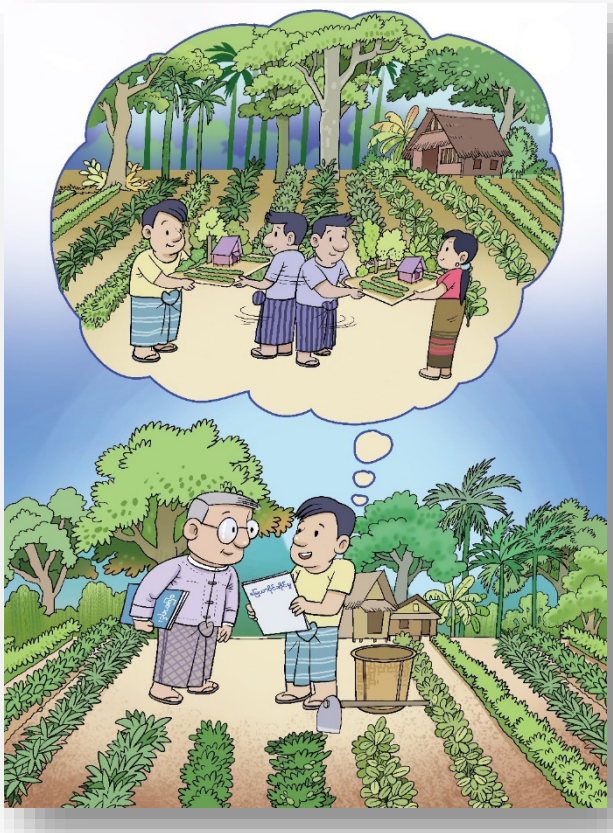
Swiss Programme for Research on Global Issues for Development



Participatory Visioning and Future Planning

Backcasting with Myanmar Farmers for a More Sustainable Future

Methodological Report

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The Swiss Programme for Research on Global Issues for Development (r4d programme) is a joint funding initiative by the Swiss Agency for Development and Cooperation (SDC) and the Swiss National Science Foundation (SNSF). The r4d programme supports research aimed at solving global problems with a focus on least developed as well as low- and middle-income countries. The r4d programme consists of five thematic modules and a thematically open module.

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Abstract

This report describes the methodology of participatory visioning and future planning, including a technique called backcasting. Based on literature and experience, we developed and applied this methodology to support smallholder farmers in southern Myanmar. In a highly participatory bottom-up approach, we co-created and documented the vision of these farmers – in direct collaboration with them – including their desirable futures, and we jointly explored possible pathways and action plans to reach these futures. We also co-implemented needs-based actions including concrete trainings, study trips, and a community-led micro-loan system to strengthen their agriculture – their main source of livelihood. Unfortunately, beginning in 2020, Myanmar experienced two overlapping waves of crisis: the health crisis as a result of the COVID-19 pandemic; and the political crisis following the coup d'etat in 2021. The final two years of the project were implemented under these extremely challenging conditions. We frequently had to adapt our operationalization to the very dynamic, changing circumstances. Fortunately, our methodology allowed for this kind of adaptive management. Despite the challenging circumstances, the farmers were positive in their assessment of the project outcomes. This suggests that the methodology of participatory visioning and future planning can be effective even under difficult circumstances. We conclude the report by presenting lessons learnt and recommendations. Firstly, we reflect on how useful this methodology was and how it can be applied in similar or different projects (research, development, etc.). Secondly, we share our practical insights and recommendations regarding the application of the methodology in the given or similar contexts. Finally, we provide practical recommendations for project planning for those who want to include participatory visioning and future planning in their projects.

Contents

1. Background

1.1. Overview of the project and overall approach

1.1.1. Donors and programme

The Swiss Programme for Research on Global Issues for Development (r4d programme) was a joint funding initiative by the Swiss Agency for Development and Cooperation (SDC) and the Swiss National Science Foundation (SNSF). As of 2012, the r4d programme supported various research endeavours aimed at solving global problems with focus on least-developed as well as low- and middle-income countries. In 2020, the r4d programme funded further initiatives to enable the implementation of research findings. These Transformation Accelerating Grants (TAGs) aimed to accelerate changes towards sustainable development and reduce poverty in countries of Africa, Asia, and Latin America.

1.1.2. The project

The authors of this methodological report were part of a research project under the r4d programme, which began in 2015. The research project (hereafter: r4d project) took place in Myanmar, Laos, and Madagascar and was referred to as "*Managing telecoupled landscapes*" (short title)[1]. Under this r4d project, research investigated land use changes in local landscapes over the past 20 years. This included analysis of the local and international drivers and decision-making processes behind the observed land use changes (incl. analysis of actor networks, power, flows, institutions), as well as the impacts of these changes on ecosystem services and the well-being of people living in the affected landscapes. In the final stage of the r4d project (called PACT phase), the project supported local to regional initiatives to strengthen the local population's livelihoods and ecosystem services. Indeed, the r4d project allocated seed money to each country for this purpose.

In Myanmar, one of the member countries, the r4d project conducted research as outlined above. The case study-based research took place from **2016 to 2019 (*research phase*)** in the northern part of Tanintharyi Region, located in southern Myanmar. We, the authors of this report, were part of the research team. During the subsequent **PACT phase (2019–2020)** of the project, we further supported and facilitated a local initiative to strengthen the local population's livelihoods in harmony with sustainable land use. As a result of the research phase, we learned that the economic development of the villages was the most pressing need from the perspective of the villagers. Thus, we outlined the overall topic of "sustainable economic development" and asked the villagers if they would like to co-design and develop some respective measures for their villages. Four out of five villages from the research phase joined. From this moment on, we followed a bottom-up, needs-based co-design approach. Over the following few months (in 2019), the villagers established their own Sustainable Economic Development Group. Every interested farmer household could become a member of this group. Further, they elected their two representatives (one woman and one man each), who became delegates to join the Sustainable Economic Development Committee, encompassing the four villages. We, the authors, assigned two assistants from the villages who supported the committee and the representative in administrative tasks. From then on, we conducted a series of workshops with the committee to identify the most relevant topics and useful measures for the villages. The representatives were also respon-

[1] Project website: www.telecoupling.unibe.ch

sible for communicating back and forth between the committee and the Sustainable Economic Development Group in their villages (e.g., to collect ideas and discuss the relevance of the measures for farmers). During the process of idea collection, feasibility studies, consulting, and voting, we served as facilitators and knowledge brokers for the committee and also assumed the role of advocates for sustainable development (especially for environmental and social responsibility) whenever needed.[2]

Picture 1: One of the several workshops we held with the Sustainable Economic Development Group Committee in 2019 to explore and identify the most relevant and useful topics and measures for the continuous development of villagers' livelihoods. (Environmental Care and Community Security Institute (ECCSi))

The Sustainable Economic Development Groups and Committee decided that the most important and pressing measure was to enable access to micro-loans under fair and economically sound interest rate conditions. Accordingly, we co-developed a community-led revolving fund system. This was done based on very close collaboration between the committee, ourselves, and external financial experts.[3] We also identified and implemented (together with additional experts) necessary trainings such as bookkeeping, loan application writing and assessing, leadership (for the representatives and assistants), study trips to other communities with micro-loan systems, and innovative experts and farmers in the region. The revolving fund was successful. Several rounds of micro-loans were granted and repaid, enabling investment in many sustainable economic activities. More rounds of micro-loans were to come.

Evidently, this initiative of the PACT phase was already designed in a participatory way. It included elements of visioning, future planning, backcasting, and action planning, even though this was not yet requested by the r4d project supervisors. The outputs and outcome of the Sustainable Economic Development initiative in Myanmar were useful and relevant for the villages, which can be attributed to the bottom-up, needs-based co-design approach. In addition, we sensed potential and motivation

[2] For more information on the process and structure of the PACT phase or the *Sustainable Economic Development Group* or *Committee*, kindly contact the authors of this report.

[3] For more information on the revolving fund, its rules and regulations, processes etc., kindly contact the authors.

among the four villages to continue the successful collaboration. Therefore, we decided to submit a proposal to conduct an additional phase under the r4d programme called Transformation Acceleration Grants (TAG; see section 1.1.1). It was granted.

Our **TAG phase (2020–2022)** picked up where the PACT phase (2019-2020) left off. It bore the title "*Collective capabilities and action for sustainable agricultural intensification in Tanintharyi Region, Myanmar*". It lasted from July 2020 to June 2022[4]. In the TAG phase, we once again took a step back and conducted a rigorous participatory visioning and future planning process together with the four villages, represented by the same Sustainable Economic Development Committee. From the visioning process (described in detail in this report) and in a joint effort together with the villagers, we derived further topics of relevance and useful measures for strengthening agriculture in the villages, which remains the most important source of livelihoods in the case study area. The present methodological report describes the methodology we used and the outputs and outcomes from this process.

Administratively, the TAG phase was a project in itself (due to formalities with the donors). At the same time, it was a continuation of the previous work. Therefore, in this report, we refer to it as the TAG phase. The TAG phase was formally coordinated by the Centre for Development and Environment (CDE) at the University of Bern, Switzerland, under the lead of Prof. Dr. Flurina Schneider. In Myanmar, the project was coordinated by the Environmental Care and Community Security Institute (ECCSi), represented by Dr. Win Myint. CDE and ECCSi[5] had already collaborated from the beginning of the r4d project in 2015. Other project co-applicants of the TAG phase from Myanmar were the Dawei Research Association (DRA) and the former OneMap Myanmar Project (later GeoMyanmar).

Notably, the TAG phase had to be carried out under increasingly challenging circumstances due to the COVID-19 pandemic and the changing political environment in Myanmar after 1 February 2021. Accordingly, the design, planning, outputs, and activities had to be adapted continuously.

1.1.3. Overall approach

This report focuses on the methodological approach used in the TAG phase. However, this methodology must also be understood against the background of the overall project approach in order to understand its relevance, usefulness, and (potential) impact.

The methodology of participatory visioning, future planning, and backcasting is a tool to help identify and document development aspirations, needs, opportunities and threats, actions, possible entry points and leverage points for transformation, etc. This identification and documentation can already be very useful, for example, for the co-design of development or transdisciplinary (action) research projects, for policy recommendations, corporate social responsibility programmes, and much more. However, the process of participatory visioning, future planning, and backcasting – including formulation of an action plan – does not necessarily lead to the actual implementation of actions or even a transformation of the prevailing problem or context. Thus, if one wishes to go beyond identification and documentation of development aspirations and possible actions, this methodology can also be used as a tool within an overall project approach focusing on, for example, the co-design and implementation of actions to truly achieve the vision or empowerment of certain (probably excluded or more vulnerable) actors, etc.

[4] Short movie about the results of the r4d and TAG project – Dreams of Myanmar Farmers: www.youtube.com/watch?v=msCAJsVvKnY

[5] Previously under a different name: Environmental and Economic Research Institute (EERI).

In this project, the methodology of participatory visioning and future planning served as one tool within an overall approach. The goal of the TAG phase was to strengthen collective capabilities and action for sustainable agricultural intensification at and beyond the village level. In particular, we aimed to support and empower the four villages in realising their development aspirations as well as help make their voices heard in current policy debates. To achieve these aims, we combined the participatory visioning and future planning process with efforts to build a community of practice. In addition, we produced several outputs such as a short movie, cartoons for notebooks and schoolbooks, social media posts, the present report, etc. in order to raise awareness and share findings.

