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Water Conservation Scheme: "Mera Paani Meri Virasat" in Haryana

Asst. Prof. Priyanka

(Department of Geography ,GDC Memorial college Bahal, Bhiwani ,Haryana)

M.Sc. Geography, NET

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Abstract:

Agriculture is a major human economic activity in India. Some important campaigns are being described inside this research paper, which will help in water harvesting for future. To make future smooth and live easily, water is very important element, which should be used judiciously. Many schemes are being run globally for water harvesting; with the help of these we can fulfill our objectives. Throw this research paper, we will study about some important water harvesting schemes of India and especially state Haryana. The exclusive consumption of water a crisis may arise in future. There is a realization among statesmen over world that "future wars would be fought not for land but for water" which is becoming scare by the day. From time to time, various programs have been implemented by the Indian government as well as the Haryana government to conserve water, so that the economic conditions of the farmer and the fertility of land remain forever. To create awareness on the global water crisis 2023 **World Water day** theme is "*Accelerating the change to solve the water and sanitation crisis*". Government of India launched the Jal Shakti abhiyan with the theme *'catch the rain will it falls when it falls'* for all districts of India. ***Jal Sanchy*** project was started in Nalanda district of Bihar for water conservation. This research aims to evaluate specially the implementation and outcomes of the 'Mera Paani Meri Virasat' (My Water, My Heritage) campaign in Haryana State, with a specific focus on its role in preserving water resources as intangible cultural heritage. The study will examine the objectives, strategies, and community engagement methods employed by the initiative to raise awareness and promote sustainable water management practices among the local population.

I. Introduction:

Water is an important and free gift given by nature for the use of all living beings on Earth. It is generally accepted that about 70% of water is available on Earth out of which the maximum amount of water is found in the southern hemisphere and less amount of water is found in the north hemisphere. Water is very essential for the life of any living being. Only one third of the amount of water available on Earth is found in the form of useful water and two third in the form of ice in high latitudes the remaining water is located in the ground, air and sea.

Amount of fresh water 3% out of this, 2% wateris found in the form of glaciers and underground water and only one percent is found in the rivers and ponds. In order to use this natural resource in the future, it is also necessary to keep water safe in the environment through sustainable management. Although about 60% of water is used for irrigation and 40% for other works. By implementing water conservation policies, the falling water level can be stopped by reducing the consumption of surface water. For the plans made to maintain the water level, the planner will have to keep different thinking through regional and national observation so that the plans can be implemented according to the regional difference and prove to be effective for the future. Water use restrictions, biotechnology policy, etc. can be

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adopted for the implementation of some policies to implement a policy maker with firmness and precision. We need to change both recycling and farm water supply policy.

Water conservation is a critical issue worldwide, and Haryana State in India is no exception. Located in northern India, Haryana is known for its agricultural economy, with farming being the primary occupation of a significant portion of its population. However, the state faces numerous challenges related to water scarcity and sustainable water management. On the basis of optimum availability of water the state has a total water availability of about 20.93 billion cubic meters which includes the surface water, groundwater and treated wastewater. Haryana is experiencing a water deficit of about 14 billion cubic meters annually with the total water demand across all sectors going up to about 34.96 billion cubic meters per year. Haryana recently took a step towards and showing that future generations have access to clean and safe water as it launched the biennial integrated water resource action plan (2023-25) .(Hindustan Times.com) Systematic methods should be used to solve this problem in the future at the country and state level. The availability of freshwater resources in Haryana is limited, and the demand for water continues to rise due to population growth, urbanization, and industrial development. This section provides an overview of the background and significance of water conservation in Haryana State.

- **Water Resources in Haryana:** Haryana primarily relies on surface water sources, primarily theYamuna and Ghaggar rivers, along with groundwater resources for meeting its water needs. However, these water sources are under severe stress due to overexploitation, pollution, and climate change. The groundwater levels have been consistently declining, leading to the depletion of aquifers and increasing instances of water scarcity, particularly during the dry seasons.
- **Agricultural Water Demand:** Agriculture is the backbone of Haryana's economy, contributingsignificantly to food production and rural livelihoods. However, the agricultural sector is also the largest consumer of water in the state, accounting for around 80% of the total water usage. The increasing demand for water in agriculture, coupled with inefficient irrigation practices, puts a strain on water resources and exacerbates water scarcity issues.
- **Urbanization and Industrialization:** Rapid urbanization and industrial growth in Haryana have furtherintensified water-related challenges. As cities expand and industries flourish the demand for water in urban areas and for industrial processes increases significantly. Urban centers in Haryana, including Gurugram and Faridabad, face water scarcity issues, inadequate water supply infrastructure, and pollution of water bodies due to untreated industrial effluents.
- **Environmental Impacts:** The unsustainable use of water resources in Haryana has led to adverseenvironmental impacts. Over-extraction of groundwater has resulted in land subsidence, saline intrusion, and the deterioration of water quality. Additionally, the pollution of water bodies by industrial waste and untreated sewage causes serious health and ecological risks.

