AGRIPRENEURSHIP IN ORGANIC CROPS:

AN EMPIRICAL STUDY IN MIZORAM

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CERTIFICATE

This is to certify that the thesis entitled "Agripreneurship in Organic Crops: An Empirical Study in Mizoram" written by R.Lalhmingthanga has been completed under our supervision.

He has fulfilled all the required norms laid down under the Ph.D. regulation of Mizoram University. The thesis is the result of his own work and investigation. Neither the thesis as a whole nor any part was ever submitted to any University for any degree or award.

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I R.LALHMINGTHANGA, hereby declare that the subject matter of this thesis is the record of work done by me, that the contents of this thesis did not form basis of the award of any previous degree to me or to do the best of my knowledge to anybody else, and that the thesis has not been submitted by me for any research degree in any other University/Institute.

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ABBREVIATION

ANOVA	-	Analysis of Variance
AME	-	Agriculture Man and Ecology
APEDA	-	Agricultural and Processed Food Products Export Development Authority
DAC&FW	-	Department of Agriculture, Cooperation & Farmers Welfare
EC	-	Executive Committee
FTDR	-	Foreign Trade (Development and Regulation) Act
FPO	-	Farmer Producer Organisation
FPC	-	Farmer Producer Companies
FIG	-	Farmer Interest Groups
GIS	-	Geographic information systems
GOI	-	Government of India
HSLC	-	High School Leaving Certificate
HSSLC	-	Higher Secondary School Leaving Certificate
IoT	-	Internet of Things
INM	-	Integrated Nutrient Management
ICTs	-	Information Communications Technologies
MOVCD	-	NERMission Organic Value Chain Development for North Eastern Region
MSMEs	-	Micro, Small and Medium Enterprises
MOM	-	Mission Organic Mizoram
MRB	-	Mizoram Rural Bank

MMC	-	Mission Monitoring Committee
NSOP	-	National Standards for Organic production
NAPP	-	National Accreditation Policy Programme
NAC-MOVCD-NER	-	National Advisory Committee for Mission Organic Value Chain Development for North Eastern Region
NAC	-	National Advisory Committee
NERAMAC	-	North Eastern Regional Agri-Marketing Corporation Limited
NGO	-	Non Government Organisations
NPOF	-	National Project on Organic Farming
NPOP	-	National Programme of Organic Production
NADEP	-	National Agribusiness Development Programme
PPT	-	Promotional Price Tag
PMU	-	Project Monitoring Unit
RKVY	-	Rashtriya Krishi Vikas Yojana
RCC	-	Re inforced Cement Concrete
SLEC	-	State Level Executive Committee
SBI	-	State Bank of India
SPSS	-	Statistical Package for Social Sciences
TFO	-	Tax and Finance Operate
WRC	-	Wet Rice Cultivation

CHAPTER -1

INTRODUCTION AND RESEARCH DESIGN

1.1. Introduction

Agriculture is the backbone of Indian economy. India is managing 17.5 percent of world population and occupies only 2.4 percent of the world geographical land. During Independence, more than half of national income was contributed by agriculture along with more than 70 percent of the total population depends on agriculture (Pandey, 2013). It is also regarded as the mainstay and basic means of the occupation of the hilly states of North East India. Mizoram –situated in the North East corner where traditional method of cultivation - shifting cultivation is still dominating the scene (Pachuau, 1994). Mizoram is an agricultural state where majority of the total population, more than 60 percent of the total population, depends on agriculture as it is the biggest source of livelihood for rural areas. Various crops are grown and paddy continues to remain the principal food crop and the staple food of Mizoram. The total State Domestic Product for the year 2015-2016 is Rs 13,277.78 crore against Rs 11,559.33 crore in 2014-2015 at current prices and the State Per Capita Income (at current prices) witnessed an increase of 11.27 percent as it is increased to Rs 95317 in 2015-2016 from Rs 85659 in 2014-2015.While National Per Capita Income is Rs 93293 during 2015-2016. In the absence of agro based industries and manufacturing sector, agriculture and its related still continues to be the main occupation of the people of Mizoram (*Economic Survey, 2017*-18). Jhum or shifting cultivation remains to be the major and dominant methods of cultivation. Due to implementation of Oil Palm Development programme, Rashtriya Krishi Vikas Yojana (RKVY), New Land Use Policy and Rural Area Development Programme, Jhum cultivation has decreased from 44,947 hectare at the beginning of 11^{th} plan to 19,851 hectare during 2015-2016 which accounts for 55.83 percent reduction (*Economic Survey,* 2017-18).

Majority of the total population, more than 60 percent of the total population, in Mizoram depends upon the agricultural sector as it is the biggest source of livelihood for rural areas (Economic Survey, 2017-18).

India has witnessed increasing production of agriculture since independence and with the introduction of Green Revolution in 1960's, there has been many fold increase in agricultural production which gave way to new employment prospect for majority of the population. Higher yield due to the use of pesticides and insecticides were having unexpected issues relating to environmental deterioration, health issues and soil fertility. So consumers across the globe are chanting the same song - organic products and its benefit thus increases the demand of organic products.

Mizoram, hilly and mountainous regions of North East India, having diverse land scape, slope and topography, is surrounded with natural beauty with rich flora and fauna. Mizoram has sub tropical and humid climate with an average temperature of 11^0 C to 21^0C in winter and 20^0C to 30^0C in summer. It has an average rainfall of 250 cm per annum (Brajendra et al., 2018). The soils of Mizoram are blessed with high organic matter status. Majority of the farmers still practice Jhumming, which results toward the loss of the top soil and its fertility every year.

The total geographical area of Mizoram is 21,081sq.km (Statistical Handbook Mizoram, 2014). Out of these 1.101m ha is cultivable. Another prospect for laying organic foundation stone in Mizoram is its low population as compared to all other Indian states and union territories. As per 2011 census the total population was 10, 97,206 (Statistical Handbook Mizoram, 2014). With increasing populations, the pressure on land and soil increases, and reduced rejuvenation period of soil fertility affects the total output of agricultural products. Keeping in mind of the status of organic farming in Mizoram, its potential and possibilities have been examined.

1.2. Concept of Organic Farming in India

Traditional agriculture in India dates back to the Neolithic age of 7500-6500 BC. The ancient Indian farmers are known to have developed and practiced mixed farming, mixed cropping and crop rotation. The balance of cosmic forces, health and fertility were the main features. Hindu Philosophy regards the earth as a living being, and considered as the foundation of all plants, mainly crops, and when cultivated or explored, provides all necessities of life not only for human beings, but also for other forms of life such as the smallest living to the largest animals. The knowledge of

plant life was highly advanced among farmers of ancient India (Deevi & Biswas, 2011).

The First 'scientific' approach to organic farming can be quoted back to the *Vedas* of the "Later Vedic period", 1000BC-600 BC. Randhawa (1986) and Perreira (1993) criticized the western methods of agriculture and highlight the importance of traditional agriculture system in India. Kansara (1995) highlighted the importance of the *Vedas* for the current day agriculture. The principle was to live together with nature rather than exploit. However, great attention was paid to agricultural technologies and agronomic practices and sophistication was achieved through genetic diversity, crop rotation and mixed cropping systems. And animal husbandry was also an integral part of the farming practice in the Indian agricultural system (Mahale & Soree, 1999).

During the past 50 years, the customary understanding and organic principles were eroded due to entry of current conventional agriculture, though the traditional knowledge and practices of agriculture has been sustained by many communities throughout the millennia and has gained importance recently for present system and methods of agriculture, especially organic agriculture. Organic farming is still a part of the living tradition of most of the communities in tribal areas and dry land areas in India. Traditional agriculture can be improved and organic agriculture is the closest to the farmer's traditional customs, practices and beliefs (Mahale, 2002).

Under the Project-Agriculture Man and Ecology (AME), the first training centre in India for Organic Agriculture was set up in Pondicherry during 1983 (Maurya, 2014). The first conference on organic farming was held at Wardha in 1984.The first National Seminar on Organic farming was said to be organized by Rajasthan College of Agriculture in the year 1992 (Maurya, 2014). During the same year the first known study on ecological agriculture in South India was published (Van Der Werf & De Jager, 1992). Since then a number of network and connections and publications relating to organic agriculture had been created. In 1993,a directory of individuals and organisations involved in sustainable agriculture in India called Green Farming was produced (Centre for Science and Environment, 1993).The

central government set up a special cell for the export of certified organic products under Agricultural and Processed Food Products Export Development Authority (APEDA) of the Ministry of Commerce and Industries. In March 2000 the Ministry of Agriculture, Govt. of India constituted the Task Force on organic agriculture. In June 2001, National Programme of Organic Production (NPOP) was set up, under which a series of volumes,concerning accreditation- regulations, criteria, procedure, and application forms were published on 12th June 2001, by Public Notice by The Government of India. The Government also introduced regulations concerning the exports of organic products. It was stated that the agricultural product would be allowed to be exported as an 'organic' product only if it was produced, processed, or pack under a valid organic certificate issued by a certifying agency duly accredited by any one of the agencies such as APEDA, the Coffee Board, the Tea Board, and the Spices Board (Maurya, 2014).

1.3. Agripreneurship: Concepts of Entrepreneurship inAgriculture

The Global Agriculture is going through different phases, within the changing situation, the agriculture shapes into new dimension and expands its scope beyond the limits of simple agriculture and animal husbandry for livelihood of the rural India. Various activities such as value addition, diversification, precision farming, technology in agriculture, agripreneurship, global marketing, organic farming, sustainable agriculture etc., are given importance in agriculture (Tamminana, 2016). After adoption of the new economic policy in India, entrepreneurial activity gained momentum by playing a major role in socioeconomic development of India. It has led to raise the level of living standard of backward regions, and the importance of entrepreneurial development is felt due to over dependence on agriculture for employment. With changes in market, agricultural companies have to adapt with varying consumer lifestyle, enhanced ecological regulations, new demand of products, chain management, food security, and sustainability which have resulted further into new participants, innovation and portfolio entrepreneurship (Saha & Hazari, 2021).

Entrepreneurship is neither bound by rigid concepts of age nor plaqued by homogeneity but they are diverse, found in every culture, class, race, ethnicity, gender, sexual orientation, physical ability and age (Singh, 2013a). With the emergence of free market in the global economies, this has led to the development of a new dimension such as 'Agripreneurship' and thus increases the individual need of responsibility for running one's own business (Alex, 2011).

The terms, agripreneurship and entrepreneurship are frequently used in the context of education, and small business formation in agriculture. It can be said that agripreneurship is synonymous with entrepreneurship in agriculture and it refers to the agribusiness establishment in the agriculture and allied sectors. Dollinger (2003) explains entrepreneurship in agriculture as the creation of innovative economic organization for the purpose of growth or gain under conditions of risk and uncertainty. Agripreneurship is not only employment plan that can lead to self abundance of the rural farmers; its development through training is a main component of Micro, Small and Medium Enterprises (MSMEs) etc., especially the agripreneurs. This leads towards improved performance of every individual that can contribute to employment opportunity, reduction in poverty and human resource development. Agripreneurship is greatly influenced mainly by the economic situation, culture and education (Singh, 2013). The transaction may involve either an input of a product or service and encompassing items such as productive resources, agricultural commodities, facilitative services (Lokanadhan et al., 2009).

Agripreneurship is the profitable marriage of agriculture with entrepreneurship. Agripreneurship turns the farm into an agribusiness (Bairwa et al., 2014). Agripreneurship also relates to entrepreneurship in agriculture. Agripreneur can also be defined as an entrepreneur whose main business is agriculture or agriculture-related. It is also generally defined as sustainable, community-oriented, directly-marketed agriculture. Sustainable agriculture denotes a holistic, systems oriented approach to farming that focuses on the interrelationships of social, economic, and environmental processes (Uplaonkar & Birada, 2015).

An agripreneur is someone who undertakes a variety of activities in agriculture and its allied sectors. Agripreneur may start an agro business, change a business direction, acquire a business or maybe involved in innovatory activity of value addition. They are influenced by three factors such as the economic, culture and education of the country (Ravindra & Sweta, 2015). Agripreneurs are a new breed of entrepreneurs ranging from any age group, combining their adoration for farming and agriculture with business. All agripreneurs are not farmers; some have taken the path of adding value through processing or new packaging for the crop of food that farmers have grown. Agripreneurs do not necessarily act alone; they can join hands with others in order to create a successful value chain. Due to increasing unemployment and poverty in rural areas and the slow growth of agriculture, entrepreneurship in agriculture, food processing, food storage and handling units for increasing production and profitability is extremely required (Babu, 2015).

1.4. Organic farming in India

Organic farming system has a long history in India. It is a method of farming where cultivation is done in such a way to keep alive the soil healthy by using organic wastes of crops, animal farm, aquatic along with other biological materials and biological fertilizers to release nutrients for the crops for sustainability and eco-friendly production.

Organic Farming is considered as a movement directed towards the philosophy of “Back to Nature”. Which aims at low input farming thus reduces dependency on inorganic fertilizers, plant protection chemicals and weedicides (Reddy, 2008).

To make farming more sustainable, remunerative, and respectable so that natural soil and fertility are enhanced and to ensure soil and water conservation, along with agricultural bio- and food security. To create a market for organic products managed and controlled by the farmers in domestic market, and to avoid, use of agrochemicals and other hazardous material and ensure chemical free water, soil, food, etc. can be stated as the main objectives of organic farming.

Thus it can be said that Organic farming is a method of crop and livestock production that involves much more than choosing not to use pesticides, fertilizers, genetically modified organisms, antibiotics and growth hormones which provide attentive care that promotes the health and meets the behavioural needs of livestock. Organic farming is a kind of farming which is based on the principle of maximum production with quality without compromising the soil fertility and the environment (Pandey &Tewari, 2010).

1.5. Organic farming in Mizoram

Organic farming started in Mizoram since 1996 (Organic Farming Act Mizoram, 1996). It was in this year that the Agriculture Department, Government of Mizoram introduced Organic Farming Project and ran a pilot test at Lungmuat village, Kolasib District. It was there that organic farming tied with contour trench farming was trialed with very promising results. Vermi-culture was also started by importing good species of earthworm. A good number of villages were covered and villagers were given training on bio-composing methods. As the organic farming system solely depends on the use of crop residue, animal manures, green manures, off-farm organic wastes and the government gave due importance to supplying organic manures like neem cake, etc. to the needy farmers to supplement their plant nutrient requirement, crop rotation incorporating legumes and use of bio-fertilizers, organic manures, biological pest control to maintain soil productivity. The Agriculture Department of Mizoram gradually reduces the import of chemical inputs such as fertilizers, pesticides, and several awareness campaign and training on organic farming were conducted.

The crops such as rice, pulses, oilseeds, maize are cultivated in Mizoram using Jhum system of cultivation. The Wet Rice Cultivation (WRC) and terraced cultivation methods are also practiced in some areas of the state. Various kinds of fruits and vegetables are also grown in Mizoram. As Indian agriculture market is becoming more competitive and qualitative, organic based products from agricultural farmers have more demand from customers, due to presence of more nutritional value, free micro-organism and its freshness (MOM, 2018).

A lead agency called Mission Organic Mizoram (MOM) was formed under State Agriculture Department of Mizoram (MOM, 2018). The agency selected six (6) districts out of 8 districts i.e. Aizawl, Lunglei, Champhai, Mamit, Kolasib and Serchhip and three organic crops- Turmeric, Ginger and Bird's eye chilli (Mizo chilli) were selected for cultivation in these districts. Out of the three crops selected, Bird Eye Chilli was already geographically identified as *Mizo chilli.*

1.6. Organic crops

It is a crop or livestock product obtained through organic farming which involves much more than choosing not to use pesticides, fertilizers, genetically modified organisms, antibiotics and growth hormones. Presently India's rank 6th interms of World's Organic Agricultural land ans 1st in terms of total number of producers(FIBL & IFOAM Year Book, 2023) As per Agriculture and Processed Food Products Export Development Authority (APEDA) report, India produced around 2.9 million MT (2022-23) of certified organic products which includes all varieties of food products namely sugarcane, oil seeds, Fibre,Cereals and Millets, Cotton, Pulses, Medicinal plants, Tea, Fruits, Spices, Dry fruits, Vegetables, Processed foods products etc.

The production is not limited to the edible sector but also produces organic cotton fiber, functional food products etc. Among all the states in India, Madhya Pradesh is the largest producer which is followed by Maharsahtra, Rajasthan, Karnataka and Odisha (Apeda, 2023).

The total volume of agriculture export during 2022-23 was 312800 MT. The organic food export realization was around Rs 5525.18 Crore (708.33million USD) Organic products are exported to European Union, USA, Canada, Switzerland, Turkey, Australia, Equator, Korea Republic, New Zealand, Japan, Vietnam etc (Apeda, 2023). It is strongly felt that Mizoram, by virtue of very less amount of chemical inputs imported and utilized, has a great scope for successful organic farming.

1.7. Mizoram Organic Farming Act, 2004

The Mizoram Organic Farming Bill was unanimously passed in July 2004 by the Mizoram Legislative Assembly. The Act 2004 adopts areas to support and regulate organic farming in tune with the National Programme of Organic Production (NPOP) in the state of Mizoram. The adopted areas in Mizoram coverall excluding the areas constituted as autonomous districts under the sixth schedule of the constitution of India. To support the organic farming, farm equipment or materials including seeds were provided to the farmers who have taken up organic farming. For the purpose of accreditation of inspection and certification, the accreditation regulations, October, 2001 notification under National Programme of Organic Production was applied. It comes under the Foreign Trade & Development Act (FTDR), providing information on standards of organic production, systems, procedures, accreditation and inspection, certification bodies and national organic logo and regulations governing its use (Deevi & Biswas, 2011).

1.8.Mission Organic Value Chain Development for North Eastern Region (MOVCD-NER)

Realising the potential of north eastern region of India, the Ministry of Agriculture and Farmer Welfare has launched a central sector scheme entitled, Mission Organic Value Chain Development for North Eastern Region (MOVCD-NER) in the 12^{th} Plan period (MOM, 2018). The scheme aims at development of certified organic production in value chain mode to link growers with consumers and to support the entire value chain starting from inputs, seeds, certification, to the creation of facilities for collection, aggregation, processing, marketing and brand building initiative. Under Mission Organic Mizoram (MOM), farmers are facilitated to form Farmer Producer Organisation (FPO) / Farmer Producer Companies (FPC), for organic production clusters. Crop specific clusters are identified and necessary financial supports for on-farm and off-farm and seed/planting are provided. Under MOVCD, Out of the eight (8) districts in Mizoram, only 6 districts of Mizoram are included initially i.e. Aizawl, Lunglei, Champhai, Kolasib, Serchhip and Mamit in the state for organic farming (MOM, 2018).

The following Table 1.1 and 1.2 highlights the selected crops, clusters, farmers, FPO and area covered of MOVCD-NER in the state of Mizoram.

Table 1.1: Selected crops, Clusters, Farmers FPO and Area covered of MOVCD-NER(2017-2018)

District	Name of Crops	Number of clusters	No of FPO	No of Farmers	Area covered(ha)
Aizawl	Chilli& Ginger	24	2	484	297
Lunglei	Ginger,turmeric, Chilli	29	3	968	883
Champhai	Ginger,chilli, turmeric,	41	4	2132	1146
Kolasib	Turmeric	17	1	402	295
Serchhip	Chilli	12	1	651	369
Mamit	Turmeric	41	3	1166	1368
Total		**181**	**14**	**5803**	**4358**

Source: *Mission Organic Mizoram, Agriculture Department, 2018*

Table 1.2: Crops, No. of FIG/Clusters, FPO/FPC, Area covered, and Number of Farmers inMizoram

Sl.No.	Crops	No. of FIG/Clusters	No of FPO/FPC	Area(Ha)	No of Farmers
1	Turmeric	67	4	1496	1376
2	Ginger	40	4	948	1652
3	Chilli	74	6	1914	2775
TOTAL		181	14	4358	5803

Source: *Mission Organic Mizoram, Agriculture Department, 2018*

The state lead agency in Mizoram named as *Mission Organic Mizoram* is the nodal agency for implementation of the mission components and effective realization of goals. The agency facilitated tie-ups with commercial enterprises and entrepreneurs for setting up of value addition infrastructure including linking up with financial institutions/commercial banks.

1.9. Research Design

This section dicusses about the research gap, objectives of the study, research questions, statement of the problem, significance and scope of the study, needs of the study, hypotheses of the study and the research methodology adopted for the study.

1.9.1. Research gap

A detailed review of literature was done in the second chapter and base of such reviewed study, a research gap has been presented in this section. From review of the past studies, it is possible to explore the various problems and prospects of agripreneurship and also how to solve such problems. It is important to note that the development of agripreneurs depends upon motivations, government supports, government policy, various factors like demography, geographical locations, culture, etc. The problems, challenges and prospects of agripreneurs at different places differ from one another. Many studies have been undertaken by various scholars relating to agriculture enterprise or agripreneurship at international, national, regional and even district level, but limited studies on agripreneurship have been found relating to backward and hilly regions like Mizoram.

At the same time, a study on entrepreneurship in agriculture in general and entrepreneurship in organic crops in particular shall be a pioneering attempt in order to fill in the gap of research.

1.9.2. Objectives of the Study

The purpose of this study is to study the Agripreneurship and allied sectors in Mizoram. The study focuses on the following specific objectives:

1. To study the policy interventions and support for organic farming in Mizoram.
2. To analyze the socio-economic origins of selected agripreneurs.
3. To examine the growth and performances of selected agripreneurs.
4. To evaluate the problems and challenges of selected agripreneurs.

1.9.3. Hypotheses of the Study

On the basis of the above objectives, the following hypotheses are formulated to be tested.

1. There is no significant growth in the performances of selected agripreneurs in the study area.
2. There is no significant difference in problems and challenges across the selected district agripreneurs.
3. There is no significant difference in problems and challenges between male and female agripreneurs in taking up agripreneurship.

1.9.4. Research Questions

The following are the research questions for the proposed study:

1. Will the potential of agripreneurs increase with the involvement and assistance of the government and its agencies?
2. Is the social life of agripreneurs directly related to their performances?
3. Can agribusiness generate growth, diversifying income, widespread employment, and entrepreneurial opportunities in Mizoram?

1.9.5. Statement of the Problem

The importance of entrepreneurs in the context of economic development can be measured in terms of employment generation, contribution to the gross state domestic product, minimization of migration, exports, etc. The special contribution that entrepreneurship can make towards uplifting a backward region like Mizoram is the creation of employment opportunities for jobless youths and providing sustainable livelihoods for the population. The government is taking a number of initiatives, starting with educating the entrepreneurs, running motivational campaigns, providing training, giving finance, arranging for raw materials, managing technologies, extending marketing help, granting subsidies, etc., in order to give a boost to entrepreneurship development in different parts of the country.

The above initiatives have hardly reached all the areas of Mizoram, and so agribusiness conditions are still very backward, although there are high potentials for development. It becomes imperative for the researcher to know the exact status of agripreneurs in Mizoram and the problems faced by them. What types of interventions have been done and will be done by the government, NGO, or any other agency to improve their conditions? Finally, what suggestions can be provided for solving their problems? Thus, it is necessary to find out what problems are being faced by the agripreneurs in Mizoram and why they are still very backward as compared to other states in India.

1.9.6. Significance and Scope of the Study

Based on review of literature, it is possible to identify that though various studies has been conducted in entrepreneurship but most of them addressed only one or few dimensions of entrepreneurship in Agriculture and allied sectors. None of them adopted integrated approach to study the entrepreneurship in agriculture and its allied sectors. One or few dimensions will, definitely, not give fair and complete picture of their operations, problems and prospects. Moreover considering Mizoram, it is difficult to find studies based on the primary data to get integrated picture of entrepreneurship in Agriculture and allied sectors in Mizoram. Therefore, the need to address various issues related to agripreneurship in Mizoram arises.

This study attempts to bridge the gap by addressing the issues with integrated framework whereby concept of entrepreneurship and its life cycle, problems in and solution of establishment & registration of organic farms, its policy intervention and prospects, environmental & managerial issues & challenges and strategies to cope with them. Status of support, diversification issues, entrepreneurs problems and prospects and benefits and opportunity cost of organic farming have attempted to address simultaneously from the data collected from the agripreneurs/ organic farmers of Mizoram.

In short, this study has the following significance:

1. It brings out the present status of agripreneurship in Mizoram. This can be supportive for government involvements and for entrepreneur to start their own enterprises in agriculture and its allied sectors;
2. It explores the challenges and hindrances which work as barriers in the development of entrepreneurial endeavor in the agripreneurship in organic farming; and
3. The outcome of the study is expected to promote issues like what type of interventions is required for the government for development of agripreneurship, and also what changes are essential to hasten its developmental processes.

1.9.7. Need of the study

The state economy is primarily based on the agriculture sector, and agribusiness played a substantial role in the growth of the state. Agri-entrepreneurship, compared to other sectors, is significantly more successful at eradicating poverty. As crop productivity raises poverty declines, and food prices for the impoverished drop. A system-oriented farming method that emphasizes the interdependencies of social, economic, and environmental processes is known as sustainable agriculture. Transform the farm into an agribusiness by combining the advantages of entrepreneurship and agriculture. This relationship between business and agriculture supports agrientrepreneurs who find markets, innovate, and create new ways to meet needs. Therefore, the study is essential as it is based on ground-level dealing with agripreneurs.

1.9.8. Research Methodology

In this section, the type and sample of the study, the pilot study conducted, sources of data and the tools adopted for analyzing the data viz. descriptibe statistics, corellation analysis, regresssion analysis, ANOVA and relative importance index method were discussed.

1.9.8.1 Type and Sample of the Study

This study is a mix method study which is both descriptive and empirical in nature, and is mainly based on primary data collected from six (6) selected districts, i.e., Aizawl, Lunglei, Champhai, Kolasib, Serchhip, and Mamit districts. As of 2019, there are 14 FPOs and FPCs under Mission Organic Mizoram (MOM). The total number of farmers and agripreneurs who are enrolled under Mission Organic Mizoram was 5803 in 2017–2018. The study attempts to cover at least 10% of agripreneurs from different FPOs, including 42 agripreneurs from the Farmers Producer Organization/Farmer Producer Centre (FPO/FPC), totaling 588 respondents. But few respondents submitted incomplete questionnaires; therefore, 551 respondents were collected using a simple random sampling method for the study.

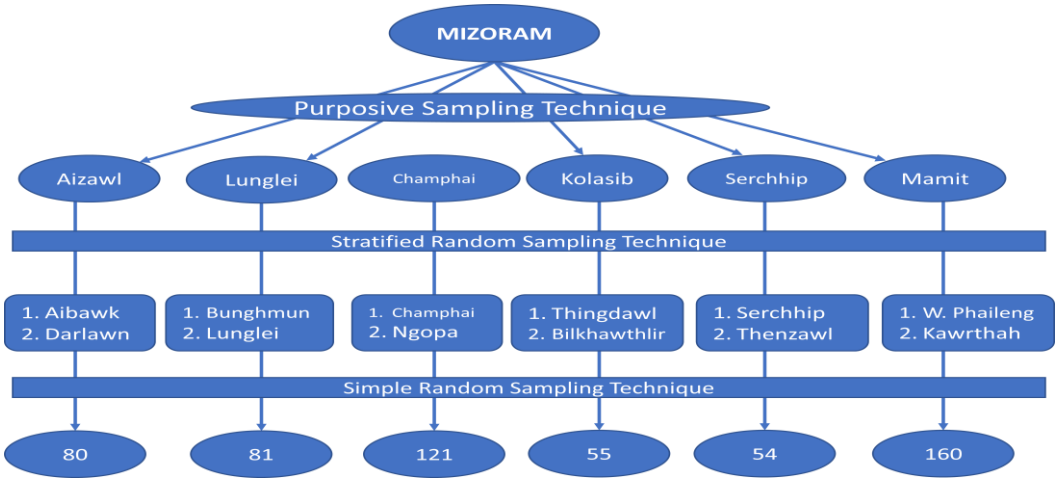

Figure 1.1: Sampling Tree

The survey includes interactions with the agripreneurs and the concerned person(s), including government officials. The study considered only those agripreneurs who had been running agribusiness successfully for the past 3 years.The actual selection is difficult because there are some agripreneurs that are not functioning at the time of study. At the same time, every possible effort was made to represent all the clusters of the selected organic crops while selecting the respondent agripreneurs under a simple random sampling method.

1.9.8.2 Pilot Study

The primary goals of the pilot study were to verify the reliability and feasibility of the research as well as validate the questionnaire. A personal endeavor was made to engage with the agripreneurs. Fifty respondents completed the surveys, and the reliability was assessed using Cronbach's alpha criterion. The determined value of 0.731 attests to the instrument's reliability. The normal probability distribution is satisfied by the variables taken into account for the analysis. The questionnaire is appropriately updated in light of the pilot study in order to elicit a response from the sample group.

Non-response bias checks

At this stage, non-response bias was conducted by both the field and the data. The survey carried out is considered acceptable because the calculated final response rate is high (92%). The main reason given for non-response is a refusal to answer the survey and the interviewers' lack of time to obtain responses.

Validity evaluation

Validity and measurement device precision are interchangeable. The degree to which what is observed or measured matches what is intended to be measured. The degree of generalizability is related to external validity, while the degree of validity of assertions made regarding the question of whether X causes Y is related to internal validity.

Variables to be studied:

Based on the literature view, the following factors, such as socio-economic profile, policy intervention and support, growth performance and problems, and the prospects of the agripreneurs, are considered for the study. However, the variables are revised and restructured based on the suitability and reliability of the data.

1.9.8.3. Sources of Data

For the present study, data were collected from both primary and secondary sources. The primary data were collected directly from the selected agripreneurs by providing them with a structured questionnaire and through personal interviews as well as personal observation. Secondary data were collected from reports, journals, books, documents, published reports of government and semi-government bodies, and the internet.

1.9.8.4 Tool for Analysis

The data were analyzed using the Statistical Package for Social Sciences (SPSS) computer packages. To analyze the growth performance, problems, prospects, and socio-economic status of the agripreneur, various statistical tools such as descriptive statistics, correlation analysis, regression analysis, relative importance index and ANOVA analysis are applied.

Descriptive Statistics

The descriptive statistic, such as mean, frequency, percentage, and standard deviation, aims to provide information on the data of the respondents. This research highlights information on demographic characteristics like age, gender, marital status, family size, number of families employed, education, occupation, income, expenditures, etc.

Correlation coefficient analysis

In this section, an attempt was made to analyze and understand the statistical measure of the interrelationship between various factors such as capital investment, annual production, annual sale, annual profit, and annual operational cost. It is also determined to compute its best use in variables that display a linear relationship connecting each other.

Regression Analysis

The multiple regression analysis was conducted to determine the relationship between the dependent variables (annual profit) and independent variables (capital

investment, annual production, annual sale, and annual operational cost) that influence agribusiness performance growth levels. The regression equation determined whether independent variables could predict the dependent variable.

Analysis of variance (ANOVA)

ANOVA analysis was conducted to measure the mean score differences between district agripreneurs and gender-wise respondents. A step-wise analysis was conducted to serve the objectives of the study. The basic assumptions for ANOVA are random sampling, independent measurements, normal distribution, and equal variance.

Relative Important Index (RII)

This study uses the Relative Importance Index (RII) method to identify and quantify the problems and challenges encountering while taking up Agripreneurship in six (6) district of Mizoram. There are 551 respondents in total, the necessary information was gathered, tallied, and analyzed as follows:

$$\mathbf{RII} = \frac{\mathbf{5}n5+\mathbf{4}n4\ \mathbf{3}n3+\mathbf{2}n2+\mathbf{n}1}{\mathbf{A}*\mathbf{N}}$$

Where,

n_5 = Number of respondent for Very Important

n_4 = Number of respondent for Important

n_3 = Number of respondent for Neutral

n_2 = Number of respondent for not important

n_1 = Number of respondent for Not at all Important

A = Highest weight

N = Total No. of Respondents

RII = Relative Important Index

1.10.Limitations of the Study

Though the study has contributed to existing literature, it also suffers from certain limitations. Firstly, the agripreneurs are not willing to reveal their exact income from agripreneurship. Thus, the financial data obtained from them might not be a true representative of their financial position. Secondly, the study was conducted among agripreneurs from six selected districts of Mizoram therefore; the findings of the study may not be generalized for other districts of Mizoram which are not included in the study. Finally, the resource and time constraints faced by the researcher have shortened the study period while a more extended timeframe would be ideal for a comprehensive examination of organic culativation.

1.11. Chapter Arrangement

The different processes of the study have been discussed in five chapters. A glimpse of each chapter's contents is given below:

Chapter I: Introduction and Research Design

The first chapter is the introductory part of the study. It highlights the definition, concept, and meaning of agribusinesses, the need and importance of the study, statement of the problem, scope of the study, objectives of the study, hypotheses, research design, methodology, limitations of the study and Chapter arrangement.

Chapter II: Review of Literature

The Review of Literature outlines a comprehensive review of the literature relevant to the present study. Various studies and research findings on agripreneurship, different variables with respect to organic farming, policy intervention, growth performance, problems, and prospects are included in this chapter.

Chapter III: Policy Intervention and Government Support

This chapter determines the agripreneurs government supports and policy interventions. It emphasizes the following topics: Institutional Supports for Organic

Crops Farming in India, National Programme on Organic Production (NPOP), National Project on Organic Farming (NPOF), Mission Organic Value Chain Development for the North Eastern Region (MOVCDNER), and analysis of the facilities availed by the Agripreneurs in Mizoram.

Chapter IV: Socio-Economic Profile and Growth of Agripreneurs

The fourth chapter highlights the analysis and interpretation of statistical tools such as descriptive statistics (mean, standard deviation, percentage, and frequency), correlation analysis, regression analysis, and ANOVA. Details and analyses are recorded, tabulated, and presented with relevance to the objectives of the study.

Chapter V: Problems and Challenges of Agripreneurs

The first chapter highlights the analysis and interpretation of statistical tools such as descriptive statistics (mean, standard deviation, percentage, frequency), and ANOVA. Details and analyses are recorded, tabulated, and presented with relevance to the objectives of the study.

Chapter VI: Findings, Conclusion and Suggestions

This chapter showcases the findings of the study and the conclusions arrived at from the study, along with suggestions to the agripreneurs and concerned authorities in framing policy-related strategies suitably and successfully.

1.12. Conclusion

This chapter mainly explains about the introduction of the whole study and the research design adopted throughout the research. It begins with the concept of organic farming in India which is followed by organic farming in Mizoram. It further highights the Mizoram Organic farming Act and the existence of Mission Organic Value Chain Development for NorthEastern Region. As the study focuses on agripreneurship, this chapter also emphasizes on the concept of agrepreneurship and its relationship with entrepreneurship. Agripreneurship is synonymous with entrepreneurship in agriculture. Generally, Agripreneurship refers to the agribusiness establishment in the agriculture and allied sectors. Agripreneurship turns the farm

into an agribusiness (Bairwa et al., 2014). The later part of the chapter contains a detailed description of research design and methodology adopted for conducting this research. Organic farming development in Mizoram has been implemented under Mission Organic Mizoram, which is an organisation consisting of FPOs, agripreneurs and farmers. During the year 2017-2018, there were 5803 farmers and agripreneurs who were enrolled under Mission Organic Mizoram. Data were collected from 551 respondents who were expected to represent 10% of the registered agripreneurs during the year 2017-2018. Appropriate statistical tools adopted for analyzing the data, limitations of the study and chapter arrangement for the whole thesis were highlighed in the later part of this chapter.

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CHAPTER- 2

REVIEW OF LITERATURE

2.1. Introduction

A review of literature plays a vital role in any research work, a thorough survey of related literature, the possibility of repetition of study can be eliminated and another dimension can be selected for the study. The literature review helps to remove limitations of existing work or may assist to extend prevailing study. An extensive body of literature already existed dealing with the various aspects of customers' satisfaction and innovative services provided by banks in India and abroad. The scholar focussed on a review of earlier literature in this chapter as it helps the scholar to understand the basics of the research and critical evaluation of the previous works about the research problem being investigated provides a rigid description related to the topic. A brief review of related studies is being highlighted in the following paragraph to highlight the significance of the study in a thematic manner. In the realm of agripreneurship, a myriad of studies have explored various aspects of agriculture, with a particular focus on organic crops such as Bird's Eye Chilli, Ginger, and Turmeric. These studies collectively shed light on the challenges, opportunities, and transformative potential within the agricultural landscape.

2.2. Agripreneurship and Organic Crops

Garima et al., (2023) study highlights seven significant factors that influence in taking up agripreneurship namely effective leadership, strategic planning, opportunity scanning, organizing and business activities, previous analysis, directing, and controlling activities. An analysis reveals that, by guaranteeing a positive work environment for employees in the agro-industries, effective leadership is regarded as the most crucial component that significantly contributes to the success of any enterprise. The success of an agripreneur requires planning before converting all business activities into action, strategic planning was also crucial. Agro-industries' success also greatly depends on all the other elements, which include scouting for business opportunities, planning and executing business operations, doing prior research, and having credit facilities. Further mention that right instruction and direction from professionals in their industries, the young agripreneurs develop their

leadership abilities. The initial cohort of agribusiness owners gains knowledge from their collective experiences and extends invitations to attend lectures. A number of first-generation agripreneurs expressed fear when asked for detailed information about agribusiness, and some lacked the necessary literacy to respond to the research question.

