

# Opportunities and stakeholders in millet promotion in India – Appraisal

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Empowering the poor to manage risk”*

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# Scheme of Presentation

1. Stakeholder Appraisal in millet growing regions in Tamil Nadu using 4 C Framework
2. New development in small scale millet processing equipments
3. Emerging market opportunities for millets in Periurban and Urban context
4. Reflection on the status of millets in PDS in Karnataka and Tamil Nadu

## Broader Frame Work used in Appraisal

Production Domain	Procurement Domain	Processing Domain	Value Added Product Production and Marketing Domain
Seed Source Land Selection and Preparation Seed Sowing Millet Cropping Post Harvest Millet Consumption Need Assessment	Millet Collection Millet Storage Transporting Millet Sales Financial transaction Need Assessment	Millet Purchase Mill Operation Financial transaction Millet Sales Need Assessment	training Current Status Financial transaction Learning, issues Requirements and Market opportunities Need Assessment

Key Informants : Farmers, Producer Organisation, NGOs representatives, State officials, Consumers, Policy Makers, Research and Development Agencies and literature

## Minor Millet Cultivation Areas in Tamil Nadu

### **Little millet (Samai) *Panicum sumatrance***

-Harur, Thirupathur, Kallar, Salem, Jayamkondam, Dharmapuri, Krishnagiri, Pennaharam, Kolli Hills, Pachamalai, Bodha Hills, Kalrayan Hills, Yercaud, Dindugul

(Mostly Eastern Ghats, Northern Tamil Nadu)

### **Finger Millet (Kelvaragu) *Eleusine coracana***

-Dharmapuri, Salem, Tiruchi, Dindugul, Perambalur, Namakkal, Krishnagiri, Coimbatore, and more districts in Tamil Nadu

(Wide spread under irrigated condition, Eastern Ghats and Northern part of Tamil Nadu)

### **Italian millet (Thinai) *Setaria italica***

-Perambalur, Villupuram, Ariyalur, Viruthachalam, Ettiyapuram, Sankarankovil  
(As mixed crop, Sporadic)

### **Kodo millet (Varagu) *Paspalum scrobiculatum***

-Thuraiyur, Perambalur, Karambai, Tiruchi, Villupuram, Dindivanam, Viruthachalam, Ariyalur, Vellimalai, Tholuthur, Dindugul, Natham

(Central and Northern Part of Tamil Nadu)

**Barnyard Millet (Kuthiraivali) *Echinochloa colona*** - Srivilliputhur, Sivakasi, Viruthnagar, Theni, Rajapalayam, Elumalai Tuticorin, Thirumangalam, Usalalpatti, Kovilpatti, Sedaiyur, Andipatti, Kalugumalai, Vilathikulam, Peraiyur, Arupukottai, Nagalapuram, Palmur, Kamuthi

(Southern and Eastern part of Tamil Nadu)

### **Common millet (Panivaragu) *Panicum miliaceum***

- Salem, Dindugul (As rain fed crop)

## Conservation

- “ **Quality seeds of millets** are not available in many location and they depend on mundys.
- “ Farmers are not able to protect seeds properly since they are attacked by rats and pests and **no private and public storage** systems functional.

## Processing

- “Households face difficulties with regard to **manual processing** of millets.
- “There is a severe **loss of knowledge** among women about culinary preparations using millets.

# Cultivation

- Farmers have **alternative short duration crops** like Tapioca, groundnut, gingelly, horsegram and coriander
- The need for raising millets crops is low in the light of **subsidised food** available through PDS.
- The **labour demand** for millet cultivation is high.
- The cost of cultivation of millets is high and **economic returns** from the crop are low and not equitable to farmers
- There is a **dearth of cattle** which is making cultivation of millets difficult from the point of view of draught animal power and dung.
- There is a severe **wildlife - agriculture conflict** in the region due to the presence of wild boars and birds and **increased pest attacks**

## Opportunities:

- “ **Quality seed production** and timely supply of new varieties based on local choice
- “ Financial assistance and **crop loans** need to be extended for promoting cultivation of millets.
- “ Insurance support for millet crops.
- “ There is a felt need for establishing local level **small and medium type processing units** to enable increased consumption.
- “ **Farmer producers companies** and Public and Private supply channels linking to food systems

# Millet supply/ Value chain pattern

➤ Farmers ➡ Local procurers ➡ Organic shops ➡

Millet Store, Re Store, Allmaa 100, Valam, Bio Organic

➤ Own Farm ➡ Organic shops ➡

Jay CEE Greens, Amirtham, F5 Stores

➤ Own farm ➡ Packed Products ➡ Own shop ➡ Commission Agencies ➡  
Other Shops ➡

Eco Care

➤ Origin diversified source ➡ Organic shops ➡ Consumers

Many Products and Whole Grain

➤ Own Farm ➡ whole sale vendor ➡

Sriramulu, Jawadi hills

➤ Farmers ➡ Local procurers ➡ Commission Agency ➡ Whole Sale  
shops ➡ provision Stores ➡ Dept stores ➡



