



Namma Nellu

Report for the Period April 2022– March 2023

Namma Nellu is a [CIKS](#) programme to conserve and scale up Traditional Rice Varieties of Tamil Nadu

Website: <https://www.nammanellu.com/>

Namma Nellu in 2022-2023



Conserving
Germplasm



Upscaling TRV



Building Awareness

Namma Nellu in 2022-2023



Seed Collection
from Specific
Locations



Analysis of Nutritional
and Therapeutic
Properties of TRV



Development and Field
Testing of Value-Added
Products

Executive Summary

- The focus for 2022–2023 was on germplasm conservation, scaling up Traditional Rice Varieties (TRVs), and raising awareness.
- CIKS conserved 160 varieties and good quality seed was produced at the CIKS TRC (Technology Resource Centre) in Sukkankollai (Chengalpattu, Tamil Nadu).
- Twenty traditional rice varieties were cultivated in fifteen acres in the CIKS farm over two seasons.
- Detailed documentation including agronomic properties and photo documentation of TRVs was done during this period.

Executive Summary

- Seeds of ten varieties have been scaled up and a trainer's training program was conducted, and a manual was produced on TRV seed production during Navari 2022.
- Seeds of six varieties have been scaled up in farmers fields during Samba 2023.
- A moisture meter were purchased for storage with proper moisture content.
- Grains Pro Bags were purchased for the storage of seeds and rice.
- Sound raising equipment was purchased to protect the TRVs fields from wild pig attack. This was worked well against wild pig.

Executive Summary

- Selected TRVs were scaled up in 5000 acres in farmers' fields across nine districts of Tamil Nadu.
- Nutritional analysis for 83 varieties was carried out looking specifically at mineral composition and protein. Studies have also been initiated on vitamin content, antioxidant and anti-diabetic properties of selected varieties.
- A publication titled – “Traditional rice varieties – A storehouse of nutrition” was produced.
- To create value-added products with TRVs, a mini rice miller and rice flour machine were purchased.

Executive Summary

- Indigenous food festivals were celebrated. Dishes prepared here have become part of the main menu in restaurants.
- A well-known chef cooked a few dishes with TRVs and shared them on her YouTube channel to raise awareness.
- For the celebrations of Diwali, Krishna Jayanthi, and Pongal, gift hampers were produced.

Traditional Rice Varieties – An Introduction



*Arubatham Kuruvai

Traditional Rice Varieties (TRV)

- Are evolved for regional/local conditions
- Need less water, fertiliser, and pesticides
- Are pest and disease resistant
- Are flood and drought resistant
- Have superior nutritional and medicinal benefits
- Have taste profile suitable for different preparations
- Yield fodder and roofing material

About Namma Nellu, a CIKS Flagship Initiative



Namma Nellu

- Over 28 years, CIKS has collected over than 150 indigenous or traditional varieties of rice
- TRV are planted every year for conservation in CIKS' research farm in Sukkankollai, Chengalpattu district and also in farmers' fields
- 2016: CIKS launched Namma Nellu to obtain public support for conserving TRV

: Conservation of Germplasm in the CIKS Farm



Navarai season

(January 2022-April 2022)

- Twenty traditional rice varieties cultivated in nine acres in the CIKS farm.
- All the varieties were harvested during the end of May 2022.
- Processing and storage was completed during the month of June 2022.
- Data collection was done for eleven TRV during this season.

: Conservation of Germplasm in the CIKS Farm (Cont...)



Samba season

(August 2022-February 2023)

- 161 TRV were raised in nursery and transplanted to 2 acres of land.
- 20 TRV were transplanted to larger scale of six acres of land.
- All varieties are being monitored regularly.
- Periodical data collection is in progress.
- Harvesting, Processing and storage was done between the period of January - March 2023.

: Conservation of Germplasm in the CIKS Farm

Samba season

(August 2022-March 2023)

- Data collected includes: height of plant, number of tillers, panicle length, flag leaf angle, date of flowering, number of productive tillers, date of harvest, number of grains per earhead, yield per plant, total grain yield per plot, straw yield per plot, 1000 grain weight, grains weight, color of grains, color of rice



Photo Documentation

A detailed photo documentation was done for all the 160 varieties that are being conserved in our TRC.



: Scaling up Cultivation of Traditional Rice Varieties



Scope and Scale

- Supporting farmers to cultivate selected TRVs in greater scale.
- Cultivation in 5000 acres
- Collaborative funding from Supraja Foundation, Woka Foundation, Turbo Energy Pvt. Ltd., and Abi Showatech (India Ltd.), Coromandel India Ltd.

: Scaling up Cultivation of Traditional Rice Varieties



Scope and Scale

- Varieties include: Seeraga samba, Kitchili samba, Mapillai samba, Thooyamalli, Karuppu kowni, Ananthanoor sanna, and Salem samba.

