Link - https://www.amrita.edu/unsdg-26/sdg13/local-education-programmes-on-climate/

Date - 1/Dec/2024



Local Education Programmes and Campaigns on Climate Change at Amrita Vishwa Vidyapeetham (2024)

Amrita Vishwa Vidyapeetham has established a comprehensive framework for climate change education, spanning climate risk awareness, mitigation strategies, adaptation mechanisms, impact reduction initiatives, and advanced early warning systems. The university's programmes reach over 9,500 participants across diverse communities, with particular emphasis on building resilience among vulnerable populations.[1][2][3]

Climate Change Education and Awareness Programmes

4-Day Certificate Course on Building Disaster Resilience and Social Responsibility

Launched in 2025 (with 2024 groundwork), this programme represents Amrita's flagship climate education initiative. The **Train-the-Trainer model** equips 27 participants—including school teachers, college students, and research scholars—with practical knowledge to become climate action champions in their communities.[2][3]

Curriculum Coverage:

- Introduction to climate change, disasters, and their societal impacts[4]
- Key terminologies: Hazard, Vulnerability, Risk, and Capacity (HRVC)[4]
- Analysis of India's hazard and vulnerability profiles[4]
- Disaster types prevalent in India and regional climate impacts[4]
- First aid techniques and real-time monitoring systems[3]
- National and state disaster management policies and climate action plans[3]

Participants & Reach: 27 participants from Kerala, Tamil Nadu, and Karnataka in the first batch[2][3]

Multi-Level Training Sessions on Sustainable Development and Climate Resilience

The Civil 20 India Working Group, in collaboration with Amrita's UNESCO Chair on Experiential Learning, organized parallel training sessions addressing three pillars:[1]

Topics: Sustainable Development, Disaster Resilience, and Energy Literacy
Reach: Over 200 participants, ranging from school students to university faculty
Outcome: All participants received certificates and recognition[1]

Disaster Resilience Training in Sikkim (2024)

A two-day certificate workshop was conducted in Gangtok, Sikkim, in partnership with state and international disaster management agencies:[1]

Partners: Sikkim State Disaster Management Authority (SSDMA), International Consortium on Landslides (ICL), and International Program on Landslides (IPL)
Participants: 85 participants from educational institutions[1]

- Nar Bahadur Bhandari Government College (55 participants)

- Deorali Government Girls' Senior Secondary School (15 participants)
- Tadong Senior Secondary School (15 participants)

Focus: Building civilian and community resilience against landslides and other disasters[1]

Sustainable Development Workshop—Sikkim (2024)

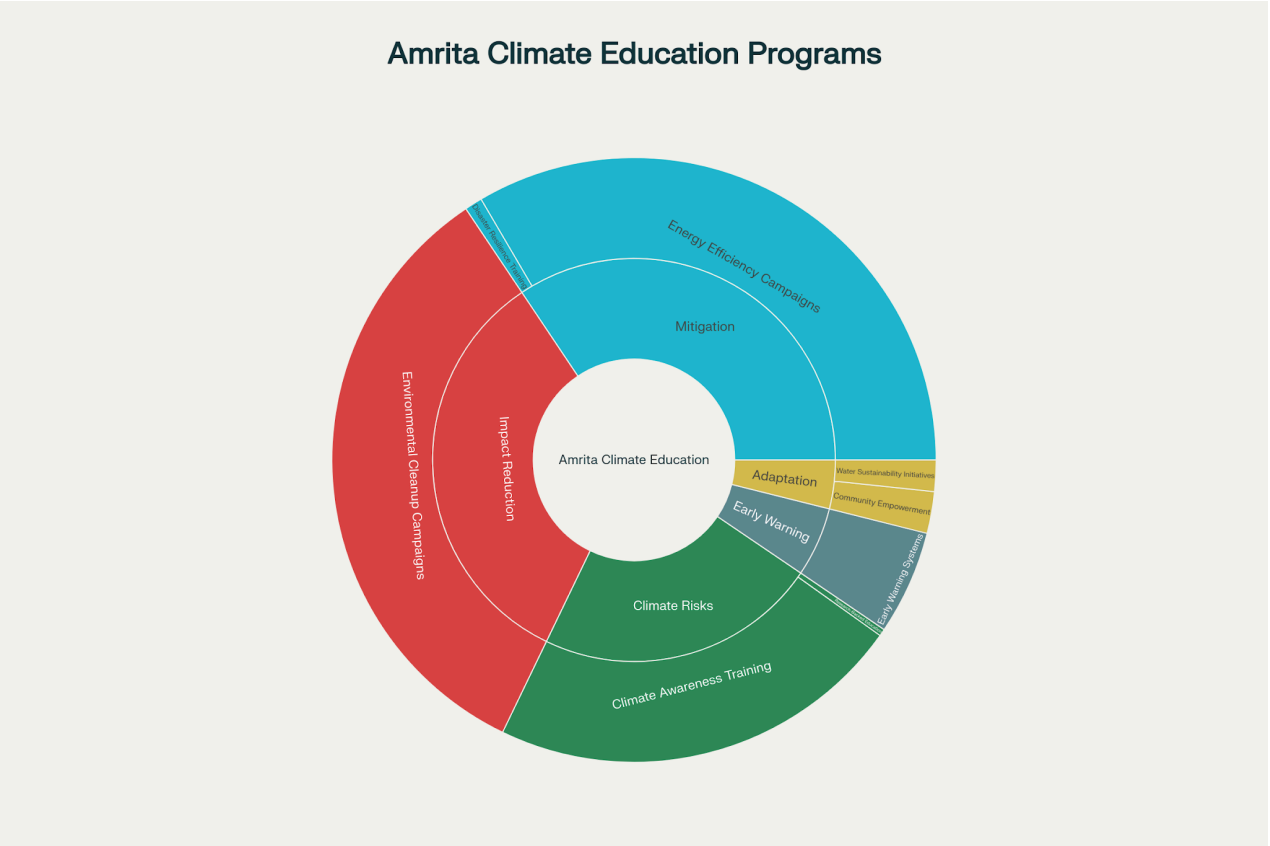
A complementary two-day workshop on **"Sustainable Development: Concepts, Frameworks, and Tools"** was conducted at Janata Bhavan Hall in Gangtok:[1]

