

ADAPTATING GROUP MODEL BUILDING TO LOW RESOURCE SETTINGS: A CASE STUDY FROM THE LAO PDR

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SUMMARY

System dynamics has been effective in tackling some of the most wicked problems we face today. Within this, group model building (GMB) has been developed as a participatory approach to develop system dynamics models. These models are representative of views and knowledge from a cross-section of disciplines.

Extensive GMB scripts have been developed providing a valuable resource for how to structure small group exercises. These scripts are generally structured towards larger teams with multiple roles; this can be a significant constraint in low-resource settings. As a result, group model building in settings where experienced facilitators and other resources are limited requires critical adaptation of these scripts.

Insights have been gained into the adaptation of GMB scripts from two stakeholder workshops held in the Lao PDR. Workshops were held in both rural and urban locations with specific known resource constraints and unanticipated resource limitations. This paper describes the elements and structure of the adaptation of GMB scripts to this low resource setting.

SITUATION

GROUP MODEL BUILDING SCRIPTS

- Extensive GMB scripts developed - valuable resource
- Generally structured towards larger teams with multiple roles
- 17 roles identified in Scriptapedia to manage workshops ("potentially completed by... two experienced facilitators but... results may be compromised") (1)

LOW RESOURCE SETTINGS

- Limited access to equipment, supplies, devices, internet
- Infrastructure (electricity, transport, venue environment)
- Human resource limitations (trained facilitation team, interpreters, participants conceptual understanding)
- Limited funds for: GMB team training, materials, venue, travel etc.



ADAPTATIONS

ANTICIPATED ADAPTATIONS

- Use (or have backup) hardcopy materials, flip chart paper, mobile hotspot
- Can not rely on electrical supply, venue flexibility required, transport delays / breakdowns
- Time required to train local team, pre-translation of terms and concepts, 'test' workshop concepts
- Creative fund management

UNANTICIPATED ADAPTATIONS

- Beehives in the meeting room - used empty offices
- All day electrical grid failure - flip charts, change from simultaneous to consecutive translation, changed 'energiser' activity to paper fan making, cut out sections to fit time constraints
- Loss of trained support facilitator - weekend training of junior staff
- Change of volunteer facilitators and capacity - additional training day added, reduced roles / responsibilities
- Removal of connection circle activity - confused CLD process

LOCAL ACTIVITIES - LAO PDR

Research Question the factors driving child stunting in rural areas of the Lao PDR, how these factors relate to each other, and identification of leverage points for decision making.

Overview

- Capacity building key part of the participatory GMB workshops.
- Overview of the problem (child stunting in Laos v Southeast Asia) discussed with participants.
- Introduction to systems thinking and system dynamics modelling presentation.
- Used local examples for each component, developed in collaboration with local staff.
- CLD prepared prior to workshop, but not presented to participants; helpful in preparing answers to potential questions and ensuring correct translation to local language and context.
- Local 'ice breaker' activities developed relevant to Laos (e.g. The Jigsaw Puzzle Game).

The Jigsaw Puzzle Game

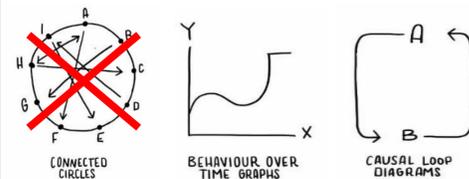
Instructions: Each participant received a part of the puzzle; task was to put the puzzle together as a group in 5 minutes; some pieces were 'missing', held by GMB team.

Purpose: To provide a visual concept of 'the whole picture'; demonstrate that we can not solve a problem if we don't know the whole story; that we each know parts of the problem and need to work together to understand the whole; and that our projects / data collection is often bound by difficult time constraints.

Tips: Use a local scene that is culturally relevant and recognisable.

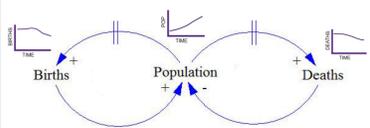


System Mapping Tools Planned & Used



- Scripts for variable elicitation (2), connection circles (3), BOTGs (4), and CLDs (5) prepared for workshops.
- Connection circle removed as it confused the CLD process - CLDs were drawn in circles.
- BOTGs and CLDs were sufficient to explore the issue and build capacity of participants in a systems thinking approach to complex problems.

