



# MEASURING PERFORMANCE IN AGRICULTURAL EXTENSION: A COMMON METRICS FRAMEWORK

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PRESENTATION TRANSCRIPT

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## **PRESENTERS**

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## **MODERATOR**

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*Julie MacCartee:*

Hello, everyone. On behalf of Agrilinks, Feed the Future, and the USAID Bureau for Food Security I would like to welcome you to our webinar today on "Measuring Performance in Agricultural Extension: A Common Metric Framework." My name is Julie MacCartee and I'm with the USAID Bureau for Food Security and I'll be your webinar facilitator today, so you'll hear my voice periodically, especially during our question and answer session.

Before we dive into the content I'd like to go over a few housekeeping items to orient you to the webinar. First – and many of you have done this already – please do use the chat box to introduce yourselves and let us know where you're coming from. The chat box is your main way to communicate today and we encourage you to use it to post your questions at any point to share resources and to discuss this topic with your colleagues. We'll be collecting your questions throughout the webinar and we'll try to answer some of them along the way in the chat box and we'll hold the rest until after the presentation.

You'll see that the slides are currently available for download in the little box in the bottom left of your screen. And there are also some recommended links, so we encourage you to explore those throughout the webinar. And lastly, we are recording this webinar and we will e-mail you the recording, the transcript, and some additional resources once they are ready. And they'll also be posted on the Agrilinks website so you'll be able to forward this on to your colleagues as desired.

All right. Let's talk about extension. As many of you know, agricultural extension and advisory services provide essential support to smallholder farmers by providing them with the knowledge and tools about modern practices and technologies by facilitating co-learning within communities and by increasing access to finance and market solutions, among other roles. And as such, ag extension is very fundamental to Feed the Future's work with smallholder farming communities.

I expect that many of you have joined today because you see value in having an established set of metrics to compare and contrast the performance of extension systems across different countries and contexts. And the Feed the Future Developing Local Extension Capacity – or DLEC – project is leading an initiative to develop a common framework for extension metrics and we're excited to have three speakers

on hand today to discuss this. So, I'll go ahead and introduce our speakers and then I will hand it over to them.

All right. So, first up will be Kristin Davis, who is a senior research fellow with the International Food Policy Research Institute and has been there since 2004. Her research includes research in capacity strengthening on agricultural extension, education, and agricultural innovation systems, and she is currently the project director for the USAID-funded project Developing Local Extension Capacity, or DLEC.

Next up will be David Spielman, who is a senior research fellow also at IFPRI, and has also been there since 2004. And he leads the institute's program on science, technology, and innovation policy.

And then, we will also have Judy Payne, who was USAID's digital solutions advisor for agriculture just recently, until 2017, and is now an independent consultant with the same focus. And she is currently helping USAID missions and their projects use digital tools to increase their reach and impact.

And so, I'll go ahead and pass the mic over to Kristin.

*Kristin Davis:*

Thank you very much, Julie, and good day to all of you. Thank you so much for joining this webinar and I hope we'll have plenty of time for discussion. So, I'm going to try to advance this slide here and start with an introduction to the project. And I'd like to give you some background on the initiative that Julie mentioned to develop a common framework for extension metrics.

To date, no common framework exists but we do see value in having a common set of metrics to consistently assess extension performance across countries and also across context. I think a set of common metrics would help us to share and adapt learning, to guide policymakers and funders and implementers as well with regard to how to invest in extension. Also, just to innovate and to maximize impact.

As I said, there is no common framework, but where the initiative started, then, was with the best fit framework, which is a conceptual developed by the International Food Policy Research Institute. The best fit framework suggests an impact chain approach. But first, let me explain a little bit more what this framework is all about. The premise of the best fit framework is there is no one-size-fits-all solution to extension and advisory services and we need local, context-specific, and customized or best fit solutions to designing impactful extension.

How does this work? We start with the extension system characteristics, and these have to be adapted or fit to the frame conditions. And you can see the frame conditions here surrounding the box in green. It's the political system, whether it's centralized or decentralized. It's the farming systems and production input and output markets. It's the business environment and civil society, et cetera.