# Millets species, Market Domains and Consumers

Push cart vendors	Wet Flour Vendors	Restaurant	Organic Shop	Whole Sale	Star type Hotel
Pearl millet	Finger millet	Finger millet	Finger millet	Finger millet	Finger millet
Shorghum		Pearl millet	Pearl millet	Pearl millet	Italian Millet
Finger miller		Barnyard millet	Barnyard millet	Barnyard millet	
		Italian Millet	Italian Millet	Italian Millet	
		Kodo millet	Kodo millet	Kodo millet	
		Sorghum	Sorghum	Sorghum	
Middle and Lower middle class	Families Middle and Lower middle class	Middle and Upper middle class	Upper middle class and Elite	Dealers and Local Vendors, Agencies, Commission Agents	Elite

# Brands and Certification in Millets

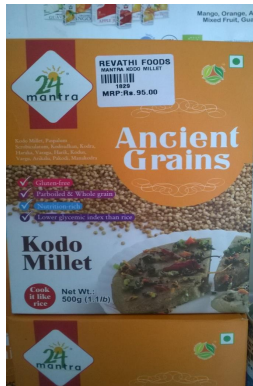


“ Ecocare, 24 Manthra, Mayoora, Sai foods, Little Millets, Jawadi Hills, Pristine, Pro-nature, Nature land, Kavalam



“ IMO, EU, USDA

“ Average INR 60-70/500 gms



## Millets in organic shops

- “ Products are certified by Food Safety and Standards Authority of India (FSSAI) and committee of organic foods, Tamil Nadu.
- “ Millets are available as whole grains, processed foods, labeled products
- “ Millets sources different places – Theni district, Kolli Hills, Jawadi hills, Thirumangalam, T.Kallupatti, Madurai, Dharmapuri, Kanjipuram farms, Karur, Tanjavur in Tamil Nadu
- “ Booming after 2010

# Almaa100 – Selaiyur- Chennai

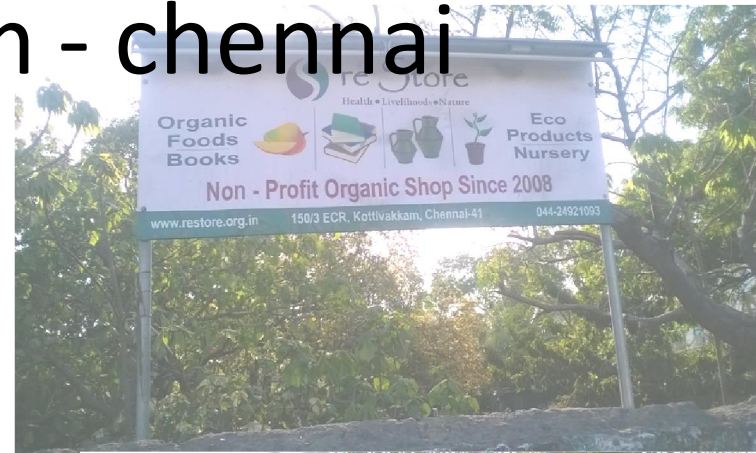


- “ Branded Foods – Ecocare, 24 Manthra, Mayoora, Vriksha, Terra Locally made products
- “ Sweets and Biscuits – Dealers mixing with other flour Maida, Wheat, Rice flour
- “ Whole Grains – from Theni Districts



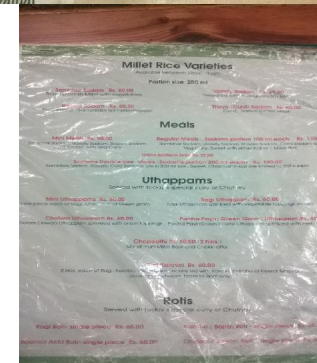
# reSTORE-kottivakkam - chennai

- “ Only organic millets
- “ Whole grains only
- “ Direct procurement from Farmers
- “ Equity benefits for Farmers and Buyers
- “Less profit margin
- “Awareness about millets – Use Media support
- “ Easy access to urbanites
- “ Organise workshops
- “ Connected with – “Millets Store” – a non profit organisation



