RESEARCH PROGRAM ON Policies, Institutions, and Markets
CGIAR
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Eastern and southern Africa agriculture value chain learning hub

Market needs study

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October 2017

ILRI INTERNATIONAL LIVESTOCK RESEARCH INSTITUTE
CGIAR RESEARCH PROGRAM ON Policies, Institutions, and Markets Led by IFPRI

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Citation: Kanyuuru, C., Skorc, N. and Staal, S. 2017. Eastern and southern Africa agriculture value chain learning hub: Market needs study. Nairobi, Kenya: International Livestock Research Institute.

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Acknowledgement

The authors would like to express their gratitude to Iddo Dror and Karl Rich who contributed to the paper by offering reviews on the content discussed and its presentation. The reviews have provided more insight within this paper and other potential work that could develop out of it.

Executive summary

In an effort to better understand agriculture value chains market needs in relation to CGIAR Research Program on Policies, Institutions, and Markets (PIM) learning hubs, the International Livestock Research Institute (ILRI) conducted a market needs study to assess the current situation and find any possible common ground between the East and southern Africa (ESA) PIM learning hub and the needs and expectations of key actors in the market. The PIM hubs seek to build capacity, develop robust evidence and learn effectively in ways that influence decision-making and contribute to improved outcomes for the poor through better programs, policies, investments and businesses.

To obtain the necessary information on barriers and facilitators of functional agriculture value chains, several key informants (KIs) from different types of organizations active in the field of value chains, namely international and local non-governmental organizations (NGOs), private companies, academic institutions and government institutions, were invited to share their experiences and opinions on value chain assessment, diagnosis or analysis, value chain development, upgrading and interventions and monitoring and evaluation of value chains, including interventions or market information systems. A total of 19 in depth interviews were conducted, either in person or via Skype, which form the basis for the discussion presented in this paper. While 19 respondents do not make for a representative sample, the information obtained gave enough insight to open doors to new discussions or to take into consideration when setting up priorities when it comes to the hub.

The interview questions ranged from reviewing the organizations' existing and desired capacities, to different approaches and tools they use when it comes to value chains, the challenges they are facing and the solutions they feel are best to address these challenges. In addition, hub-specific questions were included as well, to try and obtain insights into the perceptions of the KIs when it comes to the possibility of actively participating in the ESA PIM learning hub.

The results showed that while the interviewed organizations are actively working in the aforementioned three components that this qualitative research set out to investigate, they reported a need for increased capacity, especially when it comes to monitoring and evaluation. The learning hub, suggested as a possible solution to address these issues, was received positively, especially if it aims and turns into a space where different actors can come together to share their approaches, lessons learned, best practices and experiences.

The research, while qualitative in nature, also opens the doors and gives ideas for future quantitative and more detailed research on several ideas and concepts presented by the KIs, such as ways of bringing value chain actors together, the type of contents they would find most suitable, usability of specific tools and approaches on a wider scale etc.

Introduction

The International Livestock Research Institute (ILRI), as part of its work in the CGIAR Research Program on Policies, Institutions, and Markets (hereafter PIM), launched a Market Needs Study (MNS) to evaluate the agriculture value chain capacities and interest in the East and Southern Africa (ESA) agriculture value chain learning hub. The ESA hub is one of the four learning hubs piloted by PIM, designed to bring research, development and policy actors together in a value chain related learning process. The mandate of the hub is to enable systematic assessment of interventions and to measure their impacts through value chain analysis, develop the capacity of partners and value chain actors, to facilitate knowledge sharing among them, provide an avenue for promoting evidence and data for research-based policy decisions and offer PIM developed value chains tools to be used by value chains implementers.

The MNS was carried out with the intention of supporting development of the ESA hubs' outreach and engagement strategy and evaluated the opinions and perceptions of different types of actors who would potentially benefit from collaboration and information exchange in agricultural value chain development. The discussions centred on the anticipated hub functional and technical value chain capacities, which were clustered into three key components: a) **value chain assessment, diagnosis or analysis**; b) **value chain development**, **upgrading and interventions**; c) **value chain monitoring and evaluation**, **including interventions or market information systems**.

