

CENTRE FOR INDIAN KNOWLEDGE SYSTEMS

REPORT OF WORK DONE DURING THE PERIOD

APRIL 2017 - MARCH 2018

1. IMPROVING THE LIVELIHOOD AND FOOD SECURITY OF SMALLHOLDER TRIBAL COMMUNITIES THROUGH WADI MODEL AND INTEGRATED SUSTAINABLE AGRICULTURAL PRACTICES

This project is in progress in the Jawadhu hills block of Thiruvannamalai district of Tamil Nadu from May 2013 onwards with the support of the National Bank for Agriculture and Rural Development (NABARD). The project activities are being implemented in 39 hamlets with 1051 beneficiary households covering 400 acres in Kovilur panchayat. WADI (small orchard) fields with fruit crops and border crops have been raised in 400 acres by 511 beneficiary households. Sustainable agricultural technologies like organic nutrient management, intercropping and soil conservation against erosion are being implemented in these WADI fields. Under other livelihood activities component of this project, 551 beneficiaries are involved in various microenterprises like rearing of cows, goats and pigs, maintaining tailoring unit, pettishops, poultry incubation unit and fodder cultivation. Many traditional vegetable varieties and their seeds have been conserved through kitchen gardens raised by the beneficiary households. Smokeless *chulhas* have been provided for the beneficiaries. Beneficiaries are utilizing the agricultural implements including a tractor maintained at the Seramarathur Agricultural Machineries Facilitation Centre with minimum rental charges. An Integrated Centre comprising of oil extraction unit, little millet processing unit and the community storage facility is being utilized efficiently. Under this programme, 56 Participants Groups (PGs), a Village Planning Committee and 18 Farmers' Clubs are in place. A total of 40 vermicompost production units have been established and the farmers maintaining the units are using the vermicompost for their own use. Various training programmes comprising of technical trainings, institutional building, health and enterprises related techniques were conducted for the beneficiaries.

2. SCIENCE AND TECHNOLOGY INITIATIVES FOR SUSTAINABLE AGRICULTURE – DST CORE SUPPORT PROGRAMME – PHASE II (2013 - 2018)

CIKS has been recognized as an institution for Core Support by the Department of Science and Technology of the Government of India since 2002. Under this programme, CIKS had focused on activities that could complement and integrate with local efforts of promoting organic cultivation practices. Six community vermicomposting units and 12 individual units are in place in two districts with an average production of 42 tonnes per year. Two community (Biopesticidal) soap making units are in place which produced 965 kg during the period 2017 – 2018. Four types of oil soaps - neem oil soap, pongam oil soap, neem and pongam oil mixed soap and neem and mahua oil mixed soap were formulated and tested for efficacy. A total of 47 trainings were conducted on varied topics including – Neem oil based flakes, biofertilizers, seed and vermicompost production and traditional paddy varieties. A total of 1022 farmers (including 408 women) participated in these programmes. The biofertilizer unit is functioning with regularized production. A total of 549 farmers were trained on the uses of biofertilizers through 28 training programmes. Conservation and organic seed production of indigenous paddy varieties was taken up in two demonstration farms at Nagapattinam and Kancheepuram district. A total of 103 traditional paddy varieties were conserved and the characteristics of these paddy varieties were documented. Nearly 700 farmers from three districts were trained on seed production and organic cultivation of indigenous paddy varieties. A total of 48 acres were cultivated with traditional paddy seeds and about 10 times of seeds were produced. Two Farmer Producer Companies viz. Valanadu and Marutham Sustainable Agriculture Producer Company in Nagapattinam and Thiruvannamalai districts are functioning with a total of 5850 shareholders. Fifteen training programmes on accounting procedures, statutory compliances, marketing strategies etc., were conducted for the shareholders. Members of the Expert Committee from DST visited Sirkazhi project area in May 2017 and had a detailed interaction with beneficiaries. On 29th and 30th May 2017, A.V. Balasubramanian and Subhashini Sridhar participated in a meeting organized by DST in Lucknow and made a presentation about the activities carried out during the current phase and also presented the

proposed activities for the future phase. The current phase of this project has concluded in March 2018.

