

# Mini-workshop: The future of Africa RISING, SI and systems research in One CGIAR

3 - 4 November 2020; Virtual via Zoom

---

**Participants:** [1] Bernard Vanlauwe (BV), [2] Carlo Azzarri (CA), [3] Fred Kizito (FK), [4] Irmagrd Hoeschle-Zeledon (IHZ), [5] Iain Wright (IW), [6] Jerry Glover (JG), [7] Jonathan Odhong (JO), [8] Kindu Mekonnen (KM), [9] Mateete Bekunda (MB), [10] Michael Victor (MV), [11] Pether Thorne (PT), [12] Siboniso Moyo (SM)

## Summary of topline action points from the mini-workshop

The following key action points were agreed upon:

No.	Action	Responsible for follow-up
1.	Publication of a paper about systems research conceptual framework	P. Thorne & B. Vanlauwe
2.	Publication of a paper on “Delivering and scaling agricultural technologies to smallholder farmers in Africa: lessons from the Africa RISING program”	K. Mekonnen, M. Bekunda & F. Kizito
3.	<ul style="list-style-type: none"><li>Identify/ articulate/ document the production constraints in the major farming systems where Africa RISING operates along the lines of the study/publication by Waddington et al - <a href="https://bit.ly/350v5ML">https://bit.ly/350v5ML</a></li><li>Have a logical framework for how we prioritize determining how investments of systems research interventions can be prioritized - basically answering the question why invest in systems research?</li></ul>	An action plan for this to be developed during a follow-up meeting to be convened by PCT Co-Chairs soon.
4.	PCT Chairs to establish frequent check-ins via email and other platforms to brief, follow up and engage strategically in the One CGIAR research strategy which is moving along very fast.	PCT Co-Chairs - B. Vanlauwe & S. Moyo
5.	Put together a document presenting the lessons learned from 8 years of implementation of Africa RISING (both from a science and a programmatic perspective)	An action plan for this to be developed during a follow-up meeting to be convened by PCT Co-Chairs soon.

## **DAY ONE [3 November 2020]**

### **Introduction to the objectives and background of the meeting** - S.Moyo

#### **Meeting objectives:**

1. To review and agree on existing and yet-to-be-produced legacy products of Africa RISING.
2. To reflect on the future of Africa RISING beyond September 2021
3. To reflect on lessons and principles to help guide future programs on SI & systems research

#### **Background to the meeting:**

The future of AR beyond Sept 2021 came up during some of the recent PCT meetings. Major points raised include:

1. How will AR fit within the changes in the CGIAR?
2. AR phase II finishes on paper in September 2021:
  - a. Are we considering another phase?
  - b. Do we need to somehow place AR within or on one side of some of one CGIAR programs conceptually?
3. How best do we document and strategically share outputs of AR legacy and Return on Investment?

#### **Opening remarks** - J. Glover

- Great to see everyone on the call.
- I anticipate that Africa RISING will get a no-cost extension beyond September 2021 as we go through this developing OneCGIAR transformation. This will be helpful in ensuring that we don't lose the great partnerships that we have developed in AR.
- USAID maintains its interests in continuing work in the specific regions where AR work is being implemented. These activities will therefore continue in some form beyond September 2021.
- At some point we do hope to integrate some of these activities into the One CGIAR process or one of the initiatives so that the work you are doing has greater influence across the CGIAR. What that will look like is still uncertain at this point, but maybe it will be clearer after these couple of days.

**Progress against program-level outcomes & research questions for AR Phase II proposal** - P. Thorne, I. Zeledon & C Azzarri

- **Download presentation here:**

[https://drive.google.com/file/d/1vu9p3tLtPenOTZHeMqftG8E9f\\_6ynCPf/view?usp=sharing](https://drive.google.com/file/d/1vu9p3tLtPenOTZHeMqftG8E9f_6ynCPf/view?usp=sharing)

**Collective critique of progress against program-level outcomes and research questions**

**Q:** How important is it to reach the actual targets vs quality of participation you are seeing with current farmers? [MV]

**A:** The number of beneficiaries can change. We are still collecting info for 2020. [KM]

**Comment:** Good to see these concrete examples addressing some of the research questions. From where we were when we last met in Malawi to today, I am pleasantly surprised. [SM]

**A:** I think the data we have now gives us pretty good coverage of the program wide research questions. Having the SIAF helps us to track progress greatly. I think we could give an evidence based answer to most discussions. We need to think about how we can strengthen the quality of evidence - make it more robust and compelling. [PT]

**A:** It is not so much about the number of beneficiaries, but rather the quality. Going back to your target beneficiaries, you just have the total number and not so much of what impact per household was? [JG]

**A:** We are collecting FTFMS data. If our data quality is good enough, we may be able to extrapolate. If we can reasonably assume that the scale of these outcomes and impacts are evenly distributed across the population then we can extrapolate. So we're getting there, but I want more data quality to make this more convincing. [PT]

