



IMPACT ASSESSMENT OF JALYUKT SHIVAR ABHIYAN ON AWALAI VILLAGE OF ATPADI TEHSIL IN SANGLI DISTRICT (MAHARASHTRA)

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Abstract:

The decision which is made to purchase perfume products is a complicated process that consumers have to experience. Different factors affect the consumer choice for perfumes. These factors include social factors, demographic factors and psychological factors. For example, some consumers choose their perfumes depending on the recommendation they get from a family member who used the brand or know someone who is using it. In addition, consumers' age, income level, personality, self-concept, routine and values may affect their decision in choosing perfume products. This study aims to compare the perfume industry in India and Dubai and at the same time, studies to understand the consumer preference in terms of the factors influencing buying different fragrances. For the study, a total of 150 consumers from each country, thus 300 in all are considered. The survey was conducted in the digital mode and the responses were analyzed using statistical tools. It was seen that the Indian perfume market is overloaded with the consumer demand, however, performance of the perfume industry is better with the Dubai perfume market. The factors of perfume buying have a major impact on ratings of perfume.

Keywords: *Consumer, Marketing, Perfume, Consumer Behavior, Purchase Decision*

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Introduction:

In India, one of the most frequent natural calamities is drought. A third of the country is now either prone to drought or covered by desert areas due to its increased frequency and wider distribution in recent years. Both in terms of agriculture and overall economic growth, these regions fall behind. They feature significant annual swings in agricultural output and revenue, as well as a comparatively high prevalence of poverty. Due to their low and erratic incomes, large levels of

debt, and low levels of human development, the impoverished in these areas are extremely vulnerable to a range of hazards. Policymakers currently have a significant task in assisting the poor in escaping vulnerability and poverty and integrating the drought-prone regions into the mainstream of development.

In order to make Maharashtra a drought-free state by 2019, the Maharashtra government in India started the Jalyukt Shivar Abhiyan, commonly known as the Jalyukt Shivar Yojana. Every year, the program hopes



to eliminate water scarcity from 5000 villages. Jalyukta Shivar Abhiyan's primary goal is to instill in a farmer the notion that "every drop of rainwater is my property and it should soak in my field." Within the next five years, the Jalyukta Shivar Abhiyan hopes to provide water empowerment to 25,000 communities in Maharashtra that have been devastated by drought. (https://en.wikipedia.org/wiki/Jalyukt_Shivar_Abhiyan) The Maharashtra government's flagship program, Jalyukta Shivar, was introduced in December 2014. It seeks to eradicate water scarcity from 5,000 villages. The program improved water saving practices to make drought-prone areas more water sustainable. The plan aimed to stop as much run-off water as possible in village areas with historically low annual rainfall, particularly during the monsoon season. Decentralized water bodies were established throughout villages as part of the plan to improve groundwater recharge. Additionally, it included a proposal to improve and renew the ability of tanks and other storage sources to percolate water. Devoted committees were established to aid in building watersheds such farm ponds and cement nullah bunds as well as revitalizing the village water supply. (The Indian Express, July 2019)

Significance of the Research Work:

