

Indus River Natural Resource Management

British Council / Higher Education Commission Pakistan

INSPIRE

Transnational Education Programme

Development and delivery of a three-week taught career development postgraduate course on

“Indus River Natural Resource Management”

2012 – 2013

Partner Organisations:

University of Glasgow, Scotland, UK

Shah Abdul Latif University, Khairpur, Sindh Province, Pakistan

Contributing Institutions:

Heritage Foundation Pakistan

WWF Pakistan Wetlands Project

Course conducted at Shah Abdul Latif University, Khairpur,

Sindh Province, Pakistan.

18th November to 7th December 2013



© Photograph copyright Azra and Peter Meadows

Shah Abdul Latif University, Khairpur, Sindh Province.

Central Library. 2011.



© Photograph copyright Azra and Peter Meadows

**Shah Abdul Latif University, Khairpur, Sindh Province.
Visiting Professors Guest House on campus.
2011.**

The Indus River

The Indus River provides Pakistan with a unique range of natural resources stretching from the mountains of the Hindu Kush and Himalayas to the flood plains and coastal zone in the south of the country. These natural resources provide vital ecosystem services that impact on the economy, food, agriculture and on the livelihoods and human development of the whole country - especially its rural communities. The proper utilisation, management and protection of these resources and ecosystems are hence a national priority.



© Photograph copyright Azra and Peter Meadows

Boat transport of villagers close to banks of River Indus.
Dariya Khan Shaikh Village. Sindh Province.2011



© Photograph copyright Azra and Peter Meadows

Bullock cart with cut sugar cane vegetation.
Tando Allah Yar Village. Sindh Province.2011

The relevance of the course

The course on “**Indus River Natural Resource Management**” is highly relevant to the developmental priorities of Pakistan. These priorities include Pakistan’s Interim Poverty Reduction Strategy Paper (I-PRSP 2001, 2003), the Asian Development Bank’s Country Strategy Plan for Pakistan (2005), and the priorities of the Higher Education Commission Pakistan (HEC). They also cover the country’s research priorities, teaching development and quality assurance.

The focus of the course

The intensive three week course focused on the Indus River and the management of its resources and ecosystem services, and conservation strategies. It included consideration of the range of Indus River ecosystems that rural communities indirectly or directly depend on for their food, shelter and livelihoods. It also included environmental impact assessments of the risks and mitigation of natural hazards such as periodic flooding and earthquakes.



© Photograph copyright Azra and Peter Meadows

Banks of the River Indus near Dariya Khan Shaikh Village. Sindh Province. 2011.

Course Generic Skills

The three week course also covered generic skills. These included data collection and analysis, parametric and non-parametric statistics, field survey methodologies, report preparation and report presentation. Field work consisted of visits to and surveys of relevant ecosystems that are readily accessible from Shah Abdul Latif University such as the Indus River Dolphin Sanctuary near Sukkur. The sites included those at which Heritage Foundation and the WWF Pakistan Wetlands Programme have ongoing programmes involving ecological surveys, ecosystem services, rural community uplift, and flood resistant housing. Field work also assessed permaculture methods used by rural communities to provide small scale agricultural systems that are sustainable on the long term.



© Photograph copyright Azra and Peter Meadows

Deriya Khan Shaikh village. Sindh Province.
Heritage Foundation flood resistant ecofriendly women's resource centre built on stilts.
Permaculture plot, centre right foreground. 2011

Course Participants

The fifteen course participants were senior mid-career University and NGO staff from Shah Abdul Latif University, Sindh Irrigation and Drainage Authority, and the World Wide Fund for Nature (WWF). Their backgrounds included agriculture, biology, geography, IT, international relations, media studies, Pakistan studies, and political science.

Course Teachers and Examination Success

There were six course teachers. The three course leaders were Professor Dr Yasmeen Faiz Kazi, Dean Faculty of Natural Sciences, Shah Abdul Latif University who had obtained her PhD in Microbiology from the University of Glasgow some years ago, and by Dr Azra Meadows OBE and Peter Meadows *Sitara-i-Quaid-i-Azam*, both of the University of Glasgow. The three additional course teachers were senior staff from WWF Pakistan and Heritage Foundation Pakistan.

The whole course was intellectually demanding, and feedback from participants and teachers showed that it had been a highly rewarding experience for everyone. The overall teacher / participant ratio of 6 to 15, in other words 1 to 2.5, provided excellent teacher-participant interaction and an outstanding output in terms of examination success. All participants obtained significantly more than the 50% pass mark in the final certificated exam, with more than half achieving a score of greater than 70%.