Annual Report: 2020-21

CENTRE FOR SOCIAL INNOVATION AND ENTREPRENEURSHIP (CSIE)

Indian Institute of Technology Madras

IIT Madras - CSIE
(Center for Social Innovation & Entrepreneurship)

Sponsored by Alumni 1982, 1984, 1986 batch

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1. Introduction

Centre for Social Innovation and Entrepreneurship (CSIE) at IIT Madras was founded in August 2010 with a focus on teaching and research in the field of social enterprise in India. The Centre works in promoting social entrepreneurship through education, research and dissemination of research output. It has successfully reached out to a number of high schools, higher educational institutions and social entrepreneurs internationally through various project activities. It undertakes research projects and livelihood improvement projects to build capacities of social entrepreneurs and enrich knowledge in this sector. For all these initiatives, CSIE work closely with institutions, builds partnerships and helps them build capacities to create awareness, identify and nurture aspiring social entrepreneurs.
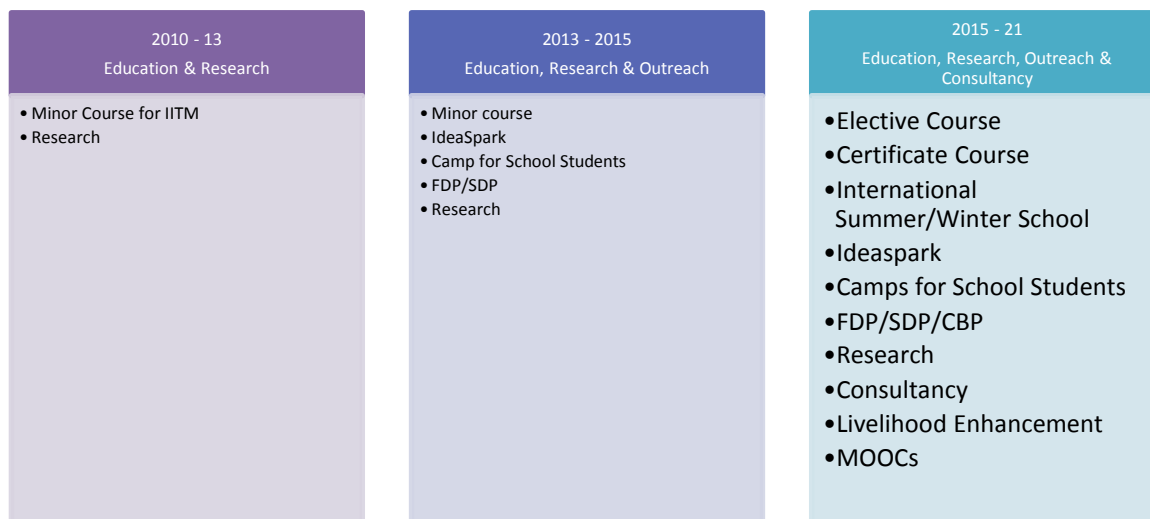
1.1 Mission

To build an environment that will facilitate the creation of social enterprise knowledge through research and empower students to apply their entrepreneurship abilities to develop solutions for greater social impact.

This is achieved by:

- *Education*. Offering academic programmes on social innovation and entrepreneurship for students across disciplines and degrees at IIT Madras and outside.
- *Research.* Providing an enabling environment for both students and faculty researchers interested in social enterprise research within the IIT campus
- *Consultancy & Outreach* Encouraging young innovators and entrepreneurs by assisting in the development of socially beneficial products and ideas
- *Collaboration.* Creating an ecosystem of social entrepreneurship and extending the same to other technology institutions including IITs.

1.2 Evolution of activities

2010 - 13 Education & Research	2013 - 2015 Education, Research & Outreach	2015 - 21 Education, Research, Outreach & Consultancy
• Minor Course for IITM • Research	• Minor course • IdeaSpark • Camp for School Students • FDP/SDP • Research	•Elective Course •Certificate Course •International Summer/Winter School •Ideaspark •Camps for School Students •FDP/SDP/CBP •Research •Consultancy •Livelihood Enhancement •MOOCs

1.3 Impact till Date

Education
- 5 batches of Innovation & Social Entrepreneurship courses. Around 200 students from IIT Madras have enrolled. About 10 students have started enterprises
- 4 International Summer/Winter Schools on Social Entrepreneurship. 82 students participated
- 4 Certificate Courses. Over 100 participants enrolled

