

ANNUAL REPORT 2018-19



**Cornell Sathguru Foundation
for Development
(CSFD)**

CHAIRMAN'S WORDS

BODY

NAME

Creating an enabling environment for promoting sustainable social development through life sciences and technology



VISION



MISSION

To contribute towards sustainable agriculture and development by enhancing capacities, knowledge creation, promoting entrepreneurship and gender equity

FOCUS AREAS



**RETAINING
YOUTH IN
AGRICULTURE**



**PROMOTING
AGRIPRENUERSHIP**



**PROMOTE INFORMATION AND
TECHNOLOGY FOR SOCIAL DEVELOPMENT**

INITITIVES OF 2018-19



Improving Agriculture Productivity through Community Solar Fence



International Agriculture and Rural Development



Gene Editing



One Health Summit

Improving Agricultural Productivity of Small and Marginal Farmers by Installing Solar Fence

Paniyal and Badampet, villages in Sangareddy, Telangana, constantly are haunted by animal attacks that affects the farming community at several levels. The frequent animal attacks has lowered the incomes of the farming community and destroyed the crops. Due to the constant threat, the farmers avoided growing food crops and only grew cotton from several years

Understanding this grave problem, Cornell Sathguru Foundation for Development (CSFD) in partnership with Aurobindo Pharma Foundation has introduced a meaningful intervention in the villages of Hathnoora Mandal, Sangareddy, which is plagued by animal menace. With an intention to improve the agricultural productivity of the farmers and to reduce animal menace, community solar fence for around 100 small & marginal farmers and their families, belonging to Badampet and Paniyal villages, was erected covering an area of 163 acres. The project ensured almost equal representation of both women and men farmers among the beneficiaries.

Community solar fence covering

165
ACRES

Reaching out to

70
FARMERS AND THEIR
FAMILIES

The project aims to benefit the farmers in improving agricultural productivity, growing more food crops ensuring food safety, resuming crop rotation, and ultimately help them in increasing their income levels. Another significant impact of the project is in terms of improving the health and productivity of the farmers, which otherwise, was deteriorated due to the constant requirement of watching and patrolling the farmlands in the night to avoid the animal raids.



In the month of June 2018, trainings were imparted to farmers on the utility of the solar fence, alarming systems, precautions to be taken and maintenance techniques for effective functioning of the solar systems. Farmers thoroughly observed and got hands on to its procedure and functionality. Training was imparted to farmers from both the villages.

Apart from facilitating the farmers in using renewable energy and technology to resolve their grave issues, CSFD facilitated in establishing farmers' club in both villages which will aid these small and marginal farmers in technology transfer, knowledge sharing, procuring common subsidies, access to credit institutions, etc., The responsibility of maintaining of agriculture solar fence is taken up by the community through these farmer clubs making this project sustainable. These clubs also acts like a platform for them to discuss and resolve problems facing in the farmers' commune in the villages.



Paniyal Farmers' Club was named by the club as "Adarsha Raitu Sangam" and Badampet Farmers' Club is named as Hanuman Rythu Mitra Sangam.



The Community solar fences at Paniyal and Badampet villages were inaugurated on 29th September 2018 at 11am. During this occasion, Mr. Rangunathan, CSFD General Secretary, local MLA Madan Reddy, , representatives from Aurobindo Pharma Foundation, local leaders and project beneficiaries were present during the occasion. Farmers expressed happiness of handing over the project to them and assured that they would maintain the solar fence and switch to food crops completely in next crop season. During this occasion farmers who already started growing food crops has shared their experiences and their future plans.



Voice Of Farmers

Lakshmi, a single mother, lives with her two children and aged parents. After erecting the community solar fence covering her farmland, she is growing maize and two varieties of pulses by intercropping. She feels empowered and is delighted to resume growing food crops. She says “I am relieved of the fact that I don’t have to stay up all night to watch the farms and can sleep at peace and get back to work in the morning with much more energy and productivity. In the next season I plan to grow chickpea and pulses.”



Yadagiri is eldest among his 4 siblings and leads his family of 12 members which includes his parents and his brothers’ families. Together they own 14 acres in which they are now growing paddy after being a beneficiary of this community solar fence project. His mother, Ms. Bantu Laxmamma, recalled “For past few years we could not cultivate paddy and were buying rice from market, but, now we are happy that we can grow our own food.” Yadagiri mentioned that in the next season he is planning to cultivate chickpea, ginger and chilies.

