Sustainable & Resilient Communities

Climate, Environment and Net Zero Targets

The WG acknowledges that the key to meeting the challenges facing the global community is the development of integrated solutions through international agreements, multilateral collaborations and transboundary cooperation for systemic transformations, to enable good governance, sustainable finance and circular economy.

Drawing inspiration from "Lokah Samastah Sukhino Bhavantu" meaning may all the beings in all the worlds become happy, the working group recognizes the fundamental interconnectedness and interdependence of all beings and all resources on earth. Thus, resolves to invoke the innate compassion arising from this universal interconnectedness in every individual.

The detrimental impacts of climate change makes it imperative that we act, unitedly, equitably, inclusively, and justly, to protect the people and planet earth. The C20 Working Group on Sustainable and Resilient Communities (SRC) - Climate, Environment and Net Zero Targets proposes policy recommendations to mitigate these global challenges.

The working group has outlined a set of transformative measures that will lead to sustainable and resilient communities through more nuanced and informed developmental pathways, based on greater equity, justice, and inclusivity. The policy recommendations from the four sub-themes namely, Climate Resilience and Social Justice, Environmental Sustainability, Net Zero Emission Management and Compassion driven Approaches to Sustainable and Resilient Communities have been cumulatively reviewed and curated. The following overarching categories of recommendations have emerged:

◆ C20 urges G20 to ensure implementation pathways for efficiency that are compassion driven and engage all sections of the population, creating targeted investment opportunities, as well as co-developing adaptation metrics, and standards across sectors to guide investment decisions. Localised implementation approaches need to be in place considering the sustainability factors.

◆ G20 needs to incentivize transparent and effective public-private and social sector partnerships for sharing expertise, knowledge, experiences, local context specific best practices and resources, to enhance innovations and sustain actions.

◆ G20 countries should support their education systems to develop and implement curriculum and training modules specific to climate change and resilience, net zero emission targets, biodiversity conservation and ecosystem restoration & degradation, at primary, secondary and tertiary level. Along with providing affordable, equitable and quality education, community specific capacity development programs need to be developed to create community wise champions.

Climate Resilience and Social Justice

A. Enhancing Climate Resilience and Disaster Management

As per United Nations Disaster Risk Reduction, (UNDRR) an effective early warning is capable of saving many lives and reducing damage by 30% if activated 24 hours before the event. However, today, one-third of the world's population, mainly in the least developed countries, is still not covered by early warning systems. Furthermore, as the impacts of climate change accelerate, investments in climate resilient infrastructure must be equally prioritised to prevent deaths, reduce the lock-in of climate vulnerability, and avoid economic losses in the decades to come. The OECD estimates that USD 6.9 trillion worth of infrastructure investments would be needed annually by 2030 to meet the sustainable development goals.

Recommendations

◆ G20 must enhance regional climate resilience and disaster management capabilities in developing and implementing early-warning systems for cascading events such as rainfall, landslides, floods etc. through reflection on approaches that are gender-equitable and support vulnerable and marginalised sections of the community.

◆ C20 recommends to foster and support the transition of agro-systems into agroecology practices, and to prevent conflicts on the use of water for agriculture and to build water resilience.

◆ Member countries should develop incentives and policies to encourage private sector investments in climate-resilient infrastructure and technologies that integrate indigenous knowledge and experiences.

◆ G20 must prioritise integrity and good governance that encompasses promoting anti-corruption measures, strengthening legal frameworks, ensuring inclusive decision-making processes, and supporting the capacity building in all community scale resilience policies and programs.

B. Democratising climate change efforts through climate-sensitive planning for climate-induced displacement

According to UNHCR, hazards resulting from the increasing intensity and frequency of extreme weather events, such as abnormally heavy rainfall, prolonged droughts, desertification, environmental degradation, or sea-level rise and cyclones are already causing an average of more than 20 million people to leave their homes and move to other areas in their countries each year. It is estimated that 80 percent of people displaced by climate change are women, according to UNEP. When women are displaced, they are at greater risk of violence, including sexual violence.

Recommendations

◆ G20 must ensure that gender mainstreaming is integrated into policies, programs, multi-level governance & administrative systems and training for capacity building of those impacted by climate-induced displacement and migration.

◆ C20 urges G20 to adopt a climate-sensitive planning dimension to peacekeeping, post-conflict reconstruction, and development efforts to prevent any relapse to armed conflicts in fragile communities. Community level training to develop comprehensive short term strategies, while implementing necessary schemes to facilitate their effective implementation.

