

Indian National Committee on Irrigation and Drainage (INCID)

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Chairman, Central Water Commission and Chairman,
INCID

International Commission on Irrigation and Drainage (ICID)

- Founded on initiative of Govt. of India on 24 June 1950
- Headquarter in New Delhi in India
- Eleven founding countries
Brazil, Egypt, India, Indonesia, Italy, Netherlands, Serbia (former Yugoslavia), Sri Lanka, Switzerland, Thailand, Turkey



Indian National Committee on Irrigation and Drainage (INCID)

- CWC is hosting the INCID. INCID, CWC and ICID closely cooperate in water resources sector
- Contributing towards knowledge dissemination: workshops, conferences, seminars etc.
- Ministry of Jal Shakti, in August 2019, re-constituted INCID as a dedicated national committee with representation from various states and union ministries, training and research institutes, NGOs, private sector, etc. for bringing ICID to the doorsteps of country level development.
- INCID have developed a number of guidelines, manuals and books for consolidating knowledge in irrigation management field.

Events Hosted and Sponsored by Govt of India

Year	Event	Location
June 1950	1 st International Executive Council (IEC) meeting	Simla, India
January 1951	2 nd IEC / 1 st Congress	Delhi, India
June 1953	4 th IEC	Bangalore, India
January 1966	17 th IEC / 6 th Congress	New Delhi, India
October 1982	33 rd IEC	New Delhi, India
December 2009	60 th IEC	New Delhi, India
December 2009	5 th Asian Regional Conference	New Delhi, India
January 2000	8 th International Drainage Workshop	New Delhi, India
January 2019	9th International Micro Irrigation Conference	Aurangabad, (Maharashtra) India

WATER RESOURCES SECTOR IN INDIA- ROLE OF CENTRAL WATER COMMISSION

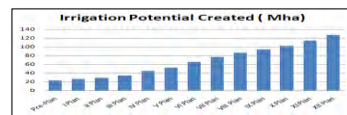
In line with the objectives of ICID, the CWC is engaged various activities in the fields of

- Irrigation, development and management
- Development of Hydropower
- Flood Forecasting,
- Rehabilitation and modernization of dams and irrigation projects,
- Transboundary and inter-state water management issues
- Capacity Building

IRRIGATION DEVELOPMENTS IN INDIA

Irrigation Development in India

- Irrigation Potential has increased from 22.6 Mha (in 1951) to 126.73 Mha by the end of 2017



- Food Grain Production increased from 51 MMT (1950-51) to 295 MMT (about 6 times)
- **Accelerated Irrigation Benefit Program (AIBP): Initiative of GoI for last mile funding and technology support for early completion of irrigation projects**

Command Area Development & Management Program

- CAD Program was launched by GoI in 1974-75. Restructured and renamed as CADWM in 2004.
- Objectives of CADWM Program
 - Bridge the gap between IPC and IPU
 - Improve Water-Use efficiency
 - Increase agriculture productivity & production
- Distinct Features
 - Last mile connectivity in delivery of irrigation water
 - PIM – Transfer of management to Water Users' Associations

Micro Irrigation

National Mission on Micro Irrigation (NMMI) under Ministry of Agriculture (as part of National Mission on Sustainable Agriculture) for providing financial support to farmers.

- Micro Irrigation -

Potential – 69.5 M ha
Achieved – 10 M ha



Irrigation Efficiency Improvement – Recent Initiatives

- It is Mandatory to implement micro irrigation in at least 10% of the Command Area in AIBP and CADWM Programmes.
- Emphasis on Pipe Distribution Network in order to avoid Land Acquisition as well to avoid wastage of water.



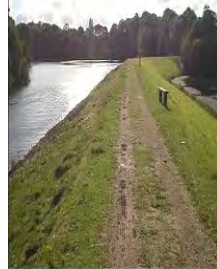
- CWC has prepared Guideline on Planning & Design of Pipe Irrigation Network
- Studies of water use efficiency in irrigation projects in various parts of the country

FLOOD MANAGEMENT

Dams (Reservoirs)



Embankments



Channel/ Drainage Improvement



EXTENT OF FLOOD PROTECTION MEASURES

S N	Flood management measures	Extent
1	Embankment	37073 km
2	Channel/drainage improvement	39727 km

Above works have resulted in protecting area of about 20.54 mha.

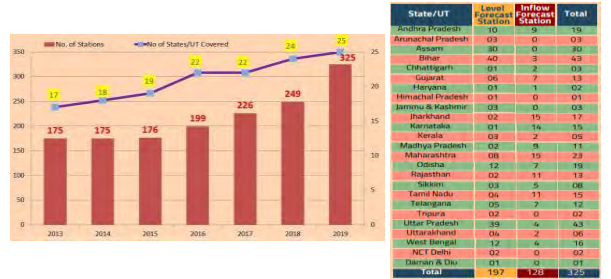
FLOOD PLAIN ZONING

- Model bill in 1975 - circulated by then Ministry of Irrigation to all States advising them for enactment of suitable legislation
- Flood Plain Zoning Acts enacted by some States.
- Being implemented in parts of Ganga river.

Locations of Flood Forecasting Stations in India



Flood Forecasting Expansion



MODERNISATION IN FLOOD FORECASTING

- Automatic Real time data acquisition and communication
- 3 day advisory forecast based on rainfall runoff modeling
- Collaboration with Google for Inundation forecast (7 level forecast stations- 11000 Sqkm). Planned to increase to 3 times during this year.

DAM SAFETY

- India has a portfolio of nearly 5700 large dams ranging from 260m to 15m heights
- Dam safety assurance initiatives taken from 1980 onwards.
- Establishment of safety assurance units at state/ regional level
- Leveraging funding support from the World Bank to promote Dam Rehabilitation and Improvement including silt management involving
 - Establishment of standard practices and techno-managerial guidelines and standards
 - Guiding rehabilitation of selected dams
 - Emergency Action Plans and Operation & Maintenance guidelines

MODERNISATION IN DATA COLLECTION AND DISSEMINATION

MODERNISATION OF DATA COLLECTION

- Modernization of hydro-meteorological data collection, processing and decision support systems
- Establishment of Water Resources Information System (IndiaWRIS) for easy availability of water related data for planning, development and research

CAPACITY BUILDING

Capacity Building

- In view of Covid, NWA (training institute of CWC) and ICID have recently joined hands to use DL tools for trainings:

- Agreed in-principle to collaborate for conducting Training and Capacity building through DL in (i) Irrigation and Water management including Micro irrigation; (ii) Flood; (iii) Water use efficiency (iv) Drainage etc.

- First course under the process of development is on Micro irrigation - training material provided by NWA, CWC is under review.

- MOODLE platform available with ICID would be used.

- The target Audience for the Distance Learning would be Water Resources and Irrigation professionals, Farmers, NGOs, Agriculture extension staff, Students, International participants especially from the member countries of ICID etc.



Thank You