



FARMER'S PERCEPTION ABOUT CLIMATE CHANGE IN AHMEDNAGAR DISTRICTS

Dr. B. B. Chopade

Arts, Commerce & Science College, Sonai.

ABSTRACT:

Climate change is altogether one amongst one in every of" one among the most important environmental challenges in all countries within the world. global climate change refers to any change in climate over time, whether because of natural variability. The present study was conducted mainly with the objective to study "Farmer's perception about climate change in Ahmednagar." For the study, Pathardi and Parner Talukas were selected from Ahmednagar District during the years 2019-20. Talukas were selected randomly and Four villages from each taluka were selected randomly and fifteen members were randomly selected from each village constituting the sample size 120.

Key words: - Farmer's perception, Climate change, Climate migration.

INTRODUCTION:

Climate change is altogether one amongst one in every of" one among the most important environmental challenges in all countries within the world. global climate change refers to any change in climate over time, whether because of natural variability and as a result of human activity (IPCC, 2007). it's become a serious concern to society due to its potentially adverse impacts worldwide. Global climate change doubtless became the critical environmental issue of present decade. Climate is claimed to be one among the first determinant of agriculture productivity. United Nations (UN) also as several national governments are worried that global climate change may endanger world food security. Studies have indicated that India is especially susceptible to global climate change, and is probably going to suffer with damages to agriculture productivity, food and water security, human health and cattle populations. Hence, the governments of developing countries are more worried about the

adverse impact and its implications. Further, people's livelihoods, especially in rural areas, are hooked in to agriculture, and global climate change poses an immediate and high threat to the livelihoods of many people in India.

Perceptions not only shape knowledge but knowledge also shapes perception. Farmers' perceptions about global climate change, therefore, strongly affects how they affect climate induced risks and uncertainties, and undertake specific measures by coping strategies to mitigate the adverse impact of global climate change on agriculture. Farmers' perception is that the key to mitigating adverse impact of global climate change on agriculture; and recommended that specific interventions targeting the farming community also as other stakeholders must be undertaken to enhance their preparedness in handling its adverse impact. Consequently, this study was undertaken to review "Farmers Perception about Climate Change" in Ahmednagar District.

OBJECTIVE:

1. To study the profiles of farmers
2. To determine the perception about climate change among the farmers.

RESEARCH METHODOLOGY:

The present study was conducted in Ahmednagar district of Maharashtra state. In Ahmednagar district there are 14 tahsils, out of which two tahsils namely Pathardi and Parner were randomly selected. For the study purpose from each tahsils 4 villages were randomly selected and from each village 15 farmers were randomly selected to comprise 120 respondents. Ex-post facto research design was used for the study. Data were collected by personally interviewing the respondents with the help of pretested structural schedule. Collected data were tabulated properly. Mean and standard deviation, frequency, percentage, coefficient of correlation methods of statistics were used for interpretation of data.

RESULTS AND DISCUSSION:

Personal and socio-economic characteristics of the respondents

A number of profile characteristics were selected as independent variables to find out profile of farmers of the study area. (Tabel-1)

It was observed from Table 1 that, majority of (44.17%) respondents belongs to Primary & middle school category followed by, 29.17 per cent respondents were found in high school category, 10 per cent respondents belongs to College/ Post graduation, 12.5 per cent respondents were found under illiterate category, 4.16 per cent of the respondents were found that they can read and write category and none of this belongs to under can read only category. As regard to occupation, majority of respondents (88.33%) of them were engaged in farming alone, 5.00 per cent of them were doing agriculture along with labour and 3.33 per cent of them were engaged in agriculture along side business.

Land holding, majority (39.17%) of the respondents were possessing 1.01 to 2.00 ha of

land and belongs to small farmers category while 35 per cent of the respondents were possessing up to 1 ha of land and belongs to marginal farmers category, and 14.67 per cent of the respondents belonged to medium farmers category (2.01 to 4 ha) whereas; 8.33 per cent farmers included under semi medium farmers category (4.01 to 10.00 ha) category and 3.33 per cent of the respondents had more than 10 ha land holding which comes under big farmers category. Majority (66.67%) of farmers had well as irrigation source followed by, (26.67%) had bore well as irrigation facility, near about 3.33 per cent farmers had pond as irrigation facility, 2.50 per cent farmers depend upon the canal as source of irrigation, 0.83 per cent of farmer had farm pond as source of irrigation and nobody depends on both river and dam as source of irrigation. As regards annual income majority of farmers (79.50%) belongs „medium“ annual income followed by high (13.33%) and low (7.17%). Majority of the respondents (69.17%) reported, medium socio-economic status, followed by, 15.83%, high socio-economic status and 15.00% low socio-economic status. As regards their awareness about crop insurance, 64.16% had „medium awareness followed by 23.34% having high awareness and 12.50% farmers had low awareness about crop insurance.