Yoganandan et al., (2022) study was too conducted to ascertain the level of satisfaction among agripreneurs and investigate the impact of demographics and demography on that level of satisfaction. The market performance, farm growth, perceived farm image, farm income, material availability, government support, and cultivation and production are the seven factors that are revealed by the AprenSAT heptagon model. The results of the regression analysis demonstrate that agripreneurs' satisfaction is significantly influenced by demographic factors, including age, education level, and farming experience. Furthermore, the satisfaction of agripreneurs is significantly impacted by emporographic factors like intercropping, sources of funding, land ownership, age and size of the farm, and annual income. The study further recommended that policymakers to consider the managerial implications of knowing how satisfied agripreneurs are with their agribusiness. the planned series of actions to improve the standard of living and contentment of agripreneurs as well as those in the rural, industrial, and service sectors. These activities include training, institutional support, and technology modernization in all stages of production and supply chain.

According to Singh et al., (2019) study, the total production, price fetched for the crop, cost of production, and labor involved information was collected from farmers cultivating the potato crops Kufri Chipsona and Kufri Alankar in the districts of Jalandhar (Punjab) and Una (Himachal) through a mixed method of semi-structured interviews and structured questionnaires. A thorough investigation at the farm level was also carried out on the methods, patterns, and for storing and distributing the crops grown in 2017. An investigation results showed various aspects to assess and address community enterprise operations. Future research should also be focus on two main issues: an efficient production model that uses data envelopment analysis to determine the benchmark price of the crop, and a diversified

utilization model integrated with marketing models. Another significant discovery was that rural women are vital to agriculture production as well because agribusiness involves processing, preservation, and packaging rather than just production. Women have a significant role to play in these areas.

According to the Parmar and Rathod (2019) study**,** the agricultural students in the study area want to begin their careers in horticulture crops, then move on to organic farming and agroprocessing. Managing pests and diseases is the most challenging aspect of farming, followed by product marketing and sales, while planting and harvesting are regarded as simple tasks. The study suggests that the middle-man margin problem should be investigated by agricultural policymakers, who should also attempt to develop strategies to draw young people into the field. The majority of survey participants were men who had completed undergraduate and graduate degrees. The sub-branch of agriculture known as horticulture, agribusiness, or horticultural crops was the most popular area to start a business, followed by organic farming and agro-processing.

According toWaqingah et al., (2018) study, technical and managerial skills are more important to farmers than entrepreneurial orientation. Agripreneurship performance is positively correlated with competency, meaning that agripreneurship performance improves with increasing competency. Farmers must become more self-reliant and creative in how they sell their goods. Farmers must experiment with new approaches to selling semi-organic shallot products. They can increase their market share and obtain a better alternative price if they are autonomous in managing the market because they won't be dependent solely on the collector. In order to implement farmer capacity-building programs like market share expansion, farm record training, and brand reinforcement, universities, industry, and the government must work in a structured manner.

Ahuja (2015) highlighted increasing consumer concerns about health, quality, safety, and environmental issues in food products. But the increasing demand of organic crops often decrease when it comes to purchasing, many people are not willing to buy organic crops as the price matters for the consumer.

The promotion of Organic Farming entails subsequent persuasions and instructions of farmers. It is noteworthy to mention that Bansal (2011) advocated for the encouragement and education of farmers in organic farming due to its potential in India, as appplications of pesticides and inorganic fertilizer are less compared to industrial nations of the world. Regarding Organic farming, the country could not afford to go organic all together due to its obligation to maintain household food and nutritional security in addition to compulsory prerequisite of organic food to be even free from the remaining effect of inorganic inputs, to identify areas within the country is needed so that it can be explored for organic agriculture (Mega Pib.nic). Due to these, assessment considering the strength and weaknesses is needed with respect to the present contribution and scope of hill ecosystem regarding organic cultivation. Since the last decade, more focus has been given to organic products thereby giving importance to organic agriculture. Presently the consumer demand for locally grown products have increased mainly due to awareness relating to healthy lifestyle and aspiration for longetivity,Ikerd (2011) noted the increasing consumer demand for locally grown agricultural products.

Regarding consumer concerns and organic products.It may also be remarked that De Lind (2002) highlighted the growing opportunities for agripreneurs, driven by consumer preferences for locally grown and value-added agricultural products.

The quality and marketing are closely inter related and Pruthi (1998) underscored the importance of preserving the quality of agricultural products, especially Bird's Eye Chilli. The condition in which products reach the market significantly influences their pricing.Earlier Vigneshwara identified that the major constraints of chilli marketing in India was mainly due to bigger share of commission agents, no proper curing methods, and exports also suffers due to poor packaging and adulteration and stiff competition with China and Pakistan Paswan (2000) also pointed out that the policy changes made Indian agriculture globally competitive, and further emphasize the need to reduced subsidies and improved pricing policies for agriculture market development. It may thus be assumed that the good qualities of agriculture produce create better marketing facilities.

It may also be mentioned that communication strategy for organic farming plays avital role and Rajagopala (2014) advocated for an effective communication strategy to support organic farming development. The impact of information technology has no doubt affected advancement in different fields and it has also impacted the agribusiness Devin (2009) noted the medium to high impact of Information Technology in agribusiness and its role in enhancing business activities. However there are many challenges in remote areas, especially in the state of Mizoram.

Chandrasekhar (2017) rightly observes that price of farming under organic farming is high in transition stage in Mysore District, though the farm Business Income from ecological agriculture is more due to higher yield and price are mainly due to the procurements of organic manure by the farmers. To condense the cost of organic manure every effort should be made to cheer farmers to keep livestock to produce on farm organic inputs. He further added that remunerative price acts as an economic incentive for encouraging more farmers to shift to organic farming. As there was little established marketing system for organic produce and due to this there is a large variation in price received. Government should take steps for the promotion of a market to cater to the domestic and export markets. Marketing channels are to be developed and by networking with the retail chains to provide remuneration price can be assured.

On the other hand, neglected vegetable marketing seems to be one of the main factors that cause financial loss for farmers. Siddique (2007) pointed out the neglect of agriculture marketing, particularly for vegetables, and its detrimental impact on rural-to-urban marketing. However it should be noted that the world focused on sustainable and profitable agriculturalbusiness. Ikerd (2008) stressed the importance of labeling agricultural products accurately to ensure consumers pay a fair price, supporting ecological integrity and economic gain. It must be mentioned that the role of aids to marketing aligns the farmers to financial gain as marketing enhances the growth and success of agripreneurs. Thus, Singh (2007) emphasized the significance of marketing aids in the success of agricultural markets and noted the emergence of agri-business ventures.

Rai (2019) openly remarks that the lifespan of organic mission rest on the land for production and certification.Without theorganic certification, the crops grown have littlesignificance in the market.If farmers cannot verify their harvest is grown from tested and recognized organic soil, the mission fails. However, according to Agarwal (2018) co-founder and Managing Director of Just Organik, Gurugram-based aggregator and provider of organic products, developing right kind of infrastructure is the key for development of organic farming in the Northeast. “While organic products, particularly spices such as black cardamom and ginger and fruits from the Northeast are undoubtedly of top quality, they become prohibitively expensive by the time they reach city consumers.

2.3. Agripreneurship: Problems and Challenges

Arumugam and Manida (2023) highlighting the problem and challenges encounter by agripreneurs in taking a business firm, including scarce funding, a lack of technical expertise and training, and insufficient market connections. Agripreneurship can only thrive in an environment that is supportive of government policies, non-governmental organizations, and private sector partnerships. It explores the function of research and education in advancing agribusines. To develop a new generation of agripreneurs, educational institutions can create specialized curricula that blend business acumen with agricultural knowledge. The development of innovations tailored to a given context, crop diversification, and sustainable land management strategies can be the main areas of research. Furthermore, added that reviving the agriculture industry, agripreneurship has the potential to propel sustainable economic development in India. A more resilient and inclusive economy can be achieved through agripreneurship's promotion of innovation, improvement of livelihoods, and protection of the environment. But for it to be implemented successfully, a number of stakeholders must work together, including the farming community, academic institutions, financial institutions, and policymakers.

Hammad (2022) providesa systematic mapping of research on concepts, opportunities, behaviors, performance-affecting factors, and challenges associated with agripreneurship in developing nations. According to the study, youth

entrepreneurial behavior is more positively correlated with entrepreneurial orientation measures like achievement motivation, self-esteem, personal control, and innovation. Several models in the field of entrepreneurship studies have included attitudes as a component for evaluating entrepreneurial behavior. Based on earlier research, additional dimensions were added to the entrepreneurial orientation scale in order to more accurately capture the mindset of an entrepreneur. In essence, attitude is the tendency to respond to a particular behavior in a satisfactory or unsatisfactory manner.

According to Shreedhar et al., (2022) most Agripreneurs were on track to achieve their goals. The study finds that the biggest obstacle faced by agribusiness owners was channel management, which was followed by harvest marketing and sales. The variables that described producers' perceptions of financial support were validated by statistical analysis. Once the relevant authority is aware of the problem of agripreneurs and takes steps to create initiatives, an agribusiness can be established. Effective agricultural entrepreneurship initiatives, it was further said, support agripreneurs who are coping with long-term economic problems like urbanization, poverty, and unemployment. They address things like the inability to pay farmers, marketing agricultural goods, women's liberation, transportation, and the development of tribal youth. These concerns include growth, greater employment, and diversification of income.

Mukhopadhyay (2020) mention that agripreneurship is necessary in India because it can lead to creative solutions for some of the most pressing problems in agriculture. Precision farming techniques can be employed by agripreneurs, to boost crop productivity. India currently produces 3.15 t/ha of wheat and 2.4 t/ha of rice, far less than China's yields of 4.7 t/ha of rice and 4.9 t/ha of wheat, respectively. By using data-driven decision-making and smoothing efficacy in the farm supply chain, input costs can be reduced to the lowest possible level. At the moment, the input cost is 64 for an output of Rs. 100. Because of this, agribusinesses are generally seen as low-profit ventures, which lower their appeal to investors. Innovative storage facilities and improved supply chain infrastructure could be implemented by new entrepreneurial ventures to lessen massive crop waste. In India, crops worth $14

billion are lost annually. The integration of remote sensing (which can provide biogeophysical data for agricultural crop monitoring and agro-metadvisory services), the Internet of Things (IoT-based smart farming is a system built for monitoring crop fields with the help of sensors that provide data on temperature, soil moisture, light, and humidity), and geographic information systems (GIS) could be adopted by Indian agripreneurs as a model for successful agricultural tech ventures from other neighboring developing countries. He further states that applying analytics and automating irrigation systems could helps monitor crop health.

Further on the issue of marketing and agricultural development, Singh (2002) stressed the pivotal role of efficient marketing for the success of agricultural development.Since agripreneurship is a vast area ,it may be stated that there are various challenges to agripreneurship in organic crop marketing, Bhutia (2015) noted the challenges faced by organic farmers or agripreneurs is due to the lack of organized marketing, which often leads to profit losses as the market are mostly handled by businessman who possessed major share of the profit. Another big issue relates to importance of certification of organic crops and risk mitigation, For the poor Indian farmers, the complexity involves as well as the risks in organic farming compels them to withdraw themselves from organic farming but Rai (2016) stressed the importance of organic certification to mitigate risks along the organic crops value chain, especially for agripreneurs.

It also maybe noted that the agripreneurship faces numerous challenges; Pandey (1989) emphasized the need for agricultural innovation in the face of numerous challenges. These included insufficient irrigation facilities, financial shortages, high irrigation duties, expensive fertilizers, and unreliable electricity supply. Additionally, a lack of knowledge about development programs, government bias, and complex loaning systems further hindered agricultural promotion. Verma et.al.,(2019) asserted that Agripreneurship is the need of the hours to make agriculture more attractive and profitable business enterprise.Agriculture provides great scope for entrpreneurship and this can be harnessed only by effective management of agri elements such as –soil, seed, water and market needs.

It is often remarked that accepting and adapting to a dynamic environment produces the best results.Hanf and Muller (1997) argued that open-minded farm entrepreneurs are better equipped to identify and address problems in a dynamic agricultural environment. This adaptability to dynamic changes is crucial for success. Although there are many challenges in ginger marketing, one of the main challenges regarding ginger marketing seems to lie in the rising cost of transportation, lack of ware housing and inadequacy of processing unit.Saini and Bhati (2001) delved into the constraints faced in ginger marketing in Himachal Pradesh, including costly transportation and limited warehousing and processing facilities.

A.K. Saini et al., (2001) further discussed issues such as non-payment of sale proceeds, transportation problems, and inadequate market information. As perthe Spice Enquiry Committee reports, the Village merchants who deals in ginger realized about 80 percent of the value of the market price. With each change of the product from one person to another, the margin of the producer was reduced, thus reducing the number of links in the chain by forming FPO/FPC is crucial for agripreneurship development. The interlinkage between culture and agribusiness seems to suggest the importance and necessity of technological development in the field of agribusiness. It maybe mentioned that Singh (2008) linked the success of agribusiness to the culture of agriculture, emphasizing that the adoption of new technology also varies among different communities in India.

Lalzirliana (2004) described how transportation challenges led to varying agricultural prices in different villages of Mizoram. Despite rich untapped resources, transportation bottlenecks hindered agricultural marketing in isolated areas.Aggarwal (2017) warns that with increasing population, insufficient availability of agricultural land, small holdings and diminishing soil potency, India is under a serious threat of losing food surplus in the near future thus creates demand supply problems within the country.

In pursuing development in agriculture business, it should be noted that there are many challenges to overcome.Gajendra (2013) identified challenges in agricultural business, including the lack of new technology, unpredictable weather,

pesticide effectiveness, water management, and financial loan distribution. In the process of changing scenario of demand for organic products in the country, it maybe stated that the agribusiness have also witnessed various changes and adapting to changing markets is crucial for agripreneurs ,SoBoehje et al., (2011) observed that agri-entrepreneurs must adapt to changes in consumption, products, distribution systems, and technologies. Further, developing entrepreneurial skills of farmers is essential and Gerard (2013) stressed the need for farmers in Europe to acquire entrepreneurial skills to stay competitive.

On the issue of innovation in farming, it maybe stated thatKumar (2015) emphasized the importance of innovation and entrepreneurship for farmers to remain competitive and profitable in the markets. It is often mentioned that infrastructure for value addition is quite important for agripreneurship.It maybe denoted that Bhat (2006) suggested developing infrastructure such as packhouses near villages to support post-harvest operations and incentivizing private entrepreneurs and cooperatives to invest in these areas. Many theorists and researchers have focused on the importance of the role of marketing infrastructure. It maybe mentioned that Thumar (2013) highlighted the pivotal role of marketing infrastructure in ensuring efficient disposal of agricultural surpluses.

The review of literature also denotes that in order to remove the disadvantages of neglecting vegetables marketing, good rapport should be built in terms of connecting consumers and producers. Consequently, Feagan (2007) emphasized the importance of connecting consumers, farmers, and the agricultural region to foster a sense of place and social connection. Simultaneously, it may be stated that technology and agriculture development in the Northeastern states of India are at a slow progress. In this context, it is worthy to mention that Saikia (2008) attributed low agricultural development in northeast states to mismanagement and inadequate technology intervention.

Some of the main problems of Indian farmers are lack of credit and shortage of finance for their farm. The similar problems pose huge challenges for agripreneurs of Mizoram, thus affected the local farmers. Lalthanthuami (2007) highlighted the

financial challenges faced by Mizoram's farmers and stressed the need for concrete actions to improve agricultural product marketing. According to Agarwal (2018) co-founder and Managing Director of Just Organik, Gurugram-based aggregator and provider of organic products, developing right kind of infrastructure is a key for the development of organic farming in the Northeast. “While organic products, particularly spices such as black cardamom and ginger and fruits from the Northeast are undoubtedly of top quality, they become prohibitively expensive by the time they reach city consumers.

Inspite of many challenges faced by the farmers in expanding farm activities, It has also been suggested that expanding non-farm activities would be beneficial for farmers and Mishra (2009) emphasized that increasing farm sector efficiency alone is insufficient for economic development and expansion of non-farm activities is very essential. Risk always seems to be at stake with development, and here lies the risk mitigation strategies as suggested by Panda (2011) suggested strategies such as crop insurance, improved marketing infrastructure, and farmers' training programs to minimize risks among farmers.

2.3. Agripreneurship growth and performance

Puja and Rajesh (2023) determined that an agripreneurship has the potential roles to improve rural communities and bolster their economic development. Biodiversity is abundant in Bihar, Jharkhand, Uttar Pradesh, Maharashtra, and Meghalaya. There are several opportunities for agribusiness at various phases of the farming process. Among them are the creation and manufacturing of natural manures and pesticides, vermicompost, biopesticides, value addition, output processing, marketing, distribution, logistics, soil testing and greenhouse development. The study further highlights that agribusiness entrepreneurship will boost farm output and profitability which will further creates new prospects in the agricultural sector. Understanding the importance of agribusiness, the government launched a number of initiatives and training courses to support agribusiness. More advantageous programs should be launched by the government to encourage agribusiness. Especially for those living in rural areas, agribusiness is a sensible way to lessen the issues of

unemployment, underemployment, and disguised unemployment. It significantly reduces rural poverty and increases wealth.

Kimoso et al., (2020) study determined that agribusiness is a significant endeavor for women and young people since it provides a variety of advantages in terms of the economy, society, and environment. Many young people and women now have the chance to think creatively and develop sustainable means of making a living from the production of PPT products, which includes harvesting, processing, packing, distribution, retailing, and marketing them throughout the whole product value chain, thanks to the UPSCALE project and the PPT farming system. This works to achieve food security by lowering unemployment, poverty, and dependency ratios. The production of vines and seeds for desmodium has also welcomed agripreneurship throughout the region. Furthermore, the PPT production system is a climate-smart tactic that gives farmers the chance. The production of vines and seeds for desmodium has also welcomed agripreneurship throughout the region. Furthermore, the PPT production system is a climate-smart tactic that gives the farmers a chance to participate in ongoing conversations about organic farming, sustainable food production systems, and more general regenerative agricultural practices in the area.

Kumar and Kumar (2019) study highlights that looks at long-term changes in employment and future growth in rural areas, modern agriculture as output growth and employment, and the adaptation of new agricultural models potential to deal with the fundamental problems facing Indian agriculture. The evolving trends in India's agriculture sector in recent year recommended course of action for the country's rural economy's future growth. One significant driver of economic growth is thought to be the shift in output and employment from agriculture to more productive non-farm sectors. The majority of economic research on rural India has concentrated on changes in employment in rural areas in none farm sector. As India's excessive reliance on agriculture for employment, planning and execution are necessary for the development of entrepreneurial programs. The best possible option for the rural population to find employment opportunities seems to be the development of agripreeurship in rural industries.

Agripreneurship or entrepreneurship in agriculture has meandered its way slowly and gradually to rural farmers ,Sah et al. (2009) highlighted how developing agripreneurs could alleviate various problems in agriculture, including reducing rural-to-urban migration and supporting industrial development in rural areas.Emphasis on agripreneurship and rural-urban linkages have often been mentioned by theorists and researchers and it maybe highlighted that Acharya and Malakar (2015) rightly remarks how agripreneurship enhances productivity, reduces costs, diversifies income, and creates employment opportunities for rural and urban populations.Matrix (2015) discussed that Agri-entrepreneurs assess other job opportunities and impact of that to their family thus this led them to choose to start their own business.

It is noteworthy that entrepreneurship and risk factors are entwinded among rural farmers, but the importance and its contribution towards development for rural areas and the country as a whole cannot be neglected.It also provides impetus to other sectors in the economy thus, Bilgrami (1996) highlighted the unique fusion of culture, profession, and business in agriculture, making it distinct from other sectors. However, Roy and Kuri (1998) pointed out that entrepreneurship is often lacking among local populations, primarily due to high risks and transaction costs. This lack of entrepreneurship slows the growth of local agripreneurs for which large number of Indian farmers still remains poor.

Kumar etal., (2019) concluded that ICT may be used effectively for a plethora of activities ranging from creation of entrepreneurial skills to a successful rural development.The use of ICT and Knowledge management in the context of rural development has taken a great start from the last one decade and the time is not very far when it will serve as alight house for agripreneurship and rural development in the entire world.

The review of literature also reveals the importance of value-added products in order to fetch in additional income for the agripreneurs thus, Vogel (2012) highlighted the importance of value-added products for agri-entrepreneurs, bringing extra income and supporting local economy and regional economy. But Doshi (2016)

reported that the local people are not supporting the organic farmers as they prefer non organic for consumption. Consumers tend to spend least amount of money for family consumption while organic crops are costlier than conventional grown crops. Ganesan and Nair(2018) asserted that the frequent occurrence during 1960's was hunger and poverty, in the era of organic farming, forcing our government to seek and accept food aid from foreign countries. And further added that being organic state, Sikkim became the burden on Indian agricultural economy.

Although there are many limitations in the growth and development of agricultural products, yet it maybe assumed that Organic Producers maybe encouraged by enhancing their income through enhancing income through marketing. Kurian (2007) shared insights from Kerala, where marketing activities boosted farmers' income through farmer markets facilitated by a council. Through the review of literature, the study finds that there is dearth of access to loans and distribution networks. It may be cited that Lingelbach et al. (2005) noted the limited availability of loans for agripreneurs in developing countries and the importance of distribution networks. Sema (2006) emphasized the need for coordination between financial institutions, governments, and farmers to promote organic farming and marketing.

Various discussions on leveraging information technology have also been held and it may be cited that Dalberg (2013) discussed the use of Information Communications Technologies (ICTs) across the agricultural value chain to improve research, access to inputs, production, marketing, distribution, retail, and traceability. Further, the idea of integrated use of Information Communications Technologies (ICTs) for marketing has played a vital role and Qaisar (2013) emphasized that the integrated use of ICTs can improve marketing value for farmers, providing hope for better marketing arrangements.

Creating a global ambience amongst consumers and producers expands the scope of development for both the organic crops consumers and producer's .It is commendable that Elliot (2013) pointed out the opportunities for agri-entrepreneurs in developing countries to cater to consumers in developed nations who are willing to

pay more for sustainable products. Verma et.al.,(2019) concluded that Agripreneurship is the call of hours to make agriculture more attractive and profitable business enterprise.Agriculture provides great scope for entrepreneurship and this can be harnessed only by effective management of agriculture elements such as –soil, seed, water and market needs.

2.3. Conclusion

In conclusion, the literature on agripreneurship and organic crop marketing underscores the multifaceted challenges, opportunities, and transformative potential within the agriculture sector. It highlights the critical role of entrepreneurship, technology, marketing infrastructure, and consumer awareness in shaping the future of sustainable agriculture. Further it illustrates building a strong framework that connects the consumers and producers in order to enhance social connectivity, and thereby promote the income of the agripreneurs. This structured narrative provides a coherent overview of the literature on agripreneurship and organic crop marketing, allowing readers to follow the story of challenges, solutions, and the evolving landscape of agricultural entrepreneurship. Precision farming techniques can be employed by agripreneurs, to boost crop productivity. Innovative storage facilities and improved supply chain infrastructure could be implemented by new entrepreneurial ventures to lessen massive crop waste. In India, crops worth $14 billion are lost annually. The integration of remote sensing (which can provide biogeophysical data for agricultural crop monitoring and agro-metadvisory services), the Internet of Things (IoT-based smart farming is a system built for monitoring crop fields with the help of sensors that provide data on temperature, soil moisture, light, and humidity), and geographic information systems (GIS) could be adopted by Indian agripreneurs as a model for successful agricultural tech ventures from other neighboring developing countries.

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CHAPTER -3

POLICY INTERVENTION AND GOVERNMENT SUPPORT

3.1 Introduction

Organic crop farming has slowly and gradually creates a pathway into Indian agriculture and at the same time with the intervention of government, organic farming is practiced even in Mizoram. The input cost of agricultural pattern and increasing use of inorganic fertilizer and pesticides damages the environment and poses a threat to human health. Earlier organic farming and its products or output were meant mainly for exports. But at present, the demand for organic products within our country and Mizoram also increases to a certain point. The increasing demand requires the farmers to meet the specifications or quality anticipated of the consumers or buyers. This chapter mainly presents the organizational structure of institutional supports for organic farming in India and Mizoram. It analyses the awareness of agripreneurs from the selected districts with respect to different government schemes, the extent of benefit of the schemes granted, financial problems of agripreneurs, availability of bank loans before and after agripreneurship and the amount the agripreneurs from each districts actually receives. It further analyses about loans received from Non Banking Institution and the assistance the argipreneurs receives while applying loans; the problems after loans granted, the extent of helpfulness of bank loans for the agripreneurship and the mode of transportation to their farms and the different types of marketing organic crops available in different districts and the level of Input; financial assistance received and also the availability of value chain marketing in the selected six districts. The agripreneurs from each district about their involvement and participation in seminars, conferences dedicated for them and also dealt with the training, hand holding, received through service provider and availability of value addition and processing unit in different districts are also analysed. The different types of training programme, helpfulness and details of the programme organized for the agripreneurs from the selected districts and the motivation received by agripreneurs are presented in this chapter.

3.2 Institutional Supports for Organic Crops Farming in India

Majority of the Indian farmers are holding a small plot of land and lack collective action for their future and their experiences and exposure to support system are very much limited. Institutions are obligatory for aggregating the produce of the small and marginal organic farmers and enhancing their bargaining power is also crucial as individual and small marketing of the products weakens the farmers bargaining position and as a result they are frequently exploited by the traders. The capability and tendency of farmers to engage in entrepreneurial behaviour is a key explanation of the different patterns of responses within the sector. This chapter is expected to address the tasks confronted by agripreneur in organic crops and how they can solve in a budget and within effective timing. The Government of India takes a lot of initiatives in promotion and regulation of Organic Agriculture.

3.2.1 National Programme on Organic Production (NPOP)

The Ministry of Commerce and Industry, Government of India launched a National Programme on Organic Production (NPOP) in the year 2000, later formally notified in the month of October 2001 under the Foreign Trade(Development and Regulation) Act ,1992 (FTDR Act). This programme provides an institutional mechanism for organic production standards, system criteria, procedures for accreditation for inspection and certification bodies (Deevi&Biswas, 2011).

The functioning structure at the NPOP was developed and employed by the Government of India through its Ministry of Commerce and Industry as the Apex body. The Top body form National steering Committee for NPOP.

- **National Standards for Organic production (NSOP) and Committees on National Accreditation Policy Programme (NAPP)**: To advise National Steering Committee, committees such as National Standards for Organic Production (NSOP) and Committees on National Accreditation Policy Programme (NAPP) are formed for national organic production standards and certification.
- **The National Steering Committee**: The National Steering Committee's main task comprises evaluation and accreditation of certification

programmes, formulating procedures for evaluation and accreditation of inspection and certification agencies.

- **The Evaluation Committee**: The Evaluation Committee appointed by the National Accreditation Committee evaluate the eligible inspection and certification agencies implementing certification programme. Based on their recommendations Inspection and Certification Agencies will be accredited by the National Accreditation Body. There are also Inspectors whose main task is to certify the organic status of the products and operations, specifying their conditions and recommendations.

3.2.2 National Project on Organic Farming(NPOF)

In the year 2000, The Government of India launched a Central Sector Scheme "National Project on Organic farming" during the $X^{th}$and XI^{th}Five Year Plan and funds were allocated .The main objectives of NPOF are capacity building,financial supports,human resource development, field demonstration, market development , domestic standards development , setting up model organic farms, support new initiatives on technology for organic farming, conduct of awareness programmes and controlling quality of bio and organic fertilizers.National level efforts were aimed to enable the successful adoption of organic farming in India. Especially in northeastern region of India, where the region has geographical advantages in organic farming, the regions are not too polluted and suitable for organic cultivation. Thus, Mizoram which is one of the northeastern states of India is having a good base set for organic farming.

3.2.3 Mission Organic Value Chain Development for North Eastern Region (MOVCDNER)

A central sector scheme was launched for implementation in the north eastern states during the 12^{th} plan period. The scheme main aim is development of certified organic production in a value chain mode to tie cultivators with buyers and to support the progress of the entire value chain from input, seeds, certification, and creation of facilities, collection, aggregation, processing, marketing and brand building initiative.

The Scheme comprises mission objectives such as:

i. To develop crop commodity specific organic value chain and address gaps in organic crop production, wild crop harvesting, organic livestock management and processing handling and marketing of organic agricultural products.
ii. Development of crop specific organic production clusters with necessary infrastructural, technical and financial support.
iii. To facilitate partnerships between farmers and organic businesses: Local enterprises and / or Farmer Producer Companies based on back-to-back long-term trade relations with clients in domestic and export markets.
iv. Provision of environment for project initiatives and development programs with necessary support for organic value chain development and create market access.
v. Empowerment of producers with program ownership by organizing them into FIGs with the final aim to federate into farmer producer organizations/ companies.
vi. Replacement of conventional farming/subsistence farming system into local resource based self-sustainable, high value commercial organic enterprise.
vii. To develop commodity specific commercial organic value chain under integrated and concentrated approach with end-to-end facilities for production, processing, storage and marketing.
viii. To develop organic parks/zones with facilities for collection, aggregation, value addition, processing, storage and market-linkages for specific commodities requiring capital intensive technology.
ix. To develop North East Region products as brands/labels through brand building and facilitating stronger marketing access under the ownership of growers' organizations/ companies.
x. Creation of state specific lead agency (Organic Commodity Board or Organic Mission) for coordinating, monitoring, supporting and financing the development and operationalization of entire value chain.

3.2.3.1 Project Strategies

There are project strategies such as mobilization of commodity clusters, capacity building, handholding, creation of infrastructure for production, training, packaging, certification and linkage of farmers with local enterprises, post harvest process and marketing .Setting up of lead agencies at Central and state government and partnership value chain supporting agencies and sharing of knowledge through service providers and building conducive atmosphere for better market.

3.2.3.2 Mission Goals

i. To install dedicated institutional systems at centre and under each of the state for development and promotion of organic farming.
ii. To create at least one to two replicable end-to-end organic value chain models in each of the state with the integration of growers, handlers, processors, and market facilitation agencies.
iii. To empower 30-50 thousand farmers of northeastern region through the creation of about 100 farmer producer companies and equip such companies with full value chain under its ownership.
iv. To convert subsistence farming to commercial organic farming with end-to-end facilities.
v. To make Northeastern states as major suppliers of organic commodities for national and international markets.

3.2.3.3. Mission Implementation Structure

At state level the mission are implemented by the State Level Executive Committee (SLEC) and executed through a designated state Lead Agency in the form of state “Organic Commodity Board” or “Organic Mission”. The State Lead Agency shall function under the overall supervision of the Department of Agriculture/ Horticulture and State Lead Agency shall be manned by professional experts on contract.

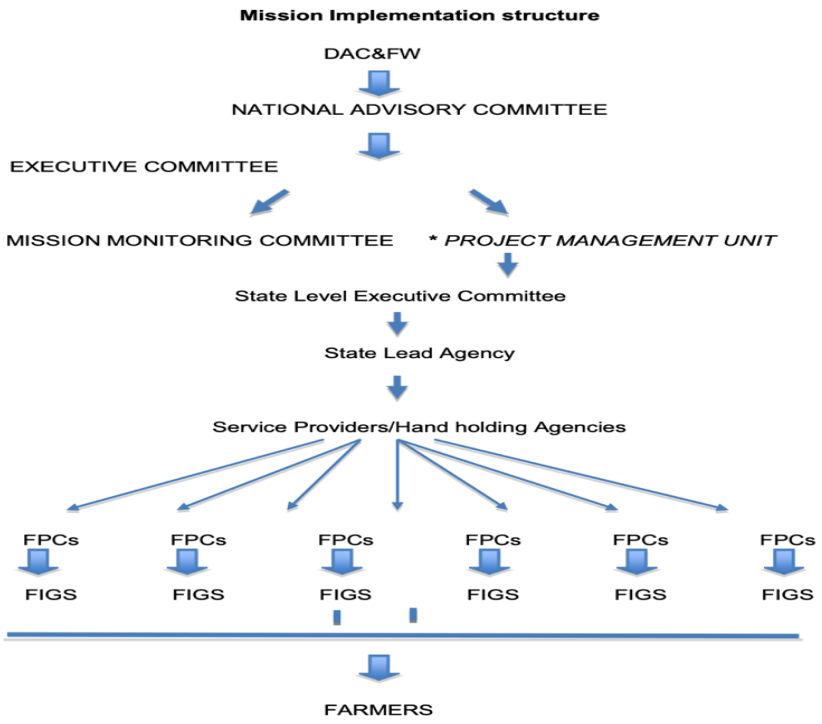

Figure 3.1: Mission Implementation Structure at National Level

3.2.4 National Advisory Committee

The National Advisory Committee for Mission Organic Value Chain for North Eastern Region (NAC-OVCNER) is the overall policy making body giving direction and guidance to the Mission and they monitor and review its progress and performance. And they are empowered to lay down implementation policies, operational guidelines and its amendment, flexibility of the schemes and approval of new components within the budget.

3.2.4.1 Executive Committee (EC)

The Executive Committee of the Mission Organic Value Chain Development for North East Region is responsible for the effective implementation of the Mission.They are empowered to review and apprise the National Advisory Committee(NAC) and consider the state action plan and approve proposal/projects of the state Lead Agency for receiving the funds.

3.2.4.2 Mission Monitoring Committee (MMC)

Mission Monitoring Committee is the overall monitoring and evaluation committee. The MMC is empowered to constitute monitoring teams, review the progress and state of implementation and requisition the services of technical experts in consultation with the Joint Secretary (INM).

3.2.5 Mission Implementation Structure at State Level

3.2.5.1 State Level Executive Committee (SLEC)

A State level executive committee are constituted by respective State Governments under the Chairmanship of Chief Secretary and comprising of representatives from departments and stakeholders, including departments of Animal Husbandry, Dairying & Fisheries, Horticulture, Agriculture Marketing, Food Processing Industries, Rural Development, Skill Development and Micro, Small & Medium Enterprises. SLEC are the sole responsible body for effective implementation of the mission objectives, judicious utilization of sanctioned funds and to ensure necessary credit flow for infrastructure creation. And also responsible for the creation/ nomination of State Lead Agency and provide necessaryauthorization/ sanction for implementation and utilization of funds through state Lead Agency.

3.2.5.2 Mission Organic Mizoram (MOM)

The State Lead Agency- Mission Organic Mizoram (MOM) is an independent agency funded by the central government .And it is the nodal agency for implementation of mission components and for ensuring effective realization of mission goals in Mizoram.

Responsibilities of state lead agency include the following:

i. Receiving the funds as per sanction from DAC&FW.
ii. Planning the implementation process and identification of commodities, clusters, area etc.

iii. Hiring of resource agencies for FPC making and for facilitating training, hand holding, ICS management, documentation and certification of crop production.
iv. Facilitating seeds/ planting material and input availability.
v. Supervision and monitoring of field activities for ensuring timely completion in time bound manner.
vi. Facilitating tie ups with commercial enterprises and entrepreneurs for setting up of value addition infrastructure.
vii. Facilitating financial institutions for credit facilitation and subsidy disbursal.
viii. Roping in professional agencies for activities like branding, labeling, packaging, publicity and certification of processing units.
ix. Organize seminars/ conferences, workshops, Buyer-seller meets, Auction meetings, festivals.

3.2.5.3 Submission of Comprehensive Action Plan

A comprehensive Action Plan for developing end-to-end value chain market keeping and funds for associating with this scheme are prepared by the states. The states consider identification of crops having market potential, matching of production and minimum capacity, development of commercially viable production clusters, where farmers/ growers are grouped into Farmer Interest Groups (FIG) at village level and groups are federated into farmer producer companies (FPC) at District or state level.

3.2.5.4 Sanction and Fund Flow Mechanism

Preparation of comprehensive project proposal for making commodity specific end-to-end value chain which is to be approved by the State Level Executive Committee will be submitted to the Project Monitoring Unit (PMU).

3.2.5.5 Value Chain Production

Developing crop specific organic production clusters and clusters development and formation of Farmer Producer Organizations/ Companies is an important mission component of MOVCDNER.

3.2.5.6 Assistance for on-farm input production unit and off-farm inputs

Registered farmers of FIGs/FPCs are assisted for creation of on-farm input production infrastructure such as liquid manure tanks, NADEP compost tanks, botanical extracts etc. The assistance available is up to maximum of 2 ha per beneficiary. One time assistance of **Rs. 3750 per ha** (up to maximum of **Rs. 7500/- for 2 ha per beneficiary**) will be provided as direct benefit transfer on verification of infrastructure created. The funds for the component are being given in three year, may be availed in first year if needed, under intimation to Government of India.

3.2.5.7 Off-farm inputs -bio-fertilizers, bio-pesticides and neem-cake.

One time assistance of Rs**. 3750 per ha** area will be provided to the farmers registered under the program in the first year for procurement of biofertilizers, biopesticides and neem cake etc. Maximum assistance per beneficiary will be restricted to 2 ha (up to Rs 7500 per beneficiary). Assistance shall be provided as direct benefit transfer on verification of input purchases.

3.2.5.8 Assistance for quality seed and planting material

To ensure quality and varietal uniformity, registered farmers will be provided with the quality seed/ planting material. Assistance for quality seed/ planting material will be limited to 50 percent of actual seed/ planting material cost limited to **Rs17500/ha(50percent of maximum Rs 35,000/-).** For effective implementation state Lead Agency can prepare a comprehensive production and supply plan and facilitate farmers with timely supply of seed/ planting material. The funds for the componentare being given in three years, may be availed in first year , if needed, under intimation to GOI.

3.2.5.9 Support for extension services, input facilitation, training handholding and certification at production stage

To facilitate lead agencies for creation of input facilitation service centre and agri- machinery custom hiring centre at commodity cluster / FPC level a sum of Rs**. 10.00 lakh/FPC** have been provided for creation of need-based facilities depending upon the crop and activities being undertaken.