Just a little pause here, Julie, to make sure everything's working fine? No problems.

*Julie MacCartee:*

We can hear you, Kristin.

*Kristin Davis:*

Good. Then I'll continue. Great. So, let's dig a little deeper here into the characteristics of the extension system and how they lead to performance. In the previous slide here I showed you how the characteristics lead to performance, which lead to outcomes or changes in behavior and then ultimate impacts. Digging a little deeper into the extension system characteristics and how they affect the performance, we first of all have governance and management structures, things like human resource management, the incentives and career paths, if any, monitoring, and evaluation. We then have both organizational and individual capacities of the extension system. And for individual agents this includes technical skills but also your functional or soft skills as well which they need for their job. And then, we also have the methods which characterize extension services, the way in which extension interacts with farmers depending on their audience, whether they're trying to reach women or use – teach something complicated where you might use farmer field schools or something, or you use radio or demonstrations.

All of these characteristics, which as I said are fit to the frame conditions, then affect the performance of the systems. And by performance we're talking about things like quality, relevance, timeliness, demand drive, effectiveness, and efficiencies. But where the best fit framework falls short is in establishing a common set of indicators against which to measure performance. So, that's what we want to talk about today and that brings us to the initiative for a common framework for metrics.

The initiative, as Julie mentioned, is led by the Feed the Future Developing Local Extension Capacity, together with the Bill and Melinda Gates Foundation, the World Bank, and of course USAID. And this initiative came out of some joint discussions on how to transform extension globally, including things like pluralism and the use of information and communication technologies, or ICT. There is a task force within the initiative that is working on this framework for common metrics, which will be discussed, actually, in a face to face meeting in Uganda in February 2019, and we're hoping to bring together some potential adopters of the framework, especially governments, to see how they're going to use the framework and what we can do with it. The task force up front decided that the metrics we're going to look at are going to be aspirational, which means data that we want to have, not necessarily that we know we can get, but also will focus on the public sector but within a pluralistic context, and perhaps with modules for further users like the private sector and civil society.

What have we done to date as the extension metrics task force? We've come up with a set of definitions, of terms. We've come up with a framework for the common metrics that includes outcome pillars or goals of extension, the target audience, and the domains across which we would like to measure extension. And then, we've taken and mapped potential metrics or data or indicators across the framework, across the pillars, the target audience, and the domain to identify gaps and overlaps. And I'm going to cover each one of these one by one very quickly.

We have defined *extension and advisory services* broadly and in a pluralistic sense to be all of the services and information needed and demanded by producers that is aimed at developing their technical, organizational, and management capacity and empowering them to make better decisions with regard to their agricultural enterprise. We then looked at the ultimate goals or the outcome pillars that most extension services have. They have one or more of these goals. One of these is with

regard to productivity and income. This means that producers are reaching their maximum productivity and income potential from agricultural activities.

A second goal many extension programs have is sustainable *[skip in audio]*, where producers mitigate, adapt to, and recover from shocks and stresses in a way that reduces chronic vulnerability while at the same time ensuring environmental sustainability.

And then, a third pillar is surrounding empowerment and equity. And here we're saying that all producers, including those that are marginalized or vulnerable, the poor, sometimes women, youth, pastoralists, all of these people have access to fair agricultural opportunities, to agency, and to human capital in order to make better farming decisions.

So, those are our pillars. Looking at the target audience, I said we're going to focus on the public sector. This is your governments, your public research organizations, your *[skip in audio]*. But we also think this framework might be applicable to the private sector – agribusinesses, private service providers – and then broadly defined civil society as well. These include your donors, nonprofits and NGOs, cooperatives, and farmer organizations.

And then, the last area we are looking at is the domains within the extension system. We start with the systems which are your overall extension structures – the institutions, networks, and incentives – things that have linkages between organizations or policies that guide extension, or even your share of the public budget.

The second area is that of inputs. These are the resources that are used to implement extension activities like your extension agent workforce, the government budget per household, and things like that.