◆ C20 urges member countries to develop a strategy to manage the forecasted displacement of population affected by climate related disasters. States need to derive policies and interventions for earmarking the camps for settlement, supply chain pathways for managing resources for non-permanent resettlement.

C. Climate Finance for Inclusive and Effective Climate Action

The World Bank Group delivered a record $31.7 billion in fiscal year 2022 (FY22) to help countries address climate change. This is a 19% increase from the $26.6 billion all-time high in financing reached in the previous fiscal year.

However, the current climate finance architecture is distributed unevenly and inefficiently especially in economies that are developing and most vulnerable to climate change.

Recommendations

◆ G20 should establish national policies that promote collaboration between the public, private, and nonprofit sectors in climate finance and foster partnerships to enhance the breadth and effectiveness of climate actions.

◆ Governments should increase emergency funding mechanisms, make it easily accessible and provide immediate and timely support to meet the needs of the most vulnerable communities affected by climate-related disasters.

◆ Member countries should upscale specific financing for mitigation and adaptation for climate change, and ensure inclusivity and social justice in the allocation and distribution of funds effectively.

◆ G20 must consider measures to integrate climate risk assessments and integrate community scale resilience building strategies into funding and project implementation, decision making processes across all levels and sectors to help governments identify potential trade-offs and synergies between climate goals and other development objectives.

◆ G20 must develop country specific climate adaptation metrics and standards to guide investment decisions and incentivize proactive community based mitigation/adaptation actions.

Environmental Sustainability

A. Ensuring Rights, Access, and Sustainability for Food Security

According to the statistics released by WPF, more than 345 million people are facing high levels of food insecurity in 2023 – more than double the number in 2020. This constitutes a staggering rise of 200 million people compared to pre-COVID-19 pandemic levels. More than 900,000 people worldwide are fighting to survive in catastrophic hunger/one step away from famine. This is ten times more than five years ago, an alarmingly rapid increase.

Recommendations

◆ The G20 must ensure that individuals have the rights and access to safe, nutritious, and culturally appropriate food, and that food systems are sustainable and resilient to climate change. Member countries need to adopt innovative food engineering technologies as well as promote the integration of the traditional practices like consumption of ayurvedic leaves and other herbs into their lifestyle.

◆ G20 countries need to promote sustainable food consumption patterns and awareness campaigns to bring in a major shift in resource consumption and food waste generation. Based on the food intake and the water consumed at community level, people need to be made aware of sustainable practices according to resource availability and changing climate patterns.

◆ G20 must implement environmental labelling and taxing of food products that are environmentally damaging, to incentivize consumers to make more responsible and sustainable food choices, as well as incentive pricing for the less-impacting food products in order to incentivize consumers to make more responsible and sustainable food choices.

◆ C20 recommends implementing a scheme where every food packet includes information on the man hours involved, the number of individuals in the supply chain, resources utilised, thereby fostering a gratitude-based approach that promotes reduced consumption and wastage.

B. Climate-Resilient Agriculture: Promoting Sustainable Practices & Knowledge Transfer

Climate change impacts food security, particularly in developing nations. According to the World Bank, the growing impact of climate change could further cut crop yields, especially in the world's most food-insecure regions. Our food systems are also responsible for about 30% of greenhouse gas emissions. Current food systems also threaten the health of people and the planet and generate unsustainable levels of pollution and waste. A third of global food production is either lost or wasted. Food insecurity worsens nutrition, causing malnutrition, undernutrition, and obesity. Roughly 3 billion people lack access to a healthy diet.

Recommendations

◆ C20 urges G20 to promote dynamic management of crop diversity and diversity-based strategies to ensure nutritional needs of the community and for more sustainable agro-ecosystems by emphasising bottom-up approaches engaging with local farmer networks in the perspective of agroecological approach.

◆ Member nations need to enhance global investment to promote sustainable agricultural practices. Training and educational programs need to be implemented to raise awareness among rural communities about the need for ecosystem restoration, environmental shifts and the impacts of climate change.

Schemes need to be accompanied by incentives such as subsidies, tax exemptions, and low-interest loans to farmers to adopt such practices.

◆ C20 recommends to raise community awareness about nutrition requirements through schemes and foster a connection between agricultural practices and food grain production.

◆ C20 calls for the adoption and enforcement of robust regulations, limiting pesticide usage to permissible levels, in the agricultural sector to safeguard the well-being of individuals and the environment.

