

# Why India is not able to irrigate all available agricultural land?

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# What's in News?

As per the available data with the Union Government, only 40% of land is irrigated.

# **Highlights:**

Against the total agricultural land of 1,80,888 thousand hectares, the cultivated land in the country is 1,53,888 thousand hectares.

Of the total available agricultural land 71,554 thousand hectares or only 40 per cent is irrigated

In fact, some of the major States including Maharashtra and Jharkhand don't even have 20 per cent of arable land irrigated.

#### Punjab is the only State which has nearly achieved 100 per cent net irrigation followed by Haryana.

Uttar Pradesh, Madhya Pradesh, and West Bengal are among the five top States with more than 50 per cent net irrigated area

# Interestingly, per the government data 60 per cent of the net irrigated area in the country is serviced through groundwater.

The rate of extraction of groundwater is more than 100 per cent in Delhi, Haryana, Punjab and Rajasthan

The Directorate of Economics and Statistics, Ministry of Agriculture and Farmers Welfare, estimates percentage of the net un-irrigated area over net area sown in the country to be about 48.65 per cent.

Further, it is estimated that 40 per cent of the net sown area is expected to remain rain-fed even after attainment of full irrigation potential of the country,

### Impact of non-irrigation:

The 2017-18 Economic Survey while laying down medium-term risks to Indian agriculture from climate change – it **projects incomes to decline by 20-25 per cent in un-irrigated areas** – does not dwell much on the immediate concerns of **falling prices of farm produce and dwindling incomes**.

The proportion of dry days (rainfall less than 0.1 mm per day), as well as wet days (rainfall greater than 80 mm per day) has increased steadily over time.

As the Centre is executing schemes to **double farmers' income farmers** in many States continue to depend on monsoon for cultivation, thereby it could hinder the vision of doubling the farmer's income

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Thousands of people migrate in search of livelihood from drought-prone areas in absence of good monsoon

# Suggestions:

The Economic Survey 2018-19 suggests that "focus should shift from 'land productivity' to '**irrigation water productivity'**.

To minimise the impact of climate change the government should **drastically extend drip and sprinkler** irrigation, replace targeted subsidies in power and fertilisers by cash transfers and review the cereals-centric policy.

Increased coverage under micro-irrigation can be the most effective mode of water conservation and these States need to focus on both **medium and long-term groundwater recharge and conservation plans**.

Building and strengthening of **canal network to take water to the farms** instead of focusing only on construction of dams.

Water is a State subject and local governments take up projects for providing irrigation in rain-fed regions under their jurisdiction.

According to the Union government, its role is limited to being catalytic, providing technical support, and in some cases partial financial assistance in terms of the existing schemes under implementation.

# Pradhan Mantri Krishi Sinchayee Yojana:

A centrally sponsored scheme Pradhan Mantri Krishi Sinchayee Yojana (PMKSY) was launched in 2015-16.

The aim is to enhance physical access of water on farm and expand cultivable areas under assured irrigation, improve on-farm water use efficiency, and introduce sustainable water conservation practices.

Besides, with the objective of facilitating the States in mobilising resources for expanding coverage of micro irrigation, **Micro Irrigation Fund (MIF) has been created with National Bank for Agriculture and Rural Development (NABARD).** 

Extension of PMKSY till 2025-26 has been approved

PMKSY has the following components:

oAccelerated Irrigation Benefit Programme(AIBP): being implemented by Ministry of Jal Shakti..

oPMKSY -Har Khet ko Pani: being implemented by Ministry of Jal Shakti

oPMKSY -Watershed: being implemented by Department of Land Resources.

o**PMKSY- Per Drop More Crop (PMKSY- PDMC):** Department of Agriculture, Cooperation & Farmers Welfare is implementing PMKSY- PDMC which is operational in the country from 2015-16.

oThe PMKSY- PDMC focuses on enhancing water use efficiency at farm level through Micro Irrigation viz Drip and Sprinkler Irrigation System.

### National Mission for Sustainable Agriculture:

National Mission for Sustainable Agriculture aims at enhancing food security and protection of resources.

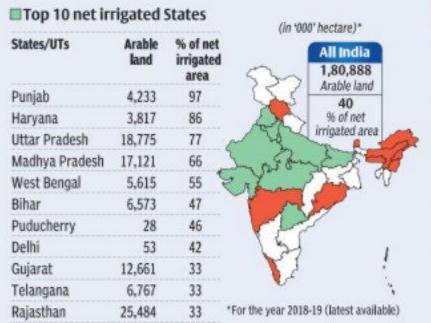
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Key targets include covering 3.5 lakh hectare of area under organic farming, 3.70 under precision irrigation, 4.0 lakh hectare under System of Rice Intensification, 3.41 lakh hectare under diversification to less water consuming crop, 3.09 lakh hectare additional area under plantation in arable land and 7 bypass protein feed making.

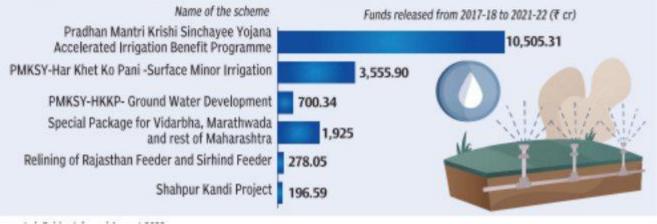
The mission has resulted in the formation of National Innovations on Climate Resilient Agriculture, a network project.

It is envisaged as one of the eight Missions outlined under National Action Plan on Climate Change (NAPCC), NMSA aim at promoting Sustainable Agriculture through climate change adaptation measures.



States/UTs	Arable land	% of net irrigated area
Jharkhand	4,319	5
Meghalaya	1,011	10
Assam	3,305	11
Arunachal Pradesh	424	13
Himachal Pradesh	816	14
Maharashtra	20,719	15
Sikkim	97	15
Manipur	448	16
Odisha	6,675	16
Nagaland	678	17
Kerala	2,235	18

# Central assistance provided to various irrigation projects by Union Ministry of Jal Shakti from 2017-18 to 2021-22



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