WELCOME
to
India Irrigation Forum

AGENDA 2030

SUSTAINABLE DEVELOPMENT GOALS

1. NO POVERTY
2. ZERO HUNGER
3. GOOD HEALTH AND WELL-BEING
4. QUALITY EDUCATION
5. WOMEN’S EQUALITY
6. CLEAN WATER AND SANITATION
7. AFFORDABLE AND RELIABLE ENERGY
8. DECENT WORK AND ECONOMIC GROWTH
9. INDUSTRY, INNOVATION AND INFRASTRUCTURE
10. REDUCED INEQUALITIES
11. SUSTAINABLE CITIES AND COMMUNITIES
12. RESPONSIBLE CONSUMPTION AND PRODUCTION
13. CLIMATE ACTION
14. LIFE UNDERWATER
15. LIFE ON LAND
16. PEACE, JUSTICE AND STRONG INSTITUTIONS
17. PARTNERSHIPS FOR THE GOALS

SUSTAINABLE DEVELOPMENT GOALS

ICID-CIID
International Commission on Irrigation and Drainage
Sustainable Development that meets the needs of the present without compromising the ability of future generations to meet their own needs

**Principles of Sustainable Development**

- Living within environmental limits
- Ensuring a strong healthy and just society
- Achieving a sustainable economy
- Promoting good governance
- Using sound science responsibly

**Development activities in different economic facets are closely interlinked: Water Food Energy Nexus**
Global challenge is to double the food production by 2050

Importance of Irrigation

Agriculture cannot be made solely dependent on rains as it amounts to gambling with the nature.

- Kauṭilya’s Arthshastra, 371 BC

References of canals and dams found in Vedas and Smritis.

Irrigation Department of Chandragupta Mourya constructed a beautiful lake named Sudarshan at Girnar, Gujarat
Challenges of sustainable food production

- Diminishing freshwater supplies for agriculture
- 80-90% of the increase to come from already cultivated lands
- Aging irrigation infrastructures
- Weak institutions and poor water governance
- Climate variability and change affecting agricultural production
- Lack of institutional and individual capacity
ICID network consist of member countries that represent 90% of the total irrigated area

ICID has steadily moved from engineering centered approach to sustainable development

...changing demographics, development scenario, limiting natural resources, and ecological sustainability.
ICID Vision 2030
Water secure world free of poverty and hunger through sustainable rural development

Mission
Working together towards sustainable agriculture water management through inter-disciplinary approaches to economically viable, socially acceptable and environmentally sound irrigation, drainage and flood management

- Provides a unique platform for all stakeholders for sharing and learning by engaging in issues of global interest.
- Gathers a wide range of experts from various disciplines to provide different perspectives.
- Stimulates and promotes multi-disciplinary discussions towards sustainable solution to water management in agriculture through:
  - Exchange of latest irrigation and drainage policies, practices, innovations and technologies;
  - Exploring and formulating concrete multi-disciplinary proposals;
  - Development of liaison/collaboration among various national/international institutions/organizations/private sector working for irrigated agriculture; and
  - Advocacy for political commitments.
India Irrigation Forum

**Mission:** Enhance the science based discourse in policy making and field implementation in Agriculture Water Management in India

**Objectives**

- Providing a platform for sharing of knowledge and experiences, networking and interaction amongst various professionals;
- Facilitating inter-disciplinary understanding and dialogue;
- Encouraging multi-disciplinary activities and programs;
- Bringing advances in research, technology and successful innovations within easy access of field level professionals;

**STAKEHOLDERS**

- Policy makers
- Farmers’ Associations
- Scientists from Agriculture organizations
- Extension services providers
- Financial institutions
- Private sector:
  - Manufacturers
  - Consultancy services
  - Contractors
  - Other service providers
- International organisations with programmes in the field of Irrigation and Drainage
- Professional Water Associations
- Non-government Organizations
- Universities and research institutes
Panel I: Capacity Development Needs

- What are the Capacity development needs of the irrigation and drainage professionals?
- What are the capacity gaps in WUAs to meet their objectives?
- Is there a need for a Forum at the state level to address these issues?

Panel II: The way forward for India Irrigation Forum

- What are CD opportunities and facilities available? Are they meeting the needs?
- How can the IIF meet these requirement?
- What mechanism should be there for IIF to be sustainable?

Goal 6: Ensure availability and sustainable management of water and sanitation for all

- **Target 6.1** By 2030, achieve universal and equitable access to safe and affordable drinking water for all.
  - 6.1.1 Proportion of population using safely managed drinking water services

- **Target 6.2** By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations.
  - 6.2.1 Proportion of population using safely managed sanitation services
Target 6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.

- 6.4.1 Change in water-use efficiency over time
- 6.4.2 Level of water stress: freshwater withdrawal as a proportion of available freshwater resources

Goal 2: End hunger, achieve food security and improved nutrition and promote sustainable agriculture

Target 2.4

- By 2030, ensure sustainable food production systems and implement resilient agricultural practices that increase productivity and production, that help maintain ecosystems, that strengthen capacity for adaptation to climate change, extreme weather, drought, flooding and other disasters and that progressively improve land and soil quality.
Water Prices Affordability by Sectors Usage

<table>
<thead>
<tr>
<th>Country</th>
<th>Household Water Supply</th>
<th>Industrial and Commercial</th>
<th>Irrigation and Agriculture</th>
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<tbody>
<tr>
<td>France</td>
<td>3.11</td>
<td>0.95</td>
<td>0.08</td>
</tr>
<tr>
<td>United States of America</td>
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<td>Turkey</td>
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<td>0.01</td>
</tr>
</tbody>
</table>

Source: CWF (2011, fig 9, p.8)

Fresh water production cost (Desalination)
USD 1-2/m³; largely dependent on energy cost and plant location
Source: Adapted from IEA-ETSAP and IRENA (2012, table 1, p.21)