SUCCESS STORY - J.R.DHANRAJ

VALUE ADDITION OF CASSAVA BY CASSAVA CHIP MAKING MACHINE

Farmer photo

Thiru.J.R.Dhanraj
S/o.Th.A. Rangaswamy
Periyappukkadu, Kalkurichi
vellalapatti post,
Belukurichi via
Sendamangalam Taluk
Namakkal District
Tamil Nadu - 637402
Age: 72 Years
Education: SSLC
Land holding: 10 acres
Farming Experience: 55 years
Crops grown:
Tapioca/Cassava: 4 acres
Coconut:3 acres
Mango:2.5 acres

Livestock:
Desibird – 30 Nos
Dairy cow – 2 animals
Goat – 6 Nos

Recognitions
National Innovation Foundation –SRISTI SAMAN award

Scientific verification: Deputy Director of Horticulture,Namakkal has visited his farm every year and certified.

Funding support: No

Whether registered/ patented: No

KVK Contact details:
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Problem/ challenge addressed

Tapioca/Cassava is one of the major tuber crops cultivated in Namakkal District of Tamil Nadu. It is cultivated for industrial as well as edible purpose. During 2011-12, the sale price of tuber reduced to lower rate which is uneconomical to farmers. Hence the farmer Th.J.R.Dhanraj has designed a machine to make tapioca tubers to chips for longer storage with good keeping quality and decide to sale the chips as such and also value added products made from chips with better market price for its value addition. This technology in turn helped the tapioca farmers and the biological deterioration of starch was minimized to larger extent.

Description of innovative practice/technology

(i) Cassava chips cutter

- Electrically operated machine
- Horsepower: 1 Hp , Capacity : 0.5 tons – 1 tonne /day
- Cutting thickness: 1 mm – 25 mm
- Cost : Rs. 10,000/-
- Fabrication: Local lathe works
- Efficiency : 200 Kg (Single pipe) and 400 Kg (Double pipe) at 3 mm thickness
- Drying : It increases the uniform drying and reduces degradation of starch

Practical utility of cassava chips cutter

1. Easy transport of the machine and also needs minimum labour for processing (1 male labour against 2 male and 2 female labours in Normal method)
2. The chips thickness can be altered from 1 mm to 25 mm (at uniform size) according to various purposes (viz., normal chips, for making cassava powder & concentrate feed for livestock)
3. Locally made with available materials (Stainless steel)
4. The chips can be used for cattle feed without any contamination (in manual chips cutting - the chips can be mixed with sand).
5. Chips can be stored up to 6 months without any fungal infestation.
6. Convenience in both mode -The electricity driven motor can be replaced with oil engine (petrol or diesel engine).
7. In addition, it can be used for cutting / slicing vegetables at home or industry

(ii). Value addition in cassava & its practical utility

1. So many value added products made from cassava chips *viz.,* cassava chips, cassava powder for payasam making, cassava biscuit,cakes, cassava halwa ,cassava murukku and cassva chilli.
2. Dry recovery of cassava tubers to cassava powder via chips is high (36%)
3. More palatability of value added products with good keeping quality when compared to fresh tubers and also fetch premium

	price in the market. 4. Reduced wastage (7 gm peel per kg of tuber) **Source of information** KVK,Namakkal and TNAU, Coimbatore **Economics/Profitability of innovative practice** **Gross income Net income B:C ratio** Normal method 1,12,000 60,000 2.15 Value addition 2,88,000 2,26,000 4.64 **Potential : Acceptance level, horizontal spread of innovation and number of farmer adopting** This technology was welcomed by other farmers and the district collector has appreciated his noval idea. Spread : 100 ha No.of farmers : 400