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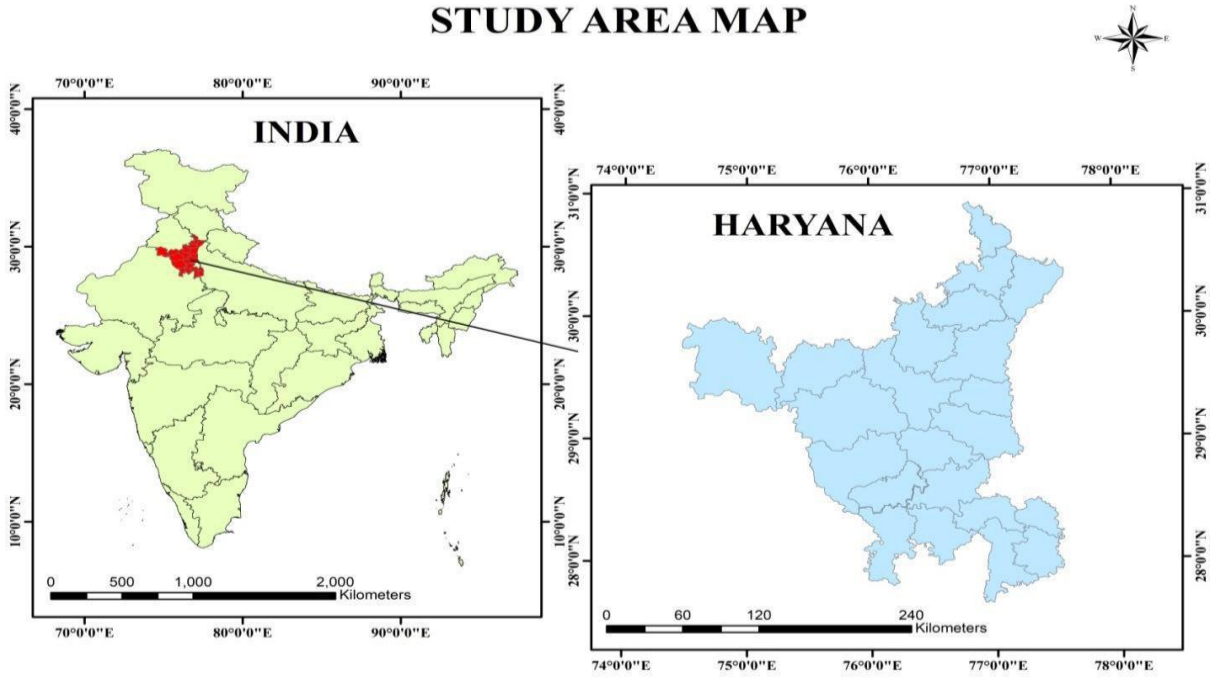

Significance of Water Conservation in Haryana State:

1. **Sustainable Agriculture:** Water conservation plays a crucial role in ensuring the sustainability ofagriculture in Haryana. Implementing efficient irrigation techniques, promoting crop diversification, and adopting water-saving practices can help optimize water use in agriculture and reduce the strain on water resources. Conservation measures can contribute to improving agricultural productivity, enhancing rural livelihoods, and achieving food security.
2. **Urban Water Management:** Efficient water management practices in urban areas are essential formeeting the growing water demand. Conservation measures such as rainwater harvesting, water recycling, and strict enforcement of regulations regarding industrial effluent treatment can help alleviate water scarcity and improve the quality of water supply in cities.
3. **Environmental Protection:** Conserving water resources is critical for preserving the ecological balanceand biodiversity of Haryana's ecosystems. Protecting rivers, wetlands, and groundwater sources from pollution and depletion safeguards the natural environment, sustains aquatic life, and supports the overall health of ecosystems.
4. **Climate Change Adaptation:**As climate change impacts become increasingly apparent, waterconservation becomes even more crucial for Haryana. Climate variability, including erratic rainfall patterns and prolonged droughts, threatens water availability. By promoting water conservation practices and enhancing water use efficiency, Haryana can better adapt to climate change impacts and ensure resilience in the face of water-related challenges.

Introduction to the 'Mera Paani Meri Virasat' Initiative:

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Agriculture is a major human economic activity. India is an agricultural country and agriculture consumes a lot of water. If we see according to the grain production in India then the names of Haryana, Punjab and Uttar Pradesh of North India comes first. Here we are talking about Haryana state. The main crops here are wheat, rice, sugarcane, cotton, barley, corn etc. In India, we see that, there is a large gap between income of agriculture workers and non agriculture workers. Poverty and under nutrition in the country are concentrated among agriculture labor and small and marginal farmers.

The present government has set a vision for a new India that involves **"Sabka Saath Sabka Vikas"**. Transforming agriculture sectors is crucial for achieving this reason as 44.2% of the workforce in the country (NSO.2019) is employed in the agriculture field and depend on agriculture for their livelihood. Due to the use of HYV seeds and the technical development in Haryana during the Green revolution, the production level got a boost, which plays an important role in solving the problems of starvation in the country. After 1950, agriculture has been working as a main driver for the economic development of Haryana state. Kaithal kurukshetra and Karnal districts of Haryana are called "The Rice Bowl of India". Haryana receives an average rainfall of 500 to 700 mm out of which the rainfall level during monsoon is around 450 mm.

Fitton ET (2019),'examine the potential trends, risks and uncertainties of land use and land availability that may arise from reduction in water availability'. The results of the study indicated globally approximately 10% of crops and gross land could be vulnerable to lessening in water availability and may loss some productive capacity and decrease in agriculture land area linked with dietary change offers the greatest buffer against land loss and food uncertainty.

As it is an agricultural state, rice and wheat being the main crops consume a lot of water for irrigation. About 3000 to 4000 liters of water is required for the production of 1 kg of rice, so an excessive amount of water is used for irrigation. Due to excessive irrigation there are problems in drinking water supply as well as the same to be a crisis for the future.

