Bulletin of Environment, Pharmacology and Life Sciences
Bull. Env. Pharmacol. Life Sci., Vol 11 [11] October 2022 : 01-04

Online ISSN 2277-1808
Journal's URL:http://www.bepls.com
CODEN: BEPLAD

ORIGINAL ARTICLE **OPEN ACCESS**

A Study on Access to Agro advisory Sources by the Paddy Growers under Changing Climate Scenario

S.Suganya[1*] and M. Kavaskar[2]
1.Ph.D Scholar 2. Associate Professor,
Department of Agricultural Extension, Faculty of Agriculture,
Annamalai University, Chidambaram-608002
Tamil Nadu, India
Email: suganmanjiri@gmail.com

ABSTRACT

A major environmental issue and worry for development is climate change. It poses threat to natural resources, crop yield, people health and productivity to the extent that the very sustainability of live on the earth came under question. With its unevenly distributed severity in developing countries projected as the most vulnerable region particularly due to their low level of adaptation. Nevertheless, agriculture and allied activities is the mainstay of economy in the region characterized with dominance of small and marginal farmers with limited risk bearing abilities. As a result, food and livelihood security already malnourished and poverty ridden developing countries are threatened to the extent that draw global attention for equipping agricultural sector against adverse effects of climate variability through adaptation of climate resilient technologies. Keeping in view of the above points, the present study access to agro advisory sources by the paddy growers under changing climate scenario was designed and undertaken. In this study was conducted in Cauvery Delta Zone of Tamil Nadu. A sample size of 240 paddy growers were selected randomly from the selected villages. A well-structured interview schedule has been used for collection of responses. The results of the study revealed more than half of the paddy growers (51.60 %) had medium level of access to agro advisory sources followed by low (35.00 %) and high (13.33 %) level of access to agro advisory from various sources. The findings of this research may help extension agencies for creating awareness and better adaptation strategies climate change.

Key Words: *Agro advisory Sources, Paddy Growers, Climate Change & adaptation*

Received 12.05.2022 Revised 21.06.2022 Accepted 05.09.2022

INTRODUCTION

Climate change is one of the biggest challenges facing the world today. The problem of human induced climate change first came into force and drew the attention of the scientists and policy makers when Inter Governmental Panel on Climate Change (IPCC) was established. The effects of global climate change are 6any folds and there is a need to create awareness and its impact on various sectors of economy. The term "weather" refers to the short-term (daily) changes in temperature, wind, and precipitation of a region. Long-term climate change could have an impact on agriculture in a number of ways, including crop production, growth rates, photosynthesis, and transpiration rates, the availability of moisture, etc. as well as quantity and quality of crops [1]. Global food production is projected to be directly impacted by climate change. A rise in the average seasonal temperature can shorten the growing season of many crops, reducing their yield [7].

The Intergovernmental Panel on Climate Change, in its 2007 report, predicts that, global temperature will rise by 2 to 4.5°C by the end of this century. The panel also predicted an increase in rainfall over the Indian sub-continent by 6 to 8 percent. According to IPCC (2014) there is possibility that food production of many countries including India would be affected due to climate change, particularly wheat, paddy and other crops would be directly affected.

Balu and Kavaskar [2] conducted a research study on knowledge level of farmers on climate change and concluded that more than half 47.67 per cent of the farmers had medium level of awareness towards climate change followed by high (35.00 %) and low (17.33 %) level of awareness about climate change. More than half 54.00 per cent of the respondents had medium level of mass media exposure, followed by 25.00 per cent of the respondents had high level of mass media exposure. Only 21.00 per cent of the respondents had low level of mass media exposure [3]. Different forms of climate information help

farmers to make informed farming decisions [7]. Rural Advisory Services (RAS) have a crucial role to play in linking farmers with sources of new information and tools so that they can transition to CSA practices [8].

