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Issues and Challenges of Organic Farming: A study on Selected FPOs 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 alwith more than 70 percent of the total population depends on agriculture (Pandey, 2013). It is also considered as the primary source of employment hilly states of North East India. Mizoram is primarily an agricultural with over 60 percent of its population, relying on farming as the main means of livelihood in rural communities. A variety of crops are are cultivated with paddy being the principal food crop and the staple diet of Mizoram. 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).

Organic farming system has a long history in India. It is an agricultural technique that focuses on maintaining soil healthy by utilizing organic by products such as organic wastes of crops, animal farm, aquatic along with other biological materials and biological fertilizers to provide nutrients for crops ensuring sustainable and enviromentally 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).

Organic farming aims to promote sustainable, profitable, and respected farming practices that enhance natural soil and fertility, and to ensure the conservation of soil and water, as well as agricultural biosecurity and food security. Therefore, it can be concluded that organic farming is a cultivation and livestock production approach that encompasses much more than merely opting out of using pesticides, fertilizers, genetically modified organisms, antibiotics, and growth hormones; it emphasizes attentive care that fosters health and satisfies the behavioral 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).

Organic farming commenced in Mizoram in 1996, following the implementation of the Organic Farming Act Mizoram, 1996. During that year, the Agriculture Department of the Government of Mizoram launched the Organic Farming Project and conducted a pilot study in Lungmuat village, located in the Kolasib District. In this village, organic farming methods were tested in conjunction with contour trench farming, yielding very encouraging outcomes. Additionally, vermiculture initiatives were initiated by bringing in high-quality species of earthworms. A considerable number of villages participated, and residents were trained in bio-composting techniques. The organic farming system relies entirely on crop residues, animal manures, green manures and off-farm organic waste therefore the government has prioritized providing organic fertilizers like neem cake to assist farmers in meeting their nutrient needs. Crop rotation with legumes, along with the application of bio-fertilizers and organic manures, as well as biological pest control, is employed to sustain soil productivity. The Agriculture Department of Mizoram is progressively decreasing the reliance on chemical inputs such as fertilizers and pesticides, while also implementing various awareness campaigns and training programs focused on organic farming.

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 asMizo chilli.

2. Issues and Challenges of Organic Farming

Entrepreneurs play a crucial role in economic development through various means, such as generating employment, contributing to the gross state domestic product, reducing migration, and boosting exports. In a region like Mizoram, entrepreneurship can significantly uplift the local economy by creating job opportunities for unemployed youth and providing sustainable livelihoods for the community. The government is taking several initiatives, starting with educating entrepreneurs, running motivational campaigns, providing training, providing finance, arranging for raw materials, managing technologies, extending marketing help, granting subsidies, etc**.,** to boost 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.

An attempt is made to identify and understand the problems and challenges of agripreneurs taking up enterpreneurships. This paper analyses the issues and challenges of Agripreneurs from six (6) districts in Mizoram. It is mainly emphasized to understand the constraints of Farmers Producer Organisation, Villages within FPO's and district wise in Mizoram. Some of the prominent issues and challenges are derived from the study of Bodunrin (2014) viz. 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.

3. Methodology

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.

4. Results and Discussion

4.1. Demographic Profile of the Respondents

An attempt is made in this section to study and understand the demographic profile of the respondents which includes variables such as age of the agripreneurs, educational qualifcations, agriprneurship as main occupation, marital status and montly income of the agripreneurs which are presented in the below table 1.

Table 1: Demographic Profile of the Respondents

Variables	Category	Total No	Percentage
Age of the Agripreneurs	Below 20	149	27.04
	21 to 30	269	48.82
	31 to 40	72	13.07
	41 to 50	31	5.63
	50 above	27	4.36
	Total	**551**	**100**
Educational Qualifications	Illiterate	21	3.8
	Literate	359	65.2
	HSLC	82	14.9
	HSSLC	65	11.8
	Graduate	23	4.2
	Postgraduate	1	0.2
	Total	**551**	**100**

Agripreneurship as Main Occupation	Yes	477	86.6
	No	74	13.4
	Total	**551**	**100**
Marital Status	Married	457	82.9
	Unmarried	49	8.9
	Widowed	35	6.4
	Divorced	10	1.8
	Total	**551**	**100**
Monthly Income	Less than 50,000	452	82
	50,000 – 1,00,000	76	13.8
	1,00,000 – 1,50,000	10	1.8
	Above 1,50,000	13	2.4
	Total	**551**	**100**

Source: Computed from primary data

The first part of Table 1 determines the age group of the respondents examined based on the various categories. An analysis of the results indicates that majority of the responents i.e. 269 (48.82 %) were belonging to the age group 21 – 30 yrs followed by below 20 yrs, 31 – 40 yrs, 41- 50 yrs and ove 50 yrs respectively.

