

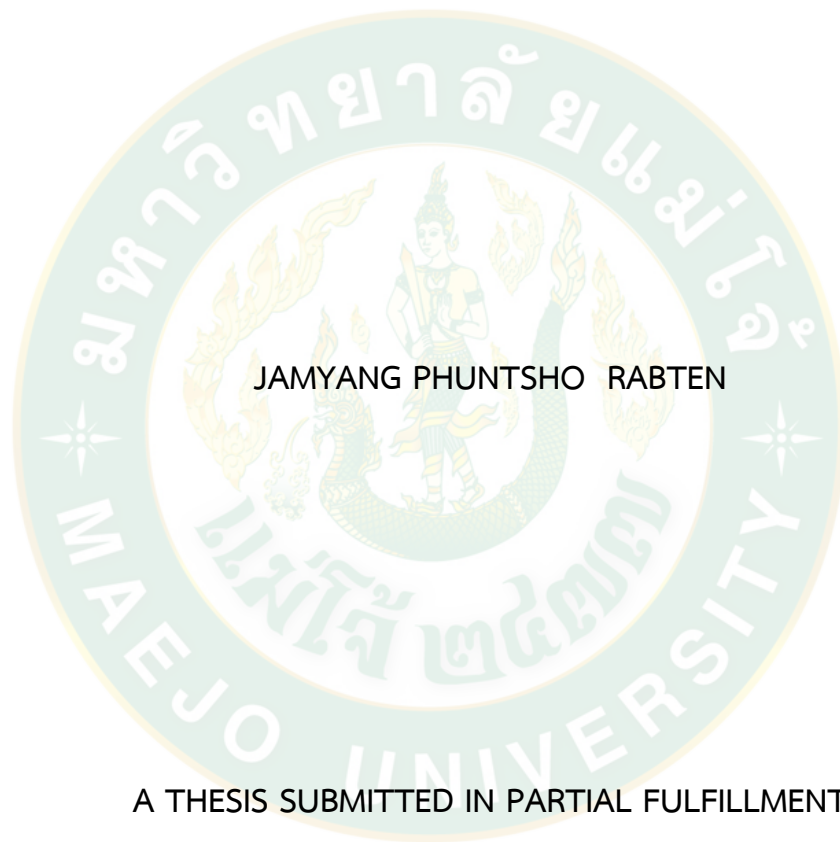
INTEGRATED STRATEGIC PLANNING OF MINISTRY OF AGRICULTURE
AND FORESTS ON RURAL-URBAN MIGRATION
IN TRASHIGANG, BHUTAN



JAMYANG PHUNTSHO RABTEN

MASTER OF PUBLIC ADMINISTRATION IN PUBLIC POLICY AND PUBLIC
MANAGEMENT
MAEJO UNIVERSITY
2019

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JAMYANG PHUNTSHO RABTEN

A THESIS SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF PUBLIC
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IN PUBLIC POLICY AND PUBLIC MANAGEMENT
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ชื่อเรื่อง	การวางแผนเชิงกลยุทธ์แบบบูรณาการของกระทรวงเกษตรและป่าไม้ ด้านการย้ายถิ่นจากชนบทสู่เมืองในเขตทราซิกัง ประเทศภูฏาน
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บทคัดย่อ

การศึกษาครั้งนี้มีวัตถุประสงค์เพื่อศึกษาปรากฏการณ์การย้ายถิ่นของประชากรจากชนบทสู่เมืองและสภาพทางเศรษฐกิจและสังคมในอำเภอทราซิกัง (Trashigang) และกลยุทธ์ของกระทรวงเกษตรและป่าไม้เพื่อกำหนดนโยบายแบบบูรณาการเพื่อลดการย้ายถิ่นในชนบทสู่เมืองในอำเภอทราซิกัง ภูฏาน เก็บรวบรวมข้อมูลโดยการวิจัยเอกสาร การสนทนากลุ่มย่อย และการสัมภาษณ์เชิงลึก อีกทั้งมีการสุ่มตัวอย่างอย่างง่ายเพื่อคัดเลือกผู้ให้ข้อมูลจำนวน 30 คน ซึ่งรวมถึงแรงงานย้ายถิ่น ผู้ไม่ย้ายถิ่น และผู้กำหนดนโยบายจากกระทรวงเกษตรและป่าไม้ รวมถึงเจ้าหน้าที่ของรัฐในท้องถิ่น จากการศึกษาผู้ย้ายถิ่น พบว่า ผู้ย้ายถิ่นส่วนใหญ่ ร้อยละ 59 เป็นเพศชาย และร้อยละ 41 เป็นเพศหญิง แร่งงานส่วนใหญ่ร้อยละ 23.4 มีการศึกษาและส่วนใหญ่มีการศึกษาสูงกว่าระดับมัธยม ร้อยละ 5.6 ปัจจัยผลักดันที่สำคัญสำหรับการย้ายถิ่นในเขตชนบทสู่เมืองในภูฏาน เกิดจากการขาดความสะดวกด้านการศึกษา ร้อยละ 46 ขาดงานนอกฟาร์มในพื้นที่ชนบท ร้อยละ 17 และสิ่งอำนวยความสะดวกบริการไม่เพียงพอ ร้อยละ 15 ในขณะที่ปัจจัยดึงดูด คือ โอกาสการจ้างงานในเขตเมือง ร้อยละ 34 การย้ายเพราะครอบครัว ร้อยละ 25 และการแต่งงาน ร้อยละ 24 ผลกระทบเชิงบวกของการย้ายถิ่นสู่เมือง คือ รายได้จากการส่งเงินกลับของแรงงานย้ายถิ่น ลดปัญหาสภาพแวดล้อมทางธรรมชาติ สุขภาพและสุขอนามัยที่ดีขึ้น และผู้ไม่ย้ายถิ่นได้รับส่วนแบ่งจากครอบครัวมากขึ้น ในขณะที่ผลกระทบด้านลบได้แก่ ที่ดินที่เหมาะสมแก่การเพาะปลูกไม่ถูกใช้ประโยชน์ การขาดแคลนแรงงานหญิงในภาคการเกษตร การสูญเสียคุณค่าทางวัฒนธรรม การลดลงของการทำงานร่วมกันในครอบครัว ปัญหาการบริหารและการจัดเก็บภาษีประจำปี ผลกระทบในท้องถิ่นอาจหายไปเนื่องจากมีเยาวชนจำนวนมากย้ายไปยังเมืองศูนย์กลางเพื่อโอกาสที่ดีกว่า ซึ่งในขณะนี้ยังไม่มีกลยุทธ์เฉพาะเกี่ยวกับการย้ายถิ่นในเขตชนบทในภูฏาน และแม้ว่ารัฐบาล โดยเฉพาะอย่างยิ่งกระทรวงเกษตรและป่าไม้ได้ดำเนินการบางอย่าง แต่การย้ายถิ่นในเขตชนบทยังคงเพิ่มขึ้น การศึกษานี้จึงเสนอให้มึนโยบายแบบบูรณาการโดยให้ชุมชนมีส่วนร่วม โดยได้กำหนดเป้าหมายกลยุทธ์ไว้ 4 ประการ คือ การพัฒนาสิ่ง

อำนวยความสะดวกในพื้นที่ชนบท สร้างแรงดึงดูดใจในการทำฟาร์มในพื้นที่ชนบท พัฒนาและส่งเสริมการท่องเที่ยวเชิงเกษตร (Agro tourism) และการส่งเสริมการท่องเที่ยวเชิงนิเวศและวัฒนธรรม (Cultural and Eco tourism) นอกจากนี้ แนวทางการพัฒนาจำเป็นต้องเปลี่ยนจากแนวทางการพัฒนาเศรษฐกิจแบบเข้มข้นไปเป็นการพัฒนาเศรษฐกิจในระดับภูมิภาคที่สมดุลและมีการกระจายอำนาจเพื่อลดการย้ายถิ่นของคนชนบทและกระตุ้นให้เกิดการย้ายถิ่นกลับสู่ชนบทต่อไป

คำสำคัญ : การย้ายถิ่นจากชนบทสู่เมือง, การพัฒนาทางเศรษฐกิจและสังคม, นโยบายบูรณาการ, กระทรวงเกษตรและป่าไม้, การกำหนดกลยุทธ์เบื้องต้น



Title	INTEGRATED STRATEGIC PLANNING OF MINISTRY OF AGRICULTURE AND FORESTS ON RURAL-URBAN MIGRATION IN TRASHIGANG, BHUTAN
Author	Mr. Jamyang Phuntsho Rabten
Degree	Master of Public Administration in Public Policy and Public Management
Advisory Committee Chairperson	Assistant Professor Dr. Suriyajaras Techatunminasakul

ABSTRACT

This study aimed to study the rural-urban migration phenomena, socio-economic status of Trashigang and the existing strategies of the Ministry of Agriculture and Forests to formulate integrated policies to reduce rural-urban Migration in Trashigang district, Bhutan. Data were collected through documentary research, small group discussion and in-depth interviews. A convenience sampling technique was instituted to select 30 informants which included migrants, non-migrants and policymakers from the Ministry of Agriculture and Forests including the local government officials. Results of the study revealed that in terms of migrants' population, the male and the youth were relatively higher with 59% for male and 41% for female. In general, majority of the migrants (23.4%) had attended some level of education, the majority had higher secondary level education (5.6%). The main push factors for rural-urban migration in Bhutan were found to be lack of education facilities (46%), lack of off-farm jobs in rural areas (17%) and inadequate service facilities (15%). On the other hand, the pull factors were employment opportunities in urban areas (34%), family move (25%) and marriage (24%) among others. The study revealed that the positive impacts of rural-urban migration were income through remittances, less pressure on the natural environment, better health and sanitation, and the non-migrants inherit more family property shares. Whereas negative impacts are following of arable land, labour shortage, the feminization of agriculture, slow development, loss

of cultural values, weakening of family cohesion, an administrative problem during the annual census and tax collection, old age destitution and loss of skilled labours. There was a threat that local products may vanish as an increasing number of youths were found to be migrating to urban centres looking for better opportunities. While, currently there was no immediate or specific strategies on rural-urban migration in Bhutan, the government and in particular the Ministry of Agriculture and Forests had implemented certain interventions albeit the rural-urban migration was still on the rise. The study had recommended that importance must be placed on inclusive community based integrated policies to reduce migration in Trashigang district by four goals, by taking modern amenities to rural areas, making farming attractive in the rural areas, develop and promote agro-tourism, and promotion of cultural and eco-tourism. Further, the developmental approach needed to be shifted from the concentrated economic development approach to regional balanced economic development and decentralization to help reduce rural-urban migration and induce return migration in the long run.

Keywords : Rural-urban Migration, Socio-economic development, Integrated Policy, Ministry of Agriculture and Forests, Strategy formulation

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Jamyang Phuntsho Rabten



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Acronyms



ASEAN	Association of Southeast Asian Nations
BDBL	Bhutan Development Bank Limited
BHU	Basic Health Unit
BLSSR	Bhutan Living Standard Survey Report
BoB	Bank of Bhutan
BOIC	Business Opportunity and Information Center
CSI	Cottage and Small Industries
DA	Development Administration
DoA	Department of Agriculture
DoFPS	Department of Forests and Park Services
EDP	Economic Development Policy
FAO	Food and Agriculture Organization
FDI	Foreign Direct Investment
FYP	Five Year Plan
GDP	Gross Domestic Product
HWC	Human Wildlife Conflict
IDP	Internally Displaced Persons
ILO	International Labour Organization
IOM	International Organization for Migration
LG	Local Government
MoAF	Ministry of Agriculture and Forests



NEP	National Employment Policy
NLC	National Land Commission
NSB	National Statistics Bureau
PAR	Poverty Analysis Report
PHCB	Population and Housing Census of Bhutan
PPD	Policy and Planning Division
PPP	Public Private Partnership
PSL	Priority Sector Lending
REDCL	Royal Enterprise Development Corporation Limited
RGoB	Royal Government of Bhutan
RMA	Royal Monetary Authority
RNR	Renewable Natural Resources
RUMS	Rural Urban Migration Survey
SGD	Small Group Discussion
UNESCO	United Nations Educational, Scientific and Cultural Organization
URC	User Right Certificate
URS	Use Right System
WCD	Wildlife Conservation Division

CHAPTER I

INTRODUCTION

A. BACKGROUND AND RESEARCH PROBLEMS

Bhutan is a small mountainous landlocked country situated in the eastern Himalayas covering geographical area of 38,394 square km with a population of approximately 735,553 people (National Statistics Bureau, 2017). Agriculture is the foundation of a nation ensuring economic growth, people's livelihoods and social stability as 62.2% of our people depend on farming and this is important in terms of employment and poverty alleviation (RGoB, 2015).

Agriculture plays a vital role in not just securing food and providing employment but a wholesome livelihood for majority of Bhutanese population. Only about 2.93% of the country's land area is cultivated, agriculture is an immensely important sector providing employment to about 59.4% of the work force. It contributes up to nearly 16.8% of the GDP, accounts for 4.3% of exports and provides a large proportion of the raw materials for industries (MoAF, 2013).

The current farming in Bhutan is characterized by small mixed family farms operated on fragmented smallholdings. The rural economy is based primarily on subsistence agriculture for livelihood. Family labour forms a substantial part of the farm labour. The limited arable land, low productivity, farm labour shortage, subsistence farming and the tough geographical terrain makes farming both unattractive and difficult in Bhutan. Further, steep terrain and poor accessibility pose immense challenge in farm mechanization. About 31% of the cultivated land is on slopes more than 50%. These factors lead to low economies of scale and high cost of production (Department of Agriculture, 2017).

In Bhutan, Ministry of Agriculture and Forests, plays an important role in development of agricultural sector through various interventions to meet the food demand for the Bhutanese people. The ministry's vision is sustainable natural resources for equitable social and economic wellbeing of the Bhutanese people and the nation. To achieve this vision, the ministry has formulated broad strategies to meet the overall goal of achieving food self-sufficiency in the country.

Now with the globalization, the face of our nation is rapidly changing. Increasing numbers of people are choosing to leave their rural homes and migrate to urban centers. Further, with the development process, the uneducated people started moving to the urban areas in search of jobs. The change in the workplace for many Bhutanese migrating from the rural villages and communities and working in the organizational set-up was a big transformation. The low agriculture sector growth, rural-to-urban migration, increasing urban population and fallowing of arable lands have led to increase in food imports thereby contributing to the negative trade balance.

With rapid rural-urban migration, an incidence of increasing agricultural land being left fallow around the country is on rise. For instance, in 2016 alone the Department of Agriculture (DoA) recorded a land fallow of 57,681 acres. The DoA statistics also show that production and productivity of crops are decreasing annually and there is a steady rise in the import of agricultural products contributing to negative trade balance.

Today, the rural-to-urban migration is becoming a most pressing issue. Various reports and studies show that rural-to-urban migration is a common phenomenon within the country whereby rural areas are left almost empty while urban areas become congested with an increasing population.

Over the last three decades, approximately 129,486 people from rural areas have migrated to urban center. The national migrants represent 21.4% of the total population of which 18.2% constitute rural-to-urban migration and 3.2% accounts for

rural-to-rural migration. Trashigang district is found to be the highest contributor with 14.5% in terms of out-migrants from the place of origin (Policy and Planning Division, 2014).

Further, the past studies revealed that Trashigang district has 890 gung-tong (empty households) against the total of 2,580 gung-tong reported by 103 sub-districts in the country. Trashigang district contributed the highest incidences of national empty households with 27.3% (Policy and Planning Division, 2014). Although, many perceives that rural-to-urban migration is a sign of economic development, however, if corrective measures are not taken, it can have negative impact and hinder equitable socio-economic development in the country.

In general, rural-urban migration has led to several social and economic problems in the country. For instance the rural-to-urban migration has created the problem of labour shortage, fallow land and human-wildlife conflict which has led to decrease in crop production and productivity. Other problems are weakening of family cohesion, old age destitution, socio-cultural break-up, loss of traditional values, slow development in the rural areas etc. (Policy and Planning Division, 2014).

While, there are several government policies and strategies that directly or indirectly contribute to reducing rural-to-urban migration, yet the incidence of people moving from rural areas to urban centers and its associated problems are still on rise. Considering the above issues and the emerging challenges, there is a need to formulate a strong strategies to address the rural-to-urban migration problem in the country.

Therefore, this study will try to look at the existing government policies and strategies, identify the gaps and formulate new integrated strategies particularly focusing on Trashigang district to reduce out-migration problem and help achieve food self-sufficiency in the district.

Hence, the study will try to answer the following research questions:

1. What is the current rural-urban migration situation in Bhutan?

- 1.1 What are the factors that influence rural-urban migration?
2. What is the socio economic situation of Trashigang district relating to migration phenomena?
3. To what extent does the current strategies serve purposes on combating rural-urban migration in Bhutan?
 - 3.1 What mechanism or forces are put in place to reduce rural-to-urban in Bhutan?
4. What is the integrated strategic planning that can reduce rural-to-urban migration in Trashigang district?

B. OBJECTIVES OF THE STUDY

The research will try to look at the overall strategic planning of Ministry of Agriculture and Forests and in particular the existing strategies and formulate new integrated strategies on reducing rural-to-urban migration in Trashigang district. The research will primarily look at the following;

1. To study the rural-to-urban migration phenomena in the last ten years
2. To study the socio economic situation of Trashigang district relating to migration phenomena
3. To review existing strategies of Ministry of Agriculture and Forests on reducing rural-to-urban migration in Bhutan
4. To formulate new integrated strategies to reduce the incidence of rural-to-urban migration in Trashigang district

C. SCOPE OF THE STUDY

The study will focus on formulating rural-urban migration strategies of Ministry of Agriculture and Forests (MoAF) and in particular for the Trashigang district. The location of the study will be Trashigang district since it is the largest district and one of the districts with highest migration rate in the country. The study aims to conduct in-depth interview and Small Group Discussion to collect the data for the study.

In most of the government documents and reports, rural-urban migration has been identified as one of the prominent issues that affects food production in Bhutan. The reduction in crop production and increase in food imports over the years has been viewed as the absence of inadequate strategies on how to curb rural-urban migration in Bhutan. Although, there are many factors that affects food production, this study will try to review the existing strategies of Ministry of Agriculture and Forests related to rural-to-urban migration and identify new integrated strategies to reduce the migration problem in Trashigang district.

The push and pull theory by Lee and migration model by Todaro will be used to study and understand the migration phenomena while strategic planning, strategic management and system theory will be used to formulate new integrated strategies to reduce rural-to-urban migration in the country and Trashigang district in particular.

Although, the rural-urban migration is a cross-sectoral issues and numerous ministries, agencies and institutions have their own strategies to reduce the migration issues, this study will particularly look from the point of view of Ministry of Agriculture and Forests and integrate the strategies of various agencies under MoAF and streamline with the programs, projects and activities for the Trashigang district.

D. EXPECTED OUTPUT OF THE STUDY

This study is expected to produce the following outputs:

1. A brief report on rural-to-urban phenomena in the last ten years containing the factors affecting migration in Bhutan
2. A brief report on the socio economic situation of Trashigang district in order to formulate a specific and practical strategies in reducing migration in the district
3. A brief report containing existing strategies of Ministry of Agriculture and Forests on reducing rural-to-urban in Bhutan
4. A report on new set of integrated strategies on reducing rural-to-urban migration for Trashigang district

Finally, this research will be useful for the Ministry of Agriculture and Forests particularly the Policy and Planning Division in formulating future policies and programs for alleviating rural-urban migration issues inter alia ensuring sustainable and balanced rural socio-economic development in the country.

E. DEFINITIONS AND TERM USED

General definition

Migration refers to movement of people from villages to the cities and nearby districts in search of better livelihoods and for the purpose of establishing a new or semi-permanent residence.

Push factors are factors that influences the movement of people from rural to urban areas. Lack of educational facilities, inadequate social infrastructures,

unproductive agriculture land, lack off-farm employment, wild animal damage to crops etc. that can push people out of the community are the examples of push factor.

Pull factors are the factors that influences the demand for rural people to move to urban places. Factors such as good education and health facilities, better job opportunities, better services, better quality of life etc. in the urban destinations that can pull people to move are some of the examples of pull factor.

Strategic planning is a systematic process of envisioning a desired future, and translating this vision into broadly defined goals or objectives and a sequence of steps to achieve them through proper planning by the Ministry of Agriculture and Forests on how to reduce rural-urban migration in Bhutan. Strategic planning includes, strategy formulation, strategy implementation and building action plan and strategy evaluation.

Strategies is a set of plan of action, or policies designed to reduce rural-urban migration in Bhutan. The strategies will be prioritized from the recommendations of the experts from the ministry and local government officials.

Vision is the long term policy statement of Ministry of Agriculture and Forests. The vision of this study is coined to reduce rural-urban migration in Bhutan to improve food production in Bhutan.

Mission is the purpose and day-to-day activities of Ministry of Agriculture and Forests. It is basically distribution of equitable natural resources, budgets and human resources to carry out the activities to achieve its vision. The mission is to ensure increase in food production through implementing adequate and sound strategies on reducing rural-urban migration in Bhutan.

Objective is a steps, activities and milestones that will help in realizing the vision/mission of the Ministry of Agriculture and Forests.

Integrated Planning is an approach or a system of Ministry of Agriculture and Forests to work in tandem with four large departments and numerous agencies and regulatory bodies which provides different technical assistance to achieve the goals of

the ministry. The integrated planning is a collective efforts, ways and means on how to reduce rural-to-urban migration inter alia the integration of existing strategies with new strategies to minimize the rural-to-urban migration situation in Bhutan.

Operational definition

Integrated strategy is an approach to consolidate the relevant strategies of Ministry of Agriculture and Forests on rural-to-urban migration in Bhutan. The MoAF is one of the largest ministries and many institutions and agencies have their own strategies to address rural-urban migration issues. The aim of this study is to bring all the strategies of different agencies together, merge and consolidate as one integrated strategy. The strategy formulation has four process as follows:

- i. Migration phenomena
- ii. Review of existing strategies
- iii. Socioeconomic situation of Trashigang district
- iv. Intervening issues and
- v. Guiding principles

Migration phenomena is the overall aspects or the characteristics of migration. In particular it encompasses the types of migrations, the migrants, destination of migration, push and pull factors (causes), the volume of migrations and the impacts of migrations.

Rural-Urban Migration existing strategies refers to uncovering of current and existing strategies implemented by Ministry of Agriculture and Forests (MoAF) on reducing rural-urban migration in Bhutan. The documentary research will be the main method to uncover the existing strategies.

Socio-economic situation refers to the social and economic status and livelihood of Trashigang district. For the review of socio-economic situation, the study will look at occupation, land use, main crops and local products as the main components to understand the potential and advantages of Trashigang district.

Intervening issues are the obstacles that hinder the smooth implementation of the strategies. It can be both internal and external factors. For example, lack of policy enforcement, coordination among lead agencies, political support etc. are the main issues that affects the policy implementation.

Guiding principles are the national policies that support Ministry of Agriculture and Forests in supporting the development of agricultural sector to work towards combating rural-urban migration issues. The guiding principles are vision 2020 and Economic Development Policy.

All the four aspects defined above will be the process for formulation of new integrated strategies which is explicitly explained in the conceptual framework under chapter 3.

CHAPTER II

LITERATURE REVIEW

A. Theories of Migration and Perspectives

There are numerous theories and models on migration and strategy formulation by different scholars and experts. However, this study will particularly review push and pull theory of migration by Lee (1966), rural-urban migration model by Todaro (1969), strategic planning by Wheelen and Hunger (2012), strategic management by Wells (1998) and system theory by Bertalanffy (1969).

1. Definition of Migration

According to Lee (1966: 49) “migration is defined broadly as a permanent or semipermanent change of residence”. Food and Agriculture Organization (2016: 6) defines migration as the “movement of people, either within a country or across international borders. It includes all kinds of movements, irrespective of the drivers, duration and voluntary/involuntary nature. It encompasses economic migrants, distress migrants, internally displaced persons (IDPs,) refugees and asylum seekers, returnees and people moving for other purposes, including for education and family reunification”.

On the other hand it is argued that migration, along with births and deaths are one of the three demographic components of population change, and it has often been described as the most difficult to measure, model and forecast (Skeldon, 2013:

1)

2. Lee's Migration Model

The push and pull theory is the widely used theory in migration studies. It was first reported by Ravenstein in his famous paper "The Laws of migration". Subsequently, few scholars such as Everett Lee had modified and developed the theory to best fit with the changes in the modern world.

Lee's migration model encompasses the push and pull factors, intervening obstacles, in order to project the migratory pattern. In his journal "A theory of migration" argues that irrespective of how short or long, easy or difficult, every act of migration involves an origin, a destination, and an intervening set of obstacles (Lee, 1966: 49).

According to Lee (1966: 50) the factors that influence the migrants to migrate are summarized into four aspects as follows:

- 2.1 Factors associated with the area of origin
- 2.2 Factors associated with the area of destination
- 2.3 Intervening obstacles
- 2.4 Personal factors

To understand the concept, Lee elaborates the above factors in a simple flow chart as shown in the figure 1 below. According to Lee, "in every areas there are countless factors which act to hold people within the area or attract people to it, and there are others which tend to repel them". The (+) signs in the (figure 1) represents the pull factors of an area which tend to hold people within the area or attract people to it, and (-) signs stand for push factors in an area which act to repel people. Apart from (+) and (-) signs, there are also (0s) which people are essentially indifferent. It is argued that all these factors work in tandem with the personal factors to influence the migrants in decision making (Lee, 1966: 49-50).

Lee's migration model is basically a model that determine the push/pull factors and intervening obstacles in order to project the migratory pattern for the policy makers to frame suitable polices. In his concept, Lee argues that intervening obstacles can sometime block migration to certain extend while push and pull factors can accelerate migration out of an origin to a new one.

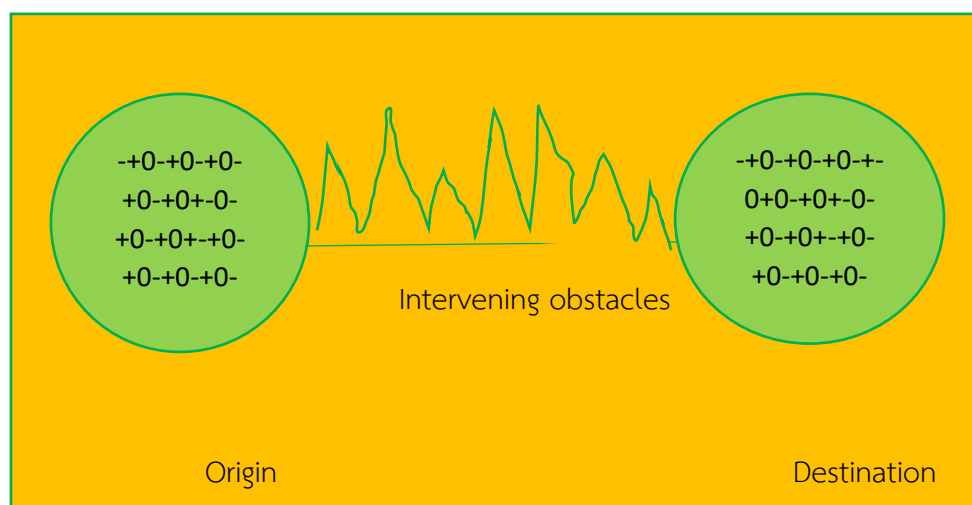


Figure 1 : Lee's migration factor chart

It is argued that the push factor is the factor that induces people to leave an old residences. In simple form, it is anything that forces people to migrate out of an origin to the destination. The main forces of push factors are economic, cultural and environmental factors. Within these three forces, there are several push factors that are prominent one such as lack of opportunities, discrimination, loss of wealth, war etc. As shown in (fig.1) the push factors are what drive people out of an origin (Lee, 1966).

