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CAMBODIA-LIBROS: LEARNING TO IMPROVE BOOK RESOURCE OPERATIONAL SYSTEM

EVIDENCE ECOSYSTEM DIAGNOSTICS FINAL REPORT

22 JULY 2022

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Learning to Improve Book Resource Operational System in Cambodia: Evidence Ecosystem Diagnostics Final Report

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The authors' views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

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ACRONYMS

USAID	U.S. Agency for International Development
SHARE	Supporting Holistic & Actionable Research in Education
UND	University of Notre Dame
CDRI	Cambodia Development Resource Institute
LMICs	Low-and Middle-Income Countries

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SUMMARY OF FINDINGS

This Systems Thinking workshop involved the implementation of eight main activities: issue prioritization, issue mapping systemigram, strategy prioritization, evidence prioritization, stakeholder and idealized evidence network mapping, evidence ecosystem relationship analysis, mapping critical success factors, and research contextualization.

A common understanding of what “evidence” for the Cambodian primary level book supply chain means is not in place. Regardless of various barriers, there is an emergence of diverse but scattered actors and mechanisms facilitating evidence generation and use, but there remains a scarcity for the evidence translation. Accessible and user-friendly knowledge of the ideal evidence ecosystem for the supply chain and its essence is vague and puzzling. Obtainment of interest and buy-in from actors to build and maintain the relationship is a promising bedrock and steppingstone.

Formulation and implementation of different mechanisms (of relevant, feasible, and within regular intervals) and investment (time, human and financial resources) to raise awareness and bring about discussion and collaboration between actors are significant for the better development and progress of the Cambodian primary level book supply chain evidence ecosystem.



INTRODUCTION

SHARE is a cooperative agreement between USAID and the University of Notre Dame (UND) that aims to advance global education learning priorities to improve learning outcomes. UND is implementing the SHARE Activity in partnership with local higher education and research institutions between 2020-2025. Through SHARE, and together with its partners, UND will advance USAID Learning Priorities in the global education sector as a global good to improve education and learning outcomes.

SHARE grounds its strategy in the belief that high-quality data and evidence are the cornerstones for evidence-based decision-making. The capacity of and incentives for actors in partner countries to gather and translate high-quality data and evidence into policy and practice in line with USAID's learning priorities varies highly across the contexts where USAID operates. This ability to produce data and evidence that are accessible to decision-makers and practically useful in making informed choices is essential for achieving countries' self-reliance in education. It is in this space where SHARE provides access to exceptional evaluation, research design, and research expertise to support USAID programs around the world.

PURPOSE OF THE ECOSYSTEM DIAGNOSTICS PROCESS

As part of the strategy for producing timely, actionable, and targeted research, SHARE kicks start each project with an Ecosystem Diagnostics Process which has three main objectives:

1. To create a shared understanding and enhanced knowledge of the key issues, root causes, effects and influencing factors across the Cambodian primary level book supply chain
2. To contextualize, inform and co-create research design using the enhanced knowledge of the Cambodian primary level book supply chain's key issues
3. To increase awareness, linkages, and functionality across the participating evidence ecosystem stakeholders.

SHARE uses the following terms to help explain the movement of evidence generation, translation, and usage in the domain specific system:

Domain Specific System (DSS) is a subsystem within a given education system that pertains to a particular aspect or issue of interest within that country's education system. For this study, the DSS would be the primary level book supply chain in Cambodia.

Evidence refers to empirical information or data based on scientific studies. The sources of this information or data are research findings published in peer-reviewed journals, reports, theses and dissertations, white papers, dissemination materials prepared using the above sources, such as infographics, and presentations in scientific conferences. This includes the original analysis of secondary or administrative data and primary research conducted using validated and qualified research methods, applying systematic observation to establish facts and reach conclusions.

Evidence Ecosystem refers to the community of interacting people and resources that contribute to the generation, translation, and use of evidence within a given domain specific system. There are three important actors in the evidence ecosystem:

- **Evidence generators** are those who produce and analyze data and evidence. The task of evidence generators is sometimes referred to as “scientific research” and its objectives is to accurately describe a phenomenon, to provide explanations, and to find what works to address social problems.
- **Evidence translators** are those who convert existing data and evidence into relevant and accessible information that can be understood by different actors. In other words, they are the actors that compile, systematize, and summarize research findings and evidence, and communicate them in a language that is understandable to non-researchers.
- **Evidence users** are those who use evidence and research to make decisions. These decisions could include programmatic, policy, and practice-oriented ones.

Figure 1. Actors in the Evidence Ecosystem



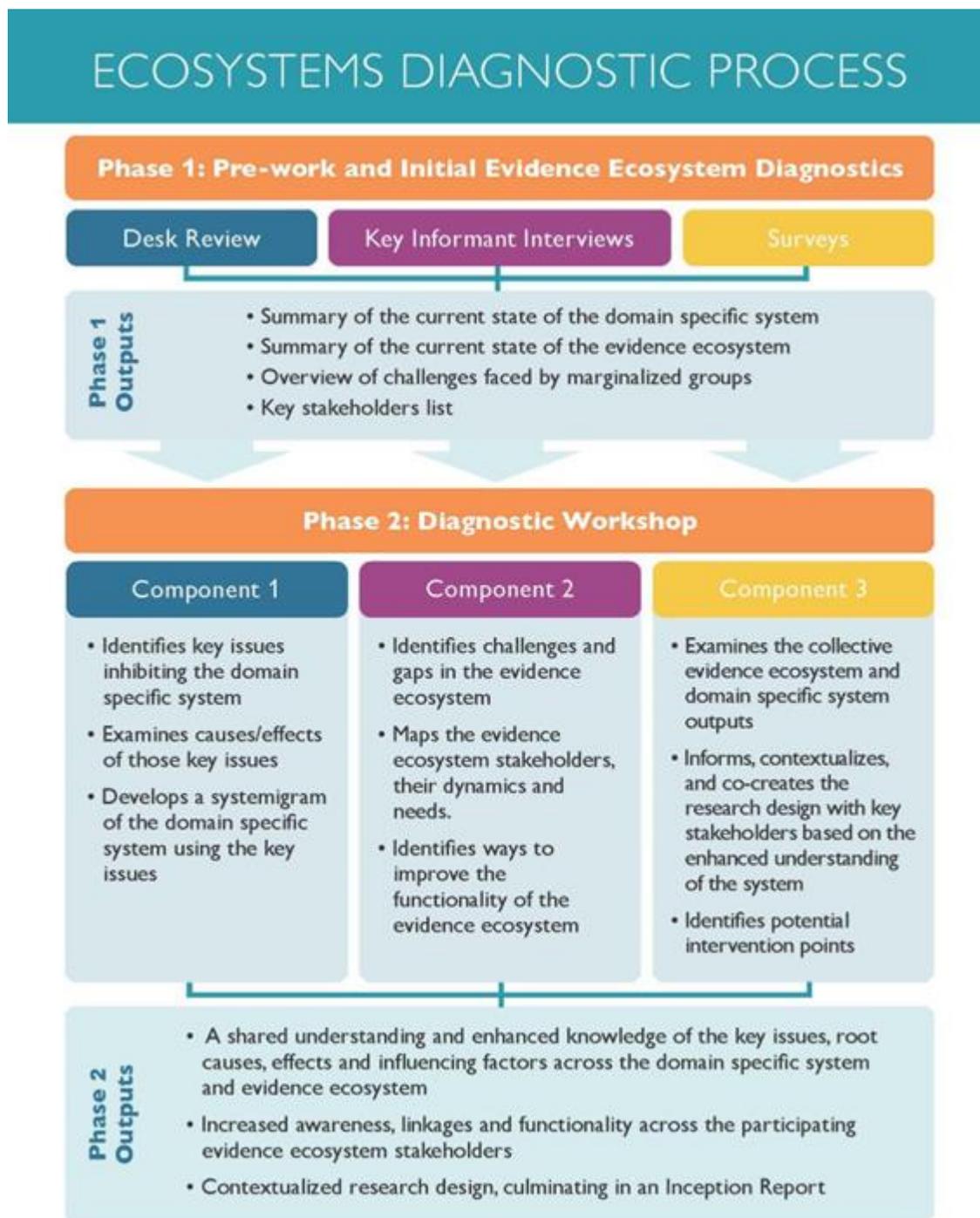
The distinction between evidence generators, translators, and users is based on the relationship that actors have with evidence, but one actor can take more than one role at a time. For example, some can be evidence generators because they do research and publish academic journals, but they may also be evidence translators because they produce infographics and participate in interviews to reach a wider audience. An evidence ecosystem might have actors who could or should fill these roles but are not actively engaged in them now. This diagnostic process wants to examine the current connections and interactions among the evidence ecosystem actors within the Cambodian primary level book supply chain.

STRUCTURE OF THE ECOSYSTEM DIAGNOSTICS PROCESS

To achieve its objectives, the Ecosystem Diagnostics Process pursues a stakeholder-centered design. The culminating workshop is structured so that the first inputs into the workshop process stem from

information gathered from stakeholders and key documents about the Cambodian primary level book supply chain through a preliminary scoping strategy. This strategy, which focuses on locating key issues in the system, parallels the overall research objectives of the full study so that the workshop can be well-positioned to probe further into research interests relevant to the Cambodian primary level book supply chain. There are two phases embedded in the ecosystem diagnostics process.

Figure 2. Ecosystem Diagnostics Process



Phase 1 involved desk review, key informant interviews (KIIs), and surveys, syntheses of which were generated into three main outputs: stakeholder list, context analysis brief, and evidence ecosystem diagnostics brief. The two briefs gave an overview of the pressing issues in the Cambodia primary level book supply chain and of the current state of the evidence ecosystem. The final stakeholder list was used as a basis to invite participants to the Diagnostics/Systems Thinking Workshop in Phase 2. The two briefs became key inputs to triggering discussions in different sections of the workshop, including issue prioritization, evidence prioritization, and research design contextualization.

Armed with the insights and foundational system knowledge developed in Phase 1, the Systems Thinking Workshop of **Phase 2** entered an in-depth examination of the Cambodian primary level book supply chain and evidence ecosystem by bringing together local stakeholders most knowledgeable about the system to review the research evidence generated in the Phase 1 and provide more inputs into the evidence. Specifically, Phase 2 built on the findings in Phase 1 through targeted activities with a core group of key stakeholders over a two-day Systems Thinking Workshop. The workshop expanded the analysis from Phase 1 by discussing both the Cambodian primary level book supply chain and the evidence ecosystem. This process of envisioning allowed the participants to identify gaps and key issues that are keeping the current system from reaching its ideal functionality. More details of the components in the two-day workshop are specified in Figure 2. The diagnostics workshop was also designed to provide direct benefits to the participants. During the workshop, participants learn who the other stakeholders in the system are (or who they should be), interact and connect with these key stakeholders, and increase the functionality of the evidence ecosystem through this interaction. They left the workshop better integrated into the evidence ecosystem and the larger Cambodian primary level book supply chain and had deeper insights that allowed them to contribute more meaningfully into the future.

RESEARCH THEMES

Learning to Improve Book Resource Operational Systems (LIBROS) study aims to identify policy and practice pathways to strengthening the primary school level book supply chains in Cambodia, Honduras, and Rwanda. Specific research questions are:

- **RQ1:** What are the characteristics and perceived impacts of a specific strategy designed to improve the book supply chain?
- **RQ2:** How and under what conditions was the improvement strategy developed and implemented?
- **RQ3:** What challenges were observed and addressed during the process? What additional supports are required for the success of the book chain improvement strategy?

To address these research questions, a qualitative case study design will be implemented. The case study design allows an in-depth account and analysis of one or more cases in real-life contexts (Creswell, 2013; Crowe et al., 2011; Johnson & Christensen, 2010). In this study, a case is defined as development and implementation of an improvement strategy in the primary school-level book supply chain system over the past five to ten years. Data will be collected through a combination of in-person and virtual interviews, email discussions, policy documents, workshops with key stakeholders, and other sources. Hence, this Phase 2-Diagnostics/Systems thinking workshop entailed both verifying the initial information gathered and then analyzing it in more detail with stakeholders. Among the analyses that were conducted were issue prioritization, network and relationship mapping and analysis, and mapping critical success factors.

PHASE I- INITIAL CONTEXT DIAGNOSIS

OVERVIEW OF THE PHASE I APPROACH

**Desk
Review** | **Papers
17**

Initial search related to the study topic yielded 378 results from scholarly literature and 11 from grey literature. Only 17 articles fit the selection criteria.

The majority of the articles selected were program reports from development partners, peer-reviewed

journals and national policy document. Analysis method: Systematic analysis

**Key Informant
Interviews** | **Interviews
18**

Eighteen KIIs were conducted with 24 key informants, 4 of whom are female. Key informants for each KII were chosen by their own institution based on the extension and relevancy of their works to the current study.

Profile of the key informants ranges from government officials working at different stages of the primary level book supply chain to related NGOs and private entities, generally working on primary level books, or specifically focusing on the marginalized groups.

Analysis method: Thematic analysis via NVivo

**Online
Surveys** | **Responses
19**

Forty-one surveys were virtually distributed to both the KII's informants and other individuals whose works are related to the study or they were being recommended by the KII informant(s).

22 submitted responses, but only 19 were usable and the rest need to be discarded due to substantial incomplete information. Out of the 19 respondents, two are female.

Analysis method: Descriptive statistics

Information from these three data sources was then triangulated to generate the overall state of the Cambodian primary level book supply chain and its evidence ecosystem, as well as to diagnose the key priority issues and causes that hinder developments in the current system. Recent policy changes or programmatic reforms and key actors related to the system were also identified.

