

**UNDERSTANDING COMMUNITY ENGAGEMENT IN FOREST RESTORATION
IN RURAL ZIMBABWE THROUGH INTERCULTURAL DIALOGUE AND
PARTICIPATORY ACTION RESEARCH**

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ABSTRACT

The decades-long decline of certain tree species in previously densely forested areas of Zimbabwe suggests that the forest's capacity to regenerate itself sustainably is at risk. In an ecologically depleted, rural region outside Harare, Zimbabwe, community members created a tree nursery site, Trees of Hope (<https://treesofhopeinzimbabwe.org>), in 2019, where indigenous saplings now flourish as part of a locally valued sustainability plan. From 2023 to 2025, an intercultural, cross-disciplinary, learning initiative—Exploring and Exchanging Communications about Trees (EECAT)—investigated how reforestation practices are understood locally with partners comprising a primary school, a permaculture organisation, researchers from universities in Zimbabwe, South Africa and the UK, a UK community interest company, and an advocate of youth-led, climate-resilient agriculture. Participatory action research captured shifts in understanding the value of trees between generations, and between formal and informal sectors engaged in climate change response. Participants' reflections both on and through their actions include tensions between respecting and adapting traditional cultural practices within their communal lands.

Keywords: intercultural communication; sustainable development; indigenous knowledge; musical arts; intergenerational learning; climate change

INTRODUCTION

The enquiry central to this article is set within the rural context of the Chinyere community, Domboshava, Mashonaland East, Zimbabwe, approximately 45 kms north of the spreading conurbation of Harare. As in other parts of rural Zimbabwe, the local population which has held these lands since before the colonial era (from the late 19th century until 1980) has witnessed the gradual march of deforestation. Until recently it has been understood that this degradation has been brought about through the continued use of firewood for cooking by the growing local population. For some decades, however, these same community members have noted that springs, boggy areas and rivers which have supported their food-growing activities have gradually run dry, following a series of prolonged and worsening annual droughts resulting from climatic change. In the last 10 years these deteriorating conditions have been exacerbated by the effects of unsanctioned gold prospecting by artisan miners within the local forest area. This has further reduced tree cover and left waterways in a poisoned state to an extent that the prospect of securing future communal livelihoods from the land has been threatened. The disappearance of some tree species suggests that the forest's capacity to regenerate itself sustainably is at risk. It is in such a precarious ecological context that questions have been raised about the way trees are valued.

In response, in 2015, the Chinyere family and wider community members began the task of collecting seeds from the local forest area. Together they have continued to cultivate and nurture indigenous and fruit tree saplings ready for sharing within the local community and schools. From these restorative and regenerative actions, the Trees of Hope nursery emerged as a community-based, eco-learning initiative that continues to gain local support. The Trees of Hope Community Interest Company (CIC) UK was founded in 2021 which has raised funds (£2000-£5000 per annum) for essential building materials for shade structures, toilets and sheds, for farming tools, for digging a dedicated borehole supplying water, for the tree nursery site, and for materials to support young people's engagement at the weekly Trees of Hope Saturday Club (attended by 20 young people). It aims to integrate food-growing and animal husbandry practices within a permacultural design that will bring longterm benefit to community members through sustainable living approaches. Such a positive participatory social context has given rise to further questions about the viability and sustainability of frontline community members' actions in Zimbabwe towards mitigating the impacts of climate change and ecological degradation. For this reason, participatory action research (PAR) approaches have been adopted as an organising framework for the research reported in this article as a means to document local practices of sustainable development.

In 2023, the collaborative research project, Exploring and Exchanging Communications about Trees (EECAT),¹ was set up between the University of Zimbabwe (UZ), Rhodes University (RU), South Africa, and Bath Spa University (BSU), United Kingdom, to address the question: How can intercultural dialogue and cross-disciplinary educational activities contribute to a better understanding of the ecological value and cultural significance of trees in local food-

¹ Funded by Bath Spa University.

growing environments? The enquiry was designed to focus on the influencing behaviours emanating from activities at the Trees of Hope nursery site (including the Saturday Club)—involving Govera Primary School, local farmsteads and the Zambuko Community Library and Cultural Centre—with respect to reforestation. The Ministry of Primary and Secondary Education (MOPSE) supported the project to take place at Govera Primary School, where children and teachers benefitted from the four-day community-based learning programme delivered in 2023 by the Schools and Colleges Permaculture Education (SCOPE) organisation, attached to the Zimbabwe Institute for Permaculture. They learned about agroforestry techniques that are sensitive to indigenous knowledge and skills held within the community.

The map in Figure 1 illustrates the local geographical context which the Trees of Hope nursery and the SCOPE training intervention has impacted. The production of this map highlights the significance of bringing different cultural perspectives to bear on the representation of spaces occupied by the participants and respondents in the EECAT project. Its creator, Kennedy Tafara Chinyere, a director of Trees of Hope (CIC) UK, was brought up in Chinyere Village and throughout his lifetime has walked these fields and visited the Mapfeni River, now polluted and mostly dry (see Figure 2 online <https://doi.org/10.17870/bathspa.30286978>). While his map is not a precise representation made to scale, it does capture some elements known only to insiders: the flow of footpaths around fields and homesteads; and the location and relative sizes of vegetable gardens and homesteads. He drew the map in 2019 to draw attention to the areas that need protection and restoration. While his insider perspective bears a powerful testament as a community member, Chinyere has been living in diaspora since 2016 (as a UK resident and subsequently as a British citizen), so the map might, rather, be interpreted as the product of an outsider-insider who is vulnerable to the attractions of nostalgic imagination. Throughout this project, other community members at the Trees of Hope nursery portray a range of insider viewpoints from a broad demographic in terms of age, gender, status and eco/social commitments. These viewpoints are interpreted and presented as faithfully as possible by outsiders: the researchers from UZ (Crispen Dirwai and Philemon Manatsa) working in situ, and the three BSU researchers (Amanda Bayley, Nick Clough and Jane Tarr) working remotely, and experiencing the actions of Trees of Hope through various media. The ethnographic research presented here must therefore be considered in that context, sensitive to the insider perspective of experience (the *emic*) being overshadowed by outsider rationality and the recolonisation of meaning (the *etic*). The project has benefitted from Dirwai and Manatsa being familiar with this tension through involvement as teacher educators in other community engagement programmes. The PAR approaches, which have included the development of narrative accounts by the participants, have been designed to connect the points of enquiry directly to the respondents' individual actions. Perspectives have been gathered that are reflexive in nature, that is, reflections in or about action (Schön 1983), and conducive to further participation, engagement and theorisation. The objective is to develop understandings about the contributions of frontline, community-based workers in the field of ecological regeneration, and about the significance of their roles and values in sustaining their collaborative efforts.

