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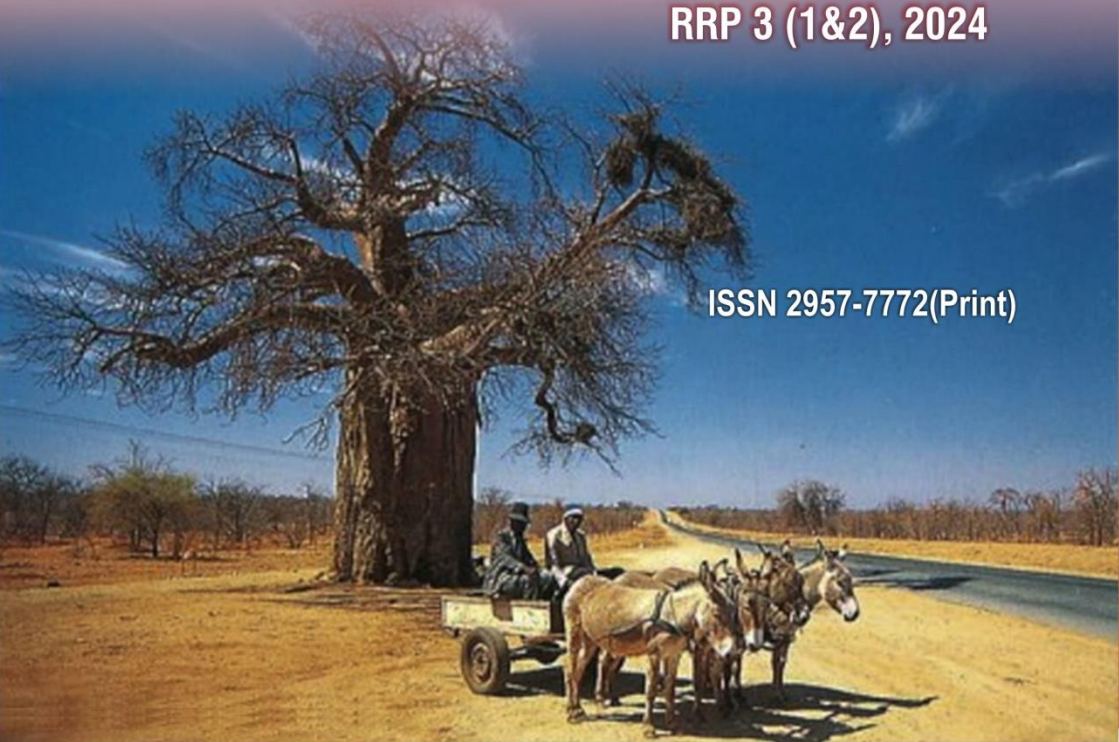

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About the Journal

JOURNAL PURPOSE

The purpose of the *Review of Rural Resilience Praxis is* to provide a forum for disaster risk mitigation, adaptation, and preparedness.

CONTRIBUTION AND READERSHIP

Sociologists, demographers, psychologists, development experts, planners, social workers, social engineers, economists, among others, whose focus is on rural resilience.

JOURNAL SPECIFICATIONS

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SCOPE AND FOCUS

In as much as the urban economic trajectory is increasing by each day, the rural economy, especially in many developing countries, still comprises a great proportion of the extractive and accommodation industries. Retaining some spaces as rural areas remains critical given the integral role rural areas play in providing ecosystem services to both wildlife and humanity. In this light, rural resilience as practice beckons for critical studies especially in the face of the ever-threatening extreme weather events and climate change that then impact on the livelihoods and lifestyles of the rural communities. Review of Rural Resilience Praxis (RRRP) comes in as a platform for critical engagement by scholars, practitioners, and leaders as they seek to debate and proffer solutions to the rural sectors' sustainable growth trajectory, which is resilient to the vagaries of climate change. This journal is also aimed at championing the philosophy of the right to be rural. The issue of conviviality between the different constituencies of the sectors, compiled with the competing challenges of improving rural spaces while also making the conservation, and preservation debates matter is the hallmark of this platform of critical thinking and reflection. The journal is published bi-annually.

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Articles must be original contributions, not previously published and should not be under consideration for publishing elsewhere.

Manuscript Submission: Articles submitted to the *Review of Rural Resilience Praxis* are reviewed using the double-blind peer review system. The author's name(s) must not be included in the main text or running heads and footers.

A total number of words: 5000-7000 words and set in 12-point font size width with 1.5 line spacing.
Language: British/UK English
Title: must capture the gist and scope of the article
Names of authors: beginning with the first name and ending with the surname
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Abstract: must be 200 words
Keywords: must be five or six containing words that are not in the title
Body: Where the authors are more than three use *et al.*
Italicise *et al.*, *ibid.*, words that are not English, not names of people or organisations, etc. When you use several authors confirming the same point, state the point and bracket them in one bracket and in ascending order of dates and alphabetically separated by semi-colon e.g. (Falkenmark, 1989, 1990; Reddy, 2002; Dagdeviren and Robertson, 2011; Jacobsen *et al.*, 2012).

