CHAPTER V

SUMMARY AND CONCLUSION

The fertilizer industry is one of the most energy intensive sector within Indian economy and is therefore of particular interest in the context of both local and global environment discussions. Increase in productivity of this good with the use of cleaner and more efficient technologies in the manufacturing sector will be most effective immersing economic, environment and social development objectives. Being the backbone of agricultural productivity, the role of fertilizers will always remain crucial. In developing countries like India, with increase in demand for food the demand for fertilizer supply has experienced an upward shift.

Cashew nut shells have not been fully utilized until now and most of them are still in a form of wastes. That amount of cashew nut shell wastes would be very potential if they were composted into organic fertilizers and fungicides. Cashew nut shell wastes are organic matter containing macro elements such as N (0.84%), P (0.21%), K (0.70%) and micro elements such as Ca (0.13%) and Mg (0.24%), that are useful for plants. Cashew nut shell contains high lignoseulose that is difficult to hydrolyze so that it will take a very long time to become organic fertilizer through natural composting.

The addition of cashew nut shell can significantly increase the composting rate of cashew nut shell waste as raw material for organic fertilizer and it can improve the quality of cashew nut shell compost formulas suitable with the compost of organic fertilizers. The treatments of cashew nut shell compost gave better effect on the growth and nutrient uptake of crop. Cashew nut shell compost formula in 50 g polybag-1 can substitute 100 g polybag-1 goat manure to increase the growth old crop. The increase of doses of cashew nut shell compost formula to 100 g polybag-1 can enhance the growth of crop. Cashew nut shell compost formula can improve the balance of nutrients in the soil so that it enhances the growth.

The experiment results on the effectiveness of cashew nut shell compost formulas as organic fertilizers and pesticides showed that both the cashew nut shell compost formulas in 50 g polybag-1 and 100 g polybag-1 which were enriched with Trichoderma spp. gave significant influence to increase resistance against pathogen
attack, *Ridigoporus lignosus*, the cause of white root fungus (JAP) disease and they were able to increase growth better than the control (top soil) because they can improve of crop. Application of cashew nut shell compost formulas are expected to reduce the land resource degradation as well as pollutant emissions, then to improve the recycled elements utilization of the farming system (zero waste), and finally to protect the environment and the welfare of local community life.

With this background, the present study was carried out with the following specific objectives.

1. To estimate the processing cost of KANBI fertilizer
2. To measure awareness and adoption of KANBI fertilizer by the farmer
3. To identify the factors influencing the purchase of KANBI fertilizer
4. To identify the factors discriminating the users and non-users of KANBI fertilizer

The Rajkot and Junagadh district will be selected purposively. The reason for selection of this district is the larger shares in selling KANBI fertilizers. Two stage sampling technique was adopted as per the objectives of the study. At the first stage of sampling at 50 farmers will be selected from each district. In the second stage, 25 users and 25 non-users farmers from each district. At the second stage, 50 farmers and 10 wholesalers from each taluka were selected purposively.

Primary data required for the study were collected through personal interview with the farmers and wholesalers using well prepared questionnaires. The secondary data will be collected through directly from the company’s reports. The tabular analysis were used to find out processing cost of KANBI fertilizer. Other analytical tools like likert scale, multiple linear regression analysis and discriminant function analysis was used according to the objectives.

5.1 MAJOR FINDINGS OF THE STUDY

5.1.1 Socio-economic Status

- The majority (60 per cent) of farmers belongs to the age between 36 to 50 years.
- It is also revealed that majority (43 per cent) of the farmers is up to secondary and second majority (38 per cent) of the farmers studied up to high secondary.
Summary and Conclusion

- It is observed that 57 per cent are the small size land holding and followed by 24 per cent farmers are medium category.
- It was revealed from field survey that out of 100 farmers 57 per cent belonged to the income up to 2,00,000.

