International Journal of Sociology and Political Science
www.sociologyjournal.in
Online ISSN: 2664-7745, Print ISSN: 2664-7737
Received: 14-04-2024, Accepted: 07-05-2024, Published: 30-05-2024
Volume 6, Issue 1, 2024, Page No. 45-48

Socio-economic status of farmers in drought-prone areas: A sociological study

Thimmanakaya K B[1*], Anjanappa B H[2]
[1] Research Scholar, Department of Sociology, Kuvempu University, Shimoga, Karnataka, India
[2] Professor, Department of Sociology, Kuvempu University, Shimoga, Karnataka, India

Abstract
The socio-economic status of farmers plays a key role in agriculture and farmers in the drought-prone taluks of Chitradurga district area. It is observed that eventually, with time, there has been a significant issue in the overall lifestyle of the farmers based on socio-economics. Further to know the general information and educational details of farmers in the drought-prone of Chitradurga district, family details and living status of respondents and source of income, income details, profession and land details of the respondents in the study area for families of the study area. Finally, given the suggestion about the development of farmers in drought-prone Chitradurga district.

Keywords: Farmers, drought-prone, poor rainfall, agriculture, lifestyle, living status, family, socio-economic

Introduction

India lives in rural areas; Approximately 700 million rural people depend on climate-sensitive sectors such as agriculture, forestry and fisheries, as well as water, biodiversity, mangroves, beaches, grasslands, etc. for their livelihood. Directly dependent on natural capital resources such as and lifestyle. Moreover, almost two-thirds of India's national income is derived from agriculture and agriculture-related activities, which can create huge employment opportunities for people. For this reason, Indian agriculture is considered an important development and studies on this subject have been initiated and succeeded. These areas receive less than 750 mm of rainfall annually and have arid climate and soil conditions that make them more prone to drought. The second category is frequent drought prone areas, which are areas with a 10-20% probability of drought. Among the several natural calamities; drought is most disastrous and its effects on untold varied miseries on the human and environment. Land and water are the two most significant natural resources in the development of agriculture and essential resource for survival of any life. People need water to drink, to grow food, to clean and bath and industrial use etc. The agricultural sector of Karnataka is frequently characterised by drought prone region Karnataka has been witnessing a drastic change in rainfall pattern and distribution for last two decades. According to survey conducted by Karnataka State Natural Disaster Monitoring Centre (KSNDMC); North Karnataka and Coastal regions have been a declining trend in rainfall.

But since independence, the government at all levels has initiated, created and implemented many new initiatives to promote the development of the broader economy and the dry and human development of the region. Therefore, the economic development of farmers in drylands has become a hot topic of discussion, debate and research among economists, policy makers, scientists and researchers.

Review of Literature

Menghistu, H. T., *et al*. (2018) [1] conducted a cross-sectional study from March 2016 to June 2016 to evaluate farmers' perceptions of drought and its socio-economic impact, as well as their mitigation and adaptation strategies. A total of 240 respondents from three districts in Tigray and one district from Afar were included in the study. The research revealed a significant decrease in farm income (from 21,882 to 6482 ETB) and income from the livestock sector (12,833 to 5659 ETB). The average market price of cattle dropped from 8228 to 4096 ETB due to the 2015/2016 drought. Farmers perceived environmental impacts such as an increase in average temperature, pasture-forest degradation, and deteriorated water quality to a high extent. Despite farmers acknowledging the severity of drought impacts, their preparedness to address these impacts was found to be minimal. Therefore, it is recommended that policymakers and government authorities seek more suitable and locally adaptable mitigation and adaptation strategies that involve the local community. Debela `. (2015) [5] define drought as an extreme and recurring climate event that significantly affects the livelihoods of millions of people worldwide, being considered the most crucial natural disaster in economic, social, and environmental terms. Mniki (2009) reported that approximately 410 major drought events occurred globally between 1980 and 2008, impacting 53.5 million people annually, due to rising temperatures, water stress, El Nino events, and a decrease in rainy days, leading to reduced crop production in various parts of Asia and Africa, as well as an increase in diseases among humans and animals.

Scope and Limitations of the Study

The Karnataka state government has declared 195 taluks as drought-prone taluks due to failure of monsoon in the current year. Out of which 161 taluks are experiencing severe drought and 34 taluks are experiencing moderate drought. It has been determined that there is no shortage of moisture in the rest of the 40 taluks, but it is clear that the entire state is under the shadow of drought. Therefore, the present research aims to answer the question of what is the economic and social status of farmers in Chitradurga, a drought-prone district of Karnataka.

