

IDENTIFYING AN OPTIMAL ECOSYSTEM MODEL OF REFUGEE-RELATED BUSINESSES VIA AN ONLINE SYSTEMS-BASED EVOLUTIONARY LEARNING LABORATORY: A CASE IN UGANDA

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ABSTRACT

The number of refugees in the world peaked at 26.3 million as of mid-2020. More than 75 percent of these refugees are in a protracted situation, one in which refugees find themselves in a long-lasting and intractable state of limbo. However, the budget for refugee protection and care has not been sufficient for years. Due to the limited humanitarian and developmental budget, the role of refugee-related businesses is gaining more attention. The aim of this study is to show the feasibility of the partially online systems-based Evolutionary Learning Laboratory (ELLab) approach in the COVID-19 era via a case study of Uganda and to identify the current systems model of refugee-related businesses, their leverage points, and the action plans necessary for the development of an optimal systems model for refugee-related businesses. The authors suggested the efficacy of the online system-based ELLab and provided new ways for the application of the ELLab method in the COVID-19 era. They also managed to identify the current systems model of refugee-related businesses, their leverage points, and their action plans through the ELLab process.

Keywords: systems thinking, Evolutionary Learning Laboratory (ELLab), online, refugees, business, Uganda

INTRODUCTION

The budget for care and protection of refugees has been increasingly insufficient for years, despite the increasing number of refugees and the majority being in a protracted situation. The number of refugees around the world escalated to 26.3 million as of mid-2020. Over 75% of these refugees are in a protracted situation, where refugees find themselves in a long-lasting and intractable state of limbo (UNHCR, 2020). On the other hand, the international community has underfunded refugee protection and care. It has agreed to the need for further cooperation to protect refugees and to support refugee-hosting

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countries, which has led to the development and introduction of the Comprehensive Refugee Response Framework. Unfortunately, these measures have not proven effective against the increasing number of refugees. Therefore, attention to the refugees being potential economic actors, their engagement in the private sector, and the role and sustainability of refugee-related businesses has grown. While there is an increase in the number of refugee-related businesses around the world, the current system model and their success factors have yet to be fully revealed.

The Systems-Thinking Evolutionary Learning Laboratory (ELLab) is a well-designed and fully proven approach for dealing with complex multi-dimensional and multi-stakeholder problems (Bosch et al., 2013) such as refugee-related businesses. Systems thinking provides a tool for understanding the complexity and the dynamic causes-and-effects in business, economic, natural, and social systems (Maani & Cavana, 2007). Systems-based ELLab is a seven-step iterative process of joint thinking and acting in which the participants engage in well-defined activities and thus learn together in an “experimental lab” environment about how to best deal with the complex multi-dimensional and multi-stakeholder problems faced by them (Bosch et al., 2013). To understand the complex systems model of refugee-related businesses and to reveal their success factors, the ELLab approach should be considered most relevant. Therefore, the partially online ELLab approach is introduced in this study.

Throughout the seven steps, participation of all stakeholders and group thinking/acting are the key towards the establishment of a joint laboratory and “ownership” of the developed systems model. However, due to the COVID-19 situation, the processes cannot be implemented jointly with face-to-face interactions. Hence, there is a need to confirm the viability of an online implementation of the ELLab approach.

Our study aims to 1) demonstrate the feasibility of a partially online systems-based ELLab approach during the COVID-19 era through a case study in Uganda, and 2) identify the current systems model of refugee-related businesses, their leverage points, and their action plans that are necessary for the development of an optimal systems model.

LITERATURE REVIEW

The authors designed this study based on the current context of systems approach in development studies, particularly with the view of the complexity of the issues of the refugees-related business and the significance of systems thinking to address those issues.

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In the following sections, we describe how previous studies have contributed to constructing our research approach.

1) Refugees-related business

Several studies have depicted refugees not only as humanitarian challenges but also as development opportunities (Betts et al., 2014, Betts & Collier, 2015). The paper “Refugee Economies -Rethinking Popular Assumptions-” attracted a lot of attention for the way it challenged popular myths about the economic lives of refugees, for instance, the myth that they are a burden for host communities. Betts et al. (2017) also highlighted several cases to show that the economic activities of refugees are also beneficial to their host communities and/or local residents in addition to themselves.