Concurrently, pull factors are those that induces people to move to a new location. It is essentially the reason that one migrate to a certain areas. Similar to push factors, economic, cultural and environmental are the key determinants or the forces

of pull factors. However, the push factors deals with reason for leaving the area whereas, pull factor deals with reason for moving to a particular place (Lee, 1966).

Likewise, between the origin and the destination that Lee's migration model discuss is an intervening obstacles. It is an environmental or cultural features of a land that hinders migration. The main intervening obstacles discussed in the Lee's migration model are cultural, physical and environmental intervening factors. For instance, the cultural intervening obstacles are cultural restrictions on travel and unfriendly territory, while environmental intervening obstacles can include physical features like mountains, rivers and desert. Intervening obstacles are a key aspects of Lee's migration model because it helps identify the intervening place between two different locations.

According to Lee's model, in both origin and the destination, there are positive as well as negative factors. He argues that there has to be more positive reasons than the negatives to migrate to certain places. Apart from the positive reasons, the intervening obstacles also have to be easy enough to overcome to migrate.

In this study, Lee's push and pull theory of migration will be used to find out the migratory pattern and the overall rural-to-urban migration phenomena in the context of Bhutan. However, the study will not look into the intervening obstacles as the purpose of study is to only review the push and pull factors of migration. Moreover, the rural-to urban migration survey has already been done and the report had been published and circulated widely. So the study will use the published report to review the push and pull factors of migration.

3. Todaro's Model of Rural-Urban Migration

Michael P. Todaro's rural-urban migration theory is another important theory that will be used to understand the migration phenomena. Todaro's rural-urban migration theory is basically an economic behavioral model. The theory assumes that despite huge unemployment issues in the urban cities, people constantly migrate from rural areas to urban centers. It is assumed that rural-urban migration is essentially driven by an economic phenomenon. The movement of people to cities are induced by an economic factor albeit the reality of urban cities with huge unemployment issues. However, people migrate with an expectation of real income differences between rural and urban works coupled with the probability of getting a new urban job (Todaro, 1969).

Todaro's migration model principally focus on two economic behavioral models: (i) the urban rural real income differential and (ii) probability of obtaining an urban job. The theory assumes that the later plays an essential role in making the decision of migrants. The decision to migrate is an outcome of rational economic calculations of relative benefits and costs, of which most are financial in nature albeit some psychological factors as well (Todaro, 1969)

According to Todaro (1969), migration happens on the foundation of an implicit, "expected" income maximization objective. It is with this assumption, the migrants argues to choose from the various labour-market opportunities that existed between the rural and urban sectors the one opportunity which maximized his "expected" gains from migration. Todaro argues that the decision to migrate thus occur in response to urban-rural differences in the "expected" rather than actual earning.

3.1 Characteristics of Todaro's Model

The characteristics of Todaro's rural-urban migration theory in nutshell summarize the following:

3.1.1 Migration is stirred largely by rational economic considerations of relative benefits and costs, financial as well as psychological factors

3.1.2 The decision to migrate depend on expected rather than actual urban-rural wage differentials

3.1.3 The probability of obtaining an urban job is inversely related to the urban unemployment rate

In addition to Lee's migration model, this study will also use Todaro's rural-to urban migration model to look at the determining factors of migration and to study and understand the decisions of the migrants to migrate to the urban areas.

4 Strategic Planning

Strategic planning is an organizational management activity that is used to set priorities, focus energy and resources, strengthen operations, ensure that employees and other stakeholders are working towards common goals, establish agreement around intended outcomes/results, and assess and adjust the organization's direction in response to a changing environment (Maleka, 2014).

A Strategic Planning is an essential process in preparing to carry out the organization's mission. An effective strategic planning process provides a framework to make decisions on how to allocate organizational resources, address challenges and take advantage of opportunities that arise along the way (Yelder et al., 1999).

A Strategic Planning is designed to help public and non-profit organizations (and communities) respond effectively to their new situations. It is a disciplined effort to

produce fundamental decisions and actions shaping the nature and direction of an organization's (or other entity's) activities within legal bounds (Bryson, 1988).

The term strategic planning was coined sometime in 1950s. Since then it has become very popular between the mid-1960s and the mid-1970s albeit it was casted aside during 1980s as various strategic planning models did not yield higher returns. However, in 1990s it was revived and the strategic planning was widely practiced and considered as the answers to all the problems (David, 2011).

4.1 Strategic Planning Process

According to Maleka (2014) strategic planning process is one of the most significant tasks of the senior management of an organization. Senior management should use it as a means to set the organizational goal, determine the strategies to require to achieve that vision, make the resource utilization decision to realize the selected strategies, and build alignment to the vision and strategic direction throughout all levels of the organization.

Strategic Planning helps an organization plan a course for the achievement of its goals. The process begins with reviewing the current operations of the organization and identifying what needs to be improved operationally in the forthcoming year. From there, planning involves envisioning the results the organization wants to achieve, and determining the steps necessary to arrive at the intended destination (Yelder et al., 1999). The strategic planning process of Yelder et al., (1999: 3) are described below;

4.1.1 Prepare to plan: Discuss within the organization and make a competent team to work, and follow the due process

4.1.2 Identification of the vision and mission of an organization: Appropriate mission and vision of an organization is vital for effective planning and setting up of the objectives

4.1.3 Setting up of the objectives: Objectives can be short term, medium term or long term depending on the nature of the work

4.1.4 Current situation analysis: Both the organization and institution analysis is important for the effective implementation of the objectives or Do and environment scan or SWOT analysis

4.1.5 Formulation of the strategy for meeting the set objectives: This is one of the most important step of the planning process and should be carefully set by the senior management by keeping into consideration the set objectives of the organization.

4.1.6 Proper implementation of the set strategies: The implementation should be in line with the planning that is on papers. Alignment of implementation with the strategies designed is very important to have a focus.

4.1.7 Feedback and control: If the implementation does not meet the set standards, then the gap should be measured and controlled in order to achieve the results.

4.2 Benefit of Strategic Planning

According to Bryson (1988) strategic planning intends to enhance an organization's aptitude to think, act, and learn strategically. The prospective benefits from the process are abundant, although there is no assurance that they will be realized in practice. These benefits includes;

4.2.1 Increased effectiveness. The organization's performance is enhanced, its mission is furthered, its mandates are met, and real public value is created. In addition, the organization responds effectively to rapidly changing circumstances.

4.2.2 Increased efficiency. The same or better results are achieved with fewer resources.

4.2.3 Improved understanding and better learning. The organization understands its situation far more clearly. It is able to reconceptualise its situation and work, if necessary, and to establish an interpretive framework that can guide strategy development and implementation.

4.2.4 Better decision making. A coherent, focused, and strong basis for decision making is established, and today's decisions are made in light of their future consequences.

4.2.5 Enhanced organizational capabilities. Broadly based organizational leadership is improved, and the capacity for further strategic thought, action, and learning is enhanced.

4.2.6 Improved communications and public relations. Mission, vision, goals, strategies, and action programs are communicated more effectively to key stakeholders. A desirable image for the organization is established and managed.

4.2.7 Increased political support. The organization's legitimacy is enhanced, its advocacy base broadened, and a powerful and supportive coalition develop

5. Strategic Management

Strategic Management is defined as an art and science of formulating, implementing, and evaluating cross-functional decisions that enables an organization to achieve its objectives (David, 2011: 6). Strategic management try to primarily place emphasis on the management of resources to achieve its goals and objectives. Strategic management is all about setting objectives, analyzing the competitive environment, analyzing the internal organization, evaluating strategies and ensuring that management rolls out the strategies across the organization.

In other words, strategic management is the deployment and implementation of the strategic plan and measurement and evaluation of the results. Deployment

involves completing the plan and communicating it to all employees. Implementation involves resourcing the plan, putting it into action, and managing those actions. Measurement and evaluation consists not only of tracking implementation actions but more importantly assessing how the organization is changing as a result of those actions and using that information to update the plan (Wells, 1998).

5.1 Stages of Strategic Management

According to David (2011) the strategic-management process entails three stages- strategy formulation, strategy implementation, and strategy evaluation which are described below.

Firstly, the strategy formulation embraces evolving a vision and mission, ascertaining an organization's external opportunities and threats, shaping internal strengths and weaknesses, creating long-term objectives, generating alternative strategies, and choosing particular strategies to pursue. Strategy-formulation issues include determining what new businesses to enter, what businesses to abandon, how to allocate resources, whether to expand operations or diversify, whether to enter global markets, whether to merge or form a joint venture, and how to avoid an unfriendly takeover.

Secondly, the strategy implementation requires an organization to establish annual objectives, develop policies, motivate employees, and allocate resources so that formulated strategies can be executed. Strategy implementation includes developing a strategy-supportive culture, creating an effective organizational structure, redirecting marketing efforts, preparing budgets, developing and utilizing information systems, and linking employee compensation to organizational performance.

Thirdly, strategy evaluation is the final stage in strategic management. Managers desperately need to know when particular strategies are not working well; strategy

evaluation is the primary means for obtaining this information. All strategies are subject to future modification because external and internal factors are constantly changing. Three fundamental strategy-evaluation activities are reviewing external and internal factors that are the bases for current strategies, measuring performance, and taking corrective actions. Strategy evaluation is needed because it is argued that success today is no guarantee of success tomorrow.

5.2 Process of Strategic Management

According to Wells (1998) there are five process of strategic management. They are pre-planning, strategic planning, deployment, implementation and measurement and evaluation. Strategic management goes beyond the development of a strategic plan, which included the pre-planning and strategic planning processes.

The pre-planning focus on pre-planning of activities and doing the detailed organizational assessment, while strategic planning aims on identification of mission, vision, guiding principles, strategic foundations and gap analysis to formulate strategic goals, strategies, objectives and develop measurement plan. Whereas, in the deployment, the plan are being made and make available to all the employees. Implementation involves resource mobilization, putting it into actions, and managing those actions. Finally, measurement and evaluation focus on check and balance, tracking the progresses, and help to translate it to update the plan.

6. System Theory

The system theory was first introduced in 1930s by famous biologist named Ludwig Von Bertalanffy. The term “system” is defined as “a set of elements standing in interrelation among themselves and with environment” (Bertalanffy, 1972).

According to the author, the system theory is the transdisciplinary study of phenomena in an organization, irrespective of independent of their element, category, or spatial or temporal scale of existence. It is also a management method; a way of analyzing and thinking about an alternative approach for an organizations. In simple term it is a theory that sees an organization as a set of interrelated and interdependent parts. It is one of the dominant organization theories in management today.

The system theory argues that organization is like living organism. They are made up of different components and subsystems that work in harmony for other system to progress and succeed (Bertalanffy, 1969). The system theory focuses on organization as a whole, its interaction with the environment, and its need to achieve equilibrium. The theory considers organization as either open or close system. According to the theory, the open system is affected by its environment while close system is not affected by the environment. The system theory focuses on understanding the organization as an open system that transforms input into outputs by working in close relation with the external environment taking feedback for further improvement in the system.

The theory believes that the success of an organization depend entirely on the synergy, interrelations and interdependence between every subsystems. The different sections and divisions, portfolios, working groups, individuals, business units and facilities are regarded as the component system of an organization (Bertalanffy, 1969). Today, system theory is widely used in the organization to measure performance, interexchange ideas and knowledge among individuals within the organization to help growth and development.

7. Development Administration Theory

The literature review revealed that Development Administration (DA) is one of the new branches of public administration. The term development administration was first coined in 1950s during the post-World War II by Edward Weidner. But it was first introduced by Indian civil servant U. L. Goswami in 1955 in his article titled “The structure of Development Administration in India”. Similarly, George Gant, F.W. Riggs, Edward Weidner, John Montgomery, Hahn Been Lee, Milton J. Esman, Ferrel Heady etc, were the first American scholars who have given the conceptualization and early patronage to development administration.

In the midst of social, economic and political turmoil created by World War II, development administration theory was introduced as a mechanism through which countries can achieve socio-economic development progress and usher development. It is a new functions and administration system introduced to represent the changes in public administration to recover from the economic shocks of World War II in carrying out policies, projects and program to develop social and economic conditions. The theory has given a new hope of greater individual freedom and equality of treatment in the society (Gant, 2006).

Further, development administration is concerned inter alia the aim to improve the standard of living, widening of their individual opportunities for personal experiences and advancement, correct inequalities and injustices in the society that conquer certain members of the society and their freedom of choice and opportunity. The theory argues that caste system, land tenure system and justice and comparative equality of treatment in the society are the main aspects that widen the inequalities in the society.

According to Gant (2006), natural resources, capital, technology and manpower are the main components of development. Hunger and starvation, poor housing, lack

of clothing, poor health are the common features and Gant argues that poverty is the main evidences of undeveloped countries. Further the people from undeveloped countries are mostly illiterate, insure and experience only unhappy leisure.

Comparative size of the national per capita income is used to evaluate the developed from the undeveloped countries. The low per capita income covers even greater poverty because of the fact in unequal distribution of national products. Elimination of poverty is the foremost priority of development focused by development administration theory. Gant argues that a country which utilizes its resources effectively is considered to be more developed than the country which does not (Gant, 2006).

The theory accords freedom of choices, the opportunities in planning and leading their lives according to their personal ideas of happiness and fulfillment, is considered one way of stating the purpose of development at higher level. The theory assumes that if choices and opportunity are given human being make social, political and economic decisions effectively and make greater contribution to society (Gant, 2006).

To have the most effective development administration, the first and foremost thing is to establish a set of purely administrative objectives for development administrators. According to Thompson (2006), there should be an innovative atmosphere, the operationalizing and wide sharing of planning goals, combining of planning (thinking) with action (doing), a cosmopolitan atmosphere, the diffusion of influence, the increasing of toleration of interdependence, and the avoidance of bureaupathology to have effective development administration.

The literature review found that there are six features of development administration which are described below:

(i) *Change orientation*

- From Stratified to egalitarian society
- From an agrarian economy to an industrial one
- From Totalitarian political regime to democratic
- From Particularism to Universalism

(ii) *Goal orientation*

- Social Development (Ensuring Equality and Justice)
- Economic Development (Growth in production and consumption)
- Political Development (Ensuring national integrity and nation- building)

(iii) *Client orientation*

- Focusing on rendering better services to clients and target groups

(iv) *Time orientation*

- Timely complementation of development projects

(v) *Commitment orientation*

(vi) *Participation orientation*

- Ensures people's participation and making people stakeholders in the development process
- People's participation is ensured by means of local governments, voluntary organizations, pressure groups, Sunshine legislations etc.
- It prevents the possibility of corruption and promotes transparency

B. Related Literature Review/Research

1. Definition of migration

Migration is broadly defined as a permanent or semipermanent change of residence (Lee, 1966: 49). Generally it is a movement of people from other area to another area irrespective of the distance and the locations. But in this study it focuses on the movement of people from rural-urban within the same geographical conditions.

2. Types of Migrations

There are basically three types of migration studied by the demographers. They are internal migration, international migration and return migration. Internal migration is a change of residence within the national boundaries, such as between states, provinces, districts, cities, or municipalities. In simple term, internal migration is the movement of people to a different administrative territory but within the same country.

Whereas, international migration is a change of residence over national boundaries. An international migrant is someone who moves to a different country. International migrants are further classified as legal immigrants, illegal immigrants, and refugees. Legal immigrants are those who moved with the legal permission of the receiver nation, illegal immigrants are those who moved without legal permission, and refugees are those crossed an international boundary to escape persecute.

The return migration refers to “the movement of a person returning to his or her country of origin or habitual residence usually after spending at least one year in other country. The return migration is further classified into voluntary return and force

return. Voluntary return is the assisted or independent return to the country of origin, transit or another third country based on the free will of the returnee whereas, the force return is the compulsory return of an individual to the country of origin, transit or third country on the basis of an administrative or juridical act” (IOM, 2011).

3. Who are the Migrants

Usually, the migrants around the world are mostly regarded as the disadvantaged, poor and the youth. One of the few universal generalizations that can be made about human migration is that the young and adults are most likely to move. According to Goldstein (1979) in the migration and rural development book published by Food and Agriculture Organization of United Nations, males tend to dominate rural to urban migration streams in Africa and Asia, whereas female are more frequent in Latin America. In most south Asian countries, migration is male-dominated except Sri Lanka which promotes female migration in the region (Srivastava and Panday, 2017).

Migration in Thailand is generally predominated by a rural households with lower resources that send mostly younger family members out of agriculture to urban centers to earn better wages. The internal migrants are mostly female with 47.8 percent and it remained constant at 48.5% from 2005-2010. The migrants in Thailand are usually between the age of 20 and 29 in 2010 and among the migrants who moved in 2016, 54.5% were aged 25-29 and 31.1% were 14-15 years. Most of migrants are from Northeast where households are relatively poor compared to other regions (UNESCO, 2018).

Migration in Nepal has been considered as significant livelihood strategy for rural people. The rural population migrating to urban centers are usually the people who no longer could secure a basic livelihood in a limited land and some economically better-off people who wanted to earn more and live happy life in the urban areas

(Timalsina, 2007). Similarly in China, migrants are usually the poor people from poorer inland provinces and poorly developed on-farm sectors (Kleinwechter, 2012). In South Asia, the migrants are from poor, most deprived and vulnerable section of the society with low level of education (Srivastava and Panday, 2017).

As per the Policy and Planning Division (2004), in Bhutan most migrants are age between 16 and 30 years, which comprises 44% followed by 31 to 45 years with 24% of the migrant population. The average age of migrant is 27, with 28 years for men and 26 years for female. Migration might thus be seen to deprive the villages of their most active and able members.

4. Destination of the Migrants

The major form of population movement in ASEAN countries is short-distance movement from one rural areas to another rural areas. In 1971, around 5.7 million people or 4.8% of the total population of Indonesia had moved between provinces since the birth. In Malaysia, the predominant form of movement was within states, between states and usually to contiguous states. In 1970, of the 2.4 million lifetime migrants in Malaysia, almost 40% had moved between rural areas, while one-third moved between urban areas. In case of the Philippines, 28% of all migrants (4.8 million) moved between rural areas and 42% from rural to urban or metropolitan area (Chulalongkorn University, 1981).

In many countries and especially in the case of South Asia, the destination of migration are found to be cities and towns where there are better infrastructure and services, more job opportunities, better quality of living besides others. In Thailand, the general migration pattern shows a predominance of short-distance moves. In 1970, rural-urban migrants in Thailand constituted about 10% of the 3.3 million migrant populations (Chulalongkorn University, 1981). The main migration destinations are

Bangkok Metropolis and vicinities, the central regions and most of the migrants are from North and Northeast region of Thailand (UNESCO, 2018).

In China, usually the poorer section of the society migrate to wealthier urban centers, economically advanced coastal provinces in the eastern part of the country to find a better employment and to meet their basic living needs (Kleinwechter, 2012).

Whereas, in case of Bhutan, although the destination for migrants is spatially spread all over the country, the most popular destination is Thimphu (capital city) followed by Paro (near capital city) and Phuntsholing (commercial hub). The other urban centers receive more or less the same level of migrants (Policy and Planning Division, 2004).

5. Migration Trend in the World and the Asia

The proportion of people living in larger towns and cities are increasing worldwide, in many cases at unprecedented rates, and particularly in many developing and emerging regions and countries it is a common phenomenon. Today, around 3.9 billion people live in settlements classified as urban, equivalent to 54% of the world's population. This figure is expected to reach 66% by 2050. In 1950, just 30% of the world's population was urban (Suttie and Vargas-Lundius, 2016).

Southeast Asia has begun to experience rapid urbanization, however, the rural population also continues to rise at a much higher rate. In 1950s, only 13% of Southeast Asia's total population of 173 million persons lived in the urban places, 22% increase was estimated by 1975 and it was further projected a growth of 35% by 2000 with estimated population of 385 million (Goldstein, 1979). Today the population of Southeast Asia stands at 653.208 million with 50.8% of the population still a rural phenomenon (Worldometers, 2018). In 2010, according to UNESCO Bangkok office, 8.3% of the Thai population had migrated internally during the previous five years, and

overall 21.8% of the population did not live in their home town. In Thailand alone, more than half of the population (50.5%) lives in urban areas (UNESCO, 2018).

According to Srivastava and Panday (2017: 15) “ the total stock of inter-regional migrants from South Asia is estimated to have increased from 10.08 million in 1990 to 27.22 million in 2015 i.e. about 2.7 times. All countries in the region except Afghanistan show an increase in inter-regional migration between 1990 and 2015”. In South Asia, the proportion of migrants in total population was as high as 32.2% in Bhutan, 20.2% in Sri Lanka and 14.4% in Nepal in 2011 (Srivastava and Panday, 2017: 7).

In India, according to migration data 2001, the migration population of India in general was 30.57%. While, 17.54% accounted for male migrant population, 44.54% accounted for female migrants. Out of the general migration population (30.57%), rural-urban migration was 16.43% of which 26.24% was male and 12.28% for female respectively (Shamshad, 2012)

The movement of people from rural-urban in Bhutan started as early as 30 years ago. The trend of rural-urban migration is increasing rapidly and rural areas are getting empty whereas the urban becoming congested with an increasing population. Over the last three decades, approximately 129,486 people have migrated to the urban areas. As of date, the national migrants represents 21.4% of which rural-urban constitutes 18.2% and rural-rural about 3.2% (Policy and Planning Division, 2014).

Rural-urban migration is likely to accelerate, and without mitigating action it will probably lead to increasing congestion, environmental degradation, conflicts of interest, and socio-economic problems in the cities, as well as further loss of an active segment of rural society (Policy and Planning Division, 2004).

6. Causes of migration

In general, people migrate mainly for four reasons- economic, social, political and environmental issues. Economic migrations is movement of people from original place to others to find works or follow particular career path. Social migration is the movement of people somewhere for better quality of life or to be closer to family and friends. Political migration is movement of people to escape political persecution or war and environmental migration is a migration caused due to natural disasters such as flooding.

The migration are again determined by push and pull factors. Push factors are the reasons why people leave an area and go to other places. For instance, lack of infrastructures, crop failure, poverty, droughts, floods, lack of employment etc. Whereas, pull factors are the reasons why people move to a particular area. They include, better services, more fertile land, job opportunities, higher income and low risk from natural hazards etc.

As per the past studies, the root cause of rural migration are rural poverty and food insecurity, lack of employment and income generating opportunities, inequality, limited access to social protection, climate change, depletion of natural resources due to environmental degradation and climate change (FAO, 2016). The FAO also highlighted that more than 75% of the world's poor and food insecure live in rural areas, mostly dependent on agriculture production for their subsistence.

In South Asia, the internal migrants are dominated by females, migrating mainly for marriage and association. However, the employment reasons cited are predominated by men in the region. For instance, 20% of the internal migrants in India, Sri Lanka and Pakistan, employment is the main reason for migration compared to 31.4% in Nepal (Srivastava and Panday, 2017).

The increase in migration trend in South Asia is primarily due to deteriorating livelihoods in rural areas, rising inequalities between rural and urban areas and between regions, and by changes in urban policies and labour market (Srivastava and Panday, 2017).

In Thailand, the rural-urban migration is strongly driven by push factors such as poor access to social and physical infrastructure. The past studies show that education is an important factor. Mostly it is the more educated people who actually migrate to urban areas although the quality of education is comparatively low in the rural areas than the urban centers (Amare et al., 2013)

The migration in Thailand has been most rampant in the northern part of the country. Although, people are blessed with rich natural resources and own large quantities of farmland yet people migrate to urban areas because of the attraction from higher wage rate and better living conditions in the cities. The literature review found that low net farm cash income, limited arable land, irrigated land, labor shortage, etc. are the significant factors that mounted rural-urban migration trend (Wongchai et al., 2007).

In case of China, the cause of rural-urban migration is driven by inter-provincial disparities, escalating demand of labour in the modern sector such as industries and service sectors, limited landholdings and lack of employment opportunities in the rural areas (Kleinwechter, 2012).

Like many under developed countries, Nepalese residing in the remote areas practice subsistence farming for their basic livelihood. Most of the rural people are small farmers and they struggle to support whole family members for all year-round to meet the basic needs. As a result, poverty accelerated at the rural household level dramatically. Because of the fact that people own very limited land coupled with lack of job opportunities in the rural areas, people have no choice but to migrate to urban centers to overcome from the destitute lives. Other important reason cited for

migration are political instability and fight between the government and Maoist and its presence in the rural areas. Many have migrated due to the fear of such groups in the rural areas (Timalsina, 2007).

In general, the reasons for rural-urban migration in Bhutan are lack of employment opportunities in the rural areas, limited access to service facilities such as education, market, health and motor-roads. While, agricultural farming related problems includes small land holdings, unproductive land, wildlife problems, inadequate irrigation, pest and diseases on crops and shortage of farm labourers. Other reasons of migration are because of marriage and transfer of workplace. The burden of labour contribution to public works and natural catastrophe are other important reasons for migration (Policy and Planning Division, 2014)

According to Policy and Planning Division (2014) the migration in Bhutan is largely perceived to be the consequences of inferior social services and quality of life in rural areas compared to those available in the destination (current place of residence), particularly urban centers.

7. Impact of Migration

Many reports and studies show that migration has numerous positive and negative social and economic impacts on both migrants as well as rural areas. For instance, rural-urban migration tends to generally loss the most productive age groups and it has significant effect on supply of labour, especially when families cannot substitute machines because of high costs, size of the land holdings or ecological conditions. The other negative impact is the rapid increasing older age structure and unavailability of skilled labour therefore less productive, and many have to depend on external supports, including government support and income from remittances sent

by out-migrants which is seen as one of the positive aspects of migration on rural residents (Goldstein, 1979).

Some studies also revealed that out-migration can have significant impact on having good future village leaders as more talented members, good education and occupational skills of the population migrate to urban places. Besides, it also results in significant drain of the talented and experienced needed persons to take advantage of the latest technologies in agriculture and related industries which will further accelerate in declining of rural economy.

In South Asia, the migration directly impacts employment and labour markets in the source areas, as well as the income, assets and expenditure of households. Remittances inflow, increase in investments, knowledge flows and skill development are the strong visible impact of an internal migration in the origin of migration and labour force supply for industrial and markets in the destination of migration. Concurrently, out-migration also reduce pressure on unemployment however, large out-migration can affect the women, children and elderly people who are left behind. The improve in livelihoods of rural people inter alia the reduction of poverty is considered as the impact of domestic remittances inflows from the migrants especially in South Asian counties like India, Bangladesh and Nepal (Srivastava and Panday, 2017).

Migration in China has also created similar positive and negative impact like other developing countries as a results of rapid migration. For instance, the remittances from migrants has contributed to the improvement of living condition in rural areas, helped in alleviating rural poverty, fees for education and medical expenses of the rural people. There are also evidences of returned migrants creating new businesses and establishment of new rural small industries. On the negative side, the reduce of local labour force leading to an increase in marginal productivities of labour are seen as serious issues (Kleinwechter, 2012).

Although, the rural-urban migration has been viewed as positive sign in Nepal, several problems for migrants and family members back home at rural villages has been reported. For instance, the increasing trend of migration from rural-urban centers has affected the agricultural sector the most especially in getting labour force and ultimately affecting food production and productivity. The migrants on the other hand has been struggling for businesses and widespread of migrants and illegal business licensing has been on the rise coupled with conflicts between authorities of municipalities and vendors as city footpaths and street pavements has been flooded with vendors affecting smooth movements of vehicles and pedestrians in the cities.

