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ECONOMICS, PROBLEMS AND FUTURE PROSPECTS OF PINEAPPLE FARMING IN THE CHURACHANDPUR DISTRICT OF MANIPUR.

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Abstract: The study Economic and viability of pineapple farming (variable, marketing, fixed & total cost) in the Churachandpur District of Manipur. To critically analyse the problems of pineapple farmers in the Churachandpur District of Manipur. Recommend measures for improvement of Pineapple farming in the Churachandpur District of Manipur. The population of the study involved all pineapple farmers' of Churachandpur district, Manipur. The sample farmers included randomly selected pineapple farmers to the tune of 100. The tools used in the study was a self - questionnaire which was administered on the sample farmers. The questionnaire was used for data collection as it was suitable and appropriate. Suitable and appropriate statistical techniques like PSPP and Excel Sheet were tabulation and testing hypothesis. The study found the problems and issues faced by the pineapple farmers is beyond their capacity to control. It was also discovered that pineapple farming in the area under study is economically viable as the pineapple farmer are profiting in spite of the problem faced. Based on the findings it may be concluded that government intervention to boost pineapple cultivation is zero. The study discovered a significant differences between experienced farmers and inexperience farmers with respect to the problems encountered while farming pineapple. It was also found out significant difference between self-owned land farmers and family owned land farmers. The study found that pineapple cultivation is very economically viable.

Index Terms: Pineapple, Churachandpur, Problems of pineapple farmer, small farmer, big farmer.

1. Introduction

Pineapple (Ananas comosus) is a herbaceous perennial crop belonging to the order Farinasae, family Bromeliacae and is one of the important commercially grown tropical fruit in the world Manipur ranked sixth in pineapple production in India, with a production of 134.82 MT fibre rich variety of pineapples in 2021-22 (Imphal Free Press, 2022). Manipur ranks 1st in area and production of pineapple among the North East hill states in 2018-19 (Anonymous, 2019). The two most important varieties of pineapple viz., Kew (big size) and Queen (small size) are produced on commercial scale in Manipur (Singh, 2022). The state of Manipur is in second position in terms of area coverage under pineapple cultivation and it contributes around 7.85 per cent of the total pineapple production of the country (Devi, 2021). Pineapple is the most important fruit crop in Meghalaya and occupies the fifth position in terms of area accounting 11.31 thousands ha and produces 117.77 thousand tonnes with an average productivity of 10.41 t ha-1 claiming 7th and 12th position respectively among pineapple producing states in thecountry. Pineapple (*Ananas comosus*) is the most economically important plant in the family romedioideae, which is divided into three subfamilies: Pitcarnioideae, Tillandsiolideae, and Bromedioideae. It belongs to the order Bromeliales, genus Ananas, and species Comosus.

Churachandpur is the largest district in Manipur by area, located in the southwestern part of the state, with its headquarters at the state's second-largest town, often referred to as Lamka. Known for its hilly terrain (350–1,950m elevation), the district has a population of 274,143 (2011 Census), dominated by the Kuki tribal community. The economy is mainly agricultural, with major crops including rice and maize, complemented by a rich, predominantly Christian culture. The district covers 4,570km2, making it the largest district in the state. It is characterized by hills, with the Khuga River running through the district. It is bounded by Jiribam and Tamenglong to the north, Chandel and Bishnupur to the east, Myanmar and Mizoram to the south, and Cachar (Assam) to the west. As of 2011, it had a population density of 60 per km2. The sex ratio is 975 females per 1000 males, and a high literacy rate of 84.29%. The population is largely inhabited by the Kuki-Zo community (including Thadou, Hmar, Paite, Vaiphei, Zou, Gangte, Simte, Mizo, etc.). Agriculture is the primary source of livelihood. The district was established in 1969, it is divided into several sub-divisions including Tipaimukh, Thanlon, Churachandpur North, and Singngat.

2. Objectives

1. Economic and viability of pineapple farming (variable, marketing, fixed & total cost) in the Churachandpur District of Manipur.
2. To critically analyse the problems of pineapple farmers in the Churachandpur District of Manipur.
3. Recommend measures for improvement of Pineapple farming in the Churachandpur District of Manipur.