Statement of the Problem

This article surveys the social and economic conditions of the farmers in Chitradurga, a drought-prone district, and how the farmers rely on agriculture in the absence of rains and the social conditions of the farmers under the main title "Farmers in a Drought-Prone Area: A Sociological Study-with special reference to Chitradurga district".

Objectives of the Study

1. To know the general information and educational details of farmers in drought-prone of Chitradurga district.
2. To know the family details and living status of respondents in the study area.
3. To know the economic status of the respondents in the study area.

Hypothesis

The study has socio-economic aspects of farmers in drought-prone of taluks of Chitradurga district of Karnataka. The socio-economic status of respondent will be poor in the study area.

Research Methodology

The area selected for the study was four taluks of Chitradurga of Karnataka state.15 villages were selected randomly from this area. The average annual rainfall and thus it is categorized as a drought affected region. Stratified random sampling method was employed for the collection of percentage was used for analysis of the data.

Data Analysis and Interpretation

In data analysis and interpretation part first, the researcher was distributed 200 questionnaires to the farmers in drought-prone study area. After that the researcher was received 131 filled questionnaires by the farmers in drought-prone of the study area. Then the researcher is analyzed and interpreted the data here.

Table 1: Shows the gender wise distribution of questionnaires of the respondents

Sl. No.	Gender	Frequency	Percentage
1	Male	98	75
2	Female	33	26
Total		131	100

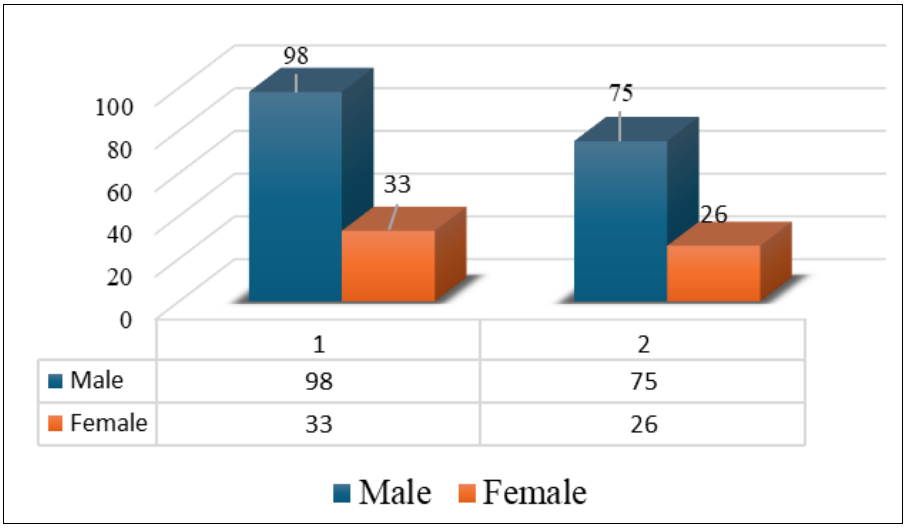

Fig 1: Shows the gender wise distribution of questionnaires of the respondents

Above table and fig. 1 shows the information on gender wise distribution of the questionnaires of the respondents and majority 75 per cent of the male respondents were given the more information on related survey because majority of the cultivators are male and the survey has female respondent like 26% per cent.

Table 2: Shows the age wise distribution of questionnaires of the respondents

Sl. No.	Age	Frequency	Percentage
1	20-30	20	16
2	31-40	31	24
3	41-50	33	26
4	51-50	24	19
5	61-70	15	12
6	Above 70	08	7
Total		131	100

Table 2 shows the age wise distribution of questionnaires, For the present research, majority 41-50 (26%) age group of farmers responded. Less above 70 (7%) age group of farmers responded regarding the research.

Table 3: Shows the educational wise distribution of questionnaires of the respondents

Sl. No.	Educational Qualification	Frequency	Percentage
1	illiterate	82	63
2	Primary Education	02	2
3	SSLC/Equallent	22	17
4	PUC/ Equallent	12	10
5	Degree/Diploma	10	8
6	PG	02	2
7	Technical Education	01	1
Total		131	100

Table 3 shows the details of the educational qualification of the respondents, majority 82 (63%) respondents were un illiterate 22(17%) respondents were SSLC or equallent educational qualification, 10% per cent were PUC or equallent, 10 per cent were degree or diploma, 02% PG and only 01% per cent respondents has technical education. because literacy rate of the study area is poor

Table 4: Shows the what the respondents' household system in the study area

Sl. No.	Type of House	Frequency	Percentage
1	Hut	12	10
2	House of Block tiles	01	1
3	House of Red tiles	72	55
4	House with a flat roof	30	23
5	Sheet house	12	10
6	RCC	02	2
7	Etc.	02	2
Total		131	100

Above table shows the repondents' house hold system in the research area, majority 55% per cent respondents have house of Red tiles, because majority of the respondent facing economic problems 23% per cent respondents have house with a flat roof and less 2% per cent have RCC and other.