5.1.2 Processing Cost

The economics of processing for the KANBI fertilizer is presented in table 4.1. The results indicated that total fixed cost of KANBI fertilizer was amounted to Rs. 7,99,341 with the share of 40.77 per cent in total processing cost. Total variable cost of processing of KANBI fertilizer was Rs. 11,97,526 with the share of 59.97 per cent in total processing cost. This shows that total variable cost is more than total fixed cost. The different variable cost, the highest cost (Rs. 2,20,000 and 11.02 per cent) was observed for raw materials followed by Transportation charges (Rs. 1,94,958 and 9.76 per cent) and cost of bags (Rs. 1,00,000 and 5.01 per cent). The total cost of possessing was estimated to be Rs. 19,96,867. Gross and net returns were found to be Rs. 36,00.000 and Rs. 16,03,133. The benefit cost ratio observed to the 1.80. So, there is good relationship between cost and benefit and indicated benefit cost ratio show that project is viable.

5.1.3 Measure of awareness and adoption of the KANBI fertilizer

Majority (54.00 per cent) of the farmers have high level of awareness about KANBI fertilizer, while, 44.00 per cent of the farmers were in medium level of awareness. Only, 02.00 per cent of the farmers were low level of awareness about KANBI fertilizer. So, it is found that there was 98 per cent of high and medium level of awareness about KANBI fertilizer.

Majority (80.00 per cent) of the farmers have medium level adopted, while, 18 per cent of the farmers have low level adopted and only 2.00 per cent of the farmers have high level of overall adoption of KANBI fertilizer.

5.1.4 To identify the factors influencing purchase of fertilizers

The factors influencing purchase decision towards fertilizer. The coefficient of multiple determinations (R²) for is 0.4237 which indicated that the selected eight variables explained 42.37 per cent of variation in purchasing decision of farmers for fertilizer and indicates moderate fit of the regression however, the results indicated that price has negative and non-significant impact (17.93), annual income has positive
Summary and Conclusion

and non-significant impact (0.00425), age has positive and non-significant impact (1.47) and education has positive and non-significant impact (4.30 per cent) on purchase of fertilizers, but farm, irrigation facility and yield has positive and significant at 5 per cent and availability fertilizer (44.38) positive and significant at 1 per cent level impact on purchase of fertilizers.

5.1.5 Factors discriminating the users and non-users

To find out the variables that discriminate the KANBI fertilizer users with non-users total of eight variables were used through stepwise linear discriminant analysis technique out of which, two variables i.e. education of farmers and yield were significant both KANBI fertilizer users and non-users. So, can be concluded that company focused on education of farmers and yield of crop than after beneficial for KANBI fertilizer. So it will be benefitted if more and more farmers use KANBI fertilizer.

CONCLUSION

The project was undertaken to assess awareness and adoption of the KANBI fertilizer by farmers of Rajkot and Junagadh district. The study was carried out in Upleta, Dhoraji and Jamkandorana taluka of Rajokt district and Manavadar, Keshod and Junagadh taluka of Junagadh district. Total sample size of 100 farmers in 50 user and 50 non-users of KANBI fertilizer. The results indicated that total fixed cost of KANBI fertilizer was amounted to Rs. 7,99,341 with the share of 40.77 per cent in total processing cost. Total variable cost of processing of KANBI fertilizer was Rs. 11,97,526 with the share of 59.97 per cent in total processing cost. The benefit cost ratio observed to the 1.80. The study pointed out that the farmers had differential awareness about KANBI fertilizer. Very few of them had low awareness and majority was in medium and high category of awareness, the study indicates the scope for creating awareness about KANBI fertilizer. The study brought forward that adoption of the KANBI fertilizer by the farmers was low as compared to their awareness about it. The reasons thereof need to be understood and suitable measures need to be undertaken. The factors influencing purchase decision towards fertilizer. The coefficient of multiple determinations (R²) for is 0.6237 which indicated that the selected eight variables explained 62.37 per cent of variation in purchasing decision of farmers for fertilizer and indicates moderate fit of the regression. The variable
which discriminate the KANBI fertilizer users with non-users were education of farmers and yield.

**SUGGESTION**

- Company have emphasize on some factors which farmer consider before purchasing fertilizer like education of farmers and yield.
- Company should focus on other product which have low sales in surveyed area like Rajkot and Junagadh district.
- The company should arrange the farmers meeting regularly for discussion and to aware of fertilizer and give information about product.
- Company should provide advertising material on the farm visit because increasing of adoption level of product.