

**MIGRATION BEHAVIOUR OF TRIBAL FAMILIES OF DAHOD  
DISTRICT OF GUJARAT**

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**BY**

**PATEL ALKESHBHAI RAMESHBHAI**

**B.Sc. (Agri.)**

**(Reg. No. 04-2630-2015)**



**B. A. COLLEGE OF AGRICULTURE  
ANAND AGRICULTURAL UNIVERSITY**

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# **MIGRATION BEHAVIOUR OF TRIBAL FAMILIES OF DAHOD DISTRICT OF GUJARAT**

**Name of the Student**

Patel Alkeshbhai R.

**Major Advisor**

Dr. Sunil R. Patel

**DEPARTMENT OF EXTENSION EDUCATION**

**B. A. COLLEGE OF AGRICULTURE**

**ANAND AGRICULTURAL UNIVERSITY**

**ANAND - 388 110**

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## **ABSTRACT**

For the first time since independence, the absolute increase in population is more in urban areas than in rural areas as per census 2011 which indicates that the extent of migration from rural area has been increasing. In Gujarat, migration is not a new phenomenon. It has been observed since long in the tribal populated districts viz. Dangs, Tapi, Narmada, Dahod and Valsad where more than 50 percent of the population is tribal. In Dahod, the tribal population is 74.3 per cent which mainly depends on agriculture. They have small land holding and totally depend on monsoon because of lack of irrigation facilities. So during the summer and winter season the rate of migration towards the urban area is often more.

Since no systematic effort has up till been made to study the migration behavior of tribal families, it was thought worthwhile to make an in-depth study on migration behavior which would throw light on many aspects, until hidden, that can be useful for bringing developmental changes in tribal population. With this in view, the present investigation entitled **“Migration behavior of tribal families of Dahod district of Gujarat”** was undertaken with the following objectives:

1. To study the profile of tribal families
2. To study the migration behaviour of tribal families
3. To study the factors responsible for migration among tribal families
4. To study the employment opportunities obtained by tribal families through migration
5. To study the relationship between profile and migration of tribal families

## **METHODOLOGY**

The present investigation was carried out in two purposively selected talukas of Dahod district of Gujarat State viz; Jhalod and Limkheda. From each selected taluka, six villages were selected randomly, out of which 60 respondent tribal families were selected with proportionate random sampling. Thus, total 120 respondent tribal

✍ .....*Abstract*  
families were selected for the study. The dependent and independent variables were studied either using readymade scales or well thought out structured schedules.

An interview schedule was developed in accordance with the objectives of the study. The data were collected through personal interview and were classified, tabulated and analyzed. The statistical measures such as percentage, mean score and coefficient of correlation were used.

## **MAJOR FINDINGS**

1. Majority of the respondents were from middle age group, were illiterate or had up to primary level of education, had medium and joint type of family.
2. Majority of the beneficiaries had no membership in social organization, had up to ₹ 50,000 of annual income and were landless or had marginal size of land holding.
3. Majority of the respondents had farming coupled with animal husbandry and agriculture labour or other labour work as their occupation and majority respondents had up to 2 animals.
4. Majority of the respondents had medium amenities available at house and majority were untrained and had low level of mass media exposure.
5. Majority of the respondents had high level of perception and economic motivation.
6. Majority of the respondent tribal families had low to very low extent of migration.
7. Major factors responsible for migration among tribal families were: lack of employment opportunities in tribal area, low wages in tribal area, availability of diverse work opportunities at migration place and poor economic condition.
8. Major employment opportunities obtained by tribal families through migration were at construction site, as a tenant farmer and as a farm labour.
9. Out of fourteen independent variables, ten variables viz., age, education amenities available at house, perception about migration, size of family, type of family, annual income, occupation, herd size and economic showed significant influence on migration of the tribal families.

**Dr. Sunil R. Patel**  
Principal,  
College of Agriculture,  
AAU, Jabugam-391 155  
Gujarat (India)



## **CERTIFICATE**

This is to certify that the thesis entitled “**MIGRATION BEHAVIOUR OF TRIBAL FAMILIES OF DAHOD DISTRICT OF GUJARAT**” submitted by **Patel Alkeshbhai Rameshbhai** (Reg. No. 04-2630-2015) in partial fulfillment of requirements for the award of the degree of **Master of Science (Agriculture)** in the subject of **Agricultural Extension** by the Anand Agricultural University is a record of bonafide research work carried out by him under my guidance and supervision and the thesis has not previously formed the basis for the award of any degree, diploma or other similar title.

**Place:** Anand

**Date :** /07/2017

**(Sunil R. Patel)**

**Major Advisor**

# DECLARATION

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This is to certify that whole of the research work reported in the thesis in partial fulfillment of the requirements for the award of the degree of **Master of Science (Agriculture)** in the subject of **Agricultural Extension** is the result of investigation done by undersigned under the direct guidance and supervision of **Dr. Sunil R. Patel**, Principal, College of Agriculture, Anand Agricultural University, Jabugam and no part of research work has been submitted for any other degree so far.

**Place:** Anand

**Date:** /07/2017

(**Alkeshbhai R. Patel**)

**Countersigned by**

(**Sunil R. Patel**)

(**Major Advisor**)

Principal,

College of Agriculture,

Anand Agriculture University,

Jabugam-391 155

Gujarat (India)

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# I. INTRODUCTION

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Migration is inevitable in the process of economic development (Afsar, 2003; Ballard, 2005). There exists a two-way causation between migration and economic development. Migration induces economic development while economic development induces further migration. Migration can be of two types: international migration and internal migration. International migration deals with migration across the countries of the world, while internal migration deals with migration within the national boundary of a country (Zohry, 2005). There are four streams of internal migration which are rural-rural, rural-urban, urban-rural and urban-urban. Among these four streams, rural-urban migration has certain distinct characteristics which affect developmental aspect of both places involved namely, place of origin and place of destination. It is well known that developmental disparities between rural and urban triggers rural-urban migration. People generally migrate from less developed rural countryside to more developed urban centers (Bhattacharya, 1993).

Rural-urban migration has its inherent linkages to agricultural development. The prosperity of rural economy depends on the prosperity of agriculture. In rural areas there are low employments opportunities in non-farm sector and thus rural people are compelled to join the agricultural sector. These result into surplus labour in the rural farm sector and trigger the problem of disguised unemployment. Due to the existence of this disguised unemployment, there is a loss in agricultural productivity and efficiency. As a consequence, the rural agricultural labour is underpaid. This has made agriculture sector a less attractive among the rural people. On the other hand, agricultural productivity may get positive impetus if these extra labours are withdrawn from the rural farm sector. The loss of attraction of agricultural sector can be attributed to various other factors too. Some of them are: fall in procurement price in some of the major cash crops, unfavorable government policies, rise in labour price, rise in fertilizer and seeds price, lack of warehousing in the form of cold storages etc (Sharma and Bhaduri, 2009). The constraints and bottlenecks of agriculture act as a push factor for migration in search of job in the urban sectors. In other words, urban informal sector acts as a pull factor which attracts rural people while low productive agricultural sector acts as a push factor which throws people out

of their rural base and combination of these two forces compel the rural people to migrate to the urban areas.

When it comes to economic development, internal migration in developing countries has become one of the most important issues in urbanization process. Structural changes such as a shift from an agricultural-based economy to a more industrialized one embrace displacement of labor out of an agricultural sector in rural areas to industrial sites in urban settings (Kuznets, 1979). Migration from rural areas accounted for at least half of all urban growth in Africa during the 1960s and 1970s and about 25 per cent of urban growth in the 1980s and 1990s (Brockhoff, 1995). In Brazil, it is estimated that over 20 million people moved from rural to urban areas between the 1950s and the 1970s at the peak of its urbanization process. In comparison, 20.5 million people in India, which accounted for 30 per cent of national urban growth, moved from rural to urban areas in the 1990s (Census of India, 2005). These figures are a clear indication of how rural-urban migration can fuel urbanization, especially in developing countries.

Given the general importance of internal migration to urbanization and development, it is also important to observe determinants of this migration decision. Since migration is a selective process, individual and family characteristics of those who choose to migrate and those who stay behind are different. For example, migration mainly involves young adults who are more likely to have a positive net expected return on migration due to their longer remaining life expectancy, or because social norms require that young adults migrate in search of a better life (De Haan, 1997). Also, in some cases, human capital theory might predict that educated people have a higher propensity to migrate than less educated people. However, this would be the case only if schooling makes workers relatively more productive at a place of destination than at home or if costs of migration are lower for the more educated workers.

Understanding determinants and selectivity of migration is important for a number of reasons. Migrants' individual and household characteristics can shape migrants' success at their destinations and effects on their families at home, such as distribution of migration's potential benefits through remittances. Those characteristics can also determine which individuals bear the cost of loss in human capital through the migration process. Therefore, knowing nature of migrants'

characteristics and migration selectivity patterns can provide guidance for policy interventions to influence migration and its impacts on migrants' families (Lall, Selod, and Shalizi, 2006). Example of such policies include the Job Search and Relocation Assistance program implemented by the U.S. Department of Labor to offer information on out-of-area jobs, job-search grant funds and relocation grants, and China's regional programs to match urban jobs and rural migrants (Lall et. al., 2006).

In some parts of India, three out of four households include a migrant. However, despite the large scale of migration in absolute numbers of people involved and India's long history of population and labour mobility, labour migration has rarely been reliably studied. Labour migration is complex. Streams differ in duration, origin, destination and migrant characteristics. Economic and social impacts on migrants and their families are variable. Migration often involves longer working hours, poor living and working conditions, social isolation and poor access to basic amenities.

At destination, migrant labour affects markets, lowering the cost of labour. Migration also affects the labour market at the place of origin. Migrant earnings affect income, expenditure patterns and investment and changes relations at household and community levels. While there seems to be some positive impact on incomes and investment, the major function of migration is to act as a 'safety valve' in poor areas. The impact on asset and income inequality is more mixed.

According to the 2001 Census, the total population of India is 1,028 million consisting of 532 million males and 496 million females. The same 2001 Census reported 315 million persons as migrants based on the place of last residence, accounting for 31 per cent of the total population of India. Our analysis indicates about 30 per cent of these 315 million migrants in India are youth. With a high percentage of its population below the age of 30 and a projected labour force expansion of 95 million by 2020 (a 12 per cent gain from 2010), India is uniquely positioned to reap the benefits from its demographic dividend.

India experienced rapid urbanization between 2001 and 2011, with an estimated 31.8 per cent decadal growth. Migration - one of the components of India's urban growth - is likely to steadily increase in the foreseeable future. As per

projections, India is expected to reach 400 million migrants in 2011, accounting for 33 per cent of the total population.

In the Indian context, seasonal migration is not a new phenomenon and the issue has been researched at length by many scholars either from the viewpoint of migration or non-farm employment (Cali and Menon, 2013; Deshingkar and Start, 2003; Haberfeld et al. 1999). Breman (1996) has written at length about seasonal migration in South Gujarat (India) since 1970. He argues that the main reason for increased seasonal migration is the decline in agricultural employment and landless tribal households in this region. Further, he points out that increased urbanization in Gujarat has attracted these individuals to migrate on a short-term basis to work in the informal sector. This diversification strategy has helped households in sustaining their livelihoods. Mosse (2005) argued that seasonal migration has become an “irreversible part of the livelihoods of rural adivasi communities in western India” (p. 3025).

### **1.1 STATEMENT OF THE PROBLEM**

For the first time since independence, the absolute increase in population is more in urban areas than in rural areas. During the last 50 years rural population has decreased from 82.0 to 68.9 per cent. Level of urbanization increased from 27.81 per cent in 2001 census to 31.6 per cent in 2011 census and the proportion of rural population declined from 72.19 per cent in 2001 census to 68.84 per cent census. It is estimated that approximately 22 million people have migrated from rural to urban areas since 2001. Thus the extent of migration from rural area has been increasing.

In Gujarat, migration is not a new phenomenon, not just a post-globalization phenomenon. The spectrum of migration stretches from seasonal migration at one end to large number of Gujaratis migrating out of country. However, our concern here is on the internal migration made by the people in search of employment. Gujarat has 14.75 per cent of tribal population. The most tribal populated districts of Gujarat are: Dangs, Tapi, Narmada, Dahod and Valsad where more than 50 percent of the population is tribal. In Dahod, the tribal population is 74.3 per cent. Most of the tribal families living in Dahod district mainly depend on agriculture. They have small land holding and totally depend on monsoon because of lack of irrigation facilities. So during the summer and winter season the rate of migration towards the urban area is often more.

Since no systematic effort has up till been made to study the migration behavior of tribal families, it will be worthwhile to make an in-depth study on migration behavior which will throw light on many aspects, until hidden, that can be useful for bringing developmental changes in tribal population. It will also be interesting to investigate the factors or causes responsible for migration and the employment opportunities the migrant people get at the destination places. With all this in view, the present investigation entitled “**Migration behavior of tribal families of Dahod district of Gujarat**” was undertaken with the following objectives.

## **1.2 OBJECTIVES OF THE STUDY**

1. To study the profile of tribal families
2. To study the migration behaviour of tribal families
3. To study the factors responsible for migration among tribal families
4. To study the employment opportunities obtained by tribal families through migration
5. To study the relationship between profile and migration of tribal families

## **1.3 SCOPE AND IMPORTANCE OF STUDY**

The study will provide an in-depth sight about the migration behavior of the tribal families and the factors which compel them to migrate from their native in search of employment. The finding thus can be of practical use in formulating the policy to mitigate the issue of migration. The results will also throw light how the personal, socio-economic and communicational characteristics of tribal families are related with their migration behavior and how manipulation of one or more of characteristics of tribal families can be helpful in lowering the rate of migration. This research will also be useful to other future investigators intending to study the migration behaviour of tribal families.

With regards to its significance, the findings of this study are expected to make modest but important contributions to policy and planning issues, because:

- It may be helpful in tackling the problems that force people to leave their rural origin and narrowing the development gap between urban and rural areas through the introduction of sound rural development strategies and effective urban management.

- It could provide information for planners and policy makers in their overall effort to formulate and implement population redistribution or migration policy. Furthermore, it could inspire other researchers to conduct further research on the issue.

#### **1.4 HYPOTHESIS OF THE STUDY**

In view of the specific objectives of the study, the null hypotheses were formulated for statistical testing as under:

**Ho1:** There is no relationship between age of the head of tribal families and their migration.

**Ho2:** There is no relationship between education of the head of tribal families and their migration.

**Ho3:** There is no relationship between amenities available at house of tribal families and their migration.

**Ho4:** There is no relationship between perception of the head of tribal families and their migration.

**Ho5:** There is no relationship between training received by the head of tribal families and their migration.

**Ho6:** There is no relationship between the size of family and their migration.

**Ho7:** There is no relationship between the type of family and their migration.

**Ho8:** There is no relationship between the social participation of the head of tribal families and their migration.

**Ho9:** There is no relationship between mass media exposure of the head of tribal families and their migration.

**Ho10:** There is no relationship between the land holding and their migration.

**Ho11:** There is no relationship between the annual income of the tribal families and their migration.

**Ho12:** There is no relationship between the occupation and migration of tribal families.

**Ho13:** There is no relationship between the herd size possessed by tribal families and their migration.

**Ho14:** There is no relationship between the economic motivation of head of tribal families and their migration.

## **1.5 LIMITATIONS OF THE STUDY**

Considering the time and other resources available with the investigator, the present study was undertaken with the following limitations:

1. The area of the study was limited to Dahod district of Gujarat state.
2. The diagnostic study was confined to only 120 respondents (tribal families) from different villages.
3. Only selected characteristic of the respondents was studied.
4. The findings were based on verbal expressions and responses of the respondents.

