Knowledge of Beneficiary Farmers about Jalyukt Shivar Campaign

Pranali N. Thakare*, V.S. Tekale and Prajakta S. Telange

Department of Extension Education, Dr. PDKV, Akola (M.S.) 444104, India

*Corresponding author

ABSTRACT

The present study was conducted in Nagpur district of Vidarbha region of Maharashtra state. For the study of Jalyukt Shivar Campaign, exploratory research design was used. After completion of one year of Jalyukt Shivar Campaign it was studied for its knowledge. After analysis it was observed that 63.34 per cent of the respondents had high level of knowledge regarding Jalyukt Shivar Campaign. In implementation of Jalyukt Shivar Campaign beneficiaries were facing problems such as soil material which hold and percolate water get scrapped (60.83%), followed by procedural delays in approvals, sanctions and fund disbursal (56.67%), activities not carried out timely (51.67%) and high rate of evaporation in summer season (48.33%) etc.

Keywords: Knowledge, Beneficiary farmer, Jalyukt Shivar Campaign, Constraints

Introduction

In the state of Maharashtra, inconsistency of rains in the very times of crop growth and discontinuity of rains create drought like situation. Nearly, 82 per cent area of the state falls in rainfed sector and 52 per cent area is drought prone, due to which agriculture field is heavily affected. Heavy ups and downs have been observed in the production of crops on dryland in the state. Less availability of water is a major factor responsible for this situation. To permanently overcome internal drought situation and to increase water availability, in December 2014, Maharashtra government has launched a new programme named Jalyukt Shivar (waterful surrounding) programme to make Maharashtra a drought-free state by 2019. There is convergence of various schemes related to water conservation. This programme focused on restoration, repair, rejuvenation and construction of local water bodies, where possible, it also linked to nearby rivers, allowing a continuous, uninterrupted flow of water for local irrigation requirements. Success of any development programme depends on degree of involvement of the people and at what level of knowledge they have about it. Keeping in view a study of knowledge of beneficiary farmers about Jalyukt Shivar Campaign in Nagpur district of Maharashtra state was undertaken.

Materials and Methods

The investigation was carried out in Nagpur district of Maharashtra state during 2015-2017. For the study of Jalyukt Shivar Campaign exploratory research design was used. Out of thirteen talukas of the district
under Jalyukt Shivar Campaign, two talukas namely Hingna and Katol were selected for the study and five and twelve villages were selected respectively from selected talukas by proportionate random sampling method.

Thus a total of 17 villages were selected for study. In total a sample of 120 beneficiary farmers from selected villages was drawn with the help of proportionate random sampling method. The data were collected with the help of schedule developed for this purpose contained questions related to knowledge of beneficiary farmers about Jalyukt Shivar Campaign by personally interviewing them.

**Results and Discussion**

It was evident from Table 1 that, cent per cent of beneficiary farmers had knowledge about villages with high scarcity of water are selected (100.00%), maximum rain water is harvested in surroundings of village itself (100.00%), outcomes of the campaign (100.00%), followed by decentralized water bodies are created (72.50%), Jalyukt Shivar Campaign is five year plan (63.33%), funds are available under various schemes (60.00%), before implementation of activities water balance sheet of village is prepared (51.67%), whereas, majority of the respondents had no knowledge about implementation of groundwater act is a part of campaign (68.33%) and every year 5000 villages will make free of water scarcity (51.67%).

In case of activities taken under Jalyukt Shivar Campaign, cent per cent of respondents had knowledge about watershed development work namely, canal deepening (100.00%) and tree plantation (100.00%), followed by majority of the respondents had knowledge about watershed development work namely, farm pond (86.67%), extraction of sludge from various existing water bodies (86.67%), watershed development work like water absorption trenches (79.17%), repairing of existing micro irrigation structures (KT Weir/Storage dam) (77.50%), strengthening of drinking water sources (77.50%), chain cement concrete canal dam works (76.67%), resurrection of old water structures (72.50%), efficient use of available water (72.50%), small river/canal joining (70.83%), watershed development work namely, graded bunding (68.33%), well/bore well refilling (67.50%), and repairing, renovating and reinstating of percolation tank and micro irrigation tank (57.17%). While majority of the respondents had no knowledge about strengthening of water usage organizations (81.67%). Above findings regarding farm pond and tree plantation were in accordance with the findings of Kulshrestha et al., (2015) and Rathod Trupti and Rathod (2016).