The third domain is that of delivery, the processes and actions taken to achieve outputs and deliver or achieve outcomes. And this is your organization and management, quality assurance, or even use of ICT – information and communication technologies.

We then have your outputs, which are the most immediate set of accomplishments necessary but not sufficient to produce the outcomes which are your changes in behavior. Things like the households reached are included within the outputs.

And then, lastly, we have outcomes. These are, as I said, your changes in behavior. These are immediate – intermediate observable and measurable changes that can be attributed to extension and can result in ultimate impacts. Things like adoption, change in behavior, change in attitude and knowledge .

There's one area we did not include and it would be interesting to discuss, and that is the ultimate impacts that's mentioned here. These are very difficult to measure and also difficult to attribute to extension programs. And Judy and David might discuss that further; we'll see.

So, what I have done here is to give you some background on the extension metrics initiative and a quick overview of what we've done in terms of definitions and *[skip in audio]* part of the common framework: the outcome pillars, the target audience, and the domains. And with that, I'd like to turn it over to my colleague, Dr. David Spielman, to start to talk about the challenges of extension metrics. Thanks.

*David Spielman:*

All right. Thanks, Kristin. I hope everybody can still hear me. It's great to have such a large audience on Agrilinks with an interest in extension metrics. And it's very consistent, this large audience, with the evolution of thinking in many quarters on extension, in which we're moving from what's historically been a very strong focus on research metrics – that is, the upstream source of science and technology for agricultural growth and transformation – to a new and very much complementary focus on the last mile and the downstream solutions for getting products and services to people, which includes information and extension recommendations.

So, quite naturally, we want to have indicators, benchmarks, and baselines to guide progress on this front, on our sort of investments and our programs and our projects in extension. But let me offer a quick sort of reality check. There's some fundamental challenges in measuring extension. So, let's start with what you might call sort of an epistemological debate. At a very basic level it can be argued that extension cannot be isolated or identified, at least not in the way we define extension in our theory of change that Kristin presented in the earlier slides. I mean, let's face it, do we really know what individuals employed by an agricultural service organization are doing? Are they providing farmers with a device? Or are they doing other things – monitoring crop production, distributing fertilizer and other inputs, collecting on overdue loans, and so on?

And even if extension can be isolated or identified, can it be quantified? Can quantitative measure adequately explain a complex system that is specific to farming systems or agroecologies, society culture, economy, and so on? And even if it can be quantified, are we sure we have a complete understanding of how extension works? Are we sure that extension leads to better farmers, or do better farmers simply seek out extension services?

All right. Let me make sure that everybody can still hear me. Yeah, I think I'm good.

And then, continuing, this sort of leads us to the broader debate of where indicators matter in our identified theory of change. Along with the impact pathway we have to think carefully about what we're trying to measure. Are they proximate input indicators on sort of the level and reach of extension? Or are they more sort of distant outcome indicators such as the causal relationship between extension and these productivity, income, or sustainability outcomes that we care about? We have to think carefully about the importance of attributing causality, which Kristin referred to earlier, or really understanding that relationship between extension on the one hand and those outcomes of interest that we care about, and trying to demonstrate that they're more than simple correlations, in that we're accounting for compounding factors. In other words, is there really a link between receiving extension services and improving your crop yields, or improving the sustainability of farming, or improving the welfare or income of a household or members of that household? It's a tough question.

All right. But let's put those things aside for a moment and assume that we're comfortable with the idea, the very idea of measuring extension. So, now we have to select, construct, and interpret some set of indicators. But there's no internationally accepted standard of what can be classified as, say, public spending on extension or who's considered an extensionist or an extension agent, or how to classify capital equipment used in extension service provision.

So, thankfully, we have some precedent to build on here. An analogous set of questions and an analogous exercise began in the late 1980s in the measurement of agricultural research. IFPRI's agricultural science and technology indicators, for instance, collects, compiles, and disseminates internationally comparable data and information on investment in agricultural research. Its advantage and what makes it distinct from the exercise we're talking about today on extension is that the ASTI metrics draw on comprehensive definitions of what constitutes research that were developed by the OECD and laid out in the Frascati Manual. So, maybe in the measurement of extension we need to develop something similar. Maybe it's up to us to develop that manual or that guidance on how to measure extension and what constitutes extension.