3. STRENGTHENING OF FARMERS THROUGH SUSTAINABLE AGRICULTURE IN ALANGADU VILLAGE – PHASE IX & X

This project has been implemented in Alangadu village of Sirkazhi taluk since 2009 and this focuses mainly on the strengthening of women groups and farmers through Sustainable Agriculture and Livelihood Enterprises. A total of four farmers' groups - two groups involving men and two groups involving women exist in the village. The irrigation channel in the village has been desilted for 3.5 kms in August 2017. Under the project, 125 saplings of six different tree species have been planted on the sides of irrigation channel. A community vermicompost unit and a community tailoring cum palm products production unit are functioning in the village involving women beneficiaries. Fourteen women are involved in the maintenance of these units and they are provided with necessary trainings and marketing support through Valanadu Producer Company and *Thughil*, an outlet promoting handicrafts in Chennai. A total of 20 new women members from Alangadu and Aachalpuram villages were trained on the production of palm based handicrafts. An exposure visit was organized for 15 women to Manapadu Palm Products Society in September 2017. A total of 60 students from Alangadu and neighbouring villages and four part time teaching volunteers are part of the *Arivu maiyam* (evening tuition centre) functioning in a common panchayat building. Six students and three teachers participated in a training programme on crafts and handwork held at Marutham School in Thiruvannamalai between 13th - 17th November. A two day training on yoga was conducted for the children and adults by eminent teachers from Bihar School of Yoga in February 2018. A new building for tuition centre is being constructed in the village and the work is nearing completion.

4. SUPPORT FOR VALANADU SUSTAINABLE AGRICULTURE PRODUCER COMPANY LIMITED (VSAPCL) FROM RABO BANK FOUNDATION

This project implemented with the support of the Rabo Bank Foundation, Netherlands from January 2015, concluded this year. The main objective of the project was to assist and build the capacity of the Valanadu Sustainable Agriculture Producer Company Limited (VSAPCL), which was promoted by CIKS in Nagapattinam district. Efforts were taken to create a new brands and product labels. A new brand

named “*Poonthazhai*” was developed for the agri-inputs and for the value added products a brand named “*Pavai*” was developed. The products like vermicompost, oil soaps, biofertilizers, value added products etc., produced by the women groups are being marketed under these brands. Valanadu team participated in the interactive session on scaling up of organic farming technologies and way forward and also in traditional seed conservation - scaling up of initiatives held at Sustainable Livelihood Institute in Auroville. A total loan of 80 lakhs has been obtained from NABKISAN and FWFB, Gujarat. Support has been provided to 168 women for the purchase of milch animal and 46,021 litres of milk has been produced and sold for Rs.11.89 lakhs. Paddy seeds and grain worth about Rs. 18 lakhs were procured.

5. SUPPORT FOR FARMER PRODUCER ORGANISATIONS THROUGH TRAINING PROGRAMMES

NABARD has been promoting FPOs (Farmer Producer Organisations) in various parts of India of which 170 FPOs are being promoted at present in Tamil Nadu and Puducherry with the support of 25 POPIs (Producer Organisation Promoting Institutions). CIKS has been identified as one of the RSA (Resource Support Agencies) to provide the capacity building training to these POPIs. CIKS had conducted such training programmes for the POPIs during the last two years. This year, CIKS had conducted two such training programmes, in two batches at Chennai and in Nagapattinam districts during October 2017 and February 2018. The first phase of the training programme was of three days duration was conducted in October 2017 with a field visit which included interactions with the Directors of the Producer Companies promoted by CIKS. The classroom sessions focused on topics which were relevant to the FPOs in their second or third year of operations, such as preparing legal contracts, accounting procedures and compliances, planning for business, branding, labeling and packaging, marketing, procedures for availing credit and Equity Grant Support, GST (Goods and Services tax) and good practices. A follow up two day training programme was conducted in February 2018, where some of the selected topics were revisited so that the participants could have a detailed discussion with the resource persons. Totally 45 delegates representing 17 POPIs participated in the first training programme and 38 delegates representing 14 POPIs participated in the second training programme. The participants also discussed their future plans for

the Producer Companies and the nature of support expected from NABARD and other agencies.