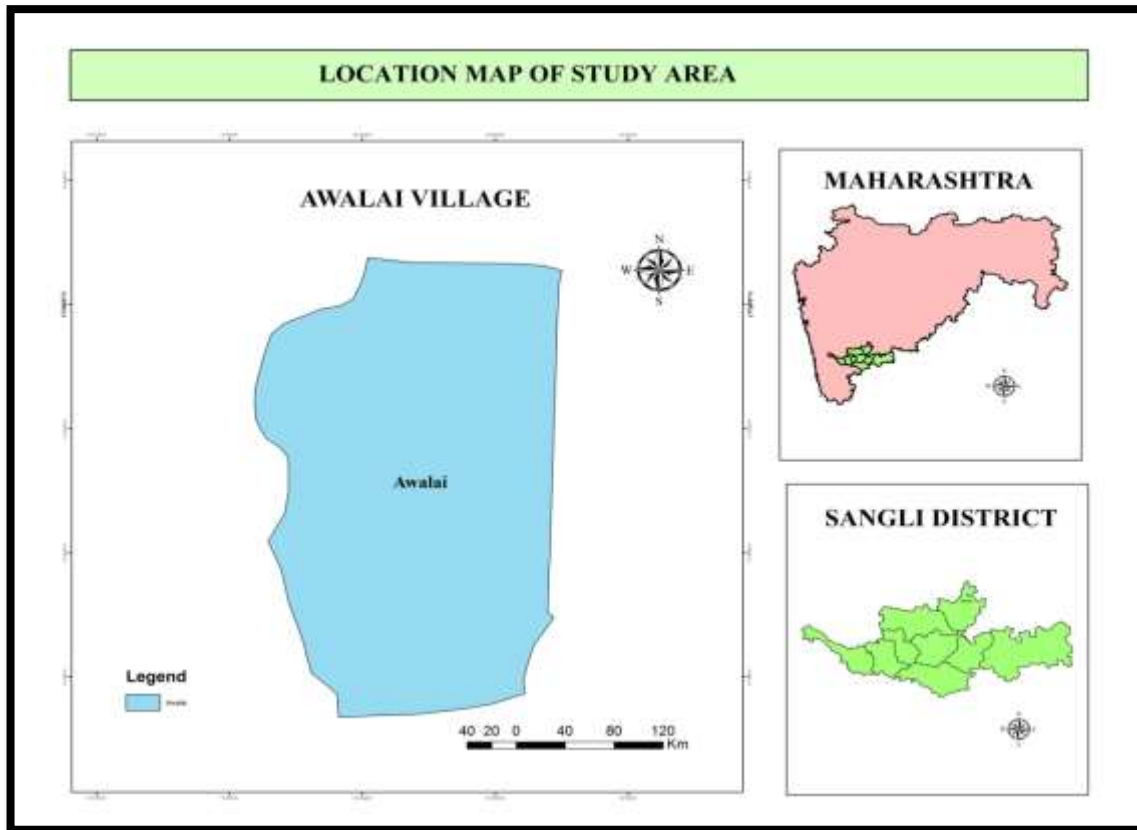
About 82% of Maharashtra is covered by rain-fed agriculture, whereas 52% of the state is vulnerable to

drought. Due to limited rainfall in the study area, water shortage is a serious issue. The research area is a part of Maharashtra's rain shadow region. Water conservation in the study region is crucial for the sustainable management of water resources. Since the research area has been experiencing severe drought for hundreds of years due to water shortages, a lack of trees, an abundance of arid land, and a lack of farmer awareness of irrigation, the study concentrated on water and irrigation infrastructure as well as rural sustainable development.

Study Area:

The location code or village code for Awalai village is 568576, as per data from the 2011 Census. In the Maharashtra state of India's Sangli district is the village of Awalai. It is located 98km from the district headquarters in Sangli and 8km from the sub-district headquarters in Atpadi (tehsildar office). According to data from 2009, Awalai village also has a gram panchayat.

The village has an overall size of 831.08 hectares. There are 1,486 people living in Awalai in total, 732 of them are men and 754 of whom are women. Awalai village has a literacy rate of 70.26%, with 76.50% males and 64.19% females being literate. The village of Awalai contains about 311 homes.



Source: Census of India.

Objectives:

For the present study, following objectives have been framed.

1. To Assess the Spatio-Temporal Changes of Drought Conditions in the Study Area by Using Remote Sensing Techniques.
2. To Analyze the Impact of Jalyukt Shivar Abhiyan on Socio-Economic Development of Local Population in the Study Area.

Database and Methodology:

The data used in the current study came from both primary and secondary sources. Field surveys, questionnaires, and in-person interviews were used to gather the primary data, while secondary data was gathered from a variety of reliable authentic sources. Normalized Differenced Vegetation Index (NDVI) is an index of vegetation health and density. It is computed

from the satellite Image using spectral radiance in red and near infrared reflectance using the formula:

$$NDVI = (NIR - R) / (NIR + R)$$

Where,

NIR= near infrared band,

R= Red band

NDVI is a powerful indicator to monitor the vegetation cover of wide areas and to detect the frequent occurrence and persistence of droughts (Thavorntam and et al.2006). This was applied to monitor vegetation health.

Where,

NDVI= Normalized Differenced Vegetation Index.

Min= Minimum Value, Max= Maximum Value,

Mean= Mean Value.