Outreach
- 5 Faculty Development Programs. 1 Student Development Program. 8 Entrepreneurship Awareness Camps. 3 Business Plan workshops conducted. Reached out to 55+ colleges, 130 faculty and1050 students from engineering colleges
- 6 school camps. 500 students from different schools in Tamil Nadu participated
- 6 Idea spark editions. 750+ students participated. 70 ideas discovered
- "Involve" a social enterprise based on peer-to-peer learning model for Government Schools was rendered incubation support

Research
- 9 Research papers presented in International Conferences and 1 book chapter published

Capacity building & Livelihood Promotion

- Strengthened management capacities of 105 Farmer Producer Companies (FPCs) and 22 NGOs through 8 Capacity Building Programs through which 263 farmers benefited and developed 8 case studies on 'best practices of FPCs'
- CSIE has become key organizing node for state and national seminars on farmer producer organizations.
- Developed social media platform to promote Korai Mats - Result – 2500+ followers, 2 retailers connects and Rs. 3, 50,000 worth of sales facilitated through exhibit space at IIT Madras, International Conferences and institutional sales.
- Established a Common Facility Centre (CFC) for Pathamadai Korai Mats under the "revival of languishing crafts" initiative by Tamil Nadu Government.
- Established a Skill Development Centre at Vellapakkam village under the CSR initiative of Chennai Petroleum Corporation Limited (CPCL). Trained 138 youth under the initiative.
- Established a rural enterprise to manufacture biochar under the Technology Transfer initiative with Shri AMM Murugappa Chettiar Research Centre.

1.4 COVID-19 Impact on activities

CSIE mainly works on ground by constantly visiting the sites of work, interacting with the local people, conducting events and workshops in and outside of IIT Madras. Due to the pandemic all the activities related to that have been cancelled and the efforts are now to take activities online.

2. <u>**GOVERNANCE STRUCTURE**</u>

The Governance Committee (GC) consists of representatives from the sponsors ('84 batch), IIT Madras faculty members and the partnering agency. The members of GC are:

- Dr. R. Nagarajan, Project Coordinator, CSIE
  Professor and Head, Chemical Engineering
- Prof. L.S. Ganesh, Professor, Management Studies
- Prof. Ashwin Mahalingam, Associate Professor, Civil Engineering
- Prof. Devendra Jalihal, Professor, Electrical Engineering
- Prof. L. Prakash Sai, Professor, Management Studies
- Prof. Mahesh Panchagnula, Dean, International & Alumni Relations
  Professor, Applied Mechanics
- Mr. Joseph Thomas, Development Office, IIT-M
- Mr. Rangarajan Ganesan, Advisor, C-TAP, IIT-M

2.1 Staff

- James Rajanayagam, Senior Project Advisor, CSIE
- Gangaram Sandeep Kumar, Project Officer, CSIE
- Aishwarya Raman, Senior Project Officer, CSIE
- Krishnaveni P, Senior Project Assistant, CSIE
- Suba Ramesh, Project Associate, CSIE

3. Activities

3.1 Education

Education in the field of Social Entrepreneurship was identified as one of the primary objectives of CSIE. CSIE believes that by educating students in the field of social entrepreneurship, we are creating a ready-source of talent for the sector.

3.1.2 Ministry of Skill Development (MSDE) – UK India Education and Research Initiative (UKIERI) Social Entrepreneurship Capacity Building

CSIE is actively engaged in UK-India Social Entrepreneurship Education Network (UKISEEN) through University of Southampton. The network is engaged in education promotion activities through conferences, seminars, workshops, competitions and related projects.

CSIE, IIT Madras along with Social Impact Lab at University of Southampton, UK has been working towards "Building Social Entrepreneurship Capacity among Technology Graduates". This project was jointly funded by MSDE and UKIERI.

This was being done through capacity building programs for teachers in technology colleges to develop and implement social entrepreneurship modules with focus on the entrepreneurial skills. Since the onset of COVID, the focus has shifted towards developing online content relevant to Social Entrepreneurship.

Current Activities:

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- CSIE is currently working to develop online video lectures and related content in the field of Social Entrepreneurship education.
- 6 video lectures in association with University of Southampton have been recorded and are in the production stage.

