

Learning, Collaborating and Transforming

The 20-Year Journey of the Global RCE Network

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Message from the Editors

It is with great pride and anticipation that we present this special publication commemorating the 20th anniversary of the global network of Regional Centres of Expertise on Education for Sustainable Development (RCEs). Over the past two decades, the RCE movement has evolved from a visionary concept into tangible local actions and a vibrant global network that is transforming education, empowering communities and inspiring action towards a more sustainable, just and resilient world.

This publication stands as both a celebration and a thoughtful reflection. It honours the remarkable journey of the RCE community, from its modest beginnings in June 2005 with seven initially-acknowledged regional centres, to a dynamic network of 200 RCEs spanning across the globe in 2025. Through the collective efforts of countless educators, youth, policymakers, researchers and community leaders, RCEs have become catalysts for change, bridging the gap between global sustainability goals and local realities.

The timing of this publication is particularly significant. The year 2025 marks not only the 20th anniversary of the RCE network but also the midpoint of both key guiding frameworks: the RCE Roadmap 2021–2030 and the ESD for 2030 Framework. This pivotal moment presents an opportunity to reflect on our collective journey, celebrate our achievements, learn from our challenges and chart an ambitious course towards 2030 and beyond.

This publication brings together rich stories, insights and analyses from RCE initiatives worldwide. Chapter 1 outlines the conceptual foundations of the RCE movement and traces the evolution of the global network over the past two decades. Chapter 2 highlights regional developments across Africa and the Middle East, the Americas, Asia-Pacific and Europe, with a special focus on youth engagement and leadership. Chapter 3 showcases promising cases of RCE projects and activities in the five Priority Action Areas of the ESD for 2030 framework, including advancing policy, transforming learning environments, building educator capacity, empowering youth and accelerating local actions. Chapter 4 analyses trends and innovations in RCE projects in 2020–2024. Finally, Chapter 5 offers reflections on the 20-year journey, capturing key milestones, achievements and ongoing challenges. Looking ahead, Way Forward outlines key directions for the future, identifying strategic priorities to further advance the role of RCEs in achieving sustainable development.

The contributions of RCEs are as diverse as the communities they serve, yet united by a shared commitment to harnessing the power of education for sustainable development (ESD). Each RCE's approach reflects the unique cultural, environmental and socioeconomic realities of its region, forming a global mosaic of local action aligned with the Sustainable Development Goals (SDGs), particularly SDG 4 (quality education) and SDG 17 (partnerships for the goals). By focusing synergies among the SDGs, RCEs advance integrated solutions that address multiple challenges simultaneously, reinforcing the interconnected nature of sustainable development.



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We extend our deepest gratitude to all who contributed, including members of the Ubuntu Committee for the RCE Community, Regional Advisors, Regional Youth Coordinators, partners and the dedicated team at the Global RCE Service Centre, whose passion and vision have made this publication possible. Your unwavering commitment to collaboration, inclusivity and innovation continues to inspire and guide the global ESD movement forward. We are especially grateful to the Ministry of the Environment of Japan for their longstanding support, which has been instrumental in sustaining and advancing the RCE initiative.

As you read this publication, we invite you to reflect on the progress achieved, the lessons learned and, most importantly, the possibilities that lie ahead. The Global RCE Service Centre at UNU-IAS remains steadfast in its support of this remarkable network, committed to amplifying its impact and co-creating pathways to a more just and sustainable future.

May this publication serve as both a source of inspiration and a call to action for all who believe in the power of education to transform lives and societies. Together, let us continue to build bridges between knowledge and action, shaping a sustainable future for generations to come.

Editors

Anupam Khajuria
Miki Konishi
Jonghwi Park
Avelino Mejia Jr

Message from the Rector of UNU

It is a great honour to celebrate the 20th anniversary of the Regional Centres of Expertise on Education for Sustainable Development (RCEs), alongside the 50th anniversary of the United Nations University (UNU). These dual milestones celebrate our enduring pursuit of knowledge, sustainability and global engagement. The RCE initiative stands as a pioneering effort that reflects the core values and mission of UNU in action.

At UNU, we are deeply committed to advancing multilateral solutions to global challenges and promoting peace, sustainability and human dignity. As we reflect on five decades of global impact by UNU, we are reminded of the transformative power of education and local action in shaping global change. The journey of the RCEs is a powerful testament to this vision.

Education has always been at the core of our efforts at UNU. It is not only a means of imparting knowledge, but the foundation for implementing the 2030 Agenda for Sustainable Development. Education is a fundamental human right — one that is essential for individuals and communities to realize their potential, engage meaningfully with the world and act for the common good. Education empowers people to envision new futures and equips them with the tools to create change.



The RCE initiative was proposed in 2003 by the fourth Rector of UNU, Professor Hans van Ginkel. His vision, rooted in a profound understanding of education and its role in society, emphasized that sustainability must be anchored in the realities of local context, culture and communities. He recognized the need for people to take ownership of sustainable development in their own regions.

This idea resonated strongly with the Ubuntu Declaration on Education and Science and Technology for Sustainable Development, adopted at the 2002 World Summit in Johannesburg, South Africa — my home country. The philosophy of Ubuntu, deeply rooted in African traditions, teaches that “I am because we are.” It is a powerful reminder of our interconnectedness and our collective responsibilities to one another and to our planet. The principles of compassion, community and cooperation that Ubuntu embodies continue to inspire and guide the RCE movement.

For the past two decades, RCEs have brought people together across generations, disciplines and sectors to address sustainability challenges in their local contexts. These efforts have nurtured a global network of knowledge, solidarity and innovation, built from the ground up. Since its inception in 2005, the RCE network has grown to 200 acknowledged RCEs worldwide. While each RCE is shaped by the diverse local cultures, histories and ecosystems of its region, all share a steadfast commitment to advancing education for sustainable development (ESD). RCEs have become vital platforms through which youth, educators, policymakers, researchers and community members co-create solutions for a sustainable future. They build the core ideals of learning-based education, grounding global aspirations within local realities.

I would like to express my heartfelt appreciation to all who have contributed to this remarkable movement. In particular, I extend deep appreciation to the Ministry of the Environment of Japan, whose sustained support has been instrumental from the very beginning. I also thank the thousands of dedicated individuals, institutions and communities around the world who have made the RCEs a living, growing network. UNU is proud to have accompanied you on this journey, supporting research, education and partnerships that connect global aspirations with local realities.

The challenges that we face, from climate change to inequality, require collective action rooted in solidarity and a long-term vision. The Pact for the Future, adopted by Member States in 2024 at the Summit of the Future, reminds us that our duty extends beyond the present, toward future generations. It is a call to act with urgency and unity.

The RCE network continues to reflect what truly matters: harmony between people and with the Earth. Its story is one of shared learning and resilience, proving that locally driven education efforts can inspire global change. On behalf of UNU, I extend sincere appreciation to the RCE community for its remarkable contributions during the past two decades. We remain deeply committed to supporting ESD through research, capacity-building and dialogue across regions and generations.

On this 20th anniversary, let us move forward with the spirit of Ubuntu, with hope, shared purpose and enduring faith in education as a powerful force to build a better world.

Tshilidzi Marwala
Rector
United Nations University (UNU)

Message from the Director of UNU-IAS

In recent years, global momentum on education for sustainable development (ESD) has surged, reflecting broad international consensus on education's transformative power. Landmark events, such as the UNESCO World Conference on Education for Sustainable Development (2021) and the Transforming Education Summit (2022), have highlighted its crucial role in addressing today's complex challenges. A key milestone was the first *ESD-Net Global Meeting*, hosted at the United Nations University (UNU) in Tokyo in 2023, an event that fostered innovation, strengthened partnerships and accelerated progress under the ESD for 2030 Framework. These developments reflect a strong global commitment to using education as a catalyst for a just and sustainable future.

The Regional Centres of Expertise on ESD (RCEs) have demonstrated how global commitments can be translated into tangible action through multi-stakeholder networks. By linking international frameworks with local realities, they have driven the transformative power of education across communities worldwide. As the secretariat of this global network, the United Nations University Institute for the Advanced Study of Sustainability (UNU-IAS) is proud to have fostered its dynamic growth and impact during the past two decades. RCEs have strengthened individual capacities and transformed communities, policies and learning systems. Rooted in local contexts, RCEs embrace diverse knowledge and perspectives, laying the foundation for meaningful transformation. By engaging multiple stakeholders, community-based ESD nurtures lifelong learning — across formal, non-formal and informal settings — and collective problem-solving for a sustainable future.

The 20th anniversary of the RCE network is both a celebration of past accomplishments and an opportunity for strategic reflection. This publication honours the collective efforts of the RCEs, shares valuable insights and charts an ambitious course for the future. The stories and case studies featured herein illustrate the dedication, creativity and resilience of RCE members, collaborators and youth leaders whose tireless efforts are shaping the future of education and society.

Among the most inspiring aspects of the RCE movement is the leadership and engagement of youth. Led by RCE Youth Coordinators, RCE youth are not only participating in activities — they have been actively contributing to shape the future of RCEs. Their energy, fresh perspectives and sense of urgency ensure that the network remains responsive, meaningful and impactful for current and future generations.

On behalf of UNU-IAS, I extend our deepest gratitude to all RCE members, partners, young changemakers and community members for their unwavering commitment and passion. Your work exemplifies the transformative power of education to build more sustainable, just and resilient societies. I also wish to express our heartfelt appreciation to the Ministry of the Environment of Japan for their long-standing support of the RCE initiative, and to the Ubuntu Committee of Peers for the RCEs for their invaluable guidance and encouragement in advancing the work of RCEs.



Looking ahead, UNU-IAS remains deeply committed to further advancing the RCE network. We are focused on amplifying its impact, fostering innovation and facilitating collaboration to co-create pathways toward a sustainable future.

May this publication serve as both a tribute to the accomplishments of the past 20 years, and a source of inspiration and motivation for the journey ahead. Let it also stand as a call to action for all who believe in the power of ESD to transform lives and societies. Together, let us continue to build bridges between knowledge and action, and to advance towards a sustainable world for current and future generations.

Shinobu Yume Yamaguchi

Director

United Nations University Institute for the Advanced Study of Sustainability (UNU-IAS)

Message from the Director-General of the Environmental Regeneration and Material Cycles Bureau, Ministry of the Environment of Japan

Since 2005, Japan has demonstrated leadership in promoting ESD internationally, and its efforts have been highly regarded worldwide. RCEs are a crucial foundation supporting these activities, promoting ESD practices at the local and regional level, and strengthening collaboration among various stakeholders.

In order to address the environmental crisis facing contemporary society and realize a truly sustainable future, a fundamental transformation of our socioeconomic systems is imperative. Advancing such change requires reaffirming and collectively embracing the principles of sustainability, which serve as the foundation for long-term resilience and prosperity. In this regard, there are high expectations for ESD and for the initiatives of RCEs aimed at expanding ESD across the globe.

As noted in the 2010 publication *First Five Years of Regional Centres of Expertise on ESD*, then Minister of the Environment Mr. Sakihito Ozawa referred to the goal of expanding the number of RCEs from 75 to 200. It is encouraging that this vision has been realized as of October 2025. Reaching this goal is a testament that reflects the dedication and hard work of everyone involved and is a very gratifying accomplishment. The Ministry of the Environment will continue to actively support the activities of RCEs and contribute to the further development of ESD.

I would like to extend our deepest appreciation to all those who have dedicated themselves to RCE activities over the years. Your unwavering commitment and contributions have been instrumental in advancing our shared vision for sustainable development and education. Thank you for your continued support and inspiring efforts.

In the years ahead, I earnestly hope that, beyond the continued expansion of RCEs, the diverse initiatives undertaken across sectors will further interconnect, generate synergies and give rise to new achievements, ultimately evolving into activities whose fruits will be widely returned to and greatly benefit Japan.

Takao Shiraishi

Director-General of the Environmental Regeneration and Material Cycles Bureau
Ministry of the Environment of Japan

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Message from the Director of the Division of Peace and Sustainable Development, UNESCO

As we mark the 20th anniversary of the Regional Centres of Expertise on Education for Sustainable Development (RCEs), we celebrate two decades of transformative work in education for sustainable development (ESD). This milestone comes at a crucial moment when the world faces unprecedented challenges that demand collective action to secure a sustainable future for all.

Over the past twenty years, RCEs have played a pivotal role in turning sustainability from an abstract global concept into tangible, local solutions. By fostering partnerships and adapting ESD programmes to regional contexts, they have empowered communities to engage in practical, hands-on initiatives that directly improve their environments and societies.

The journey of the RCE network aligns with the evolution of international frameworks, from the Decade for ESD to the current ESD for 2030 agenda. Through this work, RCEs have not only advanced UNESCO's vision of building sustainable societies but have also contributed to driving local solutions through global collaboration and supported the creation of a global culture of sustainability.

As we look ahead, the need to reimagine and strengthen ESD has never been more pressing. Emerging challenges, coupled with the acceleration of digital technologies, offer both opportunities and challenges for RCEs. As living laboratories of innovation, RCEs are uniquely positioned to embrace digital transformations that align with sustainability, equity and inclusion.

Moreover, by integrating systems thinking, futures literacy and intergenerational dialogue, RCEs can help learners look beyond current crises and envision pathways for a thriving future. The lessons learned over the past twenty years have shown that education is not confined to classrooms — it's a dynamic, community-driven force for change.

This publication is a celebration of our collective achievements, the challenges we've faced, and the exciting path that lies ahead. Through continued innovation, collaboration and localization, RCEs will continue to inspire future generations to not only overcome today's crises but also create a sustainable world for tomorrow.

Christopher Castle

Director of the Division of Peace and Sustainable Development
United Nations Educational, Scientific and Cultural Organization (UNESCO)



Message from the Secretary General of IAU

The 20 Years of Regional Centres of Expertise on Education for Sustainable Development, initiated by the United Nations University Institute for the Advanced Study of Sustainability (UNU-IAS), under the leadership of the Ubuntu Committee of Peers, marks an important milestone in the global effort to advance Education for Sustainable Development (ESD).

The International Association of Universities (IAU) has long been committed to fostering global partnerships for sustainable development, recognizing the vital role of higher education in driving transformative change. As a sector, higher education — and universities and institutions within it — play a central role in advancing Higher Education and Research for Sustainable Development (HESD) through their interconnected functions: teaching and learning, research and community engagement. These institutions serve as key catalysts for innovation and social progress, cultivating future leaders while addressing both global and local sustainability challenges.

It is for this reason that IAU got involved fully in the Ubuntu Committee of Peers¹ which was developed to mobilize the education sector to contribute to sustainable development and to strengthen science and technology education for sustainable development.

Tasked to call on educators, governments and all relevant stakeholders to review the programmes and curricula of schools and universities, “in order to better address the challenges and opportunities of sustainable development, with a focus on promoting knowledge transfers in innovative ways in order to speed up the process of bridging gaps and inequalities in knowledge”², the Ubuntu Committee of Peers and the RCE and IAU SD communities resolved to work towards a new global learning space on education and sustainability that promotes cooperation and exchange between institutions at all levels and in all sectors of education around the world.

This space, “developed on the basis of international networks of institutions and the creation of regional centres of excellence, which bring together universities, polytechnics and institutions of secondary education and primary schools”³ developed exponentially over time and today it brings together a still growing group of stakeholders.

¹ Created in 2002 and composed initially of the following organizations: United Nations University; United Nations Educational, Scientific and Cultural Organization; African Academy of Science; International Council for Science; International Association of Universities; Copernicus-Campus; Global Higher Education for Sustainability Partnership; Science Council of Asia; Third World Academy of Sciences; University Leaders for a Sustainable Future; and World Federation of Engineering Organizations. See the text of the [Ubuntu Declaration](#) which was developed and adopted by the United Nations University, UNESCO, ICSU and others at the World Summit on Sustainable Development in Johannesburg, South Africa, 25 August– 4 September 2002.

² Ibid.

³ Ibid.



In this context and over the past two decades, universities worldwide have increasingly embraced the principles of sustainability and proactively engaged with the RCE movement. Through this collaboration, they have developed and implemented a wide range of impactful initiatives that directly address environmental, social and economic challenges within their regions. These efforts not only enhance the relevance and societal impact of higher education institutions but also reaffirm their responsibility in shaping a more equitable, inclusive and sustainable future.

Despite growing global sustainability challenges, the RCE network continues to support transformative learning, action research and the development of localized solutions. These efforts empower students and academic communities alike to not only analyse current and emerging challenges but to become active participants in designing and implementing effective responses at local, regional and global levels. By linking RCEs across continents, the network fosters knowledge exchange, allowing successful innovations to be adapted and scaled in diverse contexts worldwide.

At a time when rising populism and division threaten global solidarity, the mission of universities becomes even more critical. Higher education institutions must reaffirm their role as spaces of open inquiry, critical thinking and civic responsibility. Universities have both the opportunity and the obligation to educate thoughtful, informed and creative citizens — individuals equipped to thrive in a complex world and committed to building a sustainable future for all.

In alignment with the principles outlined in Sustainable Development Goal 17 (partnerships for the goals), we jointly advocate for the continued strengthening of collaboration between RCEs, universities and a broad range of stakeholders. Such partnerships are essential to accelerating progress toward the 2030 Agenda and sustaining momentum beyond it.

The IAU is particularly pleased to witness the growing interconnectedness between the work spearheaded by the RCEs and the global HESD Cluster⁴, championed by IAU member universities. Notably, several universities are active participants in both networks, serving as dynamic bridges between these complementary communities. Through their leadership, these institutions are fostering innovation, advancing interdisciplinary research and cultivating meaningful university partnerships that target specific SDGs while maintaining strong interlinkages across the broader sustainability framework, Transforming Our World: The 2030 Agenda for Sustainable Development.

Moreover, these universities play a vital role in engaging a wide spectrum of stakeholders — particularly at the local and regional levels — thus anchoring the global sustainability agenda in community realities and priorities. By building and strengthening these connections, universities not only amplify the reach and impact of both the RCE network and the IAU Global Cluster on HESD, but also enhance the credibility and societal value of higher education. These collaborative efforts help translate science-based research into actionable, context-sensitive solutions that benefit society at large, reinforcing the indispensable role of universities in shaping a more sustainable, inclusive and resilient future.

This publication celebrates twenty years of dynamic collaboration and transformative action within the RCE network. It highlights the pivotal role of RCEs in promoting ESD globally and offers a comprehensive review of the network's evolution, milestones and contributions — from its inception until now. Importantly, this reflection comes at a crucial juncture, aligning with the midpoint review of both the *RCE Roadmap 2021–2030*, UNESCO's ESD for 2030 Framework and IAU's thirty years of commitment to HESD.

Hilligje van't Land
Secretary General
International Association of Universities (IAU)

4 - See <https://www.iau-aiu.net/HESD> and www.iau-hesd.net.



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Regional Centres of Expertise on Education for Sustainable Development (RCEs)

As of October 2025, 200 RCEs have officially been acknowledged by the United Nations University worldwide.



1 Foundation and Evolution of the Global RCE Network

Anupam Khajuria and Miki Konishi

Introduction

In today's increasingly interconnected and complex world, societies are confronted with a wide range of pressing challenges, from climate change, biodiversity loss and resource depletion to social inequality, conflict and public health crises. Addressing these issues requires holistic, inclusive and locally grounded responses. Education, in this context, plays a critical role in equipping individuals and communities with the knowledge, skills, values, attitudes and behaviours necessary to navigate and address these sustainability challenges.

Within this context, there has been a growing need for innovative, action-oriented and collaborative approaches to education that can effectively bridge global sustainability goals with local realities. Over the past two decades, Regional Centres of Expertise on Education for Sustainable Development (RCEs) have played a pivotal role in advancing education for sustainable development (ESD) and driving local sustainability actions. The RCEs serve as dynamic platforms that unite diverse stakeholders, including educators, policymakers, local government, companies and NPOs, to translate global sustainability goals into locally relevant initiatives. By integrating formal, non-formal and informal education, RCEs foster knowledge exchange, build capacity and empower communities to act collectively. Through multi-stakeholder partnerships, RCEs enable collective action to address complex sustainability challenges in context-specific and culturally meaningful ways.

This chapter provides a comprehensive overview of the origins, conceptual foundations and implementation mechanisms of RCEs. It will also present the evolution of the Global RCE Network, drawing on insights and evidence from the previous RCE publications. It outlines the core elements that define RCEs and explores how they have adapted to the challenges of a rapidly changing global landscape, while fostering concrete local actions to promote ESD and advance sustainable development.

Origin of RCEs: From Global Vision to Local Action

The RCE initiative was launched by the United Nations University (UNU) in response to the global call for active partnerships and concrete action made at the World Summit on Sustainable Development (WSSD) held in Johannesburg in 2002. Building on the momentum of the WSSD and



the adoption of the UN General Assembly resolution on the United Nations Decade of Education for Sustainable Development (UN-DESD) in 2003, UNU, through its Institute of Advanced Studies (UNU-IAS)¹ and with the support from the Ministry of the Environment of Japan, launched the concept of RCE, a pioneering programme on ESD.

While there is broad recognition of the need to promote ESD at international, national and sub-national levels, global efforts have often been fragmented, resulting in limited tangible progress. Consequently, UNU has strategically focused on local-level actions, where initiatives can be more context-specific, collaborative and impactful. The RCE initiative was developed to localize global sustainability visions into concrete actions, bridging the gap between policy frameworks and local implementation.

A significant milestone in the evolution of RCEs occurred in June 2005, when UNU began formally acknowledging the first seven RCEs², laying the foundation for the growth of the Global RCE Network. This formal recognition by UNU played a critical role in supporting local initiatives. It strengthens their credibility, enhances visibility and positions them within the broader international frameworks on sustainability and ESD. It also fosters greater trust and amplifies their ability to scale up local innovations into meaningful contributions toward global sustainable development.

The RCE Concept: A Multi-Stakeholder Platform for Advancing Local Sustainability

An RCE is a dynamic network-based institutional mechanism that gathers and coordinates existing local institutions to mobilize resources, foster collective action and generate synergy for ESD.

¹ In 2003, UNU-IAS was known as the UNU Institute of Advanced Studies. Following an organizational reform in 2014, its name was changed to the UNU Institute for the Advanced Study of Sustainability.

² RCE Barcelona, RCE Greater Sendai, RCE Okayama, RCE Pacific, RCE Penang, RCE Rhine-Meuse and RCE Toronto.

It is not a physical centre but rather a platform for promoting a community-wide and holistic approach to ESD. By breaking down silos and boundaries between sectors, disciplines and generations, an RCE serves as an innovative living laboratory. It facilitates transformative education and interdisciplinary cross-sectoral collaboration through dialogue, knowledge exchange and the co-creation of solutions for sustainable development at regional and local levels.

RCEs operate based on the four core elements guiding their activities and addressing sustainability issues at the local levels:

- 1. Governance:** Establishing management structures to promote participatory decision-making, coordinate RCE activities and ensure accountability.
- 2. Collaboration:** Engaging diverse stakeholders across formal, non-formal and informal education to enhance multi-sectoral partnerships and foster collaborative learning and action.
- 3. Research and Development:** Incorporating research into RCE practices to foster evidence-based strategies and approaches.
- 4. Transformative Education:** Promoting systemic change in education, training and lifelong learning to advance sustainable development.

The RCE concept emphasizes strengthening both horizontal links (among institutions at the same educational level, such as collaboration among primary schools or among universities) and vertical links (across primary, secondary and tertiary education) within formal education. Additionally, it highlights lateral links to facilitate collaboration among formal, non-formal and informal education sectors. This approach brings a wide range of stakeholders, including educational institutions, museums, local governments, businesses and non-governmental organizations. This whole-of-community approach fosters lifelong learning and collective action, empowering communities to address sustainability challenges in a holistic and inclusive manner (Figure 1).

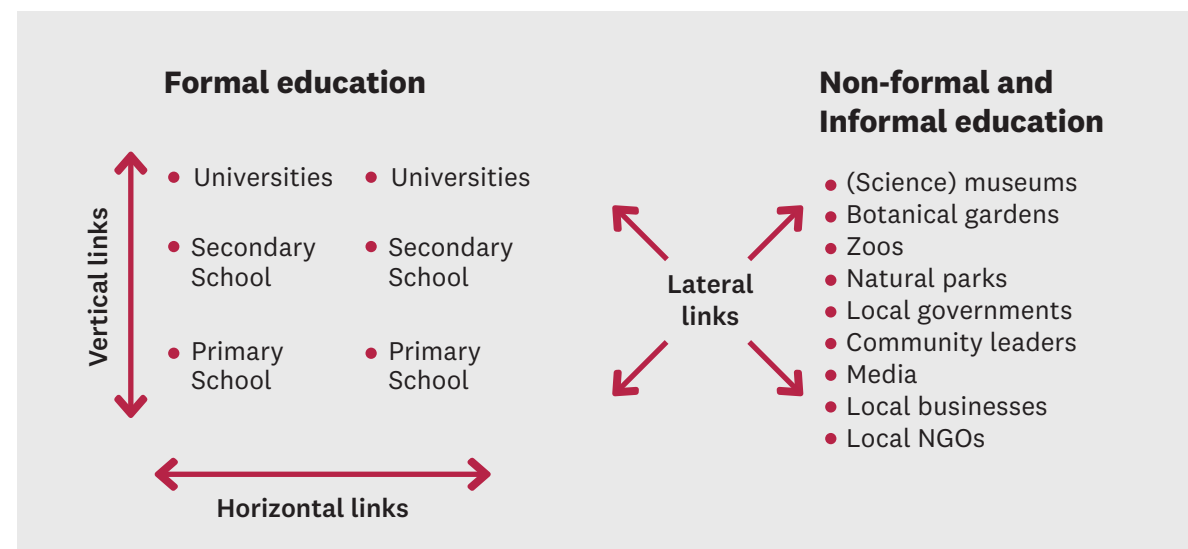


Figure 1. Collaborative links of an RCE (Source: UNU-IAS, 2014).

Implementation: Tailoring ESD to Local Contexts

While the foundational concept and core elements remain consistent across all RCEs, their implementation is flexible and highly adaptable to local contexts. Each RCE is designed to be established and operated based on the unique needs and priorities of each region, ensuring that the approach is culturally and contextually appropriate. This adaptability means that RCEs may differ significantly in their specific visions, thematic focus areas, activities, geographical coverage, coordinating institutions and participating stakeholders, which vary to reflect local priorities, challenges and available resources.

RCEs also vary widely in scale, from those covering a city or sub-national region to those spanning an entire country or even transboundary areas, such as river basins that cross national borders. In principle, an RCE should be large enough to encompass a variety of institutions across formal, non-formal and informal education sectors, yet close enough to facilitate regular communication and collaboration. Starting at a regional scale, where communities share common culture, challenges and opportunities, allows RCEs to collectively develop locally relevant visions and learning actions.

Each RCE needs to establish a coordination body that guides strategy and supports participatory decision-making and collective action in practice. This body is typically composed of representatives from key partner institutions. By fostering multi-stakeholder collaboration, the coordination body ensures that diverse perspectives are integrated and responsive to local needs. RCEs can serve as a model for reaching out to sectors and organizations that were not previously involved in sustainability initiatives. As the network evolves, it grows organically, with new organizations and individuals joining and contributing to an expanding range of activities, thereby increasing its impact.



Evolution of RCEs and Alignment with Global Frameworks

RCE initiatives have evolved in alignment with international ESD frameworks since their inception from the DESD (2005–2014). More details about the RCE’s history and aligned evolutions with the global frameworks can be found in Chapter 5.

Following the adoption of the 2030 Agenda in 2015, ESD has been recognized as a key driver in achieving all Sustainable Development Goals (SDGs), which led to the Global Action Programme on Education for Sustainable Development (GAP) (2015–2019). It was the GAP framework that first explicitly emphasized the importance of generating and scaling up actions in all levels of education and learning and introduced the five priority action areas. The GAP provided RCEs with a comprehensive framework during the period, resulting in 479 projects conducted throughout the RCE network (Vaughter and Noguchi, 2020; Vaughter et al., 2022) (See Chapter 4).

In 2020, the ESD for 2030 Framework (2020–2030) (UNESCO, 2020) was launched and have provided strong momentum for the advancement of RCE activities and the expansion of the global network. In response, the *Roadmap for the RCE Community 2021–2030* (UNU-IAS, 2021) was developed as a strategic guidance for RCE efforts. The Roadmap identifies four Strategic Priority Areas for the global RCE community:

- 1. Serving as local and regional hubs for ESD and showing leadership for innovation
- 2. Strengthening the association of RCE activities with SDGs and ESD framework
- 3. Expanding knowledge sharing and outreach
- 4. Monitoring progress of RCE achievements



To track the progress of the Roadmap, an online survey has been administered in 2025 and the results will be shared through a midterm review in 2025/2026 and a final review in 2030. Over time, the survey results will feed into regional discussion and global review, enabling the RCE network to adapt, evolve and make a significant impact towards the SDGs and the ESD for 2030 framework.

Through the agile and continuous fine-tuning of its strategic directions, the Global RCE Network has played a crucial role in advancing SDGs, with particular focus on SDG 4 (quality education), SDG 13 (climate action), and SDG 17 (partnerships for the goals) while also contributing across the full spectrum of the SDGs. RCEs’ initiatives often address multiple, interconnected goals simultaneously, in ways that are locally relevant and culturally appropriate. By fostering multi-stakeholder partnerships and co-creating knowledge, RCEs drive progress through meaningful, context-based solutions.

The number of officially acknowledged RCEs has steadily increased over the years, beginning with the seven first RCES acknowledged in June 2005. By the end of 2014, the total number of officially acknowledged RCEs reached 128. This number rose to 168 by the end of 2015 and reached 200 by 2025 (**Figure 2**). These RCEs span various regions and serve as hubs for ESD implementation at the local level, contributing to the creation of a global learning space that fosters practical action and knowledge exchange. This mechanism enables the linkage of RCE actions across levels, from local to global and vice versa.

Alongside this quantitative growth, the Global RCE Network has evolved into a dynamic platform for interregional collaboration. It facilitates the exchange of experience and knowledge not only among RCEs across regions but also with a wide range of external stakeholders. This vibrant network fosters diverse forms of cooperation — including joint research, capacity-building activities and project-based partnerships, strengthening the collective impact of RCEs and further embedding ESD into local and global sustainability efforts.

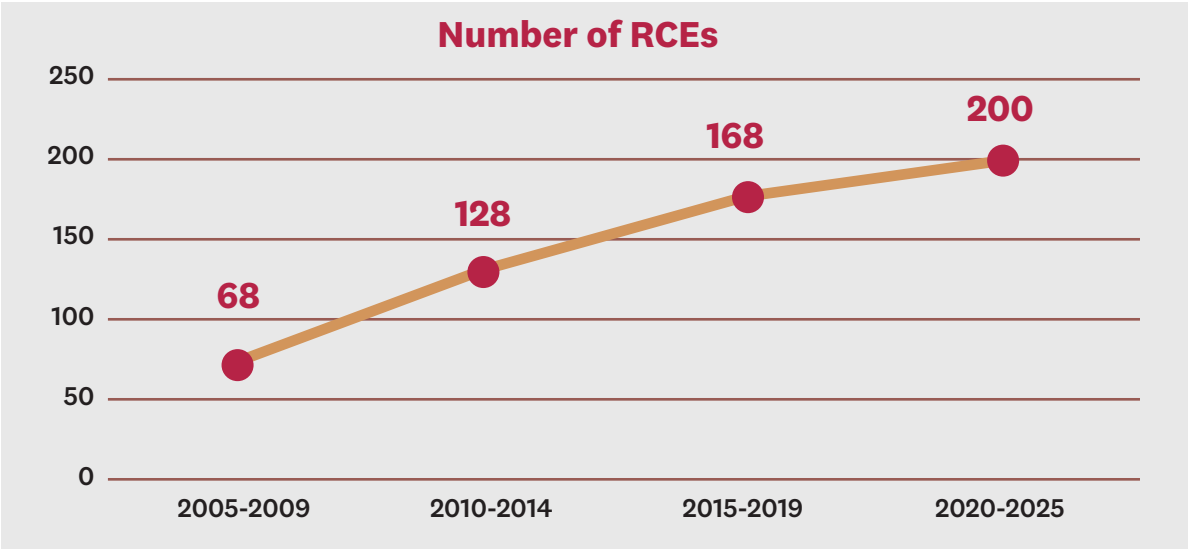


Figure 2. Growth of the Global RCE Network: Number of RCEs by five-year period (2005–2025).

Support Mechanisms for Building and Strengthening RCE Networks

The establishment and ongoing activities of RCEs are voluntary, initiated and led by local stakeholders based on their own commitment. The success of each RCE depends on their dedication to localizing ESD and creating impact within the four core elements stated earlier, namely, governance, collaboration, research and development, and transformative education.

As the global network of RCEs continues to grow across the world, the need for structured support mechanisms has become increasingly important. To ensure effective coordination and promotion of RCE activities at the global and regional levels, the following support mechanisms play essential roles: The **Global RCE Service Centre** provides strategic guidance, shares promising practices, facilitates networking and fosters collaboration across regions. In addition, the **Ubuntu Committee of Peers** for the RCEs serves as an advisory body, offering policy guidance, strategic advice and ensuring overall quality. At the regional level, UNU-IAS has appointed **Regional Advisors** to provide context-specific support tailored to each continental region: Africa and the Middle East, the Americas, Asia-Pacific and Europe. Furthermore, to enhance youth engagement across the network, **Regional Youth Coordinators** (RYCs) have been introduced in 2023 to strengthen youth leadership and ensure their engagement in regional and global initiatives.

Insights from RCEs: Action-Oriented Pedagogies

Since 2023, a research project has been undertaken by UNU-IAS to capture lessons from the RCE community on advancing action-oriented pedagogies for ESD³. In promoting ESD, learners need to develop not only cognitive skills, but also socioemotional and behavioural competencies to be able to take informed actions. Traditional education unfortunately focuses less on the latter two competencies as it has largely focused on cognitive skills. A UNESCO survey underscored this imbalance, highlighting the need to strengthen socioemotional and behavioural aspects (UNESCO, 2017). Over the past 20 years, RCEs have addressed this gap through multi-stakeholder collaboration on the ground, showing how education can enable learners to engage with real-world challenges, connect with communities and build the motivation and capacity to act.