**A:** That is what we are also trying to do with the follow up surveys in Malawi, Ghana, Tanzania and Malawi. This will provide a clear picture of AR research. We will have a panel sample where we hope to have more in depth analysis of this. [CA]

**Q:** It seems from Carlo's presentation that we are below the targets. As Jerry said, the absolute numbers are not so important rather it is the impact per beneficiary. I doubt that in the remaining time we will reach more beneficiaries. The reason is because we are now generally scaling down on our outreach to farmers rather we are now more focused on data analysis and synthesis. [IHZ]

**Q:** We gave examples from our countries (regional projects), but not as a program. This is something that we will need to figure out? [IHZ]

**A:** Most of the program research questions are not really addressable in terms of the individual research projects. I doubt that we can end up with a final program-wide report that presents a 'program' view on the research questions. [PT]

**Q:** There was a slide presented on programmatic research questions - they are still very relevant within the OneCGIAR discussions. I was very intrigued by the data presented from Ethiopia by PT. Would it stand the rigour of peer review? SIAF should be one of the main things to move forward to one CGIAR? Have you dealt with the other bottlenecks that had been identified with the SIAF indicators? [BV]

A: It is very tricky and time consuming to clear up some of the indicators and what they mean. [PT]

A: Peter was quite confident that AR Ethiopia has enough data to answer all the research questions. However for ESA and WA we still have a lot to do in terms of data analysis and analysis. [IHZ]

A: Just to clarify, we also still need more time in Ethiopia to analyze the data we have further, but what I presented shows how we are already going about this. [PT]

### **Keynote presentations by projects – impact, RoI, and achievements**

Program M&E - C. Azzarri

- **Download presentation here:**

[https://drive.google.com/file/d/1mh6UFkv97DIZKccgLS\\_L-WzMs0ZuGSpB/view?usp=sharing](https://drive.google.com/file/d/1mh6UFkv97DIZKccgLS_L-WzMs0ZuGSpB/view?usp=sharing)

-----

**Q:** How does the BTT explicitly differ from the Scaling tool? [FK]

**A:** The BTT monitors direct beneficiaries and technologies only: the scaling tools tries to monitor scaling beneficiaries. [CA]

**Q:** How many households are covered by the *ex post* evaluation? This is very nice. [PT]

**A:** That slide is based on a total 1,149 households (in Malawi) that we also followed at follow-up. We will have the same distributions for 2019 to compare. [CA]

**Q:** Has the TED approach and its results been used to influence decisions on package formulations or any other intervention points? [BV]

**Q:** I like the distributions presented... They allow us to look at averages but also at stability (slope of the frequency curve). Could we try to overlay household characteristics on the cumulative response curves and check if there are farmer category effects? [BV]

**A:** Yes, we could draw the distributions for different household categories, one at a time though. [CA]

**Q:** Could we consider moving away from the 1.9 USD per person per day to living income targets? In the cocoa sector, all the discourse is focused around living income? [BV]

**A:** We need to have a discussion about \$1.9 versus living income, as am not convinced the latter is a superior metric (also, it's not that different from the poverty line) [CA]

**Q:** The living income indicator certainly makes a difference for farmers... it may indeed be correlated with the more traditional indicators but its ambitions are quite greater. [BV]

**Q:** How do we capture the indirect dissemination of AR technologies via the mainstreaming that Kindu is describing? Surely this is the holy grail? [PT]

**Q:** Would capturing the spillover effects not be a good task for the IFPRI team? [IHZ]

**A:** Yes, we will try to capture the spillover effects, although the indirect dissemination of mainstreaming I guess is more at the institutional level, so much more difficult to measure. [CA]

**A:** Sure Irmgard. That is a kind of spillover effect but there are complexities in evaluating the extent (and quality) of that transmission. Hugely interesting area. [PT]

**Q:** When planning ex-post impact studies, can we also put emphasis on trying to understand what drove impact - put emphasis on the learning aspect? I guess spillover could be integrated through the sampling frame of such studies? [BV]

**A:** If it's institutional / organizational it should be easier. There's a lot less of them than there are farmers!!!Of course we would have to make assumptions about their effectiveness. [PT]

**A:** Drivers of impact...yes, we will study those as well. Of course learning is a little more difficult, we welcome suggestions on how to adequately capture learning (through intensity of exposure?). Perhaps for technology adoption drivers mixed methods would be also advisable, combining quantitative evidence with qualitative interpretation of causality mechanisms from FGDs, KIIs [CA]

#### East and Southern Africa Project - M. Bekunda

- **Download presentation here:**  
<https://drive.google.com/file/d/1cUk80baw0nJLATy65rG62CqkT6TKheJx/view?usp=sharing>

#### Ethiopian Highlands Project - K. Mekonnen

- **Download presentation here:**  
<https://drive.google.com/file/d/149ol49qh6nagG3mLZihPv8QDTb0b4oo9/view?usp=sharing>