3. Definition:

1. Economics is the social science that studies how individuals, businesses, and governments make choices to allocate limited resources to satisfy unlimited wants. It focuses on production, distribution, and consumption, analyzing how people use resources—like money, time, and labor—to improve lives.
2. Experienced farmers and inexperience farmers: An experienced farmer combines deep knowledge of agriculture, livestock management, and machinery with resilience to tackle challenges like pests, weather, and market volatility. Whereas, an in-experience farmer (often referred to as a "beginning farmer" or "new farmer" in agricultural contexts) is someone who has limited experience managing a farming operation.
3. Small family farmers and big family farmers: A small family, or nuclear family, consists of parents (father and mother) and their one or two children living together. It is a tight-knit unit focused on higher quality of life, better education, and improved financial stability compared to larger households and big family consist of more than 2 children.
4. Small land farmers and big land farmers: Small land farmers cultivate 1 hectares or less, relying on family labour for subsistence and local market sales. Whereas, a large land farmer is defined as an individual or entity managing extensive agricultural land above 1 hectares.

4. Research Questions:

1. What are the amount of expenses born by the pineapple farmers under various dimensions of expenditure in the Churachandpur District of Manipur?
2. Does the pineapple farmers encounter problems while farming pineapple in their land?
3. What should be the measures taken up by the pineapple farmers for increasing their yielding?

5. Hypothesis

H_o1 There is no significant difference between experienced farmers and inexperience farmers of Churachandpur district, Manipur, with respect to the problems encountered while farming pineapple.

H_o2 There is no significant difference between small family farmers and big family farmers of Churachandpur district, Manipur, with respect to the problems encountered while farming pineapple.

H_o3 There no significant difference between family with high female ratio farmers and family with high male ratio farmers of Churachandpur district, Manipur, with respect to the problems encountered while farming pineapple.

H_o4 There is no significant difference between family owned farm and self-owned farm of Churachandpur district, Manipur, with respect to the problems encountered while farming pineapple.

H_o5 There no significant difference between small land farmers and big land farmers of Churachandpur district, Manipur, with respect to the problems encountered while farming pineapple.

6. Methodology:

6.1. Method of the Study:

The researcher used one of the types of descriptive approach, a descriptive and analytical method, which is suitable for the present study.

6.2. Population of the Study:

The population of the study involved all pineapple farmers' of Churachandpur district, Manipur.

6.3 Sample of the Study:

The sample farmers included randomly selected pineapple farmers to the tune of 100.

6.4 Tool:

The researcher had developed a questionnaire and it was administered to the sample of study shown above.

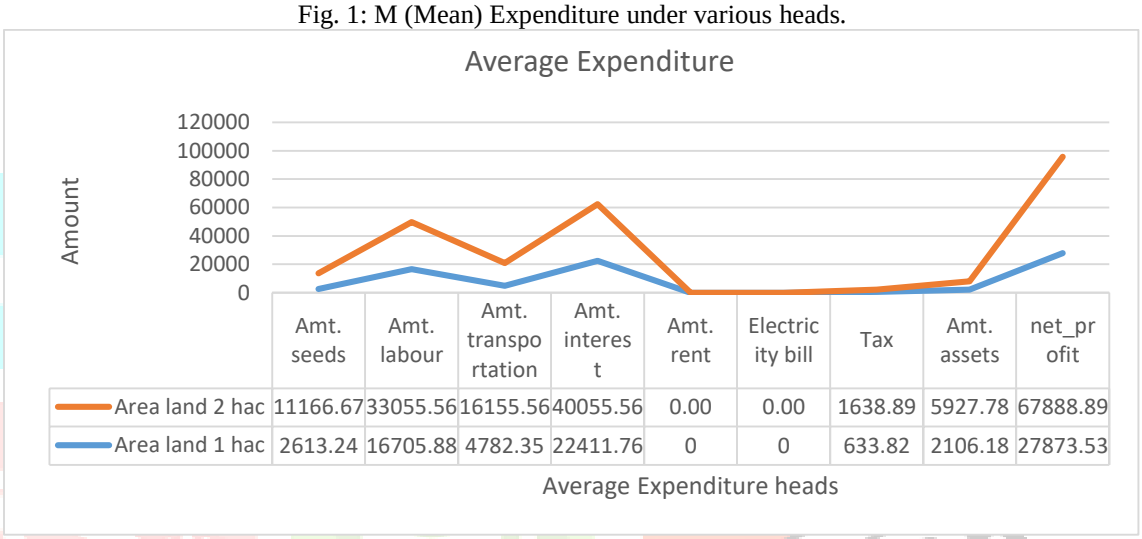
6.5 Statistical Analysis

After retrieving the questionnaire from the respondents, the responses were coded and data entry was done in the PSPP and Microsoft-Excel program and statistical computation was performed to obtain Percentage, Mean (M) and level of significances for drawing inferences.

