

Attitude of farmers towards Jalyukta Shivar Abhiyan

P. B. Kharde¹ and D. H. Madhe²

1. Professor of Agril. Extension (CAS)

2. Post Graduate Student, Department of Extension Education

Mahatma Phule Krishi Vidyapeeth, Rahuri, M.S., India

Corresponding author e-mail: pbkharde@gmail.com

ABSTRACT

India has been predominantly an agricultural country. In India, the Maharashtra state is one of the progressive states in agriculture sector. Out of the total area of Maharashtra, 82 percent comprises of the rainfed sector, while, 52 percent is drought prone. The state has witnessed a decrease in ground water level by almost 2 mt. To overcome the water inadequacy situation, water conservation is the only solution. Considering drought-like situation occurring frequently in the state, Jalyukta Shivar Abhiyan is being taken up under 'water for all-drought-free Maharashtra 2019'. The programme aims to make 5000 villages free of water scarcity every year. An irrigation potential of 22,74,744 ha. has been created in Maharashtra through Jalyukta Shivar Abhiyan. This is the success of the scheme but it is important to know the peoples opinion about Jalyukta Shivar Abhiyan. Therefore, the study was undertaken with an attempt to analyse the farmers attitude. Attitude often result in and affect the behaviour or action of the people. The present study was conducted in two tahsils namely Parner and Jamkhed of Ahmednagar district of Maharashtra with sample size of 120 respondents from 10 villages. It was observed that more than half of the respondents (59.17 %) had moderately favorable attitude towards Jalyukta Shivar Abhiyan, followed by highly favourable (22.50 %) attitude and less favourable (18.33 %) attitude of respondents towards Jalyukta Shivar Abhiyan. Respondents had made various suggestions to overcome the constraints. The important implications drawn such as, majority respondents were satisfied with the Jalyukta Shivar Abhiyan and wanted to continue with this programme. Therefore, government may continue this programme in future also.

Keywords: Jalyukta Shivar Abhiyan, attitude

INTRODUCTION

India has been predominantly an agricultural country. Hence, it is true that progress of India is very much dependent on the development of agriculture. Water is an essential and precious upon which our ecosystem and agricultural production depend. Indian agriculture continues to be a gamble with the monsoon as more than half of the sown area does not have any access to irrigation. The incidence of drought remains a threat to the country's agricultural production at macro level and to the livelihoods of people dependent on agriculture at micro level. Maharashtra is one of the leading states in India on agricultural front.

The average water availability in the state of Maharashtra is 163.82 km³. According to inter-state water tribunal awards, the allotted quantity of water to the state is 125.94 km³. Out of the five major river basin systems, 55 per cent of the dependable yield is available in the four river basins (Krishna,

Godavari, Tapi and Narmada) east of the Western Ghats. These four river basins comprise 92 per cent of the cultivable land and more than 60 per cent of the population in rural areas. The State enjoys a tropical monsoon climate, the hot scorching summer from March onwards yields to the rainy monsoon in early June.

Out of the total area of Maharashtra, 82 per cent fall in the rainfed sector, while, 52 per cent is drought prone. The state has witnessed a decrease in ground water level by almost 2 mt. Many tankers are being used for water supply across various districts of the state. To overcome the water inadequacy situation, water conservation is only solution. Considering drought-like situation occurring frequently in the state, Jalyukta Shivar Abhiyan is being taken up by the Government of Maharashtra. The scheme Jalyukta Shivar Abhiyan was launched on 26th January, 2015 with slogan 'Water for all-Drought-free Maharashtra'. One of the major responsibilities undertaken through Jalyukta Shivar

Abhiyan is to rejuvenate these natural water sources.

The Government has authorized implementation of Jalyukta Shivar Abhiyan in all districts of the state in order to permanently overcome drought situation by convergence of funds approved for schemes under various departments and through MREGS/MLA/MP Fund/District-level Fund/Non-Governmental Organizations and public participation. The scheme aimed at solving water woes of drought prone regions is already a hit with farmers as many villages are inching towards becoming water sufficient. The programme aims to make 5000 villages free of water scarcity every year. The key aim of Jalyukta Shivar Abhiyan is to establish belief in a farmer that "every drop of rainwater is owned by me and it should percolate in my land." (Source: www.mrsac.maharashtra.gov.in)

