

ANNUAL REPORT 2025-2026



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, Mumbai, Government of Maharashtra.

ANNUAL REPORT 2025-26

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Science & Technology Resource Centre Gondwana University, Gadchiroli

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.



The Guiding Principle



Science & Technology Resource Centre at Gondwana University Gadchiroli has been set up to nurture a sustainable ecosystem that enhances livelihood as well as contributes to enriching academics and research in the local context leveraging synergy between the two. This is still work in progress, however, some progress has been made in the context of Bamboo. In principle connecting up with other institutions with similar / complimentary objectives would further strengthen the ecosystem.

Padma Vibhushan Dr. Anil Kakodkar

Chairman, Rajiv Gandhi Science and Technology Commission, Mumbai, Government of Maharashtra



Senior Management



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Advisor & Office in-charge,
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Government of Maharashtra

Governing Body (GB)



STRC as a realistically implementable idea based on the CILLAGE concept, is creating wealth and equitable opportunities, sustained bonds with socio-cultural roots, while remaining up-to-date with knowledge empowerment, capacitating local communities well beyond traditional rural agri-domain and exposing them to rural opportunities.

Dr. Charudatta Mayee

Chairman, Governing Body, STRC,
Gondwana University, Gadchiroli



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Shri Swapnil Girade

CPO and Head, STRC,
Gondwana University,
Gadchiroli

Program Advisory Board (PAB)



STRC. provides a wonderful platform for creating the R & D eco-system in the University set-up and envisages to become a science and technology nodal centre for the region. With its prime focus on applicable science, technology and innovation for livelihood enhancement of the underserved communities, I believe, STRC is moving in the right path to become a centre of excellence for sustainable value creation in the coming years. Gondwana University, as the parent institution, would help propel STRC's quest in achieving the desired goal.

Dr. Prashant Bokare

Vice Chancellor, Gondwana University,
Gadchiroli and Chairman, Program
Advisory Board, STRC



PAB Members



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Products Pvt. Ltd. Sindhudurg



Shri Swapnil Girade

CPO and Head, STRC,
Gondwana University,
Gadchiroli

Team STRC

STRC is driven by a young and dynamic team drawn from diverse disciplines, united by a shared commitment to applying science and technology for the benefit of rural and tribal communities. Each member contributes dedicated efforts within their respective areas of expertise while working collaboratively to create and strengthen sustainable livelihood opportunities. STRC fosters an environment that aligns organizational growth with the personal and professional development of its team members, encouraging learning, innovation, and mutual respect. Together, Team STRC transforms challenges into opportunities, ensuring collective progress and long-term institutional growth.



STRC Mandate

Science and Technology Resource Centre (STRC) advances inclusive and sustainable development in rural and tribal regions through innovative livelihood interventions that integrate science, technology, and community participation. By identifying local needs, traditional knowledge, and emerging opportunities, STRC develops practical, technology-driven solutions that enhance livelihoods, strengthen skills, promote entrepreneurship, and improve access to knowledge and sustainable income opportunities. Through training, technology transfer, grassroots innovation, and field-based interventions, the Centre empowers farmers, women, youth, and marginalized communities to build resilient and self-reliant futures.

Focus Areas

Science & Technology



Applying appropriate technologies to address local challenges.

Livelihoods & Sustainability



Creating skills, enterprises and income opportunities around local resources.

Research & Innovation



Developing and demonstrating solutions with practical relevance.

Knowledge & Communication



Connecting communities with information, technology and opportunities.

Our Approach

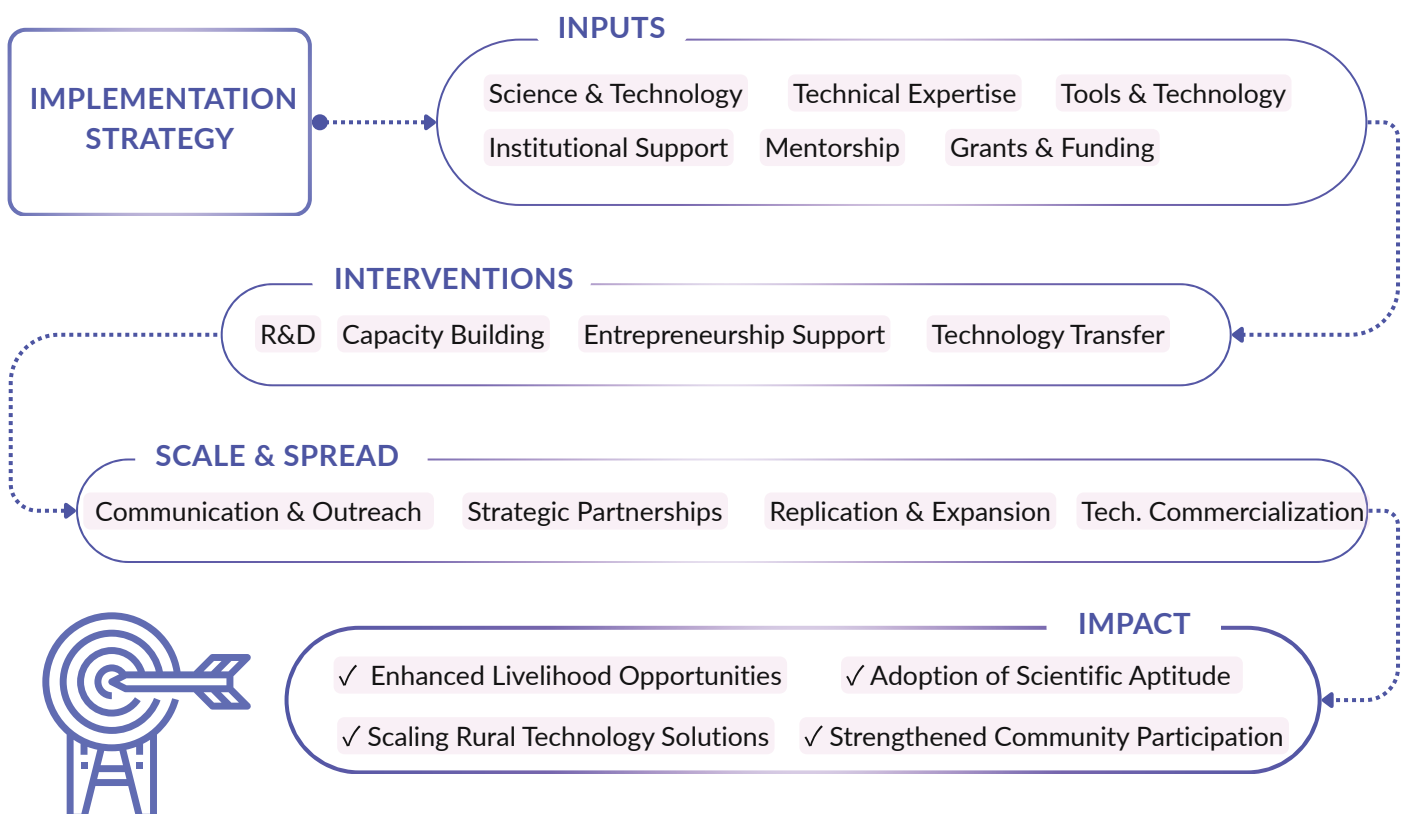


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Executive Summery



On behalf of the Science and Technology Resource Centre (STRC) at Gondwana University, Gadchiroli, we proudly present our annual report for the fiscal year 2025–2026. This year marked transformative progress in aligning grassroots innovation with sustainable development, empowering rural and tribal communities, and advancing scientific research tailored to local needs.

Shri. Swapnil Girade

Chief Program Officer & Head, STRC,
Gondwana University, Gadchiroli



The year 2025–26 marks a decisive transition for STRC from a promising collection of grassroots interventions into a mature, multi-vertical institution delivering measurable, science-backed livelihood impact across Gadchiroli and Chandrapur, districts. This year's achievements reflect not only the resilience and enterprise of the tribal communities we serve, but also the strength of the integrated model we have built, one that binds research, education, enterprise, and communication into a single continuum of sustainable development.

A Year of Consolidation and Strategic Acceleration
Across our five operational verticals, Aquaculture and Livelihoods, Bamboo Craft and Livelihoods, NTFP, Medicinal Plants and Other Livelihoods, Applicable R&D and Academic Program Development, and Communication for Development through ICT, STRC reached over 196+ villages across 14 blocks, engaging more than 1,750 community members through livelihood-centric programmes, 770 teachers and students through the Environmental Education School (EES) and teacher capacity-building initiatives, and 2,300+ farmers through structured advisory outreach.

The Aquaculture and Livelihoods vertical concluded a landmark six-year collaborative project, directly benefiting over 1,400 fish farmers and producers, with 290 farmers trained and portable hatchery and vending technologies deployed to strengthen productivity and market access. This has positioned Gadchiroli as an emerging hub for rural aquaculture while diversifying livelihoods through aqua-crop programmes such as water chestnut cultivation.

The Bamboo Craft and Livelihoods vertical, together with our market-linked social enterprise Gondwana Craft, remained the largest driver of community income, generating ₹9.8 lakh in direct artisan revenue and ₹9.89 lakh in aggregate craft sales across bamboo, Dhokra, Gond art, and pottery. We trained over 450 artisans cumulatively, elevated 80 to master-artisan status, established the Lakhandur bamboo ply-making cluster, and facilitated Artisan Card registration for 110 craftspeople in partnership with the Ministry of Textiles' Chaupal initiative. These steps lay the foundation for a circular bamboo economy targeting ₹50 lakh to ₹1 crore in annual enterprise revenue by 2028–29.

The NTFP, Medicinal Plants and Other Livelihoods vertical generated ₹17.35 lakh in direct revenue for communities reliant on forest produce, distributed 228 tools and technologies, and advanced 1,076 community engagements. A new MoU with the BAIF Institute for Sustainable Livelihoods and Development strengthens the Paramparik Vaidu Prashikshan programme, anchoring the Vaidya Chikitsalay and the Comprehensive Vaidu Directory as the basis for transitioning traditional healers into formal wellness entrepreneurs.

The Applicable R&D and Academic Program Development vertical engaged 650+ tribal students across 15 schools in its second phase through the Environmental Education School Programme and advanced Geographical Indication registration for Gadchiroli Roselle. This reinforces STRC's role as the intellectual backbone linking academic research to field-tested livelihood solutions.

The Communication for Development through ICT vertical ensured that our field impact is documented, disseminated, and made visible to institutional and public stakeholders through training manuals, SOPs, best practices, case studies, and impact stories for STRC's livelihood-based programmes and capacity-building initiatives.

Institutional Recognition and Partnerships

This year affirmed STRC's growing national standing. We were formally recognised as a Centre of Excellence by HCSSC and forged a landmark collaboration with the National Innovation Foundation (NIF) India, resulting in the award of 18 units representing seven validated grassroots technologies. In total, STRC signed 10 MoUs, engaged 8 institutional stakeholders, and built 10 strategic collaborations, while developing 25 grassroots tools in-house and deploying 264 technology units to communities. This is evidence of an innovation ecosystem that is both locally rooted and nationally networked.

Strategic Momentum and Future Vision

The year 2025–26 has solidified STRC's position as a catalyst for sustainable, community-led development across tribal regions, demonstrating that integrated science, enterprise, and education can deliver tangible, durable outcomes. Despite operational challenges in scaling artisan cohorts while preserving craft quality, securing FSSAI certification for traditional medicinal products,

and formalising informal partnerships into structured, outcomes-based frameworks, we addressed each through phased capacity-building, rigorous technology validation, and strategic investments in research design and communication infrastructure.

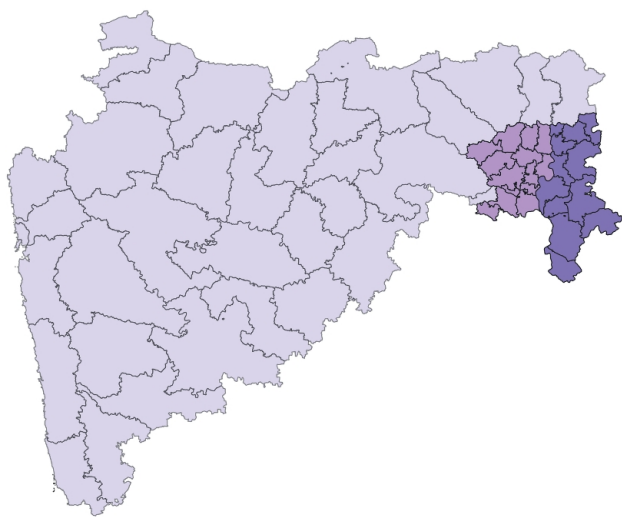
These deliberate interventions ensured that growth remained aligned with quality, authenticity, and long-term impact, reinforcing our commitment to responsible innovation and to protecting the trust that communities place in STRC's work.

Looking ahead, STRC will deepen its evolution from programme implementation to institutional leadership, building systems that outlast any single project cycle. Our priorities include expanding the certificate course portfolio to 15+ offerings with NSQF integration, securing Geographical Indication protection for key local products such as Gadchiroli Roselle, formalising traditional healers as certified wellness entrepreneurs, and scaling Gondwana Craft into an industrial-grade, circular-economy enterprise with stronger market linkages.

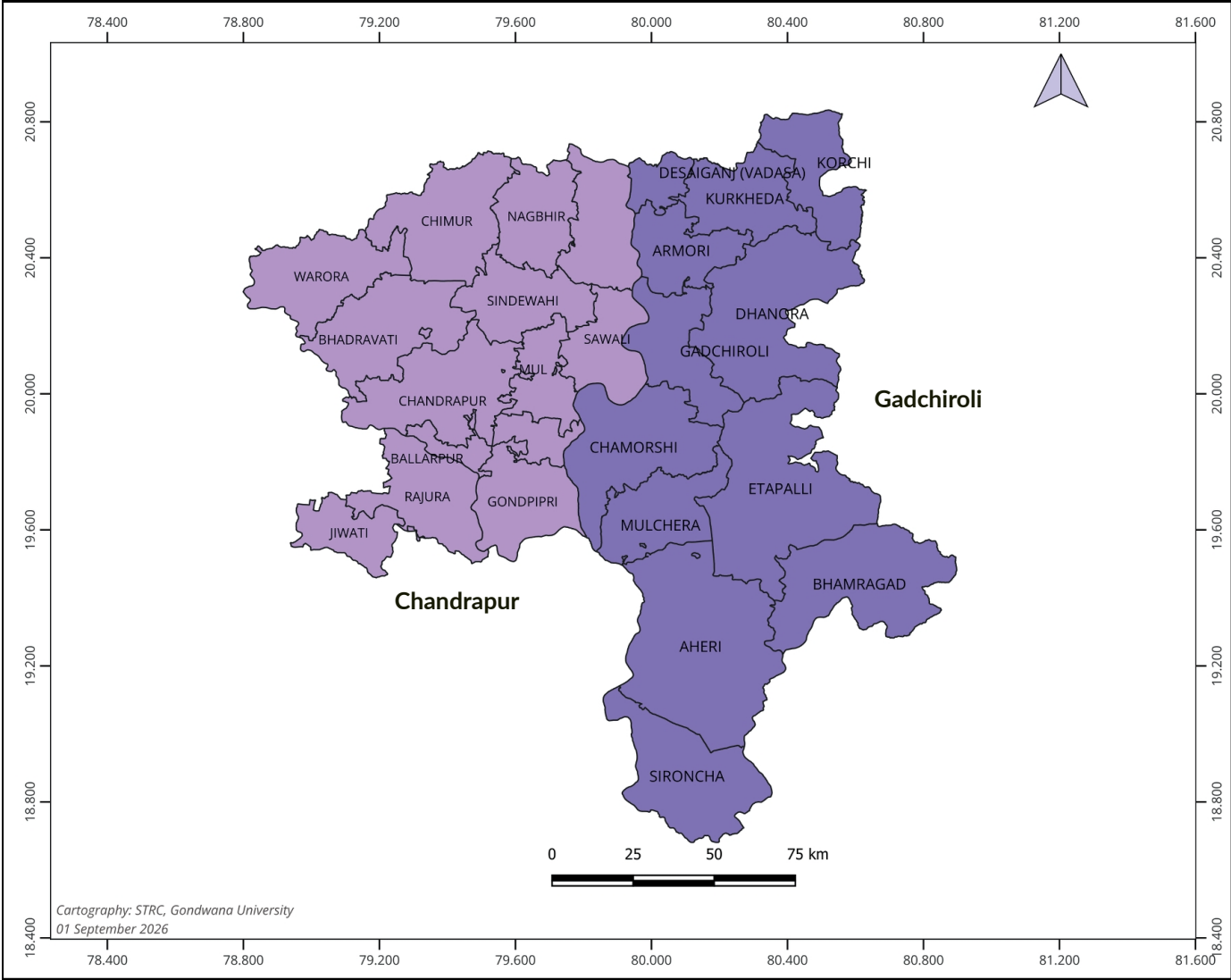
Anchored by four-year numeric impact targets, this vision ensures that every initiative is measurable, transparent, and accountable, transforming science, skill, and tradition into enduring pathways of empowerment, resilient livelihoods, and self-reliant tribal communities.



Geographical Outreach



STRC Outreach Map :
Gadchiroli & Chandrapur
District





STRC Honoured with the 'वसंतराव नाईक सामाईक पुरस्कार २०२५'

Science and Technology Resource Centre (STRC) has proven itself as a model for the state of Maharashtra due to its concerted efforts to improve the lives of rural youth and to assist tribal dominated areas of Vidarbha. In recognition of this, the prestigious 'वसंतराव नाईक सामाईक पुरस्कार २०२५', awarded by the Vasantryao Naik Agricultural Research and Rural Development Foundation, Bombay has been conferred upon Science and Technology Resource Centre, Gondwana University, Gadchiroli at the event.

Gadchiroli district, known for its tribal population and remote geography, has limited access to education - especially in the fields of science and technology. To bridge this gap, the Rajiv Gandhi Science and Technology Commission, Mumbai, Government of Maharashtra, established STRC in 2014 in collaboration with Gondwana University, with the vision of 'STRC to become centre of excellence for sustainable value creation, STRC is leveraging local resources, relevant knowledge & appropriate technologies for human capacity development'.

The Centre plays a vital role in the educational and social development of the region through applied science & technology. With a focus on enhancing skill development, promoting employment, facilitating social transformation, and addressing local issues through S&T based approach, STRC has emerged as a key platform for shaping a brighter future for Gadchiroli.

Acknowledging the Centre's impactful work in driving sustainable change through effective application of science and technology in rural development, the award was presented with a memento and a cash prize of ₹1,00,000. The award was presented by Hon. Shri Manikrao Kokate, Agriculture Minister of Maharashtra.



STRC Recognized as a Centre of Excellence by HCSSC

In a significant milestone towards strengthening skill development and preserving India's rich handicraft heritage, Science and Technology Resource Centre (STRC), Gondwana University, was recognized as a Centre of Excellence (CoE) by the Handicrafts and Carpet Sector Skill Council (HCSSC), New Delhi. The recognition was formalized through a Memorandum of Understanding (MoU) signed.

The partnership aims to promote NSQF-aligned skill development, strengthen trainer capacity, and create sustainable livelihood opportunities for tribal artisans and rural youth. Under this collaboration, STRC will implement Training of Trainers (ToT) programmes, handicraft-based vocational training, school outreach initiatives, and skill upgradation programmes in traditional crafts such as bamboo craft and Gond painting. The initiative will also support the revival of endangered traditional crafts, including Dokra art, while encouraging design innovation, product diversification, entrepreneurship, and market linkages.

A dedicated Skill Hub will be established at STRC to facilitate industry collaboration, certification, product development, and enterprise promotion. The recognition reflects STRC's continued commitment to empowering tribal communities through science, technology, and skill development. It is expected to significantly enhance employment opportunities, strengthen the local handicrafts ecosystem, preserve indigenous knowledge, and contribute to the socio-economic development of the Gadchiroli region.



राष्ट्रीय नवप्रवर्तन प्रतिष्ठान – भारत
 विज्ञान एवं प्रौद्योगिकी विभाग, भारत सरकार का स्वायत्तशासी संस्थान
National Innovation Foundation - India
 Autonomous Institute of the Department of Science & Technology, Govt. of India

Strategic Collaboration between National Innovation Foundation, India and STRC, Gondwana University

Awarded STRC with 7 Grassroot Technologies

The Science and Technology Resource Centre (STRC), Gondwana University, forged a landmark partnership with the National Innovation Foundation (NIF) – India during 2025–26, integrating grassroots innovations into community livelihood programs across Gadchiroli District. This collaboration leveraged NIF's expertise in innovation validation and technical training with STRC's field implementation capabilities, creating a science-based framework for sustainable development. A key milestone was the award of 18 units representing 7 grassroots technologies, all of which were validated for effectiveness after comprehensive training and phased trials, demonstrating STRC's ability to bridge innovation with community-driven livelihood creation.

This initiative exemplifies a replicable model for scaling scientifically validated technologies in tribal regions. By combining NIF's national innovation network with STRC's community engagement, the partnership not only generated evidence-based outcomes but also established a robust framework for technology adoption and income generation among tribal communities. The collaboration underscores STRC's commitment to fostering sustainable, science-backed livelihood solutions in forest-fringe geographies.



Empowering Rural Artisans through Strategic Outreach and Recognition

STRC, Gondwana University, in collaboration with the Development Commissioner (Handicrafts), Ministry of Textiles, Government of India, organised a Chaupal Programme to strengthen the livelihoods of rural and tribal artisans. The initiative focused on facilitating access to government welfare schemes, national recognition through the Artisan Pehchan Card, skill development opportunities, and improved market linkages through the centralized artisan portal. Through this programme, artisans received guidance on the registration process, required documentation, and benefits available under various handicraft development schemes along with technical support that enabled on-site verification of documents and completion of registration formalities, ensuring a smooth enrolment process. The programme started with an enthusiastic response from the artisan community in Gadchiroli, with over 130 artisans successfully registering for the Artisan Pehchan Card. This drive will cover the entire Gadchiroli District with 6 Chaupal program planned in coming months across Gadchiroli. The initiative represents an important step towards enhancing the visibility, institutional support, and economic opportunities available to traditional artisans in the tribal region of Gadchiroli.



Rural Aquaculture Incubation Centre Launched at Gondwana University in Collaboration with Jaljeevika- Centre for Aquatic Livelihoods

With strategic support from STRC, the Centre for Aquatic Livelihoods – Jaljeevika inaugurated the Rural Aquaculture Incubation Centre (RAIC) at Gondwana University. The centre has been established to promote aquaculture-based livelihoods by nurturing fishery entrepreneurs, encouraging innovation, and strengthening local capacities in the fisheries sector.

The RAIC provides a structured incubation ecosystem to support sustainable fisheries development in Gadchiroli district. By enhancing skills, facilitating enterprise development, and creating new income opportunities, the initiative aims to build long-term livelihood resilience and position Gadchiroli as an emerging hub for rural aquaculture.



Strengthening Traditional Healthcare System and Medicinal Plant Conservation in Gadchiroli

STRC, Gondwana University, entered into a Memorandum of Understanding (MoU) with the BAIF Institute for Sustainable Livelihoods and Development to jointly promote the preservation of indigenous healthcare knowledge and strengthen sustainable livelihood opportunities in tribal regions.

The collaboration focuses on organizing the "Paramparik Vaidu Prashikshan" (Certificate cum Training Programme for Traditional Healthcare Practitioners to enhance the scientific knowledge and skills of traditional healthcare practitioners while preserving the rich ethnomedicinal heritage of Gadchiroli. Under the partnership, BAIF serves as the technical and knowledge partner, providing expert faculty, training modules, and technical support for capacity building, evaluation, and documentation of traditional medicinal practices while Ayush experts facilitates the learning on SOPs, Ayush guidelines and standardized methods of treatment.



STRC SCALE & IMPACT

FINANCIAL YEAR 2025-26

Driving Impact. Empowering Communities. Building a Sustainable Future.



Outreach & Community Impact

Revenue Generated



30.85 Lakh

Community Revenue
Generation through STRC
Livelihood Programs



9.8 Lakh

STRCs Social Enterprise
Revenue - Direct Support to
Artisans

Engagement



1,750

Community
Members



770

Teachers &
Students

Outreach



21,32,200+

Digital Outreach



2300+

Farmer Advisory

Geography Covered



2

Districts

14

Blocks
(Talukas)



194+

Villages



Research, Innovation & Capacity Building

Grassroot Tools & Technology



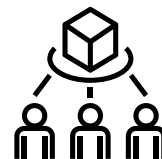
25

Processes / Tools /
Best Practices



20

Borrow by STRC



264

Number of Units
Distributed



28

Workshops



6

Courses
Developed



Partnerships & Collaboration

10

MoU
Signed



8

Stakeholders
Engaged



10

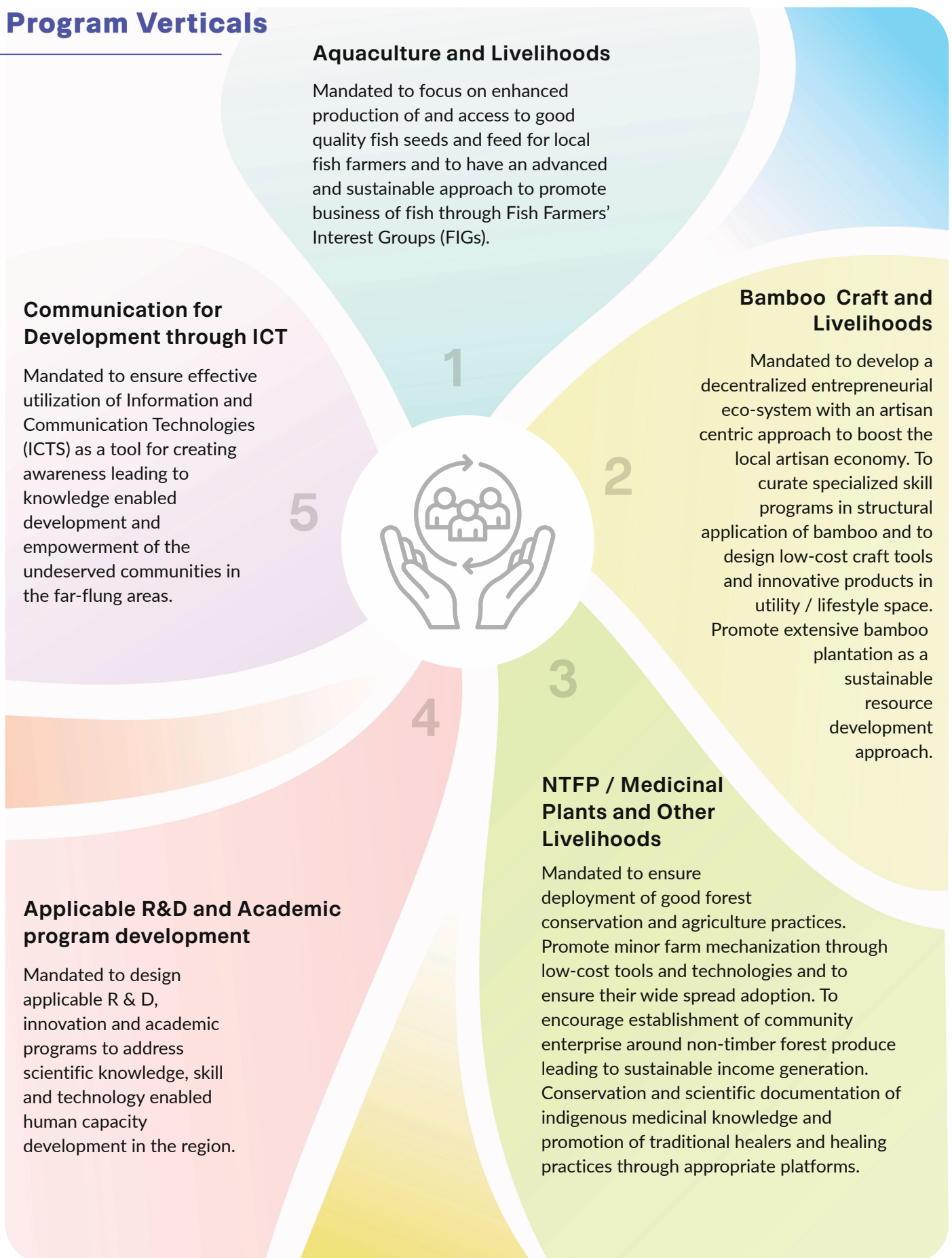
Strategic
Collaborations



Beneficiary Portfolio



Program Verticals



Aquaculture and Livelihoods



Aquaculture and Livelihood Development Overview: FY 2025-26

The 2025-26 fiscal year represents a period of substantial consolidation and strategic acceleration for the Aquaculture and Livelihood Vertical at the Science and Technology Resource Centre. Through the culmination of a landmark six-year collaborative project with MAFSU and the intensification of capacity-building, research, and market linkage efforts, the unit has catalysed transformative livelihood opportunities across Gadchiroli district.

