CENTRE FOR INDIAN KNOWLEDGE SYSTEMS

REPORT OF WORK DONE DURING THE PERIOD APRIL 2022 - MARCH 2023

1. SUSTAINABLE AGRICULTURE TECHNOLOGIES FOR FARMER PRODUCER COLLECTIVES AND ESTABLISHING MARKET LINKAGES (PHASE – III)

The Kurinji and Pudukkottai FPCs (Farmer Producer Companies) repaid the entire loan to the lending institutions, after the procurement and marketing of TRVs. Comprehensive trainings were given on various climate-resilient agriculture technologies, traditional rice varieties cultivation, seed production, and post-harvest management technologies in paddy cultivation. To assess the impacts of the project, two detailed reports on focused group discussions and project impacts were prepared. An evaluation visit was made by Supraja representative on 20th April 2022.

2. SUSTAINABLE AGRICULTURE VALUE CHAIN DEVELOPMENT

This project supported by Supraja Foundation, Hong Kong for a period of three years (November 2022 – October 2025) is being implemented in three districts of Tamil Nadu viz., Tiruvannamalai, Dindigul and Pudukkottai districts covering eight taluks, 12 blocks, 61 panchayats and 158 hamlets. This project involves interaction with farmers groups in all the three districts. We have selected 4755 beneficiaries from these three locations including 1901 (40%) women beneficiaries. Two project orientation meetings were conducted to project teams and 55 orientation meetings conducted in project areas. Totally 1095 beneficiaries participated in these orientation meetings which included 381 women beneficiaries. A baseline study was conducted for all the farmers groups selected. We also conducted baseline survey with 320 selected beneficiaries comprising small and marginal farmers as well as medium and large farmers. Seven trainings covering various topics including sustainable agriculture technologies, honey production, purification and analysis were also conducted. Five farmers groups were selected from three districts for the establishment of four Green Enterprises like neem seed processing unit, neem oil soap making unit, green manure seed production and enriched farm yard manure production. Soil sample analysis was carried out for 50 samples to determine the impacts of organic carbon status in following the sustainable agriculture farming practices. An evaluation visit was made by Supraja team

comprising three members between 8th – 10th March 2023 in all three districts.

3. SUPPORT FOR INSTITUTIONAL DEVELOPMENT THROUGH GROW FUND

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 nonprogrammatic fund that helps in capacity building of an organization; supports core cost and the overall organization development. The funding period is from April 2022 to March 2024. The support takes care of the salaries of some of the core staff (partly or fully) and it enables senior team members to focus more fully on planning, organizing and executing high-priority tasks. A large number of efforts in the nature of taking stock, spring cleaning, cataloging, backups, etc. were planned and implemented. Key resource persons were identified and engaged in important activities such as – getting a professional opinion on accounting systems, review of accounts policy and presentations, training on soft skills related to computers etc. Institutional support was identified for some key activities like support for cataloguing our publications, storing and archiving of documents, support relating to the development of accounting systems and policies, orientation for information and possible linkages with - "Social stock exchange", Linkages with Corporate partners for support of various kinds. Commencement of work relating to some key activities at the level of planning and initial steps have been taken such as – improvement of design and production of annual reports, working on consolidated report of activities, strategic planning meeting etc. of CIKS. The task of classifying and organizing all the records and documents as an archive has been started and progressing well. Various efforts for networking and linking with / keeping in touch with other non-profits were initiated and developed – participation in the events of networks such as VANI, Account Aid India, and distribution of publications. A series of strategic planning team meetings were conducted. Samples of mementoes have been produced. Book fair visits were arranged and the staff were encouraged to purchase books to improve their reading and communication skills. 28th CIKS foundation day was celebrated at the Technology Resources Centre of CIKS in Chengalpattu district.

4. REPORT ON NAMMA NELLU PROGRAMME - CONSERVING TRADITIONAL RICE VARIETIES IN TAMIL NADU

The focus for 2022–2023 was on germplasm conservation, scaling up Traditional Rice Varieties (TRVs), and raising awareness. CIKS has conserved 160 varieties and good quality seeds were produced at the CIKS TRC (Technology Resource Centre) in 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 were done during this period. Seeds of ten varieties have been scaled up, trainer's training program was conducted and a manual was produced on TRV seed production during Navarai season in 2022. Seeds of six varieties have been scaled up in farmers' fields during Samba 2023. Sound raising equipment was purchased which has worked well in protecting the paddy fields against wild pig attacks. Selected TRVs were scaled up in 5000 acres in farmers' fields across nine districts of Tamil Nadu. Nutritional analysis for 83 TRVs was carried out looking specifically at micronutrient composition (Calcium, iron and zinc) 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. Indigenous food festivals were celebrated. Dishes prepared here have become part of the main menu in some restaurants. A wellknown chef cooked a few dishes with TRVs and shared them on her YouTube channel. More recipes using TRVs have also been formulated. We have also participated in exhibitions and expos to increase awareness of TRVs among people.