The core issues assessed within these three areas included scope (research and development), key players, existing and needed expertise, approaches and tools, and the value and design of the hub. Specific objectives addressed were: a) to identify different categories of value chain players and their roles in value chain support; b) to identify the players' existing and needed expertise and tools/approaches for value chain development; c) to obtain insight into perceptions on useful mechanisms that can be applied in the design of the ESA value chain learning hub.

Using a key informant checklist developed by ILRI, a total of 19 key informants (KIs) were interviewed, either via face-to-face interviews or Skype video calls to collect qualitative data, which was managed and processed using NVIVO software. Seventeen (17) open-ended questions were asked during each interview in order to obtain as much information as possible. While conducting the interview, the interviewer did not discuss with the interviewees in case when their understanding of certain subjects appeared to be incorrect, but rather searched for the underlying explanations of the approaches and tools used in the interviewee's organization and their opinions on the addressed objectives.

A clear limitation that needs to be mentioned relates to the size of the sample. Nineteen (19) KIs are not enough to be able to draw conclusions that are representative of the entire value chain 'population' of the ESA region. However, as these 19 KIs were strategically selected based

on ILRI's previous experience in agriculture value chain activities, the KIs opinions, reflections and experiences can be used as guidelines when designing the hub's outreach and engagement strategy in order to address as many raised issues as possible.

This report shares the findings of the assessment by broadly capturing opinions on value chain players and their roles, expertise, tools and approaches they use, lessons based on experiences working in agricultural value chains and perceptions on what an effective hub would look like. It further takes a look at PIM tools, approaches and platform (as made available on tools4valuechains.org) to detect if there are already any solutions designed for the issues raised by the key informants.

An overview of interviewed organizations

Key informants interviewed comprised of five international NGOs, four local NGOs, six private Ltd companies, two academic institutions and two government ministries. Four international NGOs' main mandates are in development work and one's is in research. Local NGOs and private companies work both in research and development fields. Of the six private companies, five were knowledge and capacity service providers and one was an agriculture commodity value chain business. The knowledge and service providers in research engage in applied research at a very downstream level for the purposes of informing development interventions. Academic institutions interviewed were both a university and an institute arm of an university, while government ministries interviewed had a focus in agriculture trade and agribusiness, one focusing on development and the other on research. Responding organizations were strategically selected based on convenience from a list provided by ILRI's networks in Kenya, Ethiopia, Uganda, Tanzania and Rwanda. These organizations are operating both regionally and nationally (Figure 1). Bearing in mind that the ESA learning hub seeks to address agriculture value chains issues regionally, it is important that the views captured here have a regional focus. More information on interviewed organizations such as country of origin, gender of respondent, years of work, type of organization, research and development focus and geographical scope of operation is detailed in Annex 1.

Figure 1 – Responding organizations geographical focus

The majority of the responding organizations (NGOs) defined their key partners as government, the private sector and research institutions (Figure 2). They also engage with academic institutions, farmer and producer groups, donors and a few other regional communities. A comparison between the existing and the most needed category of partners to make the ESA learning hub a success showed similar categories of desired and existing partners (Figure 3); however, a small but notable difference is an emergence of the business and policy categories. The emergence of the business category can be considered as a validation of the importance of the private sector as a key player in growing value chains. Collaboration with the private sector has not been very easy due to a lack of openness, as noted by one of the respondents: '*getting information from the end of the chain (processing level) is difficult*' – Academic institution KI. This could be a result of the private sector's perceived need for confidentiality to protect themselves from exploitative actors or competitors. There is, however, a need for a mechanism that will enhance transparency and effective collaboration between actors to help access credible information for analysis without exposing private business' confidential information. The emergence of the policy category may suggest the need to further define the role government and other policy related institutions can play to promote functional agriculture value chains.