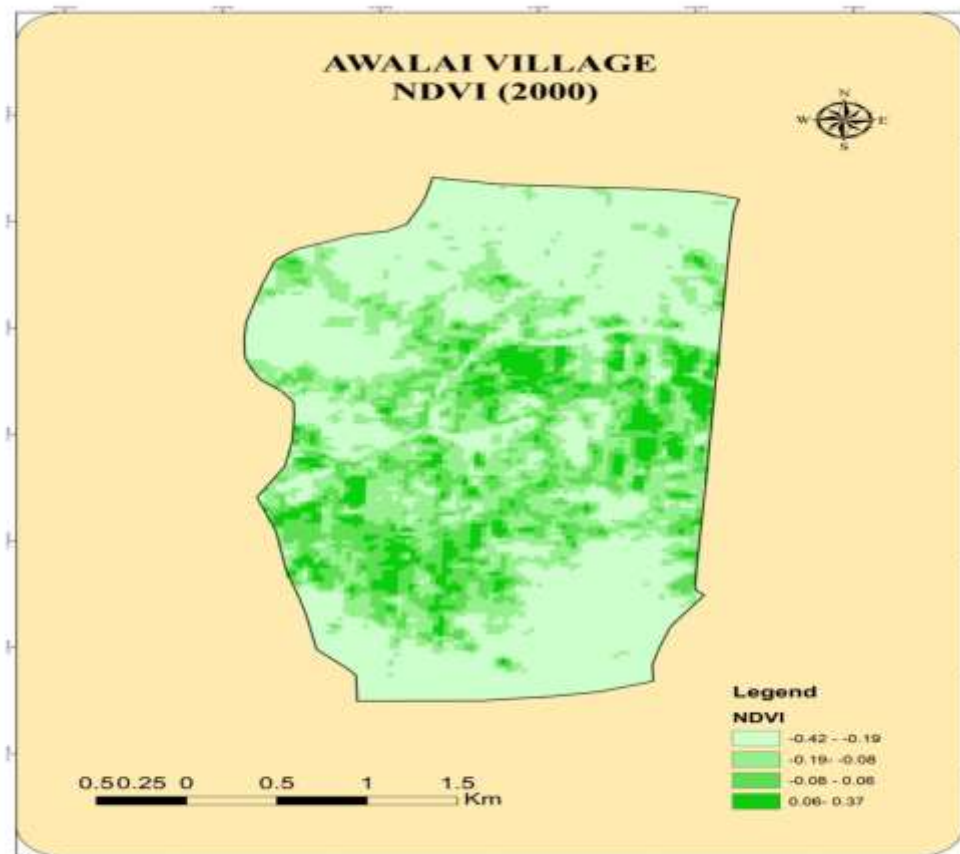
NDVI:

The Normalized Difference Vegetation Index (NDVI), which is immediately available, is initially calculated. Additionally, NDVI is frequently used globally to track drought, predict agricultural output, and help predict fire zones and desert offensive maps. NDVI is integrated into farming apps like Crop Monitoring to help with crop scouting and provide accuracy for irrigation and fertilizer administration. Since it helps to account for variations in lighting conditions, surface slope, exposure, and other external factors, NDVI is preferred for worldwide vegetation monitoring.

Below Poverty Line:

