the Indus for All Programme and Mr. Nawaz Kunbhar, a local resource person facilitated the workshop. During the workshop, the Indus for All Programme was introduced to create an understanding of its objectives. The participants were provided with the book "Conservation and Islam". The main objective and outcome of the workshop was to provide a clear understanding of the Indus for All Programme and to reinforce the importance of nature conservation and protection. The Imams realized their significant role in sensitizing the public about wise use of natural resources. An action plan was developed by the religious leaders and the Indus for All team to deliver sermons on "Conservation and Islam".

C.3.2.59 Promote sermons on conservation and Islam at Keti Bunder

A workshop for religious leaders was organized by the Programme Implementation Unit (PIU), Keti Bunder on 27 December 2007 at the CCB Community Hall of Delta Development Organization, Bagan. A total of 21 religious leaders from different villages near Keti Bunder attended the workshop. The basic purpose of the Workshop was to sensitize and mobilize the religious leaders for dissemination of conservation messages through religious sermons. The Ulema fraternity was sensitized about the significance of their role in this regard.

The participants of the workshop were from different backgrounds. During the workshop, the religious leaders discussed the way through which they can create awareness about environment and natural resource conservation. The participants ensured their cooperation in sensitizing the masses about conservation through delivering sermons using the relevant references from the Quran and Hadith. In this connection, copies of a book "Conservation and Islam" (in Urdu) published by WWF-P was also distributed amongst the participants. The participants also recommended following points to ensure religious fraternity's participation in dissemination of conservation message:

- Government and NGOs should impart the modern technical knowledge to the religious fraternity in an appropriate way using the local language;
- In order to ensure the active participation of religious community in dissemination of conservation message, a committee should be formed with adequate representation of religious leaders;
- A magazine focussing solely on Islam and conservation should be launched in the local language catering the needs of common literate people and religious community; and
- □ Forums like workshops, seminars emphasizing the involvement of religious leaders in awareness raising activities should be held more often.



Image 29: Ulemas at Keti Bunder workshop

C.3.2.60 Promote sermons on conservation and Islam at Keenjhar

A consultative meeting with the religious leaders of Keenjhar was held at the Indus for All Programme, Thatta office on 16 December 2007. The purpose of the meeting was to promote sermons on "Islam and Conservation" at Keenjhar. Mr. Mulla Mohammad Khan from Sonmiani facilitated the meeting in a manner as to sensitize them to promote sermons on conservation in the light of Islam in their area. The specific objectives of the sermon were that the religious leaders/scholars of the area clearly understand the Indus for All Programme and its consistency with the teachings of Islam. At the end of the meeting the religious representatives agreed to educate and help prevent further degradation of the environment.

C.3.2.61 Promote sermons on conservation and Islam at Pai forest

This workshop was held at Anwar-e-Mustafa Madrisa in village Nagar Chandio at Pai Forest, 12 December 2007. Apart from 9 learned religious leaders who hold the titles of Hafiz, Madriss, Mublikh, Pesh-Amam, and Aalim, other younger religious students attended the workshop. Complete agreement was found among both sides to carry out awareness activities regarding natural conservation. A plan was developed by religious leaders to deliver sermons on conservation in their relevant villages around Pai Forest. Seven sermons will be delivered by religious



Image 30: Ulemas at Keenjhar workshop



Image 31: A religious leader giving a sermon on conservation and Islam

leaders in January and February 2008. The involvement of religious leaders regarding natural conservation has added much credibility of the local communities on the issue. Religious leaders will also invite WWF - P officials during their sermons to deliver presentations on natural conservation.

C.3.2.72 Design, develop and disseminate posters/wall-charts

Two posters have been developed in the year 2007; one on "How do we benefit from Wetlands" and another poster calendar on the flowering plants of the Indus ecoregion. Both the posters were disseminated to the relevant government offices, civil society and community-based organizations. The posters were also displayed at prominent public places at the Programme sites and also available on www.foreverindus.org.

C.3.2.73 Design, develop and disseminate brochures

Nine brochures have been developed in the year 2007. These include: 1) Introduction to the Indus for All Programme (in Sindhi language); 2) Chotiari Wetlands Complex; 3) Keti Bunder; 4) Keenjhar Lake; 5) Pai Forest; 6) Fisheries resources of Keenjhar Lake; 7) Keti Bunder: Disaster, Rescue and Rehabilitation; 8) Indus delta: a vanishing ecosystem and 9) Birds of Keenjhar. The brochures were also distributed to the relevant government offices, civil society and community-based organizations. All the brochures are available online on www.foreverindus.org.

C.3.2.74 Develop promotional material

A variety of promotional material was developed and distributed during various occasions such as Steering Committee Meetings, Programme launching ceremony and religious and cultural festivals and other public gatherings. Promotional material developed under C.3.2.74 included stickers, ball points, greeting cards, and year planners. Moreover, the Programme sponsored a special edition of the monthly magazine *"Ferozan"*; the September 2007 Issue of the magazine specifically covered the Indus Ecoregion. A promotional advertisement on the Programme was published on the rear page of another monthly magazine, i.e. *"Wildlife and Environment"*. Both the publications collectively had a circulation of more than 10,000 copies.



#	Description of Material	Qty
1.	Ball Points	400
2.	Stickers	8000
3.	Greeting Cards	4000
4.	Special issue of the Monthly Urdu Magezine "Ferozan"	5000
5.	Promotional advertisement on the rear page of the quarterly magazine "Wildlife and Environment"	3000
6.	Year Planner 2008	1000

Table 20: List of Promotional Material

Table 21: Status of Output C.3.2 (Awareness raising programme for at least 8 social groups conducted by project end)

			ec 2007		
L.F. / O.B.S Code	Sub Outputs	Planned Units	Delivered Units	Balance Units	Remarks
C.3.2.1	Revise the Communication and Awareness Strategy for the Indus Ecoregion	1	0	1	This sub output has been delayed and will be completed in Q1 CY08
C.3.2.2	Motivate and facilitate selected academic / research institutions in the Indus Ecoregion to develop C & A action plan by incorporating the issues of the Indus Ecoregion	3	0	3	This sub output has been initiated before reporting period
C.3.2.5	Organize the launching ceremony of the Indus for All Programme	1	1	0	Complete
C.3.2.6	Develop, launch and maintain forever Indus Website	1	1	0	Complete
C.3.2.7	Produce and disseminate quarterly newsletters	3	3	0	Target for 2007 met
C.3.2.12	Conduct consultative workshop with media personnel	1	1	0	Target for 2007 met
C.3.2.13	Arrange journalists exposure visit to Chotiari	0	1	0	Completed ahead of time
C.3.2.15	Arrange journalists exposure visit to Keenjhar Lake	1	1	0	Target for 2007 met
C.3.2.17	Design, develop and disseminate fact sheets	1	1	0	Target for 2007 met
C.3.2.23	Sensitize resource-user groups through workshops in Chotiari	1	1	0	Target for 2007 met
C.3.2.25	Sensitize resource-user groups through workshops in Keenjhar	1	1	0	Target for 2007 met
C.3.2.27	Develop manual for environmental health and hygiene issue	1	1	0	Complete
C.3.2.28	Sensitize local women to environmental health and hygiene issue at Chotiari	1	1	0	Target for 2007 met
C.3.2.29	Sensitize local women to environmental health and hygiene issue at Keti Bunder	1	1	0	Target for 2007 met
C.3.2.30	Sensitize local women to environmental health and hygiene issue at Keenjhar Lake	1	1	0	Target for 2007 met

				Γ	
	Sensitize local women to				
C.3.2.31	environmental health and	1	1	0	Target for 2007 met
01012101	hygiene issue at Pai			Ũ	
	Forest				
	Training Manual for Youth				
C.3.2.36	groups on environmental	1	1	0	Complete
	education and advocacy				
C.3.2.39	Youth greening activities	1	1	0	Target for 2007 met
	at Keti Bunder				<u> </u>
C.3.2.41	Youth greening activities at Pai forest	1	1	0	Target for 2007 met
	Master Trainers' Training				
C.3.2.42	Manual	1	1	0	Target for 2007 met
	Train master trainers in				
C.3.2.43	Environmental Education	2	0	2	As planned, sub output will
01012170	at Thatta	-	5		be completed in Q4 CY08
	Train master trainers in				
C.3.2.44	Environmental Education	1	0	1	As planned, sub output will
	at Sanghar	-	-		be completed in Q3 CY08
C.3.2.45	Train master trainers in	1	0	1	As planned, sub output will
6.3.2.45	Environmental Education	1	0		be completed in Q4 CY08
	at Nawabshah				
C.3.2.52	Conduct Nature Study	0	1	0	Completed ahead of time
0.3.2.32	Camps at Thatta	U	1	U	
	Celebrate significant				
C.3.2.55	Environment days in	2	2	0	Target for 2007 met
	schools at Thatta				
	Celebrate significant				
C.3.2.56	Environment days in	1	1	0	Target for 2007 met
	schools at Sanghar				
0 0 0 5-	Celebrate significant	4	4	_	Tana (0007)
C.3.2.57	Environment days in	1	1	0	Target for 2007 met
	schools at Nawabshah				
C.3.2.58	Promote sermons on	1	1	0	Target for 2007 met
U.J.Z.J Ö	conservation and Islam at Chotiari	I	I	U	Target for 2007 met
	D (
C.3.2.59	Promote sermons on conservation and Islam at	1	1	0	Target for 2007 met
0.0.2.09	Keti Bunder	I	I	0	
	Promote sermons on			+	
C.3.2.60	conservation and Islam at	1	1	0	Target for 2007 met
	Keenjhar Lake			Ŭ	
	Promote sermons on				
C.3.2.61	conservation and Islam at	1	1	0	Target for 2007 met
	Pai Forest				
	Design, develop and				
C.3.2.72	disseminate posters/wall-	1	2	0	Target for 2007 met
	charts			_	
C.3.2.73	Design, develop and	1	9	0	Target for 2007 exceeded
0.0.2.10	disseminate brochures	I	3	Ŭ	
	Develop promotional				
C.3.2.74	material	1	1	0	Target for 2007 met

3.4 Output C.3.3 Traditional communication methods promoted by arranging environmental theatre and puppetry festivals

Traditional communication methods are the local avenues for information sharing or dissemination of messages among general public. These may include religious ceremonies, local festivals, exhibitions and shows where a large number of people gather and interact. Puppetry shows and interactive theatre programmes have been used during these festivals to raise public awareness regarding the Indus Ecoregion and associated natural resource issues.

C 3.3.1 Support local festivals to disseminate messages on conservation through theatre and puppetry shows at Chotiari

To mark the World Environment Day - 2007, the PIU Sanghar organized an interactive theatre on the embankment of Chotiari Reservoir on 5 June 2007. Over 2000 spectators including a large number of local community members, district and local government officials and representatives of various NGOs and media personnel attended the event. The theatre performers belonged to the "Jagartaa Group" of Sindh Development Society, a local NGO working on environmental awareness.