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Psycho-social Factors Influencing Effective Collaboration of Stakeholders in Community-based Projects: Lessons from Scope-Zimbabwe

REGINA BANDA[1], LINDA KABAIRA[2] AND MIRACLE P MABVUNDWI[3]

Abstract

Community-based projects are instrumental in achieving desirable economic changes in communities. To ensure effectiveness of community-based projects, a trans-disciplinary (TD) approach is preferred since it promotes active engagement that produces collaborative knowledge generation and engenders multiple lens of interpretation and analysis. One area where community-based projects are plausible is in projects for sustainable use of the environment. Considering the consequences of global warming and climate change, Scope-Zimbabwe, a local Non-Governmental Organisation (NGO) in Zimbabwe, embarked on a project called Seeding Local Cultures (SLC). The project was aimed at generating knowledge on how to effectively implement community involvement and inclusive participation in the implementation of permaculture through their local schools and colleges. This study focuses on a writer's workshop that was held to design a facilitator's manual and student handbook to be used to implement SLC. The motivation of this study was identifying the psycho-social dynamics that were at play in the workshop that affected collaboration of the various stakeholders. A case study approach was utilised in this study since it affords an in-depth insight of a phenomena of interest. A TD approach informed the type of collaboration expected where engagements needed to transcend disciplinary boundaries in the creation of knowledge. Observations and focus group discussions were used for data collection. Braun and Clarke's (2006) thematic analysis framework was utilised for data analysis. Themes identified included; community engagement impact processes and methods to be used; attitudes, knowledge, beliefs and motivation; attitudes, motivation and resource mobilisation and use; and skills needs for effective community project management The study concluded that a systems analysis of the processes involved with permaculture projects to ensure deep understanding of various stakeholders' needs, values and roles and knowledge and awareness of technical guidelines to be used for

[1] Department of Applied Pyschology, University of Zimbabwe, Harare, Zimbabwe
[2] SCOPE-Zimbabwe, Mt Hampden, Zimbabwe
[3] SCOPE-Zimbabwe, Mt Hampden, Zimbabwe

permaculture and indigenous knowledge systems Community engagement was found to be crucial in effective management of the SLC project. Effective resource mobilisation to eliminate the donor syndrome that threatens the longevity of community projects was also identified. Effective communication among the various stakeholders was found to be key in effective resolution of conflicts.

Keywords: *trans-disciplinary research, resilience, sustainability, community engagement, systems design, innovation.*

INTRODUCTION

Community-based projects involving NGOs are effective in tackling social and developmental problems in communities. Their effectiveness is partly defined by their durability and sustainability, yet their continued existence is threatened after the NGOs withdraw their aid (Banda et al., 2023). Projects are viewed as an ecological system comprising complex and multiple interlinking subsystems (Naderpajouh *et al*., 2020). This makes them a complex entity to understand. Matunhu *et al*. (2022) explain that community-based projects usually involve various stakeholders from different disciplines with varying needs, motivations and values, to the extent of threatening viability of the projects. The continued collaboration of these various stakeholders is one factor that governs sustainability and durability of the projects.

In the face of drastic climatic change, arid and semi-arid regions may face prolonged droughts and floods that threaten the livelihoods and sustainability of community members. Zimbabwe has been no exception. The majority of Zimbabweans live in the communal lands, and they depend on agriculture for survival (Phiri et al., 2019). Seventy percent of Zimbabwe's communal lands are located in the dry climatic spatialities constitutive of regions four and five (Mukarumbwa and Mushunje, 2010) thus making the majority of Zimbabweans vulnerable to the risks associated with climatic change. With this in mind, Scope-Zimbabwe, a local NGO that promotes the use of permaculture came up with a project (SLC) involving schools in various climatic regions in Zimbabwe, including the low-veld, to promote community involvement in sustainable use of their environment. The schools were to serve as centres for knowledge and resources to sustain and promote the use of permaculture by the communities that surround them.

How individuals that represent the various interests of the stakeholders interact may be the lifeline of the projects. One area of interaction involves generation of knowledge and systems that are used in the community projects. Various

methods of generating knowledge that govern how community-based projects have been identified as interdisciplinary approaches, participatory research and trans-disciplinary approaches underpins this study (Andrén, 2010). All these methods involve collaboration of various stakeholders and are unique in conceptual frameworks that govern them.