3.2.5.10 Value Chain Packaging, Storage and Transportation

The following are the schems that can be availed**;**

- **Integrated pack house**

The scheme provides for setting up of integrated pack house as subsidiary component of collection, aggregation and grading units and integrated processing units. Setting certain guidelines, assistance to FPCs/FPOs/FIG isrestricted to 75percent of TFO or Rs 37.50 Lakh, whichever is less. Assistance to private entrepreneurs shall be 50 percent of TFO or maximum of Rs 37.50 Lakh, whichever is less as credit linked subsidy.

- **Transportation/ 4 wheeler up to TFO of 12 lakh (50percent)**

Assistance for transportation facilities/ equipment will also be subject to the conditions mentioned at above. Assistance to Farmer Producer Companies and private entrepreneurs both will be restricted to 50 percent of TFO restricted to Rs 6.00 lakh, whichever is less. This component should be available only to the FPCs or linked with the processing units. It should not include private entrepreneur with no linkage to FPCs.

- **Cold Chain Component**

Refrigerated transport vehicles and pre-cooling/ cold stores/ ripening chambers etc constitute for cold chain infrastructure and should be developed as integral part of integrated pack house. State lead agencies need to ascertain the need according to the commodities and quantities being targeted. Extant specifications

standards and protocols on cold storage and cold-chain components will be adhered to while approving cold storage projects.

- **Cold chain component -Pre-cooling/ cold stores/ ripening chambers.**

Assistance for Refrigerated transport vehicle and pre-cooling/ cold stores/ ripening chambers etc. also is subjected to the conditions mentioned at B3.1 above and at Cold chain component B.3.3 above. However Assistance to FPCs/FPOs/FIGs/private entrepreneurs will be restricted to 75 percent of TFO or Rs. 18.75 lakh, whichever is less, separately for both refrigerated vehicle and cold storages etc.

3.2.6 Role of North Eastern Regional Agri-Marketing Corporation Limited (NERAMAC):

NERAMAC are providing marketing and logistic assistance in terms of aggregation and transportation of organic produce/products also is responsible for providing fee based services as Project Management Consultant including DPR preparation works on the request of the SLA. As part of NE organic Bazaar initiative, the Corporation provided the marketing and logistic support in association with SLA including utilization of their existing infrastructure and E-auction platform.

3.3 Supports Availed by Agripreneurs

3.3.1 Level of Bank loans availed by agripreneurs

The table 3.1 presented the distribution of loan amounts availed by individuals in different districts, categorized into various ranges. The district wise level of bank loans avails are as follows. In less than Rs. 10000, there are 3 (0.5 percent) agripreneurs, while in Rs. 10000 – 30000 there are 5 (0.9 percent) agripreneurs and in Rs. 30000 – 50000 there are 13 (2.4 percent) and in above Rs. 50000 there are 10 (1.8 percent) and majority of them i.e 520 (94.4 percent) agripreneurs do not disclose the level of bank loans.

Table 3.1 : Bank loans availed by agripreneurs

District	<Rs. 10000	Rs. 10000-30000	Rs. 30000-50000	Rs.50000 and above	Not disclosed	Total
Aizawl	1(1.3)	0(0.0)	4(5.0)	0(0.0)	75(93.8)	80(100)
Lunglei	1(1.2)	1(1.2)	3(3.7)	1(1.2)	75(92.6)	81(100)
Champhai	0(0.0)	1(.8)	1(.8)	3(2.5)	116(95.9)	121(100)
Kolasib	1(1.8)	1(1.8)	2(3.6)	2(3.6)	49(89.1)	55(100).
Serchhip	0(0.)	0(0.0)	0(0.0)	0(0.0)	54(100)	54(100)
Mamit	0(0.0)	2(1.3)	3(1.9)	4(2.5)	151(94.4)	160(100)
Total	**3(.5)**	**5(.9)**	**13(2.4)**	**10(1.8)**	**520(94.4)**	**551(100)**

Source: Field Survey

Note: The figures in the parenthesis indicate the percentage

Aizawl district shows that a significant majority of agripreneurs i.e. 75 (93.8 percent) agripreneurs do not disclose the level of loan availed, while very few individuals i.e. Only 1 agripeneur (1.3 percent) in below Rs 10000.00 category, 4 agripreneur (5.0 percent) in Rs 30000- Rs 50000.00 avails loans. These indicate a relatively higher economic capacity or need for larger loans in this district.

In Lunglei district, a balanced distribution is observed, with loans across all categories. The highest percentage of loans falls in the Rs.30000 to 50000.00, 3 (3.7 percent) respondents from the district. 92.6 percent (75 respondents) of agripreneurs not disclose the level of bank loans. Reflecting a diverse economic landscape where borrowers have varying financial requirements. But Champhai district has a unique pattern. While a substantial proportion 116 agripreneurs (95.9 percent) does not disclose about availed loans. In the Rs. 50000 and above category, there is an interesting concentration of borrowers 3 agripreneurs (2.5 percent) in the Rs. 30000 - 50000 range, which is higher compared to the other districts. This could indicate specific financial needs of the residents in this district.

At the same time Kolasib district portrays a balanced distribution similar to Lunglei. Notably, a considerable number of individuals i.e. 49 (89.1percent) not availed loans in the Rs 30000 to Rs. 50000 and above Rs 50000.00 there are 2 (3.6 percent) farmers in both the category. This suggests a demand for larger loans in this district as well. Serchhip district stands out with no loans availed by all 54 agripreneurs (i.e, 100 percent) and this might be due to the absence of agripreneurs or specific conditions, further investigation is necessary to understand this anomaly.

Whereas Mamit district exhibits a diverse loan distribution, with a significant majority, 151 (94.4 percent) agripreneurs not disclose and In Rs. 50000 and above categories there are 4 (2.5 percent) agripreneurs who avails loan. There are 3(1.9 percent) agripreneurs who avails loan in Rs 30000 to Rs 50000.00 category, while there are 2 (1.3 percent) agripreneurs who avails loan in Rs 10000-Rs 30000.00 category. This suggests a need for moderate to larger loans in this district.

The analysis from the table 3.6 loan preferences and needs across the districts. While some districts predominantly depicts varied larger loans (Rs. 50000 and above), others show a more balanced distribution across the loan categories. The distribution reflects the economic dynamics and borrowing patterns in each district, possibly influenced by local economic activities, cost of living, and individual financial situations. Further research and contextual analysis are essential to draw more comprehensive conclusions and inform policy decisions.

3.3.2 Sources of Loans avails from Other Sources

The table 3.2 provides an overview of loans obtained from non-banking institutions across various districts. Non-banking institutions include money lenders, NGOs, and loans from relatives and friends. The data highlights the distribution of these loans within each district and their percentage contribution to the total loan landscape. Out of 551 agripreneurs, only 1 (0.2 percent) avails loan from Money lender, while 4 (0.7 percent) agripreneurs avail loans from NGO, and 25 (4.5 percent) avail loans from Friends and relatives, while 521 (94.6 percent) agripreneurs does not availed loans from the mentioned sources and pull the funds from self account or family accounts.

Table 3.2 Sources of Loans Avails From Non Banking Institution

District	Money Lender	NGO	Relatives & Friends	Self/ Family	Total
Aizawl	0(0.0)	2(2.5)	0(0.0)	78(97.5)	80(100)
Lunglei	0(0.0)	1(1.2)	2(2.5)	78(96.3)	81(100)
Champhai	1(.8)	0(0.0)	20(16.5)	100(82.6)	121(100)
Kolasib	0(0.0)	1(1.8)	0(0.0)	54(98.2)	55(100)
Serchhip	0(0.0)	0(0.0)	0(0.0)	54(100)	54(100)
Mamit	0(0.0)	0(0.0)	3(1.9)	157(98.1)	160(100)
Total	**1(.2)**	**4(.7)**	**25(4.5)**	**521(94.6)**	**551(100)**

Source : Field Survey

Note: The figures in the parenthesis indicate the percentage

In Aizawl district, 78 (97.5 percent) agripreneurs do not avail any loan from sources other than Banks, while only 2 (2.5 percent) agripreneurs availed loan from NGO. In Lunglei district, no loans availed agripreneurs dominated i.e. 78 agripeneurs (96.3 percent), with a minor share in Loans from NGOs 1 (1.2percent) and money lenders (0.0 percent). This suggests a trend of informal borrowing within social circles.

Champhai district displayed a distinct pattern, with a significant proportion i.e. 20 (16.5 percent) agripreneurs obtained loans from relatives and friends. No Loans avail agripreneurs are 54 (82.6 percent), whereas money lenders played a minor role 1 (1.8 percent) farmer avail loans. This district seems to have a higher engagement with NGOs, possibly indicating efforts towards financial inclusion and development. Kolasib district also had a 55 (98.2 percent) agripreneurs with no loan avails, while loans from NGO 1 (1.8 percent) and Money Lender (0.0 percent) played minor roles in the borrowing landscape. Serchhip district exhibited a distint pattern where no loan avails agripreneurs are 54 (100 percent) indicating a strong financial system or financial exclusion is more in the district. Mamit district showcased a significant presence of no loans avails agripreneurs i.e. 157 agripreneurs

(98.1 percent), with a smaller but notable contribution from loans obtained through NGOs are 3 (1.9 percent) agripreneurs. Money lenders had no presence in this district.

The analysis shows that loans from non-banking institutions showed a varied distribution across districts. The reliance on informal sources, such as relatives and friends, was prominent across all districts, suggesting a strong social fabric for financial assistance. While NGOs played a substantial role in Champhai and Mamit districts, money lenders had minimal involvement overall.These district-wise variations in loan sources underline the diverse financial ecosystems present in the region. Efforts to enhance access to formal credit channels, promote financial literacy, and strengthen local support networks could potentially lead to a more balanced and sustainable borrowing landscape across all districts.

3.6.10: Details of Bank from which Loans are availed by Agripreneurs

This section highlights the details of banks from which loans are availed by agripreneurs. Out of 551 agripreneurs, 33 (6 percent) agripreneurs mentioned the details of bank from which they avail loans. While 518 (94 percent) agripreneurs does not disclose or not avail loans.The reason behind the high percentage of no loan could be due to the fact that the agripreneurs are pulling funds from their self account or family accounts.

Table 3.3: Details of the Bank from which Loans Are Availed by Agripreneurs

Name of districts	SBI	MRB	CANARA	Not Avail Loan	Total
Aizawl	3(3.8)	2(2.5)	0(0.0)	75(93.8)	80(100)
Lunglei	2(2.5)	3(3.7)	1(1.2)	75(92.6)	81(100)
Champhai	3(2.5)	2(1.7)	0(0.0)	116(95.9)	121(100)
Kolasib	2(3.6)	4(7.3)	0 (0.0)	49(89.1)	55(100)
Serchhip	0(0.0)	0(0.0)	0(0.0)	54(100)	54(100)
Mamit	3(1.9)	6(3.1)	0(0.0)	151(94.4)	160(100)
Total	**13(2.4)**	**17(3)**	**1(.2)**	**520(94.4)**	**551(100)**

Source : Field survey

Note: The figures in the parenthesis indicate the percentage

In Aizawl district, out of 80 agripreneurs, 75 (92.6 percent) agripreneurs does not avail loan before and after agripreneurship. Only 3 (3.8percent) agripreneurs avails loan from State Bank of India and 2 (2.5percent) from Mizoram Rural Bank and 75 (93.8 percent) agripreneurs does not avail loan before and after agripreneurship.While from Lunglei district, out of 81 agripreneurs, only 2 (2.5 percent) avails loan from State Bank of India and 3 (3.7 percent) from Mizoram Rural Bank, and 1 (1.2 percent) availed loan from Canara Bank.

In Champhai district, out of 121 agripreneurs in the district, only 3 (2.5 percent) avail loans from State Bank of India and 2 (1.7percent) avails loan from Mizoram Rural Bank at the same time 116 (95.9 percent) agripreneurs from the said district does not avail any loan from banks. In Kolasib district, out of 55 agripreneurs from the district, 49 (89.1 percent) do not avail loan before and after agripreneurship. Only 2 (3.6 percent) avail loans from State Bank of India and 4 (7.3percent) from Mizoram Rural Bank From Serchhip district out of 54 agripreneurs no one avail loan

before and after agripreneurship. From Mamit district agripreneurs out of 160 agripreneurs, only 3 (1.9 percent) avails loan from State Bank of India and 6 (3.1percent) avails loan from Mizoram Rural Bank. 151 agripreneurs (94.4 percent) from the said district not avail any loans from banks. The data provided shows the distribution of loans availed by various districts from different banks, primarily SBI, MRB, and CANARA, in the region. A comprehensive analysis of this loan distribution reveals notable trends and patterns.

Across the districts, SBI seems to be the most popular choice for availing loans among agripreneurs, with a total of 13 (2.4 percent) loans disbursed to agripreneurs. MRB follows closely behind with 17 (3 percent) loans, while CANARA has the lowest share with only 1 (0.2 percent) loan disbursed. This distribution indicates a higher reliance on SBI and MRB for financial support compared to CANARA. A closer look at individual districts reveals interesting insights. Aizawl, Lunglei, and Champhai exhibit a preference for SBI, which has the highest loan share in these districts. Kolasib and Mamit, on the other hand, show a significant inclination towards MRB. It's noteworthy that Serchhip district doesn't have any loans availed, indicating potentially different economic dynamics in that area.

In terms of loan percentages, SBI's dominance is particularly evident in Aizawl, Mamit, and Champhai districts, where it constitutes the majority of percent of the loans disbursed to agripreneurs. Similarly, MRB's influence is most pronounced in Kolasib and Lunglei. CANARA, though having a minimal presence, plays a role in Lunglei and Kolasib. In conclusion, the loan distribution across districts and banks in the region underscores the prominence of SBI and MRB as the primary sources of financial support.

3.3.4 Means of transportation to farm works

This section mainly dealt with the means of transportation to their farm work. The farmers' work place or their farm usually located in distant places from their dwelling places. Thus, means of transportation are an important factor for daily work. Table 3.4 shows the means of transportation to farm work by agripreneurs. Out

of 551 agripreneurs, 124 (22.5 percent) use their own vehicle for farming, while 2 (0.4 percent) use bus service as a means of transportation and 3 (0.5) agripreneurs utilize Truck for transportation use while 18 (3.3 percent) uses Sumo/Maxi Cab service for means of transportation, and a large majority of farmers i.e. 404 (73.3 percent) have no alternative but to walk to their farm.

Table 3.4: Means of Transport to Farm Work

District	Own vehicle	Bus	Truck	Sumo	On foot	Total
Aizawl	10(12.5)	0(0.0)	0(0.0)	3(3.8)	67(83.8)	80(100)
Lunglei	22(27.2)	1(1.2)	0(0.0)	0(0.0)	58(71.6)	81(100)
Champhai	8(6.6)	0(0.0)	0(0.0)	0(0.0)	113(93.4)	121(100)
Kolasib	12(21.8)	0(0.0)	2(3.6)	2(3.6)	39(70.9)	55(100)
Serchhip	41(75.9)	0(0.0)	0(0.0)	0(0.0)	13(24.1)	54(100)
Mamit	31(19.4)	1(.6)	1(.6)	13(8.1)	114(71.3)	160(100)
Total	**124(22.5)**	**2(.4)**	**3(.5)**	**18(3.3)**	**404(73.3)**	**551(100)**

Source: Computed from primary data

The district wise performances maybe highlighted as follows.

From Aizawl district, 10 (12.5 percent) agripreneurs use their own vehicle for transportation, while 3 (3.8 percent) utilised sumo service for transportation and 67 (83.8 percent) do not use any means of transportation that they have to walk to do their farm work. Whereas from Lunglei district, 22 (27.2 percent) agripreneurs use their own vehicle for transportation, 1 (1.2 percent) use bus service and 58 (71.6 percent) have to walk to do their farm work. In case of Champhai district, 8 agripreneurs (6.6 percent) use their own vehicle for transportation to their farm work, while the rest 113 agripreneurs (93.4 percent) have to walk for their farmwork. In case of Kolasib district, 21.8 percent (12) agripreneurs use their own vehicle for farm work and 3.6 percent (2) are using Truck for their farm work and 3.6 percent (2) utilize sumo service for farm work ,while the rest of the agripreneurs i.e.70.9 percent (39) use no other means of transportation, but to walk themselves to reach their farm. In case of Serchhip district, 75.9 percent (41) agripreneurs utilize their own vehicle for their farm transportation and 21.4 percent (13) agripreneurs have to walk to reach their farm.

Whereas in Mamit district, 19.4 percent (31) agripreneurs were using their own vehicle for transportation to their farm, and 0.6 percent (1) use Bus service for transportation and 0.6 percent (1) use truck for transportation and 8.1 percent (13) uses sumo service for transportation to their farm and 71.3 percent (114) agripreneurs have no other means of transportation but to walk themselves to their farm. Thus, out of 551 agripreneurs from the six districts, 22.5 percent (124) use their own vehicle for transportation and 0.4 percent (2) agripreneurs use Bus service and 0.5 percent (3) person use Truck for transportation and 3.3 percent (18) uses Sumo service for transportation while 73.4 percent (404) agripreneurs have to walk to towards their farm.

In summary, the analysis from the table 3.4 reveals a varied transportation landscape for agripreneurs across the districts. While walking remains a common mode of commuting to farms, there are instances of own vehicle usage, particularly in Lunglei and Mamit. Traditional methods dominate in some districts, while modern vehicles are embraced in others, indicating a dynamic interplay between tradition and modernity in agricultural transportation practices. The insights provided by this analysis can aid policymakers and stakeholders in understanding the transportation preferences of agripreneurs, which can inform strategies for rural developmentand infrastructure enhancement.

3.3.5 Types of Marketing Organic Crops

The respondents from the six districts optimally utilised every available resources and market within their domain. This section also highlights the various irregular unorganized vegetable especially organic products. Table 3.5 shows that out of 551 agripreneurs, 256 (46.5 percent) sell their products to farmers market ,while 37 (6.7 percent) sell their products to retail trader and 107 (19.5 percent) sell their products to wholesale market and 15 (2.7 percent) agripreneurs sell their products on farm retail, while 33 (6.0 percent) agripreneurs sell their bulk commodities to processor and 88 (16.0 percent) sell their produce to contract buyers and 15 (2.7 percent) agripreneurs sell their produce to any convenient market.

Table 3.5: Type of Marketing Organic Crops

Districts		Farmer Market	Direct to Retail	Whole sale market	On Farm Retail	Bulk commodities to Processor	Contract buyers	Others	Total
Aizawl	Nos.	63	3	10	3	0	1	0	80
	%	78.8	3.8	12.5	3.8	0.0	1.3	0.0	100.
Lunglei	Nos.	30	3	15	3	16	12	2	81
	%	37.0	3.7	18.5	3.7	19.8	14.8	2.5	100
Champhai	Nos.	62	10	21	8	10	6	4	121
	%	51.2	8.3	17.4	6.6	8.3	5.0	3.3	100.
Kolasib	Nos.	24	7	17	0	0	4	3	55
	%	43.6	12.7	30.9	0.0	0.0	7.3	5.5	100.
Serchhip	Nos.	3	9	41	0	0	0	1	54
	%	5.6	16.7	75.9	0.0	0.0	0.0	1.9	100.
Mamit	Nos.	74	5	3	1	7	65	5	160
	%	46.5	3.1	1.9	.6	4.4	40.9	3.1	100.
Total	**Nos.**	**256**	**37**	**107**	**15**	**33**	**88**	**15**	**551**
	%	**46.5**	**6.7**	**19.5**	**2.7**	**6.0**	**16.0**	**2.7**	**100.0**

Source : Field survey

Out of 80 farmers respondent from Aizawl district, 63 (78.8 percent) agripreneurs sell their organic product to nearby farmers market, while 3 (3.8 percent) sell their products to retail traders, and 10 (12.5 percent) sell their products to wholesale market and 3 (3.8 percent) sell their products on farm retail and no agripreneurs sell their products to processor and 1.3 percent (1) sell their products to contract buyers.

Out of 81 agripreneurs from Lunglei district, 30 (37 percent) agripreneurs sell their organic product to nearby farmers market, while 15 (18.5 percent) sell their products to retail traders, and 3 (3.7 percent) sell their products to wholesale market and 19.8 percent (16) sell their products on farm retail and 12 (14.8 percent) agripreneurs sell their bulk products to processor and 2 (2.5 percent) sell their products to contract buyers and 20 (2.5 percent) farmers sell their products as per availability of market. Whereas from Champhai district out of 121 agripreneurs, 62 (51.2 percent) agripreneurs sell their organic product to nearby farmers market, while 10 (8.3 percent) sell their products to retail traders, and 21 (17.4 percent) sell their products to wholesale market and 8 (6.6 percent) sell their products on farm retail and 10 (8.3 percent) agripreneurs sell their bulk products to processor and 6 (5.0 percent) sell their products to contract buyers. At the same time 4 (3.3 percent) agripreneurs sell their products subject to availability of the market.

In Kolasib district, out of 55 agripreneurs, 24 (43.6 percent) agripreneurs sell their organic product to nearby farmers market, while 7 (12.7 percent) sell their products to retail traders, and 17 (30.9 percent) sell their products to wholesale market and no one sell their products on farm retail and none of the farmers sell their bulk products to processor and 4 (7.3 percent) agripreneurs sell their products to contract buyers and at the same time 3 (5.5 percent) agripreneurs sell their products subject to availability of the market. In Serchhip district, out of 54 agripreneurs respondents, 3 (5.6 percent) agripreneurs sell their organic product to nearby farmers market, while 9 (16.7 percent) sell their products to retail traders, and 41 (75.9 percent) sell their products to wholesale market and no one sell their products on farm retail and none of the agripreneurs sell their bulk products to processor and no

farmers sell their products to contract buyers while only 1 (1.9 percent) farmers sell their products subject to availability of the market.

In Mamit district, out of 159 agripreneurs, 74 (46.5 percent) farmers sell their organic product to nearby farmers market, while 5 (3.1 percent) sell their products to retail traders, and 3 (1.9 percent) sell their products to wholesale market and 1 (0.6 percent) sell their products on farm retail and 7 (4.4 percent) farmers sell their bulk products to processor and 65 (40.9) farmers sell their products to contract buyers. But 4 (2.5 percent) agripreneurs sell their products subject to availability of the market.

In Aizawl district, the predominant marketing channel is the farmer market, accounting for 78.8 percent of total marketing activities. This signifies a strong local focus where agripreneurs engage directly with consumers. Direct-to-retail and wholesale markets also play significant roles, highlighting the district's efforts to cater to both individual consumers and larger retail establishments. The presence of on-farm retail further strengthens the direct-to-consumer approach, ensuring agripreneurs have a direct stake in retailing their produce. The relatively low utilization of other methods suggests a concentrated effort on local and direct marketing in Aizawl.

Lunglei district showcases a diverse approach to marketing organic crops. While farmer markets remain essential, the district balances its marketing mix with a strong presence in wholesale markets and direct-to-retail channels. Notably, bulk commodities to processors and contract buyers hold a substantial share, indicating a strategic partnership with larger buyers or processing industries. This suggests an orientation towards both local consumers and larger-scale distribution.

Champhai district's marketing strategy leans towards farmer markets, reflecting a community-oriented approach with over half of the produce being marketed through this channel. However, the presence of wholesale markets and contract buyers also indicates efforts to tap into larger markets. This dual focus ensures a balanced approach catering to local demand as well as broader distribution.

Kolasib district's marketing landscape is characterized by a significant emphasis on direct-to-retail and wholesale markets, representing 43.6 percent and

30.9 percent respectively. The district appears to have a substantial engagement with larger retail and distribution networks. Interestingly, on-farm retail is absent, potentially suggesting a more centralized distribution model.

Serchhip district stands out for its heavy reliance on wholesale markets, constituting 75.9 percent of its marketing activities. This might indicate a focus on supplying larger quantities to distribution networks outside the district. The lack of on-farm retail and contract buyers suggests a less diversified marketing strategy.

Mamit district demonstrates a unique marketing mix with contract buyers and farmer markets playing prominent roles. Contract buyers secure a substantial share, emphasizing the district's engagement with larger buyers, while farmer markets retain significance. Bulk commodities to processors also feature, indicating participation in value-added processing.In summary, the analysis from the table 3.5 in which all the districts exhibit varying marketing strategies for organic produce. While farmer markets are consistently important across all districts, the utilization of other channels such as direct-to-retail, wholesale markets, and contract buyers demonstrates a nuanced approach to cater to local and broader markets. These strategies reflect the agripreneurs' adaptability to local contexts, consumer preferences, and distribution networks, ultimately contributing to the growth of the organic agriculture sector. The Table 3.5 provides an insightful analysis of the types of marketing utilized by agripreneurs across different districts for organic crops. The marketing strategies employed include farmer markets, direct-to-retail, wholesale markets, on-farm retail, bulk commodities to processors, contract buyers, and other methods.

3.3.6 Details of training attended by Agripreneurs

This section mainly analyzes the details of training attended by agripreneurs in district wise. The districts mentioned are Aizawl, Lunglei, Champhai, Kolasib, Serchhip, and Mamit.The provided table 3.6 contains information about different agricultural training programs in various districts, along with the percentage of attendees for each type of training program. The districts mentioned are Aizawl, Lunglei, Champhai, Kolasib, Serchhip, Mamit, and the total across all districts. The

total number of agripreneurs attending different training programs across all districts came out to be 330 respondents which account for 59.9 percent of the total respondents i.e. 551.

Table 3.6: Training attended by Agriprenuers

Name of districts		Chilly growing	Turmeric growing	Ginger growing	Promotion of organic farming	Making of manure	FIG*	General body meeting	Other	Total
Aizawl	**Nos**	23	0	10	1	0	0	0	46	80
	%	28.8	0.0	12.5	1.3	0.0	0.0	0.0	57.5	100.0
Lunglei	**Nos**	2	0	33	7	4	0	0	35	81
	%	2.5	0.0	40.7	8.6	4.9	0.0	0.0	43.2	100.0
Champhai	**Nos**	3	0	0	0	0	31	0	87	121
	%	2.5	0.0	0.0	0.0	0.0	25.6	0.0	71.9	100.0
Kolasib	**Nos**	4	17	0	1	4	0	0	29	55
	%	7.3	30.9	0.0	1.8	7.3	0.0	0.0	52.7	100.0
Serchhip	**Nos**	36	0	0	17	0	0	0	1	54
	%	66.7	0.0	0.0	31.5	0.0	0.0	0.0	1.9	100.0
Mamit	**Nos**	7	11	0	5	0	0	5	132	160
	%	4.4	6.9	0.0	3.1	0.0	0.0	3.1	82.5	100.0
Total	**Nos**	**75**	**28**	**43**	**31**	**8**	**31**	**5**	**330**	**551**
	%	**13.6**	**5.1**	**7.8**	**5.6**	**1.5**	**5.6**	**.9**	**59.9**	**100.0**

Source : Field survey

FIG- Farmers Interest Groups.*

Note: The figures in the parenthesis indicate the percentage

In Aizawl district the following training programmes are conducted and the numbers of attendee from agrepreneurs are as follows. In Chilly growing training, there were 23 attendees (28.8 percent) .Whereas in Turmeric growing training, the attendance is 0 attendees (0.0 percent). But in Ginger growing training , there were 10 attendees (12.5 percent) while Promotion of Organic Farming training have only 1 attendee (1.3 percent) , making of manure training do not have attendees (0.0 percent), FIG (Farmers Interest Group) General Body Meeting do not have attendees (0.0 percent), Others training do not have attendees (0.0 percent). However, the total number of attendees who attended the training and meeting were 46 attendees (57.5 percent).

Whereas in Lunglei district, the agripreneurs attended the training as follows. In Chilly growing training, there were only 2 attendees (2.5 percent), Turmeric growing training has 0 attendees (0.0 percent), Ginger training has 33 attendees (40.7 percent), Promotion of Organic Farming training has 7 attendees (8.6 percent), and making of manure training has 4 attendees (4.9 percent). While FIG General Body Meeting and other training do not have attendees (0.0 percent) and the total attendees in Lungeli district are 35 (43.2 percent). From Champhai district, In Chilly growing training there were 3 attendees (2.5 percent),Turmeric growing training there is 0 attendees (0.0 percent), Ginger Growing training there is 0 attendees (0.0 percent), Promotion of Organic Farming training there were no attendees (0.0percent), making of manure training there are 31 attendees (25.6 percent), FIG General Body Meeting there were no attendees (0.0percent). Others training there were no attendees (0.0 percent). The total attendees for training and meeting were 87 (71.9 percent). In Kolasib district that out of 55 agripreneurs, only 4 (7.3 percent) attended Chilli training, 17 (30.09 percent) attended turmeric training, 1 (1.8 percent) attended Promotion of Organic Farming training and 4 (7.3 percent) attended making of manure and 29 (52.7 percent) attended other types of training. No one in the district attended Ginger & Turmeric growing training, General Body Meeting and Farmers Interest Group Meeting.

Whereas in Serchhip district, out of 54 agripreneurs, 36 (66.7 percent) attended Chilli training, 17 (31.5 percent) attended making of manure training and 1 (1.9 percent) attended other types of training. No one in the district attended Ginger & Turmeric growing training, General Body Meeting and Farmers Interest Group Meeting. Whereas in Mamit district, that out of 160 agripreneurs, 7 (4.4 percent) attended Chilli training, 11 (6.9 percent) attended Turmeric training and 5 (3.1) attended Promotion of Organic farming and 5 (5.1 percent) attended General Body Meeting and 132 (82.5 percent) attended other types of training. No one in the district attended Ginger & growing training, making of manures training and Farmers Interest Group Meeting.

The most popular training program in each district varies; for example, in Aizawl, it's Chilly Growing, in Lunglei, it's Ginger Growing, and in Champhai, it's Making of Manure.The percentage of attendees for different programs varied significantly across districts, with some programs having higher participation rates in certain areas.

From the analysis of the distribution of agripreneurs attending different training programs in each district, it appears that the "Others" category has the highest percentage of participants in most districts, indicating a diverse range of training interests. In some districts, specific programs like "Chilly growing" or "Ginger growing" have higher participation percentages. The "General Body Meeting" program also has notable participation in the MamitDistrict.

3.3.7 Motivation for taking Agripreneurship

Table 3.7 shows that out of the 551 agripreneurs from six districts, 275 (49.9 percent) agripreneurs gets motivated by the government / Mission Organic Mizoram, 1 (0.2 percent) farmer is self motivated into agripreneurship while 142 (25.8 percent) are motivated by their family member and 133 (24.1 percent) are motivated by their friends or agripreneurs into agripreneurship.

Table 3.7: Source of Motivation in Taking up Agripreneurship

Districts	Govt./ MOM	Self	Family member	Friends/ agripreneurs	Total
Aizawl	47(58.8)	0(0.0)	22(27.5)	11(13.8)	80(100)
Lunglei	49(60.5)	0(0.0)	20(24.7)	12(14.8)	81(100)
Champhai	28(23.1)	0(0.0)	32(26.4)	61(50.4)	121(100)
Kolasib	33(60)	0(0.0)	15(27.3)	7(12.7)	55(100)
Serchhip	33(61.1)	0(0.0)	4(7.4)	17(31.5)	54(100)
Mamit	85(53.1)	1(.6)	49(30.6)	25(15.6)	160(100)
Total	**275(49.9)**	**1(.2)**	**142(25.8)**	**133(24.1)**	**551(100)**

Source : Field survey

Note: The figures in the parenthesis indicate the percentage

From Aizawl district, Government/Mission organic Mizoram motivates 47 (58.8 percent) farmers in agripreneurship, while no one is self motivated, and 22 (27.5 percent) farmers are motivated by their family members and 11 (13.8 percent) are motivated by their friend or other agripreneurs. In case of Lunglei district ,Government/Mission organic Mizoram motivates 49 (60.5 percent) farmers in agripreneurship, while no one is self motivated, and 20 (24.7 percent) farmers are motivated by their family members and 12 (14.8 percent) are motivated by their friends or other agripreneurs. Whereas in Champhai district, Government/Mission organic Mizoram motivates 28 (23.1 percent) farmers in agripreneurship, while no one is self motivated, and 32 (26.4 percent) farmers are motivated by their family members and 61 (50.4 percent) are motivated by their friends or other agripreneurs. But in Kolasib district, Government/Mission organic Mizoram motivates 33 (60.0 percent) farmers in agripreneurship, while no one is self motivated, and 15 (27.3 percent) farmers are motivated by their family members and 7 (12.7 percent) are motivated by their friends or other agripreneurs. In case of Serchhip district, Government/Mission organic Mizoram motivates 61.1 percent (33) farmers in

agripreneurship, while no one is self motivated, and 4 (7.4 percent) farmers are motivated by their family members and 7 (31.5 percent) are motivated by their friends or other agripreneurs. In case of Mamit district, the farmers are motivated as follows - Government/Mission organic Mizoram motivates 85 (53.1 percent) farmers in agripreneurship, while 1 (0.6 percent) is self motivated, and 49 (30.6 percent) farmers are motivated by their family members and 25 (15.6 percent) are motivated by their friends or other agripreneurs.

Overall, the data suggests that government initiatives have played a significant role in motivating individuals to pursue agripreneurship across most districts. Family member's andfriends within the agripreneurship community also emerged as important sources of inspiration. These findings emphasize the importance of a supportive ecosystem, both from the government and social networks, in driving agripreneurial endeavors. The motivation sources for agripreneurs vary significantly across districts. While the Government/MOM played a notable role in some districts, family members, friends/agripreneurs, and self-motivation also had their influence. This indicates the complex interplay of external support, personal drive, and social connections in fostering agripreneurial aspirations. The district-wise analysis demonstrates the diverse factors that contribute to motivating individuals to engage in agripreneurship, reflecting the multifaceted nature of entrepreneurship in the agricultural sector. It's worth noting that while the data provides insights into motivation, the specific mechanisms or types of support provided by each factor would require further investigation.

3.3.8 Descriptive analysis on selected variables

An attempt was made to identify and understand the agripreneurs awareness on some selected parameter measure on likert's five points scale from 5 to 1. Whereas, 5 scale indicate always and 1 represent never. The descriptive statistics, such as frequency range, mean, standard deviation, and percentage, were systematically analyzed and presented into three as follows:

Table 3.8: Mean, S.D, Frequencies Measure on Selected Variables

Sl	Variables	M	S. D	A (%)	Often (%)	Sometime (%)	Rarely (%)	Never (%)	Level
1	Level of assistance received by Agriprenuers- Inputs, knowledge on financial resources, infrastructure.	4.98	0.320	27(4.9)	349 (63.34)	104 (18.87)	50 (9.07)	21(3.8)	Often Received
2	Level of assistance from bank officials in getting bank loans	3.87	0.081	184 (33.39)	106 (19.24)	242 (43.92)	15 (2.72)	4 (0.7)	Sometime
3	Level of agripreneurs access to bank loan during Pre-Agripreneurship of organic crops.	4.03	0.432	12 (2.18)	57 (10.34)	23 (4.17)	431 (78.22)	28 (5.08)	Rarely Access
4	Level of Agripreneurs participation in Financial	3.80	0.421	5 (0.9)	44 (7.99)	387 (70.24)	107 (19.42)	4 (0.7)	Sometime Participate

	Literacy program (Seminars, Conferences, workshop, training etc.)								
5	Level of availing of beneficiary schemes of the government	3.94	0.451	37 (6.72)	298 (54.08)	211 (38.29)	4 (0.7)	1 (0.2)	Often Avail
6	Level of agripreneur awareness of the Government Schemes	3.50	0.681	126 (22.87)	106 (19.24)	289 (52.45)	30 (5.4)	0	Sometime
7	Financial problem faced in engaging agripreneurship in organic crops	3.35	0.794	272 (49.36)	147 (26.68)	132 (5.81)	0	0	Always
8	Problems faced in receiving the money in already approved bank loan	4.05	0.982	84 (15.24)	19 (3.45)	349 (63.34)	90 (16.33)	19 (3.45)	Often
9	Level of participation in district-wise training, hand-holding, ICS management, documentation, and	2.69	0.783	47 (8.53))	38 (6.90)	428 (77.67)	55 (9.98)	13 (2.36)	Sometime Participate

	certification of crop production through a service provider.								
10	Access to Bank loan during agripreneurship of organic crops	3.62	0.841	41 (7.4)	283 (51.4)	185 (33.6)	33 (6.0)	7 (1.3)	Always Access
11	Level of Access to Setting Up of Value Addition and Processing Units Including Packaging, Transportation.	1.90	0.985	18 (3.3)	21 (3.8)	396 (71.9)	111 (20.1)	5 (0.9)	Always Access
12	Perception of Level of usefulness of training attended by agripreneurs	4.74	0.697	439 (79.7)	101 (18.3)	11 (2.0)	0	0	Always Useful
13	Helpfullness of Bank Loans to Agripreneurship	4.81	0.978	502 (91.1)	49 (8.9)	0	0	0	Always helpful

Source: Computed from primary data

Table 3.8 showcases the mean value, standard deviation, frequency, and percentage of agripreneurs awareness on selected parameters in the study area. The agripreneurs level of awareness was given a scale with a range of 5 to 1 to help them measure and understand the benefits available, including financial support, knowledge, technical support, and other supports. When a parameter receives a score of 5, it means that the understanding of agripreneurs about that particular parameter is always aware and beneficial. When a parameter receives a score of 1, it means that the assistance provided in terms of finance, technical support, and other supports is never availed of.

The study indicates the level of available support and benefits variables in 13 items, and the level of impact was from a point scale of always to never. An analysis shows the agreement level of 5 items was found to be always aware of financial, technical,and other supports, namely: item #7 (M = 3.35, S.D = 0.794): 'Financial problem faced in engaging agripreneurship in organic crops', item #10 (M = 3.62, S.D = 0.841) 'Access to bank loans during agripreneurship of organic crops', item #11 (M = 3.90, S.D = 0.985) 'Level of Access to Setting Up Value Addition and Processing Units, Including Packaging and Transportation', item #12 (M = 4.74, S.D = 0.697) 'Perception of the level of usefulness of training attended by agripreneurs', item #13 (M = 4.81, S.D = 0.978) 'Helpfullness of Bank Loans to Agripreneurship'.