FINDINGS ON THE STATE OF THE CAMBODIAN PRIMARY LEVEL BOOK SUPPLY CHAIN

Forecasting and Planning

- Required data for forecasting textbook demand: Enrollment and projected enrollment, Estimate of damaged and lost books...
- PDH collects data of textbook demand from schools and report them to the Office of Planning and Textbook Distribution of DCD.
- DCD prepares budget proposal to MEF.
- DCD revises budget according to the approved budget.
- A textbook-to-student ratio of 1 set: 1 student for Primary level

Title Development

- 3 textbook titles each for grade 1-3, and 5 each for grade 4-6; 24 textbook titles in total for primary level
- All core textbooks are currently written by PDH. Writers work on a freelance contract basis.
- All textbooks must follow the curriculum framework and subject syllabi.
- Supplementary reading materials are largely developed by NGOs/Development partners.

Active Use

- Schools loan textbooks to students, who need to return at the end of the school year.
- Lack of reading culture and understanding of book values
- In 2021-22, only about 19.5% of public primary schools have a standard library (1,427 out of 7,306).
- Increase in number of book fairs, mobile and online libraries
- Surge of digital and online learning Apps and materials.

Distribution Management

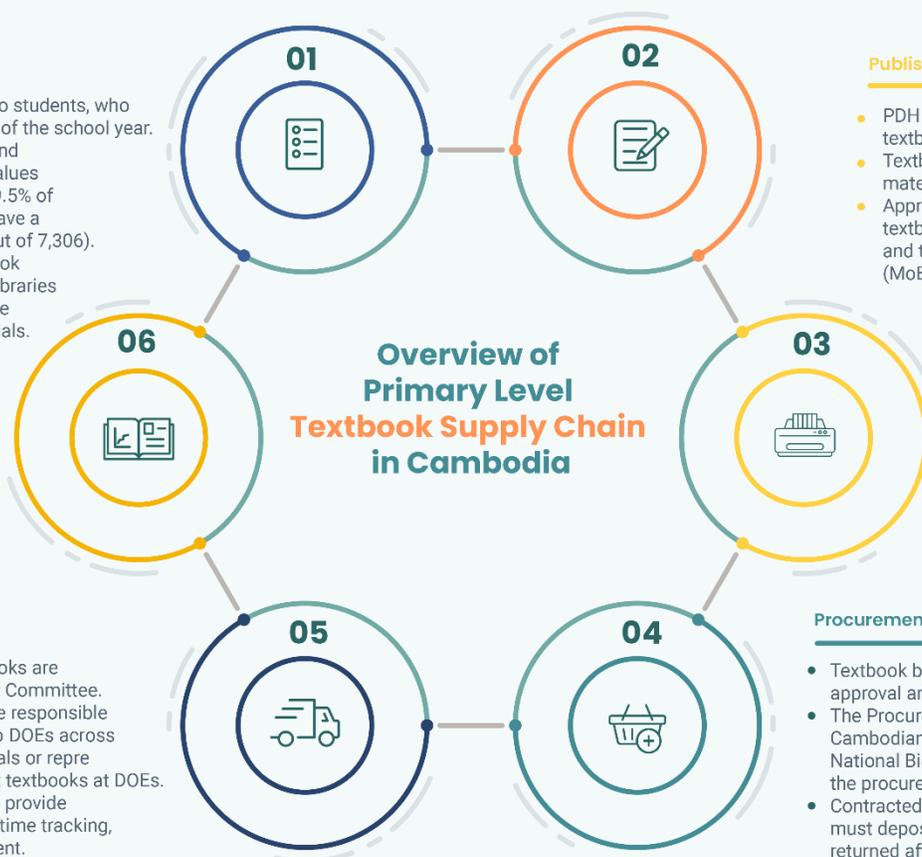
- Before distributing, textbooks are inspected by Procurement Committee.
- PDH and Sindy Printing are responsible for textbook distribution to DOEs across Cambodia. School principals or representatives come to collect textbooks at DOEs.
- TnT has been used to help provide timely data reporting, real-time tracking, and community engagement.
- Lack of book outlets in the provinces

Publishing and Printing

- PDH owns copyright for all core textbooks, currently.
- Textbook manuscripts and learning materials must be approved by EMAB.
- Approximately 3.4 million primary level textbooks are printed annually by PDH and their sub-contractors (MoEYS, 2022).

Procurement and Purchasing

- Textbook budget proposal sent to MEF for approval annually
- The Procurement Unit of MoEYS uses the Cambodian Standard of Documents on National Bidding Competition to define the procurement for printing.
- Contracted publishers and/or printers must deposit 10% at MEF, which will be returned after textbooks are 100% delivered.



FINDINGS ON THE STATE OF THE EVIDENCE ECOSYSTEM

Figure 3. Areas of Interactions between G-U and Factors Affecting These Interactions



Figure 4. Areas of Interactions between T-U and Factors Affecting These Interactions

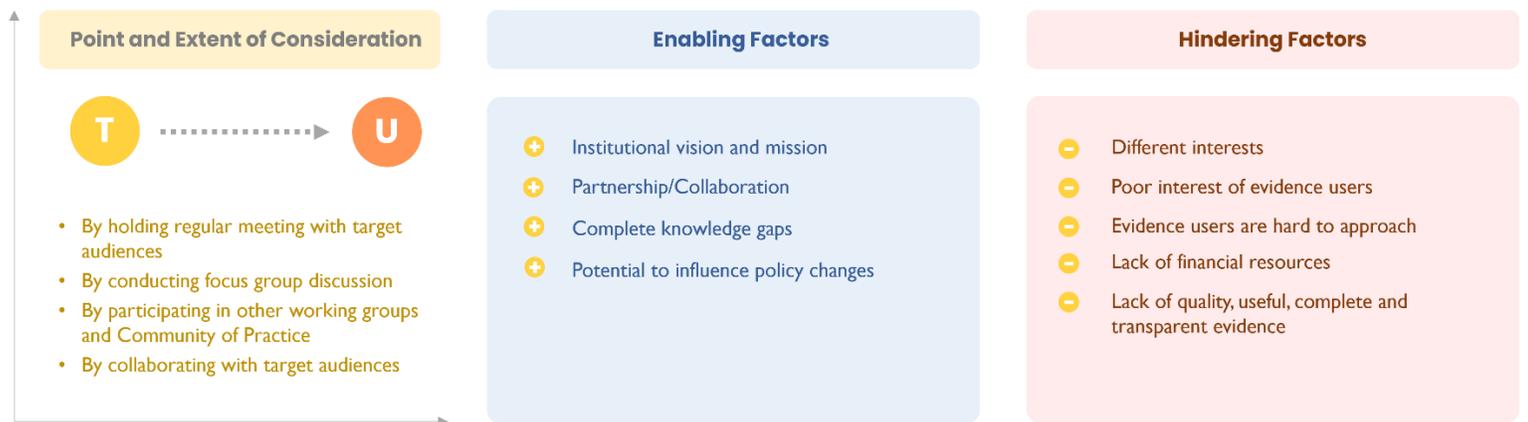


Figure 5. Areas of Interactions between U-G-T and Factors Affecting These Interactions



There is quite a consistent message from the informants that their decision-making is rarely based on research evidence. Rather, they depend more on alternative evidence, the most important of which are from three sources; Direct data collection, consultations and inputs from stakeholders, and government policies, reports, and databases.

TOP THREE SOURCES OF EVIDENCE

1 Direct Data Collection

- NGOs/Development partners: survey, interview, and focus group discussion.

- Governments: from line offices or relevant department, field mission notes. Telegram groups are quite popular for government bodies to use as means to collect information and seek comments or feedback.

2 Consultation

For policy documents or program development, direct inputs from consultants, experts, practitioners, and other stakeholders are often sought through meetings and workshops.

3 Government Document

Government policies, reports, and databases are often considered by both government departments and NGOs/development partners as evidence sources that inform their work.

Besides the abovementioned documents, having interactive conversations with the evidence generators, translators and decision-makers doing work related to primary level book supply chain or education, in general, is mentioned to be crucial, useful, and impactful. Whether the platform is formal or informal, the discussion is believed to bring about both knowledge exchange and potential collaborations for their shared goals.

PHASE 2 – SYSTEMS THINKING WORKSHOP

OVERVIEW OF THE PHASE 2 APPROACH



- **Objective 1:** Identify and define the key issues related to the Cambodian primary level book supply chain
- **Objective 2:** Develop a systemigram of the key issue(s), along with their causes and effects
- **Objective 3:** Identify and prioritize improvement strategies within the primary level book supply chain in Cambodia





- **Objective 1:** Synthesizing insights from the Systemigram and the network mapping
- **Objective 2:** Conducting network and relationship analysis
- **Objective 3:** Use the new system knowledge to contextualize, inform and co-create the Cambodia primary book supply chain research design



SUMMARY OF KEY FINDINGS

Syntheses of observations and learnings from different activities in the workshop generated six important key findings as follows:

- i). “Low quality book content”, an issue that was not prioritized in Phase I of the study, trumped the top two that were identified, “Distribution” and “Forecasting and Planning”.
- ii). The inadequacy of trained authors and book developers was commonly highlighted as the primary cause of low book content quality, and it was thought that the inadequate budget and stakeholders’ participations were the root causes. Decline in student interest and learning outcomes were the immediate effects while low national and regional socio-economic growth was the long-term impact.
- iii). Knowledge of the concerning issues and the improvement strategies or policies for the Cambodian primary level book supply chain is siloed; “Know the trees, but not the forest”.
- iv). Works (research, programs, policies etc.) of evidence ecosystem actors depict that they have considered various functions or roles within the evidence ecosystem, but they have little awareness of who and which institutions can perform those roles. The mechanisms for genuine and meaningful identification, discussion, and engagement among those actors also remain scarce.
- v). Almost-to-no availability of knowledge and evidence translation or mobilization due to different interest and lack of resources, especially funding.
- vi). Great interest in building and maintaining connections or networks is a promising steppingstone.

PARTICIPANT SELECTION AND ORGANIZATION

The final list of stakeholders from Phase I was used as a reference to invite the participants to the workshop. There were cases where an institution either appointed more than one person to the workshop or appointed another relevant official as representative(s). The seating arrangement differed

between Day 1 and Day 2, in which the former was the mixture between gender and actors in the evidence ecosystem while the latter was grouped according to participant’s identified primary role in the evidence ecosystem to align with the purpose of different activities in each day.

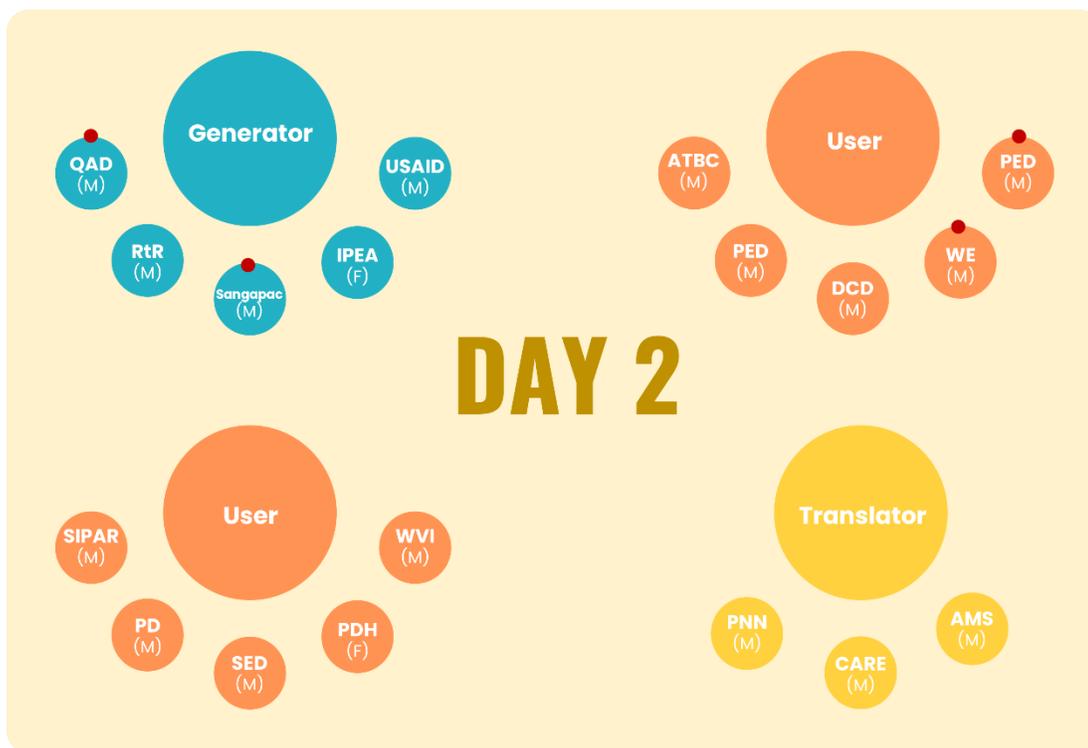


- Absent
- Evidence Generator
- Evidence Translator
- Evidence User

IPEA: USAID’s Inclusive Primary Education Activity
Rtr: Room to Read
WE: World Education

AMS: Apsara Media Services
PNN: People National Network TV

ADB: Asian Development Bank
ATBC: Angkor Thom Book Centre
CARE: Cooperative for Assistance and Relief Everywhere
DCD: Department of Curriculum Development – Planning and Textbook Distribution
PD: Procurement Department
PDH: Printing and Distribution House
PED: Primary Education Department
QAD: Quality Assurance Department
SED: Special Education Department
TRS: The Rabbit School
WVI: World Vision International



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WORKSHOP DESIGN ADAPTATION

Originally, there were six main activities to be implemented during the two-days workshop. Those activities included (i) issue prioritization, (ii) issue mapping systemigram, (iii) evidence prioritization, (iv) stakeholder and idealized evidence network mapping, (v) evidence ecosystem relationship analysis and (vi) research contextualization. However, to strengthen the focus of research contextualization activity, two additional activities were added; (vii) strategy prioritization and (viii) mapping critical success factors, details of which will be discussed in the later part of this report.