## **1.6 OPERATIONALIZATION OF THE CONCEPTS USED**

**1.6.1 Age:** It refers to actual age of the members of tribal family in completed years i.e. chronological age of the respondent.

**1.6.2 Education:** It refers to the formal education attained by the members of tribal family.

**1.6.3 Amenities Available at House:** It refers to the basic facilities available at house of the tribal family.

**1.6.4 Perception About Migration:** Perception here is conceptualized as the way how the migration is conceived by the respondent.

**1.6.5 Training Received:** It means any type of training related to skill development that a respondent has undergone.

**1.6.6 Size of Family:** It refers to the total number of members living together under common headship and sharing food under one roof.

**1.6.7 Type of Family:** It denotes whether the tribal family is of joint type (all member living together) or nuclear (only husband, wife and children).

- 1.6.8 Social Participation:** It is the participation of head of house hold in the various formal and informal institutions and organizations.
- 1.6.9 Mass Media Exposure:** It is defined as the nature and frequency of respondent's exposure/involvement in different mass media such as radio, television, newspaper, exhibition etc.
- 1.6.10 Land Holding:** It refers to the total land possessed by the tribal family in terms of hectare at the time of investigation.
- 1.6.11 Annual Income:** It refers to the total income obtained annually by the selected tribal families from agriculture and other sources.
- 1.6.12 Occupation:** It refers to involvement, connection and attachment of the tribal families in various income-generating activities.
- 1.6.13 Herd Size:** It refers to possession of number of various milch animals by tribal families.
- 1.6.14 Economic Motivation:** It refers to the degree to which heads of house hold are oriented to maximize their profit by putting emphasis on economic ends.
- 1.6.15 Migration:** Migration is the movement of people from one geographical location to another, involving permanent or temporary settlement.

## **II. REVIEW OF LITERATURE**

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The main purpose of this chapter is to organize and present the findings of the past research studies, which are related to the present investigation. The review of literature leads the researcher to conclude his findings with reference to past studies. It is also necessary in developing conceptual framework and selection of appropriate design for the study. As the literature having direct bearing on different aspects of the present study was limited, the references having little or indirect bearings were also reviewed. In accordance with the objective of the study, a brief account of related literature has been reviewed and presented in this chapter under the following heads.

- 2.1 Profile of the tribal families
- 2.2 Migration behaviour of tribal families
- 2.3 Factors responsible for migration among tribal families
- 2.4 Employment opportunities obtained by tribal families through migration
- 2.5 Relationship between profile and migration of tribal families

### **2.1 PROFILE OF THE TRIBAL FAMILIES**

The characteristics of the tribal families influence their migration behaviour. A brief account of studies on some selected characteristics of the tribal families related to the present investigation is presented in the subsequent paragraphs:

#### **2.1.1 Age**

Patel (1995<sub>b</sub>) reported that slightly less than two third (64.44 per cent) of the tribal farmers were in middle age group, while 19.26 per cent and 16.30 per cent of the tribal farmers belonged to young age and old age group, respectively.

Patel (2005<sub>a</sub>) reported that slightly less than two third (63.50 per cent) of the tribal farmers were found in the middle age group followed by old age group (21.50 per cent) and young age group (15.00 per cent).

Anonymous (2010) reported that slightly less than two fifth (38.50 per cent) of the migrant women were in the middle age group of 25-35 years followed by

29.40 per cent of the migrant women who were found in the age group of 18 to 25 years. Further, 18.60 per cent, 12.80 per cent and 07.00 per cent of the migrant women were found in the age group of 35-45 years, less than 18 years and 45-55 years, respectively.

Gimba and Mustapha (2012) studied that more than two fifth (44 per cent) of the respondents were in the age group of 21-30 years followed by 33 per cent and 23 per cent of the respondents who were in the age group of 31-40 years and above 40 years, respectively.

Patel (2013) indicated that nearly half (46.66 per cent) of the tribal farmers belonged to middle age group, followed by old age (32.50 per cent) and young age (20.84 per cent) group.

Chakraborty (2014) observed that two third (66.00 per cent) of the migrant respondents were from the age group of 26 to 35 years followed by 45.00 per cent, 15.00 per cent and 12.00 per cent of them who were from the age group of 36 to 45, 16 to 25 and 56 to 65 years, respectively.

### **2.1.2 Education**

Patel (1995<sub>b</sub>) found that slightly more than half (52.22 per cent) of tribal farmers were illiterate.

Patel (2005<sub>a</sub>) indicated that more than two fifth (44.00 per cent) of tribal farmers were illiterate, whereas 25.00 per cent of tribal farmers had primary and 25.00 per cent of tribal farmers had secondary level of education. Only 06.00 per cent of tribal farmers had higher secondary level of education.

Anonymous (2010) reported that slightly less than one third (30.20 per cent) of the migrant women were illiterate followed by 23.60 per cent and 21.80 per cent of the migrant women having primary and middle level of education, respectively.

Gimba and Mustapha (2012) reported that 18.00 per cent of the respondents had been to primary school and 40.00 per cent attended secondary school, while 20.00 per cent of them attended tertiary institutions like universities and Polytechnics/colleges of education.

Patel (2013) reported that nearly two-fifth (37.50 per cent) of the tribal farmers were found illiterate, followed by 23.34 per cent and 14.16 per cent of them who had secondary and primary level of education, respectively. Rest 10.00 per cent of tribal farmers had graduate and above level of education.

Rajan (2013) reported that slightly less than half (48.25 per cent) of the migrants were found illiterate, followed by 31.24 per cent and 12.69 per cent of them who had below metric and below graduate level of education, respectively.

Chandrasekhar *et al.* (2014) reported that among the short-term migrants, 40 per cent were illiterate while 14 per cent did not complete primary education and 17 per cent completed primary education. Thus, 71 per cent of the short-term migrants had low level of educational attainment.

### **2.1.3 Amenities Available at House**

Anonymous (2003) reported that there was a marked improvement in the quality and quantity of civic amenities such as water, electricity, latrines, bathrooms, proper ventilation, etc available to tribal women and girls after their migration to big cities.

As reported by Deka (2011), 8 out of 12 selected settlements constituting 67 percent of families had road facility, while electricity was available to 65 percent of families. Health care centre facility was available at all the selected settlements. It is very clear that basic need of drinking water was available to all, in which 79 percent had the well water, 19 percent had water facility through water tap and 2 percent collected drinking water from hand pump. Ration card was possessed by 70 percent while more than 50 percent were facilitated with voter card and tribal ID card.

Padmavathi and Saradha (2014) observed that half of the families had tiled house and 44 percent had RCC/concrete house. Patta land was possessed by 13 percent of the tribal families. Investigation of various housing characteristics of Santhals suggested that majority of them (97 per cent) owned single storied kaccha house (built up of straw and mud, instead of cement and bricks). Only few were found to have pakka single storied house (2.2 per cent) or pakka-double storied house (0.8 per cent). Most of the houses had a room and kitchen (79 per cent), however in absence of a separate kitchen, they used the space outside their living room (14.7 per cent) or a corner inside their living room (6.3 per cent) for cooking purposes.

#### **2.1.4 Perception About Migration**

As reported by Anonymous (2003), majority of tribal women perceived change in food habits (78.00 per cent), pattern of clothing, (80.00 per cent), standard of living (73.00 per cent), social behaviour (63.00 per cent) and cultural life (62.00 per cent) after their migration to cities.

As observed by Anonymous (2010), more than 85 per cent of the tribal families were reported to have a change in their life style because of the migration of the tribal women. About 36 per cent of the families reported change in the language like picking up another language or change in the style of their own language, while 18 per cent of them reported change in dressing style of the migrant women. Further, 11 per cent, 9 per cent and 4 per cent of the tribal families reported change in food habits, cleanliness and health care behavior, respectively because of the migration of tribal women.

Hlawndo *et al.* (2015) reported that majority of the migrants perceived that they improved their livelihood condition to a reasonable extent. They earned more money, got better employment, improved their food and nutrition, assets, standard of living and had better access to health and educational facilities.

#### **2.1.5 Training Received**

Shinde (2011) revealed that 44.16 per cent cotton growers received only one training, whereas, 31.67 per cent, 14.17 per cent and 10.00 per cent of them received two, three and more than three trainings, respectively.

Patel (2013) revealed that more than half (56.67 per cent) of the tribal farmers were trained, while the rest (43.33 per cent) were found untrained.

As reported by Anonymous (2015) in a nationwide survey in regards with status of education and vocational training in India only 08.83 per cent of the persons in the age group of 15-59 years were found to have some sort of vocational training.

#### **2.1.6 Size of Family**

Ghosh (2004) pointed out that nearly half of the tribal farm women had 6 to 10 members in their family.

Zala (2005) studied that 61.25 per cent of tribal and 56.25 per cent non-tribal neem tree owner farmwomen had 5 to 8 members in their family.

Patel (2006) reported that majority (87.50 per cent) of the respondents belonged to family having more than 5 members, while 12.50 per cent of them were from small family (up to 5 members).

Anonymous (2010) found that less than one half (45.70 per cent) of the respondents had 6 to 9 members in their family followed 33.40 per cent of the respondents who had up to 5 members in their family. Only 20.90 per cent of the respondents had above 9 members in their family.

Padmavathi and Saradha (2014) reported that slightly more than half (51.00 per cent) of the respondents had 4-6 members in their families, while one fourth of them had up to 3 members in their family.

### **2.1.7 Type of Family**

Nayak (1993) revealed that majority of the tribal paddy growers (60.00 per cent) belonged to joint family while only 40.00 per cent had nuclear family.

Zala (2005) studied that majority of the neem tree owner tribal (66.25 per cent) and non-tribal (60.00 per cent) farmwomen had joint type of family.

Patel (2006) reported that majority (80.00 per cent) of the tribal farmwomen belonged to joint family.

Padmavathi and Saradha (2014) reported that majority (89.00 per cent) respondent belonged to nuclear family and rest 11.00 per cent of the respondents had joint family.

### **2.1.8 Social Participation**

More (2004) indicated that majority (66.67 per cent) of the tribal farmers had low social participation in various social organizations working in study area.

Patel (2005<sub>a</sub>) reported that majority (63.50 per cent) of the tribal farmers had high level of organizational participation, while 36.50 per cent had low level of organizational participation.

Patel (2013) reported that nearly two-fifth (65.83 per cent) of the tribal farmers had membership in one or two-organizations whereas, 26.67 per cent of them had no membership in any organization. A few (07.50 per cent) of them were found to be position holders in the organization.

Rathwa (2013) stated that more than two fifth of tomato growers had membership in one organization, followed by no membership (27.50 per cent), whereas less than one fifth (18.33 per cent) of them had membership in more than one organizations and only 08.34 per cent of the tomato growers were holding position in organization.

Patel (2015) reported that more than half (55.00 per cent) of the livestock owners had membership in one organization, followed 30.00 per cent of them who had membership in more than one organizations. Only 15.00 per cent of them were found position holders.

### **2.1.9 Mass Media Exposure**

Temkar (2000) found that slightly more than two fifth (44.16 per cent) of the respondents had medium level of mass media exposure.

Darandale (2010) reported that more than 70.84 per cent of tribal maize growers had medium level of exposure to mass media, while 16.66 per cent and 12.50 per cent had high and low exposure to mass media, respectively.

Oyeyinka *et al.* (2011) reported that slightly more than half (53.00 per cent) of the respondents has no awareness about the different source of information while, 47.00 per cent of the respondents were aware about different source of information.

Patel (2013) concluded that one-third (33.33 per cent) of tribal farmers had medium level of mass media exposure followed by 23.34 per cent, 17.50 per cent, 13.33 per cent and 12.50 per cent of them who were found with very high, low, high and very low level of mass media exposure, respectively.

Patel (2015) observed that exactly one third (33.33 per cent) of the livestock owners had medium level of mass media exposure followed by 23.33 per cent, 18.34 per cent, 13.33 per cent and 11.67 per cent of them who had very high, low, very low and high level of mass media exposure, respectively.

### **2.1.10 Land Holding**

Patel (2005<sub>a</sub>) indicated that slightly more than half (52.00 per cent) of the tribal farmers were found to have small size of land holding, followed by marginal

(40.00 per cent) size of land holding. Only 8.00 per cent of the tribal farmers were found in the category of medium size of land holding.

Patel (2013) reported that slightly more than half (52.50 per cent) of the tribal farmers had small size of land holding, followed by 40.00 per cent with marginal land holding and only 7.50 per cent with medium size of land holding. None of tribal farmers had large size of land holding.

Chakraborty (2014) reported that slightly less than three-fourth of the migrants (74.00 per cent) were from the families with land holding less than 5 bigha, while 18.00 per cent of the migrants came from the families with land holding between 5 to 10 bigha. The rest 8.00 per cent of the migrants were from the families with land holding above 10 bigha.

Rathwa (2013) reported that more than half (52.00 per cent) of the tomato growers has marginal land holding, followed by 40.00 per cent with small land holding and 07.50 per cent with medium size of land holding. None of them had big land holding.

Patel (2015) reported that exactly two fifth (40.00 per cent) of the livestock owners possessed small size of land holding, whereas 31.67 per cent and 15.00 per cent of them possessed marginal and large size of land holding, respectively. Only 13.33 per cent of them possessed medium size of land holding.

### **2.1.11 Annual Income**

Ghosh (2004) reported that two-third (67.00 per cent) of the tribal farm women were found with low level of annual income followed by 23.00 per cent and 10.00 per cent with medium and high level of annual income, respectively.

More (2004) reported that nearly one third (30.33 per cent) of the tribal farmers had annual income up to Rs. 10,000/- while 40.67 per cent had annual income in between Rs. 30,000 to Rs. 40,000/-.

Patel (2013) reported that slightly less than three-fifth (58.83 per cent) of the tribal farmers had very low level of annual income followed by 29.17 per cent and 12.50 per cent of them with low and medium annual income, respectively. Only 2.50 per cent of the tribal farmers had high to very high level of annual income.

Chakraborty (2014) observed that more than two-third (69.00 per cent) of the respondents had up to Rs. 5000/- annual income followed by 24.00 per cent who had annual income between Rs. 5000 to Rs. 10000/-. Only 7.00 per cent of them had more than Rs. 10000/- of annual family income.

Patel (2015) reported that less than two fifth (36.67 per cent) of the livestock owners had annual income ranging from Rs. 1,00,001 to Rs. 1,50,00, followed by 23.44 per cent with annual income up to Rs. 50,000. Further, 16.66 per cent of the respondents had annual income ranging from Rs. 50,001 to Rs. 1,00,00 while 23.33 per cent of them had annual income above Rs. 1,50,000.

### **2.1.12 Occupation**

Patel (2005<sub>a</sub>) reported that great majority (85.50 per cent) of the tribal farmers were dependent on farming and animal husbandry, while only 10.00 per cent and 4.50 per cent of them had service and business, respectively along with farming and animal husbandry.