Works undertaken through Jalyukta Shivar Abhiyan are

- Watershed Development Works like CCT/Deep CCT/Farm Ponds /Gabian.
- The chain of Cement Nalla bandh with deepening and widening of Nalla
- Rejuvenation of old Water Bodies
- Repair, Renovation and Restoration of existing Minor Irrigation Water bodies like KT Weir / Storage Bandhara etc.
- Desilting of Water Conservation Structures like Percolation Tank, Village Tank, Storage Tanks etc.
- Connecting Water Streams to Nallas
- Repairs of Canal
- Recharging of open dug wells and tube wells
- Action Plan for Strengthening of Drinking Water resources
- Efficient use of available water
- Strengthening of Water Users Associations

The study was undertaken to study the attitude of respondents towards Jalyukta Shivar Abhiyan and also to know the constraints in its implementation and suggestions towards it.

METHODOLOGY

The present study was conducted in Ahmednagar district of Maharashtra state which has completed highest number of works under Jalyukta Shivar Abhiyan. Hence, Ahmednagar district was selected purposively. In Ahmednagar district there are fourteen tahsils out of which two tahsils namely Parner and Jamkhed were selected for study as they have completed highest number of works under Jalyukta Shivar Abhiyan. The Ex-post facto design of social research was used for the present investigation. The list of villages having highest works under Jalyukta Shivar Abhiyan was obtained from Taluka Agriculture Officer and five villages were selected from each tahsils depending upon highest works carried out under Jalyukta Shivar Abhiyan. Twelve respondents of beneficiaries of Jalyukta Shivar Abhiyan were selected from each village by simple random sampling technique and thus total 120 respondents were selected for the present study. Relevant variables were identified in consultation with experts and also based on review of related literature.

Attitude is a mental state of readiness, organization through experience, exerting a directive and dynamics influence upon individuals response to all objects and situations with which it is related. A schedule was developed to know the attitude of beneficiaries towards Jalyukta Shivar Abhiyan. The schedule having twenty statements (15 positive statements and 5 negative statement) were related to Jalyukta Shivar Abhiyan. The response of beneficiaries were recorded on three continuum as 'agree', 'undecided', and 'disagree' The positive statements were assigned 3 score for agree, 2 for undecided and 1 for disagree and the vice versa in case of negative statement.

Considering the total score, respondents were categorized on the basis of Mean \pm Standard deviation in three categories as less favourable, moderately favourable and highly favourable.

After analysing the pre-testing results, necessary modifications were done in the interview schedule regarding the wordings, statements and questions. The data collected from all the respondents were coded, classified and tabulated in order to make the findings meaningful. The findings were suitably interpreted and necessary conclusions and inferences were drawn. The collected data were tabulated according to the

objectives set forth for the study. The statistical methods viz., Frequency, Percentage, Arithmetic Mean and Standard deviation were used for analysis of data.

RESULTS AND DISCUSSION

Overall attitude of farmers towards Jalyukta Shivar Abhiyan

The information regarding the attitude of farmers towards Jalyukta Shivar Abhiyan was collected, tabulated and analyzed. The results are presented in Table 1.

Table 1
Distribution of the respondents according to their overall attitude towards Jalyukta Shivar Abhiyan

Sr. No.	Category	Respondents (N=120)	
		Frequency	Per cent
1	Less favorable (Upto 42)	22	18.33
2	Moderately favorable (43 to 57)	71	59.17
3	Highly favorable (58 and above)	27	22.50
	Total	120	100.00
Mean = 50.06		S.D.= 7.58	

It was observed from Table 1 that 59.17 per cent respondents had moderately favourable attitude towards Jalyukta Shivar Abhiyan, followed by 22.50 per cent respondents had highly favourable attitude and 18.33 per cent respondent had less favourable attitude towards Jalyukta Shivar Abhiyan. This finding is consistent with the findings of Sivraj *et al.* (2016) and Kadam (2016).

Statementwise distribution of respondents according to their attitude towards Jalyukta Shivar Abhiyan

The statementwise information of respondents pertaining to the their attitude towards Jalyukta Shivar Abhiyan was collected, tabulated and analyzed. The results are presented in Table 2.

