

Opening

October 9, 2006

## WEEKLY TIME TABLE

Color code:

	Opening and closing sessions
	Scientific methods, research preparation, field tours
	Hydro-geology, environment and water quality module
	Agronomy module
	Social sciences, economics, institutions module
	Policies, governance module
	Holidays

**Week 1**

**Location:** Roorkee      **Main Partner:** Department of Water Resources Development and Management (DWRDM) at Indian Institute of Technology (IIT), Roorkee

WEEK	FROM 10/9/2006 TO 10/14/2006						
HOURS/DAY	9H00-10H00	10H00-11H00	11H00-12H00	12H00-13H00	14H00-15H00	15H00-16H00	16H00-17H00
Monday, October 09, 2006					Arrival of participants		
Tuesday, October 10, 2006			Opening ceremony		Opening session: Introduction to IGB and YRB, Introduction to modules, Local politics of GW irrigation, Group exercise: Groundwater situations in seven villages, Groundwater governance - inter-disciplinary approach (T. Shah and others)		
Wednesday, October 11, 2006	Intro., problem definition, objectives (S. Jain)	Basic hydrology: precipitation, runoff and streamflow (S. Jain)		Basic hydrogeology (S. Bartarya)		Subsurface water and flow processes (G.C. Mishra)	Hydrology tutorial and exercises (S. Krishnan)
Thursday, October 12, 2006	Subsurface water and flow processes (G.C. Mishra)		Hydrology tutorial and exercises (S. Krishnan)	Video of flow and transport process (K. Villholth)	Groundwater lifting devices (S.K. Sondhi and M.P. Kaushal)		
Friday, October 13, 2006	Groundwater modelling (D. Kashyap)		Introduction to agronomy (S.K. Tripathi)		Geophysics applications (Avasthy)		
Saturday, October 14, 2006	Epistemology of sciences and general introduction to the purpose of social sciences (J.L. Sabatier)		Introduction to the object of sociology and social anthropology (S. Jodhka)		Presentation of Punjab social case study (B.P. Singh and R. Tiwary)		

**Week**

**1 On Sunday**

**Cultural Tour**

**Week 2****Location:** Dehradun**Main Partner:**

Central Soil and Water Conservation Research &amp; Training Institute (CSWCRTI) and Wadia Institute of Himalayan Geology and People Science Institute, Dehradun

**WEEKLY TIME TABLE****WEEK** FROM **10/16/2006** TO **10/21/2006**

<b>HOURS/DAY</b>	9H00-10H00	10H00-11H00	11H00-12H00	12H00-13H00	14H00-15H00	15H00-16H00	16H00-17H00
Monday, October 16, 2006	GW, health and the environment (K. Villholth)	GW quality and chemistry (K. Villholth)	Introduction to kinship (V. Srivastava)		Water harvesting techniques, design of small dams, hydraulic complements (V.N. Sharda)		
Tuesday, October 17, 2006	Soil-water processes and environmental soil physics (V.N. Sharda)			GW contamination and solute transport (K. Villholth)		Arsenic contamination of GW (A. Zahid)	
Wednesday, October 18, 2006	Naranpur Express - Simulation game of a South Asian Village (S. Phansalkhar and S. Krishnan)						
Thursday, October 19, 2006	Physical landscape field trip: The Doon Valley case, Dehradun, Uttaranchal (S. Krishnan, J.L. Sabatier and S. Bartarya)						
Friday, October 20, 2006	Public holidays Diwali						
Saturday, October 21, 2006							

**Week 3****Location:** Dehradun**Main Partner:**

Indian Institute of Remote Sensing (IIRS), Dehradun),

**WEEKLY TIME TABLE****WEEK****FROM****10/23/2006 TO****10/28/2006**

<b>HOURS/DAY</b>	9H00-10H00	10H00-11H00	11H00-12H00	12H00-13H00	14H00-15H00	15H00-16H00	16H00-17H00
Monday, October 23, 2006	Water harvesting field tour (CSWCRTI) and visit to expositions and museums in Dehradun						
Tuesday, October 24, 2006	GIS/RS methodologies in hydrosciences, data collection and image processing (various, IIRS)						
Wednesday, October 25, 2006	The village in Indian history (S. Jodhka)		Personal work and group discussions		Economic anthropology introduction (J.Y. Durand, assisted by J.L. Sabatier)		
Thursday, October 26, 2006	The political economy of agrarian change in contemporary India (S. Jodhka)		Personal work and group discussions, Film projection		Cultural anthropology through texts, lecture and tutorial (M. da Cunha)		
Friday, October 27, 2006	Agrarian change and social transformations in contemporary Punjab (S.Jodhka)		Personal work and group discussions, Film projection		Sociology of technology (J.Y. Durand, assisted by J.L. Sabatier)		
Saturday, October 28, 2006	Anthropological field methods (V. Srivastava)	Political anthropology : The Nuer and the Swat Pathans (J.L. Sabatier)		Film projection: The Nuer	Political anthropology : The Nuer and the Swat Pathans (J.L. Sabatier)	Changing patterns of authority (Tutorial) Case studies on irrigation through ethnographies (J.L. Sabatier)	