Drawn on an extensive literature review and interviews with 28 RCEs around the world, the project has identified seven core elements of action-oriented pedagogies: problem-based and real-world issues, community engagement, learner participation, collaboration, empathy, regional and cultural relevance, and interdisciplinarity (Thanapornsangst et al., in press).

Building on these insights, a case study publication (Insebayeva et al., 2025) and an online repository have been developed to share practices more widely. The aim is to spread the essence of action-oriented pedagogies for ESD across regions, providing inspiration and practical guidance for educators, communities and policymakers committed to sustainability transformation.

Okayama Declaration towards 2030 and Beyond

The 2025 Okayama Declaration: RCEs' Shared Commitments for a Shared Future reaffirms two decades of global collaboration to advance sustainability through education, innovation and community action. This Declaration, to be adopted at the 14th Global RCE Conference in Okayama, Japan, celebrates the 20th anniversary of the RCE initiative and responds to the rapidly evolving context of ESD. It reflects a renewed commitment to mobilizing education as a catalyst for systemic transformation in response to interconnected global crises, including climate change, biodiversity loss, inequality, digital disruption and threats to peace and well-being.



To guide future efforts, the Declaration outlines five priority areas of action: 1) positioning ESD as a catalyst for systemic and social transformation; 2) advancing knowledge exchange and local solutions through partnership; 3) empowering and mobilizing youth leadership; 4) ensuring equity, inclusion and justice; 5) harnessing digital transformation for lifelong and life-wide ESD. It also underpins a cross-cutting principle of environmental ethics — underscoring accountability to people, nature and future generations. Ultimately, the Declaration calls for transformational, culturally grounded and intergenerational change, securing education's place at the forefront of the global sustainability agenda.

These foundations continue to shape the evolution of the Global RCE Network and its contributions to global sustainability efforts.

³ This research has been supported by the Japan Society for the Promotion of Science (JSPS), Grants-in-Aid for Scientific Research, Project No. 23H01016.

2 Regional Pathways and Youth Leadership for Sustainability

Over the past two decades, RCEs have played a vital role in translating global sustainability goals into local actions. While united under a common vision, RCEs operate within highly diverse regional and cultural contexts, resulting in distinct approaches, priorities and challenges across different parts of the world.

This chapter presents an overview of regional activities and progress made by RCEs, including Africa and the Middle East, the Americas, Asia-Pacific and Europe, covering the period between 2005 and 2025. Written by the respective Regional Advisors, each section provides insights into the development of RCEs within the region, including trends, achievements and challenges. It also outlines future directions and key messages to support further collaboration and impact.

Regional snapshots are the following:

In **Africa and the Middle East**, strong community participation is a key feature of RCE activities fostering collective action and locally grounded approaches. Particularly in Africa, RCEs focus on integrating Indigenous knowledge and intergenerational learning to address local sustainability challenges. Several RCEs have also actively contributed to national education strategies and engaged in UNESCO's ESD for 2030 country initiatives. In the **Americas**, RCEs work across decentralized and multilingual contexts. Despite limited national-level support, their efforts are sustained by vibrant civil society, higher education institutions (HEIs) and community-based organizations. Rotating RCE regional meetings between North and South America have enabled collaboration on themes such as Indigenous leadership, urban sustainability and social equity, strengthening the region's collective impact on sustainable development. The **Asia-Pacific** region has witnessed remarkable growth in the number of acknowledged RCEs expanding from five in 2005 to 82 in 2025 accounting for over 40 per cent of all RCEs worldwide. RCEs in this region address diverse issues such as climate change, disaster risk reduction, biodiversity and youth empowerment. Collaborative structures like the Asia-Pacific RCE Coordinating Committee and regular regional meetings are unique mechanisms that have facilitated knowledge sharing and strengthen partnerships across countries and communities. RCEs in **Europe** operate within complex, multilevel education systems and respond to various sustainability challenges. The region is characterized by strong grassroots partnerships that bridge formal and non-formal education sectors. Since March 2024, monthly online sessions and strategic working groups have fostered collaboration and knowledge exchange among European RCEs, enhancing innovation and shared learning.

In addition to the regional sections, a dedicated part of the chapter focuses on youth engagement and leadership, highlighting how young people across the RCE network are driving change and contributing to sustainable development at local, regional and global levels. Youth are recognized not only as future leaders but as key actors today. They contribute through peer learning, community action and the development of local solutions. Since 2023, Regional Youth Coordinators (RYCs), appointed by the Director of UNU-IAS, have supported these efforts by connecting youth across RCEs, fostering collaboration and representing youth voices in regional and global dialogues.

By highlighting both region-specific and cross-cutting aspects of RCE activities, including youth leadership, this chapter offers a foundation for understanding how RCEs contribute to sustainable development at the regional level and how these efforts can be enhanced moving forward.



RCE Development in Africa and Middle East

Akpezi Ogbuigwe

Introduction

There are 39 RCEs across Africa serving as vital hubs for ESD. Through flagship projects, RCEs are linking action across local, regional and global scales, facilitating knowledge transfer and supporting the African Union's Agenda 2063. These self-organizing centres of learning empower communities to take responsibility for their future, often through non-formal education, volunteerism and the revival of Indigenous knowledge systems.

A significant milestone for the region, RCE Abu Dhabi was acknowledged in 2024 as the first RCE in the Middle East. Hosted by the local government's environment agency, this RCE aims to foster multi-stakeholder collaboration to tackle local sustainability challenges through education and capacity development.

The African RCE Story

Intergenerational and communal learning has always been part of the traditional society in Africa. From tales in the moonlight, neighborhood communal learning, age group training to formal education, it can be said that the African traditional society reflects the well-known axiom “it takes a village to raise a child.” This picture is a far cry from what we have today. Africa and the global community are at a crossroads, a statement that has been repeated by world leaders including the Secretary-General of the United Nations. Before us and at every turn are staggering issues of conflict, inequality, environmental degradation, climate change and other sustainable development challenges. The path forward has never been as doubtful as it is now. Holistic quality education, which includes ESD, has been advanced as a panacea to grow the kind of people who will be able to take responsibility for the future. The RCE mission in Africa has affirmed this hope; not only has it contributed to increased access to quality education at the community level, but it has also harnessed cultural learning spaces and Indigenous practices which hold keys to sustainable living.

As Taylor et al., 2023 observed, African RCEs exemplify how “citizens, educators, and scientists are seeking the wisdom of the past so that it may be linked to the wisdom of the present with the goal of more sustainable futures we so urgently need”. The successful RCEs in Africa draw on communication, coordination and collaboration with diverse partners to promote the integration of different forms of knowledge, community values and social learning to tackle community challenges and promote sustainable development in the context of the local community. In many of these RCE hubs, learning, research and actions are being coordinated in line with national priorities — a veritable picture of multi-stakeholder learning and action.

Strengthening Community Resilience

Restorative community action and knowledge co-creation remain prominent strategies. RCE South Rift planted over 50,000 seedlings, established environmental clubs in 30 schools, promoted eco-

stoves and led advocacy campaigns. RCE Minna has similarly advanced local tree-planting and education. Other impactful initiatives include engaging elders in intergenerational projects, with RCEs in Kenya, Malawi and southern Africa leveraging Indigenous knowledge in climate adaptation. RCE Kano's action research has tackled desertification and displacement, while RCE Minna's leadership during the Covid-19 pandemic emphasized the role of citizen science. These RCEs are more than educational platforms — they are vehicles for strengthening community resilience.

Partnerships with Governments, Academia and Global Stakeholders

Collaboration with policymakers has been a cornerstone of RCE success. In Eswatini, Kenya and Uganda, national environmental agencies such as the National Environment Management Authority (NEMA) work with universities and civil society to advance ESD. Such partnerships have helped align RCE initiatives with UNESCO's ESD for 2030 agenda. In Nigeria, RCEs have influenced national education strategies and contributed to country-level implementation of global frameworks as reflected in the UNESCO country initiatives.



9th African RCE Meeting, field visit (2019 in Luyengo, Eswatini).

Innovation in Curriculum and Youth Leadership

African RCEs are integrating ESD and SDGs into both formal and informal learning, including Technical and Vocational Education and Training (TVET) and teacher training programmes across 11 countries. Curricula address topics like wetlands, sustainability handprints and biomonitoring. Noteworthy initiatives include RCE Buea's Operation Green Sahel, RCE Minna's youth empowerment projects, RCE Kano's rural home gardens project and RCE KwaZulu-Natal's biomonitoring for water resources education. Other creative approaches, such as RCE Eswatini's plastic waste awareness campaign, RCE Lesotho's music-based well-being programmes and RCE Gauteng's emphasis on Indigenous knowledge and biodiversity, are also all testament to innovative local approaches to sustainability.

Youth ownership remains pivotal. RCE Makana's youth-led fieldwork and RCE Minna's leadership training and environmental career counselling are key examples. RCE Ogun hosted the 2023 Local Conference of Youth, producing a declaration on climate-smart systems. RCE Greater Yenagoa focuses on youth development through sports, education and scholarship. The first virtual youth conference (RCE Minna and RCE Grand Rapids, 2016) showcased the digital potential of ESD. Despite funding challenges, some RCE youth groups, such as in RCE South Rift, have succeeded through effective proposal writing.

Collaborative and Intergenerational Learning: Regional Meetings as Catalysts for Change

African RCEs are fostering intergenerational learning. Herbalist associations participate in climate and ESD projects, bridging tradition and innovation. This was very impactful at the 14th Regional Meeting in Eldoret, Kenya. The 11th RCE Regional Meeting, co-hosted by RCEs in Eswatini, Lesotho and South Africa, focused on Fostering Pan-African Collaboration for Just Futures. Projects like

Sustainable gardening with mushroom compost (RCE Abu Dhabi).



9th African RCE Meeting (2019 in Luyengo, Eswatini).

Handprints Care promote empathy, environmental action and shared responsibility. RCE Greater Masaka's Lake Victoria project demonstrates how regional collaboration and community-based research can co-create an impact.

The regional meetings have been instrumental in mobilizing stakeholders from higher education, the private sector, civil society and traditional knowledge systems. These gatherings foster partnerships, share solutions and strengthen the African response to SDG and Agenda 2063 targets. Over time, meeting themes have evolved from network building at the 5th Regional Meeting in Uganda in 2015 to the 13th Meeting focus on "just futures" held online in 2023, tackling issues from urban transformation to Indigenous knowledge and citizen science. Each conference builds momentum for a united Pan-African sustainability movement.

Way Forward

Africa does not yet have the future it wants, but RCEs are laying the foundation, one community at a time. The maturation of the African RCE network signals the need for long-term strategies, infrastructure investment and stronger integration with national and continental policy agendas. Supporting seeding grassroots initiatives could catalyze regional hubs and transboundary cooperation.

There is also a call for targeted engagement of university leaders, policy influencers and the private sector to deepen its impact. African RCEs must promote the establishment of new RCEs especially in francophone and lusophone countries, and invest in mentoring structures to expand capacity. The RCE model has proven its relevance. From climate action to youth empowerment, waste management to cultural heritage, these centres reflect Africa's creativity, resilience and potential. Local SDG localization could further ease citizen engagement and accountability.

In sum, RCEs across Africa are transforming the global narrative, community by community. Their gift to the continent, and the world, is a sustainable, inclusive and just future grounded in shared responsibility, resilience and respect for all life.

Key Messages

Everyone matters from elders to youth, and across disciplines and sectors. The Earth Charter's principles, respect, justice and peace, align with African values and the continent's scientific and indigenous legacy.

African RCEs must prioritize collaboration, human rights, transparency and inclusion. ESD should link academic knowledge with practical applications: from slum upgrading to affordable housing and environmental research. The journey of RCEs embodies the Zambian proverb: "When you run alone, you run fast; when you run together, you run far." Since 2005, the Global RCE Network — born with support from the Ministry of the Environment of Japan - has grown to 200 centres worldwide. Africa's 39 RCEs stand as beacons of ethical, community-driven change in a volatile and uncertain world.

Rooted in learning, growing a greener school (RCE Abu Dhabi).



**Opening poem by Akpezi Ogbuigwe at the 11th Africa RCE Regional Meeting:
IT'S TIME FOR AFRICA: Sustainability Futures
2 September 2021**

For most of our lives, planes traced intricate patterns across our skies
Ferrying passengers from holiday to boardroom
From meetings to mansions
Society chugged like the eternal locomotive
Ships and rigs dotted our oceans like a million rubber ducks in the tub of the world
Students entered schools and exited universities
From child to adult with scarcely a breath in between
We reveled in stadiums, bickered in markets, and flung our riches at shopping malls

And then there was silence
A wave of quiet swept the world
For the first time in many generations, we stopped to consider
And nature breathed a sigh of relief

In that quiet, Africa heard her own voice
The voice once lost in the clamour of external voices
Offering hurried solutions with colonial strings attached
The voice that rebounded off the walls of protectionist societies
Only in it for themselves
In the moment of silence that voice rings
Tremors of love rise up from the Earth
The rivers giggle to a tune of abundance
The mountains and meadows, flora and fauna
All join in this symphony of possibility
The wisdom of the ancients and the brilliance of the youth
Come together to weave a tapestry
The threads dyed red by war and those bleached by the tears of the poor
All woven together with respect and compassion
To create a new pattern, a new foundation
From which we can build a new garden of Africa

We chart a new path instead of laying new stone on old and broken roads
Learning from our mistakes and with respect for our soil
We find a new sustainable way
With peace, respect, creativity, and welfare of all
sustainable growth for sustainable futures
A path of trust, collaboration, and service to one and all
We as Africans will shape our land
And present our success as a gift to the world

Ring! Ring! Ring!
(From the other end a forceful voice queried)
"Yes please, who is speaking"
(The response was loud and clear)
Hello World. This is Africa.

RCE Development in the Americas

Roger Auguste Petry

Introduction

RCEs in the Americas experience a particular set of challenges in advancing sustainable development and ESD. Many countries, due to their size, linguistic and cultural diversity are federations with educational curricula set and administered by sub-national states and provinces. This is in contrast to national governments elsewhere that set educational standards and directly engage in UN sustainable development goal setting for countries as a whole. This means there is less direct financial and other support from national governments for enabling RCE work. There is also a much greater need and opportunity for RCEs to make local populations aware of the SDGs and introduce sustainability concepts to frame, articulate and address local issues of concern. Many communities have high levels of civic engagement, environmental awareness and histories of local and regional problem solving that RCEs are successfully mobilizing. The existence of long-standing republics and constitutional monarchies provide citizen freedoms that allow independent HEIs, strong not-for-profit sectors, diverse forms of business enterprises and local governments the ability to self-mobilize for regional sustainability issues.

Despite these strengths, the Americas is also a pressure cooker for sustainability issues. Ecologically sensitive areas are on the frontline of primary resource extraction, such as mining, oil and gas, with loss of wetlands and forests resulting from expanded agricultural production. This is further compounded by the ecological impacts of climate change and associated extreme weather ranging from prolonged drought to extensive flooding. In many cases, weak social and environmental laws and lack of regulatory enforcement create ideal conditions for local people, particularly those in Indigenous communities, to be adversely impacted by development. Growing wealth inequality and indebtedness, rising authoritarianism and weakening of public and private support for those in increasingly marginalized circumstances all undermine the aforementioned key capacities needed to build a sustainable future in the region. Facing these challenges, RCEs in the Americas are playing critical roles in mobilizing organizational partners and communities to pioneer appropriate and quality education needed for sustainable development in these challenging times.

Growth of RCEs

Despite the impacts of the pandemic, RCEs in the Americas now span 10 countries, ranging from RCE Cuenca del Plata in Argentina in the south to six RCEs in Canada. There are 30 acknowledged RCEs in the Americas. Some RCEs have now reached substantial milestones, with RCE Western Jalisco, RCE Curitiba-Parana, RCE Grand Rapids and RCE Saskatchewan continuing to thrive since their acknowledgement in 2007.

Recent additions reflect the network's ongoing dynamism and diversity: RCE Peterborough-Kawartha-Haliburton with strong leadership from its Indigenous community and local environmental non-profits; RCE Peel focused on the sustainable movement of people and goods in Ontario's industrial heartland; RCE Greater Phoenix innovating in ESD evaluation models and



Community Bike Ride, 2014 (RCE Western Jalisco).

capacity assessments, RCE Detroit-Windsor, a cross-border RCE with cities from the United States of America (USA) and Canada at its foundation (mirroring the earlier success of RCE Borderlands); RCE Hawaii having culture deeply embedded in its mission and structure (joining RCE Puerto Rico as an island RCE); and RCE Greater Cincinnati, focusing on marginalized communities and the organizations that serve them, such as urban schools.

The development of new RCEs, especially in North America, has benefited from the guidance of earlier RCEs, like RCE Greater Portland sharing its expertise and governance model. In 2023, RCEs supported new RCE development through a course collaboration with the American Association for Sustainability in Higher Education (AASHE). Entitled “Localizing the UN SDGs through Education, Training, and Regional Collaboration,” it involved six RCEs delivering five two-hour workshops from 21 February to 4 May 2023, each highlighting RCE activity on specific SDGs (AASHE, 2023).

Maturing and Integrated: The Americas Network

The America's RCE Network has steadily evolved into more integrated and coordinated community. Originally, regional meetings were occasional and sporadically hosted. Over time, however, these have matured into a regular cadence of Americas Regional Meetings, serving both to showcase project outcomes and to build shared strategies for the network. The first Americas Regional Meeting took place in 2008 hosted by RCE Saskatchewan (Canada), with subsequent hosts including RCE Montreal (Canada), RCE Curitiba-Paraná (Brazil) and RCE Lima-Callao (Peru). Early gatherings emphasized visibility and recognition, helping to situate the Americas as a growing presence within the global RCE community. By the mid-2010s, annual regional meetings became the norm, strategically alternating between North and Latin America to ensure inclusive participation. RCE Grand Rapids (USA) in 2015, RCE Western Jalisco (Mexico) in 2014, RCE Curitiba-Paraná (Brazil) in 2016 and RCE Cuenca del Plata (Argentina) in 2018 were particularly influential, each focusing on different themes: youth, sustainable cities, green culture, conservation and climate change.

The pandemic disrupted in-person gatherings but sparked innovation. RCE Salisbury hosted fully virtual RCE Regional Meetings in 2020 and 2021, which proved unexpectedly successful in broadening participation. Building on this experience, the Regional Meeting in 2024 was jointly hosted by three RCEs — Salisbury, Cuenca del Plata and Curitiba-Paraná — across two virtual

sessions. This approach combined thematic project sharing in June with collective governance and decision-making in September.

Collaboration and Joint Projects

Collaboration has become the defining strength of the RCE Americas network, and over the last decade it has matured into a dynamic platform for shared learning and collective impact. Thematic regional meetings have served not only as gatherings for dialogue but as catalysts that set shared agendas and stimulate cross-RCE partnerships.

In 2024, RCEs in the Americas were surveyed to gauge their engagement in the five Priority Action Areas of the ESD for 2030 framework (UNESCO, 2020), specific SDGs and the four strategic priority areas of the global RCE Roadmap (UNU-IAS, 2021). The results captured both the strengths and the gaps of the network. Perhaps most notably, 85 per cent of RCEs reported accelerating action at the local level, especially through community-led initiatives. Strong commitments were also reported in empowering and mobilizing youth and in building the capacity of educators, with 77 per cent, while nearly 70 per cent described themselves as active in transforming learning environments. When mapped against the SDGs, the clearest contributions clustered around goals on SDG 3, 4, 11 and 17. At the same time, the survey identified important opportunities for growth around SDGs 2, 5, 10 and 14 — covering zero hunger, gender equality, reduced inequalities and life below water.

Strategic inter-RCE collaboration has also occurred through joint projects. The collaboration between RCE Greater Burlington and RCE Puerto Rico in supporting small and medium-sized farms stands out as an example of directly linking education to community resilience in vulnerable agricultural systems (Vaughter et al. 2023). Most recently, the RCE Americas Network has consolidated its collective identity through the launch of a [website](#) and logo under the RCE Americas Network (RCEAN) brand in 2025. Furthermore, as of September 2025, a governance survey is underway to evaluate these structures and ensure that they respond effectively to the evolving needs of the network.

Tour of Agroforestry Experimental Farm, 2016 (RCE Curitiba-Parana).



Walking Tour of Vancouver, 2017 (RCE British Columbia).

Current Challenges

RCEs in the post-Covid world are increasingly fragile, with the impacts of the pandemic varying significantly across regions. A number of RCEs, especially in South and Central America, have been disrupted by substantial political and economic instability. Some RCEs have lost key organizational supporters, such as HEIs, NGOs and individual champions. For many RCEs, there is a need to restore operational capacity and renew engagement with stakeholders.

Way Forward

The RCE Americas Network has to be attentive to the diverse RCE experiences and structures in identifying opportunities for mutual collaboration and support. New RCEs require post-acknowledgement mentoring. More established RCEs are encouraged to expand their membership, often beyond one higher education organization or cluster of founding partners. There is a general need to formally integrate youth leadership and student engagement into RCE governance and operational structures, something being successfully championed by RCE Greater Atlanta through its Multi-Institutional Network Coordination Team (2023). By the RCE Americas Network gaining greater clarity on how to measure RCE success and describe RCE impacts, it can help individual RCEs position themselves as successful models for ESD in their respective regions. National governments and Pan-American organizations are only now becoming aware of the critical opportunity for the network to community-driven and grounded education for sustainable future.

Key Messages

Each challenge faced by RCEs in scaling their collaborative efforts at a regional level is, in fact, a distinct opportunity for innovation afforded by the RCE network. Other organizations, including universities, seeking to advance sustainable development across the Americas, have much to learn from the regional networking RCEs are currently pioneering.

RCE Development in Asia-Pacific

Munirah Ghazali and Eun-kyung Park

Introduction

RCEs in the Asia-Pacific region have been playing a crucial role in advancing sustainable development through education, collaboration and community engagement. Despite challenges such as climate change, educational inequality and the aftermath of the Covid-19 pandemic, RCEs continue to harness opportunities in ESD, digital learning, policy integration and youth-led initiatives. By linking education to real-world sustainability efforts, they contribute to building resilience and promoting long-term sustainability across the region.

Since 2005, the Asia-Pacific RCE network has expanded from five founding members to 82 acknowledged RCEs. This remarkable growth reflects the region's strong and sustained commitment to sustainability and education, and highlights the diverse and collaborative efforts of RCEs working towards a sustainable future.

Key Sustainability Themes

RCEs in Asia-Pacific focus on various approaches and key thematic areas. For example, these approaches include promoting ESD by integrating sustainability principles into school curricula, teacher training programmes and community-based learning initiatives. RCEs in the region tackle pressing issues, such as climate change and disaster risk reduction by supporting local adaptation measures and building community capacity. Biodiversity and environmental conservation are central priorities, with many RCEs engaged in protecting natural resources, restoring ecosystems and encouraging sustainable land management.

Alongside these efforts, RCEs contribute to water and food security by promoting sustainable agricultural practices and effective water resource management. These initiatives also empower young people through leadership programmes and sustainability projects, ensuring their active engagement in shaping their communities. Community resilience is strengthened by supporting local economies, preserving Indigenous knowledge and enhancing sustainable livelihoods. RCEs contribute to sustainable urban development by advancing eco-friendly infrastructure and smart urban planning. They play an advocacy role in promoting policy integration and governance for sustainability. Finally, RCEs utilize digital technologies and ICT tools to expand outreach and enhance access to sustainability education.

Regional Meetings and Collaborative Milestones

Since the first Asia-Pacific RCE Regional Meeting in 2008, following the Second Global RCE Conference hosted by RCE Penang in 2007, these annual gatherings have significantly shaped ESD priorities with each meeting having commenced discussion on collaborative inter-RCE initiatives. The Asia-Pacific RCEs focused on different themes. For example, the RCE Regional Meeting hosted by RCE Delhi in 2009 commenced discussion on collaborative inter-RCE initiatives. The Asia-Pacific



6th Japan RCE Youth Meeting (2024 in Yokohama, Japan).

Sejahtera Project was then proposed by RCE Tongyeong as a regional collaborative project that was deliberated and endorsed. This initiative led to the establishment of the Sejahtera Centre by RCE Tongyeong in 2015, which now serves as a regional hub to support ESD activities and foster cooperation among RCEs across the region.

The Regional Meeting that was initially planned to be hosted by RCE Yogyakarta in 2010 was postponed to January 2011 due to the volcanic eruption of Mount Merapi near Yogyakarta. Organized in conjunction with a national conference on ESD attended by the representatives from the Ministry of Education of Indonesia, Asia-Pacific RCE members were requested by the ministry to develop a draft local action plan on community-based ESD engagement, to which they responded by formulating a proposal. The Regional Meeting hosted by RCE Cha-am in November 2011 established thematic working groups on youth, biodiversity, schools, communities and disaster resilience.

Subsequent meetings covered topics such as disaster risk reduction hosted by RCE East Kalimantan (2012); women's empowerment by RCE Kitakyushu (2013); and a decade-long ESD reflection by RCE Penang (2014). In 2015, the Asia-Pacific RCE Coordinating Committee was formed to enhance regional collaboration during the Regional Meeting co-hosted by RCE Cebu and RCE Bohol. Meetings from 2016 onwards included topics such as biodiversity, policy integration and low-carbon education. The Meeting in 2017 hosted by RCE Delhi produced a publication *Multi-stakeholder Approaches to Education for Sustainable Development in Local Communities: Towards Achieving the Sustainable Development Goals in Asia* (UNESCO Office Bangkok and Regional Bureau for Education in Asia and the Pacific, 2020). The Regional Meetings in 2018 and 2019 hosted by RCE Greater Western Sydney and RCE Hangzhou, respectively, explored innovative knowledge-sharing formats and low-carbon education. Virtual meetings hosted by RCE Kyrgyzstan in 2020 and 2021 during the Covid-19 pandemic showcased adaptive local ESD initiatives. From 2022 to 2024, regional meetings hosted by RCEs Greater Gombak, RCE Tongyeong and RCE Kyrgyzstan emphasized local wisdom, sustainable communities and ESD expansion aligned with SDG 4.

Strengthening Regional Collaboration

Established in 2015, the Asia-Pacific RCE Coordinating Committee plays an advisory role in guiding inter-RCE activities and shaping Regional Meeting agendas. It works closely with the Global RCE Service Centre at UNU-IAS and Regional Advisors to support cross-country collaboration. Furthermore, countries like Japan and Republic of Korea have developed national coordination mechanisms. Japan holds annual RCE meetings that have also engaged youth in planning and organization, producing outcomes such as the publication *Sustainable Yokohama — A Guide by RCE Youth Members* (RCE Yokohama Youth Group, 2024). In the Republic of Korea, RCE Tongyeong has coordinated national RCE meetings, bringing together seven RCEs, aiding the new development of RCE Sejong and revitalizing RCE Incheon.

Collaborative Projects

Asia-Pacific RCEs have carried out joint projects to strengthen knowledge-sharing and capacity-building. In 2018, the ICT-Enabled In-Service Training of Teachers to Address Education for Sustainability (ICTeEfS) project, under the leadership of Frederick University, brought together RCE Penang, RCE Yogyakarta, RCE Southern Vietnam and RCE Crete. Funded by Erasmus Asia+ project, it trained over 700 teachers and reached more than 2,000 students (see Chapter 3). Furthermore, the Asian Teacher Educators for Climate Change Education (ATECCE) Network was launched in 2020, with the cooperation of UNESCO Bangkok, UNESCO Beijing and Asia-Pacific Cultural Centre for UNESCO (ACCU). The network has been facilitating collaboration between 20 Teacher Education Institutions (TEIs) in 11 Asian countries and has resulted in the creation of the Asian Framework of Teacher Education for Climate Action (Okayama University ESD Promotion Centre, 2024).

Youth Leadership and Engagement

Youth empowerment is a core pillar of Asia-Pacific RCEs' efforts. The Global ESD Youth Project Neuru, led by RCE Dobong-gu, connected youth from 10 countries virtually to enhance ecological literacy and leadership. RCE Tongyeong's Bridge to the World initiative has supported over 1,000 youth in addressing sustainability challenges. From 2018 to 2022, the RCE SDG Youth Challenge, led by RCE Greater Western Sydney and RCE Yogyakarta, involved youth in SDG projects and reached over 500,000 participants globally. The Youth Unite for Voluntary Action (YUVA) Meet, conducted

6th Japan RCE Youth Meeting (2024 in Yokohama, Japan).



School children discussion on mangrove reforestation project (RCE Penang).

from 2009 to 2015 and organized by The Energy and Resources Institute (TERI) and RCE Delhi, connected young leaders to global sustainability networks, fostering long-term engagement. These initiatives ensure that young people are equipped to lead the region toward a more sustainable future.

Way Forward

The Asia-Pacific RCE Network has made significant achievements in capacity building, bridging formal and non-formal education, contributing to curriculum development and serving as a local platform for dialogue and collaboration. RCEs in the region have also played an important role in influencing policymaking and promoting ESD at multiple levels. However, the sustainability of RCEs remains a challenge, as many initiatives lack institutionalized structures.

To ensure long-term impact, RCEs must work towards greater institutionalization of their activities, reducing dependency on individual champions and strengthening governance frameworks. A key priority should be increasing engagement with governments and policymakers, as many still lack awareness of the potential of RCEs in driving sustainability efforts. Additionally, fostering wider stakeholder involvement and enhancing cross-sector collaboration will be critical for expanding the reach and effectiveness of RCE initiatives. Addressing financial constraints through diversified funding sources, strategic partnerships and more substantial policy support will be essential for sustaining and scaling RCE activities across the region. By focusing on these areas, RCEs in Asia-Pacific can continue to enhance their impact in advancing sustainable development towards 2030 and beyond.

Key Messages

To advance RCE initiatives and ESD, it is essential to strengthen regional collaboration, empower youth leadership and integrate sustainability into education with a focus on climate resilience, policy support, community engagement and digital learning. Promoting local actions, sustainable livelihoods and continuous RCE growth will drive impactful, inclusive and long-term sustainability across the Asia-Pacific region.

RCE Development in Europe

Betsy King

Introduction

The European continent is acknowledged to face persistent challenges in its pursuit of sustainable development, particularly in areas such as biodiversity decline, habitat destruction, the impacts of climate change, unsustainable resource consumption and waste generation, and pollution risking health and well-being. Overall, Europe continues to consume more resources and contribute more to environmental degradation than other world regions (European Environment Agency, 2019). Within the region there are also recognized disparities in economic development and access to resources, and social inequalities hindering the pace of progress towards the achievement of the SDGs in many countries (Lafortune, G. & Fuller, G., 2025). Differences between and within countries have been exacerbated by the global Covid-19 pandemic and the ongoing impacts of conflict and wars in Europe and beyond. In responding to these challenges, there is a recognition of the opportunities offered by the transition to a low carbon, resource efficient economy creating new jobs and economic opportunities (Europe Commission, n.d.), while supporting an inclusive and sustainable future.

At a transnational level, education has long been recognized as playing a crucial role in addressing sustainability challenges in Europe, addressing international and national sustainable development priorities. Key policies and frameworks for action and cooperation are in place, for example from the European Union and the United Nations Economic Commission for Europe. However, European education systems are diverse; each country is primarily responsible for its own education policies, and some educational policies and curricula are developed and administered by subnational regions.

RCEs in Europe play a key role in mobilizing partnerships and networks within their local contexts, addressing community-specific sustainability challenges and co-developing appropriate solutions. As multi-stakeholder partnerships operating within diverse cultural, social and political settings, they are well positioned to promote transformative, locally relevant quality learning across all levels of formal, informal and non-formal education.

A Growing European Network

There has been a steady growth in the number of acknowledged RCEs throughout Europe. As of July 2025, there are 48 acknowledged RCEs in 22 countries, ranging from RCE Nizhny Novgorod in the east to RCE Dublin and RCE Porto in the west, and from RCE Helsinki Metropolitan (formerly Espoo) in the north to RCE Crete in the south. Across Europe, RCE regions vary greatly in their size and nature. Several serve whole constituent countries, such as RCE Wales and RCE Scotland within the United Kingdom and RCE Basque Country-Navarre, acknowledged in 2023, which spans two countries (France and Spain). Many RCEs have continued to thrive since their acknowledgement in the initial phase of RCEs from 2005 to 2010, such as the RCEs in East Midlands, Hamburg, London, Munich, Nizhny-Novgorod, Oldenburger-Münsterland, Porto Metropolitan Area and Severn.



School for Sustainable Living (RCE Czechia).

However, some RCEs have struggled to maintain their active operation due to leadership changes, funding constraints or revised organizational priorities. Ongoing mobilization, coordination and collective sharing and learning with regional partners continue to be led by a pan-sectoral range of inspired champions mainly from universities, local governments and non-government organizations.

Strengthening Quality Education at All Levels Through Innovation

The European RCE network consists of many grassroots multi-stakeholder networks, with distinctive capacities for research and innovation that aim to transform education at all levels through innovative projects and programmes. The network collectively strive to transform education systems through context-specific, creative projects that address both globally relevant and regional unique challenges, including climate change, biodiversity loss, circular economy, food and agriculture, and inequalities. For example, RCE Czechia worked with NGOs, policy makers and educators to co-create a sustainable consumption and production toolkit for educators (UNU-IAS 2023). RCE Scotland, in alliance with education agencies and teacher education institutions (TEIs), co-created Scotland's National Framework to support the embedding of ESD in teacher training. RCE Severn's Changemakers programme, involving local businesses and academia, supported secondary school students to take positive sustainability action into their future careers.

Elsewhere, RCE Vienna's Sustainability Challenge and RCE Fryslân's "Circular Economy Hackathon" have brought together students, teachers and businesses to create innovative solutions for local challenges. RCE Stettiner Haff's partners in business, academia, civil society and politics used a real-world laboratory approach to practical ecosystem restoration, directly engaging individuals in situated learning experiences with a focus on the agricultural and food system. RCE Warsaw Metropolitan took a similar approach, engaging with local people and their communities in national parks to support biodiversity conservation (UNU-IAS, 2022). RCE Ruhr's innovative Sevensgardens initiative creates sustainable natural dyes for people of all ages. The programme links art, creativity and sustainability and now has partners all over the world.

