#### The Times of India- 28- May-2023

# '10k villages getting Narmada water'

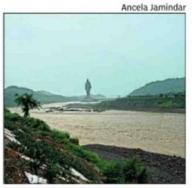
TIMES NEWS NETWORK

Gandhinagar: According to the state government, more than 10,000 villages in the state are receiving water through the Narmada canal network and 4,000 others villages have been receiving surface water and water from other sources. There are more than 18,000 villages in the state.

Stating that there is adequate water in reservoirs to provide drinking water to the people, a statement from the state government said arrangements have been made to dig new borewells at some places while water tankers have been pressed into service to provide drinking water to villages in coastal districts.

The statement said that while 2,100 million litres per day (MLD) is being provided under the block water supply scheme in Saurashtra and Kutch, 187 teams have been posted in 14 districts to repair borewells to draw groundwater.

According to the statement, 10,040 villages have be-



LIFELINE OF THE STATE

en receiving water through the Narmada project network and 4,420 villages get it from other surface sources. "The remaining villages are being covered by tubewells, handpumps and other means. Directions have been issued to dig new borewells where required, the statement added.

Water is being provided by tankers in parts of Devbhoomi Dwarka, Kutch, Bhavnagar, Gir Somnath, Rajkot, Jamnagar, Morbi, Surendranagar and Banaskantha districts, where water is not available because of reasons such as power failure, leaks in pipelines, lack of connectivity of schemes, and the like, the statement added.

Millennium Post- 28- May-2023

## **ECONOMIC PLANNING SERIES**

# **Inertial factors**



The skewed benefits of irrigation, fertiliser use and HYVs under the New Agriculture Strategy, coupled with heavy cost on account of high fertiliser subsidies, degraded soil, inadequate livestock development, and low levels of mechanisation, have been the main reasons behind the underperformance of the AAS sector

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n the last article, we saw that the Agriculture and Allied Services (AAS) sector did not quite match up to the targets set in the various five-year plans. However, production of foodgrains, oilseeds, sugarcane and cotton rose through the plan years as did productivity. But productivity levels in AAS were still much lower when compared to international agricultural nations such as China, US and Canada. In this article, we will delve deeper into the reasons for this; we will look at the progress made in expansion of irrigation and other inputs such as fertilisers and high yielding varieties of seeds

### Irrigation through the plans

It is well known that irrigation is critical for enhancing agricultural productivity. It is all the more important in India where large tracts don't get sufficient rainfall or where rainfall is concentrated during a few months.

There are many ways that one can irrigate one's land: canals, wells/tubewells, tanks and other sources. Over the years, wells/tubewells have become the dominant source of irrigation, with canals and tanks contributing much less to total irrigation. In 1950-51, canals contributed to 40 per cent of total irrigation, wells/tubewells 29 per cent, tanks 17 per cent and other sources 14 per cent. By 2010-11, these numbers had changed to 26 per cent for canals, 64 per cent for wells/tubewells, 3 per cent for tanks and 7 per cent for other sources.

In terms of coverage, the area under irrigation has expanded since the first plan. While net irrigated area increased from 21 million hectares in 1950-51 to 65.3 million hectares in 2011-12, gross cropped area increased from 23 million hectares in 1950-51 to 91.5 million hectares in 2011-12. As we know, gross irrigated area includes land cultivated more than once a year on account of irrigation. This means that there has been a sharp rise in the area cultivated more than once in a year from 2 million hectares in 1950-51 to 26.2 million hectares. The table shows this progress.

As a result of the expansion in irrigation, the total cropped area also went up from 133 million hectares in 1950-51 to 195 million hectares in 2011-12.

Some large projects taken up during the plans included the various multipurpose river valley development projects such as Bhakra Nangal, Chambal and Indira Gandhi Canal in North India; Damodar Valley, Farakka

Year	Net irrigated area (in million hectares)	Gross irrigated area (in million hectares)
1950-51	21	23
1970-71	31	38
1990-91	48	62
1999-00	57	76
2000-01	55	76
2006-07	61	85
2007-08	62	87
2008-09	63	89
2009-10	63	85
2010-11	63.6	88.6
2011-12	65.3	91.5

The net

irrigated area

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million hectares in

1950-51 to 65.3

million hectares

in 2011-12

SOURCE: AGRICULTURE STATISTICS AT A GLANCE

Barrage and Hirakud Dam in East India; Koyna and Kakrapara in West India; and Nagarjuna and Tungabhadra projects in South India. Most of these projects had flood control, power generation and irrigation as their objectives.

Some of the other major interventions in irrigation during the plan period were the Command Area Development Project (CADP) launched in 1974-75 and the Accelerated Irrigation Benefit Programme (AIBP) launched in 1996-97. The CADP involved various activities integral to irrigation such as cutting field channels and making drains and rotating water supply to ensure that everyone got a fair share. The AIBP, on the other hand, was a scheme to complete unfinished irrigation projects, most of which were large river valley projects. The CAD could not succeed because of lack of water availability and low participation of farmers. The AIBP saw moderate success and was able to add about 4 million hectares of irrigation potential up to 2006.

Two issues merit attention: private sector participation and participatory irrigation management through the involvement of water users' associations (WUAs). Many states such as Maharashtra, Andhra Pradesh and Karnataka have experimented with various models of privatisation of agriculture: Build-Own-Operate Systems (BOOS), Build-Own-Transfer system (BOT), Build-Own-Lease system (BOL). As for participatory management through the use of WUAs, this was mandated in the National Water Policy of 1987, but did not succeed because of non-availability of funds from the government and the lukewarm response of farmers to form WUAs.

