# CENTRE FOR INDIAN KNOWLEDGE SYSTEMS

1995 - 2024

**Looking Back and Looking Forward** 

**CIKS Team** 

Meeting on 23<sup>rd</sup> January 2024



# **OUTLINE OF THE PRESENTATION**

**01.** Looking back – The Journey of CIKS from 1995 to 2024

**102.** Looking forward – Plans for the future and challenges

# Looking back – The Journey of CIKS from 1995 to 2024

# **OUTLINE OF THE PRESENTATION**

Vision, Institutional structure and overview of efforts and results

**102.** The next five years – focus and challenges

# **VISION**

Food and Nutritional Security for all through Sustainable Agriculture

# **TYPES OF ACTIVITIES**

- Technical efforts relating to sustainable agriculture.
- Building and strengthening farmers institutions.
- Creating an enabling larger environment.

# TECHNICAL EFFORTS RELATING TO SUSTAINABLE AGRICULTURE

- Capacity building for local communities through training programmes,
   trainers training programmes on various aspects of sustainable agriculture.
- Production of educational and training material.
- Research on specific themes such as agrobiodiversity and plant protection.
- Study of nutritional analysis of traditional rice varieties.



# BUILDING AND STRENGTHENING FARMERS INSTITUTIONS

- Building and strengthening of farmers institutions at the level of village,
   cluster of villages and districts.
- Helping farmers to market their organic produce.
- To create structures and facilities for timely procurement of quality inputs for sustainable agriculture including – indigenous seeds, biopesticides, agents for soil fertility improvement, biofertilisers and credit.

## CREATING AN ENABLING LARGER ENVIRONMENT

- Influencing government thinking and policy on sustainable agriculture.
- Working with and influencing banks and credit institutions.
- Working towards a business service provider model for sustainable agriculture.

## **BOARD OF TRUSTEES: FOUNDING MEMBERS**

- On 23rd January 1995, it was registered as an independent Trust at Chennai, Tamil Nadu.
- Five Founding Trustees Shri M.M. Murugappan, Shri P.R. Krishnakumar,
   Shri Darshan Shankar, Dr. K. Vijayalakshmi and Shri A.V. Balasubramanian.



## **CURRENT TRUSTEES**

- Ms. Kamala Shankar, Chairperson
- Mr. Darshan Shankar, Mr. D.S.Ramakrishna Rao, Mr. T.T. Hayagreevan, Mr. Karthik

Sundaram and Vaidya Narendra Pendse, **Trustees** 

• Mr. A.V.Balasubramanian, **Director** 



# **CIKS TEAM**

- About Twenty five team members
- Technical staff with qualifications in Agriculture, Botany, Biochemistry,
   Biotechnology.
- Other staff dealing with Accounts, Computer work, Administration etc.
- Team of consultants



# **WORK FOCUS**

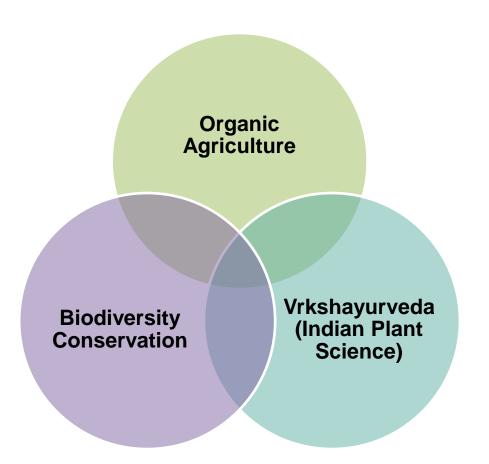
Participatory, Land and Lab based

# Research Extension

Empowerment, Trainings, Preparation of training materials



# **THEMATIC FOCUS**



# **PUBLICATIONS**

- Newsletter that is produced every quarterly in English (Interrupted during Covid).
- Monographs, poster sets, information cards, slide shows, audio visuals,
   web learning modules, calendars and desk calendars.
- Publications in Tamil, English, Hindi and Telugu produced by us.
- Translations of our material by others in the languages of Telugu, Hindi,
   Kannada and Assamese.