In Nepal, the study showed that migrated people have drastically improved their social livelihoods and assets owned by them. Their family members back home at rural areas are also reported to have benefitted significantly through remittances (Timalsina, 2007).

Literature review in general display that, migration is positive for the well-being of the rural poor households since the income of rural households with migrants are comparatively better than that of households without migrants. However, it also revealed that when younger and economically more active population move out of agriculture a decrease in production and productivity can result unless a structural change and agricultural modernization is encouraged and propagated widely.

In case of Bhutan, the positive impact of migration on rural residents is remittances received from out-migrants while labour shortage is reported as one of the main negative impacts of migration. The labour shortages is often reportedly associated with decreased in agricultural production, increased wildlife problems and slowed development in the rural areas. On the impact of migration on urban side, increasing unemployment rate, increased congestion, increased pressure on urban facilities, increased food insecurity and dependence on food imports are some of the negative aspects and increased work force, urban expansion and development and

business opportunities are the positive forces of the migration (Policy and Planning Division, 2014).

In Bhutan, various studies and reports show that the incidence of migration has been increasing over the years. It has many negative and positive impacts on the economy and rural livelihood. For instance, Department of Agriculture (2017) recorded a fallow land of 57,681 acres (sum total of dry and wetland) in the country. This is an uncultivated land found during survey which has been the result of labour shortage in the villages. Another incidence is the loss of crops to wild animals. The report also found that 1,356 metric tons of paddy, 3,892 tons of maize, 2,056 tons of potatoes and 412 tons of vegetables were lost to wild animals (Department of Agriculture, 2017)

8. Policies and strategies to reduce rural-to-urban migration

a) Indonesia and Malaysia

In Indonesia during 1960s, a rapid population growth has been recognized as a hindrance for development and a family planning program was introduced in its Five-Year Development Plan. Besides, in 1970s, due to speedy increase in population in the capital city, Jakarta, regulation was designed to inhibit the flow of migration into the city and redistribution of population from densely populated areas to sparsely populated areas. The government of Malaysia also introduced regional development program with land development and settlement as one of the most important instruments for reducing migration and this further resulted in population redistribution. Family planning was also introduced besides other policies (Chulalongkorn University, 1981).

b) The Philippines

The report also states that the Philippines and Thailand faced the similar problems during 1970s, and family planning program inter alia population redistribution scheme were introduced to curb the flooding of migration in the country. Besides, the past studies also states that in all ASEAN countries, policies on land settlements was introduced to reduce regional disparities in socio-economic development and reducing un-employment in rural areas amongst others.

According to Goldstein (1979) the main important elements of rural development and diversification of agriculture is irrigation. The increase in arable land, the better quality of crops, and the possibility of double cropping resulting from improved irrigation facilities are the major variables in improving the rural livelihoods, providing more employment opportunities, and reducing the rate of out-migration which were all introduced.

c) Thailand

The migration of people from rural areas to urban centers in search of better job opportunities is a common phenomenon in the developing countries. Thailand is an unremarkably a good example of its long history of rural-urban migration, the economic development and good records of poverty reduction in Asia.

In Thailand, to reduce rural-urban migration, the government emphasized on strategies such as promoting quality education so that people become more educated, diversified and come out with better entrepreneurial ideas to set up small and medium enterprises in the rural areas (Amare et al., 2013).

Further, the Thai government emphasized on promoting and developing sustainable agricultural system in rural areas, help build market accessibility, high value

crops and focused on raw material for industrial purposes. Importance is also placed on non-agricultural sectors inter alia weaving, sculpture and textile, supported farmers by integrating policies into practical strategies that helped improve the well-being and self-sufficiency (Wongchai et al., 2007).

Other strategies put in place are promotion of regionally balanced development, decentralization of economic growth, family planning program which has led to low birth rates from 1970s to 2000 leading to smaller migrant cohorts (UNESCO, 2018)

In addition, the Eleventh Plan 2012-2016, also emphasized on promoting a just society, strengthening economic and security cooperation, and managing natural resources and the environment towards sustainability that will effectively address the migration issues (Huguet and Chamrathirong, 2011).

d) Cambodia

Similarly Cambodia is a small developing country with majority of the population still dependent on subsistence agriculture for livelihood. Over the years, the rapid trend of rural-urban migration in Cambodia has significantly contributed to the seasonal shortage of labourers in agriculture sector. Recently, with the support of International Labour Organization (ILO) a National Employment Policy (NEP) was formulated to resolve the issues of labour shortage in Cambodia.

The study according to Chandararot and Liv (2013) with regard to reduction in agricultural production, highlighted two important issues concerning the agriculture sector (i) shortage of labour supply in the agriculture sector and (ii) the movement of rural labourers out of agricultural sector to non-agricultural production. The study also revealed that in Cambodia, the labour ratio in agricultural sector is only 1.6 workers

per hectare, which is very low and drawing labourers out of the agricultural sector would negatively affect the agriculture production.

The rapidly increasing trend of people moving from remote to urban areas or abroad can mislead as labour surplus in rural areas. However, in reality, only the people from poor households with little or no land for farming tend to migrate to urban areas. The movement of people out of agricultural sector to other non-agricultural and service sectors can put pressure on wages due to shortage of labourers in the agricultural field. When there is increase in wages for agriculture sector, the subsistence farmers are affected the most. The increase in wage rate contribute to high costs cut into their production and as a results there is less food available for the household consumption. The speedy and steadiness increase in wage rate trend in agriculture sector has left many farmers in Cambodia to decide and go out of farming and look for other higher wages in the modern sectors (Chandararot and Liv, 2013).

So as to address the issue of migration, labour shortages and employment in the agriculture sector in Cambodia, Chandararot and Liv (2013) recommended three policy interventions – (i) increase stability and income from subsistence farming by raising agricultural productivity through supply and making accessibility of modern inputs and technology, rural credits for farmers, constructing irrigation, focus on high value crops, small agro industries and medium enterprises in the rural areas (ii) promote and strengthen linkages between agricultural and agro-industry and (iii) promote decent living wages and social protection for workers in modern sector.

e) Nepal

In order to overcome the migration issues, the study has suggested government and Maoist to have continued effort to achieve permanent peace as this is one of the main reasons cited for migration of people from rural to urban areas. It is also suggested

that rural people should have good environment to work without having fear in their mind which reduces the magnitude of rural-urban migration. Apart from this, government has focused on decentralization policies and programs to foster employment opportunities, poverty reduction, and livelihood vulnerability in the rural areas (Timalsina, 2007).

f) India

In India some of the strategies adopted for the lessening of rural-urban migration are (i) promotion and intensification of rural industrialization (eg. Agro-based, horticulture, poultry, dairy, fisheries, piggery etc.) (ii) Credit facilities and loan opportunities besides subsidies because the rural poor can start small household level enterprises so that people get employed themselves and don't have to migrate to other areas. (iii) Small scale household industrial units (tea processing, horticulture, eco-tourism etc.) (iv) Establishment of higher educational institutions and vocational institutions in the rural areas since one of the main cause of migration is identified as lack of higher education facilities in the rural areas (v) promoting of good accessibility and connectivity of transport and communication system in the rural areas and (vi) rural tourism (Shamshad, 2012).

g) China

Migration in China is usually viewed from positive aspects as the sign of economic development. However, few strategies such as improvement of rural health and education system, expansion of rural micro-credit programs and incentives for migrant entrepreneurs to return to their villages thereby fostering businesses

establishments in villages and job introduction and training and vocational skills are some of the strategies put in place to curb the rural-urban migration problem in China.

h) Bhutan

There are no specific policies and strategies to reduce rural-to-urban migration in Bhutan. However, few policies and strategies directly or indirectly contribute to reducing rural-to-urban migration in Bhutan. For instance, the Government of Bhutan ensure a favourable demographic situation, as reflected for instance in the Vision 2020, decentralisation policy and in the Ministry of Agriculture's rural development policy (MoAF, 2013). The vision 2020 firstly aims to address rural urban migration issue to ensure that to retain the commitment to improving the standard of living and quality of life in rural areas. Secondly, to prepare a growth center strategy that identifies migration alternatives to Thimphu and Phuntsholing. The vision 2020 place highest priority to the development of a growth center in eastern Bhutan which will reduce the pressure for Thimphu and Phuntsholing.

The other policies adopted were to provide better road and electricity as it serves to bring communities out of isolations, increase access to market and services, and it also facilitates rural industrialization and create job opportunities. The other priorities were to expansion of access to potable water, safe sanitation and sustainable improvements in the health of the population. The other important intervention was to take or provide new programs and initiatives deliberately targeting the vulnerable and disadvantaged groups.

The decentralisation of functions, budgets, personnel and decision-making were some of the strategies emphasized during the 9th FYP and it continue till today. This process of decentralization and participatory development has resulted in the devolution of administrative and financial powers at the local level, an increased

capacity of the Dzongkhag Yargey Tshogdue (DYT) and Geog Yargey Tshogchung (GYT) to make informed, collective, realistic and local specific decisions and an increased level of autonomy of these institutions to frame regulations within their own jurisdictions.

Rural road infrastructure combined with multi-sectoral modernization of agriculture was another priority given by the government to minimize the migration problem. These interventions includes enhancing agriculture productivity, and improving famers' market access, encouraging agro-business, horticulture, and small-scale handicraft industries.

Besides, to address the increasing unemployment and negative impact of rural-urban migration the government is making agriculture economically attractive through introduction of appropriate technologies and development of infrastructure, creating lucrative investment and employment opportunities by fostering legal and financial environments, and provide numerous trainings in the adoption of farming technologies and farm-business skills to farmers and youth (Policy and Planning Division, 2014).

In general, strategies such as farm mechanization, land development and consolidation, contract farming and private sector participation, enhancement of investment in agriculture sector, formation of farmers' groups and cooperatives and infrastructure development are taken as measures to reduce rural-urban migration in the country (MoAF, 2013).

Despite numerous polices and strategies adopted by the government, migration trend and its associated problems are increasing annually. It is a cross-sectoral issues and many stakeholders will have to work together to reduce this common problem. However, the policy and planning division under the Ministry of Agriculture & Forests will have to take a lead role in conducting research and studies to look at the migration aspect and come up with a sustainable long-term framework and strategies, to reduce migration in the country.

After going through various literature, most of the reports and journals reveals that migration is a natural phenomenon. Migration should be a choice and not necessity. Migration is part of the process of development. As economies undergo structural transformation, the movement of people in search of better employment opportunities within and across countries is inevitable (FAO, 2016). So therefore, the government will have to provide the rural people with better services, opportunities and modern avenues beside others to retain them in the rural areas but also to attract urban population through formulation of sound policies and strategies to curb the increasing migration trend.

C. Conceptual Framework

1. Overview of conceptual framework

The proposed conceptual framework will particularly look into five dimensions to formulate the new integrated strategy of Ministry of Agriculture and Forests to reduce rural-to-urban migration in Trashigang Bhutan. The first dimension is identified as migration phenomena, which is further classified into push and pull factors. The push factors are the factors that induces people to move to another regions. The push factors of rural-urban migration identified in the study are lack of off-farm jobs, lack of education facilities, small land holdings and poor infrastructure.

Lack of off-farm jobs in rural areas is a general issue and it is perhaps a seasonal problem. During the agricultural farming seasons, people are engaged in farming activity. However, once the farming seasons are over people remain unemployed since there are no other economic opportunities

Lack of education facilities in the rural areas is another reason for the rural-to-urban migration. The remote areas have access to only limited education facilities and

apparently only lower level of education facilities are available that make people move out of the rural areas to urban centers.

Small land holdings is another push factor of rural-to-urban migration. The small land holding is referred to as land owned by farmers less than the average land holding size of 3.4 acres in Bhutan. The small land holding is further coupled with unproductive land, inadequate irrigation water, pest and diseases on crops etc. that hinders farming. Poor infrastructure such as road connectivity, communication network, service facilities is another main reason why people move to the urban centers.

On the other hand, the pull factors are the factors that attract people from the origin to the place of destination. The pull factors of rural-urban migration are job opportunities, high income, education and better facilities. It is apparent that the rural population that migrate to the urban centers are driven by the forces of pull factors. One such factor is job opportunities in the modern sector. The job opportunities are comparatively higher in urban centers such as in service industries, manufacturing industries, mining etc. compared to the rural areas.

Irrespective of the work and skills, the wages/salary offered to the employee in the urban centers are comparatively higher than the rural areas. The high income and salary earned from the modern sector is another reason for the migration of people from rural to urban areas.

Education is another pull factor for rural-to-urban migration. Rural areas lack good education facilities coupled with absence of higher education and vocational training institutions. Modern facilities such as good road network, communication, power supply, health facilities etc. that contribute to good living conditions is another important factor for migration of rural people to urban centers.

The second dimension of the proposed conceptual framework is to look at the existing strategies of Ministry of Agriculture and Forests. The existing strategies will play

a vital role in examining the gap and a need of the new strategies that will help in reducing rural-urban migration in Bhutan. The existing strategies that are identified are farm mechanization, land development and consolidation, contact farming and private sector participation, enhance investment in RNR sector, farmers' groups and cooperatives and Infrastructure development.

Farm labour shortage is considered as one of the key factors for compromising the productivity of agricultural products. There is a general understanding among the people that farm mechanization significantly boost production and productivity of crops besides, solving the problem of labour shortages and drudgery faced by the farmers. So, in Bhutan farm mechanization is used as one of the strategies to reduce rural-urban migration to solve the labour shortage and drudgery involved in farming.

Land development and consolidation is another approach used in the 11th Five Year Plan (FYP) to enhance agriculture production. The Ministry of Agriculture and Forests over the years noticed the high degree of land fallow in the remote areas due to farm labour shortage coupled with rugged terrain which made farming very difficult and inefficient. Therefore, the government initiated land development and consolidation through landscaping, re-terracing, leveling and ensuring irrigation channels with access roads besides exploring the possibility of leasing private fallow lands for agricultural mega projects. The idea of land development and consolidation is primarily to ease the deployment of farm machineries and other technologies to enhance agriculture production.

The Contact farming and private sector participation is another strategy used to reduce rural-urban migration in Bhutan. The main idea of contact farming and private sector participation is to engage private sector entities to play active role in agriculture and rural development. The private sector has potential to engage in large scale farming and other critical services that can offer ample of employment opportunities and income for the rural community where government cannot reach.

Similarly, investment in Renewable Natural Resources (RNR) sector is another approach used for addressing rural-to-urban migration. The growth of agriculture sector has direct role in raising real incomes of the rural poor and poverty reduction. Therefore, agriculture requires relatively higher public investment to work in ensuring the wellbeing of the rural people through alleviating poverty. Thus, 11th FYP focused to create conducive environment for investment through the subsidy policy design, investment and implementation modalities besides providing investment opportunities such as small, medium and big scales to boost RNR sector.

Farmers' groups and cooperatives are other thrust areas identified for 11th FYP. The main idea is to build the capacity of the farmers to enable them to participate in the value chain. The groups and cooperatives will enable the farmers to scale-up their operations, expand their bargaining power and take advantage of market opportunities to enhance their profitability besides help them access to inputs and services like credits, training and other government supports. Above all, the groups and cooperatives create employment and entrepreneurship opportunities for the rural communities that will help reduce the migration issues.

Infrastructure development is very vital for agriculture development in the country. Thus, top priority has been accorded for the past few five year plans. The main components of infrastructure development is categorized as construction and renovation of farm roads, irrigation channels, market sheds, collection centers and processing units beside others that will contribute to significant development of agriculture sector and it will eventually reduce the migration trend.

The third dimension is to look at the socioeconomic status of Trashigang district. The socioeconomic status is essential for the formulation of the strategy. Without knowing the socioeconomic status, formulating strategies will be vague and it will not be effective. So therefore to formulate vibrant strategies, to understand the

socioeconomic status such as occupation, land use, main crops and local products are paramount important.

Alongside the above dimensions, there are some intervening aspects identified for the study. The intervening aspects are policy enforcement, coordination among lead agencies and political support that will enhance strategy implementation.

The last dimension that will attribute to the formulation of strategy is the guiding principles or the national policies that support the smooth implementation of all cross sectoral policies. The guiding principles are vision 2020 document and Economic Development Policy (EDP).

In order to reduce the rural-urban migration problem, the vision 2020 document has accorded high priority on horticulture as a means of raising the cash income of farmers, generating export revenues and for achieving an improving in the nutritional status of the rural population. The other priority are effective management of watersheds for safe drinking water as well as for hydropower for sustainable economic development (MoAF, 2013)

Similarly, in an attempt to reduce the growing rural-urban migration problem in Bhutan, the Economic Development Policy (EDP) 2010 offers 10 years tax holiday to farmers or companies to encourage commercial farming and an additional five year tax holiday for commercial organic farming. The EDP also exempts sales tax and import duties for procurement of farm machineries and agricultural inputs (MoAF, 2013)

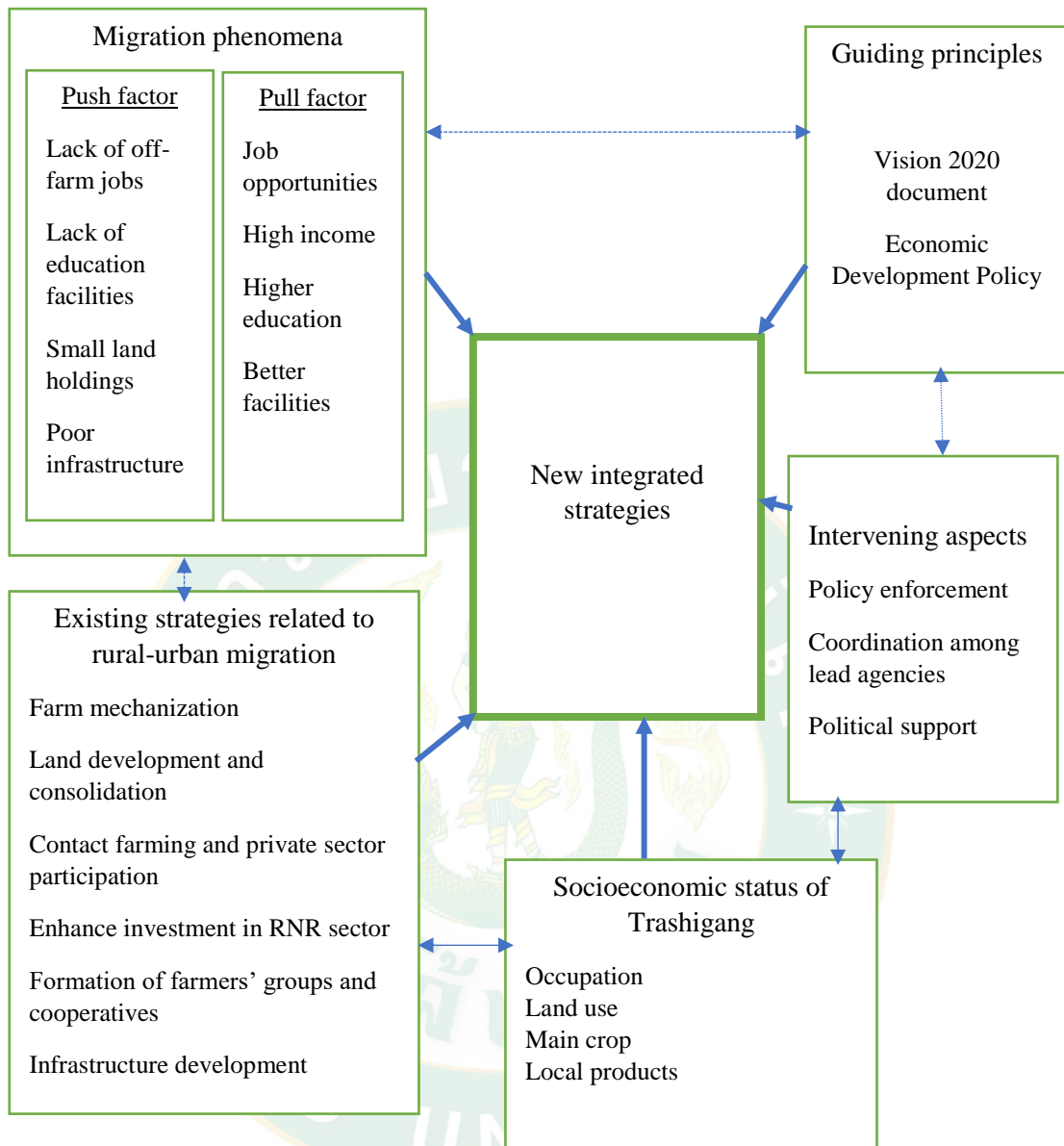


Figure 2: Conceptual framework

CHAPTER III

RESEARCH METHODOLOGY

This study used a qualitative research method based on the research objectives and research questions, relying on the collection and analysis of existing data since other methods were not able to provide satisfactory answers to the research questions established for the purpose of this study. This study reviewed the overall rural-urban migration phenomena and its associated consequences and impacts on the socio-economic development to address those issues by collecting the opinions, perceptions and experiences of people to seek answers to the research questions. The detailed research methods adopted for this study are described below.

1. Research area

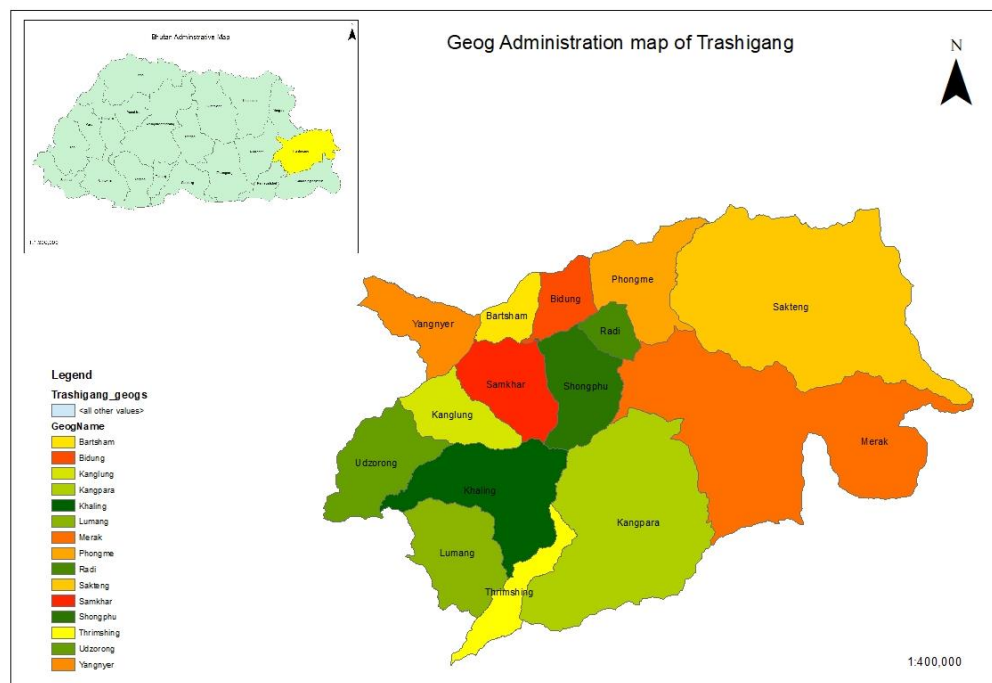


Figure 3: Study area

Trashigang district had been selected as the research area for this study since Trashigang was one of the largest districts in Bhutan with highest migration rate from the place of origin with 14.5% of the total national out-migrants (Policy and Planning Division, 2014). Further, the past studies revealed that Trashigang district had 890 gung-tong (empty households) out of the total 2,580 gung-tong reported by 103 sub-districts in the country. Trashigang district also contributed the highest incidences of national empty households with 27.3% as people from these empty households have migrated to urban areas (Policy and Planning Division, 2014).

2. Description of the Informants

This study had three informant target groups: (a) the local government officials and policy makers, (b) the people from the communities and (c) the migrants

a) Local government officials and policy makers

The first target population group of this research was policies and strategies implementers, i.e local government officials and policy makers who are at the forefront in working with the communities in formulating and implementing government policies and strategies. They are the one who plan, monitor and evaluate the grass root level activities including the implementation of government strategies. The local government officials have fairly good knowledge about the pros and cons and the effectiveness of every strategies at the grass root level that are put into practice.

While the policy makers at the ministry level have the broad view on every policies and strategies, the priorities of the ministry, five year plans and programs and the interventions and other developmental activities apart from the future plans and programs of the ministry. Therefore, the local government officials and policy makers had been selected as the first target population for this study.

b) The people from the communities (Non-migrants)

The second population target was people from the communities of Trashigang, which was identified as the study area. The migration phenomena such as determining factors, its causes and effects were collected from the people since they are the right persons to be interviewed for collection of such data as they will be knowing the ground realities of migration.

c) The Migrants

The third population target was migrants who settled permanently or temporary in capital city. The migrants know the difficulties and the challenges faced by the people and hence the reasons for their migration. Thimphu was selected as the target population for migrants since majority of the migrants are living in Thimphu.

3. Sampling Design

The following sampling design were employed to ensure an appropriate and representative samples to collect the information and data required for this study.

3.1 Purposive Sampling

A purposive sampling also known as selective sampling is a sampling techniques used in qualitative research in which the “enquirers selects individuals and sites for the study because they can purposefully inform and understanding of the research problem and central phenomenon in the study” (Cresswell, 2007). A

purposive sampling was employed for the in-depth interviews with the experts, policy makers, local leaders and the migrants.

3.2 Convenience Sampling

A convenience sampling was used for in-depth interview with the non-migrants of Trashigang district since this technique was the most appropriate one considering the remoteness of the locations. The researcher had to visit personally the rural homes in Trashigang district to find non-migrants for the in-depth interviews. Convenience sampling is the techniques used by researchers to get hold-off participants who are easily accessible and convenient for the collection of data. Oftentimes, the convenience sampling techniques includes the selection of geographical locations and participants based on the resources that make convenient for the researchers. In addition, accidental sampling technique was also employed to collect data from migrants residing in capital city, Thimphu.

3.3 Accidental Sampling

An accidental sampling technique was employed to collect data from migrants residing in the capital city. A short questionnaire were used to collect the data on migration phenomena and their perceptions and experience on the rural-urban issues.

For this study, 30 key informants (10 non-migrants, 10 migrants and 10 experts and policy makers) were selected through purposive sampling technique for the in-depth interviews. A semi-structured open-ended questionnaire were used for the in-depth interviews.

Besides, 8 senior level officials and experts from the ministry were selected and were employed as participant for the Small Group Discussion.

Further, data were also collected from 30 migrants residing in Thimphu through questionnaire by employing accidental sampling technique.

The strategic planning theme was used for the in-depth interviews with the policy makers from MoAF and local government while push and pull factor was applied for the rural people and the migrants to understand the migration phenomena in the country and the district in particular.

4. Data collection procedures

This study employed documentary research, in-depth interviews and Small Group Discussion (SGD) to collect the data. In addition, this study also collected data from the migrants residing in capital city, Thimphu through questionnaire.

4.1 Documentary Research

Documentary research is a use of texts and documents as source of materials for instance government publications, newspapers, certificates, census publications, novels, film and video, paintings, personal photographs, diaries and innumerable other written, visual and pictorial sources in paper, electronic or hard copy (Scott, 2006). According to Scott, documentary research, surveys and ethnography are the three major types of social research methods of which documentary research is widely used in sociology and other social sciences.