**Week 4****Location:** Ludhiana**Main Partner:**

College of Agricultural Engineering, Punjab Agricultural University (PAU), Ludhiana; and Department of Sociology and Social Anthropology

**WEEKLY TIME TABLE**

<i>HOURS/DAY</i>	<i>WEEK</i>	<i>FROM</i>	<i>10/30/2006</i>	<i>TO</i>	<i>11/4/2006</i>		
	9H00-10H00	10H00-11H00	11H00-12H00	12H00-13H00	14H00-15H00	15H00-16H00	16H00-17H00
Monday, October 30, 2006	Hydropedology (P.K. Sharma)	Soil-water-plant-atmosphere relationships (V.K. Arora)		Crop water requirements, water productivity (B.R. Sharma)	Irrigation water saving technologies (S.K. Sondhi)	Drainage and salinity (S.K. Gupta)	
Tuesday, October 31, 2006	History of GW irrigation development in India, GW as an commodity, GW markets (T. Shah)				Communities, groundwater and irrigation institutions: case studies in Gujarat and IGB (A. Prakash)		
Wednesday, November 01, 2006	Agriculture, water savings in China (H. Weiping)		Groundwater institutions in Bengal (A. Mukherji)	Cross-cutting research methodologies (A. Mukherji)	Introduction to agricultural and farming systems in IGB (G. Singh)		Water saving irrigation for rice (B.R. Sharma)
Thursday, November 02, 2006	Groundwater irrigation institutions, analysis of situations in eastern U.P. and Bihar (N. Pant)		Impacts of institutions, global experiences and cross comparisons of groundwater institutions : India, China, Mexico, Spain (T. Shah)			Irrigation tutorial (P. Singh and M.P. Kaushal)	
Friday, November 03, 2006	Groundwater irrigation field trip and short socio-ecological survey in Punjab (J.L. Sabatier, S. Krishnan, T. Rakesh, et al.)						
Saturday, November 04, 2006							

**Week 5****Location:** Roorkee**Main Partner:**

Department of Water Resources Development and Management (DWRDM) at Indian Institute of Technology (IIT), Roorkee

**WEEKLY TIME TABLE****WEEK****FROM****11/6/2006 TO****11/11/2006**

<b>HOURS/DAY</b>	<b>9H00-10H00</b>	<b>10H00-11H00</b>	<b>11H00-12H00</b>	<b>12H00-13H00</b>	<b>14H00-15H00</b>	<b>15H00-16H00</b>	<b>16H00-17H00</b>	<b>17H-18H</b>
Monday, November 06, 2006	Knowledge sharing, communication, awareness and media coverage (N. Manning)				Opening Session	Introduction to water institutions: A reflexive framework ( R.M. Saleth)		
Tuesday, November 07, 2006	Knowledge sharing, communication, awareness and media coverage (N. Manning)			Discussions	Senior fellows: Excursion to Haridwar Junior fellows: Communication workshop (N. Manning)			
Wednesday, November 08, 2006	Local self governance and decision making: Potential in India (M.S. Vani and R. Asthana)		Water rights approach (M.S. Vani and R. Asthana)		Legal aspects of groundwater management in Australia (J. McKay)		Energy policies in India (N.K. Dubash)	
Thursday, November 09, 2006	The energy nexus: Pricing, incentives, regulation in North India (T. Shah)		Legal aspects of groundwater management in Australia (J. McKay)		Political aspects of groundwater irrigation: review of north and south Indian examples (S. Janakarajan)			
Friday, November 10, 2006	Groundwater policy, historical background, political economy and present issues in Northern China (J. Wang)				Groundwater conflict resolution mechanisms: analysis of situations (S. Janakarajan)			
Saturday, November 11, 2006	Managing arsenic contamination of groundwater (P. Bhattacharya)		Groundwater quality protection and management (K. Villholth)		Canal irrigation versus groundwater development in Indian Punjab - The Bhakra Canal (S. Dharmadikary)		Closing ceremony	