The World Bank Group has also published a paper titled “Kakuma as a Marketplace” in 2018 with the aim of better understanding Kakuma, one of the largest and longest-standing refugee camps in the world, as a potential market as well as identifying business opportunities and challenges for the private sector. It also developed a fund named “the Africa Enterprise Challenge Fund” to support investment, development, and job creation in Kenya’s Kakuma Refugee hosting area (IFC, 2020). These are all attempts to regard refugees not only as burdens but also as economic assets for society.

Refugee-related businesses exist over the world, but their enabling factors have not yet been fully identified due to their complex nature. In this paper, refugee-related businesses are defined as the ones owned by them and managed by them, refugee-hiring businesses, and businesses that provide services and products to refugees and host communities. Refugee-related businesses have many stakeholders, including but not limited to their host governments, host communities, the private sector, humanitarian organizations, development partners, and the refugees themselves. Each stakeholder has his own vested interests and motivations, which makes it difficult to capture a complete picture of the refugee-related business ecosystem. Compounding the complexities of these various issues is the fact that this ecosystem is also subjected to the laws and regulations, the history, and the culture of host countries. For the reasons above, the factors behind the success and failure of refugee-related businesses remain unclear.

In the report titled “Private Sector & Refugees—Pathways to Scale” (IFC, 2019), stakeholders have consistently identified three factors as critical enablers of impact and scale for private sector engagement with refugees: 1) flexible financing, 2) cross-sector

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partnerships and 3) investment information. This IFC report covered the regions across Africa and the Middle East, but it did not dig into the country context even though business and investment environment vary depending on countries based on “Doing Business” (2019). In addition, this IFC report deals with refugee-related business only from the perspective of the private sector.

2) Systems Thinking

Systems thinking and system dynamics originated in the 1950s and the 1960s and have been applied in various fields. Systems thinking is a scientific field of knowledge that aims to understand change and complexity through the study of dynamic cause-and-effect over time (Maani & Cavana, 2007). Its successful application in various fields has been reported, varying from natural resource management to business development. In the 1990s, its application shifted from single disciplinary projects to multidisciplinary and interdisciplinary research and approaches that allow for the recognized complexity and uncertainty within systems (Bosch et al., 2007).

The “four levels of thinking” framework (Figure 1) proposed by Maani and Cavana is frequently utilized in a systemic approach to analyze complex systems. Figure 1 uses the analogy of an iceberg, where the event level of thinking is only the tip. This level is often the extent of our thinking that is the most visible and often requires immediate attention. Hidden from the surface are the trends and patterns of events and data (the second level of Figure 1), which relate to and affect one another via systemic structures (the third level of Figure 1). These represent a much deeper level of thinking and show how the interplay of different factors brings about the outcomes that we observe on the surface level. These factors could be economic, social, political, or structural. The deeper level of thinking that hardly ever comes to the surface is the “mental model” of individuals and organizations (the fourth level of Figure 1), which influences why things work the way they do (Maani & Cavana, 2007). The concept and framework of ELLab were developed by embedding these four levels of thinking.