Activities	Original Process	Adaptations
Issue Prioritization	<ul style="list-style-type: none"> Manually write the key issues presented from the context analysis brief and any additional issues suggested by the workshop participants. Using sticky dots to vote for the priority issue. 	<ul style="list-style-type: none"> Digitally add and present both identified and additional key issues. Live polling via QR code. Participants are able to choose the priority issue among the given options without having been pressured or influenced by the other people's choice.
Evidence Prioritization	<ul style="list-style-type: none"> This should be done right after issue mapping systemigram activity. 	<ul style="list-style-type: none"> This activity was operated proceeding a newly added activity, Strategy Prioritization, so as to enable the local research team to have a clearer focus on which point to contextualize the research design for the next step of the study.
Research Contextualization	<ul style="list-style-type: none"> There are two parts in this activity: Initial contextualization on Day 1 and Revisiting research contextualization on Day 2. Both parts, however, are open-discussion-based. 	<ul style="list-style-type: none"> This activity was condensed into just one part and implemented on Day 2. It took the form of a presentation and open discussion with participants.

In terms of explaining the evidence ecosystem and the three important actors within it, a simplified infographic was used, along with an explanation highlighting the key activities of each actor. It is observed that participants can comprehend the concept quite well because many of them had already been exposed to it either during KII or the survey. Overall, regardless of the change in order, all activities seemed to stay within the time specifically allocated to them.

WORKSHOP CHALLENGES AND SUCCESSES

	Success	Challenges	Current solution and Future works
Objective fulfillment	Fruitfully fulfill workshop's main objective 1 and 3 as clearly evidenced in the participants feedback survey (Secondary Workshop Effects-Page 40)	Was not able to completely fulfill objective 2 which is to contextualize research design. Originally, all designed activities did not enable the local research team to contextualize their research design. The workshop focused on issue prioritization while the research focuses on improvement strategies. Even if two additional activities were added to the original plan, they could only help to some extent.	<p>More time is needed for the UND team and the local team to discuss the structure and contents of the workshop before it is delivered.</p> <p>Allocate sufficient time for consultation and discussion.</p>
Language of instruction	Khmer and English were used interchangeably throughout the workshop, and almost all participants seemed to have no problems comprehending and communicating with one another.	<p>There was one foreign participant whose comprehension of local language during discussion time is still quite limited.</p> <p>The discussion was mainly conducted in Khmer and facilitators from UND could not understand much of what was discussed.</p>	Interpreter(s) should be hired if English is used for the workshop, else if there is only one or two foreigners, local team members should be allocated to help them with translation. A local team member may help translate the plenary discussion for UND facilitators.
Participant dynamic	Participants seemed to be actively engaged in all workshop activities and discussions. They took notes, being attentive and delighted to share their idea to make a better and positive change.	A few participants preferred sharing their ideas verbally rather than through writing; no written content for some parts of the activities.	Table facilitator needs to observe his/her table demographic composition and adjust accordingly. E.g. Taking a writer role on top of their facilitation.
Time allocation	All activities were implemented in their designated time except an icebreaker that was formerly designed for Day 1.	Each activity seemed to be too confined in the allocated time; hindering extensive discussion that can bring about valuable knowledge to the research design.	Carefully design each activity and allocate more time for plenary discussion.

Activities implementation	All original and additional activities were carried out.	Objectives and connections from one activity to another were not well presented: raising doubts among participants on the activities' purposes.	Each activity should be beta-tested or rehearsed before the workshop. Before implementing an activity, its purposes should be clearly stated.
Documentation	Able to complete all the information required in the (i) table facilitator note-sheets, (ii) note-taker observation, and (iii) participants feedback survey.	Those documentations were restrictive to: <ul style="list-style-type: none"> • Activity-based outputs • Behavior of participants • Facilitations • Workshop arrangement that failed to help capture what is essential such as information being shared and discussed among participants at the table as well as in plenary sessions.	Leaving some cues and space to take note of the discussion either in one or all the documentation.
Facilitation	Information related to the study, workshop objectives and activities were clearly elaborated by the lead facilitator and table facilitators. Illustration of slide presentations was a big help to this.	There were some ad-hoc changes to the flow and operation of activities. Some table facilitators were not familiar with the changes. The slide presentation was written in English.	If time allows, any change to the agenda or activities should be communicated clearly among all table facilitators as well as the observers. It might be more helpful to have the slide presentation in Khmer.
Venue arrangement	Great and clean venue environment Well-set facilities	Refreshments were served next to the meeting room, and there was noise disturbing participants' discussion. Participants sitting at the back found it quite hard to see the PowerPoint.	Consulted with the venue to arrange refreshment at a specific time outside of the discussion. Put a tablet containing PowerPoint at each table.

Three key catalysts that helped to drive the success of this workshop are:

- **Outputs from Phase I (Context Analysis Brief and Evidence Ecosystem Brief):** Provide common understanding to workshop participants who are either already well-absorbed with the topic or have no experience with it at all but are potentially important actors. Without them, participants might face difficulties in finding common ground to discuss and interact with one another.
 - **Engagement and commitment of workshop participants:** regardless of the turnout rate, all participants show their interest and engagement throughout activities in the workshop. It was observed that they tried to share their best knowledge and experience of the topics.
- Preparation and taskforce:** The facilitation guide helped the organizers a lot in preparing workshop materials, understanding roles, and visualizing the workshop flow. The taskforce is adequately manned and trained. The teamwork was great, and they were adaptable to the ad-hoc changes and other circumstances that happened before, during, and after the workshop.

OTHER CONTEXTUAL NOTES

Absentees

There are three cases regarding this aspect: (i) Participants confirmed but did not turn up to the actual event, (ii) participants presented only on the first day, and (iii) participants presented on both days but only in the morning or afternoon session. These were observed to affect not only the arrangement of the workshop activities but also information that could potentially be generated because of the absentees' roles and experiences related to the study.

Gender Balance

The local research team tried to arrange the workshop in a more gender-balanced way, even in the invitee list and seating arrangement. However, there seemed to be more male participants compared to female participants (three women). This might be due to the shortage of female stakeholders, or the invited organizations themselves did not have female representatives whose work is related to the study.

Representation of Marginalized Groups

From Phase I, the identified marginalized groups encompass students living in remote or economically disadvantaged areas, students with disabilities, and indigenous groups. Related stakeholders working in these areas were invited to the workshop, but there were only two that turned up; the Special Education Department (SED) of MoEYS and CARE Cambodia. CARE works mainly with indigenous groups, while SED's scope of work comprises more than just the marginalized groups identified in the study. Even though the presence of these two organizations is important, we were neither able to delve into the works of organizations that represented other marginalized groups nor discussed much about them across different activities in the workshop.

DAY 01 - OUTPUTS



ISSUE PRIORITIZATION

ISSUE MAPPING SYSTEMIGARM

IMPROVEMENT STRATEGY PRIORITIZATION

EVIDENCE PRIORITIZATION

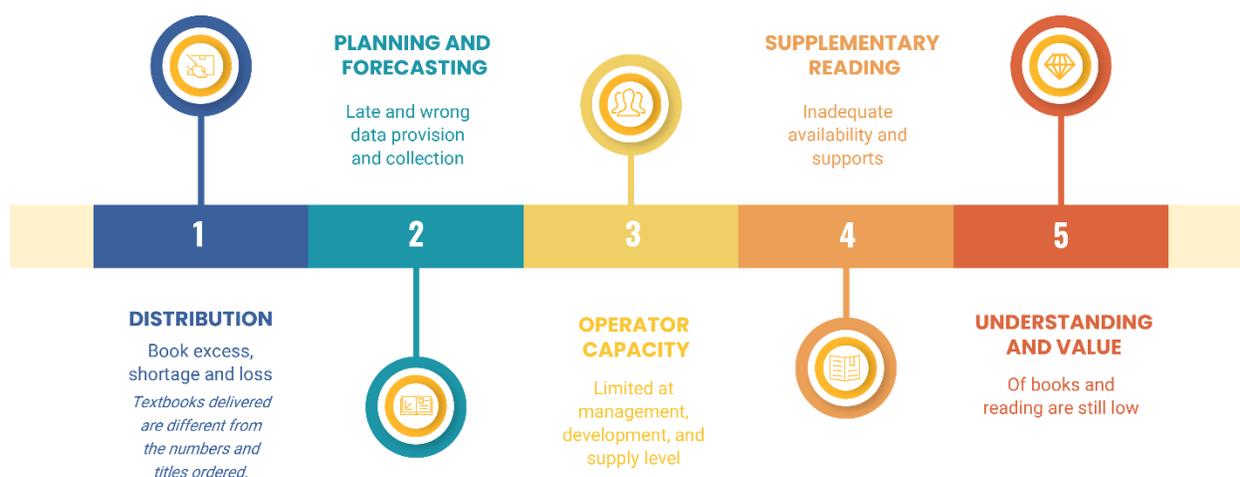
OUTPUTS



ISSUE PRIORITIZATION

Preceding this activity, the local principal investigator first used information from the Phase I-Context Analysis Brief to deliver a presentation on current key priority issues in the Cambodian primary level book supply chain (Figure 6). Participants were asked to discuss and share whether they agreed with the top five identified issues or if there are any other key concerns that they wished to bring up to take into consideration.

Figure 6. Top Five Priority Issues in the Cambodian Primary Level Book Supply Chain



Even though shared understanding and agreement on the presented issues was reached, another priority issue was suggested by participants, which is “Low book quality” (Figure 7).

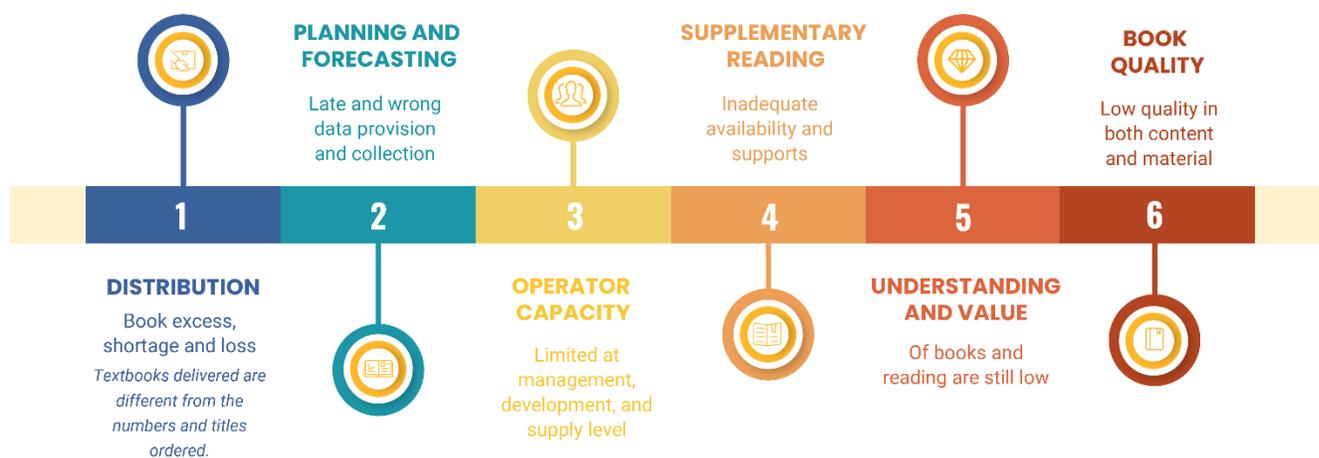


Figure 7. Top Six Priority Issues in the Cambodian Primary Level Book Supply Chain

Participants were then asked to vote for the top one priority issue among the six identified. The first round of voting reached a tie between forecasting and planning and low book quality, the latter of which trumped the rest in the second round of voting. Since there were suggestions among the participants that the term “book quality” refer to both physical and content dimensions and each needs different actions and improvement strategies, the team ran another round of voting and finally “Low quality of book content” was selected by 86% of the participants to be the most priority issue in the book supply chain of primary level textbooks and supplementary reading materials.

FIRST ROUND



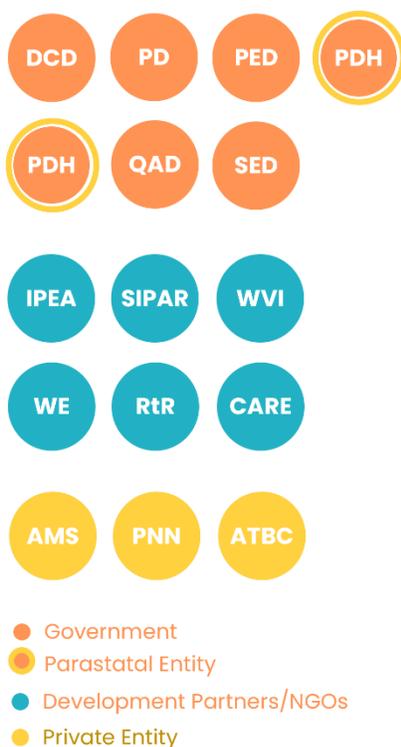
SECOND ROUND



THIRD ROUND



This selected issue, however, somewhat differed from the findings produced by the context analysis brief, which identified issue related to distribution as most pressing. Apropos of data sources from Phase I, both the issue of low book physical and content quality was mentioned, but in a small percentage and were not highlighted as the priority issues in the Cambodia primary level book supply chain by the participants. Two interrelated reasons are observed to be the possible causes of such variation.