Singh (2007) indicated that majority (60.00 per cent) of the tobacco growers were found to have farming and animal husbandry as their occupation, while 27.50 per cent of them were dependent on farming along with animal husbandry and farm laboring. Only 12.50 per cent of them were observed to have only farming as their occupation.

Kumar *et al.* (2008) concluded that majority (60.95 per cent) of the paddy growers were engaged exclusively in agriculture occupation, while 20.42 per cent of them were found to have agriculture along with allied occupations.

Anonymous (2010) reported that less than half (46.00 per cent) of the respondents were engaged as wage labourer followed by 37.60 per cent who had farming as the primary occupation.

### **2.1.13 Herd Size**

Temkar (2000) revealed that 43.33 per cent of the respondents had medium level herd size, followed by 40.00 per cent and 16.67 per cent of them who had small and large herd size, respectively.

Vasava (2005) stated that slightly less than three fourth (73.33 per cent) of the respondents had no animals, followed by 20.00 per cent and 06.67 per cent of them who had up to three animals and more than three animals, respectively.

Oladoja and Olusanya (2009) found that slightly less than half (47.90 per cent) of the farmers had medium size of herd, followed by 33.00 per cent and 19.10 per cent farmers with small and large here size, respectively.

Darandale (2010) reported that more than half (58.83 per cent) of tribal maize growers had 3-4 milch animals, whereas 33.44 per cent and 10.83 per cent of them had above 4 milch animals and up to 2 milch animals, respectively.

Patel (2015) observed that more than half (55.00 per cent) of the livestock owners had 3 animals, followed by 23.33 per cent of the livestock owners who had 4 to 6 animals and 13.34 per cent of the livestock owners had 7 to 10 animals. Only 8.33 per cent of the livestock owners had more than 10 animals.

#### **2.1.14 Economic Motivation**

Vasava (2005) reported that two fifth of the pigeon pea growers (40.00 per cent) had medium level of economic motivation.

Sajjan (2006) reported that slightly less than half (46.6 per cent) of the respondents had medium level of economic motivation, followed by 33.33 per cent and 20.00 per cent of them with high level and low level of economic motivation, respectively.

As reported by Bhosale (2010), more than half (55.84 per cent) of the rural youth were found to have medium economic motivation, whereas 24.16 per cent and 20.00 per cent of the rural youth had high and low economic motivation, respectively.

Rathwa (2013) stated that slightly less than two third (65.00 percent) of the tomato growers had medium economic motivation, while 17.50 per cent, 16.67 per cent and 00.83 per cent of them were reported to have high, low and very high economic motivation, respectively. None of them had very low level of economic motivation.

Patel (2015) studied that nearly two fifth (38.33 per cent) of the livestock owners had medium economic motivation, whereas 26.66 per cent and 13.34 per cent

of them were found to have low and very high economic motivation, respectively. Further, 11.67 per cent and 10.00 per cent of them had high and very low economic motivation, respectively.

## **2.2 DEPENDENT VARIABLE**

### **2.2.1 Migration Behaviour of Tribal Families**

Patel (1995<sub>a</sub>) reported that out of total 270 respondents, migration took place among 162 (60 per cents) tribal families. The average person migrated per households was 2.27. Out of total migrated persons, 70.65 per cent were engaged in agricultural labour work, while 29.35 per cent of them were found to have engaged in non-agricultural work.

Shah (1998) concluded that more than half (54.6 per cent) of tribal families were observed with migration habit whereas, 45.33 per cent of the tribal families had no migration habit.

Patel (1998) indicated that slightly more than half (51.76 per cent) of the tribal farmwomen migrated with their family in search of agricultural and non-agricultural labour work.

Patel (2005<sub>b</sub>) revealed that migration took place among more than half (53.00 per cent) of the respondents' families. The average migrated person per household was 1.77 and the average period of migration per household was 2.54 months.

Kareemulla, *et al.* (2009) observed that the NAREGA brought down the migration levels from about 27 per cent to 7 per cent in the sample villages because of increase in availability of work.

Kumar and Haorei (2010) reported that out of 846 respondents, 513 respondents (60.60 per cent) migrated for work, out of whom 66 respondents (12.80 per cent) stopped migration after the implementation of NAREGA.

Reddy *et al.* (2010) pointed out that distress migration was reduced as workers could find employment within the village or in surrounding areas, especially during the lean agricultural season.

## **2.3 FACTORS RESPONSIBLE FOR MIGRATION AMONG TRIBAL FAMILIES**

Anonymous (2010) reported that the tribal women when asked about the

reasons for their migration to the cities replied that unemployment was the major reason (49 per cent), followed by poverty (41 per cent). A very few tribal women responded that they came to city to experience the urban life (4 per cent), to live with fiancée (2 per cent), for fun (1.7 per cent) and because of exploitation in their village (1.4 per cent). About 89 per cent of the tribal women who migrated to Delhi told that unemployment was the main reason whereas 77 per cent of the tribal women in Mumbai replied that poverty was the main criteria for their migration.

As reported by Gimba and Mustapha (2012), the major causes of rural-urban migration were: search for better wages, education, political and social stability, better technologies, employment and business opportunities. Other causes were poverty, unemployment, crop failures and famine, and inadequate social amenities and facilities in the rural areas.

Gnana Viji (2013) reported that recognition, employment problems, improvement in career, family, family Involvement, marriage, compulsion, facilities available, financial Problems and adverse situations were the ten latent factors responsible for migration.

As observed by Vinayakam and Sekar (2013), the major reason reported by 74 per cent of migrated respondents was search of job. Other factors responsible for migration were desire for better education, family problem, parental transfer, individual transfer etc.

Bhagat (2014) reported that search of employment was the main reason for migration in case of male while, marriage was the main reason for migration for female. He also reported other reasons like business; acquisition of own house or apartment; housing problems; health care; post-retirement; natural disaster, and social/political problems for migration.

Usha rani (2015) observed that the reason for migration in case of males and females varied significantly. Work or employment among males and marriage among females were the main reasons for migration. She also reported that the majority of internal migration in India was from rural to urban areas, the reasons for which were scarcity of cultivated land, low agricultural productivity, concentration of rural economy mostly on agriculture, need of money for repaying debts, covering deficits created by losses in agriculture. Some of the other reasons for migration of people were unavailability of enough job opportunities, lack of better educational

opportunities, poor medical care, loss of wealth, pollution, poor housing, natural disasters like famine/drought, etc.

#### **2.4 EMPLOYMENT OPPORTUNITIES OBTAINED BY TRIBAL FAMILIES THROUGH MIGRATION**

Anonymous (2010) reported that about 60 per cent of the migrant women worked as domestic servant maids followed by wage labourer (34 per cent). More than three fourth of tribal women in Chhattisgarh, Jharkhand and Orissa states worked as domestic servant maids whereas M.P state tribal women were engaged in wage employment. In case of different cities, the tribal women engaged as servant maids especially in Delhi were 65 per cent followed by 51 per cent in Mumbai and 42 per cent in Kolkata. Casual labour, construction labour and private jobs were other professions reported by these tribal women to the tune of 28 per cent, 9 per cent and 5 per cent, respectively.

#### **2.5 RELATIONSHIP BETWEEN PROFILE AND MIGRATION OF TRIBAL FAMILIES**

Walsh *et al.* (1973) showed that there existed high interdependence between migration rate and population-land ratios.

Barnum *et al.* (1975) found a positive relationship between levels of education and propensity to migrate. Connell *et al.* (1976) also observed the similar results.

Todaro (1976) revealed that where income levels were considered as separate variables, migration was positively related to urban and negatively related to rural wages. Where rural-urban differentials were taken together as a single variable, there was a positive correlation between migration rate and the size of differentials.

Anonymous (1993) indicated the possibility of a relationship (negative) between the land possessed and migration of the household.

As reported by Deshingkar and start (2003), the regression analysis for MP state showed significant negative relationship between land owned and migration. In AP, the opposite was seen but the results were not significant. They also reported that with regards to livestock, the results for AP showed a significant negative relationship, i.e. those with more animals were less likely to migrate. In MP, having more animals significantly increased the likelihood of migrating. The results for agricultural assets were also different for the two States. In AP, more assets increased

the chance of migration but significance levels were not high. In MP, the relationship was negative and the results were significant, meaning that those with more assets were less likely to migrate.

Chakraborty (2014) reported negative and insignificant relationship between education and migration. He also revealed that there existed direct and significant relationship between age of head of household and decision of migration. Further, per capita family income showed significant negative result when intra-district migration was compared with inter-district migration.

Coffey *et al.* (2015) reported that adults with less than primary education (including illiterate) were significantly more likely to migrate than those with higher levels of education.

### **III. RESEARCH METHODOLOGY**

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This chapter deals with the research design, tools and techniques employed for scientific investigation. It entails the methods and procedures used for measuring dependent and independent variables. It also concerns with the selection of proper sampling techniques for investigation as well as devices used for analysis of data. The methodology adopted for the study is discussed under the following heads.

- 3.1 Location of Research Area
- 3.2 Sampling technique
- 3.3 Research design
- 3.4 Selection of the variables
- 3.5 Measurement of the variables
- 3.6 Factors responsible for migration among tribal families
- 3.7 Employment opportunities obtained by tribal families through migration
- 3.8 Construction of interview schedule
- 3.9 Method of data collection
- 3.10 Statistical framework for analysis of data
- 3.11 Conceptual model

#### **3.1 LOCATION OF THE STUDY**

The present investigation was carried out in Dahod district of Gujarat State because of following reasons:

1. Dahod district falls under the jurisdiction of AAU, Anand in Gujarat State.
2. Dahod district is tribal dominated and no any study in this district has so far been conducted on specific aspect of migration behavior of tribal families.
3. Employment problem in tribal area in general is more prominent and people migrate towards city area in search of employment. Thus the study of migration behavior holds much importance in such area.

### 3.2 SAMPLING TECHNIQUE

Dahod district comprises of seven talukas out of which, two talukas viz; Jhalod and Limkheda were purposively selected for the study. From each selected taluka, six villages were selected randomly, out of which 60 respondent tribal families were selected with proportionate random sampling. Thus, total 120 respondent tribal families were selected for the study. Village wise distribution of the respondents selected and interviewed has been given in Table 1.

**Table 1: Selected villages from selected talukas in Dahod district**

<b>Name of taluka</b>	<b>Name of village</b>	<b>Total number of tribal families in village</b>	<b>Tribal families selected and interviewed</b>
<b>Jhalod</b>	Amba	962	09
	Chakaliya	1462	13
	Garadu	1285	12
	Kadval	1209	11
	Karath	1739	15
	Limdi	2611	24
<b>Limkheda</b>	Agara	496	04
	Chidiya	486	04
	Chilakota	1239	12
	Khirkhai	406	04
	Manli	608	06
	Rai	642	06
<b>Total</b>	<b>12 villages</b>	<b>13,271</b>	<b>120</b>

### **3.3 RESEARCH DESIGN**

As stated by Kerlinger (1976), ex-post-facto research design is worthy to be applied when the independent variables have already acted upon. Keeping in view the objectives of the study, ex-post-facto research design was applied. Ex-post-facto research design is a systematic experimental inquiry in which the researcher does not have any direct control on independent variables.

### **3.4 SELECTION OF THE VARIABLES**

The selection of variables included in the study was made on the basis of extensive review of literature on the subject and in consultation with major guide. The selected variables are as under:

#### **3.4.1 Dependent Variable**

- I) Migration behaviour of the tribal families

#### **3.4.2 Independent Variables**

##### **I) Personal variables**

- 1. Age
- 2. Education
- 3. Amenities available at house
- 4. Perception about migration
- 5. Training received

##### **II) Social variables**

- 6. Size of family
- 7. Type of family
- 8. Social participation
- 9. Mass media exposure

##### **III) Economical variables**

- 10. Land holding
- 11. Annual income

12. Occupation

13. Herd size

**IV) Psychological variables**

14. Economic motivation

**3.5 MEASUREMENT OF THE VARIABLES**

**3.5.1 Measurement of Dependent Variable**

**Migration behaviour of the tribal families**

Migration is the movement of people from one geographical location to another, involving permanent or temporary settlement. Such movement of people may be studied in terms of different components like number of members from family who migrate, frequency of migration in a year, place of migration, duration of migration, and type of migration. Holistic study of all these components depicts migration behaviour of the tribal households. In this investigation, measurement of the said components of migration behaviour was done using frequency and percentage, and then respondent tribal families were categorized accordingly.

Further, migration index was calculated to measure the extent (magnitude) of migration of tribal families, which mainly depends on two factors i.e., number of family members who migrate and duration for which they migrate. Accordingly, following formula was conceived to calculate the migration index. It should be noted here that only adult members were considered in total number of members in a family; children were ignored.

$$\text{Migration Index} = \frac{\text{Average days of migration of total migrants in a family}}{365} \times \frac{\text{No. of migrants}}{\text{Total no. of member in a family}} \times 100$$

For example, there are total 6 members in a family (ignoring children) out of whom 3 members migrate during the year and their average days of migration in a year are 60. Now the Migration Index of this family is:

$$\text{Migration Index} = \frac{60}{365} \times \frac{3}{6} \times 100 = 8.22$$

After calculating the migration index the respondents were categorised in five categories as below.

No.	Category	Score Range
1	Very low	Up to 20
2	Low	21 to 40
3	Medium	41 to 60
4	High	61 to 80
5	Very high	81 to 100

### 3.5.2 Measurement of Independent Variables

#### 3.5.2.1 Age

Age is one of the factors which influences migration behaviour of the tribal people. It is operationally defined as a chronological age of respondents in completed years at the time of interview. For studying this variable, the age of only the head of household was considered. On the basis of age, the respondents were classified into following standard categories:

No.	Age	Years
1	Young age group	Up to 35
2	Middle age group	36 to 50
3	Old age group	Above 50

### 3.5.2.2 Education

Education is the process of the producing desirable changes in the behaviour of the people. In context of this study, education is an important aspect on the part of tribal families which affects their migration behaviour.

Education was operationalized here as the number of years of formal education attained by the head of the household of the tribal families and on the basis they were classified into five categories. The scoring system followed was as under.

No.	Education qualification	Score
1.	Illiterate	0
2.	Primary education (1st to 7th standard)	1
3.	Secondary education (8th to 10th standard)	2
4.	Higher secondary education (11th to 12th standard)	3
5.	College education (above 12th standard)	4

### 3.5.2.3 Amenities available at house

It refers to the basic facilities available at house of the tribal families which may also affect their migration behaviour. The scoring technique adopted and classification of the respondent tribal families made as per different amenities available at their house were as under.

No.	Items	Score
<b>I</b>	<b>Type of house</b>	
<b>A</b>	Kachha house with straw roof	1
<b>B</b>	Kachha house with naliya/patara	2
<b>C</b>	Pakka house with naliya/patara	3

<b>D</b>	Pakka house with RCC	4
<b>II</b>	<b>Amenities available at house</b>	
A	Drinking water facility	1
B	Light connection	1
C	Separate kitchen	1
D	Separate toilet	1
E	Separate bathroom	1
F	Cattle shed	1
<b>III</b>	<b>Electronic gadgets available at house</b>	
A	Radio	1
B	Television	1
C	Refrigerator	1
D	V.C.R	1
E	Electric fan	1
<b>IV</b>	<b>Vehicle available</b>	
A	Cycle	1
B	Scooter/Motor cycle	2
C	Car	3

After calculating the total score for the individual house hold, the respondent tribal families were categorized into three groups on the basis of mean and

standard deviation viz., low (below Mean – 0.5 S.D.), medium (in between Mean ± 0.5 S.D.) and high (above Mean + 0.5 S.D.) level of amenities.

