
Enhancing Rural Livelihoods through Underutilised Fruits

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Introduction

- **Environment:** Tropical to temperate
Humid to Arid
- **Production:** 59 m t in 5.5 m ha in 2005-06
- **Major fruits:** 64% (3); 19% (7)
- **Underutilised fruits:** 17% (> 100)
- **Regional importance**

BAIF: Fruit Production

- Rural development projects – poverty alleviation
- Tree-based farming
- Underutilised fruit crops: suitable for resource poor poor conditions



Tree-based Systems



Trees without intercrop

Trees with intercrop



BAIF: Fruit Processing

- Seasonal, concentrated, remote
- Marketing problems
- Promotion of processing centres
- Cooperatives for processing



Livelihood Enhancement

- Satisfactory fruit yields
- Reasonable prices for fruits
- Reliable forward linkages

Production and processing status (tons)

Species	Production	Processing
Amla	250,000	225,000
Kokum	10,200	9,000
Tamarind	300,000	280,000

Post-harvest Status Analysis

Production & Marketing of fruits:

- Group discussion
- Individual interviews
- Qualitative information

Processing:

- Discussions
- Value chain analysis

Species in the Analysis



Amla: Indian Gooseberry
Vit C, medicinal value
varieties, many products



Kokum: Western coast, limited
domestication and cultivation
HAA, medicinal / health



Tamarind: Single purpose-condiment
lacks product diversity
recent domestication

Amla (*Emblica officinalis*)

- Fertile / Irrigated – repays in 5 yrs
Less fertile / rainfed – 7-8 yrs
- Heavy rain and drought problems
- Marketing: Traders – INR 5 per kg
Processing cooperatives – waiting
Small units – delay in payment

Kokum (*Garcinia indica*)

- Traditional: Common lands forests, homesteads
- Sole stands and as intercrop in mango stands
- Low shelf life – price low
- Syrup has to be stored for 6-8 months

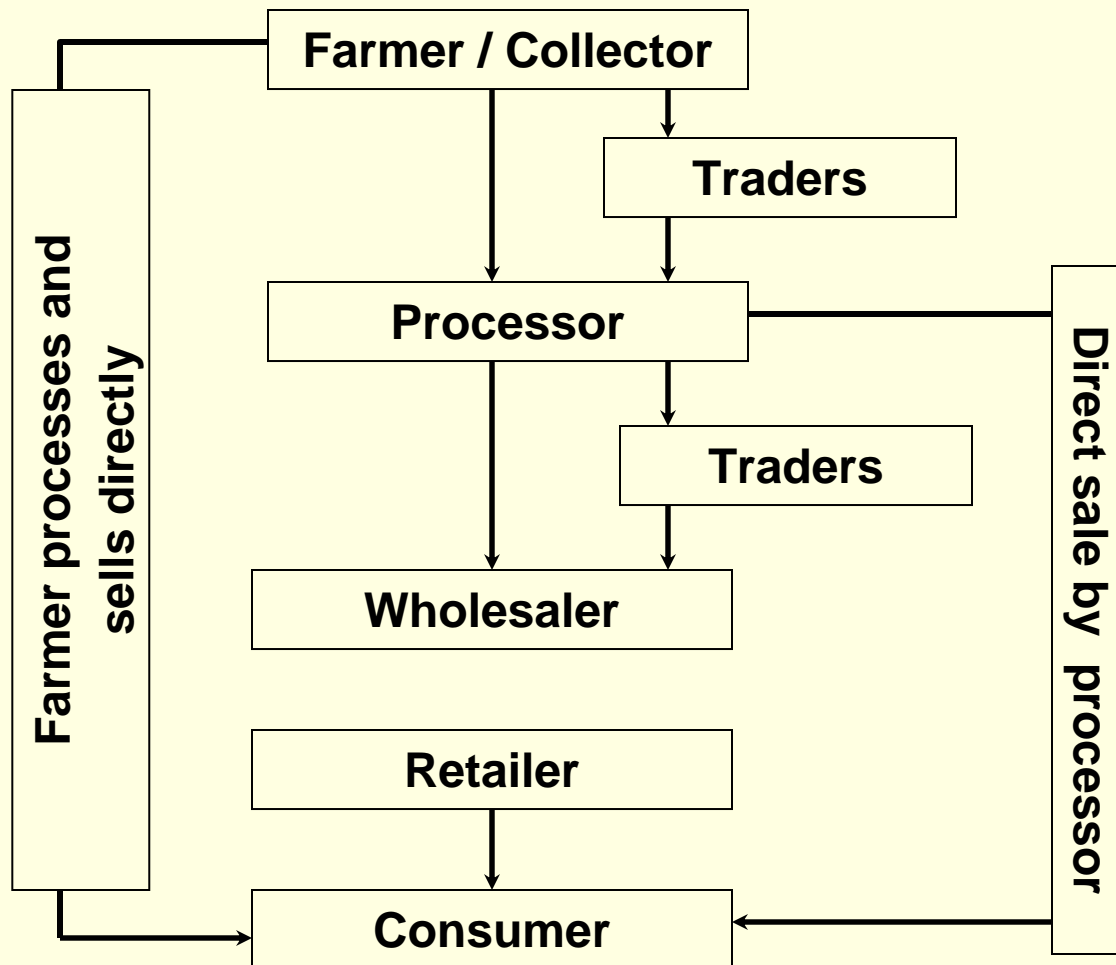


Tamarind (*Tamarindus indica*)