So, a key principle of the ASTI approach, or any approach really, is that we need to measure extension or whatever it is we're measuring at the point where the actual action takes place. It's the principle of subsidiarity. In ASTI they look at the agricultural research center or institute or at the university research program or lab. That same principle applied to extension, though, is a bit trickier. At what scale to extension metrics make analytical sense for data collection or other purposes? Do we measure extension at sort of the central or federal level? Or do we go hunting for data on extension at the state or provincial level, or the county and district level, or even further down at the very local sort of village or community level? Do we measure by geography, agroecology, farming system commodity, or value chain? Those are very different units of analysis. And do we focus on measuring public extension only or do we try to get proprietary information from private firms on their customer support and advisory services?

So, all of this suggests the need for data collection. And I would argue that if we want to track extension metrics over time and space, which is certainly the goal of

this conversation, we need to collect new data and definitely not repackage existing data. But collecting new data costs a lot of money. Thankfully, several new initiatives out there can help us, either by bringing useful data into our reach or by providing us with new data collection methods. For example, consider the World Bank's Living Standards Measurement Survey and its integrated surveys on agriculture, which provide cross-country comparability on questions such on whether a respondent has met with an extension officer in the last year or so. Or, consider the women's empowerment indicators under the Women Empowerment in Agriculture Index that's been developed by colleagues of mine here at IFPRI and elsewhere. The WEAI assembles novel data and analytics on how men and women live, work, and interact in the context of developing country agriculture, and a lot of these data points could be used to obtain a very valuable gendered perspective on extension, provision, and performance.

So, that leads us to what I think is really the essential question or the biggest challenge: Can extension metrics actually influence policy change, for example by encouraging governments to invest more in extension or to undertake meaningful structural reforms in extension? I think that the world has made tremendous progress in using evidence, data evidence like we're talking about here, to advance policy change. But we all know that there are other factors like political imperatives that affect policy change much more than simply a set of good metrics.

More importantly, even if we assume that our metrics have merit, we still need to ask if metrics are the right tool. I've heard a lot of very powerful people talk about using metrics to name and shame or rank and spank countries who don't invest enough in development priorities. But does that get us to the outcomes we really want? Extension systems are not a competitive sports league, like, say, the English Premier League, and the standings are there on the screen in front of you, or the National Football League here in the United States, where team rankings, points, and other statistics are the very essence of the game. A metric has to be actionable to be policy-relevant, otherwise how does a policymaker do anything about a low score or a low rank. And a metric also has to be substantive so that policymakers cannot simply game the system by investing in one topic or solving one particular problem to somehow move themselves up the ranks. There's been a lot of critiques of the World Bank's Ease of Doing Business Index or data collection and analysis project along these lines and it's something to think about very carefully.

So, having said all that, I think an attempt to measure extension is a tremendously good idea. And we're fortunate that the Gates Foundation, the Bill and Melinda Gates Foundation, along with several other key organizations, have taken a stab at this challenge to guide their own investments and their own grantmaking. So what you have in front of you is a list of key indicators that the foundation is considering for their extension dashboard. They form what I would argue is a good starting point for any country or program considering an investment in developing local extension capacity.

I'll walk through them very quickly for you and we can talk more about them later if you like. They are, for instance, the share of public budget spent on extension, and we would normalize that by dividing it by the total agriculture budget – so, sort of a percentage-wise intensity measure. We could also normalize that on a per household basis. An interesting metric that they're proposing is financial incentives for extension agents, such as the ratio of an extension agent's daily wage to, let's say, a rural teacher's daily wage. Continuous improvement processes – so, the proportion of extension personnel annually trained in specialized courses. Households directly reached by public extension. Again, that's a fairly standard measure, but an important one. Households reached by all extension, whether it's from the public sector or from the private sector or from civil society organizations. The quality of public extension – the share of households, for instance, reporting that public extension services were at least somewhat useful on a Likert scale kind of measure. Or service to female farmers – the share of females in smallholder households reporting that they received extension services. Or inclusivity that is something like maybe an index of inclusivity and extension services relative to some defined disenfranchised or underserved population.