Wezel A, (2014) here we tried to classify practices according to efficiency, replacement, and redesign. We analyze their advantages and disadvantages with an emphasis on diversification. It looks like; we need an irrigation system to save water.

Water conservation means that water, which is a natural resources and a gift given by nature, should be kept balanced and also ensure that water can be passed on for use to the coming generations. We should move forward with the thinking of **"Water is life and life depends on Water and Water conservation depends on you".** The 'Mera Paani Meri Virasat' (My Water, My Heritage) initiative is a pioneering campaign launched in Haryana State, India, with the objective of promoting water conservation and sustainable water management practices. The initiative recognizes the cultural and historical significance of water resources and aims to engage communities in preserving and safeguarding them as intangible cultural heritage.

Background of the Initiative:

The 'Mera Paani Meri Virasat' initiative was launched in response to thepressing water challenges faced by Haryana State. Recognizing the need for a comprehensive approach to address water scarcity, pollution, and unsustainable water practices, the government, in collaboration with various stakeholders, introduced this campaign as a means to raise awareness, change behaviors, and encourage active participation in water conservation efforts.

Objectives of the Initiative:

The primary objectives of the 'Mera Paani Meri Virasat' initiative are:

- Promoting Water Conservation: The initiative aims to create a sense of ownership and responsibility among individuals, communities, and institutions

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towards water resources, fostering a culture of conservation.

- Sustainable Water Management: The campaign seeks to promote sustainable practices for water management, including efficient irrigation techniques, rainwater harvesting, wastewater treatment, and reuse.
- Community Engagement: 'Mera Paani Meri Virasat' emphasizes the active involvement of communities, encouraging them to take ownership of their local water resources and participate in water conservation activities.
- Preserving Cultural Heritage: Recognizing water as an integral part of the cultural heritage of Haryana, the initiative aims to preserve and promote the traditional knowledge, practices, and rituals associated with water conservation.

Strategies and Activities: The 'Mera Paani Meri Virasat' initiative employs a multi-faceted approach toachieve its objectives. Key strategies and activities include:

- *Awareness Campaigns*: The initiative conducts extensive awareness campaigns through various media platforms, including television, radio, social media, and community gatherings. These campaigns educate the public about the importance of water conservation, the impact of unsustainable practices, and the role of individuals in preserving water resources.
- *Capacity Building*: The campaign focuses on capacity building at the community level, organizing workshops, training programs, and skillbuilding sessions to empower individuals and communities with knowledge and skills related to sustainable water management.
- *Community Participation*: 'Mera Paani Meri Virasat' encourages active community participation in water conservation initiatives. It involves local community leaders, NGOs, and volunteers in planning and implementing conservation projects, organizing community-level events, and facilitating knowledge-sharing platforms.
- *Policy Support*: The initiative collaborates with government agencies, policymakers, and relevant stakeholders to develop and implement policies that promote sustainable water management practices and provide incentives for water conservation efforts.

Impact and Recognition: Since its inception, the 'Mera Paani Meri Virasat' initiative has madesignificant strides in raising awareness and mobilizing communities for water conservation. It has garnered recognition at the state and national levels, receiving awards and accolades for its innovative approach and positive impact on water management. The 'Mera Paani Meri Virasat' initiative in Haryana State serves as a transformative campaign that aims to change mindsets, behaviors, and practices related to water management. By emphasizing the cultural significance of water resources, engaging communities, and promoting sustainable practices, the initiative strives to create a water-secure and culturally rich future for Haryana

Research Objectives:

- To study district wise crop diversification by the scheme “Mera Pani Meri Virasat”.
- To assess the effectiveness of the Scheme in creating awareness about water conservation among the communities in Haryana State.
- To examine the level of community engagement and participation in the Scheme.

Sources &Methodology:

- The study is descriptive-cum- exploratory in nature and based on the secondary data sources. The data has been collected from the various issues of Statistical Abstract of Haryana, government reports and government official websites.
- **Methods -** Descriptive statistical techniques like percentage, table and charts were used in the study. Also, annual

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growth rate (AGR) and compound annual growth rate (CGAR) were used in the study.

Research Questions:

1. How successful has the 'Mera Paani Meri Virasat' initiative been in creating awareness about water conservation among the communities in Haryana State?
2. What are the changes in behaviors and adoption of sustainable water management practices among individuals and communities following the implementation of the campaign?
3. What are the factors that contribute to the success or limitations of the 'Mera Paani Meri Virasat' initiative in achieving its objectives?
4. What policy recommendations can be derived from the findings to enhance the effectiveness and sustainability of water conservation initiatives in the future?

Mera Pani Meri Virasat:

In India, approximately 70 percent fresh water is withdrawn for agricultural purposes. Crop diversification with provision of incentives is pivotal to augment water use efficiency. The ground water level in Haryana state is depleting by about 1 meter every year due to the continuously increment in the paddy area in the state. So, the government always comes with different schemes in order to save water for our coming generations. 'Mera Pani Meri Virasat' scheme is also an initiative of government towards crop diversification that helps in sustaining the ground water level in the state. The main purpose of the scheme is to replace the area of paddy crop in the state by growing cereals crops like maize, cotton, bajra, pulses, and horticulture crops in 1.00 lakh hectares of land in targeted blocks.

Hadebe,S T.,(2016) Cropdiversification and production, specifically staple cereal crop production, will have to adapt to water scarcity and improved water productivity, through drought tolerant cereal crops we can save water.