Connecting Across Regions

Mobilizing and supporting inter-institutional ESD networks are a strong focus for many European RCEs. RCE Munich's digital learning platform, for example, connects sustainable institutions, stakeholders and learning locations across the city. RCE Basque Country-Navarre, has developed Factoria 4.7, a digital portal providing access to quality ESD pedagogical tools. This initiative has extended to involve diverse partners in Latin America. RCE Hamburg coordinates events such

as the national Research Colloquia on Sustainability and the World Symposia on Sustainable Development at universities.

Connections between regions have led to effective ESD action-research collaborations, often funded through European programmes such as Erasmus and Horizon, and resulting in important knowledge exchange and action. The ESD Supervision 4.0, for example, involved RCEs Oldenburger-Münsterland, RCE Vilnius, RCE Czechia and RCE Scotland in developing the Curriculum Framework for School Development in Europe. RCE London, working as a member of the Come and Meet (COMMEET) initiative and with RCEs in Africa and Asia-Pacific regions, developed community toolkits Promoting the Wellbeing of Migrants and Displaced People, and Climate Action (COMMEET, 2020). The connections between RCEs across Europe resulted in the initiation of a special issue of the journal *Frontiers in Sustainability*, “The Role of the Human Dimension in Promoting Education for Sustainable Development at the Regional Level” (Dlouhá et al., 2023).

Fostering Collaboration and Communication

Regular connection and collaboration at annual European RCE meetings have been an important feature of the development of the RCE community in Europe, fostering learning and collaboration around specific thematic issues. Well-attended, in-person meetings were hosted before the Covid-19 pandemic by RCE London (2016); RCE Ruhr, RCE Oldenburger Münsterland and RCE Denmark (2017); RCE Brittany (2018); and RCE Crete (2019). The meetings became platforms for the sharing of projects, challenges and opportunities, as well as the creation of strong ongoing personal connections and joint programmes. RCE East Midlands hosted the first innovative online replication of these meetings as a response to Covid-19 in 2020, in a two-day meeting entitled Climate Emergency, Joined-up Action. This was followed in 2021 by RCE Fryslân’s inspiring Imaginative Power of the Region online meeting. RCE Scotland hosted the 12th Global RCE Conference and two associated preparatory online global webinars in 2020 and 2021. These online meetings not only effectively involved larger numbers of participants and RCEs, but also reduced the use of carbon resources.

However, European RCEs requested a follow-on, in-person meeting in Fryslân in October 2022, entitled Greater than the Sum of the Parts, to allow deeper conversations and the consideration

Boosting multi-stakeholder learning in the region (RCE Fryslân).



of common issues. Engaging young people structurally and equally in RCEs and the development of subnetworks in Europe such as the Atlantic Arc of RCEs emerged as priorities as well as demonstrating RCE solidarity, in the face of many interdependent local, regional and global challenges. The following Regional Meetings have been jointly hosted: in 2023, an online meeting by RCE Basque Country-Navarre and RCE Fryslân, and in 2024 an in-person meeting by RCE Ruhr in collaboration with RCE Oldenburger Münsterland, RCE Basque Country-Navarre and RCE Scotland. The appointment of joint European RYCs, for RCE Fryslân and Ruhr (2022–2024) and for RCE Fryslân and Scotland (2024–2025), has strengthened numbers of RCEs across the region that have active Youth Coordinators. Relishing the opportunity to connect more regularly, monthly online Connect sessions have been held since March 2024, each hosted by a different RCE with support from volunteer communicators from RCE Scotland and RCE Oldenburger Münsterland. Strategic working groups, focusing on partnerships, communication, events, research and funding, and youth, now provide monthly updates, strengthening collective capacity and cohesion.

Current Challenges

Post-pandemic, at a time of continuing global and local economic, social and political uncertainty, the work of RCEs is vital. Some European RCEs have been severely disrupted by national conflict and political changes. For others, financial constraints and changes in organizational priorities have resulted in the loss of key individuals in host and partner organizations. Local governments, NGOs and universities are particularly under pressure, with scarce resources resulting in short-term funding and some RCEs continuing on a reduced or voluntary basis. Faced with these challenges, some RCEs have temporarily prioritized local initiatives rather than engaging in collaboration at the regional or global level.

Way Forward

In Europe and an interconnected world that is rapidly changing, harnessing the power of partnerships developed through RCEs, and demonstrating their successful impact on place-based strategic thinking and local action on sustainability issues is key. Successful initiatives have demonstrated the potential to strengthen partnerships between European RCEs and stimulate further opportunities to collaborate with other networks and regions globally to drive sustainable development towards 2030 and beyond.

The European network of RCEs has long recognized the need for a dedicated European resource to support partnership development, communication, knowledge-sharing, monitoring, mentoring, capacity building, policy linkages and access to funding. Increased online collaboration in strategic working groups offers the potential for European RCEs to collectively identify viable structural options and sources of professional and financial support for such central coordination in the future. Any developments must crucially involve young people in the decision-making processes, through the ongoing work of European RYCs for the RCE community.

Key Messages

The European RCE network is a learning community where place-based innovation and creativity inspire education and learning resulting in positive action towards a sustainable future. Further collective activity, demonstrating the network’s partnership achievements to local, national and regional governments and international organizations, will advance our important contribution to a sustainable Europe and world.

Youth Engagement and Leadership

Ahmad Ali Karim, Alyson MacKay, Aukje Sina Zijlstra, Evance Ouya, Héctor J. Esparra-Escalera, Janu Muhammad, Md. Nazmul Islam, Oriana Silva, Woojin Lee

Introduction

Youth engagement is a major driver of achieving the SDGs as young people contribute to creative and innovative ideas, dynamic energy and long-term solutions in addressing global challenges. Within the RCEs, youth initiatives are essential in advancing ESD at all levels. To enhance youth representation, RYCs to the RCE community aim to amplify youth voices in regional and global dialogues, strengthen communication, integrate diverse perspectives into policy and action, unify fragmented efforts and promote an inclusive platform for leadership and development.

RYCs serve as the liaison between local, regional and global RCE networks, supporting capacity-building efforts, sharing progress and aligning initiatives on behalf of sustainability across the globe. Through quality education, mentorship and strategic coordination, RYCs empower young leaders to reinforce local impact and global integration within the RCE network. Their leadership ensures continuity, fosters innovation and inclusiveness in regional and global efforts — advancing a more sustainable and equitable future.

RCE Youth in Action: Regional Highlights

Africa: Since 2023, the RCEs in Africa have continued to champion transformative youth-led environmental and social initiatives across the continent. Notable achievements include the advancement of projects in Kenyan RCEs — RCE South Rift, RCE Greater Nairobi and RCE North Rift — through various climate action initiatives, aimed at reversing land degradation. In Nigeria, the Sustainable Initiative for Responsible Adulthood (TSIRA) under RCE Minna is a notable effort that reorients vulnerable youth through skills training and mentorship, promoting social reintegration and economic empowerment. It stands as one of the few achievements that are largely, if not entirely, youth-led. During the 2025–2026 term, the RCE RYC plans to expand these achievements by supporting inter-RCE knowledge exchanges, mentoring emerging youth leaders and launching community-driven restoration projects.

A major highlight will be the 2025 RCE Youth Leaders Forum, envisioned as a pivotal platform to ignite cross-RCE collaboration and the formation of new regional projects addressing different SDGs, ESD and youth empowerment, aiming to cultivate and create an oasis of partnerships and scaling youth innovation. The goal is to build a stronger, interconnected network of young African leaders tackling pressing social challenges with creativity, commitment and local relevance.

The Americas: Since 2023, the Americas RCE Youth Community has been creating a space where youth and professionals can connect and engage with global issues. Their primary goal is to



A successful meeting discussion of Asia-Pacific youth with Chinese youth leaders at UCSI University (2023 in Kuala Lumpur, Malaysia).

advocate for intersectionality in sustainability efforts by highlighting local community actions, incentivizing environmental sustainability development, and enabling youth engagement in decision-making. The first regional youth-led workshop, held during the September 2023 Regional Meeting, showcased diverse youth initiatives across the Americas and incorporated a survey evaluating how these projects align with the SDGs.

Additionally, the nomination process for two RYCs from North America and Central/South America has been adjusted to overcome language barriers and promote more inclusive youth leadership. For the current term (2025–2026), the RYCs seek to continue strengthening interregional collaboration with youth-led initiatives, expand our outreach to local communities and establish a mentorship programme connecting experienced sustainability leaders with emerging youth advocates. The goal is to foster stronger partnerships with academic institutions and non-profit organizations to amplify their voices in policy dialogue.

Asia-Pacific: Youth engagement has been marked by a series of capacity-building programmes designed to equip young leaders with the skills and knowledge needed to achieve the SDGs and promote sustainability. Since 2023, RCE youth has organized the Youth Empowerment Workshops, Leadership Development Programmes, Youth Capacity Building Seminars, and Regional Youth Development Programmes. One of the RYCs also published a roadmap article titled [Youth Engagement for Environmental Sustainability: Strategies, Approaches, and Actions](#) aiming to empower youth to take an active role in achieving environmental sustainability.

Looking ahead to 2025–2026 term, the Asia-Pacific RCE Youth Coordinators plans to launch the Asia-Pacific RCE Youth Bulletin, a regional newsletter that collects and shares youth-led stories, actions and reflections from various RCEs. Building on this foundation, a monthly webinar series will be set up which will provide young people with opportunities to present their work, exchange insights and build meaningful connections. Ultimately, the inter-RCE youth network will be strengthened to enable collective action and impactful initiatives by 2026.

Europe: Since 2023, the European RYCs have focused on strengthening youth communities by reaching out to RCEs, motivating them to involve youth in their decision-making processes, and calling for the appointment of a local youth coordinator in each RCE. This has led to an increase in the number of Youth Coordinators across the region and has laid a foundation for communicating, sharing initiatives and meeting regularly through quarterly meetings. This increased connection among the youth in RCEs has allowed for collaboration across countries and easier sharing of resources and experience, allowing the youth coordinators to learn from each other and increase their skill sets.

In March 2025, these quarterly youth meetings kicked off and will continue with the commitment of fostering fruitful collaborations and starting projects with RCEs and other ESD organizations. In addition to youth community building, the European RYCs have actively participated in the annual Regional RCE Meetings and the RCE Monthly Meetings (online) in Europe. The aim is for more youth participants at these events, increasing their engagement and seats filled with younger voices around the decision-making table, with the hope of a stronger sense of climate communities across Europe.

Capacity-building session for Korean youth (2023 in Tongyeong, Republic of Korea).



RCE Youth Empowerment Workshop organized by Asia-Pacific Youth at the International Islamic University Malaysia (2023 in Kuala Lumpur, Malaysia).

Global Momentum: Youth Driving Sustainability Forward

The RYCs marked a vital step toward intergenerational and inclusive governance in representing youth within the RCE network. During the foundational years (2023–2024), efforts focused on building team structures and initiating collaborations with quarterly meetings organized by UNU-IAS, ensuring continuity and coordination. In August 2023, RYCs co-organized the International Youth Day webinar, [Igniting Changes for a Sustainable World: Embracing Intersectionality in Sustainability and Local Community Actions](#), highlighting intersectionality in sustainability practices.

In April 2024, they contributed to the ECOSOC forum, [From Ideas to Action: RCE Youth Projects on Multi-stakeholder Partnership](#), voicing youth priorities in global sustainability dialogues. A milestone was achieved in December 2023 at the 13th Global RCE Meeting and 18th Ubuntu Committee of Peers in Kuala Lumpur, Malaysia, where RYCs were formally recognized as official members. Based on their recommendations, the RCE Awards introduced a youth-led project category, with RCEs joining the jury and contributing to the assessment.

In August 2024, RYCs co-led another global webinar, [Youth at the Digital Forefront and Sustainability](#), exploring how youth leverage digital innovation for sustainable transformation. Its insights shaped the planning of training activities under the Action-Oriented Pedagogies for ESD initiatives, including youth-specific content and formats tailored for engagement.

As of 2025, with a mix of returning and new RYCs, the focus has shifted toward deepening impact and expanding representation. Building on prior lessons, RYCs have set shared goals aimed at amplifying youth-led initiatives through global dialogues, training and partnerships with other youth organizations. The continued efforts of RYCs will be visible at the 14th Global RCE Conference, reinforcing their commitment to empowering youth in shaping the global sustainability agenda.

Voices of Change: Youth Shaping a Sustainable Future

Sustainability is making the world better for everyone today, without compromising future generations. Therefore, youth play a pivotal role in ensuring a sustainable future. I look forward to working with my peers across the world in fostering intersocietal and interdisciplinary collaboration to benefit all communities across the world.

By Ahmad Ali Karim

I view my role as helping to uplift and empower youth who are often left out of important social movements, such as those with lower incomes or disabilities. We can only achieve a just and sustainable society if we include all members of society.

By Alyson MacKay

It brings me hope to be able to highlight projects and youth involved in ESD, learning from and with each other by sharing knowledge and tools. With my transdisciplinary focus on social safety, I hope to plant seeds of peace and sustainability through education.

By Aukje Sina Zijlstra

I champion community-led conservation, youth empowerment and education to build a sustainable society. I value collaboration, integrity and environmental stewardship. Key to shaping a sustainable future is inclusivity, resilience and fostering local ownership of nature-based solutions for lasting impact, especially through using local solutions to create global positive change.

By Evance Ouya

I strongly advocate for promoting innovative, education-led and impact-driven solutions to societal and environmental challenges, aiming to empower future leaders to embrace the responsibility of preserving our natural resources and fostering a more sustainable and equitable world for everyone.

By Héctor J. Esparra-Escalera



Americas Youth-Led Workshop at the Americas Regional Meeting (2023 in Atlanta, USA).

In the past five years, I have initiated a sustainable agriculture training programme for young farmers in Indonesia. Attended by more than 65,000 participants, we collaborated with various stakeholders. From this initiative, I believe that young people have an important role in creating a better future, and it starts today.

By Janu Muhammad

I strive to build a more sustainable society by providing a space for students to promote science-based climate action, equity and sustainable education throughout academic writing. I deeply believe that interdisciplinary collaboration and inclusive leadership are essential to craft a more sustainable future for all.

By Oriana Silva

I was once a curious student, now guiding youth as they explore their questions. I value empathy, shared learning and community-rooted action. A sustainable future must include youth voices — brave enough to ask “What can we change?”, and grounded enough to act where they are, together.

By Woojin Lee

3 RCE Contributions to ESD for 2030 Priority Action Areas: 10 Cases

Anupam Khajuria and Miki Konishi

Introduction

The ESD for 2030 Framework serves as the global framework guiding the implementation of ESD from 2020 to 2030. Building upon the foundational vision of the United Nations Decade of Education for Sustainable Development (UN-DESD) (2005–2014), and the Global Action Programme on Education for Sustainable Development (GAP) (2015–2019), this framework recognizes the critical role of ESD in accelerating progress towards the 2030 Agenda and the SDGs. The framework aims to review the purposes and values that underpin education, and reorient all levels of education and learning to contribute to sustainable development and to strengthen education and learning in all activities that promote ESD (UNESCO, 2020). To realize this aim, the framework identifies five Priority Action Areas: advancing policy, transforming learning environments, building the capacities of educators, empowering and mobilizing youth, and accelerating local level actions.

Across the world, RCEs have been instrumental in advancing ESD for 2030 through innovative and locally relevant initiatives. Projects and initiatives conducted by RCEs address specific community needs while contributing to global sustainability goals.

This chapter highlights two illustrative cases per Priority Action Area, providing a focused lens on how RCEs translate the framework into concrete actions. Each case summarizes the rationale, actions, results and lessons learned. Together, these 10 cases reflect the diverse strategies mobilized by RCEs globally and demonstrate the transformative potential of ESD when grounded in context and collaboration. While each project is presented within one Priority Action Area, many contribute to multiple areas, showing their cross-cutting nature. This interconnectedness illustrates the holistic approach of ESD in practice and the diverse ways in which RCEs empower individuals, communities and societies to drive change towards a sustainable future.



Priority Action Area 1: Advancing Policy

Effective policies are essential for embedding ESD into systems, ensuring continuity and legitimacy beyond individual initiatives. Advancing policy involves not only drafting strategies but also creating enabling structures, governance frameworks and resources that translate ESD visions into action.

RCEs, through their diverse approaches, have influenced curriculum reform, teacher standards, local legislation and collaborative policymaking. Two illustrative cases highlight complementary approaches to institutionalizing ESD: (1) a system-wide reform embedding ESD into national standards, and (2) a community-driven innovation scaling upward into municipal and national policy frameworks.

RCE Scotland in the United Kingdom exemplifies the first approach having played a significant role in influencing national education policy by integrating Learning for Sustainability (Lfs) as both a learner entitlement for all learners aged 3–18 and as a requirement for teacher standards. This approach supports the implementation of ESD across the education system. In contrast, **RCE Dobong-gu** in the Republic of Korea exemplifies the second approach, and has developed a community-driven, bottom-up approach to ESD policymaking and implementation through its e-Wiki platform. By engaging in government, academia, businesses and citizens, this initiative has co-created local curricula and shaped municipal policy. The success of this model has led to its replication in other Seoul districts and recognized nationally, demonstrating how bottom-up initiatives can scale into wider policy frameworks.

Box 1. Advocating for Learning for Sustainability in Scotland (RCE Scotland)



Why: While Scotland had long engaged with sustainable development education, fragmented initiatives meant that learners' experiences and teachers' responsibilities varied widely. A coherent national framework was needed to make ESD a core entitlement across the 3–18 education system, embedded in both curriculum and teacher professional standards, and to scale activity consistently across all education settings.

What: Beginning in 2012, RCE Scotland worked in close collaboration with the Scottish Government as part of its Lfs policy committee and subsequent leadership groups. Together they developed the One Planet Schools (2013) and Vision 2030+ (2016) reports, both pivotal steps that made Lfs a learner entitlement and embedded it in the mandatory Professional Standards for Teachers. RCE Scotland continues to support national implementation through co-creation of action plans, partnerships with Scottish Government and key educational bodies, and contributions to ongoing curriculum reform processes. Its role has included serving as a voice for local partners in national government-led working groups, supporting professional learning opportunities and connecting educators through cross-sectoral dialogues.

Results: Today, Lfs is an entitlement for over 793,000 learners in Scotland and a mandatory professional standard for all 58,000 registered teachers. Every school is expected to adopt a whole-school approach to Lfs, woven across the key areas of Culture (relationships, policies and leadership), Curriculum, Campus (physical learning environment, procurement) and Community (local, national and international relationships beyond the setting itself). RCE Scotland's continuous engagement has provided direct professional learning for educators and contributed to raising awareness at scale, impacting policy planning in many of Scotland's 32 local authorities. Its credibility has been acknowledged by Education Scotland, which references RCE Scotland as a key partner in ESD policymaking.



Learning for Sustainability (Lfs), by the numbers.

The four Cs

Culture

Curriculum

Campus

Community

Lfs is woven across the key areas that are the four Cs.



Learning for Sustainability (LfS), at a glance.

Lessons:

- Sustained advocacy over more than a decade shows that mainstreaming ESD requires persistence, strategic partnerships and long-term investment and commitment.
- Embedding ESD as both a learner entitlement and a teacher requirement ensures systemic integration and accountability across the education system.
- Research evidence and expert networks are crucial in influencing and sustaining policy reforms.
- Policy engagement must remain flexible; adapting systemic changes such as curriculum reviews to keep ESD priorities visible.

Authors: Betsy King and Kirsten Leask (RCE Scotland)

Further information: [Learning for Sustainability Scotland](#)

Box 2. Creation of ESD Textbooks and Operation of Dobong e-Wiki (RCE Dobong-gu)

Why: Although Dobong-gu (Dobong District) has strong environmental assets such as Dobongsan and Bukhansan mountains and a lifelong learning infrastructure, there has been a gap in locally tailored, practice-oriented ESD materials. Existing resources were often generic and lacked meaningful reflection of the district's cultural, ecological and social context. In addition, there was also no structured platform for sharing ESD and SDG resources across stakeholders. Addressing these gaps was vital for anchoring ESD in schools and embedding ESD principles into local governance and everyday community life.

What: RCE Dobong-gu developed customized ESD textbooks through public-private-academic collaboration, integrating local cultural and environmental contexts. In parallel, the Dobong e-Wiki online platform was launched as a community-managed knowledge hub, enabling public officials, teachers, citizens and students to upload, share and curate information collaboratively. Training workshops built local capacity to update the platform, while ongoing reviews by the Dobong ESD Sustaining Alliance ensured quality control.



ESD textbooks reviewed by subject matter experts.



Dr. Bae Hyunsoon

Through a collaborative process, RCE Dobong-gu developed ESD textbooks that are practical, contextualized and engaging.



Dr. Bae Hyunsoon

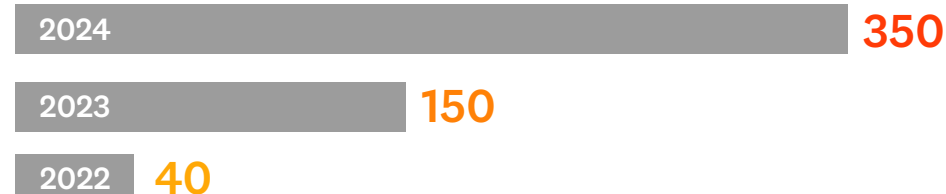
First edition of ESD textbooks.

Results: By 2024, over 12,800 students had used the textbooks, a fourfold increase since 2021. The number of instructor dispatches also surged from 166 (2021) to 2,080 (2024), demonstrating the scalability of the project. The Dobong e-Wiki grew into a recognized model for participatory policymaking and information-sharing, inspiring replication in other Seoul districts. At the national level, the collaborative framework earned recognition at the 26th Sustainable Development Conference Competition. Importantly, the initiative showcased how decentralized, community-driven engagement can directly influence formal education and policymaking.

Year	Elementary school	Middle school / Institution	Number of Students (People)	Dispatch of Instructors (Times)	Remarks
2021	10	1 school, 1 institution	3,017	166	Pilot Programme for Middle Schools
2022	14	2 schools	2,952	438	Pilot Programme for Grade 1-2
2023	13	3 schools	3,640	726	-
2024	10	2 schools	3,228	750	-
Total	47	8 / 1	12,837	2,080	-

ESD Class Support Performance in Elementary and Middle Schools within the District, 2021-2024.

Number of Information Entries on Dobong e-Wiki



Dobong e-Wiki Utilization Performance, 2023-2024.

Lessons:

- Locally owned and community-managed platforms foster inclusivity and transparency in policy implementation.
- Locally tailored content increases relevance and uptake of ESD in schools.
- The Dobong-gu case demonstrates that, even with limited funding, sustainable ESD is achievable through collaboration, digital innovation and community engagement.
- Sustaining participation requires constant network-building and resource mobilization, including volunteer and expert networks.

Author: Bae Hyun Soon (RCE Dobong-gu)

Further Information: [Dobong Sustainable Development Website](#) (in Korean)

Priority Action Area 2: Transforming Learning Environments

Transforming learning environments entails reimagining educational spaces — physical, social and institutional — so that learners are actively engaged with the world around them rather than passively consuming abstract knowledge.

RCEs worldwide are pioneering this shift by embedding education within communities and connecting learners with the places where they live, work and act. They are demonstrating how schools, universities and non-formal education settings can become living laboratories for sustainability. By bridging classrooms with real-world challenges, RCEs foster a culture of shared responsibility, inclusivity and innovation that prepares learners to act meaningfully in their local contexts. Two distinct approaches demonstrate how RCEs reshape the relationship between schools, HEIs and their communities.

RCE Greater Burlington in the USA has reshaped secondary education through a project called Burlington City & Lake (BCL) Semester, where high school students use the city itself as both classroom and curriculum. This immersive, place-based approach encourages collaboration across diverse student groups, nurtures systems thinking and empowers young people as active citizens engaged in addressing pressing local issues. Meanwhile, **RCE Vienna** in Austria has leveraged the power of universities to break down disciplinary silos through its Sustainability Challenge initiative. By linking seven universities and more than 100 external partners, the programme has reconfigured HEIs as agents of societal change. Students participate in interdisciplinary sustainability projects through service-learning with communities or by developing start-ups, gaining real-world competencies while building a culture of academic responsiveness to global challenges.

Box 3. Burlington City & Lake Semester (RCE Greater Burlington)

Why: Traditional classroom models in Burlington often left students detached from the vibrant social and ecological life of their city. Recognizing this disconnect, a 2017 community visioning process involving teachers, students, alumni and local partners revealed the need for more flexible and authentic pathways to graduation. The challenge was to empower young people as active community members while reducing barriers to inclusive participation across socioeconomic and linguistic backgrounds.

What: In response, the Burlington City & Lake Semester (BCL) was launched in 2018. Operated by RCE Greater Burlington, the programme transforms the city into both classroom and curriculum. Each semester, diverse groups of high school students earn academic credit through place-based and experiential learning. Students study Burlington's systems,

transportation, housing, energy and water, while working alongside up to 50 community partners. Projects have ranged from designing climate resilience initiatives to consulting on park planning and addressing urban social challenges. Creativity is integral, with each cohort partnering with an artist-in-residence. Beyond high school, BCL is complemented by a pipeline of connected initiatives including middle school SDG curricula, university-level certificates and teacher fellowships.



Students restore turtle habitat on the shores of Lake Champlain.



Consulting with city officials on parks and open spaces.

Results: Since 2018, more than 276 students have graduated from BCL, representing the full diversity of Burlington's public high school population. Nearly 30 per cent are from non-English-speaking households, highlighting the inclusivity of the programme. Student projects have brought together actors from nine city departments and multiple sectors to deliberate on contested land use, homelessness and public safety. Teachers and administrators now draw on BCL as a professional learning model. Its influence extends statewide, aligning with Vermont's Act 77 on flexible graduation pathways, and nationally, through publications and visiting educators.

Lessons:

- BCL demonstrates that transforming learning requires strong partnerships at institutional, community and personal levels.
- A place-based approach turns abstract sustainability issues into immediate, lived experiences for students.
- The challenge remains in reconciling its innovative pedagogy with conventional school systems, but its continued growth shows the potential for student-centered, experiential models to catalyze systemic educational change.

Author: Dov Stucker (RCE Burlington)

Further Information: [Burlington City & Lake Semester](#)

Box 4. Sustainability Challenge (RCE Vienna)

Why: Austrian higher education historically emphasized disciplinary boundaries, limiting student exposure to real-world sustainability challenges. As global crises intensified, universities faced pressure to fulfill the “third mission” of engaging society beyond teaching and research. RCE Vienna recognized that empowering students as change agents required learning environments that combined interdisciplinary collaboration, practice-oriented projects and broad stakeholder engagement.

What: Launched in 2010, the Sustainability Challenge began as a one-semester course with four universities but has since grown into a two-semester, multidisciplinary programme across seven institutions. It operates in two tracks: 1) a service-learning track, where student teams partner with NGOs, public agencies and businesses to address sustainability challenges; and 2) a start-up track, where students design and launch sustainable ventures. The programme intentionally integrates theory with practice, offering workshops, mentoring, field visits and structured reflection spaces to foster critical thinking. Sustainability is further institutionalized by anchoring the programme within university performance agreements, ensuring long-term support.



After two semesters of intensive cooperation, teams present their experiences and results at the annual Touch Down event held every June.



Teaching Conference: Students engage in multi-perspective discussions on the SDGs during the biannual teaching conferences.

Results: Nearly 1,000 students have participated, supported by more than 100 partner organizations and delivering over 165 projects, from photovoltaic installations to inclusive youth center renovations. Several start-ups such as Beeanco (sustainable consumption) and Money:care (green finance) have scaled into successful social enterprises. Alumni are now embedded in sustainability-related roles across sectors, often returning as project partners. The programme has been recognized nationally, including a nomination for the Austrian Sustainability Award. Importantly, seven universities have integrated it into official curricula, demonstrating lasting impact on higher education systems.

Lessons:

- Transformative changes in higher education require intentional design of interdisciplinary collaboration, not merely mixing disciplines but guiding students to build shared frameworks.
- Embedding initiatives in institutional agreements enhances continuity and legitimacy.
- Universities can reorient from isolated knowledge centers to civic partners, helping society address sustainability.
- Structured reflection and mentorship are essential for connecting theory with practice, transforming students into confident change agents capable of navigating the complexities of sustainability challenges.

Author: Adam Greene (RCE Vienna)

Further Information: [Sustainability Challenge](#) (in German)

Priority Action Area 3: Building Capacity of Educators

Priority Action Area 3 emphasizes the pivotal role of educators as agents of transformation. Teachers, trainers and education leaders not only determine how knowledge is transmitted, but also influence how values and attitudes are formed, and how critical skills such as problem-solving and collaboration are nurtured. By strengthening their capacities, educators can create learning environments that inspire and empower learners to take meaningful action for sustainability, driving long-term societal change.

RCEs worldwide are pioneering new approaches to building educator capacity, linking the use of digital tools with new ways of thinking about what it means to teach for sustainability. The following cases illustrate how RCEs are reshaping educators' roles: moving beyond the delivery of content toward facilitating learning processes, experimenting with innovative methods and guiding learners to engage critically with sustainability challenges. These initiatives demonstrate that strengthening teacher capacity in ESD requires both reforms within local institutions and active international collaboration, while also encouraging openness to digital, participatory and futures-oriented approaches.

RCE Penang in Malaysia has worked through the international Erasmus+ ICTeEfS project to integrate both digital literacy and sustainability into pre-service and in-service teacher education. By embedding the SDGs into revised curricula and training over 900 teachers with ICT-enabled, participatory methodologies, the project has shown how technology and sustainability can be combined to support educators as co-creators of transformative learning environments. Meanwhile, RCE Dublin in Ireland has advanced futures thinking and futures literacy among teachers through its FuturesNow initiative. In partnership with multiple HEIs, it has established a dedicated doctoral module, created national training for secondary and higher education teachers, and fostered networks that integrate long-term and futures-oriented perspectives into teaching. By moving beyond forecasting to participatory, values-based visions of possible and preferable futures, educators are being equipped to nurture critical and imaginative thinking in their students for generations to come.

Box 5. ICT-Enabled In-Service Training of Teachers (ICTeEfS) (RCE Penang)

Why: In Malaysia, teachers faced two major challenges: insufficient integration of sustainability themes into their training, and limited digital capacity to creatively deliver ESD. Despite the Ministry of Education's curriculum reforms, practical tools for linking sustainability with everyday teaching were lacking. RCE Penang, together with a network of international RCE partners, sought to close this gap by combining sustainability education with digital literacy.

What: The ICTeEfS project, launched under Erasmus+, revised nine teacher education courses at Universiti Sains Malaysia (USM) and delivered 144 hours of training to over 200 teachers from 145 schools. Using the DeCoRe+ methodology (deconstructing, reconstructing and applying knowledge through a sustainability lens), the courses integrated frameworks such as the six learning pillars of sustainable development. Likewise, the project integrated frameworks such as the 10Cs sustainability competencies (e.g. creativity, critical thinking, communication, collaboration) and the four dimensions of sustainable justice (social, economic, environmental, intergenerational). Teachers were trained in participatory and digital approaches, using platforms like Google Classroom, Webex, Telegram and Padlet, leading to the creation of 100 participatory videos and 100 sustainability-focused lesson plans. Topics addressed issues ranging from renewable energy and sustainable consumption to health and well-being. Collaboration with RCEs in Greece, Indonesia and Viet Nam further enriched the initiative.



In-service teachers' training.



In-service teachers' training, held online.

Results: The project directly trained over 200 practicing teachers and indirectly reached more than 2,000 students. Revised curricula also impacted 702 pre-service teachers at USM. Educators reported increased confidence in embedding SDGs into classroom practice and their co-created resources are now being reused across schools. USM incorporated sustainability more deeply into its curriculum, while international collaboration enhanced innovation across regions.

Lessons:

- Digital and participatory tools are powerful enablers of ESD.
- Embedding sustainability in teacher training institutions ensures systemic and lasting change.
- The ICTeFs project demonstrates that when teachers are empowered with both ICT and sustainability tools, they become catalysts for transformative learning across entire school communities.

Author: Nur Syazwana Binti Hamzah (RCE Penang)

Further Information: [ICTeFs – ICT-enabled In-service Training of Teachers to address Education for Sustainability](#)

Box 6. Envisioning and Realizing Sustainable Futures for All and FuturesNow (RCE Dublin)

Why: Futures thinking — imagining possible, probable and preferable futures — was largely missing from teacher education. Recognizing this gap, RCE Dublin and its university partners sought to embed futures thinking as a core competency for educators at both secondary and higher education levels.

What: This futures-based initiative, led by Dublin City University (DCU) and involving four other universities, co-designed training resources to strengthen educators' capacity for futures literacy. Actions included: 1) an online national course on Education for Sustainability with a futures thinking component; 2) a doctoral-level module on futures thinking within education studies, providing Ireland's first dedicated academic platform for teachers to explore futures methodologies; 3) webinars and workshops for secondary teachers delivered with NGOs such as Educate Together; and 4) the creation of sustainability and futures-focused courses at University College Cork and other partner universities. Through collaborative and participatory workshops, the programme emphasized the distinction between prediction and futures literacy, focusing instead on critical, value-driven exploration of multiple future scenarios.

Results: New courses and micro-credentials now reach both higher education staff and secondary teacher networks. Futures thinking has been integrated into new curricula at DCU and partner universities, while the doctoral module is training Ireland's next generation of education leaders. Educators report greater confidence in embedding long-term perspectives into classroom practice.

Dissemination efforts are ongoing, and FuturesNow, a new project, has been developed with transborder cooperation that aims at studying and promoting futures pedagogies in teacher education in Ireland with the aim to continue inspiring other institutions across Europe.

Lessons:

- Long-term partnerships among universities ensure institutional embedding and legitimacy.
- Flexibility in course design makes futures literacy accessible across diverse levels and sectors.
- Capacity-building for educators is not only about teaching new content — it is about cultivating imagination, agency and the ability to prepare learners for uncertain but hopeful futures.