Table 5: Shows the what the respondent's ownership of household system

Sl. No.	Ownership Status	Frequency	Percentage
1	Own	122	94
2	Rent	03	3
3	Leas	01	1
4	Etc.	05	4
Total		131	100

Table 5 shows the respondents' ownership of house hold system in the research area. majority 94 percent of farmers in drought-prone areas have own house, 3 percent respondents have rented house and only 1 per cent has leased house in the study area.

Table 6: Shows the type of family of the respondents in the study area

Sl. No.	Type of family	Frequency	Percentage
1	Joint family	110	84
2	Micro family	05	4
3	A single family	02	2
4	Extended family	14	11
Total		131	100

Majority 84 percent of farmers in drought-prone areas living in joint family, 11 per cent living in extended family, 4 per cent in micro family and 2 per cent living in a single family in the study area.

Table 7: Shows the how many members living in the family

Sl. No.	Members in family	Frequency	Percentage
1	1-3	02	2
2	4-5	01	1
3	6-7	29	23
4	8-10	31	24
5	Above 10	68	52
Total		131	100

Above table 7 shows the More than 10 people live in a farmers' house in 52 percent drought-affected areas. Only 1 live in a farmers' house in 1 percent drought-affected areas.

Table 8: Shows the Land details of the respondents

Sl. No.	Land details	Frequency	Percentage
1	Yes	121	93
2	No	10	8
Total		131	100

Above table shows the information on land details of the respondents in the study area, majority 93 percent of farmers in drought-prone areas have land and only 8 per cent of respondents have no land in the study area.

Table 9: Shows the profession of the respondents for life lead in the study area

Sl. No.	Profession	Frequency	Percentage
1	Agriculture	113	87
2	Labour	10	8
3	Business	02	2
4	Govt. Job	01	1
5	Private Job	05	4
Total		131	100

Above shows the the profession of the respondents. It can be seen here that a large number i.e. 87 percent of the people of the drought-affected area live by agriculture because majority of the population in the study area are adapted agriculture as a main work and a lesser number i.e. 1 percent live by government work.

Table 10: Shows an annual income of the family

Sl. No.	Family Income	Frequency	Percentage
1	20,000-30,000	105	81
2	30,001-40,000	12	10
3	40,001-50,000	05	4
4	50,001-60,000	02	2
5	60,001-70,000	03	3
6	Above 70,000	04	4
Total		131	100

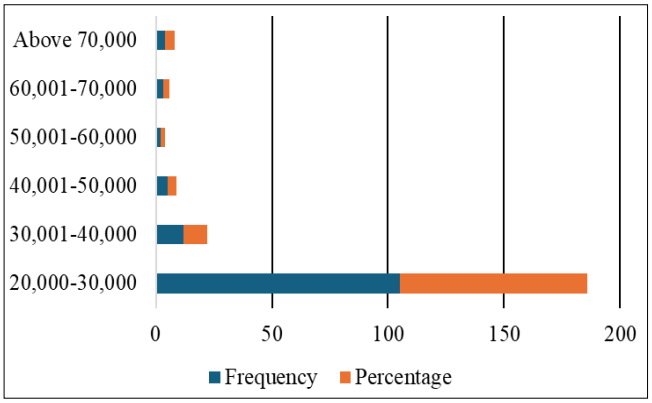

Fig 2: Shows an annual income of the family

Table 10 shows the total yearly family income of the respondents, the research indicates that majority 81 percent of farmers in drought-prone areas have an annual income of 20,000-30,000, because they have facing drought problems 10 per cent of farmers have an annual income of 30,001-40,000, 4 per cent have income of 40,001-50,000 and above 70,000, 33 per cent have 60,001-70,000 and less 2 per cent farmers have an annual income of 50,001-60,000.

