

## CHAPTER 6

### CONCLUSIONS AND FUTURE WORKS

#### 6.1. Conclusion.

The SS dryer is capable of producing a good quality RSS sheets at a high production rate, in a smaller smoke house. i. e. in this dryer, a 50 kg of RSS sheet can be smoked in a single day in a limited space ( $2.55 \text{ m}^3$ ) whereas in conventional smoke house an average quantity of 75 kg of RSS is produced after a drying period of five days in a comparatively larger smoke house ( $23.29 \text{ m}^3$ ). In other words, the loading density of newly built smoke house is  $18.60 \text{ kg/m}^3$  whereas in conventional smoke house the loading density is very much low ( $6.01 \text{ kg/m}^3$ ). (table 4, table 5).

Average drying efficiency of two method of calculation of the SS dryer is 51.7% which is a very high value with compared to the literature data of conventional system which has a drying efficiency 31%. The dryer also has following advantages over the conventional smoke house.

The SS dryer could be operated easily with less number of workers and improved healthy environment.



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#### 6.2 Future Works.

- \* It is proposed to carry out a comprehensive comparative study on the overall performance of the single day drying system and conventional system under local conditions
- \* An investigation should be carried out to study the effect of replacement of flappers with the control air flow control system.
- \* Studies on possibility of utilization of alternative renewable energy sources such as solar energy and bio gas as complete or auxiliary heating sources.