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A Framework and Tools for Assessing Local Innovation Capacity: Guide for Implementers

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MIT D-Lab works with people around the world to develop and advance collaborative approaches and practical solutions to global poverty challenges. Since 2017, MIT D-Lab has operated the Comprehensive Initiative on Technology Evaluation (CITE), a USAID-funded program launched at MIT in 2012 to develop and disseminate rigorous, practitioner-oriented evaluation methodologies for use in global development. CITE supports independent research studies led by interdisciplinary teams of researchers and practitioners working at the nexus of evaluation methodology, sociotechnical systems, and global development challenges. This document was developed under the CITE research study "Designing an evaluation methodology to assess capacity development for local innovation," implemented by the MIT Local Innovation Group.

MIT Local Innovation Group

The MIT Local Innovation Group conducts interdisciplinary social science research on processes of local innovation and local systems change in communities facing development challenges around the world. Created at MIT D-Lab in 2017 by research scientist Elizabeth Hoeffcker, the research group currently operates out of MIT's Sociotechnical Systems Research Center. Integrating academic scholarship with development practice, the group's research produces actionable findings, methodological advances, and analytical tools that enable global development actors to deepen their understanding of how local innovation processes work, how they contribute to sustainable and equitable development, and how they can be catalyzed, facilitated, and evaluated.

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INTRODUCTION

Global development actors are increasingly prioritizing approaches aimed at strengthening the capacity of local communities to develop their own solutions to the development challenges they face; in other words, to innovate locally. As interventions aimed at strengthening local innovation capacity become more popular, a need has emerged for reliable methods of assessing changes in local innovation capacity at the individual level, group level, and the level of local systems. Under the USAID-funded research project, “Designing an evaluation methodology to assess capacity development for local innovation,” the MIT Local Innovation Group has developed an evaluation framework and set of research protocols that can be used to assess changes in local innovation capacity at the grassroots level across diverse project contexts.

During the summer of 2022, the project team field tested an initial set of evaluation instruments in several locations in which MIT D-Lab and its partners had been engaged in programmatic efforts to strengthen local innovation capacity during the previous three to five years. These locations included the Western Highlands of Guatemala around Lake Atitlán; rural and semi-rural communities in the vicinity of Bogotá, Colombia; and refugee camps in Northern Uganda located in the vicinity of Arua. In each round of field tests, we compared various potential assessment instruments against each other on several performance criteria, including understandability of the questions and activities to research participants and implementers, relevance and appropriateness of the activities to the local context, feasibility of implementation, interpretability and usability of the results, and reliability of the instrument in measuring the indicators of interest.

Based on the results of that field testing, we selected a sub-set of assessment instruments for inclusion in the evaluation toolkit and made improvements to these instruments based on input from our field testing partners. This document describes the assessment instruments that we selected for inclusion in the evaluation toolkit following these comparative field tests and provides an overview of the evaluation framework. This document also offers guidance on the use of these instruments and provides direct access to the instruments through hyperlinks. More detailed guidance on implementing each instrument, including scoring the results obtained by the instruments, is included directly in the respective instrument files (hyperlinks).

This report is organized according to the primary conceptual categories in the evaluation framework. We start by presenting the evaluation framework by levels, starting with defining local innovation capacity at the individual level, followed by the group level and finally the local system level. Within each level, we provide a table that lists the primary conceptual dimensions of how we define “local innovation capacity” at that level, along with specific cognitive and behavioral sub-capacities associated with each of our major capacity “dimensions,” which serve as conceptual buckets within which to gather related groups of capabilities and competencies. Each table describing the set of capacities at the three different levels is followed by a section that describes the specific assessment tools that we selected and field tested to measure particular capabilities and competencies at that level.

Following description of all of the assessment tools at each of the three levels, we include a section with general guidance to implementers on how to plan for, deploy, and score the various assessment tools, based on our field-testing experience. We end with a section that shares common questions that our implementing partners raised during field testing and our responses to these questions, as additional guidance on implementation of the assessment instruments.

LOCAL INNOVATION CAPACITY FRAMEWORK AND TOOLS

The evaluation framework we propose for assessing local innovation capacity consists of a variety of interrelated sub-capacities that scholars determined comprise key components of “the capacity to innovate” for individuals, groups or teams, and local systems. The full framework is described in a companion report; here, we provide a summary of the framework and indicate (marked with an asterisk*) which components of the framework have assessment tools that have been identified and field-tested in the first phase of instrument validation.