We wish to highlight two aspects of the overall approach described above: (a) Making the participants' voices heard in current policy debates; and (b) building a community of practice. To do so, we must first review and detail our roles – as researchers and authors – in the TAG phase. We did not perceive ourselves as purely academic or "neutral" researchers, but rather as researchers with interests in sustainable development and the empowerment of vulnerable groups. Using the terms of Pielke, we considered our position as similar to that of *issue advocates* or *honest brokers* (Pielke, 2007). Further, we were researchers with many different roles and clearly striving for action. For example, we served as data collectors and knowledge documenters, facilitators of a multi-stakeholder process, advocates for sustainable development, environmental responsibility, justice, inclusion, and empowerment. We also served as knowledge brokers for the villagers involved in the project, providing access to requested or other useful knowledge by exploiting, sharing, and translating our vast knowledge access options available to us as urban or international dwellars (e.g. Internet, daily news) and employees of academic institutions in the global North (e.g. academic articles). Further, we served as network brokers, using our status as (national and international) researchers – an important factor in the Myanmar context – for accessing certain actor networks, including international organizations, government representatives, and other economically and politically powerful actors. In this way, according to the terms of the action research community, we would place ourselves in the field of *community-based participatory action research* (Burns et al., 2011; Rowell et al., 2015). Accordingly, for achieving (a) and (b), we acted as proactive researchers, drawing on all our roles and options. While the participatory visioning and future planning process mainly occurred at the village level, at certain points we also involved actors from the district and even national level in the process. These actors represented various sectors (private sector, NGOs and CSOs, other experts). They were asked to contribute their knowledge on certain topics (e.g. agriculture, value chains, issues of inclusion/exclusion, etc.) to assess the feasibility of the villagers' ideas, and to serve as resource persons or trainers, etc. Further, they were asked whether they would be interested in following-up on the villagers' efforts (with most, indeed, confirming their interest). Based on this approach, we tried to establish relevant (economic, political, social, environmental) contacts for the villagers, to generate access to information and knowledge, and to foster exchange, with the overall goals of (a) enabling the voices of the villagers to be heard, and (b) creating a community of practice.

In all this, the methodology of participatory visioning and future planning served as a very useful tool to identify, test, document, and communicate the villagers' development aspirations and action plans, to implement needs-based actions, to build networks and empower the villagers, and so forth.

1.2. Reflection on the role of research for development

We – the authors – believe that transdisciplinary research is necessary for sustainable development. Further, we are convinced that co-creation of knowledge and co-design of projects together with stakeholders is relevant for identifying real-world problems and desirable and feasible transformations towards a more sustainable and just world. We also believe that action-oriented projects (e.g. development projects) should build on local knowledge, needs, and ownership. Accordingly, we support the argument that development projects should be based on knowledge co-creation with local stakeholders. Research can facilitate such knowledge co-creation. Further, research can assist in making true feasibility and impact assessments of planned interventions as well as evaluations of implemented actions and projects.

1.3. Aim and usefulness of this methodological report

With the publication of this methodological report, we pursue the objective of knowledge sharing. We hope that NGOs, CSOs, development projects, researchers, and others will benefit from the information we provide on our methodological approach – and how it can be useful, how it can be implemented and embedded, etc. – such that they can adapt the methodology to their own context and needs. In so doing, we hope to contribute to more bottom-up, needs-based co-design of projects, to the empowerment of marginalized groups, and to more sustainable development overall.

The present methodological report can be useful in various ways:

(1) The theoretical background of the methodology was developed in the global North, based on experience in conducting visioning processes in the global North (see also section 3.1). By contrast, this report presents a case from the global South. Contextual circumstances in Myanmar are markedly different from published cases in, for example, the Netherlands or Germany. In this way, the report may provide useful information for actors in the global South. At the same time, the conclusions of this report also provide insights into the universality and adaptability of our methodological approach, as many similar challenges and opportunities can be found in various world regions.
(2) The project did not stop at identifying and documenting stakeholders' development aspirations and action plans, but rather also encompassed implemented actions. Indeed, despite the challenging contextual circumstances, the project also documented outcomes and impacts, and these appear promising.
(3) The report presents how the methodology was embedded in an overall approach of community-based participatory action research. This overall approach can inspire other project designs and demonstrates how the methodology can be used as a tool.
(4) Due to challenges related to the pandemic and the political change on 1 February 2021, it was necessary to adapt the project activities and methodology on an ongoing basis. This adaptive planning and management shows how the methodology can be successfully implemented despite changing circumstances. Indeed, the present report particularly tries to capture and describe this flexibility and adaptability.

2. The context of Myanmar

2.1. Farmers and farming in Tanintharyi Region

This chapter provides an overview of the contextual situation of farmers and farming in Tanintharyi Region. For further information, please consult our publications (for example, Lundsgaard-Hansen et al., 2018, 2021; Schneider et al., 2020; Zaehringer et al., 2020) and the other research-based knowledge products of the project, which can be found on the project website.[6]

Picture 2: Villagers' homes. (Lara Lundsgaard-Hansen)

Tanintharyi Region is located in the South of Myanmar near the border with Thailand. It is settled by two ethnic groups in particular (Burmese and Karen) as well as a handful of other ethnic groups in smaller numbers (Mon and others). Its agricultural sector has undergone many changes in recent decades. Mainly comprising vast mountainous areas of intact forest with some shifting cultivation of local

[6] https://www.telecoupling.unibe.ch/knowledge_products/

communities up until the 1990s, the landscape experienced major expansion of large-scale land acquisitions to grow oil palms and rubber throughout the 1990s and 2000s. Beginning in the 2010s, smallholders followed the rubber trend and started converting their shifting cultivation land to permanent cultivation of cash crops (for various reasons). Overall, land users in the region face a complex and often incoherent mix of land-related laws and policies that has accumulated in recent decades. As a result, land tenure in the region is typically conflictive, unequal, and intransparent.

Picture 3: Betel nut is an important source of income for many farmers in Tanintharyi Region. The picture shows a betel nut palm tree plantation in Hein Ze village. (Lara Lundsgaard-Hansen)

In northern Tanintharyi Region, where our project took place, most cash crops are perennial crops such as rubber and betel nut trees. The majority of people are smallholders (small-scale farmers). However, there are also many landless people, both native to the area as well as recently immigrated. Overall, residents' main sources of income are from agriculture, whether from working on their own farm or from working as daily or casual labour on other people's farms. In general, local livelihoods are relatively vulnerable to external shocks. Health infrastructure is limited, school children generally receive low-quality education, and electricity is scarce. In recent years, all villages have received either paved or gravel roads, which has made access to markets easier. Farmers in the two villages of Ein Da Rar Zar and Shin Pyan do not yet have access to land titles. Farmers in the other two villages Hein Ze and Kyaut Shat received formal land titles beginning in 2013.

For several decades lasting up until 2011, the four villages were exposed to active armed fighting. By contrast, the years 2011 to 2022 were a peaceful period in which many economic and social activities developed. Markets were accessible to farmers, other businesses grew, and civil society organizations (CSOs) and non-governmental organizations (NGOs) became more active. However, in 2020 and 2021, the COVID-19 pandemic and the onset of the political crisis put these developments on hold. In 2023, armed fighting began to affect the villages again and markets collapsed (hopefully only temporarily).

Picture 4: Regional urban elites hold rubber monocultures near rural villages. Migrant workers and local villagers are hired to work on the plantations. (Lara Lundsgaard-Hansen)

2.2. In brief – Implications of dual crisis on the project

The COVID-19 health crisis and the political crisis beginning on 1 February 2021 both had major impacts on the implementation of the TAG phase. For example, the authors could not visit the villages for a long time, as the villagers were busy with more pressing challenges. At the same time, meetings (e.g. workshops) were generally prohibited or highly restricted.

However, thanks to the preceding r4d project activities (see section 1.1.), the villagers had already gained trust in the project members and were willing to continue the collaboration despite the challenging circumstances. We correspondingly adapted our plans, for example, with respect to holding workshops, and instead tried other methods such as messenger groups, phone interviews, or villager-led workshops with the assistance of project members over phone (see section 3.3.).

When the pandemic hit Myanmar in 2020, we initially shifted all data co-collection to messenger groups and phone interviews that did not require face-to-face contacts. Unfortunately, it was impossible to reach all villagers with these methods, as mobile phone connections were only available in two out of the four villages. Later, once the pandemic-related restrictions were reduced, our local partner Dawei Research Association (DRA) from nearby the villages conducted workshops in the villages (instead of

ECCSi and CDE). Then, once the political turmoil of 1 February 2021 began, we had to pause all activities for several months. Later, we continued the workshops. These were led by the villagers themselves with the ECCSi team assisting over the phone. We also invested many desk-based efforts in producing and launching a short movie called “Dreams of Myanmar Farmers” about the villages and their development aspirations. Near the end of the project, ECCSi team members and other experts were finally able to travel to the villages again to hold needs-based trainings for climate-smart agriculture and community forestry farming (implemented by an organization called Village Integrated Development Association), video screenings, distribution of knowledge products, and a closing event. Soon afterwards, travelling became too dangerous again due to armed fighting in the region.

3. Methodological approach

3.1. Theoretical background

Shared visions provide directions for actions and behaviour, and they can create a sense of identity and unity. Overall, positive visions are an influential and necessary stimulus for transformation. In this way, visioning is a key method for fostering sustainable development (Wiek & Iwaniec, 2014).

Wiek and Iwaniec describe the relevance of visioning and participatory visioning as follows: “Creating and crafting sustainability visions fulfils an important function in research, planning, and decision-making for sustainability, as it provides a key reference point for developing strategies to transition from the current state to a desirable future state, actively avoiding undesirable developments. In addition, participatory visioning activities fulfil several process-level functions, including building capacity, empowering stakeholders, creating ownership, and developing accountability.” (Wiek & Iwaniec, 2014; p. 498). Thus, participatory visioning as well as participatory future planning (often also referred to as “scenario planning”) are powerful tools for fostering knowledge-based, collaborative capabilities and action. Such tools can support various actors in envisioning and exploring more desirable and sustainable futures and in devising and testing transitions towards these futures. They offer an alternative to ad hoc solutions as well as government-steered or other forms of top-down planning approaches. Conceptualization and application in various settings (Andersson & Gabrielsson, 2012; Butler et al., 2015; Duru et al., 2015; Oteros-Rozas et al., 2015; Schneider & Rist, 2014; Swart et al., 2004) showed that such tools are highly useful for enabling individual stakeholders to reflect on their aspirations, enhancing learning between different stakeholders, and setting priorities for joint actions.

Definition of key theoretical terms according to our understanding

Vision: desirable state in the future Visioning: process of creating and defining a vision

Scenario: possible state in the future

Backcasting: Identifying pathways to desirable future states by looking backwards (creation)

Forecasting: Identifying likely future states by means of looking forwards (prediction)

One major purpose of backcasting is to investigate how desirable futures can be achieved (Robinson et al., 2011). It involves working backwards from a particular desired future endpoint or set of goals in the future in order to determine, in the present, the feasibility of that future and the policy measures and actions that would be required to reach it. In this way, the term “backcasting” (Carlsson-Kanyama et al., 2008; Robinson, 2003) describes how stakeholders can explore the feasibility, desirability, and implications of different possible futures. In contrast, “forecasting” investigates the most likely future conditions. When backcasting, the desirable futures or visions are usually selected for a time 25–50 years into the future.

According to Robinson (2003), the basic rationale for backcasting is twofold:

1) Our ability to predict the future (forecasting) is very limited. There is fundamental uncertainty about future events. This uncertainty exists due to:
    a. lack of knowledge about system conditions and underlying dynamics and drivers,
    b. unclear prospects and likely impacts of innovations and surprise events (good or bad),
    c. lack of clarity about how people make decisions in different situations.

2) The most likely future is probably not the most desirable future. In such a situation, it is useful to explore the desirability and feasibility of different futures, rather than focussing solely on probabilities. Moreover, exploring the "most desirable futures" has the added advantage of helping us create or increase the likelihood of these futures.

Overall, backcasting suggests we have a degree of freedom of action in regards to the future (Robinson, 2003). It suggests that the prevailing system is changeable, and we can try to find ways of changing the system today to enable a better future tomorrow.

The described theoretical background on participatory visioning, future planning, and backcasting mostly stems from experiences in the global North. Therefore, we anticipated that there would be a need for adaptation of the methodological approach to the context in Myanmar.

3.2. Methodological approach in our project

In the TAG project, we combined various existing approaches and tools of participatory visioning, participatory scenario planning, and backcasting techniques that appeared suitable and feasible for the prevailing context and project aims in Myanmar. We developed and conceptualized our own methodological approach, applied it in the described setting, and fine-tuned it continuously based on our ongoing experiences. Figure 1 illustrates the completed (revised) conceptualization of the methodology as well as the operational steps one to five (red numbers).

