

2 February  
World Wetlands Day

ICIMOD

# UPSTREAM DOWNSTREAM

Wetlands connect us all



FOR MOUNTAINS AND PEOPLE

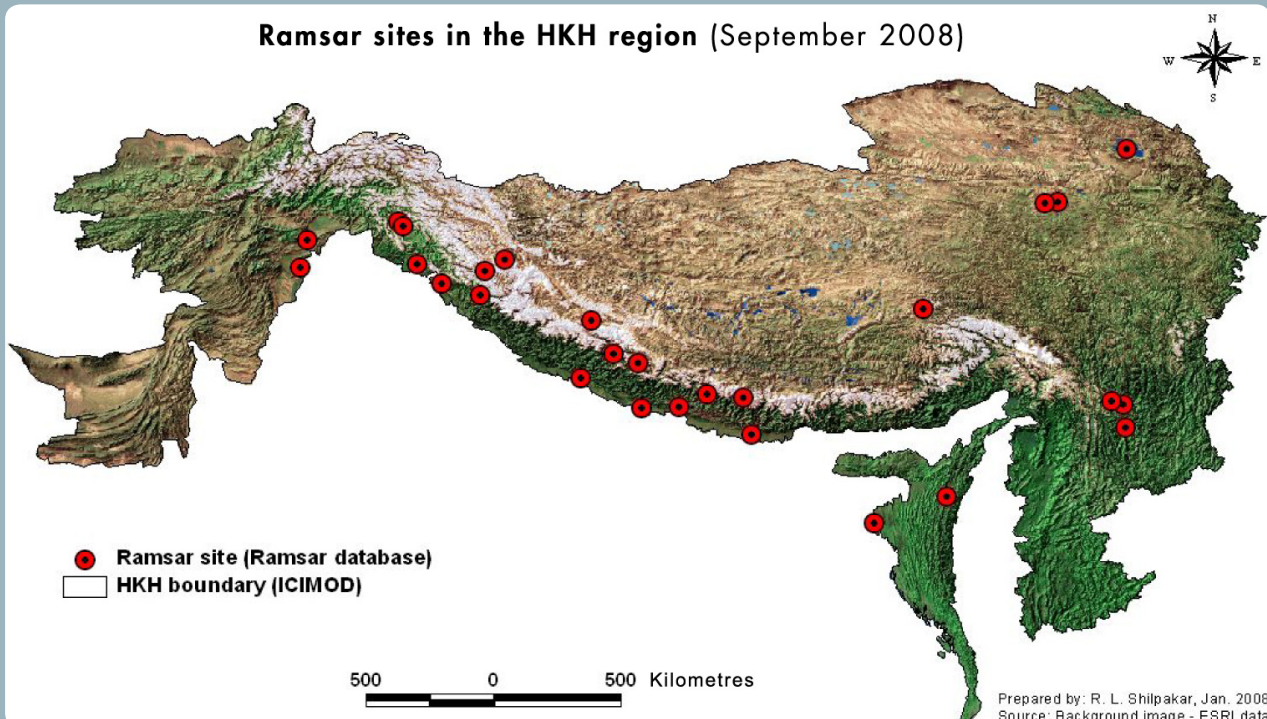
## World Wetlands Day (WWD) 2009

World Wetlands Day 2009 is being celebrated with the slogan 'Upstream-Downstream: Wetlands connect us all'. It is designed around the theme of wetlands and river basin management and the role our wetlands play in their surrounding environments. This year's slogan is very relevant for the Himalayan environment. In mountainous regions, upstream land and water management activities affect both the water availability and the risks for downstream communities. Locally, water bodies such as lakes are used to enhance local livelihoods, but they also play a crucial role for the downstream areas by maintaining the hydrological regimes of the river systems that have their origin in the mountains and acting, for example, as buffer zones for flood hazards and water resources. The health of Himalayan wetlands is of major significance to a vast population and area downstream.

## Himalayan Wetlands

Himalayan wetlands are unique ecosystems that fulfil important functions in the overall water cycle of the large Himalayan river basins that together serve close to 20% of the world's population (the Amu Darya, Brahmaputra, Ganges, Indus, Irrawaddy, Mekong, Salween, Tarim, Yangtze, and Yellow). They also provide habitat for many rare and endangered wildlife species including many migratory birds. As in the mountains themselves, there is a tremendous variation in the areas considered to be 'Himalayan wetlands'. The high altitude wetlands are of particular interest as a result of their remoteness, relatively pristine state, and provision of favourable habitat in otherwise harsh areas. Many of the high altitude wetlands are revered as sacred places, another indication of their special role.

Ramsar sites in the HKH region (September 2008)



## Uses and Functions of Wetlands

Direct use value	Indirect use value	Non-use/existence value
Fishing, food , medicine, agriculture, wetland products	Nutrients and Sediment retention, external ecosystem support	Biodiversity, habitat, unique ecosystem
Teaching, learning, research	Flood control	Religious and cultural heritage
Recreation and tourism	Storm and erosion protection	Research and education
Transport	Groundwater recharge and discharge	Landscape and aesthetic Value
Wildlife harvesting	Water purification	Spiritual value
Water supply, timber	Regulation of local climate, carbon sink	Bequest value
Energy (peat, hydropower, fuelwood)	Shoreline stabilisation, biomass export	Source of genetic resources

(Adapted from Bhandari, B (2003) *Let us keep our wetlands healthy*, Institute for Global Environment Studies (2004)

## ICIMOD focus on Wetlands

There is evidence that climate change is already causing severe direct impacts on high altitude wetlands and glaciers. Studies indicate that warming in the Himalayan region has been much greater than the global average of 0.74°C over the last 100 years. In recent years, there has been a rapid rise in the melting rate of the Himalayan glaciers. The loss of glaciers will lead to a significant decrease in the availability of freshwater in the region, and will have an adverse effect on the wetland ecosystems and the people who depend on them. At the same time, it appears that in some places wetlands are drying up and the land being converted to other uses. Himalayan wetlands and their local communities are vulnerable. Sound management plans are needed so that wetlands can maintain their ecological health and enhance their resilience, and thereby increase their adaptive capacity

to meet the challenges of global climate change. ICIMOD is focusing on development of the information and knowledge needed to improve our understanding of these resources and provide a sound basis for developing such plans and strategies.

Specifically ICIMOD is:

- Establishing a Himalayan wetlands database and information system
- Assessing the status and functions of high altitude wetlands
- Developing an integrated approach for the wise use of wetlands
- Supporting the development of the 'Himalayan Wetlands Initiative' for the wise use and conservation of Himalayan wetlands



### For further information contact

**Mr. Pradeep Mool:** [pmool@icimod.org](mailto:pmool@icimod.org)

© ICIMOD 2008

**Integrated Water and Hazards Management  
International Centre for Integrated Mountain Development**  
GPO Box 3226, Khumaltar, Lalitpur, Kathmandu, Nepal  
**Tel** +977-1-5003222 **email** [info@icimod.org](mailto:info@icimod.org) [www.icimod.org](http://www.icimod.org)

Prepared by ICIMOD Publications Unit, January 2009