So, these are probably some of the metrics that we should be considering, and I would argue they're a great start for this kind of initiative. And on that note, let me just wind up my remarks simply by encouraging everyone to think about the feasibility, relevance, and influence of these kind of metrics in their own context, be it their own country context, the agroecologies that they're concerned about, the farming systems that they observe, the provinces or states they work in, or the value chains in commodities that they focus on. And with that, let me hand it off to Judy Payne. Thank you very much.

*Judy Payne:*

Thank you, David. I assume the handlers at Agrilinks will let me know if I'm not being heard well. Unlike Kristin and David I do not have a research background and the academic discipline and clear experience that they have. I come from – I came from the US private sector and then spent about a decade at USAID and have at least as strong an interest as Kristin and David and the others on this small task force that we put together on figuring out better metrics for extension. I am especially interested in cost effectiveness of extension, given I've worked for government and of course been served by government, and also the impact of extension on the poor especially. I focus on digitally enabled extension, and digitally enabled providers and users often assume impact and cost effectiveness when that's not the case – or, it certainly shouldn't be assumed. It may be other proven techniques are better. So, I think these metrics will help us get at that.

I'm just going to pose a few questions and hope that they'll provoke thoughts from the audience and participation and additional questions from you. I wanted to point out that this is – we're presenting this as a point in time. It's definitely a work in progress. The informal task force of a handful of people is working towards the convening that Kristin mentioned that we hope to have in early 2019. But we wanted to open up the discussion to more people to get feedback. We know the metrics we have and the work that we're doing is not as good as it can get and we hope to get it much better before 2019. So, please study these slides and give us feedback during this discussion but also afterwards. You can contact any of us and also our colleagues at the Gates Foundation and the World Bank as well.

So, I'll pose a couple of questions just to get the thinking going. David asked about whether this would influence decision making. And there is a concern that we tried to set this up as some way for governments to compete, but I'd assert that if we can find some agreed upon metrics and even one country or two can stand up and say, "I'm willing to be measured against that" and show that they've made progress, I think that alone would be a great success. And then other countries might follow. Again, it's not like the "doing business" indicators, but it still would be, I think, a point of pride for governments that are really struggling and working on improving their extension services.

So, I think for decision – for policymaking it could have an effect. And we do know – and we want governments who are working on extension to participate in this

convening to see whether they find these measures useful. Kristin also pointed out that we're looking at aspirational measures right now.

Hold on just a minute. I want to make sure everything's going okay. I will get out of full screen just to make sure. Okay. I think we're just fine.

So, aspirational versus actually indicators that we can use now. David actually pointed out the many challenges to have metrics that we can collect data for over time. All those things are certainly true, but I'd say we still need to define things as aspirational and then see how close we can get with at least a few measures to start out. I'd be interested if you think that we have forgotten any critical measures. Here, I'll go onto my next slide where I have "Additional questions." Or have we gotten carried away? I think one danger is that we'll forget that most public extension services are directed to help farmers but essentially poor farmers, and do we have enough indicators to balance that interest, or will we be applauding extension services that go after the most able farmers and are not rewarded for doing the harder work sometimes of making sure the more remote farmers, remote households, can benefit from extension services.

Before our convening we want to make sure we've done homework by talking with others in a broader context, and maybe you have ideas of organizations you'd want to make sure we talk with – and it may be your organization. And how well would this be accepted or be useful by agribusiness, say, or private extension service providers. Are these measures irrelevant? Can additional ones be added? Is there a metric somehow to tackle the – how well the public extension service is leveraging private service providers? That's another really tough one. So, there's lots of questions. Again, this is a starting point, so we look forward to a rich discussion. I'm honored that I get to be the sort of provocateur on this and I'm very pleased that we have people like Kristin and David with such experience to keep us disciplined as we go through this effort.

So, I think I'll turn this over to Julie now, who can figure out what questions you all have.

*[End of Audio]*