Important Findings

1. majority 75 per cent of the male respondents were given the more information on related survey and the survey has female respondent like 26% per cent.
2. majority 82 (63%) respondents were illiterate, 22(147%) respondents were SSLC or equallent educational qualification, 10% per cent were PUC or equallent, 10 per cent were degree or diploma, 02% PG

and only 01% per cent respondents has Technical education.
3. 93 percent of farmers in drought-prone areas have land and only 8 per cent of respondents have no land in the study area.
4. Of the total 87 percent of the people of the drought-affected area live by agriculture and a lesser number i.e. 1 percent live by government work.
5. majority 81 percent of farmers in drought-prone areas have an annual income of 20,000-30,000.

Suggestions

Considering all the above factors, in the four taluks of Chitradurga district, which is a drought-prone area, complementary projects should be undertaken by the government in collaboration with the district administration and there should be a school to bring life to the taste of the farmers and labours there.

Conclusion

From the present climate study conducted in 4 taluks of Chitradurga district, it can be concluded that among the 5 dry climate indicators used, CZI, ZSI and SPI perform like and better than PN and DI. The study found that PN is very sensitive to changes in precipitation, leading to large changes in weather conditions. Similarly, DI records more "extremely boring" events, which can lead to misinterpretation of the nature of the damage. Therefore, PN and DI should not be used to describe drought conditions in Chitradurga. However, CZI, ZSI and SPI are considered the best flood indicators and can be recommended for monitoring and characterization of floods at different times in taluks of Chitradurga district of Karnataka using long-term rainfall data. Finally, the researcher has been suggested that the four taluks of Chitradurga district is a crisis area and the government should complete the project in collaboration with the district and build a school to make the lives of farmers better from the workplace.

References

1. Menghistu HT, Mersha TT, Abraha AZ. Farmers' perception of drought and its socioeconomic impact: the case of Tigray and Afar regions of Ethiopia. J Appl Anim Res,2018:46(1):1023-1031. https://doi.org/10.1080/09712119.2018.1450752.
2. Ashraf M, Routray JK. Perception and understanding of drought and coping strategies of farming households in north-west Balochistan. Int J Disaster Risk Reduct,2013:5:49-60.
3. Brida A-B, Owiyo T, Sokona Y. Loss and damage from the double blow of flood and drought in Mozambique. Int J Glob Warm,2013:5:514-531.
4. Brown C, Meeks R, Hunu K, Yu W. Hydroclimate risk to economic growth in Sub-Saharan Africa. Clim Change,2011:106:621-647.
5. Debela N, Mohammed C, Bridle K, Corkrey R, McNeil D. Perception of climate change and its impact by smallholders in pastoral/agropastoral systems of Borana, South Ethiopia. SpringerPlus,2015:4:236.
6. Dube L, Jury M. The nature of climate variability and impacts of drought over KwaZulu-Natal, South Africa. S Afr Geogr J,2000:82:44-53.
7. Guha J. Farmer Suicides in Maharashtra, India: Facts, Factors, and Possible Fixes. Honors Scholar Theses, 2012, 235.
8. Hellmuth ME, Osgood DE, Hess U, Moorhead A, Bhojwani H. Index insurance and climate risk: prospects for development and disaster management. International Research Institute for Climate and Society (IRI),2009.
9. Holden S, Shiferaw B. Land degradation, drought and food security in a less-favoured area in the Ethiopian highlands: a bio-economic model with market imperfections. Agric Econ,2004:30:31-49.
10. Karpisheh L, Mirdamadi M, Hosseini J, Chizari M. Iranian farmers' attitudes and management strategies dealing with drought: a case study in Fars province. World Appl Sci J,2010:10:1122-1128.
11. Keshavarz M, Karami E, Vanclay F. The social experience of drought in rural Iran. Land Use Policy,2013:30:120-129.
12. Mmofa AR, David N. Determinants of livestock farmers' perception of future droughts and adoption of mitigating plans. Int J Clim Change Strat Manag,2015:7:191-205.
13. Mniki S. Socio-economic Impact of Drought Induced Disasters on Farm Owners of Nkonkobe Local Municipality. Bloemfontein, Free State, South Africa: University of the Free State, 2015.
14. Mwinjaka O, Gupta J, Bresser T. Adaptation strategies of the poorest farmers in drought-prone Gujarat. Clim Dev,2010:2:346-363.
15. Thornton P, Van de Steeg J, Notenbaert A, Herrero M. The impacts of climate change on livestock and livestock systems in developing countries: a review of what we know and what we need to know. Agric Syst,2009:101:113-127.