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**STRC-GUG
Jurisdiction**

Gadchiroli
Chandrapur
(Maharashtra, India)



**Science & Technology Resource Centre
Gondwana University, Gadchiroli**

A centre of excellence for sustainable value creation, conceived and funded by Rajiv Gandhi Science and Technology Commission (RGSTC), Mumbai, Govt. of Maharashtra.

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STRC is an autonomous institute under Gondwana University, Gadchiroli. Conceived and funded by Rajiv Gandhi Science and Technology Commission (RGSTC), Mumbai, Govt. of Maharashtra, STRC is entrusted with generating livelihood opportunities by deploying appropriate science and technology, particularly for the under-served tribal communities of the Gadchiroli region since 2014. As a centre of excellence for sustainable value creation, STRC is leveraging local resources, relevant knowledge and appropriate technologies for human capacity development.

STRC's initiatives on Education for Sustainable Development

Traditionally India has been a sustainable society. In order to promote the value of sustainable development through education, the Indian government directed its various education departments to actively work on an Environment Education (EE) component as part of the curriculum.

Education for sustainable development promotes the development of the knowledge, skills and improved understanding of values and actions required to create a sustainable world, which ensures environmental protection and conservation, promotes social equity and encourages economic sustainability.

Gadchiroli region is heavily forested, largely tribal and among the most underprivileged part of the state. Science and Technology Resource Centre (STRC), Gondwana University Gadchiroli, sees a realistic possibility of leveraging local resources, relevant knowledge and technology for capacity building of local youths at different layers such as Artisans, Students and Faculties to promote knowledge enabled development.

Along with the above categories and layers of target groups, STRC believes that school going children must be part of this inclusive development approach and to address this STRC is striving to create a supplementary template for a sustainable education ecosystem. STRC, under the aegis of Gondwana University has already rolled out an under graduate Diploma in Bamboo Entrepreneurship and Design and an Environment Education Program for Tribal Schools in the process to collaborate with MAFSU, Nagpur and other National/Regional institutes, to introduce multiple certificate courses such as; Certificate Course in Scientific Fishery, Sustainable Harvesting Practices for important forest produce, post-harvest management and supply chain, Farmers' School and Web based Community Interaction Platform (WCIP) amongst others to create a cadre of adequately skilled youths. Aim is to go beyond the regular vocational slant and to develop a knowledge and technology enabled workforce. Similarly, for faculties, researchers and even NGOs with bona-fide inclination for applicable R & D, STRC has introduced 'STRC Assistance for S&T Application Scheme'; short-term small research grants.

Considering the existing realities, it is of paramount importance that STRC plays the role of a Community Enabler; develop knowledge and skill driven communities which are self-reliant and progressive.

Role of Information and Communication Technology (ICT) and Artificial Intelligence of Things (AIoT) in rural development

We see the letters ICT, everywhere. ICT stands for Information and Communication Technology. The concepts, methods and applications involved in ICT are constantly evolving in our daily lives. In the contemporary digital era, new ICT tools such as the mobile phone and its applications are widely utilised. We can utilise these technologies at any time since ICT combines information and communication technologies to enable mobility. ICT has thus been promoted as our high standard of living by assisting people in altering how we learn and function. ICT is no longer just for metropolitan dwellers. Rural development in India is one of the most important factors for growth of the Indian economy. Application of ICT is a paradigm shift to the traditional approaches that the government has been using past so many decades.



Priyanka Durge

Jr. Scientific Officer

Science & Technology Resource Centre,
Gondwana University, Gadchiroli

Similarly, over the past few years, Artificial Intelligence (AI) and Internet of Things (IoT) have become the most important technologies of the 21st century. Combining both has led us to Artificial Intelligence of Things (AIoT). When operational, IoT devices create and gather data, and then AI analyses it to provide insights and improve efficiencies and productivity. AIoT is transformational and mutually beneficial for both types of technology, as AI adds value to IoT through machine learning capabilities and improved decision-making processes. IOT application is a network or connection of devices, vehicles, equipment applying embedded electronics. Now that we can connect everyday objects—kitchen appliances, cars, thermostats, baby monitors—to the internet via embedded devices, seamless communication is possible between people, processes, and things.

We at STRC make use of a wide range of ICT tools and technologies to support field operations. Our Web-Based Community Interaction Platform (WCIP) has been designed to promote two-way communication, distribute information, demonstrate low-cost technologies, assist their easy transfer and adoption, and showcase best practices. It has a 'distance education' mandate as one of its scopes. To help local communities make informed choices and to provide technical support and live demonstrations STRC uses the Mobile Demonstration Unit (MDU) van reasonably equipped with ICT tools for direct community interaction.

With the advent of wider communication network through use of internet, it is no longer a far-fetched dream to connect and serve communities living in rural pockets using advance modes of communication technologies. Along with the day-to-day use, AIoT has now begun to be used as a development tool in agri-allied operations too. As we begin to understand the scope of application of AIoT, STRC is planning to introduce AIoT application in its forthcoming on-farm projects in collaboration with NABARD.

Environment Education Program for Tribal School Children

Implementation of the Environment Education Program's first module; introduction to bio-diversity, marks the beginning of the initiative for selected tribal schools in Gadchiroli. The programme includes audio-visual content on the ecological, economic, and cultural significance of local bio-diversity. Collectively more than 300 students from 10 Ashramshala, took part in the program. Enthusiasm of the participating students was quite evident with their active participation, and desire to learn about the relationships between the various components of bio-diversity. STRC look forward to take this activity to next level through implementation of more engaging environment education modules.