: Scaling up Cultivation of Traditional Rice Varieties



Scope and Scale

- Farmer fields spread across ten districts of Tamilnadu:

Kanchipuram, Chengalpattu, Thiruvannamalai, Nagapattinam, Mayiladuthurai, Thiruvarur, Thanjavur, Dindigul, Pudukkottai, and Ramanathapuram districts

: Scaling up Cultivation of Traditional Rice Varieties

Scope and Scale



- Farmers receive technical guidance on a need basis
- Marketing linkages with different traders were made for 3 districts- Chengalpet, Kanchipuram and Thiruvannamalai.
- For other districts, marketing linkages created through farmer producer companies.

Seed Collection and Seed Production



- 1 MT of Kamban Samba, Veethivadangan and Sanna Samba seeds were procured, cleaned and distributed to farmers for cultivation in Samba 2022 season.
- Karungkuruvai seed production is in progress in 19 acres at Sirkazhi and Kollidam blocks of Mayiladuthurai district.
- Karungkuruvai cultivated in 19 acres during Navarai 2022 in farmers field was harvested and marketing linkages created through farmer producer company.
- 2.269 MTs four TRVs seeds were procured for seed distribution to be done during Samba 2023.

Seed Collection and Seed Production (Cont..)



- Seed bank was renovated and germination test was conducted for all the 160 TRV.
- Trainers Training Programme was conducted on TRV documentation and roguing operation. “A manual on TRV seed Production, Roguing Operations and TRV documentation” has been produced in Tamil.

Nutritional Analysis

- For Nutritional analysis, it was planned to test Protein, Iron, Zinc and Calcium content of Traditional Rice Varieties.
- 83 TRVs were selected for the purpose of Nutritional analysis along with one improved variety – White ponni for comparison study purpose.
- Some of the key findings are summarized.

Zinc and Iron

- The value of zinc is consistently high among all the traditional varieties when compared to the modern variety which is 1.21 mg/100 g. Infact we have a variety Sadakar which has 5 times more Zinc content than the modern variety (5.54 mg/100 g).
- Iron values are also high for all the varieties. We have upto 6 times more for some varieties like Vellai Milagu samba.

Protein

- With regard to protein also the same trend is noticed with almost all traditional rice varieties exhibiting protein content higher than modern varieties with the highest in Sempalai (10.84 g/100g as against 7.94 g/100 g in modern variety).
- All these have been used extensively in educational material and promotional literature.

Other Studies

- Studies were conducted to analyse the vitamin content, phytochemicals, antioxidant, antidiabetic and anticancer properties of selected traditional varieties.
- Preliminary results are now available.

Implications

- These have implications for certain therapeutic properties.
- Some of the conditions for which they may be used - diabetes, cancer, inflammation, obesity, cardio vascular disease, arthritis, etc.

TRADITIONAL RICE VARIETIES

A Storehouse of Nutrition



Our Recent Publication

- Recently CIKS has published a booklet titled “Traditional Rice Varieties – A Storehouse of Nutrition”.
- It has nutritional information for 20 selected traditional rice varieties. A copy of the booklet is shared.

Value Added Products

- A Mini Rice Processing Unit with seven different types of sieves for different size ranging from fine to coarse variety of rice has been purchased.



Value Added Products

- A Mini flour machine has been purchased in order to prepare value added products.
- After the installation testing and standardization of the machines planned to conduct training to women's group in the preparation of value added products.



: Building Awareness



Indigenous Rice Festival

- 13th to 24th May'2022, Chennai
- Food festival was celebrated with the use of 12 TRV-Kaivari samba, Kuzhiadichan, Seeraga samba, Kalanamak, Adukkunel, Anandanoor Sanna, Karungkuruvai, Mullan kaima, Sivappu kowni, Navara, Thooyamalli and Thanga Samba.
- Festival was held at "Wild Garden Cafe" at Amethyst, Chennai.

2022-23: Building Awareness TRVs Recipes on YouTube

To spread awareness about the traditional varieties two episodes one making sarkarai pongal out of Kala Namak ([Kalanamak Sarkarai Pongal](#)) and one making tomato rice out of Thanga Samba ([Thanga samba Tomato Rice](#)) was done by the celebrated chef Ms. Revathi Shanmugam. This was broadcast in her YouTube channel kavinzar veetu samayal. Was viewed by more than 15k viewers



நீண்ட ஆயுளை கொடுக்கும்
தங்கச்சம்பா-தக்காளி சாதம்...

14K views • 1 month ago



பாரம்பரிய அரிசி வகை-
காலாநமக் அரிசி/சர்க்கரை...

7.4K views • 1 month ago

Gift Hampers



On the occasion of Krishna Jayanthi and Diwali, CIKS in collaboration with Sempulam Sustainable Solutions and Sweet Karam Coffee (SKC) distributed sweets and savouries made with Traditional rice varieties to well wishers, donors, etc.

PRIDE OF TAMIL NADU - CELEBRATING RICE VARIETIES OF TAMIL NADU



A rice gift box was developed with the title – “Pride of Tamil Nadu”. 38 unique varieties belonging to the 38 districts of Tamil Nadu were identified by doing detailed research. These were vacuum packed and offered as a gift box for Pongal To policy makers, industrialists, well wishers and supporters. The nutritional and therapeutic properties, cooking details and special characteristics of these varieties were put together and placed in the box. This box will be used for promotion of TRVs by CIKS



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