The study also highlights the existence of four items of the parameter that are found to be sometimes support, assist, benefits, and awareness, such as item #2 (M = 3.87, S.D = 0.081), 'Level of Assistance from Bank Officials in Getting Bank Loans ', item #4 (M = 3.30, S.D = 0.421), 'Level of Agripreneurs Participation in Financial Literacy Program (Seminars, Conferences, Workshops, Training, etc.)', item #6 (M = 3.50, S.D = 0.681), 'Level of agripreneur Awareness of the Government Schemes', and item #9 (M = 2.69, S.D = 0.783), 'Level of participation in district-wise training, hand-holding, ICS management, documentation, and certification of crop production through a service provider'.

Table further reveals the agriprenuers awareness of financial support, technical support, and other resources support in taking up agripreneurship. Based on

the overall analysis of the parameter, it was found that 3 items are on the scale of often level, namely, items #1 (M = 4.98, S.D = 0.320) 'Level of assistance received by Agriprenuers: Inputs, Knowledge on Financial Resources, Infrastructure', item #5 (M = 3.94, S.D = 0.451) 'Level of availing of beneficiary schemes of the government', and item #8 (M = 4.05, S.D = 0.982) 'Problems faced in receiving the money in already approved bank loan'.

3.4. Conclusion

For the purpose of fulfilling the first objective i.e. to study the policy interventions and support for organic farming in Mizoram, the chapter brings out the availed support in two different dimenmsions. It begins with the institutional support for organic crops farming in India which higlighted some of the major government initivatives for the promotion of organic crop such as National Programme on Organic Production, National project on Organic Farming, Mission Organic Value Chain Development for North Eastern Region (MOVCDNER), National Advisory Committee, Mission Implementation Structure at State Level and the Role of North Eastern Regional Agri-Marketing Corporation Limited (NERAMAC). The later part of the chapter focuses on the support availed by the agripreneurs in terms of bank loan , availability of transportation, marketing of organic crops , training attended as well as motivational support in taking up agripreneurship. Majority of the agripreneurs do not avail any kind of financial assistance from Bank as they have been supported from either their self account or family account. In terms of agripreneurs availing bank loan, Mizoram Rural Bank has provided more support in numbers in comparision with State Bank of India and Canara Bank. Transportational support has been one of the major issues faced by agripreneurs as majority of them did not have vehicles and lack of public transportation had leave them no choice but to walk towards their firm. The marketing strategies employed by agripreneurs includes farmer markets, direct-to-retail, wholesale markets, on-farm retail, bulk commodities to processors, contract buyers, and other methods. The most popular training program attended by agripreneurs in each district varies; for example, in Aizawl, it's Chilly Growing, in Lunglei, it's Ginger Growing, and in Champhai, its Making of Manure.The percentage of attendees for different programs varies

significantly across districts, with some programs having higher participation rates in certain areas. In conclusion, government initiatives have played a significant role in motivating individuals to pursue agripreneurship across most districts.

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CHAPTER- 4

SOCIO-ECONOMIC PROFILE AND GROWTH OF AGRIPRENUERS

4.1. Introduction

This chapter mainly studies the socio economic origins of selected agripreneurs from the six districts. It analyzed the socio economic profile of agripreneurs such as the types of familysize, types of organic crops grown, age of the agripreneurs, educational qualification, their main occupation besides agripreneurship and monthly income and types of house they settled and the area of cultivation of organic crops. This chapter mainly analyze the demographic profile of agripreneurs from the six (6) districts, namely Aizawl, Lunglei, Champhai, Kolasib, Serchhip and Mamit district.

4.2. Socio Economic Profile of the Agripreneurs

4.2.1. Family Size

This section shows the family size of the 551 agripreneurs from the six (6) districts in study. The family size distribution varies within the district and with other districts .The family size are categorized into 1-3 family members, 4-6 family members,7-9 family members, 10-12 family members,13-17 family members.

Table 4.1 : Family size of Agripreneurs

Family size		District						Total and percentages
		Aizawl	Lunglei	Champhai	Kolasib	Serchhip	Mamit	
1- 3	Nos	6	9	10	12	4.	23	64(11.62)
	%	9.38	14.06	15.63	18.75	6.25	35.94	100
4 - 6	Nos	46.	48.	75	37	34	105	351(63.70)
	%	13.33	13.91	21.74	10.72	9.86	30.43	100
7 - Above	Nos	18	21	41	5	16	35	136(24.68)
	%	15.25	17.8	26.27	4.23	13.56	22.89	100

Source : Field survey

Table 4.1 highlights the family sizes of the respondents in various districts. Step-wise analysis result indicates that Mamit district with 23 respondents (35.94 percent) has the highest number of family members under 1-3 categories, followed

by Kolasib district with 12 respondents (18.15 percent), and Serchhip district with only 4 respondents (6.2 percent) represents the lowest family member in the study area.

An analysis based on the 4-6 family size results reveals that Mamit district with 105 respondents (30.43 percent) exhibits the highest number of family members under this category, Champhai district shows the second highest family member with 75 respondents (21.74 percent), and Serchhip district with only 34 respondents (9.86 percent) stood the least among the districts agriprenuer members of family.

As far as the 7-above family member is concerned, stepwise analysis results indicate that Champhai district has the highest agripreneur family member with 41 respondents (26.27 percent), followed by Mamit district with 35 respondents (22.89 percent), and the least family size was found in the district of Kolasib with only 5 respondents (4.23 percent).

Thus, an analysis can be concluded that overall family size in various categories in Mamit district indicates a larger family member compared to other district agripreneur family members, followed by Champhai district.

4.2.2. Age of the Agripreneurs

An attempt is made in this section to study and understand the age distribution of the agripreneurs in different districts. Step-wise analysis is presented as follows.

Table 4.2 : Age of the Agripreneurs

Age at Starting time		Districts						
		Aizawl	**Lunglei**	**Champhai**	**Kolasib**	**Serchhip**	**Mamit**	**Category Total and % out of 551 in parenthesis**
Below 20	Nos.	26	16	32	16	10	49	149(27.04)
	%	**17.45**	**10.73**	**21.48**	**10.74**	**6.71**	**32.89**	**100**
21 to 30	Nos.	35	38	54	25	37	80	269(48.82)
	%	**13.01**	**14.13**	**20.07**	**9.3**	**13.75**	**29.74**	**100**
31 to 40	Nos.	8	11	31	5	4	13	72(13.07)
	%	**11.11**	**15.28**	**43.05**	**6.95**	**5.56**	**18.05**	**100**
41 to 50	Nos.	3	10	4	2	3	9	31(5.63)
	%	**9.67**	**32.25**	**12.9**	**6.45**	**9.7**	**29.03**	**100**
51-Above	Nos.	8	6	0	4	0	9	27(4.36)
	%	**29.16**	**25**	**0**	**16.68**	**0**	**29.16**	**100**
	%	**28.57**	**0**	**0**	**42.86**	**0**	**28.57**	**100**
District Total	**Nos.**	**80**	**81**	**121**	**55**	**54**	**160**	**551**
	%	**14.50**	**14.70**	**22.00**	**10.00**	**9.80**	**29.00**	**100**

Source: Field Survey

Table 4.2 determines the age group of the respondents examined based on the various categories under the below-20 age category. An analysis of the results indicates that Mamit (32.89 percent) shows the highest number of respondents in this category, followed by Champhai with 32 (21.48 percent), and Aizawl trails behind Champhai by 26 (17.45 percent) agripreneurs. Lunglei and Kolasib have a similar number of agripreneurs i.e. 16 (10.73 percent), and the least is Serchhip, with only 10 respondents (6.71 percent) in this category.

In the age group of 21–30, there are 269 respondents (48.82 percent, out of 551 agripreneurs) distributed in different districts. Mamit with 80 respondents (29.74 percent) shows the highest in this age group, followed by Champhai with 54 respondents (20.07 percent), Lunglei with 38 respondents (14.13 percent), Serchhip with 37 respondents (13.75 percent), and Aizawl with 35 respondents (13.01 percent), and the least number of farmers in the age group 21–30 is in Kolasib district with 25 respondents (9.3 percent). Thus, the results show that nearly half of the agripreneur respondents at a young age from different districts are in agripreneurship, which shows that a huge number of farmers start at an early age.

In the age range of 31–40 years. Champhai district represents the highest number of agripreneurs, with a substantial number of 31 respondents (43.55 percent), indicating that a significant proportion of agripreneurs in this district fall within this age bracket. Mamit district, with 13 respondents (18.05 percent), also has a notable representation in this age group. On the other hand, Serchhip 4 (5.56 percent), Lunglei 11 (15.28 percent), and Kolasib district (5.695 percent) have lower percentages, suggesting a potential gap in the engagement of this age group.

For the age group of 41–50 years, among the district agriprenuers, Lunglei has the highest percentage of agripreneurs with 10 respondents (32.25 percent), followed by Mamit with 9 respondents (29.03 percent). This age group is relatively older, suggesting that experienced individuals are entering agripreneurship in these districts. However, in Aizawl 3 respondents (9.67 percent), in Champhai 4 respondents (12.9 percent), and in Kolasib 2 respondents (6.45 percent) have lower representation in this category.

Lastly, based on the 50-over age group, Aizawl district with 7 respondents (29.16 percent) and Mamit district with 7 respondents (29.16 percent) have the highest age of agripreneurs, followed by Lunglei with 6 respondents (25 percent) and Kolasib district with only 4 respondents (16.68 percent), representing the least number of agripreneurs.

In conclusion, the analysis highlights the diversity in the age groups of agripreneurs across districts. Mamit, Champhai, and Aizawl have a higher proportion

of younger agripreneurs, while Kolasib and Lunglei have a more balanced distribution. Mamit has a notable presence of older agripreneurs, and Kolasib has a substantial presence of agripreneurs in the 41 to 50 age group.

4.2.3. Educational Qualification of Agripreneurs

The educational qualification distribution of agripreneurs in different districts in Mizoram is discussed in this section. The background of farmers educations are classified in the form of illiterate, literates, High School Leaving Certificate (HSLC), Higher Secondary School Leaving Certificate (HSSLC), College, University.

Table 4.3. Educational Qualification of Agripreneurs

Name of district		Illiterate	Literate	HSLC	HSSLC	College	University	Total
Aizawl	**Nos.**	1	62	9	6	2	0	80
	%	1.3	71.27	10.98	9.23	8.69	0.0	100
Lunglei	**Nos.**	3	56	13	6	3	0	81
	%	**3.7**	**15.60**	**18.85**	**9.23**	**13.04**	**0.0**	**100**
Champhai	**Nos.**	7	84	14	15	1	0	121
	%	**5.8**	**23.40**	**17.07**	**23.07**	**4.34**	**0.0**	**100**
Kolasib	**Nos.**	3	31	16	3	2	0	55
	%	**5.5**	**8.64**	**19.51**	**4.61**	**8.69**	**0.0**	**100**
Serchhip	**Nos.**	0	27	6	17	4	0	54
	%	**0.0**	**7.52**	**7.32**	**26.15**	**17.39**	**0.0**	**100**
Mamit	**Nos.**	7	99	24	18	11	1	160
	%	**4.4**	**27.58**	**29.27**	**27.69**	**47.82**	**100**	**100**
Total	**Nos.**	21	359	82	65	23	1	551
	%	**3.8**	**65.2**	**14.9**	**11.8**	**4.2**	**.2**	**100**

Source : Field Survey

Note : Illiterate : Person who could not read nor write

Literate : Person who could read nor write

HSLC : High School Leaving Certificate(HSLC)

HSSLC : Higher Secondary School Leaving Certificate(HSSLC)

College : BA or Any Graduate

University: Post Graduate of any courses.

Table 4.3 shows the distribution of education qualifications among agripreneurs in different districts. Of the total agripreneurs, 359 agripreneurs (65.2 percent) are found to be literate, and 21 agripreneurs (3.8 percent) are illiterate and could not read or write. Among the illiterate agriprenuers, respondents from Serchhip show nil responses, which indicates that all the agripreneurs are under the category of literate, followed by Aizawl districts with only one respondent, and Champhai districts with 7 respondents (5.8 percent) have the highest number of illiterate respondents across the districts.

In the category of literate scale, an analysis reveals that Mamit district agripreneurs score the highest responses with 99 (27.58 percent), followed by Champhai district with 84 (23.40 percent) place in second in this category and Serchhip district with 27 (7.52 percent) agripreneurs stood the least.

Table 4.3 determined agripreneurs with an educational qualification of HSLC in the study area. The study indicates that 24 respondents (29.27 percent) from Mamit district agripreneurs have the highest number of qualification across the district respondents in this category followed by Kolasib district with 16 (19.51percent) and the district with the least number is exhibited in Serchhip district with only 6 (7.32 percent).

The parameter based on HSSLC education qualification level, the respondent qualification under this category is relatively low in Kolasib district with only 3 (4.61 percent). The highest number of respondents are found in mamit district consisting 18 (27.62 percent) of the total respondents and followed by Serchhip district with 17 (26.15 percent).

In the variable namely College and University level, the agripreneur from Mamit district has the only respondents who attend university level, and 11 respondents (47.82 percent) shows the highest number in the college level category. Serchhip district with 4 respondents (17.39 percent) stood in the second highest qualification and Champhai district with 1 (4.34 percent) stood at the lowest category.

Overall, the data suggests that education qualification may not be a major factor influencing agripreneurship in these districts, as the majority of agripreneurs are literate without formal education or have completed up to HSLC. However, the low proportion of agripreneurs with higher education qualifications may suggest that there is potential for greater engagement of educated agripreneurs in agripreneurship. Literacy rates vary across districts, with some districts having potential for improvement. HSSLC holders are present in varying percentages across districts, indicating an interest in higher education. The proportion of college-educated agripreneurs is generally low across all districts. There's a potential opportunity to promote higher education and skill development to empower agripreneurs with innovative and sustainable practices.

4.2.4. Occupation of Farmers before joining Agripreneurship

An analysis is run to highlight and understand the occupations of farmers prior joining the agripreneurship focuses on the six districts. The main occupations of farmers before joining Agripreneurship includes service in NGO, Government service, Business and majority of the respondents already have farming as occupation. A certain proportion of farmers were not having regular occupation before joining agripreneurship.

Table 4.4: Occupation Before Joining Agripreneurship

Name of district		Unemployed	NGO	Govt. service	Business	Farming	Total
Aizawl	**Nos**	3	0	1	2	74	80
	%	**3.8**	**0.0**	**1.3**	**2.5**	**92.5**	**100**
Lunglei	**Nos**	6	3	1	2	69	81
	%	**7.4**	**3.7**	**1.2**	**2.5**	**85.2**	**100**
Champhai	**Nos**	11	3	0	1	106	121
	%	**9.1**	**2.5**	**0.0**	**.8**	**87.6**	**100**
Kolasib	**Nos**	2	3	4	2	44	55
	%	**3.6**	**5.5**	**7.3**	**3.6**	**80.0**	**100**
Serchhip	**Nos**	0	0	0	4	50	54
	%	**0.0**	**0.0**	**0.0**	**7.4**	**92.6**	**100**
Mamit	**Nos**	24	1	12	7	116	160
	%	**15.0**	**.6**	**7.5**	**4.4**	**72.5**	**100**
Total	**Nos**	46	10	18	18	459	551
	%	**8.3**	**1.8**	**3.3**	**3.3**	**83.3**	**100**

Source: Field Survey

Table 4.4 shows the occupations of farmers before joining agripreneurship in the study area. With reference to Aizawl district, the majority of them i.e. 74 (92.5 percent) respondents were engaged in farming before starting their agribusiness. Only a small proportion of agripreneurs (3.8 percent) have no previous permanent occupation, while the remaining has worked in business (2.5 percent), and government service (1.3 percent).

With an emphasis on Lunglei district, a similar pattern is observed, with the majority of agripreneurs i.e. 69 (85.2 percent) having farming as their previous occupation. However, a higher proportion of agripreneurs in Lunglei had worked in NGO i.e. 3 respondents (3.7 percent) or business i.e. 1 respondent (2.5 percent) before starting their agribusiness.

Focusing on Champhai district, the majority i.e. 106 agripreneurs (87 percent) had farming as their previous occupation, while a smaller proportion had worked in

NGO (3 respondents i.e. 2.5 percent) or business (1 respondent i.e. 0.8 percent). Interestingly, no agripreneur in Champhai had worked in government service before starting their agribusiness.

In Kolasib district, a significant proportion of agripreneurs (47.3 percent) had worked in government service and NGO (35.5 percent) before starting their agribusiness. However, farming was still the most common previous occupation, with 44 (80.01 percent) agripreneurs having worked in this sector before starting their agribusiness. In Serchhip, a small proportion of agripreneurs had worked in business (4.4 percent), while the majority of farmers (52.6 percent) had farming as their previous occupation. Interestingly, no agripreneur in Serchhip had any previous occupation except farming and business before starting their agribusiness.

Based on Mamit district, farming was also the most common previous occupation with 116 (72.5 percent) farmers having worked in this sector before starting their agribusiness. However, a significant proportion of agripreneurs in Mamit had worked in government service (12.5 percent) or NGO (1.6 percent) before starting their agribusiness.

From Table 4.4, it can be concluded that 459 (83.3 percent) agripreneurs already have farming as their main occupation before joining agripreneurship, 46 (8.3 percent) farmers have no prior employment, and 18 (3.3 percent) agripreneurs have business, and similarly, farmers having government jobs as prior employment are 18 (3.3 percent). While 10 (1.8 percent) of the respondents have engaged in non-government organizations.

4.2.5. Agripreneurship as the Main Occupation

An attempt is made to showcase the agripreneurs varying levels of agreement towards Agripreneurship as their main occupation across six districts. This portrays significant disparities between districts, indicating potential regional differences in opinions.

Table 4.5: Agripreneurship as the Main Occupation

District	Yes	No	Total
Aizawl	77(96.3)	3(3.8)	80(100)
Lunglei	75(92.6)	6(7.4)	81(100)
Champhai	120(99.2)	1(.8)	121(100)
Kolasib	34(61.8)	21(38.2)	55(100)
Serchhip	47(87)	7(13)	54(100)
Mamit	124(77.5)	36(22.5)	160(100)
Total	477(86.6)	74(13.4)	551(100)

Source: Field Survey

Note: The figures in the parenthesis indicates percentages

The table 4.5 shows the distribution of agripreneurs main occupation based on whether they are engaged in agriculture entrepreneurship or not, across different districts. In Aizawl, Lunglei, Champhai, Serchhip, and Mamit districts, the majority of the agripreneurs have agriculture entrepreneurship as their main occupation. Notably, the district-wise with the highest affirmative responses is 120 (99.2 percent) in Champhai and follows by among the Aizawl 77 (96.3 percent), and Lunglei 75 (92.6 percent) and Serchhip 47 (87 percent), Mamit 124 (77.5 percent) but, Kolasib has the lowest agreed 'Yes' respondents i.e. 34 (61.8 percent) of the total districts agripreneurs. In Kolasib, 21 (38.2 percent) agripreneurs reported other occupations. Overall, across all districts, 477 (86.6 percent) agripreneurs have agriculture entrepreneurship as their main occupation, while only 74 (13.4 percent) agripreneurs chooses other occupations. This suggests that agriculture entrepreneurship is a major occupation particularly in the districts of Aizawl, Lunglei, Champhai, Serchhip, Mamit and Kolasib.

This analysis suggests varying levels of agreement across districts. When considering the overall percentages, it's evident that there's a generally positive inclination, with an average 'Yes' rate of 86.6 percent. However, this average masks

significant disparities between districts, indicating potential regional differences in opinions.

To improve engagement and consensus, efforts could focus on areas with lower 'Yes' percentages, like Kolasib, by understanding the reasons behind the lower agreement and addressing any concerns. Sharing successful practices from districts with higher agreement could also be beneficial.

4.2.6. Marital Status of Agripreneurs

The details of respondents' marital status across of all districts are highlighted and classified as - Married, Unmarried, Widowed and Divorced. Marriage is the dominant marital status in all districts, with unmarried agripreneurs being the second largest group. Widowed and divorced agripreneurs are relatively smaller groups in all districts.

Table 4.6: Marital Status of Agripreneurs

District		Married	Unmarried	Widowed	Divorced	Total
Aizawl	Nos	74	2	2	2	80
	%	92.5	2.5	2.5	2.5	100
Lunglei	Nos	65	13	3	0	81
	%	80.2	16.0	3.7	0.0	100
Champhai	Nos	97	12	10	2	121
	%	80.2	9.9	8.3	1.7	100
Kolasib	Nos	40	6	7	2	55
	%	72.7	10.9	12.7	3.6	100
Serchhip	Nos	49	1	4	0	54
	%	90.7	1.9	7.4	0.0	100
Mamit	Nos	132	15	9	4	160
	%	82.5	9.4	5.6	2.5	100
Total	Nos	457	49	35	10	551
	%	82.9	8.9	6.4	1.8	100

Source : Field Survey

The Table 4.6 shows a marital status of agripreneurs in different districts. An analysis based on district-wise agripreneurs, majority of the agripreneurs in all districts are married i.e. 457 respondents (82.9 percent). In terms of district wise analysis, the highest percentage ranges were found in Aizawl i.e. 74 respondents (92 percent) while 40 respondents (72.7 percent) in Kolasib district. The unmarried agripreneurs ranges from 13 respondents (16 percent) in Lunglei, 12 respondents (9.9 percent) in Champhai district, 15 (9.4 percent) in Mamit district, 6 respondents (10.9 percent) in Kolasib and 2 respondents (2.5 percent) in Aizawl and only 1 respondent (1.9 percent) in Serchhip. The percentage of widowed agripreneurs ranges from 12.7 percent in Kolasib to 3.7 percent in Lunglei. The percentage of divorced agripreneurs is the lowest and ranges from 0.0 percent in Lunglei and Serchhip to 2 (3.6 percent) in Kolasib. In terms of the overall population, the majority of agripreneurs in all districts are Married, comprising 457 (82.9 percent) of the total farmers. The percentage of Unmarried agripreneurs is 35 (8.9 percent). Widowed agripreneurs is 35 (6.4 percent), and Divorced agripreneurs is 10 (1.8 percent).Overall outcomes, table 4.6 shows that marriage is the dominant marital status in all districts, with unmarried agripreneurs being the second largest group. Widowed and Divorced agripreneurs are relatively smaller groups in all districts.

4.2.7. Religion of Agripreneurs

Religion is one of the important components of socio origins of agripreneurs. This section indicates the agripreneurs religion from the six districts in study.

Table no. 4.7: Religion of Agripreneurs

District		Christianity	Hindu	Muslim	Total
Aizawl	Nos	80	0	0	80
	%	100	0.0	0.0	100
Lunglei	Nos	81	0	0	81
	%	100	0.0	0.0	100
Champhai	Nos	120	1	0	121
	%	99.2	.8	0.0	100
Kolasib	Nos	55	0	0	55
	%	100	0.0	0.0	100.0
Serchhip	Nos	54	0	0	54
	%	100.0	0.0	0.0	100.0
Mamit	Nos	157	2	1	160
	%	98.1	1.3	.6	100.0
Total	Nos	547	3	1	551
	%	99.3	.5	.2%	100.0

Source: Computed from primary data

The table 4.7 shows a cross tabulation of religion by name of the district in a certain region. It indicates that all the agripreneurs in the Aizawl, Lunglei, Kolasib, Serchhip districts are Christians, whereas in Champhai, only one individual is a Hindu. In Mamit, out of 160 agripreneurs, 157 are Christians, two are Hindus, and 1 (0.6 percent) is Muslim agripreneur. Out of the total 551 agripreneurs, 547 (99.3 percent) are Christians and 3 (0.5percent) agripreneurs are Hindus, and 1 (0.2 percent) agripreneur is a Muslim. This data suggests an overwhelming presence of Christianity among agripreneurs in the region, with Hinduism and Islam having a representation as well.

4.2.8. Monthly Income of Agripreneurs

The monthly income of agripreneur families from six districts of state were discuss and analysis in details. The monthly income of agripreneurs are categorised into four (4) - Less than Rs 50000.00, Rs 50000.00 to Rs 100000.00, Rs 100000.00 to Rs 150000.00, and Rs 150000.00 above. The income of agripreneur families includes income from all sources.

Table 4 .8: District Wise Monthly Income of Agripreneurs

District		<Rs. 50000	Rs. 50000 to Rs100000	Rs. 100000 to Rs 150000	Rs. 150000 and above	Total
Aizawl	Nos	67	10	1	2	80
	%	**83.8**	**12.5**	**1.3**	**2.5**	**100.0**
Lunglei	Nos	68	10	1	2	81
	%	**84.0**	**12.3**	**1.2**	**2.5**	**100.**
Champhai	Nos	103	10	3	5	121
	%	**85.1**	**8.3**	**2.5**	**4.1**	**100**
Kolasib	Nos	47	5	2	1	55
	%	**85.5**	**9.1**	**3.6**	**1.8**	**100.**
Serchhip	Nos	39	13	1	1	54
	%	**72.2**	**24.1**	**1.9**	**1.9**	**100**
Mamit	Nos	128	28	2	2	160
	%	**80**	**17.5**	**1.3**	**1.3**	**100**
Total	Nos	452	76	10	13	551
	%	**82.**	**13.8**	**1.8**	**2.4**	**100.**

Source : Field Survey

The Table 4.8 shows a cross tabulation of the monthly income of agripreneurs living in different districts. The monthly income ranges are divided into four categories: less than Rs. 50,000, between Rs. 50,000 and Rs. 100,000, between Rs.

100,000 and Rs. 150,000, and Rs. 150,000 and above. This analysis aims to shed light on the income distribution patterns and provide recommendations to improve the income prospects of agripreneurs.

In income range below Rs 50000.00, among the districts agripreneurs, Champhai has the highest number of agripreneurs i.e. 103 (85.1 percent) out of 121 agripreneurs followed by Mamit district i.e. 128 (80 percent) out of 160 agripreneurs, Aizawl i.e. 67 (83.3 percent) out of the total 80 agripreneurs. But Kolasib has the lower number of agripreneurs i.e. 47 (85.5 percent) out of 55 agripreneurs and followed by Serchhip district with 39 (72.2 percent) out of 54 agripreneurs. The majority of agripreneurs 452 (82 percent) out of 551 agripreneurs in six districts monthly income is below Rs 500,000.

In the category of monthly income between Rs. 50,000 and Rs. 100,000, there are 76 (13.8 percent) agripreneurs out of 551. The highest percentages from their own district comes from Serchhip with 13 (24.1 percent) out of 54 agripreneurs, next to Serchhip and Mamit with 28(17.5 percent), Aizawl 10 (12.5 percent) out of 80 agripreneurs and Lunglei with 10 (12.3 percent) among 81 agripreneurs from the district. However, from Kolasib only 5 (9.1 percent) agripreneurs are belonging in this income range.

Based on the category of monthly income of Rs. 100,000 to Rs. 150,000, there are 10 (1.8 percent) agripreneurs out of 551. Analysis based on the district-wise agripreneurs, Kolasib has the highest percentages count of 2 (3.6 percent) agripreneurs out of 55, followed by Champhai with 3 (2.5 percent) out of 121 and Serchhip have 1 (1.9 percent) out of 54 agripreneurs, Mamit have 2 (1.3 percent) among the 160 agripreneurs, while, Aizawl district shows only 1(1.3 percent) out of 80 agripreneurs and Lunglei 1 (1.2 percent) out of 81 agripreneurs.

In category of the monthly income of Rs. 150,000 and above, Champhai district agripreners indicates highest with 5 (4.1 percent) agripreneurs out of 121 agripreneurs. Aizawl and Lunglei district have the same 2 (2.5 percent) agripreneurs; Serchhip, Kolasib and Mamit are having low number and percentage count in this income range.

The majority of agripreneurs in each district have a monthly income less than Rs. 50,000, with the percentage ranging from 85.5 percent in Kolasib, 85.1 percent in Champhai and 84 percent in Lunglei district, 83.8 percent in Aizawl and 80 percent in Mamit and 72.2 percent in Serchhip.This shows that majority agripreneurs from the districts monthly income is below Rs 50000.

4.2.9. Type of Dwelling of Agripreneurs

This section highlights the type of dwelling of agripreneurs from the six (6) districts. The type of dwelling maybe categorises as Thatched, Assam Type, Cement Concrete, others.

Table 4.9:Type of Dwelling of Agripreneurs

District		Thatched	Assam Type	Cement Concrete (RCC)	Others	Total
Aizawl	**Nos**	3	67	9	1	80
	%	**3.8**	**83.8**	**11.3**	**1.3**	**100**
Lunglei	**Nos**	5	66	8	2	81
	%	**6.2**	**81.5**	**9.9**	**2.5**	**100**
Champhai	**Nos**	6	103	12	0	121
	%	**5.0**	**85.1**	**9.9**	**0.0**	**100**
Kolasib	**Nos**	1	47	7	0	55
	%	**1.8**	**85.5**	**12.7**	**0.0**	**100**
Serchhip	**Nos**	1	43	10	0	54
	%	**1.9**	**79.6**	**18.5**	**0.0**	**100**
Mamit	**Nos**	13	130	17	0	160
	%	**8.1**	**81.3**	**10.6**	**0.0**	**100**
Total	**Nos**	**29**	**456**	**63**	**3**	**551**
	%	**5.3**	**82.8**	**11.4**	**.5**	**100**

Source : Field Survey

The Table 4.9 shows the distribution of types of dwelling in different districts. The districts are Aizawl, Lunglei, Champhai, Kolasib, Serchhip, and Mamit.The four types of dwelling are Thatched, Assam type, Cement Concrete (RCC), and

Others.From the provided data on the types of dwellings of agripreneurs across different districts, the following distribution in different districts are as follows:

With reference to Aizawl district , Agripreneurs who dwells in Thatched are 3 (3.8 percent) out of 29, while in Assam Type, there are 67 (83.8 percent) out of 456, and in Cement Concrete (RCC) there are 9 (11.3 percent) out of 63 , while in Others type of dwelling there is 1 (1.3 percent) out of 3 in total districts.

In Lunglei, agripreneurs who dwells in Thatched are 5 (6.2 percent) among 26 in total districts, While Assam Type dwellers are 66 (81.5 percent) out of 456 agripreneurs in the districts, Cement Concrete (RCC) dwellers are 8 (9.9 percent) of the total 63, other type of dwellers are 2 (2.5 percent) among the 3 agripreneurs in the districts.

Special refrence to Champhai, there are agripreneurs who dwells in Thatched are 6 (5.0 percent) out of 29 agripreneurs in the district and in Assam Type the number is 103 (85.1 percent) out of 456 districts total, while Cement Concrete (RCC) dwellers are 12 (9.9 percent) out of 63 in the district.

In Kolasib, the total number of Thatched dwellers is 1 (1.8 percent) out of 29 districts total and Assam Type dwellers are 47 (85.5 percent) out of 456 districts total and Cement Concrete (RCC) dwellers are 7 (12.7 percent) out of 63 in the districts.

Whereas in Serchhip district, agripreneur who dwells in Thatched is 1 (1.9 percent) among 29 respondents in the district and in Assam Type – there are 43 (79.6 percent), but in Cement Concrete (RCC) there are 10 (18.5 percent) dwellers.

But in Mamit Districts, the agripreneurs who resides in Thatched are 13 (8.1 percent), and further increases .in Assam Type – there is 130 (81.3 percent) while person who dwells in Cement Concrete (RCC) are 17 (10.6 percent).

Totally there are 29 (5.3 percent) Thatched dwellers and many resides at Assam Type - 456 (82.8 percent) while Cement Concrete (RCC) –dwellers are 63 (11.4 percent), and person who dwells in Others are -3 (0.5 percent) The majority of agripreneurs across all districts seem to reside in Assam-type houses, which is a positive indicator of a more stable and durable housing option compared to thatch.

The use of Cement Concrete (RCC) houses is also notable, although it's not as prevalent as Assam-type houses.Thatched dwellings are relatively less common, but they still make up a small percentage of the housing types."Others" category seems to have very low representation across all districts. It appears that the majority of the households in all districts have Assam type or cement concrete dwellings. The district with the higherpercentage of Assam type dwellings is Champhai district with 85.1percent, while the district with the highest percentage of cement concrete dwellings is with 18.5 percent in Serchhip district.

The district with the highest percentage of thatched dwellings is Mamit with 8.1percent, followed by Lunglei with 6.2 percent. The other category is the least common, with a total of 3 households across all districts.It is important to note that the distribution of dwelling types may have implications for issues such as housing quality, durability, and vulnerability to natural disasters.

4.2.10. Types of Ownership of the Dwellings

The respondents' ownership of the dwelling across the district is analysis and discuss in step-wise. The types of dwellings vary from –Owned House, Rented House, Govt.quarters and others.

Table 4.10: Types of Ownership of the Dwelling of Agripreneurs

Districts		**Type of Ownership of Dwelling**				**Total**
		Own House	Rented House	Quarters	Others	
Aizawl	**Nos**	73	5	1	1	80
	%	91.3	6.3	1.3	1.3	100
Lunglei	**Nos**	70	10	1	0	81
	%	86.4	12.3	1.2	0.0	100.
Champhai	**Nos**	102	17	2	0	121
	%	84.3	14.0	1.7	0.0	100
Kolasib	**Nos**	54	1	0	0	55
	%	98.2	1.8	0.0	0.0	100
Serchhip	**Nos**	52	2	0	0	54
	%	96.3	3.7	0.0	0.0	100
Mamit	**Nos**	141	18	1	0	160

	%	88.1	11.3	.6	0.0	100.
Total	**Nos**	**492**	**53**	**5**	**1**	**551**
	%	**89.3**	**9.6**	**0.9**	**0.2**	**100**

Source: Field Survey

The Table 4.10 determined the ownership of dwellings status of the agripreneurs in district wise. The study calculated of these variables into percentage and delves categories as owned, rented, government quarter or other types in each district.

Across all districts, the majority of agripreneurs with i.e. 492 (89.3 percent) dwellings in their own house, with only a small proportion i.e. 53 (9.6 percent) agripreneurs being resided at the rented and 5 (0.9 percent) dwells at government quarters and a negligible number of 1 (0.2 percent) agripreneurs resides at other types. Based on busneown house variable, an analysis result indicates agriprepreneurs from Kolasib with 54 (98.2 percent) among 54 respondents shows the highest running business in thier own house, followed by Serchhip with 52 (96.3 percent) out of 52 agripreneurs, the remaining district such as Aizawl, Mamit, Lunglei, Champhai district with 73 (91.3 percent), 141 (88.1 percent), 70 (86.3 percent), and 102 (84.3 percent) stood third, fouth, fifth and sixth respectively

The proportion of rented dwellings percentage is highest in Champhai 17(14.0 percent) while Lunglei and Mamit, are 10 (12.3 percent) and 18 (11.3 percent) respectively. In Aizawl agripreneurs who resides in rented house were 5 (6.3 percent) But in Serchhip and Kolasib, the proportion of rented dwellings is very low, at 2 (3.7 percent) and 1 (1.8 percent) respectively.

The proportion of agripreneurs who dwells in government quarters is highest in Champhai, at 2 (1.7 percent) and lowest in Kolasib and Serchhip. The Table 4.10 also reveals a smaller proportion of agripreneurs residing in rented houses, ranging from 1.8 percent to 12.3 percent. While this proportion is generally low, districts with higher rental percentages might need to explore ways to increase affordable housing options for agripreneurs. This could involve collaborations between local governments, housing developers, and financial institutions to provide housing solutions tailored to their needs. Overall, this table 4.10 provides insights into the

ownership status of dwellings in the six districts and can be useful for understanding housing conditions in the region

4.2.11. Registration under Farmers Producer Organisation (FPO).

The reasons of registering under FPO by the agripreneurs from all the districts are discuss and interpreted in details. In order to avail the Government schemes, a farmer has to register under any of the FPO. Farmers different attitude towards registration under FPO are classified as Inherited Trade, Increase in Income, Self Employment, Less Expenses, Unavailabilty, and Other types Employment, Inclusion among FPO Members by their neighbours or relatives.

Table 4.11: Registration under Farmer Producer Organisation (FPO)

Name of district		Inherited trade	ExpectedIncrease in income	Self employment	Less expense	No other employment available	Due to inclusion among FPO leaders	Total
Aizawl	**Nos**	2	12	54	3	9	0	80
	%	2.5	15.0	67.5	3.8	11.3	0.0	100.0
Lunglei	**Nos**	3	10	43	1	24	0	81
	%	3.7	12.3	53.1	1.2	29.6	0.0	100.0
Champhai	**Nos**	4	13	35	10	59	0	121
	%	3.3	10.7	28.9	8.3	48.8	0.0	100.0
Kolasib	**Nos**	0	5	40	2	8	0	55
	%	0.0	9.1	72.7	3.6	14.5	0.0	100.0
Serchhip	**Nos**	1	0	51	0	2	0	54
	%	1.9	0.0	94.4	0.0	3.7	0.0	100.0
Mamit	**Nos**	1	14	80	25	38	2	160
	%	.6	8.8	50.0	15.6	23.8	1.3	100.0
Total	**Nos**	**11**	**54**	**303**	**41**	**140**	**2**	**551**
	%	**2.0**	**9.8**	**55.0**	**7.4**	**25.4**	**.4**	**100.0**

Source: Field Survey

The Table 4.11 provides data on the reasons for registering under Farmer Producer Organizations (FPOs) in different districts of Mizoram, along with the total number of registrations. The reasons for registering under FPO comprise inherited

trade are 11 repondents (2.0 percent), Increase In Income are 54 repondents (9.8 percent), Self-Employment are 303 repondents (55.0 percent), Less Expense are 41 repondents (7.4 percent), No Other Employment Available are 140 repondents (25.4 percent), and Due To Inclusion Among FPO Leaders is 1 (0.2 percent).