INDIVIDUAL-LEVEL CAPACITIES AND ASSESSMENT TOOLS

In Table I below, we present an overview of the three conceptual dimensions of local innovation capacity that our framework identifies as most relevant at the level of individuals. These “capacity dimensions” are components that form part of the complex, overarching “capacity to innovate” concept. Within each capacity dimension, we distinguish a series of specific capabilities and competencies that, when combined, constitute an individual’s capacity regarding that dimension. Each specific capability or competency that can be assessed with the tool we have included in the table is marked with an asterisk.*

Table I

Individual-Level Capacity Dimensions and Related Assessment Tools

Capacity dimension	Capability (cognitive)	Competency (behavioral)	Assessment tool(s)
Creative exploration and innovativeness	Critical thinking, creative thinking,* openness to taking risks, question and problem-framing,* confidence	Questioning the status quo,* framing questions/problems that invite exploration,* exploring challenges and opportunities,* proactiveness	Creative thinking-product improvement protocol ; learning and experimentation protocol
Iterative experimentation and learning	A reflective, learning-from-doing mindset,* the skills to prototype and experiment	Action learning: reflecting on action,* incorporating reflection into planning for subsequent action,* taking actions that incorporate learning*	Learning and experimentation protocol
Network building and utilization	Openness to other perspectives, the skills and confidence to form new relationships,	Forming new connections and relationships,* maintaining connections and relationships over	Network building and utilization protocol

	leveraging relationships to share resources, opportunities, and support	time,* using networks to exchange resources and support needed for innovation*	
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DESCRIPTION OF THE ASSESSMENT TOOLS

CREATIVE THINKING AND INNOVATIVENESS

About this tool: This tool is an adapted version of the approach to assessing the creative-thinking skills of individuals developed by the Torrance Test of Creative Thinking (TTCT). The tool asks participants to engage in a 15-minute brainstorming activity, during which they develop as many ideas as they can about ways in which an object (a toy) can be improved to better serve its purpose. Based on field-testing this protocol, we developed a modified approach to implementing and scoring the activity that makes it more relevant to populations with limited literacy and experience in school settings.

How to use the tool: Individual respondents complete a response sheet based on a creativity exercise using an object (toy), and implementers use the information on the sheets to score individual creativity along three creative-thinking dimensions of *fluency*, *flexibility*, and *originality*.

LEARNING AND EXPERIMENTATION

About this tool: This protocol assesses skills and abilities related to action learning, specifically participants' past experiences engaging in experimentation, reflection, and learning based on experimentation. The tool is designed as a semi-structured interview protocol and takes approximately forty-five minutes to implement with each individual respondent.

How to use the tool: An interviewer guides respondents through a series of questions following the action-learning cycle described in the protocol. The interviewer captures responses on the interview guide and subsequently scores responses related to the different phases of the learning cycle following a scoring guide that is included with the protocol. This assessment tool is designed to be implemented at the end of a discrete "learning cycle," which might correspond to the end of a project or simply the end of a phase of joint work and experimental activity. A single-capacity-development intervention might go through multiple learning cycles in its lifetime, in which case changes in the score of this tool can be compared across learning cycles.

LEARNING NETWORK BUILDING AND UTILIZATION

About this tool: The tool builds on existing network-mapping techniques and has been designed to be simple and practical to implement with respondents, irrespective of their literacy levels. The network mapping consists of three stages in which individuals identify their networks, characterize their interactions based on resources shared between members in their networks, and assess the quality of their network interactions. This is an interview-based activity that can take anywhere between 45 and 90 minutes to complete, depending on the size of respondents' networks.

How to use the tool: This tool consists of an interviewer asking a series of network-related questions to respondents, which are used to inform a drawing that the interviewer and respondent

create together of the individual’s network and various network characteristics. The tool can be used at various points in time before, during, or after a capacity-building intervention to determine if there has been a change in the respondent’s demonstrated ability to build and utilize networks for innovation.