C. Prioritising Ecosystem Restoration, Biodiversity Protection, Sustainable Water Governance, and Coastal Conservation

The world is currently grappling with significant challenges in environmental sustainability across sectors. Biodiversity loss is accelerating and the International Union for Conservation of Nature has listed a staggering 32,000 species listed as threatened, and the WWF has documented a distressing 68% decline in vertebrate populations since 1970. Water scarcity is affecting billions worldwide, as the UN estimates that 2.2 billion people lack access to safe drinking water. Marine ecosystems are under grave threat, with WWF reporting that 90% of global fish stocks are either fully exploited or overfished.
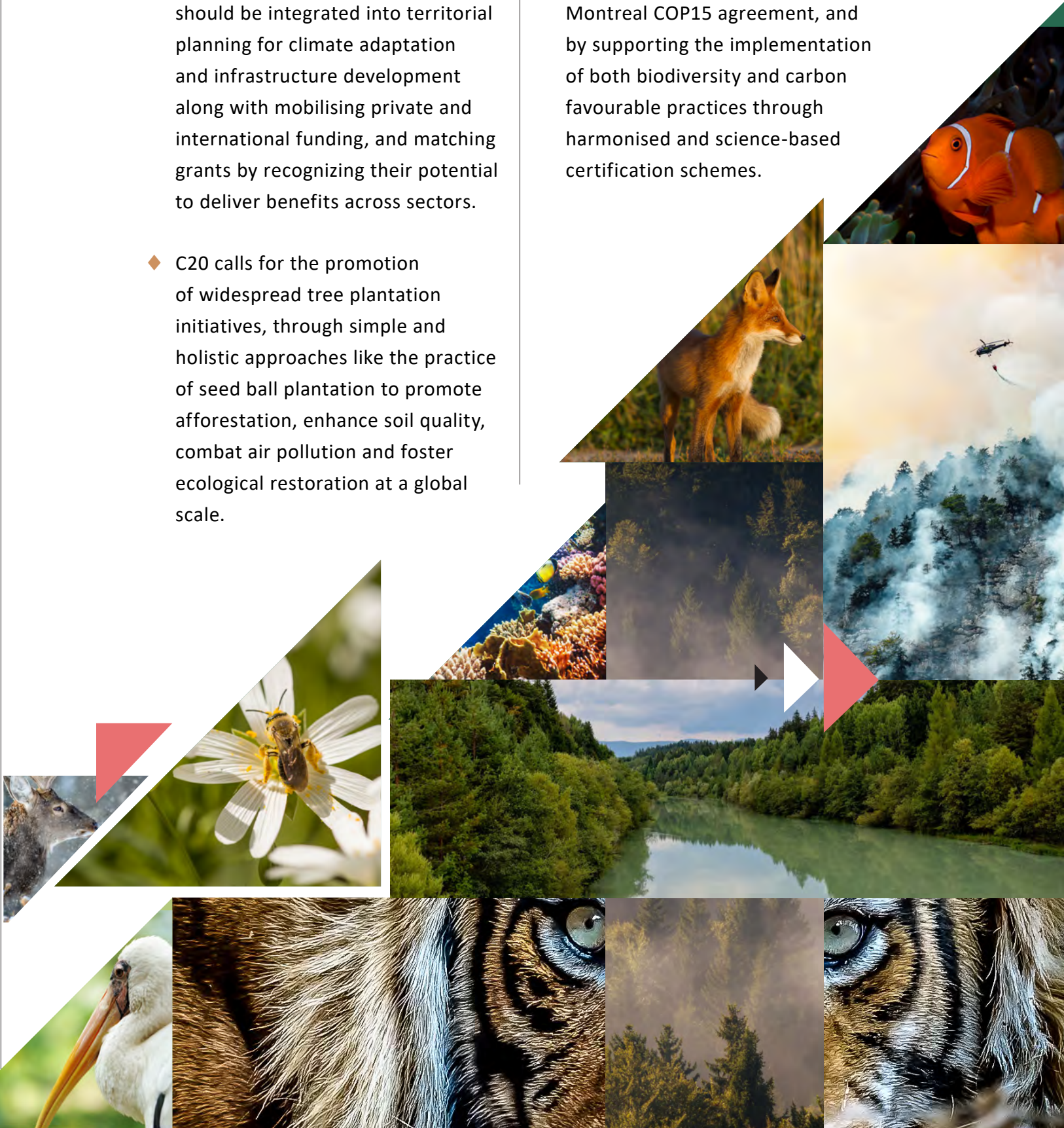
Recommendations

◆ C20 recommends the protection of important biodiversity hotspots, ecosystems and the livelihoods by addressing the challenges of biodiversity loss and the spread of invasive species through conservation of native species and promotion of ecovillages through special schemes and funding mechanisms.

