Irrigation Sector in India 2019
Emerging Trends, New Techniques, Upcoming Projects and Opportunities

- Report (PDF)
- Data-set (Excel)
- Quarterly Updates
Key Takeaways

- According to the Composite Water Management Index 2.0 report, released by NITI Aayog in August 2019, the total irrigated command area in 24 key states has increased from 55.38 million hectares (million ha) in 2015-16 to 63.94 million ha in 2017-18. Only three states - Uttar Pradesh, Gujarat and Bihar have irrigated command area of over 5 million ha.
- Despite some promising initiatives, current irrigation practices are far from satisfactory. These are characterised by poor water use efficiency, less than optimal utilisation of irrigation potential, low coverage of advanced micro irrigation systems, over-exploitation of groundwater sources, widespread use of water-intensive crops and poor freshwater management.
- The government too is making concerted efforts towards improving waste management practices through various flagship initiatives such as the Pradhan Mantri Krishi Sinchayee Yojana (PMKSY), Accelerated Irrigation Benefits Programme, Bharat Nirman Programme, Participatory Irrigation Management, Interlinking of Rivers (ILR) Programme, and Command Area Development and Water Management.
- The government has also created two dedicated funds - a long-term irrigation fund and a micro irrigation fund - with an initial corpus of about Rs 400 billion and Rs 50 billion, respectively, for financing these projects.
- Technology in the irrigation sector has evolved significantly over the past 10 years with regard to construction equipment, water transfer techniques and types of irrigation systems. Innovative technology-led irrigation systems such as micro-irrigation are gaining prominence over conventional flooding methods of irrigation.
- Of late, solar pumps have emerged as a viable, non-polluting source of power for agricultural consumers. The central government has been actively encouraging the uptake of solar pumps among farmers through schemes such as Kisan Urja Suraksha evam Utthaan Mahabhiyan.
- Of the total 29.93 million agricultural irrigation pumps, 0.13 million (0.4%) are solar powered, 8.8 million (29.4%) are diesel powered and 21 million (70.1%) operate on grid connected electricity.

Key Constraining Factors

- The gap between irrigation potential created and utilised has been increasing steadily over the last few decades. Poor budgetary provisions for operating and maintaining irrigation projects, incomplete distribution systems, non-completion of the command area development works, changes from the initially designed cropping pattern, etc. are some of the major reasons responsible for the sub-optimal utilisation of irrigation potential.
- Given the heavy dependence on groundwater sources for irrigation, groundwater depletion has emerged as a serious concern.
- Inter-state water disputes are another major cause of concern for irrigation projects.

Future Outlook

- At present, based on the projects tracked by India Infrastructure Research, the irrigation sector offer a lucrative pipeline of at least 182 projects (announced) entailing a combined investment of more than Rs 7 trillion. These projects will create a cumulative irrigation potential of 24.74 million ha.
- In the next five to six years, the irrigation sector is expected to offer huge business opportunities to various stakeholders such as project developers, engineering, procurement and construction (EPC) contractors, technology and equipment providers, financiers, etc.
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18. **Key Players/Contractors**
- Gammon India Limited
- Gayatri Projects Limited
- The Indian Hume Pipe Company Limited
- Jain Irrigation Systems
- KEC International Limited
- Larsen & Toubro Limited
- IL&FS Engineering and Construction Company Limited
- Amrutha Constructions Private Limited
- GVPR Engineers Limited
- Hindustan Construction Company Limited
- KNR Constructions Limited
- Megha Engineering & Infrastructures Private Limited
- Nagarjuna Construction Company Limited
- Patel Engineering Limited
- SPML Infra Limited
- Vijeta Projects and Infrastructure Limited

Each player profile gives information on the company overview, project portfolio (completed and ongoing projects), financial performance, future plans, etc.

**Database of Key Projects**
The database is a compilation of upcoming projects (ongoing and planned) in the sector with details on scope, location, cost, capacity, funding sources, implementing agency, contractor (wherever available), current status, expected date of completion, etc.

**Quarterly Updates**
The three quarterly updates will cover:
- Key Policy Developments
- Recent Announcements
- Update on Key Government Programmes
- Project Completion/Awards
- New Tenders
- Etc.
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