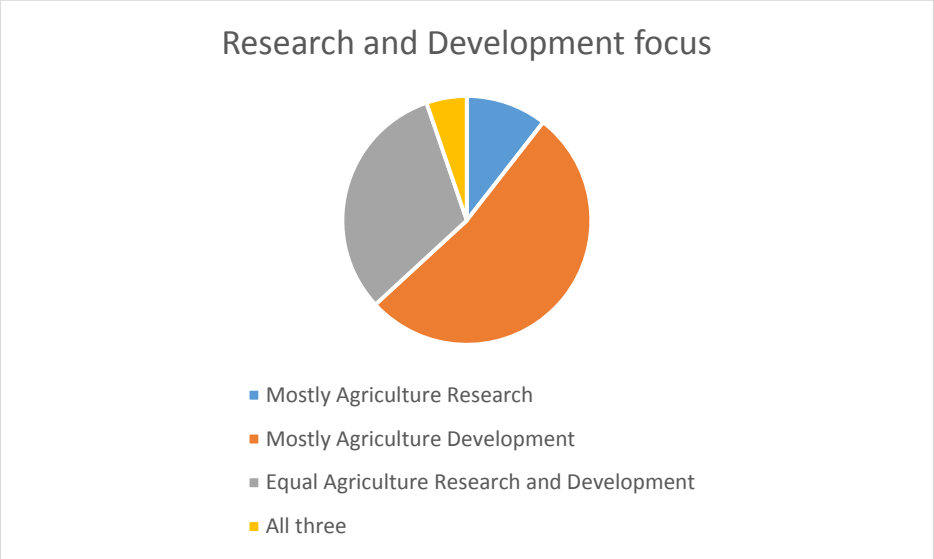
Figure 2 – Existing partner categories

Figure 3 – Desired hub partner categories

Organizations' research and development focus in agriculture value chains was evaluated as well. The organizations interviewed were largely international and local non-governmental organizations with a focus on development work. This explains the large 'mostly agriculture development' focus as seen in Figure 4. That said, it is important to note a substantial focus on 'equal measure of research and development'. This research and development link is achieved through partnerships with the research organizations (both NGOs and government) as well as through knowledge and capacity service providers working along the research and

development continuum. These service providers are characterized by a previous research or development background and are currently using their experience and evidence to support agriculture value chains either as private businesses or local NGOs. Understanding value chains through the conducted study gives insight regarding available innovations and needed capacity to help engage from an informed point of view.

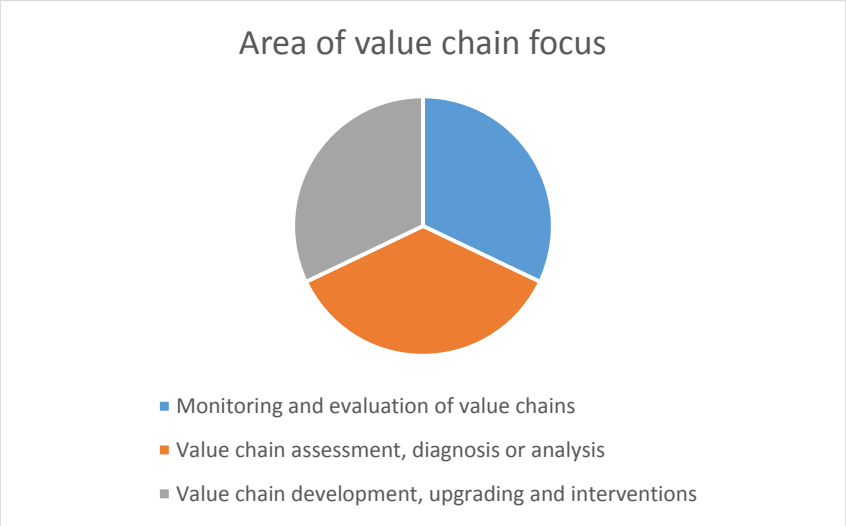
Figure 4 – Matching nodes (key informants) on agriculture research and development focus