The background of farmers educations are classified in the form of illiterate, literates, High School Leaving Certificate (HSLC), Higher Secondary School Leaving Certificate (HSSLC), Undegraduate and Postgraduate. An analysis of the results indicates that majority of the respondents 359 (65.2 %) are literate. 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.

The above table 1 shows the distribution of agripreneurs main occupation based on whether they are engaged in agriculture entrepreneurship or not, across different districts. 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.

The details of respondents' marital status across of all districts are highlighted and classified as - Married, Unmarried, Widowed and Divorced. 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.

Moreover, 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. The majority of agripreneurs in each district have a monthly income less than Rs. 50,000, followed by Rs 50,000 – Rs 1,00,000, above Rs 1,50,000 and Rs 1,00,000 – Rs 1,50,000 respectively.

4.2. 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 2: Reliability Statistics

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

Table 2 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.

4.3. 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 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 Groups 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 awareness &Skills	Between Group 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 Total	9.041 317.931 326.973	5 545 550	1.808 0.987	1.831	0.106
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 for start-ups	Between Groups Within Groups Total	21.176 323.446 344.622	5 545 550	4.235 1.004	4.216	**0.001**
Unpredictable weather and climate	Between Groups Within Groups	7.168 310.637	5 545	1,434 0.965	1.486	0.194

	Total	317.805	550			
Absence of incubation for start-ups	Between Groups 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 Total	32.725 342.638 375.363	5 545 550	6.545 1.064	6.151	**0.000**
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 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 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 levels. 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 neighbouring 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 mean (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 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 Champhai 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 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	12.27	**0.000**
	Within Groups	283.346	544	0.883	3	
	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	5.933	**0.007**
	Within Groups	310.555	544	0.967		
	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 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 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 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 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. Conclusion

This paper analyzes the problems and challenges of agripreneurs from six selected districts of Mizoram. The first part of the paper 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 start-up, problems of middlemen 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 start-ups and absence of incubation for start-ups.

References

1. Ahuja, A. K. (2015). Market Opportunities, Challenges and Future Prospects for Organic Agricultural Product. [Unpublished doctoral thesis, Maharshi Dayanand University].
2. Alex, L. (2011). A review and analysis of policies on farmer's entrepreneurship development. PELUM, Misereor, 1-55.
3. Babu, D.R. (2015). Agripreneurship – Issues and opportunities with a simple case study for better handling and post harvest management of fruits and vegetables.
4. Bodunrin, A.K. (2014) The Problems and Prospects of Entrepreneurship Activities and Business Management Practices in Nigeria. European Journal of Business and Management, 6, 58-61.
5. Economic Survey (2017-18): Government of Mizoram, Planning and Programme Implementation Department (Research and Development Branch) , pp. 209-210.
6. Kashyap, P., Prusty, A. K., Panwar, A.S. & Kumar, S., Punia, P., Ravisankar, N. & Kumar, V. (2022). Agri-Entrepreneurship Challenges and Opportunities. Today & Tomorrow's Printers and Publishers.
7. Kular, I., & Brar, A. (2012). Transforming Indian Agriculture through Agripreneurs. Indian Journal of Marketing, 42(3).
8. Mission Organic Mizoram (2018). https://missionorganicmizoram.com/.
9. Pandey, K. (1989). Adoption Of Agriculture Innovations. New Delhi, Northern Book Centre, 89.
10. Pandey, G. (2013). Agripreneurship education and development. Need of the day. Asian Resonance, 2(4), 155-157.
11. Pandey, M., & Tewari, D. (2010). The Agribusiness Book- A Marketing & value chain perspective . International Book Distributing Co.
12. Pettinger, T. (2016).Problems of agriculture-market failure. Economics Help.
13. Rai, P. D. (2016). Challenges before Sikkim, India's first organic state. Business Standard.
14. Ravindra, T., & Sweta, A. (2015).Rural development through Agripreneurship.Global Journal of Advance Research, 2(2), 534-542.
15. Reddy., & Parvatha. ,P. (2008). Principles of Organic Farming in Organic Farming for Sustainable Horticulture, Scientific Publishers(India).
16. Saikia, A. (2008). Present Status, Potentials, Problems and Strategies for Agricultural Development in North Eastern States.Agricultural Development in North East India
17. Singh, A., (2002). Agriculture Marketing in Haryana: Problems and Prospects [Unpublished Doctoral Thesis, Maharshi Dayanand University].
18. Singh, A.P. (2013). Factors Influencing Entrepreneurship Among Farming Community in Uttar Pradesh. Journal of Arts, Science & Commerce, 4(3),114-121.
19. Singh, J. (2007). Problems of Marketing of Cash Crops, Jaunpur District of Uttar Pradesh [Unpublished Doctoral Thesis, Veer Bahadur Singh Purvanchal University.