4.2 In-depth interviews

In-depth interview is a qualitative research technique that “involves conducting intensive individual interviews with a small numbers of respondents to explore their perspectives on a particular idea, program or situation” (Boyce and Neale, 2006). In-

depth interview is a two-way communication process between the interviewer and the interviewee. In-depth interview are conducted to get deeper and more detail information on specific problem and issues. During the in-depth interviews, the researchers normally ask participants or the respondents who are actually associated with the program/projects about their experiences and lesson learn, outcomes of the projects and the changes that they would like to see in the future.

For the in-depth interview three types of data collection approaches were employed as follows:

- i. Interviews with policy makers from the Ministry of Agriculture and Forests (MoAF) and Local Government (LG)
- ii. Interviews with the rural people (non-migrants)
- iii. The migrants

4.3 Small Group Discussion (SGD)

Small Group Discussion (SGD) is a qualitative research technique used for collection of specific data. Unlike Focus Group Discussion where the theme and participants for discussion are homogeneous in nature, Small Group Discussion focuses on heterogeneous themes and diversified participants for the discussion. The Small Group Discussion will deliberate and gather in-depth information and insightful knowledge on certain specific issue. The participants are usually the experts and most experienced intellectuals from diverse background.

The results from objective 1, 2 and 3 were presented in the small group discussion to validate and review the findings. At the end of the discussion, the expert group provided suggestions for improvement in the proposed strategies.

5. Data Sources

The data for objective 1 of this study were collected from both primary and secondary sources. Primary data were collected through in-depth interviews and questionnaires from the rural people, migrants and officials from Local Government and policy makers within the ministry. While, the secondary data were collected from published government documents and reports.

Similarly, for objective 2 and 3 of the study, the data collection were based on secondary sources such as government published documents, reports, journals etc. for which the researcher had written officially to ministry to obtain access for the above documents.

Whereas, for objective 4, the information were collected from small group discussion through interactive session from the groups of experts that helped to formulate new integrated strategies to reduce rural-to-urban migration in Trashigang.

6. Data collection Period

The data were collected from October 2018 through January 2019. The study adopted a qualitative techniques to collect data vis-à-vis documentary research, questionnaires, in-depth interviews and small group discussion.

7. Data analysis and interpretation

The data collected through in-depth interviews were analyzed by looking at the patterns and themes of the responses. Similar themes and patterns were grouped and then tried to understand the content of the data/information collected, analyzed and then synthesized the data. In some cases content analysis were used to analyze

the data. The data collected through accidental sampling techniques were analyzed through SPSS.

To further have a clear research methodology, a detailed research methods proposed for each of the research objectives are explained below:

Objective 1: To study the migration phenomena for the last ten years

A documentary research and in-depth interview method were used for objective 1 of the study. The documentary research covered the past ten year's data on the migration phenomena and in particular, the study reviewed migration reports of 2004, 2014 and the latest Population and Housing Census of Bhutan (PHCB) 2017. For the in-depth interview, 30 people were interviewed to understand migration phenomena and strategic planning of Ministry of Agriculture and Forests. A semi structured opened-ended questionnaire were used for the data collection. Further, data were collected through questionnaires from 30 migrants residing in Thimphu to establish the facts and support the findings of secondary data.

Objective 2: To study the socioeconomic status of Trashigang district

A documentary research method was employed for objective 2 of the study. Primarily five documents was reviewed to examine the socio-economic status of Trashigang district – Bhutan Poverty Analysis report 2017, Bhutan Living Standards Survey Report 2017, Labour Force Survey Report 2016, PHCB 2017 and Bhutan RNR Statistics 2016.

Objective 3: To review existing strategies of Ministry of Agriculture and Forests on reducing rural-to-urban migration in Bhutan

Similarly for the objective 3, a documentary research method and in-depth interview was employed. The documentary research identified and studied the existing strategies of MoAF on reducing rural-to-urban migration in Bhutan. The in-depth interview on the other hand with policy makers and local government officials helped understand the past problems and gather information and suggestions for formulating future strategies. In addition, a policy analysis matrix was used to study the existing strategies and to conclude the effectiveness of the strategies. 10 officials (experts and policy makers from ministry) were employed for the in-depth interview and a semi-structured open-ended questionnaire were used to collect the data.

Objective 4: To formulate new integrated strategies to reduce the incidences of rural-to-urban migration in Trashigang district

Small Group Discussion method was used for objective 4 of this study. Eight policy makers and experts from the ministry were as participants for the Small Group Discussion which was selected through snowball sampling technique. The Small Group Discussion reviewed the findings of the study (objective 1, 2 and 3) including draft strategies and further guide the researcher in formulating the new integrated strategy in reducing rural-urban migration in Bhutan particularly for Trashigang district.

CHAPTER IV

RESEARCH RESULTS

This chapter contains the research results of the study. The study has four main objectives as follows:

1. To study the migration phenomena in the last ten years
2. To study the socio-economic situation of Trashigang District relating to migration phenomena
3. To review the existing strategies of Ministry of Agriculture and Forests on reducing rural-urban migration in Bhutan
4. To formulate new integrated strategies to reduce the incidence of rural-urban migration in Trashigang district

A qualitative research method was employed for this study. The data were mainly collected through documentary research, in-depth interviews with migrants, non-migrants and policy makers. Besides, a small group discussion with experts were also held to validate the information and identify some of the strategies for mitigating rural-urban migration in Trashigang district. Further, data were collected through questionnaire from 30 migrants to substantiate and validate the data collected through documentary research. The research results on each of the objectives are presented below.

1. Rural-Urban Migration Phenomena in the last ten years in Bhutan

The study looked into the overall rural-urban migration phenomena in the last ten years in Bhutan. In particular, the study reviewed the demographic characteristics of a country, migration trend, types of migration, the migrants, an education level of

migrants, occupation of migrants after migrating to urban areas, the causes of migration and the impact of migration on both rural and rural areas. The detail findings are elaborated below.

1.1 The Demographic Characteristics of Bhutan

This study found that the estimated country's population in 2005 was 634,982 persons of which 333,595 persons (52.2%) were male and 301,387 persons (47.5%) were female (Table 1). Against the total population of 634,982 persons, 196,111 persons (30.9%) lived in urban areas and 438,871 persons (69.1%) lived in the rural areas (National Statistics Bureau, 2005). As per Policy and Planning Division (2014), the country's estimated population in 2014 was 712,855 persons (male 49.3% and female 50.7%) of which the urban population was estimated 220,452 persons (male 16.3% and female 14.6%) and rural population was 492,433 persons (male 32.9% and female 36.1%).

As on May 2017, the total population of Bhutan was recorded 727,145 persons. The male population was 380,453 while female was 346,692. More than half of the population (62.2%) lived in rural areas while 37.8% lived in urban areas. It was found that the rural population decreased from 69.1% in 2005 to 62.2% in 2017 whereas the urban population increased from 30.9% in 2005 to 37.8% in 2017. The population has increased by 16% and the population density increased from 17 to 19 persons/km² for last twelve years (National Statistics Bureau, 2018)

It was also found that the lifetime migrants (persons who have migrated from their place of birth but within same district) comprises of 334,185 persons or 48.7% while 39.8% or 273,607 out of 334,185 have migrated from their district to other areas.

Table 1: Population trend of Bhutan

Population/Gender	Year		
	2005	2014	2017
Bhutan	634,982	712,855	727,145
Male	333,595	351,438	380,453
Female	301,387	361,417	346,692
Urban	196,111	220,452	274,861
Rural	438,871	492,403	452,284
% of urban	30.88	30.93	37.80
% of rural	69.12	69.07	62.20

Source: RUMS 2014, PHCB 2005 and 2017

The study found that Samtse, Trashigang and Mongar districts had the highest population residing in farm with 23,810, 21,747 and 21,436 persons respectively. While Gasa (1,592) Thimphu (3780) and Haa (4,277) had the lowest. In terms of gender, the study found that female population residing in farm is slightly higher than the male wherein male population was found to be 109,155, the female population is 111,156 (Kuenzang et al., 2017)

The experts and migrants felt that the rural-urban migration is becoming a matter of concern for small country like Bhutan. Over the years people living in the villages had drastically reduced whereas the population in urban areas has ballooned up. Labour shortage in the villages has become an issue due to migration engrossed by the human wildlife conflict problems. It has become difficult to execute agricultural activities on large scale due to labour shortages and the country is now becoming more imports driven than exports. The in-depth interview with experts also found that rural-urban migration in Bhutan has become one of the issues in the recent years which

requires adequate attention from the government. Mr. Nima one of the experts from Policy and Planning Division informed that

“.....Urban centers are more attractive in terms of services and opportunities, it is obvious that people, especially youths and school drop outs migrate to urban centers seeking better opportunities such as employment. There are more number of educated youths entering in the labour force and hence the extent of migration is even higher today as they prefer to settle in urban places for whatever reasons as opposed to living in rural areas practicing farming for livelihood...” (Interview date December 18, 2018)

However, in contrary some experts feel that rural-urban migration situation in Bhutan is not really a concern as compared to other developing counties in the World. The migration is a natural phenomenon and it is important for the economic development of the country. Mr. Phuntsho, the experts from Department of Agricultural Marketing and Cooperatives feel that

“.....the situation of Bhutan is not alarming. The current trend is only natural given development differences in urban and rural areas. It may not have huge implication to national economy per se since the emigrants will contribute to economy (if employed) or depend on others, irrespective of where they reside. Least it may bring down the rural economy in isolation...” (Interview date December 19, 2018)

Similarly, Mr. Dorji senior expert from Food Corporation of Bhutan during the in-depth interview felt that it is not a big issue and he narrated that

“.....the number has started to drop in the recent years due to the advancement of modern facilities such as road connectivity, health and education,

electricity, internet connection etc. the number would drop further if the government pay more attention to equal distribution of resources, equitable development activities and provide subsidies to those who embark on the agricultural activities. This would help to eventually achieve equitable socio-economic development and help to achieve food self-sufficiency in the country....” (Interview date December 22, 2018)

Nevertheless, there are several questions on rural-urban migration from the policy makers and experts such as should the migration be kept on the natural flow? Will it not bring negative consequences in the near future? Wouldn't it cause disaster for a small country like Bhutan? What about the national goal of food self-sufficiency? In this regard, Mr. Sangay senior policy maker from the Ministry of Agriculture and Forests informed that

“.....in the longer term, rural-urban migration could become an irreversible threat to food security as rural areas are the hotspot of the food production and also a major cause of socio-economic problems. On the contrary, achieving food self-sufficiency cannot be ascertained from the growing cities....” (Interview date December 18, 2018)

The close analysis from the demographic characteristics of Bhutan confirms that the urban population is increasing while the rural population is decreasing on other hand. Samtse, Trashigang and Mongar districts have the highest farming population while Gasa, Thimphu and Haa have the lowest farming population in the country. Concurrently, female population is slightly higher than that of male population who are engaged in farming. The decrease in the rural population and inflating urban population indicates that migration is taking place in the country and the study found that male dominates the migration since male are more ambitious, bold and can take risk compared to women. The other factor could be simply because

of the fact the land and property are mostly inherited by women in the villages and men do not have privilege over such inheritance.

1.2 The Migration Trend

The study found that the migration had increased over the last couple of decades (Fig.4). In the 4th Five Year Plan (1978-1983), the cumulative migrant households in the country were recorded 1,816. It substantially increased from 1,070 households in the 5th plan to 7,422 in the 10th Plan and 23,070 in the 11th Plan. Similarly, there was a significant increase in the population of migrants from 4th plan to 10th plan. The migrant population has reached 38,034 persons in the 10th plan compared to only 13,250 persons in the 4th plan. The study found that from every households there are more than one person who have migrated to urban cities.

The total migrant population retrospective 4th plan until 10th plan had been recorded 129,486 persons (Policy and Planning Division, 2014). The study found that at the end of the 11th plan period the migrant population has reached 273,607 persons (National Statistics Bureau, 2018). Estimates suggests that if the current trends continue, the Bhutan's urban population could increase more than four times over the next 20-25 years, and would mean that half of the population would live in urban areas by year 2020 (Planning Commission, 1999).

As per Policy and Planning Division (2004), 83% of the respondents has reported increase in out-migration over the last decades, 16% have said it is constant while 3% has reported as decreased. This indicates that the rural-urban migration has been increasing over the last decade (Policy and Planning Division, 2004). This study found that the migration rate had been increased from 32.7% in 2005 to 39.8% in 2017 (National Statistics Bureau, 2018).

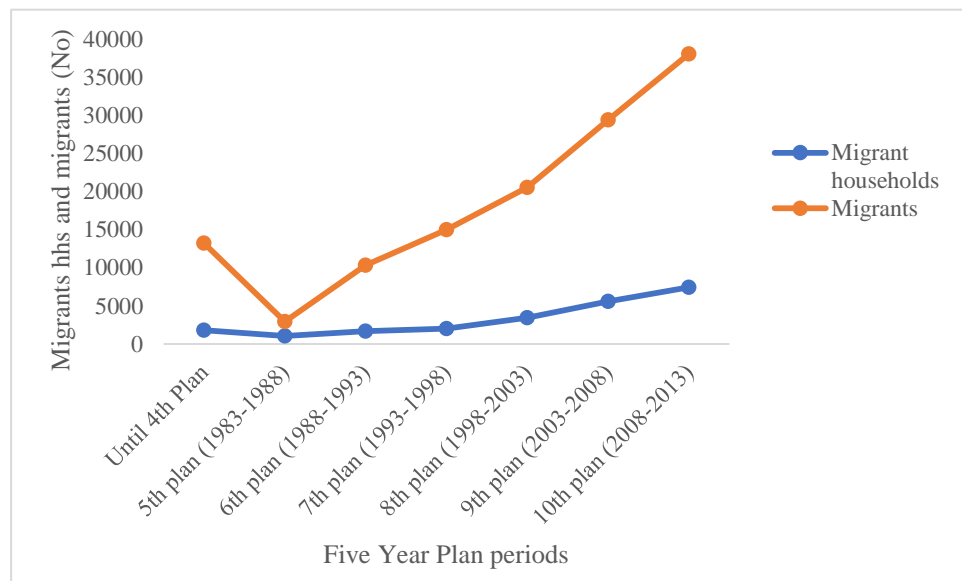


Figure 4: Migration Trend starting 4th Plan until 10th Plan

(Source: RUMS, 2014)

Further, during the course of in-depth interview, majority of the experts, migrants and non-migrants felt that the trend of migration is increasing annually. Mr. Pelgen, Planning Officer from the Ministry of Agriculture and Forests on the increase of migration trend in Bhutan reflected his opinion that

“.....the issue of gungtong (empty household in the rural areas), ageing farming community and decreasing labour force in rural areas while ever growing towns, increased population and unemployment in the urban areas are indication of increasing migration trend.....” (Interview date December 19, 2018)

Ms. Tshering another expert from Ministry of Agriculture and Forests feels that the migration trend is gradually increasing as it can be felt from the incidence of empty household in the villages. She narrated that

“...The increasing Gungtongs (Empty households) in the villages coupled with increasing fallow land and labour shortage is the sign of migration taking place in the country....” (Interview date December 20, 2018)

Mrs. Dema, an elderly women from Rongthung village under Trashigang district also shared her concern on the increasing trend of migration in her community. She narrated that in almost all the households there are no children as most of them have either left cities for studies or for jobs. Only elderly people and old parents are there to take care of their ancestral land and properties. She informed that

“...in the olden days there use to be many young people in the villages and all the agricultural works including household chores are being done by them. In the morning they will go to schools and during evening and on weekends they help parents in the field. Now the village is empty, you will see only few young people....” (Interview date November 28, 2018)

It was found that in Bhutan one or two people from every households have migrated to urban centers over the last decade (fig.2). Some reported that more than four to five people from same household have migrated to the city. This was evident from the field visit to Kanglung and Rongthung village where some households have only one or two elderly people living in the community just to take care of their house and land. The rural people have reported that because of migration, the community is facing acute shortage of labour for agriculture farming and as such many of the farm land have remained uncultivated. This was further confirmed during the in-depth interview with local leaders and experts and many feel that it is becoming a serious issue for which the government will have to come up with certain measures to address these issues urgently.

Like in the developed countries, the migration in Bhutan is seen to be gradually increasing due to economic, social and environmental factors. The experts and past studies revealed that migration is the sign of economic development. It is a natural process, it cannot be controlled and it is the prerogative of people to decide whether to migrate or not to migrate. It is obvious that for economic development, more labourers and skilled people are needed in the urban centers to work in both formal and informal sectors. While, for a small country like Bhutan where 62% of population are depended on agriculture for livelihoods, if migration are not controlled it may cause threat to food security and congestion in the urban centers due to limited facilities and services.

1.3 Types of Migration

The study found that internal migration, international migration and return migration are the mostly studied types of migration in the world. However, in case of Bhutan the migration is usually dominated by an internal migration (rural to urban and rural to rural). According to Policy and Planning Division (2014) migration is defined as the movement of people within the national boundaries, such as between districts, sub-districts, cities, or municipalities but within the same country. It was found that the migration in Bhutan is largely a rural phenomenon.

Out of the total population of 712,885 persons, rural-urban migration constituted 129,486, while rural-rural migration represented 22,928 persons making a total migration of 152,414 persons in 2014 (Tab.2). In terms of percentage, the national migrants represented 21.4% against the estimated population of 712,885 persons. The rural-to-urban migrants constituted 18.2% while rural to rural migrants accounted for only 3.2%.

Table 2: Percentage of Migrants population

Migration	Migrants	Percentage
National level	152,414	21.4
Rural-urban	129,486	18.2
Rural-rural	22,928	3.2
Non-migrants	560,471	78.3
Total	712,885	100

Source: Rural-Urban Migration Survey 2014

The study found that the rural to urban migration is the highest in the country compared to other forms of migration. Of the total population, 18.2% accounted for rural-urban migration and 3.2% for the rural-rural migration (Table 2). Unlike in the other parts of the world, migration in Bhutan is predominantly an internal migration within the country. For instance, the types of internal migration are rural-rural, rural-urban and urban-rural migration. Of these three types of internal migrations, rural-urban migration is the most popular in case of Bhutan with 18.2% out of the national migration rate of 21.4%. There is not much of data available on return migration and international migration as of date.

1.4 The Migrants

This study found that in terms of demography, younger population and particularly the male population had moved out of their home in comparison to women population. As per the rural-urban migration survey report (2014), 10.9% of the migrants are male and 10.5% are found to be female.

The analysis of primary data collected from accidental sampling technique shows that majority of the migrants are male with 56.7% compared to only 43.3%

female. Most of the migrants are age between 21-30 years with 30% followed by 34-40 years and 41-51 years with 26.7% and 23.3% respectively (Table 3).

Table 3: Respondent's information

	Variable	Frequency	Percentage
Sex	Male	17	56.7
	Female	13	43.3
Age	21-30 years	9	30
	31-33 years	6	20
	34-40 years	8	26.7
	41-51 years	7	23.3

It is further supported by the findings of in-depth interview with experts and migrants that it is mostly the men and the youth who migrates to the urban places in search of jobs and other better opportunities. The expert from Policy and Planning Division shared his view that

“.... it is evident from more than half of farming population that constitute female population. As a result, feminization of agriculture (gender imbalance) is increasingly becoming an issue and so is the ageing farming population with mobility of younger and/or productive population exceeding than the other age groups....”
(Interview date December 18, 2018)

Further, majority of the experts and policy makers from the Ministry of Agriculture and Forests feel that the migrants are fairly well-off and the educated people. Above all, the migrants are mostly the youth and male population dominate the migration proportion compared to women. This view was also supported by migrants and non-migrants during the in-depth interviews. Further, one of the non-migrants Mrs. Rinchen stated that

“...after going to school and getting some education, the younger generation doesn't want to stay in the villages. They feel shy to live in the village. Moreover, they do not have much experience in farming so they go to the cities to look for a small job....” (Interview date November 28, 2018)

In terms of age, the migrant's age constitutes from 0-64 years (figure 5). The study found that it is mostly the age group between 0-14 years of age that have migrated to the urban areas with 25.4% followed by the age group 15-24 with 22.7% and age group 25-34 with 22.6%. The age group of migrants in the age category of 35-44 is 14.2% while for 45-54 it is 8.5%. Whereas for 55-64 and 65 and above it is 4.1% and 2.5% respectively. The close analysis from the data found that the age group between 0-35 years are comparatively higher than that of 36 and above year of age group.



Figure 5: Migrants by age group

(Source: Rural-Urban Migration Survey 2014)

Thus, it is understood that the younger generation and especially the male population are the ones who opt for out-migration. The weak and economically disadvantaged population choose to stay in the rural areas. The younger generation,

particularly the youth after having some level of education they are reluctant to stay in the rural areas.

1.5 Education Level of Migrants

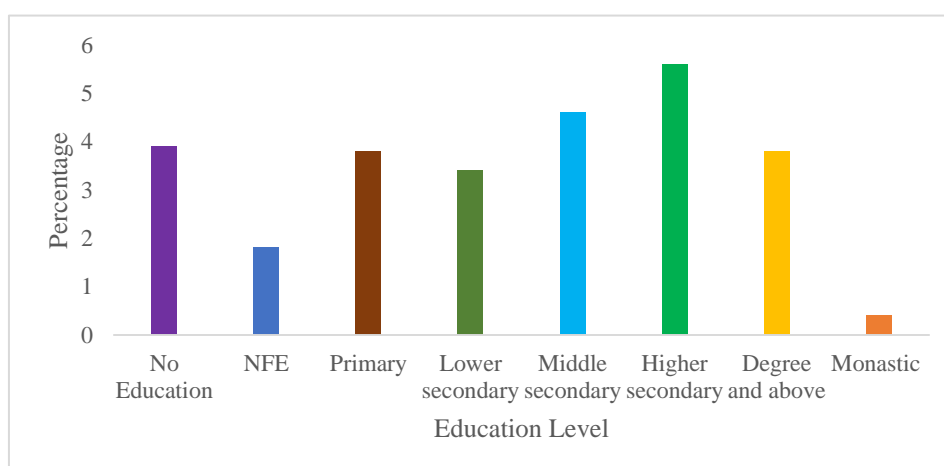


Figure 6: Education Level of Migrants

(Source: Rural-Urban Migration Survey 2014)

In general, the study found that 23.4% of the migrants in Bhutan had some level of education. It was found that 5.6% of the migrants had the higher secondary education, 4.6% had middle secondary education followed by 3.8% degree and above and primary education, 1.8% had non-formal Education and 0.4% had monastic education. The study found that 3.9% of the migrants have no education or never attended the school in their life (Fig.6).

Table 4 : Education level of migrants

Education level	Frequency	Percent
Degree	13	43.3
Higher secondary	9	30
Others	8	26.7
Total	30	100

In addition, the analysis of primary data from an accidental sampling also shows that migrants are usually the educated ones. Out of the 30 migrants, 43.3% have education level of degree, 30% have attended higher secondary level education and 26.7% as others. The in-depth interview with the experts and migrants also found that mostly the migrants are educated and particularly the youth (Table 4).

1.6 Occupation of migrants after moving to urban areas

The rural people usually migrate to urban centers with a hope to have a better opportunities and services, live a decent and comfortable life in the city. However, only some migrants get employed while some have to work as labourers. The study found that after migrating to cities, 31% of migrants are employed as civil servants, while 26% are engaged in business, 21% are found to be housewives and 9% as military personnel, 5% are employed in non-governmental organizations and 3% of the migrants are engaged in labour force. Rest are found to be students (2%), unemployed (2%) and others (1%) (Fig.7).

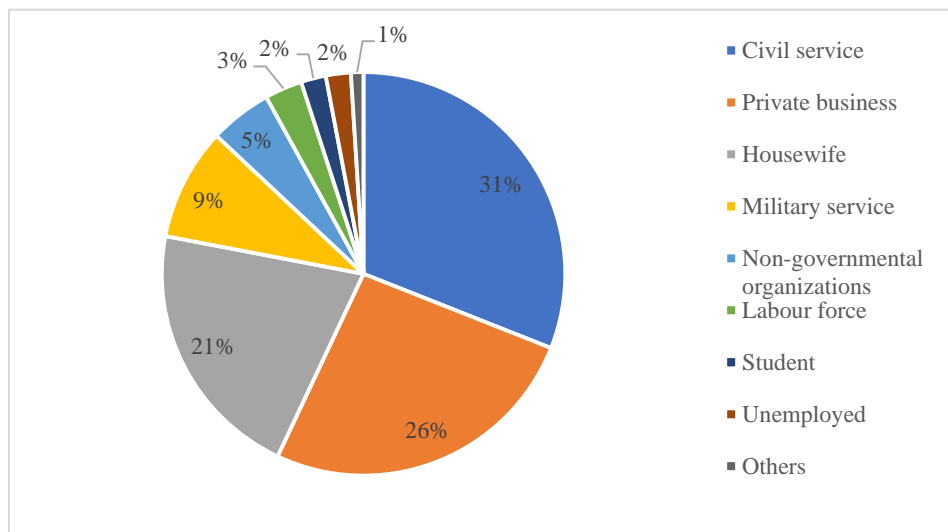


Figure 7: Occupation of migrants after moving to urban areas
(Source: Rural-Urban Migration Survey 2004)

Nonetheless, the study also found that there is a slight change in the occupation of migrants in 2014 from what had been reported in 2004. The business topped the occupation of migrants as it accounted 24.2% followed by government services 22.9%, while housewives represented 22.3% and corporate employees constituted 11.5%. Likewise, 7.3% are job seekers, military service (4.3%), students (2.5%), agricultural workers (0.6%), politician (0.2%), monk (0.2%) and 3.9% as others (Policy and Planning Division, 2014).

The analysis from an accidental sampling shows that majority of the migrants are either employed in civil service or in corporate and private sectors while some are in arm forces. Majority with 43.3% are found to be corporate employee, 36.7% are civil servant, 16.7% arm forces and 3.3% as private employees (Table 5).

Table 5: Occupation of migrants

	Variable	Frequency	Percent
Occupation	Civil servant	11	36.7
	Private employee	1	3.3
	Corporate employee	13	43.3
	Arm forces	5	16.7
Total		30	100

The policy makers, migrants and the non-migrants during the in-depth interview felt that most of the people after their migration to urban areas opt for civil servants due to job security followed by private jobs, while some also do business, few prefer doing contract works. Mrs. Dema, Pelden and Tshering, women from Kanglung geog under Trashigang district stated that all of their children and siblings are in civil service and most of them are working as teachers in the urban areas. Mrs. Rinchen also stated that

“...I have seven children and all of them are in Thimphu. Four of them are working as civil servants and three of them are doing business. So far they are doing well and we are also getting help from them when we are in need of money...”
(Interview date November 28, 2018)

The close analysis from the findings reveals that occupation of migrants have changed over the last one decade. In the past, the migrant’s occupation were dominated by civil servant followed by the business. However, the latest reports revealed that the occupation of migrant’s was topped by business. This reveals that business is the most preferred choice of occupation for migrants than the civil service. However, it may be argued that due to limited absorption capacity in the civil service,

migrants might have taken up business as the main occupation for their livelihoods in highly competitive urban centers.

1.7 The Causes of Migration

The study found that migration had become an integral part of current global development process. The migration is primarily influenced by demographic, economic, environmental, political and social drivers, as well as by individual and household characteristics, and intervening obstacles and facilitators. As such, economic drivers will continue to be the most influential among the drivers. The aspirations of youthful populations, concentration of higher education opportunities in urban centers, ever widening transportation infrastructure and continuous improvement in digital communication will boost the influence of the economic driver (Liu et al., 2019).