Image 33: interactive Theatre Performance at Chotiari

The event helped highlight biodiversity issues and the negative effects of natural resources depletion on the

livelihoods of the local people. The event was covered by print and electronic media. This includes news bulletins and articles, in addition to a 15-minute documentary on *Indus TV*, a national news channel.

C 3.3.2 Support local festivals to disseminate messages on conservation through theatre and puppetry shows at Keti Bunder

On 23 November 2007 the Programme Implementation Unit Keti Bunder organized a theatre performance in a local "Bukhari Baba" festival. More than 5,000 individuals from around Keti Bunder attended the festival. The theme of the theatre performance was "Save Nature – Develop Yourself". Famous local artists also performed skits and short plays designed to raise awareness about the theme. The famous local comedy artist Mr. Zulfi Shah also performed on the day. Students from various boys and girls schools also attended the festival.

C 3.3.4 Support local festivals to disseminate messages on conservation through theatre and puppetry shows at Pai Forest

On 28 November 2007 Nawabshah organized a Puppet show and interactive theatre during a local festival "*Shaheed Jiyo Jang Badshah*" in Sakrand Town near Pai forest. The theater was organized with the support of volunteers of local CBOs. About 2000 individuals participated from different villages around the Pai forest. The theme of the Puppet show was "Hunting and Cutting of Forest" and the theme for interactive theatre was



Image 34: The spectators of the interactive

"Dependency on Natural Resources and melancholy of local communities and the search for alternative livelihoods". The famous folk musician Mr. Sodho Laghari was invited to perform Sufi folk songs that not only entertained the guests but also conveyed the message of harmonious life through folk songs.

Table 22: Status of Output C.3.3 (Traditional communication methods promoted by arranging environmental theatre and puppetry festivals)

· ·		Apr-De	ec 2007		
L.F. / O.B.S Code	Sub Outputs	Planned Units	Delivered Units	Balance Units	Remarks
C.3.3.1	Support local festivals to disseminate messages on conservation through theatre and puppetry shows at Chotiari	0	1	0	Completed ahead of time
C.3.3.2	Support local festivals to disseminate messages on conservation through theatre and puppetry shows at Keti Bunder	1	1	0	Target for 2007 met
C.3.3.4	Support local festivals to disseminate messages on conservation through theatre and puppetry shows at Pai Forest	1	1	0	Target for 2007 met

3.5 Output C.3.4 Train local environmental educationists on the job training in Indus for All Programme

In order to carry out environmental education and communication related activities in the Ecoregion in the long run, the Programme envisages developing a cadre of trained professional through onthe-job trainings and skill enhancement. Keeping in view the multi-disciplinary nature of environmental education and behavioural change communication initiatives the Programme intends to cater a team of diverse professionals to be part of the environmental education and communication component of the Programme.

C.3.4.1 Hire, train and mobilize environmental education and communication experts through on the job trainings

The following persons have been hired under the Communication and Environment Education component of Indus for All Programme, reporting to Manager Environment Education. The Communication officer and Graphic designer are based at Programme Management Unit (PMU) Karachi and four Environment Education Officers based one each at Programme Implementation Units (PIU). On-the-job training of the hired personnel is in progress, in addition to their participation in 3-day "Challenge Leadership Workshop" and other events mentioned their individual progress reports.

Name	Designation	Date of Joining
Abdul Karim Gabol	Communication Officer	April 2007
Nida Shams	Graphic Designer	July 2007
Naveed Soomro	Environmental Education Officer-Chotiari	May 2007
Noushaba Milkani	Environmental Education Officer- Pai	May 2007
Akhtar Samoo		March 2007
(replaced Ms. Milkani)		
Nazia Bano	Environmental Education Officer-Keenjhar	May 2007
Deewan Hari Das	Environmental Education Officer- Keti Bunder	May 2007

Table 23: Names and dates of individuals hired

Table 24: Status of Output C.3.4 (Train local environmental educationists on the job training in Indus for All Programme)

		Apr-D	Apr-Dec 2007		
L.F. / O.B.S Code	Sub Outputs	Planned Units	Delivered Units	Balance Units	Remarks
C.3.4.1	Hire, train and mobilize local environmental educationists and communication experts for programme implementation	54	44	10	Units refer to man months. Target for 2007 met

Case Study 3: The Indus Ecoregion through the eyes of wildlife artists

Background

The Indus Eco-region covers a diverse array of habitats from the infamous coastal town of Keti Bunder, where the Programme has one of its four site offices, running up the Indus River where it passes Keenjhar Lake and Pai Forest, and finally ending near Chotiari Reservoir in Sanghar District.

The habitat variety itself ensures a rich diversity of flora and fauna, one the criteria used when selecting an Ecoregion. There are many floral endemics in the Indus Ecoregion and a few endemic mammal species such as the Indus Blind Dolphin. There are no true endemic bird species to the Ecoregion or to Pakistan for that matter. There are, however, a few birds that are sub-species or have their strong hold in the region, such as the Sindh Golden-backed Woodpecker.



WWF uses several mediums as part of its environmental awareness outreach to promote biodiversity in Pakistan. The Indus for All Programme

also employs an array of artists for this purpose. In fact, the Indus for All Programme hopes to excel in its awareness education outreach programme of which a large proportion of the budget is allocated.

To ensure that publications are of the highest quality and that all materials are helpfully referenced and cited, the programme has engaged three artists to prepare illustrations of flora and fauna and diagrams of people and livelihoods. Experience has shown that this investment into Pakistani artists over the long-term can yield benefits beyond simply the paintings. Usually as the artist improves his or her work, interest in the subject and project increases which in turn leads to better quality work that can ultimately be used in galleries and exhibitions. Additionally, being able to develop good quality paintings allows the programme to promote flagship species through people's natural interest in their local species.

Because the artists are often nature lovers at heart, they do not charge WWF or the programme exorbitant prices that their painting may otherwise fetch. Their satisfaction comes from seeing their

work being distributed across the country and sometimes across the globe. Their commitment is in effect a testimony of the Programme's success in harnessing human skills towards the overall conservation objectives of the Indus Ecoregion.

The artists

Ahsan Qureshi

The first artist that the Indus for All Programme engaged is Dr. Ahsan Qureshi who is an old friend of WWF Pakistan. Hailing from Abbottabad, Dr. Ahsan, a professional medical doctor, has been involved in preparing illustrations of flora and fauna for various NGOs for several years. Being a hunter himself, his attention to detail has earned him fame across the



Image 36: Dr. Ahsan Qureshi & Chief Secretary, Government of Sindh at the launch ceremony of the Indus for All Programme

globe with his paintings being sold in UK and Pakistan. Dr. Ahsan's specialty is in game birds such as pheasants, quail and ducks which coincides with his love for shooting. During the formal launch ceremony of the Indus for All Programme in Karachi on 29 August 2007, Dr. Ahsan exhibited over 40 paintings, decorating the hall with a diversity of wildlife that had probably never been seen at such a ceremony.

Dr. Ahsan's paintings sell from up to USD 600 - 1500 abroad. However, due to his commitment to conservation and his desire to give something back to nature, he rarely charges the programme more than the cost of the painting material.

Ismail Mehdi

A resident of Sanghar, one of the sites of the Indus for All Programme, this painter is a student of lqbal Mehdi, well known for his large murals. Ismail focused on portraits, landscapes and still life before being introduced to the Programme where he was encouraged to try his hand at birds and animals. His initial attempts were challenging and the programme staff had to guide him towards improving his skills. However, on his second attempt he improved dramatically. Although his income as a local teacher is hardly enough to support his large family, his love for painting doesn't stop him from spending his time painting illustrations for the Programme.

At present, Ismail is working on a series of bird illustration for a bird watching guide for the Indus Ecoregion. Through his association with Indus for All Programme, Ismail has widened his scope of work and in return the Programme has benefited from the dedicated artist in the form of illustrations for its environmental awareness outreach.



Image 37: Ismail Mehdi painting

Maryam Khan

Maryam is the latest addition to the team of artists that the Indus for All Programme has engaged. Maryam has been a special person ever since she lost her hearing at the age of two. This has far from stopped her excelling in life and pursuing a career as an artist and illustrator. With quite a few publications to her credit already (as well as many letters of admiration) the Programme is lucky to have secured her commitment to prepare illustrations for awareness material. Initially the Programme requested her to prepare some bird illustrations; however, since her strength seems to lie in preparing illustrations for teaching publications, the programme will utilize her skills for some of its work in publications for school outreach activities.

Summary

Through the work of these artists the Indus for All Programme hopes to encourage the skills of Pakistani artists so that they can contribute to the conservation interventions of the future. There are many artists from different social backgrounds in Pakistan but due to a certain stigma that is attached with the profession in the country (added to the fact that few artists ever become rich from their paintings) very few get exposure or the credit that they deserve. Through the Indus for All Programme, it is certain that the work of these artists will help the team in preparing original awareness material of the highest standard. It is also hoped that the artists will nurture their love for wildlife and use their skills to promote conservation and the forever Indus vision in the years to come.

By: Rab Nawaz, Natural Resource Management Coordinator, Indus for All Programme

PROGRAMME OBJECTIVE D

Improved alignment and collaboration for stakeholder interventions.

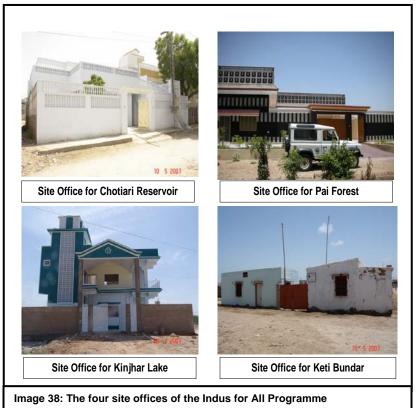
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Outcome D.1 Institutional framework in place that enables effective interaction and coordinated implementation amongst stakeholders' projects/ programme

4.1 Output D.1.1 Site coordination and advisory committees established and active for four sites

Sub output D.1.1.1 - D.1.1.5 District Coordination and Advisory Committees Established and Active

Several meetings were held with the District Coordination Officers (DCOs) of each of the three districts to establish a strong working relationship with all the DCOs. During these meetings, the programme was introduced and the role of the District Administration programme in implementation was elaborated that led to discussion on the rationale, role and functions of the **District Coordination Committees** (DCCs). Draft ToRs and Procedures were Operational developed by the Indus for All Programme that were finalized after several meetings with the DCOs. All the DCCs have been established and the first quarterly meeting of each DCC has been held. As the DCCs were formed late, especially in Thatta, a second set of meetings have not been held in 2007, but are planned for Quarter 1 of 2008. Originally, it



was planned that four committees would be established, one for each site. However, since the Local Government functions at the District level, it was decided that these committees should also function at the district scale. Hence, these committees are now renamed as District Coordination Committees (DCCs) that have replaced the previous terminology – Site Coordination & Advisory Committees.