This paper will focus on the trans-disciplinary approach and the psycho-social factors that affect effective collaboration, particularly in a workshop that was carried out as part of a community-based project by Scope-Zimbabwe. Individuals although they represent organisations or institutions that are unfeeling, they themselves possess cognitions and emotions that may inform their behaviour and perceptions of proceedings. A trans-disciplinary approach was preferred because it is found to be a promising approach generating social knowledge involving sustainable land-use and addressing complex and multifaceted "real-world problems", involving not only academics, but also knowledgeable communities (Zscheischler *et al*., 2017).

The Government of Zimbabwe has introduced a paradigm shift in the education sector where emphasis is on heritage-based education, innovation and participation of the student actively, in knowledge generation, rather than being a passive recipient of knowledge in the classroom (Zimbabwe Institute of Permaculture (Scope-Zimbabwe), 2021). This is part of the National Development Goals informed by the strategic development blueprint encapsulated in Vision 2030 whose end is to foster an Empowered and Prosperous Middle Income Economy Society by 2030 (NATIONAL DEVELOPMENT STRATEGY 1 16 NOVEMBER 2020 "Towards a Prosperous & Empowered Upper Middle Income Society by 2030" January 2021 – December 2025). The blueprint is in tandem with the international Sustainable Development Goals 14 (life on land) and 4 (quality education) (Ministry of Finance and Economic Development, 2020).

Given that community-based projects involve various stakeholders, community active participation informs projects of the values and the needs of the communities thus ensuring that disruptive and unnecessary competitions that may arise among various stakeholders are eliminated (Manyena, 2006). Ensuring communities have resilience amplifies adaptive capabilities since an adaptive buffer is created that allows individuals to deal with immediate shocks that present as threats to instant survival of communities (Twomlow *et al*., 2008). Building resilience in communities must ensure sufficient access to food supplies thus ensuring food security (Mwangi and Ostrom, 2009). In this

light, crop production was identified as an important feature of ensuring community resilience (Mukarumbwa and Mushunje, 2010).

Traditional methods of relating to the environment have been found to be more efficient, accessible and sustainable in preserving the environment as compared to the modern ways (Lepofsky, 2009). Previous studies propose that indigenous technical knowledge (ITK) remains key in accumulation of information that is useful in the maintenance and development of sustainable socio-ecological systems (Sow and Ranjan, 2021). ITK is a component of the indigenous knowledge systems (IKS) that are instrumental in informing communities of their role in the holistic complex system of sustainable coexistence with the natural environment (Reitsma *et al*., 2019).

Many now attempt to harness these indigenous knowledge systems in implementing community-based projects including Scope-Zimbabwe. Since there is a need to harness the gains from collaboration, evidence shows a trans-disciplinary approach has the potential to increase stakeholder decision making contributions, since they have implementable knowledge; the capacity to accommodate complex demands of the various stakeholders and conflict resolution (Zscheischler *et al*., 2017). Effective collaboration has been identified as key determinant in successful implementation of projects. The purpose of this treatise is horn in on the important writers' workshop, a key process in the SLC project, to identify psycho-social determinants of effective collaboration.

CONCEPTUAL FRAMEWORK

Sustainability is broadly defined as whether or not an object or concept or approach continues working overtime (Ceptureanu *et al*., 2018). For a sustainable socio-ecological system to develop, the issue of resilience must be addressed. Resilience is a complex concept that has been found to be closely related to the sustainability. Resilience entails individuals, communities or the nation are endowed with the capabilities to survive short- and medium-term shocks as people are planning for their long-term adjustments that give rise to sustainability (Boyd *et al*., 2013). It is important to have the communities participate to have measures that are acceptable and suitable for different contexts from individual levels. Trans-disciplinarity research principles inform the conceptual framework of this paper. Given community-based project thrive due to being informed by the communities that need and use them, trans-disciplinarity informs that knowledge is generated from various academic and non-academic disciplines and stakeholders (Andrén, 2010). This serves as a bridge that connects science and the real world. Andrén (2010) clarifies that

trans-disciplinary research involves three types of knowledge namely systems, target and transformation knowledge.

Systems knowledge comprises knowledge on the origins and development of the research problem and how the "life-world" interprets it. Target knowledge informs of the knowledge of the needs for change, what goals are desired and how they can be achieved. Transformation knowledge is a type of technical, social, legal, cultural and other methods of hanging existing pathways of action to conform to the desired directions. In the production of knowledge in the writers' workshop that this paper focuses on, understanding how the participants interact to inform these three types of knowledge, elucidate the importance of understanding psycho-social factors that buffer or encourage continued engagement and harmony in the various needs, values and goals of the different entities that the individuals represent.

LITERATURE REVIEW

Community-based programmes are social intercessions that lead to social practices targeted at changing the behaviours of individuals and the social and institutional structures (Ceptureanu *et al*., 2018). There are different stages that community-based projects go through. These stages comprise, *inter alia*, situational analysis, stakeholder analysis, participatory assessment and planning (United Nations High Commissioner for Refugees (UNHCR), 2008). Involving adequately trained personnel assist in ensuring the longevity of the program (Ceptureanu *et al*., 2018). Communities and cultures are constantly changing meaning problems are created while also creating opportunities to learn new things.