The year witnessed enhanced sectoral organization, technology adoption, and economic resilience, directly benefiting over 300+ fish farmers and producers. Strategic deployment of portable hatchery and vending technologies has elevated productivity, market integration, and income security, while applied research into aquatic crop systems has unearthed new economic pathways for smallholder tribal farmers.

The vertical's initiatives collectively signal a maturing, systems-oriented approach to aquatic resource management, one that balances scientific rigor with community-led development to foster sustainable, market-responsive livelihoods across the region's water-rich landscapes.

Key Impact



₹8 Lakh

Revenue Generated by Fish Farmers through STRC Initiatives

290

Fish Farmers Trained

2

No. of Training & Capacity Building

3

Technology Transfer

5

Institutional Linkages/Collaboration



Completion of the Collaborative Development Initiative with MAFSU Nagpur: Organized Fish Seed Production, Culture, and Marketing

The project titled "Development of Organised Fish Seed Production, Culture and Marketing to Ensure Sustainable Livelihood Opportunities in Aquaculture in Gadchiroli District" represents a defining achievement in advancing the fisheries sector within the district. Executed in partnership with Maharashtra Animal and Fishery Sciences University (MAFSU), Nagpur, this collaborative project operated from 2019 through 2025, establishing a comprehensive institutional and technological foundation for sustainable aquaculture development.

Strategic Approach and Institutional Framework

The project employed an integrated development model addressing four interconnected dimensions of aquaculture strengthening. First, institutional development was achieved through the systematic mobilization and formalization of Fisheries Interest Groups (FIGs) across multiple blocks in Gadchiroli district. These producer collectives emerged as primary vehicles for technology adoption, knowledge sharing, and collective marketing, fundamentally altering the organisational landscape of smallholder fisheries in the region. Second, capacity building was advanced through targeted training and demonstration programmes designed to transition fish farmers from traditional to scientifically informed practices.

Third, decentralized fish seed production systems were established through portable technology platforms, directly addressing the critical bottleneck of quality seed availability. Fourth, market development and value chain enhancement initiatives created formal pathways for product aggregation, hygienic trade, and price-advantaged market engagement.

Technological Innovation:

Portable Hatchery Systems and Market Infrastructure

A defining feature of this project has been the deployment of five fiberglass-reinforced plastic (FRP) portable carp hatcheries across four strategic locations: Kurkheda, Korchi, Chamorshi, and Mulchera blocks.

These technologically optimized units have fundamentally democratized access to quality fish seed among smallholder producers. Between 2022 and 2025, these hatcheries produced and distributed approximately 15 lakh (1.5 million) fingerlings across the target region, representing a substantial quantum of genetic material available to farming communities. Of particular significance, a farmer entrepreneur from Chamorshi successfully marketed nearly 13 lakh fingerlings during 2024, demonstrating the commercial viability of decentralized seed production and the emergence of farmer-led seed entrepreneurship.

Each unit incorporates live fish holding tanks, clean cutting and weighing facilities, and operational designs enabling easy transportation to proximate market locations. This infrastructure has catalysed a transition from informal, unhygienic marketing practices to organized, consumer-friendly trade systems that enhance both farmer price realization and consumer confidence in product quality and safety.

These portable vending platforms, designed and developed collaboratively by the College of Fishery Science, Nagpur, and STRC, represent a technology-enabled intervention addressing the persistent challenge of hygienic fish marketing in rural settings.



The project further strengthened market access through the installation of five mobile fish vending units positioned strategically at Armori, Gadchiroli, Aheri, Shriniwaspur, and Chamorshi. These portable vending platforms, designed and developed collaboratively by the College of Fishery Science, Nagpur, and STRC, represent a technology-enabled intervention addressing the persistent challenge of hygienic fish marketing in rural settings.

Each unit incorporates live fish holding tanks, clean cutting and weighing facilities, and operational designs enabling easy transportation to proximate market locations. This infrastructure has catalysed a transition from informal, unhygienic marketing practices to organized, consumer-friendly trade systems that enhance both farmer price realization and consumer confidence in product quality and safety.

Overall Impact on Fish Production and subsequent Revenue Generation

The project has shown a consistent improvement in fish production across the supported farmer sites. The data reflect a progressive increase in yield across different blocks from 2022-23 to 2024-25, highlighting the positive impact of the scientific aquaculture practices promoted under the project. The total 15.00 Lakh fish fingerlings have been distributed from these above four sites. The farmer at Chamorshi, Mr. Harish Biswas has alone sold 13.00 Lakh fingerlings during the July-September, 2024.



Portable Carp Hatcheries:

FRP Portable Carp Hatcheries (05 units) helped farmer get timely, affordable, and healthy fish seed, which directly improved fish production and income.

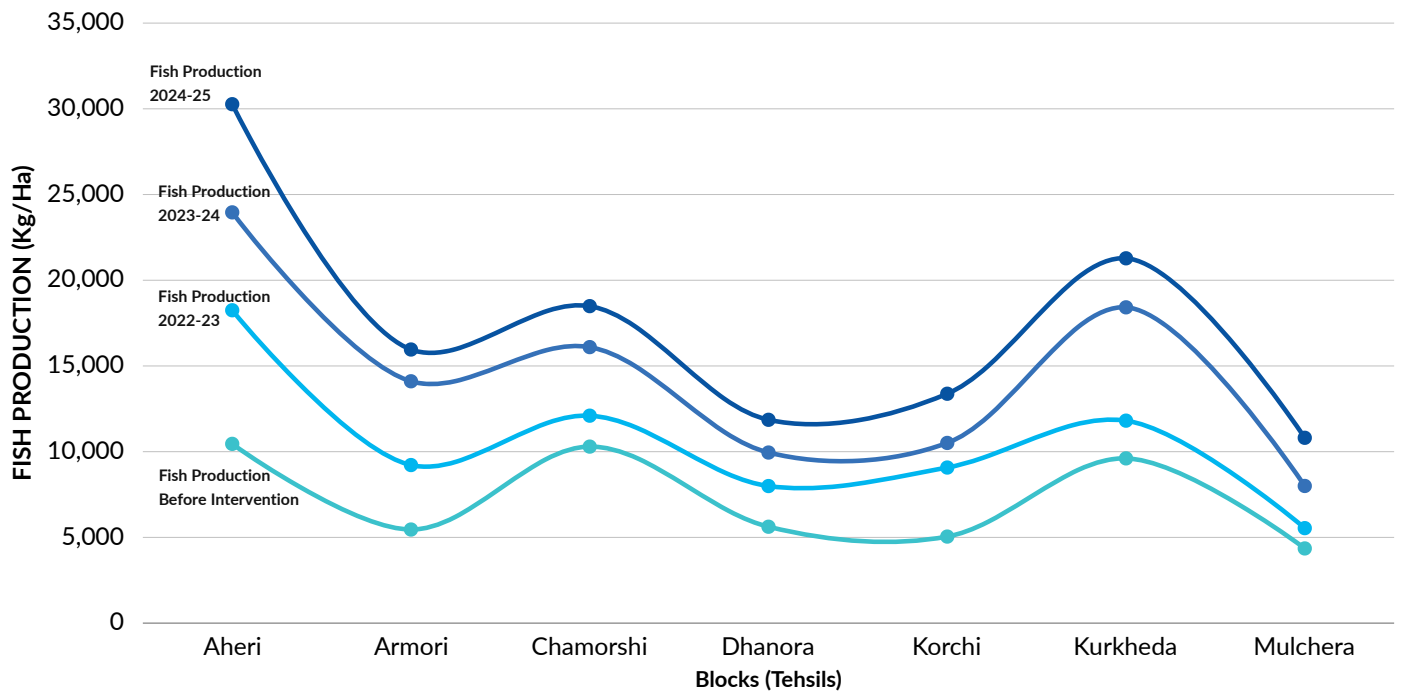


Portable Fish Vending Units:

Portable fish vending/selling units (05 units) have been installed at Armori, Gadchiroli, Aheri, Shriniwaspur and Chamorshi respectively.



Fish production at selected farmer sites during 2022-23 to 2024-25 (kg/ha):



Training and Capacity Building

The collaborative project conducted 62 comprehensive training and demonstration programmes, cumulatively benefiting 1,141 fish farmers and entrepreneurs across multiple blocks. These programmes addressed the full spectrum of scientific aquaculture practices, encompassing pond preparation and management, feed formulation and administration, disease and pest management protocols, harvesting methodologies, and market-linked post-harvest handling. The intensity and breadth of capacity building represent one of the most substantial farmer engagement initiatives undertaken in the district's fisheries sector, creating a cadre of technically informed practitioners capable of adopting and adapting scientific practices to local ecological and economic contexts



Productivity Enhancement and Economic Impact

Field-level monitoring data from surveyed aquaculture sites during the 2022-23 to 2024-25 period demonstrates consistent enhancement in fish production productivity measured in kilograms per hectare. This productivity trajectory reflects the cumulative impact of improved seed quality, scientific pond management practices, better feed administration, and disease mitigation strategies. The data provides empirical evidence of the returns to technology adoption and technical knowledge transfer among farming communities previously operating under traditional management systems



Capacity Building Initiatives in Aquaculture and Livelihood

The Centre's capacity building strategy during 2025–26 integrated multiple training modalities, institutional partnerships, and target beneficiary groups to create differentiated learning pathways suited to diverse stakeholder contexts.

01. Induced Fish Breeding and Seed Production Training Program

STRC-GUG organized specialized training on induced fish breeding and seed production of Indian major carps, targeting fish farmers and FIG members aged 18–60 years across the tribal farming communities. The three-day training was conducted at the portable carp hatchery facility in Mulchera block, combining classroom instruction with hands-on demonstrations at functional seed production units and selected fish ponds.

The training curriculum addressed the biological and technical foundations of induced breeding protocols, seed handling and grading methodologies, proper stocking density management, and best practice culture protocols for fingerling production.

Participants acquired practical competencies in hormone injection techniques, proper handling of broodstock, larval rearing management, and monitoring of early developmental stages.

The training produced measurable improvements in participants' technical knowledge and farm-level practices, contributing to enhanced seed survival rates, improved growth performance of cultured fingerlings, and increased production per hectare. By strengthening understanding of scientific breeding protocols and seed management techniques, the programme directly enhanced income-generating capacity and supported the transition toward commercial seed production enterprises among farmer-entrepreneur participants.



02. Capacity Building of Aquapreneuers in Fish Farming: (मत्स्य संगोपन व व्यवस्थापन प्रशिक्षण)

Recognizing the need for enterprise-oriented capacity building, STRC partnered with the Bank of India's Rural Self Employment Training Institute (RSETI) at Gadchiroli to deliver the "(मत्स्य संगोपन व व्यवस्थापन प्रशिक्षण)" (Fish Farming and Management Training) program. This ten-day intensive training program targeted rural youth aged 18-45 years, including members of self-help groups (SHGs) and fisheries cooperative societies.

The program positioned fish farming as a viable income-generating enterprise for rural youth seeking self-employment pathways, with particular emphasis on nursery rearing systems (spawn to fingerling transition) and scientific pond management protocols for productive, sustainable aquaculture.

The training integrated technical content with enterprise development modules, including production cost estimation, market intelligence, supply chain management, and customer relationship strategies. Expert lectures delivered by STRC faculty provided participants with specialized knowledge in quality fish seed selection, proper handling protocols, stocking density optimization, and essential management practices to ensure high survival rates and robust growth performance.

The curriculum was designed to transition participants from viewing fish farming as a subsistence activity to recognizing it as a systematic, scalable enterprise offering stable income generation and livelihood security.

Practical field exposure at functional fish farms and the portable hatchery facility strengthened capacity for technical implementation and enhanced confidence in adopting scientific practices. The programme demonstrated strong outcomes in enabling participants from SHGs and cooperative societies to initiate independent fish farming activities or enhance productivity on existing farm units, contributing meaningfully to self-employment and household income growth across the Gadchiroli region.



Certificate Course Development: Fish Seed Nursery Management (Spawn to Fingerling)

Course Design and Learning Architecture

The certificate course integrates experiential learning methodologies with audio-visual instructional resources to create a differentiated, accessible learning environment. Recognizing that many learners lack prior exposure to technical aquaculture systems, the programme employs demonstration-based pedagogy combined with interactive visual media to support conceptual clarity and practical comprehension. This instructional design facilitates effective assimilation of scientific principles while ensuring that knowledge gains translate directly into improved field-level practice.

Curriculum and Content Focus

The course curriculum emphasizes the scientific and technical dimensions of fish seed production during the critical spawn-to-fingerling phase, a period that fundamentally determines survival rates, growth performance, and economic viability of entire production cycles. The programme addresses the full scope of nursery operations, beginning with foundational pond preparation techniques including drying, liming, and fertilization to establish optimal biological and chemical conditions for seed survival and growth.

Water quality management receives substantial curricular attention, with training on monitoring and maintaining temperature, dissolved oxygen, pH, and nutrient parameters within optimal ranges for different developmental stages.

Special emphasis is accorded to stress reduction and mortality minimization strategies, encompassing proper handling protocols for spawn, appropriate acclimation procedures to prevent physiological stress, and stocking density optimization to ensure adequate space and

resource availability for developing fish. Feeding management constitutes a core curricular element, addressing both the development of natural food organisms (particularly zooplankton and phytoplankton communities) through pond fertilization and the formulation and administration of supplementary feeds to sustain healthy growth trajectories. The integration of natural and supplementary feeding represents a cost-effective, environmentally sustainable approach suited to the resource contexts and operational capacity of smallholder and marginal farmers.



Research Study: Sustainable Aquatic Crop Systems and Water Chestnut Cultivation

The Centre's commitment to evidence-based programme design has been reinforced through field-level research examining region-specific aquatic farming systems suited to Gadchiroli's agro-ecological conditions and livelihood contexts. This research-practice integration ensures that institutional interventions are grounded in systematic understanding of local resource bases, farmer practices, and economic viability.

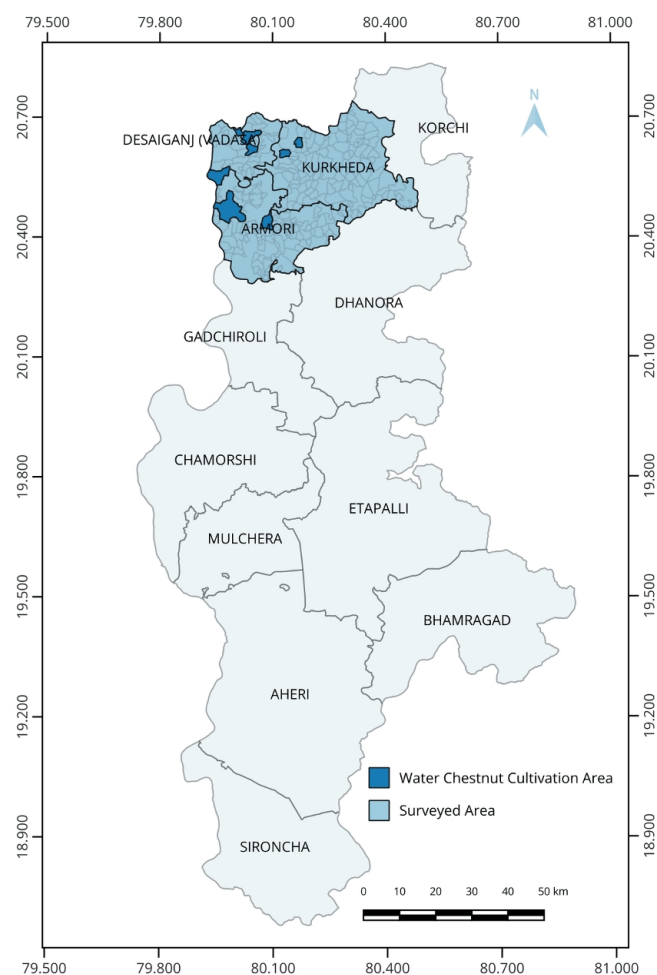
Contextual Rationale and Research Design

Gadchiroli district, with its predominantly tribal population distributed across 14,412 square kilometers, possesses an extensive water resource base comprising approximately 7,292 hectares of seasonal and perennial water bodies. These aquatic ecosystems present significant yet underutilized potential for livelihood diversification and income enhancement among farming communities.

Within this context, water chestnut (Singhara, *Trapa spp.*) cultivation has emerged as a viable and increasingly adopted livelihood strategy among smallholder farmers. The crop's suitability to shallow, waterlogged conditions, combined with relatively modest input requirements, renders it accessible to resource-constrained farming populations while commanding consistent local and regional market demand driven by seasonal consumption patterns and price stability.

To systematically assess this emerging livelihood system and generate evidence to inform future programming, STRC conducted a comprehensive field-based study across Gadchiroli district.

The research encompassed a structured survey of 45 farmers engaged in Singhara cultivation across three talukas (Vadsa, Armori, and Kurkheda) and multiple village locations (Vairagad, comprising 40% of sample; Arsoda, 22%; and Gurnoli, 18%). The study examined cultivation practices, water resource utilization patterns, productivity levels, and the economic characteristics and profitability profiles of Singhara-based farming systems.



Key Findings:

Farming Profile and Production Systems

Field research revealed that Singhara cultivation in Gadchiroli is predominantly practiced on small landholdings ranging between 0.5 and 1 acre, reflecting its particular suitability for smallholder and marginal farming populations constrained by limited arable land access. Water sources supporting cultivation encompass bore wells, rain-fed ponds, and natural reservoirs, with water availability constituting a critical determinant of system sustainability.

Cultivation practices remain predominantly traditional, with two primary establishment methodologies observed. Direct seed sowing, utilizing farm-saved seed varieties (green, red, and spine types) and conducted during January, represents the dominant approach. Transplantation of seedlings during June constitutes an alternative methodology employed by some farmers. The annual crop cycle culminates in harvesting during September through October months. Seed application rates typically range between 20 and 30 kilograms per acre, with farmers relying on farmer-managed seed selection and propagation rather than certified improved varieties.

A critical finding pertains to production system configuration. Monoculture practices dominated 84% of surveyed farms, with Singhara cultivated as a sole crop with minimal or no crop diversification or integrated production. Integrated aquaculture systems combining Singhara with fish rearing were observed on only 16% of surveyed farms, revealing substantial opportunity for enhancing productivity and resource efficiency through integrated aquatic farming models that combine multiple aquatic enterprises within a single water body.

Economic Performance and Market Dynamics

Under prevailing field conditions, average Singhara productivity was estimated at approximately 1,300 kilograms per acre, representing a stable and consistent yield level achieved through traditional management practices. Market prices demonstrated seasonal and quality-dependent variation, ranging between ₹40 and ₹70 per kilogram, with price realization influenced by fruit size, quality classification, and market timing. Gross income from a single acre of cultivation was estimated at approximately ₹25,000 to ₹91,000, depending on yield and price realization, with a typical average of approximately ₹52,000 per acre across the survey population.

Economic analysis demonstrates that Singhara cultivation operates under a low-input production system, with total cultivation costs, including land preparation, seed, pest management, and harvesting labour, ranging between ₹15,000 and ₹25,000 per acre. This cost structure yields benefit-cost ratios estimated between 1:2 and 1:3, signifying that for every rupee invested in cultivation, farmers realize returns of ₹2 to ₹3. Comparative economic analysis with conventional paddy cultivation systems reveals that Singhara delivers higher net returns while requiring substantially lower capital investments, positioning water chestnut cultivation as an economically efficient utilization of aquatic resources.

Marketing of Singhara proceeds through direct sale to local markets, with self-help groups playing a critical aggregation and distribution role, and wholesalers engaging in bulk produce procurement. The minimal transportation distance to nearby markets such as Armori and Gadchiroli enables farmers to achieve favourable price realization while maintaining reduced dependency on intermediaries and market commissions.



Cultivation methods are largely traditional, with two primary establishment practices observed:

Direct seed sowing during January and sapling transplantation in June. The study further observed that monoculture practices dominate 84%, while 16% integration with aquaculture, particularly fish rearing, remains limited. This highlights significant potential for enhancing productivity and resource efficiency through integrated aquatic farming systems. Water availability from bore wells, rain-fed ponds, and natural reservoirs was identified as a critical factor influencing the sustainability of Singhara cultivation.

Farming Profile

- Landholding: Mostly 0.5–1 acre
- Water sources: Bore wells, ponds, reservoirs
- System: Monoculture (84%), limited fish integration



Cultivation Practices

- Sowing: January
- Transplanting: June
- Harvesting: Sept–Oct
- Seed rate: 20–30 kg/acre
- Practice: Predominantly traditional

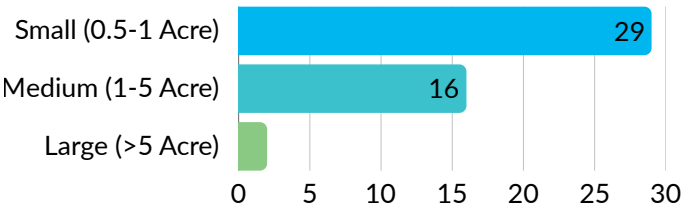
The crop follows a single annual cycle, with harvesting carried out between September and October. Under existing field conditions, the average productivity was estimated at approximately 1300 kg per acre.

Economics

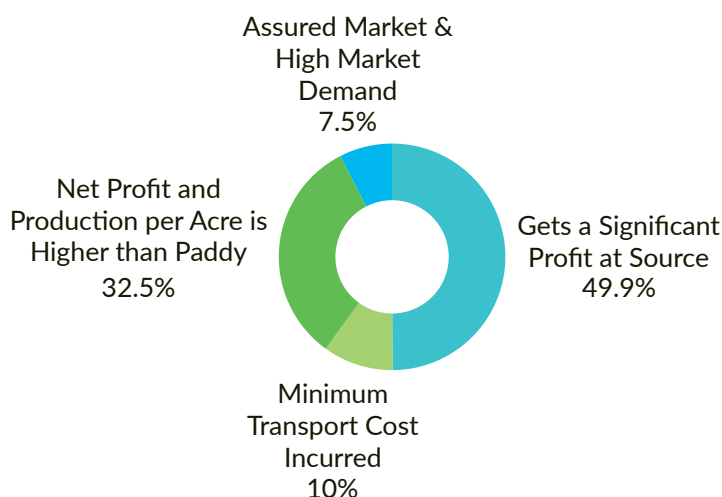
- Avg. yield: ~1300 kg/acre
- Price: ₹40–₹70/kg
- Income From 1 acre: ~₹52,000 - ₹90,000
- Higher net returns and lower costs than paddy

Economic analysis indicated that Singhara cultivation operates under a low-input production system, with total cultivation costs ranging from ₹15,000 to ₹25,000 per acre. Market prices vary between ₹40 and ₹70 per kilogram depending on fruit size and quality. The benefit-cost ratio, estimated between 1:2 and 1:3, demonstrates efficient utilisation of aquatic resources compared to conventional crops such as paddy.

Category of Farmers



Driving Factors for Crop Diversification : Preferring Water Chestnut over Paddy



Farmer Decision-Making and Livelihood Transitions

Research findings indicate that farmers in Gadchiroli district have consciously adopted Singhara cultivation as a deliberate preference over traditional paddy farming, driven primarily by economic considerations. Enhanced profitability per acre, combined with lower capital requirements and reduced transportation costs, represents the primary motivation underlying this livelihood transition. The decision reflects farmer rationality in recognizing and responding to improved economic opportunities within existing resource constraints, demonstrating agency in livelihood strategy optimization rather than external programme dependency.

Research Conclusions and Implications for Programming

The research establishes Singhara cultivation as a viable and economically efficient aquatic livelihood option within Gadchiroli's water-based agro-ecosystems. The crop's demonstrated suitability to small landholdings, low-input production requirements, consistent market demand, and superior economic performance compared to traditional crops position water chestnut farming as a high-potential livelihood pathway for tribal and marginal farmer populations.

However, the research simultaneously identifies significant opportunities for productivity and income enhancement. Limited adoption of improved agronomic practices, traditional pest and disease management methodologies, and predominantly monoculture production systems suggest substantial scope for science-based intervention. Introduction of improved cultivars offering enhanced productivity or quality attributes, adoption of scientific pond preparation and management protocols, implementation of integrated pest management strategies, and promotion of integrated aquatic farming systems combining Singhara with fish production could substantially enhance per-acre productivity and farmer income, while simultaneously improving resource efficiency and production system resilience.