From above data it shows that, beneficiary farmers were very well known about Jalyukt Shivar Campaign activities, probable reason for this might be water is important factor in their personal life and for farming, also now-a-days state government creating awareness about various water conservation activities to overcome water scarcity problem of Maharashtra, as it is major trait to development of state.

The data in Table 2 indicates that, 63.34 per cent of the respondents were having high knowledge level followed by 30.83 per cent were having medium level knowledge and 05.83 per cent were found in low level of knowledge.

It was observed from Table 3 that, majority of beneficiary farmers (60.83%) of Jalyukt Shivar Campaign faced major constraint soil material which hold and percolate water get scrapped, followed by procedural delays in approvals, sanctions and fund disbursal (56.67%) and activities not carried out timely (51.67%), respectively.
Table 1 Distribution of the respondents according to their knowledge about Jalyukt Shivar Campaign

| Sr. No. | Statements                                                                 | Knowledge |
|---------|-----------------------------------------------------------------------------|-----------|
|         |                                                                             | Yes       | No        |
| 1       | Jalyukt Shivar Campaign is five year plan.                                  | 76 (63.33)| 44 (36.67)|
| 2       | Every year 5000 villages will make free of water scarcity.                  | 58 (48.33)| 62 (51.67)|
| 3       | Villages with high scarcity of water are selected.                          | 120 (100.00)| 00 (00.00)|
| 4       | Maximum rain water is harvested in surroundings of village itself.          | 120 (100.00)| 00 (00.00)|
| 5       | Decentralized water bodies are created.                                    | 87 (72.50)| 33 (27.50)|
| 6       | Implementation of groundwater act is a part of campaign.                    | 38 (31.67)| 82 (68.33)|
| 7       | Before implementation of activities water balance sheet of village is prepared. | 62 (51.67)| 58 (48.33)|
| 8       | Funds are available under various schemes.                                 | 72 (60.00)| 48 (40.00)|
| 9       | Outcomes of the campaign.                                                  | 120 (100.00)| 00 (00.00)|
| 10      | Activities taken up under the campaign.                                    |           |           |
| A)      | Watershed development works                                                 |           |           |
| a)      | Graded bunding                                                             | 82 (68.33)| 38 (31.67)|
| b)      | Water absorption trenches                                                  | 95 (79.17)| 25 (20.83)|
| c)      | Farm pond                                                                  | 104 (86.67)| 16 (13.33)|
| d)      | Canal deepening                                                            | 120 (100.00)| 00 (00.00)|
| B)      | Chain cement concrete canal dam works                                      | 92 (76.67)| 28 (23.33)|
| C)      | Resurrection of old water structures                                       | 87 (72.50)| 33 (27.50)|
| D)      | Repairing of existing micro irrigation structures (KT Weir/storage dam)     | 93 (77.50)| 27 (22.50)|
| E)      | Repairing, renovating and reinstating of percolation tank and micro irrigation tank | 65 (54.17)| 55 (45.83)|
| F)      | Extraction of sludge from various existing water bodies                    | 104 (86.67)| 16 (13.33)|
| G)      | Small river/canal joining                                                  | 85 (70.83)| 35 (29.17)|
| H)      | Well/bore well refilling                                                   | 81 (67.50)| 39 (32.50)|
| I)      | Efficient use of available water                                           | 87 (72.50)| 33 (27.50)|
| J)      | Strengthening of drinking water sources                                    | 93 (77.50)| 27 (22.50)|
| K)      | Strengthening of water usage organisations                                 | 22 (18.33)| 98 (81.67)|
| L)      | Tree plantation                                                            | 120 (100.00)| 00 (00.00)|

Figures in parentheses indicate percentage.
Table.2 Distribution of the respondents according to their overall knowledge about Jalyukt Shivar Campaign

| Sr. No. | Knowledge index            | Respondents (n=120) | Frequency | Percentage |
|---------|---------------------------|---------------------|-----------|------------|
| 1       | Low (Up to 33.33)         |                     | 07        | 05.83      |
| 2       | Medium (33.34 to 66.67)   |                     | 37        | 30.83      |
| 3       | High (Above 66.67)        |                     | 76        | 63.34      |
|          | Total                     |                     | 120       | 100.00     |