6. CAPACITY BUILDING SUPPORT FOR SMALL AND MARGINAL FARMERS PRODUCER COLLECTIVES IN TAMIL NADU - PROJECT SUPPORTED BY FWWB

In November 2017, the Centre for Indian Knowledge Systems (CIKS) signed an MoU with Friends of Women's World Banking (FWWB) for a project to be carried out over a period of one year from 1st January 2018 onwards. The project has the following three components. The first component is "Training of Trainers" under which comprehensive training will be provided to a group of 10 - 12 persons who will serve as trainers for Board members and staff. The second component is "Training of Board members and staff" under which training will be provided to a group of 120 persons from amongst the Board members and staff. The third component is the preparation of resource materials in the form of booklets / manuals on four identified topics. During the months of February and March 2018, two Trainers' Training Programmes have been completed in Chennai. Each one was attended by about 15 Master trainers. The topics covered during the first training programme were various aspects of marketing including retail marketing, online marketing, branding, packaging and labeling, requirements of FSSAI (Food Safety and Standards Authority of India) as well as GST (Goods and Services Tax). The topics covered during the second training programme were various documents to be maintained with respect to accounts and audit, generation and interpretation of financial reports as well as credit rating and NPA (Non Performing Assets). In addition there were presentations on various aspects of contracts including a general introductory session, contracts commonly entered into farmers collectives such as for – loans, marketing, renting of space for office / godown as well as service contracts. There was also a presentation on internet and digital banking transactions. In terms of the training of Board members, a set of 152 persons representing 11 Farmer Producer Organisations have been identified as trainees. These include shareholders, promoters and Board members of Farmer Producer Organisations. Training programmes have commenced during the month of March. The work relating to resource material is in the initial planning stage.

7. PROMOTION OF FARMER PRODUCER ORGANIZATIONS IN TAMIL NADU – SFAC (PHASE I, II & III)

The Small Farmers Agri Business Consortium (SFAC) has identified CIKS as a Resource Institution for the Formation and Strengthening of Farmer Producer Organizations (FPOs) in December 2014. The activities of this project are in progress in five districts of Tamil Nadu – Cuddalore, Thanjavur, Nagapattinam, Thiruvannamalai and Perambalur. Five Farmer Producer Companies with 5260 shareholders are being supported in these five districts and we are closely working with the Department of Agri-Marketing and Agri-Business. Equity grant of SFAC has been availed for Cuddalore, Nagapattinam and Thiruvannamalai FPCs. Series of orientation and technical trainings and meetings were organized for the shareholders, BoDs, FIG members and leaders. Cuddalore District Mangalore Millets Farmers Producer Company is maintaining a retail outlet cum oil extraction unit at Avatti village and an input shop in Keezhakalpoondi village. Recently it has got the sanction for establishing a Millet processing unit from MSDA Value Added Products Machinery Centre under the Department of Agriculture Engineering, Cuddalore. Raja Raja Chozhan Farmers Producer Company in Thanjavur has purchased land and constructed a dhal mill in March 2018. The company has retail outlets at *Uzhavar santhai* in Thanjavur and in Ammapettai and input shops at three locations in Thanjavur district. It has purchased 94 tonnes of paddy seeds and sold through the input shops. It also procured 118 tonnes of blackgram from shareholders in collaboration with National Agricultural Cooperative Marketing Federation of India Ltd. Veerachozhan Farmer Producer Company in Nagapattinam district has procured 169.8 tonnes of paddy grains from the shareholders. Technical training on new varieties and cultivation techniques of paddy was conducted for the shareholders at Agricultural Engineering College and Research Institute in Trichy. Trainings on JLG formation and its importance was conducted for the FIG members. Following this, 20 JLGs have been formed and six JLGs have availed the dairy and poultry development loan from Canara Bank in Mayiladuthurai. Thenpennai Farmer Producer Company in Thiruvannamalai district has purchased land and constructed a dhal mill in Radhapuram village. Perambalur District Maize and Small Onion Producer Company is working in collaboration with the IIFPT (Indian Institute of Food Processing Technology) in Thanjavur towards value addition activities and training on onion

value addition. An onion incubation centre was inaugurated on 31st August 2017. Market tie up was made with Kerala State Marketing Federation Ltd., and 49.5 tonnes of onion worth Rs.5.50 lakhs was marketed. A one day technical training on onion value addition was conducted at IIFPT, Thanjavur for 120 shareholders in February 2018.

