

Ground Water Depletion in India

Dr. Rishu Tomar

Assistant Professor, Department of Geography, Shah Satnam Ji Girls' College, Chaudhary Devi Lal University, Sirsa - 125055

Submitted: 30-09-2021

Revised: 05-10-2021

Accepted: 08-10-2021

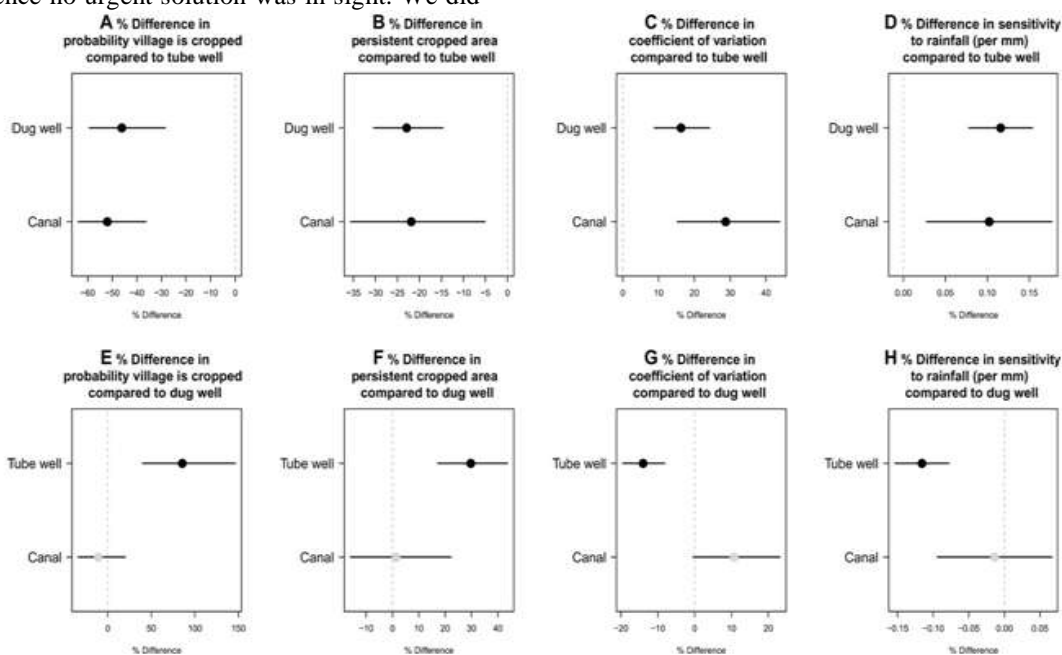
ABSTRACT:What has led the producer to adopt such HYV seeds in the first instance, that's where the bud lies and deserves to be nipped. Many studies, observations and after years of continuous research, we have come to the conclusion on the two most significant factors in the Indian agriculture viz. **Productivity** and **Production**. Enhancing the level of statistics and research regarding the same, we also tried to connect the dots among other problems of irrigation, soil texture, credit facility and timely quality support. The measures of targeted and empirical intervention were launched late in the new millennium.

Keywords:Production, Productivity, Quantitative and Qualitative measures, Food Grains, Agricultural development, Sustainable Development

Origins:Back in the late 60s, India was grappling with an availability of food grains for its populace and, hence no urgent solution was in sight. We did

rely upon **ton-by-ton** shipment style from America that for once was savior, however, we were seeking the permanent answer to our ills of food security. The embarrassment of insecurity regarding food made that solution inevitable for us in the form of Green Revolution. Thanks to the High Yielding Variety (HYV) seeds which made it possible for us to provide enough to feed empty bellies in India.

First visible impact: Green Revolution, led by MS Swaminathan, no doubt brought a transformational change in the behavior of Indian elites towards food security and greater sums of money in the coffers of Indian government. The associated impacts of HYV seeds along with input intensive agriculture were not visible at the instant adoption of this modern technology but it very well took some time to seep in and come up with an extra lot of challenges.



There is a mention in the official texts of the time regarding input intensive agriculture, however, the quantitative impact seems unclear and

vivid due to lack of empirical studies. Over the years, what we have witnessed especially in those states of revolution are tendencies of **over exploi-**

tation of the resources, carcinogenic tendencies, rise in the cost of production for producers, rise in the cases of farmer suicides and glaring gaps in the form of inequality in income, social and, even political aspects.

Measures taken by the Government to address the menace: The problem of depletion doesn't deserve to be addressed in linear narrative by simply making sure the water retains again above the dangerous levels. It, however, requires multi-modal approach to tackle the root cause of the problem.
 Image - Science.org

What has led the producer to adopt such HYV seeds in the first instance, that's where the bud lies and deserves to be nipped. Many studies, observations and after years of continuous research, we have come to the conclusion on the two most significant factors in the Indian agriculture viz. **Productivity and Production.** Enhancing the level of statistics and research regarding the same, we also tried to connect the dots among other problems of irrigation, soil texture, credit facility and timely quality support. The measures of targeted and empirical intervention were launched late in the new millennium.