7. Results

7.1. Results of the research question No. 1: What are the amount of expenses born by the pineapple farmers under various dimensions of expenditure in the Churachandpur District of Manipur?

Fig. 1: M (Mean) Expenditure under various heads.

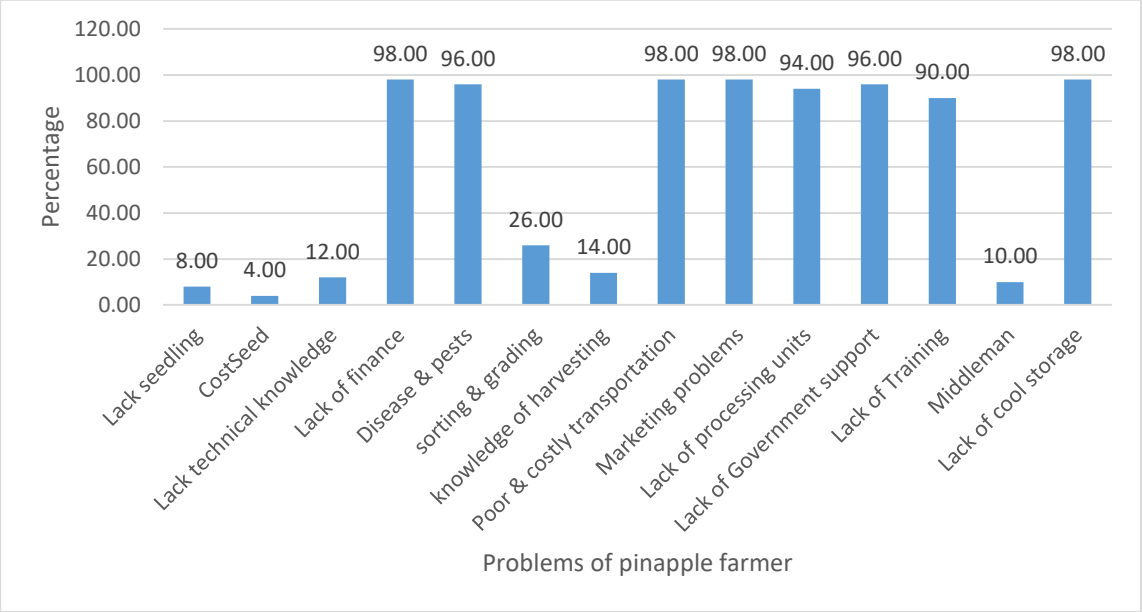


7.1.1. Deduction of the above graph

1. Farmers do not pay rent for the land. Thus, it can be deduced that the farmer own the land.
2. Farmers do not use electricity in any form in cultivating pineapple.
3. Farmers do not avail loan from the banks or financial assistance from the government. This simply indicates that the farmers do not about financial assistance from bank and government or the government and the bank is not able to reach the farmers.
4. Farmers who cultivated 2 hectares gained almost 2.5 times more profit than farmers cultivating 1 hectare.

7.2. Results of the research question No. 2: Does the pineapple farmers encounter problems while farming pineapple in their land?

Fig. Problems encountered by the farmers



7.2.1. Deduction of the above graph

Analysis of the above graph revealed major problems encountered by the farmers are as follows;

1. Lack of finances (98.00%).
2. Diseases and pest (96.00%).
3. Poor and costly transportations (98.00%)
4. Marketing of produces (98.00%).
5. No or Lack of processing units (94.00%).
6. No government support in any form (96.00%).
7. Lack of training (90.00%).
8. No or shortage of cool storage (98.00%).

7.3. Results of the research question No. 3: What should be the measures taken up by the pineapple farmers for increasing their yielding?

1. Provided financial support
2. Arrange for cool storage
3. Provide subsidised fertilizer
4. Improve transportation
5. Provide proper training
6. Regulate the price of the fruit.

7.4. Problem faced by experienced and inexperienced farmers:

7.4.1. **Result of Hypothesis Test 1 ($H_0$1):** There is no significant difference between experienced farmers and inexperience farmers of Churachandpur district, Manipur, with respect to the problems encountered while farming pineapple.

Table 1: Problems faced by experienced and inexperience farmers.

Group Statistics					
	Experience	N	Mean	Std. Deviation	Std. Error Mean
M	Inexperienced farmers	18	2.02	1.14	.27
	Experienced farmers	86	2.03	.40	.04

The above Table 2 showed the overall M of 2.02, S.D. of 1.14 for inexperienced farmer and M of 2.03 and S.D. of 0.40 for experienced farmers. This indicated that both experienced farmers and inexperience farmers have faced high level problems in farming pineapple.