GROUP-LEVEL CAPACITIES AND ASSESSMENT TOOLS

In Table 2 below, we present an overview of the four conceptual dimensions of local innovation capacity that our framework identifies as most relevant at the level of groups. By “groups,” we refer to both formal and informal groups or work teams, which could include a project team, work group, informal collective or more formal organization such as a farmers’ association, cooperative, civil society organization of varying sizes, or other types of groups. The dimensions of local innovation capacity at the group level are similar to those at the individual level, with the distinction that the related sub-capacities (capabilities and competencies) are framed as attributes of groups, rather than attributes of individuals. As in Table 1, sub-capacities that are associated with a specific assessment tool that we have field tested are indicated with an asterisk.

Table 2

Group-Level Capacity Dimensions and Assessment Tools

Capacity dimension	Capability (cognitive)	Competency (behavioral)	Assessment tool(s)
Creative exploration and innovativeness	Flexibility and openness to explore new ways of doing things,* openness to taking risks, capacity to envision change,* collaborative creative thinking*	Identifying challenges and opportunities, taking intentional risks, exploring new ways of doing things	Realistic-problem scenario protocol
Iterative experimentation and learning	The ability to prioritize directions for action, a reflective group culture, the ability to monitor and assess experiments, the capability to facilitate processes for first-order and second-order learning	Prototyping and experimentation in the technical sphere, prototyping and experimentation in the social sphere, processes of joint action learning within the group*	Action-learning reflection protocol
Network building and utilization	Group norms and values that support networking; group openness to sharing information and resources	Forming new relationships/connections* ; using networks to exchange resources to spur innovation*	Network building and utilization protocol
Collective action	Ability to organize and coordinate resources within the group to meet objectives, recognition of interdependence among group members, the skills to facilitate processes of	Establishing and maintaining processes of transparent group decision-making,* converting decisions into joint action,* participating in collective-action	Collective action protocol

	social learning and consensus formation	coalitions with other groups of similar goals/interest,* managing diverging/conflicting interests	
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DESCRIPTION OF THE ASSESSMENT TOOLS

CREATIVE THINKING AND INNOVATIVENESS

About this tool: This tool is an adapted version of the Torrence Test of Creative Thinking, a widely-used assessment tool that evaluates creative thinking and problem solving skills at the individual level. Our adapted group-level tool uses a problem scenario as the basis for the group to engage in joint brainstorming around identifying suitable solutions to the problem identified in the scenario. The activity takes approximately 35 minutes to implement and can be implemented ideally with a group size of 5-7 individuals per table or activity group.

How to use the tool: As group members develop ideas and solutions to address the problem scenario included in the exercise, implementers take notes and fill out a scoring sheet that is included in the protocol. Following the group brainstorm, implementers rate the ideas that group members generate along three creativity dimensions of *fluency*, *flexibility*, and *originality* and the extent of *collaborative production* in the process of generating the ideas. The tool can be used at different points in time over the course of an intervention to assess if there are changes in the total score or the component scores of the creativity dimensions measured by the protocol.

LEARNING AND EXPERIMENTATION

About this tool: This tool is an adapted version of the tool that we developed for assessing experimentation and action learning at the individual level. Given that it is designed for members of a group to complete together, the protocol takes the form of a focus group discussion, which is guided and facilitated by the implementer of the protocol. The assessment tool approximately takes an hour to administer, allowing more time for group discussion on their joint learning experiences. From our field-testing experience, a manageable group size will include between 6 and 12 people. In the case that a group has more than this number of members, multiple focus group discussions can be run simultaneously or consecutively, and scores can be averaged or maintained distinct depending on the objectives of the evaluators.

How to use the tool: The focus group facilitator guides discussion among the members of a group based on semi-structured questions corresponding to the different experiential-learning cycles. The implementer uses the notes from the discussion to score responses following a rubric that is included as part of the tool package. As with the individual tool, this activity can be implemented at the end of a learning cycle, which might cover the entire duration of a project or intervention, or a shorter time period, as an intervention might go through multiple learning cycles. Researchers, implementers, and/or evaluators can then compare changes in the group's scores across these different learning cycles.

NETWORK BUILDING AND UTILIZATION

About this tool: This tool is similar to the network-assessment tool designed for the individual level in that it focused on identifying network connections as well as the key innovation-related resources exchanged through those connections. In the mapping exercise, groups identify their networks, characterize the resources flowing in the networks, and judge the quality of the interactions. The activity can take anywhere between 60 and 120 minutes depending on the size of groups' networks. Depending on the size of the group, implementers can facilitate the network mapping activity with between 3 and 6 representatives from the group who play different roles in the group's day to day activities, ensuring that a variety of perspectives are included in mapping the groups' overall network of relationships.

