

1.1 BACKGROUND

In agriculture, the production of fruits and vegetables are of so vital importance that it provides three to four time more income than cereals per unit of land. In banana production, India has the first rank in the world and it is the fourth most important staple crop in the world and is critical for food security in many tropical countries (FAO, 2020). Its year-round availability, affordability, nutritive, taste and medicinal value makes it the preferred fruit among all classes of people. It has also good export potential. The fruit crops such as banana holds a great promise for accelerating the income of the farmers, especially in Nagaland. Realizing the importance of fruit cultivation many farmers are diverting their resources towards the plantation of fruit crops. The total area under fruit crops cultivation is, therefore, increasing day by day.

Banana is a monocotyledonous, perennial herb within the order Zingiberales, and the family Musaceae. A banana is a consumable fruit produced by several sorts of large herbaceous flowering plants in the genus *Musa*. Banana varies in colour, firmness and size, but is usually curved and elongated, with soft flesh rich in starch covered with a rind which may be yellow, green, red, or brown when ripe. The fruits are grown in clusters hanging from the top of the plant. Among fruits and vegetables, banana is a well-known and special crop with its peculiarities like non-seasonal character, one year gestation, single bunch output and perishable during a short period of seven to ten days. It contains eleven vitamins and the important ones are A, B, C. Banana is rich in minerals but it contains very low protein and fat. Plantation of fruit can be done all year in order to secure better prices during the off season. The nutritional value per 100 grams of banana fruit contains 104 kcal of energy, 24.84 grams of carbohydrates, among the vitamins, folates is highest with 20 mcg and among minerals it contains 5 MG of calcium. Banana powder can be used as the first baby food. It assists in reducing the risk of heart related diseases when used repeatedly and is recommended for patients suffering from kidney disorders, gastroenteritis, ulcer, arthritis and high blood pressure (FAOSTAT, 2011). Hence,

banana had been denoted as a protective food as it assumes great importance for providing nutritional security for the people.

1.2 REVIEW OF LITERATURE

Uma *et al.* (1998) analysed the marketing and export of Banana in India and concluded that even after attaining self-sufficiency and surplus production of banana, India is not able to compete in the international market for banana export due to the presence of bottlenecks in marketing channels and gaps in production with good export quality. For the improvement and development of the marketing structure, a co-ordinated approach aimed at removing all the weak links in the marketing chain is entail. A package of improved marketing services in the form of regulated co-operative markets, facilities for grading, weighing, storing, transporting, handling and finance provision is to be made available to ensure the producer a fair return from his production effort and a better share in the price paid by the consumer by fixing an appropriate support price and procurement price. Market research programmes should be oriented to the developing of an orderly and efficient marketing system. Though the National Horticulture Board (NHB) has developed a very good marketing intelligence to disseminate marketing information regarding horticultural produce to the interested parties, commodity intelligence bulletins exclusively for banana need to be published. He further suggested that India being in era of surplus banana production, developing a systematic banana marketing channel and extending its range to foreign countries by improving the shelf-life period and storage and export facilities has become crucial. Developing new banana varieties with prolonged shelf-life period and export qualities etc. are the areas of primary interest.

Nomesh Kumar and Narayana Swamy (2000) evaluated the entrepreneurial behaviour and socio-economic characteristics of farmers who adopted sustainable agriculture in India, defined entrepreneurial behaviour as a combination of seven components viz.,innovativeness, decision making ability, achievement motivation, information seeking ability, risk orientation, coordinating ability and leadership ability.

Balasaravanand Vijayadurai (2012) conducted a study in the Regulated Markets of Thanjavur district and focused on identifying entrepreneurial characteristics among the farmers and determines the level of entrepreneurial behavior among the farmers. Among them with regard to innovation it was found low among the small and marginal farmers. The level of leadership ability and ability to assume risk also found low, requiring the improvement in the entrepreneurial behavior particularly among the marginal farmers. The study has highlighted the need to improve decision- making ability among the farmers and their level of innovations in farmer practices.

Naveen *et al.* (2015) conducted a study to study the production and marketing of banana in Chikkaballapur district of Karnataka during the period of 2012-13. The results revealed that, three important marketing channels existed in the study area. The main players in channel-I were producer, village level trader, wholesaler, retailer and consumer, in channel-II: producer, village level trader, retailer, consumer whereas in Channel-III: producer, village level trader, vendor, consumer. The share of producer in the consumer rupee was higher (50.90 %) in channel-III, as compared to channel-II (46.80 %) and channel-I (41.59 %). Farmers preferred the channel-I, because farmers relished (received) the cash immediately after the sale of the produce to village level trader at the farm level itself. Further, in channel-I, the risk of violent price fluctuation in open market could be avoided.

1.3. OBJECTIVE OF THE STUDY

The present study is undertaken to determine the current status of various problem in banana cultivation, including physical loss assessment and marketing system of banana along with the problems and to make possible suggestions to address the identified problems. Despite the prominence of banana in the economy of Chesezu village under Phek District Nagaland, no research studies have been conducted on the marketing and postharvest handling including loss assessment of banana. So, it is anticipated that a systematic in- depth study on the marketing and postharvest handling of banana could be imperative to improve the overall marketing process including proper postharvest management of this fruit crop. The progress in the production is fairly essential but marketing has an equivalent advantage especially in the case of commercial crop like banana which is uprightly produced for selling in the

market. Although there have been multi-dimensional efforts to improve the production of banana in the state, however marketing and value addition have not received required attention. The present investigation covers both marketing and the profitability gained by the farmers through banana cultivation. The study provides meaningful and useful insights to the problems faced by the farmers in the production and marketing of bananas. The results of the analysis of marketing efficiency and price spread would give first-hand knowledge about the extent of benefits accrued by the producers and other stakeholders which will pave the way for making improvements in the existing marketing system. The study may also explain the selling behavior of banana growers, its reasons and consequences. More particularly, the results would help the banana growers in taking timely decision regarding the disposal of the banana fruits considering the features of perishability, seasonability and the frequent fluctuations in the price received by them. The outcomes of the study will determine the marketing costs incurred by the growers and market functionaries, which influences the final prices paid by the consumers and bear a significant effect on the efficiency of the channels. Hence, the present study is conducted with the following specific objectives:

- a) To study the profitability of banana cultivation.
- b) To determine the availability of market for the product.
- c) To identify the constraints faced by growers in production and marketing of banana, and recommend suitable policy measures.
- d) To find out the monthly income and net income from banana growers.

