Int.J.Curr.Microbiol.App.Sci (2018) *7*(7): 565-570

International Journal of Current Microbiology and Applied Sciences
***ISSN: 2319-7706* Volume 7 Number 07 (2018)**
Journal homepage: http://www.ijcmas.com

Original Research Article https://doi.org/10.20546/ijcmas.2018.707.069

Krishibhagya Scheme: An Impact Study for Improvement of Livelihood of the Farmers in Hyderabad-Karnataka Region, India

Moulasab*, S.K. Meti, and M.B. Ashoka

University of Agricultural Sciences, Raichur - 584 104, Karnataka, India

**Corresponding author*

Keywords

Beneficiaries and non-beneficiaries, Farm pond, Income, Krishibhagya, Impact, Polyhouse and Shade net

Article Info

Accepted:
06 June 2018
Available Online:
10 July 2018

A B S T R A C T

The present study was conducted to know the impact of Krishibhagya scheme on beneficiaries of Hyderabad-Karnataka region during the year 2017-18. The present study was conducted in six districts namely Bidar, Kalaburagi, Yadgir, Raichur, Koppal and Ballari coming under the jurisdiction of University of Agricultural Sciences Raichur, Karnataka. From each district 5 Krishibhagya beneficiaries (including both Farm pond and Polyhouse) and 5 non beneficiaries were selected randomly following simple random sampling technique. The data was collected from the respondents using structured interview schedule prepared for the purpose. The collected data was analysed using appropriate statistical tools. The results of the study revealed that, there is a 17 to 53 per cent increase in average yield of important crops due to implementation of Farm pond under Krishibhagya scheme, Govt. of Karnataka and increase in income of the beneficiary farmers from Rs. 8800 to Rs. 43848 ac^{-1}. There is a 31 to 58 per cent increase in yield of important horticulture crops due to polyhouse/shade net in Krishibhagya scheme. Hence there is a need to continue and implement the krishibhagya scheme to other areas. There is a need to educate the farmers to go for cultivation of high value commercial crops instead of low value crops as the irrigation facility is available. Administrators and policy makers should think of adding more components to the scheme in order to improve the socio-economic status of the farmers and for sustainable agriculture development.

Introduction

Agriculture plays a vital role in the economy of the country. It is the means of livelihood for more than 70 percent of the population in the country. Good and efficient performance of this sector is vital for food security, employment, eradicating hunger, alleviating poverty, controlling inflation, promoting economic growth and stabilizing economies. Agriculture-led development is fundamental to cutting hunger and reducing poverty in the country.

India is a rural country wherein more than 65 per cent of the people reside in villages. The socio-economic status of more than 60 percent of the villages in the country is very poor.

Many developmental programmes were introduced after the independence by the central and state governments for upliftment of socio-economic status of the rural people. More than 65 per cent of the agricultural land in the state is under rainfed farming which contributes about 55 per cent of food grain and 75 percent of the oilseed production. There is a need to improve the socio-economic status of the farmers in these areas by conserving natural resources like soil and water. In order to improve the living standard of farmers in rainfed areas, the Government of Karnataka introduced "Krishibhagya" scheme during 2014.

Krishibhagya is a flagship programme of the Government of Karnataka aimed at sustainable development of the farming community in the rainfed areas through conservation and use of rain water through rain water harvesting, adoption of dairy activities and effective natural resource management.

Under Krishibhagya scheme, the government is supporting the farmers to construct a farm pond with polythene lining, install pump set with sprinkler irrigation system. This intervention helps farmers to harvest surplus rainwater and use it as lifesaving irrigation to sustain the production and thereby it is possible to enhance the yield by 30 per cent. This intervention can potentially help farmers to stand on their own feet.

When the government spend lot of money on such schemes, it is essential to know the impact of these programmes on stakeholders and also get the feedback on any modification or improvement needed in programmes.

Hence, the present study n impact of Krishi Bhagya Scheme on beneficiary farmers was initiated with the following objectives,

1. To know the impact of farm pond and poly house on yield of important crops
2. To know the impact of farm pond and poly house on income of beneficiaries

Materials and Methods

The present study was conducted in six districts namely Bidar, Kalaburagi, Yadgir, Raichur, Koppal and Ballari coming under the jurisdiction of University of Agricultural Sciences Raichur during 2016-17. From each district 5 krishibhagya beneficiaries (including both Krishi Honda and Polyhouse) and 5 non beneficiaries were selected randomly following simple random sampling technique. The data was collected from the respondents using structured interview schedule prepared for the purpose.

The data collected includes details about the area of the farm and land use patterns, infrastructure and facilities on the farm, number of animals, cropping pattern before and after the scheme implementation, sources of irrigation, details about the financial aspects (cost of cultivation, returns, net income), constraints faced getting the benefit from the scheme, and suggestion for effective implementation of the schemes was sought.

The data collected was tabulated and analysed to draw valid conclusions. Simple statistical tools like simple averages, ratios, percentages and others were employed to analyze the data to draw meaningful inferences.