# **PUBLICATIONS (Cont...)**

- Till now we have sold and distributed about 1,60,000 copies of publications, 12,000 copies of poster sets and about 10,000 copies of CDs in all languages.
- We have reached 25 States, 3 Union territories in India.
- Our publications have reached 42 countries in Asia, Africa, South America and North America and Australia



# **PUBLICATIONS (Cont...)**

#### **Current situation:**

- CIKS has stopped publishing materials that are being sold for a price because of regulatory / income tax matters.
- Most of our publications are uploaded on our website for free downloads.
- Large number of our titles are being downloaded and used regularly.



# COLLABORATIONS WITH RESEARCH INSTITUTIONS, GOVERNMENT AND INTERNATIONAL AGENCIES

- Gandhigram Rural University, Annamalai University, Centre for Advanced Studies in Botany, Madras University, Tamilnadu Agricultural University, Coimbatore, MOP Vaishnav College, Ethiraj College and Stella Maris College, Chennai, FRLHT TDU, Bengaluru
- Govt. of Tamil Nadu, Ministry of Science and Technology, Ministry of Rural Development and Ministry of Environment and Forest.
- IFOAM (International Federation on Organic Agriculture Movement), COMPAS
   International Network.

## **DONORS - PAST AND PRESENT**

- 1. MULTILATERAL AGENCIES
- FAO, UNDP, COSTED
- 2. OTHER SOURCES
- Donations from Individuals
- Support from Families
- Remembered in a will....
- 3. CONTRIBUTIONS FROM FARMERS
- Land for various activities
- Payment for services

### **INDIAN DONORS - PAST AND PRESENT**

#### 1. Government of India

- CAPART (Council for Advancement of People's Action and Rural Technology),
   Ministry of Rural Development, New Delhi.
- NABARD (National Bank for Agriculture and Rural Development), Mumbai
- DST (Department of Science and Technology), Ministry of Science and Technology,
   Govt. of India.
- TRIFED (Tribal Cooperative Marketing Development Federation of India Limited),
   Ministry of Social Justice and Tribal of Affairs, Govt. of India
- Ministry of Environment and Forests, Govt. of India

# **INDIAN DONORS - PAST AND PRESENT (Cont...)**

#### B. Government of Tamil Nadu

- Tamil Nadu State Council for Science and Technology, Chennai
- ATMA programme, Department of Agriculture, Govt. of Tamil Nadu
- Department of Agriculture, Govt. of Tamil Nadu.



# **INDIAN DONORS - PAST AND PRESENT (Cont...)**

#### C. Private Agencies, Charitable Trust, Universities etc.

• M M Muthiah Research Foundation, Chennai, PPST Foundation, Chennai, FRLHT (Foundation for Revitalisation of Local Health Traditions, Bengaluru), SRTT (Sir Ratan Tata Trust), Mumbai, FWWB, (Friends of Women's World Banking), Ahmedabad, Turbo Energy Private Limited, Chennai, SOFA (Sirkazhi Organic Farmers Association), Sirkazhi, Tamil Nadu, United Way of Chennai, Murugappa Chettiar Research Foundation (MCRC), Chennai, Abishowatech Pvt Ltd Chennai, etc



## **FOREIGN DONORS - PAST AND PRESENT**

- HIVOS and ETC Netherlands, Ford Foundation, DFID, UK.
- Oxfam (India) Trust, The Royal Netherlands Embassy, New Delhi, IFOAM (International Federation of Organic Agriculture Movement) IDRC, Canada, WWF, USA, Whitley
   Awards Foundation, England, GTZ – German Technical Cooperation, New Delhi, Rabo
   Bank Foundation, Netherlands.
- Supraja Foundation, Hong Kong; Woka Foundation, USA



## **CIKS THROUGH THE YEARS**

1995 – 2000 2000 – 2015 2015 – 2024

Initial Phase Growth, Consolidation Phase Reviews Changes and Transition

# 1995 - 2000 (Initial Phase)

- Work focused on increasing income from agriculture through increased production and decreased cultivation costs.
- Involved systematically in training as well as research which was largely in house.
- Evolved a model for funding from multiple sources private, government,
   foreign

# 2000 - 2015 (Growth, Consolidation)

Activities increased in scale.

- Improved markets On an experimental scale, we were tying up farmers
   with consumers of organic food through the AROGYAM programme.
- During the last part of this phase, we were working towards better credit
  for farmers by an experimental programme of raising and managing a
  revolving fund.