The Government of India is also shifting its policy focus from basic cereal production of 'non- food' commercial crops, specially vegetables, fruits and flowers; it is urged that such crop diversification will boost employment.

Farmers should be given alternative crops like; maize, cotton, bajra, pulses in at least 50 percent area of paddy in the last year's area in 8 blocks of the state i.e., Ratia, Sirsa, Siwan, Guhla, Pipali, Ismailabad, Babain and Shahabad. Horticulture will have to be adopted for diversification. The objective of crop diversification through the above scheme is to promote sustainable farming along with the latest technologies, increase production and enable farmers to choose crop options to increase their income. In this scheme, by adopting micro irrigation, there will be the benefit of saving water and proper production of other crops and according to agriculture experts, 60 to 80 percent water can be saved by adopting this.

Gupta,R.P.,& Tiwari,S.K.(1985). This will help in a significant positive effect on diversification indicating that with the availability of irrigation. With its help, the rate of availability of water used for irrigation will decrease and at the same time the income of farmers will increase due to crop diversification.Farm diversification may take place as a means of profit maximization through reaping the gains of complementary relationships. The implications indicate that an initial thrust on diversification promoting policies may finally lead to betterment in the economic position of farmers.

Kremen C,(2012). Although,diversified farming systems include multiple genetic varieties of a given crop or multiple crops grown together as polyculture and may stimulate biodiversity within soil through addition of compost or manure. Diversified farming systems include polyculture, non-crop planting such as insectary strips, integration of livestock or fish with crops (mixed cropping system) and rotation of crops or livestock overtime. Along with this ,we can also suggest a diversified farming system to the farmers which will prove to be effective in increasing their income and at the same time will maintain the fertilizer capacity of the soil.

To start 'MPMV' scheme, after measuring the ground water level of different areas of Haryana, the Water Resources Authority will install piezo meters, which will reveal the surface water level.

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According to this report, the groundwater level is continuously falling down in 36 blocks of Haryana. In these areas 12 years ago the water level was 20 meters but now it has reached a depth of 40 meters. Paddy cultivation has been banned in 11 blocks and 19 blocks have been identified due to the situation being affected by the water crisis.

***Implementation Guidelines and Incentives Available under the Scheme*:**

- Rs. 7000/- per acre will beprovided to all the farmers who has diversify minimum 50 percent of their last year cultivated paddy area by growing the alternative crops such as maize, cotton, bajra, pulses in 8 blocks. Later on, the scheme extended to the all districts in the state. In addition, the above amount of Rs. 7,000/- per acre, the farmers who have adopted crop diversification by cultivating fruit plants and vegetables instead of paddy will be given a separate grant as per the provision of the projects run by the Horticulture Department.
- Gram Panchayats will not permit growing paddy in their lands. Applicable financial incentives in lieu of diversification from Paddy to other alternative crops will be given to the respective Panchayats.
- All those farmers who are operating their tubewell with a 50 hp electric motor, will not be allowed to grow paddy.
- All diversified crops such as maize, bajra, pulses will be procured by the Haryana government at Minimum Support Price (MSP). The government will install "Maize Dryer" in associated grain markets for reducing moisture content of maize grain produced by the farmers.
- 85 percent subsidy will be given for installation of Drip Irrigation System (DIS) in the alternative diversified crops like maize, cotton, bajra, pulses, horticulture.
- The department will promote mechanization by providing normal maize seed planter for sowing of maize crop in the targeted blocks for diversification of paddy through its schemes.
- Various pieces of information regarding implementation of crop diversification programmes will be provided through Information, Education and Communication (IEC) activities in the field for the awareness of the farmers. A dedicated web portal will also be started for the ease of the farmers.
- The "demonstration plots" will be established in each targeted block for showing best agriculture practices to the farmers for getting good yield of their crop.
- Farmers other than the targeted 8 blocks will also be eligible for availing benefits under this crop diversification scheme if they replace their paddy area with alternate crops.Such farmers have to apply and submit details of revenue record regarding cultivation of paddy for the diversified area during last year and condition that they have not grown paddy in any new land holding where paddy was not grown earlier.

Water Consumption of Paddy and Direct Seeded Rice (DSR) Technique

This scheme will be implemented in the entire state. Under this scheme, farmers will have to sow alternative crops (cotton, maize, pulses, groundnut, sesame, guar, castor, vegetables and fruits) instead of paddy. If a farmer adopts agro-forestry instead of paddy farming and plant 400 trees per acre, he will get Rs. 10,000 instead of Rs. 7000. Because of paddy is one of the most water consuming crop. It takes 3000 litres of water to produce one kilogram of rice. That is why; *NITIAayog* has also expressed concern over such crops. Haryana is a major rice producing state. Despite this, the government is