Analysis based on district wise shows that the agripreneurs reasons of register under FPO due to Inherited trade from highest to lowest is Lunglei district with 3 (3.7 percent), followed by Champhai district with 4 (3.3 percent), Aizawl district with 2 (2.5 percent), Serchhip district with 1(1.9 percent), Mamit district with 1 (0.6 percent), Kolasib district 0 (0.0 percent).

With reference to expectation of Increase in income, the district wise performances are arrange in highest to lowest such as Aizawl district with 12 (15 percent), followed by Lunglei district with 10 (12.3 percent), Champhai district with 13 (10.7 percent), Kolasib district with 5 (9.1 percent), Mamit district with 14 (8.8 percent) while Serchhip district have no responses. The descending percentages of agripreneurs reasons of register under FPO due to self-employment was discuss in stepwise analysis, it was found that Serchhip district is 51 (94.4 percent), followed by Kolasib district with 40 (72.7 percent), Aizawl district with 54 (67.5 percent), Lunglei district with 43 (53.1 percent), Mamit district with 80 (50 percent), Champhai district with 35 (28.9 percent) are included under this categories.

The farmers registered under FPO due expectation of less expenses in organic crops cultivation is highlighted in descending order .Mamit district with 25 (15.6 percent), followed by Champhai district with 10 (8.3percent), Mamit district with 25 (15.6 percent), Kolasib district with 2 (3.6 percent), Lunglei district with 1 (1.2 percent).

The district with the highest percentage of farmers registered under FPO due to no other employment available was Champhai district with 59 (48.8 percent), followed by Lunglei district with 24 (29.6 percent), Mamit district with 38 (23.8 percent), Kolasib district with 8 (14.5 percent), Aizawl district (0.0 percent), and Serchhip district with 2 (3.7 percent).

Only from Mamit district, there are 2 (1.3 percent) farmers who registered under FPO due to inclusion among FPO by others. Overall, the majority of registered under FPO due to self-employment is 303 (55 percent) and no other employment available is 140 (25.4 percent), suggesting that FPOs are seen as a means of livelihood and income generation for farmers in Mizoram. The most common reason for registering under FPO in Mizoram is self-employment, with 303 (55 percent) selecting this reason. The next most common reasons are no other employment available with 140 (25.4 percent) and increase in income with 54 (9.8 percent)

When looking at the reasons for registration within each district, there are some variations. In Aizawl, the most common reason for registration was self-employment (54 registrations, 67.5 percent), while in Champhai, it was no other employment available (59 registrations, 48.8 percent). In Mamit, the most common reason was an increase in income (80 registrations, 50.0 percent), followed by self-employment (38 registrations, 23.8percent).

The data suggests that FPOs are seen as a means to increase income and self-employment opportunities for farmers in Mizoram. However, the reasons for registration vary across districts, which suggests that FPOs may be addressing different needs and challenges in different areas.The most common reason for registering under FPO are Self Employment i.e. 303 (55), no other employment available is 140 (25.4percent), self-employment is 303(10.9 percent), less expense (7.4 percent), inherited trade (2.0 percent), and due to inclusion among FPO leaders (0.4 percent).

The primary drivers for FPO registration appear to be the pursuit of self-employment and an increase in income, accounting for 55 percent and 9.8 percent of total registrations, respectively. This suggests that many individuals view FPOs as a means to generate income while being self-employed. Thus the most common reason for registering under FPO in Mizoram was to increase income, followed by the lack of other employment opportunities. However, the reasons for registering varied across districts, suggesting that different factors may be influencing FPO membership in different areas.

4.2.12. Presence of Agripreneurs in the Family before Practicing Organic Farming

This section mainly highlights the presence of Agripreneurs in the family before practicing organic farming. Agripreneurs were asked to state whether any presence or any family members are agripreneurs before joining or practicing agripreneurship. There are 551 respondents from Six (6) districts.

Table 4.12: Presence of Agripreneurs Before Starting Agripreneurship in the Family

Name of Districts	No	Yes	Total
Aizawl	71(88.8)	9(11.3)	80(100)
Lunglei	71(87.7)	10(12.3)	81(100)
Champhai	118(97.5)	3(2.5)	121(100)
Kolasib	42(76.4)	13(23.6)	55(100)
Serchhip	54(100)	0(0.0)	54(100)
Mamit	130(81.3)	30(18.8)	160(100)
Total	**486(88.2)**	**65(11.8)**	**551(100)**

Source: Field Survey

Figures in parenthesis indicates percentages

Table 4.12 depicts the district wise presence of agripreneurs in the family before they starts the agripreneurship in organic farming. From Aizawl district, out of the 80 agripreneurs, 71 (88.8 percent) agripreneurs have no presence of agripreneurs in the family before joining the FPO, while 9 (11.3 percent) were having family member who were already agripreneurs.

Whereas in Lunglei district, out of the 81 agripreneurs, 71 (87.7 percent) agripreneurs have no agripreneurs in the family before joining the FPO, while 10 (12.3 percent) were having family member who were already in agripreneurship. In Champhai district out of the 121 agripreneurs, 118 (97.5 percent) agripreneurs have no agripreneurs in the family before joining the FPO, while 3 (2.5 percent) were having family member who were already agripreneurs.

In Kolasib district out of the 55 agripreneurs, 42 (76.4 percent) agripreneurs have no agripreneurs in the family before joining the FPO, while 13 (23.6 percent) were having family member who were already agripreneurs. In Serchhip district out of the 54 agripreneurs, 54 (100 percent) agripreneurs have no agriprenuers in the family before joining the FPO, while 0 percent (0) were having family member who were already agripreneurs.

In case of Mamit district out of the 160 agripreneurs, 130 (81.3 percent) have no agriprenuers in the family before joining the FPO, while 18.8 percent (30) were having family member who were already agripreneurs. Thus Kolasib, Mamit and Lunglei and Aizawl districts are having a noteworthy proportion of presence of agripreneurs already existed within families, accounting for 23.6 percent, 18.8 percent, and 12.2 percent, 9 (11.3 percent) of the total 65 agripreneurs in from the six districts respectively. This indicates the potential influence of family background on the decision to engage in agripreneurship. In contrast, Champhai and Serchhip districts exhibit a lower prevalence of agripreneurs within families, at 3 (2.5 percent) and 0 percent respectively. This suggests that in these areas, agripreneurship might be driven by factors beyond familial influence. Kolasib district stands out with the highest proportion of agripreneurs in families at 23.6 percent. This might indicate that agripreneurship is more deeply ingrained in the local culture or that there are specific advantages in the region that foster entrepreneurial initiatives. But on the other hand; there are 486 (88.2 percent) agripreneurs out of 551 agripreneurs from Mizoram, not having any presence of agripreneurs before stating agripreneurship in the family.

Overall, the data suggests a mix of districts where family history significantly influences the choice of agripreneurship and districts where this influence is relatively minimal. To encourage agripreneurship across all districts, several recommendations can be considered.

4.2.13. Agripreneurs starter in the family

This section analyses the agripreneurs starter in the family from the six (6) districts in Mizoram.

Table 4.13: Agripreneurship starter in the family

Districts		Agripreneurship Starter				Total
		Self	Father	Mother	Siblings	
Aizawl	**Nos**	80	0	0	0	80
	%	100	0.0	0.0	0.0	100
Lunglei	**Nos**	76	5	0	0	81
	%	93.8	6.2	0.0	0.0	100.0
Champhai	**Nos**	119	2	0	0	121
	%	98.3	1.7	0.0	0.0	100
Kolasib	**Nos**	52	1	1	1	55
	%	94.5	1.8	1.8	1.8	100.0
Serchhip	**Nos**	53	1	0	0	54
	%	98.1	1.9	0.0	0.0	100
Mamit	**Nos**	151	7	1	1	160
	%	94.4	4.4	.6	.6	100
Total	**Nos**	**531**	**16**	**2**	**2**	**551**
	%	**96.4**	**2.9**	**.4**	**.4**	**100**

Source: Field Survey

Table 4.13 provides data on who started agripreneurship in the family in six districts of Mizoram, categorized by self, father, mother, and siblings. The majority of agripreneurs in all districts are follows; Self Started their own agribusinesses are 531 (96.4 percent).with the highest proportion in Aizawl district at 80 (100 percent) and the lowest in Lunglei district at 76 (93.8 percent). In terms of family members, fathers were the second most common initiators of agribusiness, followed by mothers and siblings.

Among the six districts, Aizawl had the highest number of agripreneurs who started their own business i.e. 80 (100 percent) of them being self-initiated. Champhai had the second-highest number of agripreneurs with a majority of them 119 (98.3 percent) being self-initiated and 6.2 percent being initiated by their fathers. Serchhip had the third-highest number of agripreneurs (121), with 98.3 percent of them being self-initiated and only 1.7 percent being initiated by their fathers. Kolasib

had the second lowest number of agripreneurs (55), with a majority of them (94.5 percent) being self-initiated and the remaining being initiated by their family members, including fathers, mothers, and siblings. In Serchhip there are 54 (98.1 percent) agripreneurs being self-initiated and 1.9 percent being initiated by their father. Lunglei had 76 (93.8 percent) of agripreneurs being self initiated,

Mamit district had the highest number of agripreneurs (160), with a majority of them 151 (94.4 percent) being self-initiated and the remaining being initiated by their family members, including fathers, mothers, and siblings. Additionally, fathers were the second most common initiators of agribusiness in Mamit district, with 7 (4.4 percent) of agripreneurs reporting their father as the initiator.

In conclusion, the data suggests that a significant proportion of agripreneurs in Mizoram initiate their own agribusinesses. However, fathers, mothers, and siblings also play a role in initiating agribusinesses, albeit to a lesser extent. The findings have implications for policymakers and development practitioners, indicating the need to provide support for aspiring agripreneurs to start their own businesses and to create an enabling environment for entrepreneurship in agriculture. The data suggest that in these six districts, the majority of agripreneurship was started by the agripreneurs themselves, with a relatively small proportion started by other family members. However, there were some variations in the distribution of who started agripreneurship by district.

4.2.14. Farm Size

These sections highlight and analyze the farm size of the agripreneurs in districtwise.

Table 4.14: Farm size of agripreneur

Size of farm (in acre)		Aizawl	Lunglei	Champhai	Kolasib	Serchhip	Mamit	Total
0.5 - 2	**Nos.**	51	49	46	17	0	88	251
	%	20.32	19.52	18.33	6.77	0	35.06	100
2.5 - 5	**Nos.**	26	21	67	25	8	57	204

	%	12.75	10.29	32.84	12.26	3.92	27.94	100
6 -9	**Nos.**	3	3	7	5	4	8	15
	%	10	10	23.33	16.67	13.33	26.67	100
10 - 13	**Nos.**	0	3	1	7	26	5	42
	%	0	7.14	2.38	16.68	61.9	11.9	100
14 - 18	**Nos.**	0	5	0	1	16	2	24
	%	0	20.83	0	4.17	66.67	8.33	100
Total	**Nos.**	**80**	**81**	**121**	**55**	**54**	**160**	**551**
	%	**14.50**	**14.70**	**22.00**	**10.00**	**9.80**	**29.00**	**100**

Source: Field Survey

The table 4.14 provides a detailed farm sizes of agripreneurs in different districts, categorized by acreage an in terms of the number of farms and the percentages.

0.5 - 2 Acres: Aizawl has the highest number of farms in this category i.e. 51 (20.32 percent), followed by Lunglei at 49 (19.52 percent), Champhai at 46 (18.33 percent) and Kolasib at 17 (6.77 percent). They also have a significant number. Serchhip (0) zero percent and Mamit at 88 (35.06 percent) and they have fewer farms percentage in this range .It is observed that small farms (0.5 - 2 acres) are prevalent in most districts, with Aizawl and Lunglei leading the way.

2.5 - 5 Acres: Champhai dominates this category with 67 (32.84 percent) farms, followed by Mamit with 57 (27.94 percent), Aizawl with 26 (12.75 percent) and Kolasib with 25 (12.26 percent). They have a moderate number; while Lunglei has 21(10.29 percent) and Champhai is the hub for medium-sized farms in (2.5 - 5 acres).

6 - 9 Acres: Mamit district lead in this category with 7 farms. Champhai and Serchhip also have a significant presence. Thus, Mamit and Champhai district dominance in medium-sized farms extends to larger ones as well.

10 - 13 Acres: Serchhip with 26 (61.9 percent) and Kolasib have 7 (16.68 percent) a considerable number of farms in this range, with Serchhip having the highest in this category. Conclusion: Kolasib and Serchhip are notable for larger farms (10 - 13 acres).

14 - 18 Acres: Serchhip dominates this category with 16 farms (66.67 percent), followed by Lunglei with 5 farms (20.83 percent). It can be concluded that Serchhip is the primary district for larger farms in this range.

In conclusion, the analysis reveals that Champhai is a key district for medium-sized farms, while Serchhip and Kolasib stand out for larger farms. Aizawl and Lunglei have a substantial number of small farms, while Mamit has fewer farms in all categories. The data also inform agricultural policy and resource allocation, encouraging the development of different farm sizes based on the strengths and preferences of each district's agripreneurs.

The distribution of farm sizes varies across districts. For instance, Champhai and Mamit have a higher percentage of larger farms (above 4 acres), while Aizawl and Kolasib have a larger share of smaller farms (below 2 acres). Smaller farms (1 acre and below) are prevalent in Aizawl and Kolasib, comprising around 36 percent and 38 percent of their farms respectively. This could indicate population density and urbanization influencing smaller landholdings. Medium-sized farms (between 2 and 4 acres) are relatively evenly distributed across most districts, with Serchhip having the highest percentage of such farms (37.4 percent). Larger farms (above 4 acres) are more common in Champhai, Mamit, and Serchhip, with the highest concentration in Mamit at 33.3 percent.

4.3. Growth Performance of Agripreneurs

4.3.1. Reliability Test on Growth Performance of Agripreneurs

To construct the data reliability or completeness, initially, a data reliability test was run based on the performance score unit of 18 variables in Cronbach Alpha. This test is essential for maintaining data integrity. The primary goal of the test was

to verify information about the agripreneurs' financial performance. The following is a presentation of the analysis results:

Table 4.15: Reliability Values for Growth Performance of Agripreneurs

Cronbach's Alpha	Cronbach's Alpha Based on Standardized items	N of items
0.624	0.643	18

Sources: Computed from Primary Data

Based on table 4.15 determined the overall value of Cronbach's alpha for the agripreneurs growth performance is found to be 0. 624which is an acceptable range of the reliability scale. The calculated value from the 18 variables is close to 1.00 which is maximum Cronbach's alpha value. This verified whether the scale or data items are reliable and measures the same construct for the purpose of moving on to the next analytical stage. The table also shows that 0.643, or 64.3 percent of the variability in a composite score, is deemed appropriate and dependable. Combining all 18 of the scale's items would increase this reliability. With the confirmation of acceptability range of the data, furthermore, inferential statistics like correlation coefficient analysis, regression analysis, and ANOVA analysis are appropriate to run for the analysis.

4.3.2. Correlation Analysis

Partial correlation coefficient analysis was conducted by keeping age, gender, and qualification as control variables to determine the inter-relationship between the financial performance factors that are implicated in the degree of growth level of agripreneurs, the influencing factors are namely Profit, Capital Investment, Sales, Productions and Operational Cost. An effort is made to establish its best used in variables that display a linear relationship relating them to each other and the outcomes of its cross-correlation among variables are as follows:

Table 4.16: Partial Correlation Co-efficient Analysis

	CI	AP	AS	APro	AOC
CI					
AP	0.48 (0.015)				
AS	0.53 (0.017)	0.25 (0.000)			
APro	0.46 (0.000)	0.28 (0.000)	0.29 (0.000)		
AOC	0.16 (0.000)	0.15 (0.001)	0.18 (0.003)	0.46 (0.000)	

CI- Capital Investment, AS - Annual Sales, APro- Annual Profits, AOC - Annual operating cost

Age, Gender, qualification are considered as control variables

Table 4.16 determined the interrelationship between the variables, such as capital investment, annual productions, annual sales, annual profit and annual operational cost based on financial performance towards agripreneur growth. The study determined that there is a moderately positive and significant relationship between capital investment and annual productions, agripreneurs ($r = 0.48$, $p = 0.015$) can maintained growth by pooling more capital into the firm which in return increase the production of the firm, once the agripreneurs maintained the standard volume of productions will influence growth of the agriprenuership. From the analysis results showing the agripreneurs growth in respect to the relationship between annual productions and annual sales, and it is confirm that there is moderately positive and significant relationship of these two variables ($r = 0.53$, $p = 0.017$), indicating moderate growth in agripreneurs. The capital investment have a significant relations to profit generated by an agripreneur, higher the business invest into the firm, there is potential for more production which in return generated higher revenue. An analysis results shows that there is moderately positive and significant relationship in respect to relation between the variables ($r = 0.46$, $p = 0.000$) in the study area. With reference to the relationship between annual capital investment and annual operational cost, it is found that there is a weak but significant positive relationship between the variables ($r = 0.16$, $p = 0.000$), meaning that the business firm inadequately meet the annual operational cost.

The study determined the correlations between annual production and others inter-related variables on measuring the agripreneurs growth in the study area. An analysis results reveals that there is moderate but positively significant relationship between annual production and annual sale (r = 0.25, p = 0,000) indicates that there is inadequate volume of production which lead to moderate of annual sales of the firm. Analysis also found at the level range results on relationship in respect to annual production and annual profit. There is weak but positive significant relationship between annual production and annual operational cost, it is confirm from the calculated value r and p is 0.015 and 0.0.001 respectively.

Table 4.16 showcases the correlation analysis between annual sales and the difference variables, the study results reveals that the relationship of annual sales and annual profit is calculated as r = 0.29, p = 0.000 which proved of moderate but positive significant relationship, which means if there is more annual sale agriprenuers can generate more profit for the firm. The study evident that there in inadequate of cost of goods sold to meet annual sale as the calculated value of correlation shows weak relations (r = 0.18) but showing positive significant (p = 0.000), there is potential to increase sale when appropriate amount of operational cost acquired. Finally, an analysis results highlight that there is moderate but positively significant relationship between annual profit and cost of operation, meaning that volume of profit has direct influence on maintaining of operational cost. An agripreneur has moderately met the needs of operational cost which measure of his financial performance as moderate growth.

4.3.3. Regression Coefficient Analysis

An attempt is made to run the linear regression analysis to determine the relationship between the dependent variables (Annual profit) and independent variables such as capital investment, annual sale, annual productions and annual operating cost. The regression equation presented below shows the regression equation for predicting the dependent (annual profit) variable influence from the independent variables (annual sale, capital investment, annual production and operational cost:

$$Y = a + b_1X_1 + b_2X_2b_3X_3 + b_3X_3$$

Where,

Y = Annual Profit (dependent variable)

A = constant

b_1 to b_4 = Represents coefficients for the representative variables

X_1 = Capital Investment

X_2 = Annual Production

X_3 = Annual Sale

X_4 = Annual Operational Cost

Table 4.17: Model Summary [b]

Model	R	R Square	Adjusted R Square	The standard error of the Estimate
1	.632[a]	.610	.634	625.946

a. Predictors (Constant), Capital Investment, Annual Production, Annual Sale, Annual Operational Cost

b. Dependent Variable: Annual Profit

Table 4.17 determined the value of R and R square. With reference to analysis results it is found the R-value of 0.632 is a high degree of relationship, which also represents the simple correlation between the dependents variable (Annual Profit) and independents variables. The value of R square indicates how much of the total variation in the independent variables. Hence, annual profit can be predicts by the independent variables such as capital investment, annual production, annual sales and operation cost. The calculated from the analysis show 61 percent is explained by the predictors, which indicates suitable influence.

Table 4.18: ANOVA [a]

Model		Sum of Square	Df	Measure Square	F	Sig.
1	Regression	62.219	4	15.555	39.700	.000[b]
	Residual	213.923	546	392		
	Total	276.142	550			

a. Dependent Variable: Annual Profit

b. Predictors (Constant), Capital investment, Annual production, Annual sales and annual operational Cost

Table 4.18 shows the regression equation fits the given data, the independent variables such as capital investment, annual production, annual sales, operating cost have the potential to impact the dependent variable (annual profit). The analysis determined that the regression is significant as the p-value is found to be 0.000 which is less than 0.05 of significant value. Therefore, based on the study results from the regression model, the overall performance of the variables are statistically significant and predicts the results of the dependents and independents variables. Hence, this model is appropriately suitable for analysis.

Table 4.19: Coefficient [a]

Model	Unstandardized coefficients		Standardized coefficients	F	Sig.
	B	Std. Error	Beta		
Constant	1.578	0.222		7.101	000
Capital Investment	0.356	0.056	0.246	6.403	.020
Annual Production	0.490	0.057	0.338	8.616	
Annual Sale	0.328	0.046	0.278	0.088	.004
Annual Operational Cost	-0.359	-0.057	-0.244	6.297	.000
					.013

a. Dependent Variable: Annual profit

Table 4.19 determined the results of linear regressionanalysis; it is confirm that the independent variables such as capital investment, annual production, annual sales, and annual operational cost variables are significant impact of the level of agripreneur growth (annual profit). The investigation results indicates that the growth level of agripreneur has the potential to influence the independent variables, which is reaffirmed from the calculated value as 61 percent (R square is found at 0.610), the table evidently states the regression coefficient of the variables. With reference to stepwise regression analysis for dependents and independents variables, the casual relationship equation can be represented as Y = 1.578 - 0.356 (Capital Investment) + 0.490 (Annual production) + 0.028 (Annual sales) - 0.359 (Annual operation cost.

Based on the Alpha = 0.05 level of significance, the p-value of X_1, X_2, and X_3, are found less than 0.05, hence, the regression coefficient analysis results show appropriate evidence to draw that the capital investment, annual production and annual sales significant impact on level of agripreneur performance growth. Hence, rejecting the null hypothesis is at a 5 percent level of significance and accepts the alternative hypothesis. The parameter (X_4), annual operation cost is found more than 0.05, viz 0.013. Therefore, the calculated r value confirmed to conclude that this parameter is not useful impact on agripreneur growth. Hence, it accepted the null hypothesis and rejected the alternative hypothesis.

4.4. Conclusion

This chapter comprises of data analysis which focuses on fulfilling objective 2 and objective 3 of the study. The first part of the chapter describes about the objective 2 i.e. socio-economic profile of the agripreneurs viz. Family size, age, educational qualifications, occupations, marital status, religions, monthly income, dwellings, registration under FPO, agripreneurship in the family and firm sizes of agripreneurs were mainly discussed in detail. The second part of the chapter deals with fulfilling objective 3 i.e. growth performance of agripreneurs. To construct the data reliability or completeness, initially, a data reliability test was run based on the performance score unit of 18 variables in Cronbach Alpha. With the confirmation of acceptability range of the data, furthermore, inferential statistics like correlation

coefficient analysis, and regression analysis were appropriately adopted to run the analysis. Correlation analysis was conducted to determine the inter-relationship between the financial performance factors that are implicated in the degree of growth level of agripreneurs, the influencing factors are namely Profit, Capital Investment, Sales, Productions and Operational Cost and these variables are all found to be statistically significant. Regression analysis was further run to determine the relationship between the dependent variables (Annual profit) and independent variables such as capital investment, annual sale, annual productions and annual operating cost. The study confirmed that the independent variables such as capital investment, annual production, annual sales, and annual operational cost variables are significant impact of the level of agripreneur growth (annual profit).

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CHAPTER -5

PROBLEMS AND PROSPECTS OF AGRIPRENEURS

5.1. Introduction

The present chapter analyse the problems and prospects of agripreneurs from six (6) districts in Mizoram. It is mainly emphases to understand the constraints of Farmers Producer Organisation, Villages within FPO's and districtwise in Mizoram due to- illiteracy , lack of infrastructure, lack of processing centre, lack of government supports, lack of training, lack of capital, Lack of technological awareness and skills, society obligations, lack of family supports, work life imbalance, lack of finance, lack of market support, lack of skilled labour, lack of quality and treated seeds, lack of irrigation, high competition for start ups, unpredictable weather, absence of incubation centre for start ups, middlemen problems, lack of unity among agripreneurs. An analysis is performed to highlight the challenges encountered by agripreneurs taking up the agripreneurship of organic crops in the study area. The stepwise analysis is run to identify and understand their relationships and the significance difference in the mean score among the respondents.

5.2. Reliability Test

To confirm the reliability of the collected data, reliability statistics was run and stepwise discussion is presented below. In this section there are altogether 20 numbers of variables to accommodate the analysis, confirming the data appropriateness, the following analysis was run to fulfill the objectives of the study.

Table 5.1: Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No. of items
0.795	0.796	20
Sources: Primary data		

Table 5.1 determined that the variables' Cronbach's alpha values ά = 0.795, falling within the reliability scale's acceptable and adequate range. Additionally, the value derived from the 20 items is in close proximity to the maximum value of Cronbach's alpha, which is 1.00. This verified whether the scale or data items are reliable and measures the same construct for the purpose of moving on to the next analytical stage. The table also display ά = 0.796, meaning that 79 percent of the variability in a composite score is deemed appropriate, dependable, and would be improved by combining all 20 of the scale's items.

The difference between the two values represents the Cronbach's alpha derived from standardized items. This calculation is based on the pre-test or presumption that all scales have the same variance, which is not realistically possible because there will always be some in the scale or items. Therefore, the first value is taken in most cases.

5.3. Problems and Challenges of Agripreneurs

An attempt is made to identify and understand the problems and challenges of agripreneurs taking up enterpreneurships. Some of the prominent problems and challengesare derived from the study of Bodunrin (2014). The question was structured using 5 points Likert Scale and adequate numbers of data are collected from the respondents. The collected data are codified, tabulated, and finally administered for the analysis. The stepwise results of the analysis are presented herewith as follows:

Table 5.2: Mean, S.D., Frequency, Percentage, and Level of Agreement

Sl	Reasons	M	St. D	SD (%)	D (%)	N (%)	A (%)	SA (%)	Level
1	Illiteracy	1.97	0.90	165 (30%)	294 (53.36%)	42 (7.62%)	42 (7.62%)	8 (1.45%)	Disagree
2	Lack of Infrastructure	3.57	0.98	9 (1.63%)	101 (18.33%)	77 (13.97%)	292 (53%)	72 (13.08%)	Agree
3	Absent of processing unit	3.79	0.90	8 (1.45%)	52 (9.44%)	87 (15.79%)	302 (54.81%)	102 (18.33%)	Agree
4	Lack of Government Supports	3.95	0.79	5 (0.90%)	30 (5.44%)	49 (8.89%)	364 (66.06%)	103 (18.69%)	Agree
5	Lack of Training	3.58	0.98	12 (2%)	87 (16%)	91 (17%)	287 (52%)	74 (13%)	Agree
6	Limited capital investment	3.94	0.82	7 (1,27%)	39 (7.08%)	44 (7.99%)	348 (63.16%)	113 (20.51%)	Agree
7	Lack of technological awareness & Skills	3.32	0.99	14 (2.54%)	124 (22.50%)	128 (23.23%)	238 (43.19%)	47 (8.53%)	Agree
8	Society obligation	2.75	1.02	37 (6.72%)	137 (24.86%)	129 (23.41%)	61 (11.07%)	27 (4.90%)	Disagree

9	Non-cooperation from family	2.27	0.87	66 (11.98%)	346 (62.79%)	79 (14.34%)	45 (8.175)	15 (6.07%)	Disagree
10	Work imbalance	2.74	1.02	42 (7.62%)	255 (46.28%)	108 (19.60%)	126 (22.87%)	30 (5.44%)	Disagree
11	Lack of finance	3.57	1.08	9 (1.63%)	128 (23.23%)	54 (9.80%)	259 (47%)	101 (18.33%)	Agree
12	Lack of market support	3.74	0.99	13 (2.36%)	71 (12.89%)	72 (13.07%)	284 (51.54%)	111 (20.14)	Agree
13	Lack of skilled labour	3.24	1.01	10 (1.81%)	111 (20.15%)	87 (15.79%)	264 (47.91%)	79 (14.34%)	Agree
14	Lack of quality/Treated seeds	2.84	0.82	7 (1.27%)	49 (8.89%)	32 5.81%)	340 (61.71%)	128 (23.23%)	Agree
15	Lack of irrigation	4.00	0.88	3 (0.54%)	52 (9,44%)	35 (6.35%)	307 (55.72%)	153 (27.77)	Agree
16	High market competition for start-up	3.37	1.02	15 (2.72%)	131 (23.77%)	92 (16.70%)	265 (48.09%)	48 (8.71)	Agree
17	Unpredictable weather & Climate	3.47	0.98	12 (2.18%)	106 (19.24%)	99 (17.97%)	277 (50.27%)	57 (10.34%)	Agree
18	Absence of incubation for start-up	3.52	0.95	12	94	89	304	52	Agree

				(2.18%)	(17.06%)	((16.15%)	(55.17%)	(9.44%)	
19	Problem from middlemen	3.38	1.07	22 (2.18%)	128 (23.23%)	77 (13.97%)	267 (48.46%)	57 (10.34%)	Agree
20	Lack of unity among agripreneurs	3.35	1.03	18 (3.45%)	131 (23.77%)	82 (14.88%)	274 (49.73%)	46 (8.35%)	Agree

Sources: Computed from the primary data

Note: SD = Strongly Disagree, D = Disagree, N = Neutral, A = Agree, SA = Strongly Agree

St. D = Standard Deviation, M = Mean

Table 5.2 showcases the mean value, standard deviation, frequency, percentage, and level of respondents' agreement on problems and challenges variables in the study area. The analysis result indicates the agreement variables with the 20 items, and the construct-level impact was from a point scale of strongly disagree to strongly agree. The study determined that the respondents agreement level of 16 items was found to agree on problems and challenges encounter in taking up agripreneurship, namely, item #2 (*M* = 3.57, StD = 0.98). 'Lack of infrastructure', item # 3 (M = 3.79, St.D = 0.90) 'Absence of processing unit', item # 4 (M =3.97, Std. = 0.79) 'Lack of Government support', item # 5 (M = 3.58, Std. = 0.98) 'Lack of training', item #6 (M = 3.94, Std. = 0.82) 'Limited capital investment', item # 7 (M = 3.32, StD = 0.99) 'Lack of technological awareness and skills', item # 11 (M = 3.57, Std. = 1.08) 'Lack of finance'item # 12 (M = 3.74, StD = 0.99) 'Lack of market support', item # 13 (M = 3.24, Std. = 1.01) 'Lack of skill labor', item # 14 (M = 2.84, Std. = 0.82) 'Lack of quality/treated seeds', item # 15 (M = 4.00, Std. = 0.88) 'Lack of proper irrigation', item # 16 (M = 3.37, Std. = 1.02); 'High market competition for start-ups', item # 17 (M = 3.47, Std. = 0.98) 'Unpredictable weather and climate', item # 18 (M = 3.52, Std. = 0.95) 'Absence of incubation for start-ups', item # 19 (M = 3.38, Std. = 1.07) 'Competition from middlemen', and item # 20 (M = 3.35, Std. = 1.03) 'Lack of unity amongst agripreneurs'.

The study also highlights the existence of 4 items of problems and prospects creation impact in which respondents disagree on the variables such as item #1 (M = 1.97, Std. = 0.90) 'Illiteracy factors', item # 8 (M = 2.75, Std. = 1.02) 'Society obligations', item # 9 (M = 2.27, Std. = 0.87) 'Non-cooperation from family', and item #10 (M = 2.14, Std. = 1.02) 'Work-life imbalance. The study also reveals that none of the respondents agreement levels are found at the levels of strongly agree, neutral, or strongly disagree, meaning that respondents are moderately in agreement on these variables.

5.4. ANOVA Analysis

This study is an attempt to measured the variance of the population in two different score, the first is by noting the significance differences between the

variables based on districts wise agripreneurship and the second is based on the other demographic mean differences. The results of one-way analysis of variance are herewith as follows.

Table 5.3: Significance of Difference in Mean Score between the District-wise on the Variables

Variables	Sum of square	Df	Mean Square	F	Sig.
Illiteracy Between Groups Within Gropus Total	15.426 252.379 267.805	5 545 550	3.085 0.784	3.936	**0.002**
Lack of Infrastructure Between Groups Within Groups Total	31.134 284.805 315.939	5 545 550	6.227 0.884	7.040	**0.000**
Absence of processing unit Between Groups Within Groups Total	13.046 253.438 266.485	5 545 550	2.609 0.787	3.315	**0.006**
Lack of Government Support Between Groups Within Groups Total	3.263 185.222 188.485	5 545 550	0.653 0.575	1.134	0.342
Lack of training Between Groups Within Groups Total	22.179 291.257 313.436	5 545 550	4.436 0.905	4.904	**0.000**

Limited capital investment Between Groups Within Groups Total	8.922 211.196 220.119	5 545 550	1.784 0.656	2.721	**0.020**
Lack of technological Between Group awareness & Skills Within Groups Total	19.407 305.032 324.439	5 545 550	3.881 0.947	4.097	**0.001**
Society Obligation Between Groups Within Groups Total	34.209 310.788 344.997	5 545 550	6.842 0.965	7.089	**0.000**
Non-cooperation from family Between Groups Within Groups Total	5.926 244.924 250.851	5 545 550	1.185 0.761	1.558	0.172
Work-life imbalance Between Groups Within Groups Total	11.443 359.529 370.973	5 545 550	2.289 1.117	2.050	0.071
Lack of finance Between Groups Within Groups Total	46.896 337.043 383.939	5 545 550	9.379 1.047	8.960	**0.000**
Lack of market support Between Groups Within Groups	9.041 317.931 326.973	5 545 550	1.808 0.987	1.831	0.106

Total					
Lack of skilled labour Between Groups Within Groups Total	13.638 326.334 339.973	5 545 550	2.728 1.013	2.691	**0.021**
Lack of quality/treated seeds Between Groups Within Groups Total	13.894 214.094 227.988	5 545 550	2.779 0.665	4.179	**0.001**
Lack of proper irrigation Between Groups Within Groups Total	8.755 245.233 253.988	5 545 550	1.751 0.762	2.299	**0.045**
High market competition Between Groups for start-ups Within Groups Total	21.176 323.446 344.622	5 545 550	4.235 1.004	4.216	**0.001**
Unpredictable weather Between Groups and climate Within Groups Total	7.168 310.637 317.805	5 545 550	1,434 0.965	1.486	0.194
Absence of incubation for Between Groups start-ups Within Groups Total	33.259 264.494 297.753	5 545 550	6.652 0.821	8.098	**0.000**
Problems from middlemen Between Groups Within Groups	32.725 342.638 375.363	5 545 550	6.545 1.064	6.151	**0.000**

Total					
Lack of unity among agripreneurs Between Groups Within Groups Total	31.304 319.961 351.265	5 545 550	6.261 0.994	6.301	**0.000**

Source: Computed from primary data

The analysis results from table 5.3 indicate the problems and challenges encounter by the respondents of each district who are undertaking agripreneurship. An analysis is run to determined whether there is significance difference between the respondents. It is observe that the respondents face constraints in respect to illiteracy (F = 3.936, p = 0.002) which is differ at 5% significant level. Stepwise mean analysis determined that the respondents from champhai district (M = 2.275) encounter more constraint based on illiteracy than to that of other districts respondents running agripreneurship. The study indicates that serchhip district with the calculated mean value of 1.687 were found the lowest mean score, meaning that this district face least constraints influence by the illiteracy in undertaking agripreneurship in the study area. Thus, absence of processing unit is concerned, the calculated value of F = 7.040, p = 0.000 indicates highly significant differences at the 5% level. Based on the mean score, respondents from the mamit district have significant constraints (M = 3.875) and Aizawl district respondents have a least constraints (M= 3.070) as the district is the state capital facility of equipment, infrastructure, and other resources are comparatively better than other districts. Study observed that the variables namely 'Absence of processing unit' have significant differences (p = 0.006) among the districts respondents at 5% level. An investigation results highlights that lunglei district with mean score calculated value of M= 4. 098 were the most influence by this variable, the processing unit in the district are very limited though there is potential of natural resources, and Aizawl district with M = 3.542 indicates the least influences, as the majority of processing units are located in Aizawl district. The variables based on the "Lack of Government support', the results indicates that there is no significant differences among the district wise respondents influences as the

calculated p = 0.345 meaning that there is no significant differences at the 5% level. An empirical result also determined that the government supports are adequate for all an agripreneurs by undertaking agripreneurship. Thus, lack of training factors is concerned; it is found that there is highly significant differences among the district wise respondents mean score. Champhai district respondents with M = 3.862 considered the most constraints in encountering in taking up the firm and serchhip district respondents mean score is calculated as M = 3.00 showing the least influences by this factor.