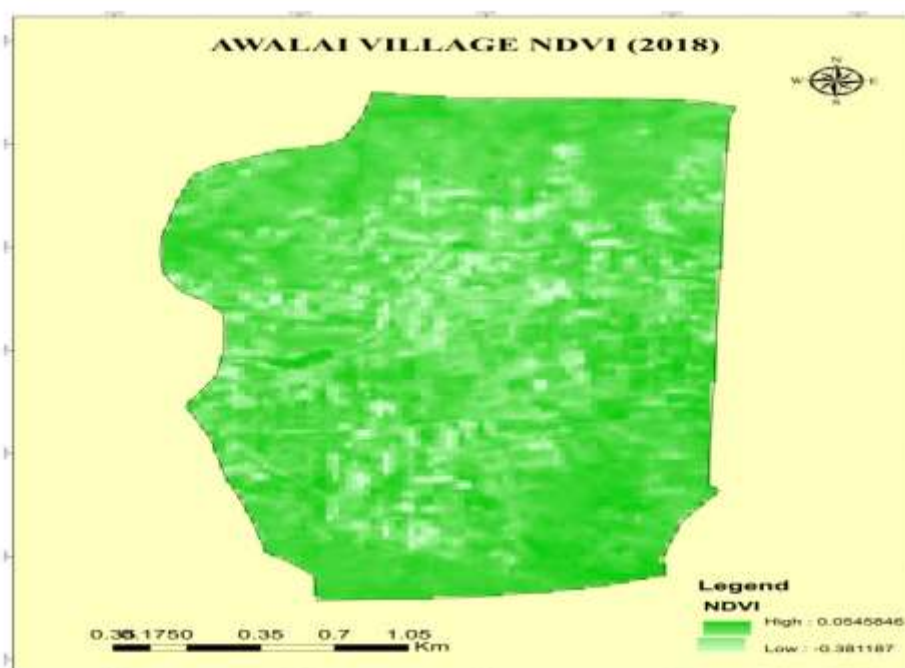
Data Analysis:

The Indian government uses the benchmark of "Below Poverty Level" to denote economic disadvantage and to identify people and households who require aid and assistance from the state. It is calculated using a variety of factors that differ both between and within states. As per the poverty report of India 2011-12 in rural areas Rs.876 and in urban area Rs.1000 per month per head was required this data has been taken into consideration for research work. The family is considered above the poverty line when the income is above Rs. 4,860 per month and if it is below Rs. 4,860 then the household is considered as the below poverty line (BPL).



The above map shows the village of Awalai NDVI (2000) The NDVI (Normalized Difference Vegetation Indicator) is a straightforward but efficient index for measuring green vegetation since it normalizes chlorophyll absorption in the red spectrum with green leaf scattering in the near infrared. The NDVI index typically has a value of -1-1. The NDVI range shown on the Awalai village map is between -0.42 and 0.37. The highest vegetation,

which is dispersed and ranges from 0.06-0.37, is present. Negative NDVI values indicate dry land and a lack of water. A 30 to 35% figure for vegetation cover is depicted on the map.



NDVI (2018)

The map represents NDVI (Normalize Difference Vegetation Index) of Awalai village (2018). This map shows high and low vegetation cover. High and low vegetation represents 0.0546 and -0.3811 respectively. Map shows more healthy vegetation than the previous year's vegetation of 2000 because "JALYUKT SHIVAR ABHIYAN" which is organized by Maharashtra state government. When we compare to 2000 years village vegetation data that time we easily conclude it is favorable and impactful effect of JSY. Above map indicates high level of vegetation cover, cropping area, forest and green park has been emerged but the other hand barren land area has been minimized. Highest value of 2000 year data and 2018 NDVI report data the change was observed. The positive impact of the "Jalyukt Shivar Yojna" increase water availability as well as healthy vegetation.

Table 1: Types of Houses in Awalai Village

Sr. No.	Types of Houses	Before JSA	After JSA
1	Kutcha House	19	11
2	Semi-Pucca House	13	07
3	Pucca House	10	14
4	RCC House	06	12
	Total Households	48	48

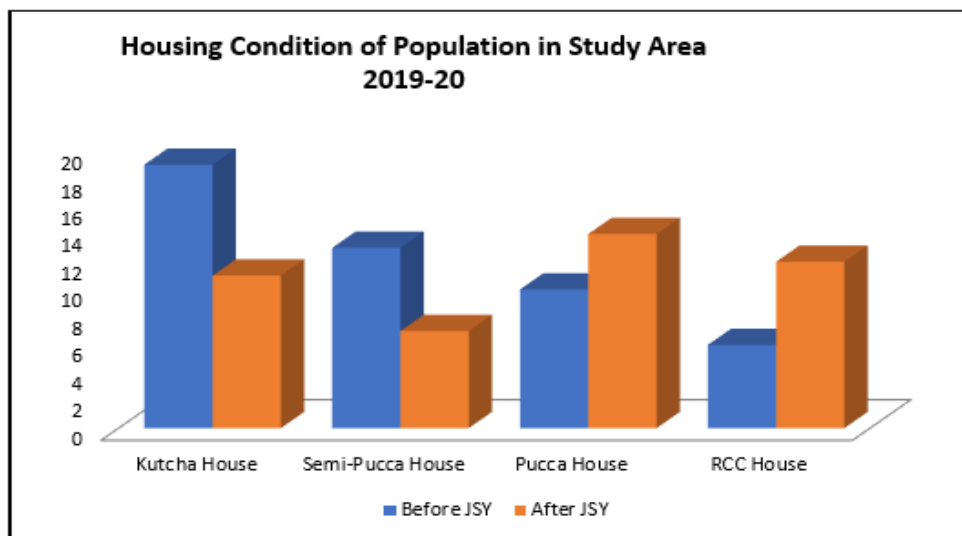
Note*- JSA Represents- Jalyukta Shivar Abhiyan