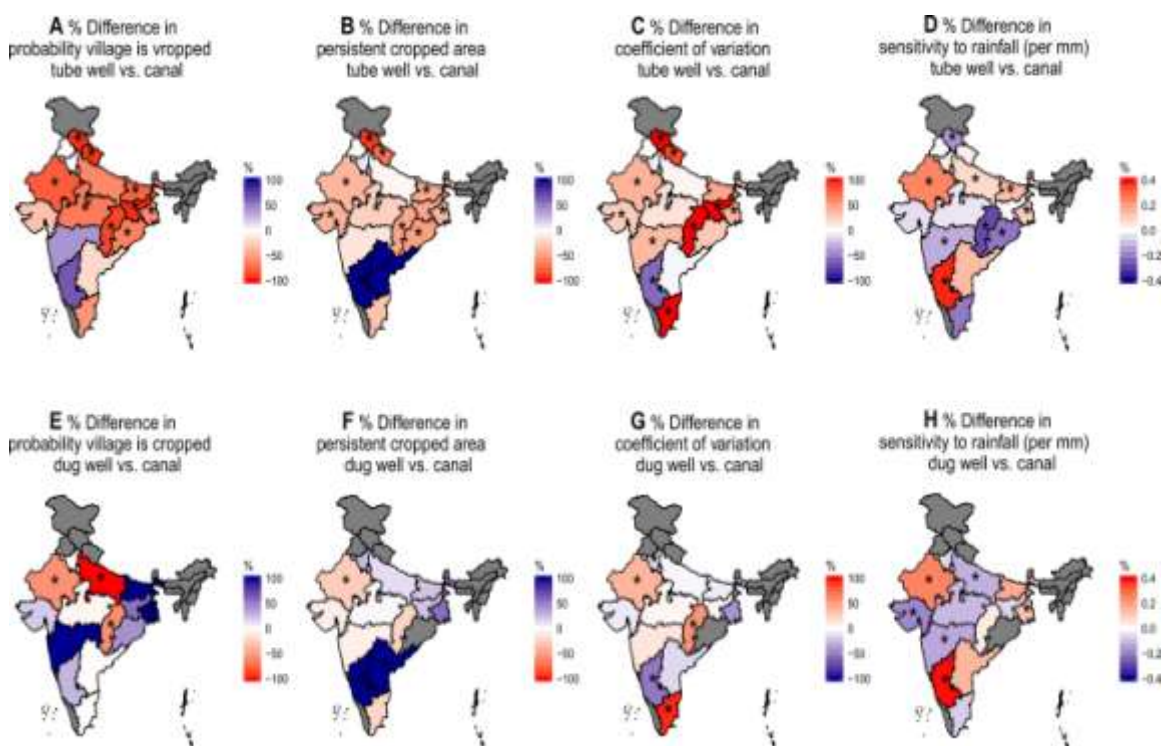


Image - Science.org

Measures like Krishi Sinchai Yojana, Per Drop More Crop, Har Khet ko Pani campaign, Micro Watershed Development program, Fasal Bima Yojana, Organic Farming, Zero Budget Natural Farming, Soil Testing facilities and Common Service Centers (CSCs); all of them collectively had quite an impact, for that involved the larger sums of money being allocated into the sectors and multi-sectoral approach with National Agricultural Bank for Rural Development (NABARD), Agriculture Infrastructure Fund (AIF) and Primary Credit Societies.

Contemporary situation: The government today even has launched the dedicated mission for improvement in the ground water depletion viz. **Atal Bhujal Yojana.** Aquifer mapping, Remote Sensing technology and wiser use of the innovative technologies have all played an enabling role in convincing the 21st century farmer of solutions in the primary sector like crop diversification, access to formal and cheap credit, abolition of middlemen, fair and transparent price discovery for his/her produce and opportunities in ancillary activities.

The Eastern Uttar Pradesh, Bihar, Jharkhand, West Bengal, these areas are engulfed with another menace of Arsenic Poisoning which somehow finds solution with the optimal utilization of resources. With greater access to irrigation facilities and governments in the centre and states round the clock effort at maximizing the potential of primary sector in India, new schemes are made with an aim to double the farmers' income by 2022 and eradicate the problems of ground water depletion, arsenic poisoning and lack of access to credit.

REFERENCES:

1. Government of India, Kurukshetra Magazine
2. Government of India, Yojana Magazine
3. Hussain, Majid, Indian Geography
4. Attri, S.D, Rathore, L.S, Challenges and opportunities in Agrometereology
5. Ray, Sinha, Ground Water Development