### 3.5.2.4 Perception about migration

Perception here is conceptualized as the way how the migration is conceived by the respondent. Perception of the respondents was measured with the help of structured schedule. The responses of the respondents were obtained in terms of their agreement or disagreement to each statement on five-point continuum ranging from strongly agree to strongly disagree. Statements with serial number 1, 2, 3 and 6 were positive while statements with serial number 4 and 5 were negative. The positive and negative statements were scored as below:

Statement	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
Positive	5	4	3	2	1
Negative	1	2	3	4	5

The possible score that could be obtained by the respondent ranged from 6 to 30. The respondents on the basis of their obtained score were arbitrarily grouped into the following five categories:

No.	Category	Score Range
1	Very low	6 to 10
2	Low	11 to 15
3	Medium	16 to 20
4	High	21 to 25
5	Very high	26 to 30

**3.5.2.5 Training received**

It means any type of training related to skill development that a respondent has undergone. The responses of respondents were obtained in 'yes' or 'no'. The scoring technique and classification were as under.

No.	Training received	Score
1	Yes	2
2	No	1

**3.5.2.6 Size of family**

Size of family denotes total number of individuals of the both sexes living together in household of the tribal families. Based on this, the respondents were classified into three categories with scoring as shown under.

No.	Size of family	Score
1	Up to 4 members	1
2	From 5 to 8 members	2
3	More than 8 members	3

**3.5.2.7 Type of family**

It refers to either nuclear or joint type of family. Nuclear type consists of husband, wife and children while joint type consist of more than one primary family on the basis of close blood relation and common residence. The respondents on the basis of their type of family were classified into two categories with scoring as under.

No.	Type of family	Score
1	Joint	2
2	Nuclear	1

**3.5.2.8 Social participation**

Social participation in the present study was operationalized as the degree to which an individual was associated with different formal social organizations. The information in regards with participation of the head of the household of the tribal families in the social organizations as a member or as a position holder was collected and on that basis, they were categorized into different levels of social participation as under.

No.	Social participation	Score
1	No membership	0
2	Membership in one organization	1
3	Membership in more than one organizations	2
4	Membership along with position holding in organization	3

**3.5.2.9 Mass media exposure**

This refers to the frequency of use of different mass media i.e. radio, television, newspaper, internet, mobile phone, agricultural fair, agricultural exhibition, farm magazines/ leaflet, *etc* by the respondent. The responses for each of these mass media were collected from the respondents and were assigned score of 2, 1 and 0 for their 'regular', 'occasional' or 'never' use, respectively. As per structured schedule, maximum score one could obtain was 18 and minimum was 0. On the basis of arbitrary method, the respondents were then grouped into the following five categories:

No.	Level of mass media exposure	Score
1	Very Low	0 to 3
2	Low	4 to 7
3	Medium	8 to 10
4	High	11 to 14
5	Very High	15 to 18

### 3.5.2.10 Land holding

The actual land possessed by the respondents in hectares was considered as such for measuring this variable and on the basis of their land holding, respondents were classified into five categories as given below:

No.	Land holding
1	Landless (00.00 ha)
2	Marginal (Up to 1.00 ha)
3	Small (1.01 to 2.00 ha)
4	Medium (2.01 to 4.00 ha)
5	Large (Above 4.00 ha)

### 3.5.2.11 Annual income

It refers to the total income obtained annually by the respondent tribal family from agriculture and other sources. Based on their annual income, the respondent tribal families were categorized as under. Further, for correlation study, annual income as such was used.

No.	Annual income	Score
1	Very Low (Up to Rs. 50,000)	1
2	Low (Rs. 50,001 to Rs. 1,00,000)	2
3	Medium (Rs. 1,00,001 to Rs. 1,50,000)	3
4	High (Rs. 1,50,001 to Rs. 2,00,000)	4
5	Very High (Above Rs. 2,00,000)	5

### 3.5.2.12 Occupation

Occupation refers to engagement of tribal families in different activities as a source of income for their livelihood. The data in this regards were sought from respondents and on that basis; they were grouped into different occupational categories and assigned score as shown below.

No.	Occupation	Score
1	Only Farming	1
2	Only Labour work	1
3	Farming + Animal Husbandry	2
4	Farming + Agriculture Labour	2
5	Farming + Other Labour	2
6	Farming + Animal Husbandry + Agriculture Labour	3
7	Farming + Animal Husbandry + Other Labour	3

**3.5.2.13 Herd size**

It refers to actual number of animals possessed by the respondent tribal families. One score was assigned for possession of each animal and then total score was obtained by summing all scores. The respondents were then classified as under.

No.	Categories
1	No animal
2	Up to 2 animals
3	3 to 4 animals
4	5 to 6 animals
5	Above 6 animals

**3.5.2.14 Economic motivation**

Economic motivation of tribal families was measured with the help of scale developed by Supe (1969) with due modifications. The responses of the respondents were obtained against each item in terms of their agreement or disagreement to the statement on five-point continuum ranging from strongly agree to strongly disagree. Statements with serial number 1, 2, 3 and 4 were positive, while statements 5 and 6 were negative. The positive and negative statements were scored as below:

Statement	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
Positive	5	4	3	2	1
Negative	1	2	3	4	5

Maximum score one could obtain was 30 and minimum was 6. On the basis of obtained score, the respondents were arbitrarily grouped into following five categories:

No.	Category	Score Range
1	Very low	6 to 10
2	Low	11 to 15
3	Medium	16 to 20
4	High	21 to 25
5	Very high	26 to 30

### **3.6 FACTORS RESPONSIBLE FOR MIGRATION AMONG TRIBAL FAMILIES**

The factors responsible for migration can be grouped in to two:

1. Push factors which are prevalent at the native place and compel the tribal people to leave the native and migrate
2. Pull factors which attract or pull the tribal people towards other places and encourage them to migrate.

For studying these factors, the list was provided to the respondents and they were asked to indicate the factor/s responsible for their migration by putting a tick mark. The frequencies were then obtained and rank was assigned from highest to lowest.

### **3.7 EMPLOYMENT OPPORTUNITIES OBTAINED BY TRIBAL FAMILIES THROUGH MIGRATION**

The tribal people get different work opportunities through migration. The respondents were asked open ended question as to which type of employment/work opportunity/opportunities they got through migration. Their responses were properly clubbed and frequencies were then calculated to interpret the results.

### **3.8 CONSTRUCTION OF INTERVIEW SCHEDULE**

The interview schedule was constructed in such a manner that all pertinent aspects in light of the objectives got covered. It is given in Appendix. In preparing the interview schedule, the investigator used available literature and also secured guidance from major guide, advisory committee, staff of department of Extension Education and other experts of Anand Agricultural University. The interview schedule was pre-tested with 25 non-sampled respondents and necessary modifications were incorporated in the final draft of an instrument for data collection.

### **3.9 METHOD OF DATA COLLECTION**

The data were collected through the personal interview by interview schedule. The respondents were interviewed personally at their home or work place. Before conducting an interview, the aim and objectives of the study were explained to them in order to get whole hearted response and correct information from them.

### **3.10 STATISTICAL FRAMEWORK FOR ANALYSIS OF DATA**

The data collected through interview schedule from respondents were processed and tabulated. The following statistical tools were used for interpretation of data.

#### **3.10.1 Frequency and Percentage**

The simple comparison was made on the basis of percentage.

#### **3.10.2 Arithmetic Mean**

It was obtained by total number of score divided by the total number of respondents. The mean was calculated by using formula:

$$\bar{X} = \frac{\sum Xi}{n}$$

Where,

$\bar{X}$  = Mean

n = Total number of respondents

$X_i$  = Value of the  $i^{\text{th}}$  respondent

#### **3.10.3 Standard Deviation:**

It was obtained by square root of the average of square deviation from mean. The formula is as under:

$$S.D. = \sqrt{\frac{\sum(X_i - \bar{X})^2}{n - 1}}$$

Where, S.D. = standard deviation

X<sub>i</sub>= Individual score

$\bar{X}$  = Mean of the sample

n= Total number of respondents

### 3.10.4 Coefficient of Correlation

This technique was used to find out the relationship between independent and dependent variables by employing following formula:

$$r = \frac{\sum(XY) - \frac{\sum X \sum Y}{n}}{\sqrt{\left[\sum X^2 - \frac{(\sum X)^2}{n}\right] \left[\sum Y^2 - \frac{(\sum Y)^2}{n}\right]}}$$

Where,

r = coefficient of correlation

n = Total number of respondents

x = independent variables

= Summation

y = dependent variables

### 3.11 CONCEPTUAL MODEL

The conceptual frame work given in the preceding section may be presented paradigmatically through the model shown in Figure 1 which is tentative and generalized. The final form of such model has been suggested at the end of this dissertation in the chapter "summary and conclusion".

**KEY TO FIGURE**

**INDEPENDENT VARIABLES**

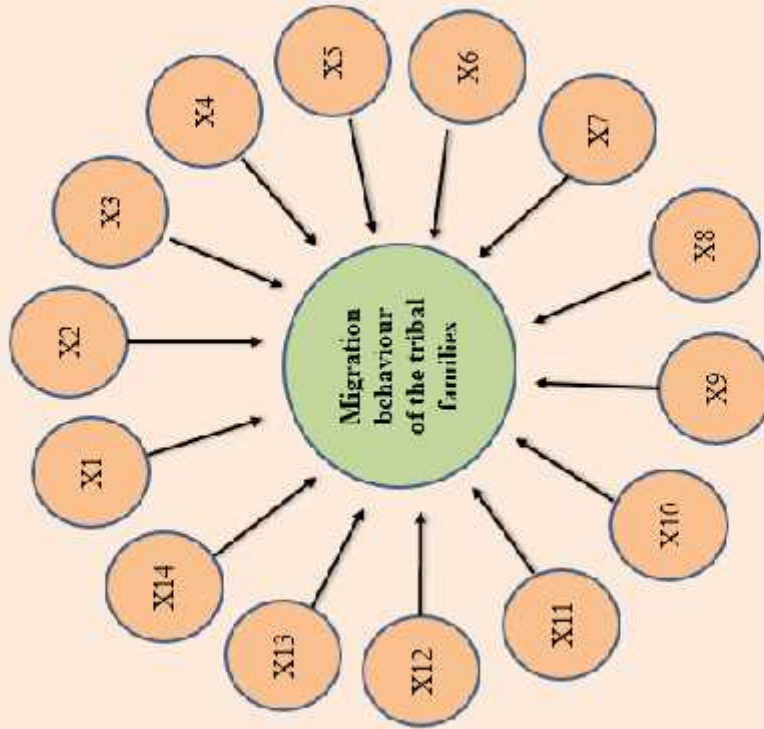
- X1: Age
- X2: Education
- X3: Amenities available at house
- X4: Perception about migration
- X5: Training received
- X6: Size of family
- X7: Type of family
- X8: Social participation
- X9: Mass media exposure
- X10: Land holding
- X11: Annual income
- X12: Occupation
- X13: Herd size
- X14: Economic motivation

**DEPENDENT VARIABLE**

Migration behaviour of the tribal families

**Legend**

Cause → Effect  
(No effect on dependent variable)



**Figure 1 : Conceptual model showing no relationship between dependent and independent variables**

## **IV. RESULTS AND DISCUSSION**

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This chapter presents the objective wise findings of the study. Keeping in view the objectives of the study, information was collected from the respondents, classified, tabulated, analyzed and presented in a systematic way as per following heads:

- 4.1 Profile of the tribal families
- 4.2 Migration behaviour of tribal families
- 4.3 Factors responsible for migration among tribal families
- 4.4 Employment opportunities obtained by tribal families through migration
- 4.5 Relationship between profile and migration of tribal families

### **4.1 PROFILE OF THE TRIBAL FAMILIES**

Identification of the profile of tribal families was one of the objectives of the present study. On the basis of review of literature, some of the important personal, social, economical, and psychological characteristics of the respondent tribal families were selected and studied. However, for certain variables like age, education, perception, training received, social participation, mass media exposure and economic motivation, the responses were received from the head of the tribal families only to avoid intricacy in receiving and interpreting the data. The findings have been tabulated, analysed and presented in following subsequent pages.

#### **4.1.1 Personal Variables**

##### **4.1.1.1 Age**

Age is an important personal characteristic of an individual which may influence his/her behaviour about a particular thing. With this consideration, age of the head of tribal families was studied as it might affect their migration behaviour. They were asked to indicate their age in completed years according to which they were grouped in to three categories as shown in Table 2.

**Table 2: Distribution of the respondents according to their age**

n=120

No.	Category	Frequency	Per cent
1	Young age group (up to 35 years)	25	20.84
2	Middle age group (between 36 to 50 years)	71	59.16
3	Old age group (above 50 years)	24	20.00
<b>Total</b>		120	100.00

The data pertaining to age of the respondent head of tribal families mentioned in Table 2 indicate that nearly three-fifth (59.16 per cent) of the respondents belonged to middle age group, followed by young age and old age with 20.84 and 20.00 per cent, respectively.

It can thus be inferred that majority of the respondents belonged to middle age group. As stated earlier, the data in regards with age were obtained from the head of the tribal families and hence, it is quite obvious that heads of the family are more likely to belong to middle or old age group.

This finding is in line with the findings reported by Patel (1995<sub>b</sub>), Patel (2005<sub>a</sub>) and Patel (2013).

#### **4.1.1.2 Education**

Generally, it is believed that formal education opens the mental horizon of an individual, helps in promoting analytical thinking and affects his/her behaviour towards subjects or objects. Considering this aspect, the formal education of head of tribal family was studied and data in this regards are presented in Table 3.

The data presented in Table 3 reveal that slightly less than one-third (30.83 per cent) of the respondents were illiterate, while 27.50, 23.34, and 15.00 per cent of them had primary, secondary and higher secondary level of education, respectively. Only 03.33 per cent of the head of tribal families were found to have graduate and above level of education.

**Table 3: Distribution of the respondents according to their educational level**

n=120

No.	Educational level	Frequency	Per cent
1	Illiterate	37	30.83
2	Primary education (1 <sup>st</sup> to 7 <sup>th</sup> std)	33	27.50
3	Secondary education (8 <sup>th</sup> to 10 <sup>th</sup> std)	28	23.34
4	Higher Secondary education (11 <sup>th</sup> to 12 <sup>th</sup> std)	18	15.00
5	Graduation and above	04	03.33
<b>Total</b>		120	100.00

At present, the importance of education is gradually being realized in tribal area also; however, the situation before some years was quite different. The awareness about education was much low coupled with insufficient schooling facilities and financial constraints in tribal area. Further for sustaining their livelihood, they are even forced today also to leave schooling. Because of these reasons, majority of the heads of tribal family who belonged to middle age and old age group, might not attain good education during their school time.

The results of the study are corroborated with the findings of Anonymous (2010) and Patel (2013).

#### **4.1.1.3 Amenities available at house**

Amenities are the basic facilities available at house of the tribal family. In this investigation, amenities in terms of type of house, basic facilities available at house, electronic gadgets and vehicle owned by the tribal families have been considered. The amenities available at their house may influence their behaviour towards migration. The data in this regard are presented in subsequent tables.