How to use the tool: An implementer asks a series of network-related questions upon which group members draw or guide the implementer to draw network maps characterizing the type and quality of resource-based interaction that groups have with other actors.

COLLECTIVE ACTION

About this tool: This is a focus group discussion tool that is used to assess the collective action sub-capacity dimensions related to internal group functioning and external coalition formation with other groups in a local system. There is no strict limit to the number of participants who can take part in this activity, as that depends in part on the size of the group; however, a manageable participant number ranges between 6 and 12 people. This assessment protocol takes between 90 and 120 minutes to implement, depending on the number of collective action decisions that implementers examine as part of the "internal group functioning" dimension of the assessment.

How to use the tool: Implementers facilitate discussion among groups on topics regarding internal decision-making processes, translation of decisions into action, and coalition formation. They then use the responses to rate the capacity to collectively act based on a scoring guide integrated in the tool.

LOCAL SYSTEM-LEVEL CAPACITIES AND ASSESSMENT TOOLS

The capacity dimensions that we have identified for assessing local innovation capacity at the local system level are related to the individual and group-level capacities mentioned previously but framed differently so as to be able to measure system-level attributes. For example, in the creativity dimension, at the level of individuals and groups we assess their capacity for creative thinking and innovativeness, while at the system level we propose assessing the system's capacity to orient and support the creative and innovative exploration of members of that system. In Table 3 below, we present these system-level capacity dimensions, along with their associated sub-capacities. Following the logic of the previous two tables, we conceptualize system-level capabilities as referring to soft and hard structural features of the system, while the system's competencies refer to the presence and performance of the systems' functions. As in the previous tables, sub-capacities that are linked to assessment tools are indicated with an asterisk.

Table 3*Local System-Level Capacity Dimensions, Indicators, and Assessment Tools: Local System Level*

Capacity dimension	Capability		Competency (system functions)	Assessment tool(s)
	Cognitive (system rules)	Structural (system elements)		
Capacity to orient and support innovative exploration	Norms and attitudes that are supportive of exploring novelty, of taking risks, and of exploring challenges to identify root causes and innovation opportunities; tolerance for trial and error within the system	Presence, quality, and equity of access to spaces for creative exploration (experimental spaces, maker spaces, labs, etc.); presence and capacity of actors directly engaged in and supporting innovative exploration	Presence and performance of system functions related to creative exploration and innovativeness: 1) orientation and guidance of innovation activity (presence, coherence, and alignment of purpose);* 2) innovative and entrepreneurial exploration and experimentation	System's purpose definition protocol
Capacity for system learning	Norms and culture that encourage learning, including admitting mistakes and critically reviewing action; tolerance for failure; attitudes supportive of prototyping and piloting	Presence and quality of learning agendas related to innovation;* presence, quality, and equity of access to learning spaces;* presence and capacity of actors facilitating learning processes	Number and diversity of system functions around which learning processes are occurring; diversity of functions covered by the learning agenda/s*	System-learning protocol
Capacity to build and utilize networks	Presence of trust between system actors; norms supportive of reciprocity and cooperation in sharing information and resources.	Number and heterogeneity of actors from key actor categories; number and diversity of roles played by actors in the network;* interconnectedness of actors in the network;* strength of interactions among local	Number and diversity of system functions served by interactions	Network building and utilization protocol

		system actors		
Capacity to coordinate and align action	Norms and rules that enable negotiation and consensus building	Presence, effectiveness, extent of participation, and inclusiveness of coordinating mechanisms and platforms related to innovation	Processes of coordinated action and effectiveness of coordinated action in achieving results vis-à-vis key system functions; complementarity of independently executed, innovation-related activities of system actors	Coordinated action protocol

DESCRIPTION OF THE ASSESSMENT TOOLS

CAPACITY TO ORIENT AND SUPPORT INNOVATIVE EXPLORATION

About this tool: This is a questionnaire-based tool that local system actors complete, either on their own behalf or on behalf of a group or organizational actor they represent. The tool assesses the level of convergence in actors' definition of the purpose or direction of innovation activity taking place within the local system. The level of convergence or divergence in actors' articulation of the purpose of innovation activity is understood as an indicator of the local system's capacity to orient and guide innovation activities.