Table 5.3 showcases mean score difference among the district-wise respondents, the variables namely 'limited capital investment' suggest significant differences (p = 0.020) at the 5% level. Champhai district with the mean score of M = 4.110 were found the highest constraints, district has shows several elements which impact on the law and order situations may be the reason stakeholders are not willing to invest into this district. Kolasib district considerably the gateway of the state has developed in all round prospect which encourage the stakeholder to set-ups their agri-based. Considering the variable of 'Lack of technological awareness and skills' an analysis results indicates that there is highly significant differences among the district wise respondents, there is a lot of constraints in taking up agripreneurship in respect to this variables. The constraints are more visible among the Aizawl district agripreneur (M = 3.578) as they are yet to well equip with technologies and skill enhancement programmed conducted in various capacity at the district are found inadequate, flock in immigrant of unskilled labour form other districts into Aizawl district also has more impact. The mean score from serchhip district respondents shows lowest value (M = 2.670) which indicating lower influence by the variables. There is also highly significant influence among the district respondents based on the society obligation variables. An analysis results reveals that the respondents from Aizawl district face more constraints (M = 3.105) on this variable than respondents from other districts. Mamit district cling to the lowest constraints with the calculated mean value of 2.200 at the 5% significance level. With references to variables Non-cooperation from family, the study indicates that there is no significant difference among the district respondents as the calculated p value is 0.172 which indicate more

than the significance value of 0.05. Therefore, family of the agriprenuers are cooperative, all the required supports are extended as and when needed. Thus, the factor namely 'Work-life imbalance' is concerned, the study found that there is no significant mean differences among the districts wise respondents as the calculated p-value of 0.072 which is close to 0.05 at the significant confident level of 5%. Therefore, the study observed that most of the agripreneur have no constraints encountering on operational of agripreneurship with their personal-life.

With references to lack of finance variables, table 5.3 determined that there is significant mean difference among the district respondents as the calculated p-value is 0.000 which indicates significant at 5% level. Champhai district with M = 3.981 shows highest constraints as the districts received low investment from the entire stakeholder which indicate inadequacy of capital in an agripreneurship. Serchhip districts with M = 625 highlighting the least constraints in respect to capital requirement of the firm. Based on lack of market support, an investigation results indicates that there is no significant difference among the respondents from various districts; the calculated mean score is 0.106 which is more than the confidential level of 0.05. Therefore, there is proper market for all the agri-products produce in the state, due to inadequate supply of state own productions, the imported conventional products from neighboring states are also floated in the market. The parameter based on the lack of skill labour, it is determined that there is significant differences on respondents mean score in district wise as the calculated mean value shows 0.021 which is less the confidential level at 5%. The mean score based on kolasib district found at 3.444 which is also leading constraints encounter among the district respondents followed by champhai district with M = 3.355 and the least constraints is considered to mamit district as the mean score(M) shows only 2.800. Parameter concerned to 'Lack of quality/treated seeds'. It is observe that the respondents face constraints in respect to this variables (F = 4.179, p = 0.001) which is differ at 5% significant level. Stepwise mean analysis determined that the respondents from lunglei district (M = 4.163) encounter more constraint based on variables followed by champhai districts with M = 4.110 and the least constraints is found in the districts of mamit M = 3.325. Focus on 'Lack of irrigation', the study reveals that there is

significant mean differences among the district respondents, the calculated p-value indicates shows p = 0.045, F = 2.299 which is closed to the value of confidential level at 5%. The study indicates that there is mean differences and the lunglei and champhai with same value of meam (M = 4.11) stood at the highest constraints encounter in agripreneurship and the least is found in the district of mamit with M = 3.525.

Table 5.3 determined district-wise respondents from six districts mean differences, an analysis results shows that there is significant differences (p = 0.001, F = 4.216) in respect to high market competition for start-ups variables at the 5% confidential level.

Respondents from champhai district with M = 3.623 has a highest constraints in taking agripreneurship, the district bordering to international where many individuals are taken up entrepreneurship as their professional, this approach created more competition among the local and agripreneurs from other districts followed by lunglei district with M = 3.426 and the least constraint encountered in the firms are from serchhip district with only 2.812 mean score. It is observe that the respondents face constraints in respect to unpredictable weather and climate (F = 1.486, p = 0.194) which is not differ at 5% significant level. Stepwise mean analysis determined that there are significant differences among the districts agripreneur, meaning that the weather and climate in the Mizoram for taking up agripreneurship is suitable, the timely and good weather leads to better productivity in the study area. Based on the variable namely absence of incubation for start-ups, the table reveals that there is significant mean score differences (p = 0.000, F = 8.078) between districts respondents which indicates that agripreneur from the study have face contrarians in their business firm in respect to this variables. The respondents from lunglei with M = 3.803 have the highest influences followed by champhei district with M = 3.743 stood in 2nd place and at the least with only M = 2.875 face the least constraints. With reference to the variable such as competition from middlemen is concerned, step-wise mean score measurement indicates that there is a significant difference (p = 0.000, F = 6.151) between the respondents from the six districts at the 5% confidential level. An agripreneur from lunglei mean score (M) is calculated as 3.803

which is the leading respondents facing the constraints in the workforce followed by Champhai district respondents with mean score (M) 3.743 stood at second place and serchhip districts with M = 2.875 were in the least respondents encountering challenges based on this variable. Lastly, the variables are based on Lack of unity among the agripreneurs, the study reveals is no unity among the respondents from all the districts. There is more differences in the district os Lunglei with mean score M = 3.672 and followed by the respondents from aizawl district with M = 3.631 and finally the respondents from mamit districts with only 2.750 mean score place at the least. An analysis reveals that there is significant differences (p= 0.000, F = 6.301) among the respondents from the entire district at the significant level of 5%.

Table 5.4: Significance of Difference in Mean Score between the Gender-wise on the Variables

Variables		Sum of square	Df	Mean Square	F	Sig.
Illiteracy	Between Groups	24.231	6	4.039	3.340	**0.037**
	Within Groups	243.574	544	0.759		
	Total	267.805	550			
Lack of Infrastructure	Between Groups	32.593	6	5.432	12.273	**0.000**
	Within Groups	283.346	544	0.883		
	Total	315.939	550			
Absence of processing unit	Between Groups	17.332	6	2.889	2.894	**0.006**
	Within Groups	249.153	544	0.776		
	Total	266.485	550			
Lack of Government Support	Between Groups	3.739	6	0.623	1.987	0.139
	Within Groups	184.746	544	0.576		
	Total	188.485	550			
Lack of training	Between Groups	35.555	6	5.926	8.973	**0.000**
	Within Groups	277.881	544	0.866		
	Total	313.436	550			
Limited capital investment	Between Groups	9.352	6	1.559	3.050	**0.049**
	Within Groups	210.767	544	0.657		
	Total	220.119	550			
Lack of technological awareness & Skills	Between Groups	19.436	6	3.239	1.056	**0.034**
	Within Groups	305.003	544	0.950		
	Total	324.439	550			
Society Obligation	Between Groups	34.442	6	5.740	5.93	**0.007**

	Within Groups	310.555	544	0.967	3	
	Total	344.997	550			
Non-cooperation from family	Between Groups	6.003	6	1.000	0.927	0.397
	Within Groups	244.848	544	0.763		
	Total	250.851	550			
Work-life imbalance	Between Groups	11.829	6	1.971	0.246	0.782
	Within Groups	359.144	544	1.119		
	Total	370.973	550			
Lack of finance	Between Groups	47.040	6	7.840	9.828	**0.000**
	Within Groups	336.899	544	1.050		
	Total	383.939	550			
Lack of market support	Between Groups	18.900	6	3.150	0.376	0.687
	Within Groups	308.073	544	0.960		
	Total	326.973	550			
Lack of skilled labour	Between Groups	13.872	6	2.312	0.291	0.972
	Within Groups	326.101	544	1.016		
	Total	339.973	550			
Lack of quality/treated seeds	Between Groups	14.762	6	2.460	3.704	**0.013**
	Within Groups	213.226	544	0.664		
	Total	227.988	550			
Lack of proper irrigation	Between Groups	9.756	6	1.626	2.137	**0.026**
	Within Groups	244.232	544	0.761		
	Total	253.988	550			
High market competition for start-ups	Between Groups	26.052	6	4.342	3.604	**0.028**
	Within Groups	318.570	544	0.992		
	Total	344.622	550			
Unpredictable weather and climate	Between Groups	7.744	6	1.291	0.450	0.638
	Within Groups	310.061	544	0.966		
	Total	317.805	550			
Absence of incubation for start-ups	Between Groups	35.359	6	5.893	2.209	**0.007**
	Within Groups	262.394	544	0.817		
	Total	297.753	550			
Problems from middlemen	Between Groups	34.183	6	5.697	0.755	0.471
	Within Groups	341.180	544	1.063		
	Total	375.363	550			
Lack of unity among agripreneurs	Between Groups	32.376	6	5.396	2.733	0.067
	Within Groups	318.890	544	0.993		
	Total	351.265	550			

Source: Computed from primary data

Table 5.4 determined the mean score difference based on gender demographic of the respondents. Study shows that there is significant difference on illiteracy of the gender, as the calculated value of F= 3.340 and p = 0.037 which is within the significant value at 5% level. Female with M = 2.098, Std. = 1.013 highlights the most influence by illiteracy factors than male categories with M = 1.865, Std. = 0.765 in taking agripreneurship in the study. There is mean score differences based on the variable 'Lack of infrastructure' (F = 12.273, p = 0.000), an analysis results indicates that despite significant difference at 5% level, the differences between male (M = 3.809, SD = 0.857) and female (M = 3.362, SD = 1,035) shows slights difference, which indicates this variables is equally influence both male and female. In respect to Absence of processing unit variables, the table determined that female (M = 3.858, St.D = 0.735) shows the highest influence by this parameter, it is fund that female agriprenuers (M = 3.856, St.D = 0.866) face more constraints than the male agripreneurs (M = 3.711, St.D = 0.934) at the significant level of 5%. Based on the parameters namely 'Lack of Government support' table reveals that female agripreneurs (M = 4.049, St.D = 0.735) influence the most by taking up agriprenuership than to that of male agripreneurs (M = 3.883, St.D = 0.764). There is also a significant difference with reference to Lack of training in the study area, and it is found that female agripreneurs are significantly influnce (M = 3.803, St.D = 0.880) by this variables than to male agriprenuers (M = 3.392, St.D = 1.020) in pursuing agripreneurship at 5% significant level.

Table 5.4 shows the detail analysis on mean differences of various variables with reference to gender of agripreneurs, step-wise analysis shows that there is significant difference between male and female agripreneur (F =3.037, p = 0.049) which is within the 5% level. It is found that female agripreneurs (M = 4.042, St.D = 0.811) face encounter more constraints on limited capital investment than male agripreneur (M= 3.852, St.D = 0.818) running the business in the study area. With reference to a variables 'Lack of technological awareness and skills', the study shows that male agriprenuer were the most affected by this variables with M = 3.906, St.D = 0.931 than to female agripreneurs as the calculated value of M = 3.368, St.D = 1.053 at the significant level of 5%. For Society obligation variables, it is found that

male agriprenuer with M = 2.921, St.D = 0.971 have higher tendency in encountering constraints in the study area thank female agripreneurs with M = 2.717, St.D = 1.085, the diffirences is significant at the 5% level. Step-wise analysis results indicates that there is no significant differences (F = 0.927, p = 0.397) between male and female agripreneurs base on non-cooperation from family, results indicates that the family members are supportive in all the process for running and establishment of agripreneurship. An investigation results shows that the female and male agripreneurs exhibit equal approaches based on the work-life imbalance, as the p = 0.397, F = 0.246 which indicates no significant differences at the 5% level.

The analysis results from table 5.4 indicate the problems and prospect encounter by the respondents who are undertaking agripreneurship. An analysis is run to determined whether there is significance difference between the respondents. It is observe that the respondents face constraints in respect to 'Lack of finance' (F = 9.828, p = 0.000) which is differ at 5% significant level. Stepwise mean analysis determined that the female respondents (M = 3.840, St.D = 1.059) encounter more constraint based on variables than to that of male agriprenuers (M = 3.325, p = 1.047) running agripreneurship. Base on the variables such as lack of market support (F = 0.291, p = 0.972, lack of skill labour (F = 0.376, p = 0.687) showcases no differences in running the business, both the genders demonstrate equal market share, and in respect to lack of skill labour most of them are unskilled which leads no differences. Furthermore, the study indicates that there is significant differences between the male and female agripreneur (F = 3.704, p = 0.013), the calculated mean score on both indicates that female respondents have more challenges with lack of quality/treated seeds variables as the mean score calculated values shows M 4.067, St.D = 0.057 than to that of male respondents (M = 3.926. St.D = 0.828) respectively. In regards to lack of proper irrigation, it is found that female agripreneurs face more challenges than male agriprenueurs, which dived the mean score among the gender as the calculate value of mean score p = 0.026, F = 2.137 which is within the significant level of 5%.

Additionally, the table 5.4 reveals that there is no significance relationship between male and female respondents based on high market competition for start-ups

and unpredictable weather climate, majority of the agripreneurship are established in a recent year were the market has more opportunity to meet the large demand of the consumers. The weather and climate in the state shows favourable for the agriculture, this nature wealth in return give higher production. The calculated mean score value shows no differences for both the variables F = 0.450, p = 0.638 for market completion and weather and climate condition. However, there is significant differences among the respondents based on absence of incubation for start-ups (F = 2.207, p = 0.007), female respondents with M = 3.625, St.D = 0.923 show more challenges encounter in this variable by undertaking business firm in the study area than male respondents with only M = 3.435, St.D = 0.975. Lastly, the table determined that the variables such as problem from middlemen, lack of unity among the agripreneurs shows no significant difference among the respondents. The business firm were not required number of middlemen as the firm themselves can easily reach out to the market and the buyers. The state with small numbers of agripreneurship, the connectivity and support system among the respondents exhibit cooperation and mutual relationships among the agripreneurs.

5.5 Relative Important Index

This study uses the Relative Importance Index (RII) method to identify and quantify the problems and challenges encountering while taking up Agripreneurship in six (6) district of Mizoram. There are 551 responders in total, the necessary information was gathered, tallied, and analyzed as follows:

$$\mathbf{RII} = \frac{\mathbf{5n5+4n4+3n3+2n2+n1}}{\mathbf{A*N}}$$

Where,

n_5 = Number of respondent for Very Important
n_4 = Number of respondent for Important
n_3 = Number of respondent for Neutral
n_2 = Number of respondent for not important
n_1 = Number of respondent for Not at all Important
A = Highest weight
N = Total No. of Respondents
RII = Relative Important Inde

Table 5.5: Relative Importance Index (RII) Ranking on Problems and Prospects in Taking up Agripreneurship

Variables	SD	D	N	A	SA	Total No.	A * N	RII	Rank
Lack of irrigation	3	104	105	1228	765	2205	2755	0.800	1
Lack of quality/treated seeds	7	98	96	1360	640	2201	2755	0.799	2
Lack of Government Supports	5	60	147	1456	515	2183	2755	0.792	3
Limited capital investment	7	78	132	1392	565	2174	2755	0.789	4
Absence of processing unit	8	104	261	1208	510	2091	2755	0.759	5
Lack of market support	13	142	216	1136	555	2062	2755	0.748	6
Lack of Training	12	174	273	1148	370	1977	2755	0.718	7
Lack of Infrastructure	9	202	231	1168	360	1970	2755	0.715	8
Lack of finance	9	256	162	1036	505	1968	2755	0.714	9
Lack of skilled labour	10	222	261	1056	395	1944	2755	0.706	10
Absence of incubation for start-up	12	188	267	1216	260	1943	2755	0.705	11
Unpredictable weather & Climate	12	212	297	1108	285	1914	2755	0.695	12
Problem from middlemen	22	256	231	1068	285	1862	2755	0.676	13
High market competition for start-up	15	262	276	1060	240	1853	2755	0.673	14
Lack of unity among agripreneurs	18	262	246	1096	230	1852	2755	0.672	15
Lack of technological awareness & Skills	14	248	384	952	235	1833	2755	0.665	16
Work imbalance	42	510	324	504	150	1530	2755	0.555	17
Non-cooperation from family	66	692	237	180	75	1250	2755	0.454	18
Illiteracy	165	588	126	168	40	1087	2755	0.395	19
Society obligation	37	274	387	244	135	1077	2755	0.391	20

Source: Computed from primary data

Table 5.5 displays the Relative Importance Index (RII) along with the appropriate importance level and ranking. The following rating criteria were adopted on a 5-point Likert scale according to level of significance: It demonstrates that the sustainable criteria were more significant the higher the RII value, and vice versa. The analysis result demonstrates the agreement on variable measures and the construct-level impact, which ranged from strongly agree to strongly disagree. On the important scale of analysis of problems and challenges faced in an agripreneurship, lack of irrigation measure of parameter is found to have the highest significance level, ranking 1 with a RII value of 0.800, followed by lack of quality/treated seeds, which ranked second with a RII value of 0.799. The remaining factors were ranked as follows: Lack of government supports at rank 3 (RII = 0.792), limited capital investment at rank 4 (RII = 0.789), absence of processing unit at rank 5 (RII=0.759) , lack of market support at 6^{th} rank (RII = 0.748); lack of training at 7^{th} rank (RII = 0.718); lack of infrastructure place in a 8^{th} rank (RII = 0.715), lack of finance at rank 9^{th} (RII = 0.714), lack of skilled labour at 10^{th} rank (RII = 0.706); absence of incubation for start up at 11^{th} rank (RII = 0.705), unpredictable weather and climate at 12^{th} rank (RII = 0.695), problem from middlemen at 13^{th} Rank (RII= 0.676), high market competition for start up at 14^{th} Rank (RII= 0.673), Lack of unity among agripreneurs at 15^{th} Rank (RII= 0.672), Lack of technological awareness &Skills at 16^{th} Rank (RII= 0.665), Work imbalance at 17^{th} Rank (RII= 0.555), Non-cooperation from family at 18^{th} Rank (RII= 0.454), Illiteracy at 19^{th} Rank (RII= 0.395) and Society obligation at 20^{th} Rank (RII= 0.391) have a significance roles in taking agripreneurship in the Mizoram.

5.6. Conclusion

The present chapter analyzes the problems and challenges of agripreneurs from six selelcted districts of Mizoram. The first part of the chapter showcases a descriptive statistics of 20 items of problems and challenges of agripreneuers and the study revealed that the respondents agreement level of 16 items was found to agree on problems and challenges encounter in taking up agripreneurship while the existence of 4 items of problems and challenges creation impact in which respondents disagree on the variables such as illiteracy, society obligation, non co-

operation from family and work imbalance revealing that these problems were not relevant for the agripreneurs in Mizoram. The variance of the population has also been calculated in two different score, the first is by noting the significance differences between the variables based on districts wise agripreneurship and the second is based on the other demographic mean differences. Firstly, the study finds that there is a significant differences among different district in terms of 15 items such as illiteracy, lack of infrastructure, absence of processing unit, lack of training, limited capital investment, lack of technological awareness and skills, society obligation, lack of finance, lack of skilled labour, lack of quality treated seeds, lack of proper irrigation, high market competition, absence of incubation for startup, problems of middemen and lack of unity among agripreneurs. Secondly, the study observed that there is a significant differences between genders in terms of 12 items such as illiteracy, lack of infrastructure, absence of processing unit, lack of training, limited capital investment, lack of technological awareness and skills, society obligations, lack of finance, lack of quality treated seeds, lack of proper irrigation, high market competition for startups and absence of incubation for startups. The later part of the chapter showcases the rank assigned to each problem by the respondents in terms of their importance in taking up agripreneurship. The study finds that lack of irrigation has been the most important problems identified by the agripreneurs which was followed by lack of quality seeds in the 2nd rank and lack of government support in the 3rd rank.

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CHAPTER-6

FINDINGS, CONCLUSION AND SUGGESTIONS

6.1. Introduction

Agriculture is an important aspect of any economy, as it provides us with food and other basic raw materials. It acquires a crucial role that immediately links to the sustainable livelihood of the farmers. Today, as urbanization is spreading fast, the shape and functioning of agriculture have changed a lot. From traditional cultivation, it has shifted to modern-era cultivation with advanced equipment and better knowledge. Modern agriculture defies diminishing marginal productivity and possesses some bigger opportunities for new-age thinkers. In such a case, agripreneurs are a new concept that revolutionizes the agricultural sector by interacting with entrepreneurship. Various activities, such as value addition, diversification, precision farming, technology in agriculture, agripreneurship, global marketing, organic farming, sustainable agriculture, etc., are given importance in agriculture (Tamminana, 2016). After the adoption of the new economic policy in India, entrepreneurial activity gained momentum by playing a major role in the socioeconomic development of India. It has led to a rise in the level of living standards in backward regions, and the importance of entrepreneurial development is felt due to overdependence on agriculture for employment. The study was conducted with a sample of 551 respondents from six (6) districts, i.e., Aizawl, Lunglei, Champhai, Kolasib, Serchhip, and Mamit Diricts.

The primary focus of the study is to study the policy intervention and support for organic farming in Mizoram; to analyze the socio-economic origins of selected agripreneurs; to examine the growth and performance of selected agripreneurs; and to evaluate the problems and prospects of selected agripreneurs. Step-wise analysis was conducted using both descriptive and inferential statistics to serve the objectives of the study. An analysis and discussion are presented herewith below:

6.2. Summary of findings

6.2.1. Findings based on Objective- I: Policy Intervention and support for Organic farming in Mizoram.

- Analysis results show that agripreneurs participated in different types of training, workshops, seminars, and other programs organized by the various agencies.
- Based on institutional support for organic crop farming in India, the government of India takes a lot of initiatives in the promotion and regulation of organic agriculture, including programs such as the National Programme on Organic Production (NPOP), National Standards for Organic Production (NSOP), National Standards for Organic Production (NSOP), the National Steering Committee, the Evaluation Committee and Committees on National Accreditation Policy Programme (NAPP) are formed for national organic production standards and certification.
- The main objectives are capacity building, financial support, human resource development, field demonstration, market development, domestic standards development, setting up model organic farms, supporting new initiatives on technology for organic farming, conducting awareness programs, and controlling the quality of bio- and organic fertilizers.
- Mission Organic Value Chain Development for the North Eastern Region (MOVCDNE) was launched for implementation in the north-eastern states during the 12^{th} plan period.
- The scheme's main aim is the development of certified organic production in a value chain mode to tie cultivators with buyers and to support the progress of the entire value chain, from input, seeds, certification, creation of facilities, and collection.
- With reference to project strategies, goals, and mission implementation structure, at the state level, the mission is implemented by the State Level Executive Committee (SLEC) and executed through a designated state lead

agency in the form of the state “Organic Commodity Board” or “Organic Mission." Following is the chain of committees:

- The National Advisory Committee for Mission Organic Value Chain for the North Eastern Region (NAC-OVCNER) is the overall policy-making body giving direction and guidance to the mission, and they monitor and review its progress and performance.
- The Executive Committee (EC) of the Mission Organic Value Chain Development for the North East Region is responsible for the effective implementation of the mission.
- The Mission Monitoring Committee (MMC) is the overall monitoring and evaluation committee. The MMC is empowered to constitute monitoring teams, review the progress and state of implementation, and requisition the services of technical experts in consultation with the Joint Secretary (INM).
- A state-level executive committee (SLEC) is constituted by the respective state governments under the chairmanship of the Chief Secretary and consists of representatives from departments and stakeholders.
- The State Lead Agency, Mission Organic Mizoram (MOM), is an independent agency funded by the central government. And it is the nodal agency for the implementation of mission components and for ensuring effective realization of mission goals in Mizoram.
- A comprehensive action plan for developing end-to-end value chain market keeping and funds for associating with this scheme are prepared by the states.
- The preparation of a comprehensive project proposal for making a commodity-specific end-to-end value chain, which is to be approved by the State-Level Executive Committee, will be submitted to the Project Monitoring Unit (PMU).
- Developing crop-specific organic production clusters and clusters and the formation of farmer-producer organizations and companies is an important mission component of MOVCDNER.

- Assistance for on-farm input production units and off-farm inputs: registered farmers of FIGs/FPCs are assisted in the creation of on-farm input production infrastructure such as liquid manure tanks, NADEP compost tanks, botanical extracts, etc.
- Off-farm inputs (bio-fertilizers, bio-pesticides, neem cake, etc.): One-time assistance of Rs. 3750 per ha area will be provided to the farmers registered under the program in the first year for the procurement of biofertilizers, biopesticides, neem cake, etc.
- Assistance for quality seed and planting material: to ensure quality and varietal uniformity, registered farmers will be provided with quality seed and planting material. Assistance for quality seed and planting material will be limited to 50 percent of the actual seed and planting material cost, which is limited to Rs 17500/ha (50 percent of the maximum of Rs 35,000/-).
- Support for extension services, input facilitation, training handholding and certification at the production stage, assistance in setting up input delivery, distribution centers, and agri-machinery customs hiring centers.
- With reference to value chain packaging, storage, and transportation, the following are the schemes that can be availed of:
    - Integrated packing house: It is a building for receiving, grading, packing, precool fresh vegetables and fruits.
    - Transportation: For transportation of organic products ,financial assistance for 4 wheeler up to TFO of 12 lakh (50 percent)
    - Cold Chain Component: Cold chain components pre-cooling, cold storage, and ripening chambers.
    - Role of North Eastern Regional Agri-Marketing Corporation Limited (NERAMAC): Marketing organisation to supports the farmers of the North Eastern India giving Pre and Post harvest supports especially in marketing the farmers' producrs.

- In the study, it was found that agripeneurs avail various levels of financial assistance; 3 (0.5%) avail less than Rs. 10000, while in Rs. 10000–30000 there are 5 (0.9 percent), and in Rs. 30000–50000 there are 13 (2.4 percent).
- Above Rs. 50000, there are 10 (1.8 percent) and the majority of 520 (94.4 percent) agripreneurs who do not disclose the level of bank loans.
- Based on the mode of loan assistance, it was found that only 1 (0.2%) avails of a loan from a money lender, while 4 (0.7%) agripreneurs avail of loans from NGOs, and 25 (4.5%) avail of loans from friends and relatives. However, 521 (94.6%) agripreneurs do not avail loans from the mentioned sources.
- From the study, it is highlighted that 33(6%) of agripreneurs reveal the details of the bank from which they avail loans, and 518 (94%) do not disclose or do not avail loans.
- It was found that 124 (22.5%) use their own vehicle for farming, while 2 (0.4%) use bus service as a means of transportation, 3 (0.5%) agripreneurs utilize trucks for means of transportation, 18 (3.3%) use Sumo/Maxi Cab service for means of transportation, and a large majority of farmers (404, 73.3%) have no alternative but to walk to their farm.
- The study reveals that 256 (46.5%) sell their products to farmers markets, while 37 (6.7%) sell their products to retail traders, 107 (19.5%) sell their products to wholesale markets, and 15 (2.7%) sell their products to farm retail, while 33 (6.0%) agripreneurs sell their bulk commodities to processors, 88 (16.0%) sell their produce to contract buyers, and 15 (2.7%) agripreneurs sell their produce to any convenient market.
- It was found that of the total 430 (78.04%) agripreneurs attending different training programs across all districts, 121 (21.96%) agripreneurs were not participating in any type of training program.
- The study found that 275 (49.9%) gets motivated by the government or Mission Organic Mizoram, 1 (0.2%) farmer is self-motivated into

agripreneurship, 142 (25.8%) are motivated by their family members, and 133 (24.1%) are inspired by their friends or agripreneurs into agripreneurship.

- The study reveals the level of available support and benefit variables in 13 items, and the level of impact was from a point scale of always to never. An analysis shows the agreement level of 5 items was found to be always aware of financial, technical, and other supports.
- The study also highlights the existence of four items of the parameter that are found to sometimes support, assist, avail benefits, and make agripreneurs aware.
- The study further reveals the agripreneurs awareness of financial support, technical support, and other resources for taking up agripreneurship. Based on the overall analysis of the parameter, it was found that three items are on the scale of often.

6.2.2. Findings based on Objective – II: Socio-economic origins of selected agripreneurs.

- From the study, it was found that Mamit district with 23 (35.94%) has the highest number of family members under 1-3 categories, and Serchhip district with only 4 (6.255%) represents the lowest family member in the study area.
- Based on the 7 above family members, the Champhai district agripreneur family member with 41 (26.27%) shows the highest and the least family size was found in the district of Kolasib with only 5 (4.23%).
- With reference to age group, under the below-20 age category, Mamit (32.89%) shows the highest number of respondents, and the least is Serchhip, with only 10 (6.71 percent) in this category.
- In the age group of 21–30, Mamit with 80 (29.74 percent) shows the highest in this age group, and the least number of farmers in the age group 21–30 is in Kolasib district with 25 (9.3 percent).

- Based on the 50-over age group, Aizawl district with 7 (29.16%) and Mamit district with 7 (29.16%) have the highest age of agripreneurs, and Kolasib district with only 4 (16.68%), representing the least number of agripreneurs.
- Of the total agripreneurs, 359 (65.2%) are found to be literate, and 192 (34.855) are illiterate and could not read or write.
- It was found that Serchhip district showed nil responses, which indicates that all the agripreneurs are in the category of literate, and Champhai district, with 7 (5.8%), has the highest number of illiterate respondents across the districts.
- From Table 5.4, it was found that 459 (83.3%) of the agripreneurs already have farming as their main occupation before joining agripreneurship, 46 (8.3%) farmers have no prior employment, and 18 (3.3%) of the agripreneurs have business, and similarly, farmers having government jobs as prior employment are 18 (3.3%). While 10 (1.8 percent) of the respondents have engaged in non-government organizations.
- Table 5.5 shows the distribution of agripreneurs main occupations based on whether they are engaged in agriculture entrepreneurship or not across different districts. The district-wise with the highest affirmative responses is 120 (99.2%) in Champhai, and Kolasib has the lowest agreed-upon 'yes' percentage, 34 (61.8%) of the total districts agripreneurs.
- Overall, across all districts, 477 (86.6%) agripreneurs have agriculture entrepreneurship as their main occupation, while only 74 (13.4%) choose other occupations.
- From the study, it was found that the majority of agripreneurs in all districts are married, 457 (82.9%). The percentage of unmarried agripreneurs is 35 (8.9%). Widowed agripreneurs are 35 (6.4%), and divorced agripreneurs are 10 (1.8%).
- Out of the total of 551 agripreneurs, 547 (99.3 percent) are Christians, 3 (0.5 percent) are Hindus, and 1 (0.2 percent) is a Muslim.

- It was found that 82% of the agripreneurs monthly income ranged between less than Rs 50,000 and only 1.8 agripreneurs had Rs 100,000–150,000 in monthly income.
- Table 5.9 reveals that 82.8 percent of the agripreneurs dwell in Assam-type houses and only 11.4 percent live in cement concrete (RCC).
- The study reveals that 89.2 percent live in their own house, and only 0.9 percent resides in the quarter.
- From the study, it was found that 55.0 percent of agrireneurs are self-made, and only 2.0 percent are found to be inherited.
- Aizawl had the highest number of agripreneurs who started their own business, with 80 (100 percent) of them being self-initiated. In Serchhip, 54 (98.1 percent) agripreneurs are self-initiated, with 1.9 percent being initiated by their father. Lunglei had 76 (93.8 percent) agripreneurs who were self-initiated.
- It was found that Mamit district, with 160 (29.01), shows the largest farm size of agripreneurs, and the least farm size was found in Serchhip district agripreneurs.

6.2.3. Findings based on Objective – III: Growth and performance of selected agripreneurs.

Correlation Analysis

- From the study, it shows that there was a moderately positive and significant relationship between capital investment and annual productions, agripreneurs ($r = 0.48$, $p = 0.015$), annual productions, and annual sales ($r = 0.53$, $p = 0.017$), indicating moderate growth in agripreneurs and that capital investment has a significant relationship to profit generated ($r = 0.46$, $p = 0.000$) in the study area.
- An analysis of the results reveals that there is a moderate but positively significant relationship between annual production and annual sales ($r = 0.25$,

p = 0.000), which indicates that there is an inadequate volume of production that leads to moderate annual sales for the firm. There is a weak but significant positive relationship between annual production and annual operational cost, as confirmed by the calculated values r and p of 0.015 and 0.0001, respectively.

- The study results reveal that the relationship between annual sales and annual profit is calculated as r = 0.29, p = 0.000, which proves a moderate but significant positive relationship.
- The study evidently shows that there is insufficient cost of goods sold to meet annual sales, as the calculated value of correlation shows weak relations (r = 0.18) but showing positive significance (p = 0.000). There is potential to increase sales when an appropriate amount of operational cost is acquired.

Regression Analysis

- With reference to stepwise regression analysis for dependents and independent variables, the casual relationship equation can be represented as Y = 1.578 - 0.356 (capital investment) + 0.490 (annual production) + 0.028 (annual sales) - 0.359 (annual operation cost).
- Based on the Alpha = 0.05 level of significance, the p-values of X_1, X_2, and X3 are found to be less than 0.05; hence, the regression coefficient analysis results show appropriate evidence to draw that the level of capital investment, annual production, and annual sales has a significant impact on the level of agribusiness performance growth.
- The parameter (X_4), annual operation cost, is found to be greater than 0.05, viz., 0.013. Therefore, the calculated r value confirms the conclusion that these parameters have no useful impact on agripreneur growth.

Testing of Hypothesis 1: "There is no significant growth in the performance of selected agripreneurs in the study area".

- The first hypothesis was formulated to confirm how well agripreneurs performed in terms of growth. Part of the business survival and growth perspective comprehends the growth of agripreneurs. Based on data from six

(6) districts, the study assessed the agripreneurs' performance growth. The study reveals the moderate relationship between annual sales, annual product, capital investment, annual profit, and annual operating cost in the study area (Table 5.16). The research additionally validates that sales (r = 0.00), production (0.04), and capital investment (0.020) have also significantly influence on yearly profit (Tables 5.17, 5.18, and 5.19). Therefore, the study rejects the null hypothesis and accepts the alternate hypothesis meaning that there is moderate growth of agripreneurs in the study area as demonstrated by the results.

6.2.4. Findings based on Objective – IV: Problems and prospects of selected agripreneurs.

Descriptive Statistics

- The study reveals that the mean value, standard deviation, frequency, percentage, and level of respondents agreement on problems and prospects variables in the study area were determined, and it was determined that the respondents agreement level of 16 items was found to agree on problems and prospects encounter in taking up agripreneurship.
- The study also highlights the existence of four items of problems and prospects creation impact in which respondents disagree on the variables.

ANOVA Analysis (Districts-wise)

- Stepwise mean analysis determined that the respondents from Champhai district (M = 2.275) encounter more constraints based on illiteracy than those from other districts who are running agribusiness. The study indicates that the serchhip district with the calculated mean value of 1.687 had the lowest mean score.
- Agripreneurs from the Mamit district have significant constraints (M = 3.875), and respondents from the Aizawl district have the least constraints (M = 3.070), as the district is the state capital and its facilities, infrastructure, and other resources are comparatively better than other districts.

- Empirical results also determined that the government's support is adequate for all agripreneurs undertaking agripreneurship.
- Thus, as far as lack of training factors is concerned, it is found that there are highly significant differences among the district-wise mean scores of the respondents. Champhai district respondents with M = 3.862 considered the most constraints in encountering in taking up the firm.
- Table 6.3 shows that Champhai district, with a mean score of M = 4.110, had the highest constraints. The district shows several elements that impact law and order situations, which may be the reason stakeholders are not willing to invest in this district.
- The constraints are more visible among the Aizwal district agripreneurs (M = 3.578), as they are yet to be well equipped with technologies, and skill enhancement programs conducted in various capacities at the district are found inadequate.
- An analysis of the results reveals that the respondents from Aizwal district face more constraints (M = 3.105) on social obligations.
- From the study, it was found that the families of the agriprenuers are cooperative, and all the required supports are extended as and when needed.
- The study observed that most of the agripreneurs have no constraints on the operational aspects of their agripreneurship with their persona-life.
- Champhai district, with M = 3.981, shows the highest constraints as the districts received low investment from all the stakeholders, which indicates the inadequacy of capital in an agribusiness.
- The mean score based on Kolasib district was found at 3.444, which is also a leading constraint encountered among the district respondents due to a lack of skilled labor.
- Stepwise mean analysis determined that the respondents from Lunglei district (M = 4.163) encountered more constraints due to a lack of quality or treated seeds.
- The study indicates that the mean differences between the lunglei and champhai values of meam (M = 4.11) show equal constraints.

- Agripreneurs from Champhai district, with M = 3.623, have the highest constraints in taking agripreneurship due to high market competition for start-ups.
- It was observed that the weather and climate in the mizoram for taking up agripreneurship are suitable; timely and good weather leads to better productivity in the study area.
- Based on the variable, namely, the table reveals that there are significant mean score differences (p = 0.000, F = 8.078) between district respondents, which indicates that agripreneurs from the study have faced constraints in their business firm with respect to these variables.
- An agripreneur from Lunglei with M = 3.803 has the constraints due to the absence of incubation for start-up, followed by Champhai district with M = 3.743, which stood in 2nd place, and at the least, with only M = 2.875, faces the least constraints.
- An agripreneur's Lunglei district mean score (M) is calculated as 3.803, which is the leading respondents facing constraints in the workforce.

ANOVA analysis (gender-wise)

- The study shows that there is a significant difference in illiteracy by gender (F = 3.340, p = 0.037), which is within the significant value at the 5% level.
- Female with M = 22.098 and STD = 1.013 are more influenced by illiteracy factors than male categories with M = 11.865 and STD = 0.765 in taking up agripreneurship.
- It was found that for the parameter 'Lack of infrastructure' there are thin differences between male (M = 3.809, SD = 0.857) and female (M = 3.362, SD = 1,035).
- From the study, it was found that female agriprenuers (M = 3.856, St.D = 0.866) face more constraints than male agripreneurs (M = 3.711, St.D = 0.934) based on the parameter 'Lack of Government Support'.
- The study reveals that female agripreneurs (M = 4.042, St.D = 0.811) encounter more constraints on limited capital investment than male agripreneurs (M = 3.852, St.D = 0.818) in running the business.