The data presented in Table 4 reveal that slightly less than two-fifth (38.34 per cent) of the respondents had kachha house with naliya/patara followed by 31.66 per cent and 25.00 per cent who had kachha house with straw roof and pakka

house with naliya/patara, respectively. Only 05.00 per cent of them had pakka house with RCC.

**Table 4: Distribution of the respondents according to their type of house**

n=120

No.	Type of house	Frequency	Per cent
1	Kachha house with straw roof	38	31.66
2	Kachha house with naliya/patara	46	38.34
3	Pakka house with naliya/patara	30	25.00
4	Pakka house with RCC	06	05.00
<b>Total</b>		120	100.00

Thus, it can be concluded that majority of the tribal families had kachha house. Because of their poor economic condition, they might not afford for pakka house.

**Table 5: Distribution of the respondents according to the facilities available at house**

n=120

No.	Facilities available at house	Frequency	Per cent
1	Drinking water facility	57	47.50
2	Electricity connection	103	85.33
3	Separate kitchen	42	35.00
4	Separate toilet	26	21.66
5	Separate bathroom	53	44.16
6	Cattle shed	88	73.33

✍.....*Results and Discussion*

It is obvious from the data presented in Table 5 that majority (85.33 per cent) of tribal families had electricity connection at their house. This is because of sincere efforts made by the state government to provide electricity in every village. Further, 73.33 per cent of the families were found to have cattle shed (of course of kachcha type) for their animals. Drinking water facility at their house itself was available to 47.50 per cent of the tribal families, while the rest had to fetch water from common water facility created at village level. Apart from this, the facility of separate bathroom, separate kitchen and separate toilet was available with 44.16 per cent, 35.00 per cent and 21.66 per cent of the tribal families, respectively.

**Table 6: Distribution of the respondents according the electronic gadgets available at house**

n=120

No.	Electronic gadgets available at house	Frequency	Per cent
1	Radio	91	75.55
2	Television	13	10.83
3	Refrigerator	00	00.00
4	V.C.R	00	00.00
5	Electric fan	87	72.50

The data presented in Table 6 show that about three-fourth of the tribal families had radio (75.55 per cent) and electric fan (72.50 per cent), while only 10.83 per cent of them had television at their house. None of them was found to have refrigerator or V.C.R.

In present era, radio might not hold importance for many people as they might have advanced electronic gadgets (like smart phone with internet facility) but it still holds importance for poor people as a means of entertainment and to some extent to receive news also. Further, it is available at much cheaper rate. Electric fan has also turned into a necessity now which is affordable by poor people and as stated earlier, majority of the tribal families had electricity connection at their house. Because of this fact, majority of them were found to possess radio and electric fan at their house.

**Table 7: Distribution of the respondents according to the vehicle possessed**

n=120

No.	Vehicle possessed	Frequency	Per cent
1	Cycle	77	64.16
2	Scooter/Motor cycle	29	24.16
3	Car	00	00.00

The data presented in Table 7 reveal that 64.16 per cent of the tribal families had cycle and 24.16 per cent of them had scooter/motor cycle available as a vehicle. None of them possessed motor car. As it was observed in the area of investigation, transport facility was less available particularly in the interior areas, where comparatively much cheaply available cycle can be a boon for the tribal people and it was essential for their mobility. Hence, majority of them were observed to possess cycle at their house.

**Table 8: Distribution of the respondents according to overall amenities available**

n=120

No.	Amenities available	Frequency	Per cent
1	Low (Up to 06.84)	26	21.67
2	Medium (06.85 to 09.90)	60	50.00
3	High (Above 09.90)	34	28.33
<b>Total</b>		120	100.00

It is clear from the data presented in Table 8 that exactly half (50.00 per cent) of the tribal families had medium level of amenities available at house followed by 28.33 per cent and 21.67 per cent who had high and low level of amenities available at their house, respectively.

The results of the study are less or more corroborated with the findings of Padmavathi and Saradha (2014).

**4.1.1.4 Perception about migration**

Perception here is conceptualized as the way how the migration was conceived by the respondent. The perception of the head of the tribal families regarding migration affect the migration behaviour of the tribal families. The data in this regard are presented in Table 9.

**Table 9: Distribution of the respondents according to their perception**

n=120

No.	Perception about migration	Frequency	Percent
1	Very Low (6 to 10)	14	11.67
2	Low (11 to 15)	20	16.67
3	Medium (16 to 20)	28	23.33
4	High (21 to 25)	54	45.00
5	Very High (26 to 30)	04	03.33
<b>Total</b>		120	100.00

The perusal of data presented in Table 9 indicate that slightly less than one half (45.00 per cent) of the respondents had high level of perception followed by 23.33 per cent, 16.67 per cent and 11.67 per cent of them who had medium, low and very low level of perception about migration., respectively. Only 03.33 per cent of the respondents had very high level of perception about migration.

It is thus inferred that majority (68.33 per cent) of the head of the tribal families had high to medium level of perception about migration. Migration of the family member/s might have helped to improve their economic condition and hence they might have cultivated more positivism towards migration.

This finding is indirectly supported by the findings of Hlawndo *et al.* (2015).

**4.1.1.5 Training received**

Training is an important component for human resource development and it has great influence on technological and behavioural change. Proper training helps in acquiring more knowledge and skills in regards with a specific aspect and shaping the attitude favourably for that. The data in respect of training received were collected from head of the tribal families and are presented in Table 10.

**Table 10: Distribution of the respondents according to training received**

n=120

No.	Training Received	Frequency	Per cent
1	Yes	15	12.50
2	No	105	87.50
<b>Total</b>		120	100.00

The data presented in Table 10 depict that great majority (87.50 per cent) of the respondents did not receive any training, while only 12.50 per cent of them received some sort of training.

It could be stated from above finding that majority of the respondents were untrained. The probable reason might be low literacy rate and little awareness among the tribal people about the training programmes conducted by government or other institutes.

This finding is in conformity with that reported by Anonymous (2015).

**4.1.2 Social Variables**

**4.1.2.1 Size of family**

The size of family is also an important social variable, which can play influential role on migration of the tribal families. Hence, the family size of the respondents was studied the data of which are presented in Table 11.

It is obvious from the data presented in Table 11 that exactly one half (50.00 per cent) of the respondents belonged to medium family followed by 30.83 per cent and 19.17 per cent of them who belonged to small and large family, respectively.

**Table 11: Distribution of the respondents according to their size of family**

n=120

No.	Category	Frequency	Per cent
1	Small (Up to 4 members)	37	30.83
2	Medium (5 to 8 members)	60	50.00
3	Large (More than 8 members)	23	19.17
<b>Total</b>		120	100.00

Thus, it can be concluded that majority of the tribal families were medium to small. Joint family system has been gradually vanishing, which is reflected in this result.

This finding is in conformity with that reported by Anonymous (2010).

#### **4.1.2.2 Type of family**

The type of family may also influence migration behaviour of the tribal families, plays an important role in migration of a tribal families. It is supposed that thought process of an individual is more likely to be affected in a joint family than in a nuclear family. It is in this respect that the type of family of the respondents was studied, the data of which are presented in Table 12.

**Table 12: Distribution of the respondents according to their type of family**

n=120

No.	Category	Frequency	Per cent
1	Joint	65	54.17
2	Nuclear	55	45.83
<b>Total</b>		120	100.00

The data presented in Table 12 show that more than one half (54.17 per cent) of the respondents belonged to joint type of family and rest 45.83 per cent of them had nuclear type of family.

It may be concluded from the above data that slightly more than half of the respondents had joint family. This shows that still there is a prevalence of joint type of family system with little bit dominance, however it has been gradually vanishing.

This finding is less or more in conformity with that reported by Nayak (1993).

**4.1.2.3 Social participation**

Social participation denotes participation of respondents in different social organizations. Those who have wider social participation are likely to have more community-orientation, knowledge and resourcefulness which in turn may affect on their migration behaviour. With this in view, social participation of the respondents was studied and data are presented in Table 13.

**Table 13: Distribution of the respondents according to their social participation**

n=120

No.	Social participation	Frequency	Per cent
1	No membership	97	80.84
2	Membership in one organization	19	15.83
3	Membership in more than one organizations	03	02.50
4	Membership along with position holding in organization	01	00.83
<b>Total</b>		120	100.00

The data mentioned in the Table 13 indicate that four-fifth (80.84 per cent) of the head of tribal families had no membership in any organization, followed by 15.83 per cent who had membership in only one organization, while only 02.50 per

cent of them had membership in more than one organizations. Only one respondent was found to be position holder in the organization.

It could be stated from the above findings that majority (80.84 per cent) of the head of tribal families had no social participation. The probable reason might be their frequent migration to the other areas in search of work, their lack of awareness about importance of such organizations and non-existence of organizations like milk cooperatives which are very common and invariably found in certain parts of Gujarat.

This finding is more or less supported by the findings of More (2004).

**4.1.2.4 Mass media exposure**

The exposure to different mass media such as radio, television, newspaper, internet, mobile phone, agricultural fair, agricultural exhibition, farm magazine, *etc.* helps the tribal families to get the information about job opportunities in urban area. This may help in moulding their migration behaviour. With this in view, the information regarding mass media exposure was collected from the head of the tribal families in terms of frequency of their exposure to different mass media. The data in this respect are presented in Table 14.

**Table 14: Distribution of the respondents according to their mass media exposure**

n=120

No.	Mass media exposure	Frequency	Percent
1	Very low (0 to 3)	67	55.83
2	Low (4 to 7)	42	35.00
3	Medium (8 to 10)	11	09.17
4	High (11 to 14)	00	00.00
5	Very high (15 to 18)	00	00.00
<b>Total</b>		120	100.00

From the data depicted in Table 14, it is observed that more than one-half (55.83 per cent) of the respondents had very low level of mass media exposure, followed by 35.00 per cent and 09.17 per cent of them who had low level and medium level of mass media exposure, respectively. None of them was found in the category of high and very high level of mass media exposure.

Thus, it can be concluded that majority (90.83 per cent) of the respondents had very low to low level of mass media exposure. The probable reason might be their low literacy rate and poor financial condition which refrain them from purchasing/using different tools of mass media.

This finding is more or less in conformity with that reported by Oyeyinka *et al.* (2011).

### 4.1.3 Economical Variables

#### 4.1.3.1 Land holding

Land is a prime requirement for agriculture and land holding is one of the most important contributors to assess one’s socio-economic status. Thus, land holding may influence on migration behaviour of tribal families. Keeping this in view, information on land holding of the tribal families was collected, the data of which are presented in Table 15.

**Table 15: Distribution of the respondents according to their land holding**

n=120

No.	farm size (ha)	Frequency	Per cent
1	Landless	09	07.50
2	Marginal (Up to 1.00)	76	63.33
3	Small (1.01 to 2.00)	21	17.50
4	Medium (2.01 to 4.00)	14	11.67
5	Large (Above 4.00)	00	00.00
<b>Total</b>		120	100.00

.....*Results and Discussion*

It is obvious from the data presented in Table 15 that slightly less than two-third (63.33 per cent) of the respondents possessed marginal size of land holding followed by 17.50 per cent and 11.67 per cent of them who had small and medium size of land holding, respectively; while 07.50 per cent of the respondents were observed to be landless. None of them had large size of land holding.

Thus, it can be concluded that great majority (80.83 per cent) of the respondents had marginal to small size of land holding and perhaps because of this reason, they might have resorted to migration for sustaining livelihood.

This finding is in conformity with the findings of Chakraborty (2014).

#### 4.1.3.2 Annual income

Timely and sufficient income is essential for any type of family for living comfortably. In this context, annual income becomes an important factor which determines the migration behaviour. The data regarding the annual income of the respondents are presented in Table 16.

**Table 16: Distribution of the respondents according to their annual income**

n=120

No.	Annual income	Frequency	Per cent
1	Very Low (Up to ₹ 50,000)	59	49.17
2	Low (₹ 50,001 to 1,00,00)	51	42.50
3	Medium (₹ 1,00,001 to 1,50,000)	09	07.50
4	High (₹ 1,50,001 to 2,00,000)	01	00.83
5	Very High (Above ₹ 2,00,000)	00	00.00
<b>Total</b>		120	100.00

It can be seen from the Table 16 that slightly less than one-half (49.17 per cent) of the tribal families had up to ₹ 50,000 of annual income while 42.50 per cent of them were found to have annual income ranging from ₹ 50,001 to 1 lakh. Further, only 07.50 per cent of the tribal families had medium level of income ranging

from ₹ 1,00,001 to 1,50,000 and only one family reported to have annual income above ₹ 1,50,000. None of the tribal families had above ₹ 2 lakh annual income.

It can thus be concluded that great majority of the tribal families (91.67 per cent) had up to ₹ 1,00,000 of annual income. Relatively lower annual income can be attributed to their marginal and small size of land holding, low level of education and social participation and high dependence on labour work as a source of income.

This finding is partially in line with the findings of Patel (2013).

#### 4.1.3.3 Occupation

Occupation is an important factor upon which sustainability of livelihood of an individual depends. Engagement of tribal families in other occupations may prove to be important determinant in shaping their behaviour towards migration. With this in view, the occupation of the tribal families was studied. The data in this regard are presented in Table 17.

**Table 17: Distribution of the respondents according to their occupation**

n=120

No.	Occupation	Frequency	Per cent
1	Only Farming	03	02.50
2	Only labour work	09	07.50
3	Farming + Animal Husbandry	34	27.50
4	Farming + Agriculture Labour	12	14.17
5	Farming + Other labour work	10	08.33
6	Farming + Animal Husbandry + Agriculture Labour	30	24.17
7	Farming + Animal Husbandry + Other labour work	22	15.83
<b>Total</b>		120	100.00

It is obvious from the data presented in Table 17 that slightly more than one-fourth (27.50 per cent) of the respondents were dependent on Farming + Animal Husbandry for their livelihood, while 24.17 per cent of them were dependent on Farming + Animal Husbandry + Agriculture Labour. Further, 15.83 per cent and 14.17 per cent of them were engaged in Farming + Animal Husbandry + Other labour work and Farming + Agriculture Labour, respectively for their livelihood, while 08.33 per cent of the respondents were engaged in Farming + Other labour work and 07.50 per cent of the respondents had only labour work as their occupation. Only 02.50 per cent of the respondents had only farming as their occupation.

Thus, it can be concluded that majority (67.50.00 per cent) of the respondents had farming coupled with animal husbandry and agriculture labour or other labour work as their occupation.

This finding is more or less similar to findings of Patel (2005<sub>a</sub>).

**4.1.3.4 Herd size**

Animals are most common in Indian rural community for getting additional income through selling of milk. Keeping this in view, the data in regards with animals possessed by the tribal families were collected and are presented in Table 18.

**Table 18: Distribution of the respondents according to their animal possession**

n=120

No.	Category	Frequency	Per cent
1	No animals	34	28.33
2	Up to 2 animals	50	41.67
3	3 to 4 animals	23	19.17
4	5 to 6 animals	12	10.00
5	Above 6 animals	01	00.83
<b>Total</b>		120	100.00

The data presented in table 18 show that slightly more than two-fifth of the respondents had up to 2 animals followed by 28.33 per cent of the respondents who didn't have any animal; while 19.17 per cent and 10.00 per cent of them had 3 to 4 animals and 5 to 6 animals, respectively. Only 00.83 per cent of the respondents had above 6 animals.