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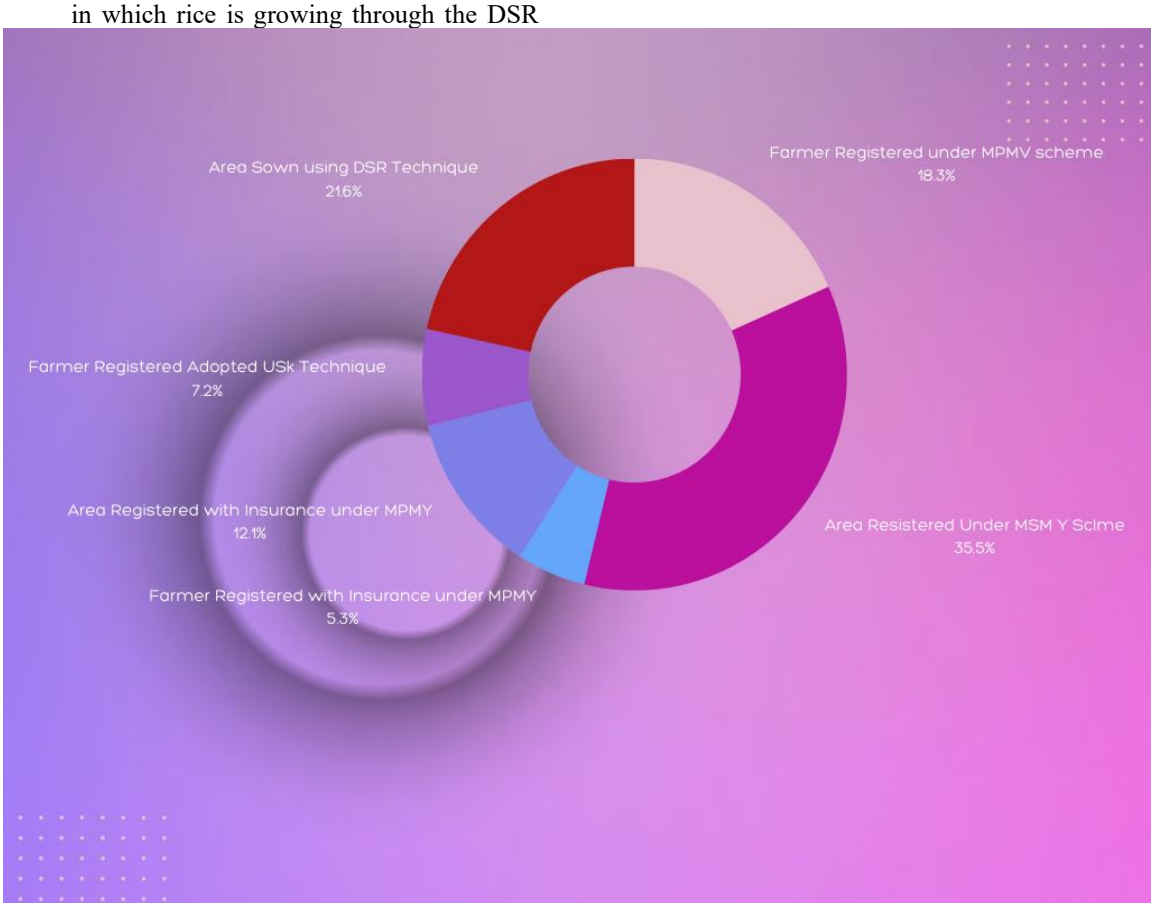
discouraging its crop without worrying about the immediate benefits.

- DSR technique is direct seeding of rice (DSR refers to the process of establishing a rice crop from seeds sown in the field rather than by transplanting seedlings from the nursery.). Here the seeds are sown in the field directly rather than transplanting the seedlings. A tractor powered machine is used to drill the seeds into the soil. There is no nursery preparation in DSR technique. The technique reduces cost by Rs. 6000 per acre and it uses 30 percent less water. All the farmers who adopting this cost effective and less water consuming method of growing rice on maximum 2.5 acre in the state will receive the Rs. 5,000 per acre. This piece of land in which rice is growing through the DSR technique known as 'demonstration plot' to popularise the technique among the peasants. This scheme is initially implemented mainly in the selected districts like Ambala, Yamunanagar, Karnal, Kaithal, Kurukshetra, Panipat, Sonepat and Jind.
- A new initiative also undertaken by the Haryana government known as ***'Kheti Khaali, FirBhi Khushali'***. Under this, an incentive of Rs. 7,000 per acre is given to farmers if they do not grow any crop in their agricultural land during the paddy season.

Analysis of Mera Pani Meri Virasat Scheme
Current Status of the Mera Pani Meri Virasat Scheme as on 08-10-2021



Source: https://fasal.haryana.gov.in

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Pie Diagram represents the current status of the MPMV scheme. It clearly shows that farmers are interested in the MPMV scheme which is a good sign for crop diversification. The success of the scheme may resolve the problem of groundwater shorts.

Table 1 & Line graph representsthe district wise current status of MPMV scheme. It clearlydepicts that Sirsa, Yamuna Nagar, Jind, Fatehabad and Hisar is the top five districts in the state in which highest farmers are registered and Mahendergarh, Gurugram, Mewat, Rewari and Faridabad is the least five districts in the state in which lowest farmers are registered under the MPMV scheme. Jind, Kaithal, Kurukshetra and Karnal districts are on top in which highest number of farmers adopted the DSR technique in the state.The farmers of all the districts of Haryana under the scheme "Mera Pani Meri Virasat" got registration has done 49157 farmers .In which the total agricultural land was listed as 95117.7 hectares. Out of which rice was sown only on 19367 hectares of land by DSR technology and rice was grown on other land by traditional planting method in which water consumption was used more. We also found that under Mera Pani Meri Meri Virasat, in some areas rice crop was also replaced by coarse grain crops mainly millet. As a result of which the scene of crop differentiation was seen increasing in each district. Apart from advising the government to grow other crops instead of rice, a provision of financial assistance of Rs. 7000 per acre was also made for growing non-rice crops in areas with excess water and to maintain the fertility of the land for the future. If a farmer is growing rice crop for a long time or a farmer is growing coarse cereals where there is scarcity of water, then the land of that area will give up its fertility power after some time due to not adopting crop rotation. This was a good step by the government towards the farmers.