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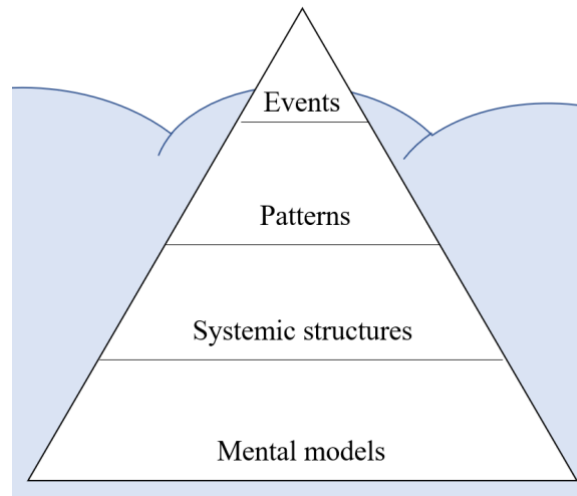
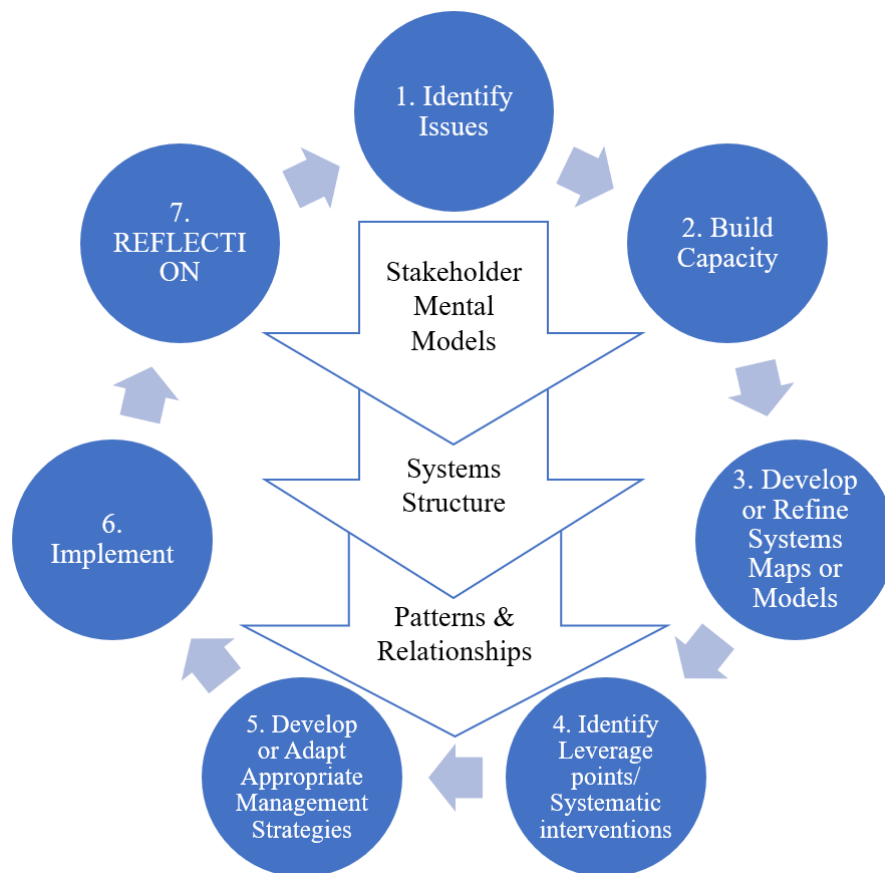


Figure 1. Four levels of thinking (Adapted from Maani and Cavana, 2007)

The ELLab is a seven-step iterative process of joint thinking and acting (Figure 2) in which the participants engage in well-defined activities and learn together in an “experimental lab” environment about the best way to deal with the complex multi-dimensional and multi-stakeholder problems faced by them (Bosch et al., 2013). As Bosch et al. mentioned, the ELLab approach can be used to deal with any complex issue, regardless of its context or discipline area under consideration, and it was successfully applied in the fields of Biosphere Reserve (Nguyen & Bosch, 2013), agriculture sustainability (Banson et al., 2016), small-scale agriculture development (Tuan et al., 2016), and new business development (Kiura et al., 2014), etc. However, this study is the first to apply the system thinking-based ELLab approach to the analysis of refugee-related business. As mentioned earlier, the increasing number of refugees and a lack of funding for their protection and care have become a critical international issue. Hence, this study attempts to provide a new approach to it.

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**Figure 2. Evolutionary Learning Laboratory for managing complex issues
(Adapted from Bosch et al., 2013)**

METHODOLOGY

In this study, the ELLab approach was used. The ELLab approach has seven steps (Figure 2). According to Bosch et al. (2013), the participation of all stakeholders and group thinking/acting throughout the seven steps are the key towards the establishment of a joint laboratory and “ownership” of the developed systems model. In this study, similar to the case of Kiura (2014), agents of key stakeholders were invited to participate in steps 1 to 5 online due to the COVID-19 situation.