- With reference to the variable 'Lack of technological awareness and skills', the study shows that male agripreneurs were the most affected (M = 3.906, SD = 0.931) than female agripreneurs (M = 3.368, SD = 1.053).
- For society obligation variables, it was found that male agriprenuer with M = 2.921 and St.D = 0.971 have a higher tendency to encounter constraints than female agripreneurs with M = 2.717 and St.D = 1.085.
- Step-wise analysis results indicate that there are no significant differences (F = 0.927, p = 0.397) between male and female agripreneurs based on non-cooperation from family.
- An investigation result shows that female and male agripreneurs exhibit equal approaches based on the work-life imbalance, as the p = 0.397 and the F = 0.246 indicate no significant differences at the 5% level.
- Stepwise analysis determined that the female respondents (M = 3.840, St.D = 1.059) encounter more constraints based on 'Lack of finance' than those of male agriprenuers (M = 3.325, p = 1.047).
- Based on the variables such as lack of market support (F = 0.291, p = 0.972) and lack of skilled labor (F = 0.376, p = 0.687), there are no differences in running the business.

***Testing of Hypothesis 2*:** "There is no significant difference in problems and challenges across the selected district agriprenuers"

- The North East Region lags behind to the rest of the country in terms of development. The main cause is the inadequate infrastructure, particularly in the state of Mizoram towards agripreneurship development. Taking up agripreneurship has presented a number of issues and challenges for agribusiness owners. Of the 20 parameters measured, the study finds that 16 (illiteracy, lack of infrastructure, absence of processing unit, lack of training, limited capital investment, lack of technological awareness & skills, social responsibility, lack of finance, lack of market support, lack of skilled labor, lack of quality/treated seeds, lack of irrigation, high market competition for start-up, absence of incubation for start-up, issue from middlemen, and lack of unity among agripreneurs) significantly differed among the districts'

agripreneurs (Table 6.3). The measures of parameter differ the effects to difference districts, since all the variables p-values shows less than 0.05 level. Hence, the study rejects null and accepts alternative hypotheses.

***Testing of Hypothesis 3*:** "There is no significant difference in problems and challenges between male and female agripreneurs in taking up agripreneurship".

- From the analysis results, it shows that the mean score differs based on the gender demographics of the respondents. Of the total 20 measures of parameters, 16 variables were found to be significantly different between male and female agripreneurs. (illiteracy, lack of infrastructure, absence of processing unit, lack of training, limited capital investment, lack of technological awareness and skills, social responsibility, lack of finance, lack of market support, lack of quality or treated seeds, lack of irrigation, high market competition for start-ups, absence of incubation for start-ups, and lack of unity among agripreneurs). Therefore, the null hypothesis is rejected at a 5% significant level.

6.3. Conclusions

This research study has been carrying out systematically to enhance agripreneur skill in taking up agripreneurship. The study identified that while many studies on entrepreneurship have been done, the majority of them have only looked at one or a small number of its aspects in the agricultural and related industries. To investigate entrepreneurship in agriculture and related industries, none of them used an integrated approach. A fair and complete picture of their operations, issues, and prospects will undoubtedly not be provided by one or a small number of dimensions. Furthermore, it is challenging to locate studies based on primary data that provide an integrated picture of entrepreneurship in Mizoram's allied sectors and agriculture. This study attempts to bridge the gap by addressing the issues with integrated framework whereby concept of entrepreneurship and its life cycle, problems in and

solution of establishment & registration of organic farms, its policy intervention and prospects, environmental & managerial issues & challenges and strategies to cope with them. Status of support, diversification issues, entrepreneurs problems and prospects and benefits and opportunity cost of organic farming have been try to address simultaneously from the data collected from the agripreneurs/ organic farmers of Mizoram. It becomes imperative for the researcher to know the exact status of agripreneurs in Mizoram and the problems faced by them. What types of interventions have been done and will be done by the government, NGO, or any other agency to improve their conditions? Finally, what suggestions can be provided for solving their problems? Thus, it is necessary to find out what problems are being faced by the agripreneurs in Mizoram and why they are still very backward as compared to other states in India

Initially, the study identified the organizational structure of institutional support for organic farming in India and Mizoram. It analyzes the awareness of agripreneurs from the selected districts with respect to different government schemes, the extent of benefit of the schemes granted the financial problems of agripreneurs, the availability of bank loans before and after agripreneurship, and the amount the agripreneurs from each district actually receive. It further analyzes the loans received from non-banking institutions and the assistance the argipreneurs receive while applying for loans; the problems after loans are granted; the extent of the helpfulness of bank loans for the agripreneurs; the mode of transportation to their farms; the different types of marketing organic crops available in different districts; the level of input; financial assistance received; and also the availability of value chain marketing in the selected six districts. The agripreneurs from each district related to their involvement and participation in seminars and conferences dedicated to them and also dealt with the training, handholding, receives through service providers, and availability of value addition and processing units in different districts are also analyzed. The different types of training programs, the helpfulness and details of the programs organized for the agripreneurs from the selected districts, and the motivation received by agripreneurs.

Second stage of study focus to understand the socio economic profile of agripreneurs such as the types of family size , types of organic crops grown, age of the agripreneurs, educational qualification , their main occupation besides agripreneurship and monthly income and types of house they settled and the area of cultivation of organic crops. This chapter mainly analyze the demographic profile of agripreneurs from the six (6) districts, namely Aizawl, Lunglei, Champhai, Kolasib, Serchhip and Mamit district.

In the third stage, the study further determined the interrelationship between the variables, such as capital investment, annual productions, annual sales, annual profit, and annual operational cost, based on financial performance towards agripreneur growth. The study determined that there is a moderately positive and significant relationship between capital investment and annual productions. Agripreneurs ($r = 0.48$, $p = 0.015$) can maintain growth by pooling more capital into the firm, which in turn increases the production of the firm. Once the agripreneurs maintain the standard volume of productions, this will influence the growth of the agripreneurship. The analysis results show the agripreneurs growth with respect to the relationship between annual productions and annual sales, and it is confirmed that there is a moderately positive and significant relationship between these two variables ($r = 0.53$, $p = 0.017$), indicating moderate growth in agripreneurs. Furthermore, the regression coefficient analysis results show appropriate evidence to suggest that capital investment, annual production, and annual sales have a significant impact on the level of agribusiness performance growth.

Lastly, the study focuses to understand the problems and prospects of agripreneurs from six (6) districts in Mizoram. It is mainly emphasizes to understand the constraints of Farmers Producer Organisation, Villages within FPO's and districtwise in Mizoram due to- illiteracy , lack of infrastructure,lack of processing centre,lack of government supports, lack of training, lack of capital, lack of technological awareness and skills ,society obligations,lack of family supports,work life imbalance, lack of finance, lack of market support,lack of skilled labour,lack pf quality and trated seeds,lack of irrigation,high competition for start ups, unpredictable weather, absence of incubation centre for start ups,middlemen

problems, lack of unity among agripreneurs. An analysis is performed to highlight the challenges encountered by agripreneurs taking up the agripreneurship of organic crops in the study area. Based on district-wise agripreneurs, the stepwise ANOVA analysis results show that, of the 20 measure parameters, 15 variables are found to significantly differ among the agripreneurs of the six districts. This suggests that the problems and challenges that agripreneurs face greatly influence the measure parameters when they decide to pursue agripreneurship. Furthermore, ANOVA analysis base on gender wise results also indicates that there is a significant difference among the gender on the measure of parameters encountering in taking of agripreneurship at 5% significant level.

6.4. Social Relevance of the Study

The study on agripreneurship in organic farming focuses on six (6) districts of Mizoram. Mission Organic Mizoram (MOM) is formed under the State Agriculture Department of Mizoram (MOM, 2018). The agency selected six (6) districts out of eight districts, i.e., Aizawl, Lunglei, Champhai, Mamit, Kolasib andSerchhip and three organic crops—turmeric, ginger, and bird's eye chili (Mizochilli)—were selected for cultivation in these districts. This study on agripreneurship in organic farming is aimed at helping agripreneurs understand the operational market from a growth perspective and identify the measures of parameters that impact agribusiness. It also facilitated agripreneurs awareness of government or other concerned agencies financial, technical, and other essential infrastructure assistance for the formulation or operation of the agribusiness. The study also facilitated financial institutions, the government, or other agencies to gain a broad range of understanding, enabling their strategies to effectively outreach to state agripreneurs. It also enables the agripreneurs to implement various promotional, expansion, and growth strategies for organic products effectively.

6.5. Suggestions

The following suggestions are advice to the government, the farmer's producer organisations (FPO), and the agripreneurs.

Suggestions to Government

- Agripreneurs in Mizoram encounter challenges, grappling with the substantial transportation expenses for their produce due to limited funding allocations. Mizoram, characterized by predominantly hilly terrain, incurs significantly higher transportation costs compared to other Indian states. Consequently, a substantial portion of funds is directed toward transportation, leading to financial inadequacies. It is imperative for the Central Government to reconsider and adjust the allocation of funds specifically for agripreneurs in hilly and mountainous regions. This revision is crucial to foster organic farming and promote agripreneurship in such areas.
- The people of Mizoram experience distinct social, cultural and economic conditions compared to other states. The remoteness and inadequade infrastructure facilities further complicated the adherance to the Central government drafted guidelines in Mizoram. Consequently, Agripreneurs and Farmer Producer Organizations (FPOs) encounter challenges in implementation. There is a pressing need for more comprehensive guidelines tailored to address the specific challenges of remote locations, aiming to foster agripreneurship in organic crop cultivation not only in Mizoram but throughout India.
- Agripreneurs in Mizoram has encountered a series of problems and challenges in the pursuit of agripreneurship. According to the respondents' ranking, the most important problem that needs immediate action is the'lack of proper irrigation' which hampers the productivity and harvest quality of the farmers. It is imperative for the government to proactively inititiate the installation of effective irrigation system for the agripreneurs in Mizoram. The concerned department or agency should be assigned the responsibility of identifying the optimal irrigation method for organic crops in Mizoram with government-backed support for proper installation.
- Moreover, lack of quality/treated seeds has been the second most important problems for organic cultivation, according to the respondents ranking. The

relatively high prices of good quality seeds often make them inaccesible for many agriprneurs. In addressing this issue, the government should engage with the suppliers of good quality seeds and take the initiative to provide these seedsat subsidized rate for the agripreneurs in Mizoram.

- The agripreneurs in Mizoram also encounter the challenge of limited capital investment as indicated by the respondents ranking. The study reveals that a significant number of respondents did not access any financial support from funding organizations; instead they rely on personal sourcesfor agripeneurship pursuits. This results in restricted investment, limiting the scope for harvesting and expansion. To address this issue, the government should collaborate with state/regional/ rural bank to extend financial assistance to the agripreneurs.
- The study emphasizes the necessity of stepping up the creation of value-adding and processing units, such as packaging, storage, and transportation facilitieswithin the district region. Because these initiatives have the ability to spur economic growth, generate job opportunities, and aid in the general development of the region's agricultural and industrial sectors, state governments ought to concentrate on helping agripreneurs establish value addition and processing units.
- The present scenario of ogranic farming in mizoram faces challenges due to insufficient market support. The agripreneurs often feel demotivated and revert to traditional crop harvesting because of the absence of a good market support. To tackle this issue, the government should establish predefined markets along with fixed rate for each crop.
- Due to inadequate funding, the state government have a limited number of skilled employees who catered avast and diverse community of organic crops growers. Consequently, numerous farmers faced challenges due to lack of proficient personnel to supervise and monitor the progress of their farms. In this context, it is essential to allocate additional funds for the recruitment of efficient technical experts and skilled personnelunder a need based scheme to

aid and train the agripreneurs for the development of organic farming and agripreneurship in Mizoram.

- Due to persistent practiced of Jhum system of cultivation in Mizoram, farmers typically lack permanent site for cultivation. Consequently, they abandoned the the land after 3 to 5 years after cultivation to allow it to regain fertility. However, organic farming requires several years to cultivate specific crops; leading farmers who have enrolled in organic cultivation grew impatient and revert to conventional crops. To address this challenge, the government should provide comprehensive education and awareness to farmers about the principles of organic crop cultivation. Additionally, the government needs to find solutions to support agripreneurs during non-harvest years, ensuring a smoother transition and sustained commitment to organic farming practices.
- Conducting a district-wise analysis of the data provides valuable insights into the effectiveness of value chain marketing strategies. By understanding the local nuances, the government or authorities must tailor approaches accordingly for each district to maximize the benefits of these strategies for businesses and the overall economy.
- The agripreneurship assistance has received prioritization across several districts, leading to a significantnumbers of agripreneurs benefiting from various forms of support. To foster further agripreneurial growth, it is imperative that districts with lower assistance rates, such as Champhai, to concentrate on designing targeted programs aim at empowering local agripreneurs and closing the assistance gap. Additionally, the government must take initiatives to facilitate the integration of various districts. Sharing best practices from high assistance rate districts like Serchhip could play an important role in the advancement of agripreneurship across the region.
- The agripreneurs in the analyzed districts generally receive minimal assistance from bank officials when seeking loans. A large number of agripreneurs appear to handle the loan application process on their own, which could be due to their familiarity with the process or the availability of

alternative sources of information and support. To improve this scenario and encourage agricultural development, concerned departments, banks and relevant authorities should contemplate implementing initiatives aimed at more guidance and support to agripreneurs throughout the loan application process, especially in districts where levels of assistance are insufficient.

- The variations in loan sources across distrcits highlight the diverse financial ecosystems within the region. Initiative efforts to enhance access to formal credit channels, promote financial literacy, and strengthen local support networks could potentially lead to a more balanced and sustainable borrowing landscape across all districts.

Suggestions to Farmers Producer Organisation (FPO)

- The absence of unity among agripreneursfrequently hinders the development of agripreneurship in organic crops. Therefore,the Farmer Producer Organization should take measures to establisha positive work atmosphere for all the agripreneur members.It is imperative to maintain peace and harmony in such a way that the incorrect practices must be corrected while the rewarding the right practices throughout the organization.
- Agripreneurs frequently overlook the terms and conditions agreed upon for selling their produce with processors or reputable companies. When offered immediate cash by businessmen directly, they tend to withdraw from the established agreements. Therefore, it is imperative for Farmer Producer Organizations (FPOs) to take proactive measures in monitoring the agreements between agripreneurs and organizations. They should ensure that agripreneurs do not withdraw from any agreement without the consent of the FPO.
- The FPO leaders bear the responsibility of providing informations and essential guidelines to agripreneurs. However, lack of information from these leaders makes it challenging for the agripreneurs to collaborate effectively with FPO leaders. Hence, it is recommended that leaders of each FPO must fulfill their responsibility associated with their positision. They must remain

vigilant for all the members and must ensure maintainance of proper communication channel at all cost.

Suggestions to Agripreneurs

- Agripreneurs who are dealling with specific organic crops are advised to patiently carry out the organic crop cultivation until harvesting. Additionally, they should approach concerned authorities and agencies for any assistance required.
- Agripreneurs are encouraged to collaborate closely with the FPO to which they belong. It is essential for them to adhere to the rules and essential guidelines provided by the FPO in terms of agreement, market, fixed rate, etc.
- Agripreneurs are recommended to give due attention to all government programmes and training sessions, attending them regulary for the succesful organic cultivation practices. Moreover, it is crucial that the training must be attended by the concerned agripreneur personally, rather than another family member.
- The present situation among agripreneurs in Mizoram indicates that majority of them do not disclose their financial status, and many have not saught financial assistance from any funding agencies. Agripreneurs are encouraged to consider accessing available financial support for enagaging in organic cultivation rather than relying solely on personal sources. This approach is crucial for sustaining long term cultivation practices.

6.6. Scope for Future Research

- With the new government in Mizoram initiating the procurement of organic crops such as ginger and dry chilli from the farmers in Mizoram starting in 2024, it is anticipated that there will be a significant shift in the pattern of organic cultivation in the region. Future research could explore the changes in scenario of organic cultivation in Mizoram before and after the procurement of specified organic crops.
- Future research could explore the comparative analysis between organic crops and conventional crops in Mizoram.

- Further exploration can be conducted on the marketing challenges and prospects associated with agripreneurship in the realm of organic.
- A state wise comparison on the performance of agripreneurs on organic crops could be further explored.
- Further investigation could be undertaken to analyze and compare the performance of Agripreneurs in organic and conventional crop cultivation on a Farmer Producer Organization basis.
- An impact of agripreneurship on the livelihood of Mizo agripreneurs could be further studied.

Appendix

Questionnaire

Agripreneurship in Organic Crops: An Empirical Study in Mizoram

Please answer all the questions.

PART A: Socio-Economic profile of agripreneurs in organic crops

(Please tick '√' for the relevant answer, wherever necessary)

1. Name of theAgripreneur: …….

2. Age of Agripreneur:

   a) Below 30 ☐ b) 30-40 ☐ c) 40-50 ☐ d) 50-60 ☐ e) Above 60 ☐

3. Age of agripreneur at the time of starting the enterprise: ……. (in Years)

4. Educational qualification:

   a) Illiterate ☐ b) Matriculation☐ c) XII☐ d) Graduate☐ e) PG☐

5. Occupation prior to starting the agripreneurship:

   a) Student☐ b) NGO ☐ c) Govt. employee ☐ d) Entrepreneurs☐

6. Are you a full-time Agripreneur? c) Yes☐ d) No☐

7. If no, Present occupation (if any)

a) Casual laborer☐ b) NGO ☐ c) Govt. employee ☐ d) Entrepreneurs/business☐

c) Others☐

8. Marital status:

a) Married ☐ b) Unmarried ☐ c) Widow ☐ d) Divorced ☐

9. Religion:

a) Christian ☐ b) Hindu ☐ c) Muslim ☐ d) others ☐(please specify ……)

10. Size of family members:

a) Up to 5 ☐ b) 6 – 10 ☐ c) 11- 15 ☐ d) Above 15 ☐

11. Present monthly income of the family (Rs.):

a) Below 50,000/- ☐ b) 50,000 – 1, 00,000 ☐ c) 1, 00,000 - 1, 50,000 ☐

d) Above 1, 50,000 ☐

12. Type of house:

a) Thatched house ☐ b) Tiled house ☐ c) Concrete house ☐

d) Others☐

13. Ownership detail of the above house:

a) Own house ☐ b) Rented house ☐ c) Govt. allotted house ☐d) Others☐

14. Agricultural land:

a) No land ☐ b) Less than 1 acre ☐ c) 1- 3 acre ☐ d) Above 3 acre ☐

15. Why did you prefer to be agripreneurship?

a) Family tradition ☐ b) Brings high income☒ c) To be self-employed ☐

d) Small investment is required ☐ e) No other alternative for income ☐ f) Other (please specify)

16. Is there anyone in the family who was agripreneur or of same related business activities?

a) Yes ☐ b) No ☐

17. Who initiated and started the agripreneurship?

a) Myself alone ☐ b) With a friend partner ☐ c) With the family ☐

d) Other (please specify) ……

PART B:Linkages with financial institutions and Growth performance

18. Do you have Personal Saving AC /Current AC? a) Yes ☐ b) No ☐

19. Time of opening AC: Before agripreneurship☐ After agripreneurship☐

20. Do you have financial problem in agripreneurship? a) Yes ☐ b) No ☐

21. Have you availed loan? a) beforeagripreneurship. b) After agripreneurship

Yes ☐	Yes ☐
No ☐	No ☐

22. If availed loan, Name of the Bank: ……

23. Amount of loan from banks/ financial institution

a. Less than 10,000 ☐ b) 10,000 to 29,000 ☐ c) 30,000 to 49,000 ☐ d) Above 50,000 ☐

24. Loans from other sources:

a. From money lender ☐

b. From NGOs ☐

c. From relatives/friends ☐

25. Purpose of loan:

a) For financing the agripreneurship☐b) Repayment of old loans ☐c) Medical treatment ☐

d) Children education ☐e) other purpose (please specify)……

26. Are you able to repay the loans from different sources?

a) Yes ☐ b) No ☐ c) Only partially ☐

27. Reasons for non-repayment / partial payment of loans/borrowing

a. Due to business loss ☐

b. Lack of liquidity ☐

c. Due to high rate of interest ☐

d. Any other reason please specify ☐

28. Capital investment :_____

29. Annual Production :_____

30. Annual Sales : _____

31. Annual Profit :_____

32. Annual Cost of Production: _____

PART C: Training and Level of Awareness

(Please tick '√' for the relevant answer, wherever necessary)

28. Have you attended any training programme? If yes, give details of course attended

a) Yes ☐ b) No ☐

29. Name of the training programme Organiser Time/Duration

1. _____ _____ _____

2. _____ _____ _____

3. _____ _____ _____

30. If you have attended, do you find the programmes helpful to your enterprise?

a. Very useful ☐

b. Useful ☐

c. Not very useful ☐

d. Useless ☐

31. (Please tick '√' for the relevant answer, wherever necessary)

Indicate your level of awareness, financial assistant, benefits received in taking up of Agripreneurship in organic crops noted below in the rate of; **A= Always (A); O = Often (O); S= Sometime (S); R = Rarely (R); N = Never (N**)

Sl	**Variables**	**A**	**O**	**S**	**R**	**N**
1	Level of Assistance Received By Agriprenuers-uts, Knowledge on Financial Resources, rastructure.					
2	Level of Assistance from bank officials in ting bank loans					
3	Level of agripreneurs access to bank loan during -Agripreneurship of Organic Crops.					
4	Level of Agripreneurs participation in Financial eracy program (Seminars, Conferences, rkshop, training etc.)					
5	Level of availing of beneficiary schemes of the vernment					
6	Level of agripreneur awareness of the vernment Schemes					
7	Financial problem faced in engaging					

	ipreneurship in organic crops					
8	Problems faced in receiving the money in eady approved bank loan					
9	level of participation in district-wise training, d-holding, ICS management, documentation, and tification of crop production through a service vider.					
1	Access to Bank loan during agripreneurship of anic crops					
1	Level of Access to Setting Up of Value Addition l Processing Units Including Packaging, nsportation.					
1	Perception of Level of usefulness of training nded by agripreneurs					
1	Helpfullness of Bank Loans to Agripreneurship					

7. Who motivate you more in agripreneurship?

   a. The government/ MOM ☐

   b. My family member ☐

   c. My friend/ agripreneurs ☐

8. What motivated you to start the agripreneurship?

   a. To satisfy economic needs ☐

   b. Profit/money making ☐

   c. Effective utilization of time ☐

d. Self-achievement ☐

e. Interest/ inclination to do business ☐

f. Job satisfaction ☐

PART D: Problem and Challenges

(Please tick '√' for the relevant answer, wherever necessary)

9. Indicate your constraints in taking up of Agripreneurship in organic crops noted below in the rate of; **5=strongly agree(SA); 4= agree(A); 3= neutral (N); 2= disagree(D); 1= strongly disagree(SD**)

Sl.No.	**Statements**	**SA**	**A**	**N**	**D**	**SD**
1.	Illiteracy					
2	Lack of Infrastructure					
3.	Absent of processing unit					
4	Lack of Government Supports					
5	Lack of Training					
6	Limited capital investment					
7	Lack of technological awareness & Skills					
8	Society obligation					
9.	Non-cooperation from family					
10.	Work imbalance					
11	Lack of finance					
12	Lack of market support					
13	Lack of skilled labour					
14	Lack of quality/Treated seeds					
15	Lack of irrigation					
16	High market competition for start-up					

17	Unpredictable weather & Climate					
18	Absence of incubation for start-up					
19	Problem from middlemen					
20	Lack of unity among agripreneurs					

43. Is there any change in the level of family saving after starting the agripreneurship? Put tick mark

a) No saving ☐ b) Marginal saving ☐

c) Saving increased greatly ☐

44. Is there any change in the level of confidence after starting the agripreneurship.

a) No change ☐

b) Increased ☐

c) Increased greatly ☐

45. List all seeds / Plants used in the farm.

(a) No seeds used

(b) All seeds are organic

(C) Some untreated seeds/ plants are used

(d) No GMO seeds purchased /plants

45. Do you purchase organic seedlings?

Yes ☐ No ☐

46. Do you use organic manures?

Yes ☐ No ☐

47. Who are the suppliers?

(a) Government (b) Private Company (c) Govt. Supplier (d) Own seeds

48. Do you purchase non organic seedlings?

Yes ☐ No ☐

49. If Yes, State why and describe your attempts to purchase organic seedlings.

50. Do you own a green house?

Yes ☐ No ☐

51. Do you use manure?

Yes ☐ No ☐

If yes, type of manure used

(a) Organic (b) Non organic (c) others

52. Source of water used in farming

(a) On site wells (b) Rivers (c) Creek (d) Ponds (e) Spring

59. Transportation used for organic crops

(a) Own vehicle (b) Bus(c) Truck (d) Sumo (d) Manual

60. Type of Marketing Organic crops

(a) Farmers Market (b) Direct to retail (c) Wholesale Market (d) On Farm Retail

(e) Bulk Commodities to processor (f) Contract to Buyer (g) Others (Please specify)

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ABSTRACT

AGRIPRENEURSHIP IN ORGANIC CROPS: AN EMPIRICAL STUDY IN MIZORAM

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AGRIPRENEURSHIP IN ORGANIC CROPS: AN EMPIRICAL STUDY IN MIZORAM

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1. Introduction

Agriculture is the backbone of Indian economy. India is managing 17.5 percent of world population and occupies only 2.4 percent of the world geographical land. During Independence, more than half of national income was contributed by agriculture along with more than 70 percent of the total population depends on agriculture (Pandey, 2013). It is also regarded as the mainstay and basic means of the occupation of the hilly states of North East India. Mizoram –situated in the North East corner where traditional method of cultivation - shifting cultivation is still dominating the scene (Pachuau, 1994). Mizoram is an agricultural state where majority of the total population, more than 60 percent of the total population, depends on agriculture as it is the biggest source of livelihood for rural areas. Various crops are grown and paddy continues to remain the principal food crop and the staple food of Mizoram. The total State domestic product for the year 2015-2016 is Rs 13,277.78 crore against Rs 11,559.33 crore in 2014-2015 at current prices and the State Per Capita Income (at current prices) witnessed an increase of 11.27 percent as it is increased to Rs 95317 in 2015-2016 from Rs 85659 in 2014-2015.While National Per Capita Income is Rs 93293 during 2015-2016. In the absence of agro based industries and manufacturing sector, agriculture and its related still continues to be the main occupation of the people of Mizoram (*Economic Survey, 2017*-18). Jhum or shifting cultivation remains to be the major and dominant methods of cultivation. Due to implementation of Oil Palm Development programme, Rashtriya Krishi Vikas Yojana (RKVY), New Land Use Policy and Rural Area Development Programme, Jhum cultivation has decreased from 44,947 hectare at the beginning of 11^{th} plan to 19,851 hectare during 2015-2016 which accounts for 55.83 percent reduction (*Economic Survey,* 2017-18).

Majority of the total population, more than 60 percent of the total population, in Mizoram depends upon the agricultural sector as it is the biggest source of livelihood for rural areas (Economic Survey, 2017-18). The soils of Mizoram are blessed with high organic matter status. Majority of the farmers still practice Jhumming, which results toward the loss of the top soil and its fertility every year. The total geographical area of Mizoram is 21,081sq.km (Statistical Handbook

Mizoram, 2014). Out of these 1.101m ha is cultivable. Another prospect for laying organic foundation stone in Mizoram is its low population as compared to all other Indian states and union territories. As per 2011 census the total population was 10, 97,206 (Statistical Handbook Mizoram, 2014). With increasing populations, the pressure on land and soil increases, and reduced rejuvenation period of soil fertility affects the total output of agricultural products. Keeping in mind of the status of organic farming in Mizoram, its potential and possibilities have been examined.

1.1. Concept of Organic Farming in India

Traditional agriculture in India dates back to the Neolithic age of 7500-6500 BC. The ancient Indian farmers are known to have developed and practiced mixed farming, mixed cropping and crop rotation. The balance of cosmic forces, health and fertility were the main features. Hindu Philosophy regards the earth as a living being, and considered as the foundation of all plants, mainly crops, and when cultivated or explored, provides all necessities of life not only for human beings, but also for other forms of life such as the smallest living to the largest animals. The knowledge of plant life was highly advanced among farmers of ancient India (Deevi & Biswas, 2011).

The First 'scientific' approach to organic farming can be quoted back to the *Vedas* of the "Later Vedic period", 1000BC-600 BC. Randhawa (1986) and Perreira (1993) criticized the western methods of agriculture and highlight the importance of traditional agriculture system in India. Kansara (1995) highlighted the importance of the *Vedas* for the current day agriculture. The principle was to live together with nature rather than exploit. However, great attention was paid to agricultural technologies and agronomic practices and sophistication was achieved through genetic diversity, crop rotation and mixed cropping systems. And animal husbandry was also an integral part of the farming practice in the Indian agricultural system (Mahale & Soree, 1999).

During the past 50 years, the customary understanding and organic principles were eroded due to entry of current conventional agriculture, though the traditional

knowledge and practices of agriculture has been sustained by many communities throughout the millennia and has gained importance recently for present system and methods of agriculture, especially organic agriculture. Organic farming is still a part of the living tradition of most of the communities in tribal areas and dry land areas in India. Traditional agriculture can be improved and organic agriculture is the closest to the farmer's traditional customs, practices and beliefs (Mahale, 2002).

Under the Project-Agriculture Man and Ecology (AME), the first training centre in India for Organic Agriculture was set up in Pondicherry during 1983 (Maurya, 2014). The first conference on organic farming was held at Wardha in 1984.The first National Seminar on Organic farming was said to be organized by Rajasthan College of Agriculture in the year 1992 (Maurya, 2014). During the same year the first known study on ecological agriculture in South India was published (Van Der Werf & De Jager, 1992). Since then a number of network and connections and publications relating to organic agriculture had been created. In 1993,a directory of individuals and organisations involved in sustainable agriculture in India called Green Farming was produced (Centre for Science and Environment, 1993).The Central government set up a special cell for the export of certified organic products under Agricultural and Processed Food Products Export Development Authority (APEDA) of the Ministry of Commerce and Industries. In March 2000 the Ministry of Agriculture, Govt. of India constituted the Task Force on organic agriculture. In June 2001, National Programme of Organic Production (NPOP) was set up, under which a series of volumes,concerning accreditation- regulations, criteria, procedure, and application forms were published on 12th June 2001, by Public Notice by The Government of India. The Government also introduced regulations concerning the exports of organic products. It was stated that the agricultural product would be allowed to be exported as an 'organic' product only if it was produced, processed, or pack under a valid organic certificate issued by a certifying agency duly accredited by any one of the agencies such as APEDA, the Coffee Board, the Tea Board, and the Spices Board (Maurya, 2014).

1.2. Agripreneurship: Concepts of Entrepreneurship inAgriculture

The Global Agriculture is going through different phases, within the changing situation, the agriculture shapes into new dimension and expands its scope beyond the limits of simple agriculture and animal husbandry for livelihood of the rural India. Various activities such as value addition, diversification, precision farming, technology in agriculture, agripreneurship, global marketing, organic farming, sustainable agriculture etc., are given importance in agriculture (Tamminana, 2016). After adoption of the new economic policy in India, entrepreneurial activity gained momentum by playing a major role in socioeconomic development of India. It has led to raise the level of living standard of backward regions, and the importance of entrepreneurial development is felt due to over dependence on agriculture for employment. With changes in market, agricultural companies have to adapt with varying consumer lifestyle, enhanced ecological regulations, new demand of products, chain management, food security, and sustainability which have resulted further into new participants, innovation and portfolio entrepreneurship (Saha & Hazari, 2021).

Entrepreneurship is neither bound by rigid concepts of age nor plaqued by homogeneity but they are diverse, found in every culture, class, race, ethnicity, gender, sexual orientation, physical ability and age (Singh, 2013a). With the emergence of free market in the global economies, this has led to the development of a new dimension such as ‘Agripreneurship’ and thus increases the individual need of responsibility for running one’s own business (Alex, 2011).

The terms, agripreneurship and entrepreneurship are frequently used in the context of education, and small business formation in agriculture. It can be said that agripreneurship is synonymous with entrepreneurship in agriculture and it refers to the agribusiness establishment in the agriculture and allied sectors. Dollinger (2003) explains entrepreneurship in agriculture as the creation of innovative economic organization for the purpose of growth or gain under conditions of risk and uncertainty. Agripreneurship is not only employment plan that can lead to self abundance of the rural farmers; its development through training is a main

component of Micro, Small and Medium Enterprises (MSMEs) etc., especially the agripreneurs. This leads towards improved performance of every individual that can contribute to employment opportunity, reduction in poverty and human resource development. Agripreneurship is greatly influenced mainly by the economic situation, culture and education (Singh, 2013). The transaction may involve either an input of a product or service and encompassing items such as productive resources, agricultural commodities, facilitative services (Lokanadhan et al., 2009).

Agripreneurship is the profitable marriage of agriculture with entrepreneurship. Agripreneurship turns the farm into an agribusiness (Bairwa et al., 2014). Agripreneurship also relates to entrepreneurship in agriculture. Agripreneur can also be defined as an entrepreneur whose main business is agriculture or agriculture-related. It is also generally defined as sustainable, community-oriented, directly-marketed agriculture. Sustainable agriculture denotes a holistic, systems oriented approach to farming that focuses on the interrelationships of social, economic, and environmental processes (Uplaonkar & Birada, 2015).

An agripreneur is someone who undertakes a variety of activities in agriculture and its allied sectors. Agripreneur may start an agro business, change a business direction, acquire a business or maybe involved in innovatory activity of value addition. They are influenced by three factors such as the economic, culture and education of the country (Ravindra & Sweta, 2015). Agripreneurs are a new breed of entrepreneurs ranging from any age group, combining their adoration for farming and agriculture with business. All agripreneurs are not farmers; some have taken the path of adding value through processing or new packaging for the crop of food that farmers have grown. Agripreneurs do not necessarily act alone; they can join hands with others in order to create a successful value chain. Due to increasing unemployment and poverty in rural areas and the slow growth of agriculture, entrepreneurship in agriculture, food processing, food storage and handling units for increasing production and profitability is extremely required (Babu, 2015).

1.3. Organic farming in India

Organic farming system has a long history in India. It is a method of farming where cultivation is done in such a way to keep alive the soil healthy by using organic wastes of crops, animal farm, aquatic along with other biological materials and biological fertilizers to release nutrients for the crops for sustainability and eco-friendly production.

Organic Farming is considered as a movement directed towards the philosophy of "Back to Nature". Which aims at low input farming thus reduces dependency on inorganic fertilizers, plant protection chemicals and weedicides (Reddy, 2008). To make farming more sustainable, remunerative, and respectable so that natural soil and fertility are enhanced and to ensure soil and water conservation, along with agricultural bio- and food security. To create a market for organic products managed and controlled by the farmers in domestic market, and to avoid, use of agrochemicals and other hazardous material and ensure chemical free water, soil, food, etc. can be stated as the main objectives of organic farming.

Thus it can be said that Organic farming is a method of crop and livestock production that involves much more than choosing not to use pesticides, fertilizers, genetically modified organisms, antibiotics and growth hormones which provide attentive care that promotes the health and meets the behavioural needs of livestock. Organic farming is a kind of farming which is based on the principle of maximum production with quality without compromising the soil fertility and the environment (Pandey &Tewari, 2010).

1.4. Organic farming in Mizoram

Organic farming started in Mizoram since 1996 (Organic Farming Act Mizoram, 1996). It was in this year that the Agriculture Department, Government of Mizoram introduced Organic Farming Project and ran a pilot test at Lungmuat village, Kolasib District. It was there that organic farming tied with contour trench farming was trialed with very promising results. Vermi-culture was also started by importing good species of earthworm. A good number of villages were covered and villagers were given training on bio-composing methods. As the organic farming

system solely depends on the use of crop residue, animal manures, green manures, off-farm organic wastes and the government gave due importance to supplying organic manures like neem cake, etc. to the needy farmers to supplement their plant nutrient requirement, crop rotation incorporating legumes and use of bio-fertilizers, organic manures, biological pest control to maintain soil productivity. The Agriculture Department of Mizoram gradually reduces the import of chemical inputs such as fertilizers, pesticides, and several awareness campaign and training on organic farming were conducted.

The crops such as rice, pulses, oilseeds, maize are cultivated in Mizoram using Jhum system of cultivation. The Wet Rice Cultivation (WRC) and terraced cultivation methods are also practiced in some areas of the state. Various kinds of fruits and vegetables are also grown in Mizoram. As Indian agriculture market is becoming more competitive and qualitative, organic based products from agricultural farmers have more demand from customers, due to presence of more nutritional value, free micro-organism and its freshness (MOM, 2018).

A lead agency called Mission Organic Mizoram (MOM) was formed under State Agriculture Department of Mizoram (MOM, 2018). The agency selected six (6) districts out of 8 districts i.e. Aizawl, Lunglei, Champhai, Mamit, Kolasib and Serchhip and three organic crops- Turmeric, Ginger and Bird's eye chilli (Mizo chilli) were selected for cultivation in these districts. Out of the three crops selected, Bird Eye Chilli was already geographically identified as *Mizo chilli.*

1.5. Mizoram Organic Farming Act, 2004

The Mizoram Organic Farming Bill was unanimously passed in July 2004 by the Mizoram Legislative Assembly. The Act 2004 adopts areas to support and regulate organic farming in tune with the National Programme of Organic Production (NPOP) in the state of Mizoram. The adopted areas in Mizoram coverall excluding the areas constituted as autonomous districts under the sixth schedule of the constitution of India. To support the organic farming, farm equipment or materials including seeds were provided to the farmers who have taken up organic farming. For the purpose of accreditation of inspection and certification, the accreditation

regulations, October, 2001 notification under National Programme of Organic Production was applied. It comes under the Foreign Trade & Development Act (FTDR), providing information on standards of organic production, systems, procedures, accreditation and inspection, certification bodies and national organic logo and regulations governing its use (Deevi & Biswas, 2011).