It can thus be concluded that majority (71.67 per cent) of the tribal families possessed animals. As discussed earlier, majority of the tribal families had marginal to small size of land holding which might be insufficient to sustain the livelihood, hence they might have resorted to animal husbandry also which is regarded as a complementary occupation to agriculture.

The finding is more or less similar with the finding of Vasava (2005) and Patel (2015).

#### **4.1.4 Psychological Variables**

##### **4.1.4.1 Economic motivation**

It is obvious that economically motivated people are more oriented towards maximization of profit as they place relatively more value on economic ends. Thus economic motivation can be one of the factors influencing migration behaviour of the tribal families in order to earn more. With this consideration, economic motivation of the respondents was studied, the data of which are shown in Table 19.

It is evident from the data reported in Table 19 that slightly less than two-fifth (39.16 per cent) of the respondents had high level of economic motivation, followed by 28.34 per cent, 15.00 per cent, 10.00 per cent and 07.50 per cent of them who were found with medium, very high, low and very low level of economic motivation, respectively.

From the below table, it can be concluded that slightly more than two-third (67.50 per cent) of the respondents were found with high to medium level of economic motivation. As discussed earlier, majority of the tribal families had marginal size of land holding and low annual income which might have been felt insufficient to sustain the livelihood, hence they might have motivated to earn more.

**Table 19: Distribution of the respondents according to their economic motivation**

n=120

No.	Category	Frequency	Per cent
1	Very Low (6 to 10)	09	07.50
2	Low (11 to 15)	12	10.00
3	Medium (16 to 20)	34	28.34
4	High (21 to 25)	47	39.16
5	Very High (26 to 30)	18	15.00
<b>Total</b>		120	100.00

This finding is more or less in conformity with Vasava (2005) and Bhosale (2010).

#### **4.2 MIGRATION BEHAVIOUR OF TRIBAL FAMILIES**

Study on migration behaviour comprises of different components like number of members from family who migrate, frequency of migration in a year, place of migration, duration of migration, and type of migration. The data in regards with all these components were collected from the respondents and are presented in Table 20.

The perusal of data presented in Table 20 indicate that in case of 35.00 per cent of tribal families, only one member made migration, while 2 and 3 members from family migrated in case of 21.67 per cent and 23.33 per cent of tribal families, respectively. It was also observed that in case of 20.00 per cent of tribal families, whole family made migration on temporary basis during the year.

In regards with frequency of migration, the data clearly show that three times migration in a year was observed in case of half of the tribal families, whereas two times migration was reported by 38.33 per cent of tribal families. Only 11.67 per cent of the respondents reported to have migrated only once in a year. As the

migrating members of the family came back to home on major festivals or social functions, 2 to 3 times migration in a year was reported by majority of the respondents.

**Table 20: Distribution of the respondents according to their migration behaviour**

n=120

No.	Component of migration behaviour	Frequency	Per cent
<b>A</b>	<b>Number of members who migrate</b>		
1	One	42	35.00
2	Two	26	21.67
3	Three	28	23.33
4	Whole family	24	20.00
<b>B</b>	<b>Frequency of migration in year</b>		
1	One time	14	11.67
2	Two time	46	38.33
3	Three time	60	50.00
<b>C</b>	<b>Average days of migration of all the members of family</b>		
1	Up to 60 days	08	06.67
2	61 to 120 days	22	18.33
3	121 to 180 days	50	41.67
4	181 to 240 days	36	30.00
5	Above 240 days	04	03.33
<b>D</b>	<b>Place of migration</b>		
1	Within Taluka	14	11.67
2	Within District	34	28.33
3	Within State	72	60.00
<b>E</b>	<b>Type of migration</b>		
1	Rural to Rural	37	30.83
2	Rural to Urban	83	69.17

So far as duration of migration is concerned, it is obvious from the data that in case of slightly more than two-fifth (41.67 per cent) of the tribal families, average days of migration of all the members were 121 to 180 (4 to 6 months) followed by 181 to 240 days (6 to 8 months) in case of 30.00 per cent of tribal families. The average migration duration was observed to be 2 to 4 months for 18.33 per cent of tribal families. The tribal families with the least average migration period (up to 2 months) and the highest average migration period were few, i.e. 8 (6.67 per cent) and 4 (3.33 per cent), respectively. Thus, majority (71.67 per cent) of the tribal families were found with 4 to 8 months of average migration period. This might be because of the fact that during monsoon, they might be engaged in agriculture at their native, while for the rest of period, they might migrate to other places as per availability of work opportunities.

In respect of place of migration, the data indicate that migration out of own district but within the state was observed in case of majority (60.00 per cent) of the tribal families, whereas migration within the district but out of their own taluka was reported by 28.33 per cent of the tribal families. Only in case of 11.67 per cent of the tribal families, migration within the taluka was observed. As revealed during the survey, the tribal people get more work opportunities at construction site or road construction in nearby districts or even far districts. Hence migration within the state was observed more. As far as type of migration is concerned, rural to urban migration (69.17 per cent) was found to be dominant over rural to rural migration (30.83 per cent). This is because of availability of more work opportunities in urban area.

**Extent of migration of tribal families:**

Study on extent (magnitude) of migration of tribal families mainly depends on two factors i.e., number of family members who migrate and duration for which they migrate. Based on this, migration index as detailed in Research Methodology was worked out for each tribal family and on the basis of migration index score, respondents were arbitrarily categorized. The data in this regard are presented in Table 21 and graphically depicted in Figure 2.

**Table 21: Distribution of the respondents according to their migration**

n=120

No.	Category	Frequency	Percent
1	Very Low (Up to 20)	33	27.50
2	Low (21 to 40)	67	55.84
3	Medium (41 to 60)	16	13.33
4	High (61 to 80)	04	03.33
5	Very High (81 to 100)	00	00.00
<b>Total</b>		120	100.00

It is evident from the table 21 that more than one-half (55.84 per cent) of the tribal families had low extent of migration followed by 27.50 per cent and 13.33 per cent of them with very low and medium extent of migration, respectively. Only 03.33 per cent of them were found with high extent of migration, whereas none of them had very high extent of migration.

It can thus be inferred that majority (83.34 per cent) of the tribal families had low to very low extent of migration. This might be because of the fact that in majority cases of tribal families, the number of migrating members was 1 or 2 which reduced the migration index score.

This finding is indirectly in contrast with the findings of Patel (1995<sub>a</sub>) and Shah (1998).

#### **4.3 FACTORS RESPONSIBLE FOR MIGRATION AMONG TRIBAL FAMILIES**

Migration among tribal families is caused by certain factors which can be grouped in to two: push factors and pull factors. As the name itself indicates, push factors push the tribal people from their native place to migrate, while pull factors are the attractions at the place to be migrated which pull or attract the tribal people towards that place. With this in view, factors responsible for migration were studied. The data in this regard were collected from the respondents which are presented in Table 22.



**Figure 2: Distribution of the respondents according to their migration**

**Table 22: Factors responsible for migration among tribal families**

n=120

No.	Factors or reasons responsible	Frequency	Per cent	Rank
<b>A</b>	<b>Push factors</b>			
1	Lack of employment opportunities in tribal area	120	100.00	I
2	Low wages in tribal area	114	95.00	II
3	Lack of basic amenities	65	54.16	VI
4	Drought/ Famine/ Crop failure	51	42.50	VII
5	Poor economic condition	98	81.66	IV
6	Landlessness	09	07.50	XIII
<b>B</b>	<b>Pull factors</b>			
1	Better education	35	29.16	IX
2	Better health care services	12	10.00	XII
3	Availability of diverse work opportunities	110	91.66	III
4	More income than MANREGA	77	64.16	V
5	Better scope for marriage	15	12.50	XI
6	Family welfare purpose	41	34.16	VIII
7	Better social status	17	14.16	X

As seen from the Table 22, the major important push factors realized by the respondent tribal families for migration were: lack of employment opportunities in tribal area (100 per cent), low wages in tribal area (95.00 per cent),

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poor economic condition (81.66 per cent) and lack of basic amenities (54.16 per cent). The other push factors were drought/ famine/ crop failure (42.50 per cent) and landlessness (07.50 per cent). The major pull factors i.e. attractions at the place of migration as realized by the respondents were availability of diverse work opportunities (91.66 per cent), and more income than MANREGA (64.16 per cent). The other pull factors were: family welfare purpose (34.16 per cent), better education (29.16 per cent), better social status (14.16 per cent), better scope for marriage (12.50 per cent) and better health care services (10.00 per cent).

Overall, it can be concluded that major factors responsible for migration among tribal families were lack of employment opportunities in tribal area, low wages in tribal area, availability of diverse work opportunities at migration place and poor economic condition which ranked first, second, third and fourth, respectively.

The result is similar to finding of Gimba and Mustapha (2012) and Gnana Viji (2013).

#### **4.4 EMPLOYMENT OPPORTUNITIES OBTAINED BY TRIBAL FAMILIES THROUGH MIGRATION**

It was also thought worthwhile to study the employment/work opportunities availed by the migrant members of the tribal families at the place of migration. With this in view, the responses were collected from the respondents, the data of which are presented in Table 23.

As it is apparent from Table 23, majority (72.50 per cent) of the migrating members of the tribal families availed the work opportunities at construction site and more than half (54.16 per cent) of them reported to have availed the work opportunity as a tenant farmer on a seasonal base with fixed proportion of share in production (All the resources including land were provided by the land owner, whereas labour work had to be done by the tenant farmer). Further, 48.33 per cent of them obtained the work opportunity in the form of farm labour, while 30.83 per cent and 10.83 per cent of them availed work at road construction and as a factory labour.

**Table 23: Employment opportunities obtained by tribal families through migration**

n=120

No.	Employment opportunities	Frequency	Percent
1	At construction site	87	72.50
2	As a factory labour	13	10.83
3	As a farm labour	58	48.33
4	At road construction	37	30.83
5	As a tenant farmer	65	54.16

The result is more or less in conformity with the finding of Anonymous (2010).

#### **4.5 RELATIONSHIP BETWEEN PROFILE AND MIGRATION OF TRIBAL FAMILIES**

To ascertain the relationship between profile of the tribal families and their migration, the Karl Pearson co-efficient of correlation was worked out. Total fourteen personal, socio-economic, and psychological characteristics of the tribal families were studied in respect to their correlation with migration of the tribal families for which score of migration index was used. The data in this regard are presented in Table 24 graphically depicted in Figure 3 and discussed under following sub heads:

##### **4.5.1 Age and Migration**

It is apparent from the data presented in the Table 24 that age had negative and highly significant correlation ( $r = -0.2388^{**}$ ) with migration of tribal families. Thus, the null hypothesis ( $H_0$ ) that “there is no relationship between age of the head of tribal families and their migration” is rejected.

This indicates that, migration of tribal families was influenced by their age and it was more prominent in young people than old aged people. It is quite

natural also that in old aged people, energy, vigour and body strength are comparatively lower while social responsibilities are more. Hence, during old age, they might prefer less to leave the native place.

This finding is found similar to those reported by Chakraborty (2014).

**Table 24: Relationship between the profile of the tribal families and their migration**

n=120

No.	Independent Variables	Correlation-Coefficient ('r' value)
1	Age	-0.2388**
2	Education	0.1800*
3	Amenities available at house	-0.1797*
4	Perception about migration	0.2521**
5	Training received	0.1400
6	Size of family	0.1864*
7	Type of family	0.2775*
8	Social participation	0.0256
9	Mass media exposure	0.0584
10	Land holding	0.0320
11	Annual income	0.2349**
12	Occupation	-0.1898*
13	Herd size	-0.1829*
14	Economic motivation	0.2362**

\* = Significant at 5% level of probability

\*\* = Significant at 1% level of probability

#### **4.5.2 Education and Migration**

The Table 24 reveals positive and significant correlation ( $r = 0.1800^*$ ) between education of the head of the tribal families and their migration. It indicates

that migration was more in those tribal families, where the head had more formal education. Hence, the null hypothesis (Ho2) that “there is no relationship between education of the head of tribal families and their migration” is rejected.

As discussed earlier, the land holding and income of majority of the tribal families were very low. In this situation, education might have helped them realize the importance of migration for earning more to sustain their livelihood. Education might also have helped them in developing self-confidence to search for work opportunities through migration. Further, better educated heads might have motivated other members of their family to migrate for better work opportunity, in case if they didn’t migrate. This might be the reason for significant association between education and their migration.

This result is found contradictory to the findings of Barnum *et al.* (1975) and Connell *et al.* (1976).

#### **4.5.3 Amenities available at house and Migration**

The data presented in the Table 24 show negative and significant correlation ( $r = -0.1797^*$ ) between amenities available at house and their migration. This denotes that migration was observed less in those tribal families where better amenities were available at house. Tribal families with better availability of amenities might have felt little bit more satisfied and might have been demotivated for migration. Thus, the null hypothesis (Ho3) that “there is no relationship between amenities available at house of tribal families and their migration” is rejected and it is inferred that amenities available at house exerted significant influence on migration.

#### **4.5.4 Perception About Migration and Migration**

It is apparent from the data presented in the Table 24 that perception of the head of tribal families had positive and highly significant correlation ( $r = 0.2521^{**}$ ) with migration of tribal families. It is obvious that in those tribal families where migration was believed to be good for improving their economic condition, migration would have been more. Thus, the null hypothesis (Ho4) that “there is no relationship between perception of the head of tribal families and their migration” is rejected and it is inferred that perception about migration had significant influence on their physical migration.

#### **4.5.5 Training Received and Migration**

The data presented in the Table 24 reveal that training received by the head of the tribal families and their migration had positive and non-significant correlation ( $r = 0.1400$ ). Hence, the null hypothesis (Ho5) that “there is no relationship between training received by the head of tribal families and their migration” is accepted and it is concluded that training didn’t play any role on migration.

#### **4.5.6 Size of Family and Migration**

The Table 24 reveals positive and significant correlation ( $r = 0.1864^*$ ) between size of family and their migration. It means that extent of migration was more in the tribal families with larger size. In case of majority of the tribal families, land holding was marginal because of which the members of family would have felt much difficult to get engaged on small piece of land and might have felt themselves redundant. Because of this reason, they might have been motivated for migration in search of work opportunity. Hence, the null hypothesis (Ho6) that “there is no relationship between the size of the family and their migration” is rejected and it is inferred that size of family exerted its influence on migration.

#### **4.5.7 Type of Family and Migration**

The data presented in the Table 24 show positive and significant correlation ( $r = 0.2775^*$ ) between type of family and their migration. As it is discussed above in case of size of family, the members would be more in joint type of family and hence, extent of migration would also be more in joint type. Therefore, the null hypothesis (Ho7) that “there is no relationship between the type of family and their migration” is rejected and it is concluded that type of family played significant role on migration of tribal families.

#### **4.5.8 Social Participation and Migration**

A look in to the Table 24 makes it clear that social participation had positive and non-significant correlation ( $r = 0.0256$ ) with their migration. Hence, the null hypothesis (Ho8) that “there is no relationship between social participation of the head of tribal families and their migration” is accepted and it is concluded that social participation had no any role to play on migration of tribal families.