Authors: Manuel Fernández López and Orla Kelly

Further Information: [RCE Dublin website](#)

Priority Action Area 4: Empowering and Mobilizing Youth

Empowering and mobilizing youth is at the heart of sustainable development, as young people are not only tomorrow's leaders but also today's innovators, advocates and drivers of change. ESD for 2030 highlights their role as key agents of transformation, stressing the need to create enabling environments where youth voices are heard and their actions actively supported.

The Global RCE Network showcases a variety of youth empowerment strategies. These are youth-led initiatives, ranging from student-driven projects that embed sustainability in learning and campus practices, to community actions advancing entrepreneurship, cultural exchange and civic participation. Some initiatives focus on environmental sustainability in formal education, where students lead projects like food waste reduction, developing leadership and teamwork skills. Others emphasize social cohesion and peacebuilding outside traditional schooling, addressing issues of violence and marginalization that affect community resilience.

RCE Detroit-Windsor in the USA illustrates the first pathway, with university students spearheading a youth-led food waste reduction campaign that not only reduced environmental impacts on campus but also built leadership capacity, peer-to-peer education skills and social equity through food recovery partnerships. **RCE Minna** in Nigeria, by contrast, exemplifies the second pathway, having engaged marginalized and at-risk youth in dialogue, mentorship and vocational training. Through its Sustainable Initiative for Responsible Adulthood (TSIRA), it has converted at-risk groups into peer role models, peace ambassadors and community leaders. Both initiatives exemplify how youth-led action can advance inclusive and locally grounded solutions for sustainable development.

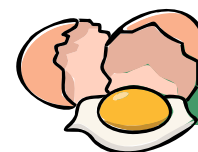
Box 7. Reducing Food Waste Through Youth Leadership and Environmental Action (RCE Detroit-Windsor)

Why: Food waste on the Wayne State University (WSU) campus created a dual sustainability challenge: significant environmental harm from methane emissions and the squandering of resources, alongside food insecurity among students. A campus-wide student survey revealed both significant cafeteria plate waste and limited awareness of the impacts of food waste, underscoring the urgent need for youth-led leadership. Addressing these issues highlighted the need for youth-led action to shift behaviors and policies.

How much food is not eaten?



At least one-third of fruits are left uneaten in 46 per cent of food trays.



At least one-third of eggs are left uneaten in 48 per cent of food trays.

Key results of a survey on cafeteria food waste.

What: In 2018, six student leaders from RCE Detroit-Windsor's Youth Network and WSU Green Warriors launched a three-phase campaign to tackle food waste. With mentorship from the NGO Make Food Not Waste, the team conducted cafeteria food audits, created educational displays and hosted creative engagement events such as turning food scraps into natural dyes for sustainable art projects. Over 30 volunteers contributed over 60 hours to peer-to-peer outreach, awareness-raising and data collection while also coordinating closely with university dining staff.



RCE Detroit-Windsor hosting a culminating educational event on food waste, featuring students' use of paint dye from food waste for painting tote bags.



Composting bins where weighed food waste is placed.

FOOD WASTE CAMPAIGN AT TOWERS CAFE

by Make Food Not Waste (NGO)

8 WEEKS



20%

Overall Reduction

Throughout the campaign, students eating at Towers Café saw a 20 per cent reduction in food waste.

17 lbs ► **13.5 lbs**

4.54 lbs

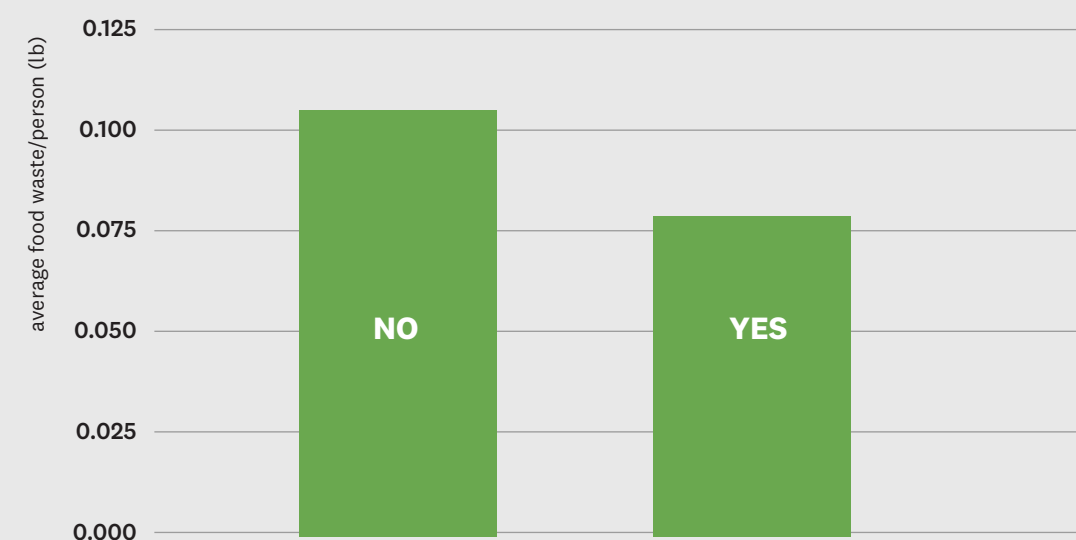
**Lowest weight
of food waste
recorded**

177 STUDENTS

**Highest number of
students who joined
the campaign**

Food reduction campaign, by the numbers.

Results: The campaign achieved a measurable 19.3 per cent reduction in food waste per dinner serving, decreasing from 51.4 grams to 39.6 grams per person. Data pinpointed self-serve items like eggs and fruit as key sources of waste, offering actionable solutions, such as portion messages and permanent signage for cafeteria managers. The programme also expanded into food recovery, collaborating with the WSU Food Pantry to provide meals to over 2,250 food-insecure students. Partnerships with dining services, NGOs and student groups strengthened networks for sustainability. Importantly, youth leaders gained advocacy, research and leadership skills that extended beyond the project itself.



Individuals who learned about food waste tend to waste less food compared to those who have not.

Lessons:

- Youth engagement works best when students are leaders, not just participants.
- Partnerships between students, NGOs and other institutions are key to sustaining change.
- Linking environmental sustainability with social equity (food recovery) makes initiatives more holistic and impactful.
- Data-driven audits combined with creative education tools can shift behaviour and policy, offering a replicable model for other RCEs and other institutions.

Author: Mohamed Dabaja (RCE Detroit-Windsor)

Further Information: [RCE Detroit-Windsor Website](#)

Box 8. The Sustainable Initiative for Responsible Adulthood (TSIRA) (RCE Minna)

Why: In Minna, youth unemployment, marginalization and political exploitation have fueled cycles of violence, restiveness and gang-related activities. Conventional security responses such as arrests and policing failed to tackle root causes, leaving many young people vulnerable and excluded. Many affected youth at ages as early as 12 years fell into destructive pathways, lacking education and mentorship opportunities, and safe spaces for dialogue. RCE Minna recognized the need for an inclusive, rehabilitative alternative that would engage rather than criminalize at-risk youth.

What: Launched as the Sustainable Initiative for Responsible Adulthood (TSIRA), the programme used a participatory, multi-stakeholder model. Community and religious leaders worked hand in hand to identify at-risk youth, who then joined facilitated dialogue sessions with psychologists, educators and mentors. Youths shared grievances and received life skills, mentorship and training. Over time, participants transitioned into new roles: as peace ambassadors, community advocates and beneficiaries of vocational and livelihood support. Local radio programmes provided platforms for youth to share positive narratives. Partnerships included the Niger State Ministry of Youth and Sports, which pledged to integrate TSIRA into policy frameworks, giving the model institutional legitimacy and a pathway to scale.



Cross section of TSIRA participants at the IDF.



Youth in a local neighborhood in Minna.

Results: TSIRA reformed and reintegrated its first cohort of 10 youth into society, all of whom became peace ambassadors. Former participants have reported family reintegration, improved livelihoods and social standing, with some even establishing businesses or starting families. The initiative shifted community perceptions from punitive measures toward community-owned, participatory rehabilitation, while government bodies considered replicating TSIRA as a statewide youth peacebuilding strategy. Parents and traditional leaders also took on mentorship roles, extending the reach of the programme.

“No one ever asked why we were into thuggery. Politicians used us and abandoned us in prison. TSIRA changed that. They listened to our stories, gave us a voice, and made us feel seen. That alone made me walk away from the streets.”

Baballe Abdullahi Garba (TSIRA Youth Ambassador)

Lessons:

- Multi-stakeholder collaboration between traditional leaders, government and educators creates an enabling environment for peacebuilding.
- Long-term follow-up, mentoring and livelihood training are essential for sustaining reintegration.
- Youth are not just recipients but active peacebuilders when given responsibility and support.

Author: Abdul Husaini (RCE Minna)

Further Information: [RCE Minna Website](#)

Priority Action Area 5: Accelerating Local Level Actions

Priority Action Area 5 emphasizes that sustainable development must ultimately be rooted in community-level action — where people live, work, learn and build resilience. It calls for scaling up community-driven solutions and ensuring that both urban and rural contexts are supported in ways that reflect their specific needs. As a nodal area, it connects with all other priority areas, showing how locally led action, supported by multi-stakeholder collaboration and national frameworks, can drive systemic transformation.

Across the RCE network, diverse approaches illustrate how local communities take ownership of sustainable development. RCEs bridge global agendas with local realities, turning policy frameworks into tangible practices that directly benefit people's lives. They highlight education as a catalyst for connecting global agendas with local realities, demonstrating how sustainability can be advanced through context-specific and inclusive approaches.

RCE South Rift in Kenya has responded to urgent environmental degradation by embedding tree-growing, agroforestry and climate education into grassroots practice, linking ecological restoration with new livelihood opportunities for women and youth.

RCE Yogyakarta in Indonesia has focused on social inclusion through innovative integrated farming, therapy and vocational training that empower children with special needs and individuals with severe mental illness to live with dignity, independence and community acceptance. Both initiatives demonstrate how locally led, participatory efforts, supported by multi-stakeholder collaboration, can accelerate progress towards sustainable development by addressing environmental, social and economic challenges across diverse community contexts.

Box 9. Tree Growing for Climate Change Mitigation as a Platform for Public Education and Community Outreach Programme in Narok County (RCE South Rift)

Why: Narok County faces severe environmental challenges: deforestation, biodiversity loss, climate variability and ecosystem degradation driven by population growth, overgrazing and unsustainable farming. These challenges threaten food systems, water scarcity and local livelihoods while increasing vulnerability to adverse impacts of climate change. The erratic rainfall, prolonged droughts and forest loss have intensified human and wildlife conflict,

leaving communities more exposed and less resilient. A lack of awareness and sustainable practices left them without tools to address these pressing issues, calling for grassroots solutions that combined conservation with livelihood opportunities.

What: RCE South Rift responded by initiating a comprehensive tree-growing and climate education programme in partnership with local government, NGOs, schools and community groups. Actions included restoring degraded forest areas, promoting agroforestry, and training youth and women in sustainable practices. Beyond ecological restoration, the innovative livelihood options such as producing eco-stoves and charcoal briquettes helped reduce firewood dependence while improving household health and income. Climate education was delivered through schools, media campaigns and workshops, ensuring broad community awareness. Youth mentorship and leadership initiatives further nurtured youth conservation champions, helping inculcate stewardship in the next generation.



Wildlife and Environment Club students of Maasai Mara University receiving tree seeds for seedling generation.

Results: The initiative planted over 50,000 trees, restoring degraded ecosystems, reducing soil erosion and enhancing carbon sequestration. Communities adopted agroforestry and sustainable land use practices, improving food security and climate resilience. Local women's and youth groups established small-scale enterprises producing eco-stoves and charcoal briquettes, creating income while reducing deforestation. Schools, youth clubs and faith-based organizations became hubs for environmental education, multiplying awareness and action. Importantly, collaboration with local authorities mainstreamed environmental protection into Narok County's development processes.

Tree Growing & Environmental Impact



Over 50,000 trees were planted in degraded areas



Over 500 farmers trained in agroforestry



At least 3,000 individuals trained on climate action and conservation

Community Engagement & Livelihood Training



86% tracked and reported survival rate of planted trees



At least 300 women and youth were trained in eco-stove production



At least 300 community members are trained in charcoal briquette making

Partnerships & Advocacy



Collaborations with Narok County Government, WWF, Friends of Mara, and local media



More than 50 local schools engaged in climate education initiatives

RCE South Rift's tree growing initiative, by the numbers.

Lessons:

- Linking awareness with practice: tree planting combined with sustainable livelihoods ensures long-term community ownership.
- Engagement with county authorities, NGOs and media amplified reach and policy influence.
- RCE South Rift demonstrates how linking ecological restoration with sustainable livelihoods empowers communities to co-create resilient futures.

Author: Evance Ouya (RCE South Rift)

Further Information: [Article in the Rufford Foundation](#)

Box 10. Integrated farming as therapy and entrepreneurship for children with special needs (RCE Yogyakarta)

Why: In rural Yogyakarta, persons and children with disabilities often face stigma, social exclusion, limited education and livelihood opportunities. Traditional education and care models were insufficient to ensure long-term dignity and independence. Without inclusive opportunities, they remain excluded from social and economic participation. Recognizing these challenges, the Ainul Yakin Inclusive Boarding Village, supported by RCE Yogyakarta, sought to create an inclusive model of education, therapy and entrepreneurship that would empower vulnerable populations and strengthen community resilience.

What: RCE Yogyakarta and Universitas Gadjah Mada partnered with the Indonesian Special Children Foundation for the introduction of an Integrated Farming System across Ainul Yakin's 13-hectare inclusive boarding village. The system combined animal husbandry, crop cultivation, aquaculture and organic waste recycling. Children and residents participated in daily livestock care, feeding, grooming and egg collection as part of both therapy and vocational training. Micro-enterprises selling eggs, vegetables, compost and souvenirs were developed through community outlets, supporting sustainability of the institution. Shared livestock ownership schemes enabled local families to co-manage pregnant animals for income, later repurchasing offspring to maintain enterprises.



Students with disabilities participating in a community service activity in agriculture.

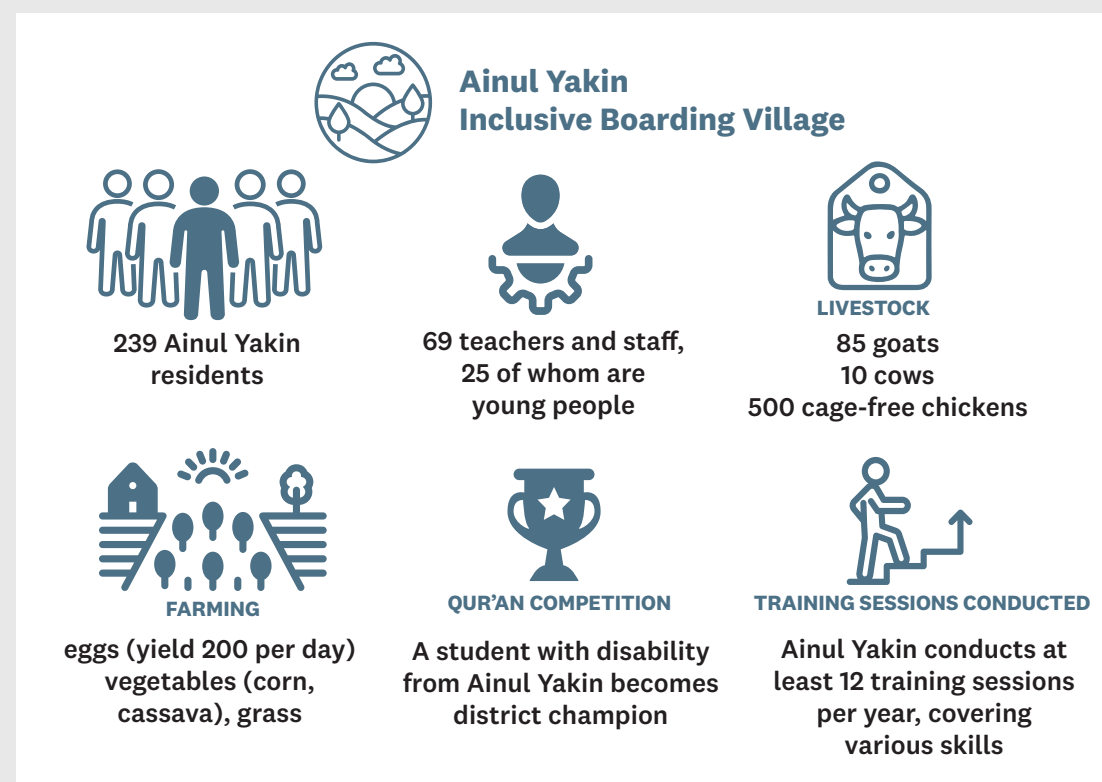
Results: The programme rapidly expanded livestock operations to 500 cage-free chickens, producing 200 eggs daily, along with 85 goats and 10 cows, ensuring daily food supplies and income streams. Animal-assisted therapy improved emotional stability, empathy and motor skills among persons and children with disabilities. They gained agribusiness skills, increasing their prospects for independent futures. Community retail provided access to inclusive economic opportunities while marketing the produce. The programme fostered social inclusion, shifting perceptions of persons and children with disabilities as contributors rather than dependents.

Lessons:

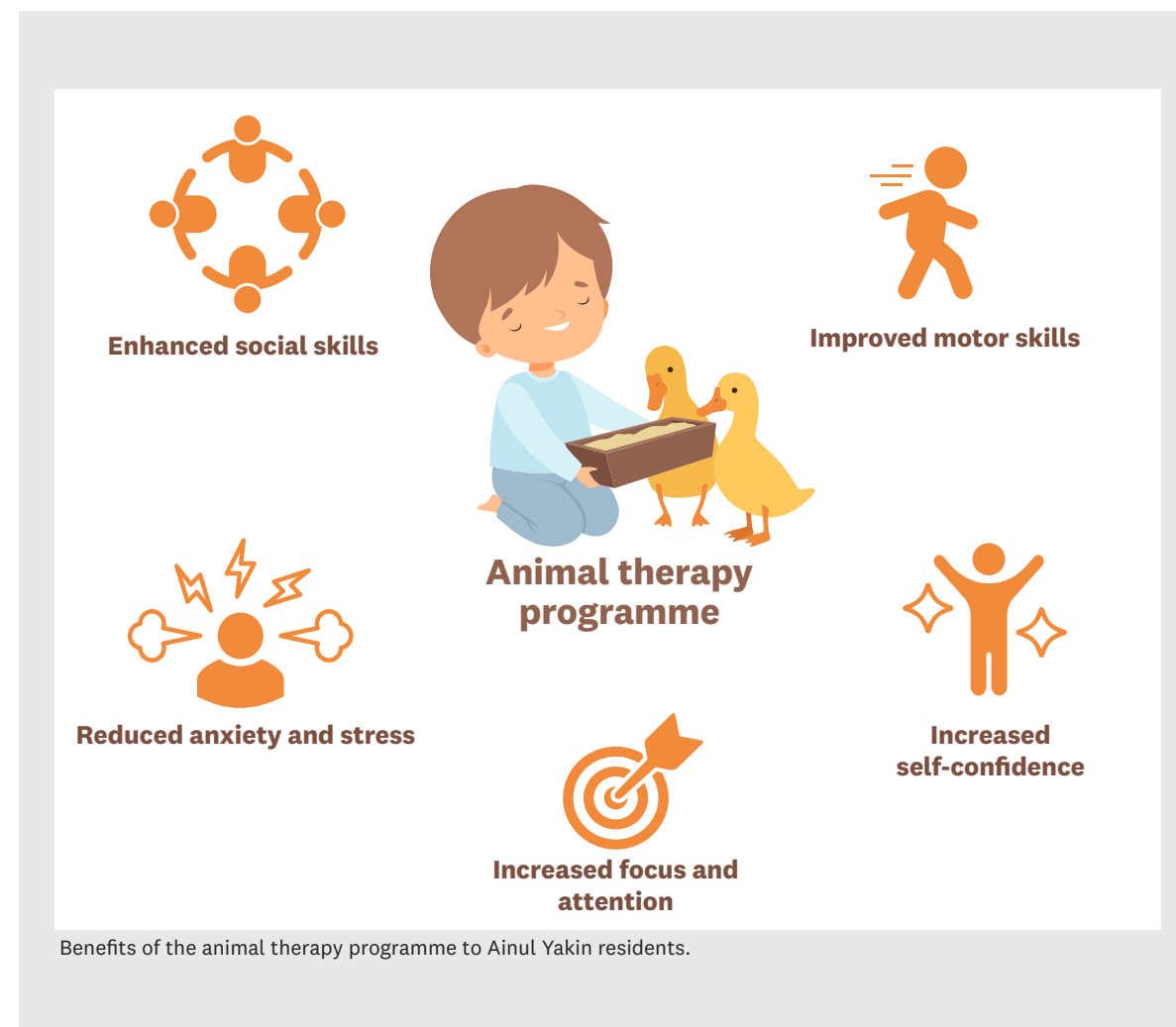
- Integration of education, therapy and livelihood training creates holistic support systems for vulnerable groups.
- Community-based economic models, such as shared livestock ownership, resilience building and reducing dependency on donors.

Author: Sarmin, Pudji Astuti and Claude Mona Airin (RCE Yogyakarta)

Further Information: [Animal therapy Santri Ainul Yakin](#) (In Indonesian)



Ainul Yakin, by the numbers.



Collectively, the 10 RCE initiatives highlighted across the five Priority Action Areas illustrate the transformative potential of locally led education and learning in advancing the global ESD for 2030 framework. By translating Priority Action Areas into concrete actions rooted in community contexts, RCEs are helping to reorient education systems, empower youth, build capacity and foster collaboration for sustainability. Together, they reveal that ESD thrives where learning is co-created across generations, sectors and institutions, and where education is linked directly to the social, economic and environmental realities of people's lives. In doing so, RCEs are not only advancing the five Priority Action Areas, but also demonstrate systemic transformation towards sustainability in practice.

4 RCE Project Trend Analysis (2020–2024)

Philip Vaughter, Anupam Khajuria and Jonghwi Park

Introduction

The 20th anniversary of the Global RCE Network marks an important moment to reflect on the significant progress made and to envision the evolving future role of ESD in an increasingly complex world. The continued expansion and impact of RCEs highlight the continued importance of multi-stakeholder collaboration in advancing sustainability through education. Looking ahead, RCEs are well placed to scale their impact by deepening partnerships, amplifying local successes on a global stage and further embedding sustainability education into policy and practice. By building on past achievements, the network can continue shaping transformative learning experiences that empower communities to take meaningful action towards sustainability. UNU-IAS previously conducted a survey of projects from 2015 to 2019 during the Global Action Programme on Education for Sustainable Development (GAP) period, and this new analysis aims to identify trends in RCE projects following the launch of the ESD for 2030 Framework in 2020.

The year 2020 marked the beginning of a new phase for ESD, as sustainability efforts adapted to evolving global challenges. This shift required ESD initiatives to adapt their approaches in order to effectively address issues such as climate change, health crises and social inequalities. With the SDGs providing a shared framework, education remained a key enabler of sustainable development, equipping individuals and communities with the knowledge, skills and agency to address complex environmental, social and economic issues. RCEs continued to play a vital role in advancing ESD through locally relevant, multi-stakeholder initiatives. Building on the achievements of the network, including its contributions to the GAP on ESD from 2015 to 2019, the period from 2020 to 2024 saw both continuity and new directions in RCE activities. As societies navigated climate change, biodiversity loss and the socioeconomic impacts of the Covid-19 pandemic, RCEs adapted their pedagogical approaches, demonstrating the resilience and relevance of education in shaping sustainable futures. This five-year period provided valuable insights into how multi-stakeholder networks can harness education to drive sustainability transformations, even in the face of uncertainty.

Given the diverse engagement strategies, regional contexts and thematic priorities of RCEs, this analysis provides a unique opportunity to examine how ESD initiatives have evolved between 2020

and 2024. The following sections explore which SDGs and ESD for 2030 Priority Action Areas have been most prevalent among RCE projects, the types of stakeholders and audiences involved, and the emerging regional and thematic trends. This is followed by a discussion of the contributions of RCEs to sustainable development, the implications of key findings and insights for shaping future directions for the Global RCE Network. By reflecting on the achievements of the network and lessons learned, this analysis aims to inform the next phase of RCE-led sustainability education, ensuring that education continues to be a catalyst for meaningful action toward a more sustainable world.



Analysis of Global RCE Network (2020–2024)

Between 2020 and 2024, RCEs reported 383 projects through the RCE portal website. The following analysis is based on RCE's self-coding of their projects when submitted. The projects came from 34 different countries and territories, reinforcing the continued commitment of the Global RCE Network to ESD. The Asia-Pacific region contributed the largest share of projects, followed by the Americas, with both regions demonstrating sustained momentum in multi-stakeholder ESD initiatives (**Figure 1**). By contrast, Europe and Africa reported comparatively fewer projects, highlighting differences in regional capacity, outreach and reporting practices. These variations suggest that while the Global RCE Network is expanding, the pace and scale of activity continue to be shaped by regional contexts, resources and institutional support.

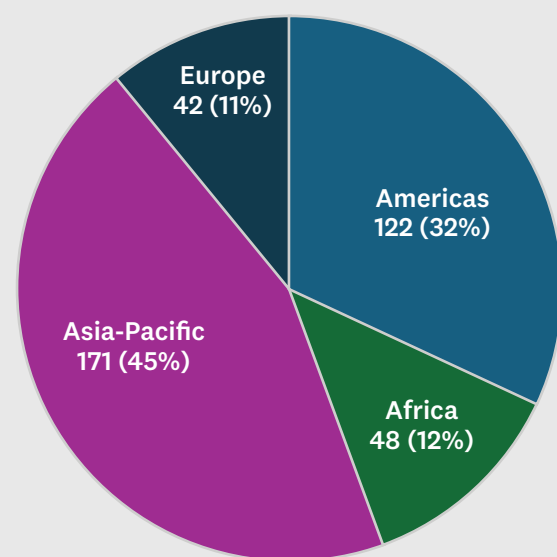


Figure 1. Overall regional representation of the projects.
*n=383

As to be expected, all projects were aligned with SDG 4 (quality education), particularly Target 4.7, which emphasizes ESD and the promotion of sustainable lifestyles, human rights, gender equality, peace and global citizenship. Beyond this core focus, RCE projects frequently addressed SDG 11 (sustainable cities and communities), SDG 13 (climate action) and SDG 17 (partnerships for the goals) (**Figure 2**). These priorities highlight a shift toward locally grounded, municipal-level solutions to global sustainability challenges and underscore the increasing role of collaboration in advancing ESD at the local level.

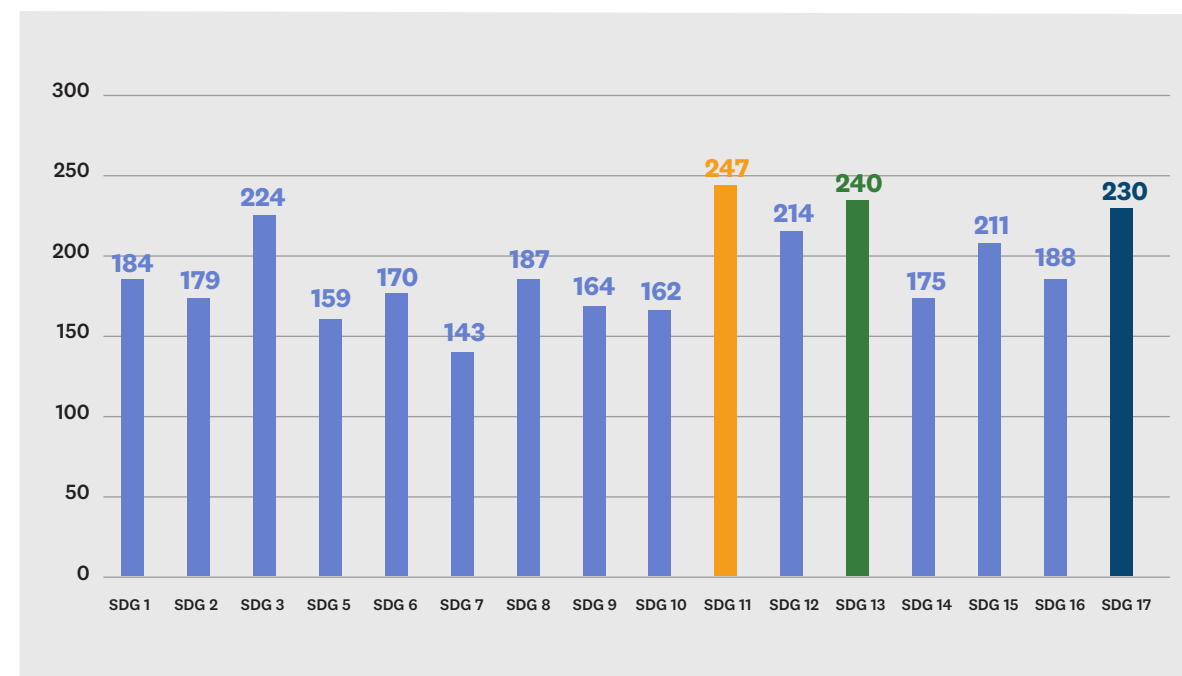


Figure 2. SDG coverage of RCE projects (2020–2024).
*n > 383, multiple selections allowed.

The strong emphasis on SDG 11 reflects the reality of a rapidly urbanizing world, where more than half of the global population now resides in cities (Anestis & Stathakis, 2024). This focus suggests that RCEs are increasingly recognizing the need to integrate sustainability into urban development, ensuring that cities become not just centres of economic activity, but also spaces for innovation, resilience and resource efficiency. Sustainable urbanization relies on educational strategies that equip communities with the knowledge and skills to create liveable, accessible and environmentally responsible spaces (Abou Jaoude, Mumm, & Carlow, 2022). Similarly, the prominence of SDG 13 highlights the ongoing urgency of climate change education, with RCEs working to bridge mitigation efforts with adaptation strategies. As climate impacts intensify, ESD will play a crucial role in preparing communities to implement solutions at local levels in order to bolster regional and global agendas. The strong presence of SDG 17 in RCE projects further reinforces the importance of partnerships in tackling sustainability challenges, positioning RCEs as key facilitators in multi-stakeholder collaboration.

The projects were also analysed by the ESD for 2030 Priority Action Areas. RCEs indicated the relevance of their submitted projects to the five Action Areas, namely 1) advancing policy; 2) transforming learning environments; 3) building capacities of educators; 4) empowering and mobilizing youth; and 5) accelerating local level actions (**Figure 3**). The strongest alignment was with Priority Action Area 5 (accelerating sustainable solutions at the local level), which was a focus for 306 out of 383 projects (80 per cent of the reported projects). This suggests that RCEs continue to be deeply embedded in community-driven initiatives, tailoring ESD to the specific needs of local contexts. The second most predominant Priority Action Area was 4 (empowering and mobilizing youth, 285 projects or 74 per cent), an encouraging trend of prioritizing youth engagement and

fostering their leadership. Priority Action Areas 2 (transforming learning and training environments) and 3 (building capacities of educators and trainers) were equally significant in a number of RCE projects (281 projects or 73 per cent), demonstrating a strong commitment to both institutional change and capacity-building for both teachers and learners (Fischer et al., 2022). However, only 221 (57 per cent) of projects addressed Priority Action Area 1 (advancing policy), indicating that while RCEs have been highly effective at the grassroots and institutional levels, influencing broader policy frameworks remains a less central aspect of their work. This presents an opportunity for RCEs to deepen their engagement with policymakers in the future, ensuring that the insights gained from local projects inform broader sustainability strategies.

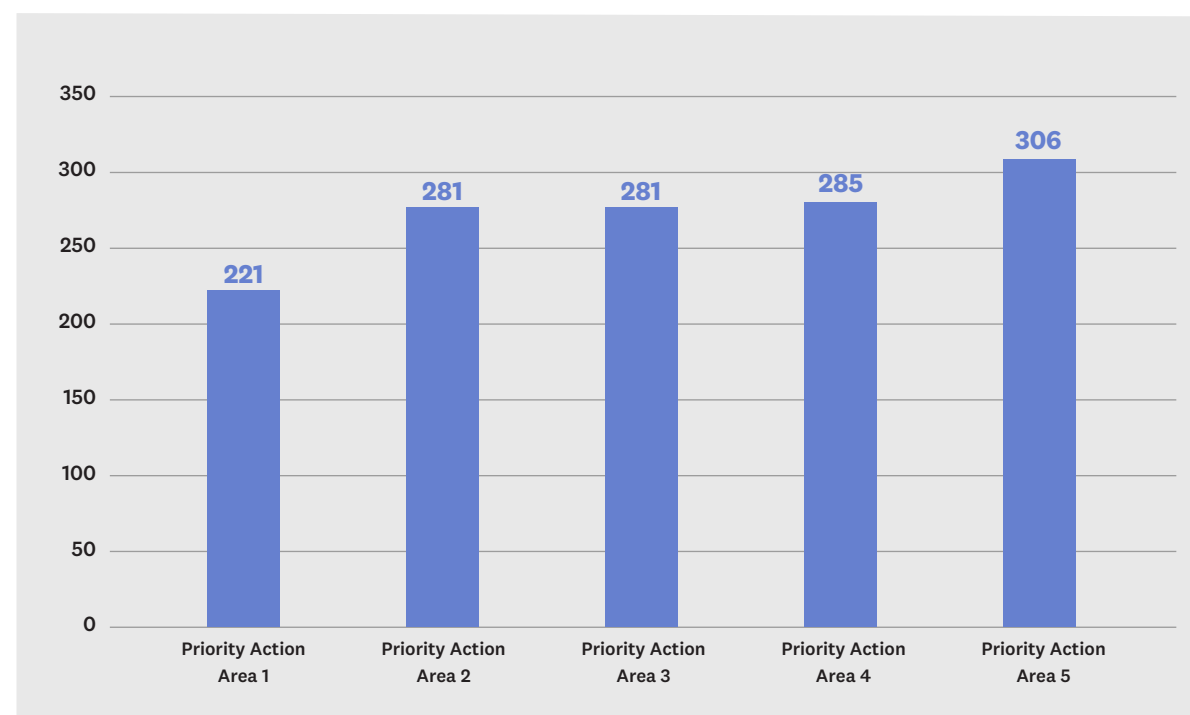


Figure 3. Global RCE projects by GAP Priority Action Area targeted (2020–2024).
**n* > 383, multiple selections allowed.

