

Remote implementation of Participatory Rural Appraisal (PRA) Tools

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Abstract

The paper critically reflects on the process of re-designing tools from Participatory Rural Appraisal (PRA) to a remote format of data collection in the 2020 Cambodia project titled “Cooperating out of Poverty? Effects of Agricultural Cooperatives on Livelihoods and Food Security in Cambodia”. The paper describes adaptations made and puts emphasis on encountered challenges and lessons learned. Further, it reflects on potentials and limitations of remote research, as well as on alternative research concepts and new forms of international cooperation. New challenges that arise – e.g. the risks of misinterpretation of results due to lack of context knowledge – demand for special attention to good communication and constant feedback loops between all team members, next to highly flexible organization, planning and scheduling.



Study Context and Method Selection

In 2020, the COVID-19 pandemic posed completely new challenges for field research and empirical data collection. To exemplify, in the case of the SLE Overseas’ projects 2020, international travel restrictions did not allow the study team to travel to Cambodia and collect data themselves. Instead, low number of cases and effective national measurements in Cambodia allowed in-country travel and research for local researchers.

Eventually, the SLE study team decided to implement the entire research project as originally envisaged and to build up a comprehensive empirical database by recruiting local research teams in Cambodia. A local coordinator had the responsibility as intermediary between the research team in Berlin and contracted teams in Cambodia. She further facilitated the recruitment of local field staff that were then contracted by the partner organization GIZ in Cambodia to oversee their contracts and to be an in-

SLE method briefs are created from the practical experiences of our alumni in their interdisciplinary research projects. Lessons learned and good practices are compiled. In each brief, we present the method that is explained clearly, step by step, and with the help of practical examples. With its method briefs, the SLE aims to support researchers and practitioners who are active in solution-oriented and transformative international development work by providing insights into hands-on methods in a structured manner, so that the wheel does not always have to be reinvented.

The Centre for Rural Development (SLE) is affiliated with the Albrecht Daniel Thaer-Institute for Agricultural and Horticultural Sciences in the Faculty of Life Sciences at the Humboldt-Universität zu Berlin. Its work concentrates on four branches: international cooperation for sustainable development as a post-master degree course, training courses for international leaders and experts in the field of international cooperation, research on sustainability issues, and advisory services for universities and organisations.

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termediary between GIZ Cambodia and the research teams on site. Local staff included a translator for the implementation of key informant interviews on site, enumerators for conducting the household survey and workshop facilitators for facilitating Participatory Rural Appraisal (PRA) workshops.

The rather spontaneous adaption to the remote format did not allow an early integration of local researchers as was desirable. Constantly changing and rather unpredictable measurements of the COVID-19 pandemic made organisation and planning difficult. Only reliable partners, good communication patterns among all the team members and enough room for constant adaptations allowed the implementations of PRA tools under these very special conditions.

Surprisingly, the COVID-19 pandemic, besides restricting the Berlin team from traveling, did not have a great impact on the implementation of the research in the field. The Cambodian research team and participants took all safety measures into account to guarantee safe interviews and workshops. Still, the Berlin team was not able to steer the data collection in the field and heavily depended on the coordinator, and the interpretation of results demanded constant clarification. The Berlin team was only remotely involved in data collection, meaning they planned and organized workshops but could not participate virtually via live-broadcasts because of low internet coverage in remote areas. Instead, both teams had joint de-briefings of the workshops via video-calls after each workshop to discuss the methodology and preliminary results of the workshops (see figure 1).

Mixed-Methods Approach

The study design was based on a mixed-methods approach for data collection, which simultaneously

allowed for an explorative and in-depth investigation of the research questions. Quantitative and qualitative research instruments were combined to reduce the risk of systematic errors and to lend more validity to the data (Flick, 2008; Hussy et al., 2013). In brief, the team conducted a quantitative household survey (HHS) and analysed the data using Propensity Score Matching (PSM), descriptive statistics and linear regression. Qualitative data was gathered via key informant interviews (KIIs), in-depth interviews and selected tools of PRA. PRA tools offer the possibility to quickly assess information about rural livelihoods by applying systematic and semi-structured research methodologies.