1.4 RESEARCH PROBLEMS

The aim of the present study is to analyse the various parameters concerned with the banana grower's viz. profitability and marketing of banana, the problems faced by the banana growers and accordingly suggest appropriate measures to improve the overall marketing system of banana in Chesezu village, Phek District. This is an empirical research mainly based on survey method. Hence, keeping in view the objectives of the study, this chapter outlines briefly the research methodology followed which includes the sampling design, nature and sources of data and analytical tools and techniques employed in achieving the objectives of the study.

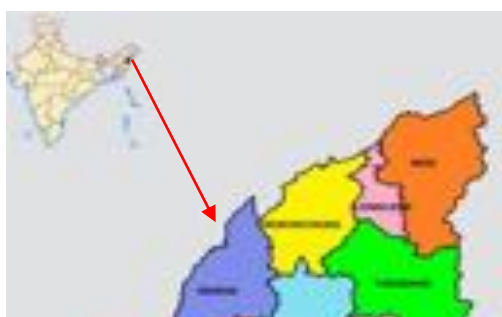
1.4.1 Limitation of the study

- a) The study was limited only to a partial area.
- b) Questionnaires alone cannot extract sufficient information.
- c) There is limited access of data as collecting every single data for the research will take a lot of time.
- d) The answers obtained from the respondent were not very relevant as most of them were uneducated.

1.5 RESEARCH METHOD

1.5.1 Study Area

Chesezu village shown in fig. 1.1 is located in Phek district of Nagaland State. It is located 57 km away from the state capital Kohima towards the east at an altitude of 1614 meters above sea level. It is situated between the longitude of 94.2804° E and latitude of 25.6822° N. The village is geographically located on a strategic hill of the Zanebu mountain range (the third highest mountain in Nagaland) with enormous sentry peak Rikhwubatu as the highest panoramic view. The village has its inherent gift of mountainous and charming landscape and is surrounded by 8 different village, toward the North Dihoma village and Kidzumithuma village, South Khulazu Basa, West Chetheba Town and Thenyizu village and towards the east EastRunguzu Village, Khuzomi village and Chozuba village. According to the population censuses of 2011, there are 777 households (approx.) and has a population of 3470 out of which 1756 were male and 1714 are female. Average Sex Ratio of Chesezu Nasa village is 950 which is higher than Nagaland state average of 931. In 2011, literacy rate of Chesezu Nasa village was 75.24 % compared to 79.55 % of Nagaland. In Chesezu Nasa Male literacy stands at 82.69 % while female literacy rate was 67.65 %. An aerial view of Chesezu village is shown in fig. 1.2. As per constitution of India and PanchyatiRaaj Act, Chesezu village is administrated by Sarpanch (Head of Village) who is elected representative of village.



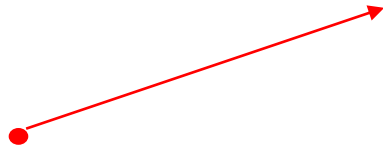


Fig 1.1 Map of Chesezu village



Fig 1.2 Areal view of Chesezu village

1.5.2 Method and sources of data collection

A. Primary data: -

This study is entirely based on primary data collected from the banana growers and market intermediary's viz. wholesalers/Commission agents and retailers. Primary data was collected regarding the entrepreneurial behaviour of banana growers, the cost incurred during the marketing of the produce and losses occurring during harvest and post-harvest stages. The data was collected through phone calls and Google form.

B. Secondary data: -

Secondary data is used to supplement the primary data and to support the study. The Secondary data related to area and production of Banana in

Chesezu Village, Phek District is collected from website of Director of Horticulture, Nagaland. Other sources used for the collection of secondary data includes websites of Directorate of Land records, Directorate of Economics and Statistics, and other published sources like journals and reports.

1.5.3 Collection of data through questionnaires

Questionnaires consist of several set of question typed and printed in a defined order in a form or set of forms. In this project, the main source of collecting data was through questionnaires design and filled with the individual respondent.

1.5.4 Period of study

The study was conducted during the duration from February to May 2021.

1.6 HIGHLIGHT OF CHAPTERS

The first chapter deals with Introduction which includes a brief background of the project, research methods, objective and scope of the study, limitation of the study, sampling techniques, chapter scheme and period of study. The second chapter deals with Analysis and interpretation various data collected from the respondents in accordance with the objectives of the study and the third chapter deals with the summary of finding, suggestions and conclusion drawn from the overall analysis of the study.

CHAPTER 2

ANALYSIS AND INTERPRETATION

This chapter deals with the data collected from the respondents in accordance with the objectives of the study and were analysed. The outcome of the present study yields a significant finding in respect to the various parameters affecting the banana cultivation as well as marketing. The data collected for the present investigation has been thoroughly discussed under the following sub headings:

1. Socio-economic characteristics of the sampled banana growers.
 - a) Gender distribution of respondents.
 - b) Education qualification of the respondents.
 - c) Age Composition.
 - d) Size of the plantation cultivation by the farmers.
 - e) Number of workers employed for cultivation.
2. Reason for engaging themselves in banana cultivation.
3. Approximate expenditure incurred in a year.
4. Communication between the buyers and sellers.
5. Revenue earned from banana cultivation.
6. Level of profitability in cultivating banana.
7. Problems of banana cultivation.

2.1 Socio-economic characteristics of the banana growers

It is imperative to look into the Socio-economic characteristics of sampled farmers before analysing a particular enterprise undertaken on the farm. This section deals with various socio- economic characteristics of sample respondents which includes gender, educational status, their age, land details, and number of workers employed for cultivation.

2.1.1 Gender distribution of respondents.

Altogether 30 samples were selected for present study. Table 2.1 shows gender distribution of respondent which show that 57% of the respondents are male and

while 43% are female. This indicates that majority of the cultivation are male. Figure 2.1 shows the chart of gender distribution.