# 2000 - 2015 (Growth, Consolidation) - Cont...

- In terms of institutional capacity building we had set up a large network of farmers Sangams and were beginning to realize the need for larger level structures.
- In terms of research we had ongoing collaborations with universities and formal research institutes.
- We were also engaging in interaction with many other NGOs through training programmes, exchange visits and in some cases collaborative research projects.

# 2000 - 2015 (Growth, Consolidation) - Cont...

- Strengthening of Sangams, formation of four organic farmers producers societies in different districts of Tamilnadu and a private limited company.
- Collaborative research efforts with research institutions as well as traditional scholars.
- Network projects involving various other NGOs.



# 2000 - 2015 (GROWTH, CONSOLIDATION) - Cont...

- The training programme were strengthened with an increasing number of trainers training programmes, production of a large number of educational and training material, construction of a technology resource centre for training and ongoing programmes for various category of farmers and trainers.
- Support for the formation of agriculture producer companies starts.
- Support for the formation of a consultancy company.

# 2015 - 2022 (REVIEWS CHANGES AND TRANSITION)

- Floods, recovery, new office...
- Redefining links with FPCs and Farmers groups
- Coping with regulatory changes relating to Income tax, Non-profits, FCRA
- Changes in funding agencies and patterns
- Covid
- Reconstitution of the Trust

# **CURRENT PROJECTS**

## **CURRENT PROJECTS**

- Supraja Foundation 2022 2025
- GROW Fund 2022 2024
- Woka Foundation 2022 2025
- Varietal Diversity of Fruits and Vegetables 2022 2024
- Namma Nellu Programme

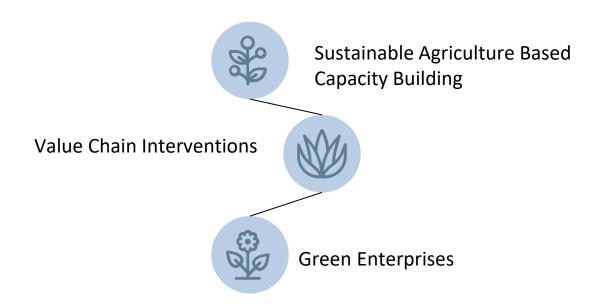


# **SUPRAJA FOUNDATION**

**CURRENT PROJECT** (2022 – 2025)

Supraja Foundation extended its support for another three years.

# PROJECT COMPONENTS



Spread over three districts in partnership with four FPCs and five farmers groups

# SUPPORT FOR INSTITUTIONAL DEVELOPMENT THROUGH GROW FUND

## **FUNDING DETAILS**

- The GROW Fund is a first-of-its-kind initiative by EdelGive Foundation.
- It supports one hundred organizations from across India over a period of 24 months.
- This is a non- programmatic fund that helps in capacity building of an organisation;
   supports core cost and the overall organization development during the Covid period.
- One hundred NGOs were selected all over India and CIKS is one among them.



#### **FUNDING DETAILS (Cont...)**

- Under various theme areas, 25 NGO partners were selected from the North,
   South, West, East, and North-east zones.
- CIKS was selected under the thematic area –"Climate, Ecology and Animal Welfare" from Tamil Nadu.
- Six other Organizations were chosen under the same category from across India.



## Some key components for which CIKS is using the funds



Salaries for Core Staff



Office expenses (eg. office rent, electricity bills, etc)



Language and Soft Skill for Staff



Improvement of Accounting Systems



**Digital Archives** 

## Some key components for which CIKS is using the funds (Cont...)











**Vehicle Maintenance** 

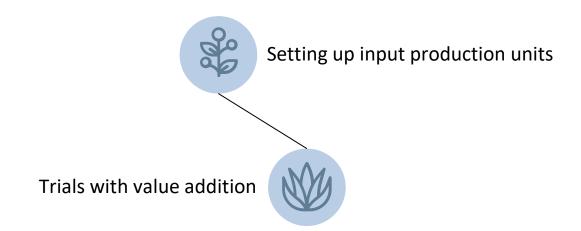
#### **WOKA FOUNDATION**

**CURRENT PROJECT** (2022 – 2025)

Woka Foundation extended their support for another three year Project details are summarized