DCC	Date of Notification	Dates of 1 st Quarterly Meetings
Nawabshah	20-08-2007	11-09-2007
Sanghar	07-08-2007	29-09-2007
Thatta	10-10-2007	14-11-2007

Table 25: Dates of DCC notification and 1st Quarterly meetings

Table 26: Status of Output D.1.1 (District Coordination Committees Established and Active)

		Apr-D	ec 2007		
L.F. / O.B.S Code	Sub Outputs	Planned Units	Delivered Units	Balance Units	Remarks
D 1.1.1	DCCs established	4	3	0	Complete (Initially 4 SCACs were planned – 1 at each site. 3DCCs were formed – 1 at each district)
D 1.1.2	DCC Meetings Chotiari	2	1	1	planned for Q1 CY08
D.1.1.3	DCC Meetings Keti Bunder	2	1	1	planned for Q1 CY08
D.1.1.4	DCC Meetings Keenjhar	2	1	1	planned for Q1 CY08
D.1.1.5	DCC Meetings Pai Forest	2	1	1	planned for Q1 CY08

Outcome D.2 Strategic guidance to the Indus for All Programme ensured and post-project implementation strategy developed as a basis for Phase II proposal

4.2 Output D.2.1 Strategic guidance to the Indus for All Programme ensured and post-project implementation strategy developed as a basis for phase II proposal.

D.2.1.1 Indus Ecoregion Steering Committee (IESC) meetings conducted

As per the work plan for 2007, the second and third meetings of the IESC were held on 12 April, 2007 and 20 November, 2007, respectively. The very first meeting of the Steering Committee was held even before the Indus for All Programme was approved and therefore it is not included in this report. Both the meetings were well attended with 80% attendance at the second meeting and 80% attendance at the third meeting. All the proposals and recommendations made to the IESC were approved. Key decisions from both meetings are summarized in Table 27:

2 nd Meeting (12-04-07)	3 rd Meeting (20-11-07)
 Composition and ToRs of the Sub- Committee of IESC were approved The Sub-Committee was authorized to review the 5-year Indus for All Logframe and Indicators and the 50-year Logframe and Indicators and submit recommendations Both the first and five year work plans for the Indus for All Programme were approved Representatives from UNDP- Small Grants Programme, Hyderabad and the Federal Planning Commission were approved as members to the IESC 	 5-year Indus for All Logframe and Indicators were approved The 2nd year (2008) work plan for the Indus for All Programme was approved Sindh Irrigation & Drainage Authority replaced the International Water Management Institute (IWMI) as member IESC The Composition of a Partnership Fund Technical Committee was approved

Table 27: Summary of Key Decisions at the IESC Meetings

D.2.1.2 IESC sub-committee meetings

The Sub-Committee of the Indus Ecoregion Steering Committee was notified in July 2007 under the Chairmanship of the Secretary, Forests & Wildlife, Government of Sindh and held two meetings since the notification. Held on the 21 August, 2007, there was 75 per cent attendance at the first meeting. On the request of the Chair of the Sub-Committee, the second meeting was held ahead of schedule on 10 October, 2007 and there was 90 per cent attendance at the meeting. Key decisions from both meetings are summarized in Table 28:

1 st Meeting (21-08-07)	2 nd Meeting (10-10-07)
 The Indus for All Programme will revise the 5-year Logframe as per the recommendations of members and present for review at the second meeting The Indus for All Programme will carry out a comparative analysis of the Sindh Vision 2030 and the Indus Ecoregion Programme documents To facilitate progress towards the 50- year Indus Ecoregion Conservation Plan, WWF-Pakistan will request for revision of draft Institutional Action Plan and development of new plans for those departments that do not have a plan 	 The Sub-Committee recommended replacement of IWMI's membership in IESC with the Sindh Irrigation and Drainage Authority for approval at the next meeting of the IESC. The Sub-Committee recommended and endorsed the Indus for All Programme Logframe for approval at the next meeting of the IESC. The Sub-Committee recommended and endorsed the Indus for All Programme Operational Plan 2008 for approval at the next meeting of the IESC. The Sub-Committee recommended and endorsed the Indus for All Programme Operational Plan 2008 for approval at the next meeting of the IESC. The Sub-Committee recommended and endorsed the list of members for the Partnership Fund Committee for approval at the next meeting of the IESC.

D.2.1.3 Programme Steering Committee exposure visit

As part of WWF-Pakistan's commitment towards capacity building of partners and stakeholders under the Indus for All Programme, two exposure trips were carried out, one to India and the other to Nepal. The purpose of these exposure trips was to provide IESC members and other stakeholders a first-hand experience of forest and wildlife management issues in India and Nepal. Both the visits provided the visitors opportunities for understanding the various approaches and institutional mechanisms that support forest and wildlife management strategies in these nations. Details of each trip are summarized in Table 29.

Table 29: Particulars of the Exposure Trips to India and Nepal					
Particulars	India	Nepal			
Dates	28 Nov- 5 Dec, 2007	6-13 Dec, 2007			
Visitors	 Secretary Forest and Wildlife, Govt of Sindh Allah Bux Kalhoro – Director General, Coastal Development Authority Muhammad Siddique Memon – Secretary Fisheries and Livestock Dr. Ghulam Akbar, Director, Indus for All Programme Rab Nawaz, NRM Coordinator, Indus for All Programme Usama Anwer, Site Manager, Indus for All Programme 	 Mr. Ghulam Sarwar Khero, Additional Chief Secretary, Government of Sindh Mr. Shamsul Haq Memon Coastal Development Authority Mr. Shahabuddin Memon, Chief Agriculture, P&D Department, Government of Sindh Mr. Abdul Razaque Qureshi, District Coordination Officer Nawabshah Mr. Mohammad Usman Panhanwar, District Coordination Officer Thatta Mr. Hussain Bux Bhagat Conservator, Sindh Wildlife Department Mr. Ghulam Qadir Shah Indus Ecoregion Coordinator, WWF- Pakistan Mr. Ghulam Mustafa Talpur Programme Coordinator Indus for All Programme 			
Places	 Wildlife Institute of India, Derhadun Indian Forest Institute, India. Corbett National Park WWF – India's initiatives for communities of Corbett National Park. WWF – India Head Quarters, New Delhi. Environmental and Cultural hotspots in Agra and Delhi 	 WWF Nepal Ecoregion Conservation Office Offices of Forest and Wildlife Officials Livelihood Initiatives of ICIMOD Community-based Initiatives at Khata Biological Corridor Shankar Nagar Community Forest Chitwan National Park Crocodile Breeding Center, Kasara 			

Table 29: Particulars of the Exposure Trips to India and Nepal

 Table 30: Status of Output D.2.1 (IESC and Sub-Committee of IESC for Indus for All Programme active and post-project implementation strategy developed)

		Apr-Dec 2007			
L.F. / O.B.S Code	Sub Outputs	Planned Units	Delivered Units	Balance Units	Remarks
D.2.1.1	IESC Meetings	2	2	0	Target for 2007 met
D.2.1.2	Sub-Committee of IESC Meetings	2	2	0	Target for 2007 met (1 meeting held ahead of schedule)
D.2.1.3	IESC Exposure Visits	2	2	0	Target for 2007 met (1 visit held ahead of schedule)

Outcome D.3 Planning and coordination carried out on a regular basis

4.3 Sub output D.3.1.1 Quarterly planning and networking of the programme

Programme Review Meetings (PRM) have been very helpful in assessing the quarterly performance and quarterly planning of the programme. To ensure proper follow-up on the decisions taken during PRMs, monthly programme management meetings are held between Programme Management Team and Site Managers. There have been three PRM meetings held so far; the dates are as follows: 5 July 2007, 2 October 2007 and 11 January 2008. A summary of key decisions taken at the three meetings is provided in Table 31 below.

1 st PRM (5 July 2007)	2 nd PRM (2 October 2007)	3 rd PRM (11 January 2008)
 To ensure the development of well coordinated work plans and quality reports, the Site Managers may reserve 2-4 days of the last week of a quarter for planning and reporting. Vaccination camps should be arranged after consultation with livestock departments. Regarding the matter of reporting between site level staff to Manager Environmental Education and Programme Sociologist, it was decided that for any communication with the site 	 It was decided to expedite the Programme activities so that targets of year 2007 can be achieved within the stipulated time. Annual Work plan for the year 2008 was reviewed Manager Monitoring & Evaluation was given the responsibility to finalize the annual work plan in view of recommendations given by the team and by IESC Sub-Committee. 	 The next Quarterly Programme Review Meeting QPRM will be of two days. Manager M&E will coordinate with all. For signing Memorandum of Understanding (MoU) with local CBOs etc, all sites shall follow the MoU formats specified in Standard Operating Procedures document. Natraj - Green bookshop at Dehradun India to be contacted for books related to Traditional Ecological Knowledge. Decision: Status of Sindh Govt's PC I for fencing the Pai forest should be followed up properly and update to be given to Team

Table 31: Summary of key decisions taken during Programme Review meetings (PRMs)

level staff, Site Managers	Leader.
should be in loop	 Training of photography should
Site Advisory Committees	be arranged for all staff. Mr.
were renamed as 'District	Ghulam Rasool, wildlife
Advisory Coordination'	photographer WWF-Pakistan,
	can be called in February 2008
	 Finalize all planning and other
	preparations for information
	centres and start construction
	once the suspension is over. Sign
	board at information centre
	Chotiari should be immediately
	installed.
	 MoVs along with progress report
	of all activities conducted in a
	month will be submitted to
	Programme Management Officer
	(Ms. Meherunissa Hamid) on or
	before 25 th of every month.
	All managers will modify their
	workplans according to the
	agreed critical activities and will
	email those to Manager M&E on
	or before 16 th January 2008.

D.3.1.2 Annual planning and networking

Yearly planning and review of the Programme is discussed in the annual planning and review

meetings. This year, the Programme has split planning and review in to two parts. One part (planning for 2008) was conducted on 3 October 2007 and the second part was the first Annual Programme Review and Networking meeting which was held in Hyderabad on 27 December 2007. The basic idea of this meeting was to review the the Programme's first performance of vear of implementation (April - December 2007), share the 2008 Work plan and to provide a brief introduction about the partnership fund with Programme stakeholders. About 12 officials from 3 districts and provincial government, 5 professionals from academia, representatives from local, provincial, national and international NGOs and Programme staff were present on the occasion; 69 participants attended the meeting. Programme officials



Image 39: Participants at the Annual Planning meeting, 27.12.07

gave brief presentations on the Indus for All Programme regarding its progress during the 1st year of implementation, Work plan for 2008 and Poverty Environment linkages. The meeting was then opened for discussion and suggestions of participants were noted for necessary action.