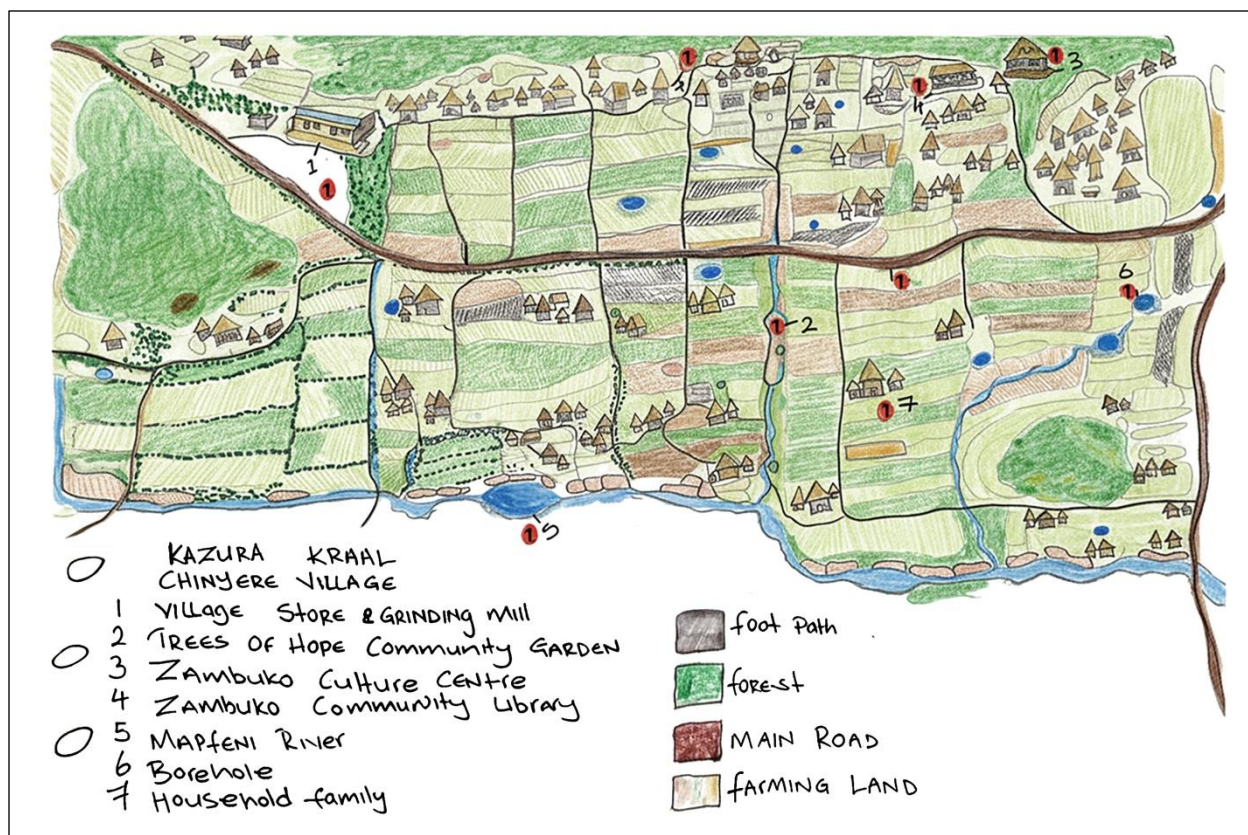


Figure 1 Map of the location around the Trees of Hope nursery

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It was understood at the outset that the values and perspectives shared by many community members would reflect an understanding of *chinyakare*. In Shona language this word expresses respect for everyday life and the ways of the ancestors that recognise cultural values and heritage shared within the community. *Chinyakare* refers to safe ways of farming and rearing animals, the relationship between land and people, family, ceremonies and rituals, songs and storytelling, mbira and dance. The concept of *chinyakare* recognises symbiotic relationships between the natural elements, human beings and the environment. Such relationships and therefore the concept have been put at risk by the combined challenges of ecological degradation and the effects of climate change. For example, women can no longer use water from the river to support the growth of their plants and vegetables; and the ideas and practices of the permaculture training programme potentially pose a threat to *chinyakare*. Thus, it was anticipated that intra-community phenomena would partly determine the dialogic nature of the research, including fissures between generations with contrasting views on the urgency of climate change mitigation measures, and between those holding indigenous and scientific knowledges and experiences. Such differences might also be understood in relation to a new post-independence community, conceptual frame represented as *chimanjemanje*: new ways of learning and doing things. Intercultural communication was part of a methodological approach used to overcome barriers by addressing issues related to underlying power relations, including those arising from residual colonial dispositions. It was important to ensure engagement and dialogic communication between participants of different generations, gender, social and professional standing and between those thinking and working within indigenous and scientific paradigms.

RESEARCH CONTEXT

In a 2016 UNESCO report, Giorgia Magni recognises how indigenous peoples and their knowledge are valuable allies in the fight against climate change and sustainable development challenges, and in maintaining global biodiversity. In the light of the new Agenda 2030, she says ‘joint efforts are urgently required to develop and implement suitable initiatives to empower indigenous peoples to uphold and realise their rights and be involved in decision making processes, thus becoming active agents of change’ (Magni, 2017, p. 444). With education and PAR central to the EECAT project, its transdisciplinary team of researchers, practitioners and educators proposes new ways of enabling indigenous people to become active agents of change in multiple local contexts.

Inclusive perspectives on the arts in environmental and sustainability education build on the transgressive learning of Change Drivers in South Africa (Kulundu 2017). Applied ethnomusicology might be a useful way of framing this research, in terms of understanding, interpreting and analysing music and dance through its role in social interaction and in cultural (ex)change, rather than as a music-centred intervention (Titon & Pettan, 2016). Klisala Harrison, for example, promotes the idea that ‘applied ethnomusicology always has its own specific meaning’ (2016: 2) which, in the context of the EECAT project in rural Zimbabwe, means regarding music as a manifestation and reflection of a community expressing its ecological and cultural values. Environmental degradation is epitomised by deforestation through clearance and cultivation (Mutasa 2020). Such activities trigger a chain of negative pressures on the environment, culminating in degradation of habitats and loss of biological diversity. This unsustainable way of interacting with the environment can be partly ascribed to the loss of intergenerational transfer of knowledge. The EECAT project attempts to reverse this process by encouraging change through exchange, on multiple levels. Its activities with schools, communities and researchers (with their varied disciplinary backgrounds—education, music, ethnography, ecology, social justice, community engagement and therapy) provide a unique combination and focus to address UN Sustainable Development Goals 4.7 (quality education), 13 (climate action), and 15 (life on land), integrating scientific knowledge, indigenous understandings, and cultural heritage. An additional backstory to this work is our recognition that 2025 is the year of Justice for Africans and People of African Descent.

The collaborative stories spiral (Gilchrist, Holmes, Lee, Moore, & Ravenscroft, 2015) is useful in this context for its conceptual framework based around co-designing non-hierarchical community arts research. The value of this approach to qualitative research lies in ‘putting the participants at the heart of the research process where they not only generate narrative, but also situate, mediate and remediate it in ways that extend conventional participatory research practices’ (Gilchrist, et al., 2015, p. 460). This conceptual framework similarly ‘reflects our commitment to generate accounts of communities of people that do justice to their collective wisdom, dynamism and creativity, as well as their transience, their needs to transform, and their responses to change’ (Gilchrist, et al., 2015, p. 460). Adopting this framework, enabled a multivoiced approach whereby ‘boundary crossing between groups or difference and diversity within groups is a resource for meaning generation’ (Akkerman, Admiraal, Simons, & Niessen, 2006, p. 462).