Fours aspects are essential in community development namely knowing and understanding the needs of the community members, control of the members of the community that become active participants in the projects, fostering and nurturing self-help and having a holistic view of communities and how members relate (Federal Reserve Bank of St. Louis, n.d). Projects for the community must be informed by the community members from the onset. Having a community project implies the acceptance and involvement of the community members and the success of the projects depends on the community members (Ceptureanu *et al*., 2018).

Ceptureanu *et al*. (2018) also found that community involvement determines how quickly or easily the project can be established and how easily it may consolidate resources needed for its success. The community-based approach to conservation aims to include communities in the decision-making processes,

management and use of resources followed by equitable sharing of the benefits that result from the resource use (Zyambo, 2018).

Milupi *et al*. (2017) propose the use of various principles that include meeting basic needs of the community, giving control of resources to the local communities, ensuring communities benefit from their local resources, and obtaining commitment from local institutions in how the resources are managed. This means priorities of the project need to match those of the community (UNHCR, 2008). The goals of the project need to align with goals of the community (Malupi *et al*., 2017; UNHCR, 2008). It must be noted however, that the environment, the communities and their demands are not static. Responding to the changing environment improves the adaptability of the project to the changing circumstances thereby improving the chances of having a sustainable project with lasting results (Ceptureanu *et al*., 2018).

Successful community projects are sustainable because they are participatory and inclusive in orientation. Five core principles that guide the success of community development projects are; community engagement, leadership, collaboration, evaluation and adaptability (Federal Reserve Bank of St. Louis, n.d). For projects to be successful, management capabilities are required, and these include securing local resources and making sure communities are familiar with the project (Ceptureanu *et al*., 2018). Projects need to have inherent mechanisms that manage change across time. With the elements of empowerment of communities and public participation, conflicts arise and the need to have clear paths of conflict resolution will ensure continued existence of the project (Malupi *et al*., 2017). A competent leader brings consistency to the processes of the program, improves networking, and partnerships, while reducing duplication of efforts.

Formal and informal leaders need to be identified before the onset of the project (UNHCR, 2008). Ownership of the project improves if project champions are identified and the project is embedded in the program in the existing community structure (Ceptureanu *et al*., 2018) Selecting these leaders may help develop an acceptable level of trust between the program implementers and the communities. Proper rules and boundaries then need to be set and clear engagement and communication to foster a transparent relationship.

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Needs of the community members from individual level need to be considered to ensure there is adequate motivation to participate in long term sustainable measures. Communities are diverse thus a need to understand, acknowledge

and incorporate community members' norms beliefs and values (Ceptureanu *et al*., 2018). Ceptureanu *et al*. (2018) explain that failure to adequately consider socio-cultural identity as informed by the norms, beliefs and values of the community may hinder development of trust that may result in ultimate rejection of the project. Community-based interventions usually do not have immediate and quick impact thus are usually viewed as time consuming (UNHCR, 2008). Immediate needs of individuals within the communities must be identified and addressed to ensure members stay resolute in attaining the sustainable goals (Manyena, 2006; Mwangi and Ostrom, 2009).

In addition to ensuring community-based resources are adequately harnessed and used, specialists also provide technical knowledge based on scientific research that could inform efficient use of resources. For Scope-Zimbabwe, the integrated Land-Use Design (ILUD) is an effective tool they depend on in their permaculture projects. As a tool used in Scope-Zimbabwe projects, ILUD ensures successful and uniform implementation of their projects, addresses these five principles (Nyika, 1998). ILUD process comprises five steps namely grounding, situational analysis, visioning, integral design and implementation and monitoring.

Grounding connects the school and the community to nature, the community culture and their past. Any community-based project uses the community's cultural identity for it to be sustainable (Ceptureanu *et al*., 2018). Situational analysis identifies resources and limitations in the community to give a better understanding of the current situation. Visioning maps the current way of thinking to the future thinking process allowing the stakeholders to come up with future goals that cover four dimensions that are ecology, social aspects, culture and economy. Integral design informs on the design skills necessary to redesign the environment to meet stakeholder needs. Implementation and evaluation helps develop work plans needed to monitor and evaluate the new designs implemented.

The TD approach creates various pathways that allow for the provision of various factors that ensure continued and effective existence of the community-based projects. Effective communication, creativity and innovation are key aspects that inform a TD approach (Andrén, 2010). To enable the stakeholders to reach high levels of intellectual integration, 'cognitive flexibility' is required. This involves an open-minded approach and the courage to embrace varied opinions of other stakeholders. It involves tolerance and respect for diverging perspectives and a continued commitment to learn despite contrasting values and differences in opinion. Community

context is described as knowledge of the contextual factors that affect the community including the relationships with other institutions like the governments, their social statues and inequalities and community problems (Ceptureanu *et al*., 2018). Improved communication between the communities and various stakeholders were found to benefit farming communities (Boyd *et al*., 2013). Collaborations with specialists in climate, social scientists, communities and various stakeholders remains key in bringing about food security (Matunhu *et al*., 2022).