		Apr-Dec 2007			
L.F. / O.B.S Code	Sub Outputs	Planned Units	Delivered Units	Balance Units	Remarks
D.3.1.1	Quarterly Programme				Target for 2007 met
	review meetings	3	3	0	
D.3.1.2	Annual planning and				Target for 2007 met
	networking meetings	1	1	0	

 Table 32: Status of Output D.3.1 (Effective planning and networking of the programme)

Outcome D.4 Indus for All Programme offices established, equipped and operational

4.4 Output D.4.1 Establishment of Programme and Field Offices

This output covers 16 sub-outputs from D.4.1.1 to D.4.1.16 and has an objective to establish and furnish the Programme and field offices. The output covers procurement and provision of office and field equipment, furniture and motorcycles to offices both at PMU and PIU levels. During the first year of the Programme's implementation phase (consisting of nine months from April to December 2007) all the equipment and furniture was procured and provided to the offices except for three motorcycles which were considered not to be needed in addition to the five already purchased during the Inception Phase (July 2006 to March 2007). Accordingly, the Programme's Annual Work Plan 2008 and OBS – October 2007 documents propose revisions allowing the Programme to purchase additional computers in place of the motorcycles. All purchases of equipment and furniture were undertaken in compliance with the procurement policy of WWF Pakistan and the operational guidelines developed for the Programme during the Inception Phase.

While purchasing the required equipment and furniture, the following principles were kept in view:

- Procuring goods and services, which best contribute to organization's performance
- Procuring as efficiently as possible and to obtain best value for money without compromising appropriate quality standards
- If not eliminate reduce waste
- Ensure good financial and budgetary controls
- Ensure compliance with the Procurement policies and procedures
- Maintain ethical business standard and full legal compliance.

		Apr-Dec 2007				
L.F. / O.B.S Code	Sub Outputs	Planned Units	Delivered Units	Balance Units	Remarks	
D.4.1.1	Motor Cycles	3	0	3	Re-appropriation requested	
D.4.1.2	Computers	15	15	0	Complete	
D.4.1.3	Scanners	6	6	0	Complete	
D.4.1.4	Printers	2	2	0	Complete	
D.4.1.5	Laptops	8	8	0	Complete	
D.4.1.6	GPS	2	2	0	Complete	
D.4.1.7	Multimedia projectors	4	4	0	Complete	
D.4.1.8	Camera and audio video equipment	4	4	0	Complete	
D.4.1.9	Spotting scopes	5	3	2	2 Will be purchased in 2008	
D.4.1.10	Furniture (sets)	10	10	0	Complete	
D.4.1.11	Camping equipment (sets)	10	10	0	Complete	
D.4.1.12 Binoculars		20	19	1	1 Will be purchased in 2008	
D.4.1.13 UPS		6	6	0	Complete	
D.4.1.14	Split units	6	6	0	Complete	
D.4.1.15	Computer server & networking & software	4	4	0	Complete	
D.4.1.16	Satellite phone	5	3	2	2 Will be purchased in 2008	

Table 33: Status of Output D.4.1 (Establishment of Programme and Field Offices)

Outcome D.5 Capacity of Indus for All Programme staff built in order for them to execute activities using the latest tools and concepts

4.5 Output D.5.1 Staff Capacity Building

D.5.1.1 Orientation at WWF-P Head Office

An orientation session was held at WWF Pakistan's Head Office on 22 May 2007. The session commenced with a welcome note from Mr. Ali Hassan Habib, Director General WWF-P, in which he focused on the characteristics of an ideal WWF Pakistan's employee. The welcome note was followed by а series of presentations from heads/managers various departments the of of organization that not only provided the Indus for All



Image 40: The Team with Director General WWF-P at the Orientation

Programme staff with an opportunity to better understand institutional policies and rules but also informed them of the various programmes and projects being carried out by different departments.

Following presentations were given by the various teams of the organization.

- Freshwater and Toxics Programme
- Conservation Department
- Communication Division
- GIS Laboratory
- Human Resources Department
- Management Information Systems
- Finance and Administration Department

Each presentation was followed by a question and answer session. A brief visit of the Head Office facilities and resources, such as GIS Lab and Environmental Data Resource Centre (EDRC) were also conducted.



Image 41: The Indus for All team outside WWF – Pakistan Head office, Lahore

D.5.1.2 International Orientation Programme

As concerns participation in the International Orientation Programme, during 2007 the Programme Economist and Manager Environment Education took part in the "Introduction to WWF" Course, Gland, Switzerland, from 24-26 September and 26-28 December, respectively.

WWF International conducts the introductory course on a quarterly basis. It is a three-day course designed to introduce participants to the worldwide goals, Programme, functions, structure and history of WWF and its network. The goal of the course is to enhance participants' affiliation with the global network and understand WWF's mission and goals. The course attracts participants from a wide range of nationalities and positions, thus offering a unique opportunity for networking as well. Participants also meet selected WWF International senior managers in the margins of the course. The orientation is also accompanied by workshops/ training courses designed to give participants specific value added insights, tools and techniques that they apply in their respective jobs. All employees in managerial positions or positions of responsibility are recommended to attend this course.

D.5.1.3 International Trainings

GIS Analyst attended "Training on Spatial Analysis Concepts, Tools, and Application of Geo-Informatics for Protected Area Management" offered by ICIMOD at Katmandu, Nepal from 1 to 11 October 2007. The training mainly focused on applications of GIS in Protected Areas Management. The course contents covered almost all aspects of the GIS and Remote Sensing. (See also section 2.4 above).

Coordinator Natural Resource Management, Mr. Rab Nawaz attended the 4th International Galliformes Conference from 14-21 October, 2007 in Sichuan, China hosted by the World Pheasants Association (WPA). The week long symposium was focused on the conservation and sustainable management of all species of Partridge, Quail, Francolin, Guinea fowl, Grouse and Pheasant, with a special emphasis on the threatened species and their habitats. Mr. Nawaz delivered a talk on "Monitoring of Pheasants of Pakistan: What is the Future for Pakistan's Galliformes?"

Mr. Mustafa Talpur, programme coordinator visited the United States of America, Washington DC on the invitation of International Rivers Network to talk at the civil society forum about the "Environmental Problem of Wetlands, Badin, Sindh, Pakistan" on 17 October 2007. He had an

opportunity to visit WWF - USA and hold separate meetings with the Fresh Water Programme, climate change, species programme and the team responsible for the Ecoregion Conservation Programme in Nepal. Mr. Talpur also briefed the members of WWF - USA on the Indus for All Programme. The members showed interest in collaborating with the Indus for All Programme and the Indus Ecoregion Programme. He also availed the chance to visit Brandeis University and deliver a talk on accountability mechanism at the International Financial Institution in one of its prestigious programme in sustainable international development at Heller Graduate School. The talk was based on the Paris declaration on aid effectiveness.

S.N					
Ο	Name	Designation	Title of course Date		Venue
		Programme	"Introduction to		Gland,
1	Ali Dehlavi	Economist	WWF" Course	24 -26 Sep 07	Switzerland
	Mohammad	Mgr. Communication	"Introduction to		Gland,
2	Zafar Khan	and Awareness	WWF" Course	26- 28 Dec 07	Switzerland
			Training on Spatial		
			Analysis Concepts,		
			Tools, and		
			Application of Geo-		
			Informatics for		ICIMOD,
			Protected Area	1 Oct 07-11 Oct	Kathmandu,
3	Farooq Laghari	GIS Analyst	Management"	07	Nepal
			4th International		Chengdu,
			Galliformes	14 Oct 07-21	Sichuan,
4	Rab Nawaz	NRM Coordinator	Symposium	Oct 07	China

Table 34: Indus for All Programme International Trainings

D.5.1.5 Team Building Exercise

Taking into consideration the significance of aood teamwork, a three-day formal Team Building Exercise was held for the Programme team from 24 to 27 May 2007. Adventure Foundation Pakistan (AFP) was selected to facilitate the exercise. The AFP has been imparting similar capacity building activities within the country since the last 27 years. The purpose of this exercise was develop understanding to and team spirit among the members team for the subsequent achievement of Programme objectives.



Image 42: Team Building Exercise 24 – 27 .05.07

The Indus for All Programme Team was divided into two major groups of 20 members each. These two groups were further divided into four teams (two teams of each group). The exercise was a mix of indoor class-room learning and outdoor physically challenging activities which involved participants in problem solving with real results. In the indoor activities, the participants were given

comprehensive information on how to be an effective team member, how to form an effective team and acquire communication skills. The outdoor activities were planned to give participants a better chance of applying what they learnt during the indoor activities. Feedback session and critical evaluation of right actions and mistakes were conducted with every group at the end of each activity.

D.5.1.6 National Trainings

While implementing the objectives through a standard process of hiring professionals in its different components, the Indus for All Programme envisages building the capacity of the hired staff. In this regard, the following staff members of the Programme have so far been got trained:

- The NRM Officer, Pai Forest, attended the training course on "Understanding Camera and lens: Exploring effective avenues for Nature Photography". The 5-day training course was organized by Pakistan Wetlands Programme (PWP) in Islamabad. The training was designed to fulfil the needs of the professionals working on nature conservation. Participants from various departments/organizations learnt various aspects of photography through interactive learning experiences and practical group work. The training also provided the participants with a good opportunity to share their experiences with each other.
- The Secretary to the Director is participating in a 3-month diploma programme in "Modern Secretarial Practices" offered by Pakistan Institute of Management. The course aims to enhance the communication, IT and technological skills of the participant.
- The Manager Monitoring and Evaluation participated in a three-day workshop on "Monitoring and Evaluation" from 19 to 21 November 2007 in Islamabad. The workshop aimed at making the participants understand the concept and principles with various tools and techniques of monitoring and evaluation.

S. No	Name	Designation	Title of course	Date	Venue
			Exploring effective		
			avenues of nature	4 Sept 07 –	Islamabad GIS
1	Mumtaz Mangi	NRM Officer (Pai)	photography	8 Sept 07	Lab
					Pakistan Institute
			Modern Secretarial	20 Nov07-	of Management
2	Fouzia Masood	Secretary to Director	Practices	19 Feb 08	Sciences
					Civil society
					Human and
					Institutional
					development
					Programme
		Manager Monitoring	Monitoring and	19 Nov 07-	(CHIP) training
3	Irshad Junejo	and Evaluation	Evaluation workshop	21 Nov 07	and consulting

Table 35: Indus for All Programme National Training

		Apr-D	Apr-Dec 2007		
L.F. / O.B.S Code	Sub Outputs	Planned Units	Delivered Units	Balance Units	Remarks
D.5.1.1	Conduct Orientation Programme-Lahore (visit)	1	1	0	Complete
D.5.1.2	Conduct Orientation Programme –International (participants)	2	2	0	Target for 2007 met
D.5.1.3	Arrange Exposure Visits International-Staff (visit)	2	2	0	Target for 2007 met
D.5.1.5	Team Building Exercise (visit)	1	1	0	Complete
D.5.1.6	National Training(participants)	2	2	0	Complete

Table 36: Status of Output D.5.1 (Staff Capacity Building)

4.6 Output D.5.2 Research Programme conducted

D.5.2.1 Internship Programme

Internship contributes towards career development of fellows/interns through valuable professional exposure with useful inputs and procedures/concepts. It is also beneficial for the Programme as it helps in enhancing the image of the Programme with established educational institutions besides providing cost effective human resource for conducting research studies for the Programme.