When Dirwai and Manatsa (and team member John Bhurekeni, Rhodes University), first approached the community members before joining them for the four-day permaculture training programme in 2023, they took care to express the following aims of the EECAT project in accessible terms: 1) to engage school teachers and children in Zimbabwe as reforesters and agroforesters alongside Trees of Hope workers and local communities; 2) to generate data about community perspectives on the significance of trees in the local environment; and 3) to encourage children to communicate through words and music their understanding and feelings about trees that they have planted. The results have extended far beyond these initial intentions, largely because regular visits by Dirwai and Manatsa, from 2023 to 2025, inspired community members to document their experiences at Trees of Hope for themselves. This is evidenced through the regular reports from Wellington Chinyere (the Coordinator of the Trees of Hope nursery, and brother of K.T. Chinyere), and from young people at the Saturday Club.² On a practical level, in order to facilitate the smooth running, organisation and communication, a committee was formed. The committee foregrounded the work of AshGric to help support Trees of Hope to become a community-based organisation (now with a written constitution).

Writing about the advantages of collective actions, Craig Lundberg (1995) emphasises synergy as a significant factor, and Maarten de Laat, and Robert-Jan Simons (2002) propose three types of collective learning—learning in networks, learning in teams, and learning in communities—all of which took place in the EECAT project. Establishing an open process of collective learning in a community-initiated education venture provided a basis for understanding not only the development of a tree nursery and adjacent social eco-learning spaces, but also other practical ecological projects where community members and professionals work in communicative collaboration to repair damaged natural resources that provide nourishment and support wellbeing. This way of learning deepens and expands the members’ understanding and development of knowledges and skills about beneficiation. The EECAT team anticipated that the development of local natural resources may be supported when local participants come together to attach value, variously, to the concept of sustainability. The notion of collective learning is particularly relevant to the context of the climate crisis, as people need to be able to work together to solve problems and innovate more accurately and more quickly in order to find workable and achievable environmental solutions.

METHODOLOGY

Ethnomusicologists who have focused on social engagement, often in collaboration with other academic and non-academic partners, have needed to adapt methodologies from relevant disciplines. Many of these methodologies are participatory and empower communities to make transformations in their own lives (Tan 2015). Social, economic and ecological changes in Zimbabwe over the last 50 years have had a direct bearing on the choice of research approaches selected here. A particular concern was to ensure high levels of participation of community members as

² These reports were (and in 2025 still are) received by the directors of Trees of Hope UK via WhatsApp and have, with permissions, been added to the growing database that informs our writing about the engagement of young people in this intergenerational enquiry.

respondents, in order to develop social eco-learning practices at community and school levels. Following Jacques J. Chevalier and Daniel Buckles:

PAR is conducting action research ‘with’ people rather than ‘for’ them or ‘about’ them. PAR is collective reasoning and evidence-based learning focused on social action. PAR is intended for use by researchers, students and working professionals seeking to improve or rethink their approach to co-creating knowledge and supporting action for the well-being of all (Chevalier & Buckles, 2019, p. 2).

It was intended that PAR would provide a basis for supporting the community members to review their own understanding of their restorative and regenerative actions and to stimulate further responsible reforestation practices. We envisaged that as community members openly shared their rationales, purposes and practices, new insights would evolve that could inform the ecological interventions. The following questions provided a focus for the shared enquiries:

- In what different ways can trees be valued?
- What are the main threats to the local forest environments?
- What responsibilities do local community members have to preserve and improve tree cover in the local environment?

Investigating these questions began to reveal how the participants understand themselves as engaging in responsible reforestation practices. Thus, the enquiry became an extended social eco-learning experience:

PAR is an invitation sent to people whose life spaces may intersect around shared concerns. Those who accept the invitation meet at agreed crossroads and choose to interact according to shared rules. But they do so with many other considerations in mind. The gathering is like a nexus - a focus point where lines and paths intersect for a period of time (Chevalier & Buckles, 2019, p. 29).

To start the process of data gathering, protocols were observed with the parent Ministry riding upon the existing Memorandum of Agreement between MOPSE and SCOPE. After permission was granted by the Ministry to undertake the project at the school, a pre-data gathering training for the university researchers was facilitated by Trees of Hope during an online workshop in March 2023. This defined the methodology and established an agreement about what to look for during data collection, report writing and subsequent evaluation. It was at this stage that the following framework for the research process was proposed.

The first stages of enquiry were structured around the activities of SCOPE’s permacultural learning programme between June 2023 and March 2024. It was envisaged that the various voices of the participants would be stimulated using reflexive products that portrayed their engagement in the activities and invited them to reflect again on their participation (Clough & Tarr, 2022), see Figure 3. During the preparatory research training in March 2023, it was agreed that reflexive products would take the form of descriptive, narrative and photographic accounts

complemented by music and stories that can trigger participants to rethink their practical situation for themselves. As crafted multimedia outcomes from the enquiries, such reflexive products would resonate with the excitement of participants' new experiences with trees and stimulate their further personal reflections and actions, thus supporting the three phases of the PAR.

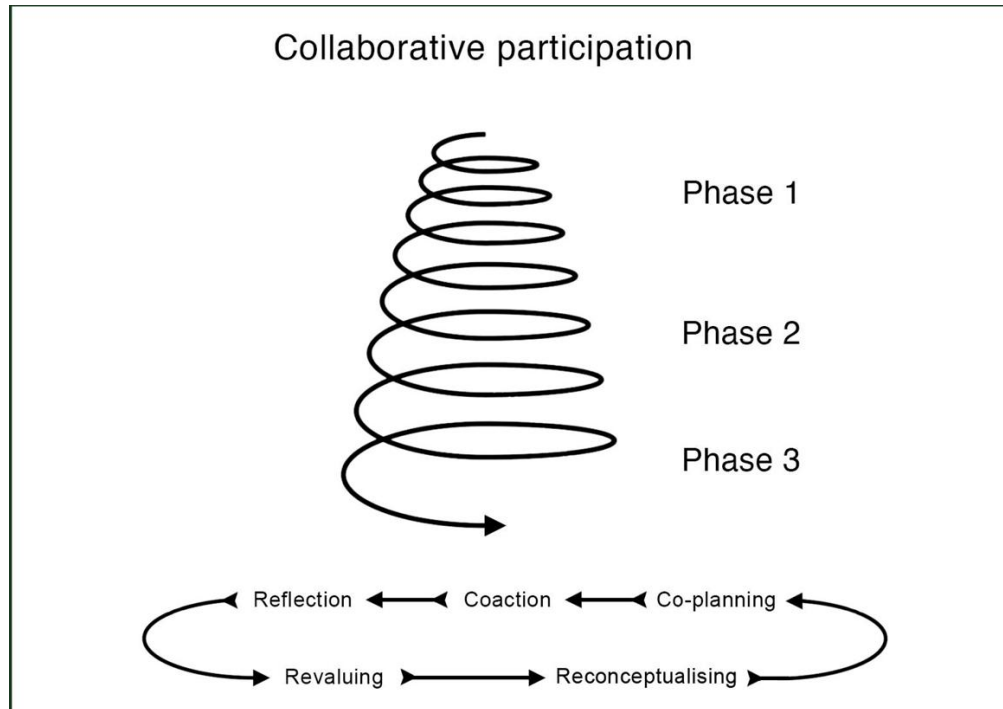


Figure 3: Iterative cycles of participatory action research

PRESENTATION OF DATA FROM THE RESEARCH

This section presents narrative, descriptive data from each of the three phases of the research between 2023 and 2025, that serve to contextualise responses by community members, including an expression through musical arts in the form of a song. These verbatim statements are presented as nine 'data sets' that represent the local knowledge and valuing of trees across each phase of the enquiry. These nine data sets prompt subsequent reflection and discussion related to the engagement of community members in the practices of reforestation, their progressive interdependence with other partners in the learning enquiry and the sustainability of the work of Trees of Hope.