◆ G20 must establish strong water governance frameworks that consider climate change, ensuring sustainable and high-quality water availability. Legislation, monitoring, and enforcement mechanisms should be implemented, along with promoting water-efficient practices at the community level. Collaboration on integrated water management, climate-resilient infrastructure, and leveraging wastewater for economic growth is crucial. Capacity building for community water champions, along with the allocation of specific schemes and funding, are necessary. Furthermore, the creation of certification and ranking systems for water-wise communities should be prioritised.

◆ C20 recommends the stricter enforcement of coastal protection regulations and policies to safeguard marine resources, ecosystems, and biodiversity. Nature based solutions should be integrated into territorial planning for climate adaptation and infrastructure development along with mobilising private and international funding, and matching grants by recognizing their potential to deliver benefits across sectors.

◆ C20 calls for the promotion of widespread tree plantation initiatives, through simple and holistic approaches like the practice of seed ball plantation to promote afforestation, enhance soil quality, combat air pollution and foster ecological restoration at a global scale.

◆ C20 recommends to better protect forest ecosystems in order to secure in-situ carbon sequestration and biodiversity, by labelling new protected areas in line with Montreal COP15 agreement, and by supporting the implementation of both biodiversity and carbon favourable practices through harmonised and science-based certification schemes.

Net Zero Emissions Management

Despite strong emphasis on climate change, environmental sustainability and net-zero emissions, G20 still accounts for over 77% of greenhouse gas (GHG) emissions. The transition to net-zero is woefully inadequate, mostly techno-solutions-focused, poorly-funded, slow, and unsustainable. It has already exacerbated crises of displacement and exploitation of vulnerable communities, caused loss of livelihoods, and generated non-recyclable waste. There is poor awareness and understanding of the crisis at hand, solutions and their feasibility, the urgency for sustainable solutions, the magnitude of financing and monitoring needed for the same. In all these aspects, maladaptation is arising as the most significant challenge in transition to net-zero emissions.

Recommendations

A. Lifestyle Changes & Demand Reduction

G20 nations must commit to promoting sustainable lifestyles focused on reducing the quantum of residual emissions that have to be balanced, by promoting solutions that bridge socio-behavioural, infrastructural, and technological domains. C20 calls for G20 nations to:

- Redesign communities, urban form, and infrastructure to drastically reduce induced GHG emissions.

- Introduce policy incentives for high-emission individuals, organisations, enterprises and communities to reduce consumption and modify behaviour and choices to achieve lower per capita resource footprints while ensuring wellbeing.

◆ Promote redesign of living spaces - enhance efficiency in use of floor space, increase daylighting and passive thermal management, use only smart appliances, minimise materials in construction.

◆ Transformatively reduce total geographical distances travelled by individuals and goods - minimise travel for work, promote teleworking and shared pooled mobility, promote city- and state-level rail transport powered by renewables, incentivise decentralised, coupled production-consumption infrastructures, systems and provisioning of services.

◆ Incentivize transitions to energy, food, water, and resource self-sufficiency - on-site renewables and micro-grids, household-level food production, resource sharing, life-enhanced and efficient products, reuse and recycling, incentivize shift to plant-based diet.

◆ Design and promote energy, emissions, and resource-efficient. management of electronic devices.

B. Circular Economy

C20 urges G20 to mandate the use of circular economy principles in designing, financing and implementation of policies for transitions to net zero emissions by:

◆ Accelerating time-bound planning, funding and development of solutions for recycling, reuse and valorisation of spent waste arising from the technologies being adopted at global scale.

◆ Mandating decentralised, affordable, efficient and clean

recycling, reuse and valorisation solutions as the necessary condition for a technology to be deemed sustainable.

◆ Promoting grassroots and frugal innovations for sustainable emissions reductions.

C. Deep Decarbonization

G20 must accelerate deep decarbonization initiatives across all sectors to achieve tangible national and global targets for net zero emissions within 2050. C20 calls for G20 nations to:

- Immediately cease subsidies for fossil fuels.

- Transparently determine and commit to peaks and timelines in emissions.

- Incentivise adoption of energy-efficient appliances and solutions across sectors and value chains.