Community-based projects are effective in that they enable the deliverance of effective and sustainable solutions instead of supplying quick fixes that are marred with future problems (UNHCR, 2008). Community-based natural resource management (CBNRM) for instance aimed to provide conditions where the community members benefit from how wildlife resources are used and managed through a bottom-up participatory approach (Milupi et al., 2017). This is contrasted to the scenario where resource management is centralized and decisions are made top down, giving limited to no consideration of the community needs (Gruber, 2010).

Four challenges were identified as the main hindrances that limit the success of community-based conservation programmes. These are the inability to sustain livelihood, poor land and resources tenure, weak institutions in the community and poor governance. The challenges were found to weaken the decision-making processes that have a barrier on equitable benefit to the members (Zyambo, 2018). Zyambo (2018) explains that projects must have the objective of conservation and enhancing local community livelihood.

BACKGROUND INFORMATION AND OVERVIEW OF THE WORKSHOP

Scope-Zimbabwe is an organisation established in 1994 that helps schools redesign their land use to achieve sustainable resource use. Scope carries out various projects with schools and their communities aimed at improving nutrition, creating a learning environment for children that fosters innovation and exploration through experience. Scope methods work to improve the connection of schools with their local communities through participatory action projects. The schools are intended to be models of sustainable living practices.

Scope works closely with the Ministry of Primary and Secondary Education as it aims to influence the implementation and development of syllabi that are used in primary and secondary schools and in colleges. The workshop that was

help from 27 to 29 September was part of the Seeding local cultures project. The project is based on the idea that indigenous knowledge systems need to be reintroduced as effective methods of managing the environment while incorporating modern technology. Pilot schools and various stakeholders including the University of Zimbabwe, Great Zimbabwe University, AGRITEX and the Ministry of Primary and Secondary Education participated.

Three of the pilot study schools presented their projects to the workshop participants. All were from natural farming region four. The schools outlined their successes and challenges in implementing and sustaining their permaculture community-based projects. Various presentations were made in the first day of the workshop to provide information on the purpose of the workshop as part of the SLC project. Focus groups were then carried out on the second day with the aim of formulating information to include in the instructors manuals and the student workbooks.

RESEARCH METHODOLOGY

A qualitative methodology in the form of a case study was adopted for this study since the SLC project provided an opportunity to gain insight on a TD approach in knowledge creating for a community-based initiative. The involvement of various individuals from different disciplines at the writers' workshop provide a unique opportunity to learn about psychosocial factors influencing collaboration both based on the participants' experiences in their various community projects and at the workshop as their shared knowledge and experiences to inform the creation of the manual and workbooks for the SLC project (Adams et al., 2007). This study was done in its naturalistic setting and was a unique process in the project's proceedings making a case study approach suitable (Leavy, 2017).

Case studies can incorporate principles of TD and also allow the researcher to be a participant in the production of knowledge, not as an expert. TD informs that research must be problem and solution oriented research in the real world, not necessarily methodology oriented (Andrén, 2010). Andrén (2010) clarifies the researcher's need to be reflexive and have deep understanding that they are not in a position of privileged knowledge. A qualitative approach is ideal because the need is to understand and describe a particular phenomenon, not to manipulate, control or predict it, or even for the purpose of generalizing the data (Bryman, 2012).

Participants in this study included various stakeholders, utilising a trans-disciplinary approach in selecting various members from different relevant

sectors including the government as policy makers, researchers, community leaders in the form of community school facilitators, specialists in Permaculture and the NGO members.

Discussions in the workshop took on the form of a focused group discussions where participants of the workshop discussed the Scope projects under the minimal guidance of the facilitator (Leavy, 2017). Three focus group discussions were done. Participants in the focus groups were assigned to accommodate some representation of each stakeholder. Each group was given a topic of discussion. The three topics were

1. processes and methods to be used
2. resources mobilisation and use
3. productivity management

The participants were to review progress of the projects in their various communities and to draw lessons from there and the current workshop. This knowledge was to guide the construction of the facilitator's guide and the students' handbooks. The groups then provided feedback to all the whole workshop delegates.

The sessions were recorded and later transcribed. Participants were asked to state their pseudonyms before they contributed anything to enable participant identification. Thematic analysis was used to analyse the data. Braun and Clarke (2006) thematic analysis framework was utilised for data analysis (Maguire and Delahunt, 2017) since it flexible and not tied to any particular epistemological or theoretical perspectives. Braun and Clarke's (2006) framework comprises six steps (familiarity with data, initial code generation, theme searched, theme reviews and finally doing write up. Analysis is done manually using Microsoft word by utilising the copy and paste and colour functions for coding of data and eventual development of these (Leavy, 2017).