Between 2020 and 2024, NGOs led or co-led 317 RCE projects (76 per cent) across the globe, highlighting the strong involvement of NGOs (**Figure 4**). This represents a marked shift from the GAP analysis (2015–2019), where HEIs led 54 per cent of projects, while NGOs accounted for only 30 per cent. Several factors may help explain this transition. The Covid-19 pandemic severely disrupted university operations, limiting their capacity for external engagement and project leadership. While NGOs bring flexibility, strong community ties and the ability to rapidly mobilize resources (Abiddin, Ibrahim, & Abdul Aziz, 2022), this change also raises questions about the long-term institutionalization of sustainability education. Governments and universities remain crucial for ensuring ESD is embedded within formal education systems and public policy. It will be essential for future projects to foster stronger partnerships between NGOs, academic institutions and local governments to sustain long-term impact.

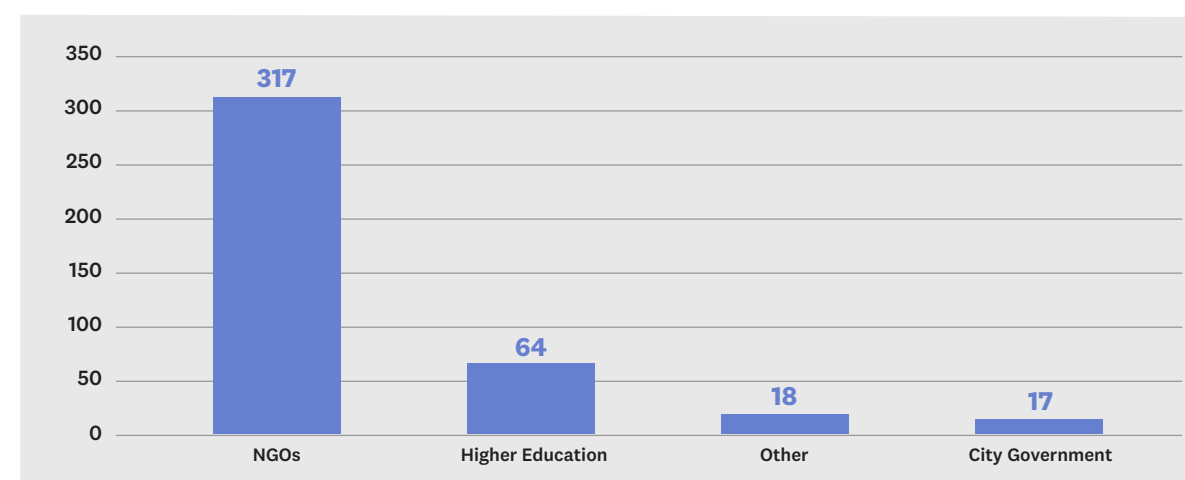


Figure 4. Global RCE projects by leading organizations (2020–2024).
**n* > 383, multiple selections allowed

The thematic scope of RCE projects further reflects the evolving priorities within ESD. With 227 RCE projects (59 per cent) focused on curriculum development, RCEs continue to play an active role in producing adaptable educational materials that can be integrated into a variety of learning settings (Figure 5). The inclusion of traditional knowledge in 215 RCE projects (56 per cent) also highlights a growing recognition of Indigenous and intergenerational knowledge as essential components of sustainability education (Brondizio et al., 2021). Additionally, while urban sustainability remained a key focus, many RCE projects linked urban areas with surrounding agricultural landscapes, forests and freshwater ecosystems. This integration suggests an increasing awareness that urban sustainability cannot be separated from broader ecological and food system considerations. Moving forward, fostering more of these cross-sectoral and cross-regional collaborations that connect cities to outlying areas that are dependent on for their resource bases will be key to ensuring that RCE projects continue to provide meaningful and impactful contributions to the global ESD agenda.

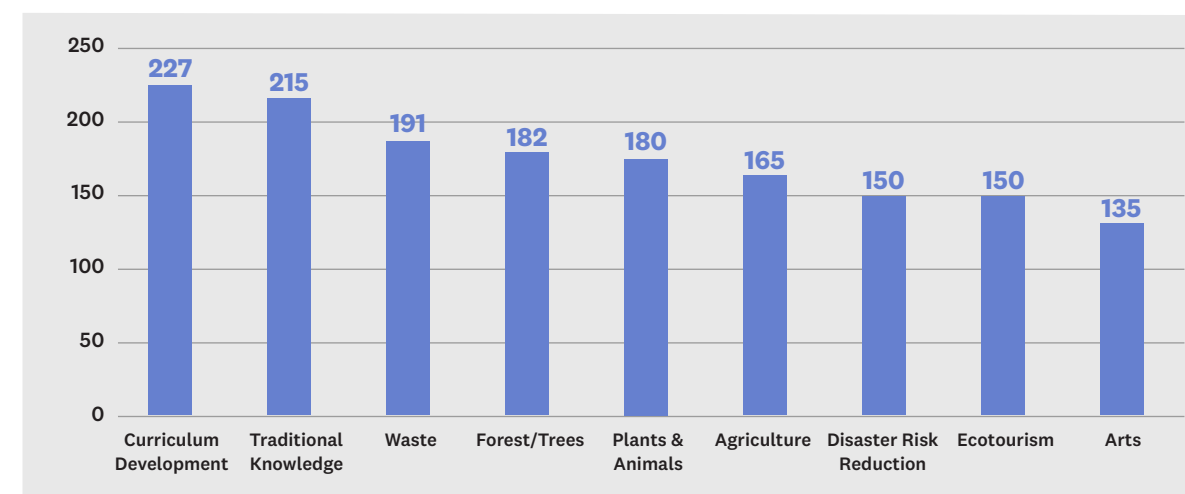


Figure 5. Global RCE projects by theme targeted (2020–2024).
**n* > 383, multiple selections allowed

From 2020 to 2024, RCEs projects continued with a strong focus on non-formal education, with 294 RCE projects (77 per cent) engaging with broader community education activities and 204 RCE projects (53 per cent) specifically targeting youth for ESD outside of classroom settings **(Figure 6)**. This emphasis shows that RCEs are still prioritizing community-based teaching and learning outside of formal education efforts, showing a strategic effort to reach diverse audiences outside of traditional classrooms. Higher education remained a significant platform for ESD implementation for many RCEs, with 222 RCE projects (58 per cent) incorporating university-level teaching, showcasing the importance of HEIs in advancing sustainability in both learning and research. Engagement with ESD in secondary education is seen in 158 RCE projects (41 per cent of projects) and engagement with primary education is seen in 136 RCE projects (35 per cent of projects), indicating that there may be obstacles for integrating ESD into already crowded curricula for formal education at the primary and secondary level. One-third of RCE project, 128 (33 per cent) explicitly worked with teacher training for ESD, based on the idea that training teachers would have a multiplier effect for ingraining ESD in classrooms. Only 48 RCE projects (12 per cent) engaged with any technical and vocational education and training (TVET) students, indicating a gap remains in embedding ESD into the workforce training of many sectors. Since many of these students will be essential for integrating sustainable practices into industries, this gap should be addressed with due haste.

The following sections present the project analyses by region.

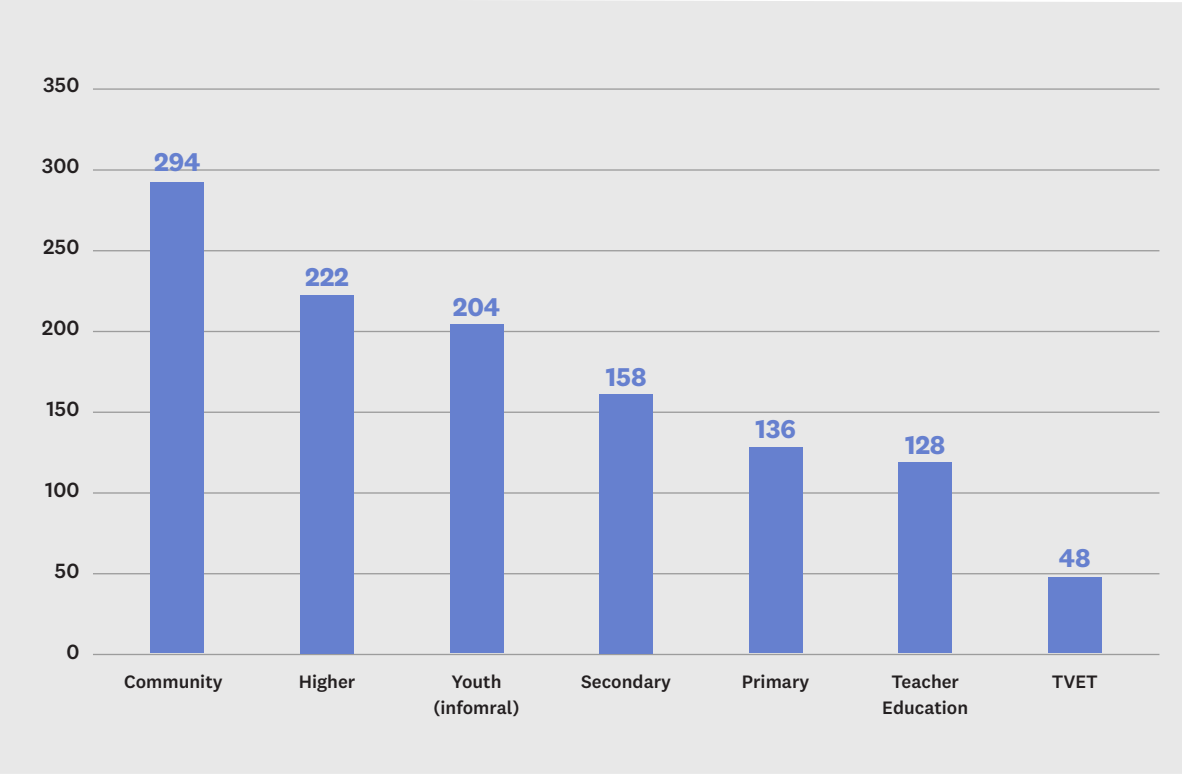


Figure 6. Global RCE projects by audience (2020–2024).
*n > 383,, multiple selections allowed

Africa and Middle East

Between 2020 and 2024, 48 RCE projects conducted in the African region across five countries were analyzed. The predominant focus areas within the region were SDG 13 (climate action), SDG 3 (good health and well-being) and SDG 1 (no poverty) **(Figure 7)**. By addressing these issues through ESD, African RCEs have positioned themselves at the intersection of sustainability, resilience and well-being.

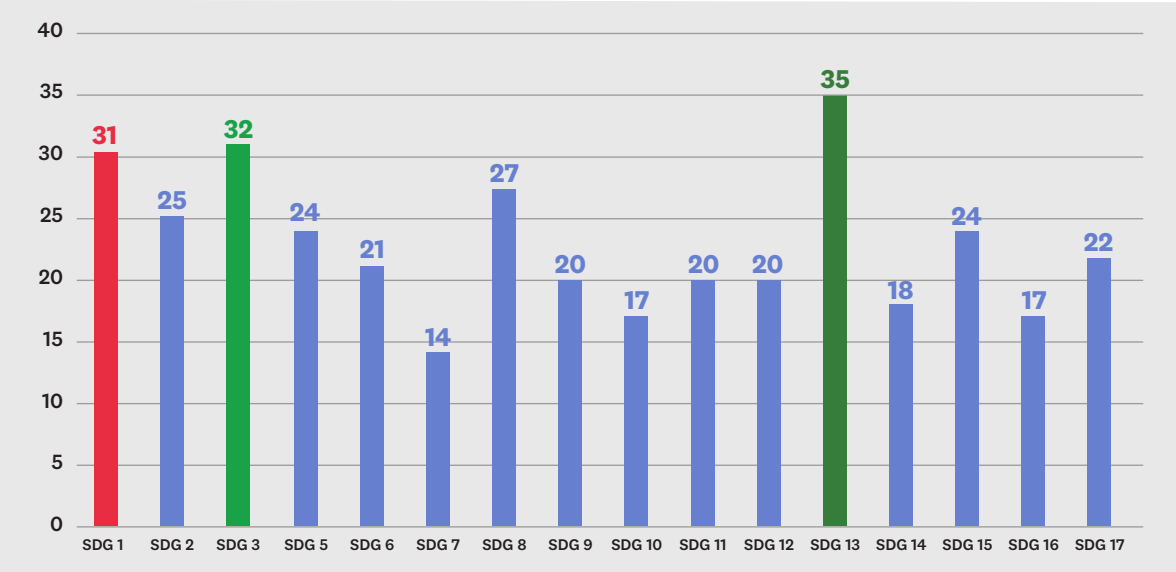


Figure 7. African RCE projects by SDGs targeted (2020–2024).
*n > 48, multiple selections allowed.

In terms of the ESD 2030 Priority Action Areas, a major shift was observed in RCEs in Africa during this period: an increased emphasis on Priority Action Area 2 (transforming learning and training environments). Whereas only 28 out of 79 (35 per cent) of African RCE projects focused on this area during the GAP years (Vaughter et al., 2022), the proportion rose to 38 out of 48 RCE projects (80 per cent) between 2020 to 2024 **(Figure 8)**. While the overall number of RCE projects in the region decreased from the GAP period, a greater proportion of RCE projects that were implemented between 2020 to 2024 emphasized learning and training environments. This suggests a growing institutionalization of ESD within formal education settings, with greater engagement from facilities operations at schools, universities and training centres. Despite this shift, Priority Action Area 5 (accelerating sustainable solutions at the local level) remained a key focus, with 40 RCE projects in the region (83 per cent) maintaining this emphasis. This demonstrates an evolving but consistent approach, where RCEs are both embedding sustainability within education environments and continually ensuring tangible, community-driven impact.

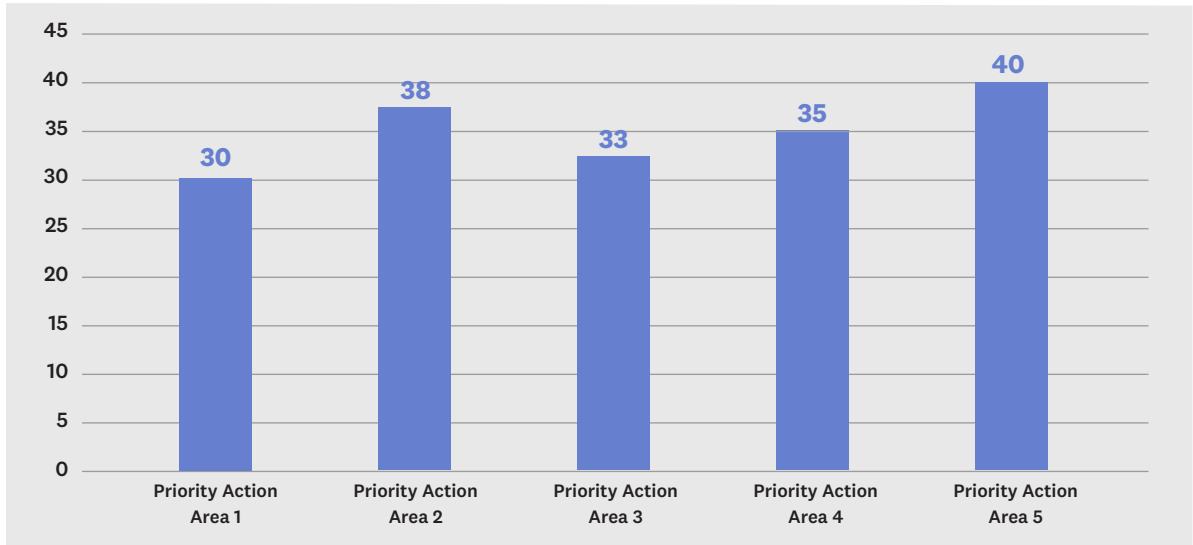


Figure 8. African RCE projects by GAP Priority Action Area targeted (2020–2024).
*n > 48, multiple selections allowed.

In Africa, 47 out of 48 RCE projects (98 per cent) from 2020 to 2024 were led or co-led by NGOs **(Figure 9)**, marking an increase of the proportion of RCE projects being led by NGOs from the GAP period, when HEIs played a more dominant role. This transition could reflect a broader recognition of the role that civil society organizations play in mobilizing communities and implementing grassroots initiatives.

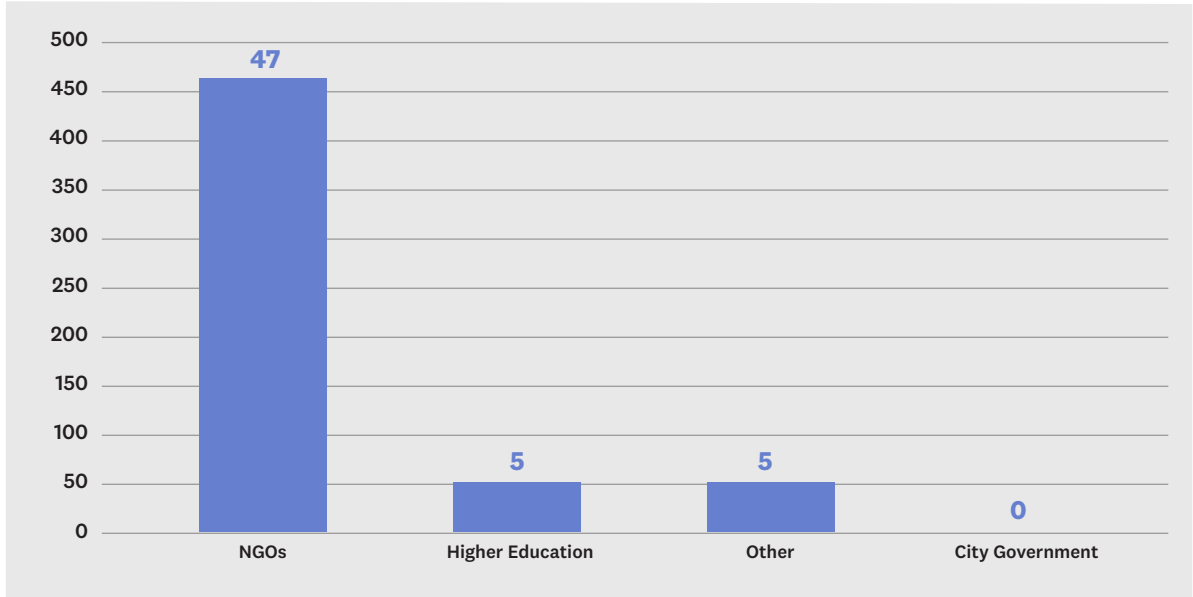


Figure 9. Africa RCE projects by leading organizations (2020–2024).

Traditional knowledge played a significant role in African RCE projects, with 30 projects in the region (63 per cent) reported they incorporated Indigenous or intergenerational knowledge systems into their ESD activities **(Figure 10)**. This aligns with a broader global movement to integrate Indigenous wisdom with contemporary sustainability science, particularly in relation to land management, biodiversity conservation and climate resilience. Additionally, 27 RCE projects (56 per cent) in the region focused on conservation or reforestation of forest ecosystems, while 25 (52 per cent) targeted the protection of specific plant or animal species. These conservation efforts indicate a proactive approach to ecosystem health and biodiversity protection, recognizing the interdependencies between environmental sustainability and human well-being (Kimengsi et al., 2022).

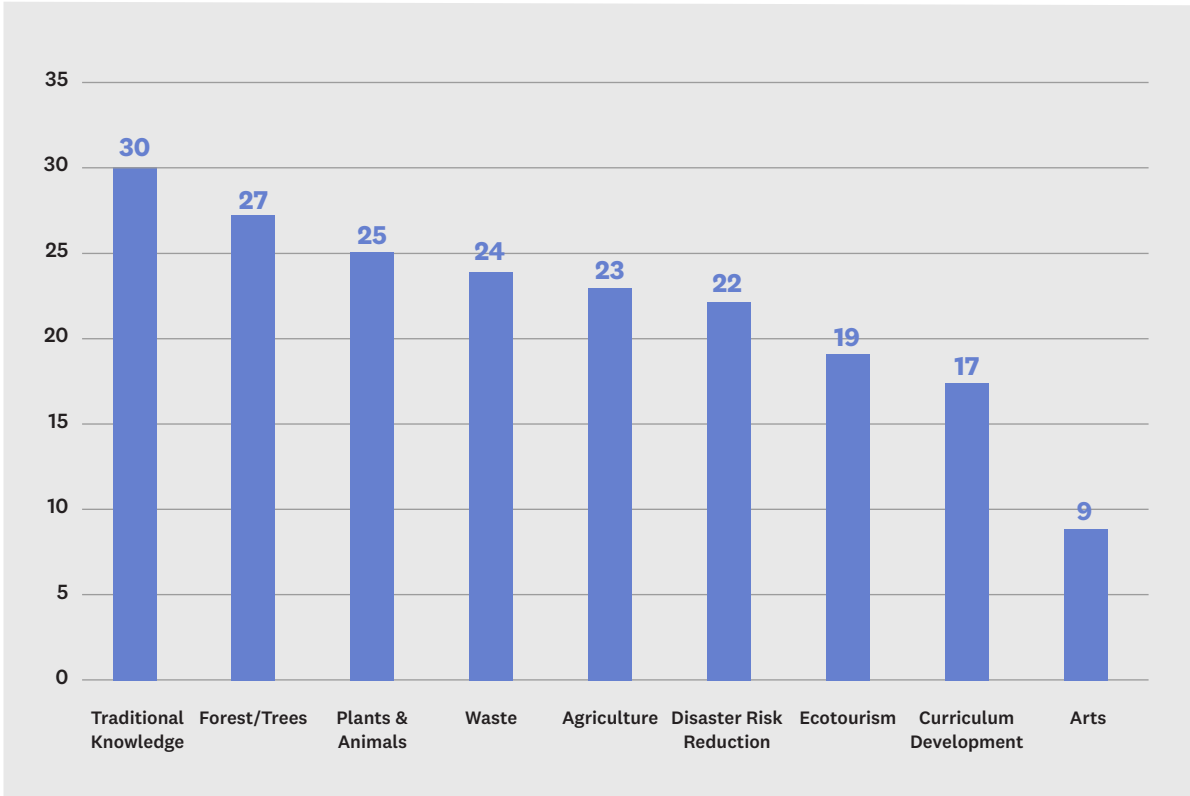


Figure 10. African projects by theme targeted (2020–2024).
*n > 48, multiple selections allowed.

The vast majority of African RCE projects, 45 out of 48 (94 per cent), had a non-formal community audience, with 31 RCE projects in the region (65 per cent) focusing on engaging with youth outside of classroom settings **(Figure 11)**. African RCEs had the lowest percentage of RCEs engaged in teacher training, with only nine RCE projects in the region (18 per cent) — all other regions had over 30 per cent of RCE projects engaged with teacher training.

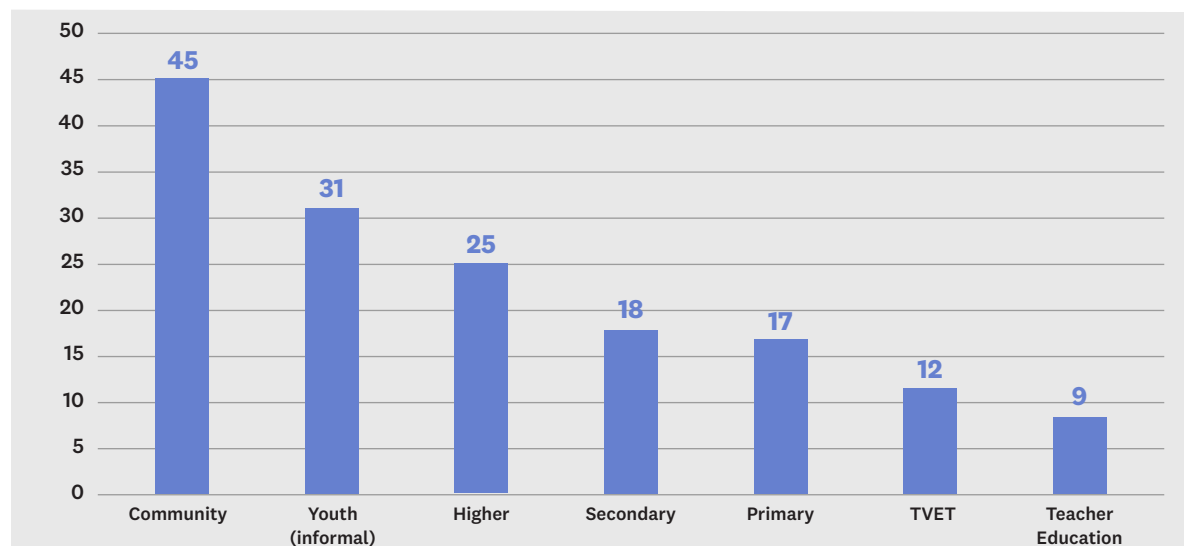


Figure 11. African RCE projects by audience (2020–2024).

*n > 48, multiple selections allowed.

Unlike other regions where urban settings were predominant, African RCE projects were primarily based in agricultural landscapes, followed by forests (Figure 12). Many of these projects explored the role of forestry in complementing agriculture and mitigating the impacts of desertification and climate change. This emphasis underscores the urgent need of the region for sustainable land use practices, particularly in response to increasing environmental pressures such as soil degradation, extreme weather events and shifting rainfall patterns (Rajasugunasekar et al., 2023). By integrating forestry conservation with agricultural sustainability, African RCEs are promoting holistic solutions that address food security, ecosystem resilience and rural livelihoods (Rodenburg, Büchi, & Haggard, 2021).

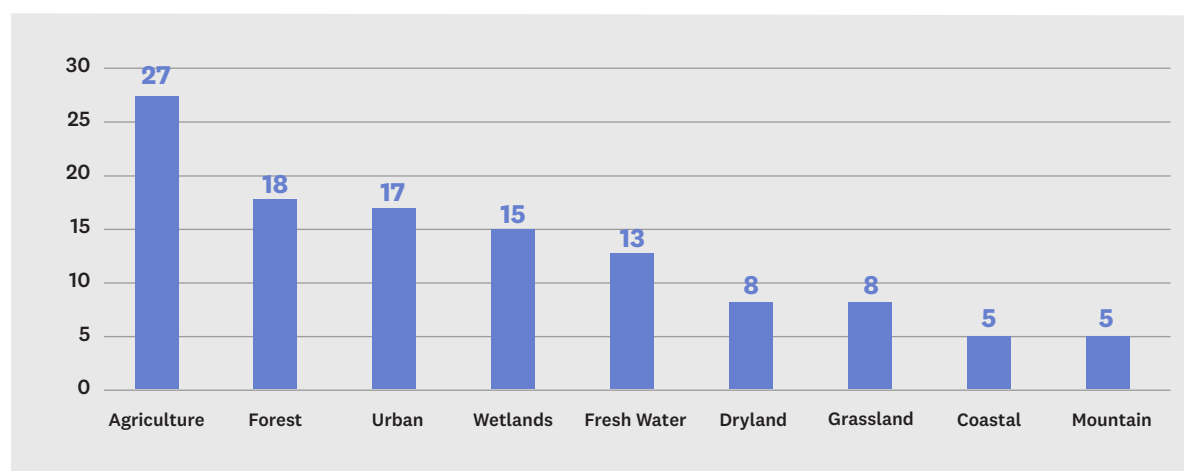


Figure 12. African RCE projects by ecosystem (2020–2024).

*n > 48, multiple selections allowed.

The Americas

From 2020 to 2024, RCEs in the Americas reported 122 RCE projects implemented across seven countries and territories, with a strong emphasis on SDG 11 (sustainable cities and communities), SDG 13 (climate action) and SDG 17 (partnerships for the goals) (Figure 13).

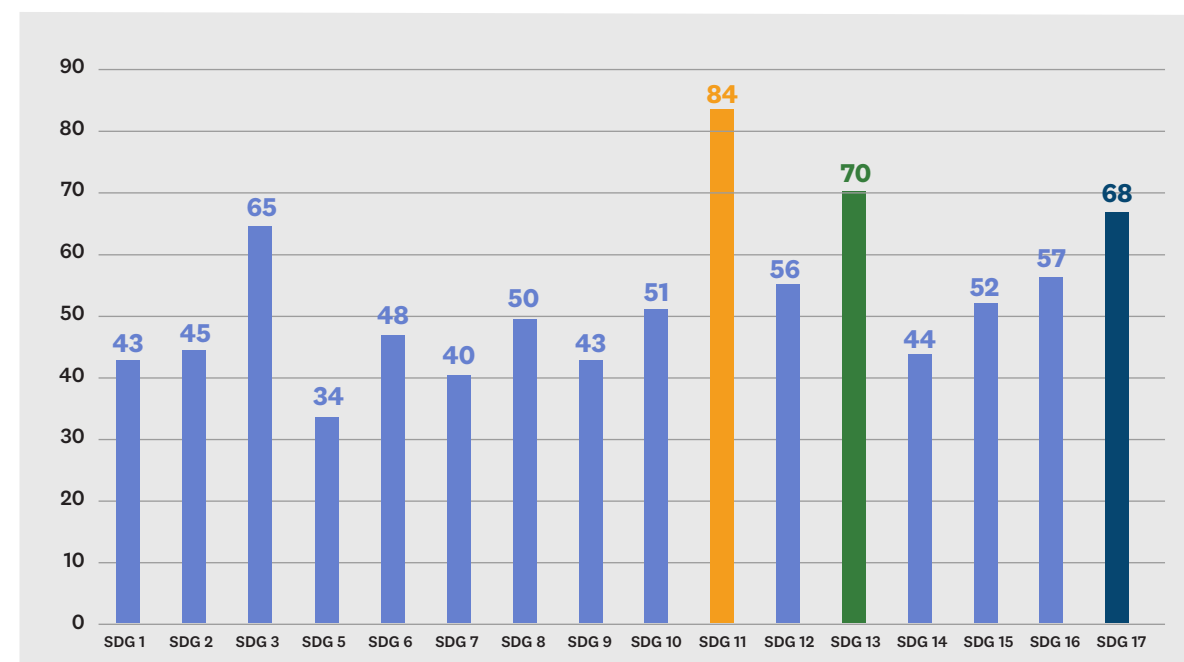


Figure 13. Americas RCE projects by SDGs targeted.

*n > 122, multiple selections allowed.

A predominant focus of ESD projects in the region was on Priority Action Area 3 (building capacities of educators and trainers), with 90 RCE projects out of 122 in the Americas (73 per cent) emphasizing teacher training (Figure 14). This is an increase in proportion from the 2015–2019 time period for the region, when 54 RCE projects out of 163 (33 per cent) were focused on Priority Action Area 3. This trend suggests a changing strategic focus, strengthening the foundation of sustainability education by equipping educators with the knowledge and tools needed to integrate ESD principles into formal and non-formal teaching, as evidenced by research throughout the Americas (Pegalajar-Palomino et al., 2021; Pihen González, 2021). The emphasis on educator capacity-building may reflect a growing recognition that teachers and other educators need to be trained and retrained in the most up-to-date knowledge in regard to the sustainable development agenda.

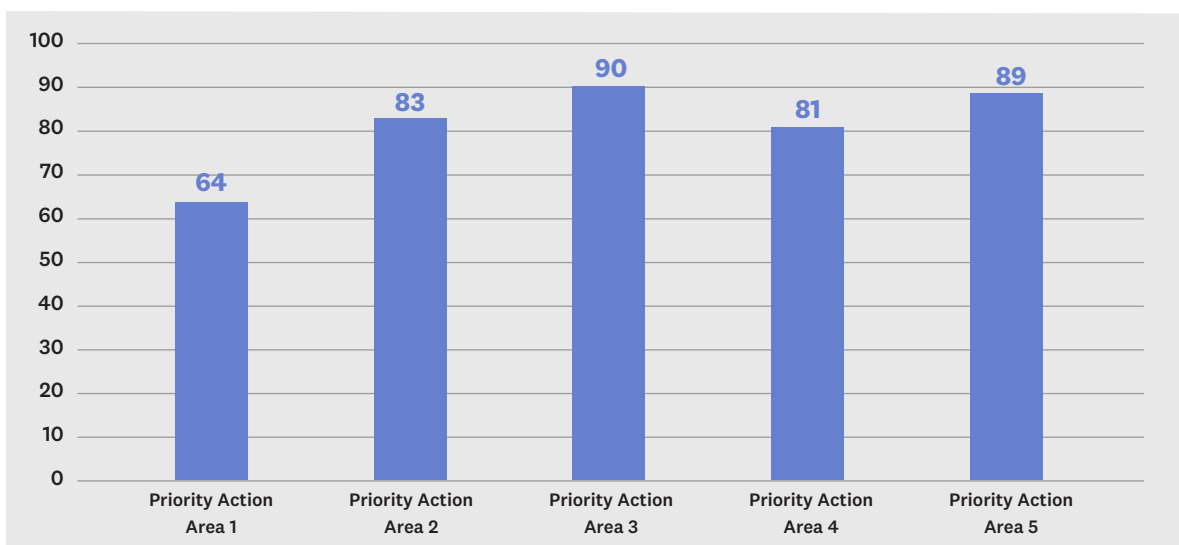


Figure 14. Americas RCE projects by GAP Priority Action Area targeted (2020–2024).

*n > 122, multiple selections allowed.

A significant structural change within the RCE projects in the Americas was the growing role of NGOs as project leaders. During 2020–2024, 102 RCE projects (83 per cent) were led or co-led by NGOs (Figure 15). This is a notable increase compared to the GAP years, when HEIs led 98 out of 163 (60 per cent) of RCE projects in the region and NGOs only led 34 out of 163 (21 per cent) of RCE projects in the region. This shift suggests a decentralization of ESD efforts, with civil society organizations taking on a more active role in implementing and driving ESD initiatives. While universities remain critical partners, NGOs may offer greater flexibility in project implementation, deeper community engagement and the ability to act as intermediaries between academic institutions, local governments and grassroots movements within communities.