- Grafts bear in 5-6 years
Sometimes no yield at 10 years
- Intercropping possible and cost of establishment back in 4-5 yrs
- Can be stored for long – but farmers preferred not to store



Generalised Value Chain



Value Chain of Amla Candy

- Product: dried pulp
- 2 kg fresh amla fruit makes 1 kg of candy
- Labour and skill required

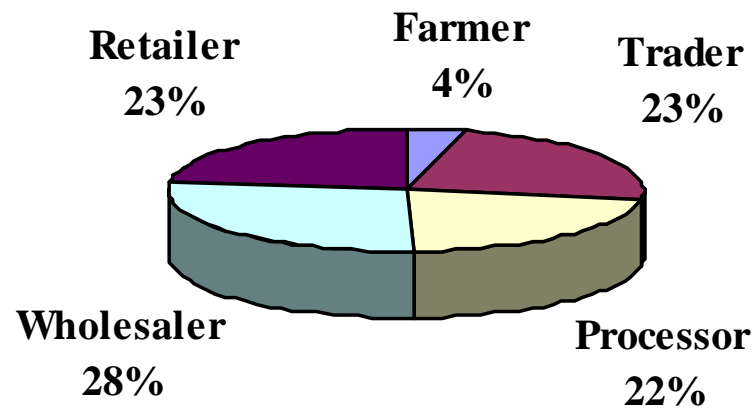


Profit Sharing (INR)

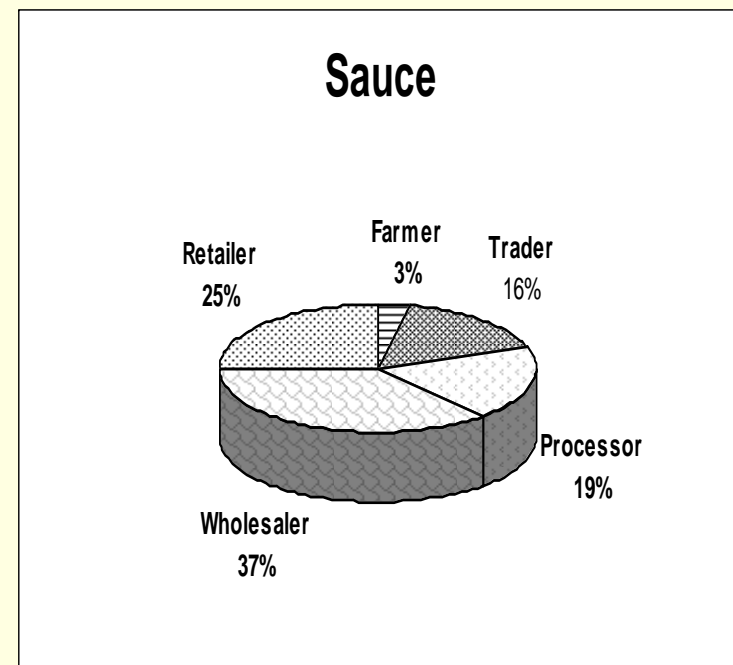
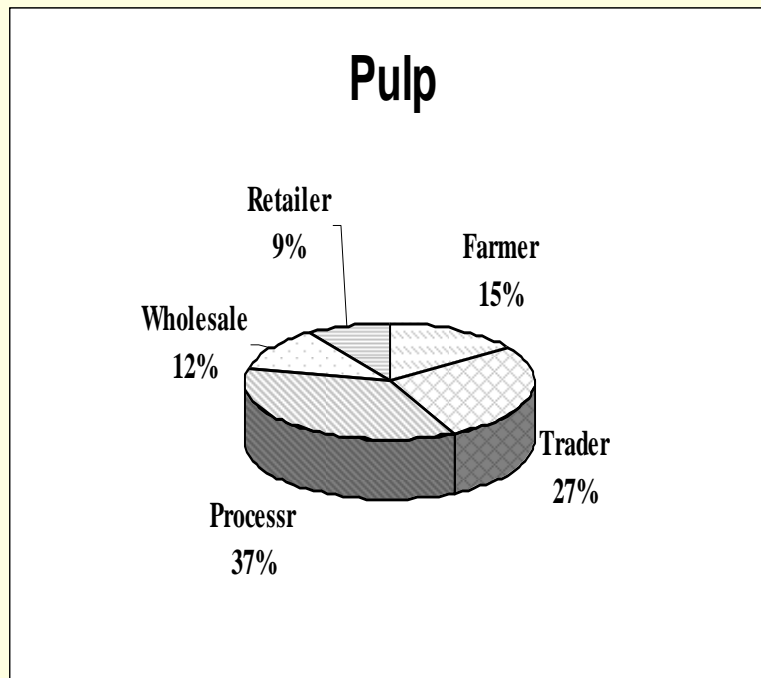
(2 kg of amla fruit processed to 1 kg of candy)

Stakeholder	Value	Cost	Profit
Farmer	10	8.50	1.50
Trader	22	12.50	9.50
Processor	58	50.00	8.00
Wholesaler	30	20.00	10.00
Retailer	40	31.50	8.50
Total (Price to consumer)	160	122.50	37.50

Profit Distribution – Amla Candy



Profit Distribution - Tamarind



Community Processing

- Small-scale processing by women self-help groups
- Fitted well with time availability
- Marketing was a problem here as well



Concluding Remarks

- **Production technology is available for most underutilised fruits. Small farmers can adopt improved cultivation practices to increase yields.**
- **Small-scale processing options are available and rural communities have the ability to handle and manage them.**
- **Marketing is the major constraint and it is necessary to create the linkages for the success of underutilised fruit species.**