How to use the tool: There are two phases of the questionnaire that participants complete: first, implementers ask respondents to define in their own words the current and desired purpose or direction for innovation activity within their local system; and then, at a subsequent point in time, they are asked to select the most important purposes from a list that has been previously synthesized and presented by implementers. Each activity is executed at different points in time to allow implementers to synthesize themes from the first activity and prepare the list of purposes from which to choose for the second. The tool can be used at different points in time to assess if there are changes in the degree of convergence in actors' identification of the purpose or direction of local innovation activity.

SYSTEM CAPACITY FOR LEARNING

About this tool: This is a survey tool that generates information on the presence of shared learning spaces and the number and diversity of learning processes and agendas taking place in these spaces as an indicator of a system's capacity to support ongoing processes of system-wide learning. The assessment tool approximately takes 45 minutes to administer and should be completed by at least 20 actors that are playing different roles in the local system.

How to use the tool: The implementer uses a response sheet to gather information on the number of shared learning spaces, learning agendas and processes taking place in these learning

spaces, and the diversity of the learning agendas vis-à-vis different innovation system functions. The information is used to see identify if there are changes along the three dimensions from one point in time to another.

NETWORK BUILDING AND UTILIZATION

About this tool: This tool involves a brief questionnaire-based, network-structure assessment tool that is adapted from existing network surveys to reflect our operationalization of the capacity dimension as an improvement in the number, diversity, and density of local system networks. It takes approximately 45 minutes to implement and should be completed by at least 30 actors in the local network to generate valid results.

How to use the tool: The implementer can distribute the network survey to system actors to complete, making sure to include actors representing a variety of sectors, organization types, and roles within the system. The implementer can also collect the information in an interview style if time and other resources permit. The tool can be used at the beginning and at the end of a capacity-development intervention to track change in the number, diversity, and density of the system network as a measure of the local system's capacity to build and utilize innovation networks.

COLLECTIVE ACTION

About this tool: This is a survey tool that is designed to be distributed to a sample of local system actors. The minimum number of actors who should respond depends on the size of the local system; however, we generally recommend a minimum of 20 actors. The tool gathers information related to two dimensions of coordinated action: 1) the extent of joint implementation of activities by two or more local system actors, and 2) the diversity of activities in relation to different innovation system functions. The survey would take between 45 and 60 minutes to complete.

How to use the tool: The implementer can distribute the response sheet to system actors for them to complete, or the implementer can choose to collect responses from system actors as a structured interview. The latter option is recommended in cases where system actors have limited literacy or may have trouble filling out a written form. Change in the number of jointly implemented activities and change in the diversity of activities over time is a measure of a local system's capacity for coordinated action. The tool can, therefore, be used before and after an intervention or at different points in time during an intervention to assess if there are improvements in these important dimensions of coordinated action.

GUIDANCE ON IMPLEMENTING THE TOOLS

In this section, we provide overall guidance on how to implement the package of assessment tools. We provide instrument-specific implementation instructions within each of the implementation protocols that are linked to in Tables 1, 2, and 3 above. For all instruments, we refer to the person or people who are using the instruments to collect data as the “implementers,” as we recognize that these individuals may be researchers, evaluators, or staff members of local organizations who have conducted capacity-building activities. We have organized implementation guidance chronologically,

starting with steps that implementers should take several weeks prior to data collection and followed by steps to take during and following data collection.

Compared to existing perception-based self-assessment approaches, our realist evaluation approach requires different sets of skills and competencies from implementers. Effective use of our assessment instruments entails discussion facilitation, observation, sense-making, and some level of understanding of the logic behind the different qualitative questions in the tools. The best way to master the techniques of information-gathering, sense-making, and interpretation is ‘learning-by-using’ through implementation of the tools in real project/ intervention settings.

Finally, the assessment instruments are still going through various forms of testing and adaptations, and we strongly believe that there is a space for improvement and modification from continued testing by us and/or by other potential users in real intervention contexts.

GUIDANCE FOR PLANNING DATA COLLECTION

Step 1: As an initial step, implementers should identify which tools they will be using, in which project context, and for what purpose. Except for the creative-thinking tool at the individual level, which is solely assessing cognitive skills, the assessment of the other capacity dimensions requires a past or an ongoing intervention or project setting that individuals, groups, or local-system actors can use as a shared point of reference to situate their responses.