Table 2
Distribution of the respondents according to their attitude towards Jalyukta Shivar Abhiyan

Sr. No.	Statement	Agree		Undecided		Disagree	
		F	%	F	%	F	%
1	Jalyukta Shivar Abhiyan is blessing for the farmers	94	78.33	16	13.33	10	8.34
2	Jalyukta Shivar Abhiyan increased ground water level and water storage capacity	80	66.67	22	18.33	18	15.00
3	Jalyukta Shivar Abhiyan increased cropping intensity and agricultural production	88	73.33	27	22.50	5	4.17
4	Jalyukta Shivar Abhiyan created new structure of water conservation and arrest maximum runoff water in the village area	80	66.67	37	30.83	3	2.5
5	Jalyukta Shivar Abhiyan increased irrigated area under agriculture	62	51.67	37	30.83	21	17.5

6	Jalyukta Shivar Abhiyan encouraged tree plantation	62	51.67	40	33.33	18	15.00
7	Jalyukta Shivar Abhiyan reduced soil erosion and helped in soil conservation	84	70.00	30	25.00	6	5.00
8	Jalyukta Shivar Abhiyan is only waste of money and time	5	4.17	20	16.66	95	79.17
9	Jalyukta Shivar Abhiyan is a boon for all -round development of the village.	99	82.5	21	17.5	0	0
10	Jalyukta Shivar Abhiyan is not an effective medium for increasing agricultural production	2	1.67	32	26.67	86	71.66
11	Jalyukta Shivar Abhiyan has decreased the rift between rich and poor.	55	45.83	39	32.5	26	21.67
12	Jalyukta Shivar Abhiyan has helped in improving economic status of farmers.	51	42.5	38	31.67	31	25.83
13	Jalyukta Shivar Abhiyan has neglected the development of small farmers.	21	17.5	30	25.00	69	57.5
14	The work under Jalyukta Shivar Abhiyan was of poor quality.	7	5.83	26	21.67	87	72.5
15	Jalyukta Shivar Abhiyan enabled practicing improved agriculture by increasing availability of water for irrigation.	63	52.5	36	30.00	21	17.5
16	Jalyukta Shivar Abhiyan increased storage capacity of water bodies by removing silt	84	70.00	27	22.5	9	7.5
17	Jalyukta Shivar Abhiyan created employment for rural youth.	50	41.67	37	30.83	33	27.50
18	Jalyukta Shivar Abhiyan did not cover all farmers in the village.	31	25.83	38	31.67	51	42.5
19	Jalyukta Shivar Abhiyan strengthened the drinking water resources.	63	52.5	38	31.67	19	15.83
20	I am satisfied with Jalyukta Shivar Abhiyan , so I will continue with this programme	93	77.5	27	22.5	0	0

A = Agree, UD = Undecided, D = Disagree, F = Frequency

The information pertaining to the attitude of farmers towards Jalyukta Shivar Abhiyan given in Table 2 is discussed as under.

1. Jalyukta Shivar Abhiyan is blessing for the farmers

The results regarding respondents according to their attitude towards Jalyukta Shivar Abhiyan in Table 2 indicated 78.33 per cent of them agreed that Jalyukta Shivar Abhiyan is blessing for the farmers, followed by 13.33 per cent of the respondents had undecided and 8.34 per cent of the respondents had disagreed with the statement.

2. Jalyukta Shivar Abhiyan increased ground water level and water storage capacity

It was observed from Table 2 that 66.67 per cent of respondents agreed that Jalyukta Shivar Abhiyan increased ground water level and water storage capacity. followed by 18.33 per cent of the respondents were undecided and 15 per cent of the respondents disagreed with the statement.

3. Jalyukta Shivar Abhiyan increased cropping intensity and agricultural production

As regards to the statement that Jalyukta Shivar Abhiyan increased cropping intensity and agricultural production, it was observed that 73.33 per cent of respondents agreed with this fact followed by 22.50 per cent of the respondents who were undecided and 4.17 per cent of the respondents disagreed with the statement.

4. Jalyukta Shivar Abhiyan created new

structure of water conservation and arrest maximum runoff water in the village area

It was found from the above table that 66.67 per cent of respondents agreed that Jalyukta Shivar Abhiyan created new structure of water conservation and arrest maximum runoff water in the village area followed by 30.83 per cent of the respondents who were undecided and 2.5 per cent of the respondents disagreed with this fact.

5. Jalyukta Shivar Abhiyan increased irrigated area under agriculture

The results regarding respondents according to their attitude towards Jalyukta Shivar Abhiyan in Table 2 indicated 51.67 per cent of them agreed that Jalyukta Shivar Abhiyan increased irrigated area under agriculture, 30.83 per cent of the respondents who were undecided and 17.5 per cent of the respondents disagreed.