Curriculum:

- Evolution of sustainable development concepts
- Understanding ecology and ecosystems
- SDG formulation and alignment
- Community sustainability and resilience assessments using Participatory Rural Appraisal (PRA)
- Demonstration of the SREE platform for real-time sustainability and resilience monitoring[1]

Participants: 34 teachers from prominent schools including Modern Senior Secondary School, West Point Senior Secondary School, and Sir Tashi Namgyal Senior Secondary School, representing disciplines including Science, Mathematics, Environmental Studies, and Social Studies[1]

Key Outcome: One participant, Mrs. Ranjana Lama (TGT, Arts) from Modern Senior Secondary School, subsequently conducted awareness sessions on Sustainable Development for her own school, emphasizing lifestyle changes for sustainability[1]



Amrita Vishwa Vidyapeetham's Local Education Programmes on Climate Change (2024)

Climate Adaptation and Community Empowerment Initiatives

Wave of Change: Water for a Sustainable Future (March-April 2024)

Launched on **World Water Day 2024 (March 22 - April 21)**, this month-long initiative combined climate adaptation with water security:[5][6]

Locations: Kallikkadu, Alapuzha, Kerala (launched at Ward 14 in Kallikkadu on March 22, 2024)
Participants: 150 women residents actively engaged in water conservation training[5]

Programme Components:

- **Awareness Sessions:** Topics covered rainwater harvesting, water reuse, waterway conservation, and daily household water usage monitoring[5]
- **Water Champions Identification:** Community members identified and trained as "water champions" to lead local water sustainability efforts[5]

- **Expert Lectures:** Distinguished lecture series featuring global experts like Dr. Prof. Miroslav Cernik, Director of CXI, Technical University of Liberec, Czech Republic[5]
- **Planned Expansion:** Similar awareness sessions and certification programmes planned for 108 communities across India[5]

Focus Areas: Climate adaptation to water scarcity, impact reduction through conservation, and community empowerment

Energy Efficiency and Clean Energy Awareness Campaigns

Amrita's students conduct extensive community outreach programmes in villages to promote energy efficiency and clean energy adoption:[7]

Locations: Villages surrounding Ettimada (Tamil Nadu), Amritapuri (Kerala), Vengal (Chennai), Bogadi (Mysore), Kochi, and Faridabad[7]

Programme Activities:

- **Community Awareness Workshops:** Interactive sessions on energy efficiency benefits and renewable energy adoption[7]
- **Practical Demonstrations:** Solar-powered streetlights, energy-efficient appliances, and biogas plants for cooking and waste management[7]
- **School Campaigns:** Awareness drives in nearby schools educating younger generations about energy sustainability[7]
- **Energy Conservation Week (November 2023):** Drawing competitions for students aged 5-17 years, flashmobs promoting energy awareness, and community engagement[7]
- **Partnerships:** Collaborations with local government, NGOs, and industry partners for scalable impact[7]

Focus: Climate mitigation through energy transition and impact reduction via efficiency

Amala Bharatam Environmental Cleanup Campaign

The university's long-standing environmental initiative has expanded significantly:[8]

Coverage: 30+ square kilometers across India
Methodology: 18 major cleanup drives with systematic waste segregation and disposal[8]
Annual Participation: Average 2,000 volunteers per drive collecting approximately 400

truckloads of waste[8]

Notable Achievements:

- **Sasthamkotta Lake Restoration:** Cleaned 4 sq km around the lake, recovering 20 years of accumulated waste[8]
- **Sabarimala-Pampa Pilgrimage Sites:** Cleared thousands of bags of waste over three-day intensive operations[8]
- **Regular Collection System:** Bins placed every 2 km with twice-weekly collection to prevent waste accumulation[8]

Climate Impact: Waste reduction as impact mitigation and community engagement on plastic pollution[8]

Early Warning and Disaster Risk Reduction Systems

Landslide Early Warning System Implementation

Amrita's pioneering **AI-integrated IoT system** for landslide detection represents a critical early warning mechanism:[9][10]

Deployment Locations:

- **Munnar, Kerala:** World's first wireless sensor network system (2009), later upgraded to AI-IoT integration[10]
- **Sikkim, Northeast Himalayas:** Deployed at government request (2015), co-funded by India's Ministry of Earth Sciences, in partnership with Sikkim State Disaster Management Authority[10]
- **Odisha:** Strategic implementation underway with state government collaboration (2024)[9]

System Capabilities:

- Real-time monitoring of slope stability and rainfall patterns
- Advanced warning 24 hours before events (can reduce damage by 30%)[10]
- Low-cost technology adaptable to all landslide-prone regions[10]

Community Training: Emphasis on participatory emergency preparedness and evacuation measures in target communities[9]

International Conference on Tsunami Risk Reduction and Resilience (December 13-15, 2024)

Organized to commemorate the 20th anniversary of the 2004 Indian Ocean Tsunami:[11]

Partners: UNESCO Chair on Experiential Learning, Amrita School for Sustainable Futures, Centre for Wireless Networks and Applications
Objectives: Advance disaster preparedness, risk management, and community resilience[11]
Focus Areas: Coastal disaster early warning and adaptation strategies

Tsunami Ready Programme

Launched in collaboration with INCOIS in June 2022, this initiative enhances coastal community preparedness:[12]

Scope: Public engagement, community leadership training, and coordination with emergency management agencies[12]
Focus: Tsunami preparedness and community-led resilience building

Research-Integrated Educational Programmes

SREE Platform for Sustainability Assessment

The **SREE (Sustainability and Resilience Monitoring Platform)** integrates real-time data with educational components:[13]

Applications:

- Community-scale sustainability assessments
- Real-time monitoring and risk analysis using geo-enabled software
- Bottom-up decision-making for climate resilience
- Implementation across multiple countries for localized action[13]

Sustainable Ecosystem and Environmental Resilience (SEER) Lab

Launched in November 2024 at Amritapuri, this Kerala's first integrated multi-lab system includes five specialized facilities:[14]

Labs:

- Water Sustainability Lab
- Soil Ecosystem Lab
- Microbiology Lab
- Climate Change & Water Resilience Lab
- Marine Ecosystem Lab

Educational Function: Provides research-backed training and analytical services, fostering environmental stewardship among students and community members[14]

2024 Documentation and Resources

Official Programme Links and Resources

- Local Education Programmes on Climate (2024)[1]
- Climate Action Plan - Pioneering Climate Action (2024)[13]
- Disaster Management Initiatives[10]
- Certificate Course on Building Disaster Resilience[4]
- International Conference on Tsunami Risk Reduction & Resilience[11]

Visual Documentation (2024)



Amrita Vishwa Vidyapeetham students participate in a community cleanup drive, promoting environmental awareness and climate change impact reduction.



Amrita Vishwa Vidyapeetham's community campaign 'Water for a Sustainable Future' promotes water sustainability and climate awareness in 2024.