Value chain areas of operation and activities

Engagement in three areas of value chain operations, namely: monitoring and evaluation of value chains, value chain assessment, diagnosis or analysis, and value chain development, upgrading and interventions were evaluated. This was achieved by questioning which of the three components made part of the responding organizations' work. As observed in Figure 5, the results reveal that most participant organizations were engaged in all the three components. The fact that the three areas of operation were mentioned almost equally, indicates that all three areas are considered important in developing an effective value chain, with each of them meeting a special need. This finding is emphasized by two respondents quoted saying, *'If the assessment is not right, development will be deceiving'* – Knowledge and capacity service provider KI, and, *'you cannot develop what you don't know hence the need to assess'* – Knowledge and capacity service provider KI.

Figure 5 – Coding references of area of value chain intervention



The level of engagement in these areas, however, differed based on an established pattern of time spent on each area by a few of the responding organizations (Table 1). Results show a majority of the organizations played a role in value chain development, upgrading and interventions, possibly because most responding organizations have a development focus. There is substantial work on value chain assessment, diagnosis or analysis; however, monitoring and evaluation activities were limited. The notable difference on the applicability and intensity of work around each area, can be considered as the result of project/organization limitation largely attributed to project/organization priorities. This is expressed by one respondent who said, *'All the funds have a specific job. I do not have the freedom to dictate where the money*

goes because I provide needed services to the client' – Knowledge and capacity service provider KI.

Table 1- Time spent on different value chain interventions.

Organization	Value chain development	Value chain assessment	Monitoring and evaluation of value chains	Organization type
A	45%	30%	25%	International NGO
B	70%	20%	10%	Local NGO
C	50%	40%	10%	Academic institution
D	75%	25%	0%	Local NGO
E	75%	10%	15%	Knowledge and capacity service provider (Private Ltd company)

Respondents outlined types of activities they conduct within the three areas of operations. Activities in value chain assessment, diagnosis and analysis comprised of scoping studies to identify constraints and opportunities within value chains before embarking on value chain development. These activities include types of commodities to prioritize, assess value chains profitability and competitiveness and explore new business and analysis of specific aspects of value chains, such as policy, market linkages, industrialization and information digitization. Some assessments focus on production without taking into consideration the market component, yet this is important to help the producers understand what market they are producing for. The studies also support mapping of existing actors and actor selection, understanding actors' needs and roles within the value chains and how market linkages can be strengthened. Assessment is also important to help define which value chain optimizes resources.

Assessment is further linked to monitoring and evaluation because one cannot track, monitor and evaluate a value chain that is not assessed from the very beginning. Both assessment and monitoring and evaluation support value chain development by offering the necessary insight into the value for money check. While seeking to emphasize the usefulness of monitoring and evaluation of agriculture value chains in tracking progress and achievements, one respondent equated its exclusion as '*kicking a ball without any goal post'* – Government Ministry KI. Value chains monitoring and evaluation activities revolved around development of frameworks and performance indicators, which are further evaluated through a research process. The knowledge obtained from this process is then used to support adaptive change management through project programming. Though monitoring and evaluation helps to find the focus within value chains, it seems to be the least understood and implemented component by most players

as displayed in Table 1. One of the reasons associated with the low implementation of monitoring and evaluation is lack of capacity characterized by little understanding of relevant monitoring and evaluation approaches (as discussed in the next section). Low budget allocation towards monitoring and evaluation activities was mentioned as a challenge and the lack of capacity in the area may further explain why this is the case.

Based on the discussion that took place as the central part of this study, value chain development, upgrading and interventions domain are characterized by activities related to market development and trade. These include linking farmers, producers and traders by facilitating market exhibitions, business to business forums, trade negotiations, trade forums, constructing physical markets and access roads to high agricultural potential areas, building bridges, incubation centres, developing contractual arrangements and processing of existing products.