Results and Discussion

District wise and crop wise impact of Krishihonda (Farm pond) on yield and increase in income of beneficiary farmers

The data with respect to district wise and crop wise impact of Krishihonda (Farm pond) on yield and increase in income of beneficiary farmers is presented in Table 1. It is clear from

the table 1 that, more than fifty per cent average increase in yield was observed in wheat (50.10) and Bengalgram (56.70) crops followed by soyabean (43.80) and Greengram (41.70). In Kalaburagi district an average increase in yield up to 52.00 per cent was observed in case of Redgram followed by dry chillies (34.10).

In Yadgir district, more than fifty per cent increase in yield was observed in crops like Bengalgram (62.50), Sunflower (60.00) and Groundnut (52.00). More than fifty percent increase in yield was observed in Redgram crop (55.60) in Raichur district followed by sunflower (48.80) and Bengalgram (38.90) crops. In Koppal district also, an average increase in yield of 51.50 per cent was observed in Sorghum followed by Cotton (43.10), Bengalgram (40.70), Maize and Dry chillies (25.00). In Ballari district an average of forty percent increase in yield was observed in crops like Sorghum and Groundnut followed by Cotton (30.70) and Sunflower (23.10).

Impact of Krishihonda (Farm pond) on average increase in yield of important crops

It is clear from the results presented in table 2 that, highest (53.00 %) average yield increase was observed in Redgram crop followed by Bengalgram (45.00 %), Sunflower (43.00 %), Sorghum (40.00 %), Wheat (38.00 %) and Groundnut (36.00 %). The reason that could be attributed to this phenomenon is availability of water, and additional storage of moisture in the soil profile leading to increased production and productivity.

The results are in line with the results obtained by Desai Rajeshwari *et al.,* (2007) and Chavai *et al.,* (2015).

Impact of Krishihonda (Farm pond) on average increase in income of beneficiary farmers

It is clear from the results presented in table 3 that, highest average increase in income of Rs. 43848 was observed in case of Cotton followed by Dry chillies (Rs. 39100), Paddy (Rs. 27825), Maize (Rs. 18342.50), Groundnut (Rs. 17290) and Wheat (Rs. 14898.33). The increase in average income of the beneficiary farmers might be attributed to the increase in the yield of the crops due to additional protective irrigation provided to the crops from the farm ponds.

Similar results of increase in total annual income due to farm ponds were also reported by Desai Rajeshwari *et al.,* (2007) and Chavai *et al.,* (2015). Munyaneza *et al.,* (2016) also reported increase in level of living both economically and healthily after incorporation of RWH Ponds in the daily farming activities of the beneficiaries.

Impact of polyhouse/shade net on average increase in yield and income of beneficiaries in important horticulture crops

It is clear from the results presented in the table 4 that, an average increase in the yield of more than fifty percent was observed in case of crops like Cucumber (58.27 %) and Brinjal (51.88 %) followed by Capsicum (41.97 %) and Ladys Finger (37.00 %) grown in polyhouse/shade net. But in case of increase in average income, highest average income was observed in tomato crop (Rs. 75020) followed by Ladys Finger (Rs. 65520), Cucumber (Rs. 50340), Brinjal (Rs. 31660) and Capsicum (Rs. 31275).

Table.1 District wise and crop wise impact of Krishihonda (Farm pond) on yield and increase in income of beneficiary farmers

Sl. No.	District	Non beneficiary farmers			Beneficiary farmers		% increase	Increase in income
		Crop	**Yield (Qntl)**	**Area (Acre)**	**No. Of irrigations**	**Yield (Qntl)**		
1	Bidar	Greengram	4.0	1	1	5.67	41.70	13200
		Blackgram	3.5	1	1	4.60	31.4	19360
		Soyabean	8.0	1	1	11.50	43.8	21000
		Bengalgram	3.0	1	1	4.70	56.7	12000
		Wheat	15.0	1	2	22.52	50.1	12320
		Sugarcane	700.0	1	4	846.00	20.9	59860
		Sorghum	2.5	1	1	3.17	26.7	3100
2	Kalaburagi	Redgram	6.0	1	1	9.12	52.0	13300
		Cotton	15.0	1	3	18.33	22.2	27000
		Groundnut	10.0	1	1	12.25	22.5	17100
		Maize	25.0	1	2	29.94	19.8	22910
		Dry chillies	25.0	1	3	33.53	34.1	15300
3	Yadgir	Groundnut	10.0	1	2	15.20	52.0	12160
		Cotton	18.0	1	3	23.75	31.9	37260
		Dry chillies	25.0	1	3	30.00	20.0	90000
		Sunflower	6.0	1	2	9.60	60.0	12600
		Wheat	13.5	1	2	20.00	48.1	16625
		Bengalgram	4.0	1	2	6.50	62.5	7500
		Maize	25.0	1	3	34.75	39.0	28275
4	Raichur	Paddy	30.0	1	3	35.60	18.7	29400
		Cotton	15.0	1	3	19.75	31.7	51300
		Redgram	7.5	1	1	11.67	55.60	11375
		Bengalgram	4.5	1	2	6.25	38.9	17500
		Sunflower	7.0	1	2	10.42	48.8	9300
5	Koppal	Groundnut	10.0	1	2	13.00	30.0	17100
		Sorghum (Rabi)	5.0	1	2	7.00	40.0	1860
		Dry chillies	24.0	1	3	30.00	25.0	12000
		Wheat	12.5	1	1	14.75	18.0	15750
		Sorghum	5.5	1	1	8.33	51.5	3487.5
		Bengalgram	4.5	1	1	6.33	40.7	5000
		Cotton	17.0	1	4	24.33	43.1	54000
		Maize	20.0	1	1	27.50	25.0	7975
6	Ballari	Paddy	32.0	1	5	37.00	15.6	26250
		Cotton	15.0	1	1	19.60	30.7	49680
		Groundnut	10.0	1	3	14.00	40.0	22800
		Maize	24.6	1	3	29.50	19.9	14210
		Sunflower	6.5	1	2	8.00	23.1	4500
		Sugarcane	75.0	1	4	92.00	22.7	149600
		Bengalgram	4.5	1	1	5.80	28.9	16250
		Sorghum	5.0	1	1	7.00	40.0	1550