#### PROJECT COMPONENTS

The components are an extension of the work carried out during the first year and there is an additional components



## VARIETAL DIVERSITY OF FRUITS AND VEGETABLES

### VARIETAL DIVERSITY OF FRUITS AND VEGETABLES

- Over the past years CIKS (Centre for Indian Knowledge Systems) has done huge amount of work in the area of traditional rice conservation and cultivation and to some extent CIKS has worked on the diversity of millets as well.
- However, this particular effort is focused on fruits, vegetables and medicinal plants
  because there has been no effort for a thorough or systematic study of this area
  namely the traditional knowledge and understanding of the nutritional and
  therapeutic properties of traditional varieties of plants.

#### PROJECT COMPONENTS



Survey of literature from books, magazines, technical journals and medical texts

Field trips in Tamil Nadu to gather information and samples





Conservation of a few selected varieties in the CIKS farm and in farmer's fields

Support from an individual donor who is a Google employee in USA with a matching amount from his employer Google!!



- Namma Nellu is a programme for the support of conservation and characterization of traditional rice varieties through donations obtained from members of the general public as well as CSR (Corporation Social Responsibility) programmes of some companies.
- It was started in the year 2016 and this is being discussed in detail separately.

# CIKS WORK ON CONSERVATION OF TRVs AND NAMMA NELLU PROGRAMMES

#### **Overview**

- Work started in Chengam of Tiruvannamalai district. Initially in leased land and then with a small piece of land in Anjur
- In 2000 shifted to Sukkankollai
- Initial years conservation in two places.
- Now 160 in Sukkankollai and 25 boutique varieties in farmer's fields.
- Upto 2016 completely through grants
- 2016-Launching of Namma Nellu
- Initially individual donors, later CSR funds also

#### **ACHIEVEMENTS**

- Seeds for 160 varieties produced year after year.
- Upscaled cultivation of at least 50 varieties
- In 5000 acres by about 2400 farmers
- 50 varieties available in market
- Documented agronomic properties basic details as well as resistance / susceptibility to pests, diseases, floods, drought, suitability to cultivation in various kinds of soils etc.
- Documented and studied nutritional and therapeutic properties
- Supraja, WOKA help and continue to help conservation, value addition
- Organic cultivation packages developed, SRI developed
- Nutritional properties studied





Developed value added products like porridge mix, flakes, flour



#### **SWEETS AND SAVOURIES DEVELOPED**



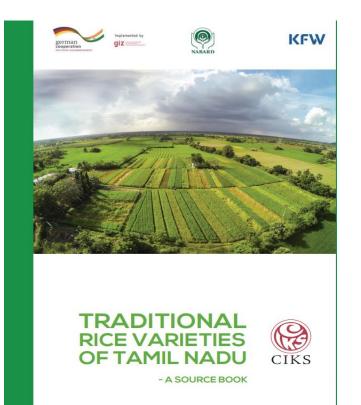


## Gift boxes of eight varieties developed for marketing





## Several publications of various kinds in English and Tamil





#### NAMMA NELLU – RECENT WORK (2021 – 2022) (Cont...)

In March 2022, CIKS collaborated with Mr.
 Rakesh Raghunathan and organized an event –
 "Sacred Offerings" which was a presentation on the temple prasadams



#### NAMMA NELLU – RECENT WORK (2021 – 2022) (Cont...)

A food festival was held at "Wild Garden Café" at Amethyst, Chennai with the use of 12 TRVs to build awareness. Some of the dishes made are – French onion risotto made with Karungkuruvai rice, Seeraga samba Nonbu Kanji, Kuzhiadichan Egyptian Koshari, Mullan kaima kongunaadu mutton briyani, Thooyamalli Mango phirni tart, etc

#### Deccan Herald Dated 12th May 2022

#### Amazing creativity in presenting rice delicacies

R. MOHAN | DC CHENNAI:

Rice might seem the plainest of the staple grains but it converts magically into delicious dishes. Creativity in preparing rice dishes in a form to please the gourmets has been attempted splendidly by celebrity chef Rakesh Raghunathan.

Taking the story beyond just rice to make it much grander, Rakesh has roped in dedicated protectors of indigenous varieties of rice in the Sempulam Sustainable Solutions to present a whole meal made from rice as the primary ingredient.