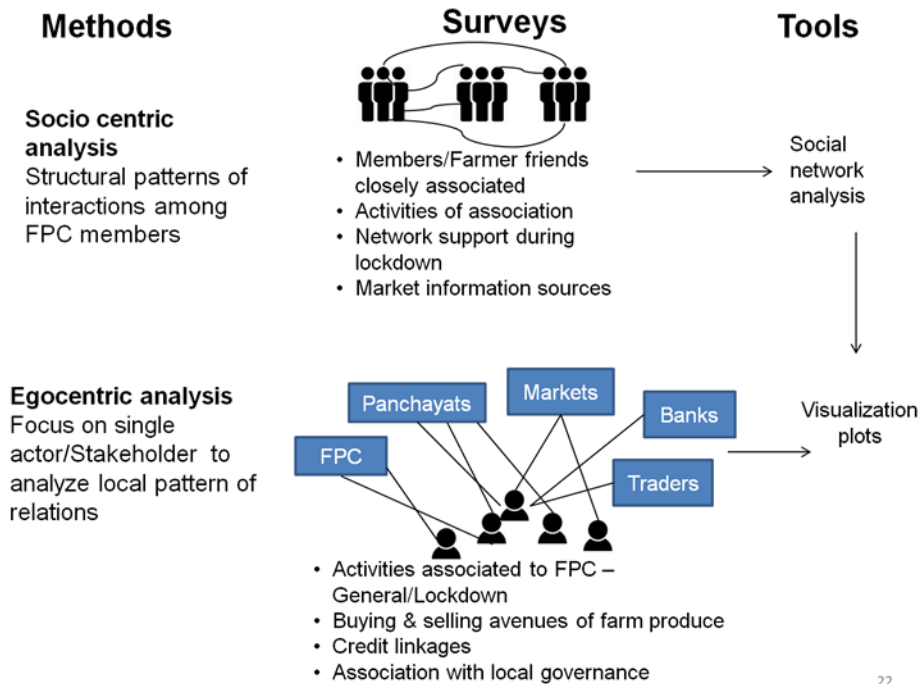More details here: http://ukiseen.org/msde-ukieri-sept

3.2 Consultancy

CSIE undertakes consultancy assignments to provide business development support for social enterprises (including FPCs) and also undertakes impact assessment for philanthropic projects.

3.2.1 Capacity Building of Farmer Producer Companies (FPCs)

Objective: To build capacities of Farmer Producer Companies (FPCs) in way of equipping them to make active role in the agricultural supply chain network. This will enable better management practices and sustainable growth.

Activities

- Conducted network analysis in large FPCs to explore structural relations among members of FPC and also across institutions in the ecosystem of FPCs
- Role of various government schemes in rendering livelihood support during pandemic led lockdown was mapped to the analysis
- FPCs and local retail markets remain the procurement hubs of farmers produce compared to government regulated markets
- FPCs supported procurement of major food crops and horticultural produce during lockdown

Analysis Framework developed by Aishwarya Raman

3.2.2 Skill Development Project at Nagapattinam

Funding source: CSR project by Chennai Petroleum Corporation Ltd. (CPCL)

Objective: Skill development of the youth in three villages in Nagapattinam district namely Panangudi, Vellapakkam and Goparajapuram.

Activities:
- 97 beneficiaries are trained and certified in tailoring and IT skills during the year.
- In addition to the above skills, 41 beneficiaries, mostly school students were given Spoken English training. This is not completed due to the pandemic.

3.2.3 Temple Waste Management Project

Funding source: Endowment fund by Prof. Dinesh Kant, IIT Madras alumnus and Professor at RMIT University, Melbourne, Australia

Objective: Waste to Wealth initiatives in religious sites by engaging women groups and processes led by ethical management'.

- CSIE had been in process of identifying women groups who have the potential to mobilize and manage flower wastes from temples.
- CSIE partnered with Oorvi, a social enterprise which develops products out of flower waste.
- The Centre entered into an agreement with Oorvi towards administering funds for infrastructure and capacity development for processing waste
- Initial tranche of funds has been released towards procuring machinery for processing larger volumes of organic wastes from temples

3.3 Outreach

CSIE offers 1-3 day/s entrepreneurship awareness programs, capacity building programs to high school and college students, social entrepreneurs and faculty members from higher educational institutions.