The study found that in Bhutan's context, rural-urban migration is mainly due to disparities of opportunities that exists between urban and rural areas. Rural-urban migration in Bhutan is typically perceived as moving of people from rural areas to urban areas in search of jobs or live with siblings/relatives or elders. It is the phenomenon contributed by both pull and push factors. People move from rural to urban areas considering better opportunities including employment, education, good health, abundance business opportunity, communication, better livelihood etc. During the in-depth interview with one of the experts from Ministry of Agriculture and Forests informed that

“....the role of geographical push-pull model and economic factors are very relevant in Bhutan. There is strong evidence of these factors influencing greater mobility both within and between the districts or rural and urban space....” (Interview date December 22, 2018)

The main contributing factor to rural-urban migration in Bhutan is found to be education, since it is less likely that educated youths no more wanted to live as farmers. Creating balanced development in rural areas as much as in urban, is perhaps the only way out to curb rural-urban migration in Bhutan.

Table 6: Main reasons for leaving rural areas (push factors)

2004		2014	
Push Factor	Percent	Push Factor	Percent
Lack of education	46	Lack of employment opportunities	42.5
Lack of off-farm jobs in the rural areas	17	Limited access to education	8.4
Inadequate service facilities	15	Small landholdings	6.7
Small landholdings	7	Limited access to markets	5.7
Drudgery of farm works	5	Limited access to better health facilities	3.7
Labour contributions to public works	3	Marriage	3.1
Non-remunerative agriculture	3	Limited access to roads	2.2
Crop damage by wild animals	3	Unproductive land	1.5
Natural calamities	1	Others	26.2
Total	100		100

(Source: Rural Urban Migration Survey 2004 and 2014)

The study found that lack of education (46%), lack of off-farm jobs in the rural areas (17%) and inadequate service facilities (15%) as the top push factors of migration in 2004. Similarly, small landholdings (7%), drudgery (5%), labour contribution to public

works (3%), crop damage by wild animals (3%), non-remunerative agriculture (3%) and natural calamities (1%) also made people migrate from the rural areas (Tab.6). While in 2014, the main push factor of migration was found to be lack of employment opportunities with 42.5% followed by lack of education facilities 8.4%, small landholdings 6.7%, lack of access to markets 5.7%, limited access to health 3.1% and marriage with 3.2%. The limited access to motor-roads and unproductive land accounted for 2.2% and 1.5% whereas, 26.2% constituted as others.

Concurrently, in 2004 the pull factors of migration are found to be job opportunity (33%), to live with parents (25%), to live with spouse (24%) and 9% is due to religious pursuit, 4% is because of business opportunity, 3% to live with relatives and 2% after their retirement from service (Tab.7). Whereas, in 2014 the pull factors of migration are found to be employment opportunities (40.4%), marriage (29.2%), business (19.4%), pursuing education (4.8%), looking for jobs (4.4%), others (1.5%) and 0.3% in pursuit of religion.

Table 7: Pull factors of migration

2004		2014	
Pull Factors	Percentage	Pull Factors	Percentage
After getting jobs	33	Employment opportunities	40.4
To live with parents	25	Marriage	29.2
To live with spouse	24	Business	19.4
Religious pursuit	9	Higher education	4.8
Business	4	Looking for jobs	4.4
To live with relatives	3	Others	1.5
Retirement	2	Religious pursuit	0.3
Total	100	Total	100

(Source: Rural Urban Migration report 2004 and 2014)

The analysis from the accidental sampling discovered that wherein from 30 respondents, 29 persons corresponding to 32.2% had responded that no employment opportunities is the main push factor followed by small landholdings (20%), limited access to roads (18.9%), and limited access to credit (7.8%). The unproductive land and human wildlife conflict constituted 6.7% each, heavy labour contribution (4.3%) while shortage of farm labour was the least with 3.3% (Table 8).

Table 8: Reasons for migration

Variable	Frequency	Percent
No employment opportunities	29	32.2
Small land holdings	18	20
Limited access to roads	17	18.9
Limited access to credit	7	7.8
Unproductive land	6	6.7
Human-wildlife conflict	6	6.7
Heavy labour contribution	4	4.4
Shortage of farm labour	3	3.3

Similarly, the analysis from the accidental sampling found that 29.7% of the respondents had reported that employment opportunities in the urban areas as the main pull factor followed by better health facilities and higher education with 18.7% and 16.5% respectively. Besides, other pull factors were better quality of life with 13.2%, business opportunities 8.8%, stay with family 6.6% and higher income 5.5% (table 9).

Table 9: Purpose of migration (Pull factors)

Variable	Frequency	Percent
Employment opportunities	27	29.7
Better health facilities	17	18.7
Higher education	15	16.5
Better quality of life	12	13.2
Business opportunities	8	8.8
Stay with family	6	6.6
Higher income	5	5.5

Correspondingly, the experts, migrants and non-migrants felt that lack of economic opportunities, lack of market facilities, limited services such as health and education, hardship and drudgery, remoteness, lack of opportunities to enhance skills, access to information, poor living conditions, lack of credit facilities, human wildlife conflict, small landholdings, farm labour shortage, peer pressure from friends and relatives are some of the push factors and economic opportunities, better facilities such as education and health, access to credit, easy access to services, less drudgery are some of the pull factors for the migration.

The study found that it is mostly the pull factors that influence the migration of people from rural to urban areas in Bhutan. The National Statistics Bureau (2018) report stated that the most cited reason for migration was family move (17.8%) followed by employment (12.7%) and education (8.3%). In general, many people decide to migrate to urban cities to have better and qualify life. The in-depth interview with experts and migrants found that employment opportunities are the most common reason for the migration. On the other hand, lack of opportunities, drudgery, poor infrastructure, poor health and education facilities, crop failure and natural disasters are some of the factors that forced people to migrate to the cities.

In nutshell, like in any other part of the world, migration in Bhutan's context is characterized as an individual decision for income maximization that is triggered by better income, amenities and employment conditions in the urban areas. The migrants believe that urban life are more secure and comfortable compared to rural life. The migrants see the universal opportunities in the urban areas that they did not recognize in their societies and communities. Migrations happens usually to explore the boundaries and richness looking for the fulfillment of their dreams that they couldn't realize in their society.

1.8 Destination of Migrants

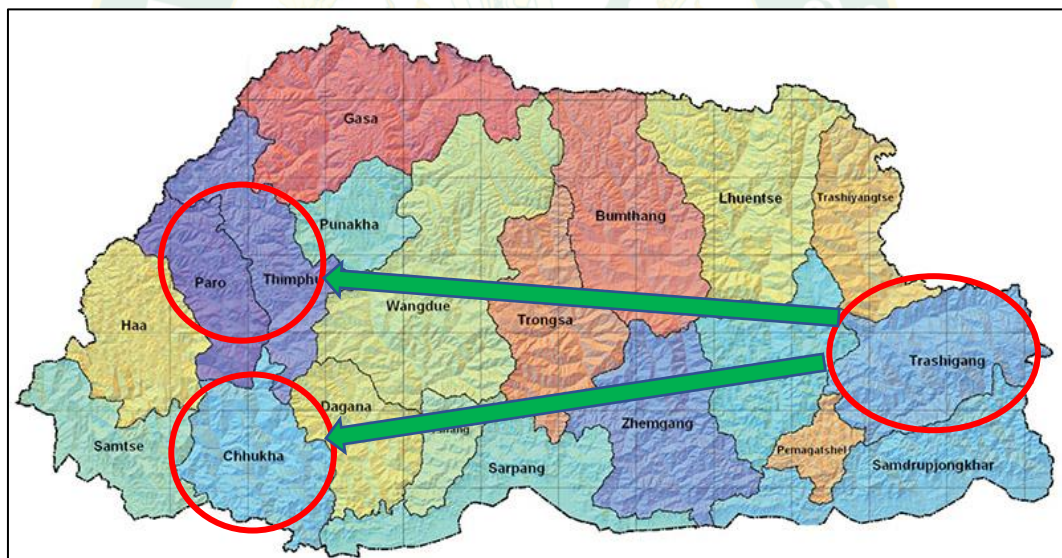


Figure 8: Map showing direction of migration

The study found that in general the destinations of migrants are more or less spread all over the country. The most popular destination was found to be Thimphu; the capital city followed by Paro and Phuntsholing (Fig.8). The study found that other urban centers received almost the same level of migrants (Rural urban migration survey, 2004). As per the National Statistics Bureau (2018), the main gaining districts

from migration are Thimphu and Phuntsholing while main losing districts are Lhuentse and Trashigang. The study found that in terms of regional migration, people are mostly migrating from three regions of eastern, central western and central eastern to the western parts of Bhutan.

The study also found that over the decade, exactly half of the districts gained in population while the other half lost their population. Thimphu received the highest number of migrants (34,378 persons) while Dagana received the least (67 persons). Trashigang lost the maximum (19,046 persons) while Haa lost the least (606 persons). Gasu had the largest proportion (81%) of their persons counted in their own Dzongkhag, while Tsiwang had the least with 54 percent (Policy and Planning Division, 2014).

The migration in Bhutan is mainly happening from eastern and central regions to the western regions. The western regions are socially and economically well-off compared to other parts of the regions. All the ministries, constitutional and autonomous bodies, state owned enterprises, Civil Society Organizations, big private companies with all the social and economic development activities are concentrated in the western region whereas, the eastern regions lack the basic social infrastructures and services. As a result, people from eastern regions are naturally forced to move to the urban areas where the services and facilities are better. The movement of people would be restricted only through ensuring equal and balanced development in all the regions.

1.9 Impact of Migration

The study found that migration has both positive and negative consequences in the socio-economic development of the country. Most of the time migrants are not so qualified and they lack job skills, therefore the migrants are generally employed as daily workers in the urban areas. This is a challenge as they cannot afford to lead a

comfortable life since they do not get enough money to meet the basic necessities for them and their families causing serious health issues as can be seen everywhere in the developing countries.

Table 10: Household level income after migration

Household income	Frequency	Percent
Improved	25	83.3
Not improved	2	6.7
Same as before	3	10
Total	30	100

The analysis from the accidental sampling on the household level income after the migration revealed that 83.3% of the migrants have improved While 10% of the migrants have responded same as before and 6.7% of the migrants have reported as not improved (Table 10).

Table 11: Physical health of migrants after the migration

Physical health	Frequency	Percent
Excellent	5	16.7
Very good	9	30
Good	12	40
Same like before	2	6.7
Worse than before	2	6.7
Total	30	100

On physical health, majority of the migrants (40%) have responded that their physical health as good, 30% as very good and 16.7% has responded as excellent. While 6.7% of the migrants have reported as same like before, another 6.7% has informed that their physical health has become worse than before (table 11).

Table 12: Quality of life after migration

Quality of life	Frequency	Percent
Highly satisfactory	1	3.3
Satisfactory	22	73.3
Moderately satisfactory	7	23.3

With regard to quality of life, 73.3% of the migrants have reported that after their migration to urban areas the quality of life was satisfactory while 23.3% has informed as moderately satisfactory and 3.3% has responded as highly satisfactory (Table 12).

However, despite the challenges, people still prefer to migrate. It is seen from the (table 13) that 96% of the migrants feel that the wage or the salary are comparatively better in the urban areas than rural areas. Similarly, the migrants also feel that access to health facilities (86%), education (83%), quality of food (80%), income potential (78%) are much better in urban areas. The happiness level and gender equality are also found to be better in urban areas with 70% and 48% respectively.

Table 13: Perception of migrants after migrating to urban centers

Social factor	Percentage
Labour toll	96
Access to health facilities	86
Access to education facilities	83
Diet and quality of food	80
Income potential	78
Happiness	70
Gender equity	48

(Source: Rural Urban Migration Survey 2004)

In general, it was found that migration has both positive and negative impact on both rural and urban areas. The study found that for the rural areas, remittances from migrants, less pressure on natural and household's resources, support with food and shelter when travelling to places where migrant's stay, influence on better health/sanitation and understanding of national policies are positive aspects while contribution to labour shortage and loss of skill labour, decrease in agricultural production, age old destitute, slow development and human wildlife problem are negative aspects of migration to rural areas (Policy and Planning Division, 2004).

Concurrently, increase in workforce, urban expansion and development, business opportunities etc. are the positive points while contribution to unemployment rate, congestion, pressure on facilities, food in-security and dependence on food imports, unlawful population and increasing crime rates are some of the negative impact on the urban areas (Policy and Planning Division, 2014).

In broad-spectrum, new ideas on development and trainings, contribution to community infrastructure development, less pressure on land and natural resources, transfer of technology and knowledge are some of the positive impact of migration while less productive age group in the rural areas, feminization of agriculture, increasing wage rate due to shortage of labour, shift of labour from primary to secondary and tertiary sector, human wildlife conflict, slow development, less stewardship for environment and biodiversity management, affecting food self-sufficiency due to less farming population and ageing population are the negative impact of migration shared by the migrants, non-migrants and the experts during the in-depth interviews. One of the experts from corporate body informed that

“...it has become difficult to execute agricultural activities on large scale due to labour shortage and the country is becoming more depended on imports and this is bad for the country...” (Interview date December 22, 2018)

Apart from the above specific and general impact of migration, there are also other broad and wider impact of migration. The most prominent ones are social, economic and psychological welling of the people. Migration sparks positive impact on the social welfare of the people in improving household income, reducing poverty, and improving health and education of the children through remittances sent by the migrants (Table 14). The rural people also become more aware through transfer of knowledge and skills by the migrants in taking better decisions in the communities.

Table 14: Impact of rural-urban migration

Positive Impact	Negative Impact
Improve household level income through remittances	Less productive age group in the rural areas
Help reduce poverty	Feminization of agriculture
Improve health and education of children	Labour shortage, fallow land and human wildlife conflict
Better decision making (transfer of knowledge and skills by migrants)	Affect food self sufficiency

(Source: Rural Urban Migration Survey, 2014)

Besides, migration also contributes to overall economic development of the country particularly through labour force participation in both formal and informal sectors. It helps in diversification of economic activities, infrastructure development and expansion of facilities and services in the urban areas. In the rural areas, through remittances it also supports in procurement of farm equipment, promote self-employment and help start small and medium enterprises for enhancement of their income. While, on the negative side migration also creates urban poverty and increases slums in the urban cities due to shortage of housing and other facilities which are the emerging challenges as a result of migration.

On the other hand, migration also have impact on the psychology of the migrants and the people back home. It affects migrants, households' families and children emotionally and physically due to absence of the people during the event of tax collections, social gatherings, celebrations and loss of family members. This is one of the negative impacts of migration which causes serious mental and affects the psychological wellbeing of the people.

2. Socio-economic situation of Trashigang District

2.1 General Profile of Trashigang

Trashigang is one of the largest districts in Bhutan. It is situated in the eastern part of Bhutan and it has a total land area of 3,066.99 square kilometers (fig.9). Administratively, Trashigang district is divided into 3 sub-districts, 15 geogs (blocks), 78 chiwogs (sub-blocks) and 410 villages. Trashigang has a population of 45,518 persons with 23,414 male and 22,104 female respectively. The population density (per sq. km) is 23.4 persons (National Statistics Bureau, 2017).Trashigang district is connected with a domestic airport and the impact of tourism is yet to be seen.

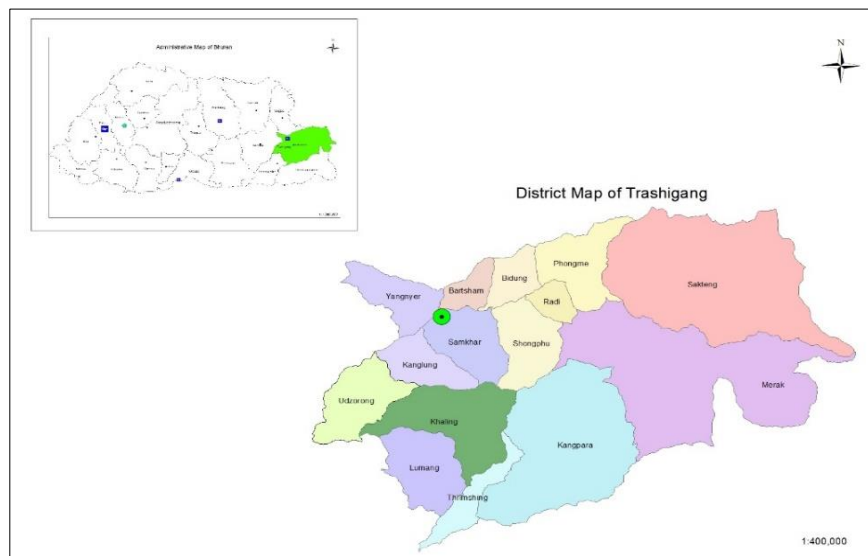


Figure 9: Trashigang administrative map

The study found that majority of the migrants population who are residing in urban areas are from Trashigang districts. Trashigang topped the migration rate as per the study conducted by the Ministry of Agriculture and Forests. Trashigang was found to be contributing to a larger part (14.5%) of the national out-migrants (Policy and Planning Division, 2014). The study found that the rural population of Trashigang District had reduced from 86.7% in 2005 to 77.8% in 2017. While the urban population increased from 13.3% in 2005 to 22.2% in 2017 (figure 10). This clearly shows that migration is rapidly taking place both within and outside the districts.

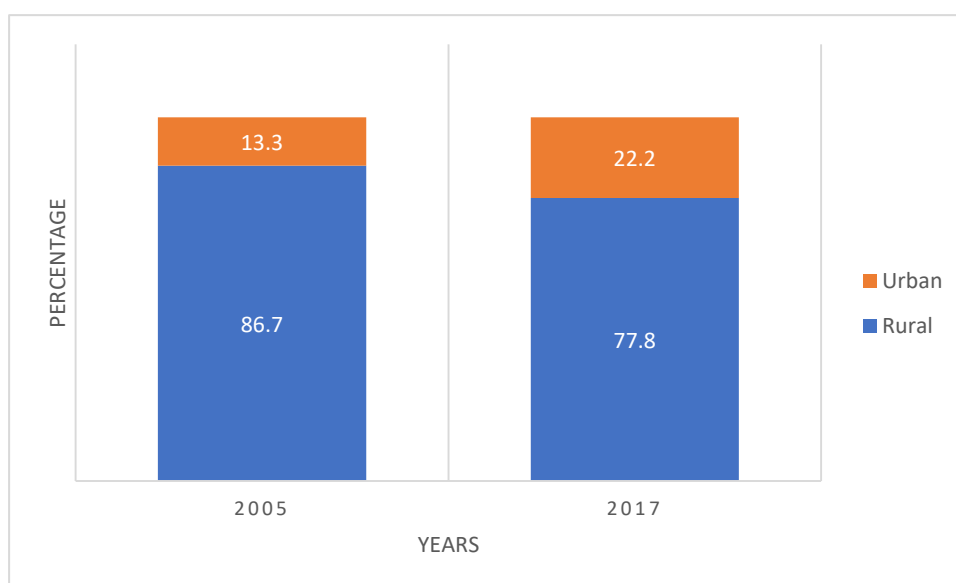


Figure 10: Comparison of rural and urban population in 2005 and 2017

(Source: Population and Housing Census of Bhutan 2017)

In terms of education infrastructure and facilities, the study found that Trashigang has 2 tertiary institutes under Royal University of Bhutan, 7 central schools, 1 higher secondary school, 3 middle secondary schools, 7 lower secondary schools, 33 primary schools, 3 extended class room, 34 non-formal education centers, 20 Early Child Care and Development and 3 other institutes. The total school enrolment number is 11,407 (5,667 males and 5,740 females). Trashigang district has 637 teachers of which 462 are male and 175 are female. The pupil-teacher ratio is 18. The district has also 34 Non-Formal Education instructors (7 males and 27 females) and 359 NFE learners (117 male and 242 female). The literacy rate of Trashigang district is found to be 64.5% (71.7% for male and 57% for female).

On the health and sanitation part, Trashigang has 3 hospitals, 7 indigenous units, 23 Basic Health Units (BHUs), 54 outreach clinics and 10 ambulances. In terms of health personnel, Trashigang has 12 doctors, 4 Dingtshos (indigenous doctors), 7 indigenous medical technicians, 1 assistant clinical officer, 70 nurses and 52 technicians. Trashigang

has 98.69% rural water supply coverage and 98% coverage to safe drinking water supplies apart from 91.6% rural population access to improved sanitation.

In term of agricultural infrastructure, the district has also 37.5 kms of irrigation channels, 139 power tillers, 57 electric fencings covering 168.87 kms of land and 13 farm shops established in various locations. The district also have 19 RNR extension centers, 1 livestock veterinary hospital, 1 regional veterinary laboratory, 15 milk processing units, 16 poultry farms and 7 piggery farms (National Statistics Bureau, 2017).

However, during the in-depth interview with non-migrants and migrants from the district, many felt that the facilities and services provided in most of the schools and medical institutions are low compared to urban areas (except in few cases) that has triggered the movement of people from rural areas to urban centers over the years. On the other side, the urban centers are getting crowded and the facilities and services are not only inadequate but getting poor in quality as a result of more demand due to swelling population.

2.2 Working-age Population

The study found that Trashigang district has a working-age population (15 years and above) of 32,922 persons of which 17,128 are male and 15,794 are female (Tab.15). Out of the total working-age population in the district, 7,873 persons are in the urban areas and 25,049 are in the rural areas. Against the total working-age population, 20,942 persons (63.6%) are economically active or in labour force and 11,980 persons (36.4%) are economically inactive as many of them are either students, monks/nuns, aged people, disabled or sick persons and they do not earn income for their livelihoods. The age between 15-64 years is considered as economically active while 0-14 and 64 years and above are considered as economically inactive. As to the labour force participation rate, in both rural and urban areas the male dominate the participation

rate with 68.2% compared to only 58.7% for the female (National Statistics Bureau, 2018).

Table 15: Economically active and inactive population of Trashigang in 2017

Usual Activity	Sex		Area		Total
	Male	Female	Rural	Urban	
Economically Active	11,674	9,268	17,875	3,067	20,942
Economically Inactive	5,454	6,526	7,174	4,806	11,980
Total	17,128	15,794	25,049	7,873	32,922
% of Economically Active	68.2	58.7	71.4	39.0	63.6
% of Economically Inactive	31.8	41.3	28.6	61.0	36.4
Total %	100.0	100.0	100.0	100.0	100.0

(Source: Population and Housing Census of Bhutan 2017)

2.3 Occupation

The study found that the estimated total population of Trashigang residing on farm in 2017 was 21,747 persons of which 10,873 are male and 10,874 are female. In terms of occupation, 75% of the total population residing in Trashigang district are found to be farmers, followed by 17% students, 4% lay monk and 4% as others. Majority of the population (71%) had never attended school, 17% had attended school from class PP to 6, 7% had education from class 7-10, 2% had attended school from class 11-12 and 3% of the population had the qualification of monastic education (Kuenzang et al., 2017).

Table 16: Proportion of farm households by education level and occupation

Education Level	Percentage	Occupation	Percentage
Never attended school	71	Farmer	75
Class PP to 6	17	Student	17
Class 7 to 10	7	Lay monk	4
Class 11 to 12	2	Shopkeeper	0
Degree/Master/PhD	0	Taxi driver	0
Monastic Education	3	Others	4
Total	100	Total	100

(Source: Agriculture Statistics 2017)

The close analysis of the study reveals that the people who have never attended schools and people with less education are the one who remain in the villages and become farmers (table 16). They are engaged in farming because they do not have bigger dreams and aspirations for going out of their communities while the young and educated people are the ones who migrate to urban centers in search of better opportunities and better quality of life because they are not interested to stay in the rural areas and do agricultural works for their livelihoods. Moreover, the youths are ashamed to stay in the village and do farming after having some education, so they migrate to urban centers with a hope to get a small and decent job that will sustain themselves.

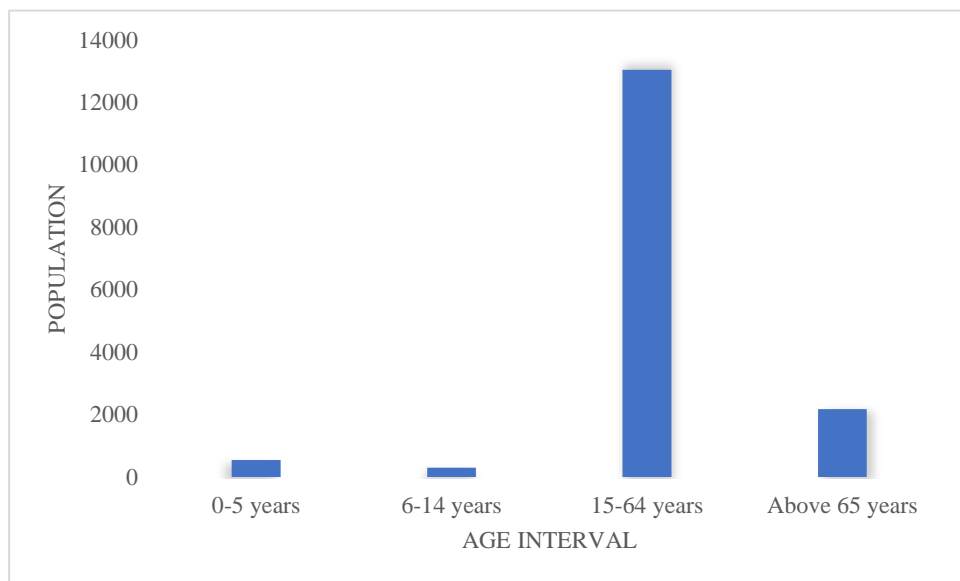


Figure 11: Farmers' Population of Trashigang in 2017 by age interval
(Source: Agriculture statistics 2017)

In terms of age interval of the farmers, majority are age between 15-64 years with 13,043 persons followed by above 65 years with 2,177 persons. The age between 0-5 years and 16-14 years have 547 and 301 persons respectively. The larger portion of Trashigang farmers' population (81%) are in the age group between 15-64 years while 14% of the farmers' population fall above 65 years of age. The age group 0-5 years constitutes 3.4% and 6-14 years represents 1.9% (Fig.11).

2.4 Land use

In terms of agriculture land use, the study found that Trashigang district has 11,940 acres as dry land of which 4,901 acres are cultivated and 7,039 acres are left as fallow. While under wetland category, against the total of 4,204 acres, 3,671 acres are cultivated and 533 acres recorded as fallow land. In terms of percentage, 87.7% of the

wetland are cultivated while 12.68% are fallow. Whereas, 41.05% of the dryland are under cultivation and 58.98% are categorized as fallow land (Table 17).

Table 17: Land use under Trashigang district by acres

Type of Land	Area (Acre)	Row percentage	Total percentage
Wet land	4,204	100	
Cultivated	3,671	87.32	26.04
Fallow	533	12.68	
Dry land	11,940	100	
Cultivated	4,901	41.05	73.96
Fallow	7,039	58.95	
Total	16,144		100

Source: Agriculture Statistics 2017

In terms of proportion of geographical area by slope percentage, 52.21% of total land terrain under Trashigang are above 50% degree followed by 37.68% in slope degree between 26-50%, 6.93% for 16-25%, 2.32% for 9-15% degree. While for 4-8% and 0-3% degree, the percentage are 0.74 and 0.12 respectively (Table 18). Further it was found that the arable land accounted for around 9% of the total geographic area out of which 13% are irrigated and more than 86% are under rain fed or dry land cultivation (Wangda et al., 2017). As such, the above factors make agriculture farming not only challenging but also physically impossible at most of the cases.

