

## Irrigation Potential and Drought - Maharashtra Case

### What is the issue?

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- Announcing that the state has suffered a drought in 2018, Maharashtra has sought a relief of Rs 7,000 crore from the Centre.

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- This has raised several questions on the effectiveness of the existing agricultural programmes in the state.

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### Why is drought relief from Centre questionable?

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- **PMFBY** - The Pradhan Mantri Fasal Bima Yojana (PMFBY) was supposed to compensate farmers in case of a drought year.

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- So the state approaching the Centre for relief despite having crop insurance in place becomes illogical.

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- **Investments** - The state had been making massive irrigation investments over the years in drought-proofing its agriculture.

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- All these have failed to make an effective impact in making agriculture remunerative, again burdening the Centre.

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- **Other states** - The other states that have suffered similar drought also need attention.

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- E.g. during 2018 monsoon (June-September), Maharashtra's Marathwada region received 22% lower rainfall than normal and Madhya Maharashtra was only 9% below normal.

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- In comparison, rainfall in the Gujarat region was 24% below normal; in Saurashtra and Kutch region, it was 34%.

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- In Rajasthan it was 23% below normal; and, in North Interior Karnataka, 29% below normal.
- Bihar, Jharkhand, Assam, Meghalaya, and Arunachal Pradesh too experienced deficiency of more than 20%.
- Thus, if Maharashtra is to be compensated for drought, the other states should also be approaching the Centre for relief.

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### **What is the public irrigation scenario?**

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- Public expenditures on irrigation cover primarily canals through major and medium irrigation schemes (MMI).
- The capital costs of canal irrigation in certain states during the 2002-03 to 2013-14 period reveal a certain trend.

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- Graph 1 gives the state-wise capital cost of public irrigation (canals, primarily through MMI schemes).
- Here, Maharashtra tops the list with Rs 20.4 lakh/ha of irrigation potential utilised (IPU).
- Notably, the all-India average cost is just Rs 6.3 lakh/ha of IPU.
- The costs per ha of irrigation potential created (IPC) are somewhat lower.
- Nevertheless, the highest is for Maharashtra at Rs 13.5 lakh/ha.
- Engineers and contractors are quick to announce IPC after construction of reservoirs and main canals.
- However, farmers benefit only when this potential created is converted to potential utilised.

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- The utilisation parameter is to be ensured by the Ministry of Agriculture and Farmers' Welfare.

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### **What is the concern with Maharashtra?**

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- Maharashtra witnesses high costs of public irrigation, which is due to several regional and administrative reasons.

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- They include the tough topography, the widening gap between the IPC and IPU, and rampant corruption too.

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- The profitability in crop cultivation from public irrigation hardly matches with the opportunity cost of public irrigation.

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- E.g. let Rs 20 lakh be the sum equivalent to the cost of public irrigation on IPU basis.

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- Consider this being given to each farmer on per ha basis as long-term bonds with a fixed interest of say 8% per annum.

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- In this case, the farmer would have got a net annual income of Rs 1.6 lakh without any risk.

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- But if that sum is actually invested in public irrigation, farmers are less likely to make Rs 1.6 lakh/ha as the net income.

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- So clearly, the benefit cost (B/C) ratios of most of these projects do not justify these projects.

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- But, as the system functions, the B/C ratios are highly inflated in feasibility reports to justify starting several projects.

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- Resultantly, investments are made, but hardly any ex-post analysis is done to check the outcome.

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### **What lies ahead?**

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- Public irrigation needs major overhauling in the country, especially in states like Maharashtra.

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- Transparency and accountability in terms of benefits and costs are essential to make worthy the irrigation investments.

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- Also, the issue of massive inequity in the distribution of irrigation water has to be addressed.

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- E.g. in Maharashtra, about 19% of gross cropped area is irrigated. But it is 100% in case of sugarcane, and just 3% in case of cotton.

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- The government should distribute irrigation water from public canals more equitably amongst farmers, on per ha basis.

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- This could lead to efficient cropping patterns with respect to water and materialise the goal of “more crop per drop”.

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**Source: Indian Express**

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