#### **4.5.9 Mass Media Exposure and Migration**

The data presented in the Table 24 indicate positive and non-significant correlation ( $r = 0.0584$ ) between mass media exposure and migration of tribal families. Hence, the null hypothesis (Ho9) that “there is no relationship between mass media exposure of the head of tribal families and their migration” is accepted with the inference that mass media exposure had no influence on migration of tribal families.

#### **4.5.10 Land Holding and Migration**

The data presented in the Table 24 indicate that land holding had positive and non-significant correlation ( $r = 0.0320$ ) with migration of tribal families. Hence, the null hypothesis (Ho10) that “there is no relationship between the land holding and their migration” is accepted. Non-significant association observed in this case might be because of much homogeneity among respondents in regards with their land holding, i.e. majority of them had marginal size of land holding.

#### **4.5.11 Annual Income and Migration**

A perusal of the Table 24 reveals that correlation between annual income and migration of tribal families was positive and highly significant ( $r = 0.2349^{**}$ ). It indicates that in those tribal families where extent of migration was more, the annual income was also more. Migration might have helped them search better work opportunities and earn more. Hence, the null hypothesis (Ho11) that “there is no relationship between the annual income of the tribal families and their migration” is rejected with the inference that annual income played significant role on migration of tribal families.

#### **4.5.12 Occupation and Migration**

The data given in the Table 24 reveal that occupation had negative and significant correlation ( $r = -0.1898^*$ ) with their migration. It denotes (as per the scoring system followed) that with increase in number of occupations among tribal families, their migration decreased. More occupations at native place might have helped the family members to get engaged in work which might have led to lesser extent of migration. Thus, the null hypothesis (Ho12) that “there is no relationship between the occupation and migration of tribal families” is rejected and it is inferred that occupation of the tribal families had significant influence on their migration.

#### **4.5.13 Herd size and Migration**

The data presented in the Table 24 show negative and significant correlation ( $r = -0.1829^*$ ) between herd size and their migration. It depicts that with increase in the number of animals possessed by the tribal families, the extent of their migration decreased. This might be because of the reason that more number of animals would have required more engagement on part of family members which might have reduced their migration. Hence, the null hypothesis (Ho13) that “there is no relationship between the herd size possessed by tribal families and their migration” is rejected with the inference that the herd size was an important variable affecting migration of tribal families.

#### **4.5.14 Economic Motivation and Migration**

It is obvious from the data presented in the Table 24 that there was a positive and highly significant ( $r = 0.2362^{**}$ ) relationship between economic motivation and migration of tribal families. Economically more motivated people in general would put in their sincere efforts to earn more. In this study also, where head of the tribal families had higher economic motivation, other family members would have been motivated /encouraged more to grasp more and more opportunities to earn more through migration and thus extent of migration would have been higher. Hence, the null hypothesis (Ho14) that “there is no relationship between the economic motivation of head of tribal families and their migration” is rejected and it is concluded that economic motivation played significant role on migration of tribal families.

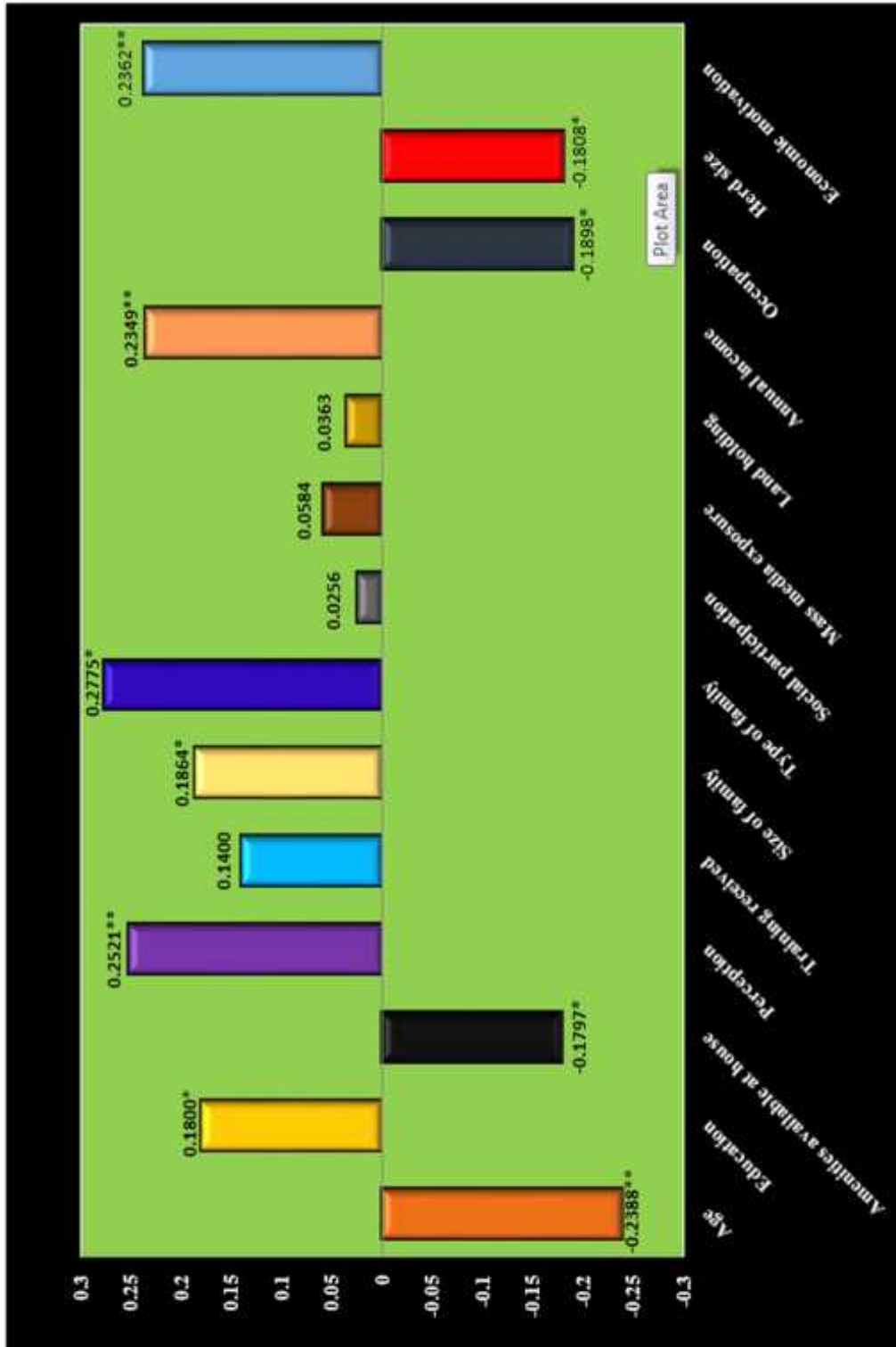


Figure 3: Relationship between the profiles of the tribal families and their migration

## V. SUMMARY AND CONCLUSION

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In this chapter, a nutshell description of the present study in respect of summary, major findings, conclusions, empirical model, implications and suggestions for further research has been given.

### 5.1 SUMMARY

For the first time since independence, the absolute increase in population is more in urban areas than in rural areas. During the last 50 years, rural population has decreased from 82.0 to 68.9 per cent. Level of urbanization increased from 27.81 per cent in 2001 census to 31.6 per cent in 2011 census and the proportion of rural population declined from 72.19 per cent in 2001 census to 68.84 per cent in 2011 census. It is estimated that approximately 22 million people have migrated from rural to urban areas since 2001. Thus the extent of migration from rural area has been increasing.

In Gujarat, migration is not a new phenomenon, not just a post-globalization phenomenon. The spectrum of migration stretches from seasonal migration at one end to large number of Gujaratis migrating out of country. However, our concern here is on the internal migration made by the people in search of employment. Gujarat has 14.75 per cent of tribal population. The most tribal populated districts of Gujarat are: Dangs, Tapi, Narmada, Dahod and Valsad where more than 50 percent of the population is tribal. In Dahod, the tribal population is 74.3 per cent. Most of the tribal families living in Dahod district mainly depend on agriculture. They have small land holding and totally depend on monsoon because of lack of irrigation facilities. So during the summer and winter season the rate of migration towards the urban area is often more.

Since no systematic effort has up till been made to study the migration behavior of tribal families, it was thought worthwhile to make an in-depth study on migration behavior which would throw light on many aspects, until hidden, that can be useful for bringing developmental changes in tribal population. It was also thought interesting to investigate the factors or causes responsible for migration and the employment opportunities the migrant people would get at the destination places. With all this in view, the present investigation entitled “**Migration behaviour of tribal families of Dahod district of Gujarat**” was undertaken.

## **5.2 OBJECTIVES OF THE STUDY**

1. To study the profile of tribal families
2. To study the migration behaviour of tribal families
3. To study the factors responsible for migration among tribal families
4. To study the employment opportunities obtained by tribal families through migration
5. To study the relationship between profile and migration of tribal families

## **5.3 REVIEW OF LITERATURE**

A brief account of literature reviewed was presented under five heads *viz.*, selected profile of tribal families, migration behaviour of tribal families, factors responsible for migration among tribal families, employment opportunities obtained by tribal families through migration and relationship between profile and migration of tribal families.

## **5.4 METHODOLOGY**

The present investigation was carried out in Dahod district of Gujarat State. Dahod district comprises of seven talukas out of which, two talukas *viz.*; Jhalod and Limkheda were purposively selected for the study. From each selected taluka, six villages were selected randomly, out of which 60 respondent tribal families were selected with proportionate random sampling. Thus, total 120 respondent tribal families were selected for the study.

The dependent variable undertaken in this study was Migration behaviour of tribal families. The independent variables were age, education, amenities available at house, perception about migration, training received, size of family, type of family, social participation, mass media exposure, land holding, annual income, occupation, herd size and economic motivation.

To study the migration behaviour, a well thought out schedule was developed. Independent variables were measured by using suitable scales and procedures adopted by various researchers with suitable modifications. An interview schedule was developed in accordance with the objectives of the study. The data of this study were collected through personal interview. The collected data were classified,

tabulated, analysed and interpreted in order to make the findings meaningful. The statistical measures such as frequency and percentage, arithmetic mean, standard deviation and Karl Pearson coefficient of correlation were used in the study.

## **5.5 MAJOR FINDINGS AND CONCLUSIONS**

The important findings of the study are summarized as below:

### **5.5.1 Profiles of The Tribal Families**

#### **5.5.1.1 Personal variables**

##### **5.5.1.1.1 Age**

Nearly three-fifth (59.16 per cent) of the respondents belonged to middle age group (36 to 50 years), followed by slightly more than one fifth (20.84 per cent) in young age category (up to 35 years) and 20.00 per cent in old age category (more than 50 years).

##### **5.5.1.1.2 Education**

Slightly less than one-third (30.83 per cent) of the respondents were illiterate, while 27.50, 23.34, and 15.00 per cent of them had primary, secondary and higher secondary level of education, respectively. Only 03.33 per cent of the head of tribal families were found to have graduate and above level of education.

##### **5.5.1.1.3 Amenities available at house**

Exactly half (50.00 per cent) of the tribal families had medium level of amenities available at house followed by slightly more than one fourth (28.33 per cent) and slightly more than one fifth (21.67 per cent) of them who had high and low level of amenities available at their house, respectively.

##### **5.5.1.1.3 Perception about migration**

Slightly less than one half (45.00 per cent) of the respondents had high level of perception followed by slightly less than one fourth (23.33 per cent), less than one fifth (16.67 per cent) and 11.67 per cent of them who had medium, low and very low level of perception about migration., respectively. Only 03.33 per cent of the respondents had very high level of perception about migration.

### **5.5.1.1.3 Training received**

Great majority (87.50 per cent) of the respondents did not receive any training, while only 12.50 per cent of them received some sort of training.

### **5.5.1.2 Social variables**

#### **5.5.1.2.1 Size of family**

Exactly one half (50.00 per cent) of the respondents belonged to medium family followed by 30.83 per cent and 19.17 per cent of them who belonged to small and large family, respectively.

#### **5.5.1.2.2 Type of family**

More than one half (54.16 per cent) of the respondents belonged to joint type of family and rest 45.83 per cent of them had nuclear type of family.

#### **5.5.1.2.3 Social participation**

Four-fifth (80.84 per cent) of the head of tribal families had no membership in any organization, followed by 15.83 per cent who had membership in only one organization, while only 02.50 per cent of them had membership in more than one organizations. Only one respondent was found to be position holder in the organization.

#### **5.5.1.2.4 Mass media exposure**

More than one-half (55.83 per cent) of the respondents had very low level of mass media exposure, followed by 35.00 per cent and 09.17 per cent of them who had low level and medium level of mass media exposure, respectively.

### **5.5.1.3 Economical variables**

#### **5.5.1.3.1 Land holding**

Slightly less than two-third (63.33 per cent) of the respondents possessed marginal size of land holding followed by 17.50 per cent and 11.67 per cent of them who had small and medium size of land holding, respectively; while 07.50 per cent of the respondents were observed to be landless.

#### **5.5.1.3.2 Annual income**

Slightly less than one-half (49.17 per cent) of the tribal families had up to ₹ 50,000 of annual income while 42.50 per cent of them were found to have annual income ranging from ₹ 50,001 to ₹ 1 lakh. Further, only 07.50 per cent of the tribal families had medium level of income ranging from ₹ 1,00,001 to ₹ 1,50,000 and only one family reported to have annual income above ₹ 1,50,000.

#### **5.5.1.3.3 Occupation**

Slightly more than one-fourth (27.50 per cent) of the respondents were dependent on Farming + Animal Husbandry, while 24.17 per cent of them were dependent on Farming + Animal Husbandry + Agriculture Labour. Further, 15.83 per cent and 14.17 per cent of them were engaged in Farming + Animal Husbandry + Other labour work and Farming + Agriculture Labour, respectively for their livelihood, while 08.33 per cent of the respondents were engaged in Farming + Other labour work and 07.50 per cent of the respondents had only labour work as their occupation. Only 02.50 per cent of the respondents had only farming as their occupation.

#### **5.5.1.3.4 Herd size**

Slightly more than two-fifth of the respondents had up to 2 animals followed by 28.33 per cent of the respondents who didn't have any animal; while 19.17 per cent and 10.00 per cent of them had 3 to 4 animals and 5 to 6 animals, respectively. Only 00.83 per cent of the respondents had above 6 animals.

#### **5.5.1.4 Psychological variables**

##### **5.5.1.4.1 Economic motivation**

Slightly less than two-fifth (39.16 per cent) of the respondents had high level of economic motivation, followed by 28.34 per cent, 15.00 per cent, 10.00 per cent and 07.50 per cent of them who were found with medium, very high, low and very low level of economic motivation, respectively.

#### **5.5.2 Migration Behaviour of Tribal Families**

The number of migrating members from the family was up to 3 in 80.00 per cent of the tribal families, while the frequency of migration was 2 to 3 times in a year in 88.33 per cent of the tribal families. The average duration of migration of all the members of the families was 4 to 8 months in case of 71.67 per cent of the tribal families. The migration was observed within the state but out of district in 60.00 per cent of tribal families. Further the type of migration was found to be rural to urban in case of 69.17 per cent of the tribal families.

More than one-half (55.84 per cent) of the tribal families had low extent of migration followed by 27.50 per cent and 13.33 per cent of them with very low and medium extent of migration, respectively. Only 03.33 per cent of them were found with high extent of migration.