The celebration of indigenous rice takes on a whole new meaning in the special menu crafted for patrons at the Wild Garden Café at the Amethyst from tomorrow to May 24, 10 am to 11 pm.

The Seeraga Samba Ramzan Nombu Kanji came first as a tribute to the Ramadan season just concluded. Adding an exotic touch to the starters was the Kuzhiadichan Koshari, a dish from Egypt that lends rice a whole new taste. And to keep the meat eaters busy with starters was the Kalanamak Bannur Mutton Pulao

The main courses bring forth the real taste of indigenous rice varieties carefully nourished in modern envi- but all of them were made







The Food Festival is being organised with the goal of assisting and encouraging farmers to conserve and market their products, as well as raising awareness levels among the urban population

ronments. The Adukkunel Baked Mediterranean Rice demonstrated the universality of the staple grain while the Ananadanoor Sanna Thengai Pal Sadam was all south Indian in taste. The Karunguruval French Onion Risotto may have suffered only in comparison to the more popular dishes.

The meat side of the table may have been pleased with Mullan Kongunaad Mutton Birvani while the Sivappu Kowni rice would have gone well with the Thai red curry and the chicken. The biryani was presented as an aromatic green pulao, coated with panko crumbs and deep fried and served with yoghurt onion

The highlight was yet to come even after a full meal as the time for sweets opened up, spectacularly with rice as the base, as in the Navara Riz au lait (a French rice and milk pudding) with Espresso Caramel melding into a delightful offering. The mango Phirni tart also came from a base of Thooyamalli rice while the Thanga Samba backed up the standard south Indian fare Akkaraadisil.

The story behind the scenes is one of deep commitment to creating something special out of ingredients available locally, from farm to table as it were, but with a lot of thought put into the cooking as an art form. The people behind Sempulam have put in considerable amount of work into growing rare varieties of indigenous rice strains while Rakesh is wellknown for bringing out the attractions of traditional



celebrated prasadams food festivals.

The attention to detail in a couple of dishes might serve to bring out the art behind it all. Take the Kaivari Samba Ven Pongal Arancini with spiced tomato dip, which comprises "Panko crumb crusted even Pongal balls deep fried with a cube of cheese and served with a gothsu / tomato dip. It is cooked with the exquisite tasting, calcium, magnesium and folic acid rice Kaivari Samba rice from the dry region of Thiruvannamalai." As many as a dozen rice varieties were used in preparing south Indian cooking, as in the dishes for the special fest.

#### NAMMA NELLU – RECENT WORK (2021 – 2022) (Cont...)

- 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.
- Supporters include ABI Showatech, Turbo Energy and Coromandel India.



## EXTENSION AND LINKAGES WITH FARMERS ORGANISATIONS

#### FIELD WORK – COVERAGE AND LOCATIONS

- Direct work with farmers for 28 years
- 15 districts of Tamil Nadu and one area in Pondicherry, namely Thiruvannamalai, Kanchipuram, Chengalpattu, Mayiladuthurai Nagapattinam,
   Dindigul, Tiruvallur, Ramnad, Cuddalore, Tanjore, Perambalaur, Pudukkottai,
   Tiruvarur, Vilupuram in Tamilnadu and Karaikkal in Pondicherry.
- Work with farmers through other organizations in 4 districts in Tamilnadu namely
   Dharmapuri, Krishnagiri, Tirunelvai and Kanniyakumari.

#### **BENEFICIARIES**

Direct Beneficiaries

4 Lakh including 45% of women

Other Institutions

1 Lakh beneficiaries Worked in Coastal, Cauvery delta, Dry land and Tribal region Members of all communities have been beneficiaries including Scheduled Tribes

## TRAINING ON SUSTAINABLE AGRICULTURE TECHNOLOGIES AND CERTIFICATION

- Given trainings on sustainable agriculture technologies and organic certification as well as seed production.
- Cultivation of different crops organically paddy, vegetables, fruits, oil seeds, cash crops, medicinal plants.