Relevant institutions were contacted throughout year-one of implementation. It is worth noting that universities and other institutions also actively sought out the Programme and several requests remain to be taken up based on felt need. During the first year of implementation phase, 6 interns served the Indus for All Programme under the supervision of PMU staff under different assignments for the duration of 1 to 3 months. As part of WWF's standard procedures, contact is maintained with the interns after they have left. Volunteers are not included in Table 37 but are gratefully acknowledged by the Programme.

S. No	Name	Qualification	Institute	Internship Period	Assignment	Location
1	Abida Parveen	MSc Maths	Jinnah Univ. for Women	12 March -11June	General Research Assistance	Karachi Office
2	Aneela Saboor	MSc Env. Studies (in process)	Karachi University	18 June- 18 July	Fact sheet for Keenjhar Lake	Karachi Office
3	Shazia Ansari	MSc Env. Studies (in process)	Karachi University	13 June -13 July	Guide on water birds	Karachi Office
4	Tahira Sattar	MSc Env. Studies	Karachi University	13 June - 13 July	Poster and fact sheet on wetlands	Wetland Centre
5	Usman Ahmed	BA	Karachi University	21 June - 21 July	Visitor Book Analysis	Wetland Centre
6	Sharmeen Peshimam	BA Comm. Design	Indus Valley School of Arts and Architecture	1 July - 31 July	Awareness and resource materials	Karachi Office

Table 37: Indus for All Internship Programme: Year 2007

Table 38: Status of Output D.5.2 (Research Programme conducted)

		Apr-Dec 2007			
L.F. / O.B.S Code	Sub Outputs	Planned Units	Delivered Units	Balance Units	Remarks
D.5.2.1	Internship Programme (person months)	15	5	10	Interns hired according to need

Case Study 4: Exposure to other ecoregions

The Indus for All Programme is guided by the Indus Ecoregion Steering Committee (IESC) whose members comprise of heads of relevant departments such as Forest and Wildlife, Fisheries and Livestock, Agriculture, Sindh Irritation and Drainage Authority, Coastal Development Authority, Local Government and members of the civil society. The committee is chaired by the Additional Chief Secretary (Planning and Development) which meets to discuss the progress of the programme and streamline the implementation.

One of the programme outputs linked with the IESC is to arrange exposure visits of its members to other ecoregions to observe first hand how conservation work is being undertaken. Seeing for oneself the benefits and impacts of successful conservation initiatives involving natural resources, wildlife and more important people, both the community and managers of the ecoregion, facilitates the task of achieving WWF - Pakistan's goal. With this in mind, it is easier for them to relate to what WWF Pakistan is trying to achieve and how they can help reach our goal.

With this in mind, Indus for All Programme / WWF Pakistan arranged two visits: one in India and the other in Nepal.

India

From 28 November to 5 December 2007 a visit to India was made with the help of WWF - India for three steering committee members (Secretary Forest and Fisheries, Secretary Fisheries and Livestock and Managing Director, Coastal Development Authority) and three Indus for All Programme staff members to Corbett National Park in the Gangetic Ecoregion, India. This ecoregion lies along one of Asia's largest rivers, the Ganges. Originating in the Central Himalayas, the river flows east along most of the length of the long mountain range to eventually join with the Brahmaputra River and head south to the Bay of Bengal. This ecoregion extends through the upper reaches of the Ganges River, across the northern Indian states of Uttar Pradesh, Haryana, and Bihar. Several centuries ago, when the habitat was intact, this ecoregion harboured a rich wildlife community that included tiger, greater one-horned rhinoceros, Asian elephant, wild water buffalo, swamp deer, sloth bear, and several hornbill species. Many of these space-dependent species are gone from much of the ecoregion, victims of the relentless wave of habitat destruction that has swept through most of the ecoregion. More than 95 per cent of this vast ecoregion has been degraded or converted into agriculture and settlement areas by the dense human population that has settled here for thousands of years. Only one large block of habitat now remains, running along the Himalayan foothills in Uttaranchal and including Rajaji, Corbett, and Dudwa national parks (www.worldwildlife.org).



Image 43: Secretary Fisheries, GoS and Community Management Officer, WWF- India, 2.12.07.



Image 43: Secretary Fisheries, GoS and Community Management Officer, WWF- India, 2.12.07.

The delegation from Pakistan spent two nights and one full day in the Jim Corbett National Park, meeting staff, students and the community working in the park. Apart from getting to see the wildlife, the six visitors also observed how the park was being managed for eco-tourism and especially tourist management, for example how the park is divided up into zones and managed for tourists accordingly. Access to the park is only permitted by car (or elephant) and only with a qualified guide. There is a limited number of tickets issued per day, ensuring that the park is not overrun with tourists and everyone gets a chance to see some wildlife. Having to have a guide also ensures that people behave accordingly, they see wildlife and more importantly, jobs are being created for local community since most of the guides belong to the surrounding towns and villages such as Ramnagar. The delegation also observed how the infrastructure has been developed and how the buildings for official and tourism use, are designed to blend in with the surroundings rather than create an eyesore for the visitors.

The visitors from Pakistan unfortunately did not observe the tiger for which the national park is famous for. However they did get to se a lot of other wildlife such as Sambar Deer, Spotted Deer, Barking Deer, Garial, Marsh Crocodile and a multitude of birds. They also met the director, deputy-director and some of the forest department staff giving them ample opportunity to ask questions and interact at a professional level.

Apart from visiting Corbett National Park, the delegation from Pakistan also stopped by at the Wildlife Institute of India (WII) situated at Dehradun, UP. The WII was



established in 1982 and provides Forest Department Officers additional training in wildlife management before they start there career in the department. Presently the institute offers three courses in wildlife management, starting from a certificate course and ending in a full master's degree in wildlife management. The main reason for visiting the institute was to meet the Dean, Director and faculty members and discuss future training opportunities for Pakistani students to receive training at the institute or for faculty members to visit Pakistan and conduct courses in Pakistan Forest Institute. The Pakistani delegation was received very well and there is good hope that collaboration can go on between the Wildlife Institute of India and Pakistan Forest Institute which should be beneficial for both sides.

<u>Nepal</u>

A delegation of 3 WWF – Pakistan and 3 IESC members including Additional Chief Secretary (Dev) and chair of IESC, 2 DCOs and senior officers of partner organizations visited Nepal from 6 to 13 December 2007. The exposure trip was organized to learn from WWF-Nepal's experience in ecoregion conservation. The visiting delegation had a briefing at WWF-Nepal office and meetings with the Director General of National Parks and officials of Forest Department at Khatmandu. The main thrust of these briefing were to learn about community forestry in Nepal which has been instrumental to maintain and increase the forest cover which is now 40% of the total land. Also how the legal and institutional changes were made to create an enabling environment for effective community participation in forest management. During the stay in Khatmandu the delegation also has a chance to visit a demonstration site for sustainable agriculture established by ICIMOD. The farm was only producing organic fruits and vegetables.

The delegation also has a chance to visit Terai Arc Landscape area where community forestry programmes are being implemented. During the field visit, the delegation had a chance to visit Khata biological corridor, Lamahi bottleneck and meeting with community and Shankar Nagar community forest. Lamahi bottleneck and Shankar Nagar community forest are two and half decade old community initiative to protect the forest. Organized local users' groups have a control over two thirds of the forest revenue. This experience has been very successful to protect and revive the

forest land and increase forest cover. The government's willingness to involve community in 1980's was influenced by the apprehension of losing forest cover.

The delegation also visited Bardia and Chitwan national parks, where they had a chance to visit forest on an Elephant safari and observed wild elephants, Rhino and Deer. These were amazing experiences to visit the thick forest and watch the wild animals. The exposure trip brought a visible lesson that community's involvement is essential for natural resources management.



Image 46: IESC delegates, ICIMOD demonstration centre, Gudavari, Nepal

By: Rab Nawaz, Natural Resource Management Coordinator, Indus for All Programme Mustafa Talpur, Programme Coordinator, Indus for All Programme

Case Study 5: Joining hands for rescue and rehabilitation in Keti Bunder

Background

The lives of Keti Bunder inhabitants were devastated from 22-27 June 2007. It took under seven days for rapid onset rains and winds that turned into a tropical cyclone (Yemyin No. 038) to leave 5,200 families homeless in Keti Bunder town alone. Including inland and remote creek settlements, according to an initial assessment, 200 improvised thatch huts were destroyed and 4,200 partially damaged (WWF-P Assessment Report, 28 June 2007). In addition, 135 boats were damaged as were half of all poultry farms and betel leaf sheds. Half of all crops on 500 acres of agricultural land were destroyed. The scale of the disaster can be gleaned from the fact that 34 villages in Keti Bunder Tehsil and 26 villages in Tehsil Kharochhan were affected. A second more comprehensive damage assessment report is summarized in Table 39.

Description	Creeks	Inland	Total
Affected	822	2,000	2,822
households			
Affected	6,424	16,000	22,424
population			
Destroyed houses	400	350	750
Damaged houses	200	850	1,050
Destroyed boats	17	9	26
Damaged boats	127	47	174
Deaths	0	3	3
Injured	7	5	12

Table 39: Extent of damage caused in Keti Bunder and 2 adjacent Talukas (30 June 2007)

The overwhelming majority of the Keti Bunder area population is illiterate, people live well below the poverty line and dependence on natural resources is only increasing. So, while the Monsoon weather system and Tropical cyclone struck Balochistan province hardest, Keti Bunder's fishermen and daily farm workers were forsaken of their livelihood, further indebted, and those made homeless were exposed to postcyclone effects of spread of malaria and water-borne diseases such as diarrhoea. In the wake of changing climatic patterns on regional scales, cyclones and sea storms have now become common phenomena in the Arabian Sea. It seems that under changing climatic patterns such natural disasters will occur more frequently in the future.