Ajay, an enthusiastic youth of Paniyal has completed his bachelor's degree in Arts. He takes pride in getting back to his family occupation of fishing and agriculture. Prior to taking this decision, he had tried working in some companies which made him realize that going back to agriculture and fishing is more respectable. His family owns an acre of land in Paniyal which was barren. Currently he started growing cotton, but, is planning to switch to chickpeas in the next season. He said that, "Through fishing I earn around Rs. 15000 a month and due to the erection of community solar fence covering my farmland, income from agriculture will be a bonus to my family."



Buchireddy, the ex sarpanch of village, is an agriculture graduate and progressive farmer in Badmapet. He always believed that agriculture is key for economic development. After completing his studies, he completely shifted to farming. He always experimented with different crop varieties and adopted the latest agricultural practices. After the erection of community solar fence, he is venturing into papaya plantation which is spread across four acres of land and he mentioned that "After 8 months the fruits would be market ready to fetch me an income of rupees one lakh per acre per month. I am also planning to get back to growing sugarcane in the next season."

International Agriculture and Rural Development

IARD is a course being offered by Cornell University for the last thirty years and is a part of International Agriculture and Rural Development with 30 credits. The course is aimed at enhancing competencies of students to understand and address the transitions in agriculture and emerging trends.

CSFD facilitated the program in collaboration with State Agriculture universities in India and Cornell University, USA.


IARD 2018-19

IARD 4020

 **USA**



IARD 6020

 **India**

Participating Universities

Cornell University, USA



Kerala Agriculture University, Thrissur

University of Agricultural Sciences, Dharwad



Assam Agricultural University, Jorhat

For the year 2018-19, 12 meritorious students pursuing agricultural sciences and 3 senior faculty were identified and selected from 3 state level agriculture universities to provide intensive training and exposure on IARD.

Students and the faculties were given scholarship to participate in IARD 4020 and 6020 programs. The project provides equal opportunity for men and women and will have 50% of women as key stakeholders.

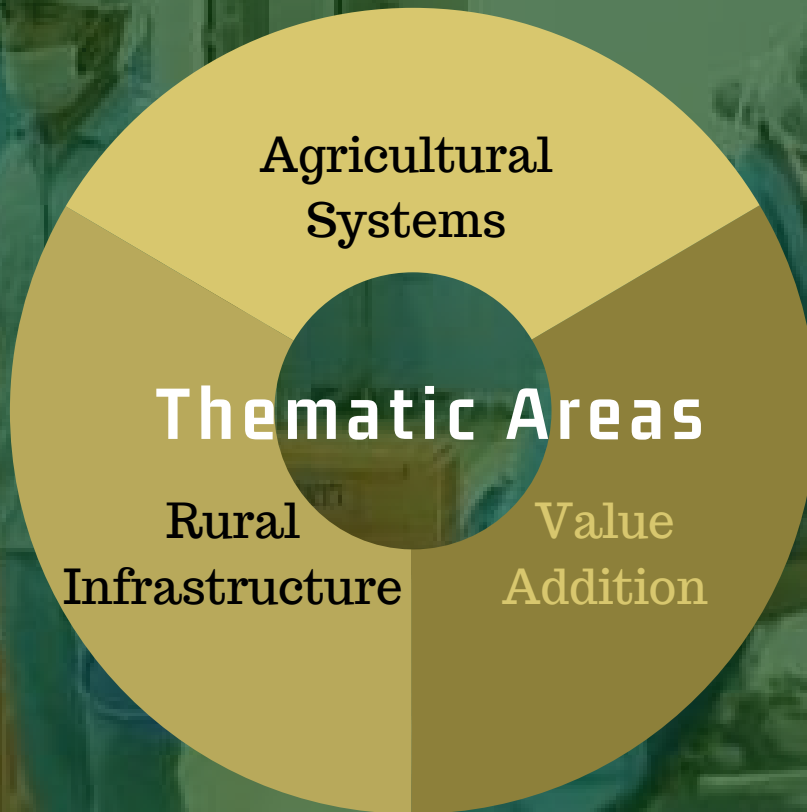
Timeline of IARD

Selection of Indian Universities and Students

Commencement of IARD 4020

Visit to Cornell, USA for IARD 4020

Participants can choose from 3 Thematic areas..