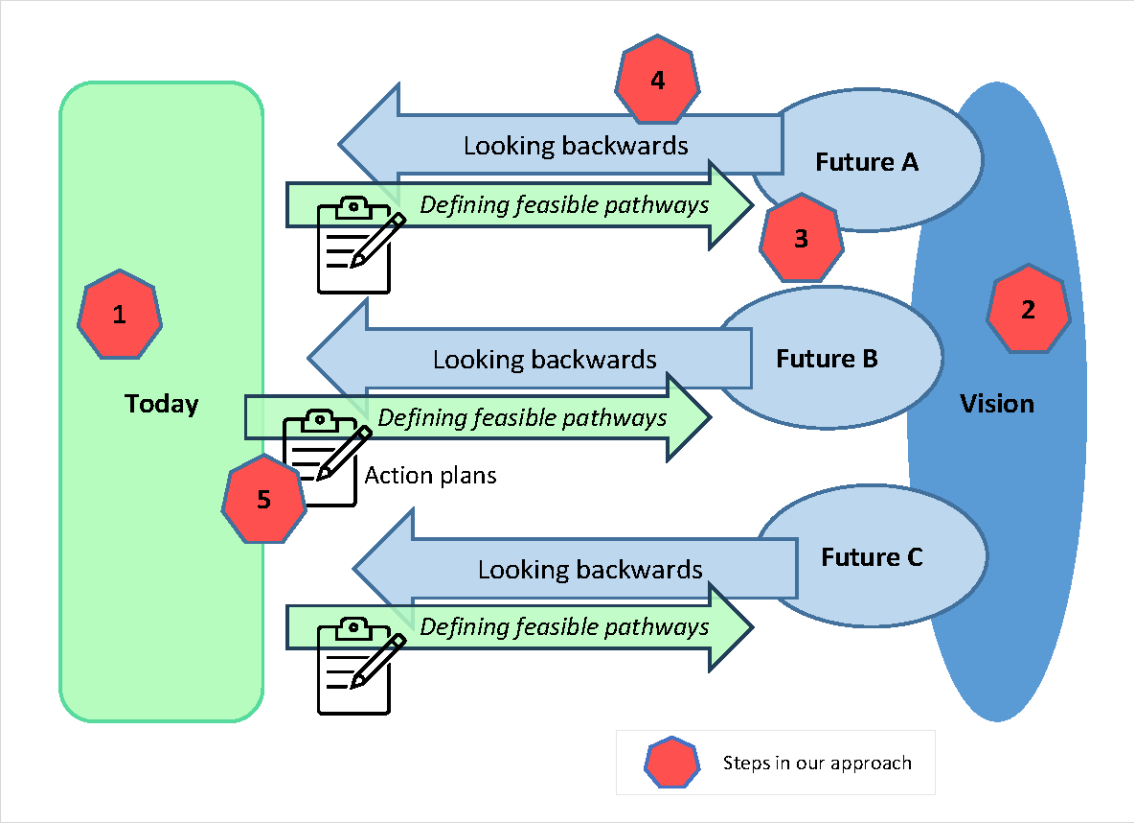


Figure 1: Our methodological approach using participatory visioning, future planning, and backcasting

The methodological approach can best be explained by describing the five operational steps (red numbers in Figure 1):

1) **Today:** Understand the system of today, including its challenges and opportunities, current trends, and relevant drivers. In our case, this included challenges and opportunities in the agricultural sector from production to selling, as well as trends and drivers such as climate change and population growth. The knowledge needed to complete this step can stem from literature, interviews, focus group workshops, and more. In our project, we were also able to build on the previous work of the r4d project (research phase and PACT phase).
2) **Vision:** Define the future vision of the people. In our project, this vision was formulated for the development of the village (see section 4.1.). We faced several challenges in this step, as a vision is an abstract construct. Also, a time horizon of 25–50 years, as recommended in the literature, was not feasible. It was too far away for the participants. We used 20 years instead, which was still quite a long, almost inconceivable time horizon for the participants. We used statements such as “when your children are adults”. But the younger participants did not have children yet and found it difficult to imagine. It was also embarrassing for them to talk about having children. Hence, for the younger participants, we used statements such as “when you are 40 / 50 years old”. However, these framings were also not very fruitful. In the end, we simply asked: “From your perspective, what is a good future development for your village? Or in other words: What kind of development do you wish to have for your village in the next 20 years?”
3) **Futures:** In the literature from the global North, this step would be dedicated to defining scenarios (plans A, B, C, …) for how the vision could be achieved. The terms “scenario” or “alternative futures” are predominantly used. In our project, however, these terms and concepts were again too abstract. Hypothetical discussions were much more challenging compared to talking about topics of concern and development aspirations. In the project team, we debated several times over a suitable term for this step. In the end, we went with “dreams” of the farmers and “desirable futures”. These dreams/futures need not be mutually exclusive alternatives, but rather describe relevant topics, which need to be addressed in order to achieve the vision. In this step of our procedure, these “dreams” or “futures” are defined. It is important for participants to understand their possible implications. When defining the desirable futures, it is important to do the following:
    a. Define more than one future, but not more than three to five. Give them a name.
    b. Check the feasibility, desirability, and implications of the different alternative futures (including risks, potential conflicts, etc.).
4) **Backcasting for pathways:** Look backwards and understand what pathways and milestones are needed to achieve each of these desirable futures. Identify entry points for change/leverage points for transformations. Define a chronological order of the milestones on the pathway. As this step requires quite some abstract thinking, skilled facilitation is required (as in any other step).
5) **Action plans:** Look again forwards and develop concrete but adaptable action plans for each desirable future and pathway. These action plans need not detail the entire pathway, but should at least cover the first meaningful phase and, if useful, roughly a second phase. Then, start by describing immediate necessary actions for the first phase. After completing the first phase, the next action plans need to be formulated and implemented.

Keep in mind that the pathways and action plans must allow for adaptive management, as circumstances are always subject to change. Steps 1–5 may need to be revisited from time to time, making the methodology an iterative process.

In reality, in the workshop discussions and other stakeholder interactions, it is not always possible – and not necessarily useful – to maintain a strict separation between the steps (today, vision, futures,

backcasting, action plans). For example, if participants talk about their vision (step 2) or desired futures (step 3), they often already refer to necessary milestones or pathways (step 4) and actions (step 5) to reach these futures. This is valuable information, even if the focus of the discussion remains on the vision or futures. These ideas for milestones and actions should be noted and taken up again at a later stage, namely when the participants address steps 4 and 5. In this way, the five steps serve more to structure the process, analysis, and documentation of co-created knowledge, rather than representing strict rules.

3.3. Operationalization – sequence of interactions with stakeholders

When we designed and started our project, the COVID-19 pandemic had not yet arrived in Myanmar, and the military coup was not foreseen. Thus, we began with a plan that we later had to revise and adapt several times. The following two sub-sections describe, firstly, how we originally intended to design the stakeholder interactions and secondly, how we finally managed the stakeholder interactions (see Figure 2).

The project used qualitative methods only.

3.3.1. Originally planned sequence of interactions

KNOWLEDGE CO-CREATION

At the village level, we planned to conduct three workshops with the members of the Sustainable Economic Development Group (see section 1.1.) and other interested villagers (see also Figure 2):

1st workshop titled "creative brainstorming", addressing mainly step 1 and exploring steps 2 and 3:
Using creative dialogue methods, villagers are asked to reflect on business as usual, trends and relevant drivers, and their needs. They do this by drawing on their own knowledge, on the expertise of external local- to district-level stakeholders, as well as the r4d project's research findings. In addition, some first possible alternative futures are jointly brainstormed.

2nd workshop titled "realistic vision, desirable futures & strategies", addressing steps 2, 3, and 4:
Villagers jointly reflect on their overall vision for their village, devise desirable and realistic futures, and – using backcasting techniques – identify concrete pathways for achieving their aspirations through joint actions. The TAG team ensures that sustainability (including the protection of ecosystem services, equality, etc.) receives adequate consideration.

3rd workshop titled "from word to action", addressing steps 4 and 5:
Villagers are supported in defining their pathways, action plans, and their first actions on the path to the desirable futures they have articulated. In addition, suitable support measures are identified on the basis of the action plans that the villagers developed. They may include inviting relevant actors from outside the local systems, such as agricultural or value-chain experts, or facilitating contacts with distant markets for niche products.

At district level, we intended to conduct two workshops with representatives from different sectors (incl. government, private sector, civil society organizations, the ethnic political organisation). The overall aim of the stakeholder interactions at district level was twofold: Firstly, it should complement the knowledge from the participatory visioning and future planning process. Accordingly, the interaction with stakeholders serves for knowledge co-creation and validation and feasibility checks. Secondly, the interactions with these stakeholders should enable and foster a collaboration between the villagers and district-level stakeholders, striving for a community of practice. Accordingly, two stakeholder interactions were planned:

1st workshop, complementing steps 1 and 3, and explore potentials of a community of practice:
The first workshop takes place after the village-level has completed the 1st workshop and before it starts its 2nd workshop. The first workshop at district level has three aims. Firstly, we evaluate and consolidate the methodology. Secondly, we establish a network of interesting actors, which the villagers can connect to and contact later on their own. Thirdly, we consolidate existing knowledge on current challenges in the agricultural sector, current and future trends and relevant drivers (step 1), as well as explore interesting, sustainable alternative futures for the agricultural sector overall (step 3).

2nd workshop, complementing steps 3-5, and foster community of practice:
The second workshop takes place after the village-level has completed the 2nd workshop and before it starts its 3rd workshop. The district-level participants do a feasibility check of the villagers' desirable future (step 3), pathways (step 4), and action plans (step 5), provide advice, and can express their interest of and ideas for collaboration.

IMPLEMENTATION OF ACTIONS

During the preceding PACT phase, in which we conducted elements of participatory visioning and future planning, several actions were already implemented. All these actions were based on co-creation and the needs of the villagers (see section 1.1.). In the TAG phase – while conducting the knowledge co-creation of the visions, future, milestones, and adaptive action plans – we aimed to outline further actions together with the villagers and other stakeholders. We planned to implement the first additional actions towards the end of the project.

As we were not a development project and did not have considerable financial or time resources, we knew that we would not have the opportunity to implement all the measures in the action plans. Therefore, we planned to additionally serve as brokers for the villagers to expand their social networks, so that they could access relevant immaterial and material resources themselves. Further, we also planned to document – together with the villagers – their vision, desirable futures, and action plans in order to share them with potential collaborators and donors.

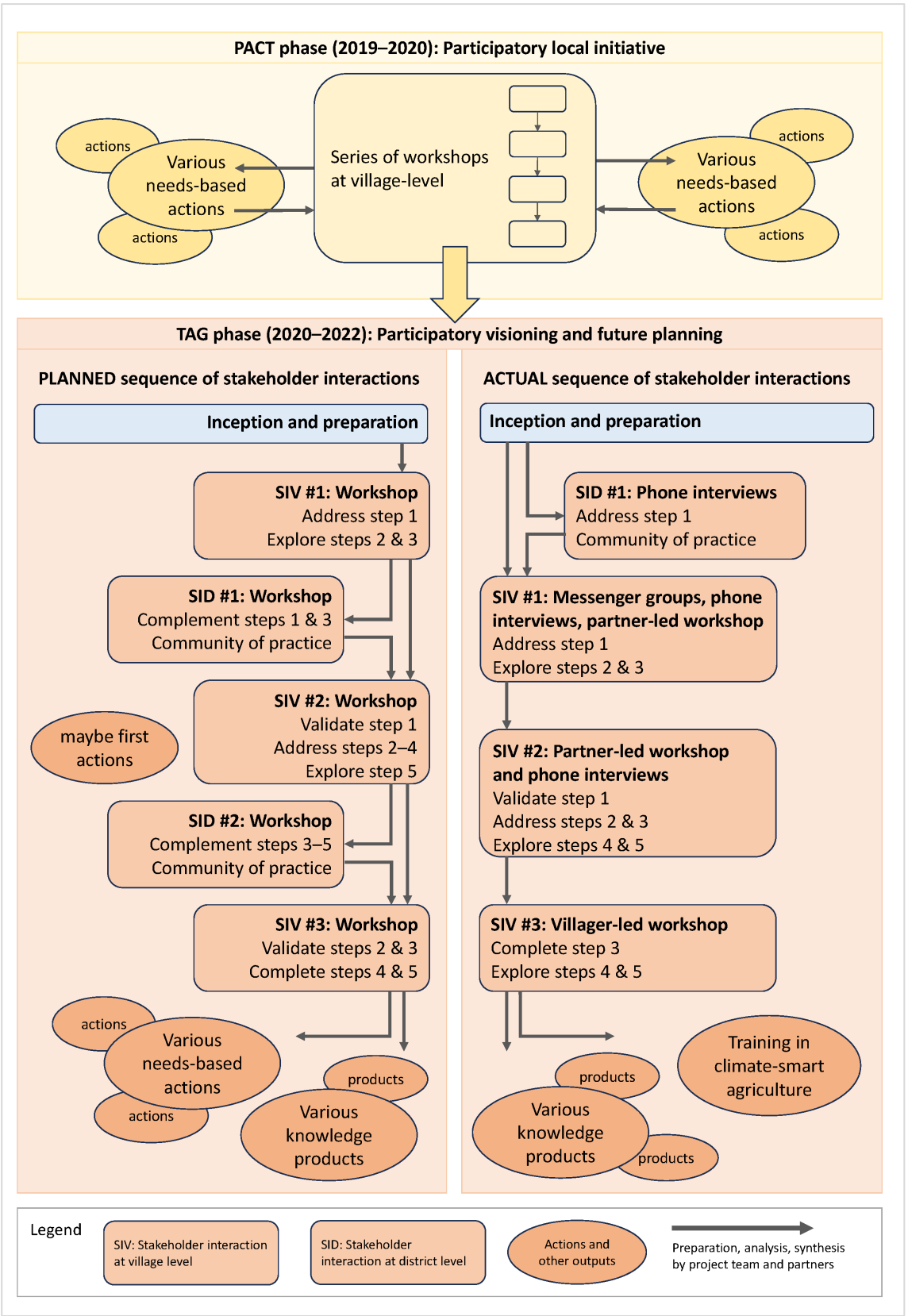


Figure 2: Originally planned (left column) and actual (right column) sequence of stakeholder interactions in our methodological approach. These adaptations were necessary due to the dual crisis in Myanmar.

