Benchmarking of Irrigation Projects

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India –W.R. Development (at a glance)

(In million hectare)

Geographical area of India

329

Ultimate irrigation Potential

140

Potential created by 1951

22.6

Anticipated potential created up to XI plan 110.84

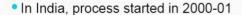
Food production increased from 51 to 252 m. tonnes

Required Production level by 2050-450 m. tonnes

What is Benchmarking?

- A systematic process for securing continual improvement through comparison with relevant and achievable internal or external norms and standards
- Benchmarking as a tool for performance improvement used in private sector since long but comparatively recent in irrigation sector





Benchmarking Concept

- Comparison with practices of more successful projects
- Determining performance gap between current & best practices
- Selecting best practices, tailoring them to fit organization & implementing them
- Cycle of improvement continues
- Benchmarks change with time as competition for improving efficiency of projects goes on

Drivers of Benchmarking

- Increasing water scarcity & competition between various sectors of water use
- Need to improve productivity of water in agriculture sector (Rs/cum)
- Need to achieve financial sustainability of irrigation schemes & phase out State subsidy
- Need to promote participatory management of schemes by users
- Need to establish a basis of accountability to service provider

Principles of Benchmarking

- Performance level best in class / group
- Performance measurement quantitative or qualitative
- Motives and needs of different stakeholders
- One Project may not necessarily be best performer in respect of all indicators.





Characteristics

- Irrigation & drainage service providers operate in a natural monopoly environment
- Irrigation & drainage entails complex & interacting physical, social, economic, political, technical & environmental processes
- Performance of these schemes is site specific
- For comparison necessary to categorize irrigation projects under various groups
- Similar & homogeneous projects should constitute a group

Objectives of Benchmarking

- Identifying the best management practices
- Enabling Comparison and thus Improvement in Performance
- Generating competition among various agencies/ projects/WUAs
- Assessing and monitoring irrigation efficiency
- Identification of Baseline for Improvement
- Prioritizing and assessing need & extent of modernisation

Advantages of Benchmarking

- Transparency in irrigation sector
- Equitable distribution of water
- Adoption of best management practices
- Bringing additional area under irrigation leading to diversification of crops
- Enable putting cap on O&M expenditure
- Maintaining financial sustainability
- Easy to convince policy makers
- Environmental sustainability in irrigated agricultural systems

Benchmarking of Irrigation Systems

- National Workshop at Hyderabad in February, 2002
- Finalization of 20 Performance Indicators
- IPTRID, INCID have brought out indicators for Benchmarking of Irrigation Projects
- Guidelines for Benchmarking of Irrigation Systems in India brought out by INCID in June, 2002
- Selection of indicators depends upon objectives of Benchmarking

Countries doing benchmarking: Australia, Mexico, India, China, Egypt, Malaysia, Pakistan, France & Spain

Benchmarking by Government of Maharashtra :

<u>Year</u>	Projects
2000-01	06
2001-02	84
2002-03	254
2003-04	261
2009-10	1268

 Government of Gujarat carrying out Benchmarking of Mahi Irrigation Project

Indicators for Performance Benchmarking of Irrigation Projects

Performance of irrigation system grouped in four main systems:

- System Performance (6 indicators)
- Agricultural productivity (4 indicators)
- Financial Aspects (8 indicators)
- Environmental Aspects (2 indicators)

After identification of projects, finalize

- Data Requirement
- Data sources for Primary data
- Need of secondary data and
- Parameters to be taken up

Way forward

- Extending it further to uncovered region
- Comparison with National & International schemes
- Increasing participation of users in benchmarking process
- Coupling of benchmarking with water audit