3.3.1 Train the trainer Program on Entrepreneurship for Polytechnic Faculty

Funding Source: CSR funds from Cap Gemini Technology Services India

- CSIE organized one day consultation meeting on entrepreneurship for faculty from Polytechnic colleges of Tamil Nadu at IIT Madras on March 13, 2020. The Programme was led by Prof. L.S. Ganesh from Department of Management Studies (DoMS), IIT Madras.

- In follow-up to the consultation meeting, a 4-day webinar on "Setting up of Incubation Cells in the Polytechnic Institutions" was conducted from 9-16 May, 2020.

- A half day Entrepreneurship awareness programme was conducted online for faculty from Govt. ITI Men Institution, Cuddalore on September 14, 2020. The programme consisted of virtual presentation by start-ups, incubators and R&D labs and Research Park of IIT Madras. The programme was led by Prof. LS Ganesh. Shreeram Ravichandran, an icubatee from IIT Madras Incubation Cell presented his start-up, MediCabs to the audience.

- An Idea Competition was organized for the polytechnic students of Tamil Nadu during the month of October-November 2020. Students from 5 Polytechnic colleges participated in the competition. The prototypes developed by the students were in the IT, IoT and AI Sectors. A second round of the competition is going on currently.

- **MOOCs in Vernacular Language:**
  The Centre has come up with a MOOC initiative called the CSIE MOOCs. The Courses offered here are pertained to the Techno- Entrepreneurial sectors. The video content is being delivered in Vernacular Languages. Please find the videos here: *https://www.youtube.com/channel/UCLOBIqhCOUOweMxwL3qr6gg/featured*

- **Training in MOOCS Videos Creation:**
  A virtual training program on developing MOOCs based online content was organized for the faculty from Polytechnic & ITI colleges on October 9, 2020 Mr. Jayakrishnan, Senior Scientist at NPTEL, IIT Madras was the instructor for the program.

- 5 video lectures on the topic Business Opportunities in various engineering sectors were produced for CSIE by the faculty from PSG Polytechnic College, Coimbatore. These videos are recorded in Tamil and will be made shortly available for the students.

- CSIE organized a virtual consultation meeting for ITI & Polytechnic colleges in Tamil Nadu on Dec 23, 2020. 81 faculty from various colleges participated in the meeting. Renowned leaders from Capgemini Mr. Kanniappan Subramani, Director of ICRES, Chennai & Mr. Allen Gilbert, Executive Vice President, Capgemini, Chennai were invited to present about the Business & Career Opportunities and impact of Innovation in Social Enterprises for the students. Mr Sakthivel Thayappan, an entrepreneur from IITM Incubation Cell presented about his start up 'YALI Mobility Services' to the audience.

  Entrepreneurship Mentorship Programmes:

- CSIE organised a Design Thinking session for the faculty from ITI and Polytechnic colleges in Tamil Nadu on February 10, 2021.The session covered the important concepts of Design Thinking. As part of the session several case studies were presented. The session was handled in both English and Tamil. Mr. Ramya Mahendran, founder of Design Squiggle was the instructor for the program.
- CSIE organised online workshop on Business Plan development for faculty from Govt. ITI and Polytechnic colleges on March 15, 2021 with an objective to impart knowledge on Business Plan to faculty so that they can teach their students. Mr. James Rajanayagam from CSIE was the instructor for the program.
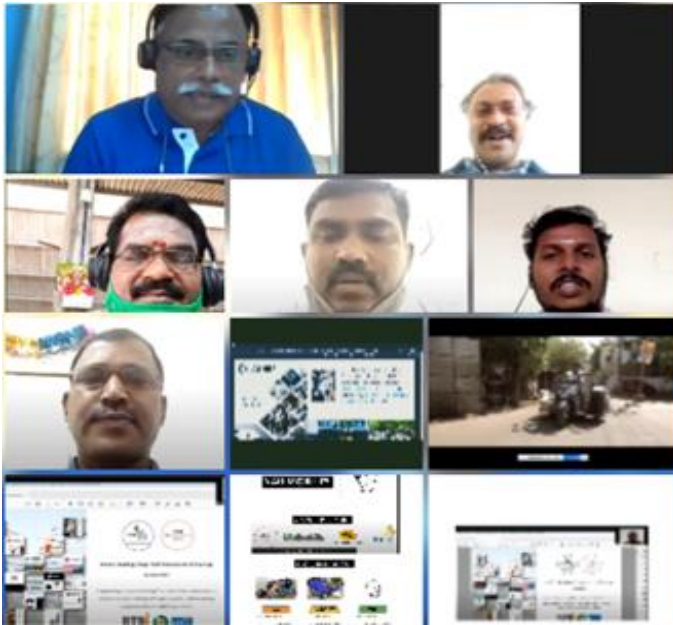
3.4 Research