- 1. Number and profile of workshop participants:** the actual turnout rate of the invited workshop participants was at the breakeven for the issue prioritization/voting activity in the morning of Day 1. However, a majority of those who voted low quality of book content as the priority issue came from those whose main roles focused on developing quality book content or they have minute experience or awareness of the situation in the other stages of the book supply chain regardless of the presentation given by the local principal investigator.
- 2. Conformity to groupthink:** Many of the workshop participants used to undertake KII and/or survey, which their indication of priority issues was not low book quality content. Nevertheless, prior to the voting, their former choices seemed to be overruled by the newly added issue that became the center of attention within their group and in the plenary. They commenced conforming to what certain members of their group and other groups believed and thought to be the priority issue and failed to address the elephant in the room. Limited time allocated for the activity, especially for the participants to thoroughly discuss and justify their choice, also amplified such judgmental heuristics.



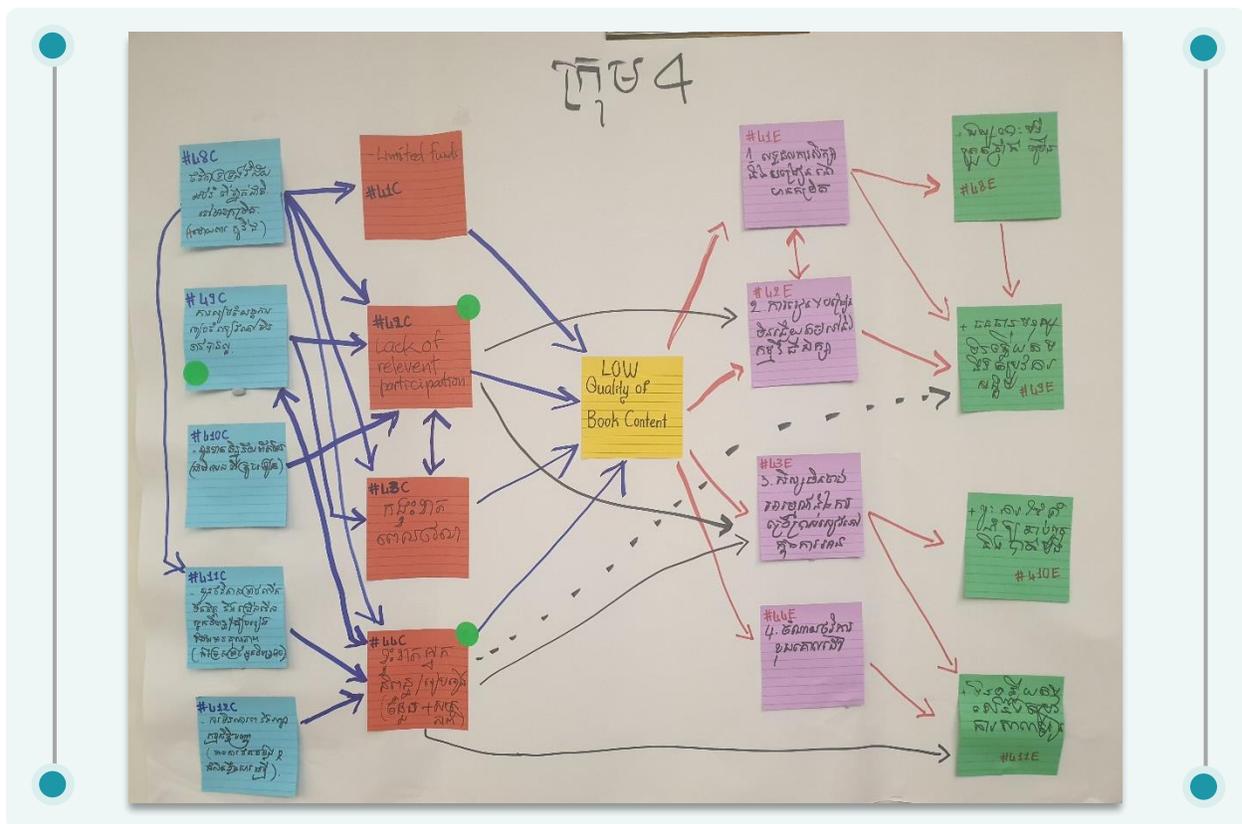
ISSUE MAPPING SYSTEMIGRAM

In this activity, each group first wrote the final priority issue on a large sticky note and placed it on the center of their flip chart and continued as follows:

- 5mn** ^{INDIVIDUAL} Write a list of important factors that are the **cause/affect** to the central issue.
- 10mn** ^{IN GROUP} Decide in group on the 5 most important factors. Write them on sticky notes and place around the central issue.
- 5mn** ^{INDIVIDUAL} Write a list of important factors that the central issue **causes/leads to**.
- 10mn** ^{IN GROUP} Decide in group on the 5 most important factors. Write them on sticky notes and place around the central issue.
- 20mn** ^{IN GROUP} Map the **second level causes**-What causes the causes?
- 20mn** ^{IN GROUP} Map the **second level effects**-What cascading effects do the primary effects lead to?
- 30mn** ^{PLENARY} Rotation, discussion and modification.
- 30mn** ^{IN GROUP} Each group starts draw connection between factors to the central issue and between factors themselves.

By the end of this activity, each group generated a systemigram that mapped primary and secondary levels of causes and effects to the selected priority issue in the Cambodian primary level book supply chain.

Photo 1. Example of Issue Mapping Systemigram from Group 4 – Day 1

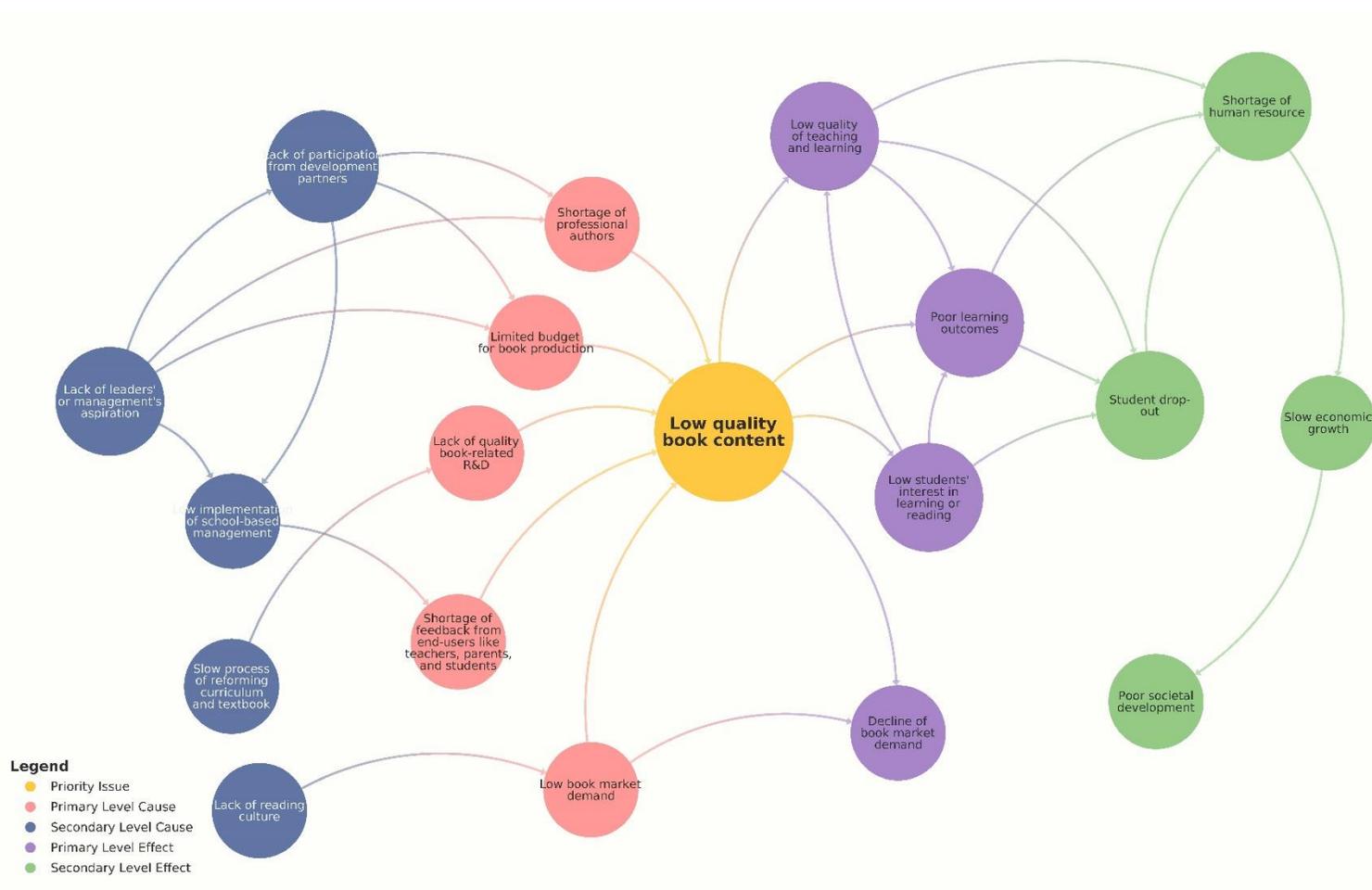


Proceeding the completion of the workshop, the Digitization team convened and implemented the following process to digitize the issue mapping systemigram into Kumu:

- Confirming and validating each designated code of the primary and secondary level causes and effects with the table facilitator note-sheets and photos taken by the digitization team member.
- Translating necessary factors from Khmer to English
- Inputting all factors and the priority issue into the Excel spreadsheet as “Element Type” with their assigned codes, different connections of which are indicated in the second sheet as “Connections”.
- Importing each group spreadsheet into Kumu and customizing necessary elements to match with the actual systemigram.

Below are the digitized issue mapping systemigram of the four groups, an interactive compilation of which can be found [here](#).

Figure 8. [Issue Mapping Systemigram – Group I](#) via Kumu



For Group I, lack of leaders’ or management’s aspirations and the lack of participation from development partners were regarded as the main root causes. Poor students learning outcomes, decline in student interest in learning and an increase in student dropouts, and ultimately the shortage of human resources was considered likely impacts of the low quality of book content.

For Group 2, there are also two main root causes leading to low quality of book content; lack of professional training for book developers and limited understanding of students' interest from book developers, which is also linked to the limited capacity of the book developers and uninteresting book content. In this group, the low quality of book content will significantly impact students' ability to grasp the concept in the book as well as decelerate the socio-economic development of the country.