Strategic Outlook: Scaling Impact through Research, Capacity Building, and Market Linkage

Moving forward, particularly in the aquaculture domain STRC has delineated a strategic agenda to accelerate the scale and depth of aquaculture-based livelihood development while maintaining scientific rigor and farmer-centered engagement.



Fish Epicentres as Strategic Development Nodes

Future development initiatives will establish fish epicentres as integrated hubs that concentrate specialized equipment, technical expertise, and demonstration systems to deliver seed production, farmer training, technology demonstration, and input supply. These strategic nodes will function as platforms for technology dissemination and peer-to-peer knowledge sharing, enabling efficient scaling of proven aquaculture innovations while reducing per-farmer access costs and transaction burdens for service delivery.



Integrated Value Chain Development

The Centre commits to advancing a comprehensive, systems-oriented approach across the entire aquaculture value chain, addressing integrated nodes of input supply (quality seed, feed, therapeutics), scientific production practices, post-harvest handling and value addition (processing, hygienic handling, packaging), and organized market distribution channels. This integrated architecture ensures that production improvements translate into commensurate farmer price realization and income security, while simultaneously enhancing product quality, consumer access, and overall market competitiveness.



Research-Informed Innovation and Technology Adoption

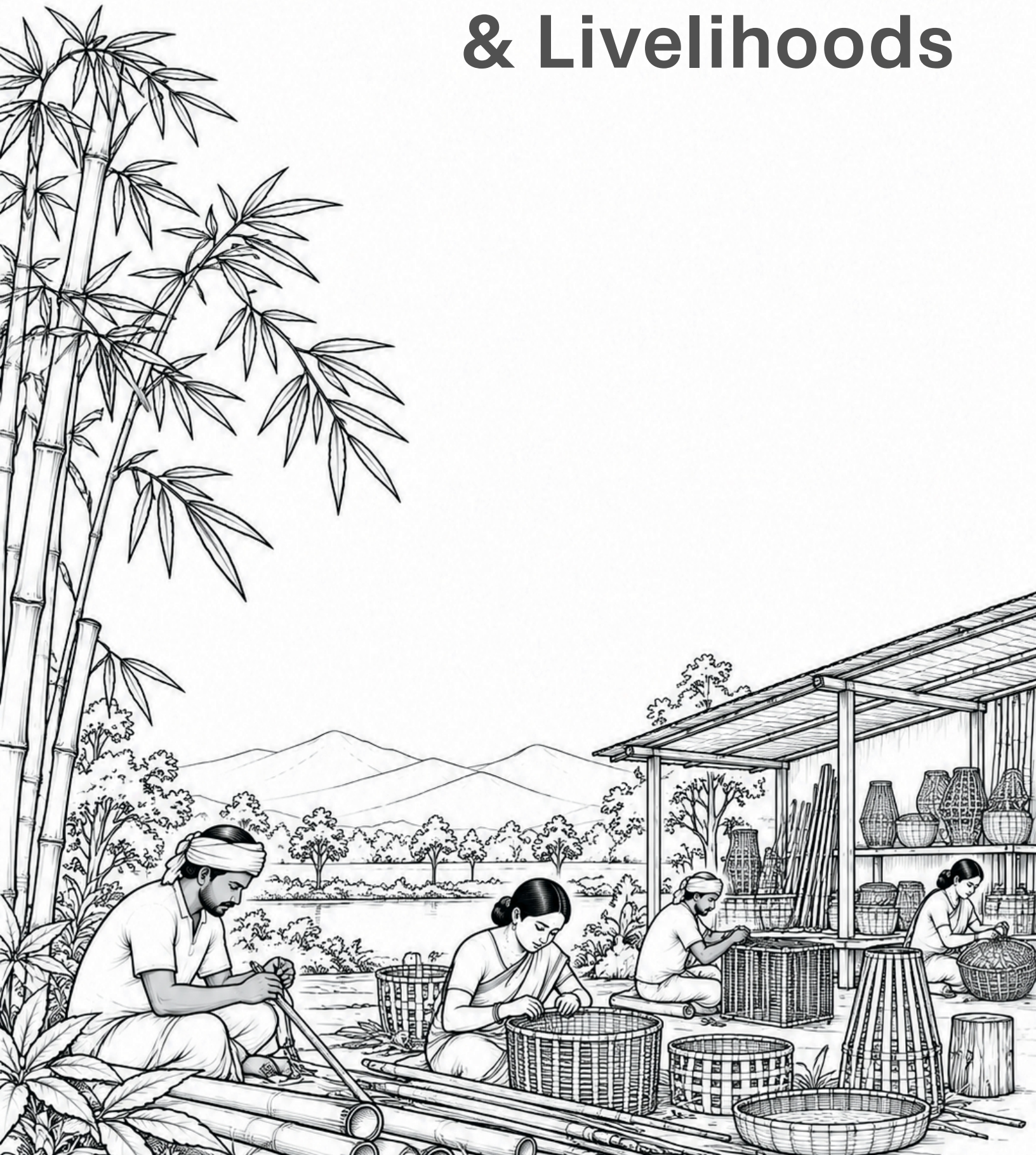
STRC's research agenda will drive need-based innovation that addresses farmer constraints and accelerates adoption of emerging, productivity-enhancing, and sustainability-improving technologies, anchored by a robust research-to-practice pipeline comprising field-level validation trials, adaptive research on technology-environment-farmer fit, and systematic knowledge transfer mechanisms. Priority domains include integrated aquatic farming systems (Singhara and fish polyculture combinations), improved Singhara cultivars suited to Gadchiroli's agro-ecological conditions, sustainable feed formulations that minimize environmental impact while controlling production costs, and climate-resilient aquaculture practices addressing emerging water availability challenges.



Market Linkage Strengthening and Price Enhancement Mechanisms

Recognizing that production gains alone cannot secure meaningful livelihood improvement without parallel market access and price realization, STRC will prioritize forward and backward market linkage development through direct producer-to-buyer engagement mechanisms that reduce intermediation and transaction costs, collective marketing via farmer organizations and SHGs to leverage aggregation and bargaining strength, real-time market information dissemination enabling informed decisions on cultivation timing and channel selection, and value addition initiatives encompassing processing, packaging, and branding that enable farmers to capture a greater share of consumer value.

Bamboo Craft & Livelihoods



Bamboo Craft and Livelihood Vertical Overview: FY 2025-26

The Bamboo Craft and Livelihood Vertical achieved transformative outcomes during 2025-26, establishing a decentralised, cluster-based bamboo enterprise ecosystem benefiting over 450 trained artisans and generating ₹9.8 lakh in direct community revenue. The year marked strategic institutional advancement with the successful establishment of the Lakhandur bamboo ply-making cluster, the facilitation of Artisan Card registrations for 110 rural and tribal artisans, and the launch of the Chaupal initiative in partnership with the Ministry of Textiles.

Through integrated initiatives encompassing product research and development, technical capacity building, and market-linked branding through Gondwana Craft, the vertical strengthened the economic viability and social recognition of indigenous bamboo craftsmanship.

The production of 2,500 units across diverse product categories, coupled with the development of three new standardised production technologies and systematic standard operating procedures, demonstrates the vertical's commitment to transitioning artisan-led production from traditional subsistence systems toward professionalised, quality-assured enterprises capable of accessing regional and national markets. This reporting period positions bamboo-based livelihood development as a central pillar of STRC's sustainable rural development strategy, with direct benefits accruing to 125 artisans across four primary craft clusters spanning Gadchiroli and Chandrapur districts.

Key Impact



₹9.8 Lakh
Total Community Revenue

384

Trained Artisans in the community

22

Master Artisans Supported

03

Technology and Processes Developed (In-house)

01

Research Study

25-26

Production 2500 Units

102

Cumulative Product Range Developed

9

Training & Capacity Building

8

Institutional Linkages



STRC Model Production Unit

Strategic Focus and Institutional Architecture

The Model Production Unit (MPU) operating under the Bamboo Craft and Livelihood Vertical functions as an integrated hub for product innovation, technology development, artisan capacity building, and market-linked quality assurance.

During 2025-26, the MPU emphasised systematic product range expansion, development of standardised production technologies, and cluster-based artisan development. This institutional model reflects a deliberate transition from workshop-based craft production toward industrialised, quality-assured production systems capable of serving institutional, commercial, and household markets at scale



Product Range

9



Production

2500+



Bamboo Based Toolkit

3



New Product Developed

22



Research and Development: Product Innovation and Process Standardisation

New Product Range Development

Strategic expansion of the product portfolio during the reporting year reflects market analysis, customer demand assessment, and assessment of artisan capacity to produce novel product categories. The vertical deliberately expanded beyond traditional accessory and institutional product categories to encompass industrial product applications, with particular emphasis on furniture manufacturing as an emerging sector opportunity.



Furniture Product Category Expansion

constituted a major innovation initiative. The vertical developed a comprehensive furniture range encompassing living room product categories, including chairs and seating systems, functional stools, coffee tables, and center tables. These furniture products were designed to address commercial market segments seeking high-quality, sustainable, and aesthetically distinctive furnishings.

The incorporation of bamboo as a primary material component in functional furniture represents an innovative application of bamboo's structural properties and aesthetic appeal, differentiating these products in premium market segments and commanding price advantages compared to conventional furniture materials.



Institutional Product Category Enhancement

Addressed a separate but substantial market segment comprising government departments, educational institutions, corporate offices, and other formal organisations requiring customised, high-quality commemorative and gifting products. During the reporting year, the vertical developed a range of large-scale mementos reaching dimensions up to two feet in height, manufactured with precision and designed to represent organisational identity and achievement. Additionally, a diverse array of customised gifting boxes was introduced, responding to institutional demand for branded, high-quality packaging solutions suited to corporate gifting and promotional applications. The cumulative product portfolio expansion resulted in the addition of 22 distinct new products to the existing product range, bringing the cumulative product range maintained by the vertical to 102 distinct designs and variants across all product categories.



Toolkit and Process Development:

Bamboo Ply Manufacturing Technology

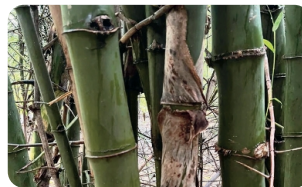
Recognition of the potential to transition bamboo processing from craft-based production to semi-industrial manufacturing led to the development of standardised, replicable technology systems for bamboo ply production. Bamboo plywood represents a composite material fabricated through lamination of thin bamboo slats, offering structural properties and durability comparable to conventional wood ply while utilising sustainably harvested bamboo resources. The development and standardisation of bamboo ply manufacturing processes represents a significant technological innovation enabling scaled production, consistency in product quality, and utilisation of local bamboo resources for value-added industrial applications.

The bamboo ply manufacturing process comprises three distinct operational phases, each with standardised protocols and quality control checkpoints:



Pre-Processing Phase:

Encompasses the foundational stages of bamboo selection, cutting, and initial preparation. The process commences with selection of mature bamboo culms meeting minimum specifications for diameter, wall thickness, and structural integrity. Selected culms are cut to standardised lengths appropriate for subsequent splitting operations. The culms are then systematically split into primary sections using splitting devices and hand tools, creating primary components suitable for refinement into ply-making slats. This pre-processing phase establishes material quality parameters and determines the maximum potential yield of usable slat material from source bamboo.



Bamboo Selection



Bamboo Cutting



Splitting into Equal Section

Processing Phase:

Constitutes the refinement stage, wherein split bamboo pieces are progressively refined into uniform, standardised slats. The outer layers of bamboo, comprising the epidermis and initial subcuticular layers, are removed through scraping or mechanical smoothing. The split pieces are then sized and straightened using specialised knives, planers, or slat-making jigs designed to achieve consistent width and thickness dimensions. Standardised slat specifications ensure compatibility with subsequent ply assembly and adhesive application processes. Treatment of slats addresses moisture management, durability enhancement, and surface preparation for adhesive bonding. The slats undergo drying to reduce moisture content to specified levels, ensuring dimensional stability and improved adhesive bonding capacity. Surface finishing operations smooth and prepare the slat surfaces for assembly.



Slat Making Process



Bamboo Treatment



Finishing Raw Slat

Post-Processing and Assembly Phase:

Encompasses the assembly of finished slats into composite ply panels and final finishing operations. Finished slats are systematically assembled and aligned in multi-directional lay-up patterns to create composite panels with structural properties suited to diverse applications. Metal clamps and adhesive systems are employed to bond aligned slat layers, creating laminated structures with strength characteristics comparable to conventional wood ply. The assembled and cured composite is then finished through sanding, edge treatment, and surface preparation to generate uniform, market-ready bamboo ply products suitable for furniture manufacturing, panelling applications, or further value addition.



Standardised Bamboo Ply Manufacturing Process

Pre-Process



Bamboo Selection



Cutting



Splitting into equal section

Processing



Slat making process



Treatment



Finishing the Raw slat

Post Processing



The development and systematic documentation of this three-phase ply manufacturing process represents a critical innovation enabling replication across multiple production locations, consistent product quality, and utilisation of bamboo resources for high-value composite products. The standardised procedure facilitates technology transfer to artisan clusters and establishes a foundation for scaled commercial production

Standard Operating Procedures (SOP) Development

Concurrent with process development, three comprehensive standard operating procedures (SOPs) were systematically documented and validated. These SOPs represent standardised, replicable protocols addressing critical production dimensions: bamboo slat making, machine operations and tool utilisation, and standardised production protocols for ply assembly and finishing. The documentation of SOPs enables consistent application across multiple production sites, facilitates artisan training, establishes quality benchmarks, and creates foundation for scaling production while maintaining product consistency and meeting market quality specifications.

Training and Capacity Building

Strategic Capacity Building Architecture

The vertical's capacity building strategy during 2025–26 employed a differentiated approach addressing distinct artisan cohorts and skill levels. Training and production workshops were systematically organised at strategically selected cluster locations, integrating classroom instruction with hands-on demonstration and direct production engagement. The approach recognised that skill development in bamboo craftsmanship requires extended practice, demonstration learning, and direct engagement with production processes alongside theoretical knowledge. Training outcomes were measured through participant skill certification, production of market-ready products, and demonstration of technical competency in standardised procedures.

Training Programmes Implemented (FY 2025–26)

Nine comprehensive training interventions were conducted during the reporting year, cumulatively benefiting 200 artisans and community members. The training programmes addressed distinct product categories, skill levels, and beneficiary cohorts, reflecting STRC's commitment to creating differentiated learning pathways suited to diverse community contexts.

01. Bouquet and Bamboo Ply Training at District Open Jail, Gadchiroli (30 days, March 2025)

Represented a unique partnership initiative extending skill development and livelihood opportunity to incarcerated populations. Training encompassing both decorative bouquet production and introduction to bamboo ply manufacturing benefited 31 participants within the correctional facility, creating opportunity for productive skill acquisition during incarceration and facilitating livelihoods transition upon release.



02. Bamboo Ply-Making Training at Lakhandur (October and November 2025)

Represented two successive two-day intensive training cycles conducted at the newly established ply-making cluster. Training conducted in October 2025 benefited 12 local youth and traditional artisans, with participants achieving level I certification upon completion. A second training cycle conducted in November 2025 again benefited 12 participants, creating a rolling capacity-building model enabling sequential cohort development and progressive skill building within the cluster.



03. Basket Weaving Training at Amirza (1 day, April 2025)

Targeted female artisans and provided intensive instruction in traditional basket weaving techniques. The single-day intensive format enabled busy female artisans to participate while managing domestic responsibilities, resulting in participation of 25 female trainees. Basket weaving represents a traditional, labour-efficient bamboo craft with strong market demand and cultural significance across the region.



04. Bamboo Jewellery Training at Armori and Kitadi (November and December 2025)

Targeted female artisans and provided instruction in bamboo jewellery production techniques. Two separate training cycles, each conducted over two days, benefited 25 female participants at each location (totalling 50 female artisans). Bamboo jewellery represents a high-value-addition craft category accessible to artisans with limited capital investment, with strong and growing market demand particularly within institutional and gifting market segments.



05. Basket Production Training at Maldugi (2 days, April 2025)

Built upon foundational weaving skills through extended hands-on production. The training cumulatively benefited 18 local youth and traditional artisans, with participants achieving level I certification upon successful completion. This training integrated classroom instruction with direct basket production, enabling participants to generate market-ready products during training and establish immediate income-generating capacity.



06. Advanced Bamboo Ply-Making Training at Lakhandur (February 2026)

Represented a level II advanced training intervention building upon foundational ply-making competencies. The two-day training benefited 42 local youth and traditional artisans who had previously completed level I training, advancing participants toward level II certification. This training emphasis on progressive skill development and advanced production techniques reflects STRC's commitment to deepening artisan expertise and enabling transition toward master artisan and entrepreneurship roles.



07. Chaupal Event and Artisan Card Registration (February 2026)

Constituted a transformative institutional linkage initiative conducted in collaboration with the Development Commissioner (Handicrafts) within the Ministry of Textiles, Government of India. This one-day event, organised at STRC's facilities, assembled more than 110 artisans and community members for direct engagement with government representatives, scheme orientation, and facilitated registration under the National Artisan Card scheme. The Artisan Card represents national-level formal recognition of artisan identity and status, enabling registered artisans to access government welfare schemes, concessional credit facilities, formal market channels, and participation in national handicraft networks.

The facilitation of card registration for 110 artisans represents a significant institutional linkage achievement, extending formal recognition and government support access to a substantial artisan cohort.



Cumulative Training Impact: Vertical Outreach and Master Artisan Development

The training efforts during 2025–26 occurred within the context of a broader, sustained capacity-building programme spanning multiple years. Cumulatively, the vertical has conducted 20 comprehensive training and production workshops across 10 administrative tehsils (blocks), reaching more than 450 trained artisans. Within this cohort, 80 artisans have been progressively upskilled to master artisan level, demonstrating advanced technical competency, consistent production quality, and capacity to mentor and train junior artisans. The cultivation of a cadre of master artisans establishes a foundation for sustainable, community-led skill transmission and enables scaling of production capacity through locally-grounded training and quality assurance mechanisms.



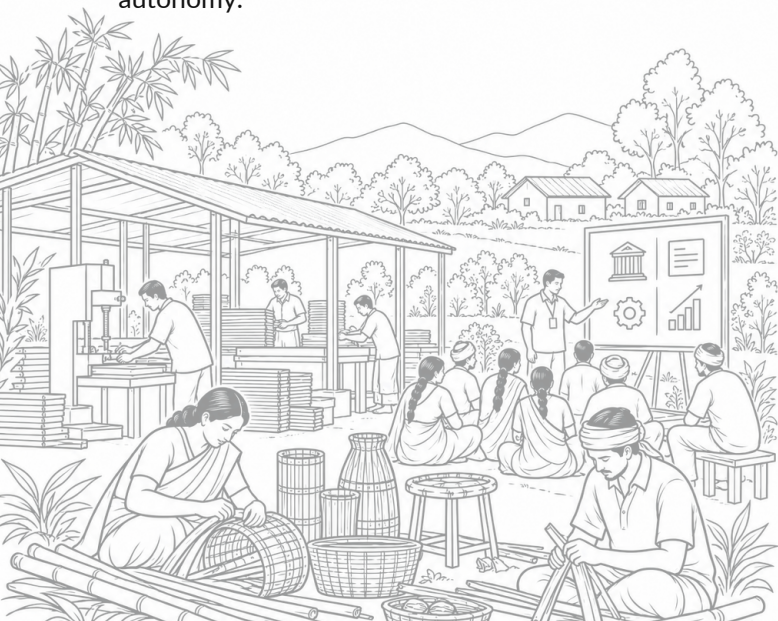
Training & Capacity building program 2026

S. N.	Title of the Training	Venue	Total No of Days	No. of artisans	Training Year	Participant Category
1	Training cum production workshop (Bouquet, Bamboo ply)	STRC-GUG at District Open Jail, Gadchiroli	30	31	Mar. 2025	Prisoner
2	Training cum production workshop (Basket weaving)	STRC-GUG at Amirza	1	25	Apr. 2025	Female
3	Training cum production workshop (Basket)	STRC-GUG at Maldugi	2	18	Apr. 2025	Local youths / traditional artisan graduate to level I
4	Training cum production workshop (Ply making)	STRC-GUG at Lakhandur	2	12	Oct. 2025	Local youths / traditional artisan graduate to level I
5	Training cum production workshop (Ply making)	STRC-GUG at Lakhandur	2	12	Nov. 2025	Local youths / traditional artisan graduate to level I
6	Training cum production workshop (Jewellery)	STRC-GUG at Armori	2	25	Nov. 2025	Female
7	Training cum production workshop (Jewellery)	STRC-GUG at Kitadi	2	25	Dec. 2025	Female
8	Training cum production workshop (Ply making)	STRC-GUG at Lakhandur	2	42	Feb. 2026	Local youths / traditional artisans graduate to level II
9	Chaupal Event - Artisan Card	STRC-GUG	1	110	Feb. 2026	Local youths / traditional artisan graduate

Artisan Cluster Development and Institutional Linkage

Concurrent with direct training interventions, systematic efforts were undertaken to strengthen cluster-based production systems and expand institutional linkages supporting artisan development. The establishment and strengthening of bamboo craft clusters in five primary locations (Maldugi, Armori, and Lakhandur in Gadchiroli district; Lakhandur in Bhandara district; and broader cluster development initiatives) represented a strategic shift from individual artisan support toward systems-based, collective production models. Cluster-based production offers multiple advantages: aggregation of production enabling economies of scale, collective marketing and price bargaining capacity, shared access to equipment and infrastructure, and opportunities for collaborative learning and quality assurance.

The Lakhandur bamboo ply-making cluster, established during the reporting year, exemplified this cluster development approach. The cluster brought together multiple artisans sharing geographic proximity and common production interests within a coordinated production system. The cluster was equipped with standardised ply-making equipment, provided with documented standard operating procedures and technical training, and linked with collective marketing mechanisms through Gondwana Craft. The cluster model enabled individual artisans to transition from isolated production toward participation in coordinated, quality-assured, and market-linked production systems while maintaining income stability and household autonomy.



Awareness, Scheme Linkage, and Technology Facilitation

Constituted critical components of cluster development efforts. STRC systematically provided awareness regarding government welfare schemes, artisan development programmes, and institutional support mechanisms applicable to bamboo craft communities. The Chaupal event, organised in February 2026, represented the most comprehensive scheme linkage initiative, directly facilitating artisan registration and awareness of Ministry of Textiles schemes, government credit facilities, and formal market access channels. Technology facilitation encompassed provision of standardised equipment, tool kits, and process documentation to cluster production units, enabling adoption of improved production technologies while minimizing individual artisan capital investment requirements.



Research Study: Bamboo Resource Assessment

Research Rationale and Methodology

Sustainable development of bamboo-based livelihoods requires grounding within scientific understanding of local bamboo resource availability, distribution patterns, and regenerative capacity.

To systematically assess bamboo resource status and establish foundation for sustainable harvesting planning, STRC conducted a field-based research study focusing on bamboo density estimation and distribution characterisation within the Dhanora block of Gadchiroli district, specifically in Khairi Tola village.

The research employed standardised forest assessment methodology, utilising 25 metre by 25 metre (625 square metre) sample plots as analytical units. Within each demarcated plot, all bamboo clumps were systematically inventoried, with detailed observations recorded on clump location (GPS coordinates), culm number per clump, culm condition and health status, and site environmental characteristics. This systematic sampling approach enabled estimation of bamboo density (culms per hectare) and understanding of bamboo distribution patterns relative to site factors.



Research Findings:

Bamboo Density and Distribution

Field research across two primary research plots (Plot 1 and Plot 2) in Khairi Tola village revealed substantial bamboo resource availability within the study area. Plot 1, surveyed across four GPS-located sampling points within a 25 metre by 25 metre area, identified a total of approximately 412 bamboo culms distributed across 11 distinct clumps.



Within individual clumps, culm density ranged between 35 and 40 culms per clump, reflecting the typical clumping growth pattern of bamboo species. Plot 2, similarly delineated and surveyed across four GPS-located points, recorded approximately 531 bamboo culms distributed across 12 clumps, with individual clump densities ranging between 40 and 45 culms per clump.

Comparative analysis across the two plots revealed consistent patterns of high-density bamboo distribution. Within a standard 25 metre by 25 metre area, average bamboo culm density approximated 460 culms across the area, translating to approximately 7,360 culms per hectare assuming uniform distribution across the larger landscape. This density level indicates substantial bamboo resource availability suitable for commercial harvesting while permitting resource regeneration through natural bamboo growth cycles and regeneration capacity.

Key Research Observations

- 1. Terrain topography within the study area was uneven and non-uniform, with variable elevation creating microhabitats influencing bamboo growth and resource accessibility;
- 2. Bamboo was present in consistently high density throughout both surveyed plots, indicating reliable and distributed resource availability;
- 3. Individual bamboo clumps exhibited consistent structure with average culm numbers per clump approximating 38 to 40 culms, reflecting typical growth architecture;

- 4. The cumulative 25 metre by 25 metre areas encompassed approximately 460 bamboo culms on average, demonstrating the productivity of local bamboo forests within Dhanora block.

The research findings establish a foundation for sustainable harvesting planning, enabling development of harvest quotas respecting regenerative capacity, seasonal harvesting protocols minimising ecological impact, and resource management systems ensuring long-term productivity of bamboo forests supporting community livelihoods.

Plot- 1

Bamboo Plotting in 25 x 25 m area			
GPS Location	Average No. of Bamboo in a Single Clump	No. of Clump	Total No. of Bamboo (25x25m)
P1-20.3525044,80.26408500	1 Clump - 35-40	11 Clump	412 approx.
P2-20.35254833,80.26757250			
P3-20.352739166,80.26744617			
P4- 20.35271111,80.26726194			

Plot- 2

Bamboo Plotting in 25x25 m area			
GPS Location	No. of Bamboo in a Single Clump	No. of Clump	Total No. of Bamboo (25x25m)
P1- 20.3523869444,80.26769500	1 Clump - 40-45	12 Clump	531 approx.
P2- 20.35236639,80.26745000			
P3- 20.35213028,80.26750444			
P4- 20.35217556,80.26770694			

Gondwana Craft: STRCs Social Enterprise for Artisans

Social Enterprise Mission and Institutional Model

Gondwana Craft represents STRC's institutional evolution toward market-linked social enterprise positioning, designed to preserve and promote indigenous craft traditions while transforming them into viable commercial livelihood pathways. The social enterprise model operationalises a foundational principle: traditional artisanship and cultural heritage merit not merely preservation as historical curiosity, but dynamic commercialisation ensuring dignified, remunerative income to contemporary artisan communities while maintaining aesthetic authenticity and cultural integrity.

