

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

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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

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- Australia started benchmarking of irrigation service providers in 1997. It took momentum after workshop in Rome supported by WB, FAO, IPTRID (International Programme for Technology & Research in Irrigation & Drainage) & IWMI

- In India, process started in 2000-01

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

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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

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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.

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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

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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

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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

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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

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

- Benchmarking by Government of Maharashtra :

<u>Year</u>	<u>Projects</u>
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)

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After identification of projects, finalize

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

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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

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