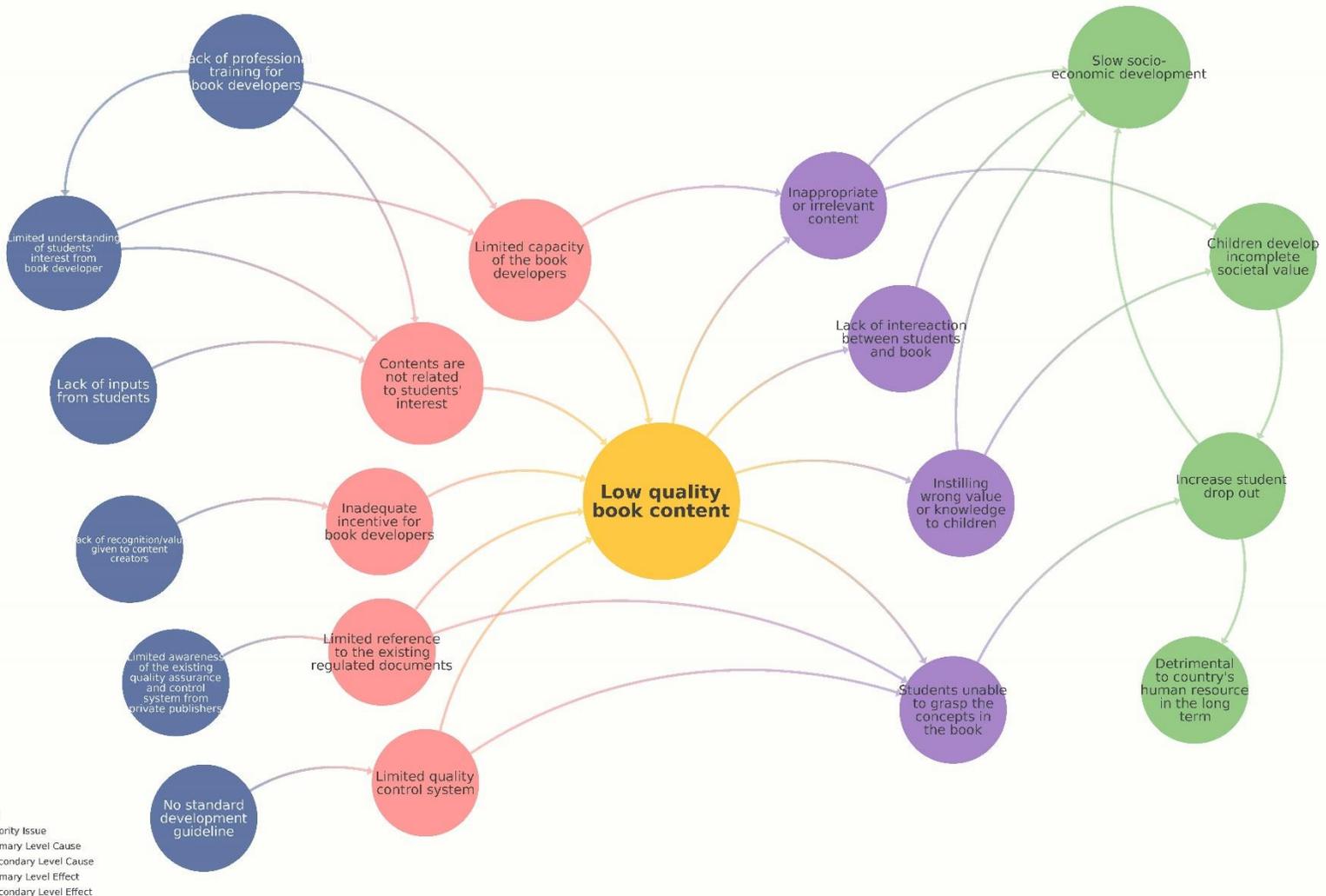
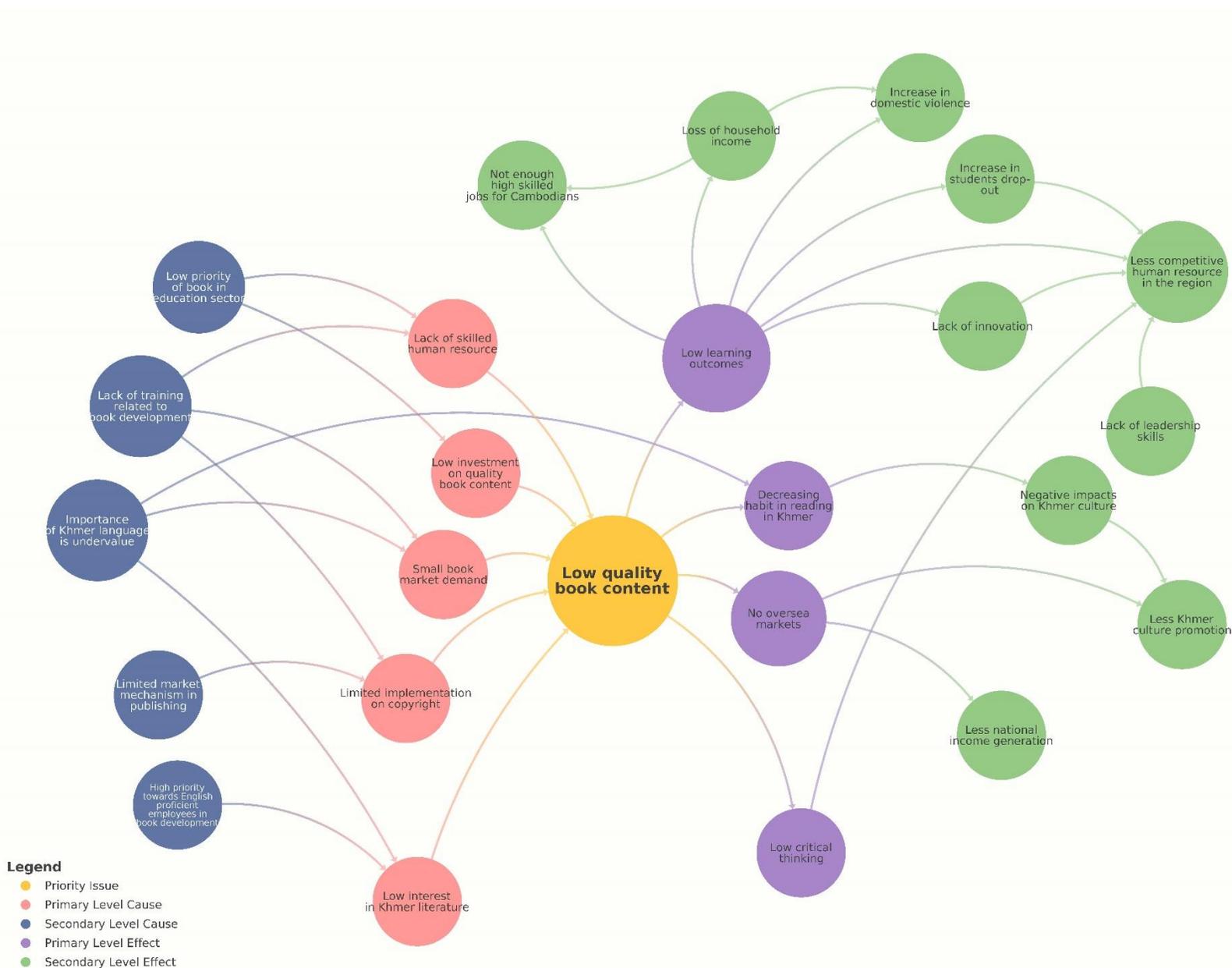
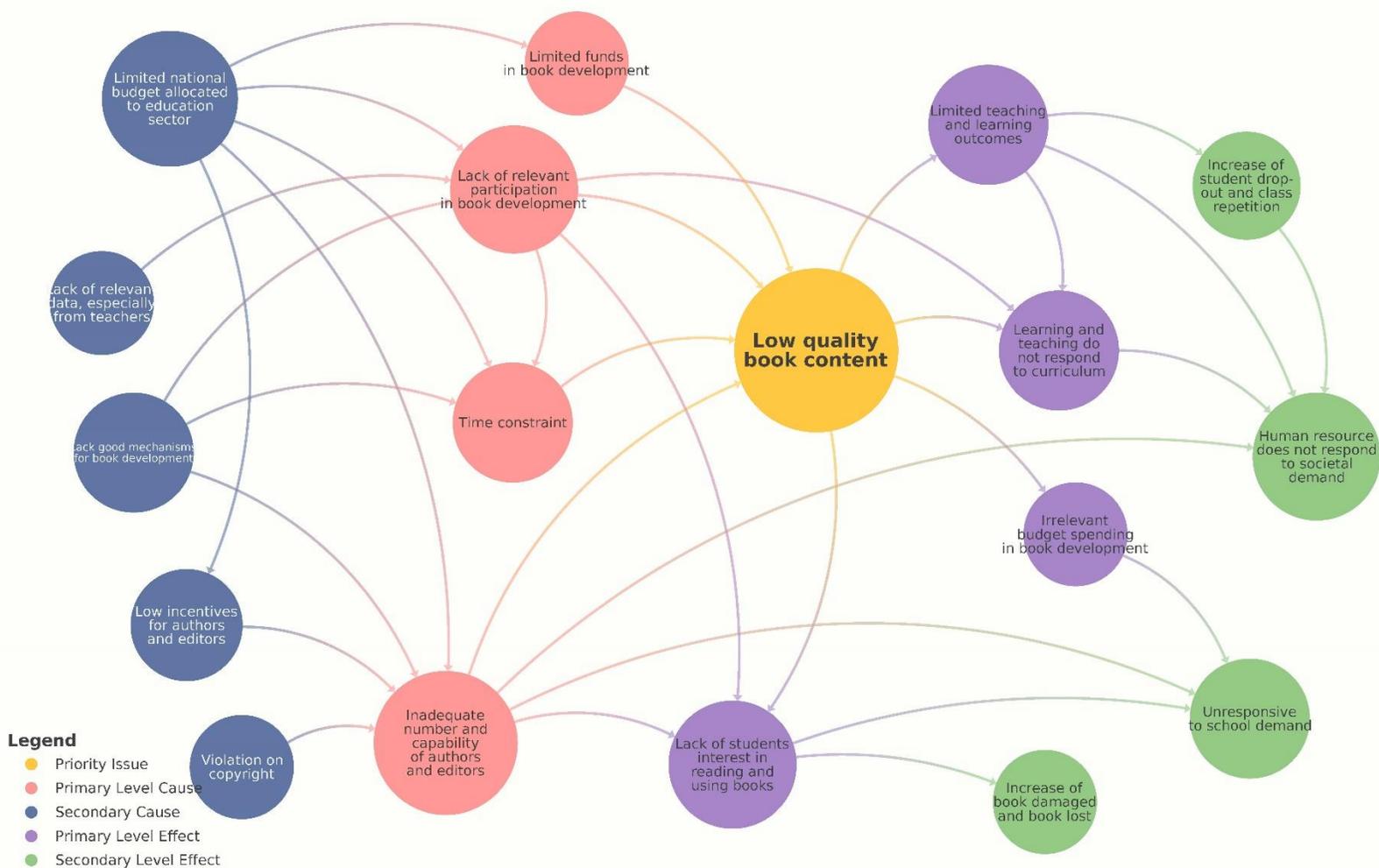


Figure 9. Issue Mapping Systemigram – Group 2 via Kumu

Figure 10. Issue Mapping Systemigram – Group 3 via Kumu

Group 3 depicted two primary level causes of low quality book content. They are the lack of training related to book development and the low value of the importance of the Khmer language in developing primary level books. Two interrelated effects resulting from this priority issue are low students learning outcomes and less competitive human resources in the region, the latter of which was deemed as the most affected aspect for Cambodia if the priority issue remains unresolved.

Figure 11. Issue Mapping Systemigram – Group 4 via Kumu

At a quick glance, there seemed to be quite complex interrelated relationships between different levels of causes and effects being mapped by participants in Group 4. Commencing from the primary level cause, it is the issue of the limited national budget allocated to the education sector that was observed to mainly trigger other causes, including the inadequate number and capability of authors and editors at the secondary level cause. On the effect side, there are also two most affected aspects resulting from the low quality of book content; unresponsiveness to school demand at the primary level and human resources do not respond to societal demand at the secondary level effect.

All things considered, the lines of causes and effects of low book content quality are very complex, and the maps of such relationships drawn by the four groups presented quite diverse images. However, what can be seen as patterns from these mappings are some common cause and effect factors. On the cause side, lack of trained authors and developers stands out and it was thought that lack of budget and inadequate stakeholder participation were the root causes. On the effect side, decline in student interest and low learning outcomes were the immediate effects and low national and regional socio-economic growth was the long-term impact.

2 nd Level Causes	1 st Level Causes	Prioritized Issue	1 st Level Effects	2 nd Level Effects
Lack of budget Low participation from stakeholders	Lack of trained book developers (authors, designers, editors, etc.)	Low book content quality	Decline in student interests in reading Low learning outcomes	Low socio-economic development growth in Cambodia and region



STRATEGY PRIORITIZATION

This activity aimed to seek insights from participants to help contextualize the research design in the next stage of the study, which is a case study on an improvement strategy for the Cambodian primary level book supply chain. Akin to issue prioritization activity, the local principal investigator first gave a brief overview of the identified policy changes or programmatic reforms from desk review and KIs. Participants were then asked to review and provide any additional aspects that should be considered before moving on to vote for the top one.

NOTABLE IMPROVEMENTS



Contrasted to issue prioritization activity, there were some challenges in reaching the final step of selecting the top improvement strategy. Even though a presentation on notable changes or improvement strategies related to the Cambodian primary level book supply chain was delivered, most participants seemed not very familiar with the improvement strategies found. Each identified improvement strategy was known to only a few participants and scarcely anybody could provide any further comments or elaboration. Since they were not well informed of those strategies, they found it hard to rate their relative success and were not able to vote for a top one.

Instead of pursuing the voting, the workshop facilitators decided to just encourage participants to give comments and bring forward discussions over the identified notable changes in the Cambodian primary level book supply chain. In this regard, it is observed that the sharing insights from different stakeholders involved in the four notable improvements in the book supply chain provided eye-opening knowledge to many other participants who were not familiar with them. The local research team also anticipated the difficulty of this activity as they had learnt from the KIs that very few participants could identify an improvement strategy in the book supply chain when they were asked to. Thus, the workshop somewhat validates this finding.



EVIDENCE PRIORITIZATION

Based on the systemigram mapping of the prioritized issue, participants in each group unanimously voted the top three areas that require more evidence.

GROUP 01

- Lack of leaders' or management's aspiration
- Limited budget for book production
- **Lack of quality book-related Research and Development (R&D)**

GROUP 02

- **Limited capacity of the book developers**
- Contents are not related to students' interest
- Limited quality control/assurance system

GROUP 03

- Low investment on quality books
- **Lack of skilled writers or book developers**
- Limited copyright protection mechanism

GROUP 04

- Lack of good mechanisms for book development
- Lack of relevant participation in book development
- **Inadequate number and capability of authors and editors**

Overall, there are two specific trends obtained from this activity. Primarily, all the four groups seemed to agree on seeking more evidence on the root causes (either primary or secondary level) leading to low quality book content rather than its effects. Although the top three evidence needed varied across groups, an issue related to the inadequacy of capable book developers at the primary level reached a consensus. Another issue that two out of the four groups seemed to agree on is the low investment or limited budget for quality book development.

