



A STUDY ON CLIMATE CHANGE AND ITS IMPACT ON MIGRATION

Economics

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ABSTRACT

In the present world, climate change is been increasing at, tremendous speed and it is very clearly visible to all. And various studies have been carried by researchers and scientist on the climate change process but very less of them concentrate on the impact of such climate change on migration. Generally, climate change will make the population migrate because it will affect the place in a such a way that it will make the world hard for living by causing food and water supplies to become more unreliable and also it will increase the frequency of disaster common. Agriculture is one of the most necessary activities that are very much needed for mankind as without food living of human becomes very difficult. But with this change in the climatic condition now a day's agricultural labor is facing it difficult to depend on agriculture for their livelihood. This is being one of the main reasons for them to migrate to urban areas and indulge them in some other works for money. The present study is been made to understand the impact of climate change on the labor force which makes to migrate in search of other employment. With this background, the present study is been carried out among 100 migrant sample respondents working from Adilabad District in Telangana state. Various questions on the reasons for migration, problems of migration and migration pattern has been asked to the respondents and the result are been analyzed.

KEYWORDS

Migration, Climate change, Sustainable development.

Introduction

Migration is one of the processes that is been adopted by the people for searching for the betterment of their living. And this movement of people is been found right from ancient times. This kind of migration occurs for various reasons which are voluntary and involuntary in nature. Environmental migration, however, is essentially a complex, multi-causal phenomenon, driven by a variety of factors and compounded by social, economic and political forces. In this context, it is important to note that environmental migration is not necessarily a problem and does not necessarily carry negative effects for migrants and countries of origin, transit, and destination. Indeed, migration has been a traditional coping mechanism, widely used by populations around the world to adapt to a changing environment.

If properly managed, migration can therefore also be a solution to cope with climate change. A comprehensive approach to managing environmental migration would, therefore, aim to minimize instances of forced migration; to ensure assistance and protection to the displaced where forced migration does occur and to facilitate the potential of migration to be an adaptation strategy to climate change. (IOM Report 2011).

Generally, climate change and migration is called as Environmental Migrants. Environmental migrants are persons or groups of persons who, for compelling reasons of sudden or progressive changes in the environment that adversely affect their lives or living conditions, are obliged to leave their habitual homes or choose to do so, either temporarily or permanently, and who move either within their country or abroad. (IOM 2007)

In the present world climate change is been increasing in tremendous speed and it is very clearly visible to all. And various studies have been carried by researchers and scientist on the climate change process but very less of them concentrate on the impact of such climate change on migration. Generally, climate change will make the population migrate because it will affect the place in a such a way that it will make the world hard for living by causing food and water supplies to become more unreliable and also it will increase the frequency of disaster common. This study "A Study on Understanding Climate Change Migration and Sustainable Development" has been made at the micro level to understand the relationship between migration and climate change and its impact on the sustainable development in India.

Objectives of the study

The study has been in order to fulfill the below-discussed objectives,

- To find out the factors of migration
- To examine the migration pattern followed by the migrants
- To understand the problems of the migration at the place of destination

- To provide policy and suggestions for the environmental migrants

Review of Literature

Developing countries are the most vulnerable to climate change impacts because they have fewer resources to adapt: socially, technologically and financially. Climate change is anticipated to have far-reaching effects on the sustainable development of developing countries including their ability to attain the United Nations Millennium Development Goals by 2015 (UN Report 2007).

In a study conducted by Diana et.al (2017) has stated that climate change is acknowledged as the largest threat to our societies in the coming decades, potentially affecting large and diverse groups of urban residents in this century of urbanization. As urban areas house highly diverse people with differing vulnerabilities, intensifying climate change is likely to shift the focus of discussions from a general urban perspective to who in cities will be affected by climate change, and how.

This brings the urban equity question to the forefront. Here we assess how climate change events may amplify urban inequity. We find that heat waves, but also flooding, landslides, and even mitigation and adaptation measures, affect specific population groups more than others. As underlying sensitivity factors, we consistently identify socioeconomic status and gender. We synthesize the findings with regard to equity types – meaning outcome-based, process-oriented, and context-related equity – and suggest solutions for avoiding increased equity and justice concerns as a result of climate change impacts, adaptation and mitigation.

