



## **A STUDY ON DROUGHT AND MIGRATION OF AGRICULTURAL LABOURERS AND FARMERS: - REFERENCE TO DUMBERPALI PANCHAYAT, SOHELA BLOCK (ODISHA)**

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### **ABSTRACT:**

Drought is a natural disaster, which influences all living and non-living organisms. Its effect all segments the society. Agriculture is highly affected due to occurrence of drought. Low rainfall makes the land dry and reduces the productivity and production and also income of the farmers, for them agriculture is the primary source of livelihoods. Agriculture labourers also extremely influence because of drought. The landless farmer's uses migration a coping strategy to face the challenges and try to find out new occupation for survive. The small and marginal farmers uses same strategy to face the challenges occurred due to drought. This article discussed about the impact of drought on migration in the study areas.

**KEY WORDS:-** Drought, Migration, Semi-urban, Urban, Marginal

### **INTRODUCTION**

In India, drought is one of the most frequently occurring national disaster and its increased frequency in the recent years, posing an increasing threat to agriculture, food security of the country, with increasing stress on rural livelihoods and resources such land, soil, water and forest. It has multi-dimensional effects on socio-economic, religious and political life of the general people. This is disrupting the normal social-economic setting in the society.

Drought is the most wide spread hydro-metrological syndrome of prolonged period of water scarcity. The longer and the larger the numbers of consecutive droughts leads to lower income, productivity and production in agricultural sector. This is influencing the socio-economic condition of rural farmers and agricultural labourers. Because of low income and persistent poverty, they are using coping strategy of migrating to urban and semi-rural area for their livelihoods.<sup>1</sup>

<sup>1</sup> A. K Gupta, "Socio-ecological paradigm for analysing problems of poor in dry regions- An India-contribution," *Ecodevelopment News* 32(1985):64.

In this article, how drought is influencing the agricultural farmers and laborers, why they are ready to migrate from rural area to semi-urban and urban areas and how they are managing themselves to face the challenges are discussed.

## FUNCTIONAL DEFINATION

**Drought-** Drought is considered to describe a situation of limited rainfall substantially below what has been established as a 'normal' value for the area concerned, leading to adverse consequences for human welfare. There are different types of drought found in different geographical areas. This article takes in to consider Agricultural drought, refers to shortage of water for crop growth or consistently over the growing season.

**Migration-** Migration is the movement of persons from one locality to another for in search of occupation and new opportunities<sup>2</sup>. Migration is a coping strategy used by people .The agricultural labourers and farmers are migrating to semi urban and urban area i.e. small towns or near to their village, because of prolonged drought.

**Agricultural labourers-** Agricultural labourers are those persons who work on the land of others on wages for the major part of the year and earn a major portion of their income as a payment in form of wages for worked performed on the agricultural farms owned by others.

**Farmer-** A farmer is a person, who owns, works on or operates an agricultural enterprise, either commercially or to sustain himself or his family. Farmers are may be small, medium or large farmers and using landless labourers in their farming activities.

## RESEARCH OBJECTIVES

The objectives of the study are as follows:

1. To make behavioral analysis of agricultural labourers and farmers at the time of prolonged drought.
2. To study about the two years of frequent drought and its impact on farmers and agricultural labourers.
3. To examine the impact of drought on migration of agricultural labourers and farmers reference to village name Kendamundi and Banjari, situated in Bargarh district of Odisha.

## RESEARCH METHODOLOGY

The study is conducted by collecting data and information from both primary and secondary sources. The secondary data is collected from articles, research publications, books, internet and other sources. For collection of primary data, sample survey method was used. For the purpose of study select two villages named Kendamundi and Banjari of Dumberpali panchayat, sohela block, Bargarh district (Odisha) was chooses and used stratified random sampling method to collect sample and divided the total population of each village in to five strata's on the basis of village ward and each strata consists of 60

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<sup>2</sup> S.P Gupta and B.L Prajapati, "Migration of agricultural labourers in Chhattisgarh region of Madhya Pradesh", *Ind. J. Labor Econ*, **41**(4):16

numbers of agricultural farmers and labourers. Again, divided each strata consist of 20 numbers of agricultural labourers and 40 numbers of farmers and finally selected 4 numbers of agricultural labourers out of 20 and 8 numbers of farmers out of 40 through simple random probability sampling from each strata. The total sample size is 120. For the collection of primary data, questionnaire method and an interview method are used and for analysis of data.