RESULTS

Participants in this study included all 28 members that attended the writers' workshop. A trans-disciplinary approach was utilised in selecting various members from different relevant sectors. In terms of demographics, there were 9 females and 19 males. Representatives from the government included 4 from the Ministry of Primary and Secondary Education, curriculum development department and 1 from Agriculture Research and Extension Services (AGRITEX); 6 research participants for the project were from the University of Zimbabwe and Great Zimbabwe University; 5 Secondary and High school and 5 Primary School facilitators represented the schools from Harare,

Masvingo and Matabeleland provinces; 1 participant from a technical college; 1 participant was a Permaculture consultant and 5 member of Scope Zimbabwe (NGO).

The participants clarified first, the aims and objectives of the SLC project before proceeding to form focus groups. Themes identified included; community engagement, knowledge and awareness among stakeholders combining indigenous knowledge systems and modern technology, attitudes, knowledge and beliefs fostering internal motivation and complex relationship of needs values and roles. Various themes arose from the discussions as indicated in the forthcoming paragraphs.

COMMUNITY ENGAGEMENT IMPACT PROCESSES AND METHODS TO BE USED

In focus group 1, the participants focused on growing of fruit trees and vegetables that were demanded in the community. Disagreements mainly arose as different individuals suggested what they believed the most viable fruit option would be. One participant then pointed out the possibility that a consensus would not be arrived at since people were from different climatic regions and areas. Some fruits may be viable in one area and not the other. Bananas were being successful in natural farming regions 2 and 3, yet not performing well in the drier region, region 4. One school in region 4 attempted to grow bananas but did not succeed due to water supply problems.

Participants identified involvement of teachers, learners, and community members and other critical stakeholders as a source of labour and resources. The process of recruitment could not be agreed on by the participants as various barriers were suggested. Participants highlighted that each individual needed to gain knowledge on permaculture processes hence the need for training. No agreements could be reached on methods on how indigenous knowledge systems could be harnessed as participants noted involvement of the community members proved difficult most of the time since they believed they needed to benefit from donor funding. The community members came in numbers to initial meetings, but after learning that they were required to provide some resources, they withdrew from participation. Others argued that prescribing a process was equivalent to dictating what communities needed to do and this reduced a sense of ownership of the project from the communities.

ATTITUDES, KNOWLEDGE, BELIEFS AND MOTIVATION

Attitudes, awareness, in-depth knowledge of processes and procedures, and individual motivation were found as key determinants in the stakeholders that affected acceptance and usefulness of recommended processes. These

variables were found to be interlinked in a complex manner. Effective and assertive communication was found to be the most instrumental factor that could elucidate these individual attributes to inform running of the projects.

ATTITUDES, MOTIVATION AND RESOURCE MOBILISATION AND USE

Focus group 2 aimed to discuss resource mobilisation and optimal use of resources. They reviewed one project from a participant school that was producing guava and baobab juice as trained by Scope-Zimbabwe in previous projects. The guavas were sourced from a schoolteacher's rural areas (Scope-Zimbabwe focal person). The same teacher donated USD 10 to buy the baobab fruit to make the juice. Effective stakeholder engagement was seen as crucial in fruitful resource management. The focus group lamented limited support from the NGO for resources. Communities engaged dropped out of the project after realizing there was not much donor funding coming, and that they would be expected to contribute resources.

One participant agreed with the sentiments of the community citing that the donor of the USD 10 was unique since most in Zimbabwe are struggling and they would rather partake in projects that add value to their way of living and livelihood. They highlighted the need to understand the context that every prospective participant of the project is operating in since Zimbabwe's economy is not stable.

Student mobilisation was also a challenge since the students also needed to have products that they could take home after hard work. The students were also seen to view manual work as punishment following observations that most schools in Zimbabwe use manual labour as a form of punishment. The lesson plans also did not accommodate students that wanted to participate in the projects due to class times and at times hot sitting arrangements. Some teachers resisted releasing the students since there was no benefit for them. One participant lamented poor relations with the school administration who discouraged project participation both in students and the teachers since they did not understand the project or even the value of the project. Children were also unavailable for the option to come during the holiday or over weekends, resulting in long dry spells that killed plants in the garden. Teachers were using these weekends and holidays to make extra income to subsidy their low salaries.

Resource mobilisation problems identified included the inability to raise adequate funds, water supply and the lack of cohesion between school administrations and project committees. One participant highlighted the need

to seek alternative sources of funds rather than depend on schools' authorities. Resource mobilisation depended on effective stakeholder engagement. Waste management was a topical issue of discussion as participants debated on how to manage and reuse the waste materials from their farming projects in a manner that was sustainable to the environment.