Presentations, Writing Papers & Assessments

Visit to India for IARD 6020



402 ,which includes 14 lectures (2 credits), was made available by both video streaming technology and black boards (an online learning platform exclusive to CU students). Students were introduced to both the major issues in international agriculture and rural development as well as the ways in which the problems are being addressed in various countries.

The lectures/discussions aimed to establish the global and regional contexts for sustainable agricultural development and focused specifically with latest technological advancements in agriculture to help motivate the students to learn, adopt and innovate in India.

6020 course curriculum included, a two week field-study trip, individual reflection papers of the trip, group discussions, project presentations addressing the challenges in food, agriculture, post-harvest and livestock production in the context of social and economic conditions of India.



The program provided an opportunity to students and the faculty to interact with experts from industry, academia, policy planners.

IARD gave scope for the students and faculty to attend various informative lectures and discussions which aided to facilitate students to gain an overarching global perspective in tandem to regional milieu in terms of sustainable agricultural development. It also offers a wide exposure to specific development challenges in India.

Impact of IARD



**Laying a stepping stone
for students to become**

- Agri- Entrepreneurs
- Extension Personnel
- Trainers
- Researchers
- Program Managers
- Policy Makers- private & public

..and influencing policy

The program helps in providing a space to improve the capacities of professionals working for agriculture and rural development. The faculty, who will be provided exposure to global trends and systems in agriculture and social development, will be able to percolate the knowledge to a lot of students through developments in the curriculum. The students on the other hand are given an opportunity to widen their horizons of understanding agriculture and social development. The students will further in their career will chair many positions in various professional roles will be able to contribute to the development directly. Some students who decide to pursue career as policy makers will help in implementing the knowledge they gained through this program in the policies beneficial for the development of the country. Many participants, after gaining knowledge from the program, come back to their communities to innovate and provide solutions to local problems.

In the words of Participants..

“It was excellent to exposure, experience and expects to bring change in rural infrastructure with suitable techniques. The course is designed with safety and convenience to the most enthusiastic and commitment leaders and coordinators have taken care of the participants with core with full of spirit. Keep it up. Thank you.”



One Health India Conference 2019

One Health has been defined as “a collaborative, multisectoral, and transdisciplinary approach—working at local, regional, national, and global levels—with the goal of achieving optimal health outcomes recognizing the interconnection between people, animals, plants and their shared environment.” (CDC)

To recognize and promote this approach CSFD actively participated in organising One Health India Conference, 2019 in New Delhi, India on 18th-19th July, 2019 which was convened by Department of Biotechnology (DBT), Ministry of Science & Technology, Government of India partnered with several Government of India departments such as Departments of Agriculture Research and Education (DARE) and Animal Husbandry, and collaborated with The Bill & Melinda Gates Foundation Institute of Animal Health and Veterinary Biologicals (IAHVB) Penn State University, USA.

As stated in the One Health Declaration, "The conference served to launch India's new One Health Initiative - an intersectoral approach to tackling the most urgent health threats. The convening brought together thought-leaders from India and around the globe, providing a platform for researchers, medical and veterinary practitioners, public and private sector stakeholders, and policymakers to integrate knowledge and identify needs and opportunities to better coordinate activities and address major human, animal, and environmental health challenges. The conference outlined a pragmatic and flexible action plan for the response, preparedness, and management of current regional, national and global health challenges using a One Health collaborative approach. The conference deliberations were focused on identifying needs and opportunities and developing a strategy map to address major human and animal diseases of concern including Brucellosis, Tuberculosis, Anthrax, Antimicrobial resistance (AMR), together with biosafety, biosecurity, burden of disease and inter-sectoral collaboration considerations."

Outcomes..

This conference resulted in a groundbreaking dialogue by scientific thought leaders, intersectoral representatives, as well as policy-makers that resulted in concrete recommendations on how to advance a future One Health framework for India based on inclusive policy reform, scientific innovation and sustainable investment.

The deliberations strongly emphasized that a multisectoral and trans-disciplinary collaboration and cooperation approach, working at local, regional, national, as well as global levels will be necessary to achieve such a One Health framework. However, depending upon the nature of collaboration(s) and parties involved in it, the committee recommended adoption of a well defined, sustainable One Health Roadmap (OHR) where each country needs to identify the concerned party(ies) and define their role in the collaboration. As such, it was agreed for action with 10-point OHR plan to assure best possible implementation of the One Health Program.

While preparing the OHR, the committee has taken due consideration of the 8-point statement on One Health by APHA and global best practices.