Table 18: Proportion of geographical area by slope percentage

Slope degree	Percentage
0-3%	0.12
4-8%	0.74
9-15%	2.32
16-25%	6.93
26-50%	37.68
Above 50%	52.21
Total	100

Source: Bhutan RNR Statistics 2017

2.5 Main Crop

The study found that maize, soya beans and beans are the major crops grown in Trashigang district while important cash crops are potato, vegetables and citrus. It was found that although the production of most of the crops have increased yet the increase in percentage is not significant (Fig.12). If good agronomic practices and high yielding varieties are introduced these crops have the potential to be cultivated on a commercial scale. The study found that maize are grown in huge quantities in the district and has huge potential for setting up collection centers and product processing units (Trashigang Dzongkhag Website, 2019).

The study also found that Trashigang district is the highest producer of potato in Bhutan producing 12.7% of the national production and also the highest in scale of Rajma beans cultivation in the country albeit the yield per acre is low. Trashigang district is also the third highest chili producer in the country (BOIC, 2015). However, marketing is still a challenge and not favourable for the poor famers as most of the produces are sold in the auction yard where the prices are mostly controlled by few Indian traders from Assam and West Bengal.

The rate of the farm products are also determined by the production in India. For instance, the Bhutanese farmers fetches good prices during off-season and when the production of agricultural products are bad in India. When there is a bumper production in India, the Bhutanese products cannot compete prices with Indian products because more often Bhutanese products are expensive than Indian products. Owing to such circumstances, the farmers are not able to produce more due to absence of reliable market and to minimize the risk of not being able to market their products.

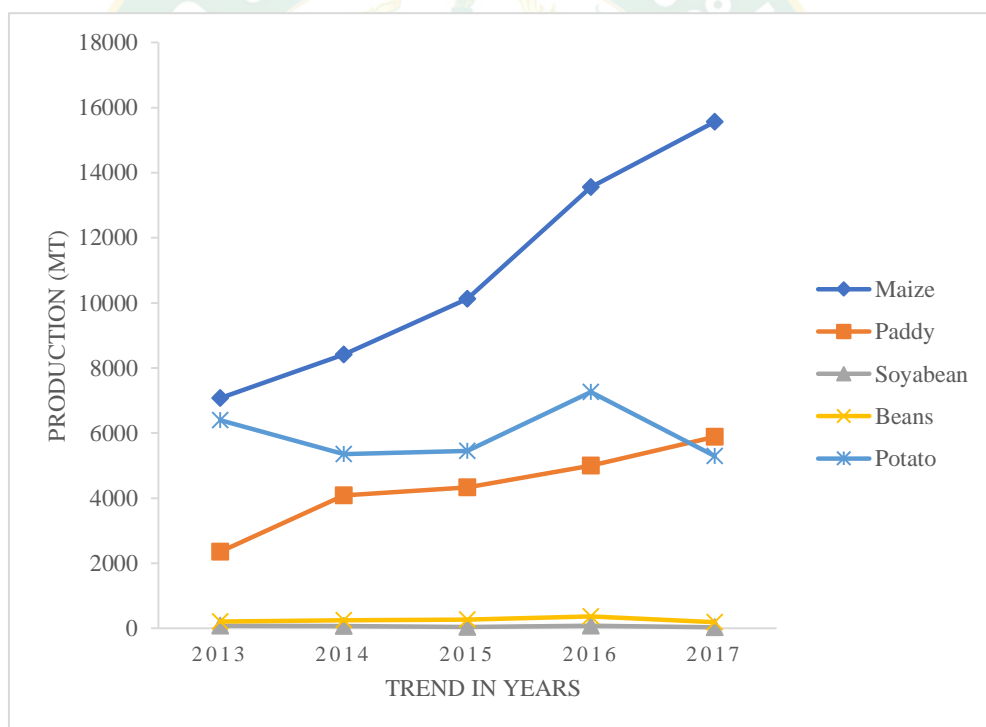


Figure 12: Production trend of major crops grown in Trashigang

Concurrently, the study also found that there is a key challenge particularly on issue of migration as the district has experienced the highest migration loss of 16,697 persons (National Statistics Bureau, 2005). This has resulted in farm labour shortages in the rural areas which in turn major chunk of the agricultural land are left fallow leading

to low agricultural production and productivity in the district. Further, the study found that crop damages by wild life, frequent droughts, pests and diseases outbreaks, etc. are some of the main challenges in enhancing agriculture productivity (Trashigang Dzongkhag Website, 2019). In nutshell, migration has a direct correlation in production and productivity of agricultural produce. Higher the migration rate the severe is the consequences on the farming and rural livelihoods.

2.6 Local Product

The study found that Trashigang districts is also a home to several local products. The arts and artisans are concentrated in few sub-districts that produce high value products that has potential to capture the attention of local, regional and international tourist visiting the district. For instance, Radhi geog (sub-district) is well known in the country for its fine raw silk *bura gho* (national costumes), Kangpara geog for producing handicrafts such as mask, wooden bowl, wooden cups, bamboo baskets, *bangchung*s (bamboo product), *patang*s (knives) and *choesham* (alter). The Radhi bura has established image across the markets and it has huge demand in Bhutan (BOIC, 2015).

Merak and Sakteng geogs are found to be famous for their traditional based self-reliant textile. The textile are made out of yak's skin, hair and wool. In the recent years their textile have gain popularity among the tourists and has become a source of income for the people. Even the small thing such as yak's tail has been used for home decorative and ritual purposes and it fetches good price in the market.

Similarly, in terms of agricultural products Thrimshing, Kangpara and Bartsham are the most popular geogs for chili production and these geogs are referred to as chili hubs of Trashigang district. The study found that these three geogs produce huge quantities of chilies and are sold in the Bhutanese market in many forms; green chili,

sundried red chili, boiled and sundried (white) chili, chili powder, chili pickle etc. Besides, Yangnyer geog is famous for producing a unique gene chili known as “*tegteg pa solo*” and it is considered a high end delicacy (BOIC, 2015).

Radhi also known as the “rice bowl of east” is the highest producer of rice in the district. The main source of income for the people of Radhi come from sale of rice. The most common and mostly cultivated rice variety is known as *sorbang* and it has huge market demand across the country.

Now with the construction of new domestic airport in the district and the door being opened for international, regional and national tourism, the agricultural production and local products especially high value products are expected to hit the local markets. Some of the rural communities have already seen the impact of tourism and they are optimistic about the positive changes that will bring in their communities and they are looking forward for larger volumes of agricultural produce and other local products.

The analysis of socio-economic situation of Trashigang district in comparison to migration and its causes, it was found that one of the key reasons cited by majority of the rural people during the in-depth interview was lack of sufficient social infrastructures and poor facilities, which triggered the movement of people from their homeland to urban centers. It was felt that a strong and vibrant economic development activities and diversification are necessary to have strong rural economic base in Trashigang to address the problem of rural-urban migration.

The majority of the migrants living in urban areas (Thimphu and Phuntsholing) comes from eastern region and some part of central and southern regions. As compared to the west, these regions are socially and economically backward. These regions do not have enough basic infrastructures and services nor do have enough private and government offices, large and medium scale industries to provide jobs for the emerging population. On the other hand, Thimphu and Phuntsholing are the two

biggest cities with all the social and economic activities concentrated in these two areas and thus it has become the most preferred choice of destination for the migrants.

3. Review of Existing Strategies of Ministry of Agriculture and Forests on Reducing Rural Urban Migration in Bhutan

The study reviewed inter alia government documents, reports, policy papers on government strategies and interventions identified to curtail the incidence of rural-urban migration in Bhutan. Besides, in-depth interview with experts were also conducted to gather and support the findings from the documentary research. The details of the findings are presented below;

3.1 Government Strategies on Rural-Urban Migration

The study found that in general there are no specific government strategies targeted for rural-urban migration in Bhutan. Nonetheless, few existing government interventions are expected to address rural-urban migration issues in Bhutan. Out of few interventions implemented thus far, the study found that the government is focusing on making rural life easier by prioritizing farm road construction, development of irrigation facilities, health and sanitation, education, electricity supply, drinking water supply, telecommunication facilities which are very basic needs at the rural areas. One of the notable approaches is taking development closer to the communities with inclusive and more decision making power as well as decentralization of resources so that the development agenda and grassroots needs are decided by the people themselves. Some of the existing government interventions are as follows:

3.1.1 Use Right System (URS)

Use Right System (URS) is the land reform initiative taken by the Royal Government of Bhutan to benefit farmers and unemployed youth. It is the noble initiative of His Majesty the King to utilize the limited arable state land in a sustainable way for economically productive activities in the rural areas. The main focus of URS is to provide platform for farmers, unemployed youth and school drop outs living in rural areas as well as rural people to take up agricultural related activities in a sustainable manner so that it help generate income for themselves, enhance rural economic productivity, contribute to national objectives like food self-sufficiency, curbing rural-urban migration and solve youth unemployment problem in the country (Lamsang, 2016).

Under the URS, the government grants User Right Certificate (URC) to individual or groups to utilize the state land for specific purposes like for example growing of cash crops. The URS, allows the beneficiary to continue use the land for productive purposes but if it is not used or misused, the URC can be withdrawn at any time by the government. The project started as a component of land kidu (His Majesty's welfare program) in 2016 to enhance land productivity, provide employment for youth and to promote commercial farming. So far 145 households received 297 acres as URC land for cultivation purposes (Lamsang, 2016).

3.1.2 Priority Sector Lending (PSL)

The Priority Sector Lending (PSL) is established by Royal Monetary Authority (RMA) of Bhutan based on the inspiration and vision drawn from the Royal Address to the Nation in 2016. It was during the 109th National Day Celebration, His Majesty commanded that “the financial sector has a great opportunity to improve access to

credit for our youth and rural people in entrepreneurship and commercial farming”. Thus, PSL came as a noble initiative to provide a platform for rural people and youth with improved access to credit for coming up with Cottage and Small Industries (CSI) at a lower interest rates compared to other financial institutions in the country (RMA, 2017).

The primarily objective of Priority Sector Lending (PSL) scheme is to promote and identify the Cottage and Small Industries (CSI) as a priority sector for targeted lending and increased coordination and efficiency in the delivery of government support schemes and incentives. PSL is a lending based on insurance on the proposed project assets (BoB, 2019).

Under PSL, the financial institutions supports agricultural CSI and non-agricultural CSI activities. Agricultural CSI includes primary production and value-added activities such as processing, packaging, marketing and sales. While, non-agricultural CSI comprises production, manufacturing, and services. The PSL Guidelines define the CSI sector by investment size up to Nu. 1 million as “cottage” and investment size above Nu. 1 million and up to Nu. 10 million as “small” industry (RMA, 2017).

In terms of modus operandi, PSL has channeled its support and intervention through a special window services provided by various government institutions and it is operated through districts PSL committees. Further, the government has identified CSI as one of the five economic jewels of the country and several support schemes and initiatives are underway to promote the agriculture sector and CSI sector providing fiscal incentives (tax exemption) and financial institutions lending to the CSI’s at lower interest rates. The CSI sector has immense relevance to the Bhutanese economy. It is the largest source of domestic production and employment generation for the growing youth population while also addresses challenges in the agriculture sector and problems related to rural-urban migration. The beauty of the PSL scheme is that it

ensures not only equal financial access to farmers and youth at much lower interest rates but also without having any mortgage and guarantors (RMA, 2017).

3.1.3 Agricultural Development Scheme Loans

The two most prominent banks that provide agricultural development loans are Bhutan Development Bank Limited (BDBL) and Royal Enterprise Development Corporation Limited (REDCL). These two banks provide loans to farmers and aspiring youths who are interested in taking up agricultural works in the rural community at comparatively low interest rates with minimum or no collaterals to encourage agricultural works. Although, other banks do provide agricultural loans but the requirements and procedures are lengthy and interest rates are much higher.

BDBL was established in 1988 and it is the only bank that gives focus to the rural farmers and provides micro, small and medium financial services for the development and modernization of agricultural, commercial and industrial enterprises in the country (BDBL, 2019). REDCL was established in 2016 through the government order to provide funds for non-formal rural activities on low interest rate of 4% per annum and without any collateral requirement in order to stimulate economic activities and add value to the domestic resources and create employment in the country (REDCL, 2019). Since then, 962 proposals (includes both agriculture and non-agriculture) were approved against the 2419 proposals received spending Nu 105. 6 million in 2017 (REDCL, 2017).

3.1.4 Allotment of Land to Landless

Poverty in Bhutan is predominantly a rural phenomenon and one of the main causes of poverty is landlessness. More than half of the country's population is depended on agriculture and agriculture related activities to sustain their livelihoods.

People in the far flung remote rural areas with inadequate land and those who are mostly depended on sharecropping are the most susceptible to chronic poverty (National Land Commission, 2019). Rural-Urban Migration Survey (2014) also found that poverty is one of the push factors for rural-to urban migration.

There is a strong association between land and the poverty. Most of the people living under poverty are those who have limited land or landlessness. Therefore, in order to eliminate the problem and improve living standards of the rural poor people, His Majesty the Fourth King of Bhutan commenced the resettlement program in 1997 to grant Kidu (welfare) to the landless, people with small landholdings, and households that are highly dependent on shifting cultivation. With the commencement of such a noble initiative, nine phases of resettlement programs were implemented in five districts of Dagana, Samdrup Jongkhar, Tsirang, Sarpang and Samtse resulting in the resettlement of 4,600 households.

Although, the multidimensional poverty reduced significantly but rural poverty is much higher than urban poverty and inequality is rising in rural areas. To eliminate larger disparity in the society, His Majesty the King initiated a land reform exercise in 2007. To date, 123,265 beneficiaries have been granted a total of 133,287.765 acres of land tenure-ship and rights. Today 71% of households in the country own land tenure-ship and rights (Dorji, 2018).

Further, His Majesty, the king has initiated the new process of taking welfare to the people through office of Gyalpoi Zimpon (His Majesty's Chamberlain) and its regional offices. The people with landless and who really deserve such grant from His Majesty the king are identified and verified through office of Gyalpoi Zimpon with the support of grant coordinators from district and sub-districts. Further, in 2011 the National Rehabilitation Program was instituted under National Land Commission Secretariat mainly to rehabilitate landless and socio-economically disadvantaged communities (National Land Commission, 2019).

3.2 Existing Strategies of Ministry of Agriculture and Forests on reducing rural-urban migration in Bhutan

The study found that Ministry of Agriculture and Forests had no immediate or specific strategies for rural-urban migration in Bhutan. However, during the course of documentary research and in-depth interview with experts found that in general all the activities of the Ministry of Agriculture and Forests, by default contributes to reducing rural-urban migration in Bhutan. Some of the major interventions taken up by Ministry of Agriculture and Forests for curbing rural-urban migration are as follows:

3.2.1 Making agriculture sector attractive in the rural areas

The study found that 62.2% of the country's population still live in rural areas and are depended on agriculture for livelihoods (National Statistics Bureau, 2018). For a small country like Bhutan, making agriculture sector attractive in rural areas is paramount important. In line with this, the Ministry of Agriculture and Forests had made conducive environment for agriculture development over successive Five Year Plan periods.

Provision of free inputs such as high yielding seeds and seedlings, green house sets, processing materials, livestock breeds, construction of farm roads, irrigation supply, market infrastructures, technology dissemination, crop compensation, electric fencing, construction of farm shops, buy-back guarantee schemes, commercialization of agriculture and enterprise development are some of the interventions provided by the Ministry of Agriculture and Forests to make agriculture attractive in the rural areas (MoAF, 2013).

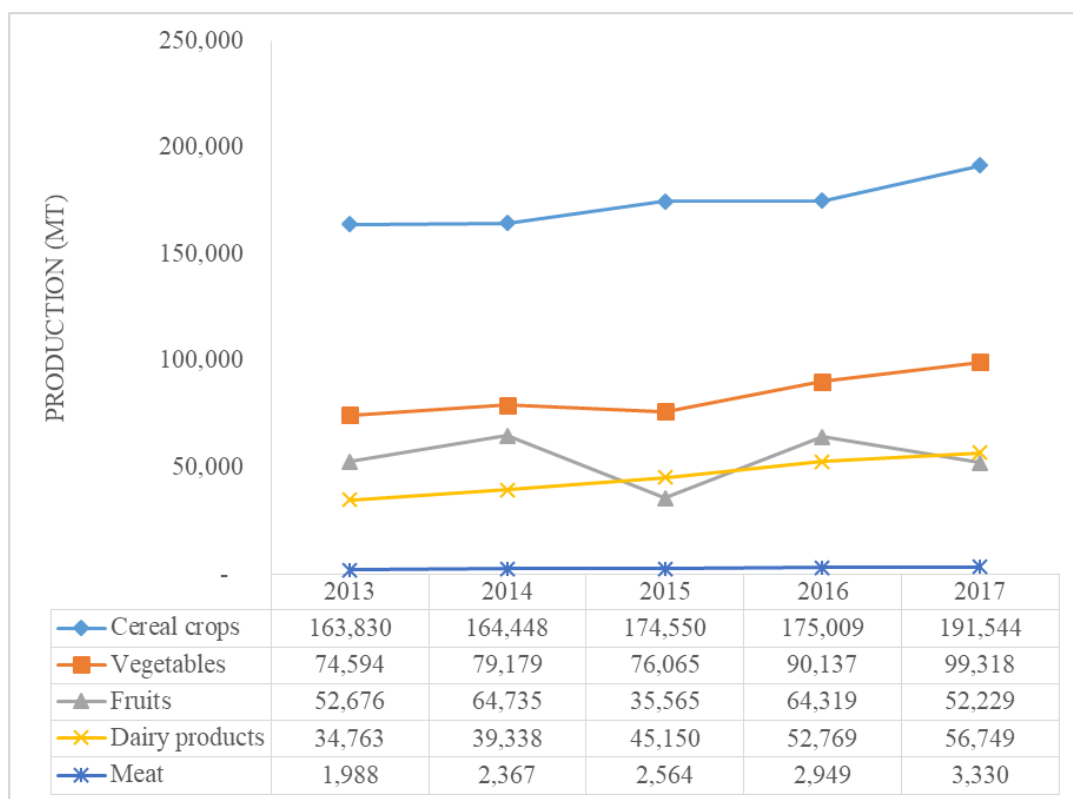


Figure 13: Production trend for major agricultural commodities
(Source: Bhutan RNR Statistics 2017)

Since the introduction of new technologies, the production of agricultural commodities had been on rise. The (figure 13) shows the production trend of major agricultural commodities from 2013 to 2017. The production of cereal crops had increased from 163,830 MT in 2013 to 191,544 MT in 2017. Similarly, the production trend of vegetables too had increased from 74,594 MT in 2013 to 99,318 MT in 2017. However, the production trend for fruits were unsteady nevertheless it had shown improvement from 35,565 MT in 2015 to 64,3319 MT in 2016 and 52,229 MT in 2017 respectively. While, the production trend for dairy products and meat were seen to be comparatively low yet the production trend for the both the commodities were on rise from 2013 until 2017.

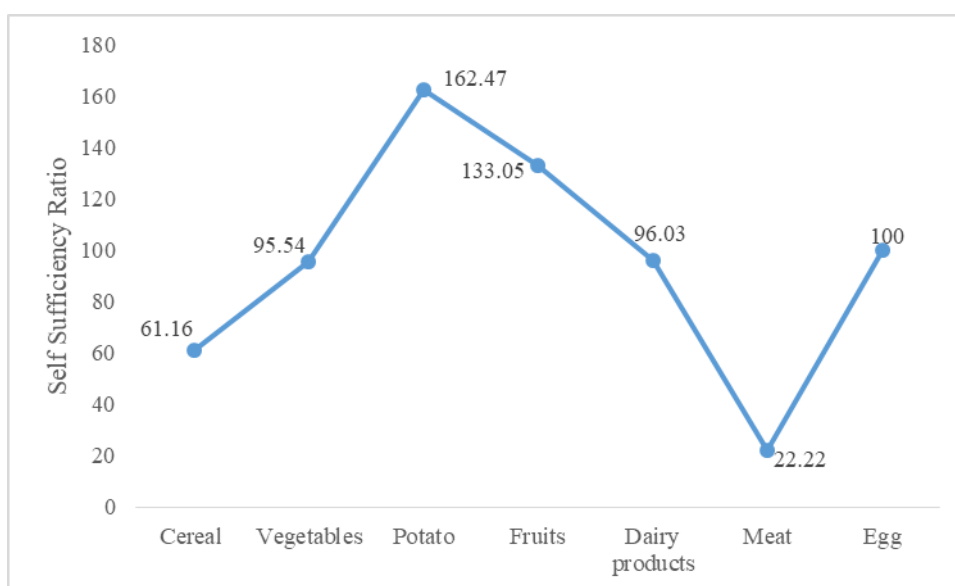


Figure 14: Self-sufficiency ratio for key RNR produce in 2016

(Source: DoA, MoAF)

Ever since the introduction of modern agricultural technologies and other interventions, lot of improvements and development had taken place in the agriculture sector. Although, the share of budget for agriculture sector was seen to be declining yearly yet in terms of absolute figure the budget had been increasing substantially. Today, Bhutan is 61.16% self-sufficient in cereal crops, 95.54% self-sufficient in vegetables, 162.47% self-sufficient in potato, 133.05% for fruits, 96.03% self-sufficient in dairy products, 22.22% for meat and 100% self-sufficient in egg (Figure 14).

Concurrently, the value of export for agricultural products too increased from Nu 2,112.56 million in 2013 to Nu 2,792.52 million in 2014. However, the export value slightly declined to Nu 2,335.90 million in 2015 but it picked up to Nu 2,805.13 million in 2016 and the value stand at Nu 2,736.96 million in 2017 (Figure 15). The achievement made thus far is an attribution of various interventions and strategies deployed in the

agriculture sector for making agricultural farming productive and attractive in the rural areas.

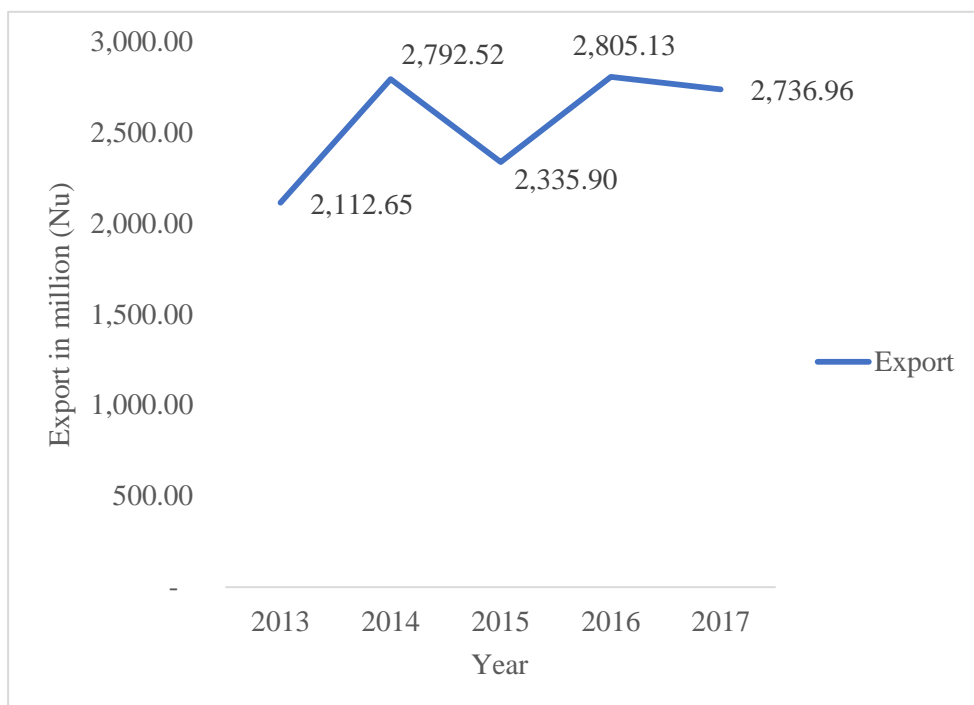


Figure 15: Trend of export for RNR produce
(Source: Bhutan RNR Statistics 2017)

3.2.2 Land Development and Consolidation

Most of the agriculture farming land in Bhutan are found to be very steep in topography and are not suitable for farming. As per the Bhutan RNR Statistic (2017), more than 50% of the total land area are identified as 50 degree or more in terms of landscape which make agriculture not only challenging but impossible in some cases. Farm labour shortages, human-wild life conflicts, rural-urban migration and seasonal water shortage has aggravated the incidence of fallow land thus threatening food self-sufficiency and food security in Bhutan.

Therefore, one of the prominent interventions introduced by the ministry was the farm mechanization program. The main objectives of farm mechanization were to reduce the incidences of fallow land, labour shortage and drudgery besides making farming a cost-effective, economically efficient and rewarding for the farmers. The farm mechanization covered not only land development aspects but also production boosting machinery, value-addition equipment, small and medium scale processing equipment beside others.

Land consolidation and development is another initiative of the Ministry of Agriculture and forests. It was found that the agriculture production was highly reduced as a result of fallow land which was again an attribution of the absentees of huge number of land owners in the villages as they reside in the urban centers. In order to boost the agriculture production through optimal land utilization process, the agriculture ministry in the 11th plan accorded high priority on land consolidation and development. The ministry has initiated the leasing of private fallow lands and state lands for establishing mega projects in agriculture, livestock and forestry farms. It is expected that leasing of land would result in enlargement of land areas through deployment of farm machinery and other technologies for landscaping, terracing, levelling, realignment of irrigation channels which will eventually boost agricultural production.

3.2.3 Irrigation and farm road development

Irrigation is one of the key aspects to boost crop production and support crop diversification while farm road is to make easy accessibility and marketing of agricultural produce to the nearby markets. The ministry has been according top priority for the last few five year plans in allocating substantial budget for rehabilitation and

construction of new irrigation channels and farm road constructions throughout the country to make farming productive and profitable.

However, the major issue in Bhutan is the mismatch of available water resources and the location of the agriculture field. For instances, most of our agriculture land are located in steep and top of the hills while the water flows in the valleys. As such, farmers in Bhutan still continue to depend on monsoon rains for agriculture farming which are often erratic and unreliable. It was found that one of the reasons for fallow land is shortage of water for agriculture farming. So as to address this issue, initiatives are taken to construct large scale irrigation schemes and investments are made in water harvesting technologies and exploring ground water facilities for farming.

Towards the end of 11th Five Year Plan (2018) the ministry has constructed 901.04 km and rehabilitated 1,715.47 km of irrigation channels throughout the country. In addition, 111,196.24 km of farm road were also constructed to boost the agriculture production and improve accessibility and marketing (Wangda et al., 2017).

3.2.4 Electric fencing to curb Human Wildlife Conflict

The loss of crops and livestock to the wild animals is a predominant issue especially in the rural areas of Bhutan. The study found that one of the reasons for rural-urban migration in Bhutan is the incidence of human wildlife conflict. As per the Agriculture Statistics (2017), it is found that 49% of the farming population has reported crop damage by wild animal as one of the farming constraints for them and they spent on average 48 days and 67 nights in a year guarding their crops in the field. Annually, it is estimated that farmers incur loss ranging from 0.3% to 18% due to wild animals damages (MoAF, 2013).

