

STRC NEWSLETTER

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SCIENCE & TECHNOLOGY RESOURCE CENTRE CONDWANA 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 a society, 'Science & Technology Resource Centre Foundation Gadchiroli', registered under the Societies Registration Act, 1860 (XXI of 1860)



STRC initiates an unique collaboration with Gadchiroli Open Jail, to educate, aware and train its inmates serving the last leg of their jail-term, on Bamboo Craft as a viable and sustainable livelihood option for a dignified life after jail.



From the CPO's Desk

Community Engagement Through Eco-Tourism Initiatives in Gadchiroli Region

"Leave only footprints, take only memories" captures the essence of Eco-Tourism. This approach to Responsible...

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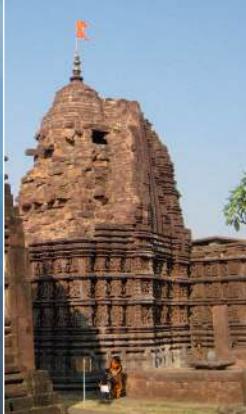
A major threat to agriculture is climate change, especially in areas like Gadchiroli where in summer time water availability is questionable. ...

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Shri. Ashis Gharai

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Community Engagement Through Eco-Tourism Initiatives in Gadchiroli Region

“Leave only footprints, take only memories” captures the essence of Eco-Tourism. This approach to Responsible Tourism emphasizes harmonizing with nature, deriving joy from its tranquillity and beauty, without disrupting the environment or seeking unnecessary luxuries. Eco-Tourism goes beyond mere recreation; it focuses on educating visitors about the natural and cultural environment, serving as a tool for conservation, and offering sustainable economic benefits to local

communities. By fostering an appreciation for the natural world, Eco-Tourism encourages responsible tourists to preserve the sanctity of their surroundings. At the same time, it aims to create sustainable income opportunities for forest-dependent communities, ensuring that tourism contributes to the well-being of both nature and the people who live closest to it. This balance of enjoyment and conservation makes Eco-Tourism a powerful instrument for protecting the environment while supporting local livelihoods.

Having said that, there exists a very thin line between mass/commercial tourism and Eco-Tourism; if Eco-Tourism projects are not planned and managed properly, it can inflict damage to natural environment and to the communities living in close proximity. Though India is not entirely new to the concept of Eco-Tourism, it's not too old either. It has been observed that despite having serious potential and political will to develop the idea of Eco-Tourism in a natural resource and bio-diversity rich country as India, it was not until late 90s and early in to the new millennium that the concept got momentum. States like Kerala, Sikkim, Madhya Pradesh and parts of West Bengal can be termed as pioneers of the concept of Eco-Tourism in India. Lately, Odisha, Uttarakhand and Maharashtra (especially the western region) and few others have taken up significant steps in this direction.

Talking about Maharashtra, like the western part, the eastern Vidarbha region, with its vast stretches of forests having rich floral and faunal diversity, forest dependent primitive tribal groups,

natural water bodies, tribal culture and art forms and places of religious importance presents tremendous potential for Eco-Tourism development. The nodal body for Eco-Tourism development in the state, Maharashtra Eco-Tourism Development Board (MEDB) was established in 2015, with a mandate to boost Eco-Tourism in the state and create employment opportunities for local youths, has been recently reconstituted. With a clear mandate in mind, concerned stakeholders such as department of Forest, Tourism, Tribal Development and District Administration may come forward, drawing reference from successful ET Models from across the country to formulate unique Eco-tourism Development Framework for Gadchiroli region.

Some of the factors, comprehensive and well-aligned with sustainable development principles, must be considered while we foster Eco-Tourism in Gadchiroli.