Table 1. District wise Status of Mera Pani Meri Virasat

Name	MPMV F.R.	MPMV A.R. (Hectare)	DSR F.R.	A.U.B.R. (Hectare)
Total	**49,157**	**95,117.77**	**19,367**	**84,134.57**
Ambala	4,316	5,353.89	1,654	1
Bhiwani	1,311	3,686.76	55	37,527.68
Charkhi Dadri	533	1,025.98	3	8,641.63
Faridabad	506	1,063.36	64	384.72
Fatehabaad	4,797	11,935.18	948	580.44
Gurugram	101	227.88	14	752.93
Hisar	4,726	11,269.32	929	4,508.20
Jhajjar	901	1,998.72	72	2,156.64
Jind	4,950	10,986.00	3,811	202.8
Kaithal	4,321	6,409.13	2,591	15.86
Karnal	3,123	4,518.05	2,218	2.8
Kurukshetra	3,624	3,587.11	2,239	0

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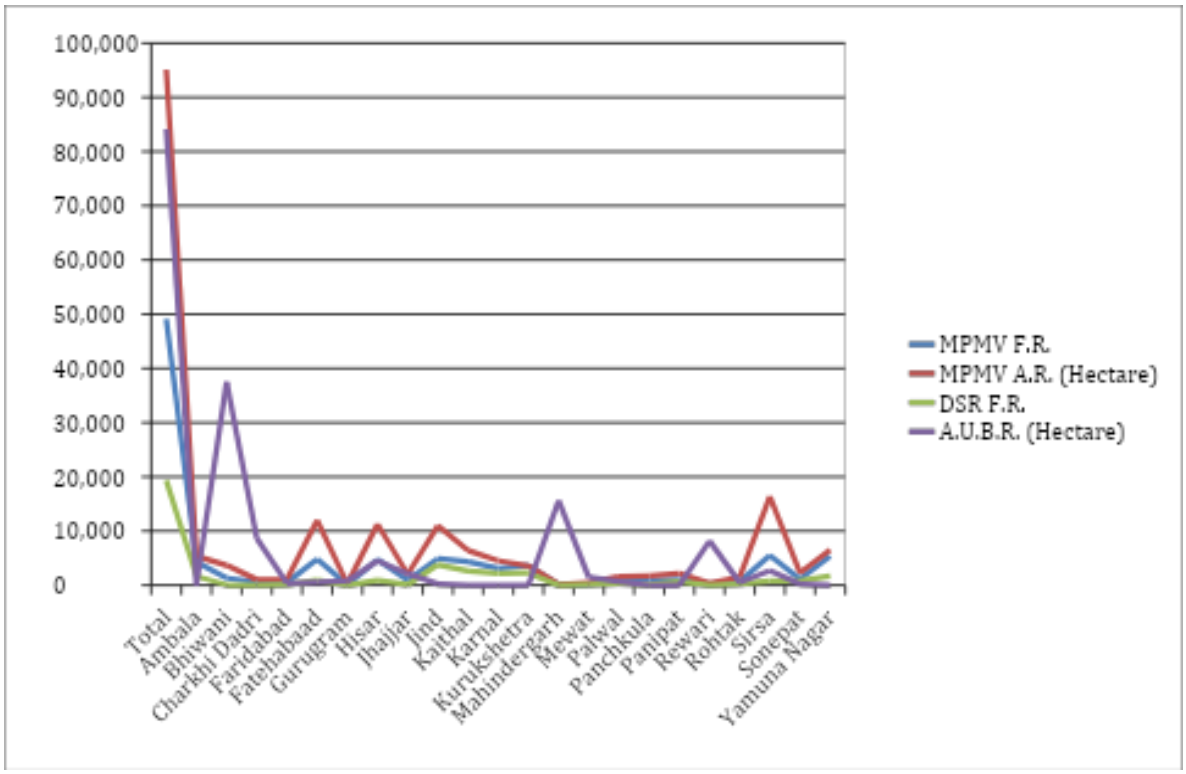
Mahindergarh	91	160.82	2	15,620.40
Mewat	190	460.41	139	1,443.71
Palwal	781	1,626.29	335	635.99
Panchkula	972	1,694.45	146	8.38
Panipat	1,054	2,161.82	698	15.68
Rewari	235	314.41	7	8,168.59
Rohtak	714	1,476.08	186	504.7
Sirsa	5,448	16,341.99	814	2,724.41
Sonepat	1,106	2,278.78	816	234.67
Yamuna Nagar	5,405	6,541.18	1,694	3.25

Source: https://www.agriharyana.gov.in



https://www.agriharyana.gov.in

Note : F.R.- Farmer Registered , A.R.- Area Registered , I.F.R.- Insurance Farmer Registered , I.A.R.- Insurance Area Registered ,F.U.B.R.- Farmers Under Bajra Replacement, A.U.B.R.- Area Under Bajra Replacement.

