JALVIGYAN SAMEEKSHA (HYDROLOGY REVIEW)

Theme
Fresh and Sea Water Interaction in
Coastal Regions



Publication of Indian National Committee on Hydrology (INCOH) (IHP National Committee of India for UNESCO) National Institute of Hydrology, Roorkee 247667 (India)

INDIAN NATIONAL COMMITTEE ON HYDROLOGY (INCOH)

(IHP National Committee of India for UNESCO)

Constituted by the Ministry of Water Resources in 1982

INCOH Secretariat

Member Secretary, Indian National Committee on Hydrology (INCOH)

National Institute of Hydrology, Roorkee – 247667, INDIA

Phone: +91 1332 272906 Ext. 299

Fax: +91 1332 272123 E-mail: <u>incoh@nih.ernet.in</u> Web: www.nih.ernet.in

Activities of INCOH

Sponsorship of Research/Applied Projects

INCOH provides sponsorship to research and development projects to fulfil its following objectives:

- To conduct studies and research using available technology.
- To develop new technology and methodologies for application to real life problems.
- To develop hydrological instruments indigenously and to evaluate new techniques.
- To develop new software for application in field hydrological problems.
- To give impetus to hydrological education and training.

About 48 research projects from different parts of the country have been sponsored uptil now. The funding for various projects has been provided under the following ten broad areas:

- ➤ Hydrology of surface water (rivers, lakes and reservoirs) including snow and glaciers.
- > Remote sensing applications to hydrology and water resources.
- > Hydrological information system and computers in hydrology.
- > Hydrological instrumentation and telemetry.
- > Environmental hydrology.
- > Hydrometeorlogical aspects of water resources development and flood forecasting.
- > Groundwater, springs, conjunctive use, drainage and water re-use.
- > Drought, water conservation and evaporation control.
- > Nuclear applications in hydrology.
- > Education and training in hydrology.

Organisation of National Symposium on Hydrology

INCOH organises at least one national seminar/symposium every year to bring together hydrologists and water resources engineers from various parts of India. Since 1987, INCOH has been organising such National Seminars every year on specific focal themes.

Sponsorship of Seminar/Symposia/Conferences/Short-Term Courses

INCOH provides sponsorship to various agencies and organizations for organising national, regional and international events in hydrology.

JALVIGYAN SAMEEKSHA (HYDROLOGY REVIEW)

Theme
Fresh and Sea Water Interaction in
Coastal Regions

Editors

Anupma Sharma & Archana Sarkar

National Institute of Hydrology, Roorkee



Publication of
Indian National Committee on Hydrology (INCOH)
(IHP National Committee of India for UNESCO)
National Institute of Hydrology, Roorkee 247667 (India)

INDIAN NATIONAL COMMITTEE ON HYDROLOGY (INCOH) (IHP National Committee of India for UNESCO)

Chairman Mr. R. Jeyaseelan

Chairman, Central Water Commission, New Delhi

Executive Member Dr. K.D. Sharma

Director, National Institute of Hydrology, Roorkee

Member Secretary Dr. Ramakar Jha

Scientist-E1, National Institute of Hydrology, Roorkee

SUB-COMMITTEES OF INCOH

STEERING COMMITTEE

Chairman 1. Member (D&R), Central Water Commission, New Delhi.

Members 2. Director, National Institute of Hydrology, Roorkee. 3. Chairman, Central Ground Water Board, Faridabad.

4. Chief Engineer (HSO), Central Water Commission, New Delhi. 5. Director (R&D), Ministry of Water Resources, New Delhi.

Secretary 6. Dr. Ramakar Jha, Sc. E1, National Institute of Hydrology, Roorkee.

RESEARCH COMMITTEE (SURFACE WATER)

Chairman 1. Director, National Institute of Hydrology, Roorkee.

Members 2. Director, Centre for Water Resources Studies, National Institute of

Technology, Patna.

3. Chief Engineer (Dam Design), Irrigation Design Organisation, Roorkee.

4. Director (Hydrology - DSR), Central Water Commission, New Delhi. 5. Director, R&D Dte., Ministry of Water Resources, CWC, New Delhi.

6. Chief Engineer (Surface Water), Irrigation Dept., Bangalore.

7. Representative of DG, IMD, New Delhi.

8. Director, GERI, Baroda, Gujarat.

Secretary 9. Dr. S.K. Jain, Sc. F, National Institute of Hydrology, Roorkee.

RESEARCH COMMITTEE (GROUND WATER)

Chairman 1. Member (SML), Central Ground Water Board, Faridabad.

Members 2. Director (R&D), Ministry of Water Resources, New Delhi.

3. Joint Director, CWPRS, Pune.

4. Prof. B.B.S. Singhal, Emeritus Professor, IIT Roorkee, Roorkee.

5. Director, NGRI, New Delhi.

6. Dr. G.D. Gupta, Advisor, DST, New Delhi.

7. Chief Engineer (Ground Water), Irrigation Department, Hyderabad. 8. Dr. Ramakar Jha, Sc. E1, National Institute of Hydrology, Roorkee.

Secretary 9. Mr. R.C. Jain, Sc. D, Central Ground Water Board, New Delhi.

JALVIGYAN SAMEEKSHA (HYDROLOGY REVIEW)

Vo	lume	20.	2005
		_ ,	

THEME:	FRESH AND SEA WATER INTERACTION IN
	COASTAL REGIONS

C	റ	N	Т	F	N	Т	2
$\mathbf{\circ}$	\smile	1 4		ᆫ	ľ		J

Technical	Papers
-----------	--------

recinical rapers	
Management of South Chennai Coastal Aquifer System - A Multi Objective Approach S. Mohan and S.K. Pramada	1
Seawater Intrusion Due to Freshwater Draft in Coastal Aquifers K. Nageswara Rao and A. Mahesha	15
Seawater Intrusion Mapping Using Modified GALDIT Indicator Model - Case Study in Goa A.G. Chachadi	29
Geophysical Investigations for Groundwater in Coastal Tracts P.C. Chandra	47
INCOH Sponsored Research Projects	65