The Gondwana Craft platform integrates four distinct craft traditions encompassing the region's rich cultural and artistic heritage. Bamboo craft constitutes the primary focus area, encompassing utility items (baskets, containers, furniture) and decorative pieces reflecting bamboo's versatility and the technical competencies of local artisan communities. Dokra craft, an ancient lost-wax metal casting tradition, brings distinctive metalwork reflecting the region's tribal artistic heritage. Gond painting, a distinctive tribal art form characterised by intricate dot and line work on natural themes, represents a living artistic tradition requiring contemporary market linkage and valuation. Pottery, encompassing terracotta and clay-based artistic production, completes a comprehensive craft portfolio representing diverse artistic traditions and artisan skill domains.



Artisan Network and Geographic Reach

Gondwana Craft extends across a geographically dispersed artisan network spanning primary bamboo craft clusters in Maldugi (Kurkheda block, Gadchiroli district), Armori (Armori block), Lakhandur (Bhandara district), Wadsa (Wadsa block), and Gadchiroli town (Gadchiroli block). Dokra craft production is concentrated within Bhamragad block of Gadchiroli district, while Gond painting centres are based in Gadchiroli town and surrounding areas. Pottery production is primarily located in Bhadravati block of Chandrapur district.

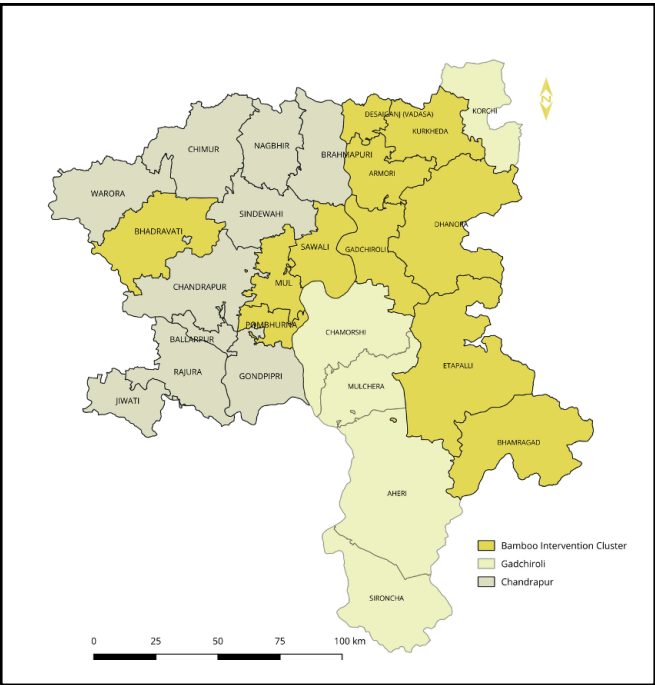
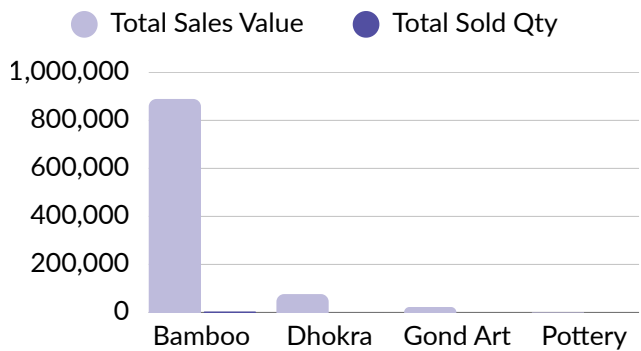
The cumulative artisan network encompasses 125 registered artisans across the five primary craft clusters: 38 bamboo artisans in the Maldugi cluster, 17 bamboo artisans in Armori, 25 bamboo artisans in Lakhandur, 18 terracotta artisans in Gadchiroli, 15 Dokra craft artisans in Bhamragad, and 12 Gond painters in Gadchiroli. This distributed artisan network, operating within formalised cluster frameworks, provides a stable human resource base for production scaling and market engagement.

Market Engagement and Sales Performance: FY 2025–26

Gondwana Craft's commercial performance during 2025–26 demonstrated the viability of the social enterprise model and the market acceptability of crafts produced by STRC-supported artisans. The social enterprise executed 2,500 units of craft production across the reporting year, generating aggregate sales revenue of ₹9.89 lakh (₹9,89,270).

The aggregate sales performance demonstrates market viability of social enterprise craft commercialisation while simultaneously highlighting the comparative strengths of bamboo craft production in terms of volume, consistency, and revenue contribution. The enterprise's ability to generate ₹9.8 lakh in direct artisan revenue during a single fiscal year, while simultaneously maintaining cultural authenticity and fair remuneration, demonstrates the potential of market-driven social enterprise models to transform indigenous craftsmanship into sustainable livelihood systems.

Gondwana Craft - Annual Sales Record		
Craft	Total Sold Qty	Total Sales Value
Bamboo	3736	889110
Dokra Craft	32	76310
Gond Art	3	22500
Pottery	7	1350
Total	3778	989270



Market Engagement and Institutional Representation

Gondwana Craft's institutional visibility and market engagement were substantially advanced during the reporting year through participation in seven major regional, national, and international exhibitions and events. These exhibition opportunities provided direct market access, visibility among prospective institutional buyers, and validation of craft quality among diverse stakeholder constituencies.

District Tourism Transformation Festival (September 2025, Gadchiroli) represented the initial major exhibition opportunity, positioning Gondwana Craft within the district's tourism and cultural development strategy. Agrovision-2025 (November 2025, Nagpur), Central India's premier agricultural summit, provided access to an institutional and commercial buyer audience. The Indian International Science Festival (December 2025, Chandigarh) offered national-level visibility

and opportunity to position traditional crafts within science and innovation frameworks.

The National Educational Workshop-2025 (December 2025, Surat, Gujarat) extended reach into educational and institutional markets. Gadchiroli Mohotsav (December 2026, Gadchiroli) provided grassroots visibility and cultural celebration context. Koya Krushi Kumbh (February 2026, Gadchiroli) offered agricultural audience engagement and rural market linkage. The District Level Agriculture, Animal Exhibition and Mini Saras Winter Festival (March 2026, Chandrapur) provided regional exhibition and market access opportunity.

This intensive exhibition calendar demonstrates STRC's commitment to regular market engagement, progressive scaling of exhibition footprints from local to national platforms, and systematic development of institutional and commercial buyer relationships supporting sustainable revenue growth.

Gondwana Craft- Representation in Regional and National Events			
S. N.	Date of the Event	Title of the Event	Place
1	23rd September 2025	STRC's Contribution to the Successful Catalyzing Gadchiroli District Tourism Transformation Festival 2025	Gadchiroli
2	21st-24th November 2025	STRC at Agrovision 2025: Central India's Largest Agri Summit	Nagpur
3	December 6-9, 2025	IISF - Indian International Science Festival	Chandigarah
4	December 25-28, 2025	National Educational Workshop-2025: "Contribution of Education in a Developed India"	Surat, Gujarat
5	December 26-27, 2026	STRC Showcases Grassroots Innovations and Local Crafts at Gadchiroli Mohotsav-2025	Gadchiroli
6	February 5-9, 2026	STRC Showcases Grassroots Rural Innovations at Koya Krushi Kumbh-2026	Gadchiroli
7	March 20-24, 2026	District Level Agriculture, Animal Exhibition and Mini Saras Winter Festival 2025-26	Chandrapur

Strategic Roadmap:

Vision for Circular Bamboo Economy and Scaled Social Enterprise

Vision and Mission Orientation

The bamboo vertical's strategic vision for the medium and long term envisions the establishment of a circular bamboo economy—an integrated, regionally-grounded production and distribution system wherein bamboo is harvested sustainably, processed through value-adding transformation, manufactured into diverse market-ready products, distributed through formalised market channels, and consumed within domestic and commercial markets. This circular economy vision transitions beyond extractive resource utilisation toward regenerative, equitable production systems wherein environmental sustainability, artisan welfare, and market viability are simultaneously achieved. Central to this vision is the transition of STRCs Bamboo Vertical from an artisan support programme toward a professional, large-scale social enterprise operating with industrial efficiency while maintaining fair compensation to artisan contributors and authentic cultural expression. This transition requires advancement across multiple institutional and operational dimensions: professionalised enterprise management, advanced production technology, expanded market reach, formalised distribution infrastructure, and strengthened artisan integration within enterprise value chains.

Strategic Initiatives and Institutional Development Pipeline

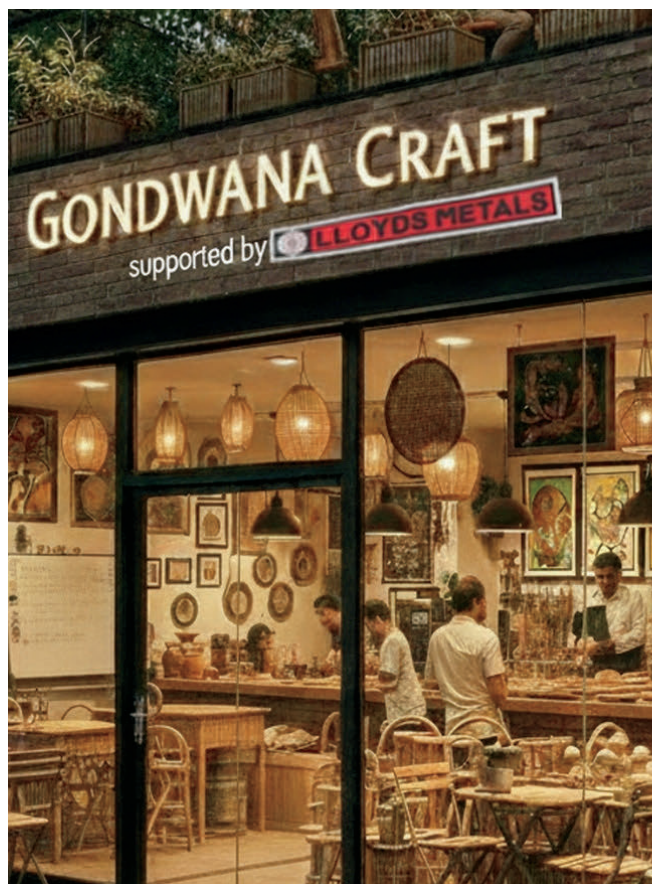
Several major institutional initiatives constitute the roadmap for advancing toward the circular bamboo economy vision:

Upcoming Project under Bamboo for Green Economy: Pathways and Technologies represents a governance and coordination mechanism designed to align STRC's bamboo development efforts with external stakeholder priorities, policy frameworks, and market opportunities.

The project facilitates dialogue among government agencies, private sector entities, civil society organisations, and artisan communities, enabling integrated strategy development and coordinated implementation of bamboo sector development initiatives.

The Gondwana Craft Retail Outlet Initiative

Represents expansion of permanent, institutionalized retail and exhibition infrastructure. The establishment of dedicated Gondwana Craft outlets at strategic locations, managed under professional retail standards, enables consistent market presence, direct consumer engagement, and establishment of brand identity and consumer loyalty. Permanent retail infrastructure supplements temporary exhibition participation, enabling sustained market engagement and predictable revenue flows.



Technical Innovation and Bamboo Species Utilisation

Concurrent with institutional development, the vertical prioritises technical innovation addressing the structural properties and manufacturing characteristics of bamboo plywood and composite products. Current efforts emphasise investigation and utilisation of diverse bamboo species present within Gadchiroli district's forests, each characterised by distinct culm diameter, wall thickness, fibre strength, and working properties. Advanced research aims to optimise species selection for specific product applications, enhance structural durability and longevity of ply composites, and develop specialised processing protocols for species-specific requirements. This technical innovation programme ensures that industrial-scale bamboo ply production maintains environmental sustainability through species rotation and balanced harvesting while achieving product quality and performance specifications meeting regional and national market standards.



Human Capacity Development and Entrepreneurship

Central to the strategic roadmap is systematic human resource development transitioning artisans from production skill competency toward entrepreneurship and enterprise management capacity. The IDC-IIT Bombay Designed Diploma in Bamboo Entrepreneurship and Design, developed through partnership with the Indian Institute of Technology Bombay, represents a comprehensive, accredited programme addressing both technical competency in bamboo product design and manufacture alongside business development, financial management, and enterprise leadership capabilities. The diploma programme creates foundation for artisan transition into independent enterprise ownership, cluster leadership, and scaling roles while ensuring that enterprise development remains grounded in artistic authenticity and cultural continuity.



Cluster-Based Production Scaling and Decentralised Manufacturing

The strategic vision emphasises expansion and deepening of cluster-based production models as mechanisms for scaling while maintaining community rootedness and decentralised livelihood distribution. Additional bamboo craft clusters are envisioned across Gadchiroli and Chandrapur districts, each operating as integrated production and business development hubs supporting artisan collectives, providing shared equipment access and infrastructure, and enabling economies of scale in materials procurement and market engagement. This decentralised production approach distributes livelihood opportunities across multiple villages and blocks, preventing concentration of employment and enabling broad-based rural economic development.



Long-Term Impact Outcomes

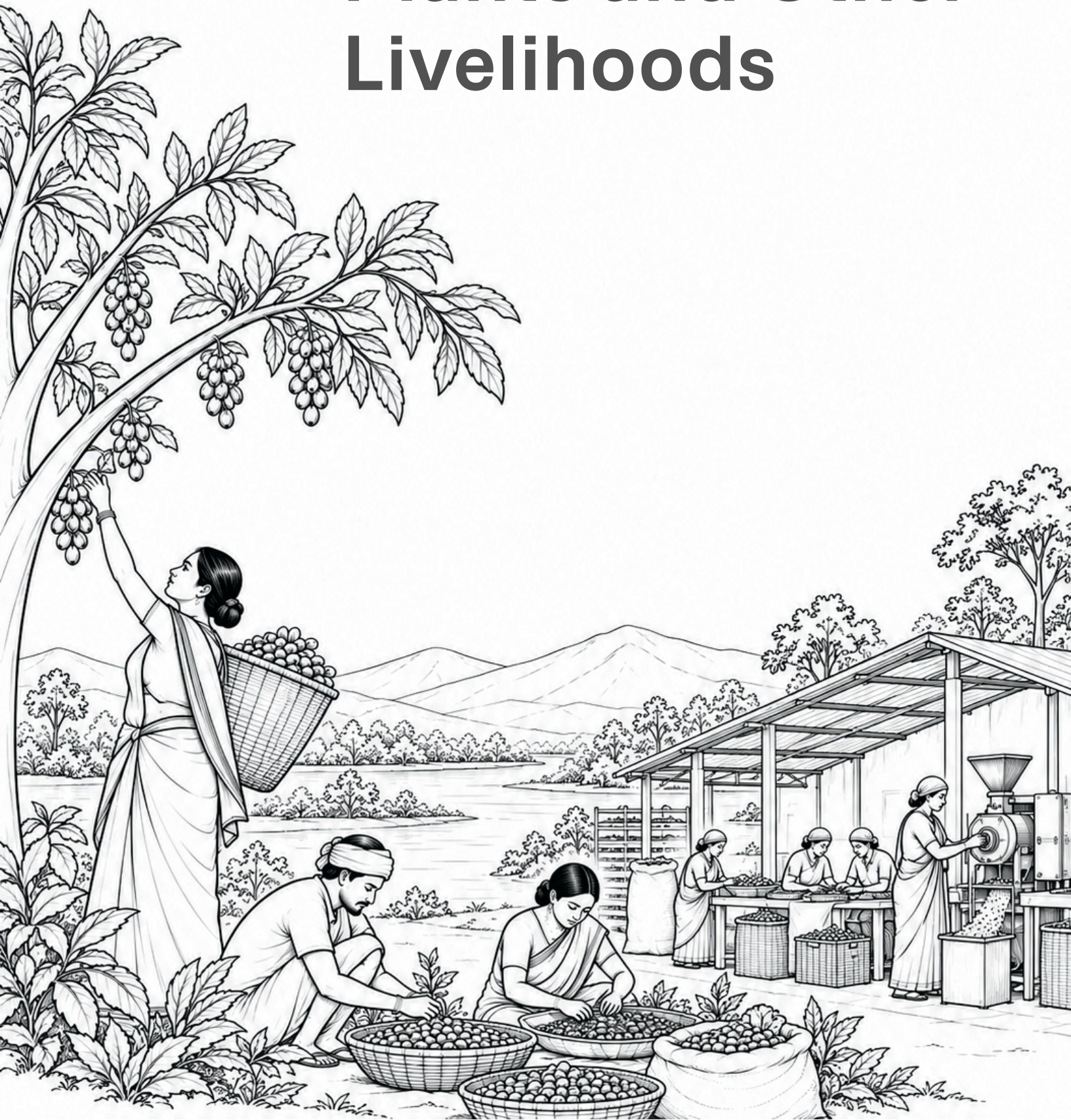
Implementation of this strategic roadmap is projected to achieve transformative outcomes across multiple dimensions by 2028–29:

Economic Impact encompasses scaling of bamboo enterprise revenue toward ₹50 lakh to ₹1 crore annual revenue, with proportionate expansion of artisan income and poverty alleviation impact. Employment and Livelihood outcomes target direct employment of 500 to 750 artisans across expanded cluster networks, with indirect employment benefits accruing to raw material collectors, equipment manufacturers, and market distribution agents. Ecological Sustainability objectives prioritise establishment of sustainable harvesting practices respecting bamboo forest regenerative capacity, with potential role in forest carbon sequestration and ecosystem service provision.

Cultural Preservation and Market Validation of tribal artistic traditions position indigenous craftsmanship as valued economic contribution and cultural treasure, ensuring intergenerational transmission of artistic knowledge while creating contemporary livelihoods supporting youth retention in rural communities.



NTFP / Medicinal Plants and Other Livelihoods



Non-Timber Forest Produce, Medicinal Plants, and Other Livelihoods Overview: FY 2025-26

The Non-Timber Forest Produce (NTFP), Medicinal Plants, and Other Livelihoods Vertical achieved transformative integration of traditional ecological knowledge with contemporary scientific validation during 2025-26, generating ₹17.35 lakh in direct revenue for farming and collecting communities while advancing climate resilience, ecological conservation, and indigenous knowledge preservation across Gadchiroli and Chandrapur districts.

The vertical transformed forest-based economies through systematic interventions encompassing sustainable NTFP harvesting and value addition, regenerative agricultural practices demonstrating four-fold economic returns, geographical indication-based product branding for regional crop biodiversity, grassroots technology dissemination serving 88 tribal and marginal beneficiaries, formal professionalization of traditional healing systems through the Vaidya Chikitsalay, conservation of 150+ medicinal species within bamboo polyhouse, substantial advancement of the Comprehensive Vaidu Directory scientifically validating traditional knowledge, and systematic weather and crop advisory services reaching 2,300 farming community members. Collectively, the vertical directly engaged 1,076 capacitated individual community stakeholders including farmers/tribal forest produce gatherers/ rural entrepreneurs in sustainable practices while establishing STRC as the institutional nexus bridging forest-based traditional livelihoods with formal market systems, ecological sustainability, and scientific validation. The reporting year demonstrates the vertical's commitment to transforming indigenous ecological knowledge into economically viable, environmentally regenerative, and scientifically validated livelihood systems ensuring dignity, income security, and environmental stewardship for tribal and marginal farming populations.

Key Impact



₹17.35 Lakh

Revenue Generated for Farmers through STRC Initiatives

1076

Community Outreach

2300

Farmer Advisory Outreach

12

Types of Tool & Tech. Borrowed & Transfer

228

No. of Tools (Units) Distributed

612

Technology Transfer (Individuals)

13

Training & Capacity Building

5

Institutional Linkages

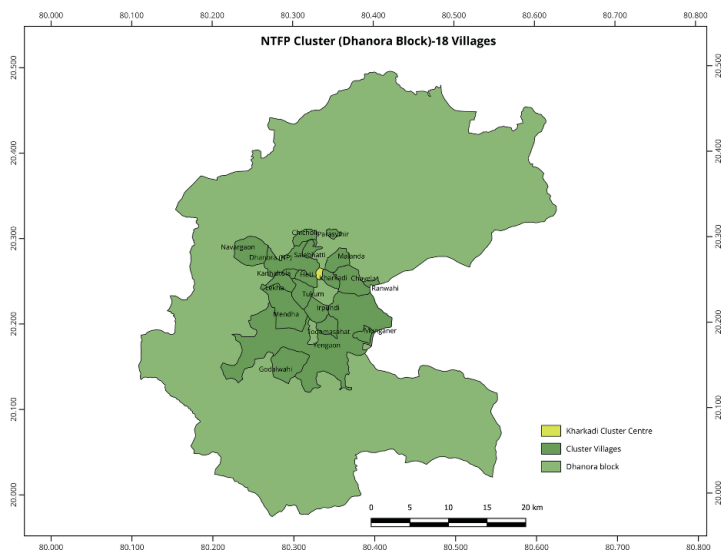


Primary Processing and Collection Centre at Kharkadi (Dhanora)

Strategic Context and Implementation Framework

The Primary Processing and Collection Centre (PPC) Project at Kharkadi represents a transformative institutional intervention transitioning Gadchiroli's forest-based livelihoods from informal collection systems toward organized, market-integrated value chains. Operationalized during 2025–26, this decentralized aggregation and processing hub functions as a strategic node integrating primary collectors—particularly tribal communities and women's self-help groups, into structured non-timber forest produce value chains encompassing scientific collection, sustainable harvesting, quality grading, primary processing, and market linkage development. The initiative reflects STRC's commitment to enhancing income stability, reducing post-harvest losses, and increasing value retention at community level through systematized operations.

The reporting period marked a significant transition from foundational infrastructure development toward functional operational impact. The Centre has evolved from preparatory activities into a fully operational aggregation and processing facility generating measurable improvements in aggregation efficiency, substantial reduction in post-harvest losses, and demonstrable enhancement in income realization through primary processing and value addition interventions.



Infrastructure Development and Technology Deployment

The PPC initiative deployed comprehensive technology infrastructure and input support systems enabling community-level processing and value enhancement. Central to this deployment were 200 mahua collection nets enabling hygienic flower collection and contamination reduction, 35 honey collection kits promoting hygienic extraction and initial processing, and 10 bamboo cutters and pole extractors facilitating sustainable harvesting of forest resources. Storage infrastructure was substantially enhanced through convergence with the Ekal Project, which constructed a 100-metric-ton capacity storage godown providing bulk storage facilities for NTFP aggregation, addressing critical post-harvest losses and enabling market-responsive inventory management.

Technology / Tool	Quantity Distributed	Purpose
Mahua Collection Nets	200	Clean collection of flowers, reducing contamination and improving quality
Silo Bags	200	Scientific storage, minimizing moisture damage and pest infestation
Weighing Machines	2	Standardized measurement ensuring transparency in trade
Air Blowers	10	Cleaning and primary grading of produce

Aggregation Operations and Value Realization

Procurement operations during the reporting year demonstrated significant improvements in aggregation efficiency and price realization across multiple NTFP commodity categories. The Centre operationalized systematic collection, grading, and value-chain engagement generating the following outcomes:

01. Mahua Seeds (Tori) Procurement:

Aggregated 5 metric tons, with bulk marketing achieving procurement prices of ₹30 per kilogram and sale at ₹32 per kilogram, generating ₹10,000 incremental gain through organized bulk transactions and reduced intermediary involvement.



02. Charoli Aggregation:

Reached 2 metric tons, with quality-based price differentiation enabling procurement at ₹250 per kilogram and sale at ₹270 per kilogram, generating ₹40,000 net profit through systematic quality assessment and grading protocols



03. Mahua Flowers (Surface Collected)

Aggregation reached 7 metric tons, achieved through deployment of collection nets and systematic aggregation protocols. Surface-collected flowers were procured from collectors at ₹30 per kilogram and marketed at ₹40 per kilogram, generating ₹70,000 in net aggregation profit through improved storage and market coordination. This margin demonstrates the value retention achievable through structured aggregation and reduced intermediation.



04. Mahua Flowers (Net Collected):

Aggregation of 2 metric tons was strategically retained for value addition initiatives rather than immediate raw material sale, enabling development of processed mahua products capturing substantially higher value margins in subsequent fiscal periods.



05. Raw Bamboo Poles

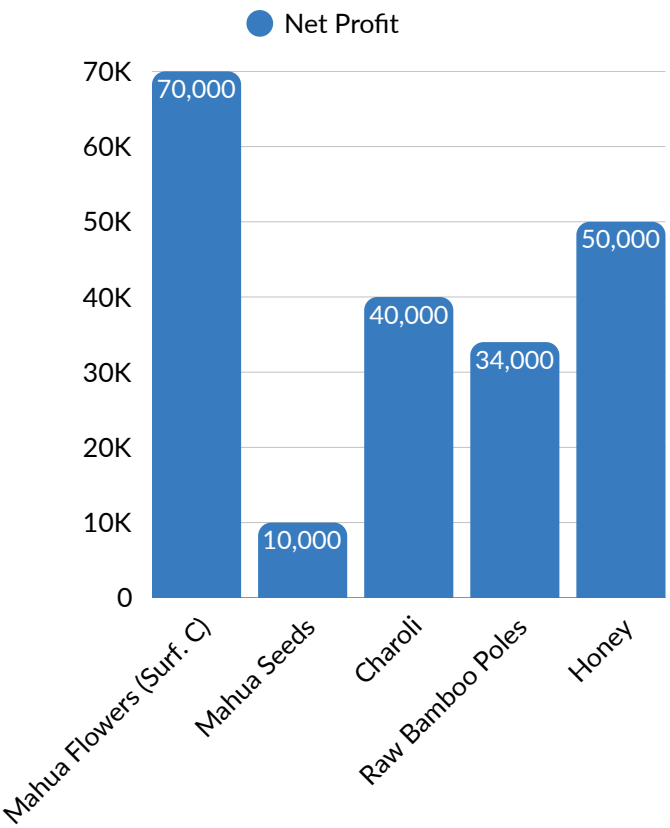
Aggregation exceeded 1,700 units, with sorting and grading interventions enabling procurement at ₹50 per unit and sale at ₹70-₹80 per unit, generating between ₹34,000 and ₹51,000 net profit. This substantial margin demonstrates the significant value creation achievable through sorting and grading of forest products previously sold as undifferentiated raw material.