Multi stakeholder platforms are the setting of interaction among different stakeholders to enhance strategic coordination, collaboration, learning and partnership around business development, financial management, organization development, advocacy and access to market information. Members of farmer organizations, such as cooperatives, are empowered to manage their organizations through the change of knowledge and skills to increase production and improve quality of commodities. Other activities include policy advocacy through government stakeholder meeting at a regional, national and local government authority levels to support harmonization of laws on regulation and levies. Project management is promoting embedding the culture of sustainability within projects through the emphasis on an exit strategy, whilst activities around disease control and environmental conservation were also mentioned.

Existing and desired capacities

When further evaluating existing and desired capacities within the three key value chain components, the respondents described the existing and needed capacity within their organizations in the three components and these were coded accordingly. General results in Figure 6 and Figure 7 reveal that the most desired capacities are those related to the areas of monitoring and evaluation followed by value chain assessment and value chain development/upgrading of value chains respectively. This is depicted by the highest change of coded references between existing and needed capacity in the area of monitoring, evaluation and learning compared to changes between existing and needed capacity in value chain development, upgrading or interventions and value chain assessment, diagnosis or analysis.

Figure 6—Coded references on existing capacities within the three value chain components

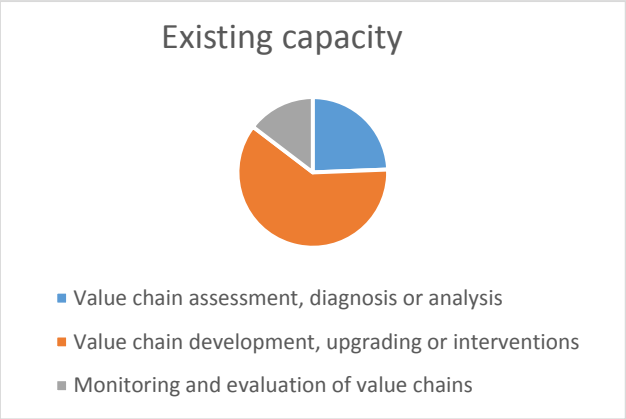
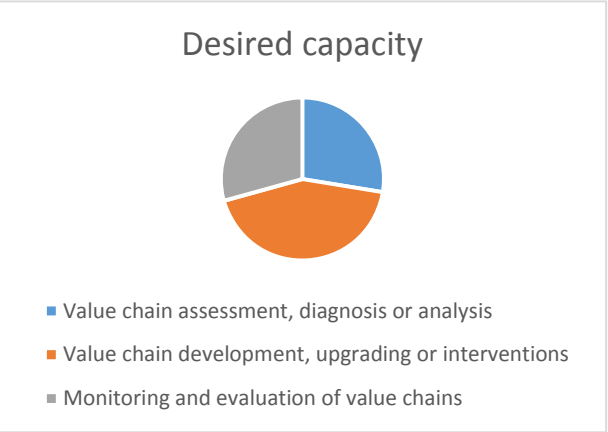


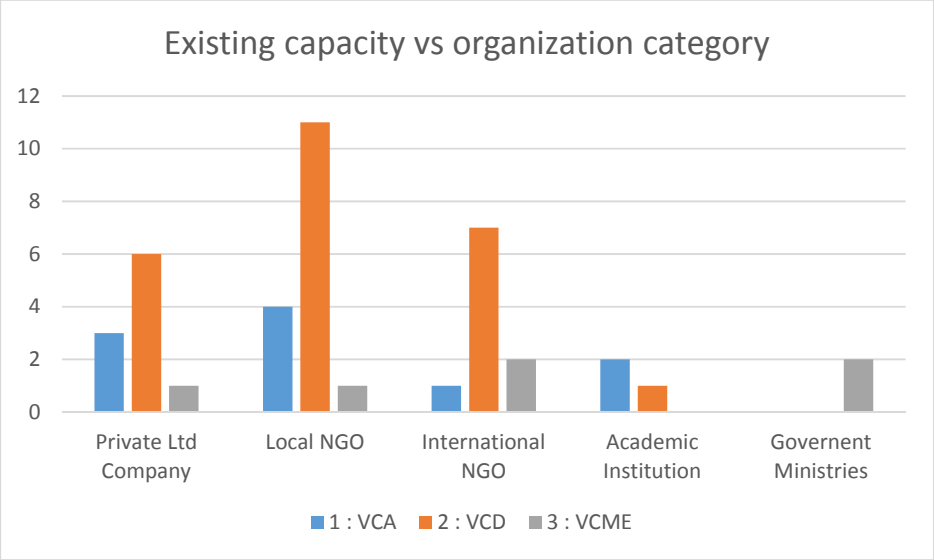
Figure 7—Coded references on desired capacities within the three value chain components