## ANALYSIS

In the recent year, frequency of drought is a great concern and problem for the people of Bargarh, Odisha, where an agriculture is the main source of livelihood of the people. Their main income source is the cultivation of paddy. Due to drought and rainfall variability, the traditional farmers are looking for sources of income beyond agriculture, because they are not getting profit from agricultural activities and migrating to other places in search of occupation.

## PROFILE OF STUDY AREA

Banjari is a medium size village located in Sohela Block of Bargarh district, Orissa with total 432 families residing. The Banjari village has population of 1531 of which 814 are males while 717 are females as per Population Census 2011. Banjari village has lower literacy rate compared to Orissa. In 2011, literacy rate of Banjari village was 71.06 % compared to 72.87 % of Orissa. In Banjari Male literacy stands at 79.01% while female literacy rate was 62.25 %. In this village out of total population, 970 were engaged in work activities. 47.01 % of workers describe their work as Main Work (Employment or Earning more than 6 Months) while 52.99 % were involved in Marginal activity providing livelihood for less than 6 months. Of 970 workers engaged in Main Work, 207 were cultivators (owner or co-owner) while 97 were Agricultural labourers. Kendmundi is a medium size village located in Sohela Block of Bargarh district, Orissa with total 482 families residing.

The Kendmundi village has population of 1822 of which 905 are males while 917 are females as per Population Census 2011. The village has higher literacy rate compared to Orissa. In 2011, literacy rate of Kendmundi village was 79.77 % compared to 72.87 % of Orissa. In Kendmundi Male literacy stands at 87.44 % while female literacy rate was 72.16 %.

In Kendmundi village out of total population, 680 were engaged in work activities. 89.26 % of workers describe their work as Main Work (Employment or Earning more than 6 Months) while 10.74 % were involved in Marginal activity providing livelihood for less than 6 months. Of 680 workers engaged in Main Work, 339 were cultivators (owner or co-owner) while 168 were Agricultural labourers.

## MIGRATION STATUS DURING NORMAL AND DROUGHT PERIODS

TABLE NO-1

AREA UNDER THE STUDY	TOTAL WORK FORCE	MIGRATION (NORMAL YEAR)		MIGRATION(DROUGHT PERIODS)			
		2014-15		2015-16		2016-17	
		NUMBER S	PERCENTAGE (%)	NUMBERS	PERCENTAGE (%)	NUMBER S	PERCENTAGE (%)
KENDAMUNDI	680	80	11.76	137	20.14	170	25
BANJARI	970	120	12.37	160	16.49	210	21.64

Sources: Primary data

Above table states that migration has been rising during drought period compared to normal year in both villages. The total migrant population of Kendamundi, out of total work force was 80 in 2014-15 and it became 170 in 2016-17. There was increased of 112.5% of migrant population between that periods. The total migrant population of village Banjari was 120 out of total work force in 2014-15 and increased to 210 in 2015-16. There was gradual growth of migrant population in both villages. Drought may be the determinant of migration and a push factor in the study areas.

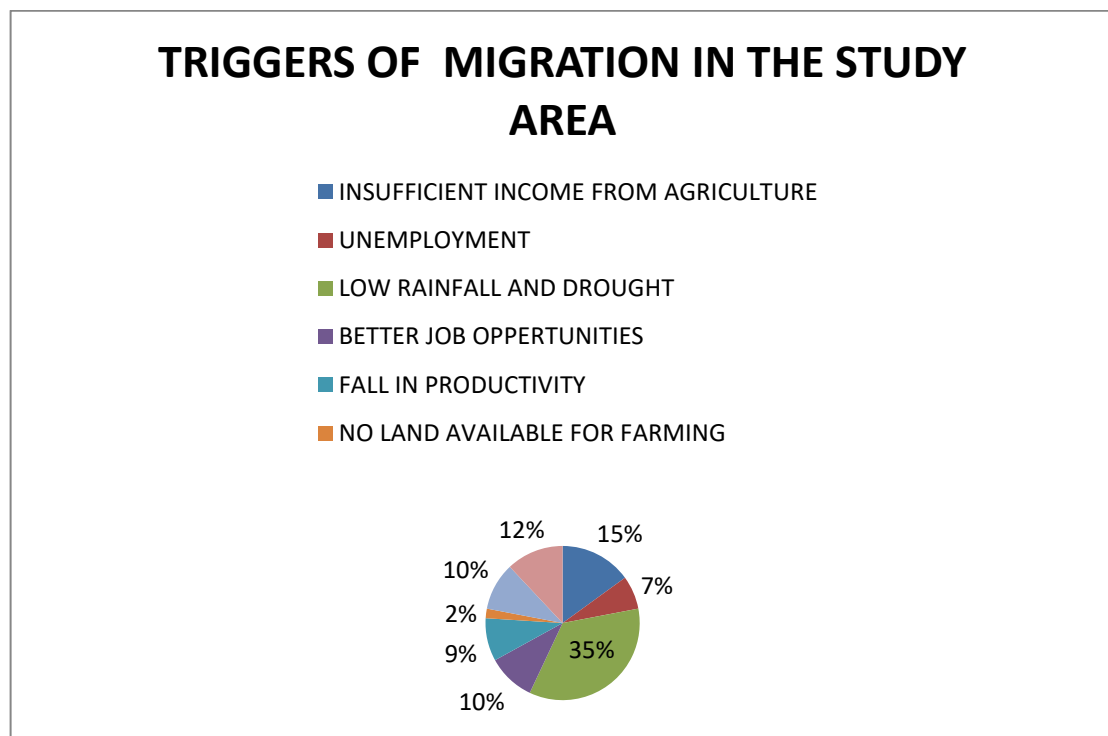
### TRIGGERS OF MIGRATION IN THE STUDY AREA