Table 2: Test result of hypothesis 1 ($H_0$1)

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
M	Equal variances assumed	29.18	.000	-.07	102.00	.942	-.01	.15	-.31	.29
	Equal variances not assumed			-.04	17.87	.968	-.01	.27	-.58	.56

Analysis of table 3 revealed that "there exist significant difference between experienced farmers and inexperience farmers of Churachandpur district, Manipur, with respect to the problems encountered while farming pineapple" ($p<0.05$). Hence, the hypothesis **($H_0$1)** is rejected.

7.5. Problem faced by small family and big family farmers.

7.5.1. **Result of Hypothesis Test 2 ($H_0$2):** There is no significant difference between small family farmers and big family farmers of Churachandpur district, Manipur, with respect to the problems encountered while farming pineapple.

Table 3: Problems faced by small family and big family farmers.

Group Statistics					
	Sex ratio	N	Mean	Std. Deviation	Std. Error Mean
M	Small family farmers	48	2.06	.56	.08
	Big family farmers	56	2.01	.61	.08

The above Table 4 showed the overall M of 2.06, S.D. of 0.56 for Small family farmers and M of 2.01 and S.D. of 0.61 for big family farmers. This indicated that both small family and big family pineapple farmers have faced high level problems in farming pineapple. However, small family farmer's problems is slightly higher.

Table 4: Test result of hypothesis 2 ($H_0$2)

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
M	Equal variances assumed	.01	.925	.44	102.00	.660	.05	.12	-.18	.28
	Equal variances not assumed			.45	101.61	.657	.05	.11	-.18	.28

Analysis of table 5 revealed that "there exist no significant difference between small family farmers and big family farmers of Churachandpur district, Manipur, with respect to the problems encountered while farming pineapple" ($p>0.05$). Hence, the hypothesis **($H_0$5)** was not rejected.

7.6. Problem faced by high female ratio family and high male ratio family farmers.

7.6.1. Result of Hypothesis Test 3 ($H_0$3): There no significant difference between family with high female ration farmers and family with high male ratio farmers of Churachandpur district, Manipur, with respect to the problems encountered while farming pineapple.

Table 5: Problems faced by high female ratio family and high male ratio family.

Group statistics					
	Group	N	Mean	Std. Deviation	Std. Error Mean
M	High female ratio family	40	2.04	.87	.14
	High male ratio family	2	2.20	.00	.00

The above Table 6 showed the overall M of 2.04, S.D. of 0.87 for small female ratio family and M of 2.20 and S.D. of 0.00 for high male ratio family. This indicated that both small female ratio family and high male ratio family have faced high level problems in farming pineapple. However, high male ratio family problems is slightly higher.

Table 6: Test result of hypothesis 3 (H_03)

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
M	Equal variances assumed	.98	.328	-.26	40.00	.796	-.16	.62	-1.41	1.09
	Equal variances not assumed			-1.17	39.00	.247	-.16	.14	-.44	.12

Analysis of table 7 revealed that "there exist no significant difference between small family farmers and big family farmers of Churachandpur district, Manipur, with respect to the problems encountered while farming pineapple" ($p>0.05$). Hence, the hypothesis **(H_03)** was not rejected.

7.7. Problem faced by family owned farm and self-owned farm.

7.7.1. Result of Hypothesis Test 4 (H_04): There is no significant difference between family owned farm and self-owned farm of Churachandpur district, Manipur, with respect to the problems encountered while farming pineapple.

Table 7: Problems faced by family owned farm and self-owned farm.

Group Statistics					
	Group	N	Mean	Std. Deviation	Std. Error Mean
M	Self owned farm	98	2.06	.57	.06
	Family owned farm	6	1.57	.72	.29

The above Table 8 showed the overall M of 2.06, S.D. of 0.57 for self-owned farmers and M of 1.57 and S.D. of 0.72 for family own farm. This indicated that both self-owned farmers have faced negligible problems. However, family owned farmers have faced high level problems in farming pineapple.

Table 8: Test result of hypothesis 4 (H_04)

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
M	Equal variances assumed	2.73	.101	2.02	102.00	.046	.49	.24	.01	.97
	Equal variances not assumed			1.64	5.39	.158	.49	.30	-.26	1.25

Analysis of table 9 revealed that "there exist no significant difference between self-owned farmers and family farmers of Churachandpur district, Manipur, with respect to the problems encountered while farming pineapple" ($p>0.05$). Hence, the hypothesis **(H_04)** was not rejected.