6. Jalyukta Shivar Abhiyan encouraged tree plantation

As regards to the statement that Jalyukta Shivar Abhiyan encouraged tree plantation, it was observed that 51.67 per cent of respondents agreed with this fact followed by 33.33 per cent of the respondents were undecided and 15 per cent of the respondents disagreed with the statement.

7. Jalyukta Shivar Abhiyan reduced soil erosion and helped in soil conservation

In the Table 2 it was revealed that 70.00 per cent of respondents agreed that Jalyukta Shivar Abhiyan reduced soil erosion and helped in soil conservation, while 25 per cent of the respondents were undecided and 5 per cent of the respondents disagreed with the above statement.

8. Jalyukta Shivar Abhiyan is only waste of money and time

The data in Table 2 concluded that 79.17 per cent of respondents disagreed that Jalyukta Shivar Abhiyan is only waste of money and time followed by 16.66 per cent of the respondents were undecided

and 4.17 per cent of the respondents agreed with this fact.

9. Jalyukta Shivar Abhiyan is a boon for all-round development of the village

The results regarding respondents according to their attitude towards Jalyukta Shivar Abhiyan indicated 82.50 per cent of them agreed that Jalyukta Shivar Abhiyan is a boon for all round development of the village followed by 17.50 per cent of the respondents who were undecided.

10. Jalyukta Shivar Abhiyan is not an effective medium for increasing agricultural production

As regards to the statement that Jalyukta Shivar Abhiyan is not an effective medium for increasing agricultural production, it was observed that 71.66 per cent of respondents disagreed with this fact, 26.67 per cent of the respondents were undecided and 1.67 per cent of the respondents agreed with the statement.

11. Jalyukta Shivar Abhiyan has decreased the rift between rich and poor

It was observed that 45.83 per cent of respondents agreed that Jalyukta Shivar Abhiyan has decreased the rift between rich and poor, 32.50 per cent of the respondents were undecided and 21.67 per cent of the respondents disagreed with the statement.

12. Jalyukta Shivar Abhiyan has helped in improving economic status of farmers

It was found from the above table that 42.50 per cent of respondents agreed that Jalyukta Shivar Abhiyan has helped in improving economic status of farmers, followed by 31.67 per cent of the respondents who were undecided and 25.83 per cent of the respondents disagreed with this fact.

13. Jalyukta Shivar Abhiyan has neglected the development of small farmers

The results regarding respondents according to their attitude towards Jalyukta Shivar Abhiyan in

Table 4.13.1 indicated 57.50 per cent of them disagreed that Jalyukta Shivar Abhiyan has neglected the development of small farmers, 25 per cent of the respondents were undecided and 17.5 per cent of the respondents agreed with the statement.

14. Work under Jalyukta Shivar Abhiyan was of poor quality

As regards to the statement that the work under Jalyukta Shivar Abhiyan was of poor quality, it was observed that 72.50 per cent of respondents disagreed with this fact, followed by 21.67 per cent of the respondents undecided and 5.83 per cent of the respondents agreed with the statement.

15. Jalyukta Shivar Abhiyan enabled practicing improved agriculture by increasing availability of water for irrigation

Further, it was observed that 52.50 per cent of respondents agreed that Jalyukta Shivar Abhiyan enabled practicing improved agriculture by increasing availability of water for irrigation, followed by 30.00 per cent of the respondents who were undecided and 17.5 per cent of the respondents disagreed with the statement.

16. Jalyukta Shivar Abhiyan increased storage capacity of water bodies by removing silt through people's participation

It was revealed that 70.00 per cent of

respondents agreed that Jalyukta Shivar Abhiyan increased storage capacity of water bodies by removing silt through people's participation, while, 22.50 per cent of the respondents were undecided and 7.50 per cent of the respondents disagreed with this fact.

17. Jalyukta Shivar Abhiyan created employment for rural youth

The results regarding respondents according to their attitude towards Jalyukta Shivar Abhiyan in Table 2 indicated 41.67 per cent of them agreed that Jalyukta Shivar Abhiyan created employment for rural youth, followed by 30.83 per cent of the respondents who were undecided and 27.50 per cent of the respondents disagreed with this fact.

18. Jalyukta Shivar Abhiyan did not cover all farmers in the village

It was revealed that 42.50 per cent of respondents disagreed that Jalyukta Shivar Abhiyan did not cover all farmers in the village, followed by 31.67 per cent of the respondents who were undecided and 25.83 per cent of the respondents agreed with this fact.