- Mandate time-bound, renewables-powered electrification of energy/thermal sources in industries and phasing out of coal & fossil fuels.

- Mandate time-bound transition to sustainable feedstock for hard-to-abate chemical industries.

- Design, implement and monitor solutions to prevent lock-in emissions in future sectoral growth.

- Effectively monitor and eliminate greenwashing, green colonialism, and monoculture plantations for carbon capture.

Compassion Driven Approaches to Sustainable and Resilient Communities

The world is witnessing an alarming rise in violence against both humanity and the environment. Interpersonal violence affects millions of people, with a staggering number of annual fatalities globally. While efforts are being made to address it, they alone are inadequate to restore peace and harmony in society and nature. People experience two types of poverty in this world - poverty of food, clothing and shelter and poverty of love and compassion. Compassion is the most important factor that can transform lives. If we take this first step courageously, without fear, then all of our decisions and subsequent actions and their results will have a special beauty, spontaneity and power.

Recommendations

A. Fostering Peace, Harmony, by integrating Cultural Values and Rediscovering Local Traditions

◆ The G20 needs to prioritise promoting a culture of peace, harmony with nature, and education for building sustainable and resilient communities, emphasising human, cultural, and spiritual values for collective flourishing and well-being, and integrate them effectively into all public policies in a trans-sectoral manner.

◆ G20 must develop and implement experiential learning and hands own approaches at schools and universities for promoting a culture of peace and harmony with nature

◆ Member countries need to develop and implement strategies to rediscover local traditions, map them with respect to fostering peace, harmony and ecosystem restoration. Develop scalable models to train the future generation in utilising local traditions.

◆ G20 should establish schemes that will motivate multinational corporations and business enterprises to adopt rural enclaves and provide support and funding for the development of essential infrastructure such as schools, colleges, hospitals, and small-scale industries.

◆ G20 needs to recommend the local universities to adopt the nearby communities to engage, support and work in a participatory manner for identifying existing challenges, developing sustainable and resilient solutions, providing support in availing existing government schemes.

◆ C20 recommends prioritising youth empowerment through compassion-driven approaches by engaging young people in decision-making processes with access to quality education, skills training, and opportunities for leadership and entrepreneurship.

B. Compassion as a foundational element in educational curriculum

1. G20 must consider mandating the development of compassion-based educational frameworks that are tailored to local cultural, social, and economic contexts, while ensuring alignment with international standards and global perspectives. Furthermore, a course that teaches compassion and selflessness needs to be developed from kindergarten to grade 12 and higher education.

2. Member countries need to develop training materials and in terventions tailored for teachers and parents, focusing on integrating self-care, resilience, and the cultivation of inner compassion within the learning environment. A mandatory textbook including all aspects of the greatness of selflessness and compassion should be introduced. Furthermore, countries should also invest in designing reliable and valid assessment methods.

3. G20 must prioritise awareness programs that highlight the value of local experience, indigenous knowledge, and social responsibility, aiming to counter the invisibility of these important resources.

Udaaharans

We selected the following best practices to showcase the achievements of high impact projects undertaken by civil society organisations.

1. Unnat Kheti – Children's Investment Fund Foundation

The project, initiated three years ago, aims to promote Low Carbon Agriculture (LCA) and natural farming practices in India. It has successfully trained and supported 18,000 farmers including women. The project has also facilitated market linkages for LCA products, engaged cooperatives and corporations in sustainable sourcing, and provided research-based support to governments. The outcomes include widespread adoption of natural farming practices, the establishment of natural farming boards in Uttar Pradesh, Gujarat and Madhya Pradesh, and the operationalization of bio-resource production centres run by women Self-Help Groups.

2. SREE (Sustainability & Resilience for Community Engagement & Empowerment) Platform – Amrita Vishwa Vidyapeetham

The lack of effective measurement, dissemination of information, and dynamic data analytics for community-scale sustainability and resilience assessment poses challenges for community-level decision-making. To address this gap, a technology-based crowd-sourced platform called Sustainability and Resilience for Community Engagement and Empowerment (SREE) has been proposed. Integrated with a mobile application called Empower Community App, this platform enables bottom-up assessments, knowledge acquisition, and informed decision-making. SREE utilises geo-enabled software and crowdsourced data to measure, map, analyse, and propose recommendations for community-level sustainability and resilience indicators. Implemented in multiple countries, this participatory solution allows for mapping, monitoring, risk assessment, and deriving recommendations for sustainability and resilience at various scales.