Generally, there were good relations between the host schools and Scope. Field officers usually visited the schools to evaluate the projects and to offer technical advice. Scope also provided some material assistance to the schools in the form of seedlings and fences among others. Participants also reported a fruitful relationship with the AGRITEX officers, especially in region 4 schools. One school reported having good relations between the school administration and the project committee since they sent 2 members, a teacher and a community member to a fellow school that was doing the Scope project to learn from them and to also get seedlings for bananas.

Some schools testified of successes in engaging additional sources for resources that were not the school, the teachers, the students or the NGO. One school also reported the forestry commission donated 50 fruit trees that were successfully planted and were being maintained. One school reported having planted 16 banana trees to make use of the runoff water from the classroom roofs and these were sourced from the community at no cost. The school also grew, and harvested beans donated by AGRITEX officer got 5 5l gallons in harvest. This increased the interest of the local communities when they saw the development close to our administration area. The same school indicated that 5 ladies from the community are doing gardening using Scope guidelines. These same ladies can serve as a source of labour for the school whenever required.

AWARENESS CAMPAIGNS

Two schools exhibited innovation in methods of increasing community engagement and awareness of the projects. One used workshops at the school. The community members also attend workshops including nutrition workshops. They are currently preparing to go to Victoria Falls and packing their herbs to sell and exhibit there. These successes in community engagement were a result of the school managing to align the non-formal area of education into the Scope project.

One school, on 20 June 2022, hosted the World Environmental Day that saw the attendance of 1181 people. They also hosted visitors from other schools that wanted to learn about the permaculture project. Community shows like

this were suggested to be one effective way to give feedback to the communities on the projects and their successes.

SKILLS NEEDS FOR EFFECTIVE COMMUNITY PROJECT MANAGEMENT

Focus group 3 focused on ascertaining what was happening in the various project communities in terms of project management, monitoring and evaluation. All schools indicated a failure to have proper record keeping. It was found that school administrations handled the finances but the authorities did not reveal how much money was spent buying the inputs and how much was then received as proceed from the project since the school administration is responsible for selling the produce from the project.

The participants decided to prescribe production processes that may result in success. The participants agreed it was prudent for the projects to start small. This followed testimonies of projects that started off with many beds and products that ended up wilting from limited water supply and could not be tended to due to scarcity in labour.

Technical knowledge of what to grow, how to grow it and where to obtain the resources needed to grow the stuff at reasonable prices were noted as basics that individuals needed to be aware of. Members and the communities in which the projects were done were not fully aware of the recommended ILUD process designed by Scope Zimbabwe. This was because people trained in it earlier had left the communities and the projects, leaving new members that were naive of permaculture processes. Brain drain was noted as a major threat to productivity.

Schools got assistance from the schools in the form of start-up money and some schools partook in broiler projects. All schools had limited mortality rates in broiler projects. The group explored the possible cause and found that it may be because almost all stakeholders in the project agreed at the viability of the broiler project in that it gave a quick turnaround of funds and everyone benefited from the income.

Poor yields were found to be a result of the limited water supplies that most schools were facing. Schools also lamented lack of a viable and stable markets for their produce. One school testified of failing to find a market for their lettuce at harvest time. The focus group interjected to propose a prior process of planning for production and marketing. A market survey was suggested before production to ensure produce is the preferred product. A test run may be advisable to gauge the market response to the products.

sourced guavas to make guava juice at the school. This stakeholder may have interpreted the resource mobilisation problem from a self-help perspective. However, most participants indicated community-based projects in their areas faced a challenge after the community member realised they needed to contribute resources and not much donor funding was available. This informs community-based projects of the dangers of the donor syndrome that arises in community-based projects, which serves as a huge threat to sustainability of such projects ((Banda *et al*., 2023).

Andrén (2010) posits that target knowledge clarifies the knowledge of the needs for change, what goals are desired and how they can be achieved. From this perspective, projects must be informed from the onset by the community members for success to be achieved (Zyambo, 2018). A variation in this sentiment was found in how the schools were carrying out their permaculture projects. Committees are set up and these are the main drivers of the activities that are done. The participants at the workshop felt this may be a hindrance as it creates passengers in the community projects instead of active participants. Basic needs for communities for instance must be met, and these include food security and income.

Another aspect that clarified the need for the TD principle of target knowledge is how 1 school proved community engagement continued due to autonomy given to the community in deciding what to plant and how to use the produce. These participants managed to experience the principle of cycling of resources as they realised how resources they put in could be converted to beneficial output in the forms of their harvest. Another school showed that community members appeared in their numbers at the initial meeting only, possibly because they thought donations would come. When the community learned there was need to give in labour and possibly put in some inputs, participation faded away. This could be a basic indicator that the basic needs of the community members were not being met (Milupi *et al*., 2017). The workshop participants also commented on the need for the project leaders to implement water harvesting methods as the idea in permaculture is not only to extract but to assist in putting water back into the ground. Project leaders and the communities must clearly understand the cycle of resources. Projects need to realise that the community members have to benefit directly from the projects in a manner that satisfies their basic needs, and this fosters collaborative efforts.