-----  
**Q:** Investments in all of Africa RISING for 10 years ~\$95m; projected economic benefits (from one intervention?) to Ethiopian HH for the same period ~\$250m. It is important to show quantifiable ROI for the investments made by the donor to research work. [JG]

**A:** The economic benefit was calculated not only based on a single technology. It was calculated for AR validated crop, livestock and NRM technologies adopted by farmers. The ROI for the 10 years is over USD 75 million. When we project the primary benefits up to 2025, the ROI can reach USD 250 million. We still need to refine the method of calculation and reach a concrete result. [KM]

**A:** We can use these headline analysis to get people more interested in why there should be more investment into Ag. research. However we need to be careful about grabbing interest at the headline and losing that same interest as soon as they drill down into the details (second level messages). [PT]

**Comment:** It is also critical to capture the information that indicates what AR did differently to end up with such ROI. [JG]

**Q:** It would be very helpful to me if, as a group, AR could articulate your point on the way AR proceeded...systems research, research to development continuum, "We have designed and managed

the process all through" [not sure what you mean or the significance of this]. Articulating the utility of the way AR was designed and how it's different, if it is, would be really helpful. [JG]

**A:** We are documenting this for publication with respect to Ethiopia and the Chief Scientists are also working towards a programme level synthesis. I guess by designed and managed I was thinking of the extent to which designs need to evolve and the importance of adaptive management but that is perhaps equally vague

### West Africa Project - F. Kizito

- **Download presentation here:**

<https://drive.google.com/file/d/1NBRb9WyGrcoQZYbpb2FbOYBDXd8Vt4-/view?usp=sharing>

-----

**Comment:** Nice articulation of quantified risk reduction. And linkage to other supports such as insurance! [JG]

**Q:** How does WorldCover look at your observations? [BV]

**A:** WorldCover values research insights as evidence they can use when estimating payout for insurance premiums to farmers. [FK]

### Actionable conversation

Key questions for discussion:

1. What are the priority actions for documenting AR scaling, impact, and RoI?
  - Documentation of AR scaling experiences from each of the 3 projects is also critical. Agreeing on a mechanism to do this would be important led by the 3 regional Chief scientists. [CA]
    - We have done the skeleton and will share with our research team members. Each member will describe what they did. I anticipate that we will have a lot of information by the end of the day. We are confident that this will result in a good document on how AR has done scaling. [MB]
  - SIAF is definitely one the significant legacy products for AR going forward. [BM]
  - We've seen lots of examples presented . They are excellent, but if we are to leave any legacy behind we would be best served to focus on the interactions( the systems research work) done. Also the work led by IFPRI on measuring intervention impacts. All these can contribute to current discourse within the OneCGIAR. [BV]
  - Our experience with working along the research-development continuum. We have kind of designed and managed the process all through, probably because we had a lot of time. We got lots of things wrong and others right too. So I think we are a good showcase of how you can go through the process from research question formulation to scaling. [PT]
  - When we talk about what we are going to document, we should also think about who we are doing this for? Are these materials intended for science audiences?

- We should go beyond productivity and look at all returns from all sides - income, poverty, nutrition, resilience etc. These will give a well rounded estimate. We will try to measure that and our study in Ghana will be our first action to achieve this.[CA]
2. What are the gaps between the regional vs. program-level outcomes and how can we fill those in the next year? - A quick check in to see whether we are making progress towards program level outcomes and what can we do within the remaining life of the program/projects? (clarification)
    - The program level outcomes are drawn from the regional level outcomes. [IHZ]
  3. What are lessons learned in AR that we would like to leave behind for future use -technologies, new ways of doing business, multi-center cooperation, etc?
    - Cross centre collaboration as a lesson learnt for the CGIAR. bringing together 3 lead CG centres plus many others to support these was unique.[BM]
    - The fact that we really had a long term project that allowed us to engage/disengage partners. This longer term engagement also attracted partners to stay involved. There was no real strategy /plan , mainly because the topic was broad , but all partners also realized they needed each other to make tangible contributions. [IHZ]
    - The program's successful relationship with the donor was quite collaborative. [IHZ]
    - The fact that the program was premised on a package of innovations rather than a single one like most other projects. This attribute made it unique. This is also a double -edged sword because it make evaluation of impacts a bit more complicated, but great for ultimate beneficiaries.[CA]
    - AR has acted as an integrator mobilizing and coordinating complex partnerships to contribute to unifying efforts that equally provide value to research partners. [FK]
    - The people element in AR is also a significant aspect. [MV]
    - The capacity building aspect within AR is also huge. Some students trained by the program in different countries and regions have ascended into significant leadership positions within the scientific community in their countries. [KM]
    - The program operated throughout its lifetime with a relatively lean management team as compared to other programs/projects that have existed within the CGIAR. A significant portion of the funds was also always used for research. [IHZ]
    - There has been a partnership dividend from co-investment with development partners (i.e. frontline public and NGO delivery systems; large development initiatives supported by USAID Missions such as Innovation labs and this needs to be explored further; also public-private partners. [FK]
    - Great communication strategy is in place.[BM]