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Data and Methodology

As part of research work the researcher has conducted a study on Migrant Labour working in varies industry of Adilabad district an interview schedule has been framed in order to carry out the study and the data was collected from them in person. For the purpose of this study, those migrants who have stated the main factor of migration was climate change has been selected. The selected migrant's data has been used for making this study "A Study on Understanding Climate Change Migration and Sustainable Development". The study was made with the sample size 100 which was collected from September 2017 to December 2017. Adilabad district has been selected for the study as a huge number of migrants are finding their employment there at the garment industries.

Result and Discussion

Table 1 Socio-Demographic Characteristics of the Migrants

Demographic characteristics	Number	Percentage
Sex	81	81
Male	19	19
Female	100	100
Type of family	51	51
Joint	49	49
Nuclear	100	100
Age	38	38
<20	44	44
20-30	13	13
30-50	05	5
>50	100	100
Marital status	46	46
Married	45	45
Unmarried	9	9
Widow	100	100
Community	31	31
OBC	54	54
SC/ST	15	15
Others	100	100
Land holdings	82	82
Marginal(<1 hectare)	11	11
Small (1 to 2 hectare)	7	7
Medium (2 to 10 hectare)	0	0
Big (> 10 hectares)		

Source: Primary data, 2017

Sex wise distribution of the migrants indicates that among the 100 migrant respondents, only 19 were females and other 81 were males, the sex ratio being 234 females per 1000 males. Fifty-one percent of the sample respondents were from joint family and without a big difference remaining 49 percent were from nuclear family. Majority of the workforce (44 percent) were from the age group of 20-30 years. Information relating to educational attainments of the respondents indicates that about 71 percent of the migrant garment industry workers of the current study were found to be either illiterate or had completed only primary level of education. Data relating to a marital status of the members in the current study highlights that 46 percent of the population was married.

Data pertaining to the average holding of the land of the respondents unravel the fact that an overwhelming majority (82 percent) of the respondents were having marginal holding followed by small land holders (11 percent) and medium (7 percent). Caste wise analysis reveals that the largest single groups (54 percent) were from SC/ST.

Among the selected respondents only 38 percent of the population had some mode of savings the major source of savings was a bank which is

about 31.59 percent. Next to bank 26.32 percent had saved in the post office. Among the persons who save 31.50 percent stated that they save for marriage. In the study on an average 56 percent of the respondents reported that they have been indebted and the remaining 44 percent stated that they have not undertaken any form of debt. Of these indebted workers, 37.05 percent approached the head of the garment industry in which they work for their loan. Loans are borrowed for meeting a variety of needs. About 23.21 percent of the respondents stated that they borrowed for emergency needs.

Details on migration

Information on the details of migration will help us in understanding the migration pattern followed by the migrant workers.

Table 2 Migration Stream

S. No	Migration stream	Number	Percentage %
1	Intra district	23	23%
2	Inter-district	12	12%
3	Inter state	65	65%
	Total	100	100

Source: Primary data 2017

Interstate migration dominates with 65 percent of the migrants coming from other states in India. A significant 23 percent had migrated within Erode district and 12 percent constituted inter-district migration. An analysis of interstate migration reveals that a total of 65 percent had migrated coming from other states of Telangana. In this 32.42 percent had migrated from Maharashtra, 26.15 percent from Karnataka, followed by 13.45 percent from Odisha and 10.75 percent from Chhattisgarh and a less percentage of 9.23 and 8.00 from Tamil Nadu and Andhra Pradesh respectively.

Table 3 Inter-State Migration

S. No	State	Number	Percentage
1	Maharashtra	21	32.42
2	Karnataka	17	26.15
3	Odisha	9	13.45
4	Chhattisgarh	7	10.75
5	Tamil Nadu	5	8.00
6	Andhras Pradesh	6	9.23
	Total	65	100

Source: Primary data, 2017

Among the migrants who have come from other parts of Telangana state, a majority of 41.6 percent of the sample respondents were from Nizamabad district followed by 25.0 percent from Warangal district and 16.7 percent each from both Karim Nagar and Medak districts.