Existing capacity

Comparing existing capacity by category is a challenge because the sample size is not equal for each organization category. More respondents in the private service providers and local and international NGOs categories influence the finding that demonstrates existing capacities in value chain development by the three organization categories. A key finding worth noting is the consistent low capacity in the area of monitoring and evaluation by all actors (see Figure 8).

Figure 8 – Coded references on existing capacity in various organization categories



Existing capacities mentioned by the private service providers included livestock production and marketing skills, advocacy provision and training, business planning, innovation incubation, actor engagement and product development. Local NGOs existing capacities included market/business development, organizational and strategy development, managing partnerships, skill sets planning, training in leadership and mentoring of value chain actors, portfolio management of interventions, strategic coordination/organizing and mobilizing actors and advocacy. Responding international NGOs mentioned existing capacities in training in emergency/recovery interventions, technical skills in business expertise, livestock expertise, institutional capacity building expertise, strengthening and capacity building of groups and organizations. This was emphasized by one of the respondents who said, *'Broadly we understand how value chains work and we understand how to help people fill gaps in the value chains'* – International NGO KI. The NGOs develop the expertise of value chain actors through good facilitation and capacity building.

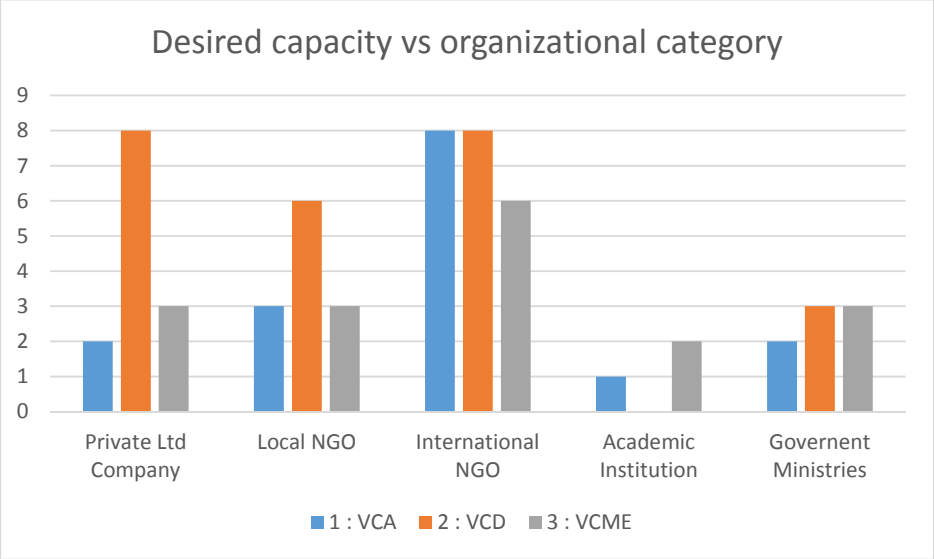
Capacities on value chain assessment and monitoring and evaluation of value chains are discussed together because both largely use a research process in implementation. Reported areas of existing capacity on value chain assessment was an existing pool of technical expertise such as food science, genetics and general agriculture amongst others, partnership with university institution to bring agribusiness skills, value chain analysis from a market approach, staff capability to conduct the whole research process and quantitative skills.