The presented paper focuses on the PRA workshops alone, which include the following: an adapted version of the participatory Method for Impact Assessment of Programs and Projects (MAPP) was used to assess the impacts of the agricultural cooperatives on the livelihoods and food security of the beneficiaries of the GIZ project; the Venn-Diagram was used as a complementary tool to derive recommendations for supporting and promoting the exchange and dissemination of local agricultural knowledge within communities (see figure 2); SWOT (strength, weaknesses, opportunities and threats) analyses were conducted with representatives of each of the two agricultural cooperatives, with the aim to provide a brief and up-to-date assessment of the organizational and social structure of the cooperatives through self-evaluation.

The results from all methods were finally merged and triangulated to capture the complexity of the context from different perspectives and to increase validity, reliability and inter-subjective traceability.

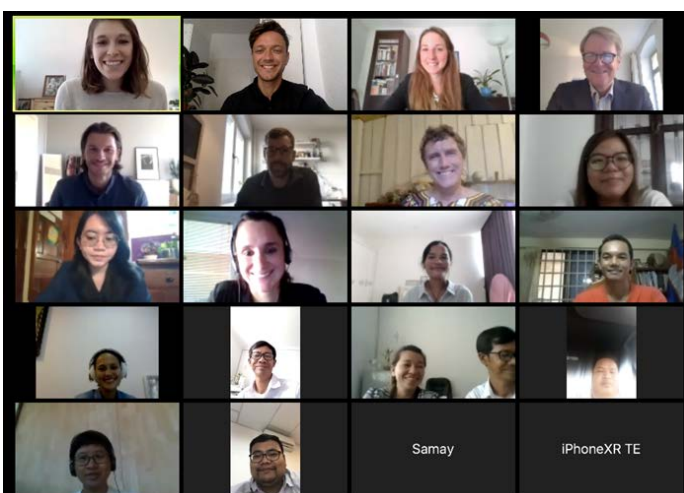


Figure 1: Remote Kick-Off Meeting of all team members in Cambodia and Germany (source: SLE 2020)

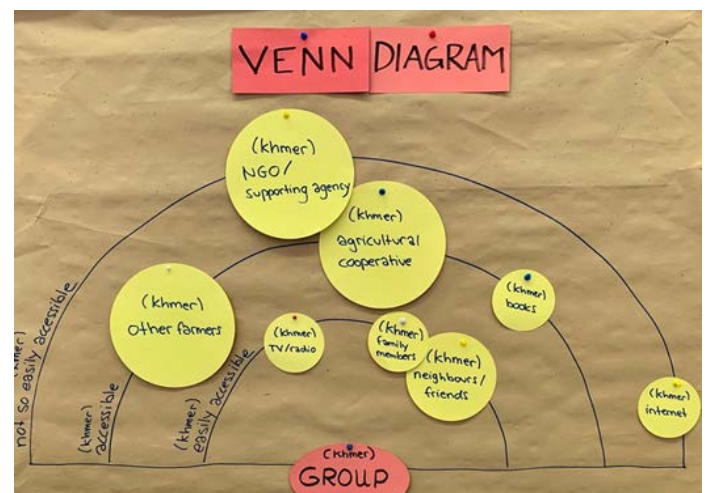


Figure 2: Template Venn Diagram (source: SLE 2020)

Designing and Organizing Remote Implementation of PRA Tools

Recruitment of Local Researchers

For the recruitment of workshop facilitators, job descriptions were published in the common job portals in Cambodia by the national coordinator. Based on preset criteria, the national coordinator made a preselection of the applications, with whom the Berlin team arranged video-call interviews. The team leader, two Berlin team members and the Cambodian coordinator conducted the application interviews. All interviews were evaluated according to a preestablished evaluation scheme.