The original seven steps proposed by Bosch et al. (2013) and the parts revised for this study are explained in the following sections.

Build Capacity (Step 2 of Figure 2)

Original

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- Capacity-building sessions during which the participants learn how to integrate the various mental models into a systems structure usually come after the “Identify Issues” step.

Revised

- Under the revised methodology, the “Build Capacity” step comes first as it would be better for participants/agents to understand the methodology at the beginning of the ELLab process.
- Related works have shown that this part is usually done via face-to-face lectures, workshops, and/or training (Bosch et al., 2013, Nguyen & Bosch, 2013), but this part was implemented online under the revised methodology.

Identify Issues (Step 1 of Figure 2)

Original

- Bosch et al. explained that issues are usually identified at the “fourth level of thinking” with an issue workshop and a series of forums with specialist groups to gather the mental models of all stakeholders involved in the issue under consideration, their perceptions of how the system works, what they regard as barriers to success and drivers of the system, and possible strategies/solutions to overcome these problems.

Revised

- In this study, the “Build Capacity” step came first before this step was taken. This part was also implemented online.

Develop or Refine Systems Maps or Models (Step 3 of Figure 2)

Original

- This step includes the implementation of the “third level of thinking” and is implemented through integration of the various mental models into a systems structure.

Revised

- In this research, the “Refine Systems Maps or Models” step was jointly conducted online.

Identify Leverage points/ Systemic Interventions (Step 4 of Figure 2)

Original

- The participants move to the “second level of thinking” by interpreting and exploring the model for patterns, how different components of the model are

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interconnected, how the feedback loops, reinforcing loops, and balancing loops, lead to the identification of leverage points for systemic intervention, and how the outcomes are used to develop a refined systems model. Leverage points are defined as points where actions and changes in structures can lead to significant, enduring improvements (Senge, 1990).

Revised

- In this study, this step was also implemented online.

Develop or Adapt Appropriate Management Strategies (Step 5 of Figure 2)

Original

- The outcome of Step 4 forms systemically defined management strategies.

Revised

- This step also was implemented online.

Implement and Reflect (Steps 6 & 7 of Figure 2)

Original

- This step for the people in different areas of management is to implement the strategies and/or policies that will have the greatest impact. Since there are no completely “correct” system models in a complex and uncertain world, and unintended consequences always occur, the only way to manage complexity is by reflecting on their outcomes at regular intervals.

Revised

- None. Steps 6 & 7 are out of this study’s scope. These two steps will be examined further in a future research project by design.

APPLICATION TO AN ACTUAL CASE

The authors chose to apply the systems-based ELLab approach to the case of refugee-related businesses in Uganda since Uganda has accepted more than 1.4 million refugees from surrounding countries such as South Sudan, DRC Congo, Somalia, Burundi, Rwanda, etc. (UNHCR, 2021) and they are facing complex social issues which desperately require intervention. Compared to other refugee-hosting countries, the government of Uganda has relatively generous policies toward refugees, as it provides them with freedom of movement and work. However, despite the refugee-friendly laws and regulations in Uganda, cases of refugee-related businesses and investments in this country are still limited (IFC, 2019). The systems thinking-based ELLab approach was introduced as an optimal way to analyze complex social issues and identify possible

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solutions for refugee-related businesses. Each step of the procedure is described in the following sections.

Procedures

Build Capacity

In this study, eight agents of key stakeholders, including the host country government (the government of Uganda), refugees, development partners, etc. participated in an online workshop (via Zoom) in June 2021 and were the first to receive training on the basic knowledge of systems thinking, and learn how to draw the Casual Loop Diagrams (CLD).

Identify Issues

To identify the major interests of key stakeholders revolving around refugee-related business, workshop participants/agents went through the following activities by utilizing an online whiteboard platform (Miro).

- Identify key stakeholders of refugee-related businesses (Activity 1),
- Identify the roles of each key stakeholder (Activity 2),
- Identify as many major interests, concerns, drivers of actions, and mental models per key stakeholder as possible (Activity 3), and
- Group the ideas identified through Activity 3 and label each group using an affinity diagram.