-----  
**Q:** How is NRM being defined across the AR program and what is its value? Looking across the regions we could easily just say soil and water conservation rather than NRM? Could AR just switch the terminologies? It seems you all have robust information to evaluate the NRM interventions?[JG]

**A:** There is an undervaluation of NRM benefits - mostly ignoring human and social benefits. Even when we speak of RoI it would be best to caveat that we haven't done valuation around the issues like economics etc. A lot of the technologies we have in AR focus on soil and water conservation, so it's a good suggestion. In relation to economics around NRM/Soil and water conservation still relates to the broader concern about undervaluation of their benefits.

**A:** Soil and water conservation is not limiting. Is rehabilitation the same as soil and water conservation? What is the aggregator of all the items highlighted as aspects of NRM by Fred if it were not the increase in crop yields? [MB]

**A:** Different scholars define NRM in different ways. Some include crops, livestock and SWC as part of their NRM definition. Others say NRM is equivalent to SWC. I think interactions among crops, livestock and SWC are important. It may be good to use SWM as it is broader than SWC. [KM]

## **DAY TWO [4 November 2020]**

### **Status of the discussion around the research agenda of the 'One CGIAR' - I. Wright**

- **Download presentation here:**  
[https://drive.google.com/file/d/1bf5IrK1lICvVY08WzD\\_Srer4eTZx2SBu/view?usp=sharing](https://drive.google.com/file/d/1bf5IrK1lICvVY08WzD_Srer4eTZx2SBu/view?usp=sharing)

-----

**Q:** Was there continuous consultation with different priority countries to get their feedback on the proposed research /impact areas?

**A:** There was some very high level consultation with countries in different regions early on but it was not very specific and did not get down to specifics. [IW]

**Q:** The initiatives being introduced in the OneCGIAR process appear to be analogs to the CRP in some sense. I get the sense that they are a bit more dynamic and more responsive to the pooled funding. Do you have a sense of what that might look like?[PT]

**A:** The difference between these new initiatives and the CRP is that they will be funded as full projects. The CRPs at the moment are a mix of windows 1 & 2 funding and then a whole basket of window 3 and bilateral funding. The challenge of course has always been to make a coherent program from all these diverse sources of funding. So there will be an agreement amongst a particular group of donors to say that we'd like to fund this project and then there will be relevant staff under each to engage from within the CGIAR depending on the topic of the initiative. The initiatives will be designed during 2021 although this timing may be a challenge, also more important will be commitment from donors to fund them. Clearly the timescale is very ambitious and there are concerns whether we can do it all. [IW]

**Q:** Thanks for the presentation Iain. Most recently I was involved in the sustainable and resilient production discussion. The geographic prioritization of the initiatives is also still a concern. The lack of specificity in these broad regions - for example West Africa has a lot of production systems yet not all require the same level of help in terms of productivity. So in the discussions I have been a part of this has come up. Some people want to see certain specific countries focused on, but if we go that route then in a common agenda a country level focus isn't really specific enough in terms of specific production systems itself. Ghana for example has a cocoa system and maize system. This doesn't bring the systems of prioritization to the right level. Because of that I am more of an advocate for the FAO/ John Dixon et al. farming systems prioritizations. It may be possible to reconcile these different layers. So is there appetite to get to specific prioritized farming systems? [JG]

**A:** I think we do need to get to that level of prioritization Jerry. There has been a lot of discussions about regions and countries, agro ecological zones and so on. However, I will note that now it seems there is less enthusiasm for organizing research by regions due to the heterogeneity within those regions. Having regional programs doing the same things doesn't make a lot of sense. So one of the prevailing discussions is how do you organize research at agro-ecology level, but manage the impact at the country level? Its government and policies that you have to leverage to get technologies into practice. The slide on regional lead and country leads is to ensure that we get both the country dimensions and regional leads that may cover agro-ecological categories within and beyond country borders. Recently there has been a lot of prioritization by the breeding programs and crops to end hunger initiatives about which crops should that initiative be working on? However, that kind of prioritization hasn't happened for the other other programs. These decisions haven't fully formed yet, but I agree that they will have to be made sooner or later. Otherwise how would donors be able to make an investment decision? This also has to be overlaid with donor priorities and donor priority countries. There is going to be a big challenge in how this will be structured. The reality is that most of the money is going to continue to be bilateral. [IW]

