



EMPOWERED BY HAE GROUP

Empty Spaces Initiative Report 2026

We are devoted to protecting the Earth that sustains us, while honoring the powerful bond between humanity, nature, and shared prosperity.





Understanding The Interconnectedness Of Risk And Transformation

The Environmental Survey 2025 showed strong staff interest in better understanding aviation's impact on the environment and human health. This creates an opportunity to link awareness of the company's operational footprint with broader sustainability initiatives, including the Empty Spaces project in Ngandu Village, Kenya.

This is particularly important because aviation's impact extends beyond CO₂ emissions. In addition to contributing significantly to global warming, the sector also generates non-CO₂ effects such as nitrogen oxides, vapour trails, and air pollution, with consequences for both ecosystems and human health. These impacts include climate change, biodiversity loss, soil and water degradation, and increased risks of respiratory, cardiovascular, and neurological disease.

The Empty Spaces project is especially relevant because it connects two sectors that are often seen separately — aviation cargo and agriculture — but which are closely linked through global trade and shared dependence on natural systems. While air cargo enables the movement of agricultural goods across global markets, both sectors rely on environmental stability and are vulnerable to ecological disruption.

Evidence from Nyeri County shows how environmental degradation can intensify wider social and economic pressures. Between 2019 and 2021, the combined effects of environmental decline and COVID-19 contributed to significant increases in food poverty and absolute poverty, including among children. This illustrates how shocks in one part of a system can cascade across others when resilience is weak.

At the same time, the project demonstrates that interconnected systems can also amplify positive change. What began as a local tree-planting initiative is evolving into a broader community-led movement with growing reach and support. In this way, Empty Spaces provides not only a response to environmental risk, but also a practical example of how targeted local action can contribute to wider resilience, sustainability, and inclusive development.

Nature-Based Solutions

Most HAE Group companies operate from offices and do not own aircraft or other vehicles that generate significant Scope 1 greenhouse gas emissions, with the exception of Belfast Airport and East Midlands Airport Handling. However, as part of the aviation supply chain, HAE Group supports the industry's commitment to achieve net zero by 2050 by reducing its operational footprint and investing in carbon sequestration projects.

According to IATA (2023), carbon offsetting is one of the key components of aviation's net zero strategy and represents the second-largest contribution (19%) during the transition. High-quality offset projects can also deliver

wider social benefits, including job creation, improved community health, and progress towards the UN Sustainable Development Goals.

Agriculture is both a major source of greenhouse gas emissions and a sector with strong potential to remove carbon through sustainable land management. Human activities such as land-use change, deforestation, excessive fertiliser use, and fossil fuel combustion continue to drive climate change, while climate impacts increasingly threaten food production and food security (Kabato et al., 2025).

At the same time, agriculture can act as a carbon sink. Soil is the Earth's largest terrestrial carbon pool, and the 4 per 1000 initiative highlighted that increasing soil organic carbon stocks by just 0.4% annually could make a significant contribution to offsetting global CO₂ emissions. Recent research also points to regenerative agriculture, especially agroforestry, as one of the most effective nature-based solutions for long-term carbon storage.



In this context, nature-based solutions provide an important link between climate action, ecosystem restoration, and community resilience. As Discover Agriculture (2026) concludes, biological carbon sequestration remains one of the most effective approaches for addressing emissions while also delivering environmental and social co-benefits.

“Among the most efficient natural carbon sinks are perennial trees, particularly those found in tropical forests and agroforestry systems, including avocado trees” (Discover Agriculture, Yangaza I., Andrew S.M. (2026, p. 1).

Rationale of the Empty Spaces Project

The Empty Spaces project was created to give HAE Group a more direct, transparent, and community-focused approach to sustainability than its previous virtual tree-planting model. By working closely with farmers in Ngandu Village, Kenya, the project aims to deliver clearer environmental, social, and economic benefits through fruit tree planting, while supporting regenerative agriculture and local livelihoods. It also improves impact measurement through more transparent monitoring and reporting, making sustainability efforts more tangible, accountable, and meaningful for both the community and HAE Group.

One Year of Transformation

In 2025, the Empty Spaces project in Ngandu Village entered a new phase of community ownership. Following the final delivery of HAE-funded fruit tree seedlings in April, local leaders established a community nursery using locally available resources. With access to communal land and solar-powered water, volunteers planted 3,600 avocado seeds, which are expected to be ready for distribution in 2027.



The project has strengthened both livelihoods and social cohesion. Weekly work in the nursery created a shared sense of purpose and mutual support, while also helping vulnerable residents such as Alice Gakenia, who received community support to secure her land rights and move into a safer home.