The cumulative procurement operations across all commodity categories generated net aggregation and processing profits ranging between ₹2,04,000 and ₹2,21,000, demonstrating the significant economic returns achievable through structured aggregation, systematic grading, and primary-level processing. The project conclusively demonstrated that even minimal interventions at the collection stage, when coupled with systematic aggregation and scientific processing, can substantially enhance market value realization and provide improved income stability for primary collectors.

06. Honey Aggregation

Achieved 1 metric ton, with scientific filtration and hygienic packaging protocols enabling procurement at ₹300 per kilogram and sale at ₹350 per kilogram, generating ₹50,000 net profit. The processing intervention substantially enhanced product appeal and market acceptability.



Value Addition and Product Development



The reporting period witnessed strategic transition from raw material aggregation toward systematic value-added product development. Mahua Laddu emerged as a successful market-ready product, with standardized preparation methodologies, consistent flavor profiles, and positive consumer acceptance establishing this traditional confection as a commercially viable and scalable product category.

Mahua Cookie trials achieved promising initial results in texture and taste development while requiring continued refinement to optimize shelf-life characteristics and achieve target shelf stability for retail distribution.

Honey Processing implemented scientific filtration protocols removing impurities and enhancing transparency while hygienic packaging and labelling enhanced product safety perception and retail market acceptability. Quality assurance protocols included systematic laboratory testing at NABL-accredited facilities validating product safety, microbial standards, and compliance with food safety parameters. Formal market integration was advanced through initiation of FSSAI registration processes, establishing legal authorization for commercial food product sale. Product appeal was systematically enhanced through professional packaging design and branding development positioning products within premium market segments



Capacity Building and Market Integration

Capacity building initiatives integrated with aggregation operations addressed critical skills deficits limiting community participation in formal value chains. Training interventions encompassed quality assessment and product grading, hygienic handling and processing protocols, packaging and branding development, market communication and buyer relationship management, and regulatory compliance navigation. Women self-help groups received particular capacity building attention, with specialized training on collection management, aggregation coordination, and

enterprise operation enabling transition from primary collection roles toward active microenterprise participation. Exposure to basic market concepts and enterprise management enabled SHG members to develop understanding of market-based pricing, product positioning strategies, and consumer preference dynamics. These interventions facilitated meaningful transition of women's self-help groups from primary collection roles toward active participants in decentralized value chain enterprises, strengthening community livelihoods and fostering community-led development models.

Primary Processing Centre Kharkadi: NTFP Procurement Operations and Value Realization, FY 2025–26

S. N.	Commodity	Quantity Procured	Procurement Rate (₹/kg or unit)	Selling Rate (₹/kg or unit)	Estimated Net Profit	Value Realization Insight
1	Mahua Flowers (Surface Collected)	7 MT (7000 kg)	30	40	₹70,000	Margin achieved through aggregation and improved storage
2	Mahua Flowers (Net Collected)	2 MT	—	—	—	Retained for value addition, ensuring higher future returns
3	Mahua Seeds (Tori)	5 MT (5000 kg)	30	32	₹10,000	Incremental gain via bulk marketing
4	Charoli	2 MT (2000 kg)	250	270	₹40,000	Quality-based price advantage
5	Raw Bamboo Poles	1700+ units	50	70–80	₹34,000 – ₹51,000	Significant value gain through aggregation and sorting
6	Honey	1 MT (1000 kg)	300	350	₹50,000	Improved returns via filtration and packaging
Total Estimated Net Profit					₹2,04,000 – ₹2,21,000	

Strategic Context and Problem Statement

Cotton cultivation in Gadchiroli district has historically been characterized by persistent low productivity stagnating between 3.5 and 4.5 quintals per acre, directly threatening economic viability of smallholder and marginal farming populations. This productivity stagnation results from systemic vulnerabilities encompassing heavy dependence on expensive chemical inputs, increasing pest vulnerability despite pesticide escalation, progressive soil degradation from mono-cropping and chemical dependency, and limited access to regenerative production knowledge and support systems. These vulnerabilities collectively constrain farmer incomes and household food security while simultaneously degrading natural resource bases underlying long-term agricultural sustainability.

To address these interconnected challenges, STRC initiated the Climate-Smart and Regenerative Agriculture (CSRA) Project during Kharif 2025, designed to demonstrate an alternative agricultural paradigm shifting rainfed cotton production from high-input dependency toward self-sustaining regenerative frameworks. The project aimed to bridge the gap between traditional farming and contemporary agro-ecological science, demonstrating that environmental stewardship and economic profitability are mutually reinforcing rather than conflicting objectives.



Technical Framework and Production System Design

The CSRA Project employed a sophisticated integrated production system combining High-Density Planting System (HDPS) Bt cotton with redgram intercropping in a precisely optimized 10:1 ratio, utilizing standardized spacing of 60 centimeters by 15 centimeters. This high-density crop geometry was designed to maximize light interception and canopy coverage efficiency while suppressing weed growth through competitive canopy development, reducing reliance on mechanical or chemical weed management. The production system's foundation in regenerative practices encompassed comprehensive soil health management through Dhaincha green manuring incorporating nitrogen-fixing organic matter, seed treatment with Beejamrut enhancing germination success and early-stage seedling vigor, and exclusive reliance on bio-based nutrient and pest management solutions replacing synthetic chemical inputs.



Pest management protocols implemented an integrated approach combining mechanical and biological strategies including pheromone traps enabling targeted pest monitoring and biological control, sticky traps providing passive insect monitoring, and botanical extract applications (*Brahmastra* and *Agniastra* formulations) providing organic pest suppression. This integrated approach resulted in near-zero chemical pesticide usage across all project acreage, fundamentally eliminating the chemical "input trap" wherein farmers require increasing pesticide expenditures to manage pest populations.

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Field Implementation and Extension Model

Project implementation across 50 acres in four villages of Chamorshi block was facilitated through a distinctive extension model deploying 25 Rural Agricultural Work Experience (RAWE) students as field facilitators providing continuous linkage between scientific research and field-level implementation. This student-based extension mechanism proved highly effective in remote rural contexts, combining advanced academic training with hands-on field experience while providing localized knowledge transfer nodes within farming communities. The extension model was further strengthened through digital advisory services disseminating weekly scientific monitoring and evaluation insights to approximately 2,300 participating farmers via WhatsApp, ensuring that field-generated knowledge was rapidly translated into actionable farmer recommendations.

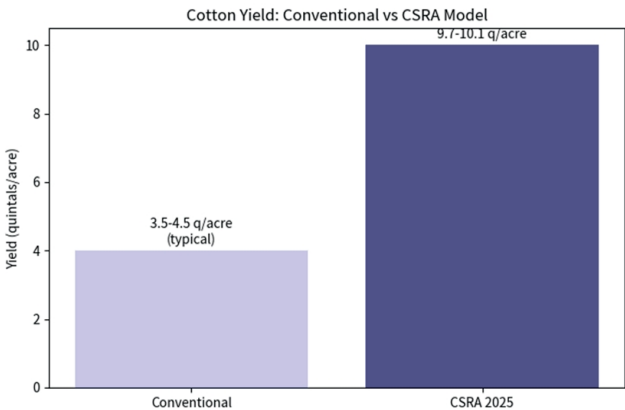


Productivity Outcomes and Economic Impact

The CSRA Project achieved transformative productivity outcomes fundamentally challenging conventional assumptions regarding yield-sustainability trade-offs in rainfed agriculture. Cotton yields surged to 9.7–10.1 quintals per acre, representing approximately 2.5-fold improvement over conventional farming systems typical in the region. Project data projections suggest final potential yields reaching 12 quintals per acre as the Kharif 2025 harvest concludes, demonstrating ongoing productivity gains. Redgram intercrop production contributed additional 1–3 quintals per acre, providing both nutritional diversity and financial risk mitigation through diversified income sources.

From agronomic perspectives, field observations documented significantly elevated earthworm activity and substantially improved soil moisture retention compared to neighbouring conventional plots, providing direct evidence of soil health restoration and enhanced water-holding capacity supporting climate resilience.

Economic performance demonstrated compelling financial outcomes with net returns ranging between ₹48,000 and ₹57,000 per acre, representing approximately four-fold improvement compared to conventional farming systems generating net returns of ₹12,000–₹15,000 per acre. Cost of cultivation was maintained between ₹28,000 and ₹32,000 per acre through systematic use of on-farm bio-inputs, representing 25–30% reduction compared to conventional chemical-intensive systems. Gross returns reached as high as ₹85,000 per acre, demonstrating that regenerative practices, when properly implemented with scientific precision, deliver superior economic returns while simultaneously enhancing ecological sustainability.



Climate-Smart Regenerative Agriculture: Comparative Performance Analysis vs. Conventional Farming Systems, Kharif 2025			
Parameter	Conventional	CSRA Model (2025)	Improvement
Cotton Yield (q/acre)	3.5–4.5	9.7–10.1 (up to 12)	~2.5×
Redgram Intercrop (q/acre)	—	1–3	Additional income
Cost of Cultivation (₹/acre)	Higher	28,000–32,000	Reduced
Gross Returns (₹/acre)	Lower	Up to 85,000	Substantial
Net Returns (₹/acre)	~12,000–15,000	48,000–57,000	~4×

Strategic Significance and Scaling Recommendations

The CSRA model successfully validated that a low-cost, high-yielding, environmentally sustainable cotton production framework is entirely achievable within rainfed agricultural contexts. The project demonstrates conclusively that transition toward chemical-free systems does not require yield sacrifice; rather, it enhances overall agro-ecosystem vigor and long-term productivity potential. By reducing the "input trap" wherein farmers incur escalating pesticide expenditures to manage induced pest populations, the project increased financial autonomy of marginal farming populations while simultaneously restoring ecological integrity.

The project's strategic recommendations for scaling include:

01. Establishment of village-level bio-input production centres enabling decentralized production of Dhaincha seed, Beejamrut cultures, and botanical extract formulations



02. Institutionalization of the RAWE-based extension model enabling integration of academic learning with field application across university curriculum



03. Strengthening market linkages for chemical-free produce enabling farmers to capture premium pricing reflecting reduced input costs and environmental sustainability attributes



04. Implementation of long-term soil health tracking mechanisms enabling measurement of ongoing carbon sequestration benefits and soil restoration outcomes.



Reinforcing GI Tagging for Gadchiroli Roselle (Ambadi)

Strategic Rationale and Crop Selection

The initiative to secure Geographical Indication (GI) registration for Roselle (*Hibiscus sabdariffa*), locally known as *Ambadi*, represents STRC's strategic response to addressing the substantial gap in value realization for locally abundant traditional crops and food products in Gadchiroli district. During extensive field visits and grassroots interventions across the district, STRC identified critical underdeveloped potential in indigenous crop systems—products of significant cultural heritage, proven nutritional value, and distinctive agro-climatic identity, yet remaining confined to subsistence-level consumption with minimal market engagement and income generation. Roselle was selected as the pilot GI registration initiative reflecting its cultural significance, economic potential, and distinctive regional characteristics. Traditionally cultivated as a secondary crop often grown along field borders or intercropped with major crops including paddy, millets, and pulses, Roselle has remained integral to local agricultural practices particularly among tribal farming communities for decades, yet has received minimal formal recognition or market development.



Traditional Knowledge and Multi-Purpose Utilization

Tribal communities across Gadchiroli district have developed sophisticated traditional knowledge systems encompassing multiple utilization pathways for Roselle, reflecting deep ecological understanding and resource efficiency:

Fibre Extraction

It involves processing plant stems to produce strong, naturally durable fibre traditionally used for manufacturing ropes, cordage, and traditional textile applications. The fibrous material represents a high-value resource currently underutilized in contemporary markets.

Leaf Consumption

As a tangy, nutritionally rich leafy vegetable constitutes a regular dietary component among tribal populations, particularly during seasons of optimal leaf tenderness. The leaves provide essential micronutrients and contribute significantly to household nutrition security.

Beverage Preparation

From fleshy red calyces (flowers) produces distinctive sour-flavored traditional drinks valued within local communities for distinctive taste, digestive benefits, and perceived health attributes including blood pressure management and immune support. These beverages represent culturally significant products with potential for commercial market development. This multi-dimensional utilization reflects the crop's integral role in local food security systems, nutrition provision, and livelihood support structures, demonstrating the richness of traditional knowledge supporting sustainable resource management.

Agro-Climatic Distinctiveness and Quality Attributes

Roselle cultivation in Gadchiroli district benefits from unique environmental conditions directly contributing to distinctive quality characteristics differentiating regional production from other agro-climatic zones:



Climate Adaptability:

The crop thrives optimally under tropical monsoon conditions with temperatures ranging between 25°C and 35°C and adequate rainfall availability, rendering it exceptionally well-suited to rainfed agricultural systems prevalent in Gadchiroli. Rainfall patterns and thermal regimes of the region provide precisely optimal growing conditions.



Low-Input Farming Systems:

Predominantly cultivated using organic inputs and traditional practices rather than chemical-intensive methods, Roselle cultivation in the region remains largely free from chemical residues. This organic production character represents a significant market differentiation advantage within contemporary consumer markets emphasizing chemical-free foods



Soil Characteristics:

Well-drained sandy loam to loamy soils enriched with organic matter support healthy plant growth and enhance nutrient uptake efficiency.

The soil characteristics of Gadchiroli's agricultural lands provide ideal growing media for Roselle production. quality attributes including deep red pigmentation, elevated dietary fibre content (approximately 14.42%), low fat content (approximately 0.69%), and strong nutraceutical potential distinguishing Gadchiroli Ambadi in competitive markets.



Forest-Based Ecology:

The surrounding forest ecosystem and low industrial development of the region contribute to clean production environments and elevated phytochemical properties. The low pollution environment and biodiversity-rich ecological context enhance the nutritional and medicinal properties of produced Roselle.

These environmental and ecological factors collectively yield Roselle with distinctive



Livelihood Enhancement Pathway and Market Potential

The GI registration initiative aims to establish foundational infrastructure for sustainable livelihood enhancement through multiple mechanisms:

Product Identity and Regional Branding

Establishment differentiates authentic Gadchiroli Ambadi within competitive markets, enabling consumer recognition and quality assurance.

Traditional Knowledge Protection mechanisms prevent unauthorized utilization and intellectual property misappropriation of regional crop varieties and production knowledge.

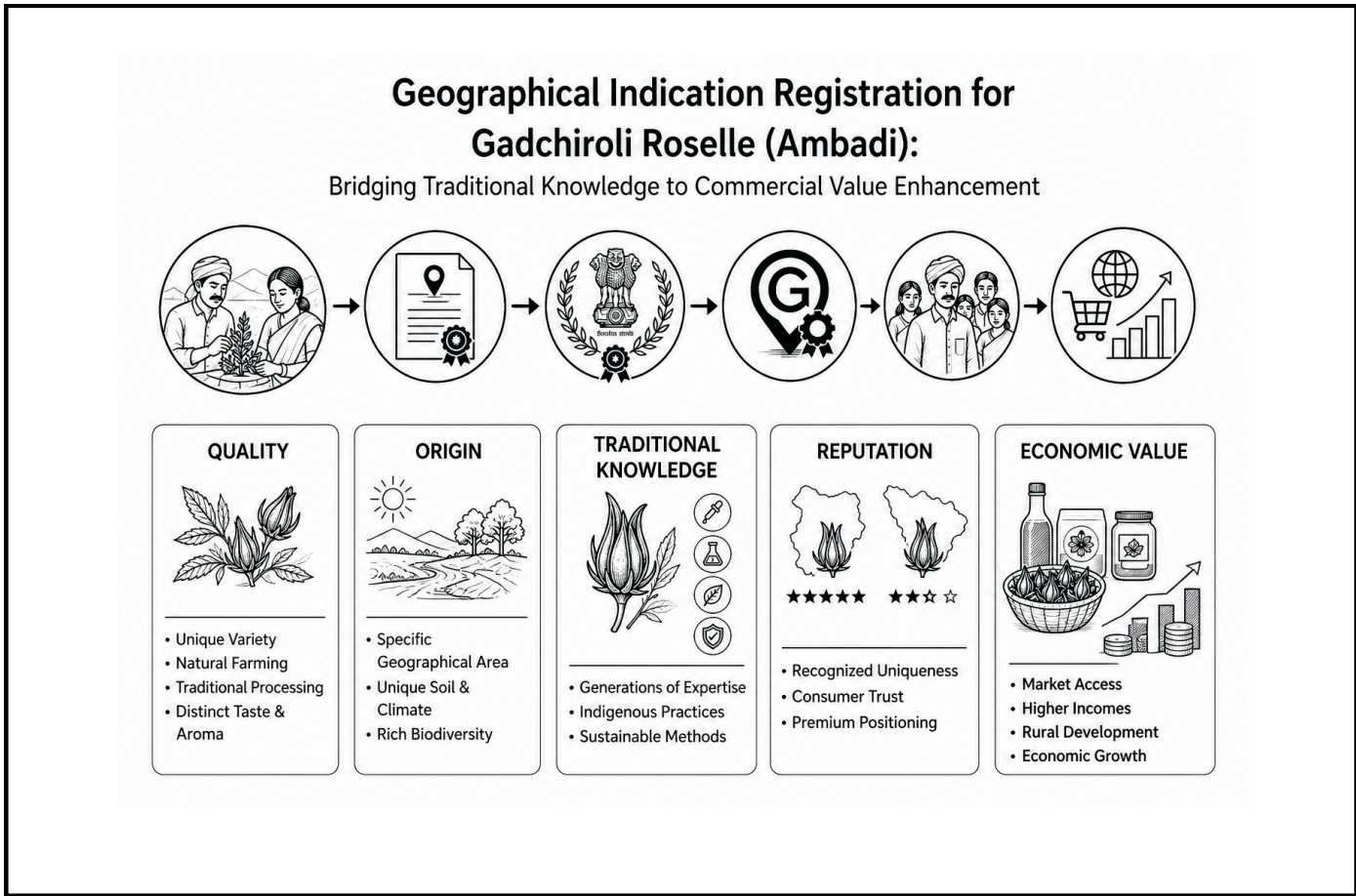
Improved Price Realization through premium market positioning reflecting distinctive agro-ecological identity and organic production characteristics.

Farmer Collective Strengthening and integrated value chain development building organized production and marketing systems.

Processing and Value Addition Promotion

Encompassing beverage production, fibre processing, and specialty food development.

Currently, an estimated 2,000–3,000 farmers across Gadchiroli district engage in Roselle cultivation and primary processing. Potential annual turnover for the region's Roselle sector is estimated between ₹1.2 crore and ₹3.75 crore, representing substantial untapped economic opportunity. The GI-based commercialization approach fundamentally shifts the regional agricultural paradigm from subsistence utilization toward market-oriented, value-driven livelihood enhancement leveraging distinctive agro-ecological identity and rich traditional knowledge.



Grassroots Technology Dissemination Initiative: Collaborative with National Innovation Foundation, India

Collaborative Framework and Strategic Objectives

The grassroots technology dissemination programme, implemented through collaboration between STRC and the National Innovation Foundation (NIF), represents a systematic institutional approach to enhancing rural productivity through transfer and adoption of appropriate, affordable, and indigenous technologies. Executed between December 2025 and March 2026 across six distinct training programmes, this initiative focused on empowering tribal communities and self-help groups with practical technological interventions designed to systematically reduce physical drudgery, enhance productivity within traditional rural activities, and generate multiple pathways for income enhancement through value addition and mechanized production.

Technological Interventions and Performance Specifications

The training programmes encompassed six distinct technology categories, each addressing specific rural livelihood constraints and production bottlenecks:

01. Bamboo Strip Making Machine

Employing a manual two-stage system capable of producing approximately 5,000 splints per hour or 30 kilograms per day, applicable to craft production, incense stick manufacturing, and woven mat production. This technology systematically reduces manual labour requirements while enabling production scaling.



02. Multi Tree Climber (Sitting Type)

Incorporating pedal-and-handle mechanism with integrated safety locking system, enabling 60-foot ascent within approximately five minutes. The sitting-type configuration substantially enhances safety compared to traditional manual climbing while enabling harvesting of coconut, areca nut, and fruit tree crops.



03. Multi Spice Grinder

Powered by 0.5 horsepower motor and featuring both grinding stone/roller and mortar/pestle operational modes, enabling both dry and wet grinding of spices, grains, and soaked food items. The machine substantially reduces manual grinding labour while enabling scaling of food processing activities.



04. Cotton Wick Machine

Powered by 50 watts and capable of rolling 20–55 wicks per minute compared to 8–10 manually, providing five-fold productivity improvement over traditional hand production. The technology addresses production bottlenecks in religious and household lighting applications.



05. Leaf Plate and Bowl Making

Utilizing manual tools and molds to layer and stitch natural leaves into disposable, eco-friendly food service utensils, providing sustainable alternatives to plastic packaging while generating income opportunities.



06. Multi Food Processing

Utilizing scalable distillation and extraction methods requiring minimal capital investment, enabling production of value-added products including amla juice, papaya jam, and other processed food commodities.



Participant Engagement and Capacity Building Outcomes

The training initiatives collectively engaged 88 beneficiaries drawn primarily from tribal communities, self-help groups, and marginal farmer populations. Participant demographics revealed balanced gender representation and substantial youth participation, indicating successful engagement with younger generations seeking alternative livelihood pathways beyond agricultural labour.

Training methodology emphasized experiential learning and hands-on skill development with approximately 12 distinct technology tools distributed to beneficiaries for immediate implementation and field testing. 13 additional training sessions facilitated advanced technical understanding, maintenance protocols, and troubleshooting capabilities ensuring sustainable technology adoption beyond initial training periods.

Capacity building extended beyond individual technological competency toward institutional linkages connecting beneficiaries with government welfare schemes, technical support networks, and market access mechanisms vital for sustainable long-term technology adoption.

Participant feedback consistently highlighted the effectiveness of grassroots innovations when characterized by cost-effectiveness, accessibility, minimal maintenance requirements, and practical rural applicability.

Impact Documentation and Productivity Gains

Monitoring and impact assessment activities documented significant productivity improvements and livelihood enhancement outcomes:

Productivity Gains:

The cotton wick machine increased output capacity five-fold over manual production methods. Bamboo processing utilizing strip-making technology achieved high yields of 3,500–4,000 sticks per kilogram, representing substantial production scaling.

Income Potential:

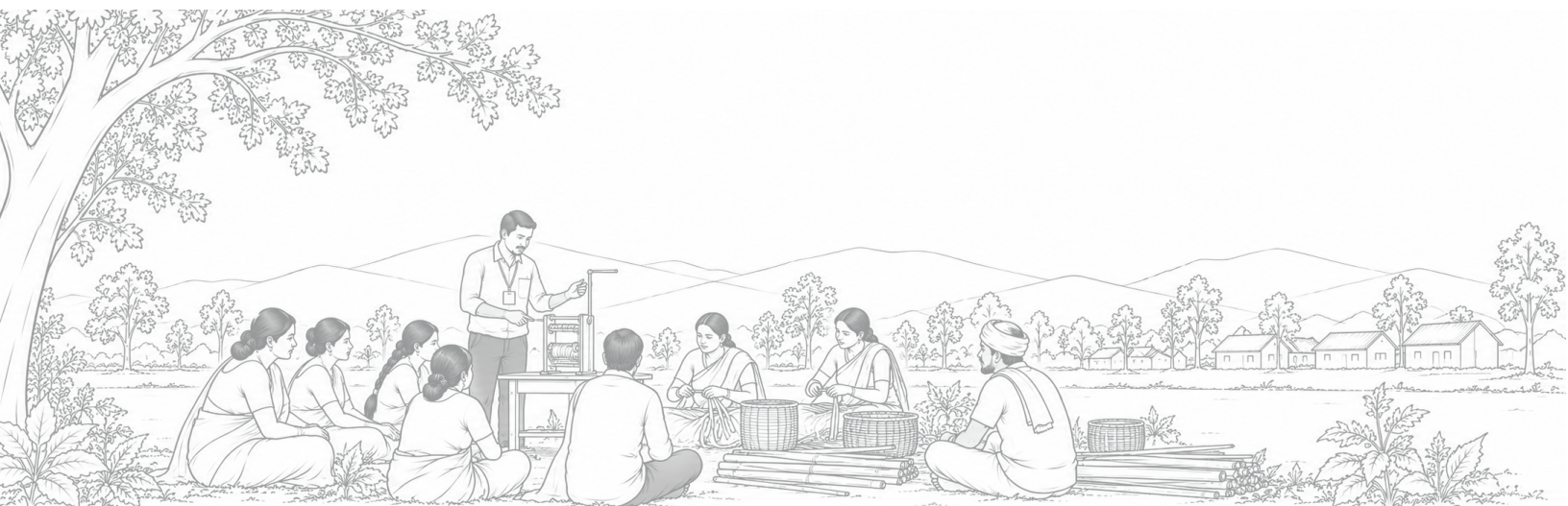
Innovations including the cotton wick machine indicated potential daily earning capacity of ₹100–₹250 for rural women, representing substantial income supplementation for marginal household economies.

Drudgery Reduction:

Technologies systematically reduced physical strain and manual labour requirements in traditionally labour-intensive activities, particularly benefiting female artisans and elderly practitioners.

Safety Enhancement:

The sitting-type tree climber provided substantially safer harvesting compared to traditional manual climbing through integrated locking mechanisms, reducing occupational injury risks.



Environmental Sustainability

Training programmes promoted eco-friendly alternatives to plastic packaging through utilization of natural leaves and sustainable bamboo processing, contributing to environmental conservation objectives.



Recommendations and Future Directions

Analysis of participant feedback and implementation experience revealed critical areas for future enhancement including:

01. Advanced Maintenance Training implementing specialized workshops focused on device troubleshooting and long-term maintenance capability.

02. Marketing Framework Development Establishing group-based marketing and procurement strategies enabling SHGs to scale production and access wider markets.

03. Financial Integration Exploring subsidized credit and financing mechanisms removing capital constraints to technology adoption.

04. Institutional Linkage Strengthening establishing formal relationships with government agencies, development programmes, and market distributors ensuring sustainable commercialization pathways.