Phase One: March 2023 – February 2024

The training programme delivered by SCOPE on 26-27 June 2023 and 17-18 October 2023 provides a context for the three data sets that are presented here as points of focus for reflection and discussion. A sensitisation meeting was held on 26 June 2023 immediately prior to the first training (see Figure 4 online <https://doi.org/10.17870/bathspa.30287011>) which attracted 58 participants, including children, parents, teachers and government representatives in environmental issues and extension services, representatives of youth groups,

caregivers, religious organisations and many community members. The aim of the sensitisation meeting was to outline the project aims and objectives promoting discussion about how the activities can be embedded and sustained in the community beyond the duration of the EECAT project.

During the training (Figure 5), the Integrated Land Use Design (ILUD) process³ provided a holistic framework for ensuring the development of ecological practices based on permaculture principles (Figure 6). The programme was organised around these key themes:

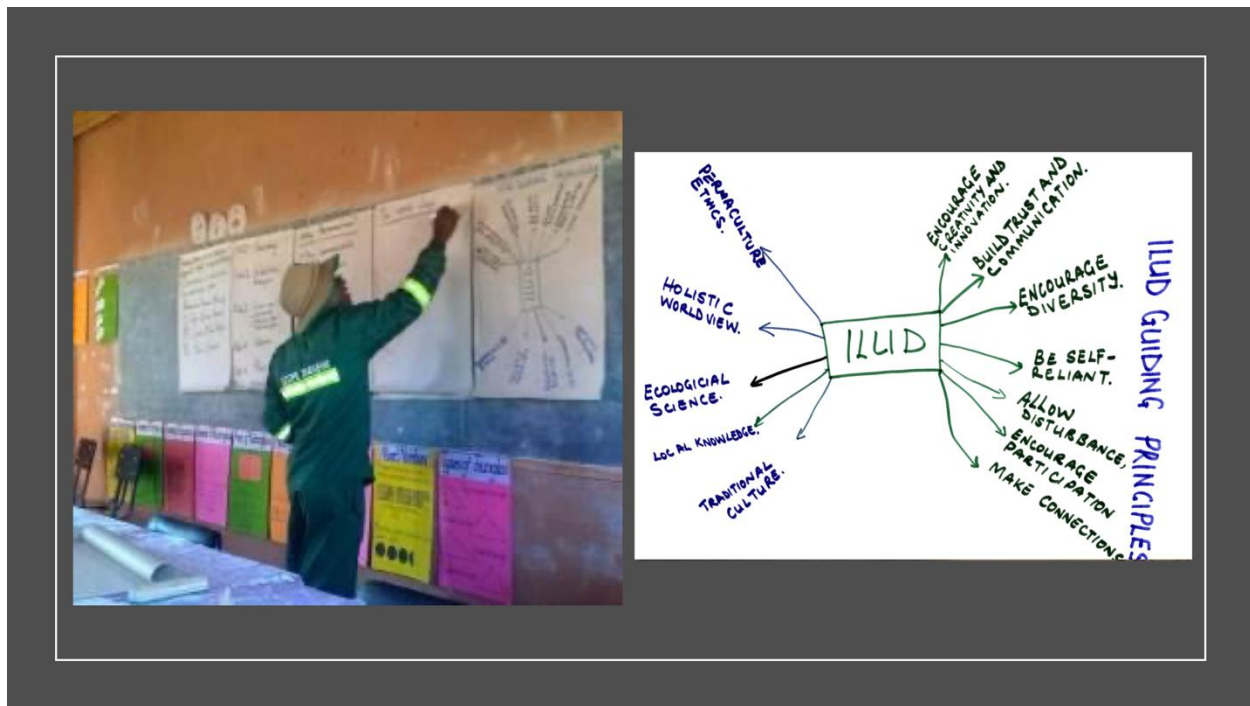
- Historical background
- Introduction to permaculture
- Grounding: worldview, mystical, ladder model and historical profiling
- Waste separation at source
- Bocashi and thermal compost making
- Situational analysis
- Vision and mission statements
- Vision boards
- Practical zoning and soil enhancement



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Figure 5 SCOPE training programme 26-27 June 2023

³ https://www.seedingschools.org/ss_media/documents/ILUD_as_a_tool_for_landscape_regeneration_2.pdf



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Figure 6: SCOPE training showing the Integrated Land Use Design process

The trainers emphasised the importance of cooperative approaches and intergenerational learning. It was noted that this value is rooted in the community's socio-political living heritage commonly referred to as *unhu/ubuntu* (respect for others) principles of *mushandirapamwe* (a group effort of working together as one). These principles were evidenced during a musical celebration of the achievements of the training programme, at a tree planting day at Govera Primary School, 6 July 2023 (Figure 7 online <https://doi.org/10.17870/bathspa.30287023>).

The second training event, 17-18 October 2023, initiated the implementation stages of SCOPE's provision and was attended by 36 participants: 18 men and 18 women. The participants comprised two Agritex officers,⁴ one officer from the Environment Management Agency, four village heads, three researchers (UZ and RU), three Trees of Hope members, two School Development Committee members, one pastor, four teachers, four out-of-school youths, ten learners, and two parents. Following this training, on 30 November 2023, Dirwai and Manatsa held consultations with the school and community-based participants about the capacities and knowledges they held with respect to permaculture and reforestation. The three data sets presented here were gathered with due permissions following the ethics procedure at BSU in the UK. Data Sets 1 and 3 were included in the project report prepared by Bhurekeni, Dirwai and Manatsa in 2024.

⁴ Agritex is The Department of Agricultural Technical and Extension Services in Zimbabwe: <https://ccafs.cgiar.org/partner/departments-agricultural-technical-and-extension-services-zimbabwe>

Data Set 1

Verbatim comments made during the sensitisation meeting by different community members, translated from Shona by Manatsa, 26 June 2023:

We expect that whatever we learn here, will be cascaded back to our own homes. We therefore expect to gain more knowledge on how trees are propagated so that we can use the same knowledge here at school and back at our homes in order to transform our own lives.

We want more training on how to propagate our indigenous trees. These have health benefits, spiritual benefits, economic benefits when we sell fruits from some of these indigenous trees and environmental benefits as trees and shrubs produce oxygen and help in combating soil erosion.

We want to document from our elders the knowledge that they have about how and why they used to value our indigenous trees. In the old days there were trees that were prohibited from being cut for the purpose of energy (firewood) through the observation of traditional laws 'the Dos and Don'ts'. Today people just cut trees at random without carefully selecting those traditionally permissible to be used for firewood.

There is deeper knowledge domiciled in the people that is yet to be exploited. The EECAT project is a platform [that] can be used to communicate deeper knowledge about trees, from the community.

Data Set 2

A description of a music experience at Govera Primary School (**video 1** https://youtu.be/U8NO_OPTCrM) while trees are being planted, 6 July 2023:

Three community members visited Govera School and played mbira and hosho to celebrate the planting of new trees in the school grounds. W. Chinyere, coordinator of Trees of Hope nursery, played mbira alongside two elders: William Chitauro on mbira and Sekuru Noel Chinyere on hosho. The community musicians were given chairs and many school pupils and teachers gathered around naturally in a circle to listen to the music. In call and response form, W. Chinyere sang 'Ndiudzewo kwakaenda vamwe' and the school pupils responded with the words 'Zvandiremera sango', clapping confidently with movements and some laughter along with the hosho player. A female teacher and a school pupil danced within the circle to the music and when the teacher stopped (after 1'20") 3 more female pupils started to dance. A gathering of about 70 school pupils seemed to listen with attentive enthusiasm to this traditional music being played by community members. Finally, W. Chinyere gave a signal for the playing to be concluded. The participants, including the children, clapped at the end of the piece.