The year also marked important progress in knowledge-sharing and sustainable farming practices. Agronomy expert John Kahiga trained farmers in the use of organic fertilisers, organic pesticides, seedling care, pruning, grafting, and integrated pest management. This is particularly important in a context where long-term reliance on synthetic inputs has contributed to soil degradation.



To support long-term impact, the community formally established HASS Avocado Experts and Fruits Growers, creating a structure for future coordination, training, and growth. Overall, 2025

demonstrated a clear shift from externally supported tree planting to a broader, community-led model of environmental restoration, skills development, and local resilience.

DELIVERING 1,000 AVOCADO SEEDLINGS, APRIL 2026

As part of Earth Month, stakeholders of the *Empty Spaces* project came together in April 2026 to support their community-led restorative agriculture initiative in Ngandu Village, Nyeri County.



Sponsored by datacair Kenya and HAE Group, the event combined tree planting with the distribution of 1,000 fruit tree seedlings to local farmers. More than 150 beneficiaries from Ngandu and neighbouring villages received the seedlings in the presence of Franklin Ongoli, Deputy County Commissioner of Mathira West, Martha Wamaitha, government representative, and Anthony Muriithi Ndagita, a member of the Nyeri County Assembly.

The event also brought together HAE Kenya customers, including Tradewinds Logistics, Expolanka Freight, Flawless Empire, Monstera, and Lafrik Logistique. Many contributed financially and attended with their families. Special recognition goes to Racheal Mugure, General Manager of Tradewinds, who, together with Magnate Ventures Ltd, donated more than 1,000 indigenous and avocado trees in support of the initiative.



In an interview with Kenyan GTN TV Digital, Franklin Ongoli said: “The number of farmers interested in the project had exceeded all expectations, including participants from neighbouring locations and their local chiefs. As a result, the trees had to be distributed among many beneficiaries, with some receiving only two to five trees. The project has been very well received, demonstrating a clear need to expand it across the entire West Mathira Sub-County”.

Anthony Muriithi Ndagita added: “We hope this programme will continue and expand into neighbouring areas, contributing to Kenya’s 15 billion trees initiative. Within three years, its

impact will be felt not only in environmental improvement, but also in food security and economic empowerment”.

Beyond the seedlings themselves, the project is helping to build long-term community capacity. Community leader Patrick shared that the initiative has inspired local people to establish their own tree nursery, creating opportunities for learning, collaboration, and future self-sufficiency.

The visit also left a strong impression on participating staff from datacair and HAE Group Kenya.

“It is encouraging to be part of work guided by clear responsibility. The project clearly stands out as a strong and impactful initiative; well received, firmly rooted in genuine community needs, and demonstrating real potential for long-term, scalable impact. This solid foundation gives confidence in what has already been achieved, and in what can be built going forward”. /Brian Omondi, datacair Business Analyst/.



“These trips have allowed me to connect with colleagues and fellow participants in a way that the office environment simply doesn't permit. The shared effort of working toward a common, positive goal builds a unique camaraderie that carries over into our professional collaboration.

I strongly suggest we organize occasional trips to return to farms we have previously assisted, seeing the progress and growth of the trees would be incredibly motivating for the team.

More importantly, this would allow us to create a "feedback loop " observing what techniques worked well, identifying any steps we should avoid in the future, and learning where we need to focus our efforts next.



Moving from measuring *output* (how many trees we plant) to *outcome* (how many survive and thrive) would be a significant step forward”. / Daisy Warimi Maingi, HAE Group, Cargo Operations and Reservations Co-ordinator/.

The event also attracted interest from neighbouring communities. A group from Segana location attended to learn from the Ngandu experience and is now preparing to develop its own community tree

nursery project focused on environmental conservation, livelihood improvement, and climate resilience.

Since then, three more sublocations in Mathira West and East in Nyeri County have expressed interest in joining the initiative: Rititi Nursery, in partnership with Tist; Sagana State Lodge Nursery at Hombe; and Mugutu location.

The *Empty Spaces* partnership continues to grow with a simple but powerful mission: to restore ecosystems, uplift communities, and help build a future in which people and nature thrive together.

PETER MAINA MUKIRI



Peter Maina Mukiri was born and raised in Mathira West, Nyeri County, Kenya, where he now lives with his wife, Alice Wanjiku, their four children, and his 93-year-old father.

A born-again Christian and discipleship teacher, Peter has dedicated much of his life to serving others. For many years, he lived in Nairobi, working with international NGOs in social work and community development, including supporting people living with HIV through counselling, care, training, and economic empowerment.