Table.3 Constraints faced by beneficiary farmers in implementation of Jalyukt Shivar Campaign

| Sr. No. | Constraints                                                                 | Respondents (n=120) | Frequency | Percentage |
|---------|------------------------------------------------------------------------------|---------------------|-----------|------------|
| 1       | Improper site selection                                                      |                     | 38        | 31.67      |
| 2       | Beneficiaries were not taken in confidence before starting the programme     |                     | 32        | 26.67      |
| 3       | Unscientific implementation                                                  |                     | 46        | 38.33      |
| 4       | Lack of transparency                                                         |                     | 45        | 37.50      |
| 5       | Soil conservation key to ground water recharge but get neglected             |                     | 42        | 35.00      |
| 6       | Campaign appeared to hold water but would not recharge it                    |                     | 48        | 40.00      |
| 7       | Soil material which hold and percolate water get scrapped                    |                     | 73        | 60.83      |
| 8       | High rate of evaporation in summer season                                   |                     | 58        | 48.33      |
| 9       | Productive land goes under the construction of farm pond                    |                     | 11        | 09.17      |
| 10      | Activities not carried out timely                                           |                     | 62        | 51.67      |
| 11      | Procedural delays in approvals, sanctions and fund disbursal                |                     | 68        | 56.67      |

Figures in parentheses indicate percentage.

The other constraints followed by the respondents were high rate of evaporation in summer season (48.33%), campaign appeared to hold water but would not recharge it (40.00%), unscientific implementation (38.33%), lack of transparency (37.50%), soil conservation key to ground water recharge but get neglected (35.00%), improper site selection (31.67%), beneficiaries were not taken in confidence before starting the programme (26.67%) and productive land goes under the construction of farm pond (09.17%), respectively.

The major constraint faced by beneficiary farmers of Jalyukt Shivar Campaign was soil material which hold and percolate water get scrapped which results in only holding of water not recharging of ground water table in some areas of study, followed by this contrading other constraint were procedural delays in approvals, sanctions and fund disbursal and activities not carried out timely by concerning agencies. The findings were supported by Athare et al., (2013) and Chavai et al., (2015).

From the results of the present study it could be concluded that majority of the beneficiary farmers had high level of knowledge about Jalyukt Shivar Campaign, it was because of water nourish and support plant and animal
life, also prosperity and welfare of humanity depends on water which is irreplaceable resource. Major constraint identified through study was soil material which hold and percolate water get scrapped therefore focus should be on scientific implementation of Jalyukt Shivar Campaign.

References

Athare, T., B. Singh., V. Gouda and B. K. Singh. 2013. A study on constraints in people’s participation in integrated watershed development. *Indian J. of Ext. Edu.* 49(3&4): 149-153.

Chavai, A. M., U. V. Rakshe and S. B. Shinde. 2015. Impact of farm pond on the beneficiary farmers of Maharashtra.

*International J. of Trop. Agri.* 33(4): 3525-3528.

Government of Maharashtra. Water Conservation Department. Government Resolution No.JaLaA-2014/Case No. 203/JaLa-7 published on 5 December, 2014.

Kulshrestha A., S. Sen and Y. K. Singh. 2015. Study of technological knowledge level about watershed practices in Morena District of Madhya Pradesh, India. *Indian Res. J. Extn. Edu.* 15(1): 89-93.

Rathod Trupti and M. K. Rathod. 2016. Knowledge and adoption of watershed practices under Integrated Watershed Management Programme in Wardha District. *Technoframe- A J. of Multidisciplinary Advance Res.* 5(1): 76-83.

How to cite this article:

Pranali N. Thakare, V.S. Tekale and Prajakta S. Telange. 2018. Knowledge of Beneficiary Farmers about Jalyukt Shivar Campaign. *Int.J.Curr.Microbiol.App.Sci.* 7(08): 2936-2940. doi: [https://doi.org/10.20546/ijcmas.2018.708.311](https://doi.org/10.20546/ijcmas.2018.708.311)