The traditional Shona piece, *Marenje*, is used as a metaphor that can represent different meanings according to the context. Here, the singers are invoking the properties of the forest (*sango*) that bring challenges to humans, such as

snakes, lions and other harmful creatures. In this situation, however, as noted by K. T. Chinyere as he watched the video, the challenges can be understood differently: the forest is shrinking and the foods (fruits, mushrooms, leaves, etc.) and medicines (roots, bark and saps) are insufficient to meet the needs of the local community. Thus, what they are singing can be interpreted as ‘a new kind of challenge that the forest is presenting to us’. The song takes the form of call and response (see Figure 8 online <https://doi.org/10.17870/bathspa.30287038> for the entire song in Shona):

Call:	<i>Ndiudzewo kwakaenda vamwe</i>	Where are you now?
Response:	<i>Randiremera sango</i>	The forest is hard for us. We are suffering here. These are new challenges for us.

Data Set 3

Examples of verbatim comments made by community members during the consultation meeting, 30 November 2023 (translated from Shona by Manatsa), with additional remarks from Dirwai:

The *muchecheni* tree:

W. Chinyere: *from our research, one old woman in our community told us that a long time ago pregnant mothers used to burn the roots and drink the powder in the water. Women suffering from period pains take the roots and dry them, grind them into a powder and put them in porridge and take the concoction.*

I want to add more information. The muchecheni tree has good fruits. We need further research on the nutritional value of this tree, it must be good for our health. We can produce a drink out of this tree.

Muchecheni leaves can be used to treat boils. You crush the leaves of the muchecheni tree and apply the crushed substance as a bandage to the boil. The boil will automatically press out the nucleus without you putting in any effort.

The *mubvamaropa* tree:

The ‘blood’ reddish liquid from the bark can be used as betadine. To those suffering from cataracts, you carve the bark from the eastern and western sides then use sadza to take the bloody liquid.

I have a problem on what was said about the treatment of cataracts using the mubvamaropa liquid. My mother had a cataract, doctors wanted to do a minor operation to remove it. She was hesitant to take up that offer and decided to go the traditional way of using the mubvamaropa. A woman would drop the red liquid into her eye. She used to cry a lot once that was done, but the cataract was not removed at all. We ended up opting for the minor operation and the cataract was removed. Is there a measure on the quantity of red liquid from the mubvamaropa that has to be dropped in one’s eye?

No she did it the wrong way. It is said you use a piece of warm sadza and not dropping the liquid directly into your eye!

The mupangara tree:

Mupangara is used for the treatment of snake bites. You chew the leaves and you apply to the bite with a piece of cloth or bandage. We understand that can help pull out all the poison from your body. It is used as an antidote for snake bites.

[Dirwai interjects: *We want our Chemistry counterparts at UZ to interrogate what is in Mupangara that can treat snake bites and which type of snakes.*]

This Mupangara tree acts as a lightning conductor. With the presence of Mupangara tree at your homestead you are well protected from lightning bolts.

[Dirwai interjects: *We also want our Physics counterparts at UZ to interrogate what it is in the Mupangara tree that makes a good lightning conductor.*]

You can mix the powder with Vaseline and smear on a ringworm, it heals fast. Unlike modern medication that treats the outer skin, mupangara goes deeper than that. I mean you use the fresh fruits ‘baby’ to treat ringworms. You crush the fresh fruits and smear directly on the ringworm.

Discussion of data sets from Phase One

These examples of comments from community members provide a clear indication of the starting points for their engagement in forest restoration. In the first data set they identify that they need more information about how indigenous trees can be propagated. This may seem a strange request considering that they live on the edge of an ancient forest. However, until recently it has been assumed that the forest can regenerate itself, as it has done since humans first occupied these lands. There is a recognition in these statements that the capacity of the forest to regenerate itself is now at risk, and an acknowledgment of the complexities involved in ensuring the propagation of the diversity of indigenous tree types in this locality.

Even from these few contributions, in the third data set there is confirmation that protecting the diversity of indigenous tree types is essential for the wellbeing, health and nutrition of the local community who neither have regular access to healthcare services nor to supermarkets, nor even the regular means to purchase essential foodstuffs from commercial sources. Their comments provide an illustration of the depth of understanding of the properties of each tree and how it is valued.

A feature of these data is that they reflect the capacities within the community to discuss matters openly by sharing perspectives from experiences of different families and homesteads. Such dialogic engagement has the potential to support continual learning about the value of trees and to strengthen the sense of responsibility held within the community to safeguard the future of the local forest. By employing PAR methods these various perspectives have been documented in ways that can inform the further development of reforestation practices.

Regarding the musical data from an ethnomusicological perspective, we can recognise that song translation analysis is a means to develop knowledge of intercultural connectivity (Aronson & Box, 2021), as we seek to find meaning, and that, in a community setting, clap patterns have a structural function as part of the music and dance (Agawu 2016). K.T. Chinyere's observations highlight the potential for additional voices, multiple meanings and ambiguities to be held within the community of singers and players in a way that lends excitement to the moment, encouraging deeper thinking and feeling about what had appeared as a simple process of planting trees in the school grounds. The questions that emerge from this expressive musical art form are portentous in ecological terms. The forest itself can be understood as a sacred place. The issue is whether this is an appropriate way to propagate indigenous trees and recreate forest spaces on which human lives have previously depended.

Phase Two: February – December 2024

A gathering of local community members took place on 17 February 2024 when Dirwai and Manatsa visited Govera Primary School and the Trees of Hope nursery site to present hard copies of their report of the EECAT research (Figure 9 online <https://doi.org/10.17870/bathspa.30287056>). (K.T. Chinyere had been working at the nursery site since 6 January 2024 and was also present at this community meeting.) Discussions at the gathering focused on suggestions made by young people in the local community who had been attending the weekly Saturday Club at the Trees of Hope nursery site. It had been their decision to call the event 'Young People and Climate Change'. They wanted the discussions to explore three main topics: global climate change; the importance and medicinal use of indigenous trees; and the effects of drug and substance abuse.

The gathering stimulated a further range of community actions in and around the Trees of Hope nursery site which demarcate Phase Two of the EECAT project and provide a context for the data selected here. The first data set relates to W. Chinyere's work organising groups of young people to visit the forests on the far edge of the villages to collect the seeds of indigenous trees. These were brought back to the tree nursery, planted in pockets and nurtured into trees saplings which were then transplanted to locations within the local community. Two further data sets were generated by children and young people attending the weekly Saturday Club at the tree nursery. Throughout 2024 they were actively engaged in the work of the nursery, planting seeds, watering, weeding and nurturing the plants into saplings ready for planting out in the community (**video 2** <https://youtu.be/e6MqEKopQXk>). They also researched the properties of several indigenous trees by visiting and interviewing elders in their locality. One group explored the *mukuyu* and *mutohwe* trees in Chinyere village and another group researched the *mutamba* and *muremberembe* in Chawonza village. The fourth data set relates to the work of Rukudzo Ashley Kavumbura,

Founding Director of Ash-Gric, in Harare, who attended the gathering on 17 February, and who has subsequently supported the development of the Trees of Hope nursery.⁵

All these data were received through WhatsApp communications from W. Chinyere, coordinator of the tree nursery site. The EECAT project provided a mobile phone to facilitate these communications about trees which are shared here as data, with due permissions, in the form of four separate but related data sets.