Implemented Grassroot Technologies , their key features and primary application

Technology	Key Features & Performance Metrics	Primary Applications
Bamboo Strip Making Machine	Manual two-stage system producing ~5,000 splints/hour or 30 kg/day.	Crafts, incense sticks, and mats.
Multi Tree Climber (Sitting Type)	Pedal-and-handle mechanism with safety lock; 60 ft ascent in ~5 minutes.	Coconut, areca nut, and fruit trees.
Multi Spice Grinder	0.5 HP motor; features both a grinding stone/roller and a mortar/pestle side.	Wet/dry grinding of spices, grains, and soaked items.
Cotton Wick Machine	50W power; rolls 20–55 wicks/min compared to 8–10 manually.	Diyas, temples, and daily religious use.
Leaf Plate & Bowl Making	Manual tools/molds used to layer and stitch natural leaves.	Disposable, eco-friendly utensils.
Multi Food Processing	Scalable methods for distillation and extraction with minimal investment.	Value-added products (e.g., Amla juice, Papaya jam).

Vaidya Chikitsalay: Traditional Healthcare Practitioners Empowerment through University Community Partnership

Strategic Context and Knowledge Preservation Imperative

The Vaidya Chikitsalay initiative represents a transformative institutional model preserving indigenous medical heritage while simultaneously fostering rural entrepreneurship and formal recognition of traditional healing systems. Operationalized as a functioning traditional medicine clinic providing direct healthcare services to community members, the Vaidya Chikitsalay serves as both a clinical service centre and a strategic platform for professionalization of traditional healing practitioners, documentation of traditional medical knowledge, and development of sustainable market-linked enterprises based on indigenous therapeutic systems.

The initiative responds to a critical knowledge crisis threatening the continuity of indigenous medical traditions.

Tribal communities across Gadchiroli maintain exceptional ethno-medico-botanical heritage encompassing sophisticated diagnostic approaches, plant-based therapeutic formulations, and integrated healing methodologies developed through generations of practice and observation.

However, this knowledge confronts multiple vulnerabilities: the fragility of oral traditions lacking systematic documentation, absence of formal recognition within contemporary healthcare systems, widening intergenerational gaps as younger generation members pursue alternative livelihood pathways, and the lack of viable market mechanisms enabling economically sustainable traditional medical practice.

STRC positioned itself as the institutional anchor providing necessary infrastructure for knowledge documentation, scientific validation, market integration, and business professionalization ensuring that indigenous medical knowledge neither becomes lost historical curiosity nor remains confined to subsistence practice.



Institutional Model and Professionalization Architecture

The 2025–26 fiscal year marked a significant transition of the Vaidya Chikitsalay from purely clinical service delivery toward a comprehensive socioeconomic empowerment framework bridging tribal wisdom with institutional support structures. The clinic achieved operational maturity during the reporting period, establishing itself as a functioning healthcare facility serving community members while simultaneously operating as a training platform, knowledge documentation centre, and business incubation hub for traditional healthcare enterprises.

A cornerstone of the 2025–26 professionalization initiative was implementation of a specialized 5-day "Paramparik Vaidu Prashikshan" (Traditional Healer Training Program) developed through collaborative partnership with BAIF Livelihoods. This institutional training partnership brought standardized professional development to traditional healing practitioners, addressing critical gaps in business management, regulatory compliance, product development, and enterprise operation. The training programme systematically advanced traditional healer professionalization by integrating clinical knowledge with business acumen, positioning healers for successful transition from individual practitioners toward formal enterprise operators capable of accessing institutional markets and formal support systems.

Performance Metrics Patient Reach

The clinic served over 600 individuals during the reporting period, representing significant community reliance on traditional healing services. This patient volume demonstrates substantial demand for culturally appropriate, accessible healthcare services within rural contexts.

Operational Availability:

The clinic maintained 248 operational days during the fiscal year, demonstrating high institutional commitment and service reliability. This operational consistency establishes predictable healthcare access for community members and strengthens institutional credibility.

Clinical Efficacy:

Preliminary impact assessment documented 92% positive clinical feedback from patients, representing substantial validation of traditional treatment methodologies and practitioner competence. This efficacy rate aligns with global research on traditional medicine systems and demonstrates effectiveness comparable to contemporary clinical services.

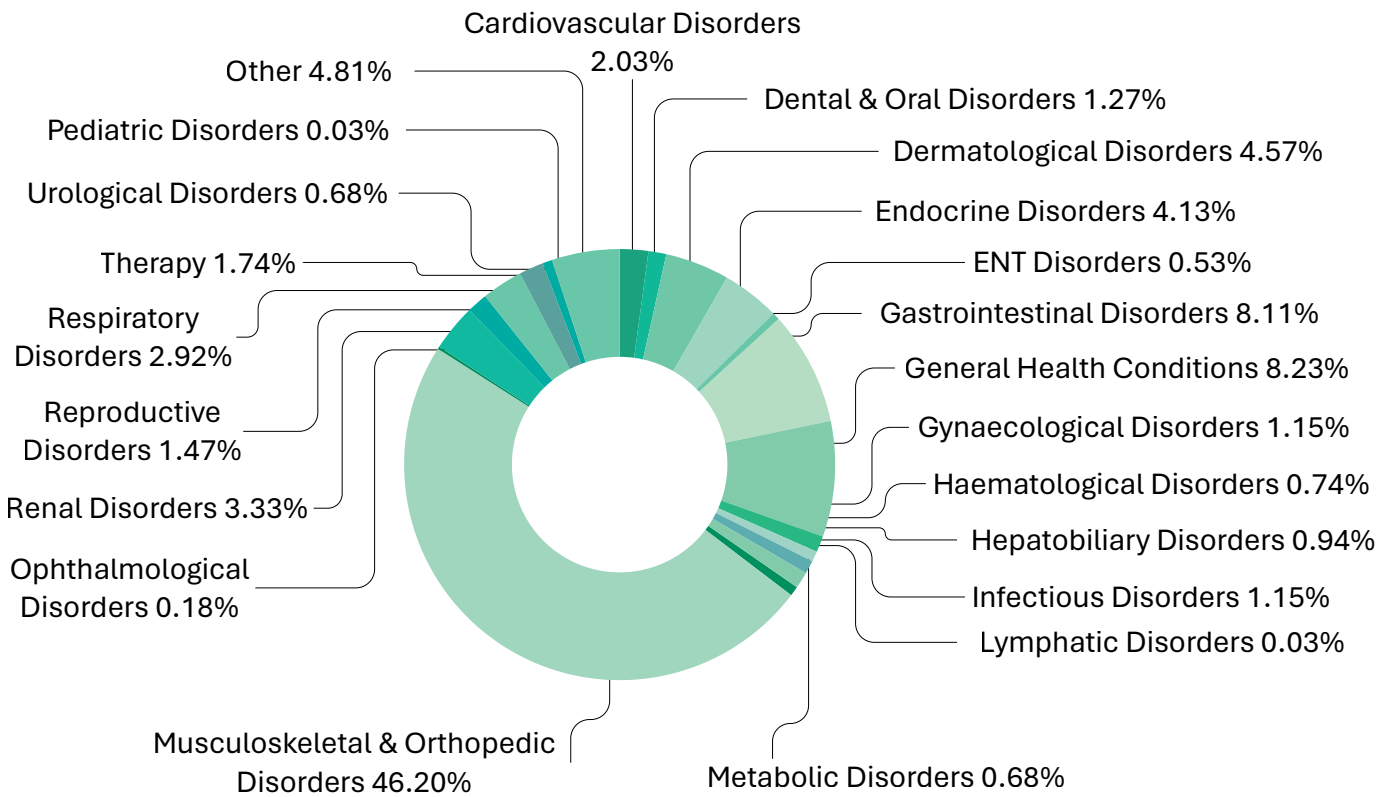
Patient Retention:

Analysis of clinic utilization patterns revealed 65% return/repeat visit rate among patients with chronic conditions, indicating successful management of long-term health conditions and sustained community confidence in therapeutic approaches. This retention metric reflects patient satisfaction and perceived therapeutic effectiveness.



Vaidya Chikitsalay Clinical Performance Metrics: FY 2025-26

Key Performance Indicator	Achievement (2025-26)	Impact Interpretation
Total Patient Reach	600+ Individuals	Significant community trust and reliance
Operational Days	248 Days	High institutional availability
Clinical Efficacy	92% Positive Feedback	Validation of traditional treatment success
Patient Retention	65% Return Rate	Success in chronic disease management



Specialization and Therapeutic Excellence

Analysis of 2025–26 clinic records identified specific areas of clinical specialization and therapeutic excellence demonstrating the Vaidya Chikitsalay's particular strength in particular health domains:

Orthopedics:

Emerged as a primary clinical strength area, with particularly high success rates in treating spine disorders and bone fractures through integrated physiotherapy-Ayurvedic methodologies. These complex conditions historically challenging for conventional systems found effective treatment through traditional and integrated approaches.

Chronic Disease Management:

Demonstrated consistent success in managing diabetes and arthritis through traditional therapeutic protocols, providing affordable healthcare alternatives to local populations lacking access to expensive pharmaceutical interventions or specialist medical services. The clinic's success with chronic conditions reflects the effectiveness of traditional approaches for long-term health management.

Socio-economic Empowerment Outcomes

Beyond clinical service delivery, the Vaidya Chikitsalay generated transformative socioeconomic outcomes for associated traditional healers:

Youth Engagement:

The initiative catalysed 40% rise in youth interest in traditional healing professions, with three formal apprenticeships launched during the reporting year. This youth engagement addresses critical intergenerational knowledge transmission challenges and ensures continuity of healing traditions.

Geographic Reach:

Clinic patients were recorded from over 100+ villages across Gadchiroli and Chandrapur districts, demonstrating that traditional healthcare services generate significant geographic reach despite the local clinic location. This geographic dispersion reflects the substantial demand for accessible healthcare services and the clinic's reputation within regional communities



Vision and Strategic Trajectory

The 2025–26 cycle demonstrates that the Vaidya Chikitsalay represents far more than a clinic - it functions as an incubator for tribal wellness economies. Through strategic partnership with institutional support systems and deliberate pivot toward FSSAI-standardized product commercialization, STRC is creating a replicable model wherein indigenous knowledge intersects with modern market mechanisms enabling both knowledge preservation and economic sustainability for traditional healing practitioners.

• The Medicinal Plant Archive: Conservation & Community

Infrastructure Innovation and Design Philosophy

The establishment of a **bamboo polyhouse herbal garden** represents an innovative infrastructure solution uniquely adapted to rural and tribal contexts characterized by resource constraints and environmental sensitivity. Unlike conventional polyhouse structures relying on industrial materials and elevated capital investment, this facility utilizes locally abundant bamboo as the primary construction material, achieving cost-effectiveness, environmental sustainability, and technical functionality. The structure provides controlled microclimatic conditions suitable for systematic conservation, cultivation, and propagation of medicinal plant species while simultaneously serving as a demonstration platform, research facility, and capacity-building centre.

Conservation Framework and Species Portfolio Development

The herbal garden during the reporting period successfully established and systematically maintained over 90 medicinal plant species representing diverse botanical families, therapeutic applications, growth forms, and ecological niches.

The comprehensive conservation effort encompasses multiple plant life form categories:

Herbs including *Andrographis paniculata* (Kalmegh, widely used in fever and digestive disorders), *Centella asiatica* (Brahmi, traditionally utilized for cognitive enhancement and nervous system support), *Phyllanthus niruri* (Bhui Amla, employed in liver and kidney support).

Shrubs and Small Trees including *Rauwolfia serpentina* (Sarpagandha, utilized in cardiovascular disorders), *Vitex negundo* (Nirgudi, used in inflammatory conditions), *Plumbago zeylanica* (Chitrak, employed in digestive and skin applications).

Climbers and Creepers including *Tinospora cordifolia* (Guduchi, widely used in immune enhancement and fever management), *Cissampelos pareira*, *Pergularia daemia*, *Piper nigrum* (Black Pepper, valued in digestion and nutrient bioavailability enhancement).

Tree Species including *Pterocarpus marsupium*, *Terminalia chebula*, *Madhuca longifolia*, representing larger plant forms and forest-associated species.



Aquatic and Semi-Aquatic Plants including *Azolla pinnata*, *Cryptocoryne retrospiralis*, representing water-dependent species requiring specialized cultivation systems.

This stratified approach ensures representation of multiple ecological niches and growth forms, enabling comparative study of growth behavior and performance across plant types within controlled and semi-controlled environmental conditions. Planting materials were sustainably collected from natural forest patches with appropriate regulatory permissions, ensuring compliance with conservation norms and ethical sourcing protocols.

Research Framework and Systematic Observation

The herbal garden functions as an integrated living laboratory facilitating systematic scientific study across multiple botanical and agronomic parameters:

- Seed Germination characteristics and propagation success rates for diverse species under controlled conditions
- Vegetative Propagation methodologies for species presenting challenges to conventional seed-based reproduction
- Growth Rate Monitoring and comparative performance metrics across species and ecological conditions
- Survival Percentage and establishment success rates across species cohorts
- Phenological Observation tracking seasonal growth patterns, flowering and fruiting cycles, and response to environmental variations
- Response Assessment to controlled microclimatic conditions and measurement of adaptive capacity across species.

Climbers are evaluated through structured support-based growth systems replicating natural ecological relationships. Aquatic species are monitored in specially designed water-holding structures replicating natural habitat conditions. This systematic research framework enables generation of empirical data supporting wider cultivation initiatives and informing evidence-based conservation planning.



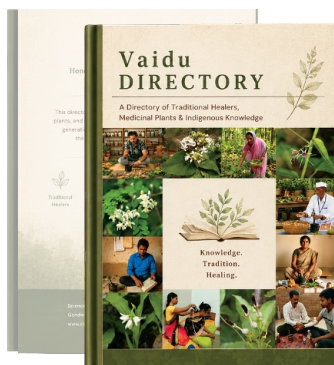
Capacity Building and Demonstration

Beyond conservation and research roles, the herbal garden operates as a dynamic learning and demonstration hub where farmers, self-help groups, community members, and trainees receive direct instruction in scientific medicinal plant cultivation techniques, nursery management protocols, species-specific agronomic practices, and biodiversity conservation methodologies.

The facility's integrated design combines ethnobotanical knowledge documentation with scientific validation, enhancing credibility and effectiveness of capacity-building initiatives while ensuring cultural continuity and community ownership of conservation efforts. This model establishes medicinal plant cultivation as a viable livelihood pathway compatible with ecological conservation and cultural preservation objectives.



Comprehensive Vaidu Directory: Scientific Documentation and Validation of Indigenous Medicinal Knowledge



Strategic Context and Knowledge Preservation Imperative

The development of the Comprehensive Vaidu Directory represents a sophisticated systematic initiative addressing critical vulnerability of indigenous medicinal knowledge systems in Gadchiroli district. Traditional healers, locally known as Vaidus, possess extensive ethno-medicinal knowledge acquired through generational inheritance, observational learning, and experiential practice, collectively forming the primary healthcare resource for remote tribal communities. Despite richness and demonstrated community relevance, this knowledge has remained largely undocumented, geographically restricted, and vulnerable to gradual erosion due to lacking scientific validation and formal institutional recognition. STRC conceptualized the Vaidu Directory in 2021 as a consolidated documentation effort responding to this knowledge preservation imperative. Over successive iterations, the initiative evolved from basic ethnobotanical listing toward a scientifically structured knowledge repository. The 2025–26 version marks major advancement by systematically integrating detailed healer profiles with validated scientific insights on medicinal plants, thereby bridging traditional wisdom with contemporary research understanding.

Methodological Framework and Data Collection Protocols

The directory development employs rigorous methodological architecture combining field-based empirical research with structured knowledge synthesis:

Structured Healer Profiling capturing comprehensive demographic details, knowledge lineage and inheritance patterns, experiential background, therapeutic expertise specializations, diagnostic methodologies employed, and geographic practice areas. This profiling addresses not merely botanical knowledge but the complete clinical and diagnostic context within which traditional knowledge operates.

Individual Interviews and Focus Group Discussions utilizing semi-structured questionnaires enabling in-depth documentation of individual healer experiences, case studies, treatment protocols, and observed outcomes.

Personal Interaction Records documenting local plant nomenclature, plant parts utilized in therapeutics, traditional preparation methodologies, therapeutic indications and applications, and observed clinical outcomes.

Cross-Reference Validation with classical Ayurvedic texts and authenticated digital resources including Vikaspedia and AYUSH databases, establishing scientific grounding for traditional knowledge.

Field Botanical Surveys identifying medicinal plant species in natural habitats with specimen collection and systematic botanical identification, establishing geographic distribution and ecological context.

Geographic Information Systems Mapping of traditional healers and therapeutic practice patterns revealing spatial clustering reflecting localized ecological knowledge and resource availability.

Vaidu Profiling Framework and Specialization Patterns

The 2025–26 directory iteration encompasses comprehensive healer profiling utilizing standardized evaluation protocols. Analysis of documented healer cohort (currently encompassing 50 traditional healers with systematic expansion ongoing) reveals significant patterns and characteristics:

Age and Generational Distribution:

Analysis indicates that a majority of documented Vaidus belong to middle and advanced age groups, highlighting urgent necessity for systematic knowledge documentation and intentional intergenerational knowledge transfer mechanisms. This generational pattern underscores the knowledge preservation imperative driving the directory initiative.

Experience Depth:

Experience levels demonstrate significant variation across practitioner cohort, with several healers practicing for more than three decades, representing deep repositories of accumulated clinical knowledge. Years of practice ranging from approximately 10 to 50+ years reflect diverse practitioner trajectories.

Lineage of Knowledge:

The knowledge system is predominantly lineage-driven, with family-based transmission representing the dominant knowledge acquisition pathway. Limited instances of formal documentation exist, highlighting the reliance on oral transmission and observational learning.

Area of Expertise:

Specialization analysis reveals distinct therapeutic domains including bone setting, snakebite treatment, skin disorders, women's health, and gastrointestinal conditions. This specialization reflects both individual healer interests and localized ecological knowledge supporting particular therapeutic traditions.

Geographic Clustering:

Analysis reveals that certain ailments and associated healing practices are geographically clustered across specific villages and regions, reflecting localized ecological knowledge and resource availability. This clustering indicates that traditional therapeutic knowledge is intimately connected to specific landscapes and their ecological characteristics.



Ailment Relevance establishing scientific correlation between traditional plant usage and contemporary disease understanding, validating traditional knowledge through modern medical frameworks.

Literature Reference providing supporting evidence from contemporary research studies and foundational Ayurvedic sources, situating traditional knowledge within expanding scientific knowledge base. This validation architecture substantially enhances credibility of traditional practices while establishing foundation for further scientific research, pharmacological investigation, and potential mainstream healthcare integration of validated therapeutic formulations. The directory positions traditional knowledge not as historical curiosity but as evidence-based healthcare resource worthy of contemporary scientific attention and research investment.

Digital Dissemination and Knowledge Accessibility

The directory leverages digital platforms for comprehensive dissemination and accessibility, employing dual-language interface (Marathi for local community accessibility and English for wider academic and professional audiences) maximizing reach across diverse user groups. The online platform facilitates dynamic content updation, community feedback integration, and continuous knowledge enhancement ensuring contemporary relevance. Real-time dissemination ensures utility for community stakeholders, educational institutions, healthcare providers, scientific researchers, and policymakers. The digital format enables rapid information retrieval, cross-referencing capabilities, and interactive engagement with documented knowledge systems, transforming traditional knowledge from isolated community practice toward recognized, documented, and scientifically validated healthcare resource.

"Comprehensive Vaidu Directory: Framework for Indigenous Medicinal Knowledge Documentation and Scientific Validation".

Component	Description
Ethno-medicinal Importance	Traditional use and relevance in local healing practices
Phytochemical Profile	Identification of active chemical constituents
Pharmacological Mechanism	Mode of action of bioactive compounds
Ailment Relevance	Scientific correlation with diseases treated by Vaidus
Literature Reference	Supporting evidence from research studies and Ayurveda sources

Crop Advisory Services

Rationale and Implementation Model

Recognizing critical information asymmetries affecting agricultural decision-making in remote rural contexts, STRC developed and implemented a systematic **Crop Advisory Service** designed to enhance farmers' climate preparedness, promote adoption of scientific crop management practices, and strengthen climate-adaptive agricultural systems across Gadchiroli district. This advisory service systematically translates complex meteorological data into contextually appropriate, actionable agricultural recommendations customized for local conditions, specific crop developmental stages, and seasonal agricultural calendars.

Advisory Development Methodology and Content Architecture

The advisory service employs sophisticated content development methodology integrating multiple data streams:

- **Indian Meteorological Department (IMD) Forecasts** providing accurate, validated weather prediction data including temperature, rainfall, wind patterns, and other critical atmospheric parameters
- **Region-Specific Agricultural Weather Advisories** from India Meteorological Department agricultural division offering initial broad recommendations
- **Localized Contextualization** adapting general recommendations to Gadchiroli-specific agro-climatic conditions, soil characteristics, crop phenology, and farmer capacity
- **Seasonal Calendar Integration** aligning advisory content with specific crop developmental stages and seasonal agricultural activities ensuring temporal relevance

- **Weekly Dissemination Schedule** ensuring temporal alignment with crop phenological stages and seasonal farming operations

Advisory content is systematically developed in both Marathi (regional language ensuring accessibility to farming communities) and English (enabling wider dissemination and institutional usage). The presentation format deliberately emphasizes simplicity and visual clarity, utilizing icon-based and pictorial communication substantially enhancing comprehension across diverse literacy levels and age cohorts within farming communities.



Dissemination Infrastructure and Community Engagement

The advisory service leverages **WhatsApp-based distribution channels** enabling rapid, direct dissemination across farmer groups, self-help groups, agricultural cooperatives, and community organizations. This digital distribution infrastructure achieves timely information delivery directly to end-users while bypassing traditional communication barriers and information delays characterizing conventional extension services.

As of the reporting period, WhatsApp-based advisory networks **collectively connect with over 2,300 farmers and community stakeholders**, ensuring unprecedented reach for agricultural extension information.

The service establishes continuous feedback mechanisms enabling community input, dynamic content refinement based on farmer field experience, and customization addressing emerging agricultural challenges. This participatory approach ensures advisories remain responsive to farmer needs and reflect field realities rather than generic recommendations disconnected from local context.

Content Dissemination and Impact

During the reporting period, 41 comprehensive Agri Bulletins were successfully developed, circulated, and disseminated to farming communities. These advisories comprehensively addressed major regional crops including paddy, cotton, maize, redgram, mung, and urad, supplemented by detailed guidance on diverse vegetable categories including brinjal, okra, chickpea, bitter gourd, ridge gourd, tomato, and chilli, and guidance on key fruit crops including mango. The breadth of crop coverage reflects STRC's commitment to comprehensive agricultural support across the region's diversified production systems.

Advisory content systematically incorporated weather forecasts and agro-meteorological inputs from India Meteorological Department including regional inputs from Nagpur meteorological centre, enabling scientifically informed, climate-responsive farmer decision-making at household and farm levels. This evidence-based approach ensures farmer recommendations reflect contemporary weather conditions and forecasted atmospheric variations rather than relying on historical averages or conventional wisdom.



Service Impact and Agricultural Resilience Enhancement

Preliminary assessment indicates substantial contributions toward enhancing farmers' preparedness for adverse weather events, promoting adoption of scientific crop management practices, and strengthening climate adaptation capacity within rainfed agricultural systems.

The advisory service directly addresses information asymmetries historically limiting agricultural productivity and resilience, providing knowledge resources previously inaccessible in remote rural contexts. By enabling farmer access to contemporary meteorological information alongside scientifically informed agricultural recommendations, the service empowers farmers with decision-support tools enabling responsive management adaptations to emerging climatic conditions.

Strategic Road Ahead: Consolidating Livelihood Models

Looking ahead, STRC's strategic vision for the NTFP, Medicinal Plants, and Other Livelihoods Vertical involves transitioning from successful localized demonstration models to expansive, district-wide replication. A primary focus is the systematic scaling of the Climate-Smart Regenerative Agriculture (CSRA) framework. Following the decisive four-fold economic success of the Kharif 2025 pilot, STRC plans to expand the HDPS-cotton and redgram intercropping model across northern blocks of Gadchiroli. Concurrently, the vertical will scale its processing infrastructure, utilizing the Kharkadi Primary Processing Centre as a replicable blueprint to establish additional decentralized aggregation hubs. These hubs will empower more Self-Help Groups to capture higher value margins through scientific grading, hygienic processing, and formal market linkages for diverse forest commodities.

Institutionalization and commercialization of traditional knowledge form the second strategic pillar. The successful foundation of the Vaidya Chikitsalay and the Comprehensive Vaidu Directory will be leveraged to transition traditional healers into formalized wellness entrepreneurs. STRC will prioritize securing FSSAI certifications and formal product certifications. By integrating rigorous scientific validation (phytochemical profiling and NABL-accredited testing) with targeted capacity building in enterprise management, packaging, and branding, the vertical aims to build robust, resilient value chains. This comprehensive approach ensures that indigenous ecological knowledge is not merely preserved, but actively transformed into standardized, high-value commercial assets that guarantee dignified, sustainable income streams for Gadchiroli's tribal communities.



Indigenous
Knowledge



Documentation and
Validation



Standardization and
Quality Assurance



FASSAI - Aligned
Product Development



Market linkages and
Commercialization



Sustainable
Livelihood

Applicable R&D and Academic Program Development



Applicable R&D and Academic Program Development

Overview: FY 2025-26

The Applicable R&D and Academic Program Development Vertical achieved transformative innovation and knowledge ecosystem development during 2025-26, strategically positioning STRC at the intersection of research, technology, and education to build a science-driven, field-responsive development framework operating across Chandrapur, Gadchiroli, and Nagpur districts. The vertical implemented a comprehensive model translating theoretical knowledge into practical solutions, enhanced skills, and sustainable livelihood opportunities through six interconnected programs. The reporting year witnessed significant advancement through the Environmental Education School Program engaging 650+ tribal students across 15 schools, institutional facilitation of 10 research proposals under the S&T Application Scheme, foundational progress on Geographical Indication registration for Gadchiroli Roselle, systematic Research Design and Communication Support across aquaculture, bamboo craft, and NTFP domains, strategic institutional collaborations establishing formal knowledge exchange pipelines, and development of nine specialized certificate courses addressing critical skill gaps in traditional healing, bamboo craft, aquaculture, Gond painting, and forest management.

With a concerted focus on integrating scientific knowledge with indigenous wisdom and ecological understanding, the vertical ensured interventions remained scalable, adaptive, and community-centric, reaching 1,076 beneficiaries through training, research, and programmatic engagement while establishing STRC as a pivotal institutional hub connecting grassroots innovations with formal education systems across tribal and resource-constrained geographies.