Source: Field Survey, 2019-20

Housing condition of the local peoples of the sample village most of the households having kutcha house, when the JSA was not introduced, kutcha and semi-pucca house category peoples are decreased but pucca and RCC house people data has been increased. People having income less than the government demarcated the line of income (Government of India, Report 2018). After the JSA income level of the farmers was tremendously changed. On an



average 60 per cent of the households having pucca houses, because of agricultural development due to water availability.



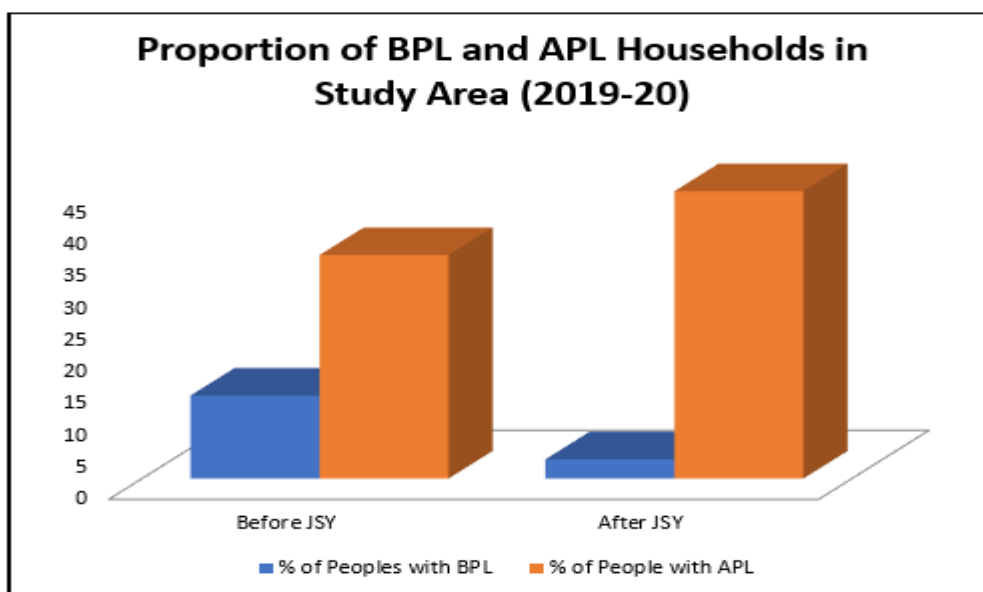
Source: Field Survey, 2019-20.

Table 2: Poverty Condition in Awalai Village

Sr. No.	Poverty Condition	Before JSA	After JSA
1	Peoples with BPL	13	3
2	Peoples with APL	35	45
	Total Households	48	48

*Note- BPL stands for Below Poverty Line; APL stands for Above Poverty Line

Source: Field Survey, 2019-20



Source: Field Survey, 2019-20.