Participants at the workshop proposed the need for good leadership, community engagement, collaboration with stakeholders and a robust evaluation process that is a product of good record keeping for the projects and

these characteristics are key in fostering project adaptability. These findings are in tandem with the five core principles suggested by the Federal Reserve Bank of St. Louis. To this end, Scope provided the ILUD process to guide these proceedings across the lifespan of the project. Although the tool provides a uniform process that can be monitored and evaluated, it appeared that some of the schools that presented were not succeeding in following through with the establishment of this process. A systems design and analysis of projects is thus necessary to ensure its endurance.

For projects to be successful, management capabilities are required and these include resource mobilisation, adequate resource needs analysis, careful documentation and a clear mapping of the program's life cycle (Ceptureanu *et al*., 2018). Ceptureanu *et al*. (2018) further clarifies that community projects must be self-sustaining and considerations that determine self-sustaining projects vary at three different levels namely individual, organisational and community level. Conflict management is one necessary skill that the project leadership must possess in community projects management (Malupi *et al*., 2017). All the schools that presented proved that conflicts occur frequently in managing community development projects. Conflicts threaten the very existence of the project if they are not effectively managed. Conflicts in the schools that presented arose mainly from competing for the limited proceeds from the projects. There appeared to lack proper clarity in duties and responsibilities among the stakeholders.

Community involvement that results in community awareness of the project determines how quickly the project establishes and develops (Ceptureanu *et al*., 2018). One school that presented testified they managed to keep participation of the community from the beginning of the project. This inclusion gave the community ownership of the project that served as motivation for efforts put. This is contrary to the other schools that invited the schools to their meetings to inform them of the projects.

Understanding community context is important for effective community-based management (Ceptureanu *et al*., 2018). Some schools showed they did not adequately investigate their resources to establish their strengths and weaknesses. For instance, one school professed a water production capacity of less than a 100l per day, yet they had planted 35 beds of vegetables. The region that the schools are located are mainly dry regions that are suitable for small grains. The same school ordered seeds that were not ideal for the season they were in. the other school planted and harvested lettuce that had no ready market. Consultations with AGRITEX and Scope project officers may have

provided the project managers with sound advice on what they could have tried to minimise the losses. Other scholars add that effective resource mobilisation entails an adequate resource needs analysis and a clear mapping of the program's life cycle (Ceptureanu *et al*., 2018). These are a product of effective communication with various stakeholders and effective documentation. Resource mobilisation cannot be effective if the program leaders fail to understand and identify their strengths and weaknesses.

CONCLUSION AND RECOMMENDATIONS

A systems analysis of the processes involved with permaculture projects is necessary to ensure their continued existence. A trans-disciplinary approach informs of how knowledge can be produced to inform effective collaboration among stakeholders. Scope-Zimbabwe managed to provide a platform for engagement of the various stakeholders involved in the SLC project, in the writers' workshop to ensure each stakeholder's concerns are aired and considered in the creation of the instructor's manual. Scope also provided comprehensive processes that ensures effective and uniform management of projects in the ILUD process, though a training need was identified. ILUD process if correctly implemented would help the project implementers understand their communities' socio cultural and socio ecological relations. Values and goals of the project may then be more effectively aligned with those of the communities and its members to ensure a mutually beneficial coexistence that provides for the short-term needs of the communities and term goals achievement for the projects. However, schools seem to apply the ILUD process haphazardly and less effectively as expected. There may be a need to evaluate where the problem arises.

Community engagement is central to effective management of the Scope projects in schools and communities because it would foster collaborations from the various stakeholders. Schools need to be able to embark on effective resource mobilisation to eliminate the donor syndrome that threatens the longevity of community projects. Effective communication among the various stakeholders may aid in resolving conflicts that arise from the lack of clear boundaries, roles and expectations that is inherent among the various stakeholders. Increased awareness of sustainable ways of doing agriculture can be achieved by schools as demonstration centres, having children go out to the communities as advocates for permaculture and occasionally holding exhibitions like fairs for the produce.

Scope needs to invest more in workshops for both project leaders and communities to ensure the application of systematic principles and methods in carrying out projects. These project leaders also need to identify ways to ensure community ownership of the projects so that the projects cater for the

needs of the members in their context. Involvement of technical advisors and the communities ensures the bridge between indigenous knowledge and technological advancements informed by the experts. A cyclical exchange of information ensures concerns for all stakeholders are considered in all processes from planning to monitoring and evaluation to engender sustainable, participatory development.

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