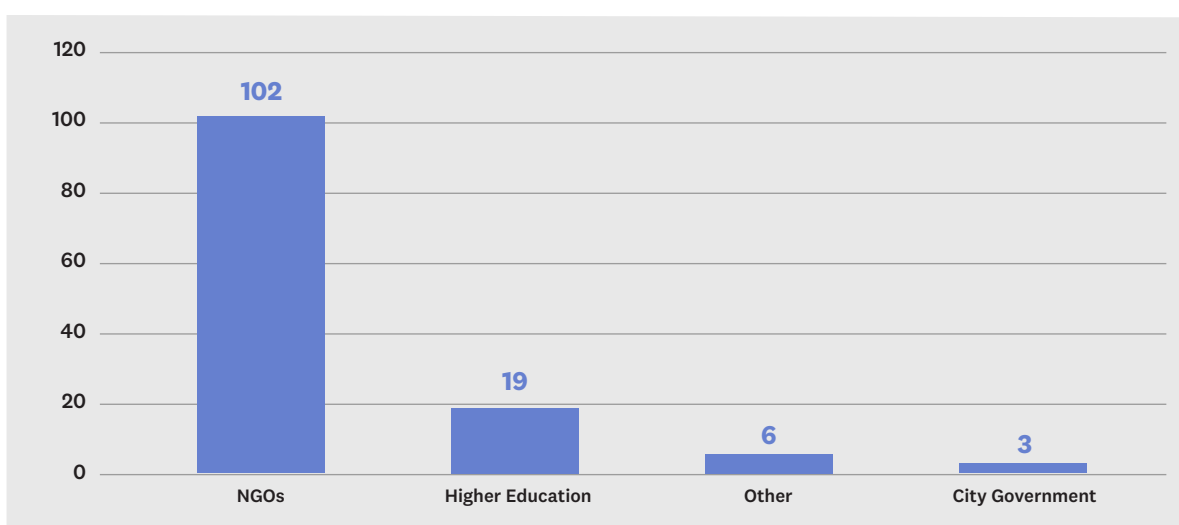


Figure 15. Americas RCE projects by leading organizations (2020–2024).

Additionally, 74 RCE projects (60 per cent) in the Americas focused on curriculum development, ensuring that ESD content is accessible and adaptable for broader educational use (**Figure 16**). The integration of traditional knowledge into 61 RCE projects in the region (50 per cent) highlights an ongoing effort to bridge Indigenous and local knowledge systems in the Americas with contemporary sustainability education, reinforcing the importance of culturally relevant approaches to environmental stewardship (Huaman & Swentzell, 2021; Macintyre, de Souza & Wals, 2024). The integration of reforestation and conservation accounts for 54 projects in the region (44 per cent), with many forest projects occurring in coastal settings. This further reinforces the commitment of the region to ecosystem resilience, recognizing that addressing climate change requires both mitigation and adaptation strategies across diverse landscapes.

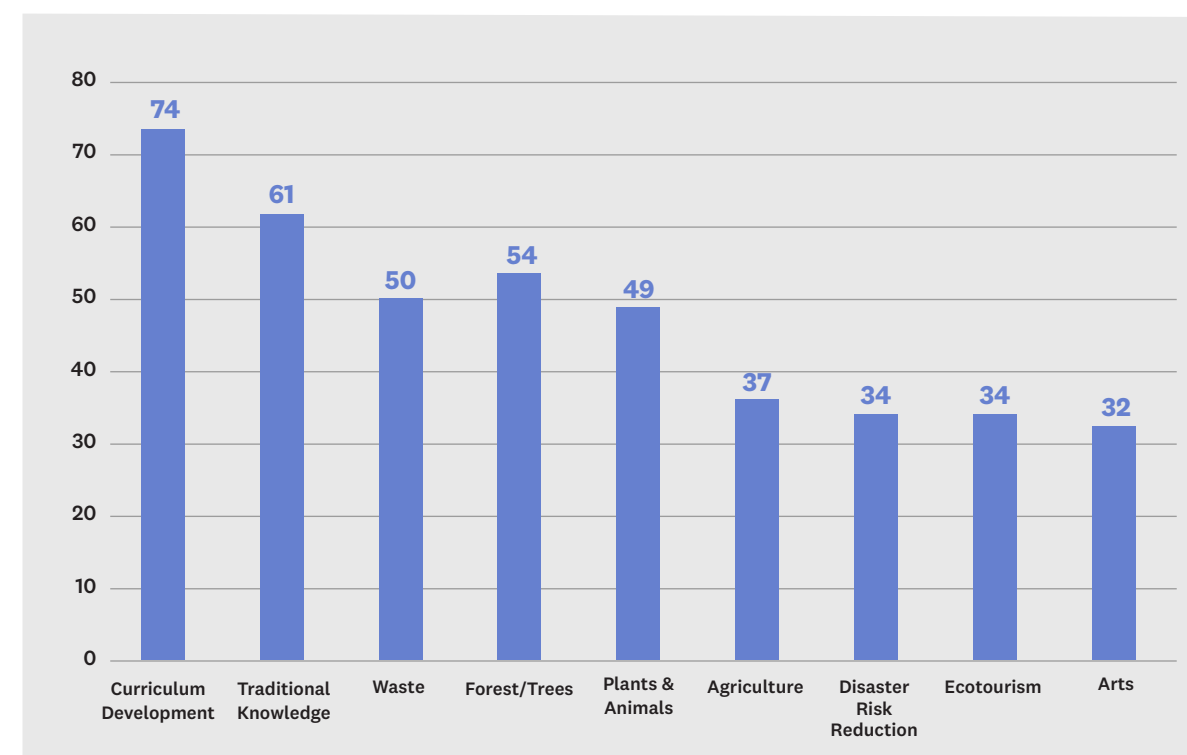


Figure 16. Americas RCE projects by theme targeted (2020–2024).

*n > 122, multiple selections allowed.

Like other regions, the Americas had a predominant focus on ESD for non-formal community projects for the majority of its projects, with 96 RCE projects (78 per cent) focusing on this form of audience engagement (**Figure 17**). The Americas also had the highest proportion of projects by region that worked explicitly with higher education students with 76 RCE projects, (62 per cent). However, the region also had the lowest proportion of RCE projects targeting youth out of classroom settings, with 46 projects (37 per cent) engaging with this type of audience. All other regions had over 50 per cent of their RCE projects engaging with non-formal education targeting youth.

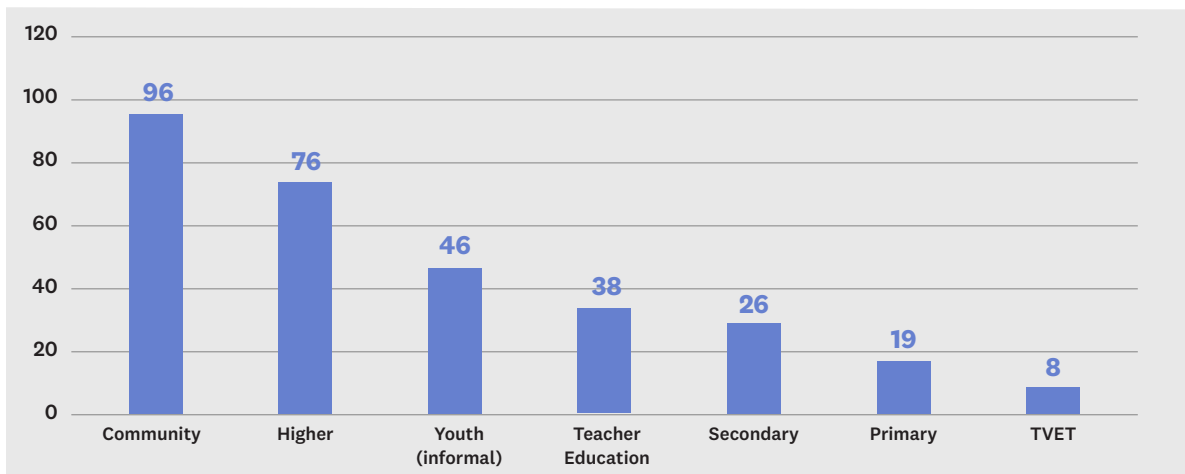


Figure 17. Americas RCE projects by audience (2020–2024).

*n > 122, multiple selections allowed.

Geographically, RCE projects in the Americas were predominantly urban areas, with 79 RCE projects (65 per cent) occurring in urban settings, aligning with the focus of the region on SDG 11 (**Figure 18**). However, 39 projects also addressed the challenges of agricultural landscapes (32 per cent of projects in the region) and 33 projects addressed the challenges faced in coastal environments (27 per cent). The Americas had the highest percentage of RCE projects related to marine and coastal sustainability compared to other regions, with many focusing on sea-level rise and climate change adaptation. This emphasis reflects the pressing environmental challenges faced by coastal communities across the region, particularly in the Caribbean and Atlantic coastal areas, where rising sea levels, extreme weather events and biodiversity loss threaten both human settlements and marine ecosystems (Filho et al., 2022).

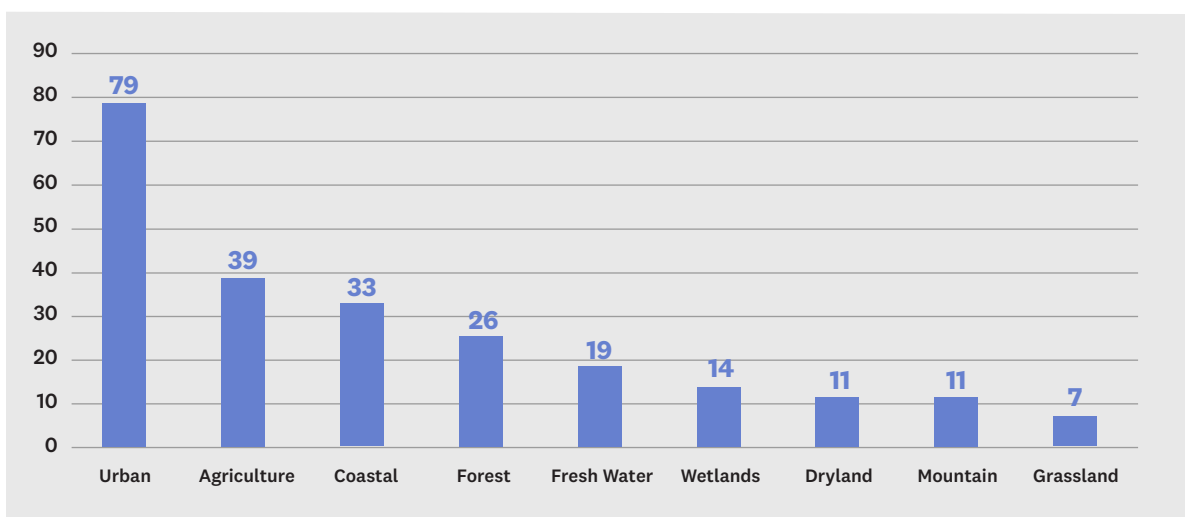


Figure 18. Americas RCE projects by ecosystem (2020–2024).

*n > 122, multiple selections allowed.

Asia-Pacific

From 2020 to 2024, RCEs in the Asia-Pacific region reported 171 projects implemented across 12 countries, with Australia, India, Japan, Malaysia and Republic of Korea leading in contributions. The strong emphasis of the region on SDG 17 (partnerships for the goals), SDG 11 (sustainable cities and communities) and SDG 12 (responsible consumption and production) underscores the growing importance of collaborative, urban-focused and sustainability-driven approaches to development (**Figure 19**). The prevalence of SDG 13 (climate action) and SDG 15 (life on land) also reflects the dual commitment of the region to addressing climate resilience and biodiversity conservation within the RCEs.

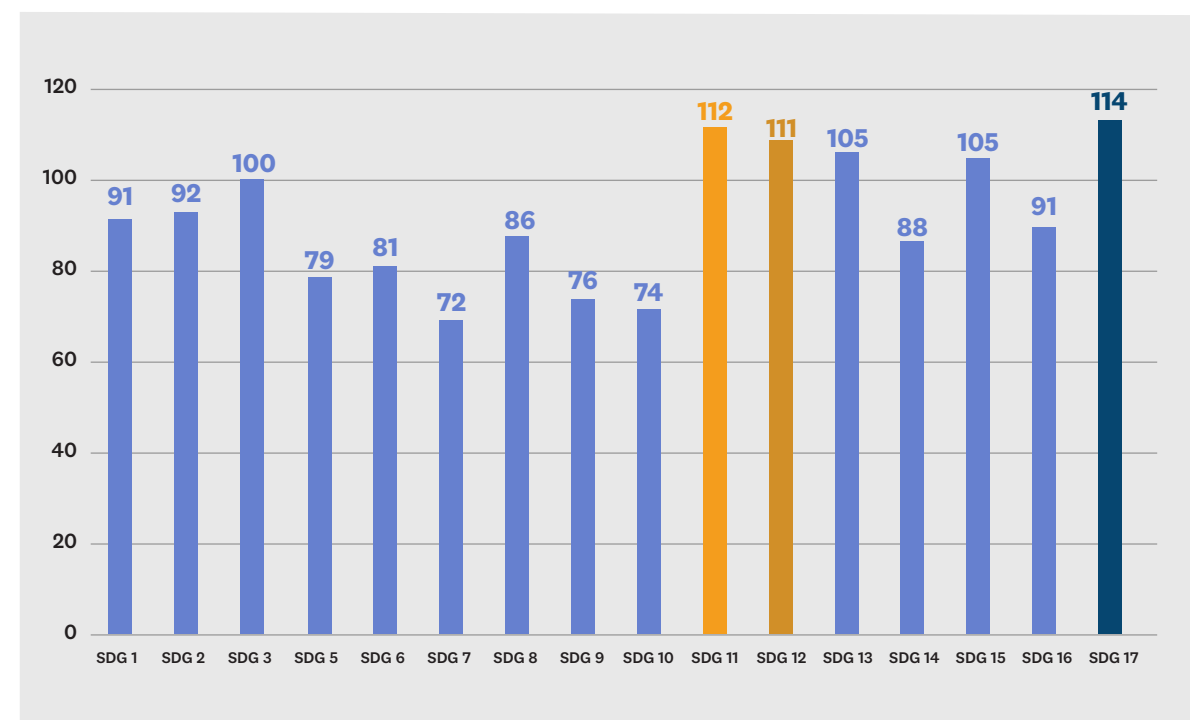


Figure 19. Asia-Pacific RCE projects by SDGs targeted (2020–2024).

*n > 171, multiple selections allowed.

The alignment of RCE projects with Priority Action Area 5 (accelerating sustainable solutions at the local level) and Priority Action Area 4 (empowering and mobilizing youth) suggests that sustainability efforts in the Asia-Pacific region continue to be community-driven, emphasizing grassroots leadership and youth engagement as key ongoing components of ESD (**Figure 20**).

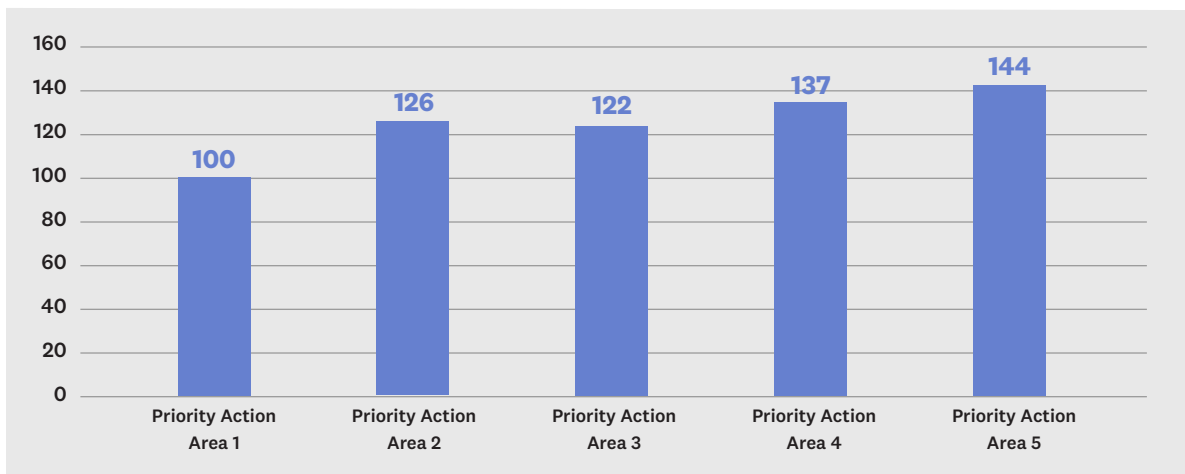


Figure 20. Asia-Pacific RCE projects by GAP Priority Action Areas targeted (2020–2024).

*n > 171, multiple selections allowed.

As with other regions, a notable trend in the Asia-Pacific region was the increasing leadership of NGOs in RCE projects, with 134 RCE projects (72 per cent) led or co-led by civil society organizations (**Figure 21**) — an increase in proportion from the GAP period when 50 out of 167 RCE projects (30 per cent) were led by NGOs. This shift likely reflects a growing recognition of NGOs as effective facilitators of sustainability initiatives, able to bridge gaps between government policies, academic institutions and local communities. Additionally, the region had the highest proportion of RCE projects led by city governments, 12 projects (7 per cent), indicating that urban sustainability efforts using ESD continue to be integrated into municipal planning and governance structures more than other regions.

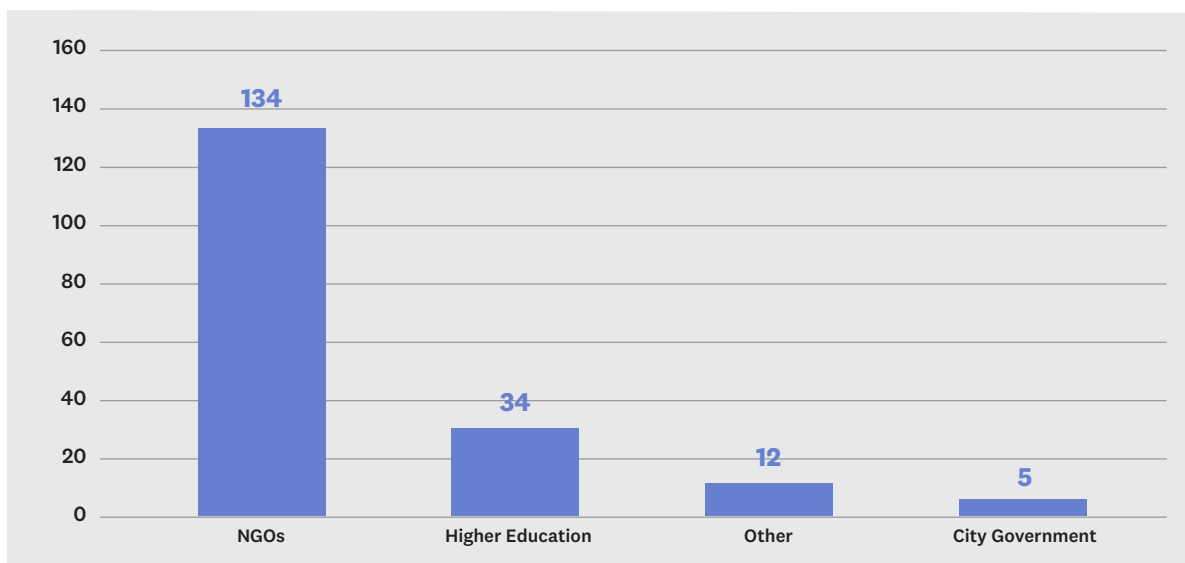


Figure 21. Asia-Pacific RCE projects by leading organizations (2020–2024).

The emphasis on curriculum development for 103 RCE projects (60 per cent) and traditional knowledge integration for 100 RCE projects in the region (58 per cent) highlights commitment of the region to embedding sustainability education within both formal learning institutions and community knowledge systems (**Figure 22**). Furthermore, the strong focus on waste management in 93 RCE projects in the region (54 per cent), particularly plastic waste reduction, signals an urgent regional response to one of the most pressing environmental challenges facing Asia-Pacific nations, where rapid industrialization and consumer culture have contributed to significant waste management issues throughout the region (Debrah, Vidal & Dinis, 2021). This focus ties in with the focus of the region on SDG 12 (responsible consumption and production).

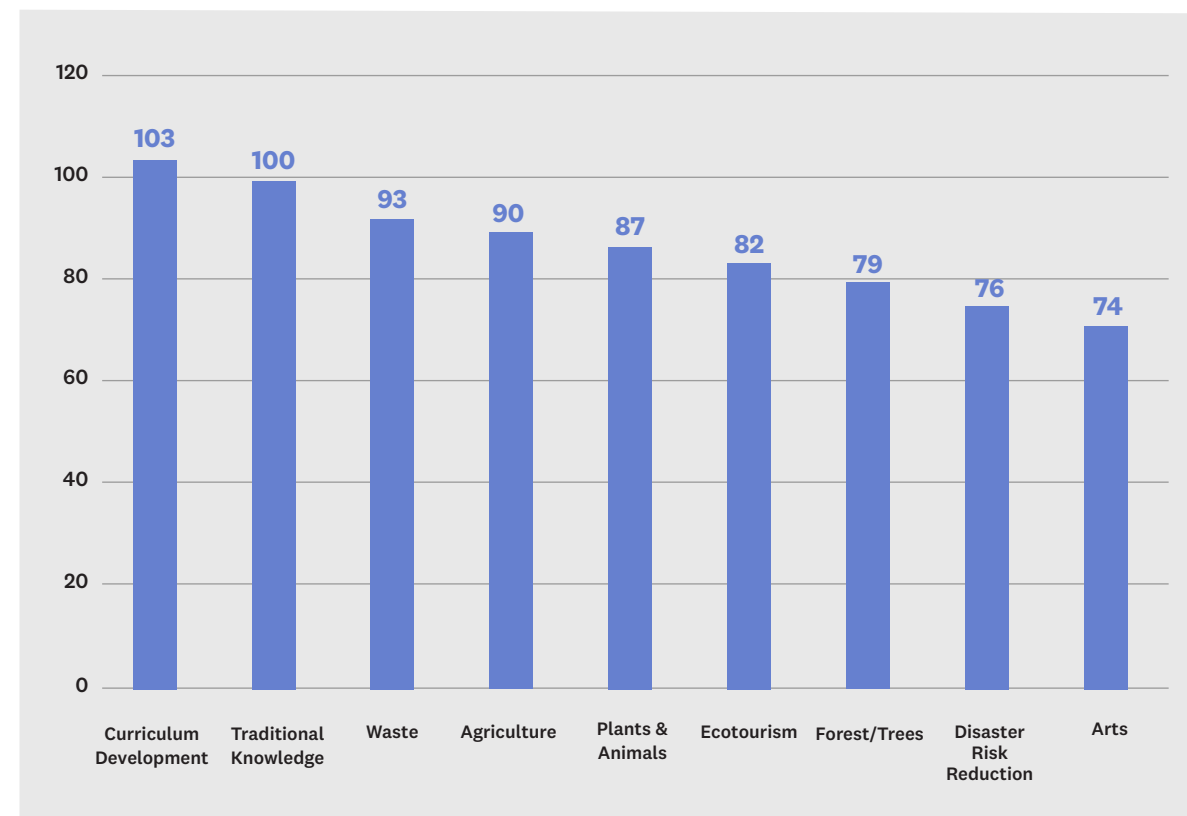


Figure 22. Asia-Pacific RCE projects by theme targeted (2020–2024).

*n > 171, multiple selections allowed.

In line with the region’s engagement with Priority Action Areas 4 (empowering and mobilizing youth) and 5 (accelerating sustainable solutions at the local level), the audiences most frequently targeted by RCE projects in the Asia-Pacific region were local communities in 128 RCE projects (75 per cent) and youth outside of classroom settings in 107 RCE projects in the region (62 per cent) (**Figure 23**).

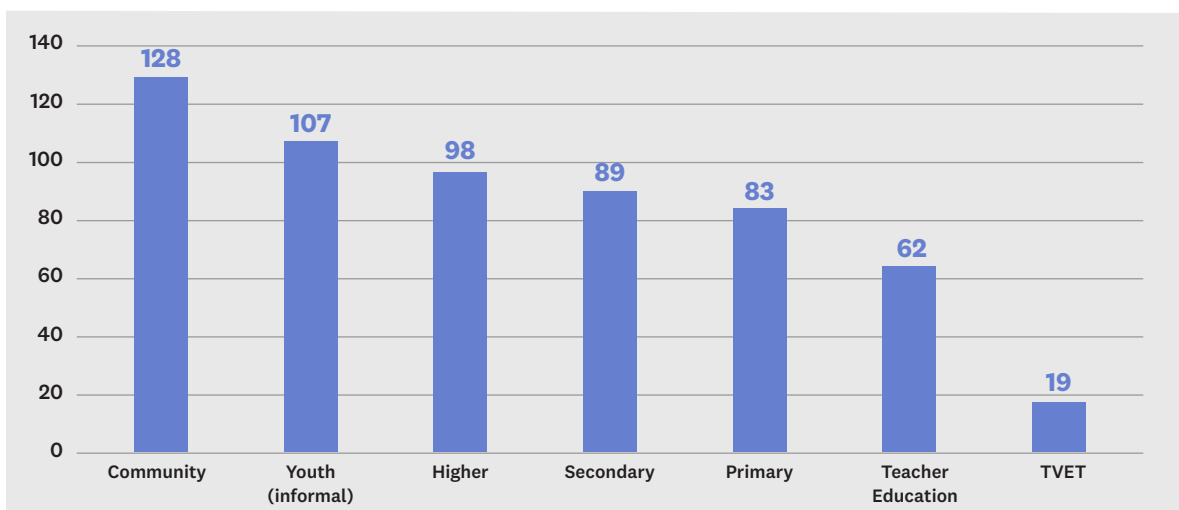


Figure 23. Asia-Pacific RCE projects by audience (2020–2024).

*n > 171, multiple selections allowed.

While urban settings dominated 101 RCE projects in the region (59 per cent), the Asia-Pacific region had a high proportion of projects focusing on freshwater ecosystems, with 52 RCE projects (30 per cent) of ESD initiatives targeting education for the conservation and restoration of rivers and lakes (**Figure 24**). Many cities throughout the Asia-Pacific region are exploring ESD as a mechanism for conserving and preserving water quality in rapidly urbanizing regions (Luo et al., 2022). Fifty projects also engaged with agricultural landscapes (29 per cent) and 47 projects were set in forests (27 per cent), reflecting ongoing efforts to balance environmental conservation with food security and land use sustainability (Yasmeen et al., 2022; Öztürk et al., 2022).

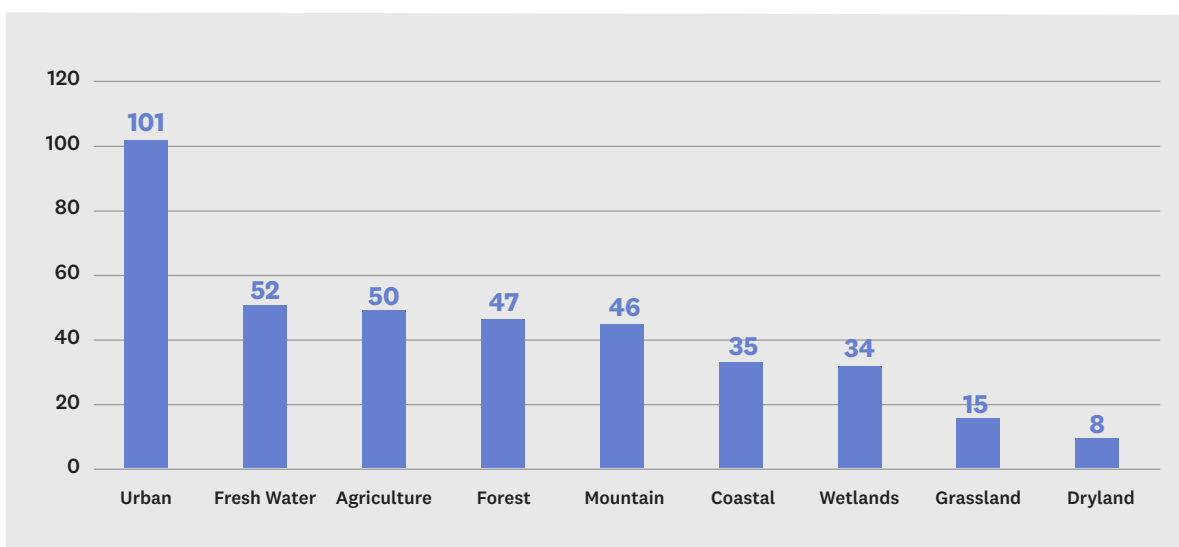


Figure 24. Asia-Pacific RCE projects by ecosystem (2020–2024).

*n > 171, multiple selections allowed.

Europe

Between 2020 and 2024, RCEs in Europe reported 42 ESD projects implemented across 10 countries, with a strong emphasis on SDG 11 (sustainable cities and communities), SDG 15 (life on land), SDG 3 (health and well-being) and SDG 13 (climate action) (**Figure 25**). The region had the lowest percentage of RCE projects targeting SDG 17 (partnerships for the goals), with 23 projects (55 per cent). Compared to other regions, where over 80 per cent of ESD projects targeted SDG 17, European RCEs seem to be prioritizing localized and self-sufficient approaches to sustainability rather than emphasizing cross-sectoral or international collaborations.

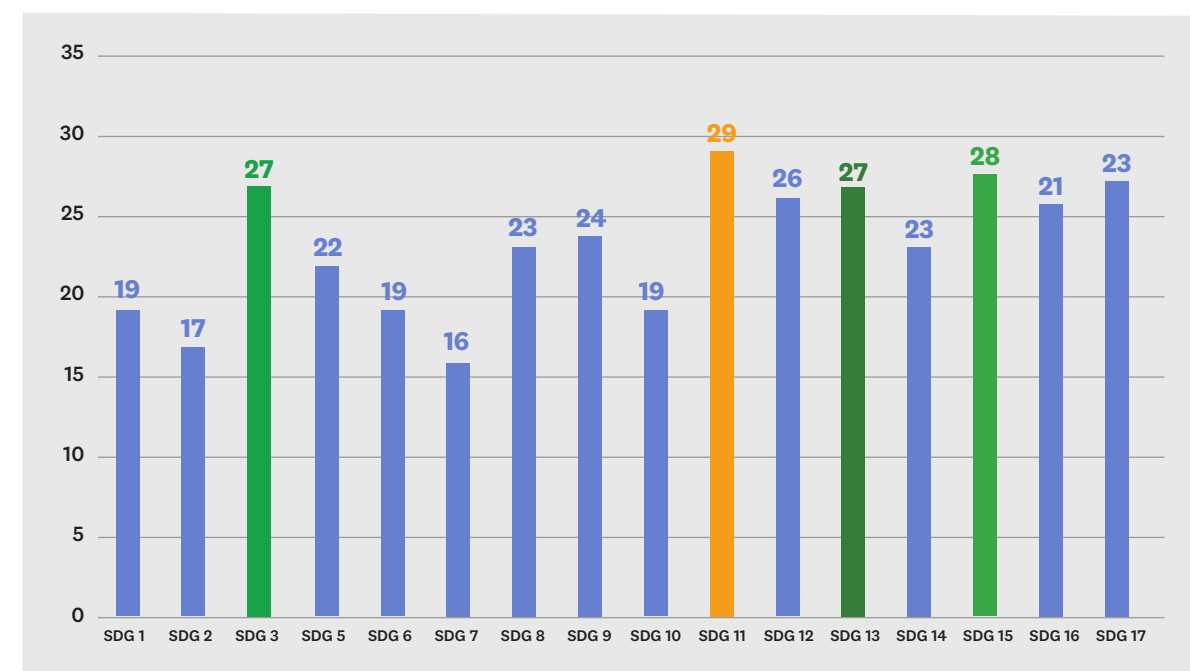


Figure 25. European RCE projects by SDGs targeted (2020–2024).

*n > 42, multiple selections allowed.

The overwhelming focus on Priority Action Area 3 (building capacities of educators and trainers), present in 35 RCE projects (83 per cent), reflects a continuing commitment to embedding sustainability into formal education within the region. Additionally, the high engagement with Priority Action Areas 2 (transforming learning and training environments) in 31 RCE projects (74 per cent), 4 (empowering and mobilizing youth) in 30 projects (71 per cent), and 5 (accelerating sustainable solutions at the local level) in 30 RCE projects in the region (71 per cent) indicates that European RCEs are taking a holistic approach to sustainability education, ensuring that both educators and young people play a central role in implementing sustainable solutions (**Figure 26**).

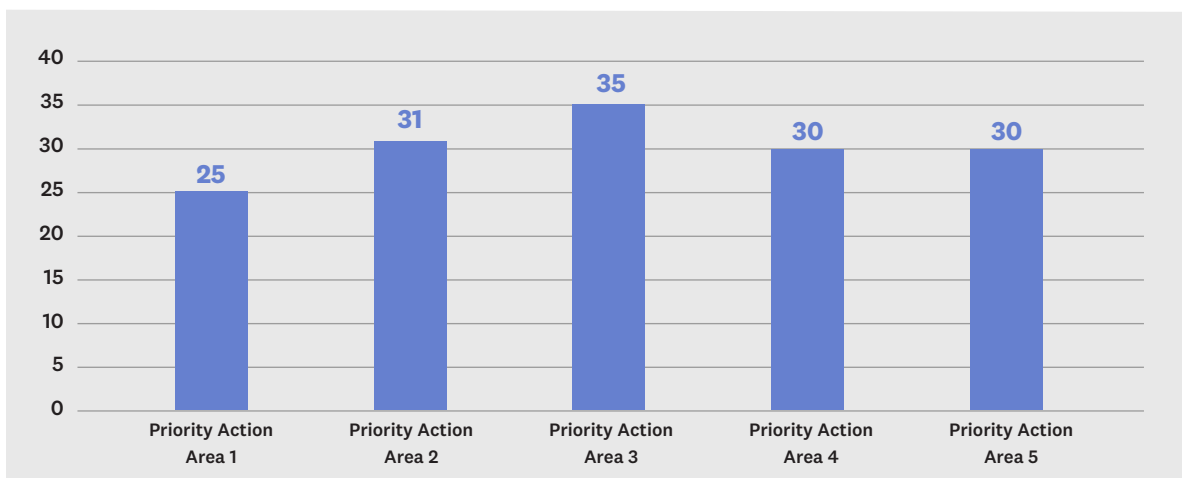


Figure 26. European RCE projects by GAP Priority Action Area (2020–2024).
**n* > 42, multiple selections allowed.