The "Wave of Change" banner image (from World Water Day 2024) exemplifies Amrita's community-centered climate adaptation campaigns, featuring the university's UNESCO partnerships and commitment to water sustainability. Student-led cleanup initiatives showcase hands-on environmental education and impact reduction practices.[5][6]

Programme Reach and Impact Summary

Overall Statistics (2024):

- **Total Participants Trained:** 9,500+
- **Major Programmes:** 10 initiatives
- **Geographic Coverage:** Multi-campus, state-level (Sikkim, Kerala, Odisha), and pan-India reach

- **Planned Expansion:** 108+ communities across India targeted for water sustainability training
- **Partnership Models:** UNESCO, government disaster management agencies, NGOs, and international organizations

Audience Breakdown:

- Students and faculty: 5 programmes
- Educators and school teachers: 2 programmes
- Local and rural communities: 4 programmes
- Government and disaster management agencies: 2 programmes

Focus Distribution:

- Climate change risks and impacts awareness: 3 programmes
- Climate mitigation strategies: 3 programmes
- Climate adaptation and impact reduction: 3 programmes
- Early warning systems and disaster preparedness: 1 programme

Scaling and Future Initiatives

Amrita's climate education programmes operate on a **Train-the-Trainer model**, enabling exponential scaling of impact. By equipping educators, community leaders, and youth with comprehensive climate science knowledge, first aid skills, and disaster preparedness tools, the university creates multiplier effects throughout communities. The planned expansion to 108 communities, coupled with ongoing deployment of early warning systems in multiple states, positions Amrita as a national leader in climate change education for resilience and adaptation.[1][2][3]

⁂

1. https://www.amrita.edu/unsdg-25/sdg13/education-programmes/
2. https://www.amrita.edu/press-media/amrita-vishwa-vidyapeetham-introduces-short-term-certificate-course-in-disaster-management/

3. https://www.instagram.com/asf_amrita/?hl=en

4. https://www.amrita.edu/program/4-days-certificate-course-on-building-disaster-resilience-and-social-responsibility-through-experiential-learning/

5. https://www.amrita.edu/news/wave-of-change-amrita-vishwa-vidyapeetham-launches-a-month-long-water-sustainability-initiative-on-world-water-day-2024/

6. https://www.amrita.edu/events/wave-of-change-water-for-a-sustainable-future/

7. https://www.amrita.edu/unsdg/sdg7/amrita-vishwa-vidyapeethams-student-led-programs-on-energy-efficiency-and-clean-energy-in-villages/

8. https://www.amrita.edu/association/amritasanjeevani/amalabharatham/

9. https://amma.org/news/protecting-lives-odisha-government-and-amrita-university-collaborate-for-landslide-early-warning-system/

10. https://www.amrita.edu/school/sustainable-futures/initiatives/disaster-management/

11. https://www.amrita.edu/events/international-conference-on-tsunami-risk-reduction-resilience/

12. https://www.amrita.edu/amma/disaster-relief/

13. https://www.amrita.edu/unsdg-25/sdg13/climate-action-plan/

14. https://www.amrita.edu/news/keralas-first-integrated-multi-lab-system-for-environmental-sustainability-launched-at-amrita-vishwa-vidyapeetham/

15. https://www.amrita.edu/news/cultural-ecology-of-environment-and-climate-change-learning-from-the-past-for-a-sustainable-future/

16. https://ammachilabs.org/amrita-serve-villages-celebrate-world-environment-day-with-collective-action-for-sustainability-and-womens-empowerment/

17. https://www.amrita.edu/unescochair-sustainable-development/

18. https://www.amrita.edu/research/labs/sustainable-ecosystem-environmental-resilience-lab/

19. https://www.amrita.edu/unsdg/sdg6/amrita-vishwa-vidyapeetham-embraces-world-water-day-with-student-engagement-and-awareness-campaigns/

20. https://www.amrita.edu/unsdg-26/sdg6/water-conscious-planting/

21. https://www.newindianexpress.com/states/odisha/2024/Mar/07/osdma-collaborates-with-rimes-amrita-for-disaster-preparedness

22. https://www.amrita.edu/amma/environmental-action/

23. https://covaimail.com/amrita-observes-world-cleanup-day-with-3000-students-and-300-staff-cleaning-public-spaces/

24. https://www.amrita.edu/events/international-conference-on-tsunami-risk-reduction-resilience/photo-competition/

25. https://www.instagram.com/p/DCBFyTIOW9Q/