

## **JACKFRUIT (*Artocarpus heterophyllus*)**

Jackfruit is one of the important under-utilized fruit crop famous for its bulky and nutritious fruit. Popularity of jackfruit as a commercial crop is limited due to wide variation in its fruit quality. Jackfruit can be used in different stages viz. immature stage, mature, firm ripe as well as fully ripe stage. Promotion of this under-utilized organically grown homestead fruit can lift the status of this fruit to a fruit that plays a pivotal role in nation's nutritional security as it recorded many health benefits.

### **Problems**

Around 50% wastage of jackfruits during season, difficulty in handling, varietal difference, limited level of processing and value addition, and lack of scientific skills among local people in processing and value addition.

### **Solutions**

Value addition and processing, skill development of local women and transfer of technology, and development of micro enterprises for livelihood development of women

**Technologies:** University of Agricultural Sciences (UAS), Bangalore

1. Ready to Cook Tender Jackfruit 2. Jackfruit RTS 3. Jackfruit jam 4. Jackfruit peda



Ready to Cook Tender Jackfruit



Jackfruit Jam



Jackfruit Ready to Serve (RTS)



Jackfruit Products

# **Value addition of local fruits for livelihood development of women**

Mitraniketan Core - Support Project



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## BANANA (*Musa sp*)

Banana is one of the fruits plenty available in Kerala throughout the year. We have varieties of banana suitable for fruits, processing and as vegetable. The plants are considered as the symbol of 'prosperity and fertility'. It has greater socio economic value and multifaceted uses, hence referred as 'Kalpatharu' (Plant of Virtues). Banana has influence on the socio-economic life of millions of small and marginal farmers and is a source of nutrition for many people.

### Problems

Poor post harvest handling, wastage, high price imbalance, improper value chain and supply chain, only 4% of the produce is processed into products, available value added products are expensive, these products contain additives and chemicals, and highly perishable in nature

### Solutions



- ➔ Harvesting at proper stage of maturity for processing
- ➔ Pre- treatment for browning of mature raw banana
- ➔ Value addition through processing such as banana flour based products, chips, jam etc
- ➔ Zero wastage - By product utilization such as banana peel pickle
- ➔ Natural and organic banana flour for nutritious baby food
- ➔ Fortified baby food with millets especially ragi for high nutritional value
- ➔ Development of micro enterprises for livelihood development of women

### Flour based baby food

### Technologies:

1. **Banana flour:** Banana flour is prepared from banana varieties that are rich in starch content such as Nendran and Monthan. Peeled bananas are pre-treated with potassium meta bisulphite solution, sliced and dried in drier and then it is floured – National Research Centre for Banana (NRCB), Trichy
2. **Flour based baby food:** Banana flour is mixed with green gram powder, milk powder and sugar in a ratio and is then packed - National Research Centre for Banana (NRCB), Trichy
3. **Fortified baby food with ragi:** Banana flour is mixed with ragi and sugar in a defined ratio- tried and developed by Mitraniketan Core team in its Fruit processing unit.



Banana Flour



Fortified baby food with ragi

## COCONUT (*Cocos nucifera*)

Coconut palm in India is referred as 'Kalpavriksha' which means tree which gives all that is necessary for living. Coconut is one of the main crops cultivated in Kerala. It has wide variety of uses. Coconut is a food, beverage and an oil seed. In tender form it is consumed as a beverage and the kernel of matured coconut is an ingredient in many food preparations.

### Problems

Low production, price fluctuations, imported and adulterated products, and limited local level processing/value addition enterprises.

### Solutions

1. Value addition through processing such as Virgin Coconut Oil, desiccated coconut powder and coconut chips
2. By product utilization such as chutney powder, coconut laddoo, cookies, chocolate etc
3. Development of micro enterprises for livelihood development of women

### Technologies: Coconut Development Board, Ernakulam

1. **Coconut chips:** Ready to Eat osmo-dehydrated product of coconut
2. **Coconut cookies:** Ready to Eat snack product prepared from maida and coconut gratings
3. **Coconut chocolate:** Sweet confectionery item prepared from coconut gratings, sugar, butter with a coating of chocolate
4. **Virgin coconut oil:** Traditional method of processing- tried and standardized by the Core team in Mitraniketan Fruit processing unit