Develop or Refine Systems Maps or Models

Agents jointly developed a CLD to capture the current system model of a refugee-related businesses and to understand the interactions between its components and factors. Participants and agents considered the cause-and-effect relations between grouped ideas identified in the previous step and wrote them down, based on what they learned from the “Building Capacity” lecture.

Identify Leverage points/ Systemic Interventions

After identifying the reinforcing and balancing loops in the developed CLD, leverage points and potential systemic intervention points were identified after discussion among the agents.

Develop or Adapt Appropriate Management Strategies

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The leverage areas form the basis of integrated action plans that will become elements of the optimal ecosystem model of refugee-related businesses.

Implement and Reflect (Steps 6 & 7)

Some parts of the action plans identified in the previous step are to be implemented on the ground, but that is out of this study's scope.

RESULTS AND DISCUSSIONS

Results

Results of the online ELLab process

Through the above-mentioned procedures, certain ELLab steps, i.e., steps 1 through 5, were implemented online by utilizing digital tools such as online video conferencing service and whiteboarding platforms as shown in Figure 3.

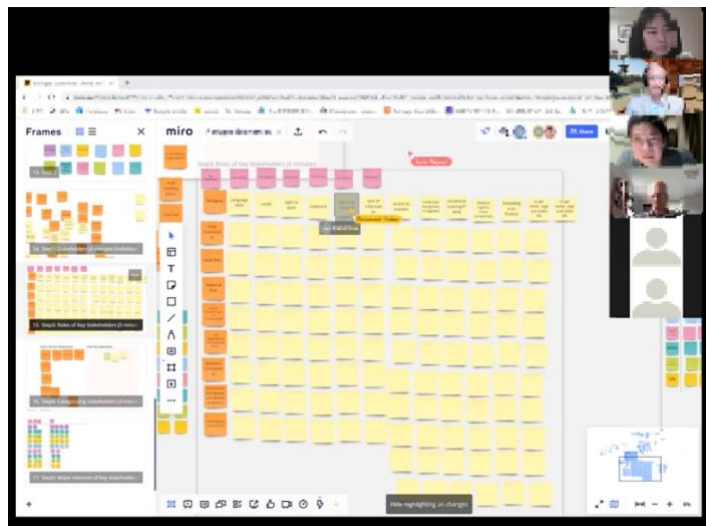


Figure 3. An image of the workshop

Outcomes of the ELLab

Through the step “Identify Issues,” major interests, concerns, and mental models of each key stakeholder were identified, as shown in Figure 4.

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Figure 4. A part of the result of Step 1

Through the “Develop or Refine Systems Maps or Models” step, the CLD was developed, as shown in Figure 5. The CLD consists of six reinforcing loops (from R_1 to R_6) that are positive feedback systems, which represent growing or declining actions and two balancing loops (B_1 and B_2), which seek stability or regain control within the system. Loops R_1, R_3, R_4, and R_5 represent growing actions that have negative impacts on enhancing refugee-related business activities, such as the loop that increases the tension between refugees and host communities (R_1), the loop that enhances the negative images of refugees (R_3), and the loop that creates distrust among stakeholders (R_5). Through the development of the CLD, the system structure that affects the activities of refugee-related businesses is revealed in a systemic manner.