There are numbers of factors that forced the people to migrate from one place to another. Some factors may influence more as compared to others factors. The following figure and chart shows some important triggers of migration in the study area.

TABLE NO-2

IMPORTANT TRIGGERS OF MIGRATION	RESPONDENT VIEWS IN TERM OF %
INSUFFICIENT INCOME FROM AGRICULTURE	15
UNEMPLOYMENT	7
LOW RAINFALL AND DROUGHT	35
BETTER JOB OPPERTUNITIES	10
FALL IN PRODUCTIVITY	9
NO LAND AVAILABLE FOR FARMING	2
LESS CROPS PRODUCTION FOR SALE	10
NOT SATISFIED WITH MY LIVELIHOOD	12
TOTAL	100

Sources: Primary data



Above table and chart shows about the views of respondent regarding triggers of migration in percentage term. It shows that low rain fall and drought is the key factor responsible for migration of agricultural farmers and laborers in the study areas compared to other factors.

## **MAJOR FINDINGS**

In both villages the main occupation is farming and landless person are working as an agricultural labor. The farming is highly depends upon monsoon and late or uneven arrival of monsoon affects farming in a great extent. Frequent happening of drought in the study areas, affecting the socio-economic life of the people. Their production and profit from agricultural activities is falling drastically. So they are like to choose other occupations rather than farming. Both farmers and agricultural labor class people are migrating to semi urban and urban area. The migrant people are working in nearby native place and also moving to other states like Gujarat, Maharastra, Chatisgarh, etc. The major section of migrant population are working as a labor in construction sectors. Some extent crops insurance provided by the government and drought relief measures taken by the state government helps to the farmer and agricultural laborers not to choose other occupation.

## **RECOMMENDATION**

- 1- Construction of dams, ponds and other means to reserve rain water.
- 2- To improve soil moisture availability through watershed programs, and generally reduce vulnerability to drought through agricultural development.
- 3- Research to develop improved technologies can help provide protection from drought. Scientific progress in understanding the physiology of drought and in developing biotechnology tools offers the promise of significant impact in drought mitigation.
- 4- Increased dependence on wage income, asset depletion and public relief are the major mechanisms used to meet the shortfall in income.
- 5- Encourage the farmers to choose such crops that required less water for cultivation.
- 6- Optimal uses of underground water for farming activities.
- 7- Generations of employment opportunities in the study are to control migration.
- 8- To provide immediate drought relief to manage and control migration.
- 9- The proper implementation of Mahatma Gandhi National Employment Act.
- 10- Motivate the people to choose non-farming activities.

## **CONCLUSION**

Drought is one of the major climatic hazards, affecting agriculture and the livelihoods of millions of farmers and agriculture labourers. It has huge economic costs, in terms both of actual economic losses during drought years and of losses arising from forgone opportunities for economic gains. Drought impact on rice production is substantially higher at the farm level than at the aggregate level in the study areas. Farm households use various coping strategies to deal with the consequences of drought: migration, careful choice of cropping patterns, rice varieties, planting date, planting method and crop management

practices. Increased dependence on wage income, asset depletion and public relief are the major mechanisms used to meet the shortfall in income. There is a meaningful relation between drought impact and migration.

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