Table 2.1. Gender distribution of respondents

| Gender | No. of respondents | Percentage (%) |
|--------|--------------------|----------------|
| Male | 17 | 57 |
| Female | 13 | 43 |
| Total | 30 | 100 |

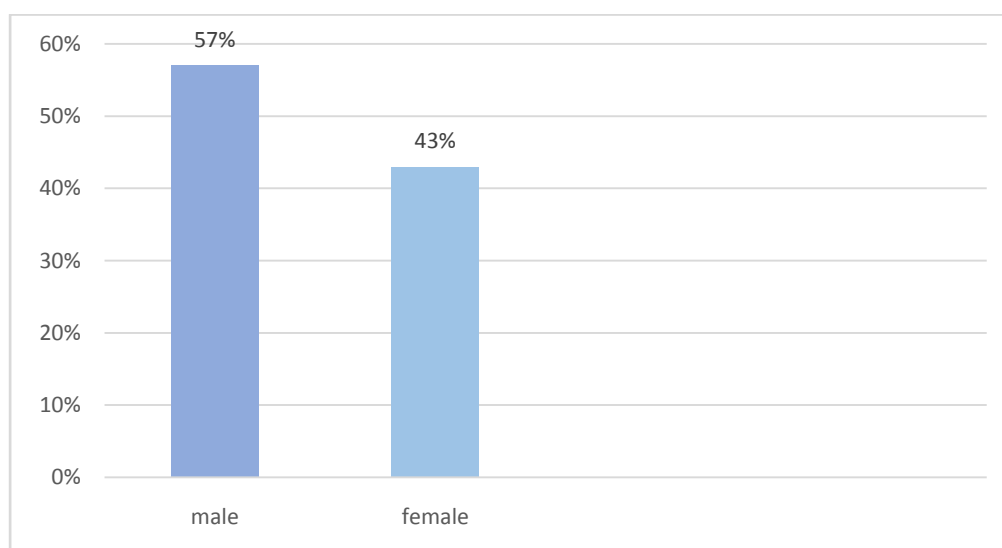


Fig 2.1 chart showing Gender distribution

2.1.2 Education qualification of the respondents.

Level of education plays an important role in elevating the socio-economic status of the farmers. Education broadens the mental horizon of farmers to knowledge and keeps the farmer well informed about innovations and better methods of farming. Table 2.1 reveals the educational status of the sampled banana growers. The table

revealed that, only 20 per cent of the banana growers were literates while 80 per cent of them were illiterates. Figure 2.2 shows the chart of educated status of the respondents which indicated that the level of education for majority of the sampled banana growers was found to be illiterate.

Table 2.2 Education qualification of the respondents.

| Particulars | No. of respondents | Percentage (%) |
|-------------|--------------------|----------------|
| Educated | 6 | 20 |
| Uneducated | 24 | 80 |
| Total | 30 | 100 |

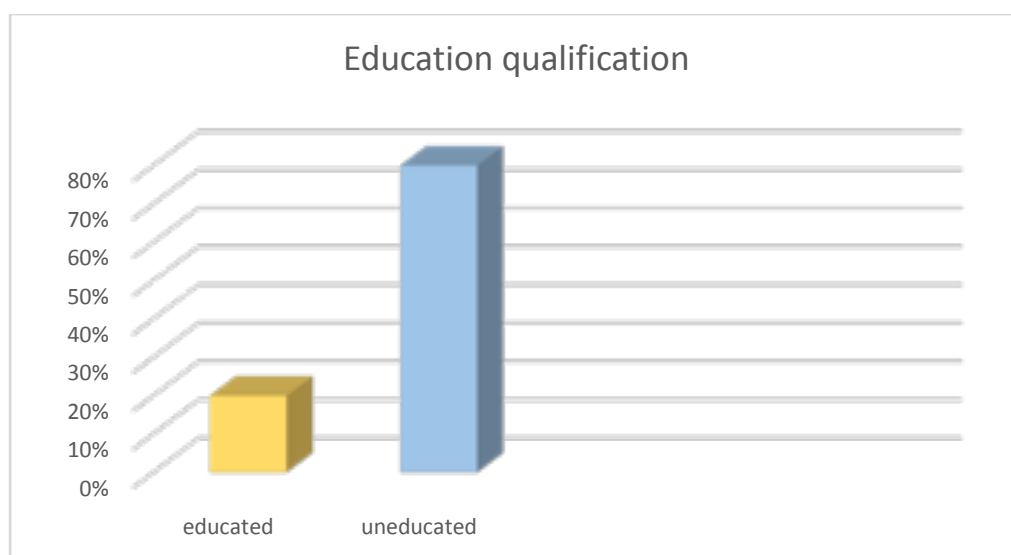


Fig 2.2 Chart showing the educated status of the respondents.

2.1.3 Age Composition

Age is an important socio-economic variable that is positively associated with the farming experience and have a direct bearing upon the adoption level and the overall production. Figure 2.3 shows the chart of age composition.. The age composition of different size of farm groups from table 2.3 indicates that majority (60 %) of the banana growers belonged to 18 – 60 years age group whereas 13.33 per cent of the

growers belonged to less than 18 years and 8 per cent growers belonged to greater than 60 years age group.

Table 2.3 Age composition of the respondents.

| Age | No. of respondents | Percentage% |
|---------|--------------------|-------------|
| <18 | 4 | 13.33 |
| 18 – 60 | 18 | 60 |
| >60 | 8 | 26.67 |
| Total | 30 | 10 |

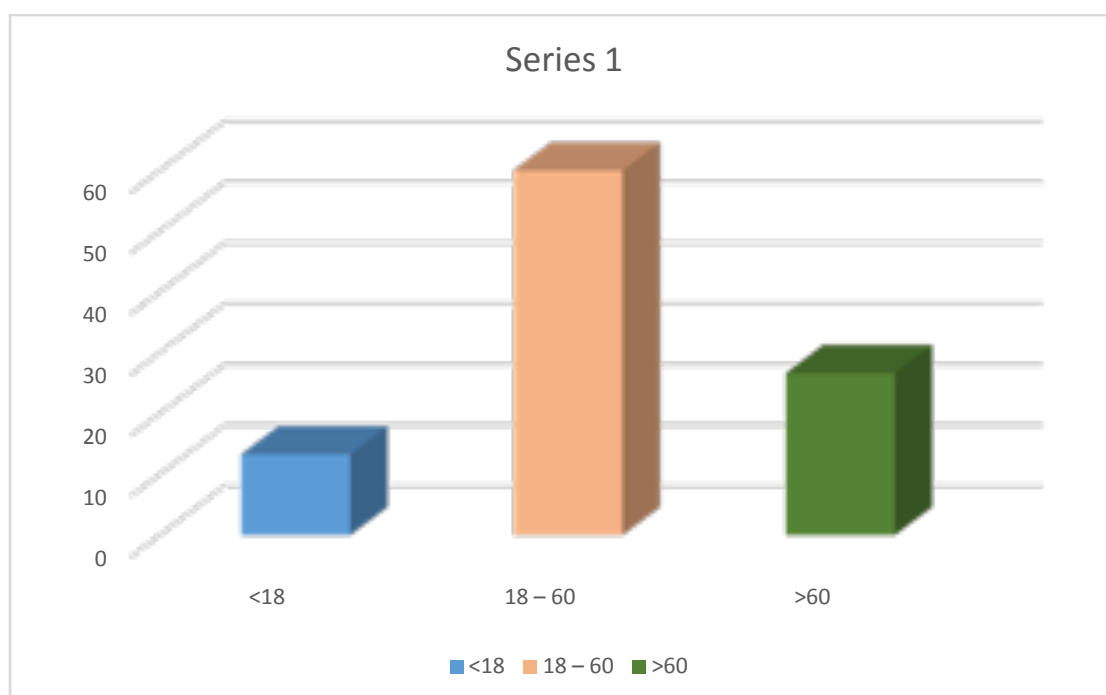


Fig 2.3Chart showing age composition of the respondents.