A striking trend in Europe was the shift in leadership of RCE projects, with NGOs spearheading 38 of reported projects (79 per cent) (**Figure 27**) — nearly triple the proportion from the GAP period when 17 out of 70 European RCE projects (24 per cent) were led by NGOs. Meanwhile, city government leadership in ESD projects declined from 7 out of 70 RCE projects (10 per cent) in 2015–2019 to just 2 out of 42 RCE projects (4 per cent) in 2020–2024, suggesting that sustainability efforts in the region have become increasingly decentralized and reliant on civil society organizations rather than municipal authorities. This shift may reflect broader political and economic trends in Europe, where many governments have faced fiscal constraints, leading to a greater dependence on NGOs to drive community-level sustainability initiatives.

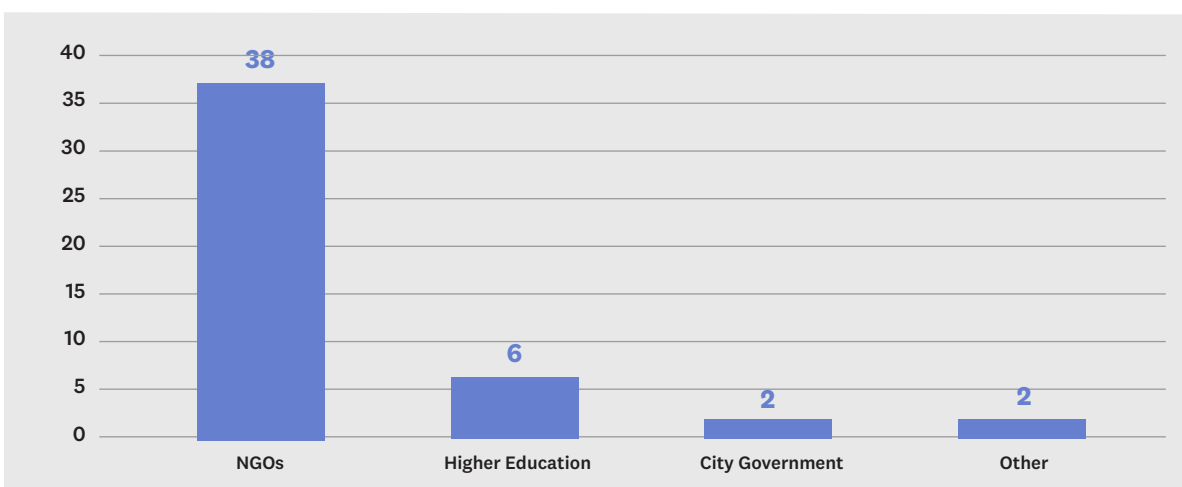


Figure 27. European RCE projects by leading organizations (2020–2024).

32 RCE projects in the region incorporating curriculum development (76 per cent) and 24 projects focusing on waste reduction and management (57 per cent) aligns with the push of the European Union for formal curriculum on ESD along with circular economy models and stricter waste

regulations (Chioatto & Sospiro, 2023) (**Figure 28**). Additionally, a strong emphasis on forest conservation and reforestation in 22 RCE projects (52 per cent) underscores the response of region to mounting biodiversity loss and habitat fragmentation, a particularly urgent issue given the historically low levels of protected natural areas in Europe and relatively high local extinction rates across most taxa (Hermoso et al., 2022).

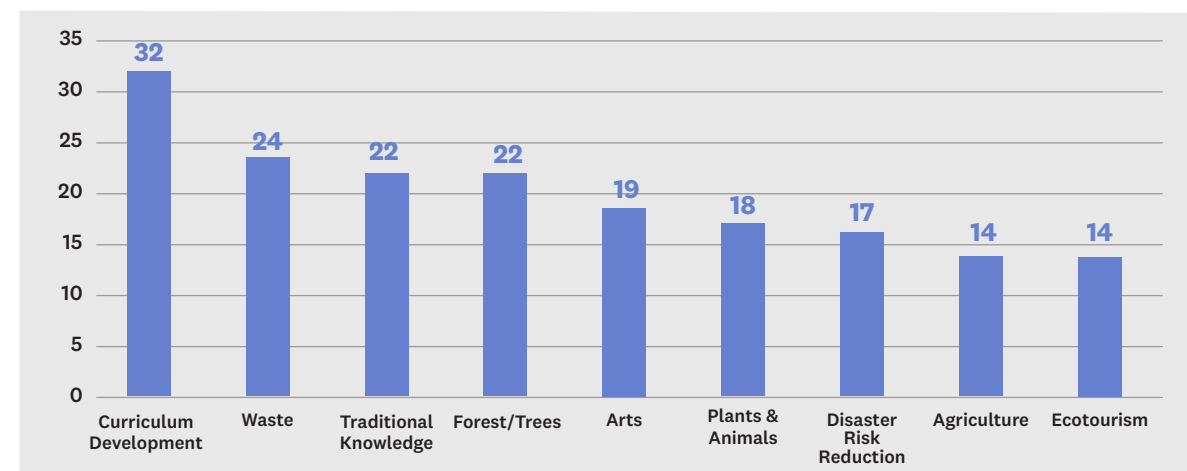


Figure 28. European RCE projects by theme targeted (2020–2024).
**n* > 42, multiple selections allowed.

A distinctive feature of European RCE projects was their reported audience. Unlike the other regions where community was the single predominant target audience, European RCEs equally focused their ESD projects on secondary education and community (26 projects or 62 per cent each) (**Figure 29**). In addition, European RCE reported the highest number of projects focused on ESD in teacher training (20 projects or 48 per cent) compared to all other regions.

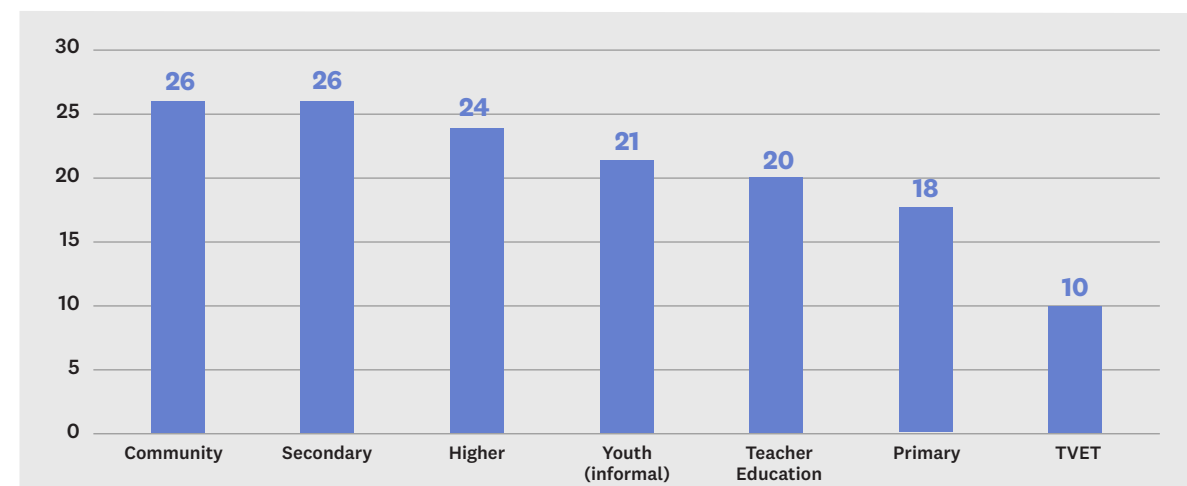


Figure 29. European RCE projects by audience (2020–2024).
**n* > 42, multiple selections allowed.

In terms of project settings, 21 initiatives of the region (50 per cent) took place in urban environments, reflecting ongoing efforts of Europe to integrate sustainability into city planning and infrastructure (**Figure 30**). However, 14 projects in the region also targeted forested areas (33 per cent), 13 projects targeted agricultural landscapes (32 per cent), and 13 projects targeted freshwater ecosystems (32 per cent). This distribution suggests a broad-based approach to sustainability that balances urban resilience with rural and ecological restoration efforts.

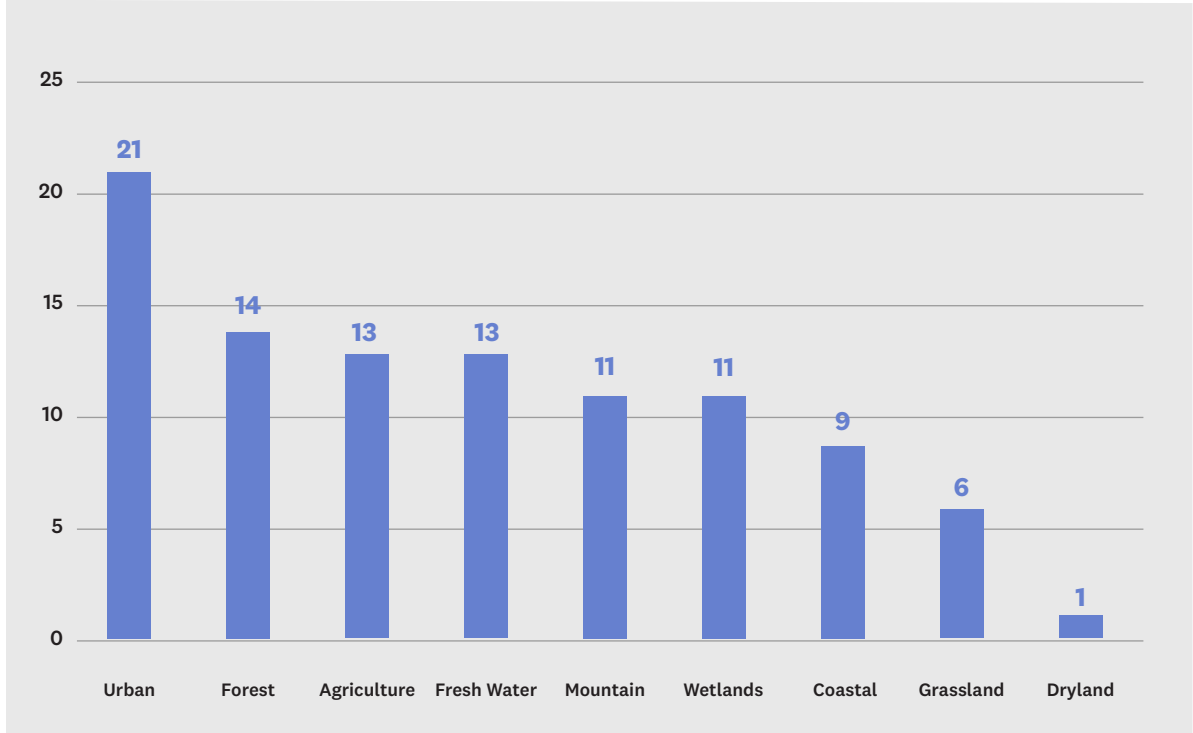


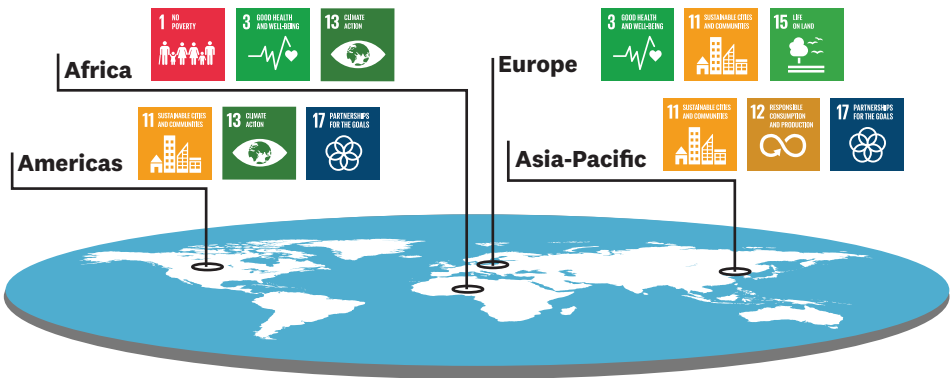
Figure 30. European RCE projects by ecosystem (2020–2024).
*n > 41, multiple selections allowed.

Similar to the Asia-Pacific region, the focus on freshwater ecosystems highlights increasing regional concern over water resource management and pollution control, critical issues in light of climate change and shifting precipitation patterns across Europe (Christidis & Stott, 2021). Together, these trends indicate a strong commitment to sustainability education and environmental restoration, with European RCEs playing a crucial role in addressing both local and continental ecological challenges.

Regional Comparison Analysis (2020–2024)

Regional differences in SDG focus reflect the distinct sustainability challenges faced in each region. In Africa, SDG 3 (good health and well-being) and SDG 1 (no poverty) were emphasized, illustrating the strong link between sustainability, public health and economic resilience. The Americas, Asia-Pacific and Europe all placed significant emphasis on SDG 11 (sustainable cities and communities), aligning with their increasing focus on urban sustainability. Europe also distinguished itself through a strong focus on SDG 15 (life on land), reinforcing efforts around biodiversity conservation and ecological restoration. Meanwhile, SDG 17 (partnerships for the goals) was most prominent in the Americas and Asia-Pacific, highlighting an emphasis on cross-sectoral and international collaboration, whereas European RCEs placed less focus on global partnerships, favouring more localized, smaller-scale networks. Across all four regions, SDG 13 (climate action) remained a top priority, reinforcing a shared global recognition of the urgency of mitigating and responding to climate change.

In terms of the ESD 2030 framework, Priority Action Area 5 (accelerating sustainable solutions at the local level) and Priority Action Area 4 (empowering and mobilizing youth) were the most engaged Priority Action Areas in all regions except for Europe. Europe placed the strongest emphasis on Priority Action Area 3 (building capacities of educators and trainers), ensuring sustainability concepts were integrated into professional development for teachers. These variations suggest that while all regions recognize the importance of sustainability education, their strategies differ — some emphasize systemic change within education institutions, others focus on strengthening educator expertise, and others prioritize community-driven action for non-formal education.



The thematic priorities of RCE projects further highlight regional sustainability challenges. In Africa, conservation was a dominant focus, with 56 per cent of projects addressing conservation of forest ecosystems and over half targeting specific plant and animal species for protection. Many of these initiatives also integrated Indigenous knowledge systems (62 per cent), underscoring the importance of traditional environmental stewardship. In the Americas, curriculum development

and Indigenous knowledge was also widely incorporated into ESD materials, but across a broader range of topics beyond conservation, particularly in relation to climate adaptation and sustainable resource management. The Americas region also had the highest focus on learning about forests in coastal zones. The Asia-Pacific region placed the strongest overall emphasis on disaster risk reduction across all settings, while also prioritizing waste management (54 per cent), particularly the reduction of plastic waste, in response to growing concerns about plastic pollution. Meanwhile, Europe had the highest proportion of projects focused on circular economy principles, with 57 per cent of projects emphasizing waste reduction and sustainable resource use, aligning with EU policies on sustainability. These variations highlight how RCEs adapt their sustainability education initiatives to address both global SDG priorities and the specific environmental and socioeconomic contexts of their regions.

Comparison of RCE Projects Analysis Between GAP (2015–2019) and Current Period (2020–2024)

The data generated by RCE self-coding in the current period appears to be more complex than that of the previous GAP period. This is because RCEs in the current period tagged their projects with significantly more features, for instance, multiple Priority Action Areas of a project or multiple SDGs covered by a project. This inherited complexity of the dataset presents a challenge for the comprehensive comparative analysis of the time series data presented in this section.

Several notable shifts between GAP and current analyses were observed. First of all, the total number of RCE projects reported dropped from 479 during 2015–2019 to 383 reported during 2020–2024. This reduction is likely attributable to the closure of many schools, universities and other institutions worldwide in 2020 and 2021 due to the Covid-19 pandemic, which may have disrupted many ongoing projects and limited the capacity for new initiatives. The implications of this drop could affect the analysis of the more recent time period, as fewer projects may limit the breadth and diversity of data, potentially influencing the observed trends and the generalizability of the results. The decline of the reported projects was observed across the regions except for the Asia-Pacific region where the number of projects was slightly increased from 167 to 177 (Figure 31).

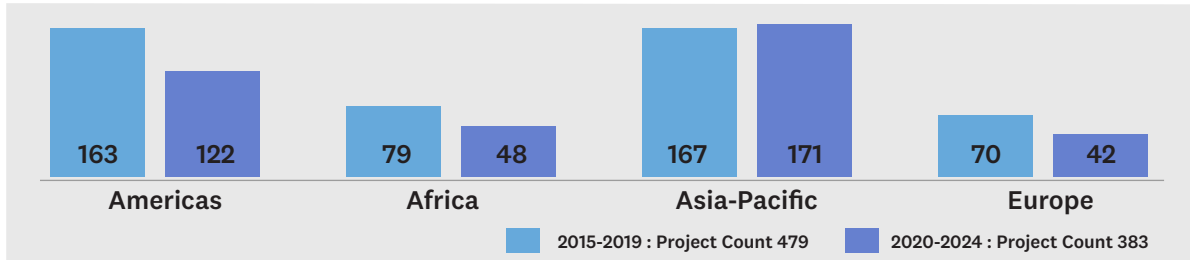


Figure 31. Regional representation of RCE projects (2015-2019) and (2020-2024).

Second, the SDGs prioritized by RCEs appear to have evolved between the two periods while RCE projects engaged with a broad spectrum of SDGs. In the GAP period the most frequent focus were on SDG 13 (climate action), SDG 15 (life on land) and SDG 12 (responsible consumption and production) (Vaughter et al., 2022). From 2020 to 2024, while SDG 13 continued to be a significant focus, emphasizing the critical role of education in addressing climate challenges, there was a notable increase in the prominence of SDG 11 (sustainable cities and communities) and SDG 17 (partnerships for the goals). This indicates a shift toward urban sustainability and the importance of multi-stakeholder and cross-sectoral collaborations. The growing emphasis on SDG 11 signals a broader recognition of cities as essential spaces for implementing sustainable development solutions (Chen et al., 2022), while SDG 17 underscores the expanding role of partnerships in driving sustainable development initiatives (Masuda et al., 2022). This shift aligns with broader global sustainability trends, where urbanization and collaborative governance are increasingly viewed as vital to achieving sustainable development (Teixeira Dias et al., 2023).

Third, RCE projects showed notable shifts in their ESD 2030 Priority Action Areas between 2015–2019 and 2020–2024. Note that while the total number of RCE Projects fell from 479 to 383, the project count for every Priority Action Area actually increased (Figure 32). This contradiction stems from individual RCEs tagging their projects in multiple areas, as discussed earlier. The analysis shows that Priority Action Area 5 (accelerating local actions) remained the most common focus in both periods. However, the margins between Priority Action Area 5 and the other Areas in the GAP period are significantly reduced in the current period. This shows RCEs’ efforts in increasingly balancing their activities in different Priority Action Areas beyond the local actions.

More specifically, engagement with Priority Action Area 2 (transforming learning environments) grew significantly, especially in Africa. Priority Action Area 3 (building capacity of educators) remained the area of most engagement for European RCE projects during both time periods, highlighting the role of well-prepared educators in the region. In contrast, Priority Action Area 1 (advancing policy) saw limited engagement in both periods, suggesting that while grassroots and institutional initiatives are strong, influencing policy continues to be a challenge.

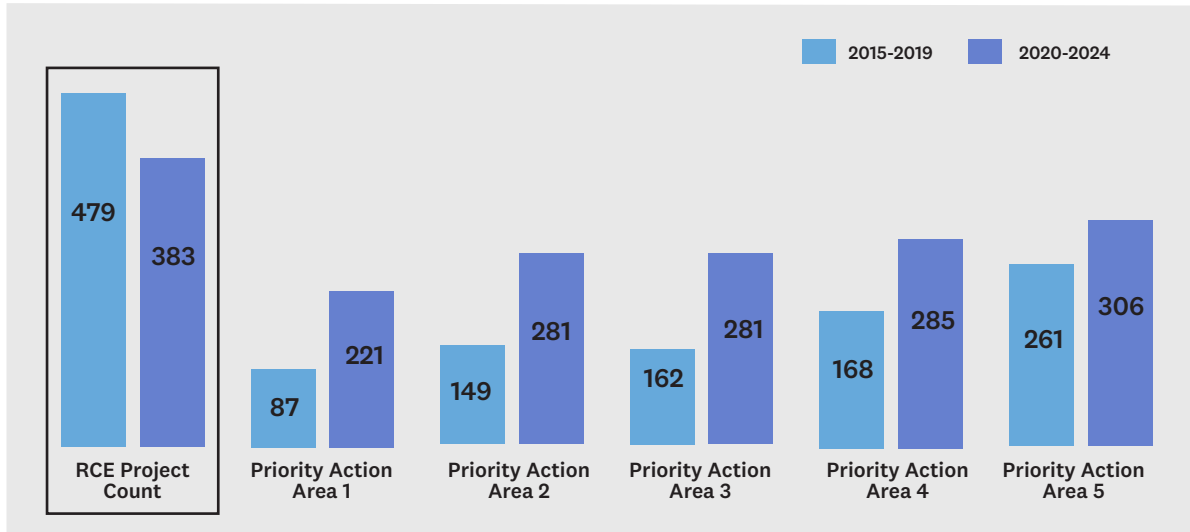


Figure 32. Representation of Priority Actions for the RCE projects (2015-2019) and (2020-2024).

Fourth, the leadership of RCE projects demonstrated a notable shift as well between the two periods (**Figure 33**). From 2015 to 2019, HEIs were the dominant leaders, heading over 258 projects (54 per cent). However, from 2020 to 2024, a major trend was the growing role of NGOs in leading RCEs projects across all four regions. Compared to the GAP period, civil society organizations took on an even larger share of leadership responsibilities, with NGOs assumed leadership in the majority of projects, with over 317 projects (76 per cent) being led or co-led by NGOs. This shift reflects a move toward more decentralized and community-driven models of sustainability education, with NGOs playing an increasingly agile and responsive role in addressing local sustainability challenges. While universities continue to contribute through research and curriculum development, the increasing leadership of NGOs highlights their ability to mobilize resources quickly, engage communities effectively and implement projects with a high degree of adaptability. However, this change raises important questions about the long-term sustainability of ESD initiatives. While NGOs excel at grassroots implementation, institutional support and momentum from both governments and universities may be essential to ensuring the long-term systemic impact of these projects (Kaba, 2021).

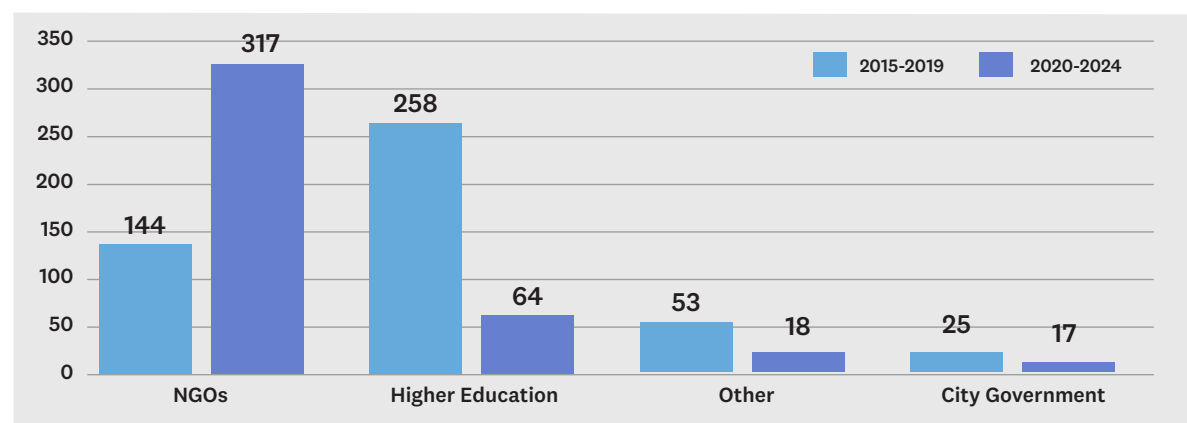


Figure 33. Representation of Leadership for the RCE projects (2015-2019) and (2020-2024) .

Fifth, some key shifts emerged in the thematic focus while RCE projects remained diverse in themes during both periods. From 2015 to 2019, climate action, biodiversity conservation and responsible consumption were central themes, in line with the broader SDG priorities of the time. These themes persisted from 2020 to 2024, but new areas gained traction, particularly waste management and urban sustainability. With 50 per cent of RCE projects in the 2020-2024 period addressing waste reduction — especially plastic waste — there is clear evidence of growing concern over consumption patterns and pollution, likely influenced by global efforts such as bans on single-use plastics and the increasing visibility of oceanic plastic pollution. Furthermore, projects focused on urban resilience, sustainable mobility and green infrastructure became more prevalent, reflecting the heightened emphasis on SDG 11. The inclusion of traditional knowledge components also grew, with 56 per cent of projects incorporating Indigenous and intergenerational knowledge systems, highlighting the growing recognition of cultural perspectives in sustainability education.

Finally, the project settings of RCE projects also shifted between the two periods. From 2015 to 2019, project settings were distributed more evenly across urban, rural and natural environments. However, from 2020 to 2024, there was a clear increase in urban-focused projects, with the majority

of RCE initiatives now taking place in cities and metropolitan areas. This trend corresponds with the increased prioritization of SDG 11 and the recognition that cities are key sites for sustainable development interventions. While urban projects became more prominent, there was also a concerted effort to connect urban areas with their surrounding ecosystems, with many projects explicitly linking cities to agricultural landscapes, forests and freshwater ecosystems. This integrated approach reflects an emerging awareness of the interdependencies between urban sustainability, food security, water management and biodiversity conservation. Despite these trends, regional differences persisted, with Africa continuing to prioritize agricultural landscapes and conservation efforts, while the Americas focused more on marine and coastal areas than other regions, and Europe and the Asia-Pacific region emphasizing conservation and restoration of freshwater ecosystems.

Conclusion and Next Steps

Over the past decade, RCEs have demonstrated their ability to adapt to emerging global challenges while maintaining a strong commitment to using education as a local implementation mechanism for sustainability action. The comparison between the 2015-2019 and 2020-2024 periods highlight both continuity and evolution in the approach of the Global RCE Network. While climate action remained a central priority, there was a growing focus on urban sustainability, waste management and stronger multi-stakeholder collaboration. The increasing prominence of SDG 11 (sustainable cities and communities) and SDG 17 (partnerships for the goals) suggests that RCEs are continuing to emphasize the importance of cross-sectoral cooperation in tackling complex sustainability issues in an urbanizing world. The expansion of partnerships, especially at the municipal level in some regions, reflects an opportunity for RCEs to play a greater role in shaping sustainable urban development and strengthening local governance for sustainability.

Looking ahead, there are exciting opportunities for RCEs to deepen their impact by expanding their engagement with policy frameworks and decision-makers. While policy change has been a less prominent focus compared to local implementation and education initiatives, RCEs are well-positioned to bridge the gap between grassroots action and systemic change. Strengthening connections with policymakers and integrating ESD into broader sustainability strategies at the national, regional and international levels could amplify the long-term impact of their work. Additionally, while NGOs have played an increasingly central role in leading RCE projects, ensuring a balanced distribution of leadership among local governments, universities and civil society organizations will be key to institutionalizing ESD efforts and ensuring their sustainability beyond individual project cycles.

Finally, as RCEs continue to prioritize urban sustainability, conservation and traditional knowledge integration, there is great potential to further explore the intersections between these areas such as promoting nature-based solutions in cities, strengthening food systems through sustainable agriculture and expanding circular economy initiatives using existing knowledge systems. By building on the insights from 2020-2024, RCEs can continue to evolve as leaders in ESD, shaping more resilient, inclusive and sustainable communities worldwide.

5

Reflections and Lessons Learned from 20 Years of the Global RCE Network

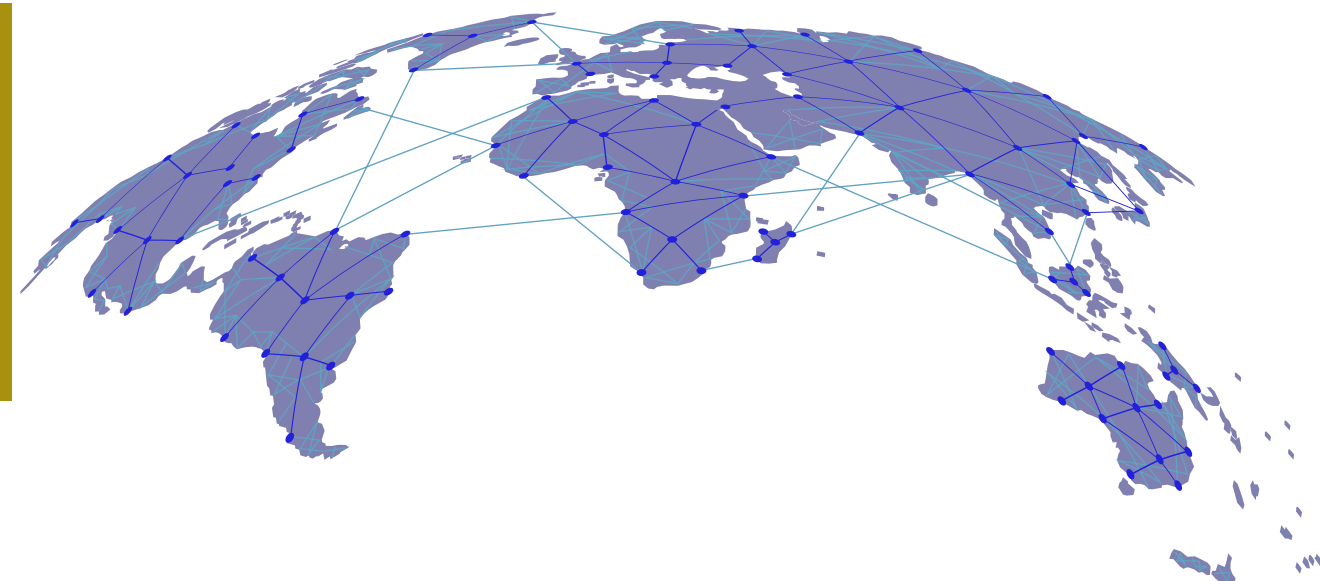
Anupam Khajuria, Miki Konishi, Mario Tabucanon and Dzulkifli Abdul Razak

Introduction

Since their establishment in 2005, the RCEs have evolved into a global network dedicated to promoting ESD through localized, multi-stakeholder collaboration. Initiated by UNU with significant and ongoing support from the Ministry of the Environment, Japan, the network now includes 200 RCEs across the world. Over the past two decades, RCEs have played a pivotal role in advancing the global ESD agenda, responding to successive international frameworks, particularly UN-DESD (2005–2014), GAP (2015–2019) and the current ESD for 2030 (2020–2030). At each stage, RCEs have demonstrated adaptability and innovation, translating global sustainability ambitions into local actions rooted in diverse cultures, priorities and community needs, showcasing the transformative potential of community-driven approaches to ESD.

Building on this foundation, this chapter offers a comprehensive reflection on the evolution of RCEs over the last 20 years. It begins by tracing the development of RCEs in close alignment with international ESD frameworks, laying the groundwork for their contributions to localizing sustainability through education and partnerships. The chapter also explores how RCEs have contributed to bridging policy and practice, the ways in which they have drawn on Indigenous and traditional wisdom to root ESD in local values and contexts, as well as resilience and transformation of RCEs during the Covid-19 pandemic.

Moving beyond their foundational roles, the chapter then highlights how the RCEs have encountered and addressed key challenges, including sustaining momentum, ensuring financial viability, enhancing inclusive governance and strengthening monitoring and evaluation. It reflects on how RCEs have learned from these experiences, adapted to diverse and evolving contexts and contributed to advancing ESD through locally grounded, collaborative approaches. These reflections highlight how RCEs have evolved as resilient learning communities and platforms for values-based transformation, continually shaped by lessons from practice.



13th Global RCE Conference (2023 in Gombak, Malaysia).

To complement these insights, the chapter presents compelling stories from five long-standing RCEs, acknowledged in 2005 or 2007, as illustrative examples from the early years of the network. While not exhaustive, these cases demonstrate how sustained, community-based collaboration can drive both personal and collective transformation, contributing to the development of resilient and inclusive communities. Together, these narratives offer a forward-looking perspective on the role of RCEs in shaping a more human-centred and sustainable future.

Development of RCEs in Alignment with ESD International Frameworks

The United Nations Decade of Education for Sustainable Development (2005–2014)

The UN-DESD, launched in 2005 and led by UNESCO, marked a pivotal era for embedding sustainability into education systems worldwide. Its overarching goal was to integrate the principles, values and practices of sustainable development into all aspects of education and learning, with the aim of encouraging behavioural changes that would create a more sustainable future in terms of environmental integrity, economic viability and social justice (UNESCO, 2014). In response to this call, the RCE framework was envisioned as a practical mechanism to operationalize ESD at the local level, while fostering also global connectivity and knowledge exchange (Mochizuki & Fadeeva, 2010).

During the first five years (2005–2009), the Global RCE Network experienced foundational growth and rapid expansion. Starting with seven RCEs acknowledged in June 2005 (see Chapter 1), the network grew to 68 RCEs by December 2009. This period was characterized by the establishment of new partnerships and the creation of educational initiatives that bridged formal, non-formal and informal education. RCEs developed new curricula, teacher training programmes and community workshops that promoted system thinking, critical reflection and participatory learning. Their activities addressed urgent local challenges by adapting the ESD framework to diverse local contexts. RCE projects were grounded in the spirit of community, social learning, diversity and respect for multiple forms of knowledge. Throughout this period, the RCE network engaged policymakers through roundtables and facilitated networking and collaboration through regional meetings and global conferences, addressing critical themes, such as climate change, sustainable consumption, biodiversity, disaster management and youth empowerment.