A joint discussion of the results led to a ranking of the candidates. In case of the assistant facilitators, the lead facilitator was already recruited and also took part in the interview committee. An experienced and skilled interdisciplinary Cambodian team was chosen, whereby particular importance was given to digital literacy of the candidates to assure good communication and documentation of results. Eventually, the PRA team in Cambodia consisted of a lead facilitator, with relevant field experience in participatory methods and four assistant facilitators with a clear division of tasks and responsibilities.

In addition, a freelance PRA trainer was contracted to further train the team and to participate in the field-testing as an observer. Observation reports were particularly helpful for the Berlin team to further adjust the methodology and gain additional context knowledge about the local situation.

Furthermore, the coordinator also accompanied some of the participatory workshops in the field and documented impressions from the workshops. Her expertise and her work experience helped the Berlin team to better understand the local context – her role became indispensable to the success of the study.

Organising the Research Process

The local research team conducted 10 PRA workshops in four different villages in two consecutive weeks (see figure 3). The workshops were organised in close cooperation with GIZ field officers and local authorities, especially with regards to the permission needed by village chiefs and to fulfil all necessary safety measures. The teams in Berlin and Cambodia were in regular contact and discussed the proceedings after each workshop for quality assurance and exchange of information on work flow, challenges and context.



Figure 3: PRA Workshop in Kampong Chhnang, Cambodia (source: SLE 2020)

The Berlin team had devised a detailed manual for the planning and implementation of workshops, which served as a guideline for the Cambodian team and included a detailed description all steps, responsibilities, timeline, group settings and comments on particularly relevant points (see table 1). The field manual served as a basis for data collection and was continuously adapted to the specific needs of the implementing Cambodian team as well as to the local context. Moreover, the field manual was shortened and simplified to meet the new schedule of data collection, which was shortened to two weeks instead of five weeks. The challenging situation required a solid preparation, frequent communication with the implementing team as well as high flexibility regarding the implementation of the methodology to allow for quick adjustments in the field.

Specific Requirements for Data Analysis

The data analysis of the conducted PRA workshops demanded special attention to knowledge management. To ensure effective interpersonal traceability of results between the teams in Cambodia and Berlin, the teams decided to introduce templates for the collection and presentation of data for the Cambodian team (see figure 4). The templates in-

Topic	Present	In the past few years	Before AC	Trend	Remark
Livelihood	Present	In the past few years	Before AC	Trend	Remark
Health	Many patient and have nurses/doctor	On the way to hospital, road is bad	Difficult	Better than before	After AC come
Agriculture Market	Market only for Ag. specific agriculture only	No market yet	No market	Better than before	Bounded training
Family	Help each others (from Cousins)	No one help in family busy with children	Help each other as normal	Better than before	Children grow up and they are helps
Home Gardening	Crops some for eat and some for sale	Some for knowledge	The same	Better than before	Have own land can grow whatever

Figure 4: Photo protocol of the Trend Analysis conducted in the PRA Workshop in Kratie, Cambodia (source: SLE 2020)