Here's a closer look at each initiative with additional insights:

a. Local Participation and Ownership:

Forming Eco-Tourism Committees within the community to involve members in decision-making. Conducting regular meetings to gather feedback and adjust plans as needed.

b. Offering Well Packaged Eco-Tours:

Gadchiroli has immense potential when it comes to designing well packaged eco-tours such as temple tourism, river tourism, jungle stays and artisan villages etc.

c. Capacity Building and Skill Development:

Gondwana University's Model Degree College has a uniquely designed course curriculum being offered in-form of certificate, diploma, research-based degree courses which has the potential to develop a cadre of skilled youth in Eco-Tourism sector. There can be multiple certificate courses that can be introduced in hospitality management and nature education. Partnering with NGOs or government programs can help to provide training in Eco-Tourism related ancillary skills along with workshops on sustainable practices, customer service, and safety protocols.

d. Promotion of Indigenous Culture and Crafts:

Gadchiroli's remote charm, rich cultural tapestry and unique art-forms invite travellers to discover its serene landscapes and ancient traditions. Gadchiroli is known for its unique art-forms such as bamboo craft, dokra craft, earthen pottery and gond paintings etc. Science and Technology Resource Centre (STRC), Gondwana University through its Bamboo Craft and Gondwana Craft initiatives is mandated to focus on artisan centric skill development, revive dying art-forms and in creating a viable social-entrepreneurship platform for local artists and craftsmen to showcase their work to tourists.

e. Conservation Awareness Programs:

Developing educational materials and activities for tourists to learn about local ecosystems. Encouraging schools and community centres to participate in conservation efforts and awareness campaigns. Educate tourists about the region's biodiversity, wildlife, and environmental conservation. Community-led awareness campaigns can promote responsible tourism practices. Develop guided nature trails, birdwatching spots, and interpretation centers. Locals can lead these tours, sharing their knowledge about flora, fauna, and ecosystems.

f. Home-stays and Community-Based Lodges:

Encourage community members to offer home-stays or manage small lodges. This not only generates income but also allows visitors to immerse themselves in local life.

g. Sustainable Livelihoods:

Eco-tourism can create livelihood opportunities beyond agriculture. Community members can engage in handicraft production, organic farming, or culinary experiences.

Successful Eco-Tourism initiatives prioritize community well-being, environmental conservation, and cultural preservation.





Climate-Smart Agriculture in Gadchiroli

A Pathway to Sustainable Livelihoods and Environmental Resilience

A major threat to agriculture is climate change, especially in areas like Gadchiroli where in summer time water availability is questionable. In Gadchiroli, however, farmers can promote sustainable agriculture and increase their climate change resilience by implementing climate-smart agriculture (CSA) techniques.

CSA prioritizes these three goals: 1. boosting food security, development, and agricultural productivity and incomes; 2. boosting ability to adapt from farm to country; 3. lowering greenhouse gas emissions while building up carbon sinks.

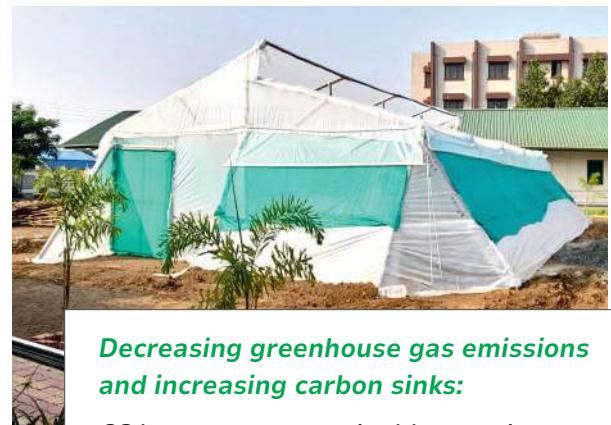


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Increasing agricultural productivity and incomes, ensuring food security and development:

CSA promotes practices that increase crop yields and stabilize agricultural production to ensure a reliable food supply for the community and increase farmers' income. This can be achieved through crop diversification, introduction of climate-resilient crop varieties and efficient water management techniques such as rainwater harvesting and drip irrigation.



Decreasing greenhouse gas emissions and increasing carbon sinks:

CSA promotes sustainable practices that reduce agriculture's environmental footprint, such as using biofertilizers and biopesticides, using renewable energy sources such as solar-powered pumps, and promoting carbon sequestration through soil conservation and good agriculture practices.