While we have designed the tools as a package, implementers can choose to use the whole package of instruments or a specific set of instruments depending on their assessment needs and goals. For instance, implementers might be interested in only assessing the “learning and experimentation” instrument in an intervention context that is focused on enhancing learning or adaptive capacity.

In terms of the frequency of assessment, all of the tools are meant to be used at different points in time over the course of an intervention design to strengthen local capacity for innovation. Since the overall objective of implementing this package of assessment tools is to assess changes in capacity in all or some of the capacity dimensions, the different assessment tools can be used before, during and after the implementation of an intervention. While a two-time (before-after) assessment is the minimum to track change over time, implementers can perform additional assessments during the course of interventions, depending on the time horizon of the intervention, the programmatic or evaluative needs for understanding changes in various dimensions at different points in time, and the resources available for assessment.

Step 2: Implementers should identify the participants, i.e., the individuals from whom data will be collected using the innovation-capacity assessment tools. We have provided guidance on identifying suitable participants for the individual-level, group-level, and system-level assessments as part of the “instruction for implementers” sections at the beginning of each individual assessment tool.

Step 3: Implementers should determine what permissions, if any, are required to collect data from the individuals they have identified to participate in the assessment. Depending on the purposes of

the data collection, and whether implementers are affiliated with an academic institution, they may need to obtain approvals to implement their protocols from an academic Institutional Review Board (IBR), or from local or regional authorities in the locations where data collection will take place. In the case of organizations implementing these tools to assess their programming, these formal permissions may not be necessary; however, this should be determined well in advance of planning data collection activities.

Step 4: Implementers should make the necessary logistical arrangements, including securing a suitable space for group-level activities, obtaining refreshments, or other acknowledgements if these are appropriate to acknowledge participants' time.

Step 5: Implementers should obtain the specific object and materials that are needed to implement the creativity exercise (stuffed toy or similar item). If the specific toy that is recommended in the activity cannot be found locally, a similar-looking toy can be used as long as it does not miss or add new toy body parts that are not taken into consideration by the standard scoring norm, which can be a potential source of bias during scoring.

Step 6: Implementers should take time to go through all the instruments (instrument-specific instructions, respondent answering sheet, and scoring guides) to make sure that everything is clear before implementation. This should happen at least one week before the implementation date. A joint preparation session among implementers is highly advised to have a shared understanding of the implementation procedure and the team roles (i.e., who will facilitate, who will take notes, whether photos will be taken, etc.).

Step 7: For ease of implementation in remote or rural contexts all the tools are paper-based and designed to be printed in black and white on standard letter sized paper. Implementers should plan to print all the instrument sheets with their specific instructions, respondent answering sheet, and scoring guides well in advance (at least a week prior to implementation, in case any printing issues are encountered). We recommend double-sided printing if feasible for ease of implementation and resource considerations.

Step 8: At least a week before the data collection begins, implementers should confirm who will participate in the sessions and assign a unique, two-digit ID to each participant, in the case that anonymizing participants' answers is important to the implementing organization. These IDs can be used on the participants' forms and in subsequent analysis.

GUIDANCE FOR IMPLEMENTING DATA COLLECTION

Drawing lessons from our field experience, the following guidance can help to ensure smooth implementation of the data collection protocols:

- At the start of any in-person data collection activities such as interviews or focus groups, implementers should reconfirm that respondents are willing and able to spend the total

amount of time required to do the activities, as part of obtaining respondents' consent to participate in the activities.

- Also as part of the informed-consent process, interviewers and focus group facilitators should solicit respondents' willingness to have their conversations audio-recorded.
- Implementers should make sure that if participants are completing their own forms, they place their ID on each form in the case that maintaining participant anonymity is important. If implementers are completing forms on behalf of participants, they should place the respondents' unique ID on each form.
- Implementers should take notes of any questions, concerns, or suggestions that participants raise during the activities, in addition to comments made specifically during focus group activities.
- In addition to completing any protocol-based activity sheets, implementers should take observational notes on the group dynamics, particularly in the case of group-level activities. They should also audio-record any focus group discussions to assist with completing notes following the activity.