Table 19: Proportion of crop lost to wild animals

Crops	Production (MT)	Quantity lost (MT)	% Lost
Paddy	86,385	1,284	1.5
Maize	94,052	5,151	5.5
Wheat	3,833	37	1.0
Barley	2,005	8	0.4
Millet	1,739	64	3.7
Buckwheat	3,480	78	2.2
Potato	57,223	1,407	2.5
Total lost	248,717	8,029	16.8

Source: Agriculture Statistics, 2017

It was found that the crop lost to wild animal is common across all crops. The percentage lost is slightly higher for maize with 5.5% followed by millet with 3.7%, potato 2.5%, and 2.2% for buckwheat. For paddy, wheat and barley the lost is 1.5%, 1% and 0.4% respectively. Annually, the farmers' lost 8,029 metric tons of crops against the total production of 248,717 metric tons which accounts for 16.8% lost (Table 19).

Today Human Wildlife Conflict (HWC) is recognized as a complex issue that changes with changing socio-economic and environmental conditions that need timely and appropriate measures to achieve goal of both food security and environmental conservation. Accordingly, the ministry has developed various measures to mitigate and curb the impact of HWC. Of various interventions, electric fencing is found to be one of the most effective measures towards protecting crops from the wild animals.

Electric fencing of agricultural farm land is gaining popularity throughout the country due to its incredibility to ward off wild animal from the farm land. Further, the electric fence has not only helped reduce crop lost to wild animals but it has also helped increase crop cultivation and crop diversification. It has also eased the life of

farmers during the crop season and enabled them to engage in other productive works. Further, it has helped in reducing the incidence of fallow land in the country.

For instance, in a study conducted by WCD it was found that the electric fencing significantly reduces the average time spent by farmers on guarding the crops. So far the ministry of Agriculture had constructed and installed 3,558.73 km covering 40,224.14 (25,517.79 acres dryland and 14,706.35 acres wetland) benefitting 18,691 households throughout the country (Wangda et al., 2017).

3.3 Effectiveness of Existing Strategies

The study conducted an in-depth interview with the experts and policy makers including the local government officials on the effectiveness of the existing government strategies and on how to curb the rural-urban migration issues in Bhutan. Since there are no such immediate or specific strategies for rural-urban migration yet this study tried to assess some interventions that are put in place. The study looked mainly through the lens of Ministry of Agriculture and Forests and discussed various existing strategies with the experts which were later listed in a matrix (Table 20) and the experts were asked to provide their feedback on the listed strategies. The experts were asked to rate against each strategies/interventions as highly effective, moderately effective, not effective and highly not effective. The compilation of the feedback provided by the experts are presented in the matrix below.

Table 20: Policy analysis matrix

Existing Strategies	Highly effective	Moderately effective	Not effective	Highly not effective	Total count
Farm mechanization	1	9	0	0	10

Existing Strategies	Highly effective	Moderately effective	Not effective	Highly not effective	Total count
Land development and consolidation	3	5	2	0	10
Contract farming and private sector participation	1	5	4	0	10
Investment in RNR sector	6	4	0	0	10
Formation of farmers' groups and cooperatives	1	8	1	0	10
Infrastructure development (farm road & irrigation)	4	6	0	0	10
Subsidy (input supply)	1	6	2	1	10
Agriculture commercialization	3	6	1	0	10
Enterprise development (product processing)	5	3	2	0	10
Training and capacity development (training in agriculture for youth and dropouts)	2	7	1	0	10
Use Right System (URS) for land	2	8	0	0	10
Priority Sector Lending (PSL)	2	7	1	0	10
Foreign Direct Investment and PPP model	1	6	3	0	10

The close analysis of the matrix (Table 20) shows that in general all the strategies or interventions implemented by various agencies under the Ministry of Agriculture and Forests are effective. The perception of the experts and policy makers

is that the above interventions have either directly or indirectly helped reduced rural-urban migration in Bhutan. But there is no in-depth study done on the effectiveness of each interventions identified.

Majority of the experts feel that investment in agricultural sector and enterprise development (product processing) is highly effective while other interventions such as farm mechanization, land development and consolidation, contract farming and private sector participation, formation of farmers' groups and cooperatives, infrastructure development, subsidy, agriculture commercialization, capacity building, use right system, priority sector lending and foreign direct investment are worthwhile and rated as moderately effective.

However, some of the experts too feel that free supply of seeds and seedlings should be discontinued since they are of the view that farmers have the capacity to afford the cost for seeds and seedlings. The other reasons cited for discontinue was that there is a concerns regarding how best farmers make use of free seeds supplied by the government. Some experts' feel that free supply of seeds and seedlings create too much dependency and it also lack ownership and it does not shows any impact at the end. So it is felt that subsidy especially the seeds and seedlings should be tagged with extension support to have sense of ownership and accountability at the end. One of the experts from Livestock Department stated that

"...input supply not to discontinue completely but provide on case by case basis. There is a need to thoroughly review the input supply culture to farmers in Bhutan. For example, supply of milking cans, if it does not bring significant changes, it may need to be stopped..." (Interview date December 23, 2018)

In connection to the above discussion, another expert from the Policy and Planning Division stated that

“...rural development should transcend from failed piecemeal approach and sectoral focus to a more holistic and an integrated approach...” (Interview date December 22, 2018)

Similarly, on the policy analysis matrix pertaining to strategy on contract farming and private sector participation and formation of groups and cooperatives, the experts feel that despite its relevance and importance accorded by the ministry for the development of agriculture sector, it is not effective in practical. The experts feel that private sectors and entrepreneurs are not interested in contract farming nor there is a sign of private sector participation because of several difficulties attached to farming in Bhutan. Firstly, the topography is not suitable for farming, climatic conditions are not so favourable for farming and it involves lot of risks. Secondly, there is very limited scope for farm mechanization except in the west and some part of southern regions, and it also poses challenges for economy of scale and post-harvest losses due to transportation which is not easy in case of Bhutan. Thirdly, the cost of production is very high and have very limited market within the country, exploring markets outside country is a challenge because of the quality and volume of products.

On the groups and cooperatives, the experts feel that the concept itself is an alien thing thus people take time to understand and conceive the ideas and principles of such model. People lack confidence and trust which are the main factors in groups and cooperatives. Other challenges that hindrance the functioning of groups and cooperatives are economy of scale, lack of diversity of products and poor qualities of farm produce due to lack of post-harvest knowledge. Although, groups and cooperatives had proven successful in other parts of the world, it will take some time to take root in our system.

In general, it was felt that almost all the interventions implemented by Ministry of Agriculture and Forests are helping in addressing rural-urban migration yet a separate

and detail study is required to see the effectiveness of each interventions. Most importantly, a separate and detail study for free supply of seeds and seedlings and other input supply (eg. livestock equipment) is necessary to better understand the situation and its impact in the rural areas as most of the experts feel that it should be discontinued.

4. To formulate new integrated strategies to reduce the incidence of rural-urban migration in Trashigang district

The study found that in general the main causes of rural-urban migration in Bhutan are lack of education facilities, lack of off-farm job opportunities in the rural areas, inadequate service facilities, small land holdings, drudgery of farm works, crop damage by wild animals etc. While on other hand the study found that there are no specific policies or strategies for curbing rural-urban migration in Bhutan, neither it has been mainstreamed in the existing policies nor there a lead agency to look at the issues holistically.

The general feeling amongst the experts and policy makers is that migration is a common issue and one sector cannot solve the problem. Migration need a multi-sectoral approaches for development of rural areas because it is like any other issues caused by social, economic and environmental factors which will require an integrated approach. Over the years, with the growing population choosing to settle in the urban areas has caused tremendous pressure on urban infrastructures, facilities and services calling for expansion of urban facilities and services. On the contrary, as more and more people migrate to urban areas, farming population continue to shrinks and agricultural production and food security is becoming a concern for the government.

With such arguments coupled with the emerging issues, it is suggested that the government should start formulate and implement migration policy with cross-sectoral

integration as the guiding theme. The policies and strategies should be drawn from the philosophy of Gross National Happiness (GNH) which is the supreme goal of the country. The strategies must be linked to the four pillars of Gross National Happiness which includes equitable socio-economic development, preservation and promotion of culture, conservation of environment and good governance. Cascading from the four pillar and nine domains of GNH, the strategies must be further linked to the national key result areas and agency key result areas so that it does not divert from the main framework of GNH.

Keeping in mind the philosophy of GNH, the focus should be on integrated rural development policy which will be an overall mother policy for development of rural areas. The experts feel that addressing rural-urban migration must adopt a multi-sectoral approaches with clear coordination, implementation and M&E mechanism in place. More focused intervention probably to adopt a “project mode” and area/landscape based development bestowing migration as a policy priority and mandating specific organization with migration issue can be a way forward. This setup will not only establish ownership and accountability for the lead agency to attach importance in migration but also it will enable lead agency to call for collaboration from line ministries and agencies to identify ways and means to work together and find a solutions to the issues.

To understand the root cause and develop a migration reduction framework, a small group discussion was held with the local leaders, experts and policy makers within the Ministry of Agriculture and Forests. During the discussion, it was highlighted that in general, the government should focus on de-crowding strategies for key businesses and service based government offices equitably across the districts so that population mobility are retained in the respective locality. Balanced regional development and making rural livelihood socially and economically attractive by reducing drudgery, by bringing in innovative technology, provide better and efficient

services and more importantly taking modern amenities to rural areas was another recommendation provided by the experts.

Further, the experts feel that district and local government should create enabling environment for the people to access modern services in their locality. Providing increased impetus on improving and providing quality social infrastructures such as transportation, health, education, entertainment etc. and identify, plan and implement on key potentials of the individual geog or district to accrue maximum socio-economic benefits for the communities.

Besides, it was also suggested that the government should create employment opportunities by investing in primary, secondary and tertiary sectors. Enterprise development should be the primary focus based on the area specific potentiality. Creating smart and economically vibrant villages to attract business and enterprises with market outlets and facilities so that younger generation return to villages and the incidence of migration are reduced.

Trashigang is one of the largest districts in terms of size and population with lot of economic potential for diversification yet lot of people migrates to urban places due to lack of facilities and poor services in the district. As a result, there is a loss of educated, qualified and skilled people causing economic and social problems in the district. Therefore, the following strategies which are developed based on the approaches of open system theory will be the cornerstone for mitigating rural-urban migration in the district. The open system theory approaches which contains the inputs, processes, output, goals and feed back to improve the system is used for the development of strategies (fig.16)

Integrated strategies to reduce migration in Trashigang district

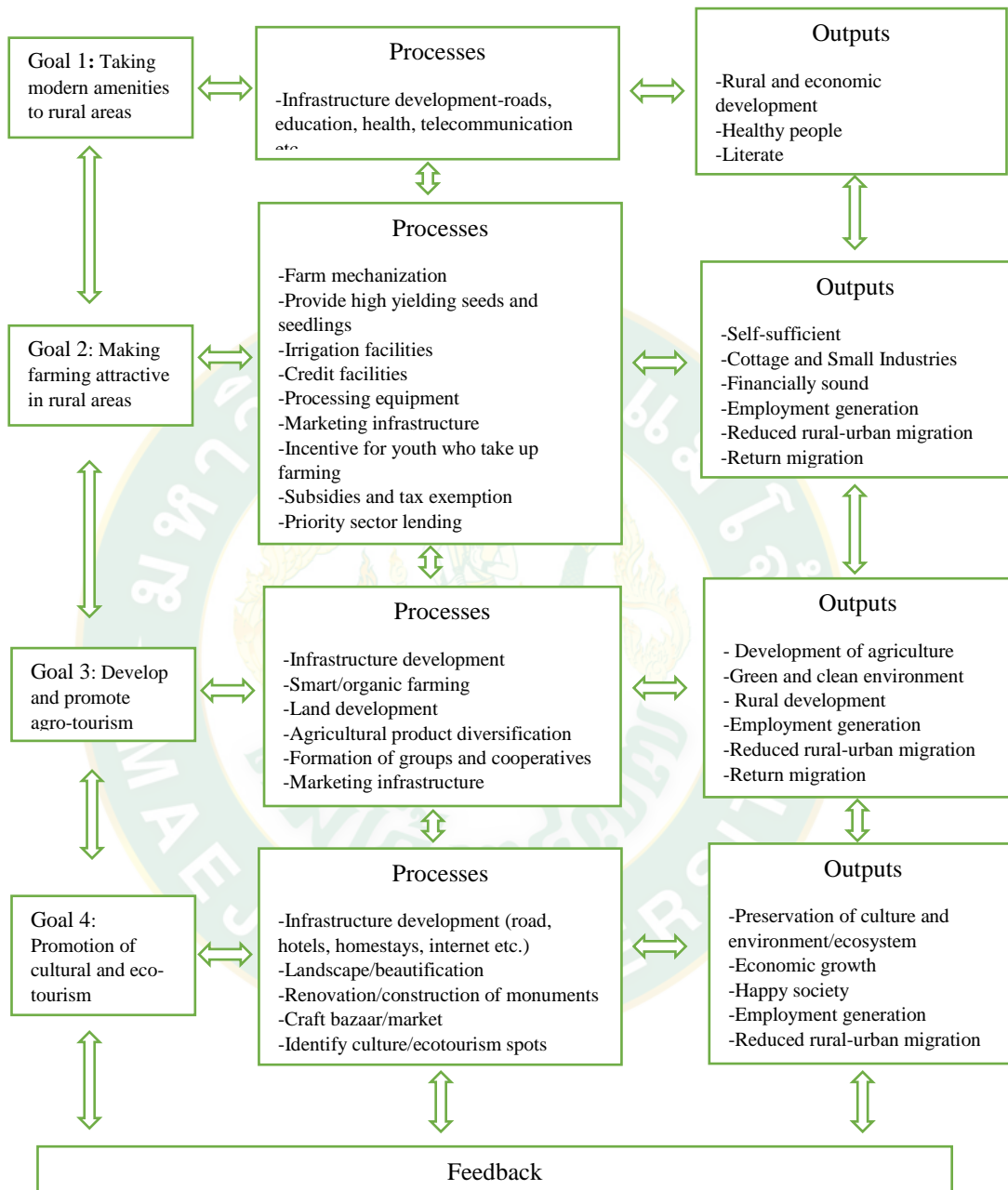


Figure 16: Strategies for reducing migration

4.1 Taking modern amenities to rural areas

One of the most cited reasons for migration is lack of infrastructure and facilities in the district. Trashigang is one of the largest districts with highest population in the country. Majority of the people are found to be farmers and they are highly depended on agriculture for livelihoods. As per the Bhutan Living Standards Survey Report (2017) the general literacy rate of Trashigang was 57.5% which is one of the lowest in the country. The television connection and internet penetration was found to be 61% and 5.5% which is also low compared to other districts in the country. In terms of household happiness rating, Trashigang was found to be one of the lowest with 67.3% in the country.

Besides, the Poverty Analysis Report (2017) also found that Trashigang has one of the highest poverty rate with 10.7% along with few other districts. Similarly, the non-migrants from the district cited that the district lack good facilities and infrastructure. It was learnt that some of the far flung remote communities still doesn't have road and irrigation facilities which are basic needs of the rural areas. Education and health facilities are also poor and people have to walk hours to reach the nearest centers to obtain those services.

In view of the above, the study suggest the district to prioritize the socio-economic development plans and continue to support construction of all-weather roads, irrigation facilities, education and health services, build telecommunication and network, marketing infrastructures across the district so that people will have sense of urban life with improved quality of life, literate, healthy and happy society which will certainly lead to reduction of rural-urban migration.

4.2 Make farming more attractive in the rural areas

Rural-urban migration is mostly driven by the factors such as lack of off-farm job opportunities in the rural areas, inadequate service facilities, small land holdings, drudgery of farm works and crop damage by wild animals. To this effect, the government should continue to emphasize on making farming attractive through land consolidation and development, farm mechanization, provide high yielding seeds and seedlings, irrigation development, supply of processing equipment, marketing infrastructure development and support value chain for certain high value crops, support electric fencing to avoid crop loss to wild animals. Further, farming need to be made more encouraging by aggressively promoting modern technologies and make less laborious to the farmers and for those who are interested in farming.

Similarly, incentivize rural livelihood by making it socially and economically attractive. Living allowance in the rural areas such as special incentives for educated youths working in farms through start-up capitals would further make farming attractive in the rural areas. Besides, sufficient economic and livelihood opportunities should be created in the rural areas. Most people in Bhutan are subsistence farmers. Farming system practiced are predominantly conventional method that are often labour intensive and involve lots of drudgery. The focus should be diverted from subsistence to commercial farming.

Further, the government will have to re-emphasize and continue to provide adequate subsidies and tax exemption to potential youths and rural people who are keen in taking up farming on larger scale. All the supports will have to be tagged with financial institutions and other NGOs for easy access to startup capital starting from production till the marketing of products. The support from the government will have to be packaged properly so that rural people and younger generation take up agriculture farming as their main occupation.

Special projects through certain NGOs, government agencies, development partners etc. should be encouraged in high value crops and other cash crops in the potential areas. For instance, the highlanders have been given the Royal Permission to collect Cordyceps only for them, which has greatly helped highlanders to reside in their own communities. There are instances where highlanders who have migrated to urban places before the grant of this economic opportunity have now moved back to their original places. Similar type of incentives should be introduced in future.

Priority Sector Lending (PSL) and Land Use System (LUS) has proven successful in employing youth and rural folks in the country. These initiatives had not only helped unemployed youth from cities go back to their village to take up farming but helped generate income to support themselves and their relatives. It has also helped the rural people in taking commercial farming through the support of priority sector lending and land use system granted by the government. To make these strategies more effective and efficient, it must be tagged with extension support, capacity building and credit facilities which are not properly harmonized at the moment. Moreover, it need to be packaged appropriately for smooth implementation and for the sustainability of the projects.

Similarly, setting up of Cottage and Small Industries in the rural areas must be highly encouraged. The district should provide support to interested youths, drop outs and rural folks come up with innovative ideas and help development of proposals and innovative business ideas. The youths should be trained on various aspects such as on-farm and off-farm businesses, entrepreneurial skills and linking with financial institutions for fund support to initiate the projects. The success of these projects will lead to self-sufficient, independent, financially sound, ensure employment creation in the rural areas and further help reduce out migration and encourage other unemployed youth from the urban cities to return to their villages.

4.3 Introduction and promotion of Agro-tourism and homestay facilities in the communities

Community-based economic diversity is paramount important for the upliftment of economic and social wellbeing of the rural people. If the community manages to diversify the local economic base, it can create more opportunities for the rural people to engage in economic activities that will help retain rural population from out migration. Further, the economic diversification will also provide and create sense of stability in the community and help grow organically. It is the workforce and the collective ideas of the community that will be the strength and asset to transform the rural economic base. For this, district should promote and encourage agro-tourism in the potential communities.

Nevertheless, to make the agro-tourism sustainable, the strength of the communities lies in the special product that the community will have to offer, a product that is something unique and pleasing to the outsiders. The tourists prefer something special and unique experiences to take away from their visits. Homestay is another important aspects to showcase the beautiful and diversified traditions and unique customs of how people enjoy their rural life without distraction from modern busy life.

Trashigang has plethora of native crops and domestic animals being raised as a means for their livelihoods. All the crops are grown naturally without using any chemicals that makes all agriculture produce pure and fully organic. People still follow the conventional method of farming with diversified and mixed cropping. People also raise domestic animals especially cattle and horses for products and transportation.

The beautiful green scenery of agriculture landscape coupled with plethora of crops and diversity, varieties of tropical and sub-tropical fruits, green and clean environment will certainly capture the attention of tourists and make Trashigang a

potential place for agro-tourism. However, the idea and concept of agro-tourism and homestay are new to Bhutan. While in Thailand and other developed countries it has become one of the main sources of income for the community people which could be promoted in Trashigang as well.

Therefore, Trashigang district will have to work together with different stakeholders, initiate and sensitize rural communities on agro-tourism and provide technical support and trainings to take the advantage of its benefits. On the other hand, the rural people should understand the concept and transform their communities, through agricultural diversification and by building a strong community for agro-tourism which has huge potential in the region. The agro-tourism will immensely help diversify business opportunities, create employment opportunities in the local areas, develop the communities, help maintain green and clean environment and reduce migration in the long run.

4.4 Promotion of cultural and eco-tourism in the district

The exotic and remoteness, a well-protected and respect for cultural heritage and natural environment had made tourism sector in Bhutan as one of the most exclusive travel destinations in the world. Bhutan is known for its Gross National Happiness philosophy- a development paradigm which tries to balance socio-economic development with preservation and promotion of culture, without causing damage to environment and keeping good governance at the center of its development agenda. Today, tourism is arguably a vibrant business with high potential for growth and further development. A strong adherence attached to its “High Value, Low Impact” tourism policy serves the purpose of creating an image exclusivity and high-yield for Bhutan (Tourism Council of Bhutan, 2019).

Bhutan has a forest cover of 71% of the total geographical area and 51.4% are identified as protected areas which consist of national parks, wildlife sanctuaries, strict nature reserve, biological corridors and royal botanical parks (Department of Forests and Park Services, 2017). Of the total protected areas, Sakteng Wildlife Sanctuary (SWS) is located in the eastern most part of the country under Trashigang district. The park spreads over Merak and Sakteng geog in Trashigang and Lauri geog in Samdrupjongkhar forming 146.08 sq.km (Department of Forest and Park Services, 2019).

As per the studies, in SWS there are 857 plants including 130 species of orchids and 41 species of Rhododendrons, 280 birds, 37 species of mammals, 63 butterflies, 5 reptiles, 3 amphibians, and 2 species of fishes. It harbors highest diversity of Rhododendron species in the country with three endemic, *R. kesangiae*, *R. bhutanese*, and *R. pogonophyllum*. Further, the Khaling Torrent Catfish (*Parachilognis bhutanese*) endemic to Bhutan is also found in the Sanctuary (Department of Forest and Park Services, 2019). The richness in bio-diversity and natural resources has great potential for Trashigang to start eco-tourism in the region.

On the cultural side, Trashigang is also a home to several monasteries, historical places and monuments including the Trashigang Dzong which was constructed in 1659. A 24 km drive from Trashigang is the famous temple Gomphu kora surrounded by a beautiful rice field and banana trees with magnificent Drangme chu flowing by the base of Gomphu kora. It is believed as one of the famous places where Guru Rinpoche meditated in that place in order to subdue a demon who dwelt in a huge black rock. The body imprint and miraculous signs can be even seen today. Therefore, it is considered as one of the sacred places for pilgrimage.

Similarly, Yonphula Lhakhang, Bartsham Lhakhang and Rangjung monastery are some of the sacred Buddhist places where people would love to visit and pay respect. The other unique and specialty of Trashigang is semi nomadic people from Merak and Sakteng whose costumes are unique in Bhutan. Their living style, customs and

traditions and a clean and serene environment covered with beautiful rhododendron flowers surrounded by Snowcap Mountains add value for cultural and eco-tourism in the region.

Linking of goals and strategies to the Gross National Happiness Philosophy

Gross National Happiness					
Goals/Integrated Strategies	Four Pillars of GNH				National level
	Pillar 1 ¹	Pillar 2 ²	Pillar 3 ³	Pillar 4 ⁴	
Taking modern amenities in rural areas	✓	-	-	✓	Consolidation ↕ District level
Making farming attractive in rural areas	✓	-	-	-	
Develop and promote agro-tourism	✓	-	-	-	
Promotion of cultural and eco-tourism	✓	✓	✓	-	

Figure 17: Strategies linking to GNH framework

As the country's socio-economic development is guided by GNH philosophy, the study tried to map out the goals and integrated strategies of MoAF with the framework of GHN corresponding to each of the pillars of GNH. The proposed integrated strategies on reducing rural-urban migration in Trashigang will have

¹ Sustainable socio-economic development

² Preservation and promotion of culture

³ Environmental conservation

⁴ Good governance

contribution directly or indirectly to the four pillars of GHN as shown in the figure 17 above. The first goal (taking modern amenities in rural areas) will contribute to first pillar sustainable socio-economic development and the fourth pillar- good governance through community and social participation by ensuring good management of limited government resources in an efficient and effective way.

Similarly, the second and third goal (making agriculture attractive in the rural areas & promotion of agro-tourism) will contribute to fulfillment of first pillar i.e. sustainable socio-economic development while the fourth goal (promotion of cultural and eco-tourism) will support in achieving the first, second and third pillars of GHN. The study strongly feel that the consolidation of national level policies and strategies would immensely benefit the district level development.

Further, the study had identified the responsibilities of Ministry of Agriculture and Forests, other ministries and agencies on the suggested goals and corresponding strategies identified for reducing rural-urban migration in Trashigang, Bhutan (table 21). Depending on the relevancy, as reflected in (table 21) it is recommended that the concerned agencies should focus and carry out the responsibility diligently. However, in some areas like infrastructure development, identification of eco-tourism sites, landscape and development, homestay etc. the different agencies like Ministry of Work and Human Settlement, Home Ministry, Tourism Council of Bhutan and NGOs should collaborate and work together.

Although, the agro-tourism, cultural and eco-tourism are supposed to be the national level policies in order to promote and encourage regional and global tourism for the income generation and bringing economic development in the country. However, the benefits of tourism can be distributed in the societies and communities through various means such as community tourism, homestays, spiritual tourism etc. by participating in the tourism value chain process.

Table 21: Relevant agencies for implementing the strategies

Goals	Strategies	Ministry of Agriculture and Forests	Other ministries and agencies
Taking modern amenities to rural areas	-Infrastructure development- Roads, education, health facilities, telecommunications, internet etc.		✓
Making farming attractive in the rural areas	-Farm mechanization -Input supply -Irrigation -Credit facilities -Electric fencing -Marketing and processing	✓ ✓ ✓ ✓ ✓ ✓	✓
Develop and promote agro-tourism	-Infrastructure development (roads, hotels, homestay, internet etc.) -Local product diversification -Marketing infrastructure -Smart farming -Organic farming	✓ ✓ ✓ ✓ ✓	✓ ✓
Promotion of cultural and eco-tourism	-Infrastructure development (roads, hotels, homestays, internet facilities etc.) -Landscape and beautification -Renovation and construction of religious monuments -development of eco-tourism sites and spots -craft markets on the high ways	✓ ✓ ✓ ✓	✓ ✓ ✓ ✓ ✓

	-Eco lodge	✓	✓
	-Spiritual tourism	✓	✓

5. Road Map

The study recommends to implement the program on a “project mode” covering the above discussed strategies embedded in the form of a special project. The study suggest to plan the project period from 2020 to 2030 for a duration of ten years (fig.18) and if successful, to replicate in other areas. In the initial five years, the district should focus on infrastructure development such as roads, schools, health facilities, internet and telecommunications, agriculture infrastructures besides others. Similarly, focus should be placed on creating conducive environment by providing all the supports and facilities required for agricultural development. Once the infrastructures are put in place, the effort should be on agriculture production and diversification with special focus on commercial farming and private sector participation along with group formation and cooperatives to enhance the production and channel of marketing. Subsequently, agro-tourism, cultural and eco-tourism should be instituted for community development and employment creation. In this way, similar projects should be up scaled and replicated in other districts.