### **5.5.3 Factors Responsible for Migration Among Tribal Families**

The major important push factors realized by the respondent tribal families for migration were: lack of employment opportunities in tribal area (100 per cent), low wages in tribal area (95.00 per cent), poor economic condition (81.66 per cent) and lack of basic amenities (54.16 per cent); while the major pull factors were: availability of diverse work opportunities (91.66 per cent), more income than MANREGA (64.16 per cent) and family welfare purpose (34.16 per cent).

### **5.5.4 Employment Opportunities Obtained by Tribal Families Through Migration**

Majority (72.50 per cent) of the tribal farmers availed the work opportunities at construction site followed by the work opportunities as a tenant farmer (54.16 per cent), as a farm labour (48.33 per cent) and at road construction (30.83 per cent).

### **5.5.5 Relationship Between Profile and Migration of Tribal Families**

The independent variables viz. education, perception about migration, size of family, type of family, annual income and economic motivation had positive and significant correlation, while age, amenities available at house, occupation and herd size had negative and significant correlation with migration of the tribal families. Further, the variables like training received, social participation, mass media exposure and land holding could not establish significant relationship with migration of the tribal families.

## **5.6 CONCLUSIONS**

1. Majority of the respondents were from middle age group, were illiterate or had up to primary level of education, had medium and joint type of family.
2. Majority of the beneficiaries had no membership in social organization, had up to ₹ 50,000 of annual income and were landless or had marginal size of land holding.
3. Majority of the respondents had farming coupled with animal husbandry and agriculture labour or other labour work as their occupation and majority respondents had up to 2 animals.
4. Majority of the respondents had medium amenities available at house and majority were untrained and had low level of mass media exposure.

5. Majority of the respondents had high level of perception and economic motivation.
6. Majority of the respondent tribal families had low to very low extent of migration.
7. Major factors responsible for migration among tribal families were: lack of employment opportunities in tribal area, low wages in tribal area, availability of diverse work opportunities at migration place and poor economic condition.
8. Major employment opportunities obtained by tribal families through migration were at construction site, as a tenant farmer and as a farm labour.
9. Out of fourteen independent variables, ten variables viz., age, education amenities available at house, perception about migration, size of family, type of family, annual income, occupation, herd size and economic showed significant influence on migration of the tribal families.

## **5.7 EMPIRICAL MODEL**

The tentative conceptual model was laid down in the beginning of this dissertation, while arriving at the conceptual frame of the study (Figure 1). Now, the final form has been depicted through the empirical model in Figure 4. The model shows those characteristics of the tribal families which had positively significant, negatively significant and non-significant relationship with dependent variable i.e. migration of the tribal families.

## **5.8 ACTION IMPLICATIONS**

Based on the findings of the study, one can safely recommend following action implications:

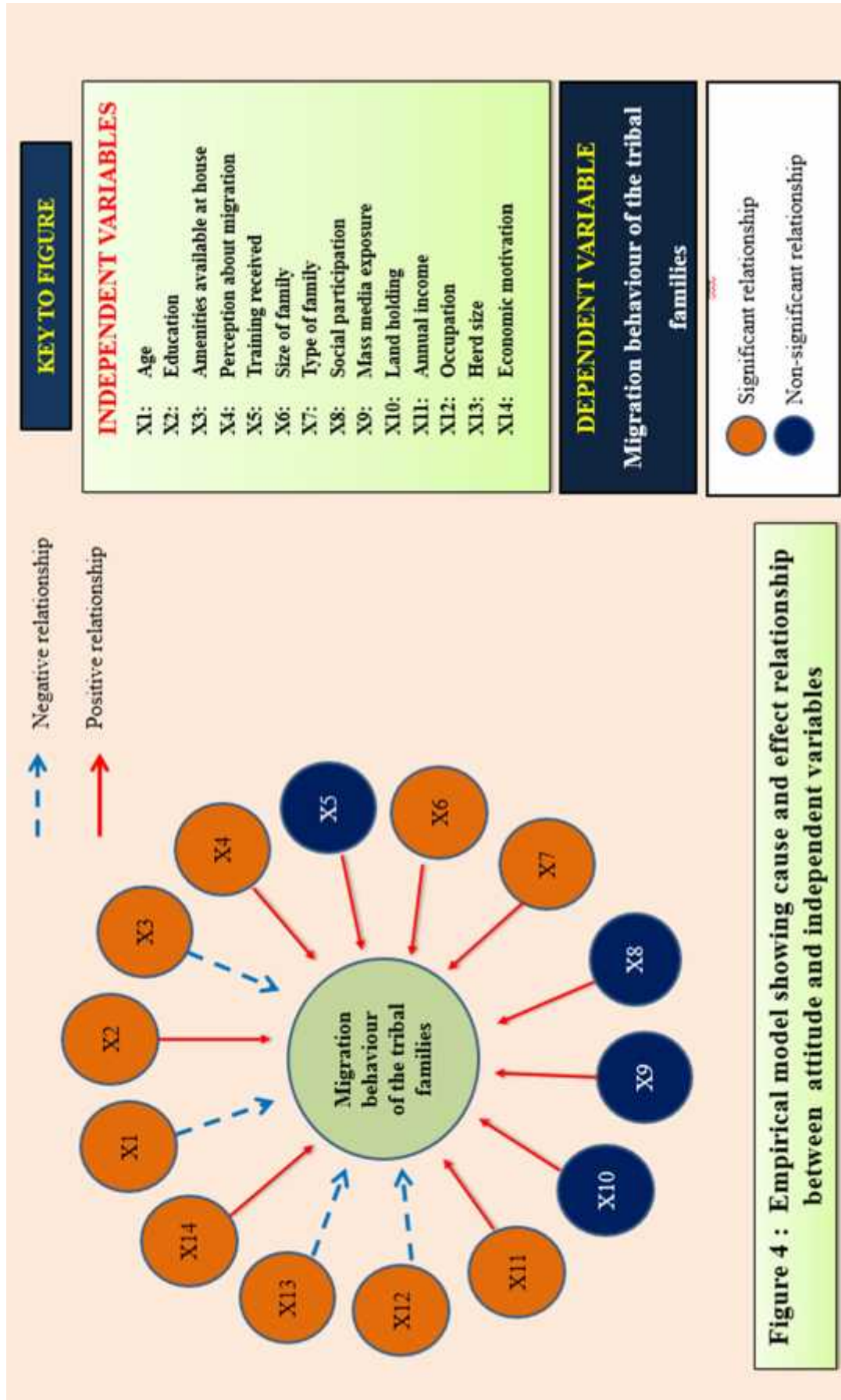
1. The results of the study are useful in knowing the characteristic of the tribal families and thereby help to serve as guideline for policy makers, planners and extension workers to plan and implement tribal development efforts.
2. The findings of the study also throw light on factors responsible for causing migration among tribal families. The finding thus can be of practical use in formulating the policy to mitigate the issue of migration.
3. The findings indicated that variables like age, education, type of family, size of family, occupation, herd size, economic motivation were

prominent in influencing the migration of tribal families. Thus, it will help to the policy makers and planners in manipulating one or more of these variables to effectively chalk out the strategy to lower the rate of migration.

## **5.9 SUGGESTIONS FOR FURTHER RESEARCH**

In light of the findings of the study, the following suggestions were made:

1. The study was carried out under certain limitations of time and resources available with researcher, covering only one district of middle Gujarat. It is true that the findings of a single study are not adequate to make any generalization. Therefore, it is necessary to replicate the same study in other districts of the state.
2. The research area should be extended further and sufficiently large number of tribal families should be studied to draw valid and general conclusions.
3. To overcome the existing factors faced by the tribal families, the solutions of these factors need to be investigated.
4. Such studies should be repeated after some lapse of time.



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## INTERVIEW SCHEDULE

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### “MIGRATION BEHAVIOUR OF TRIBAL FAMILIES OF DAHOD DISTRICT OF GUJARAT”

Schedule No: \_\_\_\_\_

Date: \_\_\_\_\_

Name: \_\_\_\_\_

Village: \_\_\_\_\_ Taluka: \_\_\_\_\_ Mobile Number: \_\_\_\_\_

#### PART-I

#### Personal, socio-economic and psychological characteristics

##### 1 & 2 Age and education of the head of the respondent family:

Sr. No.	Name of the head family	Age in years	Education
1			

##### 3. Amenities available at house:

###### I. Type of house:

- a. Kachha house with straw roof ( )
- b. Kachha house with naliya/patara ( )
- c. Pakka house with naliya/patara ( )
- d. Pakka house with RCC ( )

###### II. Amenities available at house:

- a. Drinking water facility ( )
- b. Light connection ( )
- c. Separate kitchen ( )
- d. Separate toilet ( )
- e. Separate bathroom ( )
- f. Cattle shed ( )

III. Electronics gadgets available at house:

Sr. No	Items	Please( ) mark
1	Radio	
2	Television	
3	Refrigerator	
4	V.C.R	
5	Electric fan	

IV. Vehicle available:

Sr. No	Items	Please( ) mark
1	Cycle	
2	Scooter/Motor cycle	
3	Car	

4. Perception: How do you feel about migration? Indicate your response by putting a tick mark in appropriate column.

Sr. No	Item	Strongly agree	agree	Neutral	Dis agree	Strongly disagree
1	It is my helplessness that I/we have to migrate.					
2	Migration has helped to prosper my family.					
3	I strongly advise others to migrate to uplift their family economically.					
4.	It is better to stay at the native and sustain the life with whatever we earn.					
5.	May God never put up anybody in the circumstances to leave his native and migrate.					
6.	Migration is the alternative to sustain our family.					

**5. Training received**

Have you taken any type of training that has helped you to earn your bread and butter? Yes/No (Please mark)

**6. Size of family:**

**Number of members in the family:** \_\_\_\_\_

**7. Type of family:** a) Nuclear ( )

b) Joint ( )

**8. Social participation:**

Are you a member or occupying any position in following organizations? Yes/No

Sr. No.	Name of organization	As a member	Position holder
1	Gram panchayat		
2	Taluka/District panchayat		
3	Milk co-operative society		
4	Agril. Service co-operative society		
5	Irrigation co-operative society		
6	Farmer club		
7	Youth club		
8	Other, Please specify		

**9. Mass media exposure:**

How frequently do you expose yourself to following mass media? (Please mark)

Sr. No.	Media	Exposure		
		Frequently (2)	Occasionally (1)	Never (0)
1	Radio			
2	Television			
3	News paper			
4	Internet			
5	Mobile			

6	Agricultural fair			
7	Agricultural exhibition			
8	Farm magazine			
9.	Any other			

**10. Land holding:** \_\_\_\_\_ ha

**11 Annual income:** \_\_\_\_\_ Rs.

**12. Occupation:**

Sr. No.	Occupation	Please mark
1	Only Farming	
2	Only labour work	
3	Farming + Animal Husbandry	
4	Farming + Agriculture Labour	
5	Farming + Other Labour	
6	Farming + Animal Husbandry + Agriculture Labour	
7	Farming + Animal Husbandry + Other Labour	

**13. Herd size: (Number possess):**

Sr. No.	Livestock	Number
1	Bullock	
2	Cow	
3	Buffalo	
4	Calves/Heifer	
5	Sheep	
6.	Goats	

**14. Economic motivation:** Please, state your opinion about the following statements:

Sr. No.	Statement	SA	A	UD	DA	SDA
1	A tribal family should engage in such work that will yield more economic profit.					
2	The most successful tribal family is one which earns maximum.					
3	I always think of the new ways and means of earning more and more money.					
4	My all efforts are oriented towards money making.					
5	One should earn money, but only earning of money is not the goal of life					
6	Those who are crazy after money run here and there like a dog.					

**Note:** SA: Strongly agree, A: Agree, UD: Undecided, DA: Disagree, SDA: Strongly disagree

### Part-II Migration Behaviour

**1. How many members of family migrate?**

Sr. No.	Number of member	Please $\sqrt$ mark
1	One	
2	Two	
3	Three	
4	Whole family	

**2. Frequency of migration in year:**

Sr. No.	Frequency	Please $\sqrt$ mark
1	Once	
2	Twice	
3	Thrice	

**3. Place of migration:**

Sr. No.	Place of migration	Please ✓ mark
1	Within Taluka	
2	Within District	
3	Within State	

**4. Duration of migration: (Please indicate the duration of migration in time period of Days for all the members):**

Sr. No.	Member	Total days of migration in a year
1	First	
2	Second	
3	Third	
4	Fourth	
	Total	

**5. Type of migration:**

Sr. No.	Type of migration	Please ✓ mark
1	Rural to Rural	
2	Rural to Urban	

**PART- III**

**Factors responsible for migration among tribal families**

Please indicate that which factors or reasons are responsible for migration.

Sr. No.	Factors or reasons responsible	Please ✓ mark
<b>A</b>	<b>Push factors</b>	
1	Lack of employment opportunities in tribal area	
2	Low wages in tribal area	

3	Lack of basic amenities	
4	Drought/ Famine/ Crop failure	
5	Poor economic condition	
6	Landlessness	
<b>B</b>	<b>Pull factors</b>	
7	Better education	
8	Better health care services	
9	Availability of diverse work opportunities	
10	More income than MANREGA	
11	Better scope for marriage	
12	Family welfare purpose	
13	Better social status	

#### **PART- IV**

#### **Employment opportunities obtained by tribal families through migration**

Please indicate that which type of employment opportunities you got through migration.

Sr. No.	Employment opportunities
1	
2	
3	
4	
5	

## Correlation Matrix

	Age	Education	Aminities	Perception	Training received	Size of family	Type of family	Social participation	Mass media exposure	Land holding	Annual income	Occupation	Animal possation
<b>Age</b>													
<b>Education</b>	-0.432**												
<b>Amenities</b>	0.262**	-0.245**											
<b>Perception</b>	-0.027NS	0.191*	0.023NS										
<b>Training received</b>	-0.096NS	0.123NS	0.008NS	0.141NS									
<b>Size of family</b>	-0.133NS	0.181*	0.048NS	0.292**	0.136NS								
<b>Type of family</b>	-0.145NS	0.128NS	-0.040NS	0.069NS	-0.082NS	0.326**							
<b>Social participation</b>	-0.091NS	0.162NS	-0.116NS	0.137NS	0.244**	0.051NS	0.058NS						
<b>Mass media exposure</b>	-0.005NS	0.024NS	-0.053NS	-0.071NS	-0.019NS	0.148NS	0.055NS	-0.081NS					
<b>Land holding</b>	-0.165NS	0.020NS	0.019NS	-0.184*	0.059NS	-0.016NS	-0.158NS	-0.093NS	0.315**				
<b>Annual income</b>	-0.222*	0.134NS	-0.121NS	0.150NS	0.068NS	0.296**	0.046NS	-0.091NS	0.379**	0.536**			
<b>Occupation</b>	-0.017NS	-0.092NS	0.055NS	-0.302**	-0.128NS	-0.188*	-0.137NS	-0.099NS	0.112NS	0.310**	-0.002NS		
<b>Animal possation</b>	-0.011NS	-0.028NS	0.052NS	-0.291**	-0.072NS	-0.196*	-0.252**	-0.155NS	0.193*	0.472**	0.069NS	0.585**	
<b>Economic motivation</b>	-0.197*	0.195*	-0.137NS	0.118NS	0.064NS	0.178NS	0.223*	-0.032NS	0.263**	0.346**	0.395**	0.014NS	0.027NS