Table 1.1: Selected crops, Clusters, Farmers FPO and Area covered of MOVCD-NER(2017-2018)

District	Name of Crops	Number of clusters	No of FPO	No of Farmers	Area covered(ha)
Aizawl	Chilli& Ginger	24	2	484	297
Lunglei	Ginger,turmeric, Chilli	29	3	968	883
Champhai	Ginger,chilli, turmeric,	41	4	2132	1146
Kolasib	Turmeric	17	1	402	295
Serchhip	Chilli	12	1	651	369
Mamit	Turmeric	41	3	1166	1368
Total		**181**	**14**	**5803**	**4358**

Source: *Mission Organic Mizoram, Agriculture Department, 2018*

Table 1.2: Crops, No. of FIG/Clusters, FPO/FPC, Area covered, and Number of Farmers inMizoram

Sl.No.	Crops	No. of FIG/Clusters	No of FPO/FPC	Area(Ha)	No of Farmers
1	Turmeric	67	4	1496	1376
2	Ginger	40	4	948	1652
3	Chilli	74	6	1914	2775
TOTAL		181	14	4358	5803

Source: *Mission Organic Mizoram, Agriculture Department, 2018*

The state lead agency in Mizoram named as *Mission Organic Mizoram* is the nodal agency for implementation of the mission components and effective realization of goals. The agency facilitated tie-ups with commercial enterprises and entrepreneurs for setting up of value addition infrastructure including linking up with financial institutions/commercial banks.

2. Review of Literature

A review of literature plays a vital role in any research work, a thorough survey of related literature, the possibility of repetition of study can be eliminated and another dimension can be selected for the study. The literature review helps to remove limitations of existing work or may assist to extend prevailing study. An extensive body of literature already existed dealing with the various aspects of customers' satisfaction and innovative services provided by banks in India and abroad. A brief review of related studies is being highlighted in the following paragraph to highlight the significance of the study in a thematic manner.

Garima et al., (2023) study highlights seven significant factor that influence in taking up agripreneurship namely effective leadership, strategic planning, opportunity scanning, organizing and business activities, previous analysis, directing, and controlling activities. An analysis reveals that, by guaranteeing a positive work environment for employees in the agro-industries, effective leadership is regarded as

the most crucial component that significantly contributes to the success of any enterprise. The success of an agripreneur requires planning before converting all business activities into action, strategic planning was also crucial. Agro-industries' success also greatly depends on all the other elements, which include scouting for business opportunities, planning and executing business operations, doing prior research, and having credit facilities. Further mention that right instruction and direction from professionals in their industries, the young agripreneurs develop their leadership abilities. The initial cohort of agribusiness owners gains knowledge from their collective experiences and extends invitations to attend lectures. A number of first-generation agripreneurs expressed fear when asked for detailed information about agribusiness, and some lacked the necessary literacy to respond to the research question.

Yoganandan et al., (2022) study was to conducted to ascertain the level of satisfaction among agripreneurs and investigate the impact of demographics and demography on that level of satisfaction. The market performance, farm growth, perceived farm image, farm income, material availability, government support, and cultivation and production are the seven factors that are revealed by the AprenSAT heptagon model. The results of the regression analysis demonstrate that agripreneurs' satisfaction is significantly influenced by demographic factors, including age, education level, and farming experience. Furthermore, the satisfaction of agripreneurs is significantly impacted by emporographic factors like intercropping, sources of funding, land ownership, age and size of the farm, and annual income. The study further recommended that policymakers to consider the managerial implications of knowing how satisfied agripreneurs are with their agribusiness. the planned series of actions to improve the standard of living and contentment of agripreneurs as well as those in the rural, industrial, and service sectors. These activities include training, institutional support, and technology modernization in all stages of production and supply chain.

According to Singh et al., (2019) study, the total production, price fetched for the crop, cost of production, and labor involved information was collected from farmers cultivating the potato crops Kufri Chipsona and Kufri Alankar in the districts of

Jalandhar (Punjab) and Una (Himachal) through a mixed method of semi-structured interviews and structured questionnaires. A thorough investigation at the farm level was also carried out on the methods, patterns, and for storing and distributing the crops grown in 2017. An investigation results showed various aspects to assess and address community enterprise operations. Future research should also be focus on two main issues: an efficient production model that uses data envelopment analysis to determine the benchmark price of the crop, and a diversified utilization model integrated with marketing models. Another significant discovery was that rural women are vital to agriculture production as well because agribusiness involves processing, preservation, and packaging rather than just production. Women have a significant role to play in these areas.

3. Research Design

3.1. Research Gap

A detailed review of literature was done in the second chapter and base of such reviewed study, a research gap has been presented in this section. From review of the past studies, it is possible to explore the various problems and prospects of agripreneurship and also how to solve such problems. It is important to note that the development of agripreneurs depends upon motivations, government supports, government policy, various factors like demography, geographical locations, culture, etc. The problems, challenges and prospects of agripreneurs at different places differ from one another. Many studies have been undertaken by various scholars relating to agriculture enterprise or agripreneurship at international, national, regional and even district level, but limited studies on agripreneurship have been found relating to backward and hilly regions like Mizoram. At the same time, a study on entrepreneurship in agriculture in general and entrepreneurship in organic crops in particular shall be a pioneering attempt in order to fill in the gap of research.

3.2. Objectives of the Study

The purpose of this study is to study the Agripreneurship and allied sectors in Mizoram. The study focuses on the following specific objectives:

1. To study the policy interventions and support for organic farming in Mizoram.
2. To analyze the socio-economic origins of selected agripreneurs.
3. To examine the growth and performances of selected agripreneurs.
4. To evaluate the problems and challenges of selected agripreneurs.

3.3. Hypotheses of the Study

On the basis of the above objectives, the following hypotheses are formulated to be tested.

1. There is no significant growth in the performances of selected agripreneurs in the study area.
2. There is no significant difference in problems and challenges across the selected district agripreneurs.
3. There is no significant difference in problems and challenges between male and female agripreneurs in taking up agripreneurship.

3.4. Statement of the Problem

The importance of entrepreneurs in the context of economic development can be measured in terms of employment generation, contribution to the gross state domestic product, minimization of migration, exports, etc. The special contribution that entrepreneurship can make towards uplifting a backward region like Mizoram is the creation of employment opportunities for jobless youths and providing sustainable livelihoods for the population. The government is taking a number of initiatives, starting with educating the entrepreneurs, running motivational

campaigns, providing training, giving finance, arranging for raw materials, managing technologies, extending marketing help, granting subsidies, etc., in order to give a boost to entrepreneurship development in different parts of the country.

The above initiatives have hardly reached all the areas of Mizoram, and so agribusiness conditions are still very backward, although there are high potentials for development. It becomes imperative for the researcher to know the exact status of agripreneurs in Mizoram and the problems faced by them. What types of interventions have been done and will be done by the government, NGO, or any other agency to improve their conditions? Finally, what suggestions can be provided for solving their problems? Thus, it is necessary to find out what problems are being faced by the agripreneurs in Mizoram and why they are still very backward as compared to other states in India.

3.5. Significance and Scope of the Study

Based on review of literature, it is possible to identify that though various studies has been conducted in entrepreneurship but most of them addressed only one or few dimensions of entrepreneurship in Agriculture and allied sectors. None of them adopted integrated approach to study the entrepreneurship in agriculture and its allied sectors. One or few dimensions will, definitely, not give fair and complete picture of their operations, problems and prospects. Moreover considering Mizoram, it is difficult to find studies based on the primary data to get integrated picture of entrepreneurship in Agriculture and allied sectors in Mizoram. Therefore, the need to address various issues related to agripreneurship in Mizoram arises.

This study attempts to bridge the gap by addressing the issues with integrated framework whereby concept of entrepreneurship and its life cycle, problems in and solution of establishment & registration of organic farms, its policy intervention and prospects, environmental & managerial issues & challenges and strategies to cope with them. Status of support, diversification issues, entrepreneurs problems and prospects and benefits and opportunity cost of organic farming have attempted to address simultaneously from the data collected from the agripreneurs/ organic farmers of Mizoram.

In short, this study has the following significance:

1. It brings out the present status of agripreneurship in Mizoram. This can be supportive for government involvements and for entrepreneur to start their own enterprises in agriculture and its allied sectors;
2. It explores the challenges and hindrances which work as barriers in the development of entrepreneurial endeavor in the agripreneurship in organic farming; and
3. The outcome of the study is expected to promote issues like what type of interventions is required for the government for development of agripreneurship, and also what changes are essential to hasten its developmental processes.

3.6. Research Methodology

In this section, the type and sample of the study, the pilot study conducted, sources of data and the tools adopted for analyzing the data viz. descriptive statistics, corellation analysis, regresssion analysis, ANOVA and relative importance index method were discussed.

3.6.1. Type and Sample of the Study

This study is a mix method study which is both descriptive and empirical in nature, and is mainly based on primary data collected from six (6) selected districts, i.e., Aizawl, Lunglei, Champhai, Kolasib, Serchhip, and Mamit districts. As of 2019, there are 14 FPOs and FPCs under Mission Organic Mizoram (MOM). The total number of farmers and agripreneurs who are enrolled under Mission Organic Mizoram was 5803 in 2017–2018. The study attempts to cover at least 10% of agripreneurs from different FPOs, including 42 agripreneurs from the Farmers Producer Organization/Farmer Producer Centre (FPO/FPC), totaling 588 respondents. But few respondents submitted incomplete questionnaires; therefore, 551 respondents were collected using a simple random sampling method for the study.

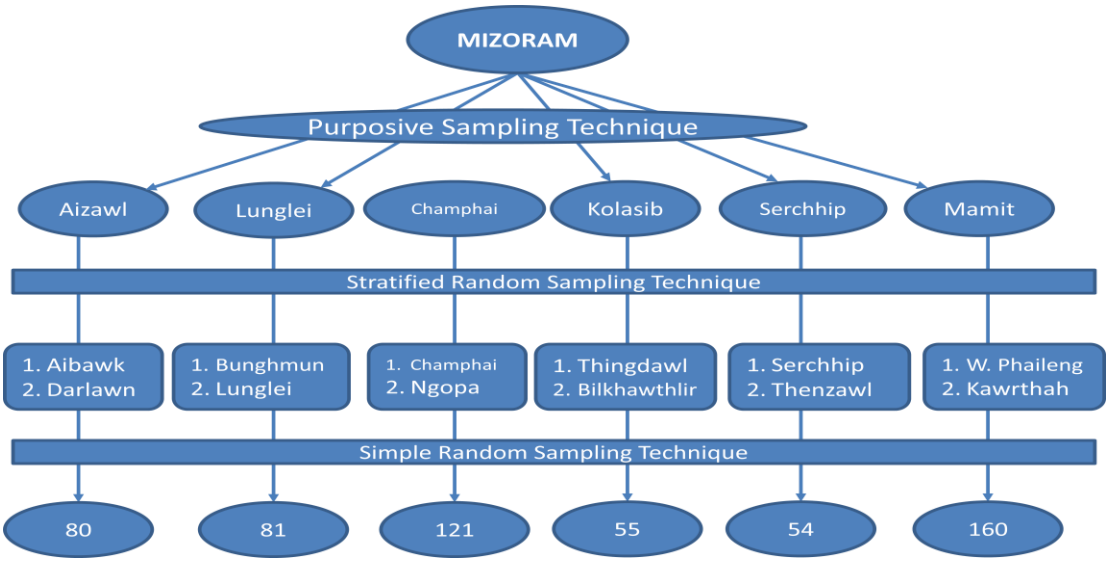

Figure 1.1: Sampling Tree

The survey includes interactions with the agripreneurs and the concerned person(s), including government officials. The study considered only those agripreneurs who had been running agribusiness successfully for the past 3 years. The actual selection is difficult because there are some agripreneurs that are not functioning at the time of study. At the same time, every possible effort was made to represent all the clusters of the selected organic crops while selecting the respondent agripreneurs under a simple random sampling method.

4. Limitations of the Study

Though the study has contributed to existing literature, it also suffers from certain limitations. Firstly, the agripreneurs are not willing to reveal their exact income from agripreneurship. Thus, the financial data obtained from them might not be a true representative of their financial position. Secondly, the study was conducted among agripreneurs from six selected districts of Mizoram therefore; the findings of the study may not be generalized for other districts of Mizoram which are not included in the study. Finally, the resource and time constraints faced by the researcher have shortened the study period while a more extended timeframe would be ideal for a comprehensive examination of organic cultivation.

5. Objective wise Analysis and Findings

Objective I – Policy Intervention and Support for Organic Farming in Mizoram

- Based on institutional support for organic crop farming in India, the government of India takes a lot of initiatives in the promotion and regulation of organic agriculture, including programs such as the National Programme on Organic Production (NPOP), National Standards for Organic Production (NSOP), National Standards for Organic Production (NSOP), the National Steering Committee, the Evaluation Committee and Committees on National Accreditation Policy Programme (NAPP) are formed for national organic production standards and certification.
- The main objectives are capacity building, financial support, human resource development, field demonstration, market development, domestic standards development, setting up model organic farms, supporting new initiatives on technology for organic farming, conducting awareness programs, and controlling the quality of bio- and organic fertilizers.
- Mission Organic Value Chain Development for the North Eastern Region (MOVCDNE) was launched for implementation in the north-eastern states during the 12^{th} plan period.
- In the study, it was found that Agripreneurs avail various levels of financial assistance; 3 (0.5%) avail less than Rs. 10000, while in Rs. 10000–30000 there are 5 (0.9 percent), and in Rs. 30000–50000 there are 13 (2.4 percent).
- Above Rs. 50000, there are 10 (1.8 percent) and the majority of 520 (94.4 percent) Agripreneurs who do not disclose the level of bank loans.
- Based on the mode of loan assistance, it was found that only 1 (0.2%) avails of a loan from a money lender, while 4 (0.7%) Agripreneurs avail of loans from NGOs, and 25 (4.5%) avail of loans from friends and relatives. However, 521 (94.6%) Agripreneurs do not avail loans from the mentioned sources.

- From the study, it is highlighted that 33(6%) of Agripreneurs reveal the details of the bank from which they avail loans, and 518 (94%) do not disclose or do not avail loans.
- It was found that 124 (22.5%) use their own vehicle for farming, while 2 (0.4%) use bus service as a means of transportation, 3 (0.5%) Agripreneurs utilize trucks for means of transportation, 18 (3.3%) use Sumo/Maxi Cab service for means of transportation, and a large majority of farmers (404, 73.3%) have no alternative but to walk to their farm.
- It was found that of the total 430 (78.04%) Agripreneurs attending different training programs across all districts, 121 (21.96%) Agripreneurs were not participating in any type of training program.
- The study reveals that 256 (46.5%) sell their products to farmers markets, while 37 (6.7%) sell their products to retail traders, 107 (19.5%) sell their products to wholesale markets, and 15 (2.7%) sell their products to farm retail, while 33 (6.0%) Agripreneurs sell their bulk commodities to processors, 88 (16.0%) sell their produce to contract buyers, and 15 (2.7%) Agripreneurs sell their produce to any convenient market.
- The study found that 275 (49.9%) gets motivated by the government or Mission Organic Mizoram, 1 (0.2%) farmer is self-motivated into Agripreneurship, 142 (25.8%) are motivated by their family members, and 133 (24.1%) are inspired by their friends or Agripreneurs into Agripreneurship.
- The study reveals the level of available support and benefit variables in 13 items, and the level of impact was from a point scale of always to never. An analysis shows the agreement level of 5 items was found to be always aware of financial, technical, and other supports.
- The study also highlights the existence of four items of the parameter that are found to sometimes support, assist, avail benefits, and make Agripreneurs aware.

- The study further reveals the Agripreneurs awareness of financial support, technical support, and other resources for taking up Agripreneurship. Based on the overall analysis of the parameter, it was found that three items are on the scale of often.

Objective II – Socio Economic Origins of Selected Agripreneurs

- From the study, it was found that Mamit district with 23 (35.94%) has the highest number of family members under 1-3 categories, and Serchhip district with only 4 (6.255%) represents the lowest family member in the study area.
- Based on the 7 above family members, the Champhai district Agripreneurs family member with 41 (26.27%) shows the highest and the least family size was found in the district of Kolasib with only 5 (4.23%).
- With reference to age group, under the below-20 age category, Mamit (32.89%) shows the highest number of respondents, and the least is Serchhip, with only 10 (6.71 percent) in this category.
- In the age group of 21–30, Mamit with 80 (29.74 percent) shows the highest in this age group, and the least number of farmers in the age group 21–30 is in Kolasib district with 25 (9.3 percent).
- Based on the 50-over age group, Aizawl district with 7 (29.16%) and Mamit district with 7 (29.16%) have the highest age of Agripreneurs, and Kolasib district with only 4 (16.68%), representing the least number of Agripreneurs.
- Of the total Agripreneurs, 359 (65.2%) are found to be literate, and 192 (34.855) are illiterate and could not read or write.
- It was found that Serchhip district showed nil responses, which indicates that all the agripreneurs are in the category of literate, and Champhai district, with 7 (5.8%), has the highest number of illiterate respondents across the districts.
- From Table 5.4, it was found that 459 (83.3%) of the agripreneurs already have farming as their main occupation before joining agripreneurship, 46 (8.3%) farmers have no prior employment, and 18 (3.3%) of the agripreneurs

have business, and similarly, farmers having government jobs as prior employment are 18 (3.3%). While 10 (1.8 percent) of the respondents have engaged in non-government organizations,.

- Table 5.5 shows the distribution of agripreneurs main occupations based on whether they are engaged in agriculture entrepreneurship or not across different districts. The district-wise with the highest affirmative responses is 120 (99.2%) in Champhai, and Kolasib has the lowest agreed-upon 'yes' percentage, 34 (61.8%) of the total districts agripreneurs.
- Overall, across all districts, 477 (86.6%) agripreneurs have agriculture entrepreneurship as their main occupation, while only 74 (13.4%) choose other occupations.
- From the study, it was found that the majority of agripreneurs in all districts are married, 457 (82.9%). The percentage of unmarried agripreneurs is 35 (8.9%). Widowed agripreneurs are 35 (6.4%), and divorced agripreneurs are 10 (1.8%).
- Out of the total of 551 agripreneurs, 547 (99.3 percent) are Christians, 3 (0.5 percent) are Hindus, and 1 (0.2 percent) is a Muslim.
- It was found that 82% of the Agripreneurs monthly income ranged between less than Rs 50,000 and only 1.8 Agripreneurs had Rs 100,000–150,000 in monthly income.
- Table 5.9 reveals that 82.8 percent of the Agripreneurs dwell in Assam-type houses and only 11.4 percent live in cement concrete (RCC).
- The study reveals that 89.2 percent live in their own house, and only 0.9 percent resides in the quarter.
- From the study, it was found that 55.0 percent of Agripreneurs are self-made, and only 2.0 percent are found to be inherited.
- Aizawl had the highest number of Agripreneurs who started their own business, with 80 (100 percent) of them being self-initiated. In Serchhip, 54

(98.1 percent) Agripreneurs are self-initiated, with 1.9 percent being initiated by their father. Lunglei had 76 (93.8 percent) Agripreneurs who were self-initiated.

- It was found that Mamit district, with 160 (29.01), shows the largest farm size of Agripreneurs, and the least farm size was found in Serchhip district Agripreneurs.

Objective III – Growth and Performance of Selected Agripreneurs

Correlation Analysis

- From the study, it shows that there was a moderately positive and significant relationship between capital investment and annual productions, agripreneurs ($r = 0.48$, $p = 0.015$), annual productions, and annual sales ($r = 0.53$, $p = 0.017$), indicating moderate growth in agripreneurs and that capital investment has a significant relationship to profit generated ($r = 0.46$, $p = 0.000$) in the study area.

- An analysis of the results reveals that there is a moderate but positively significant relationship between annual production and annual sales ($r = 0.25$, $p = 0.000$), which indicates that there is an inadequate volume of production that leads to moderate annual sales for the firm. There is a weak but significant positive relationship between annual production and annual operational cost, as confirmed by the calculated values r and p of 0.015 and 0.0001, respectively.
- The study results reveal that the relationship between annual sales and annual profit is calculated as $r = 0.29$, $p = 0.000$, which proves a moderate but significant positive relationship.
- The study evidently shows that there is insufficient cost of goods sold to meet annual sales, as the calculated value of correlation shows weak relations ($r = 0.18$) but showing positive significance ($p = 0.000$). There is potential to increase sales when an appropriate amount of operational cost is acquired.

Regression Analysis

- With reference to stepwise regression analysis for dependents and independent variables, the casual relationship equation can be represented as Y = 1.578 - 0.356 (capital investment) + 0.490 (annual production) + 0.028 (annual sales) - 0.359 (annual operation cost).
- Based on the Alpha = 0.05 level of significance, the p-values of X_1, X_2, and X3 are found to be less than 0.05; hence, the regression coefficient analysis results show appropriate evidence to draw that the level of capital investment, annual production, and annual sales has a significant impact on the level of agribusiness performance growth.
- The parameter (X_4), annual operation cost, is found to be greater than 0.05, viz., 0.013. Therefore, the calculated r value confirms the conclusion that these parameters have no useful impact on agripreneur growth.

Testing of Hypothesis 1: "There is no significant growth in the performance of selected agripreneurs in the study area".

- The first hypothesis was formulated to confirm how well agripreneurs performed in terms of growth. Part of the business survival and growth perspective comprehends the growth of agripreneurs. Based on data from six (6) districts, the study assessed the agripreneurs' performance growth. The study reveals the moderate relationship between annual sales, annual product, capital investment, annual profit, and annual operating cost in the study area (Table 5.16). The research additionally validates that sales (r = 0.00), production (0.04), and capital investment (0.020) have also significantly influence on yearly profit (Tables 5.17, 5.18, and 5.19). Therefore, the study rejects the null hypothesis and accepts the alternate hypothesis meaning that there is moderate growth of agripreneurs in the study area as demonstrated by the results.

Objective – IV: Problems and prospects of selected agripreneurs.

Descriptive Statistics

- The study reveals that the mean value, standard deviation, frequency, percentage, and level of respondents agreement on problems and prospects variables in the study area were determined, and it was determined that the respondents agreement level of 16 items was found to agree on problems and prospects encounter in taking up agripreneurship.

- The study also highlights the existence of four items of problems and prospects creation impact in which respondents disagree on the variables.

ANOVA Analysis (Districts-wise)

- Stepwise mean analysis determined that the respondents from Champhai district (M = 2.275) encounter more constraints based on illiteracy than those from other districts who are running agribusiness. The study indicates that the serchhip district with the calculated mean value of 1.687 had the lowest mean score.
- Agripreneurs from the Mamit district have significant constraints (M = 3.875), and respondents from the Aizawl district have the least constraints (M = 3.070), as the district is the state capital and its facilities, infrastructure, and other resources are comparatively better than other districts.
- Empirical results also determined that the government's support is adequate for all agripreneurs undertaking agripreneurship.
- Thus, as far as lack of training factors is concerned, it is found that there are highly significant differences among the district-wise mean scores of the respondents. Champhai district respondents with M = 3.862 considered the most constraints in encountering in taking up the firm.
- Table 6.3 shows that Champhai district, with a mean score of M = 4.110, had the highest constraints. The district shows several elements that impact law and order situations, which may be the reason stakeholders are not willing to invest in this district.

- The constraints are more visible among the Aizwal district agripreneurs (M = 3.578), as they are yet to be well equipped with technologies, and skill enhancement programs conducted in various capacities at the district are found inadequate.
- An analysis of the results reveals that the respondents from Aizwal district face more constraints (M = 3.105) on social obligations.
- From the study, it was found that the families of the agriprenuers are cooperative, and all the required supports are extended as and when needed.
- The study observed that most of the agripreneurs have no constraints on the operational aspects of their agripreneurship with their persona-life.
- Champhai district, with M = 3.981, shows the highest constraints as the districts received low investment from all the stakeholders, which indicates the inadequacy of capital in an agribusiness.
- The mean score based on Kolasib district was found at 3.444, which is also a leading constraint encountered among the district respondents due to a lack of skilled labor.
- Stepwise mean analysis determined that the respondents from Lunglei district (M = 4.163) encountered more constraints due to a lack of quality or treated seeds.
- The study indicates that the mean differences between the lunglei and champhai values of meam (M = 4.11) show equal constraints.
- Agripreneurs from Champhai district, with M = 3.623, have the highest constraints in taking agripreneurship due to high market competition for start-ups.
- It was observed that the weather and climate in the mizoram for taking up agripreneurship are suitable; timely and good weather leads to better productivity in the study area.
- Based on the variable, namely, the table reveals that there are significant mean score differences (p = 0.000, F = 8.078) between district respondents, which indicates that agripreneurs from the study have faced constraints in their business firm with respect to these variables.

- An agripreneur from Lunglei with M = 3.803 has the constraints due to the absence of incubation for start-up, followed by Champhai district with M = 3.743, which stood in 2nd place, and at the least, with only M = 2.875, faces the least constraints.
- An agripreneur's Lunglei district mean score (M) is calculated as 3.803, which is the leading respondents facing constraints in the workforce.

ANOVA analysis (gender-wise)

- The study shows that there is a significant difference in illiteracy by gender (F = 3.340, p = 0.037), which is within the significant value at the 5% level.
- Female with M = 22.098 and STD = 1.013 are more influenced by illiteracy factors than male categories with M = 11.865 and STD = 0.765 in taking up agripreneurship.
- It was found that for the parameter 'Lack of infrastructure' there are thin differences between male (M = 3.809, SD = 0.857) and female (M = 3.362, SD = 1,035).
- From the study, it was found that female agriprenuers (M = 3.856, St.D = 0.866) face more constraints than male agripreneurs (M = 3.711, St.D = 0.934) based on the parameter 'Lack of Government Support'.
- The study reveals that female agripreneurs (M = 4.042, St.D = 0.811) encounter more constraints on limited capital investment than male agripreneurs (M = 3.852, St.D = 0.818) in running the business.
- With reference to the variable 'Lack of technological awareness and skills', the study shows that male agripreneurs were the most affected (M = 3.906, SD = 0.931) than female agripreneurs (M = 3.368, SD = 1.053).
- For society obligation variables, it was found that male agriprenuer with M = 2.921 and St.D = 0.971 have a higher tendency to encounter constraints than female agripreneurs with M = 2.717 and St.D = 1.085.
- Step-wise analysis results indicate that there are no significant differences (F = 0.927, p = 0.397) between male and female agripreneurs based on non-cooperation from family.

- An investigation result shows that female and male agripreneurs exhibit equal approaches based on the work-life imbalance, as the p = 0.397 and the F = 0.246 indicate no significant differences at the 5% level.
- Stepwise analysis determined that the female respondents (M = 3.840, St.D = 1.059) encounter more constraints based on 'Lack of finance' than those of male agriprenuers (M = 3.325, p = 1.047).
- Based on the variables such as lack of market support (F = 0.291, p = 0.972) and lack of skilled labor (F = 0.376, p = 0.687), there are no differences in running the business.

***Testing of Hypothesis 2*:** "There is no significant difference in problems and challenges across the selected district agriprenuers"

- The North East Region lags behind to the rest of the country in terms of development. The main cause is the inadequate infrastructure, particularly in the state of Mizoram towards agripreneurship development. Taking up agripreneurship has presented a number of issues and challenges for agribusiness owners. Of the 20 parameters measured, the study finds that 16 (illiteracy, lack of infrastructure, absence of processing unit, lack of training, limited capital investment, lack of technological awareness & skills, social responsibility, lack of finance, lack of market support, lack of skilled labor, lack of quality/treated seeds, lack of irrigation, high market competition for start-up, absence of incubation for start-up, issue from middlemen, and lack of unity among agripreneurs) significantly differed among the districts' agripreneurs (Table 6.3). The measures of parameter differ the effects to difference districts, since all the variables p-values shows less than 0.05 level. Hence, the study rejects null and accepts alternative hypotheses.

***Testing of Hypothesis 3*:** "There is no significant difference in problems and challenges between male and female agripreneurs in taking up agripreneurship".

- From the analysis results, it shows that the mean score differs based on the gender demographics of the respondents. Of the total 20 measures of parameters, 16 variables were found to be significantly different between male and female agripreneurs. (illiteracy, lack of infrastructure, absence of processing unit, lack of training, limited capital investment, lack of technological awareness and skills, social responsibility, lack of finance, lack of market support, lack of quality or treated seeds, lack of irrigation, high market competition for start-ups, absence of incubation for start-ups, and lack of unity among agripreneurs). Therefore, the null hypothesis is rejected at a 5% significant level.

6. Conclusion

This research study has been carrying out systematically to enhanced agripreneur skill in taking up agripreneurship. The study identified that while many studies on entrepreneurship have been done, the majority of them have only looked at one or a small number of its aspects in the agricultural and related industries. To investigate entrepreneurship in agriculture and related industries, none of them used an integrated approach. A fair and complete picture of their operations, issues, and prospects will undoubtedly not be provided by one or a small number of dimensions. Furthermore, it is challenging to locate studies based on primary data that provide an integrated picture of entrepreneurship in Mizoram's allied sectors and agriculture. This study attempts to bridge the gap by addressing the issues with integrated framework whereby concept of entrepreneurship and its life cycle, problems in and solution of establishment & registration of organic farms, its policy intervention and prospects, environmental & managerial issues & challenges and strategies to cope with them. Status of support, diversification issues, entrepreneurs problems and prospects and benefits and opportunity cost of organic farming have been try to address simultaneously from the data collected from the agripreneurs/ organic

farmers of Mizoram. It becomes imperative for the researcher to know the exact status of agripreneurs in Mizoram and the problems faced by them. What types of interventions have been done and will be done by the government, NGO, or any other agency to improve their conditions? Finally, what suggestions can be provided for solving their problems? Thus, it is necessary to find out what problems are being faced by the agripreneurs in Mizoram and why they are still very backward as compared to other states in India

7. Suggestions

The following suggestions are advice to the government, the farmer's producer organisations (FPO), and the agripreneurs.

Suggestions to Government

- Agripreneurs in Mizoram encounter challenges, grappling with the substantial transportation expenses for their produce due to limited funding allocations. Mizoram, characterized by predominantly hilly terrain, incurs significantly higher transportation costs compared to other Indian states. Consequently, a substantial portion of funds is directed toward transportation, leading to financial inadequacies. It is imperative for the Central Government to reconsider and adjust the allocation of funds specifically for agripreneurs in hilly and mountainous regions. This revision is crucial to foster organic farming and promote agripreneurship in such areas.
- The people of Mizoram experience distinct social, cultural and economic conditions compared to other states. The remoteness and inadequade infrastructure facilities further complicated the adherance to the Central government drafted guidelines in Mizoram. Consequently, Agripreneurs and Farmer Producer Organizations (FPOs) encounter challenges in implementation. There is a pressing need for more comprehensive guidelines tailored to address the specific challenges of remote locations, aiming to foster agripreneurship in organic crop cultivation not only in Mizoram but throughout India.

- Agripreneurs in Mizoram has encountered a series of problems and challenges in the pursuit of agripreneurship. According to the respondents' ranking, the most important problem that needs immediate action is the'lack of proper irrigation' which hampers the productivity and harvest quality of the farmers. It is imperative for the government to proactively inititiate the installation of effective irrigation system for the agripreneurs in Mizoram. The concerned department or agency should be assigned the responsibility of identifying the optimal irrigation method for organic crops in Mizoram with government-backed support for proper installation.
- Moreover, lack of quality/treated seeds has been the second most important problems for organic cultivation, according to the respondents ranking. The relatively high prices of good quality seeds often make them inaccesible for many agriprneurs. In addessing this issue, the government should engage with the suppliers of good quality seeds and take the initiative to provide these seedsat subsidized rate for the agripreneurs in Mizoram.
- The agripreneurs in Mizoram also encounter the challenge of limited capital investment as indicated by the respondents ranking. The study reveals that a significant number of respondents did not access any financial support from funding organizations; instead they rely on personal sourcesfor agripeneurship pursuits. This results in restricted investment, limiting the scope for harvesting and expansion. To address this issue, the government should collaborate with state/regional/ rural bank to extend financial assistance to the agripreneurs.
- The study emphasizes the necessity of stepping up the creation of value-adding and processing units, such as packaging, storage, and transportation facilitieswithin the district region. Because these initiatives have the ability to spur economic growth, generate job opportunities, and aid in the general development of the region's agricultural and industrial sectors, state governments ought to concentrate on helping agripreneurs establish value addition and processing units.

- The present scenario of ogranic farming in mizoram faces challenges due to insufficient market support. The agripreneurs often feel demotivated and revert to traditional crop harvesting because of the absence of a good market support. To tackle this issue, the government should establish predefined markets along with fixed rate for each crop.
- Due to inadequate funding, the state government have a limited number of skilled employees who catered avast and diverse community of organic crops growers. Consequently, numerous farmers faced challengesdue to lack ofproficient personnel to supervise and monitor the progress of their farms. In this context, it is essential to allocate additional funds for the recruitment of efficient technical experts and skilled personnelunder a need based scheme to aid and train the agripreneurs for the development of organic farming and agripreneurship in Mizoram.
- Due to persistent practiced of Jhum system of cultivation in Mizoram, farmers typically lack permanent site for cultivation. Consequently, they abandoned the the land after 3 to 5 years after cultivation to allow it to regain fertility. However, organic farming requires several years to cultivate specific crops, leading farmers who have enrolled in organic cultivation grew impatient and revert to conventional crops. To address this challenge, the government should provide comprehensive education and awareness to farmers about the principles of organic crop cultivation. Additionally, the government needs to find solutions to support agripreneurs during non-harvest years, ensuring a smoother transition and sustained commitment to organic farming practices.
- Conducting a district-wise analysis of the data provides valuable insights into the effectiveness of value chain marketing strategies. By understanding the local nuances, the government or authorities must tailor approaches accordingly for each district to maximize the benefits of these strategies for businesses and the overall economy.

- The agripreneurship assistance has received prioritization across several districts, leading to a significantnumbers of agripreneurs benefiting from

various forms of support. To foster further agripreneurial growth, it is imperative that districts with lower assistance rates, such as Champhai, to concentrate on designing targeted programs aim at empowering local agripreneurs and closing the assistance gap. Additionally, the government must take initiatives to facilitate the integration of various districts. Sharing best practices from high assistance rate districts like Serchhip could play an important role in the advancement of agripreneurship across the region.

- The agripreneurs in the analyzed districts generally receive minimal assistance from bank officials when seeking loans. A large number of agripreneurs appear to handle the loan application process on their own, which could be due to their familiarity with the process or the availability of alternative sources of information and support. To improve this scenario and encourage agricultural development, concerned departments, banks and relevant authorities should contemplate implementing initiatives aimed at more guidance and support to agripreneurs throughout the loan application process, especially in districts where levels of assistance are insufficient.

- The variations in loan sources across distrcits highlight the diverse financial ecosystems within the region. Initiative efforts to enhance access to formal credit channels, promote financial literacy, and strengthen local support networks could potentially lead to a more balanced and sustainable borrowing landscape across all districts.

Suggestions to Farmers Producer Organisation (FPO)

- The absence of unity among agripreneursfrequently hinders the development of agripreneurship in organic crops. Therefore,the Farmer Producer Organizationshould take measures to establisha positive work atmosphere for all the agripreneur members.It is imperative to maintain peace and harmony in such a way that the incorrect practices must be corrected while the rewarding the right practices throughout the organization.

- Agripreneurs frequently overlook the terms and conditions agreed upon for selling their produce with processors or reputable companies. When offered immediate cash by businessmen directly, they tend to withdraw from the established agreements. Therefore, it is imperative for Farmer Producer Organizations (FPOs) to take proactive measures in monitoring the agreements between agripreneurs and organizations. They should ensure that agripreneurs do not withdraw from any agreement without the consent of the FPO.
- The FPO leaders bear the responsibility of providing informations and essential guidelines to agripreneurs. However, lack of information from these leaders makes it challenging for the agripreneurs to collaborate effectively with FPO leaders. Hence, it is recommended that leaders of each FPO must fulfill their responsibility associated with their positision. They must remain vigilant for all the members and must ensure maintainance of proper communication channel at all cost.

Suggestions to Agripreneurs

- Agripreneurs who are dealling with specific organic crops are advised to patiently carry out the organic crop cultivation until harvesting. Additionally, they should approach concerned authorities and agencies for any assistance required.
- Agripreneurs are encouraged to collaborate closely with the FPO to which they belong. It is essential for them to adhere to the rules and essential guidelines provided by the FPO in terms of agreement, market, fixed rate, etc.
- Agripreneurs are recommended to give due attention to all government programmes and training sessions, attending them regulary for the succesful organic cultivation practices. Moreover, it is crucial that the training must be attended by the concerned agripreneur personally, rather than another family member.
- The present situation among agripreneurs in Mizoram indicates that majority of them do not disclose their financial status, and many have not saught financial assistance from any funding agencies. Agripreneurs are encouraged

to consider accessing available financial support for enagaging in organic cultivation rather than relying solely on personal sources. This approach is crucial for sustaining long term cultivation practices.

Scope for Future Research

- With the new government in Mizoram initiating the procurement of organic crops such as ginger and dry chilli from the farmers in Mizoram starting in 2024, it is anticipated that there will be a significant shift in the pattern of organic cultivation in the region. Future research could explore the changes in scenario of organic cultivation in Mizoram before and after the procurement of specified organic crops.
- Future research could explore the comparative analysis between organic crops and conventional crops in Mizoram.
- Further exploration can be conducted on the marketing challenges and prospects associated with agripreneurship in the realm of organic.
- A state wise comparison on the performance of agripreneurs on organic crops could be further explored.
- Further investigation could be undertaken to analyze and compare the performance of Agripreneurs in organic and conventional crop cultivation on a Farmer Producer Organization basis.
- An impact of agripreneurship on the livelihood of Mizo agripreneurs could be further studied.

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