7.8. Problem encountered by small land farmers and big land farmers.

7.8.1. Result of Hypothesis Test 5 (H_05): There is no significant difference between small land farmers big land farmers of Churachandpur district, Manipur, with respect to the problems encountered while farming pineapple.

Table 9: Problems faced by small land farmers and big land farmers.

Group Statistics					
	Group	N	Mean	Std. Deviation	Std. Error Mean
M	Small land farmers	20	2.07	.21	.05
	Big land farmers	48	2.09	.73	.11

The above Table 10 showed the overall M of 2.07, S.D. of 0.21 for small land farmers and M of 2.09 and S.D. of 0.73 for family own farm. This indicated that both small land farmers and big land farmers have faced high level problems in farming pineapple. However, big land farmers problems is slightly higher.

Table 10: Test result of hypothesis 5 (H_05)

Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
M	Equal variances assumed	3.19	.079	-.14	66.00	.887	-.02	.17	-.36	.31
	Equal variances not assumed			-.21	61.51	.838	-.02	.12	-.26	.21

&$Analysis of table 9 revealed that "there exist no significant difference between small land farmers and big land farmers of Churachandpur district, Manipur, with respect to the problems encountered while farming pineapple" ($p>0.05$). Hence, the hypothesis **(H_05)** was not rejected.

9. Conclusion:

The study found the problems and issues faced by the pineapple farmers is beyond their capacity to control. It was also discovered that pineapple farming in the area under study is economically viable as the pineapple farmer are profiting in spite of the problem faced. Based on the findings it may be concluded that government intervention to boost pineapple cultivation is zero. The study discovered a significant differences between experienced farmers and inexperience farmers with respect to the problems encountered while farming pineapple. It was also found out significant difference between self-owned land farmers and family owned land farmers. The study found that pineapple cultivation is very economically viable.

References:

[1] Akali, S. Jha, Sharma, K. K. A. 2009. Cultivation of Pineapple for Upliftment of Rural Economy in Nagaland, India. Acta Horticulturae, (822), pp. 99–106. doi:10.17660/ActaHortic.2009.822.11

[2] Baruwa, O. I. 2013. Profitability and constraints of pineapple production in Osun State, Nigeria. Journal of Horticultural Research, 21(2). doi:10.2478/johr-2013-0022

[3] Devi, R. Kashyap, D. Devi. H. A. Choudhury, J. and Kikon, P. L. 2021. Traditional pineapple production: Scope for scale up to enhance farmers' income, International Journal of Agricultural Sciences Volume 17(2); pp.305-310. DOI:10.15740/HAS/IJAS/17.2/305-310

[4] Hasan, S. S, Ali, M. A. and Khalil, M. I. (2010), Impact of Pineapple Cultivation on the Increased Income of Pineapple Growers, The Agriculturists 8(2); pp. 50-56.

[5] Iwuchukwu, J.C. Nwobodo, C. E. Udoye, C. E. 2017. Problems and Prospects of Pineapple Production in Enugu State, Nigeria. Journal of Agricultural Extension, 21(1), 167–180. doi:10.4314/jae.v21i1.14

[6] Jha, K. K. 2012. Entrepreneurial Behaviour of Pineapple Growers, Indian Research Journal of Extension Education Special Issue (Volume I), pp.142-145.

[7] Mukherjee, A, Singh, P, R, Mrinmoy, S and Burman, R. R. 2021. Enhance farmers' income, International Journal of Agricultural Sciences, Volume 17 (2), pp. 305-310.

[8] Sema, A. Maiti, C.S. Dietholhou, (2011). Pineapple Cultivation in North East India - A Prospective Venture. Acta Horticulturae, (902), 69–78. doi:10.17660/ActaHortic.2011.902.4

[9] Semaa, A. Maiti, C.S. and Dietholhou. 2011. Pineapple Cultivation in North East India - A Prospective Venture, 7th International Pineapple Symposium, DOI:10.17660/ActaHortic.2011.902.4

[10] Singh, K.J., Sarkar, D. and Mondal, B. 2022. Study on Economics of Pineapple Cultivation in Manipur, India. Economic Affairs, Vol. 67(05); pp. 833-837, December 2022. DOI: 10.46852/0424-2513.5.2022.18

[11] Singh, N. A, Singh, R, Feroze, S.M. and Singh, R. J. 2016. Pineapple Production in Ghana, Journal of Economics and Sustainable Development, 8(18); pp.34-43.

[12] Williams, P. Adade, C. O. and Essegbey, G. O. 2017. Economic Implications of a Changing Climate on Smallholder, Journal of Economics and Sustainable Development, 8(18); pp. 34-43.