3.3.2. Actual situation

This section describes the necessary adaptations of the methods due to the pandemic and the political situation (see also section 2.). Fortunately, we had already conducted several years of research, followed by the PACT phase of co-creating a community-led revolving fund (see section 1.1.). Accordingly, we had already built a relatively strong relationship and sense of mutual trust with the villagers. This was key to continuing the project under the highly challenging circumstances that came about. Unfortunately, we did not yet have a strong trust-based relationship with the district-level stakeholders at the time. As a result, the planned district-level work remained rather challenging.

KNOWLEDGE CO-CREATION – COMBINATION OF REMOTE AND ON-SITE

For several months, the pandemic made it impossible to travel within Myanmar or to organize gatherings of people. In order to not lose too much valuable time in the context of very uncertain circumstances, we started with remote knowledge co-creation. Later, we managed again to organize some on-site gatherings, before we had to shift back to remote modes.

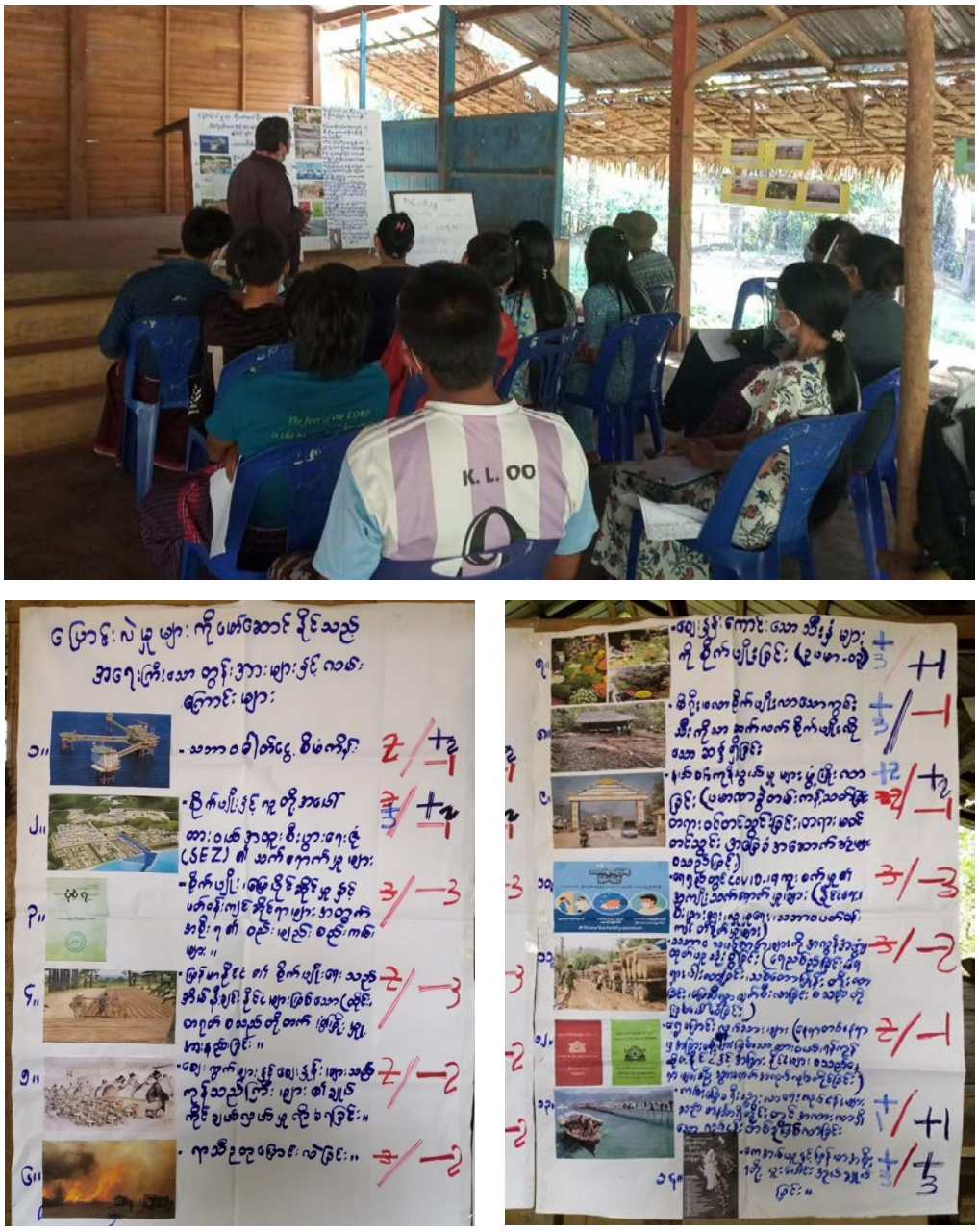
At the village-level, we conducted the following stakeholder interactions (see also Figure 2):

1st series of interactions (a combination of remote and on-site), Nov.-Dec. 2020. This series of interactions had the goal of addressing step 1 in detail and exploring steps 2 and 3:

- REMOTE – In Nov. and Dec. 2020, we established *Facebook messenger groups* in Hein Ze and Kyaut Shat (two villages out of four[7]) to consolidate and collect in-depth knowledge on opportunities and challenges in their agricultural sector (step 1), as well as to collect personal development visions (step 2). We sent questions by voice message, they replied by voice message.
- REMOTE – In Dec. 2020, we additionally conducted *phone interviews* with selected project participants from these two villages to reflect on "business as usual" (step 1), to collect in-depth knowledge on personal development visions (step 2), and to collect people's desirable futures (step 3).
- ON-SITE – In Dec. 2020, once travel restrictions within Tanintharyi Region were lifted again (while still existent for inter-regional travels within Myanmar), our local partner from Dawei – Dawei Research Association (DRA) – commenced with workshops at village level[8]. The *workshop* took place only in Ein Da Rar Zar and Shin Pyan. It was not necessary anymore for Hein Ze and Kyaut Shat thanks to the messenger groups and phone interviews. The achieved goals of the workshop were to consolidate and extend opportunities, challenges, trends, and drivers (step 1), to collect development visions and reflect on importance of agriculture and "business as usual" in the vision (step 2), and to collect initial ideas of desirable futures (step 3).

[7] The two other villages – Ein Da Rar Zar and Shin Pyan – did not have phone coverage, therefore, interactions with these villagers were impossible for several months.

[8] The workshop guidelines were developed by the authors of this report and validated by the local partner DRA.



Picture 5: Collecting, discussing, and voting about external trends and drivers and their relevance for the villages' development. (Dawei Research Association (DRA))

2nd series of interactions (a combination of on-site and remote), Jan. 2021 and June 2021. This series of interactions had the goal of addressing steps 2 and 3 in detail and exploring steps 4 and 5:

- ON-SITE – In Jan. 2021, our local partner DRA could facilitate the next *workshop*. It took place in Kyat Shat and Hein Ze villages.[9] In this workshop, we first recapitulated and validated the knowledge collected over messenger groups and phone interviews (addressing steps 1–3). Then, based on insights from all previous stakeholder interactions, we screened three short

[9] For Ein Da Rar Zar and Shin Pyan, the same workshop was planned for 1 Feb. 2021, which turned out to be the day the political crisis emerged. Our local partner was driving to the villages on his motorbike when he was stopped by security forces and told to return home.

videos[10] about agriculture-related topics to inspire the forthcoming discussion. This agenda point was titled “other places, other dreams”. The screening was followed by a discussion whether these topics were also relevant to their villages or not. Next, the villagers defined their development vision for their village (step 2) and visualized it with a drawing. Then, we focused on the desirable futures (step 3). We collected ideas for futures and reflected on the suitability, feasibility, and implications of each future for the village, people, and environment. Finally, the five most desirable futures were selected by the villagers. Also, pathways with necessary milestones (step 4) and actions (step 5) were explored. Finally, the group reflected on the most useful knowledge products (to document their vision, futures, and action plans) that could be generated by us and used by everybody to communicate to the outside. Also, the group elected delegates, who would join district-level workshops in the future to represent their village.

- REMOTE – In June 2021, we conducted phone interviews with selected villagers from Ein Da Rar Zar and Shin Pyan in order to replace the workshops to some extent. In the questionnaire, we followed a similar logic as for the workshops on-site.

3rd interaction (workshops, led by villagers, assisted over phone), June and July 2021. This interaction had the goal of consolidating step 3 and advancing steps 4 and 5:
To consolidate step 3 (desirable futures/dreams) and advance on steps 4 and 5 (pathways using backcasting and action plans), we organized villager-led workshops (one per village), which we accompanied over the phone. This workshop was conducted in all four villages and organized and facilitated by our Sustainable Economic Development Group representatives (see section 1.1.). The goals of these workshops were to agree on the three most desirable futures (step 3) and to develop a timeline (representing a pathway) and action plans for each future, including what would need to be done, when, and with/by whom (a combination of steps 4 and 5). Additionally, the groups discussed (but did not yet decide) whether the villagers would be willing to finance certain actions through the established revolving fund. The workshops went well. However, the context of political crisis made it difficult for the villagers to conceive of pathways and action plans. There was a lot of uncertainty: Why and how to formulate pathways and action plans if the current context is unpredictable and unsafe and livelihoods are at great risk?