No	Steps	Time	Time schedule	Group Setting	Purpose
MAPP Workshop					
	Arrival	30 min	7.30 - 8.00		Coffee/Tea
	Greeting and Introduction	10 min	8.00 - 8.10	Entire Group	Introduction of study team and presentation of visit purpose
1	Timeline	20 min	8.10 - 8.30	Entire Group	"Starter tool" to find out about village situation and orient participants towards livelihood factors
2	Collection and Prioritization of Livelihood Factors	40 min	8.30 - 9.10	Entire Group	Define factors important for the livelihood situation in the village
3-1	Trend Analysis	40 min	9.10 - 9.50	First Sub-Group	Find out about development of selected livelihood factors
3-2	Livelihood Matrix or Trend Analysis Grp 2	40 min	9.10 - 9.50	Second Sub-Group	Identify relations between different livelihood factors
3-3	Presentation	10 min	9.50 - 10.10	Entire Group	Presentation of results of sub-groups
	Break	20 min	10.00 - 10.20		Refreshments and material preparation for the next exercise
4	Activity Introduction and ranking	20 min	10.20 - 10.40	Entire Group	Introduction and ranking of AC activities
5	Activity Matrix Scoring (& SW-Analysis)	40 min	10.40 - 11.20	2 Sub-Groups	Determine and rank influence of AC activities on livelihood factors
6	Final presentation & future perspectives	15 min	11.20 - 11.35	Entire Group	Collection and ranking of ideas for new services the AC should offer.
	Wrap up	5 min	11.35 - 11.40	Entire Group	Extract main result of the morning session
	End of MAPP Workshop with Lunch	60 min	11.40 - 12.40	Entire Group	Informal Discussions and reflection
Venn Diagram					
	Greeting and Introduction	10 min	13.00 - 13.10	Facilitators	Introduction of study team and presentation of visit purpose
	Brainstorming	10 min	13.10 - 13.20	Participants	Find out about important sources of information
	Ranking and Allocation of circles	15 min	13.20 - 13.35	Participants	Identify most important sources of information
	Remarks and presentation	5 min	13.35 - 13.40	Participants	Give everyone the chance to give remarks and present
	Brainstorming Action Identification Small Group discussion	30 min	13.40 - 14.10	Participants	Collect creative ideas and rank them according to their reception
	Plenary discussion action proposed by the 2 groups	30 min	14.10 - 14.40	Participants	Agree possible action for AC to consider (Draft Action Plan); Agree on level of priority (High medium Low) for each action
	Venn Wrap up and next steps after both workshops Reality-check	20 min	14.40 - 15.00	Facilitators Participants	Divide responsibilities
	Photo protocol			Facilitators	Documentation
	Report			Facilitators	Documentation in English for the Berlin team
End of Venn Diagram					
	Village Walk (optional)	60 min	Afternoon	Interested Participants	Cross-check of data
	Recap, Safeguarding & preservation of results, preliminary data analysis.	120 min	tba.	Facilitator Team	Recap: What was good? What was not good? What can be done better? Ensure proper documentation Preliminary data analysis and aggregation
	Feedback to Berlin steering team	20 min	tba.	Lead Facilitator & Back-stopper	Feedback by Telephone
SWOT Analysis					
	Introduction of SWOT	5 min	09.00	Facilitator Team	Introduction of the method and its purpose
	SWOT Analysis	45 min	09.05	Participants	Identify the AC's internal strengths and weaknesses as well as external opportunities and threats
	Ranking	5 min	09.50	Participants	
	Recommendations	15 min	10.05	Participants	derive recommendations for future AC activities
	Photo protocol			Facilitator team	Documentation
	Report			Facilitator team	Documentation in English for the Berlin team

Table 1: Summary of the moderation plan of PRA workshops: MAPP Workshop, Venn-Diagram & SWOT Analysis

Location		
Date		
Participants	Total number of participants	
	thereof AC members & non-members	AC Members: (men/women) Non-members: (men/women)
Facilitators		
Observers		

What was good?:

What was difficult?:

Additional information:

Figure 5: Template PRA field report (source: SLE 2020)

cluded enough room for complementary comments to also document observations, challenges and best practices. Field reports and photo protocols (see figure 2 and figure 5) became substantial parts of the data analysis. Photos of the local area, of attending participants and of actual workshops proved to be particularly important to better understand the local context and research conditions of the respective workshops. Additional feedback loops via video-calls between the teams in Cambodia and Berlin complemented the written and photo documentation and further opened room for discussion of adaptations regarding the data collection. Finally, the triangulations between methods proved to be indispensable, especially to avoid possible sources of errors and misinterpretations because of a lacking contextual knowledge from the PRA tools alone.