**A:** There is also the unresolved issue about the research - development continuum. Our missions don't want to typically invest in long term research, they want to invest in development. Centrally (in Washington) we would like to keep investing in the longer term research. And I think other donors often blend the two. But one of my points about focusing on the farming systems is that when Imap donor priorities in terms of geographies, most map out underneath 6-7 broad farming systems. It is a very difficult thing to come up with pooled funding for a common research agenda particularly when the lenses through which the priorities are looked at are different. [JG]

**Q:** It is not yet clear from me how the ongoing bilateral projects and program will be integrated into these new initiatives? Will they be integrated to one or several? This is because Africa RISING was in the past for example mapped to Livestock CRP (at ILRI) and Maize CRP (at IITA). How will this confusion be avoided? [IHZ]

**A:** They will not be mapped. Unlike the CRP, these new project will be stand-alone projects. What is less clear is within the new CGIAR how will the knowledge from across projects be integrated? How will these be synthesized? Where will the funding come to put everything together? That bit hasn't been worked out yet. Maybe the platforms have a role in that, but it is not clear yet. [IW]

**Comment:** It could be something that Africa RISING needs to identify from our side on how best we fit within the 5 impact areas namely: Five Impact Areas: (i) Nutrition & food security, (ii) Poverty reduction, livelihoods & jobs, (iii) Gender equality, youth & social inclusion, (iv) Climate adaptation & greenhouse gas reduction, (v) Environmental health & biodiversity. [FK]

**Comment:** With regards to the question about how to organize the OneCGIAR, I think we will need both the regional and global dimensions (farming systems focus). For example there will need to be set-up that links Africa RISING to CSISA in Asia and Mas Agro in Mexico etc. In a sense Africa RISING is already a bit of an exception because we do work across the regions and across centers and also across farming systems with a sort of coordinated functions. So I think that should be expanded to CGIAR -wide. But sometimes these things can also be good on paper, you can draw lines to show how things are linked up etc, but then practically it comes with consequences in terms of funding streams, design of those programs, enforcing some standard operating principles etc. So I think that is an area where the CGIAR

can do a lot of work in. So you can look at this reform as creating uncertainty and stress, but it is also giving a good opportunity to rethink a little bit the way we are set-up and doing stuff. The time is very short, I agree with that. [BV]

**Comment:** I think Africa RISING is a good program working across regions and drawing on different expertise and global capacities within the CGIAR and delivering at country levels. So we have a model and in that sense we are not really starting from scratch and we also have the experience. [IW]

**Comment:** I guess the key on how best to position regions, countries and landscapes as key dimensions of delivery remains a challenge. Using an evidence base such as work generated by Africa RISING can inform or generate scientific evidence on multiple transformation pathways that are appropriate to different contexts. [FK]

**Q:** Was there continuous consultation with different priority countries to get their feedback on the proposed research /impact areas? [KM]

**A:** There was some very high level consultation with countries in different regions early on but it was not very specific and did not get down to specifics. [IW]

### **Status of conceptualization of systems research in AR** - P. Thorne

- **Download presentation:**

[https://drive.google.com/file/d/1VJYW3WU6U-2ujqgWJJKx-DGzIO\\_3zf4B/view?usp=sharing](https://drive.google.com/file/d/1VJYW3WU6U-2ujqgWJJKx-DGzIO_3zf4B/view?usp=sharing)

-----  
**Q:** Are there less complicated and practical examples of system research that can be a showcase for our local partners? [KM]

**A:** Yes, we do have some of those in Africa RISING like the doubled up legumes in Malawi, the forage intercropping examples in Ethiopia. We may need to do case studies that we can make more accessible to farmers. But you are right that sometimes it is so easy to plunge into complications when talking about systems research. [PT]

**A:** I think the priorities in a systems context would be processes that link system components e.g. efficiency including sub-processes such as waste reduction. [PT]

**A:** I think moving forward, it would be good to identify an integrated value proposition that can be co-designed with investors and partners. [FK]

**Q:** What PT has presented is a really good structure for a review paper on systems research. When can we write that paper? The structure is right there and we can fill those with examples from Africa RISING. [BV]

**A:** You are right and I agree that we should. However, the challenge was that our initial attempt didn't take off well because of a lack of consensus about what systems research entails. [PT]

**A:** I think it is important to write this up. One of the challenges in the CGIAR is that we don't have actual capacity for systems research. Many people say they do it, but it's not 'real' systems research. So, I think producing a paper will do two things - (i) show that we really do have some systems research, and (ii) help the rest of the CGIAR to think through what we're talking about.

So I would definitely encourage you PT and if there are limitations then you can reach out to me for support.[IW]

## **Topline action points for SI & systems research and other donor-led efforts** - J. Glover

[no ppt presentation, but key points are as below]

I was hoping to discuss the following 3 broad categories of issues.

1. **USAID Washington's goals with the global research agenda** (focus around the sustainable and resilient production action area in One CGIAR.