At the district-level, we had to considerably reduce the stakeholder interactions due to the circumstances first with the pandemic and later with the political situation. However, we managed to create a reduced form of interaction with selected stakeholders at the district level:

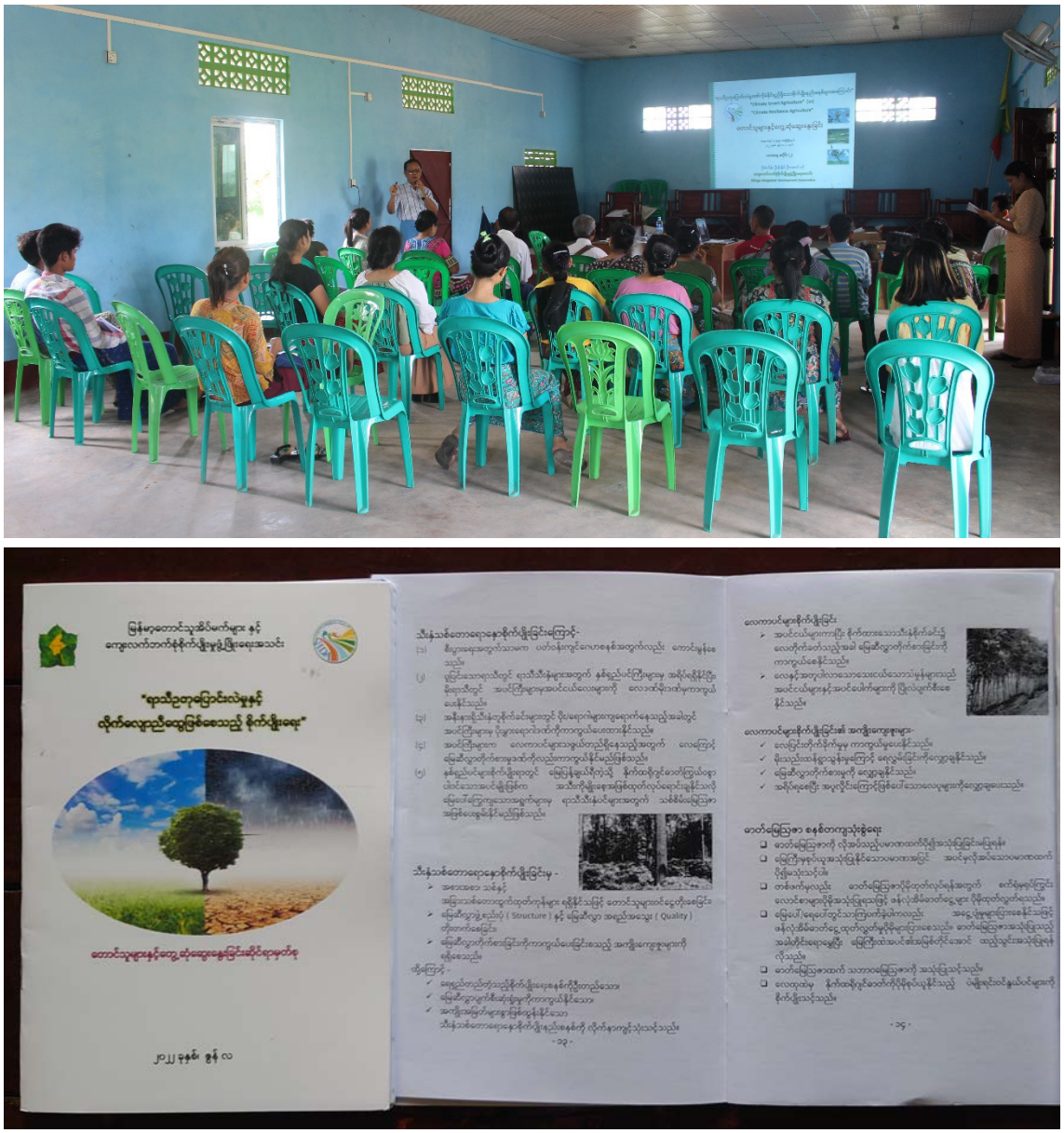
1st interaction, over the phone, Oct. and Nov. 2020: We had planned to conduct a workshop in Oct. 2020. Due to increasing pandemic restrictions regarding gatherings of people, we had to cancel it. As an alternative, we conducted bilateral phone interviews with representatives from the private sector, NGO/CSO sector, and agricultural experts to collect knowledge on opportunities and challenges in the agricultural sector, to identify trends and relevant drivers (step 1), and to establish potentially interesting contacts for the villagers (see overall project approach, section 1.1.).

2nd interaction cancelled: We had planned that our local partner DRA would organize and facilitate a district-level workshop. However, we had to cancel these plans due to the political situation. Also, with the onset of the political crisis (as of Feb. 2021), it was no longer recommended to contact people over the phone with whom there was not yet an established relationship of trust.

[10] The topics were: (1) explaining climate-smart agriculture; (2) a case of community-led forest conservation in Malawi; (3) explaining multi-cropping types and benefits.

IMPLEMENTATION OF ACTIONS

The participatory visioning and future planning process brought to light several actions, which, fortunately, we had already implemented during the PACT phase, such as creating a microfinance system, conducting various trainings in agriculture and finances, etc. We say “fortunately”, because the pandemic (as of 2020) and especially the political situation (as of Feb. 2021) made the implementation of further actions almost impossible. After concluding the participatory visioning and future planning process, we were able to implement only one further training in June 2022 (see Table 1, section 4.1.).



Picture 6: Theoretical part of the training conducted in June 2022 on climate-smart agriculture. (Aung Myin Htun)

Besides actions together with the villagers, we also invested in documenting and communicating about the villagers’ dreams (see section 4.1. for outputs), as we were forced to perform mostly desk-based work.

4. Dreams of and change for Myanmar farmers

4.1. Results, outputs, and actions

4.1.1. The dreams of Myanmar farmers

For the village visions, the answers were quite similar among the four villages. They all desire basic social and health infrastructure in their villages (schools, small clinics, monasteries or churches, area for sports etc.) as well as electricity and good roads. Further, they wish to have good and clean access to water, successful agriculture, and other profitable economic activities (e.g. small- and medium-enterprises). They wish for social unity and peace, prosperity, and fun.

In the process of the participatory visioning and future planning, at first, there was a collection of various ideas for desirable futures. After the feasibility and suitability assessment and considerations of potential consequences of the futures, as well as after a voting by the villagers, three desirable futures were defined. They were also illustrated in Figure 3 and described in a short movie (see Figure 4). These three dreams were:

1. **Access to loans:** For farmers and other villagers, accessing cash is a challenge. Cash is especially needed at certain points in the yearly planting and harvesting cycle. For example, cash is needed to buy seeds, saplings, or other inputs for planting and growing. At the same time, cash is needed to store the products after the harvest and wait until prices increase. There are some microfinance companies present in the region. There are also private persons who lend out money. However, these money lending options are usually associated with high interest rates. Another option is to lend money from the harvest buyer and in return agree on a fixed (low) price for the products. Banks do not yet offer loans to farmers in this region. Having a just and economically sound microfinance system would enable the farmers and other villagers to strengthen their agricultural practices or business and therewith their livelihoods.
2. **Climate-smart agriculture:** Farmers experience changes in the climate. For example, the rains occur at the wrong times or too intensively, temperatures rise to extreme levels, streams dry out, etc. Farmers sometimes lose parts of their harvest due to these climatic conditions. At the same time, farmers do not know how to react to such extreme or unprecedented events and lack the necessary resources to react to these conditions or prevent damages. Farmers wish to strengthen their knowledge and practices as well as their other resources to make agriculture more resilient to climate change.
3. **Secure land tenure:** In recent decades, farmers in all the villages have experienced considerable land tenure insecurity (Lundsgaard-Hansen et al., 2018, 2021). It is their great desire to secure their land tenure in order to have protected livelihoods and pass on their land to the next generation.

Figure 3: These cartoons illustrate the farmers' dreams (from top left to bottom right): (1) Access to loans; (2) climate-smart agriculture; (3) secure land tenure; (4) all three dreams combined in one illustration. (Illustrations by Thiha Lin, 2022)

4.1.2. Actions

As described above, together with the villagers, we outlined and implemented several actions. It was a participatory, needs-based definition of actions, stemming both from the PACT phase (2019–2020) as well as the TAG phase (2020–2022) of the project (see sections 1.1. and 3.3.). The actions during the PACT phase could be implemented as planned. For the TAG phase, we originally planned to invest considerable time and financial resources into implementing further actions. However, as of 2020 (onset of health crisis) and 2021 (onset of political crisis), we had to adapt because implementing actions became increasingly challenging or impossible. Therefore, we also invested considerable time resources in producing knowledge products that would support making the villagers' voices heard. Additionally, due to the political nature of the villagers' third dream (secure land tenure), we decided – for the time being – to omit any actions related to land tenure given the political situation, and to focus rather on the dreams of access to loans and climate-smart agriculture. The following paragraphs describe the implemented actions.

As a result of the bottom-up co-creation process in 2019 in the four villages, a *revolving fund* (microfinance loan) system was initiated featuring just and economically sound interest rate conditions. Villagers interested in taking micro-loans from the revolving fund had to become members of the Sustainable Economic Development Group (see section 1.1.). In an intensive participatory process and accompanied by financial experts, the rules and regulations of the revolving fund were designed, loan application forms were created, roles and responsibilities were defined, and so forth. The TAG phase served to strengthen the evolving system, further adapt it to the needs of the villagers, coordinate and provide support over phone, and make it even more resilient to crisis. Up to the date of publication of the present report, the revolving fund was still running in all four villages, despite the very challenging circumstances.

Picture 7: Final revisions of the revolving fund rules and regulations by the Sustainable Economic Development Group Committee in 2019. The rules and regulations were signed by all representatives in the following workshop. (Thein Phyo)

Picture 8: A loan taker shows her stored harvest. She keeps the harvest and sells it a bit later when prices are higher. She took the loan to bridge the income gap until she will sell her products. (Tha Gyan Aye)

To support the dreams of “access to loans” and “climate-smart agriculture” as well as for related topics or transferable skills, several *capacity building* actions were defined and implemented. Table 1 provides an overview of all the implemented capacity-building actions.

As a result of the various project activities, the villagers also became proactive and organized further trainings by external experts themselves. For example, they organized a practical training on the advantages of and how to produce and use natural fertilizer, insecticides, and fungicides, as well as a training on dengue prevention.

Table 1: Implemented capacity building actions during the project, always facilitated by the Environmental Care and Community Security Institute (ECCSi) of Myanmar (co-authors). Further capacity building actions were envisioned during the TAG phase as of 2020 (see section 1.1.), but were impossible to implement due to the health and political crises that occurred.

Type of action	**Topic**	**When**	**Implementing organization** always together with ECCSi	**Project phase**
Workshop series	Jointly developing the revolving fund	Apr. 2019	Sustainable Economic Development Committee from the four villages, backstopping by revolving fund expert	PACT
Training	Financial management for households	Apr. 2019	Dawei Research Association (DRA)	PACT
Training	Growing elephant foot yam (promising regional cash crop)	Apr. 2019	DRA	PACT
Study trip	Visiting another revolving fund system in the region	Apr. 2019	Tanintharyi Nature Reserve Programme (TNRP)	PACT
Study trip	Visiting a mango plantation in the region	May 2019	Owner of farm	PACT
Supervision and training	Assisting in setting up the revolving fund system and accompanying the first round of loans	June 2019	Revolving fund experts (microfinance company) from Yangon	PACT
Training	Leadership skills	Sept. 2019	Master Academic Trainer and Professional Education Centre	PACT
Study trip	Visiting an elephant foot yam farm and processing factory	Oct. 2019	Owner of farm and factory and DRA	PACT
Study trip	Organic farming	Jan. 2020	Agricultural expert	PACT
Health crisis hitting as of 2020. *Political crisis hitting as of 2021.*				
Training	Climate-smart agriculture[11]	June 2022	Village Integrated Development Association (VIDA)	TAG

Building new and strengthening existing *networks* for the villagers was another important part of the project. On the one hand, this networking component was relevant for implementing the actions. For example, to conduct targeted, needs-based trainings, we identified suitable experts from the region (or if not available in the region, we invited experts from other parts of Myanmar). On the other hand, fostering a community of practice between villagers and relevant contacts was also an element of the overall project approach (see section 1.1.). Accordingly, it was our intention that – after the actions (e.g. trainings) – the villagers could remain in contact with these experts, if desired. Through this project

[11] In June 2022, there was no active fighting in Northern Tanintharyi Region. The ECCSi team together with two agricultural experts of VIDA travelled to the villages again. The training in climate-smart agriculture encompassed a feasibility study of options for climate-smart agriculture in each village as well as a two days of training per village and distribution of a guidebook. The ECCSi team also used this opportunity to screen the video in the villages, formally close the project, and visit some NGOs and CSOs in the region.

networking, the villagers gained better access to knowledge and other resources, but they also acquired networking skills themselves. As a result of the networking efforts, the villagers gained contact with (and partly remained in contact with):

- Dawei Research Association (DRA) – their most important new contact (according to the project monitoring), a local CSO
- Tanintharyi Nature Reserve Programme (TNRP)
- Various innovative farmers and producers in the region
- Finance experts from the microfinance company in Yangon
- Master Academic Training and Professional Education Centre
- Agricultural experts from the region
- Agricultural experts from the Village Integrated Development Association (VIDA)
- Corporate Social Responsibility Programme of international oil and gas companies in the region
- Kalyana Mitta Foundation
- Notably, also among the four villages, people got to know each other and continued to exchange with each other even after the project ended.