8. PROMOTION OF FARMER PRODUCER ORGANIZATIONS IN TAMIL NADU – SFAC (PHASE IV)

The Small Farmers Agri Business Consortium (SFAC) has sanctioned the fourth phase of the project for the Formation and Strengthening of Farmer Producer Organizations (FPOs) in October 2016. Work under this project is in progress in Cuddalore, Tiruvarur, Thanjavur, Thiruvannamalai (Thiruvannamalai and Cheyyar blocks) and Kancheepuram districts of Tamil Nadu. A total of six FPOs have been promoted in these districts. Peravoorani Coconut Agro Producer Company in Thanjavur district has availed working capital loan from FWWB, Gujarat. Technical trainings on Nccra production at IIFPT, Thanjavur and Marketing strategies for coconut at Thiruchitrabalam were conducted for the shareholders. Exposure visits were organized to CODISSIA Agri fair and Coconut fair held in Coimbatore in July 2017 and in February 2018, respectively. An input shop has been opened at Thiruchitrabalam in November 2017. Tiruvarur Farmers Producer Company is involved in the *Fazal Bheema Yojna* scheme in collaboration with KKFF, Thiruvenkadu. It has procured 2.4 tonnes of neem seeds and 2.7 tonnes of black gram from shareholders. Fourth Annual General Body Meeting of the FPC was conducted in September 2017. A community vermicompost unit established in Melapanaiyur village is functioning successfully with regular production. Veerannarayanan Agriculture Farmers Producer Company in Cuddalore district has opened two input shops at Pinnalur and Kattumannarkovil blocks. Exposure visits were organized to Valvil FPC in Namakkal, Raja Raja Chozhan FPC in Thanjavur and to IIFPT in Thanjavur. A total of 23 trainings were conducted for 570 members. Training on new varieties of paddy and cultivation techniques was conducted for the shareholders at Agricultural Engineering College and Research Institute in Trichy. The company has procured 67.7 tonnes of paddy during February 2018. Kanchi Farmer Producer Company in Kancheepuram district has opened an input shop in Thirukazhukundram. The Annual General Body Meeting was conducted in July 2017. Technical and

orientation trainings were organised for the shareholders. Cheyyar and Groundnut Farmers Producer Companies in Thiruvannamalai district are operating with 2048 shareholders. They have opened input shops for the sale of seeds, fertilizers etc. Demonstrations and technical trainings on seed production, vermicomposting, CO-8 red gram cultivation, yield increasing techniques etc., were conducted for the shareholders. Annual General Body meetings were conducted in 2017.

9. PROMOTION OF FARMER PRODUCER ORGANIZATIONS IN TAMIL NADU (POPI I)

This programme implemented under the Producers Organization Development and Upliftment Corpus (PRODUCE) Fund scheme of NABARD from April 2015, concluded in March 2018. Under this programme, six Farmer Producer Companies comprising of 5125 shareholders have been promoted in Kancheepuram, Dindigul, Thiruvannamalai and Ramanathapuram districts. To build the capacities of Board of Directors, Chief Executive Officers and shareholders different kinds of technical, managerial, financial and legal training programmes and exposure visits were organized. Monthly meetings of the Board of Directors and project review meetings were also conducted regularly in all the districts. Necessary licenses required for the business have been obtained for all the Producer Companies. Six Agro Service Centres have been established through these FPCs in their respective working areas. Through these Centres supply of various inputs, groceries, cattle feed and knowledge dissemination activities are being carried out. Credit linkages for working capital and milch animal purchase were created with the Friends of Women's World Banking (FWWB), Ahmedabad, Samunnati, Chennai and NABKISAN, Chennai. All the six Producer Companies under this programme have got the Equity Grant Fund from SFAC.