Increasing adaptive capacity from farm to nation:

CSA equips farmers and communities with the knowledge and tools to adapt to climate change and make their livelihoods more resilient to extreme weather events and other climate-related challenges. This includes promoting soil conservation practices such as agroforestry and cover crops, as well as developing early warning systems for extreme weather events.

Science and Technology Resource Centre (STRC) at GUG has been actively implementing CSA measures in Gadchiroli, India, across its various verticals:

- ✓ **On-farm Initiatives:** Promoting sustainable practices such as crop rotation, reduced tillage, inter-cropping, water-efficient irrigation and the use of climate-resilient plant varieties along with use of bio-fertilizers and bio-pesticides and support the introduction of renewable energy sources. STRC's Saguna Rice Technology (SRT), vegetable production and climate-resilient agriculture projects have similar aspects.
- ✓ **Scientific Fish Farming:** Promote sustainable aquaculture practices, such as integrated aquaculture to reduce environmental impacts and improve livelihoods, and develop climate-resilient aquaculture systems that can adapt to changing water temperatures and availability. STRC's success stories with farmers introducing poultry under Integrated fish farming initiatives as well as the availability of animal feed and seeds at the local level solve these problems.
- ✓ **Bamboo Crafts & Livelihoods:** Promoting bamboo cultivation as a sustainable alternative to wooden crafts, metals and developing energy-efficient processing techniques. STRC promotes bamboo cultivation and builds an efficient value chain based on bamboo products through sustainable social entrepreneurship model.
- ✓ **NTFP, Medicinal Plants & Livelihoods:** Promoting sustainable harvesting and processing of non-timber forest produce (NTFPs) and medicinal plants, STRC has initiated a cluster based NTFP collectivization project in Dhanora, following Good Forest Conservation Practices (GFCP)
- ✓ **Academic Program Development:** Integrating CSA principles into agricultural education and conducting research on climate change impacts and adaptation strategies. STRC's environmental education for school children ensures that future generations understand the importance of sustainable and climate-friendly agriculture.
- ✓ **Communication for Development through ICT:** Reaching a wider audience through awareness of CSA and facilitate knowledge sharing between stakeholders. STRC's Mobile Demonstration Unit ensures communication about CSA practices even in the most remote locations by bridging the gap between experts and communities and promoting participatory learning of CSA. Resource materials in form of brochures, leaflets, banners and digital media platforms and organization's website act as tools to spread the word.

By integrating mitigation and adaptation strategies across the entire agricultural value chain, STRC plays a critical role in promoting climate-smart agriculture in Gadchiroli and ensuring sustainable livelihoods and environmental resilience in the face of climate change. The way forward may be to scale up these efforts in a region.

Reference:

Campbell, B. M., Thornton, P., Zougmoré, R., van Asten, P., & Lipper, L. (2014). Sustainable intensification: What is its role in climate smart agriculture? *Current Opinion in Environmental Sustainability*, 8, 39–43. <https://doi.org/10.1016/j.cosust.2014.07.002>

STRC-GUG's Website: <https://strc.org.in/>



Gadchiroli Open Jail Comes Forward to Collaborate with STRC: Sustainable Skills to Create Better Livelihood Opportunities for Inmates

In a progressive step to collaborate for skill development, a team from Gadchiroli Open Jail led by Shri. Anand Kokate, Superintendent, Open Jail, Gadchiroli along with Shri Sanjay Tripathi, Director and State Coordinator-Prison, Maharashtra State, visited STRC on 14th June 2024.

While interacting with the Chief Program Officer & Head, STRC, Shri Ashis Gharai, the visiting authorities discussed possibilities of specialized skill development program on bamboo craft for prisoners designed to promote and create opportunities to learn sustainable and marketable skills. The central jail authorities expressed their interest for the program, recognizing its potential by equipping them with useful skills for their future reintegration into society.

Following the discussion, STRC organized a one-day training program on bamboo basketry for the prisoners in the premises of the Open Jail on June 21, 2024. Subsequently, a comprehensive proposal was submitted to the jail authorities.