Another part of the overall project approach was to *make the villagers' voices heard*. By creating and disseminating knowledge products and other outputs (see below) and by spreading the word of the farmers' dreams in meetings, presentations, conferences, interviews, project proposals etc., we sought to raise awareness of the development aspirations and needs of the farmers. For example, in June 2022, the ECCSi team met with various international and local NGOs and CSOs in Dawei area. In this meeting, they told the representatives about the farmers' dreams and other project results, and distributed some knowledge products to them. However, under the prevailing circumstances, it was somewhat difficult to gain much attention for the farmers' dreams, as many stakeholders – understandably – were preoccupied with the political crisis and its effects on the economy and society.

Picture 9: Study trip to another village with existing revolving fund, visiting a pig breeding farm.
(Thein Phyo)

Picture 12: Financial management training. Together practicing calculations for bookkeeping.
(Aung Myin Htun)

Picture 11: Financial management training. Loan takers practice the bookkeeping themselves.
(Aung Myin Htun)

Picture 10: Study trip to an organic farm. The owner explains how they make organic fertilizer.
(Aung Myin Htun)

4.1.3. Knowledge products and other outputs

Based on the participatory visioning and future planning of the TAG phase[12], we created several knowledge products that were targeted at audiences beyond (but also including) academia. They were aimed at knowledge sharing and awareness raising among the villagers, their networks, potential donors and collaborators, researchers, NGOs and CSOs, and many more. These products and outputs included:

- A short movie[13] about the farmers' dreams, accessible on YouTube (see Figure 4), with over 47,000 views one year after its publication
- Cartoons created by the artist Thiha Lin (Thiha Sakhan Thit) from Yangon (see Figure 3)
- Schoolbooks (empty notebooks for schoolchildren) with the cartoons integrated (for awareness raising and knowledge dissemination)
- Notebooks for adults, with the cartoons integrated (for awareness raising and knowledge dissemination)
- Numerous obligatory documents for the revolving fund system (terms of reference, rules and regulations, loan application forms, certificates, etc.)
- Certificates for the Sustainable Economic Development Group representatives and assistants, which acknowledge their outstanding efforts and experience.
- Training materials from various trainings
- Various informative posts on ECCSi's Facebook page[14] (mostly in Myanmar language) and on CDE's Facebook page[15] (in English language)
- Blog post[16] (written by Anita Makri, 2020) titled "A better life off the land: Villagers join forces in Myanmar"
- The present methodological report titled "Participatory Visioning and Future Planning – Backcasting with Myanmar Farmers for a more Sustainable Future"

[12] There are many more knowledge products and other outputs from the research phase (2016-2019) and PACT phase (2019–2020).

[13] https://www.youtube.com/watch?v=msCAJsVvKnY, video produced by tagufilms (တာန်ခိုး), Yangon, Myanmar. Published on YouTube in August 2022.

[14] https://www.facebook.com/r4dmyanmareccsi

[15] https://www.facebook.com/R4DTelecoupling

[16] https://k4d.ch/a-better-life-off-the-land-villagers-join-forces-in-myanmar/, Knowledge for Development, last accessed on 18 July 2023.

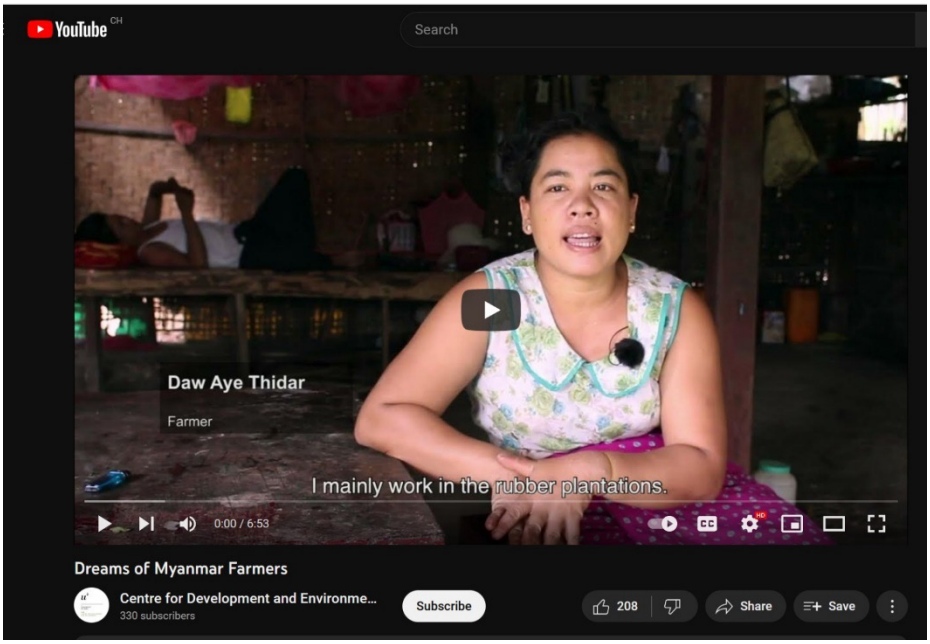


Figure 4: Dreams of Myanmar Farmers, short movie (published on YouTube, produced by tagufilms Myanmar, 2022)

4.2. Outcomes and impact at the village level

At three points in time, we conducted monitoring and evaluation of the project activities in order to explore the outcomes and (potential) impacts of the project: At the end of the PACT phase (2020), at the end of the TAG phase (2022), and before finishing the present report (2023). This section is based on the results of the monitoring and evaluation as well as on personal observations of the authors.

Economic dimension: Agriculture, livelihoods, finances

Access to loans. At the village level, we observed the most effects. The revolving fund was still running successfully in 2023 (since 2019). Apparently, most members can fill out the loan application forms themselves by now and can manage their loans well. The training by DRA and the intense workshops with the Sustainable Economic Development Committee (see Table 1) contributed to this considerably. A visit from two revolving fund experts in 2019 (see Table 1) further contributed to strengthening the revolving fund and also to reassuring the members that their system is solid. So far, the loan takers have always repaid their loans. The number of members of the Sustainable Economic Development Groups in each village has increased every year. The loans strengthened their agricultural practices and other economic activities. According to the statements of villagers, in most cases the revolving fund has contributed to improving the livelihoods of loan takers. In just a few cases, there was no improvement – but also no deterioration. Some members stated that they desired bigger loan sums and longer repayment cycles.

Multi-cropping. As a result of the trainings and study trips on climate-smart agriculture and organic farming, as well as countless discussions on sustainable agriculture in the Sustainable Economic Development Committee workshops, many farmers have become more aware of the benefits of multi- or inter-cropping. According to the statements of the villagers in July 2023, most farmers are now practicing this technique. For example, they grow vegetables or fruits under the perennial trees (plantation

of cash crops), grow bamboo as wind and sun shelters (and for household use), or they grow various crops together side by side.

Organic farming methods. According to the monitoring and evaluation of July 2023, farmers who previously used lots of chemicals have reduced their chemical inputs. Apparently, they have become more aware of the negative impacts of using chemicals in agriculture. Other farmers produce their own organic fertilizers, insecticides, and fungicides and are experiencing benefits such as increased yields, less insects on lime trees, etc. Additionally, some villagers have begun or intensified cultivation of organic vegetables in their backyard for personal consumption. All these outcomes seem to be an effect of the diverse trainings, study trips, and awareness raising via various project activities. For example, we initiated many discussions in the Sustainable Economic Development Committee workshops about sustainable agriculture. As a result, the representatives decided that its revolving fund system would not permit loans for buying chemical inputs.

Picture 13: Organic vegetables (picture taken from the study trip to an organic farm; Aung Myin Htun)

New crops. One outcome from the agriculture-related trainings on cash crops and study trips was that farmers sought to apply the new knowledge. For example, many farmers started growing elephant foot yam and were successful with it. Also, some started growing mangoes successfully or other crops that they encountered in the trainings and study trips. Unfortunately, however, due to the ongoing political situation, the market collapsed for most cash crops and farmers can no longer sell their products (including the crops they already had). Only rubber can still be sold to Thailand (status as of July 2023).

Picture 14: Dried chips of elephant foot yam, looked at during the study trip to a pioneer farmer of elephant foot yam. (Aung Myin Htun)

Picture 15: A raw elephant foot yam (Aung Myin Htun)

Livestock breeding. Another outcome of the project activities is that farmers now grow more livestock, especially pigs. This is an indirect result of the revolving fund (being able to make small investments through the loans) and of the exchange with experts and other villages. Our project did not directly promote livestock breeding. However, according to the monitoring and evaluation, this new business is strengthening the livelihoods of the farmers considerably – also in times of the dual crisis.

Picture 16: Loan taker started breeding pigs (Naw Phel Htee Nar)

Livelihoods: Overall, the villagers have expanded their sources of income by diversifying their agricultural practices. This is a result of the various capacity building actions and the revolving fund. For example, some farmers have commenced with multi-cropping and grow their own bamboo. Others have started raising livestock or growing additional crops such as elephant foot yam. Additionally, some

villagers grow organic vegetables for their own consumption. According to the villagers, this diversification has led to more secure livelihoods. Due to awareness-raising efforts and trainings, organic farming techniques have also become more prevalent, further strengthening the health of farmers. Unfortunately, the political situation currently prevents the farmers from implementing additional measures they learned in the climate-smart agriculture training and other actions. The market collapse and active fighting in the region make it very difficult to pursue activities that go beyond the daily securing of livelihoods.

Social dimension: Empowerment

Increased social and communication skills. The leadership training received a very good evaluation thanks to its manifold positive effects. Apparently, the effects are still prevalent several years after the training. In July 2023, the original participants (of 2019) explained that they now have an increased ability to listen carefully, to let others finish speaking (not interrupting), to encourage others to speak freely, to stand up themselves in front of many people and talk, to have more empathy, etc. As a result, they now feel that others listen to them and respect them more than before. Moreover, as many people in the villages participated in the training, overall communication in the villages appears to have become more respectful. Additionally, the elder generation appears to respect the younger generation more than before. Moreover, many participants also advanced their digital communication skills, in particular because mobility and meeting restrictions forced us to hold conversations via voice messages on messenger groups, via telephone conferencing, and via other social media channels.

Picture 17: Leadership training in Hein Ze village (Aung Myin Htun)

Equity. Throughout the project activities, we always paid attention to being inclusive of people of all ethnic groups, gender, age, and social status. Especially younger people and women learned to step up and join discussions as an equal member of the group. Moreover, we had one young woman from our project team, who coordinated and facilitated all the activities in the villages very professionally. She was well respected by all villagers, including village authorities, elderly people, and men. She became like an idol to the younger participants and women in the villages.

Picture 18: Several young women held special functions in the project leadership, Sustainable Development Group Committee, etc. The visibility of their functions, competences, and skills was high and increasingly well accepted by all members. (Aung Myin Htun)

Building networks and access to knowledge and other resources. Participants established many new contacts by being introduced to several outside experts and innovative farmers, by collaborating with participants in the other villages, and by interacting with each other within the individual villages. Thanks to these contacts, they have continued to find access to new knowledge or other needed resources. For example, whenever they have a question regarding the crop elephant foot yam, they now contact DRA directly themselves (not us, the project leaders). Had the political situation been calm, we would likely even have been able to build a network between villagers and stakeholders at the district, national, and international level.

Empowerment. Overall, participants from all social strata and backgrounds (including gender, ethnic group, age, social status) have increased their social and communication skills and cultivated more respectful communication and behaviour in the villages. Additionally, continuous exchange between the four villages has given rise to a community of practice among villagers that goes beyond village boundaries. Participants stated that they now simply contact each other whenever they want to know something from one another. The participants also now feel confident contacting external experts and asking them for advice or training (something they would not have done before). In this way, the participants appear more empowered, independent, and proactive now compared to when the project started in 2015.

Environmental dimension

Positive impacts from organic farming. Increased organic farming practices and reduction of chemical inputs directly benefits the environment. While we did not conduct an environmental impact assessment, project elements such as multi- or inter-cropping (which can naturally reduce pests, etc.), use of

organic fertilizer, insecticides, and fungicides will have positive impacts on biodiversity, soil quality, water quality, and much more.