10. PROMOTION OF FARMER PRODUCER ORGANIZATIONS IN TAMIL NADU (POPI II)

This project is being implemented under the NABARD's PRODUCE Fund scheme from August 2015 onwards. A total of four Farmer Producer Companies with 2281 shareholders have been promoted in Thiruvannamalai and Dindigul districts. Series of technical, managerial, financial and legal training programmes and exposure visits were organized to build the capacities of Board of Directors, Chief Executive Officers

and shareholders. Monthly project review meetings and Board of Directors meetings were conducted regularly. Necessary licences required for the Producer Companies were obtained. Four Agro Service Centres have been established through these FPCs in their respective working areas. Through these Centres supply of various inputs, groceries, cattle feeds and knowledge dissemination activities are being carried out. Credit linkages were created with the FWWB, Ahmedabad, Samunnati, Chennai and NABKISAN, Chennai for working capital and milch animal purchase. All the four Producer Companies under this programme have got the Equity Grant Fund from SFAC.

11. PROMOTION OF JOINT LIABILITY GROUPS AND CREATING CREDIT LINKAGES IN KANCHEEPURAM, THIRUVANNAMALAI AND RAMANATHAPURAM DISTRICTS

This project to promote Joint Liability Groups (JLGs) in Kancheepuram, Thiruvannamalai and Ramanathapuram districts is being implemented from March 2015 with the support of NABARD. Under this project, it has been proposed to promote 600 JLGs, 200 each in Kancheepuram, Thiruvannamalai and Ramanathapuram districts. In Kancheepuram district, Uthiramerur, Achirapakkam, Madhuranthakam and Thirukazhukundram taluks have been selected and a total of 50 JLGs have been formed. In Thiruvannamalai district, Vandavasi, Thellar, Peranamallur and Chetpet taluks have been selected and 23 JLGs have been promoted. In Ramanathapuram district, Kamudhi and Paramakudi taluks have been selected and 21 JLGs have been promoted. Savings bank accounts have also been opened for all these JLGs. Efforts are on to promote remaining number of JLGs and to create credit linkages with financial institutions.

12. INCREASING THE INCOME LEVEL OF FARMERS THROUGH PRODUCTION, VALUE ADDITION AND MARKETING OF INDIGENOUS RICE VARIETY – *SEERAGA SAMBA*

This project implemented in Thiruvannamalai district with the support of NABARD under its Farm Sector Promotion Fund (FSPF) from April 2016, concluded in this financial year. Project activities were implemented in Vandavasi, Thellar and Peranamallur blocks. Literature survey and physical survey on the availability of indigenous paddy varieties was conducted. A total of 589 farmers including 294

women were trained through 30 training programmes on organic farming, indigenous rice varieties, seed production techniques and value addition of rice. Four exposure visits were also organized for the beneficiaries to CIKS Indigenous Seed Conservation Centre in Sukkankollai and *Seeraga Samba* Seed Production and Processing Unit in Kalavai, Vellore district. Resource materials on Organic Paddy Cultivation and Traditional Paddy Varieties were distributed to the beneficiaries. Demonstration fields were established by the beneficiaries in 10 acres to demonstrate various sustainable organic cultivation techniques. Nearly, 38 metric tonnes of *Seeraga Samba* grains were procured from the farmers. Trade mark registration has been completed. A documentary video film about the project has been produced. A paddy huller machine has been purchased under the project and being utilized efficiently.

13. INCREASING THE INCOME LEVEL OF FARMERS THROUGH PRODUCTION, VALUE ADDITION AND MARKETING OF INDIGENOUS RICE VARIETY – KUZHIADICHAN

This project implemented in Ramanathapuram district with the support of NABARD under its FSPF programme concluded in this financial year. In Ramanathapuram district, the project work was implemented in Kamuthi, Paramakudi and Mudhukulathur blocks. Literature survey as well as physical survey on the availability of indigenous paddy varieties was conducted in Ramanathapuram, Pudukottai and Tuticorin. Beneficiaries were trained on organic farming, indigenous rice varieties, seed production techniques and value addition of rice through 30 training programmes. Four exposure visits were organized for the beneficiaries to CIKS Indigenous Seed Conservation Centre in Sukkankollai. Demonstration fields were established in 10 acres. Resource materials on Organic Paddy Cultivation and Indigenous Paddy Varieties were distributed to the beneficiaries. Trade mark registration has been completed. A documentary video film about the project has been produced. A paddy huller machine has been purchased under the project and being utilized efficiently.

