COLLABORATIVE
CROP RESEARCH
PROGRAM

THE McKNIGHT FOUNDATION

FRN observation Protocol

Antecedents:

Farmer Research Networks are a principles-based approach to agroecological research. They are meant to provide a mechanism where farmers can:

- Have a protagonistic role in determining research agendas that matter to them.
- Establish research designs that embrace and understand the socio-ecological diversity of farmers' communities, landscapes, households, and plots to develop options for different contexts, as well as shed light on underlying principles and mechanisms that contribute to agroecological knowledge.
- Leverage and create farmer networks that can expand and deepen over time to provide sustainability and scale to knowledge creation and sharing.

In order to establish and improve FRNs, it is necessary to learn from them, which requires both evidence and reflection. This protocol is for an instrument that can be implemented by facilitators of FRNs to feed both short-term learning loops of the FRNs, as well as contribute to broader efforts to implement FRNs.

The observation protocol can be complemented by other methods like surveys, ethnographies, and interviewing. Its main benefit is being systematic and using existing resources efficiently.

Method:

- The observer should use and adapt the observation protocol in Appendix A whenever they are going to an FRN meeting or field visit.
- During the event the observer should record notes in a notebook especially trying to capture testimonies. The observer will also probably be participating and won't be able to capture everything, these are quick notes
- Immediately after every visit or meeting the observer should elaborate/expand on their observations in a more detailed manner following the prompts in the tool in Annex A, these are the full description notes.
- Either at the end of the research (if it's a short period of time) or at regular intervals, the observer should transfer their notes to an electronic form (like a word document.) At this moment the observer might start with analysis and reflection.
- When the observer and team begin the analysis they should review all the notes and either by hand or using a software, code emerging patterns and mechanisms, probably using the FRN principles (Appendix B) as a theoretical framework.
- These patterns and mechanisms should be written down and documented using the notes as supporting evidence to illustrate and describe mechanisms.
- The initial findings should be presented to the FRN groups for their reflection and discussion at least once a year. A what, so what, now what adaptive action format for the meeting can be used. This meeting should have someone taking detailed notes and/or a recording of good enough quality that it can be transcribed and can be added to the word document as more qualitative data.
- Once every year these findings will be discussed with other FRNs and a synthesis of the findings will be elaborated to inform future actions.

Appendix A: Observation tool format This is meant as a guideline that can be adapted to different circumstances. The left side is what the observer would actually use, the middle is a justification for the purposes of the protocol, and the right column includes some abbreviated examples that aren't meant to limit the scope of what the observer can note, but provide some guidance on level of detail. This is where people should expand on their notes.

Guiding areas:	**Corresponding principal that will help in the interpretation:**	**Short examples of expanded notes**
Name of observer(s):	This will be important to locate the observer, their subjectivities and be transparent about power issues related to principle 1.	
Date:	To be able to look at change over time	
Event or visit:	To think about how the context might affect participation and discuss ownership.	*FRN field day where 8 different farmer groups, each from a different community, presented innovations at different stands from 9 am to 2 pm and then a group lunch. The event was paid for with project funds (lunch, tents, travel) and organized by the lead NGO, but the farmers organized their stands and invited the participants.*
Participants: Here names can be listed, and/or counts based gender, age and other relevant information should be noted such as ethnicity, wealth, ruralness, and/or importance of agriculture. It would be good to reflect or ask who isn't there that they or you think should be and why	Principle 1; 1.3; 3.2 Principle 3; 3.2	*There were 85 participants, most of them were men over 50 from village A. There was a group of older women also from that village. Everyone was indigenous except for 8, all from the same community. There were 2 representatives from one village, they were expecting many more but it was a holiday there. In the community where the event was held there were many young women who were working in fields and not coming to the field day, when I stopped to ask one if she is coming to the field day she said she hadn't heard about it, when I told her what it was about she remembered that her father-in-law will be there and will tell her about it, she is too busy with the animals and washing today. There were two extension workers, both indigenous. There was a cluster of 4*

		young men (around 22 years old) who seemed to know each other but were from different communities and they each had smart phones. *It seems like the farmers who attended were the most proactive or connected farmers from their community.*
General participant dynamics: who is talking more, who is talking less? What are the levels of interest you are noticing? Are there side conversations? What language (s) are being used if that's important. What kind of non-verbal communication are you noticing? What seem to be different motivations for people being there? Are there examples of different people feeling comfortable/ trust? Or are some uncomfortable, who are these people?	Principles 1; 1.2; 1.3 Principle 2.2 Principle 3; 3.2	*One woman said she really liked the stands on the field days, but not really the research and monitoring, she does the latter so she will be invited to the field days.* *In general, there were a lot of questions from the farmers to other farmers, each stand took 30 minutes. There was also a lot of joking around and socializing, but mostly divided between the 2 farmer organizations that were there. The extension workers seemed very close to people in the first farmer organization named XX.* *The women tended to congregate among themselves and sort of process the presentation in real time in whispers. A group of 3 ladies were commenting on how great the q'ila q'ila seed was because worms don't attack it. They also were commenting among themselves that "it's good to exchange seed, we should do it with quinoa and potato, it really produces results"* *Another group of 4 elderly women were sitting together on the dirt on the edge of a presentation chatting to each other in Ayamara about using stars to predict the weather (the topic of the stand they were near). They were drawing things in the sand to explain to each other what they were hearing.*
Content-related participant dynamics: Who is saying what? Who is bringing up new ideas, who is questioning ideas, who is asking clarifying questions, who is providing information? (can do frequency counts, transcribe exchanges, provide some detailed examples)	Principe 1.1 Principle 2; 2.1; 2.2; 2.4	*A kind of outsider in the community, he lives there but is also high up in the dairy buying cooperative -- his clothes were completely different and much more "extension worker" than everyone else. He asked a series of questions after a farmer (Gualberto) presented on all the quinoa varieties he conserves. The dairy/outsider guy said all this research is well and good but now they are all used to making money after the quinoa boom, and they need to figure out what is the one variety that will perform well so that everyone can grow it. The response from one yapuchiri was that they aren't just interested in income but also the food security of the entire community. The other replied more along the*