Potentials and Limitations of Remote Implementation of PRA Tools

The PRA village workshops were the most challenging part when redesigning the methodology to a remote format. Both teams in Berlin and Cambodia highlighted the good interaction within and between the teams, which was explained by clear roles and responsibilities, high flexibility with regards to method adaptations and organizational planning, good team spirit, mutual trust and strong dedication to the study. Surprisingly, internet connectivity was not a major issue when debriefing the workshops. Live-video calls during the actual workshops were not possible due to insufficient mobile internet coverage in the rural areas.

Generally, the Berlin team observed that a lack of in-depth contextual knowledge regarding the daily life in rural Cambodia, its history and culture and its linkages to our study was perceived to remain the biggest challenge when interpreting the PRA results.

Literature alone could not replace personal impressions and informal conversations on site. Moreover, informal conversations would have helped to better grasp and contextualize the collected data, fill it with life and meaning and to better steer conversations during the workshops. Against this background, triangulation of results and constant feedback loops and communication with the Cambodia team were indispensable.

Further, the intended timeline did not always meet the realities in the field. The short timeframe between the field testing and the implementation phase made it difficult to adapt lessons learned. Timeslots in between the workshops left little room for de-briefings, adaptations, and preparations, let alone recreation for the local staff members. Some of the methodical steps had to be simplified for lack of time; sometimes it led to a loss of significance of the results, for example in the case of the MAPP workshops, which are by design comparably more complex in requirements and implementation through prerequisite concepts and methodological requirements than relatively simpler and well-established methods such as SWOT analyses. This also led to the dilemma that some important results lacked background information about the context and causal relationships.

An important lesson learned is that PRA workshops should be accompanied by a professional translator, who can guarantee an accurate documentation and proper translation of the discussions of the participants, while the facilitation team can concentrate on the flow of the workshop.

Still, some challenges arose regardless of whether the research was conducted remotely or not. Language barriers would have occurred either way. Introducing academic concepts such as “social inclusion” and “local knowledge” without deeper explanation led to diverging interpretations of the tools by the participants and made the comparison of results challenging. Moreover, participatory methods, despite their participatory claim, still are a rather extractive and top-down approach (of concepts, interpretation) in practice, as a result of persisting paradigms, rooting in global inequalities within academics and international cooperation. Critical analysis and reflections of one’s own intention, objectives and associated implications must become an inherent part when designing a methodology. Following this line of thought, it would have been more desirable to involve motivated and respected experts in the development of such formats from the very

beginning to better meet the interests and needs of the local community already in the planning phase.

Alternative Concepts of Research and Cooperation

In conclusion, implementing PRA tools remotely remains challenging, especially regarding the coordination of field work and interpretation of results. Nevertheless, remotely implemented PRA tools ultimately proved to be feasible, reliable and saved time and costs. Overall, remote PRA can be recommended for future studies when considering the mentioned challenges and careful planning. Rather simple and well-established methodologies (e.g. SWOT analysis) proved to be easier to implement and analyse and should therefore be prioritised over rather complex methodologies, who demand careful explanations and close guidance (e.g. MAPP).

In the future, a closer cooperation of all team members during the entire research process -- including the design of methodology, data collection and data analysis -- promise further benefits. The early inclusion of all participating team members, including local team members, in each and every step of the research proposes and demands other, new concepts of international cooperation and research as a whole, i.e., Peer-Tandem-Research, or Co-Research (see referencing method concepts).

Alternative and innovative forms of cooperation that include and enhance local researchers and people from respective countries have the potential to both positively affect the quality and validity of data and further give national staff a more prominent role in the research process, enhance local expertise and ensure that generated knowledge remains within the respective communities.

Finally, it remains to be seen if such forms of remote data collection, remote research, and remote management will increase and arguably change the way of working in international cooperation after the COVID-19 pandemic.

Further Literature

Methodological Concept

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