BAIF and STRC Explore Cross-Learning Opportunities

During a recent visit of BAIF representatives to STRC, multiple cross-learning and collaboration opportunities were discussed. While STRC wishes to leverage BAIF's expertise in sustainable development, BAIF team expressed their willingness to understand STRC's innovative initiatives to drive potentially impactful outcomes.



BAIF representatives discussed various aspects of current programs with Chief Program Officer & Head, STRC, Shri Ashis Gharai and staff, exploring areas of mutual interest and potential collaboration. The primary focus was on developing comprehensive action plans that align with both organizations' goals of promoting sustainable practices and community development. STRC plans to undertake multiple exposure visits to BAIF's field project sites in the coming weeks.

MSSDS, Govt of Maharashtra Approved 'Bamboo Grower' Course Launched at STRC

STRC launched a new course, 'Bamboo Grower', starting 15th June 2024 under the Acharya Chanakya Skill Development Centre through Maharashtra State Skill Development Society (MSSDS), Mumbai. This 260 hours program spread across 45 days aims to impart essential skills and knowledge on bamboo cultivation, fostering sustainable agricultural practices and supporting local economy. The course has been designed to cover various aspects of cultivation of bamboo, from planting techniques to plantation management, encompassing a comprehensive knowledge for aspiring bamboo growers. Total 30 trainees have registered for the first batch of the course.

STRC organized an inaugural event to launch this course. Dr. Anil Hirekhan, Registrar, Gondwana University, formally inaugurated the course in presence of Principal, Model Degree College, Dr. Amudala Chandramouli, Chief Program Officer & Head, STRC, Shri Ashis Gharai and enrolled trainees. During his address, Dr. Hirekhan urged the trainees in the audience to remain sincere and committed to gain maximum learning.



Preliminary Survey of Traditional Healers Carried Out in Etapalli

STRC in collaboration with Lloyds Infinite Foundation (LIF), is set to establish the 'STRC Vaidya Chikitsalay' at Lloyds Kali Ammal Memorial (LKAM) Hospital in Hedri, Etapalli.

To have a robust database on disease prevalence, prevailing traditional treatment patterns, correlation with available plant/other natural resources and methods of disease diagnostics, semi-structured field surveys were conducted during the first week of June 2024. One to one interviews and group interactions with local traditional healers (THs) were organised in multiple villages of Etapalli Tehsil.

Shri Ashish Bhoyar, Junior Scientific Officer, STRC, led the survey, covering 19 villages/hamlets with local support from Lloyds Metals. During the survey, over 30 traditional healers were identified and 12 THs were short-listed. These healers have been recommended for further evaluation and potential on-boarding in the Vaidya Chikitsalay initiative. A survey report has been submitted.





वैद्य चिकित्सालय

पारंपारिक उपचारांना प्रोत्साहन देणारा अभिनव उपक्रम

पारंपारिक उपचार पद्धतींना प्रोत्साहन देणे, पारंपारिक वैदुंना ओळख निर्माण करून देणे व स्वदेशी औषधी ज्ञानाचा/उपचारांचा लाभ अनेक लोकांना घेता येईल या दृष्टीकोनातून विज्ञान व तंत्रज्ञान संसाधन केंद्र, गोंडवाना विद्यापीठ, गडचिरोली यांच्या सहाय्याने 'वैद्य चिकित्सालय' गोंडवाना विद्यापीठ परिसरात सुरु करण्यात आले आहे.

वैद्य चिकित्सालयाची वैशिष्ट्ये



पारंपारिक/आयुर्वेदिक/
प्राचीन औषधोपचार
पद्धतीद्वारे अनेक
रोगाचे निदान



रोग विषयतज्ज/
पारंपारिक वैद्यराज
यांच्या मार्गदर्शनाखाली
आयुर्वेदिक उपचार



बि.पी./शुगर/बद्धकोष्टता/सांधेदुखी/अशक्तपणा/
पाठदुखी/गुडघेदुखी/मायग्रेन/दमा/ किडनी समस्या/
त्वचेचे समस्या/या सारख्या अनेक आजारांवर
नैसर्गिक/आयुर्वेदिक उपचार इ.