Data Set 1

Table 1 summarises information received from W. Chinyere on 2 March 2024 about the wide range of seeds he collected with groups of young people from the forest, for them to nurture in the tree nursery.

Tree name	Number of seeds collected	Information about the properties of these trees collated from internet sources
<i>Musasa</i>	116	An evergreen tree providing good shade. The bark is used to make rope, sacking and cloth.
<i>Muhacha</i>	100	A hardwood fruit tree with medicinal qualities.
<i>Muremberembe</i>	100	The roots, bark, leaves and flowers of the tree are used within the community for many medicinal treatments.
<i>Mubvee</i>	50	The tree has medicinal properties for example in relieving fevers and skin conditions.
<i>Mutohwe</i>	120	The tree has ecological benefits providing shade, food for animals, and traditional medicines.
<i>Mutamba</i>	50	The fruit of this tree has medicinal properties, for example in treating coughs and diarrhoea.
<i>Moringa</i>	300	A fast-growing tree that is drought resistant. This tree used to speed up wound healing and has nutritional properties.
<i>Mukuyu</i>	130	This fig tree provides good shade for people and animals. Its roots are used for weaving baskets and rope.

Table 1: Data received from W. Chinyere (2 March 2024)

Data set 2

A message from young people attending the weekly Saturday Club for inclusion in a Newsletter, 18 March 2024 (see Figure 10 online <https://doi.org/10.17870/bathspa.30287083>), to share with children at Hennock Primary School, Devon, UK, in response to a question they had asked about the number of trees they had planted:

⁵ Ash-Gric is a food processing company in Harare, dedicated to promoting sustainable and resilient agri-food systems. It launched its Agroecology Academy in January 2025, providing comprehensive education and hands-on training in agroecology, sustainable farming practices, and environmental stewardship.

We have planted 1,500 trees in the nursery, 100 in the local community, 156 in Govera Primary School and Chiriseri Primary School, and 50 in our food forest in the Trees of Hope garden.

We have questions for you [to children at Hennock Primary School]:

How do you care for your trees?

How many types of trees do you have in your community?

Have you planted any trees?

Do you enjoy working with nature?

What are your views about the Saturday Junior Club?

We are growing trees for the future - as leaders of tomorrow.

What actions do you take to avoid deforestation in your community?

How do the elders react to your actions?

Data set 3

From his visit on 17 February 2024, Kavumbura noted that the project work would benefit from wider national recognition. He provided a set of objectives for the Trees of Hope nursery which were agreed by community members and were adopted as a prelude to an application to the Zimbabwean Youth Alliance for recognition of Trees of Hope as a Community-based Organisation (CBO) operating with a local committee that was supported by an agreed constitution. On 6 August 2024 the Committee adopted and signed their constitution (see Figure 11 online <https://doi.org/10.17870/bathspa.30287104>), with the following objectives:

- to promote, encourage, and develop nature-friendly and indigenous knowledge-based initiatives that help to fight climate change in Zimbabwe;
- to promote research and development on tree planting, seed bank management, natural resources management and food security;
- to promote engagement and active participation of children in the community;
- to design and craft learning programmes and materials that will be exploited to turn Trees of Hope into a learning centre;
- to encourage the preservation of tradition and culture through the preservation of indigenous knowledge.

Data set 4

A statement by one young person from the Saturday Club, Anashe Gweshe, about the value of trees that she prepared for sharing at the *Seeding Local Cultures* conference in Harare, organised by SCOPE (3-5 December 2024):

Trees are very important to us in many ways.

We cannot think of our existence without trees.

Trees convert a great deal of our food deficiency by providing fruit and vitamins.
They supply timber for various uses.
Trees prevent soil erosion.
Many kinds of medicines are prepared from the leaves, roots and barks of trees.
Above all they help us to keep ecological balance supplying oxygen.
To preserve our environment we should plant more and more trees.

Discussion of data sets from Phase Two

Building on the discussion of data presented from Phase One, it was noted that the clear signs of the various stages of the permacultural and reforestation action research cycle (including the training, the community planning, and the implementation of the ILUD process), would all be documented through photographs and texts. In Phase Two, this process of documentation has been adopted by community members themselves. For example, W. Chinyere presented a record of the number of seeds that have been collected: 966 seeds in total. At a simple level this provides an inventory that can be tracked weekly and annually. Beyond that, within the action research cycle, it allows opportunity for reflection, planning and, importantly, a review of the capacity of the tree nursery site to house the various saplings that can now be propagated. It is apparent from the contribution of the young people that some saplings are now being shared in the community.

This process of self-documentation is also being adopted by the young people who are beginning to summarise the value of trees and to develop a view of themselves as ‘leaders of tomorrow’. Significantly they ask questions of other young people, reflecting their growing awareness of their own responsibilities. Their questions reflect an emerging curiosity about how other young people are responding to the ecological challenges that they identify, and invite other voices to join in the enquiries. Their question ‘How do the elders react to your actions?’ resonates with a nuance related to community engagement that has already been identified: How can intra-community tensions (in this case possibly between different generations as perceived by young people) be recognised and addressed?

The introduction of other voices is also evidenced with the relative outsider-insider, Kavumbura, influencing the language discourse at Trees of Hope. The fusion of administrative and indigenous insights that are reflected in the crafting of the words of the new objectives result from another form of intercultural communication that can be seen as fundamental to the promotion of community engagement within PAR.

Phase Three: January – March 2025

The discussion of findings in the final phase of the EECAT activities are framed within the intercultural spaces between the Trees of Hope CIC UK committee members, researchers from the three universities (Zimbabwe, Rhodes, Bath Spa), and the community members contributing to Trees of Hope in Zimbabwe. These various participants were freshly drawn together within the recent representation of the project work on the new website. It

was agreed that a final stage of data collection would enable the researchers to gauge the extent to which trees were being valued ecologically and culturally and to identify whether responsibility for their protection was being recognised at a local level as a result of the ongoing initiatives of Trees of Hope. It was agreed that the expanding project team in Zimbabwe, together with the committee members in the UK, needed to review these related issues to inform their shared work on project development planning, fundraising and implementation. Two separate contexts for data collection and analysis are:

1. Community meetings in and around the Trees of Hope site in Zimbabwe on 17 January 2025;
2. An interview with K.T. Chinyere (in the UK), related to the work of Trees of Hope UK, about the allocation of funds for developing the infrastructure of the tree nursery site during February and March 2025.

Data Set 1

Where permissions had been granted, use was made of the visual materials from the website and the documentation of the previous stages of the EECAT project to create a new reflexive product. This took the form of a 12-page booklet that was designed by UK researchers, Clough and Tarr, to enable participants in and around the tree nursery site and at the school to recognise their own actions and to express their thoughts and feelings about the engagement of the Trees of Hope community (see Figure 12 online <https://doi.org/10.17870/bathspa.30287134>). Each page presented a photograph of local participants engaged in tree/permaculture work of one kind or another. Each photograph was accompanied by a short statement that described the actions being taken. Examples from pages 5-10 of the booklet:

- *These children are sitting next to an elder in the classroom. Together they are learning about permaculture and growing trees.*
- *These experienced community members have created the Trees of Hope nursery site. They are growing and caring for trees there. They are hoping to reforest the local area.*
- *Every Saturday, this community member is encouraging young people to adopt permacultural ways at the Trees of Hope nursery site.*
- *These community members are playing mbiras at the nursery site. This reminds everyone about the old ways and about how people can connect with the land.*
- *Mr Chandimhara, the headteacher of the Primary School, is happy to receive the green covered report from Philemon [Manatsa] and Crispen [Dirwai] from the University of Zimbabwe. Together they are writing and reading about the work of the Trees of Hope project.*

After each statement the same question was asked to prompt open responses from those reading the booklet either at Govera Primary school or at the Trees of Hope nursery site:

What do you think and feel about this?

