Workshop under the Project

**Dissemination of Sustainable Technologies in Rural and Peri-Urban Habitats**

**Venue:**
Indian Institute of Science - Kudapura, Challakere campus, Chitradurga District, Karnataka-India

**Organised by**
Centre for Sustainable Technologies, Indian Institute of Science, Bangalore-560012

**Sponsored by**
HT Parekh Foundation, A CSR initiative of HDFC Limited

**Objectives:**

(a) To disseminate the following Sustainable Technologies
1. Low carbon materials and building systems
2. Appropriate and improved sanitation technologies
3. Drinking water purification for fluoride-contaminated water
4. Fuel-efficient wood burning devices
5. Fuel-efficient Agro-processing Dryers

(b) To facilitate entrepreneurship development
1. Provide technical training for skill development in Sustainable Technologies and promote entrepreneurship
2. Interface with government agencies for capacity building in Sustainable technologies and improving vocational education

**Background**
The Indian Institute of Science (IISc) was founded in 1909 as result of a visionary “public-private partnership”
between industrialist Jamestji Nusserwanji Tata, the Government of India and the Maharaja of Mysore. Over the last century, IISC has emerged as India’s premier destination for higher education and advanced research, attracting the best and brightest minds in the country and abroad to pursue cutting-edge research tackling critical global challenges.

Centre for Sustainable Technologies (formerly known as Centre for Application of Science and Technologies to Rural Areas—ASTRA) Indian Institute of Science, Bangalore has been pioneer in fostering the sustainable technologies. It was initiated in 1974. CST technologies are adaptable both at individual (household) and community (cluster) levels. Both dissemination models have been extensively tested at individual, village and village cluster level for technical performance and ability to meet societal needs, user acceptability and meeting sustainability goals.

Impact of CST technologies
1. Low carbon materials and building systems:
Under the Low-carbon alternative building technologies for housing and infrastructure development there are over 100,000 buildings. This has been made possible through individuals, Government, Corporate & Private agencies. Individuals, architects, engineers, building professionals, developers, consultants, NGO’s and Corporates are few agencies involved dissemination. The environmental impact established is 2.5 million tonnes Carbon savings.

2. Appropriate and improved sanitation technologies:
Individual, private agencies and Government are stakeholders to be trained on the fundamentals of eco-friendly local-earth based sanitation units that provide hygienic and environmentally safe disposal of night soil without contaminating ground water. Innovative techniques adopted is one of the safest ways to contain and handle human excreta. Many cost effective models and environment friendly designs have been developed, disseminated and field tested for performance. This technology would generate enough local employment to trained youths through utilisation of locally available construction materials.

3. Drinking water purification for fluoride-contaminated water:
De-flouridation water filters for domestic and community use, more than 100 installations (domestic & community filters) are complete and functioning and supply of Fluoride free drinking water has been assured.

4. Fuel-efficient wood burning devices
There are about 1.6 million devices deployed through technology dissemination by individual households, Restaurants, hostels, industry canteens, State and S&T councils, Govt. Agencies, KVIC, NGO’s, Corporate & private agencies. The assessed environmental impact is 2.5 million tonnes carbon savings.

5. Fuel-efficient Agro-processing Dryers
Agro-processing dryers are being used in the field for dehydration of agricultural and horticultural produce mainly to improve the keeping quality by extending the shelf life and for value addition. This has been used for drying Areca, Cardamom, Banana, Mango, Greens, Vegetables and other Fruits.

Details of Workshop
It is clear from CST’s experience that there is a need for large scale dissemination of ST's in rural habitats. This is possible only through training/capacity building, effective demonstration and entrepreneurship development. This aims to create a stand-alone training facility through IISc-Challakere campus for effective technology transfer to individuals and entrepreneurs.

The workshop comprises of lectures, hands-on training and demonstration of construction techniques and field visits.

Resource Persons:
Faculty from the Centre for Sustainable Technologies, Department of Civil Engineering and other invited experts.

Co-ordinators:
Prof. B.V. Venkatarama Reddy
Chairman, Centre for Sustainable Technologies, Indian Institute of Science, Bangalore

Dr. S. N. Ullas
Centre for Sustainable Technologies, Indian Institute of Science, Bangalore

Mr. H. I. Somashekar
Centre for Sustainable Technologies, Indian Institute of Science, Bangalore

Workshop Duration:
2 to 6 days (depending on the type of technology) with travel boarding and lodging facility for the selected candidates.

Who can apply:
Individuals, rural youths, entrepreneurs, professionals, architects/engineers, NGOs, Agencies working in the field on above mentioned areas of housing, sanitation, energy efficient & smokeless stoves and Agro-processing Dryers.

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Registration Form

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Send Application to:
1. Chairman, CST, IISC Bangalore-560012
2. Dr. S. N. Ullas, CST, IISC Bangalore-560012
3. Mr. H. I. Somashekar, CST, IISC Bangalore-560012

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