After completing a 10-year contract, Peter returned home to care for his ageing father, reunite with his family, and give back to his community. Together with his wife, he now works in dairy farming and other agricultural activities.

His journey into avocado farming began when Catherine Njoki introduced him to a project focused on Hass avocados. Through training sessions and visits to a pilot farm, Peter learned about the value of grafted avocados, proper planting methods, and the market potential of the crop.

Today, he sees the project as a turning point for local farmers. With community land now available for grafting seedlings, improving quality, and training others, Peter believes the initiative could transform thousands of lives in the years ahead.

To him, avocado farming is about more than agriculture — it is a pathway to knowledge, opportunity, and long-term economic security. He also hopes the project will open doors to international markets and future value-added products, while creating opportunities to explore other crops such as coffee.

In a region where many families rely on small plots of land, Peter believes that well-managed avocado and coffee farming can work side by side and provide meaningful support to households.

Above all, he speaks with gratitude — for the training, the encouragement, and the support the community has received.

“May God bless everyone who has contributed in one way or another. May they know that their work is not in vain.”

RUTH MUTHONI

My name is Ruth Muthoni, a proud Kenyan, a Christian, a pastor, a wife, a mother of four, and a farmer. For 21 years, I have been married to my husband, Dionisio Muriithi, a military soldier. My family is my greatest blessing, and they inspire me every day to work hard and build a better future.

My farming journey has not been easy. I faced many challenges in food crop farming, including pests, diseases, high costs, and hard labour. Instead of giving up, I chose to find a better way, and that is how I started jungle farming. I embraced it because it requires less investment, no tilling, and works in harmony with nature. It has taught me that farming can protect the environment while also supporting a family.

Over time, my farm has become a source of hope and opportunity. I harvest honey, keep fish in rainwater pits, use pond residue as fertilizer, and grow azolla for chicken feed. Even weeds have become useful as kienyeji vegetables and for goat farming. This has shown me that with knowledge and creativity, even small resources can bring great value.

When HAE introduced the idea of fruit tree planting, it gave me a new vision. I would like to gradually replace part of my jungle farm with fruit trees so that I can continue conserving nature while improving my family's income and nutrition. I believe this opportunity will help me grow not only as a farmer, but also as a person who can bring positive change to my community.

This new chance from HAE Group has filled me with hope, excitement, and many bright ideas. I am eager to learn, ready to work hard, and committed to building a better future for my family, my community, and my country.



CLOSING CONCLUSION

The story of *Empty Spaces* is ultimately a story of possibility — of how a small, locally rooted initiative can grow into a powerful expression of shared responsibility, resilience, and hope. What began as an effort to plant trees has become something far greater: a living partnership between industry, community, and nature, shaped by learning, trust, and a common commitment to a better future.

In Ngandu Village, the project has shown that environmental restoration is not only about recovering land, storing carbon, or responding to climate risk. It is also about strengthening livelihoods, restoring dignity, creating opportunity, and bringing people together around a shared vision. Each seedling planted represents more than a future harvest; it represents investment in healthier ecosystems, stronger communities, and the belief that long-term change is possible when people are empowered to lead it themselves.

For HAE Group and its partners, this initiative reflects an important shift in the way sustainability is understood and practiced. It demonstrates that meaningful climate action is not achieved through distance or abstraction, but through direct engagement, local partnerships, and a willingness to connect global challenges with human realities on the ground. In this way, *Empty*



Spaces is not only contributing to wider net zero ambitions, but also helping to build a more inclusive and regenerative model of development.

The transformation seen in 2025 and 2026 is only the beginning. A community nursery has taken root, farmer knowledge is expanding, new networks of support are forming, and neighbouring communities are stepping forward with the desire to join. This momentum matters. It shows that when communities are trusted, when knowledge is shared, and when partnerships are built with care, small beginnings can lead to far-reaching impact.

As this journey continues, *Empty Spaces* stands as a reminder that the most meaningful sustainability work is not only measured in tonnes of carbon or numbers of trees, but in lives strengthened, confidence restored, and futures reimagined. Its message is simple yet profound: when people and nature are supported to thrive together, transformation becomes possible.

The work ahead remains important, but the direction is clear. What is growing in Ngandu is more than trees. It is a model of hope, stewardship, and shared progress — and a powerful example of how lasting change can begin from the ground up.

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Photographs by Catherine Miriri and Isaac Miriri

The project rationale is grounded in the ideas outlined in Richard Hardymont's book *Measuring Good Business: Making Sense of Environmental, Social and Governance (ESG) Data* (2025).

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