GUIDANCE FOR DOCUMENTING AND ANALYZING DATA

Following the implementation of data collection activities, we recommend that implementers approach documentation and scoring of results keeping the following guidance in mind:

- For the creative-thinking and innovativeness assessment, implementers can complete the scoring at the end of the day or after all respondents finish their assigned activities for the day. As scoring of this activity does not require memory or recall on the part of the implementer, the scoring is less time-sensitive than the other instruments.
- For the learning and experimentation protocols, which are interview and focus group based (depending on level), it is important for implementers to pass the notes they took during the activities onto the scoring sheets as soon after completing the activity as is feasible, in order to maximize recall of information, including details that they might not have had time to write down during the activities themselves.
- In the process of assessing the innovation capacity of individuals, groups, or local systems, we advise implementers to evaluate and/or interpret the scores for each dimension separately rather than attempting to aggregate the dimensions into a composite score. This is not only because the scoring for each dimension is on different scales but also because scoring the dimensions separately provides implementers with the opportunity to see which specific capacity dimensions are and are not showing progress over the course of an intervention, which provides more useful information on areas that require further work and capacity development.

Q AND A FROM FIELD TESTING PARTNERS

In this section, we share common questions that were raised by our instrument testing field partners during the pilot testing process as well as our answers to these questions. This section therefore

provides additional guidance on how to implement the various assessment instruments, and is organized according to the four main capacity dimensions of the local innovation capacity assessment framework.

CREATIVE THINKING AND INNOVATIVENESS

Question: Regarding the creative thinking protocol at the individual level, in the case that respondents can read and write comfortably enough to complete the activities, is it better to still use enumerators to document respondents' answers on the response sheets for them, or allow respondents to write their answers on their own behalf?

Answer: Letting respondents write down their responses themselves gives them more freedom and space to think creatively and modify their ideas as they go, so we recommend this option. However, before making this decision, implementers should ensure that respondents can comfortably read and write and will not find the amount of writing required to complete the activities overly burdensome or tiring.

LEARNING AND EXPERIMENTATION

Question: It is challenging for implementers to listen to participants' responses on the different dimensions of learning and experimentation (reflection, experimentation, and planning) and take notes on answering sheets; how do you suggest we document their responses?

Answer: We advise implementers to take brief notes directly under each question on the implementation protocol during the interviews and then to transfer the notes into the response sheets after they have finished the interviews. We recommend transferring the notes immediately following completion of the activity, so that the details behind the brief notes are easy to remember and can be incorporated into the scoring process.

Question: Is it possible to implement the learning and experimentation protocol at the group level with a group of individuals who have been part of a similar capacity-development intervention but who have worked on individual projects?

Answer: No, we do not recommend implementing this protocol with individuals who have worked on separate projects because our unit of observation is the group as one entity, and there must be a joint project that they are working on for group members to share their joint reflections, experimentations, and future planning.

COLLECTIVE ACTION

Question: When thinking about implementing the collective action instrument at the group level, what is an ideal group number and composition for the kind of groups to include?

Answer: All members of a group must have been engaged in a shared project activity to be able to reflect on their collective-action experience. The number of people in a group for implementing the assessment tool can be anywhere from five to 15 people, i.e. large enough to capture a group experience and small enough to facilitate effective discussion for implementers. It is not necessary to have all members of the group present to speak about the group's collective experience as long as a sufficient number of group members are present who can represent the various diverse perspectives and experiences within the group. We therefore recommend making sure that the individuals who complete the assessment have a variety of roles within the group including leadership roles, management roles (if relevant), and other roles.

Question: Taking time into consideration, when implementing the collective action protocol, do implementers have to assess whether all the three identified decisions have been translated into action?

Answer: Assessing the level of implementation of all the three major decisions gives a better picture of the group's capacity to collectively act; however, in implementation contexts where time is a significant constraint, implementers can choose to only assess the level of implementation of the first major decision.

NETWORK BUILDING AND UTILIZATION

Question: When the network mapping is implemented at the group level, who should we (implementers) engage in the mapping exercise?

Answer: Sometimes a group might have many members, and it might not be practical to involve all group members in a network-mapping exercise. When that is the case, we advise implementers to select five to 10 group members who are playing different roles (and therefore exposed to different network interactions) to complete the exercise on behalf of the full group.