Reduction of plastic and other waste littering. Environmental awareness has risen in the villages. Youth groups have started to collect litter in the villages. Farmers use less plastic in their daily routines, and households have started to separate waste and collect it in bins instead of throwing it in the plantations or forest. According to the villagers, this is an indirect effect of our project activities.

Overall

The villagers stressed that they very much appreciated our project approach, as it allowed them to co-design all actions. According to them, they benefitted greatly from the various needs-based actions. They hope that this project or similar projects will continue to take place in their villages once the political situation is stable again. In the monitoring and evaluation carried out in July 2023, all participants emphasized that, unfortunately, the prevailing political situation makes everything much more difficult. They expect that the outcomes and impact of the project activities will be even stronger as soon as the political situation calms down and economic activities can resume. For example, they would like to adopt several measures to make their agriculture more climate-smart and resilient to climate change and they would like to establish close collaboration with traders from nearby to sell their old and new products. Thus, we believe that our methodology (in combination with the overall project approach) would have an even greater impact if the political circumstances were more stable.

Project team and project level

On our side, too, the development and application of this participatory visioning and future planning methodology gave rise to impacts and outcomes. In the course of the project, we gained many insights into how (not) to apply the methodology, facilitate the participation, adapt to constantly changing circumstances, etc. As a result, we held several reflection discussions and wrote this present methodological report. The acquired experience and lessons learned will serve us to co-design other projects in the same and other world regions. Also, with this report, we hope to share our insights with a wide range of stakeholders who desire to adopt a similar approach.

Further, with the dissemination of the knowledge products (movie, cartoons, report, etc.), we seek to attract potential collaborators and donors for needs-based follow-up actions (and projects) with these villagers or other farmers in Myanmar and beyond.

5. Conclusions on methodology and recommendations for application

5.1. Reflection on usefulness and applicability of methodology

In this section, we reflect on the usefulness of this methodology in our project and whether it has the potential to be useful in other projects, too.

Usefulness and applicability

During the initial PACT phase (2019–2020; see section 1.1.), we already conducted elements of participatory visioning and future planning, backcasting, and developing action plans; however, we had not yet framed it as part of this methodology. In addition, we had already implemented several needs-based actions (see section 4.1.). Our TAG phase (2020–2022) picked up where the PACT phase left off. We again took one step back and conducted a rigorous participatory visioning and future planning process together with the four villages. From the visioning process, we jointly derived further topics of relevance and useful measures for strengthening agriculture in the villages, as agriculture remains the most important source of livelihoods in the case study area. This process was highly participatory, time-consuming, action-oriented, and focused on knowledge co-creation. From our point of view, this process – despite being time-consuming and complex – displayed two major advantages:

Firstly, thanks to thorough co-creation and feasibility assessments of ideas, the jointly identified desirable futures / topics (access to loans, climate-smart agriculture, secure land tenure) were *highly relevant for the participants*. Consequently, the derived actions were targeted, tailored to participants' needs, and gave rise to positive outcomes.

Secondly, the highly participatory nature of the process and effective actions *increased the sense of ownership among participants*. When action plans are introduced in a top-down manner, participants' sense of ownership is often weak. Use of this methodology, however, can significantly increase the sense of ownership among participants – even more so if intermediate results are achieved and actions are co-implemented in parallel to the participatory-visioning and future-planning process. In return, co-developed action plans will be approved, supported, and implemented by the committed participants.

As described, in our project, this methodology enabled us to identify relevant topics for sustainable development and possible interventions, despite exceptionally challenging circumstances. Thus, we believe that this methodology would be even more effective in a stable context. Nevertheless, our experience proved that it is also a suitable methodology in an unstable, unpredictable context. As long as the methodology is not treated as a very strict framework, but rather as a tool for structuring knowledge co-creation, analysis, and documentation, it can be applied quite flexibly in support of adaptive management. Moreover, it can also be applied in different contexts (world regions, cultures, political systems) and for various topics (environmental conservation, rural development, urban planning, gender equality). Needless to say, the methodology and overall project approach must always be adapted to the prevailing context and purpose.

As portrayed, the methodology of participatory visioning and future planning is a tool to help identify and document development aspirations, needs, opportunities and threats, actions, possible entry

points and leverage points for transformation, etc. However, a process of participatory visioning and future planning alone does not necessarily lead to actual implementation of actions or even a transformation of the prevailing problem or context. If embedded in an overall action-oriented project approach, the present methodology can provide very useful directions for actions, networking, knowledge products, etc., thereby enabling real impacts. Notably, however, the identification and documentation of development aspirations, needs, opportunities and threats, actions, possible entry points for transformation, etc. can already be very useful in itself, for example on behalf for policy recommendations, corporate social responsibility programmes, research programmes, and much more.

In conclusion, the present methodology is *applicable in various professional fields and geographical contexts*. On the one hand, it is clearly applicable in research and development projects. On the other, it appears applicable in projects with a focus on the future and developing action strategies, ranging from urban planning and women's entrepreneurship to policy reformulations and business reorganization efforts. Further, this methodology also seems applicable in diverse geographical contexts. Existing studies point to successful application in different countries in Europe. Our project showed that the methodology required some adaptation for a context such as Myanmar, but was very useful. In (especially pre-coup) Myanmar, for example, the methodology appeared capable of considerable impact. Indeed, the pre-coup system in Myanmar was dynamic and the initial return on investments was high (such as investment in human capital via trainings). Accordingly, needs-based actions had significant potential to substantially contribute to improving people's livelihoods. Thus, the methodology appears very promising for any kind of context, given it is adapted to the local context.

Reflection on the role of research(ers) in this methodology

We believe that the participatory visioning and future planning methodology can *benefit from including research*. Especially in steps 1 (today) and 3 (desirable futures), but also in all other steps, research can contribute considerably. In step 1, investigation is required of the challenges, opportunities, trends, etc. of the prevailing system. In step 3, each desirable future requires a feasibility and suitability study, and potential consequences need to be assessed. Together with local and other stakeholders, researchers can assist in co-creating this knowledge (transdisciplinary research). For example, in our project, there were several ideas for needs-based actions on the table, which we had to omit after assessing their potential impact (e.g. producing furniture and handicrafts from rattan did not make sense, as there would not have been enough buyers in the region and no established supply chains).

However, there are also many elements in the methodology where research does not form the core. As a result, researchers not only serve as investigators, but rather embody *various roles* when applying the methodology. It is important that researchers remain aware of and transparent about their various roles and potential conflicts of interest (see also Bulten et al., 2021). Researchers can serve as facilitators of the multi-stakeholder process, as knowledge brokers (providing access to needed knowledge on demand), as network brokers (connecting to relevant stakeholders), and much more, as we did in our project. Additionally, researchers can also support the participatory visioning and future planning process by taking on the role of advocates for interest groups, which are not present in the process. These can be vulnerable or excluded stakeholders, for example ethnic minorities, smallholders, women, or non-human stakeholders such as fauna, flora, or the environment in general. In our case, we researchers took on the role of advocates for sustainable development during the multi-stakeholder discussions. Thus, we repeatedly reminded everyone involved of issues such as environmental responsibility, social inclusion, and long-lasting economic returns on investment.

5.2. Methodological insights from and recommendations for the given context and similar contexts

As described above, in this project, we developed, tested, and applied – in an iterative process – a conceptual and methodological approach that we viewed as suitable for the prevailing context in the villages. Most of the theories, concepts, and methodological approaches on participatory visioning, scenario/future planning, or backcasting have been developed in the global North, based on case studies from Western countries (e.g. the Netherlands or Germany). Some aspects of the theoretical background appeared suitable to the prevailing context in Myanmar as well, while others required adaptation. Based on existing literature and our experience – and also with regard to providing a more suitable methodology for projects in the global South – in this section we articulate the insights and recommendations that we gained.

Application of methodology: Speaking in practical terms

In the given context, we encountered several *methodological challenges* during the stakeholder interactions. For example, the steps 2 (vision) to 4 of the methodological approach (backcasting for pathways, formulating milestones) were partly too abstract. They required translation into everyday language, using intuitive terms and with an awareness of cultural taboos and the way participants think. Further, the definition of pathways – including entry points for change – and the formulation of action plans were rather challenging because it required planning beyond one year. Most villagers were not used to this kind of – from their perspective – long-term planning. Also, the participants generally did not see themselves as capable of influencing, for example, political processes of government business. It was difficult for them to reflect on possible entry points to change or on finding solutions to problems that went beyond their own village. Thus, it was critically important to provide skilled facilitation in the stakeholder interactions, with an awareness of how to navigate the prevailing context (see also below).

In the workshop discussions and other stakeholder interactions, it is often not possible – and also not useful – to maintain strict separation between the five steps. For example, if participants talk about their vision (step 2) or desired futures (step 3), they often already refer to necessary milestones (step 4) and actions (step 5) to achieve these futures. This is valuable information, even if the focus of the discussion remains on the vision or futures. At the same time, any such ideas for milestones and actions should be noted and taken up again at later stages, when the participants address steps 4 and 5. Thus, this approach with the five steps *serves as a tool to structure* the process, analysis, and documentation of co-created knowledge, rather than as a very strict framework. If useful, it can even be treated as an iterative process.

As this methodology can serve as a basis for formulating action plans and implementing actions, it is important to ensure that the futures, pathways, and action plans stay *realistic* (though not unnecessarily modest). In this way, we recommend planning enough time and opportunities (events/stakeholder interactions) for validation, plausibility, feasibility, and suitability checks. This can be done by the project team and researchers, by the stakeholders themselves, by external stakeholders, or by other experts. It is also valuable to ensure that there are no misunderstandings and that reconsideration and adaptation are possible. Thus, it is useful to integrate moments of validation in the co-creation process.

Notably, each desirable future also carries *risks, potential winners and losers, and potential conflicts*. For example, what if the introduction of new crops fails, and farmers lose the money they invested? Or what if these new crops require a considerable financial investment at the beginning and only rich

farmers can do this? Conducting a thorough risk and conflict analysis is imperative for stakeholders to make informed decisions. Additionally, with corresponding measures, it is also possible to prevent certain risks and conflicts from ever arising.

In addition, for these and various other reasons, it is crucial to provide *very skilful facilitation* of the stakeholder interactions. For example, during the interactions, conflicts can arise, or power imbalances can shape the discussions. The facilitator must be able to handle such situations. Further, it is necessary to know the prevailing context, culture, norms (including taboos), traditions, etc., and to be able to communicate in the local language or dialect. All these elements are in addition to the need for core facilitation skills of multi-stakeholder processes. Regarding didactics, we recommend using drawings or other forms of visual illustration. This helps the discussants to formulate their thoughts. This is also especially relevant in contexts where participants are not proficient or confident in reading and/or writing. In conclusion, it is indispensable to have a very skilful and, where possible, local facilitator.

If a project can continue with action implementation after the participatory visioning and future planning, we recommend *revisiting the action plans* at regular intervals (e.g. bi-yearly) together with the participants. The action plans might require adaptations due to changing contexts (external reasons) or due to internal reasons if, for example, the already implemented trainings did not bring about the hoped-for competences or due to delays in action implementation, etc. It is also possible to revisit the other steps from the participatory visioning and future planning process.

***Stakeholder engagement, representation, and inclusion*[17]**

It was important for the participants to *perceive the benefits* of the visioning process. For example, the participants in our project were motivated as the process was accompanied by opportunities to establish new contacts, access to trainings and micro-loans, and tangible documentation of their vision, futures, and action plans (e.g. in the form of a short movie). If participants see benefits in joining the visioning process, they are more likely to do so and to take on ownership. This is likely to be the case in most contexts also in the global North. However, the phenomenon may be even stronger in countries of the global South. In Myanmar, for example, it was very visible that the participants, most of whom were poor, were highly motivated to improve their livelihoods, and by joining our project, they hoped to better their livelihoods.

Financial compensation of participants was crucial in Myanmar. The participants could not afford to miss work in order to attend multiple workshops. This had nothing to do with corruption or buying participation. It was about making participation possible by securing the participants' livelihoods during their absence from work (for example, they could hire a labour force replacement for a day using our financial compensation). Moreover, in countries of the global South, such financial expenses or compensations might encompass a much wider or more diverse range of expenses than in, for example, Switzerland. Besides cash, other types of compensation can include gasoline for a participant's motorbike, mobile data for online meetings, pen and paper, food, etc. For many participants, it was crucial that these financial expenses were covered by project funds. In the global North, prices are generally higher and the costs for co-creation might effectively be higher even if the range of expenses is narrower. In the end, it is important in all world regions that financial expenses are budgeted well in order to enable stakeholder engagement and inclusion (see also section 5.3.).