Image 47: Near Sama Village, Keti Bunder, 23.06.07

Coordinated response of the Programme and its partners

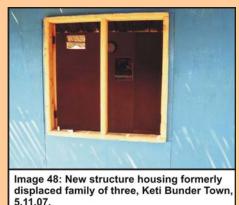
Within hours of the onset of the disaster, the Programme's site office at Keti Bunder joined hands with stakeholders to provide humanitarian assistance. In terms of rescue and relief, cash was provided to community members to take sea-worthy boats out for rescue missions during the night of the cyclone. Boat fuel was provided to Supreme Master Ching Hai International Association to support the distribution of 822 bags of relief goods to residents of Keti Bunder Town and nearby creeks. As many as 6,300 bottles of "Aab-e-Nuqra" (water purification drops) were provided to the

affected through a generous donation by Qarshi Industries Pakistan. In collaboration with partners such as the Union Council, Hajamro Mahol Dost Committee, and the Aga Khan Planning and Building Services, a rapid assessment of damages was conducted. The same partners and the Programme, seeking further collaboration from the Pakistan Fisherfolk Forum, Action Aid, Merlin, Islamic Relief, Action Against Hunger, Oxfam GB, among others, developed a proposal for the rehabilitation of livelihoods and secured Rs. 3 million. With rapid approval from the Royal

Netherlands Embassy, the proposal accesses the Indus For All Programme's Partnership Fund for such interventions as the repair of boats and repair of damaged thatched houses targeting the most vulnerable creek residents.

Action after the Appeal

Alongside the livelihood rehabilitation proposal, the Programme launched an appeal. Both individuals and WWF-Pakistan gratefully organizations responded. acknowledges members of the public, organizations, WWF-Pakistan's own board members, staff and their families who contributed generously. A case study-worthy example is noted here, illustrating rapid grant giving, needs identification, and spending that was carried out on an emergency basis. One of the very first organizations to respond to WWF's appeal was the Karachi Acceuil. Under the patronage of Mrs. Pierre Seillan, wife of the Consul General of France, and the presidency of Mrs. Myriam Urooj, Karachi Acceuil donated money for the building of a jhonpree (wooden



structure/structure made of reeds and wood only) to replace a thatched hut that was completely blown away in Keti Bunder Town on 22 June 2007. With each site visit, Karachi Programme staff ensured the rapid purchase of building materials and erection of the housing structure.

Agreeing on a long-term vision and acting collectively

To date, the participation of rescue and rehabilitation work beneficiaries has developed and strengthened confidence and understanding of the Programme's activities up to 2012 and bevond. Moreover, institutional stakeholders with longstanding and respected expertise in a variety of fields relevant to implementing disaster preparedness plans, but also without whom pursuing the Indus Eco-region Conservation Programme (2055) would be futile, have proven their ability to join hands. In the short term, efforts are underway to construct at least one elevated rescue platform for demonstration and testing and to develop disaster preparedness plans. In the long term, community participation is being sought to increase mangrove forest cover as natural shields against the elements; district government participation is being sought for developing coastal and Indus-Delta land-use plans that will form part of general decision-making as well as early warning systems; and, livelihood enhancement and diversification initiatives are being undertaken to increase the resilience of natural resource dependent communities to future disasters.

By: Ali Dehlavi, Programme Economist, Indus for All Programme



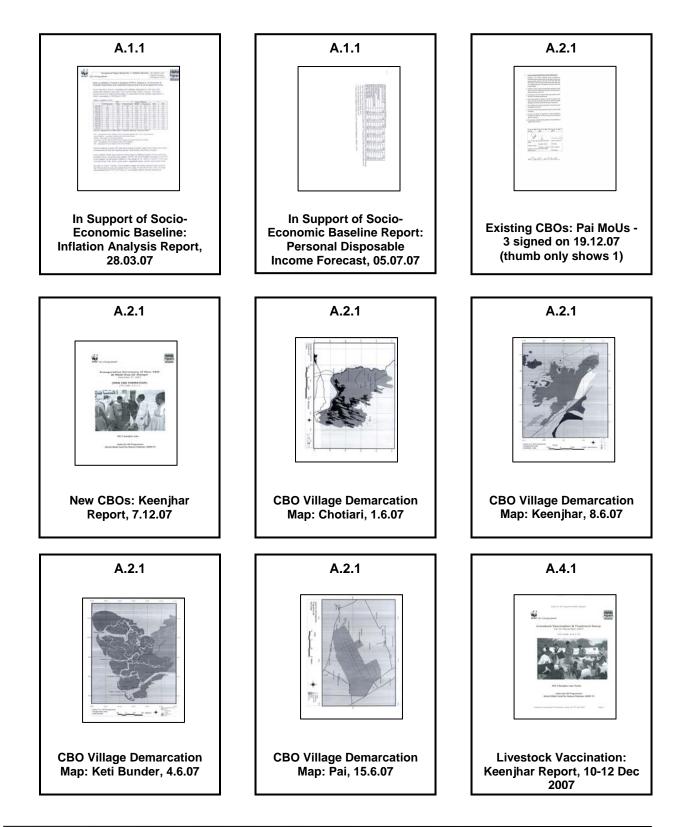
Bunder Village, 24 .06.07

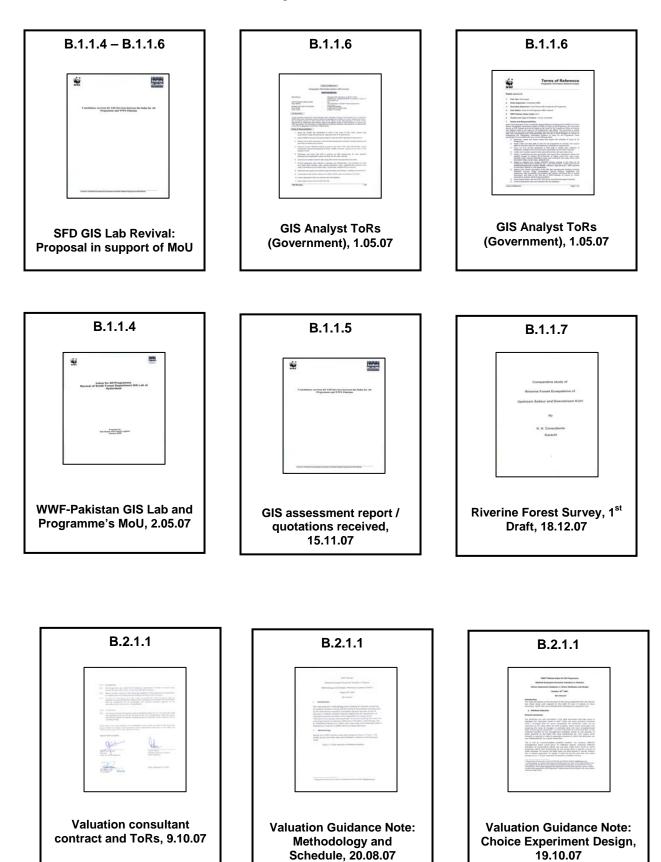


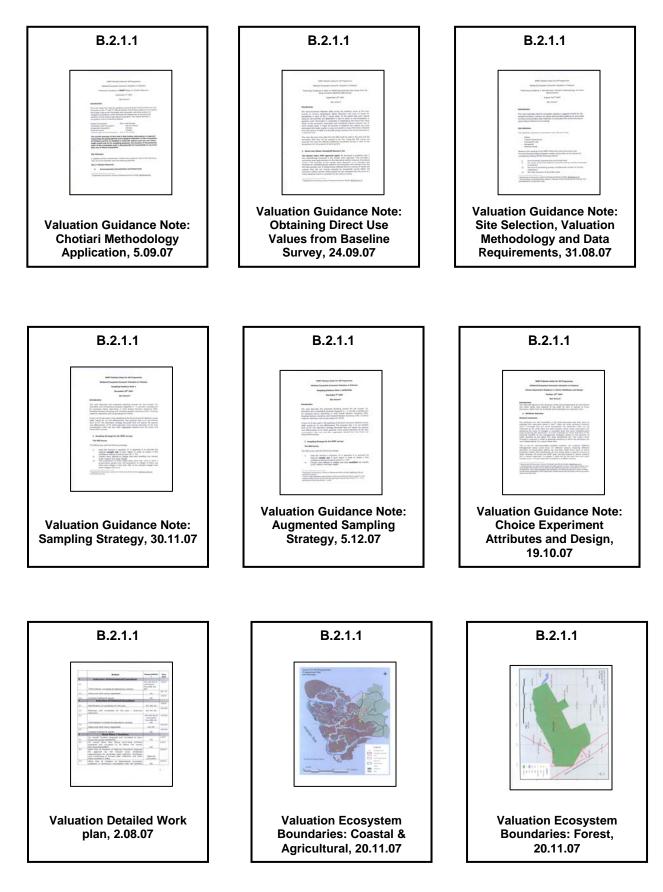
Image 50: Keti Bunder Village, 24.06.07

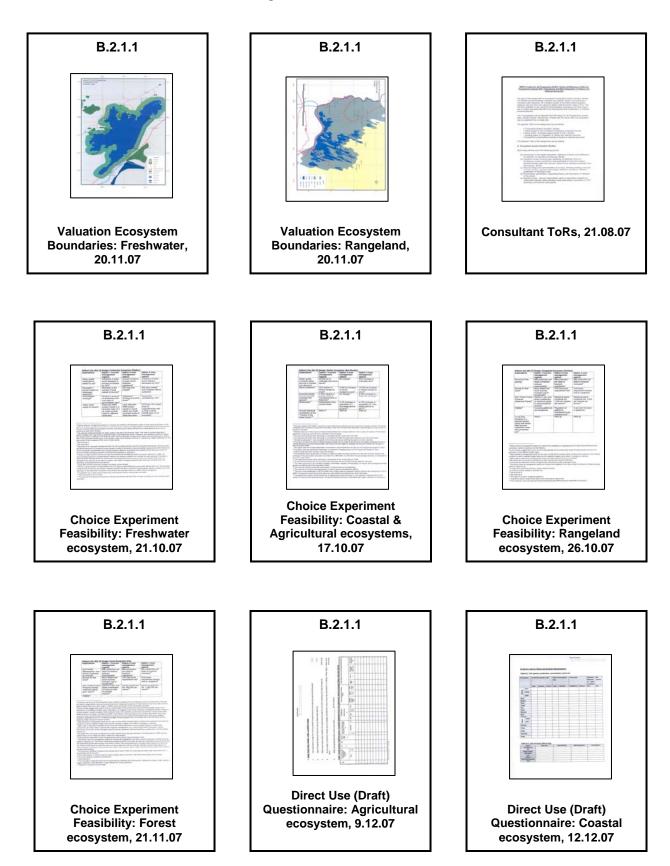
Annex I: Year 1 Implementation (Apr-Dec 2007) – additional documents available