2.1.4 Size of the plantation cultivation by the farmers.

Size of the land holding for the farmers were divided into four parts viz. less than 1 ha, 1-2 ha, 2-3 ha and > 3 ha as indicated in table 2.4. It shows that the percentage of land holding for less than 1 ha, 1-2 ha, 2-3 ha and > 3 ha are 10, 47, 26, 17 respectively. Figure 2.4 shows that majority of land holding fall under 1-2 ha with 47 percentage.

Table 2.4 Size of the plantation cultivation by the farmers

| Particular | No. of Workers | Percentage (%) |
|------------|----------------|----------------|
| <1 ha | 3 | 10 |
| 1-2 ha | 14 | 47 |
| 2- 3 ha | 8 | 26 |
| >3 ha | 5 | 17 |
| Total | 30 | 100 |

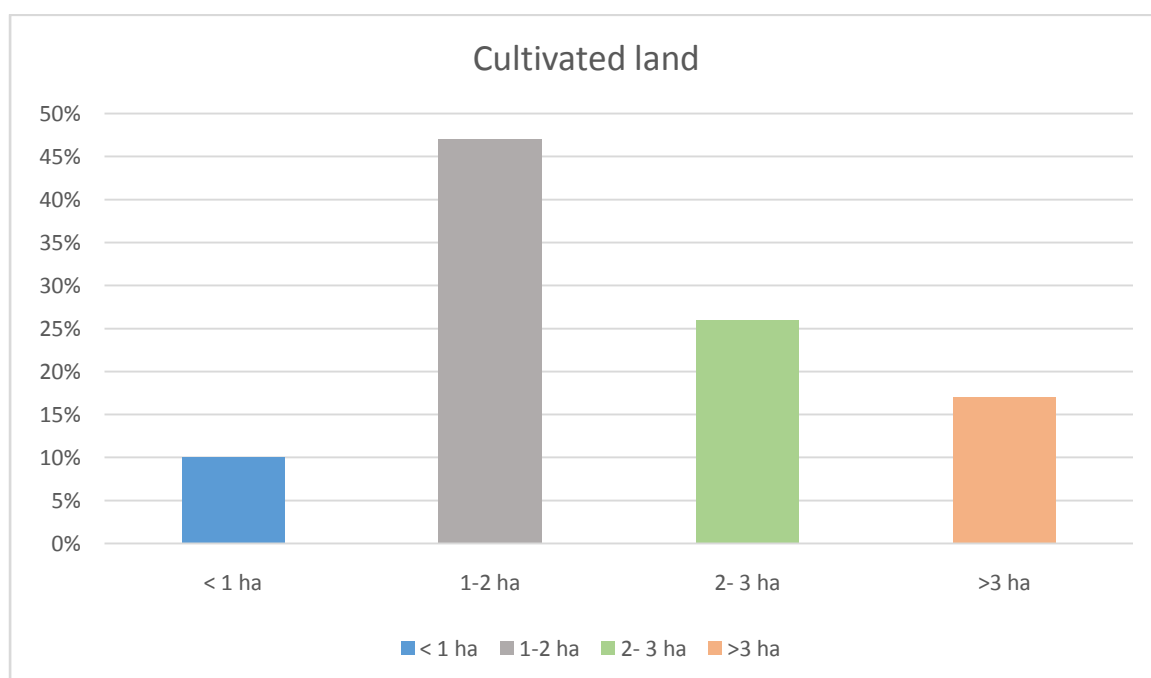


Fig 2.4 chart showing size of cultivates land.

2.1.5 Number of workers employed for cultivation.

From table 2.5, it indicated that 77 percent of the cultivators do not employ any workers for cultivation of banana whereas 17 percent of the cultivators employ 1-3 workers and 6 percent employ more than 3 workers. Figure 2.5 shows the chart for number of workers employed for cultivation.

Table 2.5Number of workers employed for cultivation

| No. of workers | No. of percentage | Percentage (%) |
|----------------|-------------------|----------------|
| None | 23 | 77 |
| 1-3 | 5 | 17 |
| > 3 | 2 | 6 |
| Total | 30 | 100 |