The weather data and associated AGROMET advisories assist farmers in making day-to-day decisions, such as choosing which crops and varieties to sow, carrying out cross-cultural tasks, applying irrigation and plant protection techniques, mulching the soil to conserve moisture, and harvesting their crops. Farmers can postpone operations based on weather and related AGROMET alerts might reduce losses from unusual weather and save essential input [6]. Agricultural activities are very sensitive to climate and weather, these are some of the biggest risk factors in growing conditions. The differences of a measure of time have important implications for how we predict changes in weather and climate.

MATERIAL AND METHODS

In this research study was conducted in Cauvery Delta Zone of Tamilnadu viz., Thanjavur, Thiruvarur and Nagapattinam. A sample size of 240 respondents were selected. The data was collected using well-structured and pre tested interview schedule. The variable access to agro advisory sources consisted of 15 sources comprising of formal (included 4 sources), informal (included 4 sources) and mass media information (included 7 sources). The respondents were asked to express their frequency of contact with these sources on four-point continuum viz., occasionally, rarely and never and scoring pattern was given as four (4), three (3), two (2) and one (1) respectively. The score obtained on various agro advisory sources were added to get the total score of respondents on this variable. With the total score obtained from the respondents were classified into three categories such as low, medium and high level of access to agro advisory sources. The collected data were analyzed by using simple percentage analysis and mean score were used for overall access to agro advisory sources and source wise access to agro advisory.

RESULTS AND DISCUSSION

Overall access to agro advisory sources

The different sources to which the respondents were seek the information on climate change and adaptation measures have been collected and furnished in table 1.

Table: 1 Distribution of respondents according to their overall access to agro advisory sources

S.No	Agro advisory sources	Number	Per cent
1	Low	84	35.00
2	Medium	124	51.66
3	High	32	13.33
	Total	240	100.00

From the Table 1, it could be seen that more than half of the respondents (51.66 %) had medium level of access to agro advisory sources followed by low level of access (35.00 %) and high level of access to agro advisory sources (13.40 %). It could be concluded that majority of the respondents had medium level of access to agro advisory sources. This might be due to the fact that most of the respondents had medium to high level of mass media exposure and social participation may be the probable reason for medium level of access to agro advisory sources.

Source wise access to agro advisory information

This section highlights the source wise access to agro advisory information data were collected, analyzed and presented in table 2 to 4.

Informal source wise access to agro advisory

The different sources to which the respondents were seek the information on climate change and adaptation measures have been collected and furnished in table 2

Table 2. Distribution of respondents according to their informal source wise access to agro advisory

S. No	Sources	Mean Score	Rank
1	Family members	3.82	I
2	Friends and relatives	3.50	II
3	Neighbors and fellow farmers	3.05	IV
4	Progressive and experienced farmers	3.18	III

It could be observed from the table 2 that family members (ranked first) were the major source of agro advisory. This was followed by friends and relative (II), progressive and experienced farmers (III) and

neighbors and fellow farmers (IV). It could be concluded that family members were the major source of agro advisory followed by friends and relatives. This was due to the fact that most of the respondents live together under the same roof, they would have enough time to spend, they discuss about climate change, farming and the problems in the cultivation etc.

Formal source wise access to agro advisory

The different formal sources to which the respondents were seek the information on climate change and adaptation measures have been collected and furnished in table 3.

Table 3. Distribution of respondents according to source wise formal access to agro advisory

S. No	Sources	Mean Score	Rank
1	Department of Agriculture (State Department of Agriculture Officials)	3.02	II
2	Scientist from Agriculture University (Including KVK)	2.10	III
3	Private agro input agencies	3.68	I
4	NGOs	1.84	IV

It could be seen from the table 3 that private agro input agencies were major sources of agro advisory which was ranked first. This was followed by Department of Agriculture (II), Agriculture University (III) and the NGOs (IV). It could be concluded that private agro input agencies are considered as an major source of information who provide technologies as well as information to the farming communities in their localities. This may be probable reason for private agro input dealers are the major source of agro advisory among the respondents. Extension officers from the state department of agriculture have good network but due to lack of manpower and mobility cannot provide advisory service to farmers up to their satisfaction level. The main problem in case of agro-advisory services provided by public extension system for reaching to the farmers is the gap in communication process.