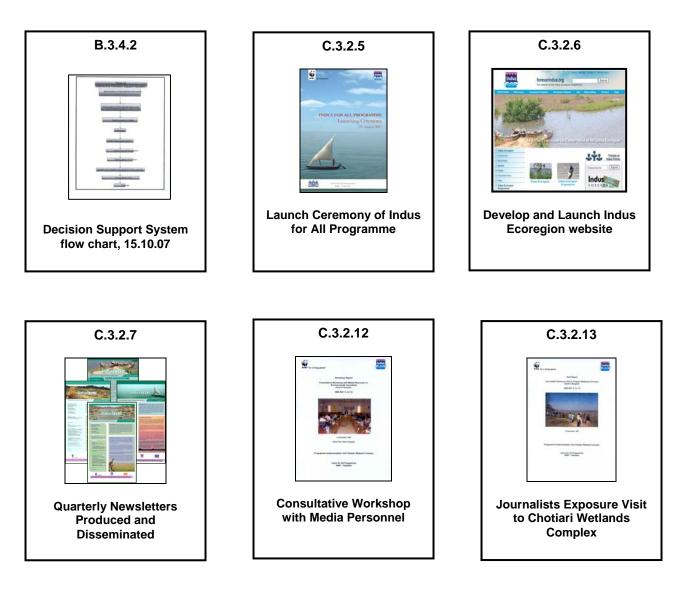
Annex I: Year 1 Implementation (Apr-Dec 2007) - documents available additional to MoVs submission of 30 September 2007 (available upon request)



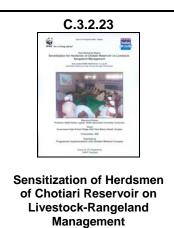


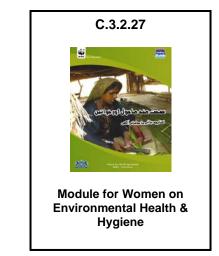




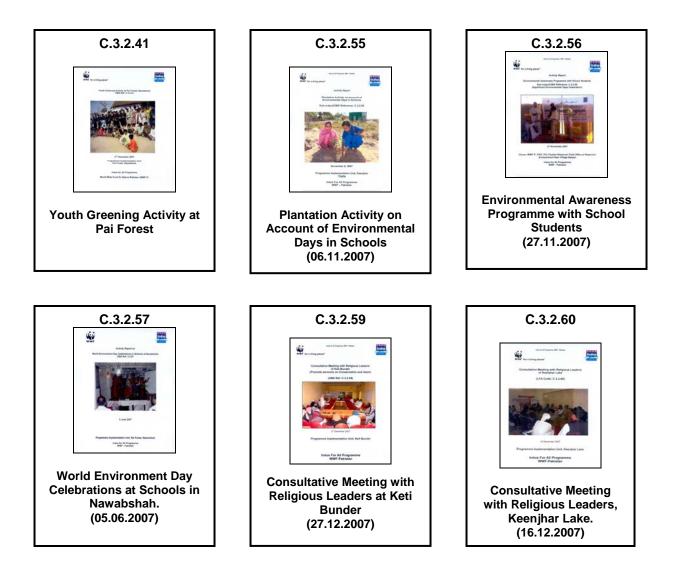
















Posters/Wall charts designed, developed and installed.

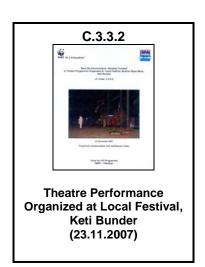


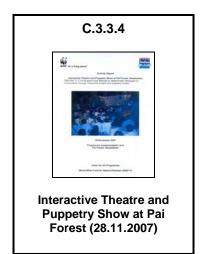


souvenirs etc.) Developed

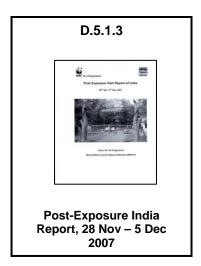


Interactive Theatre Performance at Chotiari (05.06.2007)









Annex II: Year 1 Work Plan (April – December 2007)

Annex III: Sub output – Wise Progress Brief (April – December 2007)

Annex IV: Financial Report (Reporting Period: April to December 2007) (Activity No. 14544)

Annex V: Additional activities

Annex V: Additional activities

S. No	Additional activities	Organized by	Date
1.	Networking and Partnership initiatives with key stakeholders. From July 2006 – December 2007, the Programme has intensively engaged stakeholders in dialogue on Indus Ecoregion conservation and livelihood issues. These confidence building measures created strong partnerships and are incrementally enabling policy – level interventions in forth coming years. The Programme has signed MoUs with 6 organizations (3 Government of Sindh departments and 3 civil society organizations). To date, MoUs have been signed with (1) Sindh Forest, (2) Sindh Wildlife, (3) Sindh Irrigation & Drainage Authority, (4) Pakistan Fisherfolk Forum, (5) UNDP – GEF Small Grants Programme, and, (6) Aga Khan Planning and Building Services. In Q1 CY08, it is expected that MoUs will be signed with (1) Sindh Fisheries & Livestock department, (3) Sindh Coastal Development Authority, (4) Sindh Education & Literacy department, (5) Sindh Environment & Alternative Energy department, and (6) Sindh Irrigation & Power department, and (6) Sindh Irrigation & Power department.	Indus for All Programme	Inception Phase (July 2006 – March 2007) & 1 st year of implementation (2007)
2.	Presentation on "Threats and Issues of Pai Forest" by the Programme team leader to the National Assembly's Standing Committee.	Indus for All Programme	16 December 2006
3.	1st International Maritime Conference – Threats and Opportunities in the 21 st Century Presented Paper at the conference.	National Centre of Maritime Research, Bahria University, Karachi	4 -6 March 2007
4.	WWF Network's facilitate a Risk Management Exercise for the Indus for All Programme. Two WWF officials Dr. Ghana Shyam Gurung, WWF- Nepal & Ms. Celine Beaulieu, WWF- International, conducted the day-long exercise.	WWF-International	March 2007
5.	Mr. Fred Smiet, First Secretary Royal Netherlands Embassy visited two of the four Programme sites—Chotiari Reservoir and Keenjhar Lake.	Indus for All Programme	March 2007
6.	Presentation on "Biodiversity and Indus for All programme" to the students and faculty of Indus Valley School, Karachi. The Team Leader, Indus for All Programme, Dr. Ghulam Akbar and Dr. Ejaz Ahmad, Deputy Director General, WWF-Pakistan gave presentations on the subject. Subsequently two interns worked on various themes of Indus for All programme.	Indus Valley School of Arts, Karachi	March 2007
7.	Programme staff participated in a workshop on Education for Sustainable Development. Manager Environmental Education and the Communications Officer attended the workshop.	IUCN – Pakistan (Karachi)	March 2007
8.	Participation of the Programme team at a Youth	United Nations Population Fund	27 March 2007

	Male and introduction Indus For All Decem		
	Mela and introduction Indus For All Programme, WWF- Pakistan, to the different NGOs and Government Officers present.	(UNFPA)/ Health And Nutrition Development Society	
9.	Consultative workshop on Raising <i>Bund</i> (embankment) of Keenjhar. Programme team participated in the workshop and shared that WWF-Pakistan has launched the Indus For All Programme in its four priority sites which includes Keenjhar.	(HANDS) Keenjhar Fishermen Welfare Society	30 March 2007
10.	PIU Chotiari played host to B.Sc Forestry students from Pakistan Forest Institute (PFI), Peshawar, with a view to strengthening communication between field teams and academia.	Indus for All Programme	April 2007
11.	Jashn-e-Eid Milad-un-Nabi & Capacity Building & Promoting Environmental Sustainability. WWF Pakistan team participated and presided over the seminar.	Bakhtawar Women Development Organization	6 April 2007
12.	"Studying Biodiversity: Applicability of Mathematical Techniques". The Programme Team Leader and Programme Economist gave presentations on the subject. Students were also introduced to the Indus For All Programme. Meeting was held at the University campus.	Jinnah University for Women, Karachi	10 April 2007
13.	Seminar on Delta and the role of civil society. WWF – Pakistan participated in the seminar and was honoured as chief guest.	Delta Development Organization	12 April 2007
14.	"1 st joint meeting of the Karachi Water Partnership (KWP) Management Group with the KWP Advisory Council". The Programme Team Leader is a member of the KWP Advisory Council. It was discussed that the Programme's site-level water and sanitation action plans will adapt to affordable filtration technology units of which 40,000 are already being installed across 40 sites in Karachi by 2009.	IUCN-Pakistan, Karachi (itself a KWP member)	13 April 2007
15.	Workshop on Environmental degradation in delta and its impacts on daily life of community". The Programme actively participated in the workshop and discussed the key problems of poverty related to environment.	Pakistan Fisherfolk Forum (PFF)	16 April 2007
16.	Earth Day 2007 Celebration at Sanghar PIU-Chotiari actively participated in earth day celebrations which also included an awareness walk. The event was organised by Dharti Dost Sangat.	Dhartee Dost Sanghat, Sustainable Development Foundation (SDF), Explorer & Organization for Welfare & Prosperity of Rural Areas (OWPRA)	22 April 2007
17.	Disaster Management workshop. Participated in and facilitated the workshop.	Pakistan Fisherfolk Forum (PFF)	24 April 2007
18.	Facilitation of Syed Asad Ali Award-2007 Ceremony at the Wetlands Centre, Karachi. The Director, WWF-Pakistan gave a presentation on the Programme and other regional activities of WWF-Pakistan.	WWF-Pakistan	May 2007