[17] For further reflections on stakeholder representation and inclusion in multi-stakeholder processes, we recommend consulting Lundsgaard-Hansen et al. 2022.

In general, *representation matters* for the outcome of the process. Whose wishes and opinions do we include in the participatory visioning and future planning? Is it better if the invited participants represent the whole – usually heterogeneous – community? Or is it enough to collaborate only with one specific group from within the village (e.g. young female landless farmers)? The kind of participants (including their experiences and opinions) greatly influences the course of discussions during workshops, the voting results, as well as the outputs and outcomes. It also matters whether the participants belong to a homogenous group or represent a heterogenous community. This not only impacts the outcomes of the process, but also the facilitation. Heterogenous workshop groups tend to have more disagreements and it is often necessary to plan enough time for discussions and negotiations. This is especially the case if participants hold opposing viewpoints and refuse to learn from each other. Against this background, it is important to facilitate a very conscious, careful, and well-reflected invitation process. Ideally, prior to extending invitations, organizers and local stakeholders or experts will conduct a stakeholder analysis and clarify the aim of participatory visioning and future planning.

Another challenge is how to handle power disparities constructively. It does not make much sense to exclude *powerful stakeholders* out of hand and develop visions, desirable futures, action plans, etc. that they will oppose. If this is done, these stakeholders can easily and effectively undermine the process and its outcomes after the fact. From our point of view, there are two options: In the first option, powerful stakeholders can be invited to participate in the process just as other stakeholders do, even if they might sometimes dominate, for example, the workshop discussions. In this case, the facilitator needs to ensure that equal participation can happen. If powerful stakeholders join and proactively support the process, it is even more likely that it will be successful. Conversely, if powerful stakeholders are excluded from the process against their wishes, they might effectively undermine it. In the second option, powerful stakeholders do not join the participatory visioning, but are informed regularly and given the chance to provide feedback or other inputs. Powerful stakeholders who are informed and develop a neutral or positive attitude towards what is occurring usually do not undermine the process (but they also might not actively support it). Of course, it is also possible to practice a mix of both options.

Finally, it is important that participants develop a sense of *ownership*. It is also of great added value if some participants take on a *leadership* role, even if only informally. The process of participatory visioning and future planning as well as implementation of the actions afterwards run more smoothly if ownership and leadership are present among the participants. This is especially relevant if the community is supposed to continue after the project has ended. In this case, we even recommend co-constructing *institutions and capacities*, structures and processes that will make a continuation possible.

Creativity is important

When exploring the different futures, we need to forget about the current system (at least for a short time). We want to be creative, find (completely) new ideas. One way how to support creativity is the creative dialogue approach (Beeby & Simpson, 2011): Think out loud, learn by talking, think together (not only individually), use creative art (drawing, mapping, theatre, etc.), use storytelling, identify and put aside assumptions and preconceptions, use motion (walk-shops, games), etc. In creative dialogues, there are no “stupid questions” or “stupid thoughts”.

What is (not) a dialogue? Dialogue may be explained using the words of a doctoral student in Beeby & Simpson (2011):

- Dialogue is the art of thinking together.
- The intention in dialogue is to reach new understanding and in doing so to form a new basis from which to think and act.
- We seek to find common goals that can help align our actions.
- Dialogue is a conversation with a centre — not sides.
- Dialogue attempts to bring about change at the source of our thoughts and feelings.
- Dialogue requires people to work with their uncertainties. It is not about defending one's certainties.

This is a collection of possible methods, which can be used in the workshops or other forms of knowledge co-creation, in order to support creative thinking and creative dialogue:

- (Focus) group discussion (better in small groups to enable active participation and inclusion)
- Developing a storyline/timeline, maybe even spatially explicit
- Individual reflection
- Drawings
- Casual loop visualization
- Post-Its and index cards (for capturing ideas)
- Mental models
- Quantitative models/data
- Ranking/rating
- Interviews and surveys
- Maps
- Collage
- Stock-flow diagram
- Social/actor network analysis, power mapping, actor mapping
- Wall-mounted timelines
- Fictional newspaper headlines
- Storytelling
- Story-completion
- Walk-shop or other motion exercise
- Games
- Theatre
- Role playing

To support creativity in group settings, it is useful to have innovative and creative persons among the project participants who dare to speak up. Such people think outside the box and can inspire the whole group. Unfortunately, these people can be rare. Or they can be hard to get involved in the process, as they are often engaged in various other activities. Of course, there are also creative and innovative people who do not feel comfortable sharing their thoughts in group settings. In this case, the facilitator needs to encourage (but not force) this person to speak up and create an atmosphere of confidence and trust among all participants.

Another way to foster creativity can be to show how other people in other places deal with similar situations and what kind of solutions they found. We used this method by screening three short movies about agriculture-related topics of concern (climate-smart agriculture, community forestry, multi-cropping; see section 3.3.) in an agenda point titled “other places, other dreams”. Thanks to these movies, we were able to initiate a rich discussion among the participants about what their villages need or do not need for the future. However, it is important to keep in mind that this method (in our example: showing three short movies) can greatly impact the outcome of the discussion – and thus the project itself.

Adaptive management: Being structured while staying flexible

The health and political crisis required that we remained very flexible in our planning. Travel and meeting restrictions – and later also safety concerns while travelling – constrained the stakeholder interactions. Additionally, the near collapse of the banking sector forced the revolving fund to pause.

Communication blackouts made interactions impossible. Decreasing confidence among participants to talk over phone (even though our topics were not political in nature) made even remote co-creation challenging, etc. Accordingly, we could not plan beyond one or two weeks or had to pause our project activities for weeks at some points.

The methodology itself also demanded a flexible approach. Co-creation implies that nothing is predefined. Accordingly, we continuously took up and reacted to the inputs from participants. For each step, we did not yet know what the results would be. We needed to stay open, dynamic, and flexible in everything we did.

At the same time, we needed to be systematic in our methodology in order to ensure good quality results. The five steps of the methodology made this possible by providing the necessary guidance (while allowing for flexibility). We stuck to the sequence of the steps, however, adapted the methods of co-creation according to the circumstances.

Overall, this methodological approach proved to be useful in our case, as it allowed for adaptive management while remaining structured.

5.3. Practical considerations for project planning

As described above, participatory visioning and future planning is a time-intensive, complex, but rewarding methodology. In the following section, we offer recommendations for project planning when incorporating this methodology.

Plan a lot of time. Co-creation tends to be time consuming:

a) Set-up: Setting up a group of participants takes time and requires trust building. You need to get familiar with the potential participants (e.g. host community, authorities) and they need to get familiar with you. Moreover, decisions about who can participate (and who cannot) need to be made carefully, ideally together with the future participants and the group of people they represent.
b) Co-creation process: Depending on the project, there will be a series of meetings over several days or months. Do not underestimate the time needed for discussions within a meeting. It is better to plan less content for each meeting. Translation can make everything take twice as long. Also plan for social time during or outside the meetings. This strengthens the group and improves the outcomes of co-creation.
c) Outputs: Preparing and implementing actions and other outputs (e.g. knowledge products) is another time-consuming activity.

We recommend planning lots of time, also to make sure that the budget, staff availabilities, and deadlines do not get too tight, and the quality does not suffer.

Competences within the research team. Co-creation for participatory visioning and future planning requires specific competences and skills among team members. These skills go beyond typical academic skills such as data collection and communication of results, etc. Stakeholder engagement requires profound social, communication, facilitation, and organizational skills. There are various ways of making sure that the right competences are represented in the team. The project can hire someone who takes care of the co-creation process. This might imply a division of labour (but close collaboration)

between the researcher(s) and the co-creation coordinator(s). Or the project can hire an impact-oriented researcher with strong social skills who can practice co-creation (probably with reduced publication pressure). In any case, there may be some need for trainings, coaching, supervision etc. to strengthen the required skills.

Focus on solutions and pathways. In our experience, participants are more motivated to engage actively if they anticipate finding a solution to a real-life problem as a result of the participatory process. Of course, understanding the problem (system knowledge) forms the basis for future action. However, co-creation should not stop there, but look for feasible solutions and/or pathways (target and transformation knowledge). Participatory visioning and future planning can support such endeavours.

Work with intermediate results and outputs. Intermediate results, actions, and other outputs motivate the participants not only to stick with the co-creation process, but also to co-steer the process and outputs, and to take ownership. Thus, we recommend that projects start early with co-creation of knowledge, implementation of actions, and creation of other outputs, instead of spending a lot of time with data collection only.

Expectation management and exit strategy. The scope and resources of a project are usually limited, in some projects more than in others. It is important to manage the expectations of the participants. We recommend communicating transparently, early, and repeatedly about what the project can do and – maybe even more important – what it cannot do. Furthermore, we recommend reflecting together with the stakeholders on how they can continue without the project once it is finished. This “exit strategy” can also be incorporated into the action plans.

Budget allocations. Participatory processes are time-intensive and, thus, costly (to cover salaries of project staff, longer project durations, etc.). Further, they can require additional financial expenses such as honoraria, travels, accommodation, food and drinks, maybe social activities, notebooks, and pens, etc. The preparation and implementation of actions and other outputs (trainings, seed money, study trips, rent, etc.) require further considerable financial allocations. All these additional expenses and allocations need to be considered already in the stage of project planning.

It is important to note that financial compensation is crucial in a global South country like Myanmar. Participants often cannot afford to miss work to attend workshops. Providing financial compensation for workshop attendance – for example to farmers or labourers – is not the same as corruption or buying participants. It is about making participation possible by securing participants’ livelihoods when they miss work – as well as making travel and mobile data use, etc. possible.

Social dimension. The purpose of participatory visioning and future planning is mostly to co-design and initiate a transformation. Transformations are per se related to the social dimension, regardless of the topic. Transformations need to be facilitated and supported by human beings. Transformations can also cause conflict and profoundly impact people’s lives, etc. Thus, we recommend including the social dimension from the very beginning, regardless of the topic with which the visioning and future planning process is concerned. For example, it is useful to plan social activities among the participants, strengthen their social and communication skills, foster their leadership and facilitation skills, create a sense of unity, etc.

Adaptive management. It is not possible – and also not useful – to plan the outcomes of co-creation projects. Participants might come up with completely different ideas, and all kinds of challenges can

arise (e.g. natural hazards, changing market prices, rotating authorities, pandemic, social unrest), which require reorientation or delay of the project. Therefore, it is very useful to employ an adaptive management approach in the project and to manage the budget flexibly. This leaves space for uncertainties and on-the-fly adaptations. It also enables the coordinators to monitor the project more flexibly.

Choosing the donor strategically or negotiating with it. Many donors like a clear plan of the project timeline and outcomes (LogFrames) and request fixed, non-adaptive budgets. True co-creation, however – in which participants voice their expectations and shape the project process – implies uncertainties about the project's final direction and how costs are allocated. Choosing a donor who allows for adaptive planning and project management (including flexible budgets) is one way out of this dilemma. Or it might also make sense to negotiate space for adaptive management with the donor during project inception.

Joint proposal development. Regardless of whether the donor approves adaptive management, the project proposal should be co-developed with prospective participants and partners, to outline clear project plans and outputs that are based on co-design and needs. However, co-design at the acquisition stage requires funds prior to submission of the project proposal.

Fair, contextually aware, and conflict-sensitive projects. Participatory visioning and future planning is an inclusive process. The representation of stakeholders in this process needs to be defined carefully. Project partners should collaborate on fair terms and be respectful towards the participants and other stakeholders. Participatory visioning and future planning must be considerate of the local culture and context, including awareness of and respect for local codes of conduct, taboos, traditions, and other cultural or social norms. Further, it must be aware of and sensitive towards power structures and imbalances. Moreover, participatory visioning and future planning must be sensitive towards existing and potential conflicts of interest, armed and non-armed conflicts, and any other forms of safety risks. Participatory visioning and future planning can only be fruitful when projects adopt a fair, contextually aware, and conflict-sensitive approach.

Picture 19: Long as well as short social activities increase the group cohesion. Here, we played *screaming the name* when the curtain falls. (Thein Phyo)

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