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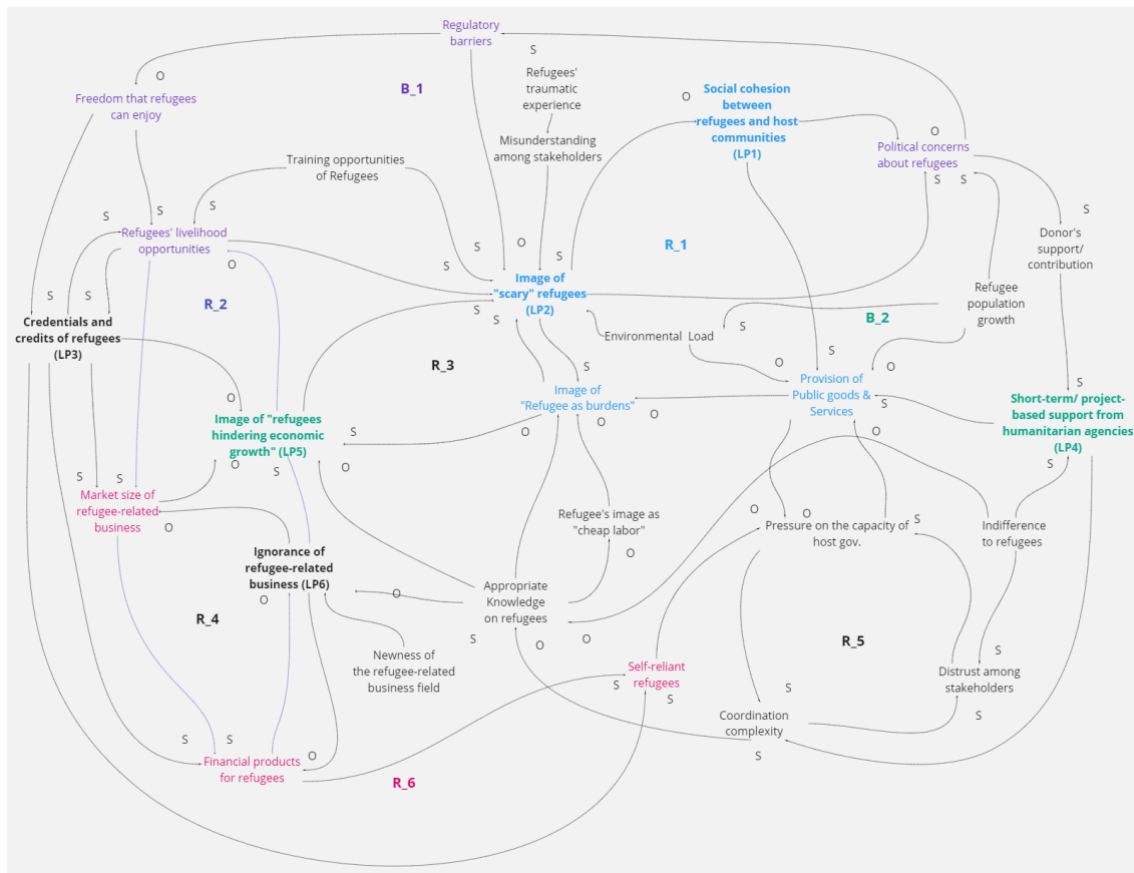


Figure 5. The current systems model of refugee-related business in Uganda

Through the Step “Identify Leverage points/ Systemic Interventions,” leverage/ systemic intervention points were revealed as shown **in bold** in Figure 5. The expected implementors of each leverage point vary, but the overall picture of the system and systemic intervention points were identified as below:

- Social cohesion between refugees and host communities (LP1)
- Image of “scary” refugees (LP2)
- Credentials and credit of refugees (LP3)
- Short-term/project-based support from humanitarian agencies (LP4)
- Image of “refugees hindering economic growth” (LP5)
- Ignorance of refugee-related business (LP6)

Through the step of “Develop or Adapt Appropriate Management Strategies,” the following action plans corresponding to each leverage point were identified by the agents.

- To ease distrust and maintain security in refugee-hosting areas by the local government (for LP1)

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- To change the narrative on refugees (for LP2/ LP5)
- To establish a platform that provides credit for refugees (for LP3)
- To establish a recognition system for the degrees/credentials of refugees (for LP3)
- To develop an information-sharing network among stakeholders (for LP4)
- To involve intermediary organizations for better coordination and easing distrust (for LP4)
- To share success cases of refugee-related business among stakeholders, including investors, enterprises, and government entities (for LP6)

Discussions

Discussions for the ELLab process

Through the above-mentioned procedures, we have shown that certain ELLab steps can indeed be implemented online. Even though actual implementation (Step 6) must be done on-site, but this study suggested that steps 1 through 5 can be implemented online by utilizing digital tools such as online video conferencing service and whiteboarding platforms, and by participation of key stakeholder agents.