The design and selection of the contents of the booklet prompted responses to the following themes:

1. intergenerational learning
2. permaculture activity in the school grounds
3. indigenous knowledge held in the community
4. recycling as an ecological practice
5. the significance of community-based learning
6. the integration of reforestation and food growing
7. the human/emotional aspects of reforestation
8. the communication of feelings about trees and nature
9. the role of music/arts in sustaining cultural knowledge/practices
10. the impact of researchers and professionals in the community setting.

Dirwai and Manatsa reported that those who gathered at Govera Primary School and later at the tree nursery site (17 January 2025) showed great interest in the laminated copies of the booklet. This was particularly the case in the school, where five children were recorded (with due permissions) expressing pleasure at seeing themselves and their friends in the pictures, and sharing their knowledge, their growing interest in and active appreciation of trees. For example, one child remarked:

I am happy to see my friend in the book. Trees are important. We get oxygen. They are life. We planted 11 moringa trees at Trees of Hope.

17 male and 16 female youth respondents assembled to share their views in Shona which were (with due permissions) video recorded with simultaneous digital translations (later checked by Manatsa), then transcribed for sharing with the wider EECAT research group. Salient points that emerged are summarised here:

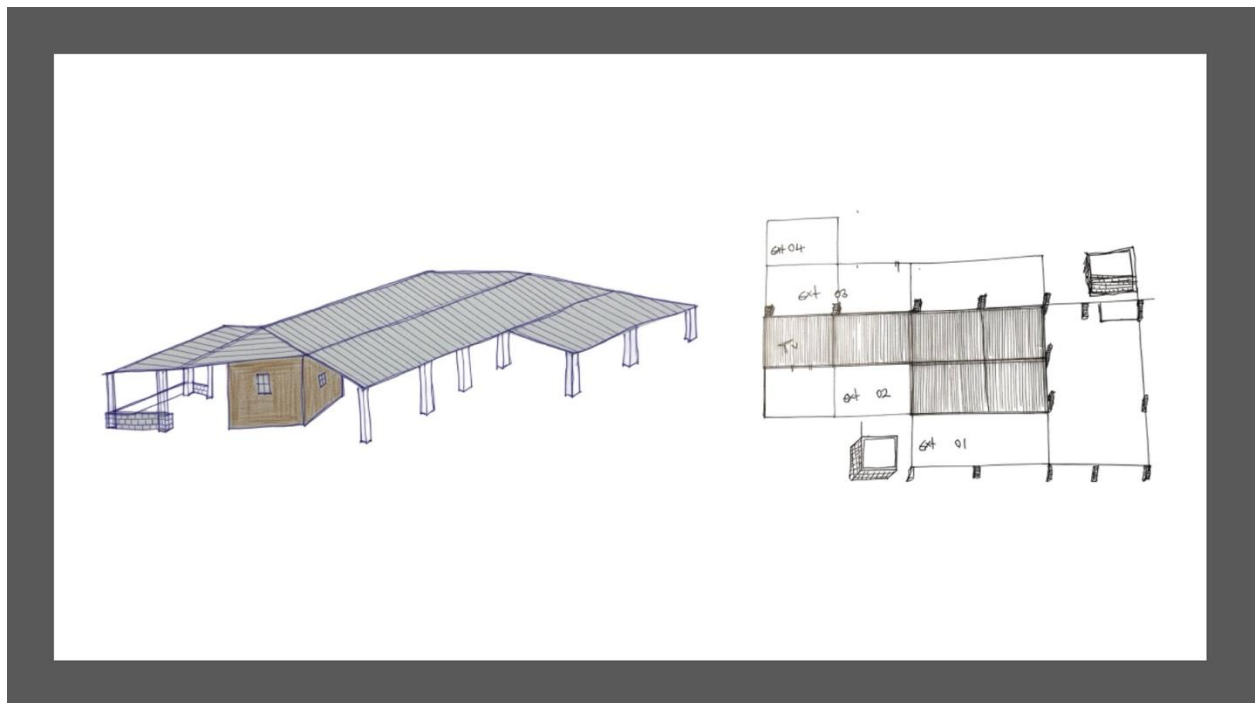
- *We are happy with this project and to see young people involved*
- *We have been learning to plant indigenous trees from seeds and are now able to water them*
- *We are collecting firewood through pruning trees*
- *We are recognising the healing properties of trees (chividze, muremberembe)*
- *We are now using a tsotso stove built from mud that fires with sticks*
- *I am happy to be in this book. I am planting indigenous trees around the home: muzeze, musekesa*
- *We have better air to breathe around the homes. The spaces are more beautiful*
- *Children are learning the importance of trees for their lives*
- *We are looking forward, aware of the Climate Change agenda*
- *The project can provide more education about the importance of trees*
- *We need to switch from fossil fuels to biofuels and to develop irrigation systems*

- *Fencing is important to protect young saplings from animals*
- *There are challenges. Sometimes the project suffers from vandalism due to misunderstandings of our intentions*
- *As a teacher I am happy to be part of the project. This community project is an eye-opener for me*
- *These activities distract young people from harmful activities (e.g. drug misuse)*
- *We can make more byproducts including medicines from the trees as a business enterprise. These can be sold to help parents with school fees.*

Reporting back on this event, Dirwai and Manatsa were impressed by the high turnout, the high levels of interest, and the strong sense of ownership of the Trees of Hope project by the community members. Indeed, they reported that UZ has now adopted Trees of Hope as a Community Engagement Initiative to support the reorientation of education practices towards the recognition of traditional cultural values.

Data Set 2

An interview with K.T. Chinyere, 16 February 2025, was with Clough and Tarr (Directors of Trees of Hope UK) at a meeting to inform decisions about the transfer of funds to Trees of Hope in Zimbabwe. He referred to the plans he had drawn up for the next phase of building at the tree nursery site which subsequently took place in March 2025 (Figure 13). In this way, his drawings acted as a reflexive product that stimulated the development of his thinking even as he was talking.



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Figure 13: K.T. Chinyere's plans for building at the Trees of Hope nursery site, 16 February 2025

The 20-minute interview was transcribed verbatim and then summarised for the purpose of informing the discussions of the Trees of Hope UK Committee and also, with his permission, for sharing in this paper. K.T. Chinyere's responses evidence how, as an 'insider-outsider-insider', he has been a sensitive and influential catalyst across the differing cultural spheres of rural Zimbabwe and the UK, justifying project funding streams in the light of his continuing learning about the needs of participants at the Trees of Hope nursery site. He reported how his recommendations were based on new understandings assimilated from his visit in January 2024 and from regular communication with his brothers, W. Chinyere and Tendai Chinyere, and with Kavumbura. He emphasised the importance of creating diverse spaces at the nursery site as a means to respond not only to the emerging environmental questions but also to specifications arising from the process of applying for status as a community-based organisation with support from the Zimbabwe Youth Council. For this latter reason, K.T. Chinyere underlined the importance of creating spaces where young people could feel safe because the pleasant shade from the young trees surrounding the site has been attracting the attention of local people making exploratory visits in increasing numbers. He referred to the need for secluded spaces as an immediate priority, where young people could develop their own activities, e.g. drawing, reading, craft work and sewing. Ongoing conversations with community members demonstrated that this forest garden environment was being regarded as a refuge in an increasingly depleted neighbourhood.