DAY 02 - OUTPUTS



STAKEHOLDER AND IDEALIZED EVIDENCE NETWORK MAPPING
EVIDENCE ECOSYSTEM RELATIONSHIP ANALYSIS
MAPPING CRITICAL SUCCESS FACTORS
RESEARCH CONTEXTUALIZATION



STAKEHOLDER AND IDEALIZED EVIDENCE NETWORK MAPPING



After an explanation of the evidence ecosystem and its current actors' interactions was delivered, participants were asked to go through the following steps in order to identify both current and ideal evidence ecosystem actors whose works are deemed essential for the improvement to the Cambodian primary level book supply chain:

- 10mn** IN GROUP Select a maximum of FIVE stakeholders within the EE, who you think are most critical to ensuring research related to quality of book content is produced, translated, or used. Place an orange sticky dot on any ideal actor.
- 5mn** PER GROUP Present and justify your group selections to the whole room.
- 10mn** IN PLENARY Discussion and questions
- 5mn** PER GROUP Write on sticky notes the 15 selected stakeholders according to the color coded and lay out the sticky notes on the paper in the center of the table. **Generator**. **Translator**. **User**
- 10mn** IN GROUP Use the **connector ribbons** to begin making connections between stakeholders that you know **already existed**.
- 10mn** IN GROUP Use a different color connector to indicate **relationships that don't currently exist but that you believe should exist to improve the network's functionality**.
- 10mn** IN GROUP Indicate the nature of connection and its direction on sticky arrows.
- 30mn** PLENARY Rotation, discussion and modification.
- 5mn** PER GROUP Map update

Even though each group had the same list of evidence generators, translators, and users, they mapped the status, nature, and direction of those connections or relationships differently. To analogize, while some tables could map connections (existing or potential) between different actors, others left a few actors to stay unconnected. Seating arrangement, participants' expertise, and experience were observed to be the cause of the differences. For Day 2, participants were grouped according to their primary role in the evidence ecosystem. Henceforth, the top five stakeholders identified by them were of their own familiarity but not for other groups playing different roles in the evidence ecosystem. They either had little knowledge or involvement with those identified stakeholders. This mapping activity also revealed five actors whose connections or relationships have greatly supported the system's functionality. They are the Department of Curriculum (DCD), Publishing and Distribution House (PDH), Primary Education Department (PED), and the Teacher Training Department (TTD). Ensuring that all identified actors have a sound understanding of each other work would be a crucial steppingstone to formation of evidence ecosystem.

Photo 2. Example of Stakeholder and Idealized Evidence Network Mapping- Group 2 – Day 2

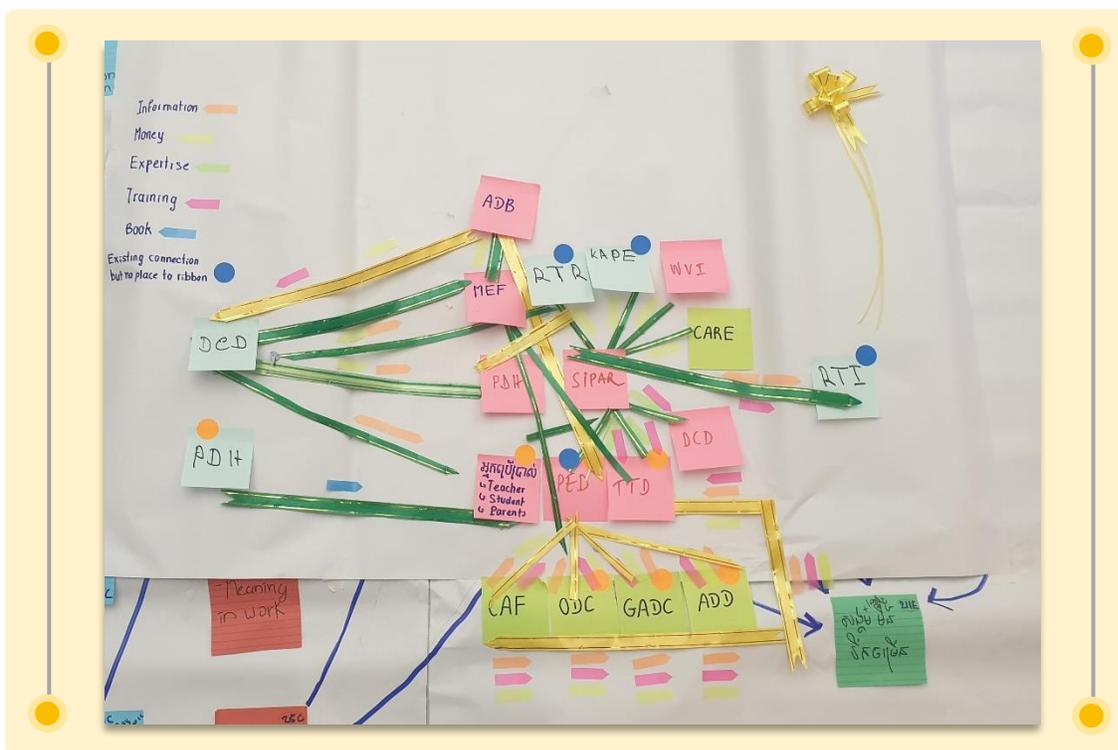


Photo 3. Example of Stakeholder and Idealized Evidence Network Mapping- Group 4 – Day 2



An interactive version of each group Networking map can be found [here](#). When hovering or clicking on a certain aspect of the map (Circle – evidence actor, Connecting line-connection or relationship), more detail regarding status (existing or ideal), nature (information, expertise, finance etc.) and direction (one way or bi-directional) of connection will be displayed at the right side of the screen.