Table 2 & bar graph representsthe district-wise water table fluctuations and depth to watertable in Haryana state for the period June 1974 to June 2018. It clearly states that in Haryana state the water table is on average decline -10.38 meters from June, 1974 to June

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2018. Mahendergarh, Kurukshetra, Kaithal, Gurgaon & Fatehabad are the districts which show the highest fluctuations in the water table. It means the depth to water level in these five districts increases highest from 1974 to 2108. Sirsa, Bhiwani, Jhajjar, Rohtak, Hisar are the districts which shows the lowest fluctuations in the water table. It means the depth to water level in these five districts decrease lowest from 1974 to 2018. Water is the basic necessity for the functioning of all life formsthat exist on earth. It is safe to say that water is the reason behind earth being the only planet to support life. This universal solvent is one of the major resources we have on this planet. It is impossible for life to function without water. So there every person their duty to minimum use of water in every field like as agriculture, industry and in our routine life because water fluctuation is a very serious issue for our plant as well as human beings.

Table 2. Haryana Fluctuation of water table at District level 1974 to 2018 June

Sr. No.	Districts	Depth to Water Table (in Meters)		Fluctuation in Water Table (in Meters)
		June,1974	June,2018	
1	Mahendergarh	16.11	48.54	-32.43
2	Kurukshetra	9.27	39.11	-29.84
3	Kaithal	6.28	29.33	-23.05
4	Gurgaon	6.64	26.88	-20.24
5	Fatehabad	10.48	29.78	-19.3
6	Panipat	4.56	21.17	-16.61
7	Rewari	11.75	27.31	-15.56
8	Karnal	5.72	19.13	-13.41
9	Faridabad	6.42	18.57	-12.15
10	Panchkula	7.58	17.63	-10.05
11	Yamuna Nagar	6.26	12.7	-6.44
12	Mewat	5.5	11.33	-5.83
13	Palwal	5.37	11.09	-5.72
14	Ambala	5.79	11.44	-5.65
15	Sonepat	4.68	10.23	-5.55
16	Jind	11.97	14.33	-2.36

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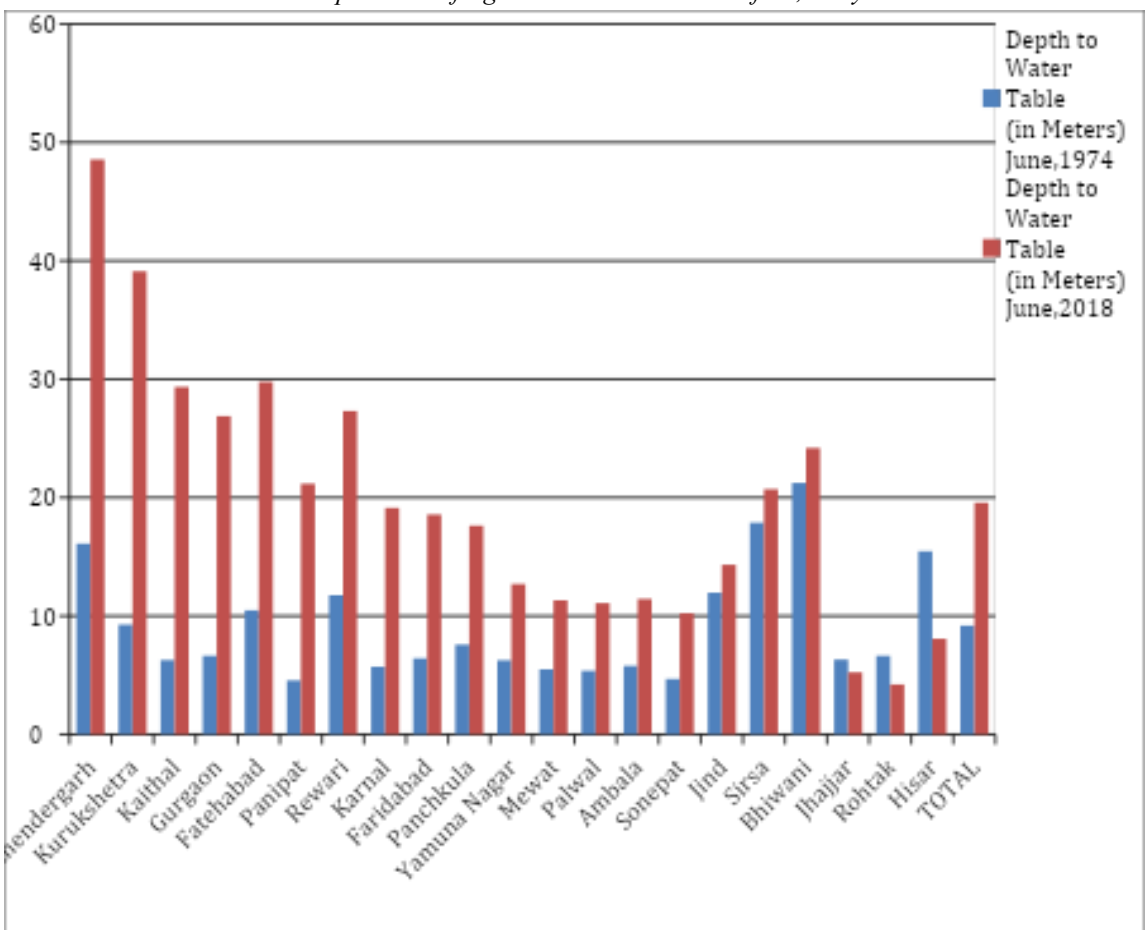
17	Sirsa	17.88	20.71	-2.83
18	Bhiwani	21.24	24.19	-2.95
19	Jhajjar	6.32	5.24	1.08
20	Rohtak	6.64	4.22	2.42
21	Hisar	15.47	8.08	7.39
	TOTAL	**9.19**	**19.57**	**-10.38**