### TRAINING ON SUSTAINABLE AGRICULTURE TECHNOLOGIES AND CERTIFICATION (Cont...)

- Followed sustainable agriculture technologies in 4 Lakhs hectares of land.
- 25,000 Acres that are organic including self certified, NPM (Non Pesticidal Management) and certified through IMO (International Agency) and Tamil Nadu Organic Certification Department (TNOCD)
- CIKS staff and farmers representatives are trained internal inspection procedures.



#### **IMPACT OF TRAINING PROGRAMMES**

- Reduced cost of cultivation
- Increased income
- Cultivation is more self-reliant making use of local inputs
- Better management of risks
- Long term impact in terms of enhanced soil fertility
- Farmers obtain greater value for their produce

#### LINKS WITH ORGANISATION OF FARMERS

- Worked with individual farmers, farmers groups, farmers clubs, sustainable agriculture self help groups etc.,
- Five societies in the districts of Kancheepuram, Tiruvannamalai, Nagapattinam, Dindigul and Ramnad
- In the early phase, helped in setting up of a company Arogyam Organics Private Limited with focus on sales and marketing
- Twenty two farmers producer companies in 9 Districts
- In the later phase helped in the setting up of a company Sempulam Sustainable Solutions
  which is offering a whole range of services for farmers, farmers organisations and various
  other institutions including knowledge, consultancy, training, sales and marketing, value
  addition etc.

#### **FARMER PRODUCER COMPANIES**

33,013

169

**Rs. 702 Lakhs** 

**Shareholders** 

42% are women

**Directors on the Board** 

27% are women

**Total authorised share capital** 

With a paid up capital of INR 479 Lakhs

#### **FARMER PRODUCER COMPANIES**

- Range of services to share holders Inputs supply including seed, manures, plant protection materials, cattle feed, technical supports, agri machinery facilitation centres, procurement, value addition and marketing linkages
- Financial linkages with NABARD, NAKISAN, NABFINS, FWWB, Ananya Finance,
   Samunnati, IDBI, SBI and Tamilnadu Gramiyan Bank.
- Identified as a producer organization promoting institution (POPI) and Resource
   Supporting Agency (RSA) by NABARD.

#### **FARMER PRODUCER COMPANIES**

- Identified as a resource agency by SFAC (Small Farmers Agri Business Consortium)
   of the Government of India.
- Convergence with TNRTP (Tamil Nadu Rural Transformation Project) SFAC EGS
  (Equity Grant Scheme) and CGS (Credit Guarantee Scheme), BDA (Business
  Development Assistance), MSDA (Mission on Sustainable Dryland Agriculture).

## ENTERPRISES FOR SUPPORTING ORGANIC FARMING

### UNITS TO PRODUCE INPUTS FOR CROP CULTIVATION AND CROP PROTECTION

- Neem seed processing units 2
- Neem oil soap unit
- Rural Bio pesticides units 9
- Biofertiliser unit 1
- Seed processing unit 4 nos
- Community Vermicompost units 9



#### **VALUE ADDITION UNITS**

- Value addition units established and marketing linkages created
- Paddy processing units and flour making units
- Oil extraction units
- Millets processing units
- Primary processing centre for vegetables
- Milk procurement and process centre

#### **SERVICES FOR FARMERS AND GROUPS**

- Soil testing laboratory 1
- Agricultural Machineries Facilitation Centres (AMFCs) 10 nos
- Cattle feed manufacturing unit



#### RESEARCH ACTIVITIES

- Why Research
- Themes / Topics
- Locations of Research Activities
- Types of Research
- Collaboration with Institutions

#### WHY RESEARCH?

The following are some of the key reasons why we took up research –

- On certain themes and topics of great interest and value to us, research is not being carried out by the mainstream research institutions or universities.
- Research that is carried out has very little involvement of farmers at the level of design, consultations, prioritizations or even user feedback.



#### WHY RESEARCH? – Contd.

- We have need for research on some special topics such as Vrkshayurveda (Traditional Indian Plant Science)
- The output of our research efforts is mostly training modules or manuals or audio visuals for farmers. Generally, there are no outputs that are "Academic" such as theses or papers in journals.