Figure 12. Network Mapping – Group 1 via Kumu

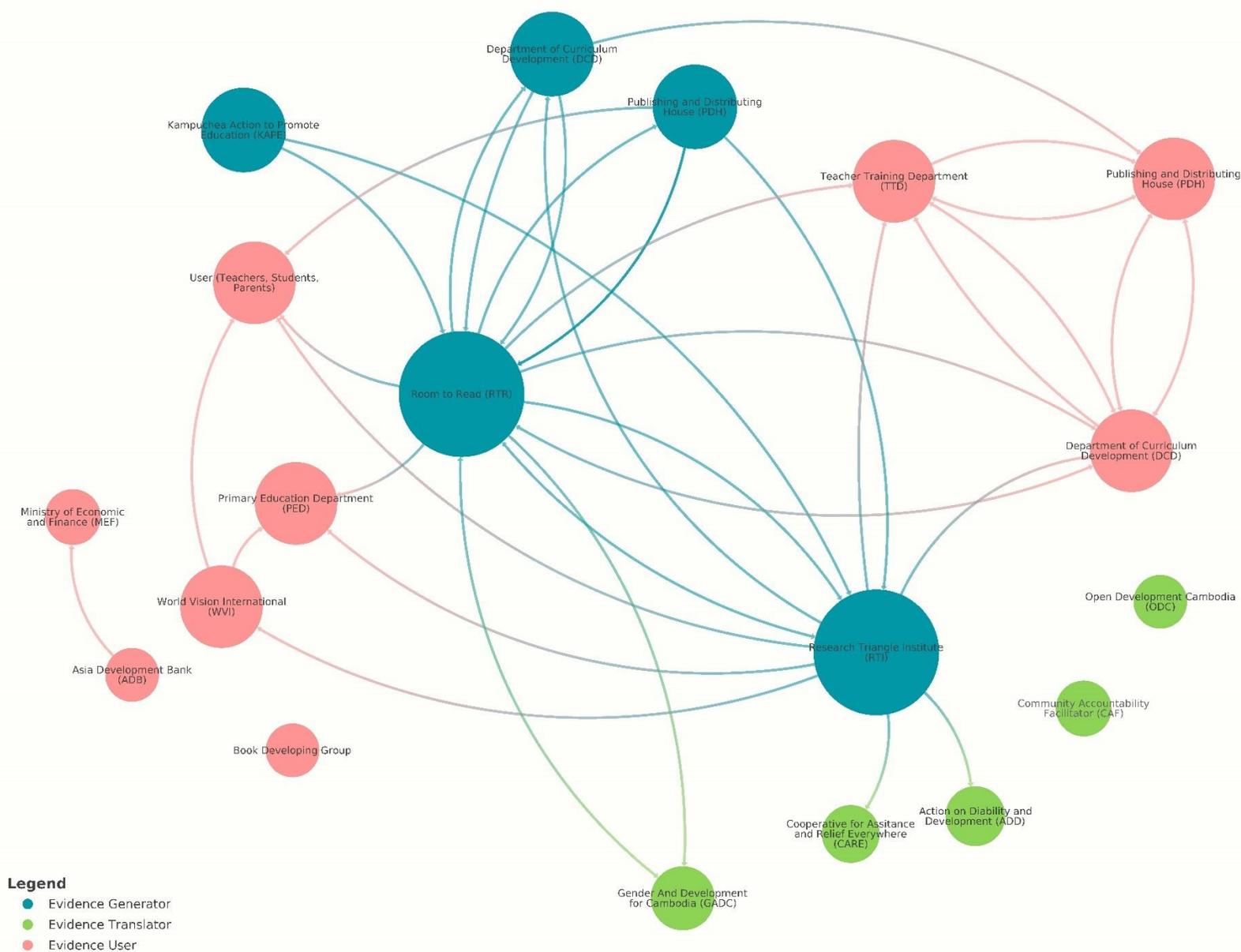


Figure 13. Network Mapping – Group 2 via Kumu

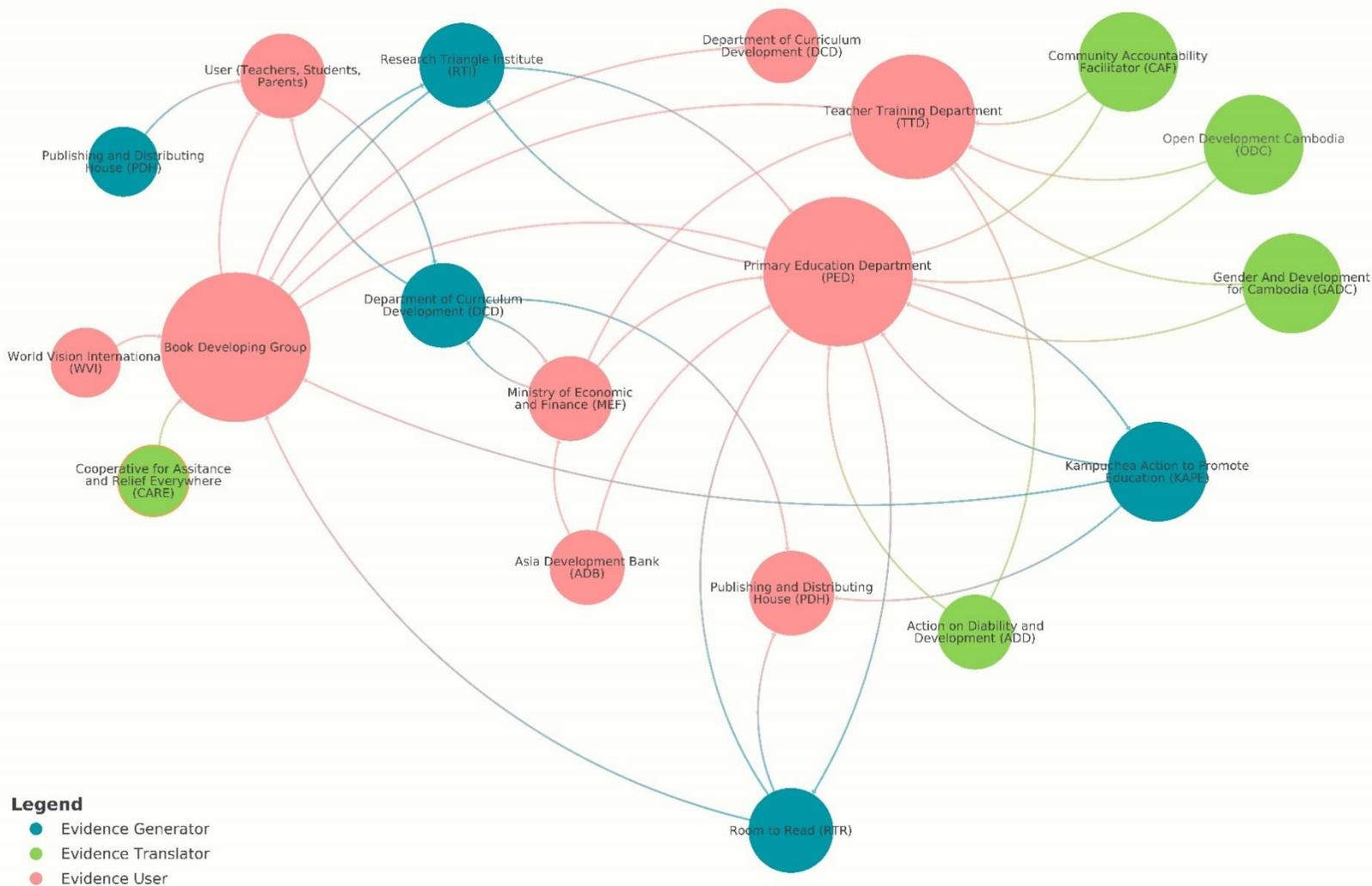


Figure 14. Network Mapping – Group 3 via Kumu

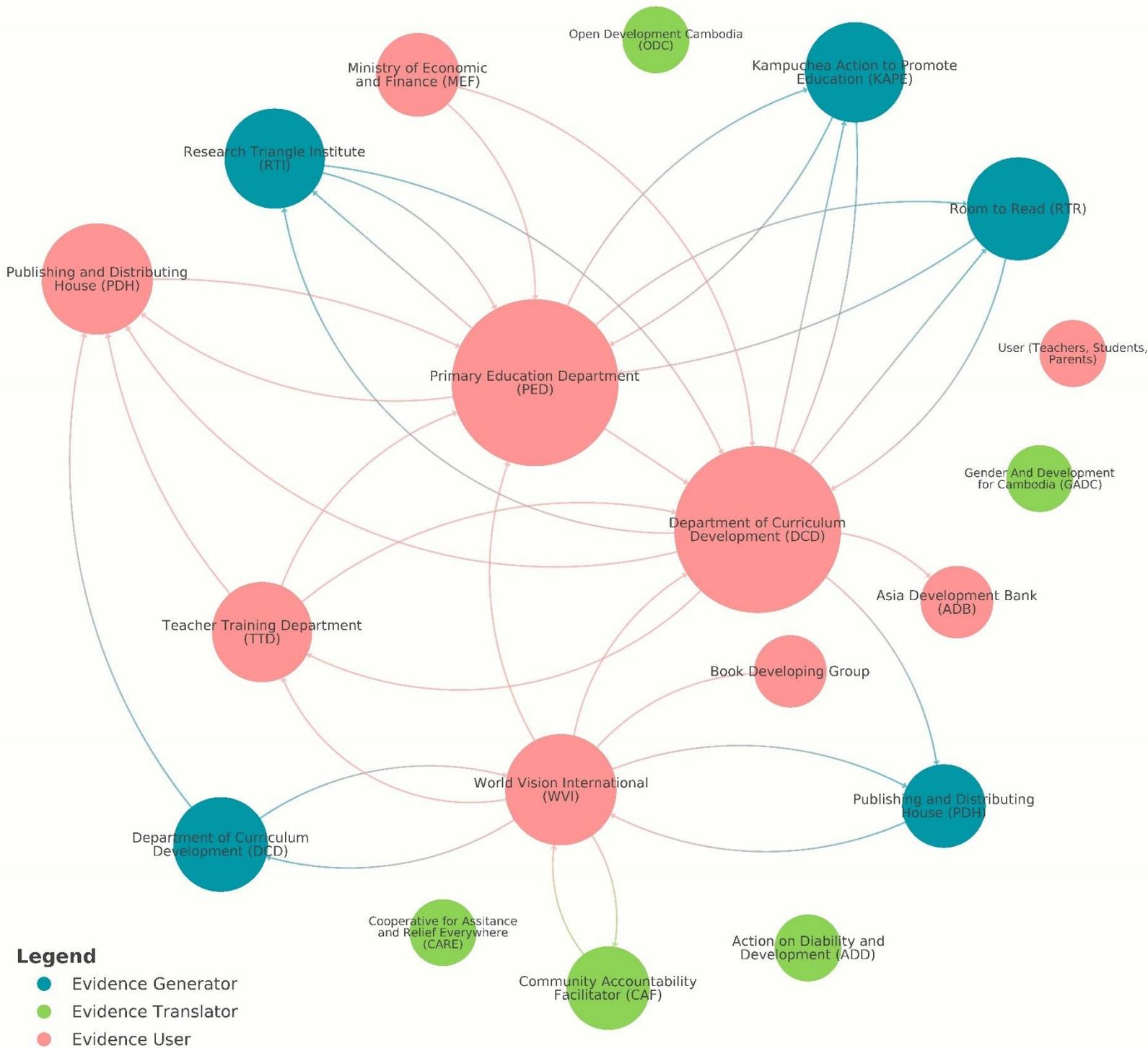
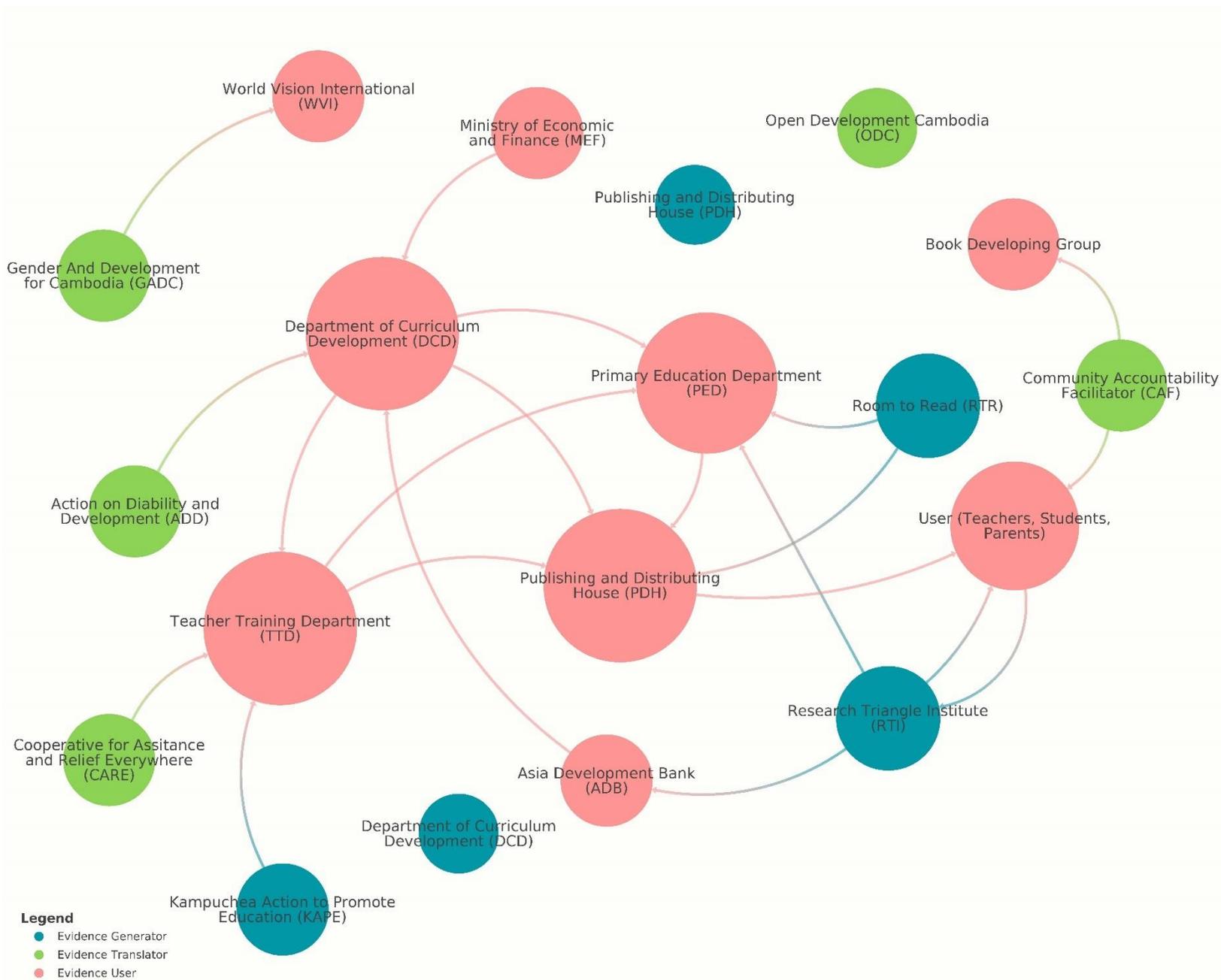


Figure 15. Network Mapping – Group 4 via Kumu





EVIDENCE ECOSYSTEM RELATIONSHIP ANALYSIS



This activity provided time for participants to reflect and analyze relationships within the evidence ecosystem at a deeper level. They had the chance to not only validate their understanding, but also share and learn from one another on how to bring about new relationships while maintaining and improving the condition of the existing ones.

40mn IN GROUP Select the **top FIVE critical relationships** that are important in help building ecosystem for better primary book quality content.

Begin analyzing their relationship's strength in this order: "non-existent" to "weak" to "strong".

Indicate what are the barriers or enablers to that strength of relationship.

Share ideas for creating/improving the relationship.

5mn PER GROUP Present and justify your group analysis to the whole room.

20mn IN PLENARY Discussion and questions

One of the most common barriers leading to a non-existent or weak relationship between actors is the lack of opportunity to bring awareness of and collaboration with one another. To combat this barrier, all groups agreed that relevant mechanisms that can bring these stakeholders together either to firstly reach a mutual understanding or potential engagement on certain projects or aspects of any concern should be in place. While such mechanisms are encouraged, the focuses or objectives of each stakeholder's institution should be considered as well. There are cases where it is not that a stakeholder does not want to collaborate with another or because of any competition, but it is more of the variations in focuses and goals across related institutions.

Apropos to strong relationships between certain existing actors, three crucial enablers were observed. Firstly, it is the realization that their institutions are parts of the same working chain or system, in this case, the Cambodian primary level book supply chain. Without good relationships among stakeholders, it will be hard to strengthen the system. Secondly, each stakeholder possesses different but relevant expertise and knowledge, of which the willingness to exchange can help complement one another to achieve one common goal or their own institutional goals. Last but not least, it is the regular meetings (professional and personal) that are held between stakeholders that have continued to help strengthen the relationship.

GROUP 1 + 4			
Relationship	Strength	Barrier or Enabler	Ideas for creating or improving relationships
Media (PNN, AMS) --> ODC	Non-existent	No opportunity to meet	<ul style="list-style-type: none"> • Attending or hosting events together (using the middleman) • Creating infographic • Because ODC is a place with existing reports, they wish to translate that report.
Media --> Save the Children/World Vision	Non-existent	No connection between the two	<ul style="list-style-type: none"> • Organizing meeting for mutual understanding • Co-content creation
RTI --> AMS	Non-existent	Have not reached out to each other	<ul style="list-style-type: none"> • Meeting to establish relationship • Involve in training/fellowship with RTI
RTR --> PDH (and other publisher groups)	Weak	<ul style="list-style-type: none"> • No regular comprehensive training for everyone • No regular connection (Covid-19) • Timing 	<ul style="list-style-type: none"> • RTR is willing to provide a co-license of the title/content to publish in order to sell using the PDH platform. • Establishment of MoU • CDRI (being the middleman) for both partners to meet. E.g., Hosting events (like this one-Systems Thinking Workshop) • Learn more about regulation or terms and conditions involved to work with PDH
RTI --> CARE	Weak	<ul style="list-style-type: none"> • Both are busy (no time to discuss) -- Time constraint • Before there was no requirement to work on multilingual education, but now RTI is focusing on it. 	<ul style="list-style-type: none"> • Co-generating research content and application on early grade students' (ethnic minority) learning performance. • Inviting CARE into the RTI technical working group.
RTI --> CDRI	Weak	No reaching out to each other	<ul style="list-style-type: none"> • Work on how information/research can be shared directly with each other.

GROUP 2			
Relationship	Strength	Barrier or Enabler	Ideas for creating or improving relationships
PDH --> Book Developer Groups (NGOs..) DCD --> Book Developer Groups (NGOs..) SED --> Book Developer Groups (NGOs..)	Non-existent/Weak	<ul style="list-style-type: none"> • Commitment to personal goals is the current priority • Weak collaboration 	<ul style="list-style-type: none"> • Creating mechanisms for collaboration • Exchange of experts and training • Improve collaboration • Creating a “Book Bank”
PDH --> DCD	Strong	<ul style="list-style-type: none"> • Used to be the same institution • Both institutions are parts of the same book supply chain • Long-term relationship (Professional and personal) 	<ul style="list-style-type: none"> • Having regular meetings (monthly; formal and informal)

GROUP 3

Relationship	Strength	Barrier or Enabler	Ideas for creating or improving relationships
DCD <--> PED	Weak	<ul style="list-style-type: none"> Limited mechanism for collaboration Overlap roles and responsibilities 	<ul style="list-style-type: none"> Talk to find solutions for cooperation between the two department
DCD --> MEF	Weak (This was then changed to strong after plenary discussion)	<ul style="list-style-type: none"> Limited government budget (Covid-19 impact) 	<ul style="list-style-type: none"> Improve the capacity of DCD in negotiating with sitting committees in MoEYS and MEF.
PED <--> RTI	Strong	<ul style="list-style-type: none"> Mutual trust Co-creation since the beginning of projects PED has good human resources 	<ul style="list-style-type: none"> Continue to produce good results to improve learning outcomes
WVI <--> DCD	Weak	<ul style="list-style-type: none"> World Vision just started a new strategy to work with national level (PED, DCD, EQUAD) 	<ul style="list-style-type: none"> Continue to exchange technical support through consultative meeting
DCD <--> PDH	Strong	<ul style="list-style-type: none"> Good collaboration mechanisms 	<ul style="list-style-type: none"> Continue what they are doing



MAPPING CRITICAL SUCCESS FACTORS

This activity was one of the two newly added activities which aimed to help contextualize the research design. It is closely related to the analytical framework that is going to be used in the next phase of the study. There are two parts in this activity, and each group went through the following processes.

- 5mn** PER GROUP Reflection on the selected priority issue, and existing and potential resources (Human, finance, time) in the current system.
- 20mn** IN GROUP Mapping the existing and ideal strategies and tactics that have helped or can help improving the current Cambodian primary level book supply chain.
- 10mn** IN PLENARY Presentation and discussion



Akin to Stakeholder and Idealized Evidence Network Mapping, participants' seating arrangements and their knowledge and experience working in the system viewed certain elements differently. For instance, while Group 1 and 4 perceived that the strategy to improve book developers' capacity has been implemented, Group 2 and 3 put it as an ideal strategy that should be formulated and operated.

Regarding tactics, each group shared various existing points that have helped to solve the issue of low-quality book content. They ranged from guidance and consultation with experts and relevant ministerial departments to other mechanisms like book expos, writing competitions, digital-based activities, etc. Nonetheless, an ideal tactic that almost all the groups brought up for discussion is better enforcement of copyright law. The attainment of this might encourage new potential book developers as well as the current ones to enter and improve the current condition of the primary level book development arena.