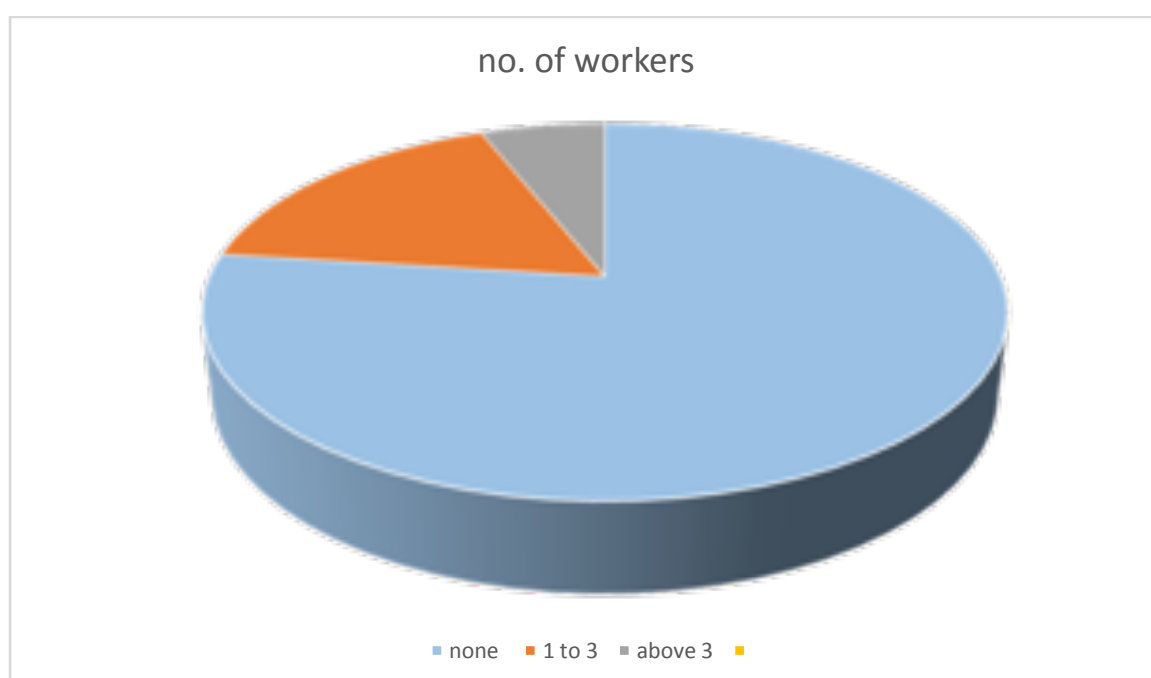


Fig 2.5 Chart showing number of workers employed for cultivation.

2.2 Reason for engaging themselves in banana cultivation.

Due to socio-economic characteristics of the sampled banana growers as stated above, there are various constraints for the farmers. Table 2.2 indicates the reason for engaging themselves in banana cultivation which is divided into four parts viz. make use of the field, suitable for banana cultivation, to generate income and all of the above. The result shows that majority of the cultivator plant banana to generate income. Figure 2.3 shows the chart for engaging in banana cultivation which specifies that 7 percent of the cultivator plant banana in order to make use of field, 23 percent

of cultivator plant banana as their land is suitable for cultivation based on soil in Chesezu, 50 percent plant to generate income and 20 percent cultivator plant banana for the above three points.

Table 2.6 Reason for engaging themselves in banana cultivation

| Particular | No. of Workers | Percentage (%) |
|---------------------------------|----------------|----------------|
| Make use of the field | 2 | 7 |
| Suitable for banana cultivation | 7 | 23 |
| To generate income | 15 | 50 |
| All of the above | 6 | 20 |
| Total | 30 | 100 |

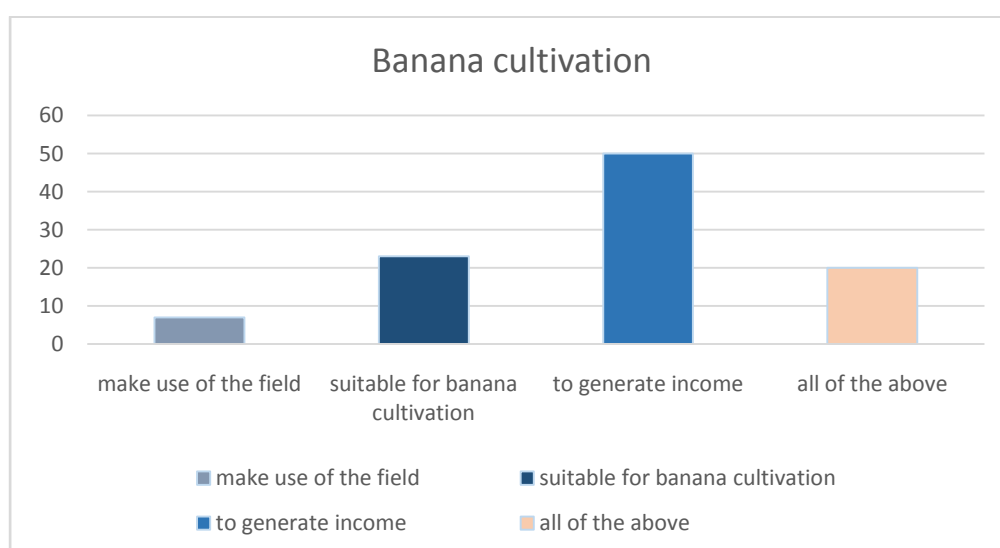


Fig 2.6 chart showing reasons for engaging in banana cultivation.

2.3 Approximate expenditure incurred in a year

From the table 2.7, it indicated that 17 percent of the cultivator’s spend less than ₹ 1000 in a year whereas 27 percent of the cultivators spend between ₹ 2000-3000 and 13 percent of the cultivators spend more than ₹ 3000 in a year. Majority of the respondents i.e., 43 percent of the cultivator spend between ₹ 1000-2000. The overall expenditure may be less because of low transportation cost and various other related parameters. Figure 2.7 shows the approximate expenditure incurred during the banana plantation.

Table 2.7 approximate expenditure in a year

| Expenditure (₹) | No. of Workers | Percentage (%) |
|------------------|----------------|----------------|
| <1000 | 5 | 17 |
| 1000-2000 | 13 | 43 |
| 2000-3000 | 8 | 27 |
| >3000 | 4 | 13 |
| Total | 30 | 100 |

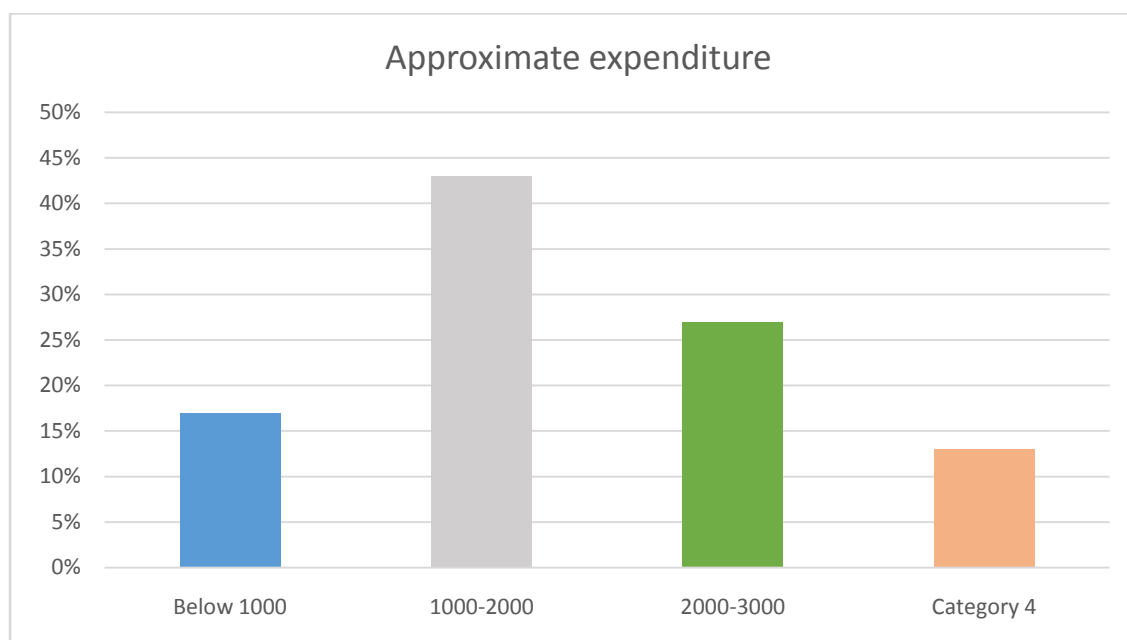


Fig 2.7 chart showing expenditure in a year.