Key Impact

1076

Outreach
(Teachers + Students)

6

Courses
Developed

4

Training & Capacity
Building

2

Institutional
Linkages



Environmental Education Program for Tribal School Children

Program Philosophy and Implementation Framework

The Environmental Education School Program (EES) represents a transformative educational initiative reimagining science pedagogy within tribal schools by shifting from conventional classroom instruction toward experiential, inquiry-driven, and culturally responsive learning paradigms. Developed through endorsement from the Tribal Development Department in Gadchiroli, the program fundamentally aligns with National Education Policy (NEP) 2020 vision emphasizing holistic learning, experiential pedagogy, and contextual education, while addressing a critical gap in conventional education systems where science is frequently taught in isolation from students' local environment and cultural experiences.

Implementation Architecture and Geographic Reach

During the reporting period, the EES program expanded significantly across 15 strategically selected tribal schools located within Chamorshi, Gadchiroli, and Dhanora blocks, directly engaging 650+ students from traditionally underserved educational contexts. Implementation focused on creating sustainable systemic change through concurrent teacher capacity enhancement initiatives including comprehensive Teacher Orientation sessions and 5 specialized Training of Trainers (ToT) programs designed to equip educators with pedagogical skills necessary for implementing experiential, culturally responsive teaching methodologies. A distinctive program feature was the co-creation of curriculum modules collaboratively with teachers, ensuring educational content remained both formally curriculum-aligned and authentically locally relevant, thereby supporting long-term program integration within institutional education systems.

Curriculum Modules and Pedagogical Innovation (Table)

The EES program deployed a structured, modular curriculum encompassing five core thematic domains designed to build progressive environmental scientific understanding:

Module 01: Introduction to Biodiversity



provides foundational awareness of species diversity, ecosystem interdependencies, and ecological roles.

Module 02: Understanding Ecological Processes through Nature Trail



employs experiential ecosystem learning enabling direct observation and guided ecological interpretation.

Module 03: Cultivating Roots of Traditional Health – Medicinal Plant Garden



integrates conservation awareness with traditional health knowledge systems.

Module 04: Classification of Local Wild Vegetables (Raanhaji)



systematizes cultural food knowledge using scientific classification methodologies.

Module 05: Soil, Plant and Us



explicates complex soil-plant-human interlinkages and sustainable agricultural systems.

The program employs an innovative pedagogical framework emphasizing interactive, experiential learning methodologies including Nature Journaling and Field Observation, Drawing and Scientific Documentation, Sample Collection and Data Tabulation, Forest Visits and Ecological Exposure Learning, Gardening and Hands-on Experiments, Storytelling and Narrative Presentations, and Group Discussions and Collaborative Learning Structures, collectively fostering curiosity, critical thinking capacity, and contextual understanding.



Impact of EES Program



2

Phase Completed



25

School Coverage



5

Experiential Modules Implemented



1024+

Student Engagement



60

Teacher Engagement



01

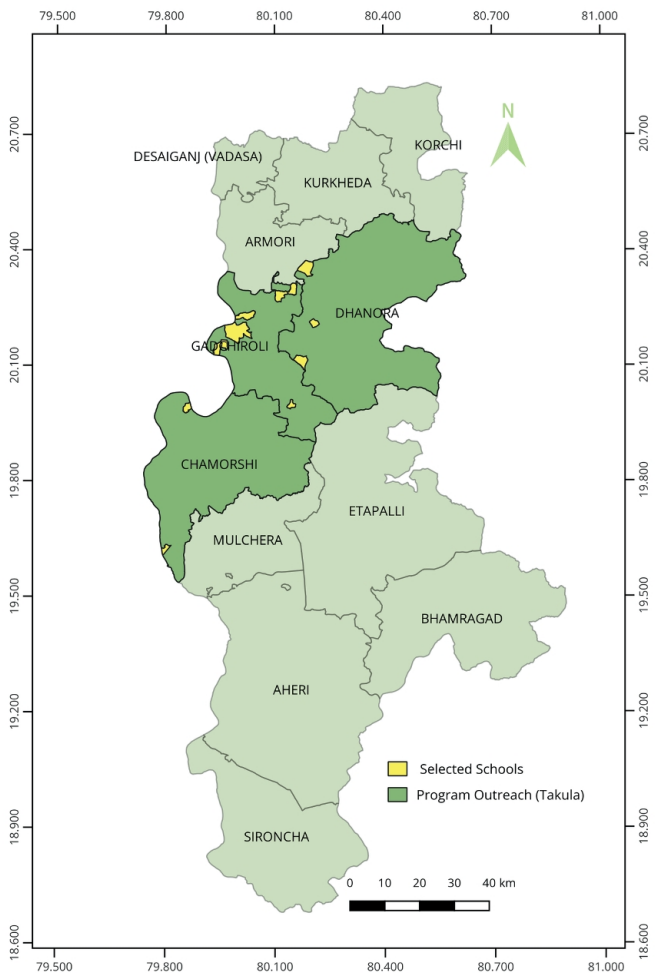
Orientation



05

ToT sessions

Program Outreach



Institutional Collaborations

Strategic Partnership Philosophy

The Institutional Collaborations and Memoranda of Understanding initiatives constitute a foundational element within the vertical's strategic architecture, systematically establishing formal relationships with academic institutions, research organizations, government agencies, non-governmental entities, and private sector stakeholders to enhance technical expertise, facilitate knowledge exchange, and strengthen program implementation capacity.

Key Collaborative Institutional Relationships

Substantial progress was achieved through systematic engagement with multiple institutional partners:

National Innovation Foundation (NIF):

Technology sourcing partnerships facilitating identification and adaptation of appropriate grassroots agricultural and processing innovations.

BAIF Development Research Foundation:

Traditional knowledge systems collaboration focusing on documentation methodologies, certification protocol development, and business professionalization frameworks.

Skill Development Department:

Formal sector alignment establishing systemic connections between STRC certificate courses and national/regional skills qualification frameworks.

Indian Council of Agricultural Research – Central Institute of Fisheries Education (ICAR-CIFE):

Technical collaboration providing advanced aquaculture expertise, curriculum development guidance, and scientific validation protocols

Central Institute of Fisheries Education (CIFE) at Kakinada:

Exposure partnerships facilitating access to advanced aquaculture practices, technology demonstration opportunities, and specialized training methodologies.

Collaborative Implementation Framework

The collaborative implementation framework emphasized reciprocal knowledge exchange wherein STRC extended access to extensive field-level implementation experience and community-based innovation, while partner institutions provided specialized technical expertise, advanced research methodologies, and established best practice frameworks. Strategic emphasis concentrated on developing collaborative institutional relationships extending beyond conventional technical assistance models toward genuine knowledge co-creation frameworks, participatory research initiatives, and shared capacity building architectures.



National Innovation Foundation (NIF):

Technology sourcing and grassroots innovation support



BAIF Development Research Foundation:

Traditional knowledge systems and certification programs



Skill Development Department:

Alignment of courses with formal skill frameworks



ICAR – CIFE (Balabhadrapuram):

Technical expertise in aquaculture and curriculum inputs



Kakinada-based institutions:

Exposure to advanced practices and future collaboration opportunities

Short Term Certificate Course Development

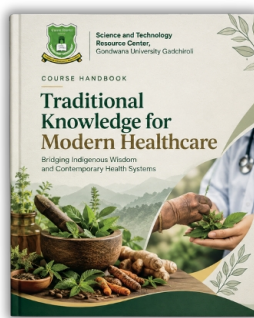
Strategic Context and Certification

Framework

STRC's certification program establishes formal recognition mechanisms for traditional skills, craft techniques, and agricultural practices historically acquired through informal apprenticeships and experiential learning. The development of nine specialized certificate courses represents an institutional commitment to professionalizing indigenous knowledge systems, ensuring that traditional expertise receives formal acknowledgement and economic valuation within contemporary occupational frameworks.

Comprehensive Certificate Course Portfolio

During 2025–26, STRC developed nine comprehensive certificate courses addressing critical skill gaps and livelihood opportunities:



01. Certificate Course in Traditional Healing and Naturopathy:

Building on the Vaidu Directory documentation, this course provides foundational knowledge of traditional medicinal systems, plant identification, preparation methodologies, and basic healthcare applications.



02. Certificate Course in Bamboo Mat Making:

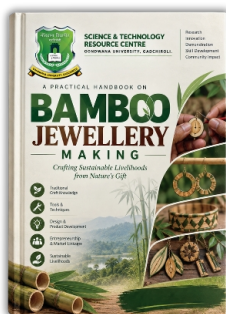
Developing skills in sustainable bamboo harvesting, processing techniques, weaving patterns, and quality maintenance for traditional mat production.



03. Certificate Course in Fish Seed Nursery Management (Spawn to Fingerling):

This specialized aquaculture course, technically developed under the Aquaculture vertical but offered through the certification program, trains participants in scientific fish seed production, nursery pond management, water quality control, feeding protocols, and disease prevention in hatchery environments.





04. Certificate Course in Bamboo Jewellery:

Developing skills in bamboo craft specialization including material selection, cutting techniques, polishing methods, and decorative applications.



07. Certificate Course in Forest Nursery Raiser:

Providing training in medicinal and forest species propagation, nursery management, sapling production, and conservation-oriented cultivation practices.



05. Certificate Course in Bamboo Ply Making:

Training in sustainable bamboo utilization, preliminary processing, ply manufacturing techniques, and finishing protocols for furniture applications.



08. Certificate Course in NTFP Harvester:

Training in ethical collection practices, sustainable harvesting techniques, biodiversity conservation principles, and post-harvest handling protocols for non-timber forest products.



06. Certificate Course in Bamboo Minor Furniture:

Developing skills in bamboo furniture design, joinery techniques, structural engineering principles, and finishing methodologies



09. Certificate Course in Gond Painting:

Preserving distinctive tribal artistic traditions through training in natural pigment preparation, traditional design patterns, storytelling through art, and contemporary market adaptation.

Certificate Course Architecture and Learning Outcomes

Each certificate course employs a systematic learning architecture encompassing:

Technical Skill Development:

Practical hands-on training in core craft techniques, agricultural practices, or healing methodologies.

Scientific Understanding:

Systematic knowledge of ecological contexts, biological principles, or biochemical processes underlying traditional practices.

Market Integration:

Training in product development, quality assessment, branding strategies, and market linkage mechanisms.

Entrepreneurship Training:

Business development, financial management, and enterprise operation skills for creating sustainable livelihood enterprises.

Cultural Contextualization:

Understanding of traditional knowledge systems, cultural heritage preservation, and community-based practice frameworks.

The certification framework emphasizes accessible, practical training suitable for diverse learner backgrounds encompassing tribal artisans, forest-dependent communities, farmers seeking livelihood diversification, and youth pursuing alternative employment pathways. Course durations vary from intensive 10-day programs to comprehensive 6-month training cycles based on technical complexity and skill mastery requirements.

Institutional Integration and Recognition Pathways

STRC's certificate courses are systematically integrated within broader qualification recognition pathways through strategic partnerships with the Skill Development Department and other formal education certification systems. Formal certification enables credentialed participants to access government welfare schemes, financial support programs, and institutional market channels requiring documented qualification verification. The certification framework creates opportunities for formal apprenticeship systems, employment placement assistance, and ongoing professional development pathways ensuring sustainable livelihood security beyond initial skill acquisition.



Strategic Road Ahead: Building a Comprehensive Academic and Research Ecosystem

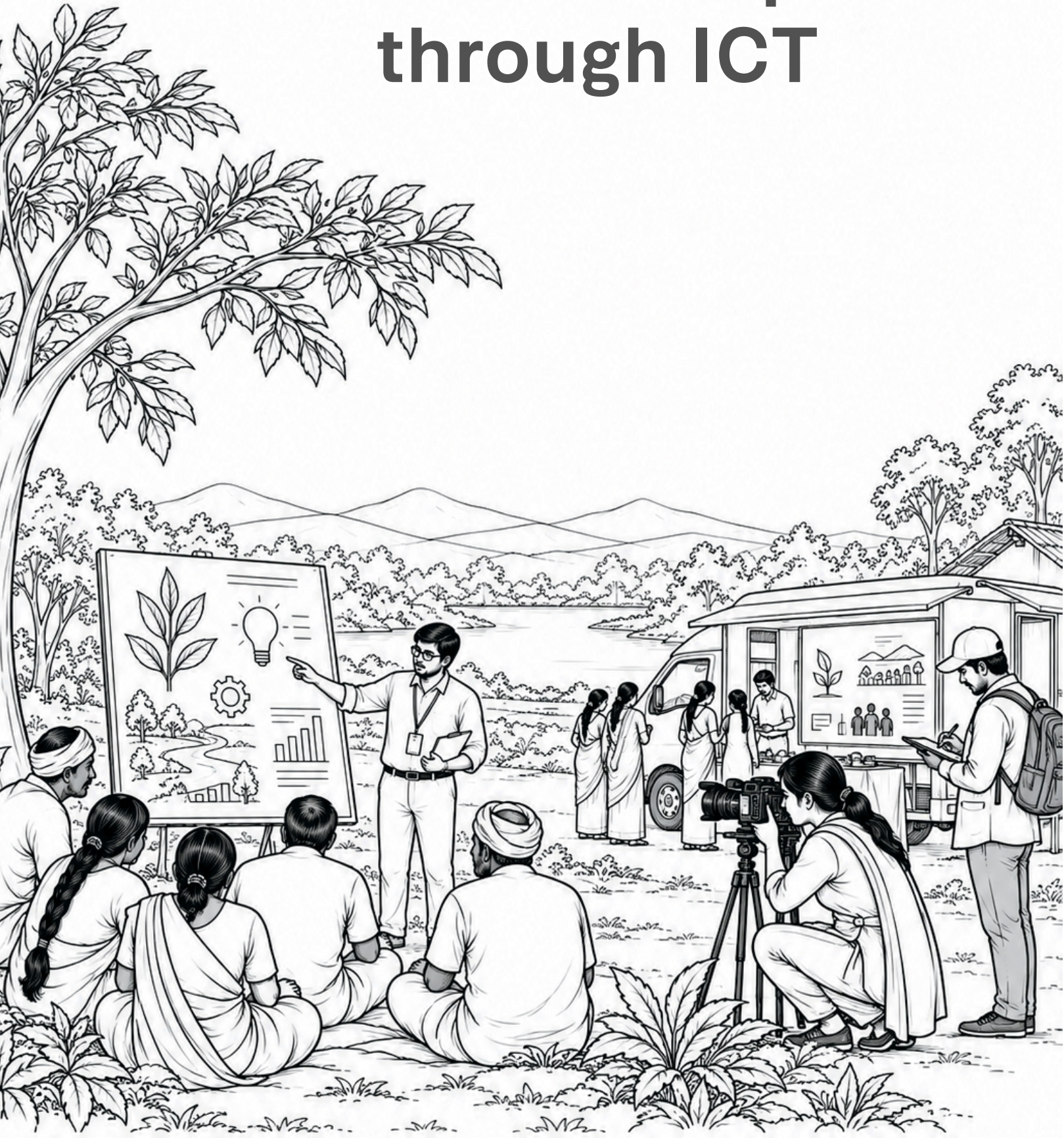
Looking ahead, STRC's strategic vision pivots toward establishing the Institution as a comprehensive nodal centre for applied research, academic innovation, and technology dissemination across eastern Vidarbha's tribal landscapes. The immediate priority involves elevating the successful Environment Education School Program into a fully-fledged "Education for Sustainable Development" curriculum formally integrated within the regional educational framework. Concurrently, the S&T Application Scheme will evolve into a sophisticated research incubator, systematically sourcing, mentoring, and scaling high-potential innovations from grassroots innovators and academic institutions. This strategic deepening will position STRC as a vital conduit linking fundamental academic research with actionable, field-tested livelihood solutions. The GI registration for Roselle will be advanced to secure formal protection, unlocking premium market positioning and establishing replicable IP protection models for other regionally distinctive products across NTFP and agricultural domains.

The long-term trajectory envisages the formalization of STRC's extensive institutional collaborations into structured, outcomes-based partnerships. Memoranda of Understanding will be strategically leveraged to co-develop accredited academic programs—ranging from advanced diplomas to specialized vocational courses—tailored explicitly to the region's ecological and economic realities. The certificate course portfolio will be expanded to 15+ offerings while establishing pathways for National Skills Qualification Framework (NSQF) integration, ensuring formal recognition of traditional skills within national education and employment systems.

By anchoring these initiatives within robust research design and communication frameworks, STRC can ensure that knowledge generated across all verticals—Aquaculture, Bamboo Craft, and Non-Timber Forest Produce—undergoes rigorous validation, effective translation, and impactful dissemination. This integrated approach will cement the vertical's role as the intellectual and methodological backbone of Gondwana University's community-facing mission, transforming isolated educational interventions into a cohesive, scalable academic-research-livelihood continuum that delivers measurable, sustainable impact across Gadchiroli and beyond.



Communication for Development through ICT



Communication for Development through ICT Overview: FY 2025-26

The Communication for Development through ICT Vertical achieved transformative outreach and institutional visibility during 2025-26, strategically leveraging digital platforms and communication technologies to bridge STRC's grassroots interventions with wider public and institutional audiences across tribal and rural geographies.

The vertical translated field programs and innovations into accessible, user-friendly formats, generating over 21.32 lakh in total digital outreach through a coordinated mix of website engagement, social media amplification, and field-based communication. Systematic digital dissemination reached 22,200+ website views and 21,10,000+ social media views, while strategic execution of digital campaigns and participation in exhibitions and workshops strengthened community visibility and institutional presence at the grassroots level.

The reporting year also witnessed the development of publications documenting field stories, audio-visuals and program outcomes, alongside a 40% growth in audience engagement reflecting deepening community connection and participation. Through sustained emphasis on translating knowledge into clear, meaningful communication and reinforcing coordination between field teams and central systems, the vertical established itself as the strategic communication backbone of STRC, enabling inclusive development, timely information flow, and enhanced effectiveness across all institutional efforts.

Key Impact



21,32,200+

Total Digital Outreach



22,200+

Website Views



21,10,000+

Social Media Views



07

Exhibitions and Workshops



08

Digital Campaigns



20+

Publication



40%

Engagement Growth

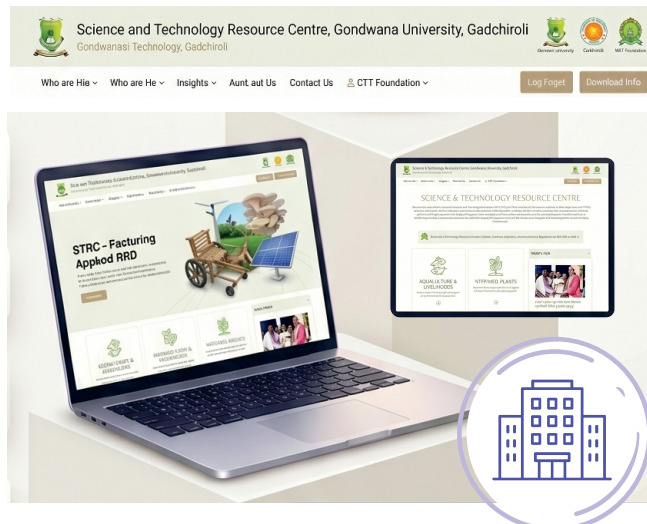


Key Achievements



Gondwana Craft E-commerce (<https://gondwanacraft.com/>)

STRC successfully launched and operationalized the Gondwana Craft E-commerce Platform (gondwanacraft.com), an initiative bringing the region's traditional art forms under one unified brand to preserve and promote these unique, dying craft traditions through an artisan-centric approach. By enabling tribal artisans to access broader markets and showcase their craftsmanship to a wider audience, the platform strengthened income security and livelihood opportunities while advancing the growth of the artisan economy through a sustainable and viable social entrepreneurship model.



Organization Website (<https://strc.org.in/>)

STRC strengthened its digital presence through regular updates to strc.org.in, enriching it with current project information, articles, and communication materials to enhance transparency and institutional visibility. This sustained content development ensured the website served as a comprehensive, up-to-date knowledge resource for stakeholders, partners, and the wider public.



STRC Digital Herbarium Website

STRC initiated the development of a Digital Herbarium Platform, aimed at systematically documenting, preserving, and digitally showcasing indigenous plant knowledge from the region. This initiative seeks to safeguard traditional botanical wisdom while creating an accessible digital repository for research, education, and conservation purposes.



STRC developed and disseminated IEC materials, publications, and audio-visual content using multilingual storytelling to reach diverse tribal and rural audiences. Systematic documentation of success stories and field case studies further highlighted program outcomes and best practices, reinforcing the institution's communication and knowledge-sharing efforts.



STRC recorded significant growth in digital outreach through targeted social media campaigns, enhancing the visibility and engagement of its initiatives across audiences. Inclusive communication strategies further enabled efficient last-mile outreach, ensuring information reached even the most remote and underserved communities.

The Road Ahead

Digital Platforms

STRC Digital Herbarium:

The initiative will scale up to document at least 100 medicinal plants, with a focused emphasis on rare and endangered species, while promoting conservation awareness and preserving indigenous botanical knowledge.

Gondwana Craft:

The platform will be further enhanced in terms of aesthetics, functionality, SEO and product listing to improve user-friendliness, visibility, and engagement.

The Organizational Website:

The website will be regularly updated with detailed project information and integrated with live dashboards and infographics to enable real-time insights and stronger communication.

Live Dashboards & Data Visualization

Interactive live dashboards will be developed and implemented for STRC projects, enabling real-time data visualization, improved monitoring, and clearer representation of program progress and impact.

Publication and Print Media

High-quality publications will be designed and produced, including the Annual Report, newsletters, catalogues, STRC brochures, infographics, and a Vaidu Directory, to strengthen institutional communication and documentation.

Audio-visual

Audio-visual content will be systematically developed to document field-based case studies and effectively communicate program impact.

Outreach

- Social media platforms will be proactively managed through planned content scheduling, targeting outreach of over 30 lakh views.
- Field-based success stories and informative videos will be developed around tools and technologies, farming challenges, and standard operating practices (SOPs), tailored to farmers' needs for practical and impactful communication.

Initiatives

A two-day workshop will be organized for local audiences and small entrepreneurs to strengthen their digital presence, focusing on creating engaging social media content and impactful promotional materials. Participants will gain practical skills to effectively promote their businesses, with a special session featuring a popular influencer as an added highlight.



Learn

Build Digital Skills
Social media strategy
Content planning



Create

Develop Promotional
Content, Posts, Reels
Promotional creatives



Promote

Strengthen Digital
Presence Brand
communication Product
& service promotion



Reach

Expand Business
Visibility Customer
engagement Wider
market reach

National-Events Participation



India
International
Science
Festival (IISF),
Chandigarh

At IISF-2025, the RGSTC-led Maharashtra Pavilion received the **Jury Mention Award**, recognizing the technical quality, implementation relevance, and national contribution of initiatives showcased under the RGSTC framework, including projects presented with STRC's participation.



National
Educational
Workshop,
Surat

First in India

■ Staff Reporter

GONDWANA University in Gadchiroli has launched a Traditional Healers' Clinic (Vaidya Chikitsalaya) in collaboration with local tribal healers to provide treatment for common ailments, becoming the first university in the country to introduce such an initiative.

The innovative project has been launched under the leadership of Vice-Chancellor Dr Prashant Bokare, inspired by Maharashtra Chief Minister Devendra Fadnis, who had encouraged the university to undertake community-oriented initiatives benefiting local people.

The clinic aims to formally

recognise the traditional knowledge of indigenous healers, provide them with institutional support and livelihood opportunities, and make affordable healthcare accessible to people in remote tribal areas.

The university's Science and Technology Resource Centre (STRC) is managing the initiative under the leadership of Swapnil Girde. The project seeks to bridge the gap between traditional tribal medicine and modern healthcare through research, documentation and scientific validation.

For generations, tribal communities such as the Gond, Madia and Pandharia relied on traditional healers for primary healthcare. Despite their extensive



The clinic aims to formally recognise the traditional knowledge of indigenous healers, provide them with institutional support and livelihood opportunities, and make affordable healthcare accessible to people in remote tribal areas.

sive knowledge of medicinal plants and indigenous treatment, these practitioners have largely remained outside the formal healthcare system and often faced social stigma.

Recognising the risk of this traditional knowledge disappearing due to migration and changing lifestyles, Gondwana University has begun identifying experienced healers through village-level outreach programmes. Their practices are being documented and scientifically evaluated with the help of botanists and naturopathy experts.

As part of the initiative, the university provides institutional recognition and certification to traditional healers. At present,

ent, 14 healers are offering services at the university clinic, while more than 50 certified healers continue serving their villages with enhanced social recognition and improved livelihood opportunities.

The outpatient clinic offers treatment for common ailments at a nominal fee ranging from Rs 20 to Rs 50. Patients requiring advanced care are referred to modern medical practitioners whenever necessary. The clinic has already benefited thousands of patients.

Traditional healer Rambhail Lalai Raut said that, practitioners who had long faced neglect due to perceptions of being unscientific now receive respect and recognition for their inher-

ited medical knowledge. Describing the initiative as more than just a healthcare project, Vice-Chancellor Dr Prashant Bokare told 'The Hitavada', "It represents a process of social and cultural revival. He noted that systematic documentation of centuries-old medicinal knowledge, combined with scientific validation, will help preserve valuable indigenous healthcare traditions, while strengthening affordable primary healthcare in tribal regions. He added that, the initiative, inspired by Chief Minister Devendra Fadnis, has brought long-overdue recognition to traditional healers and integrated them into a structured healthcare framework."

TheHitavada

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ehitavada.com

HCSSC, New Delhi recognises STRC as 'Centre of Excellence'

■ District Correspondent
GADCHIROLI, May 9

AS PART of a significant initiative aimed at providing a major boost to skill development and the preservation of traditional Indian handicrafts, the Science and Technology Resource Centre (STRC) at Gondwana University, Gadchiroli, has been officially recognised as a 'Centre of Excellence' (CoE) by the Handicrafts and Carpet Sector Skill Council (HCSSC), New Delhi.

A Memorandum of Understanding (MoU) regarding this strategic collaboration was signed recently at the HCSSC headquarters in New Delhi. The objective of this partnership is to strengthen skill development initiatives for artisans and youths in the Gadchiroli region, to conserve and preserve traditional tribal handicrafts, and to create opportunities for sustainable livelihoods.

Under this collaboration, special emphasis will be placed on the key areas like training of trainers, handicraft-based and Vocational Training, provision of loans on training facilities in various traditional handicraft disciplines, School Education Programs, promotion and Skill Upgradation, revival of

Memorandum of Understanding signed



Swapnil Girde and Dr Prashant Bokare showing the MoU.