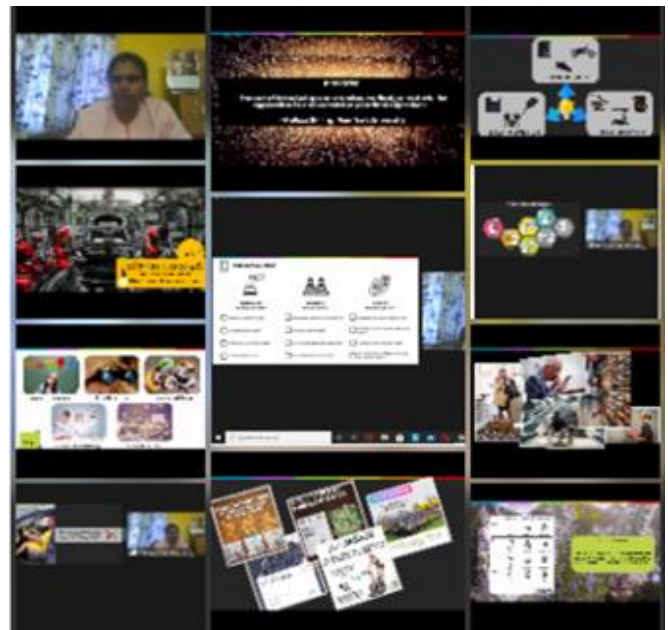#### 3.4.1 EngineeringforChange (E4C) Research Collaboration

CSIE has been in collaboration with E4C for the past 2 years. As part of the collaborations CSIE guides teams as part of the E4C Fellowship program.

The partnership has been further extended by CSIE becoming a partner along with E4C in ASME Innovative Showcase ISHOW2021.
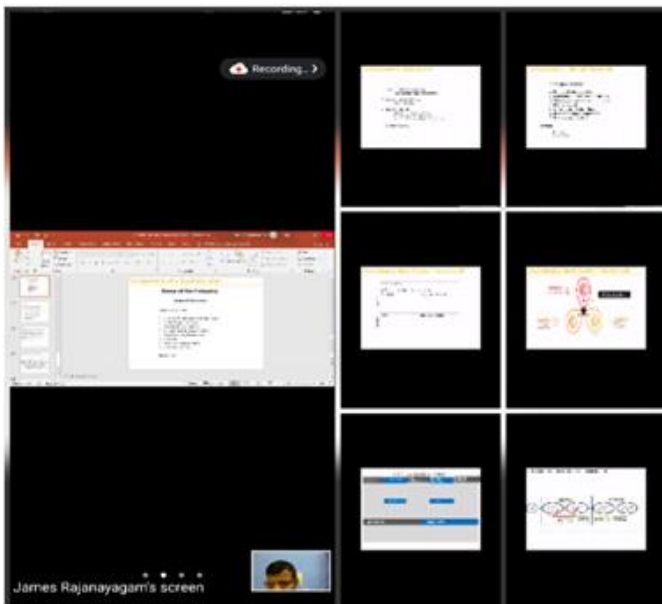
Photographs:

One Day Online Consultation meeting with Capgemini Leaders

Design Thinking Session

Business Plan creation Session

MOOCs Video recording with Faculty

All images here part of the Train the Trainer Programme for ITI & Polytechnic Colleges in Tamil Nadu

*Women trained in Tailoring at the Skill Development Center, Nagapattinam
Have stretched and distributed face masks during the ongoing pandemic.*

Interaction with the flow vendors part of Temple Waste Management project at a temple in Tamil Nadu

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The above images shows the beneficieries of the Batch II & III in Tailoring and IT as part of the Skill Development intiative.