Perception of farmers about climate change

Perception understands and interpretation of changes in climate (rainfall, temperature) by farmers based on their prior experience. (Tabel-2)

It was found that the majority of the farmers had medium level followed by high and low level of perception about climate change parameters such as temperature, rainfall and dry spells in various viz, weather and climate, agriculture, health, animal husbandry and industrial sector. Further, farmers“ perception about different dimensions of

climate change was also analyzed and the results are given in the following Table 2. From Table 2 it is concluded that, majority of respondents, agree to the statement that there has been change in onset date of monsoon (93.33%), very high temperature during summer (94.16). On the basis of observations related to climate change it can be concluded that most of respondent felt that there has been a significant amount of change in various parameter to climate change. (Tabel-3)

Most of the respondents agreed that the production of various crops is reducing (94.16%), quality of crops decreases (93.33%), cropping pattern changed (91.66%), Pest attack is increased (90.16%) , and number of irrigations is increased (89.16%),

From Table 4 it is concluded that, majority of respondents (95.83%) agreed that death rate of livestock is increasing, (93.33%) farmers agreed to statement that poultry and livestock rearing become difficult, (90.83%) farmers said that there was scarcity of fodder crops these statements were highly perceived by the farmers. Whereas, according to (85.83%) respondents habits of animal/ birds are changing, (85.00%) farmers said that health of farm animals/ cattle are affected.

The finding of the studies is that majorities of the respondents were having education up to primary and middle school. The majority of farmers had farming was main occupation. Most of the farmers belong to small land holdings. Well was the main source of irrigation. Farmers had medium category of socioeconomic status and farmers have better knowledge about crop insurance. Majorities of farmer's perception about climate change high

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1. Table no 1. Respondents Profile

Sr. No	Variable	Frequency(F)	%
1	Education		
	Illiterate	15	12.5
	Can read and Write	05	4.16
	Primary & middle	53	44.17
	High school	35	29.17
	College	12	10
2.	Occupation		
	Labour	08	06.67
	Business	06	05.00
	Farming	106	88.33
3	Land Holding		
	Marginal	42	35.00
	Small	47	39.17
	Medium	17	14.17
	Semi medium	10	08.33
	Big	04	03.33
4	Irrigation Facilities		
	Pond	04	03.33
	Well	80	66.67
	Farm Pond	01	00.83
	Canal	03	02.50
	Borewell	32	26.67
5	Annual Income		
	Low	11	09.17
	Medium	93	77.50
	High	16	13.33
6	Socioeconomic Status		
	Low	18	15.00
	Medium	83	69.17
	High	19	15.83
7	Crop Insurance		
	Low	15	12.50
	Medium	77	64.16
	High	28	23.34

Table no 2 - Climate

Sr. No	Statement	Frequency(F)	%
1	Onset date of monsoon change	112	93.33
2	Decreased in rainy days	109	90.83
3	Occurrence of more dry spell	103	85.83
4	Very high temperature in winter	113	94.16
5	Heavy rain affects the unfilled gains in cereal crops	104	86.66

Table no 3. Agriculture

Sr. No	Statement	Frequency(F)	%
1	Changing crop pattern	110	91.66
2	Pest attack increased	109	90.83
3	Number of irrigations is increased	107	89.16
4	Production of various crops is reducing	113	94.16
5	Quality of crops decreases	112	93.33

Table no 4. Livestock

Sr. No	Statement	Frequency(F)	%
1	Difficult in rearing of Poultry and livestock	112	93.33
2	Scarcity of fodder crops	109	90.83
3	Changing habits of animals	103	85.83
4	Health affected of animals	102	85.00
5	Increasing in death rate of animals	115	95.83