In addition, for the successful online ELLab process, it is critical to involve a facilitator who has rich experience in the original ELLab approach and can support participants proceed through each step by engaging participants appropriately. Under this research, apart from a moderator, a facilitator who is familiar with systems thinking and the ELLab joined the workshops and supported participants when necessary. Via online, it becomes difficult to check the level of engagement of each participant due to less visibility of facial and body expressions which would be more visible off-line. Online process also makes it difficult for participants to ask clarification questions to other participants which can be easily done if off-line. Therefore, the participation of facilitators who can support each participant, while observing the overall progress of workshops, becomes key to successful implementation of the online ELLab process.

Furthermore, for the online ELLab, it is necessary to devise a way to make full use of collective knowledge of participants who are not familiar with online tools. Even though online tools become more widely accepted in the COVID-19 era, participants' proficiency level varies. For this study, a person who is familiar with those online tools joined the process as a technical support member and wrote ideas down in Miro on behalf of participants who did not master how to use it. Through this process, the importance to

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prepare the environment, where participants can focus on the activities of each step without facing any technical difficulties, was shown.

Discussions for the outcomes of the ELLab

This study showed that the ELLab approach can identify key stakeholders of refugee-related businesses and their main interests. In addition, the approach also proved to be effective to identify the overall system of refugee-related business, its systemic intervention points, and action plans which would be components and factors of an optimal ecosystem model of refugee-related businesses. However, its subsequent development will fall under the scope of a future study. The following comments from a workshop participant also supports the effectiveness of this approach.

“Through the workshop, typical patterns of actions and thoughts of each stakeholder were revealed and we could realize our own bias. The process to develop the causal loop diagram helped visualize our own bias. Its visualization makes it possible for us to eliminate our bias and think about an optimal ecosystem model of refugee-related businesses.”

Through this process, participation of experienced professionals with diverse related-field backgrounds contributed to reaching the above-mentioned outcomes. Under this study, agents of key stakeholders were carefully selected to uncover mental models of key stakeholders and incorporate their diverse perspectives into one systems model. Agents were from organizations/institutions such as governments, non-government organizations, humanitarian organizations, and development organizations. Majority of agents have over 10 years of experiences in each field, which enabled them to construct a comprehensive systems model. The introduction of agents under the ELLab process becomes feasible only when securing the participation of people with sufficient experience and knowledge in the related fields.

Many leverage points and action plans were derived from the proposed ELLab process. The IFC report (2019) introduced three factors as critical enablers for further private sector engagement with refugees and only addressed the issue of “investment vehicles,” which is just one of the components of the systems model. If we observe the CLD developed in the ELLab process, it is obvious that there are several intervention points to be addressed other than “investment vehicles.” Even though no systems model can ever be completely “correct” in a complex and uncertain world (Bosch et al., 2013), it supports

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us to “see wholes” (Senge, 1990). Especially with refugee-related issues, a fragmented approach where each stakeholder lacks the “whole view” has led to unsolved issues. Therefore, seeing the whole of a system and considering systemic intervention points are critical for refugee-related issues including refugee-related business. The ELLab approach gives way to see the refugee-related business system as a whole and to identify interrelations between components and factors of its system, which could advance a more holistic solution to the issues.

CONCLUSION

This paper shows the feasibility and efficacy of a partially online systems-based ELLab approach through a case study of Uganda. This paper also successfully identified the current systems model of refugee-related businesses in Uganda, their key leverage points and action plans necessary for the development of an optimal systems model of refugee-related business. To increase the number of refugee-related businesses, further research needs to be conducted on the development of an optimal ecosystem model for refugee-related businesses as this paper only identified some components and factors of the optimal ecosystem model of refugee-related businesses. The identified action plans should also be implemented and studied in future studies.

ACKNOWLEDGEMENTS

The authors would like to express their gratitude to the Refugee-Lens Investment Network (RIN) for their advice on this study and the team of Knowledge Management Network of Private Sector Development, Department of Economic Development, Japan International Cooperation Agency (JICA), and other JICA experts for their cooperation and valuable comments during the course of this research. This work was also supported by the “Sumitomo Life Child Raising Project.”

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