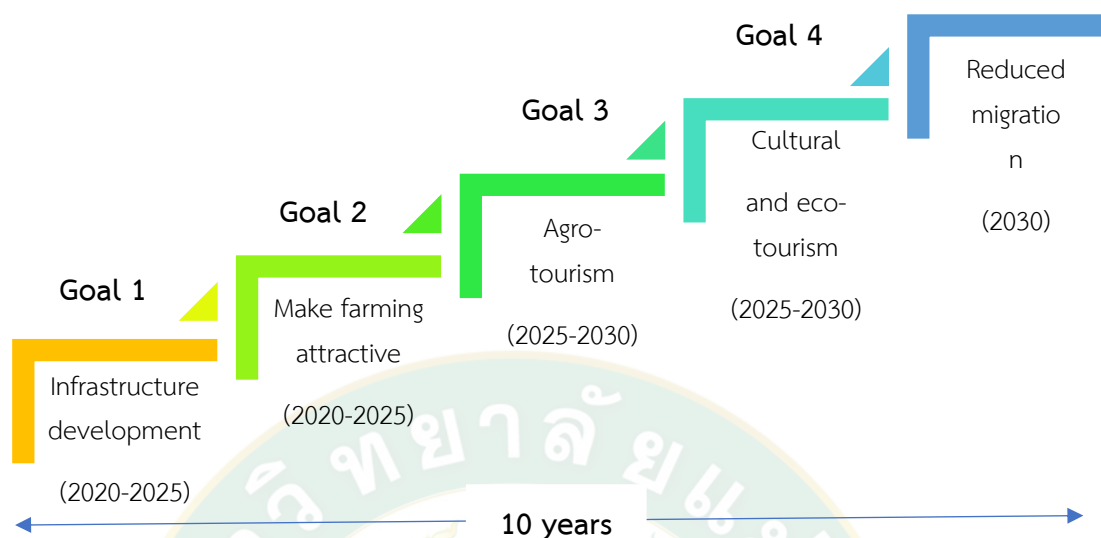


Figure 18: Road map for implementation of goals and strategies

6. Operational modalities/ Modus Operandi

In terms of operational modalities, the district will have to take lead in implementation of the projects. The project management office should be housed in district headquarter under the direct supervision of district governor. Particularly, the planning section should take lead in collaboration with RNR sector and other relevant stakeholders in implementation of the projects. A strong monitoring and evaluation system must be put in place to ensure the smooth implementation of project activities. The project should also institute Project Steering Committee for overall policy guidance, approval of work plans, reports and to provide recommendations and suggestions for smooth functioning of project activities.

7. Financing Mechanism

The study suggests that in the initial period, the government should provide the following necessary fund support and investment in order for the project office to be established and functional:

- ✓ Capital investment on infrastructure development
- ✓ Human resource and development
- ✓ Mobility and office equipment
- ✓ Seed money for supporting projects

In addition, the project activities will have to be tagged with priority sector lending scheme for fund support from financial institutions and use right system to obtain certificate for land lease with land commission and other relevant agencies. Subsequently, the government will have to explore for Foreign Direct Investment (FDI) and Private Public Partnership (PPP) model to scale up and further development of activities in the district.

CHAPTER V

CONCLUSION, DISCUSSION AND RECOMMENDATIONS

This study was an attempt to study the migration phenomena in the country and come up with certain measures to address the rural-urban migration issues in Bhutan particularly for Trashigang district. The study had four objectives (i) to study the rural-urban migration phenomena in the last ten years (ii) to study the socio-economic status of Trashigang district in relating to migration phenomena (iii) to review existing strategies of Ministry of Agriculture and Forests on reducing rural-urban migration in Bhutan and (iv) to formulate integrated strategies to reduce the incidence of rural-urban migration in Trashigang district, Bhutan.

The results of the study revealed that the population has increased from 634,982 persons in 2005 to 727,145 persons in 2017. The study found that the rural population decreased from 69.1% in 2005 to 62.2% in 2017 whereas, the urban population increased from 30.9% in 2005 to 37.8% in 2017. The migration rate was found to be increased from 32.7% in 2005 to 39.8% in 2017. The main push factors of migration are lack of education (46%), lack of off-farm jobs in rural areas (17%) and inadequate service facilities (15%). While, employment opportunities (33%), family move (25%) and marriage (24%) are found to be pull factors. Fallow land, labour shortage, slow development, and loss of skilled labour are the consequences of rapid migration.

The study found that there are several impacts of migration on social, economic and psychological welling of the people. Migration sparks positive impact on the social welfare of the people in improving household income, reducing poverty, and improving health and education of the children through remittances sent by the migrants. The rural people also become more aware through transfer of knowledge and skills by the migrants in taking better decisions in the communities. On the negative

side, the migration has caused decreased in productive age group in the rural areas, loss of skilled labour, lead to feminization of agriculture, labour shortage, fallow land, human wild life conflicts, affected food self-sufficiency and increased food imports due to decline in food production in the country.

The analysis of socio-economic situation of Trashigang district in comparison to the destination of migration which are mainly Thimphu, Phuntsholing and Paro found that there is an absence of strong and vibrant economic development activities in the district. The majority of the migrants living in urban areas (Thimphu and Phuntsholing) come from eastern region (mostly Trashigang) and some part of central and southern regions. It was found that 75% of people of Trashigang are engaged in agriculture farming and the land use comprises of dry and wetland where maize, soya beans and beans are grown as major crops while potato is the main cash crop followed by vegetables and citrus. Majority of the population (81%) are age between 15-64 years of age and the male dominates economically active population in both rural and urban areas. Although, Trashigang has potential for high value agricultural and non-agricultural products yet there are lot of challenges such as absence of market, social services coupled with rural-urban migration. Tourism which is one of the drivers of economic development is sluggish in the eastern region at the moment.

The study found that there are no specific government strategies targeted for rural-urban migration in Bhutan. However, the study found that the government had focused on making rural life productive by prioritizing farm road construction, development of irrigation facilities, health and sanitation, education, electricity supply, drinking water supply, telecommunication facilities which are very basic needs at the rural areas. One of the notable approaches was taking development closer to the communities with inclusive and more decision making power as well as decentralization of resources so that the development agenda and grassroots needs are decided by the people themselves.

Some other major interventions taken up by the government and Ministry of Agriculture and Forests for curbing rural-urban migration are Use Right System, Priority Sector Lending, Agriculture Development Scheme Loans, allotment of land to landless, land development and consolidation, irrigation and farm road construction, electric fencing to reduce crop loss to wild animals etc. In general all the interventions implemented by various agencies under the Ministry of Agriculture and Forests are effective. The perception of the experts and policy makers is that these interventions have either directly or indirectly helped reduced rural-urban migration in Bhutan. But there is no in-depth study done on the effectiveness of each interventions identified and implemented by the ministry.

In general, it is was found that migration in Bhutan is not taken place due to reasons that are humanitarian crisis in nature such as natural calamities, climate change and conflicts as seen in other regions of the world but migration in Bhutan's context is mainly characterized by an individual decision for income maximization which is further triggered by better amenities and employment conditions in the urban areas (Todaro, 1969). The notion of urban life is more secure and comfortable compared to rural life, the income differentiation between the rural and urban and expectation of getting a decent job in the urban areas has caused migration in the country (Todaro, 1969).

It is mainly the pull factors that have attracted the people to migrate to urban centers. The reasons for migration in Bhutan fits very well with the theory of rural-urban migration and push and pull theory (Lee, 1966 and Todaro 1969). In terms of migrants, young people particularly the semi-educated have largely migrated to the urban areas. This has immensely affected agriculture sector in the rural areas. Migration has caused shortage of labour in the rural areas, led to feminization of agriculture as young men tend to migrate out of the villages and opt for off-farm jobs, further it has broaden the responsibilities of women and increased aging population in rural areas.

The other problems are increase in fallow land and crop damages by wild animals. As a result, there is a sharp decline in percentage of arable land and escalated food imports due to decline in agricultural productivity and production in the country. It has also aggravated household level food insecurity and increased of *gungtongs* (abandoned households) in the communities.

Migration is a cross-sectoral issues. No individual agency or entity can resolve the issues of migration. It will require a multi-sectoral approach and integrated strategies to address the rural-urban migration problem. Therefore, the government in collaboration with different stakeholders, different sections and divisions, portfolios, working groups, individuals, business units must work together to achieve the results as the component system of an organization (Bertalanffy, 1969). For the agencies and organizations to be successful, enhancement of growth and development within the organization there must be a good system in place to measure performance, interexchange ideas and knowledge among individuals. The success of an organization depend entirely on the synergy, interrelations and interdependence between every subsystems (Bertalanffy, 1969).

Besides, for every organization a strategic planning is an essential process in preparing to carry out the organization's mission. An effective strategic planning process provides a framework to make decisions on how to allocate organizational resources, address challenges and take advantage of opportunities that arise along the way (Yelder et al., 1999). Rural-urban migration is a problem caused by inequitable and imbalance socio-economic development in the societies. Therefore, to improve the standard of living, widening of individual opportunities for personal experiences and advancement, correct inequalities and injustices in the society the government must focus on the land tenure system and justice and comparative equality of treatment in the society as these are the main aspects that widen the inequalities in the society (Gant, 2006)

The Development Administration theory accords freedom of choices, the opportunities in planning and leading their lives according to their personal ideas of happiness and fulfillment. The development administration theory argues that when the choices and opportunity are given human being make social, political and economic decisions effectively and make greater contribution to society (Gant, 2006).

Thompson (2006), argues that there should be an innovative atmosphere, the operationalizing and wide sharing of planning goals, combining of planning (thinking) with action (doing), free from influence and top-down approach to have effective development administration. The development administration theory will undoubtedly play a vital role in shaping the socio-economic conditions through better planning, decision making and effective financial management to achieve the results.

Generally, it is construed that rural-urban migration is a common phenomenon in under developed and developing countries particularly in the Southeast Asia and African countries. Therefore, these under developed and developing countries are primarily focusing on creating basic facilities such as road connectivity, education, healthcare, electricity supply, drinking water supply, internet connection etc. for making rural life comfortable and happy like urban cities. In a similar way, Bhutan must also place a paramount importance on basic infrastructure development in the rural areas and further concentrate on agriculture development through providing subsidies in agricultural inputs and supplies, low interest loans and start-up capital for agricultural works, setting up cottage and small industries in the rural areas. Should the rural economic base become strong and vibrant, this would significantly reduce the trend of migration. Further, it will also help equitable socio-economic development and achieve food self-sufficiency in the country.

Rural-urban migration in other countries are mainly found to be seasonal or day migrants. In case of Thailand, particularly people from northeastern region migrate to central and Greater Bangkok area looking for better economic opportunities.

However, to check and control the rapid rural-urban migration trend, Thailand has introduced several special programs/projects under the Sufficiency Economy Policy and new agricultural development theory propounded by the late His Majesty the King of Thailand which includes smart farming, agro-tourism, eco-tourism, organic farming and new integrated and sustainable agricultural systems implemented in several provinces and districts through the support of Royal Projects and the government. The most notable achievement under Royal Project is the One Tambon One Product (OTOP) which has widely captured the market both within and outside the country.

Similarly, in China increasing number of educated people are choosing to return to rural areas. Reverse urbanization is picking up as infrastructure development are rapidly improving in the rural areas while living cost in urban cities are skyrocketing as whatever they earn in the urban areas they spend for living expenses. To this effect, the Chinese government had placed top priority for reverse urbanization and modernization of farming. Further, in a drive to boost the rural economy the government had introduced tax breaks, easier financing and other supports measures for rural entrepreneurs. As such, in 2017 seven million people including talented university graduates had returned to rural areas from the cities to take up farming.

While, in India the case is no different. Over the years some people have given up city jobs to return to countryside to start a smart farming business because they saw huge potential in farming. On the other hand, the government also supports and provide 100 days guarantee labour for the villagers in a year, supports women empowerment scheme loans at cheaper rate to start business for self-employment. The government also extends as much as 50% subsidy for farming. Further, the government in collaboration with NGOs and other affiliated organizations provides monetary and educational support in enterprise development fund through single window for reverse migration. Now with the development of standard of living in the

rural areas, growing employment opportunities, and increase in daily wages due to scarcity for agricultural labour has also resulted in reverse migration.

Thus, after the close analysis of Bhutan migration phenomena, its challenges and with the review of case studies from various countries, the study suggests three recommendations that would help reduce rural-urban migration in Bhutan.

5.1 Policy recommendations

The study found that one of the main reasons of rural-urban migration in Bhutan is inequitable or imbalanced socio-economic development in the country. The current economic development is highly concentrated in western parts of the country and other regions such as north, some parts of south and particularly the eastern regions are left behind in terms of socio-economic development. Therefore, the study recommends to shift the development approaches from concentrated economic development to regional balanced economic development and community based integrated development approach through decentralization as most of the migration are happening from eastern, southern and northern regions to the western regions.

The other policy recommendation is to make farming more attractive for youths and rural folks through subsidies, tax exemptions, and packaging of existing Priority Sector Lending and Land Use System with financial institutions and other relevant agencies to take up commercial farming, establish agriculture related CSIs and non-agriculture CSIs in the country. More focus should place on integrated and sustainable agricultural development system through optimum use of limited arable land, farmland division, prioritizing high value crops to achieve food self-sufficiency in the country.

Besides, rural-urban migration is a cross-sectoral issues and it need to be looked holistically. At the moment, there is no dedicated ministry or agency to take lead in

resolving rural-urban migration issues. Every ministries and the concerned agencies are playing their own role in resolving migration issues. Therefore, it is felt that a separate and dedicated agency need to be identified to collaborate with different public and private stakeholders, external agencies, NGOs etc. to streamline and avoid duplication of works and improve effectiveness and efficiency within the system to address the migration issues.

5.2 Operational level recommendation

Rural-urban migration is a natural phenomenon that is rampant in the underdeveloped and developing countries. Rural-urban migration occurs mainly due to poor rural infrastructure and social services. Therefore, it is suggested that the government should continue to focus and provide top priority on basic infrastructure development such as education and health facilities, roads, irrigation, communication network etc. in the rural areas. In particular, the study suggests to institute a special projects that would support introduction and promotion of smart farming, agro-tourism, cultural and eco-tourism in Trashigang district. This initiatives will not only help reduce migration but also induce return migration in the future. Should such initiatives proves successful, similar projects and programs can be up-scaled and replicated in other districts where migration rates are high.

5.3 Further research recommendation

This study looked rural-urban migration from a perspective of Ministry of Agriculture and Forests and its associated challenges with regard to food production and productivity. However, migration is found to be an issue that requires national

attention as it affects the general economic situation of the country. No individual agency or institution can control the incidence of rural-urban migration as it is a cross-sectoral issue. At the same time, migration has both positive and negative consequences at origin and at the destination. While the study captured some positive and negative impacts of migration on rural areas from the past studies however the impacts on urban areas and in particular at the national level is not available.

It was found that migration has contributed to increase in unemployment issues, crime rates, congestions and increase in food imports etc. Further, it has also affected the migrants economically and socially as the living has become expensive in the urban cities. As such, a further study is required to understand the social and economic situations of migrants residing in the urban areas to better understand the living standards and livelihoods of the migrants.

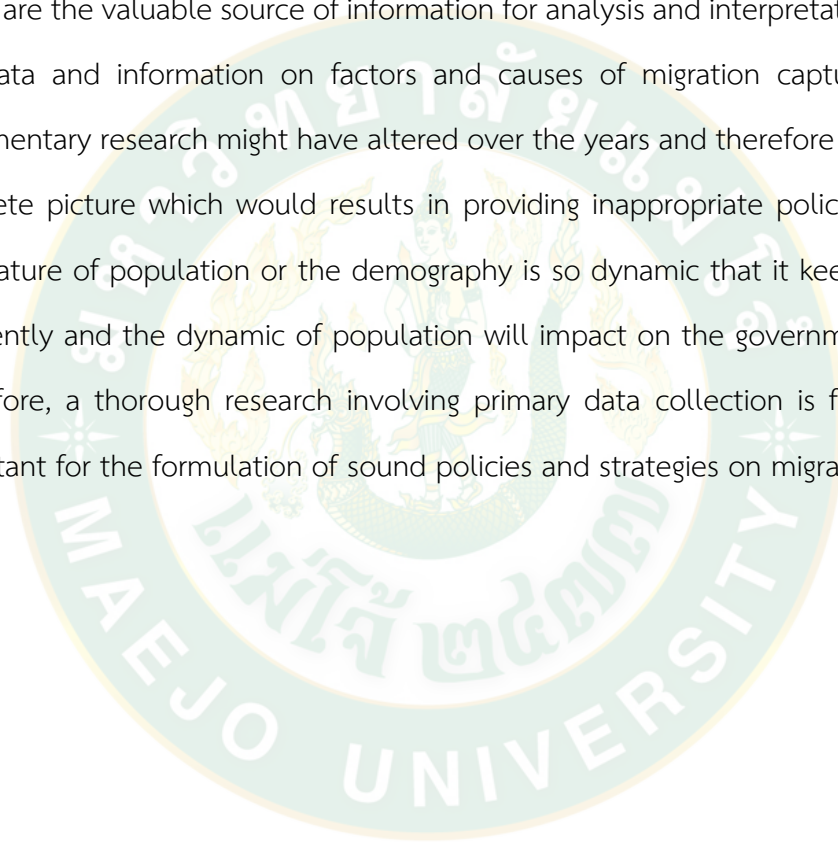
The other issue highlighted during the in-depth interviews and small group discussion with migrants and experts is human wildlife conflict as one of the impacts of rural-urban migration that has led to decrease in food production. However, there is no detail study conducted on the subject nor it has any scientific conclusions about how rural-urban migration has aggravated the issues of human wildlife conflict in the rural areas. Therefore, the relationship between rural-urban migration and human wildlife conflict need to be established through further research and studies.

The study also found that apart from internal migration, there are also incidence of international migration albeit small numbers but experts during the small group discussion have flagged it as a serious problem and if it is not addressed on time it has the potential to cause brain drain. Moreover, the causes and effects of international migration need to be ascertained through further research as there are no data available on international migration at the moment.

Moreover, this study was largely focused on migration which is a cross sectional study but the migration phenomena is predominantly a long term in nature and it is

dynamic as the population change time by time. So the future study should focus on longitudinal study to better understand the overall migration situations in the country to help formulate better policies and strategies for mitigating rural-urban migration in the country.

Lastly, this study was mostly based on documentary research with limited primary data, thus, it might have missed the first-hand experiences and the data itself which are the valuable source of information for analysis and interpretation. Moreover, the data and information on factors and causes of migration captured from the documentary research might have altered over the years and therefore it may provide obsolete picture which would results in providing inappropriate policy intervention. The nature of population or the demography is so dynamic that it keep on changing frequently and the dynamic of population will impact on the government strategies. Therefore, a thorough research involving primary data collection is felt paramount important for the formulation of sound policies and strategies on migration.



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APPENDIX

Appendix 1: In-depth interview questions (for migrants)

1. How many years have you been in this place? Do you like this place?
2. What differences do you see between your village and here?
3. Could you give the reasons for your migration to this place?
4. What are the factors that pull you here? Can you list them?
5. What are the factors that push you out of the village? Can you list them?
6. How many people from your village moved to other places? Could you give a rough number?
7. Usually in your village who are the migrants and why they choose to migrate?
8. If you have a chance will you go back to your village and why?
9. Could you share some incidences of migrants going back to your community?
Why did they return?
10. What are some of the benefits of migration on rural communities? Please list them?
11. What are some of the negative impact of migration on rural communities?
Could you list them?
12. What are some the positive impact of migration on rural communities? Could you list them?
13. Do you know the government tries to reduce migration in your communities?
Can you mention the name of some projects and programs?
14. Do you think the projects help reducing migration in your village? Which strategies are the best to your village, in your opinion?
15. Do have any social networks in the destination? Do you get any help from them?

Appendix 2: In-depth interview questions (Non-migrants)

1. How many people are there in your household? What is the household occupation? Is there any other people working in other places?
2. Where are they working and what kind of work they do? Do you receive remittance from the migrants?
3. Did anyone from your family migrated to urban areas? Why?
4. Why didn't you migrate to urban centers? What makes to stay here in the village?
5. What are the factors that pull people to the urban areas? Can you list them?
6. What are the factors that push people out of the village? Can you list them?
7. How many people from your village moved to other places? Could you give a rough number?
8. Are there any return migrants in your village? Why did they return?
9. What are some of the benefits of migration on rural communities?
10. What are some of the negative impact of migration on rural communities? Could you list them?
11. What are some the positive impact of migration on rural communities? Could you list them?
12. Do you know the government tries to reduce migration in your communities? Can you mention the name of the projects?
13. Do you think the projects are working in your village in reducing migration? Which strategies are the best to your village, in your opinion?

Appendix 3: In-depth interview questions (for Experts)

1. Could you say something on rural-urban migration context in Bhutan?
2. What is the situation of rural-urban migration now and how is it affecting the socio economic development of a country?
3. What are some of the push factors of migration? Could you list them?
4. What are some of the pull factors of migration? Could you list them?
5. How the policy makers can help reduce push factors in the villages?
6. What are some of the strategies that are currently implemented to reduce rural-urban migration in Bhutan? Could you list them?
7. Which rural-urban migration strategies worked well? Please explain?
8. What strategies, programs, projects and activities would you recommend for scaling up? Why?
9. What strategies do you think should be discontinued? Why?
10. What mechanism or forces lead to success in implementation of rural-urban migration strategies and why?
11. What mechanism or forces has led to failure of implementation of rural-urban migration strategies? Why?
12. Could you suggest some new strategies that would help reduce rural-urban migration in Bhutan? Please elaborate them?
13. How important are the lead agencies in smooth implementation of the strategies? Why?
14. What role do you think the district and local governments should play in order to reduce rural-urban migration in Bhutan? Why?
15. What do you think about the requirement of political support on the strategies and policies pertaining to rural-urban migration in Bhutan? Why?

16. What do you think the government should do to reduce rural-urban migration in Bhutan?
17. Can you suggest the integrated policy that is the most appropriate to reduce rural to urban migration in Bhutan?
18. Is there anything that you would like to add?



Appendix 4: Policy Analysis Matrix

Existing strategies	Highly Effective	Moderately Effective	Not Effective	Highly not Effective	Remarks
Farm mechanization					
Land development and consolidation					
Contract farming and private sector participation					
Investment in RNR sector					
Formation of farmers' groups and cooperatives					
Infrastructure development (farm road & irrigation)					
Subsidy (inputs supply)					
Agriculture commercialization					
Enterprise development (Product processing)					

Existing strategies	Highly Effective	Moderately Effective	Not Effective	Highly not Effective	Remarks
Training and capacity development (Training in agriculture for youth and dropouts)					
Use Right System (URS)					
Priority Sector Lending (PSL)					
Foreign Direct Investment and PPP model					

Appendix 5: Questionnaire for Migrants

Questionnaire

This questionnaire is prepared with the objective to carry out the academic study on *“Integrated Strategic Planning of Ministry of Agriculture and Forests on Rural-Urban Migration in Trashigang, Bhutan”*.

The study is undertaken to fulfill the partial requirements of the Master of Public Administration course. The data collected through the questionnaire will be purely used for the academic purpose. Further, all information will be reported only in aggregated form and no individual information will be reported or disclosed. Your cooperation and sincere help will be highly valued and appreciated.

Kindly tick/circle your responses to the questionnaire.

1) Personal Information

1.1 Bio data

Sex: 1) Male 2) Female

How old are you?Years (by end of 2018)

What is your occupation? (Tick only one)

- | | | | |
|--------------------------|---------------------|--------------------------|--------------------------|
| <input type="checkbox"/> | 1) Civil servant | <input type="checkbox"/> | 4) Corporate employee |
| <input type="checkbox"/> | 2) Private employee | <input type="checkbox"/> | 5) Arm forces |
| <input type="checkbox"/> | 3) Business | <input type="checkbox"/> | 6) others (specify)..... |

Marital status (Tick only one) 1) Married 3) Divorced 2) Single 4) Separated**1.2 Information on residence**

Where is your home town?

Where is your family? Are they with you? Yes/No.....

No. of family members with you?

Where does your parents live?

No. of years away from original place:Years.....Months

No. of years in current place:Years.....Months

1.3 Level of education (Tick only one) 1) No education 4) Degree 2) Primary school 5) Others (Specify)..... 3) Higher secondary**2. Reasons and purposes of migration****2.1 Why did you migrate from your village to urban city (Can Tick More Than****one)** 1) Small landholdings 6) Shortage of farm labour 2) Unproductive land 7) No employment opportunities

- | | |
|--------------------------------------------------------|--------------------------------------------------------|
| <input type="checkbox"/> 3) Human-wildlife conflict | <input type="checkbox"/> 8) Limited access to credit |
| <input type="checkbox"/> 4) Pest and diseases on crops | <input type="checkbox"/> 9) Heavy labour contributions |
| <input type="checkbox"/> 5) Limited access to roads | |

2.2 What factors attracted you to migrate to the city (Can Tick More Than one)

- | | |
|---------------------------------------------------------|------------------------------------------------------|
| <input type="checkbox"/> 1) Higher education | <input type="checkbox"/> 5) Employment opportunities |
| <input type="checkbox"/> 2) Stay with family | <input type="checkbox"/> 6) Better health facilities |
| <input type="checkbox"/> 3) Access to credit facilities | <input type="checkbox"/> 7) Business opportunities |
| <input type="checkbox"/> 4) Better quality of life | <input type="checkbox"/> 8) Higher income |

2.3 Which one is the most important factor that pushed or attracted you migrate to the city (Please select only one from the selection made in question 2.1 & 2.2)

Answer

3. What is the main source of income for your family? (Can Tick More Than one)

- | | |
|-----------------------------------------|-------------------------------------------|
| <input type="checkbox"/> 1) Agriculture | <input type="checkbox"/> 3) Salary |
| <input type="checkbox"/> 2) Business | <input type="checkbox"/> 4) Contract work |

4. How much do you earn in a month (tick only one in the box)

- | | | | |
|--------------------------|------------------------|--------------------------|---------------------|
| <input type="checkbox"/> | 1) Less than Nu 5000 | <input type="checkbox"/> | 2) Nu 5001-10,000 |
| <input type="checkbox"/> | 3) Nu 10,001-15,000 | <input type="checkbox"/> | 4) Nu 15,001-20,000 |
| <input type="checkbox"/> | 5) Nu 20,000 and above | | |

5. Who facilitated to move to the current place? (Can Tick More Than one)

- | | | | |
|--------------------------|-------------------|--------------------------|-----------------|
| <input type="checkbox"/> | 1) Family members | <input type="checkbox"/> | 3) Relatives |
| <input type="checkbox"/> | 2) Friends | <input type="checkbox"/> | 4) Own decision |

6. How is your physical health after migrating to the current place (Tick only one)

- | | | | |
|--------------------------|----------------------|--------------------------|---------------------|
| <input type="checkbox"/> | 1) Excellent | <input type="checkbox"/> | 2) Very good |
| <input type="checkbox"/> | 3) Good | <input type="checkbox"/> | 4) Same like before |
| <input type="checkbox"/> | 5) Worse than before | | |

7. How is the overall quality of life after migrating to the current place (Tick only one)


- | | | | |
|--------------------------|----------------------------|--------------------------|-------------------|
| <input type="checkbox"/> | 1) Highly satisfactory | <input type="checkbox"/> | 2) Satisfactory |
| <input type="checkbox"/> | 3) Moderately satisfactory | <input type="checkbox"/> | 4) Unsatisfactory |

8. How is the income level of your family after migrating to the current place

(Tick only one)

- | | | | |
|--------------------------|---------------------------|--------------------------|-------------------|
| <input type="checkbox"/> | 1) Improved significantly | <input type="checkbox"/> | 2) Improved |
| <input type="checkbox"/> | 3) Not improved | <input type="checkbox"/> | 4) Same as before |
| <input type="checkbox"/> | 5) Worse than before | | |

9. Do you have plan to return to your village and why?



.....

.....

.....

.....

10. If you want to go back to your home town what government should support or what are the initiatives that government will have to be under taken in order to control the rural-urban migration in your community?

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CURRICULUM VITAE

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