# Millets in Restaurants

- “ South Indian Dishes – Dosa, Ponagal, Briyani, Boiled items – Puttu, Rotti, Koozh, Khazhi, Soup
- “ Served as combo and sole food
- “ Price of the food varies – Most **not affordable by common**
- “ Source of millets is from their own farms and organic shops
- “ **Awareness materials** are provided in the Restaurants - Know your traditional food , Expressing health benefits like controlling blood pressure, cholesterol and other health problems
- “ Consumers Profile – Those suggested by **Physicians, keen on organic foods, Explorers**





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Ka Restaurant

## Millets in wholesale shop

- “ Source from the southern parts of Tamil Nadu and hill stations and from Karnataka.
- “ Bulk purchase and transfer to dealers in Koyambedu, Paris - Kottaval Chavadi, Tambaram
- “ Supply the millets to Commission agents to dealers, mini market and deal with agents with in Bangalore, Nasik, Luck now



# WHOLESALE SHOP – Products and whole Grain



Sri ramulu, kothwal chavadi



Godown of the shop



Whole sale pack

# Diversity in wholesale shop



Sanaullah, kothwal chavadi





# Dedicated space for Food Grains Market



FOOD GRAIN MARKET,  
KOYAMBEDU



Sector 1



Pachaa traders



Owner of the shop



All NUS Millets, Paddy



Thinais 1kg

# SRINIVASA ENTERPRISES – Millet Product Dealer



30%-40% profit margin for Agencies across Tamil Nadu

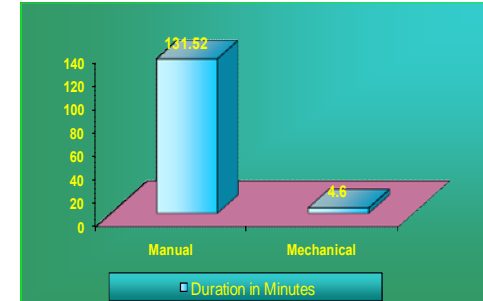


# Post harvest processing machineries for Millets

Manual Pounding



Dehusking mill



Manual Grinding



Pulveriser



Mc gill Rubber Sheller  
90 %



Double Hopper and Single Sheller  
82-85%



Dehusker with Hopper  
68-70%



Husker and Polisher  
65%



Perfura CIAE model of Stone Machine 77-82%

## Agriculture Engineering, Centre of Excellence for Small Millets, GKVK, Bangalore

- “ This is only the centre in India exclusively for millet processing sponsored by INSIMP programme
- “ Ragi pearling machine (Rs. 65,000) Ragi pulveriser (Rs. 95,000) manufactured by VEE THREE SERVICE Enterprises, Bangalore
- “ Ragi pulveriser small (Rs. 35,000)
- “ Table top ragi pulveriser (Rs. 71,000)
- “ Uruli roaster manufactured by Gayathri Enterprises, Chennai
- “ Ribbon blender for (value addition)
- “ Packaging machine (Rs. 4 lakhs) manufactured by Century systems, Bangalore
- “ Powder making machine (Rs. 4.5 lakhs)
- “ Sealing machine (Rs. 17,000)
- “ Flaking machine (making machine) manufactured in Mysore
- “ This centre is conducting training on value addition

# Millet Inclusion in Tamil Nadu PDS !

- “ Tamil Nadu- Lamps – Large Scale Multipurpose Society – District Consumer Cooperative Whole sale Shop Limited – Retail Shops at District level
- “ Finger millet, Italian millet, Little millets, Pearl millet are available - Rate INR 60-70/ kg
- “ **No procurement policy yet in Tamil Nadu for PDS**
- “ Comprehensive Assessment on current Production – Availability
- “ Minimum Support Price for millet – Farmers Welfare
- “ Enabling subsidy policy – consumer Welfare
- “ Purchase arrangement with processing mills – Working through FPOs
- “ Channelling through PDS supply chain
- “ Most of the Ragi produced in Krishnagiri district of Tamil Nadu has been produced by Karnataka state last year
- “ Most of the Little millets produced in Dharmapuri district of has gone to Nasik and Theni for Processing and not consumed locally

Little millets Pack



# Millets and PDS in Karnataka

- “ Government of Karnataka has fixed Minimum support price for Ragi as Rs. 2100/Quintal
- “ Ragi supplied through PDS in southern part of Karnataka and Sorghum supplied through PDS in Northern part of Karnataka
- “ Currently Ragi and Sorghum in PDS is only for BPL families but there is raising demand from all families
- “ Constraints faced by the state for continuous supply
- “ There is high demand from Rich people of metro city like Bangalore and they are very much interest on getting millets through anyway (either PDS or private market)
- “ Besides, Noon meal scheme in Karnataka is promoting finger millets based foods (Ragi motha) from primary school to High school (1<sup>st</sup> standard to 10<sup>th</sup> standard)





Thank You



Enabling poor rural people to overcome poverty