14. INCREASING THE INCOME LEVEL OF FARMERS THROUGH PRODUCTION, VALUE ADDITION AND MARKETING OF INDIGENOUS RICE VARIETY – *KITCHALI SAMBA*

This project from NABARD under its Farm Sector Promotion Fund (FSPF) is in progress in Kancheepuram district from April 2017 onwards. Project activities are in progress in Uthiramerur, Madhuranthagam and Achirapakkam blocks. Beneficiaries were trained on indigenous rice varieties, organic farming and seed production technologies through 10 training programmes. Two exposure visits were also organized to the CIKS Indigenous Seed Conservation Centre in Sukkankollai village of Kancheepuram district. Information booklets on Organic Paddy Cultivation and Traditional Paddy Varieties have been distributed to the beneficiaries. Demonstration fields were established in 10 acres by the beneficiaries. Procurement of *Kitchali Samba* grains from the beneficiaries is in progress. A documentary video film about this project is also at the finishing stage.

15. A PILOT PROGRAMME FOR INITIATING RURAL WOMEN INTO AN ENTERPRISE USING BIOMASS DRYERS UNDER AICRP ON BIOMASS BASED TRAY DRYERS - DINDIGUL DISTRICT, TAMIL NADU

This pilot project is in progress in Sendurai and Mallanayakkanpatty villages of Natham taluk in Dindigul district with the support of DST since August 2016. Under this project, two women groups have been identified to become entrepreneurs by using this biomass dryer. Two biomass dryers have been installed in Kalathupatty and Mallanayakkanpatty villages. Awareness meetings on the utilization of biomass dryers were conducted for the women groups. Trial run has been done with Brinjal, Bhendi, Tomato, Coconut, Banana, Bitter Gourd and Neem leaves. Efforts are on for the standardization of products, packaging and test marketing. Expert Committee on Science and Technology for Women and the Group Monitoring Workshop was conducted on 14th of November 2017 at the Indian National Science Academy (INSA), New Delhi. On behalf of CIKS, the Principal Investigator of the project K. Subramanian participated and presented the progress made in this project.

16. RETAINING VILLAGE YOUTH IN AGRICULTURE THROUGH CAPACITY BUILDING PROGRAMMES – A PILOT PROGRAMME IN NAGAPATTINAM DISTRICT

This project implemented with the support of Rabo Bank Foundation, Employee Fund and co-financed by NABARD, Chennai concluded in January 2018. Sixty beneficiaries including twelve women from four blocks of Nagapattinam district are part of this project. They were trained on various technologies, credit availing strategies and marketing aspects through 75 training sessions. Beneficiaries were taken to the other districts like Tirunelveli, Coimbatore and Trichy in Tamil Nadu and to Karnataka to learn various technologies relating to organic vegetable production, marketing of organic seeds, dairy activities, value addition processes etc. As a result of the continuous effort of DDM of NABARD, Nagapattinam and CIKS Sirkazhi team, credit linkages have been established with the Bank of Baroda in Mayiladuthurai (Rs.9 lakhs) for creating integrated farms and with the State Bank of India in Sirkazhi (Rs. 6.60 lakhs) under its MUDRA (Micro Units Development and Refinance Agency) Agriculture Term loan for cattle rearing. Mr. S. Nagoor Ali Jinna, CGM of NABARD, Chennai had a discussion session with beneficiaries of the project on 17th September 2017 at Sirkazhi. As part of the monitoring visit, Mrs. Mildred Xess, General Manager of NABARD Chennai visited Sirkazhi in January 2018 and had interaction with beneficiaries. The activities and the outcome of the project was presented in the International Conference on “Invigorating Transformation of Farm Extension towards Sustainable Development: Futuristic Challenges and Prospects” held in Tamil Nadu Agricultural University (TNAU), Coimbatore between 9th - 10th March 2018. This presentation has won “Best Paper Award” in the conference.