वैद्य चिकित्सालयाची वेळ



मंगळवार, बुधवार व शुक्रवार
सकाळी ११ ते दुपारी ०४ वाजेपर्यंत



विज्ञान व तंत्रज्ञान संसाधन केंद्र, गोंडवाना विद्यापीठ,
MIDC रोड, कॉम्प्लेक्स, गडचिरोली - ४४२६०५



STRC Vaidya Chikitsalay now has a branch at Hedri catering to communities in the southern blocks

**STRC and Lloyds Infinite Foundation (Lloyds Metals)
sign Memorandum of Understanding**





STRC Celebrates World Environment Day with a Campus-Wide Plantation Drive

Every year, 5th June, is celebrated as World Environment Day to commemorate the occasion, STRC organised an in-campus plantation drive. The event aimed to promote environmental sustainability and raise awareness about it as a practices.

Under the able leadership of the Chief Program Officer and Head, STRC, Shri Ashis Gharai, the entire team of STRC staff actively participated in the event, planting a variety of horticulture plants across the STRC campus. The occasion was filled with enthusiasm and a shared commitment to environmental conservation, demonstrating STRC's dedication to promoting sustainable practices and environmental stewardship.

STRC pledges to take this initiative to Ashramshala schools and beneficiaries on ground.



Young Medicos Visited STRC as Part of Their Summer Internship

A group of young medicos, visited STRC as part of their summer internship program (2024-25) under Maharashtra University of Health Sciences, Nashik during 10th to 25th June, 2024.

This exposure program was organized as part of their learning goal (Health Education & Research Methodology) in clinical research. During the period, amongst host of events and field exposures organized by Gondwana University, Gadchiroli, the students visited STRC Vaidya Chikitsalaya to gain first-hand knowledge about the traditional healing practices adopted by local folk healers. During the visit, they were also apprised about STRC's multifarious indigenous medicinal knowledge related initiatives such as; Vaidu Directory and Medicinal Plant Checklist etc.



Review of Manav Vikas Mission Supported Projects Held

Under the chairmanship of Deputy Commissioner, Manav Vikas Commissioner, Chhatrapati Sambhaji-nagar, a project review meeting was held on June 12, 2024 at District Planning Office, Gadchiroli.

In the said meeting, Manav Vikas Mission supported projects implemented by STRC, namely, a) Integrated Fish Farming (Fish and Poultry) for Livelihood Development of Local Community in Medpalli Cluster, Aheri and b) Establishment of Bamboo Common Facility Center (CFC) in Kurkheda Block, Gadchiroli, as a Rural Enterprise for Skill Upgradation and Livelihood Generation of Traditional Bamboo Artisans, were reviewed. During the meeting Chief Program Officer & Head, STRC, Shri Ashis Gharai, apprised the District Planning Officer on the progress of both the projects. Shri Ajay Shahre, Scientific Officer, STRC and Shri Nikhil Borse, Junior Scientific Officer, STRC were present in the meeting.

While the Integrated Fishery project has been successfully executed within the timeline, the Bamboo CFC project is set to achieve all its deliverables within the stipulated project period by September 2024.



GOVERNMENT OF MAHARASHTRA

Collaborations and Future Partnerships



Hon'ble Vice-Chancellor, Gondwana University, Dr. Prashant Bokare called on Dr. Archana Patankar, Vice President, NSDC Research and Impact, to discuss possible collaboration on establishment of a state of the art Skill Centre at Gondwana University Gadchiroli. Along with Dr. Kapil Chandrayan, Consultant, NSDC, a team of senior office bearers of Gondwana University were also present.



Conceived and funded by Rajiv Gandhi Science and Technology Commission (RGSTC), Mumbai, Government of Maharashtra, Science & Technology Resource Centre (STRC) is an autonomous institute established in concurrence with Gondwana University, Gadchiroli in 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 acts as a catalyst to science and technology based development of the under-served tribal communities of the Gadchiroli region and as a bridge between knowledge activities of the University and enhanced livelihoods in the neighborhood.



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