Table.2 Impact of Krishihonda (Farm pond) on average increase in yield of important crops

SL. No.	Crop	Non beneficiary farmers yield (Qntl/acre)	Beneficiary farmers yield (Qntl/acre)	Average yield increase (%)
1	Cotton	16	21.12	31
2	Paddy	31	36.3	17
3	Redgram	6.75	10.39	53
4	Sorghum	4.5	6.37	40
5	Bengalgram	4.1	5.91	45
6	Wheat	13.66	19.09	38
7	Groundnut	10	13.61	36
8	Dry chillies	24.66	31.17	26
9	Sunflower	6.5	9.34	43
10	Maize	23.65	30.42	25

Table.3 Impact of Krishihonda (Farm pond) on average increase in income of beneficiary farmers

SL. No.	Crop	Increase in income (Rs.)
1	Cotton	43848
2	Paddy	27825
3	Redgram	12337.5
4	Sorghum	2499.37
5	Bengalgram	11650
6	Wheat	14898.33
7	Groundnut	17290
8	Dry chillies	39100
9	Sunflower	8800
10	Maize	18342.5

Table.4 Impact of polyhouse/shade net on average increase in yield of important horticulture crops

SL. No.	Crop	Non beneficiary farmers yield (Qntl/acre)	Beneficiary farmers yield (Qntl/acre)	Average yield increase (%)	Increase in income (Rs.)
1	Tomato	242	317.02	31.07	75020
2	Cucumber	108	170.925	58.27	50340
3	Capsicum	41.375	58.75	41.97	31275
4	Ladys Finger	220	301.9	37.00	65520
5	Brinjal	121.8	185.12	51.88	31660

The increase in average yield and income of the beneficiary farmers might be attributed to the fact that, the crops are cultivated in the protected environment where utmost care is taken due to which pest and disease infestation is very low along with the life saving irrigation provided to the crops.

It is clearly concluded from the results of the study that, there is a 17 to 53 per cent increase in average yield of important crops due to implementation of Krishihonda (Farm pond)under Krishibhagya scheme and increase in income of the beneficiary farmers.

There is a 31 to 58 per cent increase in yield of important horticulture crops due to polyhouse/shade net under Krishibhagya scheme. Hence there is a need to continue and implement the krishibhagya scheme to other areas. There is a need to educate the farmers to go for cultivation of high value commercial crops instead of low value crops as the irrigation facility is available.

Administrators and policy makers should think of adding more components to the scheme in order to improve the socio-economic status of the farmers and for sustainable agriculture development.

References

Chavai, A. M., Rakshe, U. V. and Shinde, S. B., 2015, Impact of farm pond on the beneficiary farmers in Maharashtra. *International Journal of Tropical Agriculture*, 33(4): 3525- 3528.

Desai Rajeshwari, B.L. Patil, L.B. Kunnal, H. Jayashree and H. Basavaraj, 2007, Impact assessment of farm ponds in Dharwad district of Karnataka. *Karnataka J. Agric.Sci*. 20(2):426-427.

Munyaneza, O., Majoro, F., Hagenimana, E. and Usabyisa, W., 2016, Impact Assessment of Hillside Rainwater Harvesting Ponds on Agriculture Income: Case Study of Ntarama Sector in Rwanda. Journal of Water Resource and Protection, 8, 844-854.

How to cite this article:

Moulasab, S.K. Meti, and Ashoka, M.B. 2018. Krishibhagya Scheme: An Impact Study for Improvement of Livelihood of the Farmers in Hyderabad-Karnataka Region, India. *Int.J.Curr.Microbiol.App.Sci.* 7(07): 565-570. doi: https://doi.org/10.20546/ijcmas.2018.707.069