Collectivization of Selected Forest Produce; Collection and Primary Processing through a Community Centric Business Model

An intervention to establish a Primary Processing Unit for selected NTFPs is being implemented at Kharkadi in Dhanora Taluka under the 'NTFP, Medicinal Plants and Other Livelihoods' program of Science & Technology Resource Centre, Gondwana University, Gadchiroli. The objective of the project is to provide an additional livelihood option to the community through collectivization and processing and scale of selected forest produce in the cluster. In the initial phase, STRC will provide seed capital for procurement of forest produce from community. A 25 member of community based organization named as 'Luchai Dhan Shetkari Swayam Sahayta Gat, Kharkadi' has been established to manage the community level business. This year, for the preliminary procurement of forest produce, STRC proposed to allocate INR 4.00 lakh as Seed Capital, along with a provision of INR 1.50 lakh to repair existing structures as storage facilities.



Skill Development Workshop on Bamboo Construction

Science & Technology Resource Centre, Gondwana University, Gadchiroli is running a one-year undergraduate diploma in 'Bamboo Entrepreneurship and Design'. The first batch of diploma students participated in the 12-day 'Skill Development Workshop on Bamboo Construction' held from 3rd to 14th February 2023. The workshop was organized by Bamboo Research and Training Centre (BRTC), Chichpalli in collaboration with Blue Planet, Kotkata and Maharashtra Bamboo Promotion Foundation (MBPF).

During this training low-tech approach was adopted along with using locally available materials, minor tools and technologies. Through their assigned work, students learned essential on-site management along with operational strategies for bamboo craft and construction.



Our Current Focus



STRC-GUG

Bamboo Craft & Livelihoods

Mandated to develop an entrepreneurial eco-system with an artisan centric approach in the bamboo based livelihood sector. Designing specialized capacity building programs, introducing innovative low-cost craft tools to develop a product portfolio in the utility craft and lifestyle product space. Establishing linkages between financial institutions and local enterprises through community-led multi-stakeholder development models.



Sangeeta Kapoor, Director, Blue Planet, Kolkata, an expert in sustainable living visited STRC to interact and explore possibilities of collaboration in the Bamboo as a structural material / construction sector. During the discussion she identified common interest and expressed her desired to organise a '15-day Skill Development Workshop on Bamboo as a Construction Material' in association with STRC and Maharashtra Bamboo Promotion Foundation (MBPF). Efforts are on to develop a team of 20 artisans to be trained.



STRC Aquaculture & Livelihood wing visited the Integrated Fish Farming (IFF) site at Potgaon, Wadsa and interacted with Shri. Purushottam Randive to understand the status of the intervention. Shri. Randive sought a few solutions for challenges faced during rearing which was addressed by the visited Scientific Officer and Jr. Scientific Officer, STRC. He also informed about his income generation from first poultry cycle which stands at INR 40,000/-.



At Jambli of Gadchiroli Block, a session was held under the 'One Staff One Gramsabha' efforts to create awareness about STRC and a session was organized at Madapalli, Aheri to interact with 'Jal Jivika Matya Vikas Gat' to excite the farmers to get involved in 'Integrated Fish Farming' initiative.

Mobile Demonstration Unit (MDU)

A van-based audio-visual interactive platform cutting across multiple program verticals, used as a tool to generate awareness, disseminate information, demonstrate appropriate low-cost technologies, facilitate its smooth transfer & adoption and showcase best practices to enable local communities make informed choices.

11

Events

112

Sessions

8400

Audience Addressed

100

Villages

11

Blocks





विज्ञान व तंत्रज्ञान संसाधन केंद्र गोंडवाना विद्यापीठ, गडचिरोली



एक वर्षीय पदविका अभ्यासक्रम बांबू उद्योजकता आणि रचना

आदिवासी व ग्रामीण तरुणांना बांबू क्षेत्रात भविष्य घडविण्याची संधी तथा सक्षम व कुशल मनुष्यबळ तयार करण्याच्या दृष्टीने गोंडवाना विद्यापीठाद्वारे सुरु करण्यात आलेला पदविका अभ्यासक्रम

अभ्यासक्रमाची प्रमुख वैशिष्ट्ये



बांबू उद्योजकता केंद्रित
अभ्यासक्रम



बांबू क्षेत्रातील कुशल
तज्ञांद्वारे प्रशिक्षण



बांबू संशोधन व
विकासाकरिता
आधुनिक व सुसज्ज सुविधा



बांबूवर आधारित उद्योगांच्या
स्थापनेसाठी आर्थिक सहाय्य
मिळविण्याची संधी

प्रवेश घेऊ इच्छुक असणाऱ्या विद्यार्थ्यांकरिता ...

- ✓ निशुल्क - प्रवेश व वसतिगृहाची सुविधा
- ✓ शिका व कमवा योजने अंतर्गत आर्थिक सहाय्य मिळविण्याची संधी
- ✓ यशस्वीरीत्या अभ्यासक्रम पूर्ण केल्यास रोजगार सहाय्य

विद्यार्थी प्रवेश क्षमता



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इच्छुक विद्यार्थ्यांनी त्वरित
संपर्क साधा

शैक्षणिक पात्रता शिक्षण: १२ वी पास
वयोगट : १८ - २५ वर्षे



बांबू कारागिरांची आवश्यकता