2.4 Communication between the buyers and sellers

From the table 2.8, it can be seen that majority of the respondents i.e., 57 percent communicated the buyers through brokers, 13 percent through phone calls while the remaining 30 percent of the respondent's communication the buyers through friends and relatives. Figure 2.8 shows the chart of the communication between the buyers and sellers.

Table 2.8 Communication between the buyers and sellers

| communication | No. of workers | Percentage |
|---------------|----------------|------------|
|---------------|----------------|------------|

| | | |
|---------|----|------|
| Phone | 4 | 13% |
| Brokers | 17 | 57% |
| Friends | 9 | 30% |
| total | 30 | 100% |

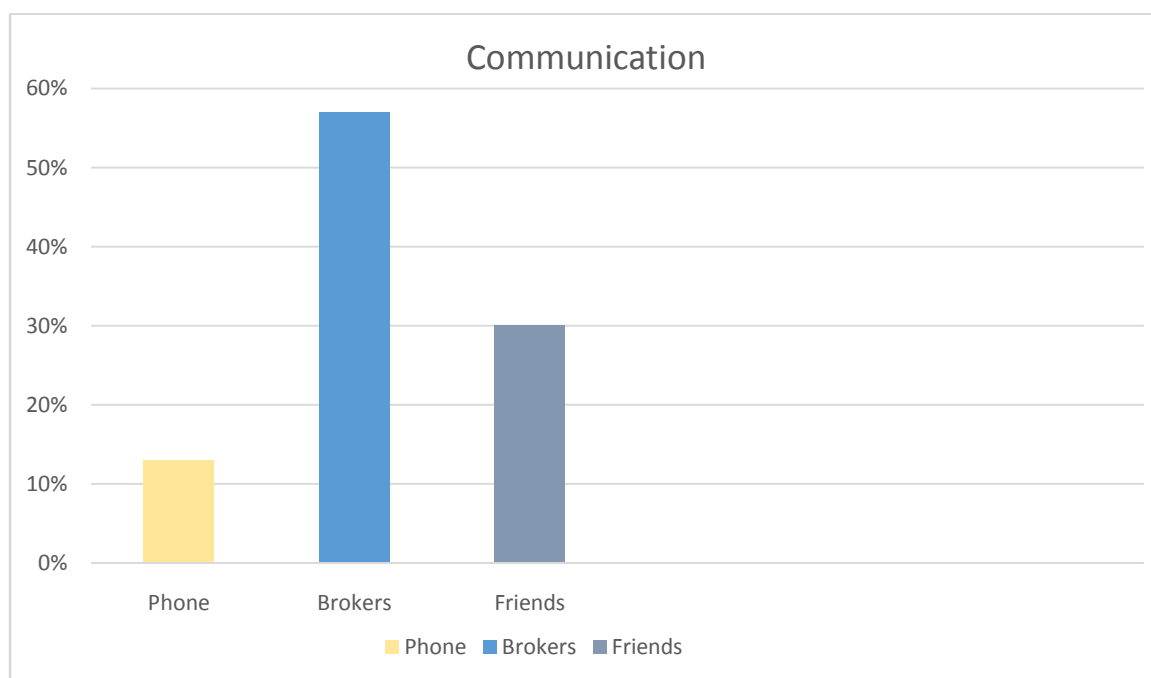


Fig 2.8 Chart showing communication between the buyers and sellers.

2.5 Revenue earned from banana cultivation

The crop gets ready for harvest after 10-11 months of planting. Banana is harvested when the fruit is slightly or fully mature depending on the market preferences. For long distance transportation, harvesting is done at 75-80 % maturity. Bunches attain maturity from 90-150 days after flowering depending upon variety, soil, weather condition and elevation. Bunch is harvested manually by hand picking with the help of sharp sickle. Harvested bunch is generally collected in well-padded tray or basket and brought to the collection site. Bunches are kept out of light after harvest, since this hastens ripening and softening. For local consumption, hands are often left on

stalks and sold to retailers. The packaging of fruits is required for efficient handling and marketing, better eye appeal and better shelf life. The proper packaging protects the fruits from pilferage, dirt, physiological and pathological deterioration during further handling. In case of Chesezu village, no packaging is done at the farm level and banana leaves is used as the cushioning material for transportation of fruits. Due to poor packing quality the bananas deteriorate and fetch low price. Table 2.9 shows that majority of the farmers earned their income between ₹ 20000 - ₹ 30000. Figure 2.9 indicates the revenue earned from banana cultivation, the result showed that 10 percent earned below ₹ 10000, 30 percent earned between ₹ 10000 – ₹ 20000, 53 percent earned between ₹ 20000 – ₹ 30000 and 7 percent earned above ₹ 30000 in a year.

