# Climate Change Adaptation in South Asia: GWP Perspective

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#### Introduction

- GWP was founded in 1996 to foster (IWRM) in Partnership with
- government agencies
- public institutions
- private companies
- professional organisations
- multilateral development agencies and
- others concerned with water issues.

### South Asian Context

South Asia includes

Bangladesh, Bhutan, India, Nepal, Pakistan, and Sri Lanka country Water Partnership.

Endowed with vast water resources.

- 70% of the population lives in rural areas.
- Monsoon based Agriculture
- Agriculture main livelihood source.
- Major source of income.

## Impact of Climate Change

- Higher temperatures,
- increased variability in precipitation, and
- higher incidence of extreme weather events.

#### Therefore:

- Water security of millions is important.
- Highly vulnerable to droughts and floods (2010 Koshi floods, Nepal and Flood in Pakistan 2011).

## Challenges

- Weak Adaptation Capacities of the countries.
  - Data base and information
  - Finance
  - Technical Know-how
  - Regional Co-operation
- Increasing intersectoral competition for water.
- Need to balance demand and supply of water.
- Water-related climate variability will impact.

## Adaptive Measures

- Enhanced cooperation and dialogue among the countries.
- local, national and regional initiatives that foster
- Research and develop knowledge
- data and knowledge sharing among institutions
- Community based action programmes.
- establishing cooperative framework to advance a regional agenda aimed at increasing the exchange of knowledge and best practices.

#### **Activities**

- Assessment of Climate Change Impact across the countries.
- Indentify successful adaptation measures for incorporation in policy and strategies.
- Climate resilience best practices and gender sensitive techniques in water management.
- Help develop local adaptation plans for climate resilience.

### **Activities**

Nepal

Rapti river basin

6,360 sq. km

Floods and droughts, hydrological design guidelines, urban water

## Bangladesh

Surma-Kushiyara-Meghna Sub-basin 20,000 sq.km Flood management, water pollution, sea level

### India

Subarnekha river basin 14,600 km²

rise

Water pollution, flood management, irrigation, traditional water management, governance

Wainganga sub basin of the Godavari river 36,306 sq. km

Water pollution, water supply services, irrigation management, groundwater depletion, traditional water management

#### **Pakistan**

Upper Indus river basin (Potohar plateau area) 13,000 sq. km

Irrigation, drinking water supply, flood and drought management, water and natural habitat

#### Sri Lanka

Deduru Oya

2,616 sq. km

Irrigation, water supply and river regulation, water sharing, drought management, water quality, basin management, traditions

Nilwala Ganga

960 sq. km

Flood management, water quality, water and environment, irrigation, governance