STRATEGIES

Komar Rean, Komar Jes
(Children learn, Children know)

Children standard book guideline

Capacity building strategy to expand pool of content creators

TACTICS

Continue staff training and capacity building

Training book creators

Trusted and collaborative partnership

Communication and information sharing led by MoEYS

Digital library (TAF and RTR)

Effective forecasting of book demand

GROUP 01
+ **GROUP 04**

STRATEGIES

Increase investment in book development

Textbook revision-Concept-based

Strengthening authors' and publishers' capacity

TACTICS

Staff training

Consulting with experts

Book expo

Writing competition

Increase incentives for book development

Annual book development forum

Enforcing copyright law

GROUP 02

STRATEGIES

Recognition of author profession

Reinforcing copyright law

Digitalization of learning material

Increase involvement with private entity

TACTICS

Career path for authors

Technical training

Continuous Professional Development (CPD) Program

Standardized acceptable capacity of skilled author

Portfolio evaluation

Royalty program

Copyright committee

GROUP 03



RESEARCH CONTEXTUALIZATION

This activity is more of a sum of three different activities rather than a sole implementation of its own. It encompasses (i) strategy prioritization, (ii) stakeholder and idealized evidence network mapping, and (iii) mapping critical success factors.

Strategy prioritization

Objective:

To consult and validate improvement strategy or policy identified in the Context Analysis Brief in Phase I of the study.

Key outcomes:

- The improvement strategies identified in the Context Analysis Brief were grouped under the following four categories: Institutional Change, Policy Change, Content Change, and Digitalization.
- Participants agreed on the Institutional and Policy Change but revision should be made to the categorization of components in Early Grade Reading and Track and Trace (TnT).
- Early Grade Learning Package Model and the operation of Concept-based textbooks were grouped under a new category “Content Change”.
- TnT and other digital initiatives (reading and learning materials, library, etc) were grouped under “Digitization” category.
- Regardless of the absence in participants’ unanimous determination, TnT and Early Grade Learning Package Model were the top two improvement strategies that seemed to gain most interest from the participants.

Stakeholder and idealized evidence network mapping

Objective:

To identify potential members for the Advisory Board and research samples for the next study.

Key outcomes:

- All participants show great interest in connecting with one another and involving themselves in different parts in the next stage of the study.

Mapping Critical Success Factors

Objective:

To validate improvement strategies or policies identified in the Phase I-Context analysis brief as well as in the Strategy Prioritization activity itself. It also aimed to measure the feasibility of using and contextualizing the proposed analytical framework, the Critical Success Factors for the primary level book supply chain.

Key outcomes:

- Three strategies were validated; Koma Rean, Komar Ches (Children learn, Children know) and textbook revision-concept based for the Content Change, and digitalization of learning materials strategy for the Digitalization category.

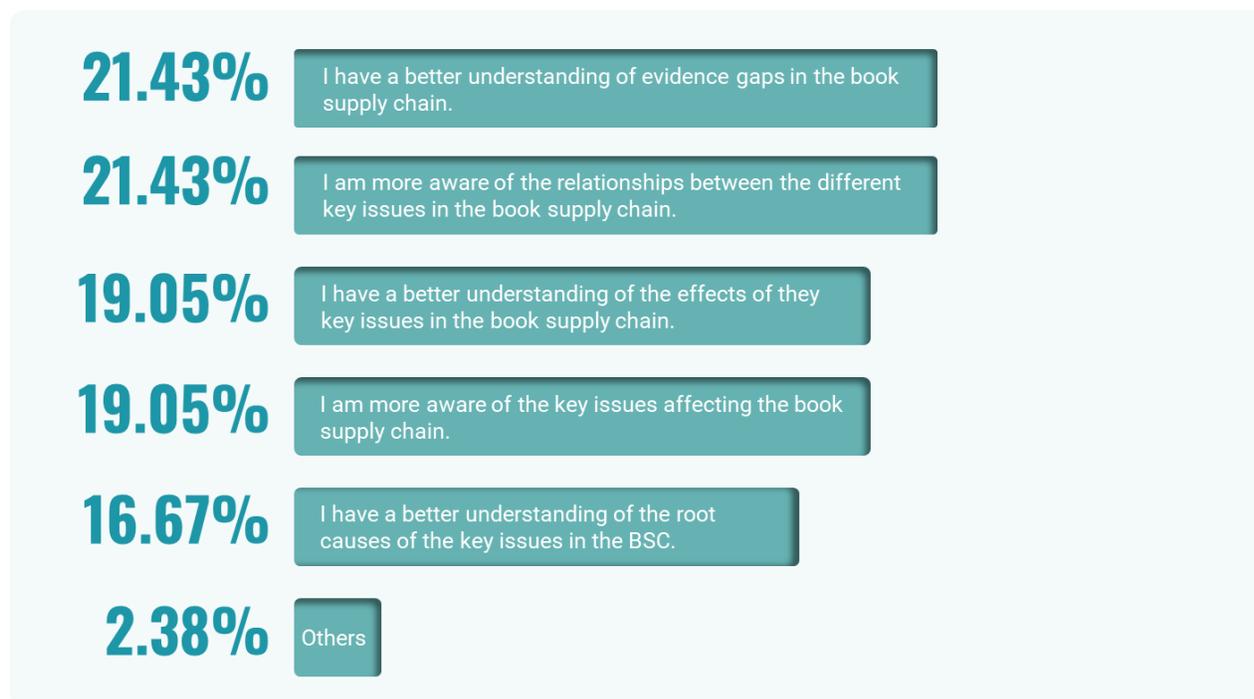
SECONDARY WORKSHOP EFFECTS

Feedback survey was put into KoBoToolBox and was used to observe whether there are any observable changes to the participants' perspective and understanding of the Cambodian primary level book supply chain and its evidence ecosystem.

Among all 16 participants, a total of 14 participants completed the survey, yielding 87.5% response rate. The overall results show that the workshop helped to enhance individual's understanding of the contemporary problems in the book supply chain evidence ecosystem. It also allowed individual actors to identify the need for evidence as well as realize their roles in the evidence ecosystem. More importantly, it gave opportunities for the respondents in establishing new networks, strengthening their connection as well as discussing the possibilities in working together to improve the condition of the Cambodian primary level book supply chain.

Change in Participants' Understanding of the Cambodian Primary Level Book Supply Chain

Figure 16. How has the workshop changed your understanding in the Cambodian primary level book supply chain? (Multiple Responses Question)



Overall, the top two changes in the participants' understanding lied on their awareness on the different key issues in the book supply chain and its evidence gaps. Besides these two, they also had a better understanding of not only the root causes of the problems, but also their side effects.

Change in Participants' Understanding of the Evidence Ecosystem

Figure 17. How has the workshop changed your understanding of the evidence ecosystem? (Multiple Responses Question)

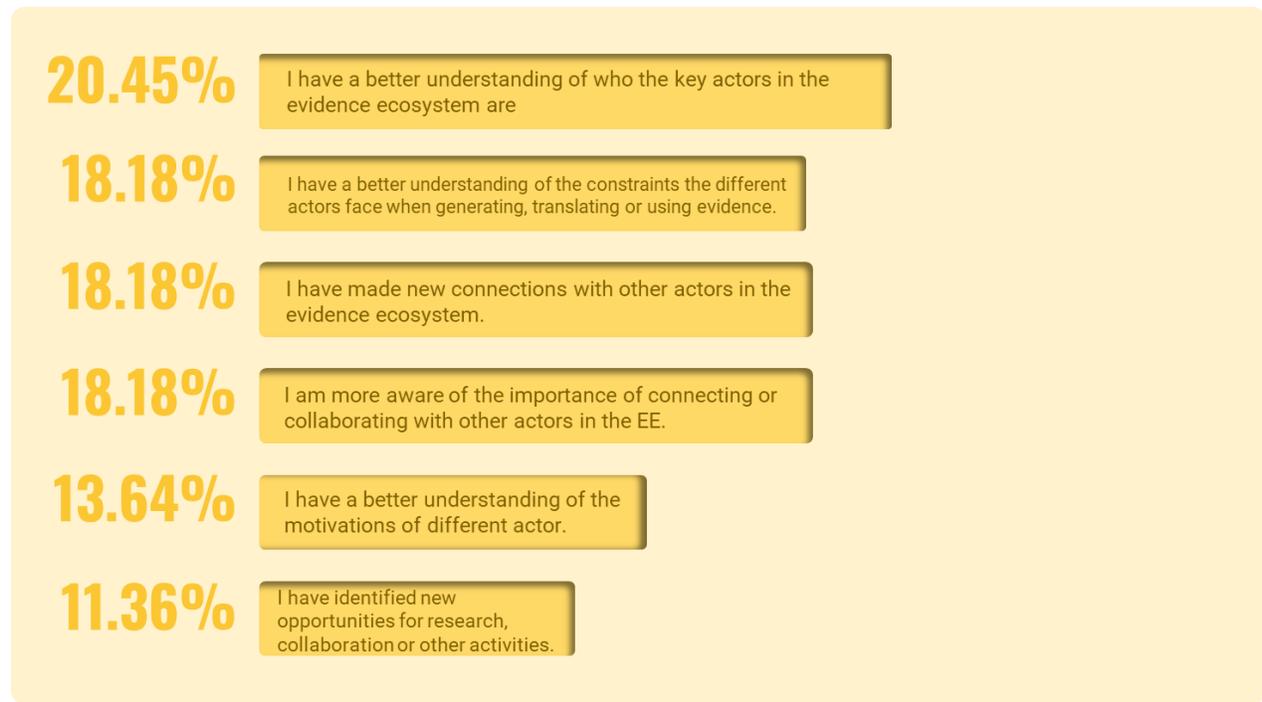


This figure illustrates the general trend of improvement in the participant's understanding and awareness of the evidence ecosystem. To be precise, the workshop helped increase their understanding of the current relationships between evidence generators, translators, and users, and how important it is in using evidence to help solve concerning problems in the book supply chain. Importantly, they felt that they are able to understand their role better which might allow them to perform effectively in the system. It is worth noting though that only about 7.5% of the workshop participants obtained a better understanding of what an ideal evidence ecosystem might look like.

Change in Connection with Different Actors in the Evidence Ecosystem

Illustrated in Figure 15 is how participants perceived the workshop effect on their connection with the other actors in the evidence ecosystem. From the result, this workshop has helped them gain more ideas, namely, knowing the existing actors in the evidence ecosystem (18.18%), making new connections with the other actors (18.18%) as well as recognizing the importance of connecting and collaborating with the other actors (18.18%). They also indicated that they have identified new opportunities for research, collaboration, or other activities (11.36%).

Figure 18. How has the workshop affected your connection with different actors in the evidence ecosystem? (Multiple Responses Question)



CONCLUSION AND RECOMMENDATION FOR ACTIONS

The Ecosystem Diagnostics Process mainly aims to diagnose the Cambodian primary level book supply chain and its evidence ecosystem to increase awareness, interaction, and functionality across the evidence ecosystem. This process also helped to contextualize, inform, and co-create the research design of Phase III of LIBROS study, which will focus on analysis of improvement strategies/programs that have significantly contributed to the development and performance of the book supply chain.

Based on the learning gathered through the literature review, key informant interviews, surveys, and the systems thinking workshop, the following actions arose as potential next steps for strengthening the evidence ecosystem around the Cambodian primary level book supply chain.

Key Finding 1: Different understanding of the term “evidence”; hence, different identification of evidence sources and related actors who generate, translate, and use the evidence.

Recommendations: Formulating relevant mechanisms (content or platform) in which allow or enable:

- Communicating and setting common ground on what “evidence” for the Cambodian primary level book supply chain encompasses.
- Mapping and disseminating information of relevant actors and their current roles and responsibilities.
- Identifying and notifying the preferred communication mode/means/methods between actors.

Key Finding 2: There is little use of evidence from rigorous research in decision making. Government departments tend to use data from national census and surveys conducted by the National Institute of Statistics of the Ministry of Planning and their own administrative data. NGOs and development partners are more likely to use results from baseline surveys or their own assessment to inform their programmatic development. Consultation in the form of workshops or focus group discussion is also a popular way to obtain inputs for policies and programs.

Recommendations:

- Promoting the generation, translation, and usage of actionable research.
- Having a common platform for sharing research outputs/evidence.

Key Finding 3: Inadequate knowledge of and collaboration among and between evidence ecosystem actors due to different interests and lack of resources (human, finance, time).

Recommendations:

- Diagnosing the convergence and divergence of the actors’ interest and focus.
- The government, development partners, NGOs, and private enterprises should consider investing in building linkages and collaboration between evidence ecosystem actors.
- Creating mechanisms (relevant, beneficial, feasible and within regular intervals) that can promote meaningful collaborations between actors such as technical exchange, joint training program, co-creating research content.
- Having a middleman to coordinate meetings and dialogue among relevant actors.

Key Finding 4: Inadequate accessible and user-friendly knowledge of the ideal evidence ecosystem and its importance and contribution to better development in the primary level book supply chain.

Recommendation:

- Presenting and justifying the importance of having a sound evidence ecosystem in the primary level book supply chain.
- Promoting the formulation, translation, and usage of a shared, contextualized, and standardized map of evidence ecosystem and research for the Cambodian primary level book supply chain.
- Initiating buy-in from the strategic level and securing appropriate and meaningful incentives and funding mechanisms.



LIBROS: Learning to Improve Book Resource Operational Systems

CAMBODIA