After 2014, water resource development was given a new push with the formation of an omnibus Ministry of Jal-Shakti which looks after all issues of water resources and river valley projects, and river development in general. There

has been a special emphasis on the rejuvenation of the river Ganges.

# Fertilisers and seeds

Apart from irrigation, fertilisers and seeds are critical for improv-

ing productivity in agriculture. As we know, India's soil is deficient in nitrogen and phosphorus, which has to be supplied through fertilisers. India's production capacity of fertilisers has increased manifold since 1950-51. From a mere 39,000 tonnes produced in 1950-51, India's production rose to 11.9 million tonnes in 1990-91 and 16.1 million tonnes in 2013-14. However, this has had to be supplemented with imports, even though fertiliser imports have declined over the years. The state supports the production of fertilisers through large amounts of subsidies, given their criticality in agricultural production. All in all, consumption of fertilisers has also gone up from 70,000 tonnes in 1950-51 to 12.6 million tonnes in 1990-91 and 24 million tonnes in 2013-14. This works out to 0.5 kg/hectare in 1950-51, which shot up to 76.8 kg/hectare in 1990-91 and 125.4 kg/hectare in 2013-14.

While increasing use of fertilisers has been a part of the new agriculture strategy since the 1960s, there are some constraints and problems. Firstly, fertilisers are effective only when there is sufficient irrigation, which limits their use to the irrigated parts. As a result, almost 60-70 per cent of the cultivated areas that are dependent on rainfall consume only 20 per cent of the fertilisers. Another issue with fertiliser use is that it is skewed towards rabi crops which contribute to about 35 per cent of agricultural production but consume 65 per cent of fertilisers. Finally, the levels of fertiliser subsidy have crossed Rs 75,000 crores in the twelfth plan, which is a major component of government expenditure. Not only that, most of these subsidies are cornered by the more affluent farmers. Because of these reasons, there was an effort to shift to organic manure since the ninth plan. However, this has had limited impact on the high fertiliser subsidies and the skewed nature of fertiliser consumption.

Improved seeds are the other component of India's agriculture strategy since the 1960s. The HYV programme was a critical part of the Green Revolution strategy, started in 1966. By 1997-98, 76 million hectares were covered by high yielding varieties of seeds. For wheat, this number was 90 per cent, for rice it was 75 per cent and for coarse grains, it was 55 per cent. The ICAR, the National Seeds Corporation, the State Farms Corporation of India and the various research institutes and agriculture universities are involved in the research, production and distribution of breeder seeds, foundation seeds and certified seeds. A Seeds Bank was set up by the Government of India in 1999-2000 to make seeds available and develop infrastructure for their production and distribution.

Apart from fertiliser and seeds, there are many other issues that present challenges in the sector, namely soil conservation, animal husbandry and mechanisation in agriculture. While heavy fertiliser use has led to nutritional deficiency of soils, soil erosion has led to surface soil being washed away. With respect to animal husbandry, the challenge lies in improving yield of milk in cows, improving breed quality, and livestock development so that they can contribute more to the national income. Finally, mechanisation of agriculture has remained at low levels and the use of tractors and modern equipment has been limited.

#### Conclusion

Irrigation, fertiliser use and high yielding variety of seeds were the troika, which comprised the New Agriculture Strategy in India since the 1960s. There have been mixed results of this strategy: on the one hand, production of foodgrains, sugarcane, cotton and oilseeds has increased manifold, such progress has been skewed in favour of certain regions (mainly Punjab, Haryana, Western UP in the initial years and parts of Rajasthan, Andhra Pradesh, Tamil Nadu, MP. Maharashtra and Guiarat in later years, i.e., only where there were irrigation facilities available) and certain crops (wheat and rice). This has also come at a heavy cost in terms of high fertiliser subsidies, degraded soils, inadequate livestock development (India has the largest livestock population of the world with 17 per cent live-stock but the sector's contribution to agricultural income is very low. European countries have a very low livestock population but the sector contributes more than 50 per cent of agricultural income). Low levels of mechanisation have also constrained productivity levels in agriculture. Given these challenges, the task for our agricultural policy planners is cut out.

The writer is Addl. Chief Secretary, Dept of Mass Extension Education and Library Services, Govt of West Bengal. Kashmir Age- 28- May-2023

Jal Jeevan Survekshan (JJS-2023)

## Srinagar Ranks Top In The Country In Implementation of JJM Among 135 Har Ghar Jal Certified Districts



SRINAGAR, MAY 27: In a major recognition, the Srinagar District has been Ranked as the top performing District under Jal Jeevan Survekshan(JJS-2023) among 135 Har Ghar Jal Certified Villages across the Country in the implementation of the flagship program of the Central Government, the Jal Jeevan Mission(JJM).

The Srinagar District has attained the top rank in implementation of JJM by scoring 100 percent marks under set parameters and indicators of JJS-2023 and by completing 10407 FHTCs in respect of targeted 10407 households in 29 villages of the District.

Jal Jeevan Survekhshan (JJS 2022) is an evaluation methodology introduced by MoJS, Gol on October 02, 2022 to assess the Districts/ States on the basis of performance in implementation of JJM and rank

them accordingly at national level on a monthly basis.

Under this competition District Srinagar has done some remarkable work in Har Ghar Jal Certification, Water Quality Testing through labs & FTKs, Training of women for use of FTKs, Skill training for O&M Staff etc across India during the last few months and has been able to improve its rank from 46 to Rank 1 as on May 25, 2023.

Speaking about the achievement, the Deputy Commissioner Srinagar, Mohammad Aijaz Asad has said that this is a pride moment for Srinagar District which has been achieved through collective efforts of the Team.

The DC has also congratulated the team of JJM and urged them to work with added zeal and dedication to maintain top rank in JS.