Table 2.9 Revenue earned from banana cultivation

| Revenue (₹) | No of respondents | Percentage (%) |
|--------------|-------------------|----------------|
| <10000 | 3 | 10 |
| 10000-20000 | 9 | 30 |
| 20000-30000 | 16 | 53 |
| >30000 | 2 | 7 |
| Total | 30 | 100 |

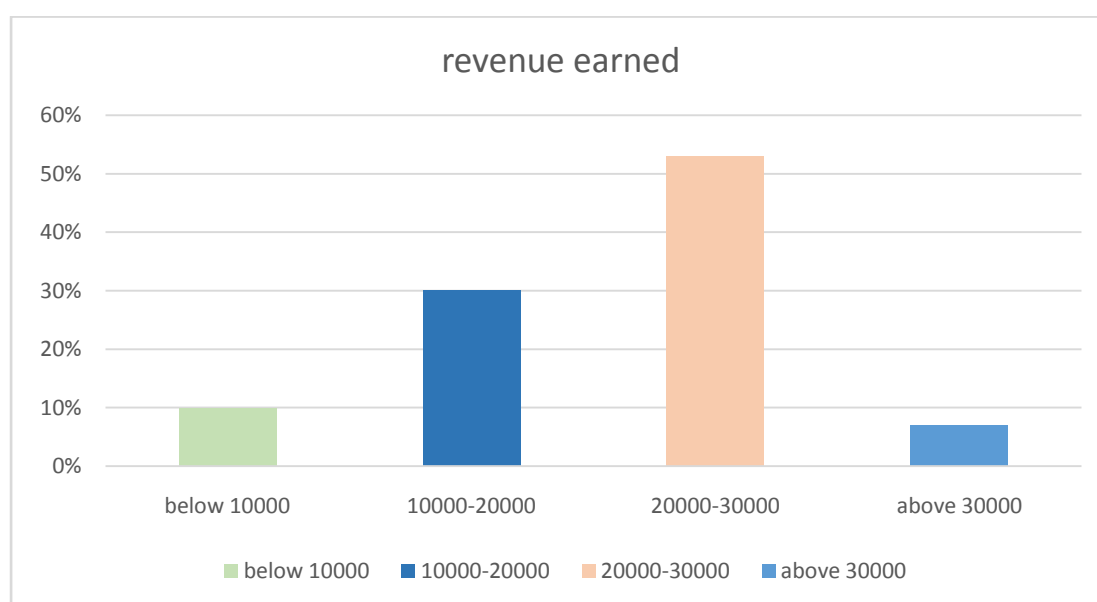


Fig 2.9 Chart showing revenue earned from banana cultivation.

2.6 Level of profitability in cultivating banana

From table 2.10, the result indicated that 90 percent of cultivator profit through banana cultivation whereas 10 percent of cultivator do not get any profit which might be due to soil, water availability, sunshine and non-maintenance of the field. Also, figure 2.10 shows the chart for level of profitability in cultivating banana which indicate that 10 percent of cultivator does not receive any profit, 53 percent get margin profit and 37 percent of cultivator get high profit.

Table 2.10 Level of profitability in cultivating banana

| Particular | No. of workers | Percentage |
|-----------------|----------------|------------|
| Not profit | 3 | 10% |
| Profitable | 16 | 53% |
| Very profitable | 11 | 37% |
| Total | 30 | 100% |

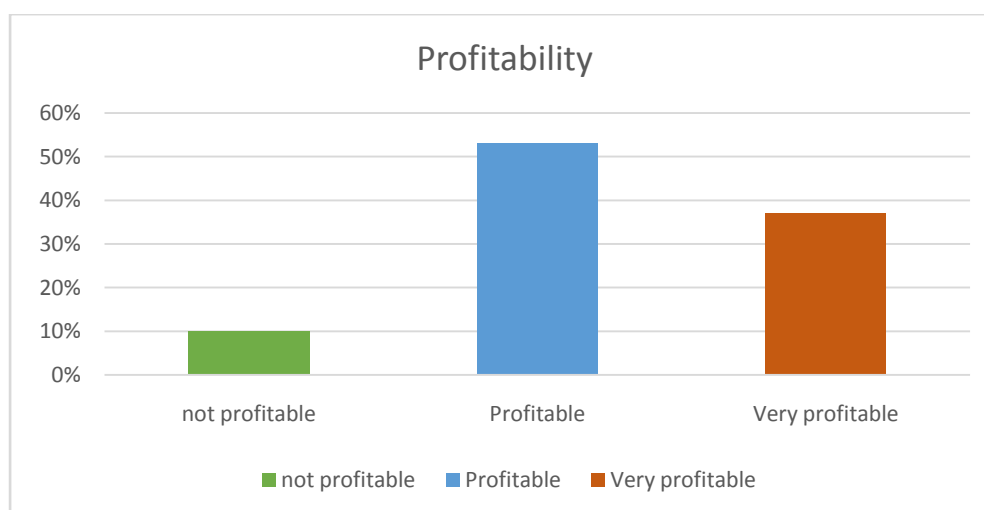


Fig 2.10 Chart showing profitability in cultivating banana.

2.7 Problems of banana cultivation

From table 2.11, the result showed that the major problem for cultivation of banana is due to labour shortage or cost. It showed that 10 percent is due to diseases, 30 percent is due to pest, 53 percent is due to labour and 7 percent is due to high production cost. Figure 2.11 shows the chart of the problem of banana cultivation.

Table 2.11 Problems of banana cultivation.

| Sources | No of Respondents | Percentage |
|-------------------------|-------------------|------------|
| Diseases | 3 | 10% |
| Pests | 9 | 30% |
| Labour | 16 | 53% |
| High cost of production | 2 | 7% |
| Total | 30 | 100% |