When we think of our central research funds and what we're investing in the CGIAR system. We would very much like to invest in a common agenda and thus far it seems to be working well despite the ambiguities and various concerns. But I guess Iain is right about the Ag. development community continues to do these stand-alone projects, Africa RISING is one example. We would like to move away from that and really have a more common agenda. Where there is this opportunity for wider synthesis, information transfer and so on. But when you look at the sustainable and resilient production agenda, what do we focus on? I notice in the current options being proposed, there are various options being proposed such as livestock, agronomy, IPM etc. As Peter rightfully asked, what is the right resolution? What are the categories and then how do we ensure that they are integrated? Africa RISING has covered all of that, but maybe not in a systematic enough way to develop consensus around a common agenda.

2. **Prioritization and what Africa RISING can contribute over the next 18 months.**

Africa RISING geographies are set, so for a moment put aside the geographic prioritization issue for a moment. But I am wondering if over the next 18 months you have the information you need to identify (for example for the mixed maize production systems of ESA) what are the top priorities e.g. are they in agronomy? Livestock? Soil management etc. If it is all of those; then can you imagine if someone came to you and said - we want to know what we really need to push forward in that farming system to push the needle on hunger, poverty, malnutrition etc. What are the top 3 things? Or alternatively what are the combinations needed? The reason I bring this up is because there's frequent reference to crops to end hunger, and that is really built around prioritization of crops. There were quantitative methods to develop prioritization of those specific crops. So some got less while others got more funding going their way than they had in the past. What is the right crop equivalent in the systems research? We need to do it in a broad enough way that we can develop a compelling enough way that captures the attention and resources of multiple donors? Aside from the OneCGIAR process, internally (at USAID) we are increasingly asking these questions - why are we for example investing in IPM vs increasing allocation to irrigation or mechanization? Why is our allocation the way it is? We would like a more objective and quantifiable method for getting to these investments.

3. **How to identify relevant benchmark and milestones**

In the discussions around production systems, one of the areas that is pretty much cited everytime is closing the yield gap. Which I think is great! But that is an eternally moving goal to achieve. So what are the yields that the CGIAR or any one of our research investments (for that matter) are aiming for? Is it 8t/ha for these communities? Is 3 t/ha? Or is it 5 t/ha? Even a range would be fine. But I think (maybe I am wrong), but I would like to hear this. You know it is a lot different, if you take different approaches and innovations to get a few people upto 9 t/ha vs getting the average of a region or a community at 3 t/ha. And of course that is just talking about cereals for example - what are the other relevant benchmarks (in the other categories too)? This is important so that by year 3 of a project you can say that we are achieving our goal and that also gets back to prioritization.

I hope these points give you an idea of the threads that I see as coming from the previous discussions and really the previous 9 years of Africa RISING so that we can not just get to a common agenda within the CGIAR system but also we can more broadly prioritize within a systems research framework what we should be doing to push the needle on these goals of poverty, hunger and malnutrition etc.

### **Discussion**

**Comment:** It is true that we don't have anything like this crop variety yielding 30 t/ha or is resistant to fall army worm etc. System research probably doesn't deliver those kinds of things, but my thinking is that we really need to kind of identify some key processes that operate across systems components that people can come to grips with and efficiency would be one of them for example. In many different areas you can do it in terms of knowledge transfer. I guess what you're saying Jerry is that you need stuff from us that you can encapsulate in one or two sentences and people say, yes, that is worth investing in. [PT]

**Comment:** Thanks Jerry for the well thought out insights. I can relate a lot to what you're saying and I was kind of looking at the points you raised as advice for us in terms of strategic direction. We can collectively think about how our research could maximize pathways from research to impact at scale while at the same time we can embrace a systems transformation approach for food, land and ecosystems while also working with development partnerships. Given the way that Africa RISING has been working over the last 8 years, we have a couple of issues on our side for instance working with more than 7 CGIAR centers all working towards a common agenda. I am just thinking about how we can have greater buy in from other CGIAR centers that we already have partnerships with. In terms of prioritization, the use of SIAF would also be a very good entry point to: (i) emphasize issues around efficiency, (ii) show interconnectedness of multiple pathways/trajectories to achieve sustainable intensification, and (iii) identifying relevant benchmarks and milestones - we could start with the indicators and milestones that are used within the framework. So I look at this as a good pointer for us to finetune our thinking in the next 1.5 years to bring a research agenda that is broader. [FK]