#### THEMES / TOPICS

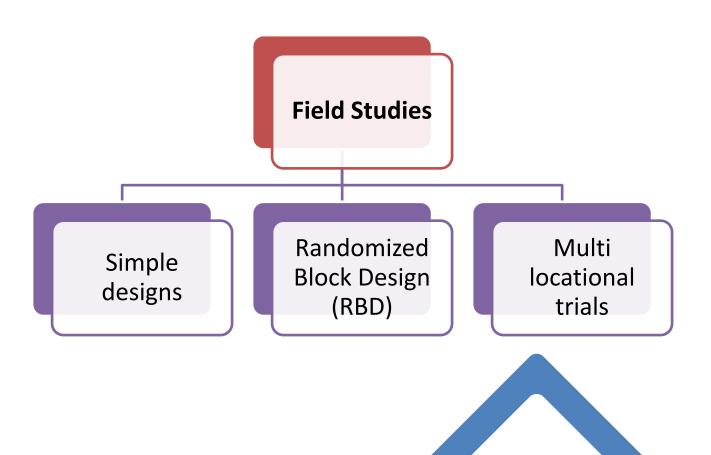
- Inputs for Organic Cultivation and Pest Control Devices and Technologies
- Organic Packages for Crops and Research on Crop Cultivation
- Vrkshayurveda

#### **LOCATIONS OF RESEARCH ACTIVITIES**

- CIKS Experimental Farms in Chengalpet District and Nagapattinam District
- Farmers fields in various locations
- Insect rearing laboratory at Sirkazhi
- With collaborating institutions



#### **TYPES OF RESEARCH**



#### **TYPES OF RESEARCH(Cont...)**

#### **Laboratory Studies**

- Insect rearing laboratory set up in Sirkazhi
- Various species of insects Spodoptera Litura, Aphis craccivora, Epilachna beetle and Mealy bug were continuously reared in the laboratory.
- Bio assays were conducted in the laboratory on biopesticides which were prepared based on Ayurvedic approach.
- Different formulations viz. Kashaayam, Arkam and Thailam were prepared with specific plants were tested against insects.
- Properties identified viz. Antifeedant, repellant, Oviposition deterent, mating disruptor, etc in order to educate farmers and optimize the use of preparations.

#### **COLLABORATION WITH INSTITUTIONS**

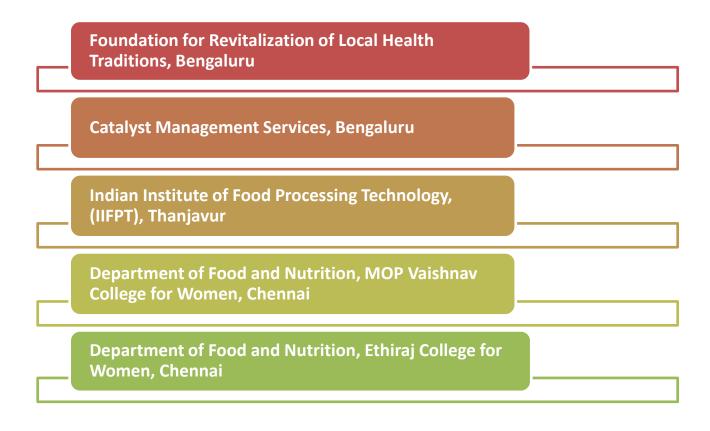
Dept of Entomology, Faculty of Agriculture, Annamalai University, Chidambaram

Dept of Plant breeding and Genetics, Faculty of Agriculture, Annamalai University Chidambaram

Dept of Plant Pathology, Faculty of Agriculture , Annamalai University , Chidambaram

**Centre for Advanced Studies (CAS) Botany, Madras University** 

#### **COLLABORATION WITH INSTITUTIONS (Cont...)**



#### TRC-THE FLAGSHIP PROJECT

#### **KEY ACTIVITIES**

- Training centre for all trainings, farmers, academics, students and general public.
- Demonstration of all organic farming technologies- Vermicompost, other composts, terrace garden, Azolla, biopesticides, SRI etc.
- Agro forestry
- Seed processing units
- Paddy processing infrastructure
- Vegetable conservation work
- Vrkshayurveda experiments / Research

#### **FACILITIES SUPPORTING ACTIVITIES**

- Dormitory and guest rooms
- Kitchen, dining area
- Agro forestry
- Staff quarters
- Storage godowns
- Power backup
- Equipment PCs, LCD projector, Generator and Agricultural Machinery

## Let us discuss...