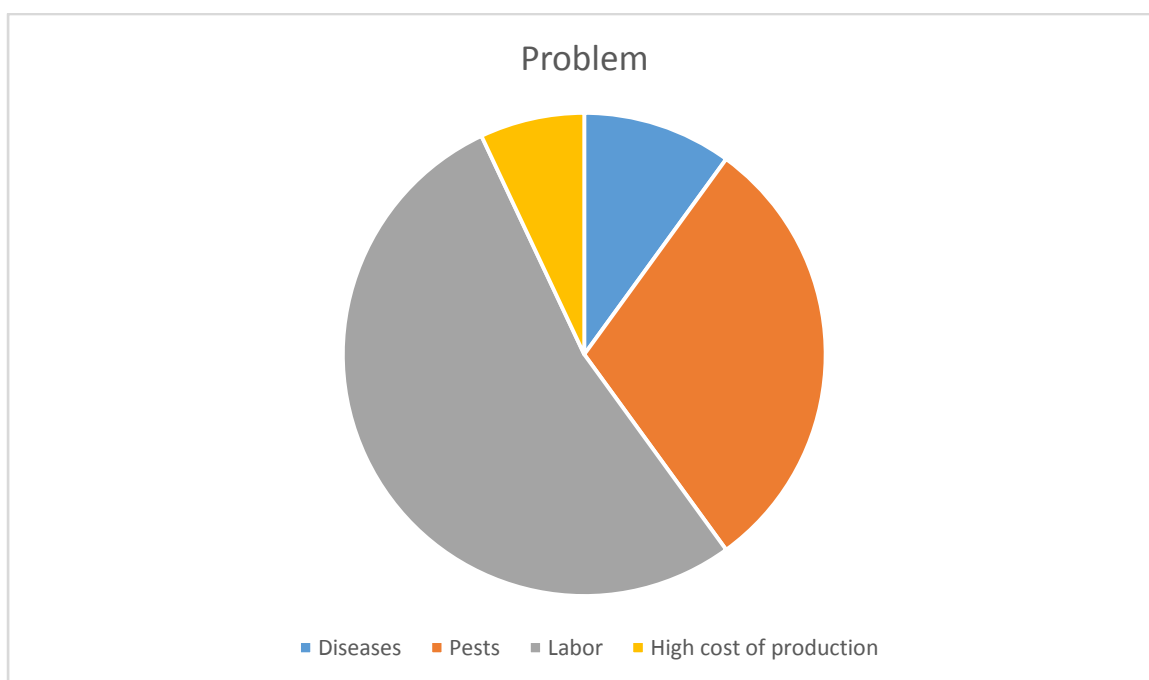


Fig 2.11 Chart showing problems of banana cultivations

3.1 SUMMARY

1. 57 percent of the respondents engage in banana cultivation were male and 45 percent were female.
2. Majority of the cultivators are uneducated i.e., 80 percent whereas 20 percent of the respondents are educated.
3. Majority (60 percent) of the banana growers belonged to 18 – 60 years age group whereas 13.33 per cent of the growers belonged to less than 18 years and 8 per cent growers belonged to greater than 60 years age group.
4. 10 percent of the respondents cultivate less than 1 ha, 47 percent of the respondents cultivate land of 1-2 ha, 26 percent of the cultivators used 2-3 ha and 17 percent cultivate above > 3 ha for plantation.
5. 77 percent of the cultivators do not employ any workers due to the cultivating being carried, 17 percent of the cultivators employ 1-3 workers and 6 percent employ more than 3 workers.
6. 7 percent of the cultivator plant banana in order to make use of field, 23 percent of cultivator plant banana as their land is suitable for cultivation based

on soil in Chesezu, 50 percent plant to generate income and 20 percent cultivator plant banana for the above three points.

7. The average number of respondents i.e., 50% of the respondent has engaged themselves out in small scale. Only 23% employ one more worker for cultivation.
8. Majority of the respondents spends Rs. 1000-2000 in a year as an expenditure and very few expend more than Rs. 3000 in a year.
9. 57% of the respondent communicate the buyers through brokers and 13% through phone calls while the remaining 30% communicate the buyers through friends and relatives.
10. The average farmers i.e. 53% are earning an income of Rs 20000 to 30000, 30% are earning Rs. 10000 to Rs. 20000. Only 7% of the respondents are earning above Rs.30000 in a year.
11. 53% of the respondent feel that banana cultivation is profitable and 37% of the respondents are of the opinion that very profitable. Only 10% thinks that the cultivation is not profitable.
12. All the respondents feels that banana cultivation is one of the best jobs to be taken up as it generates good number of profits.

3.2 SUGGESTIONS

1. Banana cultivation is mostly taken up by the uneducated, it would be advisable to the educated unemployment to control themselves in plantation program instead of staying unemployment.
2. The states should set up some kind of work shop programme to the public in order to educate them in its plantations process.
3. The cultivation should be taken up as full-time job instead of part-time or optional job.
4. It would be good if there is a uniform rate of price so that the farmers are not adversely affected at different seasons or when there is deflation in the market.
5. The government should provide pesticides and insecticides to protect the crop from diseases and pests.

6. The state should set up finding institution which will encourage and support the farmers to produce more.
7. The companies or government must look into the proper packaging and safekeeping of the local products which also includes a proper brand for advertisement and also for preservation and exportation of the goods.

3.3 CONCLUSION

It may be concluded from the study that Banana is emerging fruit crop in Chesezu village and there is an increasing trend in area, production and productivity of Banana in Chesezu village which demonstrates the immense potential for rapid expansion of banana marketing. This study shows that it generates a good sum of income to the farmers which helps in satisfying their needs which in turn generate employment among the villager. The study also showed that the majority of the cultivators are illiterate which result in failure to gain full profitability. Hence, Various awareness on plantation and marketing of banana should be done by Agri and allied Department in Nagaland. The study on constraints faced by the banana growers in production of banana revealed that the labour cost or shortage posed a major problem in banana production along with problem such as diseases and pest. The context of marketing, the major constraint faced by the grower is the lack of proper and assured market for the produce which result in selling to the brokers or intermediaries at a minimum price. Also, it was observed that due to poor infrastructural facilities in the study area in terms of cold chain infrastructure, absence of processing units and cold storage facility also poses a considerable problem to the banana growers.

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ANNEXURE

QUESTIONNAIRES ON A CASE STUDY ON BANANA CULTIVATION WITH SPECIAL REFERENCE TO CHESEZU VILLAGE

I, **BESUVOTO NYEKHA**, pursuing **BACHELOR OF COMMERCE, NAGALAND UNIVERSITY**. I am undertaking a research on the topic “**A STUDY ON BANANA CULTIVATION WITH SPECIAL REFERENCE TO CHESEZU VILLAGE**”. Therefore, I have designed a questionnaire to obtain your view and satisfaction level on banana cultivation. The information you provide will be strictly kept confidential and shall pertain to academic purpose only.

NAME:

GENDER:

1. Education qualification of the correspondent

- a) Educated
- b) Uneducated

2. Age of the correspondent

- a) Below 18
- b) 18 – 60
- c) Above 60

3. How much area of land do you cultivate?

- a) Below 1 ha
- b) 1-2 ha
- c) 2-3 ha
- d) Above 3 ha

4. How many workers do you employ monthly?

- a) none
- b) 1-3
- c) Above 3

5. Reason for commencing or engaging yourself in banana cultivation?

- a) Make use of field
- b) Suitable land for cultivation
- c) To generate income
- d) All of the above

6. What is the approximate expenditure incurred in a year?

- a) below 1000
- b) 1000-2000
- c) 2000-3000
- d) above 3000

7. How do you contact buyers?

- a) phone
- b) brokers
- c) friends
- d) directly to market

8. What is the revenue earned or generated through banana cultivation in a year?

- a) Below 10,000
- b) 10,000-20000
- c) 20000- 30000
- d) Above 30000

9. What do you think the revenue earned from the plantation is?

- a) Not profitable
- b) Profitable
- c) Very profitable

10. Do you face any problems? Give reason.

- a) Diseases
- b) Pests
- c) Labour
- d) High cost of production