**Comment:** Prioritization is easy once you know what your objective function is. The problem is that we don't have a simple objective function. On crops to end hunger the prioritization was pretty straight forward and in some ways simplistic - based on yield, number of people benefitting, potential for income etc. So that is not too hard to do in coming up with a prioritized list of crops. Now, if you're trying to prioritize which systems we should invest in, you don't have a simple objective function against which to do that. You instead have multiple objectives and tradeoffs and these also interface with political objectives within those countries. So there is no easy answer. So on one hand you have a yield gap, you could even extend that and ask the question what is the potential of this system to be contributing more (without defining what more means)? More could mean more food, more income etc. You would have to

look at where the system is now and what is the potential for it to move towards the direction you'd want it to go. Of course we want our system to deliver on many things and we really struggle with the tools and methods to make those observations. And as I said, politics plays a role as well. For example when we do livestock master plans for various countries, that is not a technical exercise, so prioritizing investment in the livestock, but there are usually political considerations there. The government would for example want to produce livestock products for export, feed the domestic population, or is interested in livestock for trade and employment. So depending on the answer to those questions, you would come up with a different set of priorities. [IW]

**Comment:** You are absolutely right Iain. Certainly from my perspective, if you're talking about prioritizing these crop investments, the economists and the plant scientists that went through that exercise were very satisfied with that process. I certainly agree with the rationale you gave for why it is more difficult to do that prioritization in terms of systems, but you know it does recall to my mind the paper from 2010 by Waddington et al.

([https://www.researchgate.net/publication/227286043\\_Getting\\_the\\_focus\\_right\\_production\\_constraints\\_for\\_six\\_major\\_food\\_crops\\_in\\_Asian\\_and\\_African\\_farming\\_systems](https://www.researchgate.net/publication/227286043_Getting_the_focus_right_production_constraints_for_six_major_food_crops_in_Asian_and_African_farming_systems)). It basically was a constraints analysis for specific crop productions. They had these categories which they felt were right ones in a production system. I think that is one level below where Africa RISING could go. In other words, AR could just talk about production constraints in any of those major farming systems. I don't know how specifically, you would do that, but I wonder if that is something that could be worked out. Anyways, if you check out that paper by Waddington and built it up for systems analysis of AR farming systems, I wonder if you could come up with something equivalent to what Waddington et al did. And that would resonate quite well I think with the folks that did the crops to end hunger prioritization. It would at least get some logical structure for prioritization, because right now it is rather scattered as Iain described. For example somebody could ask why are you prioritizing livestock in one geographical location and not the other and not more agronomy instead? The political lens will be there for sure, but what we are keen to do is to get the so-called more objective prioritization down, then we could map those political considerations. So all political considerations aside, what are the priorities within the systems that Africa RISING has covered? On Fred's point about benchmarks, I really loved how you (Fred) articulated the risk reduction in your presentation yesterday. I think there is fertile ground there instead of focusing on the more abstract resilience issue, I think Africa RISING can do more in this area of risk reduction and quantifying those - what are the approaches to reducing risks in a fairly quantified way rather than just saying if you use tied ridges it reduces the risk of crop failure. What I think several of you are working on across AR is quantifying that risk reduction, and that could go a long way towards prioritization. [JG]

**Comment:** Yesterday I presented a slide on adoption, which shows how the researchers are going to do yield cuts from farmers who are hosting technologies down to farmers who are not part of Africa RISING. It is not only yield cuts they are going to do, but they are going to ask questions about everything. I was thinking that maybe this is one way of explaining why farmers may get an average of 3 t/ha rather than 9 t/ha. This will probably help us in identifying what we should be doing to help the farmers move upward with their yields. [MB]

## **Excellence in Agronomy 2030** - B. Vanlauwe

- **Download presentation here:**

<https://drive.google.com/file/d/1PnidJsSeghNH25UWoTOUHfft6GGwJmiB/view?usp=sharing>

-----

**Q:** Livestock has been contributing in many ways to improve crop production and livelihood of smallholder farmers in Africa and other developing countries. They provide service and product (manure) functions to crop production/productivity. Has livestock received a good place in this Excellence in Agronomy initiative?[KM]

**A:** You are the right kindu. In some systems you can't simply separate crops from livestock, infact very often livestock is often a viable entry point to increasing crop productivity. I think a lot will depend on how these initiatives will develop and how it will all happen in the end. In EiA we talked about a global and a regional function, but there is also a 3<sup>rd</sup> function which is referred to as the country and alignment which is the area where all these functions will need to talk to each other. So it needs more thinking, but having this level would be necessary. From both livestock side and crops side we need to talk together and implement activities jointly.[BV]

## **Transforming Livestock food systems – focus on SI of integrated crops - livestock production -**

S. Moyo and P. Thorne

- **Download presentation here:**

<https://drive.google.com/file/d/17k5YAKn-FOu8poSK3qP1UivaJYaAqCW3/view?usp=sharing>

### **Actionable conversation:**

1. What are some principles we are learning about integrating systems research that would be useful for the new OneCGIAR action areas (both from a science and a programmatic perspective)?