19.	Ceremony of Model Village at Hilaya, Keenjhar The Programme staff met with the District	District Government	4 May 2007
13.	Coordination Officer Thatta and Director of Model village Programme.		4 iviay 2007
20.	Joint Cluster Review Meeting, Keenjhar, Thatta. The Indus For All Programme was introduced to the participants.	Strengthening Participatory Organization Sindh	10 May 2007
21.	Collaborated with District Government to organize Hepatitis Vaccination Camp at Village Barkat Ali Distt Sanghar. PIU-Chotiari Reservoir supported a Hepatitis Vaccination Programme organized by District Government Sanghar to establish a camp at village Chaudhry Barkat Ali.	District Government Sanghar & PIU- Chotiari Reservoir	11 May 2007
22.	Civil Society Dialogue The Programme participated in the event and discussed the Factory schooling system, learning and schooling and education policy of Pakistan and the place of environment in the syllabi.	United States Agency for International Development (USAID) / Education Sector Reform Assistance (ESRA)	31 May 2007
23.	Seminar on Illegal / harmful fishing practices in Sindh and Balouchistan (Karachi)	WWF – Pakistan	31 May 2007
24.	Release of a captured Civet cat by a villager from Pai Forest. The Programme awarded the villager with a shield and cash reward.	Indus for All Programme in collaboration with Sindh Wildlife Department	June 2007
25.	Indus for All Programme relief work in Keti Bunder. In the aftermath of the destruction caused by strong Monsoon weather the Indus for All Programme team carried out vast relief, rescue and rehabilitation efforts.	Indus for All Programme	June-July 2007
26.	The Team Leader of the Programme gave a seminar to the Botany Department, Karachi University on "Biodiversity: Threats and Opportunities"	Karachi University	June 2007
27.	On the occasion of World Environment Day, a workshop with local NGOs and CBOs was organised to highlight the related issues in the area.	Programme Implementation Unit, Keenjhar	5 June 2007
28.	Seminar on "World Environment Day" at Sonhari Village. Representatives of the Programme and WWF delivered speeches on the importance of environment and the local conditions of Keenjhar Lake	Pakistan Fisherfolk Forum (PFF)	5 June 2007
29.	Hosted a Seminar on World Environment Day, 2007. PIU-Chotiari Reservoir hosted an in- house seminar on World Environment Day, 2007 which was organized by Dhartee Dost Sanghat (an active local NGO) at Site Office Chotiari.	Dhartee Dost Sanghat, Sanghar	5 June 2007
30.	Tree Plantation in Government Degree Collage Sanghar A tree plantation activity at Government Pir Shaheed Syed Sibghatullah Shah (PSSSS) Degree Collage.	Jointly organized by PSSSS Degree Collage & PIU Chotiari Reservoir	5 June 2007
31.	Keti Bunder Appeal Led by the Team Leader, the Programme	Programme Management Unit	25 June 2007

	Economist circulated an appeal to selected		
	donor on-line networks (comprising 40 members), to banks and Karachi-based associations. Appeal money obtained was spent on rehabilitation, e.g., a house was erected by September 2007.		
32.	Workshop on elimination of harmful fishing practices	PIU, Keenjhar	12 June 2007
33.	Certificate Distribution Ceremony of training course. Members of WWF attended the ceremony.	Sindh Fisheries Department	20 June 2007
34.	Experience sharing & dinner with fisheries officials (Sindh & Balochistan)	WWF-Pakistan, Thatta	20 June 2007
35.	International Day of Drug Abuse WWF – Pakistan participated in the event as a key speaker on drugs, social problems and its reasons.	Global Welfare & Development Organization	26 June 2007
36.	The Programme World Population Day	Population welfare department / United Nations Population Fund (UNFPA) / HANDS	11 July 2007
37.	The Team Leader gave a presentation to Pakistan Tobacco Corporation (PTC), Akora Khattak, NWFP on Biodiversity	PTC, Akora Khattak	14 July 2007
38.	Population & Development Participated in the event as key speaker on the impacts of increasing population on natural resources and economy.	UNFPA & Population Department	22 August 2007
39.	Fisheries Ceremony at Chilya, Keenjhar Participated in the inauguration of model villages at village Ramzan Mirbhar Chilya. After the inauguration WWF - Pakistan met with the Secretary Irrigation and Director General Fisheries & Communities at a rest house about the concerns of communities on the development activities of both departments.	Sindh Fisheries Department	24 August 2007
40.	Girls Education and Health Hygiene, Keenjhar. Programme staff participated in the event as a guest.	Strengthening Participatory Organization Sindh	28 August 2007
41.	"Research and Training Workshop". The Programme Economist defended a 2 year grant proposal (later successfully obtained on 13.1.08) to strengthen the quality of the Programme's existing valuation research and widen its peer review but also generates greater awareness of conservation in the Indus Eco- region.	SANDEE (held in Dhaka)	6 September 2007
42.	Exposure visit to Keenjhar for Trust for Voluntary Organization (TVO), Punjab. Team members also gave a presentation on Indus For All Programme and arranged a visit to the Makli world heritage.	Trust for Voluntary Organisation TVO)	12 September 2007
43.	Experience Sharing of ThreeP Project, Keenjhar. Programme staff participated in event of experience sharing at Leadership for Education	LEAD- Pakistan	24 September 2007

	And Development (LEAD) office Gharo as guest.		
44.	Experience sharing seminar about Medical camps by PIU Keenjhar staff. They shared their experience of conducting medical camps and reproductive health issues organized by WWF- Pakistan in collaboration with Global.	Global Welfare & Development Organization	3 October 2007
45.	Indus for All Programme Participated in the National Poster Day, Keenjhar, Thatta	HANDS	19 October 2007
46.	Consultative meeting with the NGOs of Thatta district. Team members gave presentations on the Indus for All Programme. It was decided that WWF-Pakistan, Thatta, will conduct/arrange the next consultative meeting for the local organizations of Thatta on development activities and possible collaboration.	Strengthening Participatory Organization (SPO) & OXFAM	13 November 2007
47.	Seminar on Keenjhar Lake and its issues.Team members represented the Programme and delivered speeches and introduced Indus For All Programme among the audience	Keenjhar Development Organization	13 November 2007
48.	Seminar on World Children Day. A Speech was delivered on the role of children in sustainable environment	HANDS Thatta	20 November 2007
49.	Exposure visit of Kakapir Community from Karachi. A presentation was given on the working of the Indus For All programme, Thatta site and arranged community meetings at Jhampir.	TPP Project WWF-P Karachi and Indus For All Programme Thatta	22 November 2007
50.	First meeting of the National Forum on Education for Sustainable Development, Karachi. Manager Environmental Education & Communications participated.	IUCN-Pakistan	22 November 20 07
51.	Universal Human Right's Day. Programme staff represented WWF-Pakistan and delivered speech	Keenjhar Fishermen Welfare Society & HANDS Thatta	10 December 2007
52.	District Youth Assembly Thatta. Indus For All Programme team participated along with its youth group and setup a stall.	HANDS Thatta	18 December 2007
53.	Facilitated CCP's Project Advisory Panel Meeting. The Programme Team Leader participated in the meeting held at the PMU in Karachi.	CCP / WWF	December 2007

Partnership Fund

The Partnership Fund has been planned as a separate part of the Indus for All Programme to address issues which are not being covered in focused geographical as well as thematic areas. The Fund's activities began in Q4CY07 as planned. Additional funding is required to enable the project stakeholders to contribute in the development of the long term vision of the Indus Eco-region under the Indus for All Programme. The Partnership fund aims to achieve the following objectives:

- Enable line departments and civil society organizations to leverage existing resources to raise additional public funding to play a stronger role in the Indus for All Programme implementation;
- Provide incremental financing or seed money for on-going projects, especially rural support and area development programmes, to incorporate lessons from poverty-environment linkages studies in their strategies or to initiate new activities;
- Expand support-base for the Indus for All Programme amongst academia, district governments, businesses and industries.

Under the Partnership Fund, financial support will be provided to specific Government line departments, Civil Society Organizations and Academic-Research Institutions for their initiatives / projects for management of Natural resources, biodiversity conservation and sustainable livelihoods Of the total financial support available, it is initially proposed that 40% be granted to government, 40% to NGOs/CBOs and 20% to academic and research institutions (see Figure 2).

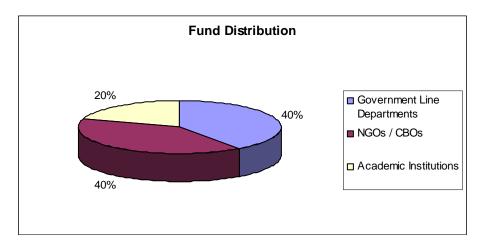


Figure 2: Distribution of Fund finances amongst stakeholders

As an integral part of the Indus for All Programme, the Partnership Fund seeks to continue and enhance the implementation of the Indus for All Programme through securing partnerships with all its stakeholders.

Partnership Fund Progress

The secretariat of the Partnership Fund has been established in WWF – Pakistan, Karachi office and recruitment of a two - member team has been completed. Details of staff are below:

- 1. Manager Partnership Fund
- 2. Partnership Fund Executive

During the third meeting of the Indus Eco-region Steering Committee – the 'Fund Technical Committee' was formed and approved. The Partnership Fund Technical Committee comprises of sixteen members from the Government of Sindh, Civil Society Organizations, academia and officials from small grant programmes of different national and international organizations (figure 3).

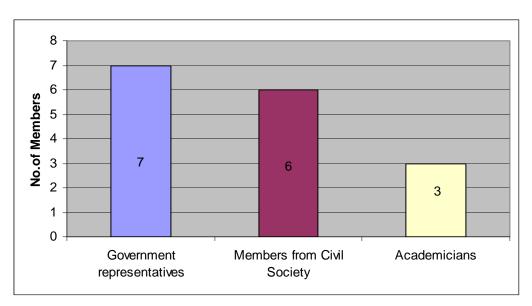


Figure 3: Composition of the Partnership Fund Technical Committee

The Terms of Reference and Rules of Business for operation of the Fund Technical Committee are at present being developed.

The Partnership Fund Secretariat has been busy developing of the following documents:

- Terms of Reference and Rules of Business for Partnership Fund Technical Committee;
- Introductory Brochure about the Partnership Fund;
- Procedure and Policy Guidelines for potential grant recipients; and
- Working paper for "Orientation Workshop on Partnership Fund for Stakeholders".

During the Programmes first Annual Review and Networking Meeting held on 27 December 2007, in Hyderabad, the Manager Partnership Fund briefed participants about the activities of the Partnership Fund and its objectives, themes and operational procedures.

Annex VI: Site specific activity maps

Our Mission

WWF - Pakistan aims to conserve nature and ecological processes by:

- Preserving genetic, species and ecosystem diversity
- Ensuring that the use of renewable natural resources is sustainable, both now and in the longer term
- Promoting actions to reduce pollution and the wasteful exploitation and consumption of resources and energy

Vision of the Indus Ecoregion Programme

"Mankind coexists with nature in complete harmony and biodiversity flourishes in its respective habitat"

Indus For All Programme, WWF - Pakistan

Programme Management Unit (PMU) 606, 607 Fortune Centre, Block-6 P.E.C.H.S, Shahra-e-Faisal, Karachi. Tel: 021-4544791-92, Fax: 021-4544790 www.foreverindus.org

Programme Implementation Units (PIU)

Chotiari Wetlands Complex

House # 129/2, Housing Society, Near Government Boys High School, Nawabshah Road, District Sanghar, Sindh. Tel: 0235-542837, Fax: 0235-542791

Keenjhar Lake

House # B/112, Hashimabad Society Makli, District Thatta, Sindh. Tel: 0298-772318, 772319, 610426 Keti Bunder

Keti Bunder Town, P.O. Keti Bunder via P.O. Mirpur Sakro, District Thatta, Sindh. Tel: 0298-607685, 620291

Pai Forest

House # A-3, M.U.C.E.T Employees Co-operative Housing Society, District Nawabshah, Sindh. Tel: 0244-366364, Fax: 0244-282496

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