5. SUPPORT FOR SUSTAINABLE AGRICULTURE ACTIVITIES FROM WOKA FOUNDATION (December 2021 to November 2022)

Woka Foundation of USA provided support for sustainable agriculture activities of CIKS during the period December 2021 to November 2022. The support is for conservation, characterization, scaling up, studying biochemical and nutritional properties of TRVs as well as for building technical skills and soft skills of the team members. During this one-year period, 20 varieties are being cultivated and documented in the CIKS farm spread over 7.16 acres. Five varieties—Kamban samba, Sanna samba, Veethivadangan, Karungkuruvai, and Vellai kudaivazhai—have been scaled up to a total of about 270 acres. A set of 50 rice samples were given to a testing

laboratory for the analysis of moisture, ash, energy, carbohydrate, protein, fat, dietary fibre, sodium, potassium, iron, calcium, phosphorus, zinc and magnesium. The preliminary results have been obtained. Efforts were made to promote TRVs through programs involving chefs and collaborating with restaurants. The capacity building efforts have included technical areas such as paddy cultivation for seeds, as well as general areas such as using online communication tools like Zoom and Google Meet and video production.

6. SUPPORT FOR SUSTAINABLE AGRICULTURE ACTIVITIES FROM WOKA FOUNDATION (December 2022 to November 2025)

The Woka Foundation of USA extended their support for a three-year period in sustainable agriculture activities of CIKS. The project period is from December 2022 to November 2025. The support was for human resources, work relating to various aspects of TRV (Traditional Rice Varieties) including conservation, characterization, scaling up and biochemical and nutritional characterization as well as for building technical and soft skills of the team members. In addition to these, pilot efforts for decentralized production of inputs for sustainable agriculture and pilot efforts for value addition were carried out. Last year (2021 to 2022) an assessment of certain micronutrients like zinc, iron, calcium, and protein was done in a laboratory for 50 selected traditional rice varieties. This year, as a follow up to that we have assessed nutritional analysis for 34 traditional rice varieties. A booklet Traditional Rice Varieties-A Storehouse of Nutrition was published. This booklet highlights the nutritional and therapeutic properties of 20 traditional rice varieties. Capacity building trainings on both technical and non-technical topics was identified and conducted like photography and packaging and labeling training to the field staff. More trainings will be planned in the next few months.

7. VARIETAL DIVERSITY OF FRUITS AND VEGETABLES PILOT PROJECT

There is a stupendous diversity of fruits and vegetables in the Indian sub-continent. This diversity is valuable and important for various reasons including – their nutritional value, therapeutic and medicinal value and also what it contributes by way of resilience to climate change. This particular study mainly focuses on fruits, vegetables and medicinal plants because there has been no effort for a thorough or systematic study on this area namely the traditional knowledge and understanding of the nutritional and

therapeutic properties of traditional varieties of fruits and vegetables. The duration of this project is one year (October 2022 to September 2023). The following are the components of the varietal diversity of fruit and vegetables pilot project – Survey of Published Technical and Popular Literature such as books, magazines and journals, Information from traditional knowledge sources including Ayurveda and Siddha medical texts, Nighantus (Medical lexicons) and texts of Pakasastra (cooking) and Pilot field surveys in Tamil Nadu to identifying possible leads and locations and make a beginning with the field level conservation of five shortlisted varieties of fruits/or vegetables to be conserved in the CIKS farm and farmers' fields. The initial phase of the project has commenced with an extensive literature review, sourcing insights on varietal diversity in fruits and vegetables from both popular literature and technical journals. Subsequently, a comprehensive strategy was devised for conducting field surveys across ten districts in Tamil Nadu. A well-structured questionnaire was developed to capture nuanced data on varietal traits, and dedicated survey in charge teammates were appointed for each district. The primary objective of the field survey is to gather and acquire firsthand information about the cultivation, utilization, and conservation of diverse fruit and vegetable varieties in various regions. The field survey is set to commence next month.

8. NABARD – PODF: NURTURING OF SUSTAINABLE AGRICULTURE PRODUCER COMPANIES (PHASE – II)

This programme focused on nurturing of Sustainable Agriculture Producer Companies. CIKS has received sanction letter from NABARD (National Bank for Agriculture and Rural Development) for two Producer Companies, namely – Chengam in Chengam block and Managiri in Jawadhu Hills block of Tiruvannamalai district for a period of two years (April 2023 – March 2025). These two FPCs could receive support for remuneration to the CEOs (Chief Executive Officer) and support for conducting trainings to CEOs and BoDs (Board of Directors) over a period of two years.