Mass media source wise access to agro advisory information

The different mass media sources to which the respondents were seek the information on climate change and adaptation measures have been collected and presented in table 4.

Table 4. Distribution of respondents according to their mass media source wise access to agro advisory information

S. No	Sources	Mean Score	Rank
1	Newspaper	2.92	III
2	Mobile phone	3.49	II
3	Leaflet / Folder / Farm magazine	1.56	VI
4	TV	3.74	I
5	Radio	2.26	IV
6	KrishiMela/ Exhibition	2.12	V
7	Poster/ Wall paintings	1.24	VII

The table 4. indicated that majority of the respondents reported that TV was major source of agro advisory and ranked first followed by Mobile phone and newspaper which was ranked II and III respectively. Almost all the respondents owns television which may help them to gain knowledge on the farm programmes telecasted. Further, Mobile phones have been spreading fast among farmers and they are exchanging their marketing, weather and other agro advisory information among each other. mobile phones have provided new approach to farmers to make tentative decisions much more easily than before. This may be possible reason for most of the respondents were assessed the TV and mobile phones. Radio was another important source of agro advisory to the respondents and ranked IV, followed by KrishiMela/ Exhibition ranked V, Leaflet / Folder / Farm magazine ranked VI and Poster/ Wall paintings ranked VII. Most of the respondents in the study area are not having radio was replaced by many other electronic devices especially TV and mobile phones so they are not using it.

CONCLUSION

More than half of the respondents (51.60 %) had medium level of access to agro advisory sources. It was concluded that access to agro advisory information is useful to the farmers and plays a crucial role to improve their agricultural income and protecting their crop in different seasons. Further, the findings of this research may help extension agencies for creating awareness and better adaptation strategies climate change.

REFERENCES

1. Anupama Mahato. (2014). Climate Change and its Impact on Agriculture. International Journal of Scientific and Research Publications, 4 (4) :1-6
2. Balu,D and M. Kavaskar. (2021). Mass Media Role in Changing Awareness Level on Climate Change among the Farmers in the Disadvantaged Districts of Tamil Nadu. Bulletin of Environment, Pharmacology and Life Sciences, 10 (9): 1-4
3. Balu.D and M. Kavaskar. (2021). Awareness Level of farmers on Climate Change in the Disadvantaged Districts of Tamil Nadu. Advances in Bioresearch, 12(6): 10-12
4. IPCC, 2007. Climate Change (2007): Synthesis Report. Contribution of Working Groups I, II and Ill to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change In: [Core Writing Team, Pachauri, RK and Reisinger, A. (Eds.)]. IPCC, Geneva, Switzerland, Pp:104
5. IPCC. 2014. Climate Change (2014): Synthesis Report. Contribution of Working Group I,II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, R.K.Pachauri and L.A.Meyer (eds)]. IPCC, Geneva, Switzerland, Pp:151.
6. Pinaki Roy. (2018). Agromet Advisory for Empowering Farmers to Mitigate Climate Change. Biotech Articles.Pp:1-3
7. Rupan R, Saravanan R and Suchiradipta B. (2018). Climate Smart Agriculture and Advisory Services: Approaches and Implications for Future, Research Report Brief 1, MANAGE- Centre for Agricultural Extension Innovations, Reforms and Agripreneurship, National Institute for Agricultural Extension Management (MANAGE), Hyderabad, India.
8. Simpson, B.M., Burpee, C.G. (2014). Adaptation under the "New Normal" of Climate Change: The Future of Agricultural Extension and Advisory Services. Michigan State University and Catholic Relief Services. (available at https:// agrilinks. Org /sites /default /files /resource files /MEAS%20Discussion%20Paper%203%20-%20Climate% 20C hange%20and%20EAS%20-%202014_01_31.pdf).

CITATION OF THIS ARTICLE

S.Suganya and M. Kavaskar. A Study on Access to Agro advisory Sources by the Paddy Growers under Changing Climate Scenario . Bull. Env.Pharmacol. Life Sci., Vol 11 [11] October 2022 : 01-04