**Comment:** Earlier, Peter suggested that it is around the process of these systems that we could identify the relevant categories. Maybe it is around those same processes that Africa RISING is integrating the different research components to address. So for example on waste (as identified by Peter), so perhaps that goes back to the feed troughs and that goes back to the waste reduction and synergies. I am just wondering whether Peter's thinking on that could direct or be a part of that conversation around item 1 Boni. [JG]

**Comment:** I am quite intrigued by the idea of looking at those processes, but typically it becomes mostly very discipline oriented. I kind of like how to frame it about processes because that is where the different disciplines often interact. Just to point out on the Waddington paper, I cited it as an illustrative element. AR would be going one or two steps ahead of it. [JG]

**Comment:** The work that AR has done with very broad partnerships with different CGIAR centers over a long time with quite lots of lessons learned and success stories that can be documented. We can frame our thinking around managing diverse multiple partners across different countries and regions could add value to CGIAR as they frame the new structure. [FK]

**Comment:** If you asked me what have you learned from AR. Then my answer is the fact that AR has entered into many systems using various entry points. But from that what I consider as a key

lesson is the fact that evaluation of the performance of an entry point goes much further beyond the primary reasons for which that entry point was selected in the first place. In simpler terms if you are doing something with a variety to improve yields, the evaluation has to go much beyond just looking at yield increases. That is something that should apply to most of the interventions/ areas that are being developed in the One CGIAR - even for genetic gain. [BV]

**Comment:** Currently , this discussion on how to populate that sustainable production and resilience component that is happening now and possibly in the next few weeks,there will be a decision taken on that. For this reason I am proposing that we should keep each other engaged on the crop and livestock systems side to ensure that there is a voice in the room reinforcing the important value of having that interaction.I am involved in the agronomy discussions but Boni/Iain and Peter are involved in livestock and maybe other discussions. So could we not once in a while or even frequently touch base to reflect on progress on different sides. There will be lots of suggestions coming from different directions and these may not have any logic, so we need a strategy.[BV]

One of the issues around the initial attempt at writing a paper about systems research was the fact that there was an issue with the language used in the publication. This is in addition to the issue raised by Peter about the lack of consensus among the group of authors about the systems research parameters.[JG]

2. How can we document the items in point (i) above and mainstream them into OneCGIAR discussions and decisions?

### **Summary of topline action points from the mini-workshop**

The following key action points were agreed upon:

No.	Action	Responsible for follow-up
1.	Publication of a paper about systems research conceptual framework	P. Thorne & B. Vanlauwe
2.	Publication of a paper documenting AR experiences with scaling approaches and achievements	K. Mekonnen, M. Bekunda & F. Kizito
3.	<ul style="list-style-type: none"> <li>● Identify/ articulate/ document the production constraints in the major farming systems where Africa RISING operates along the lines of the study/publication by Waddington et al - <a href="https://bit.ly/350v5ML">https://bit.ly/350v5ML</a></li> <li>● Have a logical framework for how we prioritize determining how investments of systems research interventions can be prioritized - basically answering the question why invest in systems research?</li> </ul>	An action plan for this to be developed during a follow-up meeting to be convened by PCT Co-Chairs soon.
4.	PCT Chairs to establish frequent check-ins via email and other platforms to brief, follow up and engage strategically in the One CGIAR research strategy which is moving along very fast.	PCT Co-Chairs - B. Vanlauwe & S. Moyo
5.	Put together a document presenting the lessons learned from 8 years of	An action plan for this to be

	implementation of Africa RISING (both from a science and a programmatic perspective)	developed during a follow-up meeting to be convened by PCT Co-Chairs soon.

**Closing remarks**

Jerry Glover

There is a critical eye being put on this type of systems research within USAID because of the challenge of capturing the impact of this type of effort that doesn't go back to some specific category. In other words, people are convinced for example that agronomy is good to improve, but the systems research approach is questioned. Part of this goes back to what I mentioned earlier about prioritizing crops, it is a much simpler thing and that makes it more measurable and quantifiable. That level of certainty gives people satisfaction that is not common in systems research. Frankly, if there weren't a couple of us at USAID advocating for this type of research at USAID, it could easily go away in terms of a funding category. So it is really important, I think, at some point to determine how we can prioritize interventions or research categories and at least have a logical framework for how we prioritize these investments - basically answering the question why invest in systems research? This goes back to the rationale for developing that paper on systems research. That is one area that you could really make some advancements in the coming 18 months.

Bernard Vanlauwe

This was a good discussion and a necessary one. This is an opportunity that we have. Once the One CGIAR is set it will be difficult to introduce change. We can do that now despite the drivers and interests, but it is also good to try - I think. Of course a lot about how this new One CGIAR will go depends on how much pooled funding there will be. We however cannot think that the pooled funding will be like windows 1 & 2 where we can basically make a lot of decisions. So my interpretation about what is happening is that pooled funding is almost going to be like windows 3 funds in nature with clarity in the investment and implementation plans. It will also be very project oriented with strict stage-gating. Jerry has made a point about the need for us to come up with a well articulated description of value for systems research that can be enticing even to the development actors beyond our science community. Maybe we should identify key systems research components that should be part of One CGIAR.