Table 4 Inter-District Migration

S.NO	Districts	Number	Percentage
1	Nizamabad	5	41.6
2	Warangal	3	25.0
3	Karim Nagar	2	16.7
4	Medak	2	16.7
	Total	12	100

Source: Primary data, 2017

Historically migration has been in existence from time immemorial and its incidence and cause have varied depending upon the various dimensions of situations that have been prevailing at a particular place at a given point in time. The factors influencing the decision to migrate are varied and complex, from one country to another or from one religion to another within a country depending upon socio, economic, demographic and cultural factors of the origin on one hand and upon the conceptualization of migration process and the scale of investigation on the other.

Reason for Migration

Only those migrants who have stated that they have migrated because of climate change is been taken for study. So the main reason for migration among the selected respondents is climate change.

Since climatic change/environmental change was highlighted to be the major reason for migration it has been further discussed. Questions were asked of the respondents regarding the major climatic disaster that they faced at their place of origin which influenced them to migrate. These are discussed further in the following table.

Table 5
Major Climatic Disaster

S. No	Climatic Disaster	Percentage
1	Drought	45
2	Flood Earthquake	30
3	Earthquake	15
4	Soil Erosion	10

Source: Primary data, 2017

From the above table, it is evident that a majority of 45 percent of the selected respondents stated drought to be the major climatic disaster which influenced them to migrate. Around 30 percent of the population stated that they faced the climatic disaster of the flood in their place of origin which made them to migrate. It was followed by 15 percent of the population who faced earthquake and 10 percent of the population faced soil erosion.

Table 6
Major Climatic Impact faced by the Respondents

S. No	Impact of Climatic Change	Percentage
1	Loss of asset	17
2	Loss of Livelihood	23
3	Soil Infertility	25
4	Loss of agricultural production	35

Source: Primary data, 2017

From the above table, 17 percent of the sample respondents stated that the major impact of the climatic change was a loss of asset at the place of origin. About 23 percent of the sample respondents stated that they lost livelihood at their place of origin and 25 percent of the population faced the problem of soil infertility and 35 percent of the migrant workers faced the problem of loss of agricultural production at the place of origin.

Problems faced by migrants at the place of destination

Table 7
Problems of Migrants at destination

S. No	Problem	Scores	S. No	Problem	Scores
1	Language	71.81	6	Availability of health provision	48.37
2	Getting ration card	55.78	7	Children education	46.69
3	High cost of living	54.58	8	Health	42.73
4	Away from relatives	53.91	9	Job promotion	41.56
5	Poor living condition	50.79	10	Finding shelter	39.73

Source: Primary survey 2017

Among the 100 sample respondents surveyed, the highest percent score (71.81) was given for 'language'. This is due to the fact that about 65 percent of the migrants were from other states. The next prominent problem faced by the migrants was 'getting ration card'. This calls for the administrators to effectively monitor the Public Distribution System when the number of internal migrants is on the rising side. This is closely followed by 'high cost of living'. About 57 percent of migrants migrated alone; another problem stated by the respondents was "away from relatives". For the other stated problems, the assigned scores took value between 40 and 50

On the whole, language and getting ration card were stated as the major problems faced by the migrants.

Policies and Suggestions

- There are huge groups of migrant in the study are illiterate and they are not aware of the crucial climate change problem that they are facing. Some steps must be taken to provide awareness among people regarding the climate change issues.

- Many of the migrants are found to be dependent on agriculture and due to climate change, their dependency has been affected which forced them to migrate for better jobs. So government should take some actions on it.
- Migrants are facing so many problems in their place of origin so there must be some steps taken to reduce their problem at the destination.

Conclusion

For many people in India migration is been chosen as a process in order to help their family by proving income and also to reduce the problems that they face because of climate change. To have a proper sustainable development there is need of many studies on migration taking place within countries. And strong policy implication, needed for the migrants for ensuring better employment and living condition. In the study, most of the migration process has been taken place because of drought. And those migrants have been depending on agriculture for their livelihood in the past. So there is some step needed to be taken for the upliftment of those migrants.

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