Another important theme related to K.T. Chinyere's vision for the Trees of Hope nursery as a site for learning: the creation of new covered areas for food preparation and with communal seating would encourage visits by elders who could raise awareness of traditional knowledge about indigenous trees and their various nutritional and medicinal properties. He described their concern about the fragility of these species in the shrinking forest areas around them, recognising that through generations of human occupation, the forest had been relied upon to regenerate itself but that this could no longer be taken for granted. This became the most pressing argument in his rationale: that there was a need to extend the covered areas so that more tree saplings could be propagated and nurtured. He recognised that even in this rural area which holds rich traditional knowledge about the land, it was necessary to create conditions where local people could learn not just *about* but also *from* the trees that they loved. He envisaged that to safeguard the future of some trees it would be necessary to study and document the different ways in which they could be propagated from seeds to saplings, then into fully grown trees in the controlled environment of the tree nursery site. He foresaw that careful annual monitoring would ensure the continued safeguarding and restoration of forest areas where local cultural traditions can flourish.

K.T. Chinyere used the plans for the next building phase at the nursery site to identify Trees of Hope as a community-based place of learning where local people, of all ages, could develop relationships with trees over years. He gave an example of how this learning process could be initiated by children: having chosen their favourite trees in the remaining forest, they could collect seeds, propagate them at the nursery site and support their growth until they could be transplanted to a safe environment near their homestead. This alone, he argued, could enhance their knowledge, understanding and love of trees.

Discussion of data sets from Phase Three

Data set 1 reveals how local people are recognising the tree nursery as a site of learning, not only for children and young people but for the wider community. They are also showing awareness of complexities that arise. In this live, multivoiced context there is evidence not only of appreciation of traditional knowledge that they hold about the medicinal properties of trees, but (in some cases) of changing approaches to the use of trees for firewood and cooking, to minimise degrading impacts. This cycle of PAR indicates that reforestation measures rely not only on strengthening but also the adaptation of traditional cultural practices and that in this respect there is a need to explore further the role of community-based, intergenerational learning alongside the work of teachers in schools.

Insights from both data sets have resulted from the sustained application of participatory research methods that have allowed time for all those involved in the action to reflect further on the implications of the ongoing work of the project. It would seem that the community members who have been engaged have begun to see themselves on the other side of a change process. The booklet of photographs and short descriptions of actions taken have arguably stimulated recognition of their part in a range of project outcomes. These materials have helped to open up multivoiced, dialogic communication between participating teachers, young people, tree nursery workers, wider community members, researchers from three universities, and UK-based committee members.

In light of the enthusiastic responses from community members who were already completing the building works specified on the plans, K.T. Chinyere's commentary is a testimony to development in the minds of community members that the Trees of Hope site is becoming a community-based tree nursery learning centre. He used his drawings as a reflexive product that encouraged new layers of thinking and feeling about the actions that he was undertaking alongside community members. These were also influencing the further development of his plans. As he was talking, he realised that the spaces for young people would need to be further extended, an aspect of the site development that was implemented by the building team the following month.

CONCLUSIONS

Evidence from this research shows that forms of local action for sustainable development are being supported by opportunities for participants to express (through word, poetry, song, dance, mapping and design) their thoughts, feelings and aspirations about the applications of sustainability within their daily lives. The discussions presented here also reflect the aspirations of the UN Sustainable Goals (within the 2030 Agenda for Sustainable Development) with respect to Partnership:

We are determined to mobilise the means required to implement this Agenda through a revitalised Global Partnership for Sustainable Development, based on a spirit of strengthened global solidarity, focussed in particular on the needs of the poorest and most vulnerable and with the participation of all countries, all stakeholders and all people (United Nations, Department for Economic and Social Affairs, 2015).

The variety of perspectives that have been documented from the application of iterative PAR approaches in relation to enquiries about ecological and social partnerships in rural Zimbabwe help to inform the further development of reforestation practices, both locally and more widely. The evidence shows that local community members have recognised the positive impacts of a partnership between local organisations formed through the EECAT project, comprising a primary school, a community-based tree nursery and a university department. Through collaboration with these partners, community members, including children, have experienced cycles of learning, action, documentation and review that are seen as significant for sustaining their forest environment that supports their livelihoods and wellbeing. A priority for the EECAT team has been that the learning and enquiry processes are accessible to the participants, are respectful of their contributions, and engage them in critical review through inclusive, dialogic and enduring interactions that promote understanding of their insider perspectives. The enquiries reported here have spanned three phases over a two-year period, March 2023–March 2025, a generous timescale that has been necessary given that the combined human processes of action and critical reflection have not previously taken a form recognised as ‘research’ by those living inside the context. The repetition of the cycle of gatherings, discussions, action and reflection has been encouraged by engagement with outsider partners (SCOPE, Trees of Hope UK), and has received further encouragement from and engagement with new partners: AshGric, and the Environmental Management Agency. A WhatsApp message from Kavumbura is an example of the ongoing support that the network continues to provide in response to the new building works planned in Phase 3:

I managed to visit the Trees of Hope nursery site on 15th May [2025]. I was really amazed by what my eyes saw. The place has really changed drastically. The shade itself is just a wonderful piece of art. I would like to applaud and appreciate all the effort, support, craft and labour that was implemented. Indeed the centre’s expansion will make the project more lively. I was laughing with Wellington [Chinyere] saying that now the ‘hope’ in Trees of Hope is coming to life! He took me through the plan of the extension, and I appreciated that the centre would now become more wholesome. The different sections [of the building] will contribute meaningfully to the growth and sustainability of the project (Kavumbura, 29 May 2025).

In the meantime, K.T. Chinyere identified further plans for his visit in July 2025 to include the use of the new workshop and cooking spaces to support groups of young women who are keen to discuss and implement sustainable practices in firewood collection and cooking. He has also begun to discuss the idea of using bicycle technology to transport saplings to other community settings and schools. Inspired by the achievements at the tree nursery site, the Trees of Hope UK Committee are planning a day of activities in their own rural community, in March 2026, to promote awareness of the interdependence between trees and humans.

These connected actions will themselves continue to raise further critical points for reflection. There are inevitably unresolved questions that apply globally about the relative roles of school-based and community-based learning in

forest regeneration, and also about the relative ways that responsibilities for the local ecosystem can be taken on by both younger and older members of the community. Additionally, there is indication, within the discussions above, that, notwithstanding advances in scientific and ecological knowledges, there is an important role for the traditional musical arts to enrich and deepen the ways that a community may think and feel about the ancient forests on which they have depended. The content of this paper provides a platform for addressing these complexities and teasing out the tensions, through intercultural communication, between respect for indigenous, cultural traditions (*chinyakare*) and exploring the ramifications of new sustainable practices (*chimanjemanje*). With young people at its heart, who are seeing themselves ‘as leaders of tomorrow’, this enquiry has outlined a community-based trajectory founded on an intercultural partnership which can be seen as a constructive response to the identified ecological challenges. It has captured gradual transformations towards achievable environmental solutions that have emerged from collective learning and collaborative interventions.

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