		lines of the importance of diversity for resilience and how one variety can fail, and they should be proud and conserve their knowledge. The same 2 yapuchiris were also sharing tips on irrigation and tractor use.
How is research and learning happening? by whom? Are some people are using recipes? Repeating back what a researcher might want to hear? Are some people expressing underlying mechanisms? Are differences across contexts being discussed? Are there moments that it is clear that farmers have or probably will use the technologies being developed? Describe specific exchanges and examples.	Principle 2; 2.3; 2.4	*At one stand a farmer presented about the living barriers his community plants every 40 meters and have T'hola bushes and some grasses. Another farmer commented where he lives there are no t'ola bushes, but he has trees marking the borders, then different farmers talked about which fields with different kinds of borders were good at helping with wind erosion. The extension worker said in experiments they did at the research station it was important to have 3 rows of bushes to make sure wind didn't get through and that the bushes were at least 50 cm high. A farmer said if the plants were interspersed it is OK to have just two rows, but one row should be pasto lloron which spreads low to stop the wind. There was a vigorous discussion about if and when 2 rows existed. Most of the discussion was between older male farmers and the extension worker, but a woman mentioned she burned all the living barriers where she lives because the rats live in them and eat the seeds when she plants them. Another farmer shared how we covers the seeds after planting so the rats can't get to them right away.*
Networks: Are outside knowledge or people invoked? Are people mentioning others that they have spoken with about the research, or knowledge that came from someone outside the group or being shared with others? Describe.	Principle 3; 3.3	*One talked about bioles that he was using that the quinoa association taught him how to make at a training event. For some (around half) this was new and interesting, they asked him questions about recipes and use and listened intently, another third seemed to be part of the same association and already knew that information. The rest didn't hear him.* *The 4 young men with smart phones were taking a lot of pictures and videos, when I asked them why and what they were doing with them, they showed me that they were on a WhatsApp group with other young quinoa farmers who are all part of the evangelical church (n=63 members) and they share information about quinoa and church meetings.* *One stand was run by 4 woman who were using pH strips to test soil and drinking water pH. They were very confident and autonomous in*

		their presentation. They had learned the technique and gotten the strips from a lead farmer who had attended a Soil Kit workshop.

Appendix B: FRN principles

Principle 1	
Principle	*Counter-Principle*
1. Diverse **farmers** participate in the whole research process.	Farmer participation is limited to a somewhat homogenous group of farmers.
1.1 Farmers co-create the research agenda.	Researchers determine the research agenda.
1.2 Farmers are engaged throughout the research process.	Farmers are engaged primarily during data collection.
1.3 Farmers from marginalized groups have meaningful representation in the network.	Farmers from dominant social groups are the primary participants in the network.
1.4 Farmers strengthen their capacity to learn together.	Farmers learning about research is not prioritized by the network.
Principle 2	
2. Research is rigorous, democratized, and useful, focused on AEI knowledge creation that provides practical benefits to farmers based on their social and biophysical context.	Research benefits researchers and results/learnings are focused on theoretical advances
2.1 Research effectively addresses farmers' problems and opportunities and is continually adapted based on reflection on experiences by FRN members	The research agenda is set by researchers and is not modified throughout the research process
2.2 Co-developed research plans are formalized through an agreement of all parties that covers principles, rules of engagement, and responsibilities	Researchers make all meaningful decisions relevant to the research
2.3 Research is based on sound, appropriate, and participatory designs and protocols.	Research is based in formal, top-down protocols.
2.4 Relevant local, indigenous, and farmer knowledges are fully integrated into research.	Only scientific knowledge informs research protocols.
Principle 3	
3. Networks are collaborative and facilitate learning and knowledge sharing	Networks are hierarchical and knowledge only flows one way.
3.1 Networks support learning and knowledge sharing among all members.	Networks support researcher learning and interests, and findings are not shared with other stakeholders.
3.2 Networks are made up of connections among differently positioned actors and encourage the flow of learning throughout the network.	Networks are homogenous and knowledge only flows out.
3.3. Networks facilitate learning and knowledge sharing among farmer groups and within communities.	Networks support researcher learning and interests, and findings are not shared with other stakeholders.

3.4 Network members engage in iterative reflection and planning to guide network activities.	Network members do activities that do not deviate from the initial plan.