Combining BOTGs and CLDs



- Prompted discussion around mental models and how to challenge.
- Clarified reasoning and usefulness of BOTGs and CLDs.
- Created greater understanding of the problem.

Policies & Interventions (7)

- Identified on CLD map with relevant variables numbered, correlating to intervention.
- Overlaps and gaps in current and planned interventions / policies visually identified.
- Created greater understanding of the need for integration between sectors.

Current initiative name: _____

Brief description: _____

What are the top three (3) outcomes you are trying to achieve?

What secondary / incidental outcomes do you think may be achieved?

GMB AGENDA

Time	Activity	Who	Materials
8:00-8:30	Registration	To be assigned	Sign-on sheet, name tags, consent forms
8:30-8:35	Welcome (5 min)	Facilitator	
8:35-8:45	Ice breaker jigsaw puzzle game (10 min)	Modelling team	Jigsaw puzzle max 50 pieces
8:45-8:50	Purpose & outcomes (5 min)	Facilitator	Powerpoint
8:50-9:00	Identifying variables (10 min)	Facilitator	
9:00-10:00	Causal relationships - connection circle (60 min)	Modeller: records links between variables on the connec. Facilitator Record connection.	Powerpoint
10:00-10:20	Morning tea		
10:20-11:30	Behaviour over time graphs (70 min)	Wall-builder: collect graphs and organise. Modeller: records Facilitator on the connec.	A0 flipchart paper Marker pens Blue-tag BOTG AS printouts (5 per person) Powerpoint
11:30-12:30	Intro to CLDs (60 min)	Facilitator	Powerpoint Prepared CLD
12:30-1:30	Lunch		
1:30-1:35	Energiser (5 min)	Activity TBC by local facilitators.	
1:35-1:55	Model review (20 min)	Wall-builder: records in feedback loops and as Facilitator stories gained. Modeller: updates CLD in STICKE	
1:55-2:25	Priority variables - CLD (30 min)	Modeller: records B&R connections, B&R loops, and as Facilitator STICKE, as activities continue. Recorder: notes stories shared.	Printed CLD A0 flipchart paper Marker pens
2:25-3:00	Afternoon tea		
3:00-4:00	Interventions (60 min)	Wall-builder: records interventions sheets and groups Facilitator	Interventions templates on A5 paper (5 per person)
4:00-4:15	Wrap up & next steps (15 min)	Facilitator	
4:30	FINISH		

OUTCOMES

Value for Laos participants

- Introduction to systems thinking using locally relevant examples.
- Practical use of system dynamics tools to explore complex problems.
- How systems thinking tools can be used to identify gaps / overlaps in interventions to assist decision makers.
- Highlighted the need to identify interactions between different parts of a system, to look at the whole story.
- Highly interactive process requiring full participation and knowledge sharing.
- Story telling component identified as being 'relatable' for Laos culture.

Future use in Laos context

- Expression of interest in using BOTGs and CLDs as part of integrated projects and decision making process.
- Host organisation* to train local facilitators in GMB process.

RECOMMENDATIONS FOR FACILITATORS

- Use scripts to provide a framework, identify time requirements, and familiarise with activity method and purpose.
- Add an additional 1/3 of time for consecutive translation.
- Minimum of two facilitators and one dedicated note taker.
- Use local examples developed in collaboration with local staff to ensure relatability, promote ownership over the workshop process and outputs, and build capacity.
- Plan for different levels of conceptual understanding and prepare relevant examples.
- Make sure everything is available in hard copy and/or use equipment that does not require a power outlet.
- Emphasis on story telling component of activities (in the Laos context, this resonated with local cultural practices).
- Have a local support team to assist with preparation of workshop, invitees, logistics, and identifying solutions to local problems.
- LOCAL PROBLEMS have LOCAL SOLUTIONS.

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