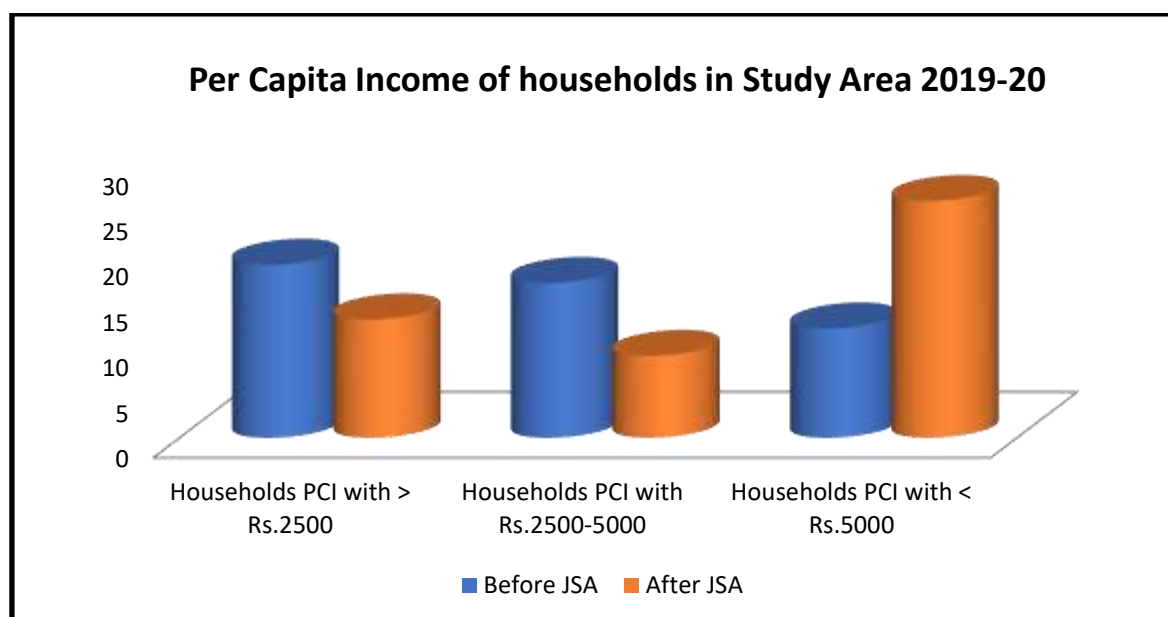
Poverty is a complex concept that may involve social, economic, and political dimensions. It is the lack of a specific amount of material goods or money. According to the India poverty report, which was generated by the Indian government's ministry of social justice and empowerment in 2004–2005, In Maharashtra, the Scheduled Caste population was significantly below the poverty level (44.80%), accounting for more than one-third of the population (36.80%). The poverty line was established by the Indian government in the rural areas using the per capita monthly income of Rs.972 for the entirety of India and Rs.1407 for the urban areas. As per field report data before the JSY below Poverty Line households are maximum but the scheme was launched then the scenario has been changed.

Table 3: Per Capita Income in Awalai Village

Sr. No.	Income Category	Before JSA	After JSA
1	Households PCI with > Rs.2500	19	13
2	Households PCI with Rs.2500-5000	17	9
3	Households PCI with < Rs.5000	12	26
	Total Households	48	48

*Note- PCI stands for Per Capita Income

Source: Field Survey, 2019-20



The per capita income of the people living in drought is typically substantially lower than that of the people living in irrigated land. Nearly 40% of residents in a sample hamlet in the Sangli district made less than Rs 2,500 per year. The fundamental cause of this situation is the increased number of landless people, which resulted in an extremely low per capita income. 35% of the families had a per capita income of between Rs 2,500 and Rs 5,000, on average. Only 25% of the population had an income of at least Rs. 5,000 prior to

the Jalyukta Shivar Abhiyan. But after the JSY, everything changed, and the number of individuals who make a living from agriculture has increased thanks to irrigation infrastructure.

Conclusion:

In the forgoing analysis that follows, an effort has been made to look at the geographic distribution of this underprivileged population in the Sangli district as well as their socio-economic growth and changes that have occurred in 2019–20. The analysis is based on both



primary and secondary sources of data in order to highlight the actual situation and show how growth planning can be done wisely while also raising living standards in the studied area. The Maharashtra government implemented JSA to provide better irrigation facilities. Prior to the JSA agriculture system, there were extremely few varieties of crops, crop products, and other farming-related quality and quantities due to a severe drought condition.

Following the JSA, people's perceptions of those who use irrigation and water were altered. The development of agriculture is largely dependent on capital investment and irrigation. Because more than 75% of the population in the study area depended solely on rainfall, there was very little agricultural output prior to the introduction of JSA. The village of Awalai in the Atpadi tehsil received a Pani foundation award throughout the research period. JSA has helped Awalai village become one of the best in the irrigation category.

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