19. Jalyukta Shivar Abhiyan strengthened the drinking water resources

As regards to the statement that Jalyukta Shivar Abhiyan strengthened the drinking water resources, it was observed that 52.50 per cent of

Table 3
Distribution of respondents according to the constraints faced

Sr. No.	Constraints	Respondents (N=120)	Rank
1	Improper site selection	65 (54.16)	I
2	Influence of local contractors in the terms of deciding the location and nature of works	61 (50.83)	II
3	Activities not carried out timely	52 (43.33)	III
4	All farmers in the village are not covered	31 (25.83)	IV
5	Improper village mapping	23 (18.33)	V

(Figure in parentheses indicate the percentage)

respondents agreed with this fact, 31.67 per cent of the respondents were undecided and 15.83 per cent of the respondents disagreed with the statement.

20. Regarding satisfaction with Jalyukta Shivar Abhiyan and its continuation

Finally it was revealed that 77.50 per cent of respondents agreed that they were satisfied with Jalyukta Shivar Abhiyan and would continue with this programme, while, 22.5 per cent of the respondents were undecided.

The above results are in accordance with the findings of Bhankariya (2004), .Agrawal (2015) and Singh and Prakash (2010).

Constraints faced by the respondents in implementation of Jalyukta Shivar Abhiyan

The data regarding constraints faced by respondents is given in Table 3.

The data presented in Table 3 revealed that the respondents faced constraints of improper site selection (54.16 %), influence of local contractors in the terms of deciding the location and nature of works (50.83 %), activities not carried out timely (43.33 %), all farmers in the village are not covered (25.83 %) and improper village mapping (18.33 %).

These findings are in line with Patel (2011), Korde (2017) and Lamkane (2018).

Suggestions given by the respondents

An attempt was made to study the suggestions offered by the respondents. The data is presented in Table 4.

Table 4
Distribution of respondents according to suggestions given by them

Sr. No.	Suggestions	Respondents (N=120)	Rank
1	Proper site for the works has to be selected	61 (50.83)	I
2	People should be involved in deciding the location and nature of works	58 (48.33)	II
3	The works should be completed within stipulated time	47 (39.16)	III
4	Maximum farmers should be covered under <i>Jalyukta Shivar Abhiyan</i>	32 (26.66)	IV
5	Mapping of village should be done properly	21 (17.50)	V

(Figure in parentheses indicate the percentage)

The data presented in Table 4 indicated that the respondents suggested that proper site for the works should be selected (50.83 %), people should be involved in deciding the location and nature of works (48.33 %), the works should be completed

within stipulated time (39.16 %), maximum farmers should be covered under Jalyukta Shivar Abhiyan (26.66 %) and mapping of village should be done properly (17.50 %).

These suggestions were found similar with Darandle (2010), Patel (2011) and Lamkane (2018).

REFERENCES

1. Agrawal S. (2015). A study on Impact of Watershed Development Programme in Income, Employment generation and change in cropping pattern of the beneficiaries of Jabalpur district (M.P.) Ph. D. Thesis, JNKVV, Jabalpur.
2. Bhankariya D Samir. (2004). An Economic Impact of Watershed development programme in Banaskatha District of Gujarat State. Ph.D. Thesis, Gujarat Agriculture University.
3. Darandle A. D. (2010). Attitude of tribal farmers towards organic farming practices in maize crop. M.Sc. (Agri.) thesis, AAU, Anand.
4. Kadam P. (2016) Attitude of the farmers towards integrated pest management technology programme on cotton. *International Journal of Agricultural Sci.*, 12 (2): 294-297.
5. Korde V. M. (2017). Attitude of farmers towards organic farming. M.Sc. (Agri.) thesis, VNMKV Parbhani.
6. Lamkane Y. S. (2018). Attitude of farmers towards recommendation of soil health card M.Sc. (Agri) thesis, VNMKV Parbhani.
7. Patel M. A. (2011). Attitude of farmers towards Crop Insurance Scheme, M.Sc. (Agri.) Thesis, Dr. PDKV, Akola.
8. Singh S. B. and Prakash N. (2010). Socio-economic impact of Watershed Development Project in Manipur. *Indian Research Journal of Extension Education*. 10(1):78-82.
9. Sivaraj, P., H. Philip and M. Chinnadudrai (2016). Attitude of Paddy Farmers towards Crop Insurance in Erode and Tiruchirappalli districts of Tamil Nadu. *Agriculture Update*. 11(1) 90-92.

.....