Source: *Department of Agriculture & Farmer Welfare, Haryana.*



II. Conclusion:

The results of the study indicate that MPMV is an ambitious scheme introduced by Haryana government. It encourages the farmers towards crop diversification that helps in risk reduction in agricultural activities as well as sustaining the ground water level in the state. Financial incentive of Rs. 7000 are paid to all those farmers who adopt the MPMV scheme in the state and grow alternative crops on the area more than 50 percent their last paddy grown area and subsidies are also provided on agricultural equipments. As on 8 October, 2021; 49157 farmers are registered under the MPMV scheme with the area 95117.8 hectares. It shows that farmers are taking interest in the scheme. The

study also reveals that area and production of paddy and cotton are continuously increasing and showing a positive growth rate whereas the area of bajra is declining and continues but still the production of bajra is continuously increasing. And both the area & production of maize crops continues declining (Karki et al., 2009). For policy implications, it is suggested that government should organised the awareness programmes at panchayat levels about the scheme and its benefits so that more farmers are registered under the scheme.All the alternative crops given in the scheme should be purchased on the MSP. Incentives paid under the scheme should be on time. Through a combination of qualitative research methods, including interviews, surveys, and analysis of campaign materials, this research aims to provide valuable insights into the successes, challenges, and potential impact of the 'Mera Paani Meri Virasat' initiative in Haryana State.

Reference:

[1]. Agriculture Ecosystem & Environment 221, 198-204. https://doi.org/10.101/j.agee.2016.01.039

[2]. Chakrabarti, S., & Kundu, A. (2009). Rural Non-Farm Economy: A Note on the Impact of Crop-Diversification and Land-Conversion in India. Economic and Political Weekly, 44(12), 69-75.

[3]. Chand, R. (2019). Transforming Agriculture for Challenges of 21st Century. 102 Annual Conference of Indian Economic Association (IEA), 27-29 December 2019 (pp. 1-23). Surat: Indian Economic Association (IEA). Retrieved March 30, 2020, from https://niti.gov.in/sites /default/files/2020-01/Presidential_Address.pdf

[4]. Fitton, N. et al., (2019). The Vulnerabilities of Agricultural Land and Food Production to Future Water Scarcity.

[5]. Garbach K, et al., (2017). Examining Multi-functionality for Crop Yield and Ecosystem Services in Five Systems of Agroecological Intensification. International Journal of Agriculture Sustain 15(1), 11-28. https://doi.org/10.1080/14735903.2016.1174810

[6]. Gupta, R. P., & Tewari, S. K. (1985). Factors Affecting Crop Diversification: An Empirical Analysis. Indian Journal of Agricultural Economics, 40(3), 304- 309. https://doi.org/10.22004/ag.econ.271340

[7]. Hadebe, S.T., et al., (2016). Drought Tolerance and Water Use of Cereal Crops: A Focus on Sorghum as a Food Security Crop in Sub - Sharan Africa. Journal of Agronomy Crop Science 203, 177-191.

[8]. Karki et al., (2009). Trends and Growth in Major Crops of Haryana. Haryana Journal of Agronomy, 25(1&2), 22-24.

[9]. Kremen C, et al., (2012). Diversified Farming Systems: An Agroecological, Systems Based Alternative to Modern Industrial Agriculture. Ecology and Society 17(4) ,44. https://doi.org/10.5751/ES-05103-170444

[10]. McDaniel, R.L., et al., (2017). Crop and Location Specific Agricultural Drought Quantification: part III. Forecasting Water Stress and Yield Trends.2017. Trans. ASABE 60(2017), 741-752.

[11]. Mishra, P. K., & Rai, S. C. (2014). A Cost-Benefit Analysis of Indigenous Soil and Water Conservation Measures in Sikkim Himalaya, India. Mountain Research and Development, 34(1), 27-35. https://doi.org/10.1659/MRD-JOURNAL-D-12- 00013.1]

[12]. National Centre for Agricultural Economics and Policy Research (NCAP).

(2004).Impact of Vegetable Research in India. (S. Kumar, P. K. Joshi, & S. Pal, Eds.) New Delhi: National Centre for Agricultural Economics and Policy Research (NCAP). Retrieved December 21, 2019, from http://www.ncap.res.in/uploadfiles/workshop/wsp13.pdf

[13]. Pattanayak, U. (2019). Crop Diversification and Sustainable Agriculture in India Working Paper. January 2017.

[14]. Agriculture Ecosystem & Environment 223, 98-104 https://fasal.haryana.gov.in

[15]. Ramappa, K, B. et al., (2014). Water Conservation in India: An Institutional Perspective. Ecology, Environment and Conservation, 20(1), 303-311.

[16]. Rani, A. (2017). Regional Disparities in Agricultural Development in Haryana. Journal of Advance Management Research, 5(5), 481-485.

[17]. Rusch A, et al., (2016). Agricultural Landscape Simplification Reduces Natural Pest Control: A Quantitative Synthesis

[18]. Saraswati P, A. (2011). Crop Diversification in Karnataka: An Economic Analysis. Agricultural Economics Research Review, 24(July-December), 351-357

[19]. Wezel A, et al., (2014). Agroecological Practices for Sustainable Agriculture. A review. Agronomy Sustainable Development, 34(1), 1-20. https://doi.org/10.1007/s13593-013- 018.

[20]. Global Environmental Change, 58(July 2018), https://doi.org/10.1016/j.gloenvcha.2019.101944