Key milestones in the second half of the Decade (2010–2014) included the adoption of the Tongyeong Declaration on RCEs and ESD at the 7th Global RCE Conference hosted by RCE Tongyeong in 2012. This declaration reaffirmed the network's commitment to building a global learning space for ESD, promoting collaboration and sharing best practices. Another significant achievement was the adoption of the Okayama Declaration in 2014 at the 9th Global RCE Conference hosted by RCE Okayama. This declaration set the future direction for RCEs beyond the UN-DESD, emphasizing the need for stronger partnerships, enhanced capacity building and a focus on impacts in local communities. Furthermore, the adoption of the Guiding Principles for the RCE Community in 2014 underscored the importance of quality, good governance and continued alignment with international ESD frameworks.

By the end of the UN-DESD in 2014, the network had expanded to 128 RCEs worldwide, demonstrating significant influence in mainstreaming ESD at multiple levels. The achievements during the UN-DESD decade positioned RCEs as key actors in the ongoing global movement for

sustainable development, with a robust foundation for future growth and impact. As the world transitioned to new international ESD frameworks, the RCE network was well-prepared to continue its leadership in advancing ESD. The enduring spirit of Ubuntu and the principles of sustainability remain at the heart of the RCE movement, ensuring that education continues to be a powerful driver of transformation for a more sustainable world, also under the follow-up framework that began in 2015.



Global Action Programme on Education for Sustainable Development (2015–2019)

The launch of the Global Action Programme on ESD (GAP) in 2015 marked a transformative phase for both the RCE and the broader global ESD movement. As the successor to the UN-DESD, the GAP aimed to scale up ESD actions, accelerating progress toward sustainable development and the newly adopted Agenda 2030 and SDGs.

The adoption of the above-mentioned Okayama Declaration in 2014 reaffirmed the RCE community's commitment to contributing to the GAP, which was operationalized through the first RCE roadmap, Roadmap for the RCE Community, 2015–2019. This roadmap ensured that RCE strategies were closely aligned with GAP's five Priority Action Areas: advancing policy, transforming learning environments, building capacity of educators, empowering and mobilizing youth, and accelerating local level actions.

The adoption of the SDGs in 2015 marked a major shift, drawing global attention to the interconnected nature of sustainability challenges. Instead of treating the 17 goals separately, there was growing recognition of the need to address root causes, manage trade-offs and create synergies. The SDGs' clarity and universality helped raise awareness across sectors, including business, government and civil society, beyond the education community traditionally engaged in ESD. As cross-sector collaboration was already well embedded in the RCE network, RCEs were well-positioned to align with the SDG framework and leveraged their multi-stakeholder foundations to accelerate progress toward the goals.



Throughout the GAP period, RCEs continued to advance ESD and implement contextually relevant actions through diverse partnerships, resulting in a wide range of innovative projects and initiatives. [A comprehensive study](#) by the Global RCE Service Centre at UNU-IAS analyzed 479 RCE projects implemented from 2015 to 2019, documenting their progress, achievements and future directions (Vaughter, Noguchi, and Li, 2022). The documented outcomes underscore the effectiveness of the RCE network as a key driver in scaling up ESD, empowering individuals and communities to take action, and strengthening the capacities of local systems to support sustainable development.

Education for Sustainable Development for 2030 (2020-2030)

The ESD for 2030 framework, launched by UNESCO in 2020, builds upon the GAP and reinforced the vital role of RCEs in accelerating ESD. During this decade, RCEs continue to align their activities with the SDGs, guided by the [Roadmap for the RCE Community 2021-2030](#), which was developed through an extensive consultation with RCE members. This roadmap sets out a shared vision and strategic direction towards 2030, identifying four priority areas: serving as local and regional hubs for ESD and innovation leadership, strengthening the association of RCE activities with SDGs and ESD frameworks, expanding knowledge sharing and outreach, and monitoring progress of RCE achievements.

In response to the growing demand to demonstrate how RCE activities contribute to the SDGs, the Global RCE Service Centre has been showcasing concrete examples of RCE initiatives advancing sustainable development through education since 2020. This has included the compilation of case publications and the presentation of outstanding practices at international conferences and forums. The publication [RCE Contributions to a More Sustainable World: Celebrating Five Years of Innovative Projects on Education for Sustainable Development \(2015-2019\)](#) (UNU-IAS, 2020) highlighted 12 award-winning projects from 2015–2019, demonstrating innovative, community-based solutions to local sustainability challenges and the network's capacity for transformative learning. Building on this, UNU-IAS released a series of thematic publications featuring promising RCE case studies aligned with specific SDGs, including those on climate action (SDG 13), biodiversity conservation (SDGs 14 and 15) and sustainable consumption and production (SDG 12) (UNU-IAS, 2021, 2022, 2023).

By 2025 the RCE network has expanded to comprise 200 RCEs globally, reflecting growing recognition of RCEs as vital hubs for advancing ESD and contributing to achieving the SDGs. Through continued effective partnerships and commitment to community-driven solutions, RCE remains at the forefront of advancing education as a key driver of sustainability at local, regional and global levels.

Bridging Policy and Practice for Transformative Action: RCEs as Catalysts for Systemic Change

One of the most distinctive contributions of RCEs is their ability to bridge the gap between policy and practice. While international sustainability frameworks provide critical direction, their successful implementation relies on local adaptation and engagement. Positioned at the intersection of education, research, government, civil society and business, RCEs facilitate the translation of high-level policy goals into context-specific actions through multi-stakeholder collaboration. Through initiatives such as curriculum reform, teacher training and the co-creation

of locally relevant learning resources that reflect both sustainability priorities and cultural values, educational institutions can foster a more inclusive and effective learning environment that empowers learners to engage with and address both local and global challenges. These activities have empowered youth, educators and citizens to take ownership of sustainability efforts and become active change agents in their communities.

The influence of RCEs, however, extends beyond implementation, some RCEs have also contributed to policy-making processes by leveraging their local experiences and knowledge. They have participated in advisory bodies, co-hosted policy dialogues and co-developed sustainability plans with local authorities. RCEs have played integral roles in making policy development more inclusive and responsive. For instance, RCE Zaria (Nigeria) informed environmental policy guidelines using data from youth-led vegetation monitoring aligned with IUCN criteria, while RCE Greater Western Sydney (Australia) collaborated with municipal authorities to shape platypus conservation strategies through citizen science (UNU-IAS, 2022). These examples demonstrate how RCEs, grounded in local practice, can also function as policy shapers, providing evidence, insights and models that inform more responsive and inclusive decision-making.

Despite these achievements, challenges remain. Some RCEs struggle with limited visibility among policymakers and lack institutional recognition or long-term support. Strengthening communication and advocacy will be essential to scale up successful models and embed ESD more systematically into policies and governance frameworks. As trusted local platforms grounded in real-world practice, RCEs are uniquely positioned to continue serving as dynamic bridges between policy aspirations and transformative action.

Integrating Traditional and Local Wisdom: Fostering Deeply Rooted Sustainable Learning

Advancing ESD recognizes the enduring significance of the past, not merely as heritage to be preserved, but as a source of values, wisdom and guidance that shape our collective future. As illustrated across the regional reflections, many RCEs have embraced this perspective, honouring Indigenous and traditional knowledge systems as integral to re-examining the present and co-creating more sustainable communities. Concepts such as *ubuntu* in Africa and *sejahtera* in Asia-Pacific exemplify interconnectedness, balance and communal well-being, principles deeply aligned with the whole person and whole-of-community approaches in ESD.

For instance, RCE Penang in Malaysia, acknowledged by UNU in 2005, adopted *sejahtera* from its inception, affirming that sustainable futures must be grounded in respect for the past. This value-based approach has extended beyond national boundaries, with RCE Tongyeong in the Republic of Korea incorporating *sejahtera* into its identity and ESD practice. Likewise, RCE Greater Gombak in Malaysia, acknowledged in 2020, introduced SDG 18 on Spirituality and Cultural Values and pioneered the “communiversity” model, which fosters collaboration between universities and communities by drawing on Indigenous and local knowledge, including cultural values, spiritual traditions and ecological practices, to enrich ESD and support sustainable development.

These examples demonstrate how grounding ESD in traditional wisdom and human values can make learning more locally relevant and transformative.



Prometheus | Unsplash

Adapted Through Covid-19 Pandemic: Resilience and Transformation

Although the Covid-19 pandemic posed significant challenges, particularly in 2020 and 2021, RCEs demonstrated strong resilience by leveraging their trust-based, long-standing partnerships. Many mobilized quickly to support affected communities by distributing essential supplies, offering mental health support and continuing education through alternative channels such as community radio and printed materials where digital access was limited. These efforts, carried out in collaboration with universities, local governments, NGOs and citizens' groups, highlighted RCEs' commitment to both learning continuity and community solidarity.

The rapid shift to digital engagement posed initial challenges, especially for remote areas lacking internet access. However, RCEs gradually adapted by expanding their use of online platforms to sustain learning and collaboration. In 2020 and 2021, all RCE Regional Meetings were held online, and the postponed 12th Global RCE Conference was also convened virtually for the first time. By 2022, hybrid formats became the norm, significantly improving accessibility and enabling broader participation — not only within the RCE community, but also among external stakeholders interested in learning about RCE initiatives.



Challenges and Lessons Learned from the RCE Network

Over the past two decades, RCEs have made significant contributions to advancing ESD in diverse social, cultural and ecological contexts. This journey, while marked by significant achievement, has also involved overcoming numerous challenges. These experiences have not only tested the resilience of the network but also offered valuable lessons that continue to shape its evolution.

One enduring challenge has been raising awareness and deepening engagement, particularly among youth, whose futures are most affected by sustainability issues. While many RCEs have succeeded in mobilizing multi-stakeholder partnerships, others have struggled to translate this momentum into broader community ownership. A key lesson is that fostering youth leadership and embedding ESD in everyday life requires consistent support, context-sensitive outreach and space for youth-driven action.

Sustaining operations and momentum over time has also posed difficulties. Some RCEs have flourished due to strong leadership, active participation and institutional anchoring. Others, however, have faced setbacks due to leadership transitions, shifting institutional priorities or limited human and financial resources. These differences reflect the varied realities in which RCEs operate, such as inequalities in digital access, regional instability or differing degrees of government recognition. The experience of the network underscores that inclusive governance, shared leadership and flexible organizational structures are essential for long-term sustainability. The strength of RCEs lies in collective ownership: while strong leadership is important, building resilience requires avoiding over-reliance on any single individual or institution.

Financial sustainability remains a pressing concern. While some RCEs benefit from sustained institutional support or government funding, others rely on short-term grants or volunteer contributions. A clear lesson here is the importance of cultivating strategic partnerships and diversifying funding sources. Resilience grows when RCEs embed their activities within broader local and national agendas, aligning with institutional missions and community priorities. As each RCE is shaped by its own context, there is no universal formula, adaptive approaches and localized strategies are key.

Another critical challenge has been the limited systematization of evaluation and monitoring across the network. While pilot efforts have been made, the diversity of contexts has made a unified approach difficult. Recognizing this gap, the RCE Roadmap 2021–2030 identifies monitoring and evaluation (M&E) as a strategic priority. Recent efforts by the Global RCE Service Centre to track RCE activities annually have begun to yield valuable insights. The lesson here is that coherent, yet flexible and context-sensitive M&E frameworks are needed — not only to improve accountability and demonstrate contributions to the ESD for 2030 framework, but also to enhance peer learning and amplify collective impact.

Taken together, these challenges and lessons reaffirm the strength of the RCE model: grounded in local realities, connected through global collaboration and continually evolving through reflection and learning. Going forward, the network's ability to build upon these lessons will be critical to achieving its transformative potential.

RCE Stories and Voices

RCE Okayama: A Pioneer in Advancing Whole-Community Approach to ESD

Hirofumi Abe

RCE Okayama has been a pioneer in promoting ESD across the Okayama region since its acknowledgement in June 2005 as one of the world's first seven RCEs. Its main activities are centered in Okayama City, a major transportation hub in western Japan with a population of 720,000, known for its rich natural and cultural landscape. RCE Okayama has grown from an initial coalition of 19 organizations into a dynamic, multi-stakeholder network comprising approximately 400 organizations from a wide range of sectors and continues to expand its activities throughout the region.

One of the unique features of RCE Okayama is that ESD is actively being promoted into formal schools, facilitated by its integration into the Okayama City Education Promotion Plan. This strategic alignment ensures that ESD is not just an add-on, but a core component of the educational experience for students across the city. Community Learning Centres, known as Kominkans, play a key role for fostering lifelong learning among citizens. The city has appointed dedicated ESD coordinators to each of the 37 Kominkans, with each centre serving a junior high school district. These Kominkans have become a vital base for community members of all ages and various stakeholders to collaborate in solving social and local problems. This innovative structure, widely known as the “Okayama Model,” exemplifies a whole-community approach to ESD and has been recognized internationally. In 2016, the Okayama ESD Project conducted by RCE Okayama was awarded the UNESCO-Japan Prize on ESD. The sustained development and continued operation of these collaborative platforms have significantly strengthened civic engagement and empowered communities to pursue collaborative problem-solving, supported by both human and financial resources from the city government. As cross-sector collaboration grounded in ESD had already been established by the time the SDGs were internationally adopted, efforts to build momentum for SDG-related initiatives processed smoothly. New groups have emerged within RCE Okayama with the aim of achieving the SDGs and preparing post-2030 frameworks, and have organized large-scale events involving industry, government, academia and civil society.

While RCE Okayama has achieved positive results, youth engagement remains an ongoing challenge, particularly against the backdrop of Japan's declining birthrate and ageing population. In response, RCE Okayama involved students through its organization of ESD events, such as the stakeholder meetings at the UNESCO World Conference on ESD in Okayama City in 2014. It has also been empowering young people to play an active role in shaping a sustainable future through initiatives such as the ESD University-Student Internship, ESD-Coordinator Training, and Youth



Riverbank Cleaning-up Event in Okayama City as part of the SDGs Project on Marine Environment
Let's Save the Sea and the Rivers.



Group discussion at the Okayama ESD Forum (2024 in Okayama, Japan).

Activity Support Funds. Many of those who have attended these events or initiatives and had positive experiences are now taking on leadership roles in ESD.

Our vision is to build a sustainable society where all generations recognize its value, learn from one another and take voluntary, proactive action. This will expand cooperative networks across the region and beyond. To realize this vision, RCE Okayama will continue to promote ESD, learn from other RCEs and contribute to the Global RCE Network by sharing good practices.

A Testimonial from an RCE Member

“I spent my junior and senior high school years at a UNESCO Associated School, and after graduation, I continued to work as an assistant for the UNESCO Associated Schools Network in Okayama. Today, I am a teacher at the same school, where engaging in active discussions both in and out of the classroom has greatly influenced my educational philosophy. Through these experiences, I came to realize the importance of keeping thinking critically in everyday life and envisioned becoming an educator who helps students feel confident and unafraid to engaging dialogue and foster mutual understanding. As a teacher, I strive to enhance my English classes to deepen not only my students' knowledge but also their own thinking, while promoting project-based learning in collaboration with universities, companies and through international exchange.”

By Saki Kaneda

RCE Tongyeong: Bridging Local Action and Global Dialogue Through the Sejahtera Forest

Unji Lee

Tongyeong has built a multi-stakeholder platform that advances ESD across formal, non-formal and informal sectors, fostering collaboration among schools, citizens, government agencies and NGOs.

Among its flagship initiatives are Bridge to the World, a programme designed to cultivate youth leadership, citizen sustainability forums and a school-based ESD teacher network. A milestone in the region's ESD journey was the opening of the RCE Tongyeong Sejahtera Forest ESD Centre in 2015, with support from the Ministry of Environment of the Republic of Korea. This dedicated space has enabled the integration of a wide array of lifelong learning programmes, serving as a hub for innovation and community engagement.

Over the past two decades, RCE Tongyeong has educated approximately 200,000 learners — including students, teachers and citizens — through of its comprehensive ESD initiatives. More than 60 schools now have designated ESD teacher coordinators and sustainability principles are embedded in school curricula. The Bridge to the World youth programme has nurtured globally engaged young leaders, some of whom have gone on to contribute to international sustainability platforms. Additionally, RCE Tongyeong has developed and implemented a life cycle-based ESD curricula tailored to learners of all ages.

Despite these achievements, RCE Tongyeong continues to navigate the challenge of balancing institutional stability with innovation, particularly amid the expanding scope of sustainability agendas. Within this evolving landscape, defining the role and boundaries of the RCE remains an ongoing task. RCE Tongyeong aspires to grow into a research-informed Asia-Pacific hub that supports evidence-based policy and community practice for sustainability.

Sustained collaboration with schools, citizens, government and NGOs has been critical. Investments in infrastructure like the Sejahtera Forest ESD Centre, educator and youth empowerment, and adaptive governance models have enabled long-term transformation. RCE Tongyeong's experience underscores the importance of trust-based relationships in fostering sustainable and just communities.



Tongyeong ESD International Forum and 15th Asia-Pacific RCE Meeting (2023, Tongyeong, South Korea).



Biodiversity education for elementary students, set against the backdrop of Sejahtera Forest.

A Testimonial from an RCE Member

“My journey with RCE Tongyeong began in 2011 when I joined as an education coordinator. Over the years, I have been deeply engaged in designing ESD programmes that bridge local issues with global sustainability goals. Working within the RCE community has transformed my perspective on education—from a one-way delivery of knowledge to a dynamic, participatory process of learning, questioning, and co-creating solutions.

Currently, I manage ESD programmes at Sejahtera Forest, focusing on youth leadership, school – community partnerships, and inclusive learning environments. My work aims to localize global goals through hands-on experiences that nurture empathy, resilience, and critical thinking.

Looking forward, my vision is to strengthen RCE's role as both a local catalyst and a global connector for sustainability. In an age of uncertainty, I believe that deep-rooted collaboration across sectors and generations is essential to building more just, inclusive, and sustainable communities.”

By Unji Lee

RCE East Midlands: Catalysing Education and Training for a Sustainable and Low-Carbon Future

Andrew Reeves

RCE East Midlands was formed in 2007, covering a region comprising rural settings with market towns and four small cities, with its current activities concentrated in the sub-region surrounding around Leicester, in the United Kingdom. The RCE brings together a diverse coalition of partners from higher education, local government, consultancy, regional agencies and the voluntary sector. The region faces a range of sustainability challenges, including poverty alleviation and economic development, the transition to a net zero economy and the need to adapt to a changing climate, including increasing flood severity.

Our focus is on harnessing education and multi-sector collaboration to catalyze action for sustainability. A recent highlight, recognized as an RCE Award Flagship Project, has been joint work by local universities to deliver carbon literacy training and mentoring support across the subregion. Beneficiaries have included schools, arts-based charities, neighbourhood-level charities, business advisors and the regional economic development partnership. In each case, the organizations went on to embed climate action in their engagement and work, such as by creating climate-focused arts initiatives and embedding net zero as a priority in decisions on major infrastructure, such as Leicester's new climate-positive bus station. This work has made the Leicester area one of the most "carbon literate" in the UK, which has been reflected in the strategies and actions of local organizations.

Some key lessons from RCE East Midlands' experience emphasize the importance of adaptability and inclusivity. While political structures, regional boundaries and partnership bodies may change, the spirit of cross-sector work for the shared purpose of addressing sustainability through education can be retained within evolving structures. In the case of RCE East Midlands, this has meant pursuing more recent activities within new formal partnership structures between universities, local government and other stakeholders with strong political backing.

The RCE's adaptability was further tested in 2020, when it hosted the RCE Europe Meeting as an open conference for over 300 attendees, extending the reach beyond existing RCE members. Originally planned as a hybrid event, the meeting was rapidly transitioned to a fully online format in response to the pandemic. This virtual experience not only ensured the continuity of international collaboration but also demonstrated the potential for future RCE partnerships to flourish with a significantly reduced carbon footprint.



BioBlitz Leicester Recording Activity Day.



Climate action training for community organizations.

A Testimonial from an RCE Member

"I joined carbon literacy training led by RCE university partners for the local enterprise partnership in 2021. I lead the Leicester-based National Space Centre (NSC) – before the training, we were considering our carbon footprint aspirations but didn't know how to shape them. The training clarified that working towards net zero was essential and gave me personal confidence to lead NSC through a three-step process: know your number, set a target, make a plan. As a consequence, NSC now knows its carbon footprint, has set a target to be net zero by 2030, has run educational exhibitions about the climate crisis reaching thousands of local people and has made practical steps to get towards net zero. We face technical challenges to get there, but the training and supportive local networks we have joined give me confidence on how to react and reassess what is achievable without losing faith in the overall objective."

By Chas Bishop

RCE Western Jalisco: Empowering Communities for Sustainable Futures in Mexico's Rich Biodiversity Region

Salvador García Ruvalcaba (RCE Western Jalisco)

RCE Western Jalisco acknowledged in August 2007 is situated in one of the most biodiverse regions of the state of Jalisco in Mexico. Over time, its reach has expanded far beyond its original boundaries, now encompassing a greater number of municipalities and a broader array of protected natural areas than was initially anticipated. This growth reflects the dynamic nature of the region and the increasing importance of collaborative sustainability efforts.

One of the flagship initiatives is the Ecos de la Naturaleza (Echos of Nature) programme, initiated in 2008 on Radio Costa. Designed to promote the initiatives of RCE Jalisco, the programme has broadcasted over 800 episodes, serving as an essential platform for environmental education and community engagement. In the same year, three RCE members established a traveling collection of biological specimens, representing diverse ecosystems. This innovative project has reached more than 175,000 individuals across 48 municipalities, providing hands-on learning experiences and fostering a deeper appreciation for local biodiversity. A variety of activities have been conducted, including courses, workshops, conferences, environmental fairs, reforestation campaigns and clean-up initiatives. These activities have benefited children, young people, teachers, priests, local governments, companies and indigenous populations.

In 2013, RCE Jalisco started electronics recycling programme, which has collected 26 tons of electronic waste in just eleven years, with the enthusiastic participation of the university community. The following year saw the creation of a university organic garden, an initiative that has provided training opportunities to more than 12,000 people of all ages, promoting sustainable agriculture and food security. Since 2016, RCE Jalisco has partnered with Cáritas Autlán to implement the SDGs, providing direct support to 200 families in need. In October 2024, the Applied Sustainability Learning Centre was established in El Grullo, Jalisco. This project has generated significant interest among a diverse array of stakeholders, including municipal governments, staff members of the Sierra de Manantlán Biosphere Reserve, educators, students of all educational levels and civil society organizations.

RCE initiatives in RCE Jalisco have fostered capacity-building beyond the university, forming strategic alliances with government, church, business and community sectors. Since 2015, inspired by Pope Francis's encyclical *Laudato Si'*, the RCE has promoted environmental stewardship by aligning ESD efforts with the SDGs and regional needs. Strong partnerships with municipal governments such as Autlán and El Grullo have become reference points for scaling up initiatives in other municipalities, reflecting the RCE's sustained leadership and collaborative approach.

As RCE Western Jalisco continues to grow, it is imperative to engage protected natural area managers and other stakeholders to ensure the long-term success of sustainability initiatives. Furthermore, it is crucial to raise funds to support projects that prioritize ESD and the SDGs.



Nursing students discuss SDGs in a radio programme.



Course on practice of organic farming.

A Testimonial from an RCE Member

Cáritas Autlán formally began its collaboration with RCE Jalisco in 2016, with the shared goal of meeting the needs of 200 families living in poverty and vulnerability. We have received training, advice on developing projects related to the Sustainable Development Goals (SDGs), and participatory assessments that have enabled us to identify specific problems of families living in poverty.

New stakeholders became involved and the necessary tools were used to help families improve their living conditions. Courses and workshops on organic food production, the use of medicinal plants, garden creation and housing improvement for seniors. During the Covid-19 pandemic, RCE Jalisco coordinators and volunteers supported food distribution campaigns.

These activities have contributed to the SDGs (1, 2, 3, 4), improving the quality of life of 120 families. Cáritas Autlán and RCE Jalisco are currently working on a new project to establish an Applied Sustainability Learning Centre similar to the one RCE has in El Grullo.

By Laura Vargas Casillas

RCE KwaZulu-Natal: Bridging Knowledge, Practice and Policy for Regional Impact

Jim Taylor (RCE KwaZulu-Natal)

RCE KwaZulu-Natal (RCE-KZN) was inaugurated during the World Environmental Education Congress, held in Durban, South Africa in July 2007. RCE-KZN is established as a partnership-based organization, and has offered training courses, developed copyright-free learning support materials, and conducted research into ESD processes and activities across the southern African region. It is a collaborative work that brings together diverse stakeholders, including the University of KwaZulu-Natal, the Wildlife and Environment Society of South Africa (WESSA), GroundTruth, the Duzi uMngeni Conservation Trust (DUCT) and RCE Makana.

In partnership with WESSA, the Eco-Schools programme has reached over 1.2 million learners, involving more than 4,500 schools and 45,500 teachers across the region. This initiative has promoted awareness among young people and further builds capacity for sustainability education systems across the region.

RCE-KZN has had many highlights in the past twenty years. One significant milestone was to co-launch, with the Lesotho government, the Lesotho National ESD Policy in July 2009. Lesotho was the first country in the world to launch an ESD policy — a major achievement that integrated ESD into national policy frameworks and marked a key step forward for the region. RCE-KZN is also partnering with the UNICEF Yoma website system for youth capacity building. This includes using Yoma to upskill youth citizen scientists across southern Africa, in partnership with the [International Water Management Institute \(IWMI\)](#) and Makana RCE. Through this project we apply citizen science, supported by artificial intelligence, to mobilize a situated knowledge revolution across the southern African region. These efforts have fostered a culture of action-based learning amongst young people, strengthening community involvement in environmental stewardship. This work strengthens community involvement in environmental stewardship. Despite these achievements, RCE-KZN continues to face challenges in securing sustainable funding. To address this, we undertake many project-related fundraising activities and most of our projects are organized on a cost-recovery basis.

Looking ahead, RCE-KZN envisions a world in which everyday actions and lifestyle choices contribute to sustainability and the well-being of all life forms — people, plants and animals.

RCE-KZN applies an Action Learning Quadrant Framework, which ensures that ESD goes beyond mere awareness raising and promotes open-access learning through a multiplier effect. By developing and sharing digital learning support materials, many other organizations can adapt and customize resources and apply them in their own contexts.



COP 17 Bonn Workshop (2017 in Bonn, Germany).



Studying water organisms.

A Testimonial from an RCE Member

I first heard about the activities of RCE-KZN when I became part of the Enviro-Champs movement in 2013. At the time the RCE was working with DUCT to support Enviro-Champs. Enviro-Champs work for the common good. They are community-spirited and seek to care for and uplift communities. This work includes identifying environmental challenges and working with the authorities to solve them. Challenges include water and sanitation issues, waste dumping and sustainable environmental management.

It has been my privilege to be elected to a leadership position in Enviro-Champs and manage a project in Durban. We were encouraged that we were able to help people in times of flooding, with solid waste dumping, plastic pollution and even alien invasive clearing. This work must continue into the future!

In my personal capacity, my colleagues in the KZN-RCE supported me to undertake a degree in Environmental Management, I have now graduated!

By Ayanda Lepheana

20 Years of Action and the Paths Forward

“The best way to predict the future is to create it.”

This statement (by Peter Drucker) is the very essence of our RCE movement for the last 20 years. Twenty years ago today, a small number of pioneers acted on the firm belief that the future is not set in stone but can be shaped through our actions. And today, we celebrate the remarkable journey that followed.

The past two decades have been marked by enormous uncertainty. The impacts of climate change leave no corner of the world untouched; rising inequalities exacerbate social tensions; and escalated peace and security concerns threaten global citizenship and solidarity. In response, the international community has issued and declared numerous calls to action, particularly trying to address such global crises through education, including *UN DESD* (2005-2014), *GAP* (2015-2019) to the *ESD for 2030 framework* (2020-2030) and *Greening Education Partnership*, to name a few.

Throughout these decades of uncertainty, the mission of RCE has remained clear: to translate global agenda into local actions. Our RCE communities have not undertaken this work in a vacuum but with the very aim of shaping the futures of the community in which they operate.

This book is a tribute to the achievements of our RCE communities across every continent, from Asia-Pacific to Africa, and from Americas to Europe. The stories and insights captured throughout the chapters are told by the very people who bring the network to life, including our visionary founding members, our dedicated Regional Advisors and Youth Coordinators, and the passionate grassroots implementers.

From their contributions, we coherently witness the incredible agility of the RCEs in adapting to the ever-changing environment and needs of their local context. For instance, we have seen NGOs take on growing leadership in RCE projects for the last five years, shifting from dominant leadership by higher education institutions in the past; RCE’s SDG focus have been distinctively localized by region (e.g. SDG 13 Climate Action in Africa vs. SDG 11 Sustainable Cities in Europe) as well as the priority action areas (e.g. Learning Environment in Americas and Europe vs. Community Engagement in Africa and Asia-Pacific). This diversity is our greatest strength, showcasing a truly living and self-sustaining network in action.

While the future remains uncertain, our path forward is not. The RCE network’s well-established role in expanding ESD beyond schools and empowering everyone to be part of the solutions is more essential than ever. We turn sustainability challenges into extraordinary opportunities to find collective solutions because, to an RCE, “everyone” truly means everyone — men and women, children and elders, farmers and city planners, small business owners, civil servants, Indigenous people and persons with disabilities.



The 2025 Okayama Declaration on RCEs and ESD: Shaping the Future We Want, adopted at our 20th anniversary Global RCE Conference, lays out the vital steps for our path forward. It is more than a statement; it is our collective vision and a reaffirmation of our commitment to reimagining **education as a new social contract**. It is a contract to foster genuine intergenerational solidarity, create pathways to sustainable livelihoods, and cultivate a culture of lifelong learning for living together with humans and nature.

To achieve this vision, the Declaration focuses our collective efforts on five key priorities: First, it calls on us, RCEs, to **position ESD as a catalyst for systemic and social transformation**, moving beyond individual projects and formal education to drive structural changes through lifelong learning. Second, we will **advance knowledge exchange and local solutions through partnership**, co-creating solutions in the nexus of traditional, cultural and scientific knowledge. Third, we will continue to **empower and mobilize youth leadership**, breaking barriers to their full and sustainable engagement. Fourth, we will **ensure the principles of equity, inclusion and justice** to mainstream all our activities. Finally, and fifth, we will **harness digital transformation to make lifelong and life-wide ESD** a reality for all while remaining mindful of associated risks and trade-offs.

Along with the **Roadmap for the RCE Community 2021-2030**, the Okayama Declaration will serve as our blueprint for the next stage of the Global RCE Network. The Global RCE Service Centre at UNU-IAS has already taken initiatives to recalibrate its support to better align with the visions. Among many, it begins with constructing and disseminating a research-informed toolkit on **action-oriented pedagogies** drawn from the data and [promising cases from our RCE members](#). In addition, UNU-IAS will continue to raise visibility of the Global RCE Network and support its outreach across international and regional platforms.

These instruments, paired with our ever-strong commitment, will allow us to navigate the complex and interconnected challenges of our time, with the same firm belief held by our visionary founders: that education shapes our future.

The future is in our hands. Together, we will continue to learn, act and build the sustainable future we all want.

Dr. Jonghwi Park

Academic Programme Officer and Head of Innovation and Education
UNU-IAS

List of Abbreviations

AASHE	Association for the Advancement of Sustainability in Higher Education
ACCU	Asia-Pacific Cultural Centre for UNESCO
AKUM	Abdulkadir Kure University Minna
ATECCE	Asian Teacher Educators for Climate Change Education
ATU	Atlantic Technological University
CBOs	Community-Based Organizations
COMMEET	Community Engagement and Empowerment through Education and Training
COP26	26th UN Climate Change Conference of the Parties
Covid-19	Coronavirus Disease 2019
CWSN	Children with Special Needs
DCU	Dublin City University
DeCoRe+	Deconstruction, Construction, and Reconstruction
DEI	Diversity, equity, and inclusion
DIWA	Development Initiative for West Africa
DUCT	Duzi uMngeni Conservation Trust
ECOSOC	United Nations Economic and Social Council
ESD	Education for sustainable development
ESD-Net	Education for Sustainable Development Network
G20	Group of Twenty
GAP	Global Action Programme on Education for Sustainable Development
GTCS	General Teaching Council for Scotland
HEIs	Higher education institutions
HESD	Higher Education and Research for Sustainable Development
IAU	International Association of Universities
ICT	Information and Communication Technology
ICTeEfS	ICT-enabled In-Service Training of Teachers to Address Education for Sustainability
IET	Islamic Education Trust
IFS	Integrated Farming System
IWMI	International Water Management Institute
LfS	Learning for Sustainability
MHQ	Musabaqah Hifzil Qur'an

MOEJ	Ministry of the Environment of Japan
NGO	Non-governmental organization
NPO	Non-profit organization
NSC	National Space Centre
PKK	Women's Family Welfare Group
RCE	Regional Centre of Expertise on Education for Sustainable Development
RCE-KZN	RCE KwaZulu-Natal
RCEAN	RCE Americas Network
RYC	Regional Youth Coordinators
SDGs	Sustainable Development Goals
SEAMEO	Southeast Asian Ministers of Education Organization
SETU	South East Technological University
SMI	Severe mental illness
TEIs	Teacher education institutions
TERI	The Energy and Resources Institute
TUD	Technological University Dublin
TVET	Technical and vocational education and training
UCC	University College Cork
UN-DESD	United Nations Decade of Education for Sustainable Development
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
UNU	United Nations University
UNU-IAS	United Nations University Institute for the Advanced Study of Sustainability
USA	United States of America
USM	Universiti Sains Malaysia
WESSA	Wildlife and Environment Society of South Africa
WRUAs	Water Resource Users Associations
WWF	World Wide Fund for Nature
YSA	Youth Service America
YUVA	Youth Unite for Voluntary Action

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