Endangered Handicrafts etc. Krishna Kumar, CEO of HCSSC, Dr Prashant Bokare, Vice-Chancellor of Gondwana University and

Co-Chairman of the STRC Foundation, and Swapnil Girde, Chief Programme Officer and Head of STRC were present during signing this agreement.

The establishment of this 'Centre of Excellence' was made possible through the visionary leadership and guidance of Dr C D Mayee, Chairman of the

Science and Technology Resource Centre, and Dr Prashant Bokare, Vice-Chancellor of Gondwana University. Dr Shriram Kawale, Pro-VC, Dr Anil Hirekhan, Registrar, and Pragati Gokhale, Advisor and Officer-in-Charge at RGST, Nagpur also helped in the task. Gandharva Pilare, Scientific Officer and Vinod Varthiya, Junior Scientific Officer also extended necessary cooperation.

शेतकऱ्यांसाठी आता गोंडवाना विद्यापीठाचे 'लो-कॉस्ट' मॉडेल

बांबू पॉलिहाऊस ते पोल्ट्री शेडपर्यंत संधी : स्थानिक संसाधनांतून कृषी क्षेत्राला तंत्रज्ञानाची जोड

शेतकऱ्यांसाठी आता गोंडवाना विद्यापीठाचे 'लो-कॉस्ट' मॉडेल बांबू पॉलिहाऊस ते पोल्ट्री शेडपर्यंत संधी : स्थानिक संसाधनांतून कृषी क्षेत्राला तंत्रज्ञानाची जोड

लोकमत
दिनीप टेलकर
लोकमत न्यूज नेटवर्क

गडचिरोली : ग्रामीण, अदिवासि आणि कुबी समुदायांच्या स्थानिक गरजा ओळखून त्यांच्या परवडणारे तंत्रज्ञानाधारित उपाय विकसित करण्याच्या दिशेने गोंडवाना विद्यापीठाने पुढाकार घेतला आहे. विद्यापीठांतर्गत कार्यरत विज्ञान व तंत्रज्ञान संसाधन केंद्राने (एस्टीआरसी) शेतकऱ्यांसाठी कमी खर्चिक बांबू पॉलिहाऊस आणि लो-कॉस्ट बांबू-कोम्पोजिट पोल्ट्री शेड विकसित केले आहेत. स्थानिक संसाधनांचा वापर करून कमी खर्चात कृषी व पशुक व्यवसायासाठी आवश्यक संरचना उपलब्ध करून देण्याचा प्रयत्न या माध्यमातून करण्यात आला आहे.

गोंडवाना विद्यापीठ वैज्ञानिक कार्यालयावर ग्रामीण व आदिवासी भागातील सामाजिक-आर्थिक विकासासाठी विविध अनुसंधानांमधून उपक्रम राबवित आहे. 'एकूण' प्रकल्पाच्या माध्यमातून ग्रामस्थांची संवाद, 'विद्यार्थी आणखी माता' उपक्रमाद्वारे शिक्षणापासून दूर गेल्या विद्यार्थ्यांवर पोहोचत तसेच एस्टीआरसी, गोंडवारी आणि अप्पर वर्ग यांसारख्या उपक्रमांमार्फत शेतकऱ्यांचे थेट संपर्क साधला जात आहे.

शेतकरी व ग्रामीण समुदायांमधील समस्या जाणून घेणे स्थानिक संसाधनांच्या माध्यमातून वापरता येतील असे उपाय विकसित करण्यावर एस्टीआरसीने विशेष साधन उपलब्ध करून देण्याच्या उद्देशाने हा उपक्रम राबविण्यात आला आहे. सदर बांबू व पोल्ट्रीशेडच्या माध्यमातून गडचिरोली या भागास विविधशेडी शेतकऱ्यांना विकासचे योग्य तालमिर्माण झाले आहे.

एस्टीआरसीच्या वतीने घ्यावेत आणि गडचिरोली तालुक्यातील २० शेतकऱ्यांना प्रायोगिक तत्वावर २० लो-कॉस्ट बांबू-कोम्पोजिट पोल्ट्री शेड वितरण करण्यात आले आहे. लघुसंस्कार कुकुटपालनाला चालना देऊन ग्रामीण कुकुटपालन सुरू करू इच्छिणाऱ्या शेतकऱ्यांना हा उपक्रम राबविण्यात आला आहे. बांबू व पोल्ट्रीशेडच्या माध्यमातून गडचिरोली या भागास विविधशेडी शेतकऱ्यांना विकासचे योग्य तालमिर्माण झाले आहे.

क्षेत्रीय अनुभवातून संशोधनाला दिशा

विद्यापीठाच्या संशोधन कार्याचे वैशिष्ट्य म्हणजे क्षेत्रातील समस्या ओळखून त्यावर प्रत्यक्ष प्रयोगीकरीत असलेले तंत्रज्ञानाधारित उपाय विकसित करण्यावर भर दिला जात आहे. एस्टीआरसीच्या माध्यमातून क्षेत्रीय पाहणी, संशोधन, शेतकरी संवाद आणि प्रत्यक्ष हस्तक्षेपातून मिळणाऱ्या अनुभवांचे संशोधन व तंत्रज्ञान विकासात रुपांतर केले जात आहे.



२० शेतकऱ्यांना पोल्ट्री शेड

एस्टीआरसीच्या वतीने घ्यावेत आणि गडचिरोली तालुक्यातील २० शेतकऱ्यांना प्रायोगिक तत्वावर २० लो-कॉस्ट बांबू-कोम्पोजिट पोल्ट्री शेड वितरण करण्यात आले आहे. लघुसंस्कार कुकुटपालनाला चालना देऊन ग्रामीण कुकुटपालन सुरू करू इच्छिणाऱ्या शेतकऱ्यांना हा उपक्रम राबविण्यात आला आहे. बांबू व पोल्ट्रीशेडच्या माध्यमातून गडचिरोली या भागास विविधशेडी शेतकऱ्यांना विकासचे योग्य तालमिर्माण झाले आहे.



गोंडवाना विद्यापीठाच्या एस्टीआरसीच्या वतीने आणण्यात आलेले बांबू पॉलिहाऊस.

कमी खर्चात पॉलिहाऊस

संशोधित शेतकरी भागावरच अधिक लक्ष देत गोंडवाना विद्यापीठाच्या वतीने तंत्रज्ञान विकसित करण्यात आले आहे. कृषी क्षेत्रातील उत्पादनात, पशुक व्यवसाय, स्थानिक संसाधनांचा कार्यक्षम वापर आणि ग्रामीण उद्योजकतेला चालना देण्यासाठी अशा तंत्रज्ञानाच्या अर्थव्यवस्थेला चालना देण्यात येत आहे. कमी खर्चातून विद्यापीठाच्या या नवीन उपक्रमांचा लाभ घ्या.

परसबागेतील कुकुटपालनासाठी पोल्ट्री शेड

ग्रामीण कुकुटपालन पशुक उपक्रमाचे साधन उपलब्ध करावे, यासाठी एस्टीआरसीने कमी खर्चात पोल्ट्री शेड विकसित केले आहे. घाण्या परिसरात किंवा उपलब्ध जागेत लघुसंस्कार कुकुटपालन सुरू करू इच्छिणाऱ्या शेतकऱ्यांना हा उपक्रम राबविण्यात आला आहे. बांबू व पोल्ट्रीशेडच्या माध्यमातून गडचिरोली या भागास विविधशेडी शेतकऱ्यांना विकासचे योग्य तालमिर्माण झाले आहे.

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विद्यापीठाच्या वतीने घ्यावेत आणि गडचिरोली तालुक्यातील २० शेतकऱ्यांना प्रायोगिक तत्वावर २० लो-कॉस्ट बांबू-कोम्पोजिट पोल्ट्री शेड वितरण करण्यात आले आहे. लघुसंस्कार कुकुटपालनाला चालना देऊन ग्रामीण कुकुटपालन सुरू करू इच्छिणाऱ्या शेतकऱ्यांना हा उपक्रम राबविण्यात आला आहे. बांबू व पोल्ट्रीशेडच्या माध्यमातून गडचिरोली या भागास विविधशेडी शेतकऱ्यांना विकासचे योग्य तालमिर्माण झाले आहे.

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विद्यापीठाच्या वतीने घ्यावेत आणि गडचिरोली तालुक्यातील २० शेतकऱ्यांना प्रायोगिक तत्वावर २० लो-कॉस्ट बांबू-कोम्पोजिट पोल्ट्री शेड वितरण करण्यात आले आहे. लघुसंस्कार कुकुटपालनाला चालना देऊन ग्रामीण कुकुटपालन सुरू करू इच्छिणाऱ्या शेतकऱ्यांना हा उपक्रम राबविण्यात आला आहे. बांबू व पोल्ट्रीशेडच्या माध्यमातून गडचिरोली या भागास विविधशेडी शेतकऱ्यांना विकासचे योग्य तालमिर्माण झाले आहे.

६६
विद्यापीठाच्या वतीने घ्यावेत आणि गडचिरोली तालुक्यातील २० शेतकऱ्यांना प्रायोगिक तत्वावर २० लो-कॉस्ट बांबू-कोम्पोजिट पोल्ट्री शेड वितरण करण्यात आले आहे. लघुसंस्कार कुकुटपालनाला चालना देऊन ग्रामीण कुकुटपालन सुरू करू इच्छिणाऱ्या शेतकऱ्यांना हा उपक्रम राबविण्यात आला आहे. बांबू व पोल्ट्रीशेडच्या माध्यमातून गडचिरोली या भागास विविधशेडी शेतकऱ्यांना विकासचे योग्य तालमिर्माण झाले आहे.

पेपर

नवराष्ट्र

Gadchiroli | 06 November 2025 | Page 2

संधी

गोंडवाना विद्यापीठाचा उपक्रम, रोजगार व उद्योग करण्याची संधी

जिल्ह्यात गावपातळीवर आता नवे तंत्रज्ञान

गडचिरोली, छत्रपती, गोंडवाना विद्यापीठाच्या विज्ञान आणि तंत्रज्ञान संसाधन केंद्राने गडचिरोली जिल्ह्यातील ग्रामस्थांवर नवा तंत्रज्ञान उपक्रम सुरू केला आहे. यासाठी ग्रामीण नवोन्मेष प्रकल्पाने ग्रामीण भागात गावपातळीवर ग्रामीण भागातील कार्यवाही आली आहे. या उपक्रमातून गावपातळीवर, शेतकरी आणि महिलांना नवे तंत्रज्ञान वापरून रोजगार व उद्योग करण्याची संधी मिळणार आहे. यासाठी विज्ञान आणि तंत्रज्ञान संसाधन केंद्राने संशोधन प्रयोगेही आहे. यातून ग्रामीण नवोन्मेष प्रकल्पाने ग्रामीण भागात गावपातळीवर ग्रामीण भागातील कार्यवाही आली आहे. या उपक्रमातून गावपातळीवर, शेतकरी आणि महिलांना नवे तंत्रज्ञान वापरून रोजगार व उद्योग करण्याची संधी मिळणार आहे.

लवकरच प्रशिक्षण व प्रात्यक्षिक कार्यक्रम

या गांवांचा वापर करून कार्यवाही यासाठी एस्टीआरसीकडून लवकरच प्रशिक्षण व प्रात्यक्षिक कार्यक्रम घेण्यात जाणार आहे. नंतर होई ते स्थानिक लक्ष्यांवरून देण्यात येतील. या प्रकल्पातून गडचिरोली जिल्ह्यात गावपातळीवर नवे उद्योग, रोजगार आणि स्वावलंबीताला मदत होणार आहे. ग्रामीण विकासाला नवी दिशा मिळणार आहे. गोंडवाना विद्यापीठाच्या कुलगुरू डॉ. प्रशांत बोकरे, प्र-कुलगुरू डॉ. श्रीराम कावडे, कुलगुरू डॉ. अजित लिरिंगरा यांच्या मार्गदर्शनाखाली गोंडवाना विद्यापीठाच्या विज्ञान आणि तंत्रज्ञान संसाधन केंद्राने कार्य प्रारंभ केले आहे.

सक्षिप्त संस्कार केले आहेत. विज्ञान आणि तंत्रज्ञान संसाधन केंद्र व ग्रामीण नवोन्मेष प्रकल्पाने ग्रामीण भागात गावपातळीवर ग्रामीण भागातील कार्यवाही आली आहे. या उपक्रमातून गावपातळीवर, शेतकरी आणि महिलांना नवे तंत्रज्ञान वापरून रोजगार व उद्योग करण्याची संधी मिळणार आहे.

या योजनेअंतर्गत मिळाली येई

१. कामगार कर व करवाही हाताळणी कर

२. मत्स्य संसाधन कर

३. पावसाळी आणि वडी नवोन्मेष कर (सिमेंट व उद्योग कर)

४. मत्स्य उद्योगाचे माली नवोन्मेष कर

५. बांबू पोल्ट्री व अमरुती बंदीकरण कर

६. बुद्धीगर्भ अन्न विक्री कर (टीए व्हाला ५० रिट)

उपक्रमातून होणारे फायदे

१. उपक्रमातून रोजगार मिळेल व महिला समाविष्टता. बुद्धीगर्भ नवोन्मेष कर, शेतकरी उद्योगाचे माली नवोन्मेष कर व बांबू पोल्ट्री उद्योगाचे माली नवोन्मेष कर या सारखे उद्योग विकसित व गावपातळीवर उपलब्ध करून देतील.

२. या प्रकल्पातून लक्षाधीनी व निवडित महिला कार्यवाही आली आहे.

गोंडवाना विद्यापीठाचा उपक्रम, रोजगार व उद्योग करण्याची संधी

गडचिरोली, छत्रपती, गोंडवाना विद्यापीठाच्या विज्ञान आणि तंत्रज्ञान संसाधन केंद्राने गडचिरोली जिल्ह्यातील ग्रामस्थांवर नवा तंत्रज्ञान उपक्रम सुरू केला आहे. यासाठी ग्रामीण नवोन्मेष प्रकल्पाने ग्रामीण भागात गावपातळीवर ग्रामीण भागातील कार्यवाही आली आहे. या उपक्रमातून गावपातळीवर, शेतकरी आणि महिलांना नवे तंत्रज्ञान वापरून रोजगार व उद्योग करण्याची संधी मिळणार आहे.

लवकरच प्रशिक्षण व प्रात्यक्षिक कार्यक्रम

या गांवांचा वापर करून कार्यवाही यासाठी एस्टीआरसीकडून लवकरच प्रशिक्षण व प्रात्यक्षिक कार्यक्रम घेण्यात जाणार आहे. नंतर होई ते स्थानिक लक्ष्यांवरून देण्यात येतील. या प्रकल्पातून गडचिरोली जिल्ह्यात गावपातळीवर नवे उद्योग, रोजगार आणि स्वावलंबीताला मदत होणार आहे. ग्रामीण विकासाला नवी दिशा मिळणार आहे. गोंडवाना विद्यापीठाच्या कुलगुरू डॉ. प्रशांत बोकरे, प्र-कुलगुरू डॉ. श्रीराम कावडे, कुलगुरू डॉ. अजित लिरिंगरा यांच्या मार्गदर्शनाखाली गोंडवाना विद्यापीठाच्या विज्ञान आणि तंत्रज्ञान संसाधन केंद्राने कार्य प्रारंभ केले आहे.

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१. उपक्रमातून रोजगार मिळेल व महिला समाविष्टता. बुद्धीगर्भ नवोन्मेष कर, शेतकरी उद्योगाचे माली नवोन्मेष कर व बांबू पोल्ट्री उद्योगाचे माली नवोन्मेष कर या सारखे उद्योग विकसित व गावपातळीवर उपलब्ध करून देतील.

२. या प्रकल्पातून लक्षाधीनी व निवडित महिला कार्यवाही आली आहे.

मत्स्यपालन व शिंगाडा उत्पादनातून शेतकऱ्यांना उत्पन्नवाढीची नवी दिशा

गंदा व तोडसा येथे क्षमतावृद्धी प्रशिक्षणाला शेतकऱ्यांचा उत्स्फूर्त प्रतिसाद

गंदा व तोडसा येथे क्षमतावृद्धी प्रशिक्षणाला शेतकऱ्यांचा उत्स्फूर्त प्रतिसाद

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गंदा व तोडसा येथे क्षमतावृद्धी प्रशिक्षणाला शेतकऱ्यांचा उत्स्फूर्त प्रतिसाद

गंदा व तोडसा येथे क्षमतावृद्धी प्रशिक्षणाला शेतकऱ्यांचा उत्स्फूर्त प्रतिसाद

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गंदा व तोडसा येथे क्षमतावृद्धी प्रशिक्षणाला शेतकऱ्यांचा उत्स्फूर्त प्रतिसाद

गंदा व तोडसा येथे क्षमतावृद्धी प्रशिक्षणाला शेतकऱ्यांचा उत्स्फूर्त प्रतिसाद

गंदा व तोडसा येथे क्षमतावृद्धी प्रशिक्षणाला शेतकऱ्यांचा उत्स्फूर्त प्रतिसाद

गंदा व तोडसा येथे क्षमतावृद्धी प्रशिक्षणाला शेतकऱ्यांचा उत्स्फूर्त प्रतिसाद

Partners in Development



Gondwana University,
Gadchiroli



Rajiv Gandhi Science & Technology Commission,
Govt. of Maharashtra



National Innovation
Foundation, India



Maharashtra State Skill
Development Society



Lloyds Metals and Energy
Ltd., Hedri, Etalpali



Maharashtra Animal &
Fishery Sciences
University, Nagpur



Jaljeevika, Pune



Arogya Prabodhini



Development Commissioner
for Handicrafts



BAIF Development
Research Foundation, Pune



District Planning and
Development Council, Gadchiroli



Indian Council of
Agricultural Research



Handicrafts and Carpet
Sector Skill Council



Mahila Arthik
Vikas Mahamandal



National Skill Development
Corporation



Central Institute of
Fisheries Education (CIFE)



District Mineral
Foundation (DMF)



Gramodaya Sangh,
Bhadravati, Chandrapur



Vasoo Bamboo Arts,
Chandrapur



Sanskriti Bastar
Raipur, Chhattisgarh



Namaste
Bamboo Pvt Ltd



District Administration,
Gadchiroli



Ballarpur Institute of
Technology



Department of Fisheries,
Gadchiroli Government of
Maharashtra



देवराई कला ग्राम LLP,
Bhamragarh

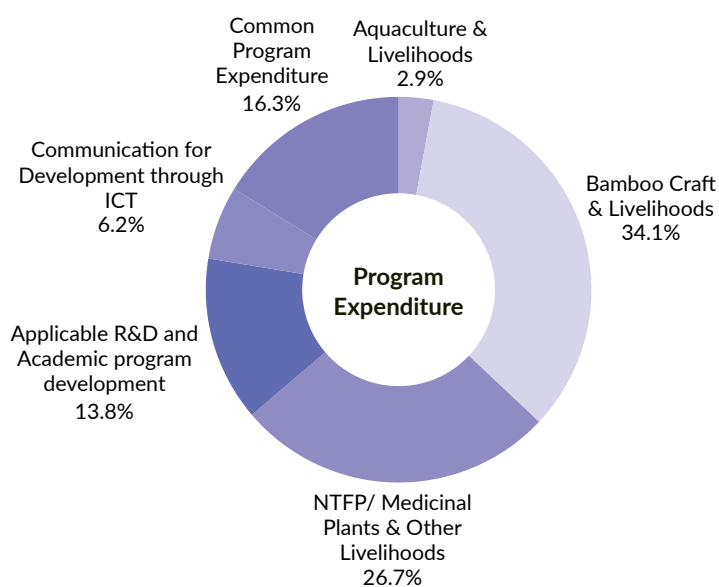
Financial Expenditure

During the financial year 2025-26, Science and Technology Resource Centre (STRC) recorded a total expenditure of ₹ ₹1,84,33,982 from total budget of ₹3,29,44,071 towards advancing skill development, rural technology dissemination, livelihood promotion, entrepreneurship development, and community empowerment initiatives across the region.

Of the total spending, ₹62,07,878 was allocated towards program implementation, ₹68,87,146 towards Human Resource Cost, ₹ 5,37,504 towards Administration & Operations and Non-Recurring & Other Expenses ₹48,01,454.

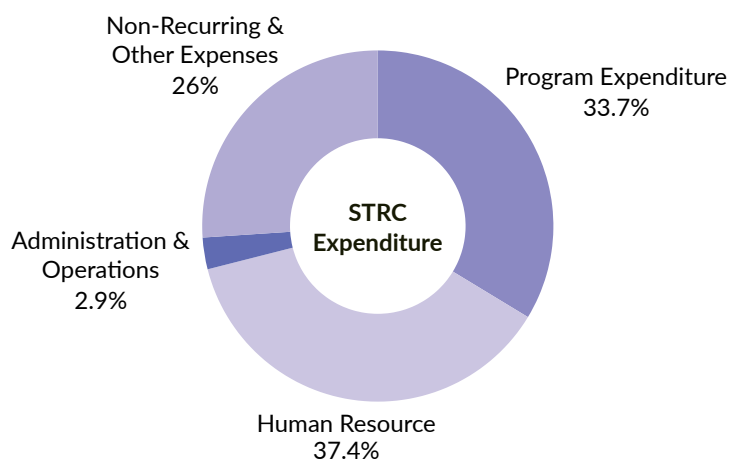
Fund Utilization

Program Expenditure	Amount (in Lakh)
Aquaculture & Livelihoods	₹ 180995
Bamboo Craft & Livelihoods	₹ 2116723
NTPF/ Medicinal Plants & Other Livelihoods	₹ 1660394
Applicable R&D and Academic program development	₹ 858513
Communication for Development through ICT	₹ 381904
Common Program Expenditure	₹ 1009349
Total	₹ 6207878



Allocation of Funds Across Key STRC Initiatives

STRC Expenditure	Amount (in Lakh)
Program Expenditure	₹ 6207878
Human Resource	₹ 6887146
Administration & Operations	₹ 537504
Non-Recurring & Other Expenses	₹ 4801454
Total	₹ 18433982



These investments enabled the Centre to expand its grassroots interventions, strengthen innovation driven community development, and enhance sustainable livelihood opportunities for diverse beneficiary groups.

UTILIZATION CERTIFICATE

Financial Year – 1st April 2025 to 31st March 2026

1	Title of the Project	Science and Technology Resource Centre (STRC)
2	Name of the Organization / Institute	Gondwana University Gadchiroli
3	Principal Investigator	Shri. Swapnil Girade Chief Program Officer & Head STRC-GUG
4	Rajiv Gandhi Science and Technology Commission, Mumbai Sanction Order No and Date of Sanctioning the project	RGSTC/File-2013/CR-25, issued by RGSTC on May 20,2013
5	Period of Project	2013-2018 (Initially Sanctioned) Last Extension Received 23 rd July 2025 to 23 rd July 2027
6	Amount brought forward from the previous financial year	Rs. 1,63,05,277/-
7	Amount received from RGSTC during current financial year (Please give No. & dates of Sanction Orders showing the amounts paid)	1)Vide Letter No. RGSTC/File-2013/DPP122/CR-70/28, Dated 20 th Jan 2026, Rs1,65,15,262/-
8	I) Interest received in the current financial year (Deductible from the next installment II) Other receipt if any	Rs.23,532/- Rs.1,00,000/-
9	Total amount that was available for the expenditure during the financial year (Sr. No 6+7+8).	Rs.3,29,44,071/-
10	Total expenditure in current financial year.	Rs. 1,84,33,982/-
11	Unspent balance at the end of the financial year.	Rs. 1,45,10,089/-
12	On closure, unspent balance refunded/ to be refunded to RGSTC, if any (Please give details of cheque No. and date)	NIL

Certified that the amount of **Rs.1,84,33,982/-** (Rupees One Crore Eighty Four Lakh Thirty Three thousand Nine Hundred Eighty Two Rupees only) mentioned against col. 10 has been utilized on the project for the purpose for which it was sanctioned and that the balance of **Rs.1,45,10,089/-** (Rupees One Crore Forty Five Lakh Ten Thousand Eighty Nine Rupees only) remaining unutilized at the end of the financial year ending 31/03/2026 will be adjusted towards the grant-in-aid payable during the next year.

Certified that I have satisfied myself that the conditions on which the grant-in-aid was sanctioned by the Rajiv Gandhi Science and Technology Commission has actually been utilized for the purpose for which it was sanctioned.


Chief Program Officer & Head
Science & Technology Resource Center
Gondwana University, Gadchiroli


(Signature of the Comptroller/ Finance and
Accounts Officer/Accounts Officer)
Finance & Accounts Officer
Gondwana University, Gadchiroli


(Signature of the Head of Institution)
Registrar
Gondwana University, Gadchiroli

STATEMENT OF EXPENDITURE

Statement showing grants received from Rajiv Gandhi Science and Technology Commission, Mumbai and the Expenditure incurred the period 01/04/2025 to 31/03/2026, and requirement of funds up to 31/03/2027 for the Project Entitled "Science and Technology Resource Center, Gondwana University, Gadchiroli".

Item	Unspent balance brought forward from previous year	Grant received from RGSTC during the year 2025 to 2026	Other receipts if any, received if any, on the grant received	Total of Col. (2+3+4)	Expenditure incurred from 01/04/2025 to 31/03/2026	Balance (5-6)	Requirement of funds in financial year 2026-2027
1	2	3	4	5	6	7	8
1. Non- recurring Equipment	73,94,903	0	0	73,94,903	37,67,107	36,27,796	4,00,000
2. Recurring Expenditure							
a) Manpower	16,25,684	90,15,262	0	1,06,40,946	68,87,108	37,53,838	52,00,000
b) Consumables	27,69,862	60,00,000	0	87,69,862	62,07,878	25,61,784	75,00,000
c) Travel	6,93,691	8,00,000	0	14,93,691	6,22,942	8,70,749	35,00,000
d) Contingencies	1,59,231	7,00,000	0	8,59,231	3,70,663	4,88,568	10,00,000
e) Overheads (if applicable)	0	0	0	0	0	0	0
3. Other if any	36,61,878	0	0	36,61,878	5,78,984	32,06,426	15,12,418
TOTAL	1,63,05,277	1,65,15,262	1,23,532	3,29,44,071	1,84,33,982	1,45,10,089	1,44,12,418



Chief Program Officer & Head
Science & Technology Resource Center
Gondwana University, Gadchiroli



(Signature of the Comptroller/ Finance and
Accounts Officer/Accounts Officer)
Finance & Accounts Officer
Gondwana University, Gadchiroli



(Signature of the Head of Institution)
Registrar
Gondwana University, Gadchiroli



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