17. RETAINING VILLAGE YOUTH IN AGRICULTURE THROUGH CAPACITY BUILDING PROGRAMMES – A PILOT PROGRAMME IN NAGAPATTINAM DISTRICT

This project implemented with the support of NABARD, Chennai and co-financed by Rabo Bank Foundation, Employee Fund concluded in January 2018. Sixty beneficiaries including five women from four blocks of Nagapattinam district are part of this project. They were trained on various technologies, credit availing strategies and marketing aspects through 75 training sessions. Beneficiaries were taken to the other districts like Tirunelveli, Coimbatore and Trichy in Tamil Nadu and to

Karnataka to learn various technologies related to organic vegetable production, marketing of organic seeds, dairy activities, value addition processes etc. Credit linkages have been established with the Bank of Baroda in Mayiladuthurai (Rs.9 lakhs) for creating integrated farms and with the State Bank of India in Sirkazhi (Rs. 6.60 lakhs) under its MUDRA (Micro Units Development and Refinance Agency) Agriculture Term loan for cattle rearing. Mr. S. Nagoor Ali Jinna, CGM of NABARD, Chennai had a discussion session with beneficiaries of the project on 17th September 2017 at Sirkazhi. The activities and the outcome of the project was presented in the International Conference on “Invigorating Transformation of Farm Extension towards Sustainable Development: Futuristic Challenges and Prospects” held in Tamil Nadu Agricultural University (TNAU), Coimbatore between 9th - 10th March 2018. This presentation has won “Best Paper Award” in the conference.

18. NFSM – AGRICULTURE DEMONSTRATION FOR PULSES IN THANJAVUR DISTRICT

This project implemented with the support of the Department of Agriculture in Thanjavur concluded in this financial year. Activities of this project were implemented in Ammapettai, Orathanadu and Bhudalur blocks of Thanjavur district. In each block, 100 ha of demonstration plots were identified and provided with the seeds of new varieties of pulses by the Department of Agriculture. Training sessions were organised for the beneficiaries by CIKS on topics such as, characteristics of new varieties, yield parameters, organic methods of seed treatment, pest and disease management, harvesting techniques and post harvest management. As part of the programme, Field days were organised by visiting the demo fields in respective blocks. Totally 15 training sessions were conducted and 300 farmers participated in the programme.

19. NAMMA NELLU - CONSERVING INDIGENOUS RICE VARIETIES IN TAMIL NADU

Namma Nellu is an initiative of Centre for Indian Knowledge Systems (CIKS) to conserve traditional rice varieties in Tamil Nadu. Through this programme, 138 traditional paddy varieties have been conserved this year. The conservation of traditional paddy varieties took place at two different locations in Tamil Nadu during Samba 2017 (August 2017 to February 2018). We have also cultivated six traditional

paddy varieties in a larger area at CIKS farm. We have produced over 3.5 tonnes of seeds from 138 varieties which can be used for cultivation in the forthcoming year. In the same season, seeds of 11 different traditional paddy varieties were distributed to 17 farmers in Nagapattinam district under this programme and marketing arrangements were facilitated by CIKS through the Producer Companies. During the cultivation process, we have documented various agronomical properties of the varieties. In the following Navarai season 2018 (January 2018 to April 2018), four different varieties of paddy have been cultivated in the CIKS research farm at Kancheepuram district. Now the crop is in harvesting stage. During the same season, nine varieties were distributed to the farmers in Kancheepuram and Thiruvannamalai districts for larger cultivation. Nearly 25 tonnes of 14 traditional paddy varieties namely *Kitchali samba*, *Seeraga samba*, *Kuzhiadichan*, *Mappillai samba*, *Kaivirai samba*, *Kattu kuthalam*, *Vellaikaar*, *Sigappu kuruvikaar*, *Soorankuruvai*, *Rasagadam*, *Karunkuruvai*, *Karuppu kowni*, *Sigappu kowni* and *Salem Sanna* that was harvested from Samba 2017 season were procured by Kanchi Sustainable Agriculture Producer Company. We have also done a study on the cooking qualities of identified 20 varieties. Details about this programme can be found in a website (www.nammanellu.com) that is dedicated to this programme.