<u>Desired capacity</u>

The distribution of desired capacity in value chain development is consistent with the existing capacity trend, emphasizing the effect of an unbalanced sample of different organization

categories. Of interest to note, despite this sample limitation, is the high amount of mentions of desired capacity in value chain assessment, diagnosis and analysis within the international NGOs category (see Figure 9). Furthermore, consistent desire for capacity in monitoring and evaluation by all organizations categories demonstrates that the low engagement in the component as observed in Figure 8 is not out of choice but due to the lack of capability to apply it.

Figure 9 – Coded references on desired capacity in various organization categories



Various expertise raised within the private service providers category include building a pool of more people with technical expertise in value chain development. Such teams would have the most relevant value chain skill set that constitutes experience, knowledge, skill and ability. To support this, one of the KI respondents (private service provider) has opted to also teach university students with the intention of building more capacity. There is also a need for capacity in communication through reporting, advocacy, cooperative and farm management, technologies to address post-harvest losses i.e. perishability of milk, access to finance and less bureaucracy in government procurement/bidding processes. Local NGOs laid more emphasis on the need for capacity around managing knowledge and sharing information through ICT mechanisms that will support easy upload of information and E-marketing to easily share information on prices and products. There is also a need for capacity around reporting and documentation and continuous staff development, especially in instances where there is high staff turnover. Several of the international NGOs KIs expressed the need in the areas of facilitating actors in implementing value chain upgrading, negotiation skills, communication, organizing farmers into associations, more training in the area of commodity value chain and linkages with the private sector to provide support in business skills.

Within value chain assessment, diagnosis and analysis component, private service providers raised the need for more capacity around data management. More suggestions noted that monitoring and evaluation is very valuable in their work but do not have the needed capacity to implement. Local and international NGOs expressed the need to develop their research skills and documentation by obtaining more exposure to assessments using diagnostic tools, as well as build capacity to obtain new knowledge for them to remain at the cutting edge. There is a high dependency on consultants for value chain assessments, however, more staff capacity is required. To achieve more transformation, there is a need for collaboration with partners who understand value chain assessments in the private sector or research institutions. There is also the need to build the capacity of project leaders in the area of monitoring and evaluation. At the moment, on the one hand, the skills are perceived as low and, on the other, there is a very small number of people specializing in this specific area. The majority of staff competent in monitoring and evaluation has a focus on emergency/recovery, however, more competency is needed in commodity value chains. More funds would go a long way to improve the area of monitoring and evaluation. Ideas from the government suggest that there is a low number of staff stationed in value chain assessment and it consists mainly of scientists with skills on markets to help target market analysis, considering that most value chains are informal. The need for more skills in scientific modelling and sharpened skills in qualitative skills was also mentioned. Monitoring and evaluation skills are commonly outsourced and there is a specific need for capacity at the project design stage before conducting baselines.

Approaches and tools applied in agriculture value chains

Based on experiences of different KIs in research and development sectors, value chain players use a variety of approaches and tools to build functional value chains as observed in this study. Ongoing work conducted within the PIM CRP scope has also categorized tools and approaches used in supporting work within the value chain, which are available on http://tools4valuechains.org/. One contrasting feature between the PIM tools and the tools discussed below is that PIM tools and approaches are produced from a research perspective by different CGIAR centres (IFPRI, CIAT, ILRI, CIP and ICRAF). These are therefore likely to be used by other researchers working on value chains. Tools and approaches discussed below are both research and non-research based and thus give a broader picture of what research private service providers and non-governmental organizations are applying in implementing value chains development. Understanding this broad scope of approaches and tools is essential in supporting the PIM hub strategy on outreach and engagement, which would presumably allow an interaction of both researchers and non-researchers.

Based on discussions with the key informants, five categories of approaches and tools emerging from the discussions are understood to be:

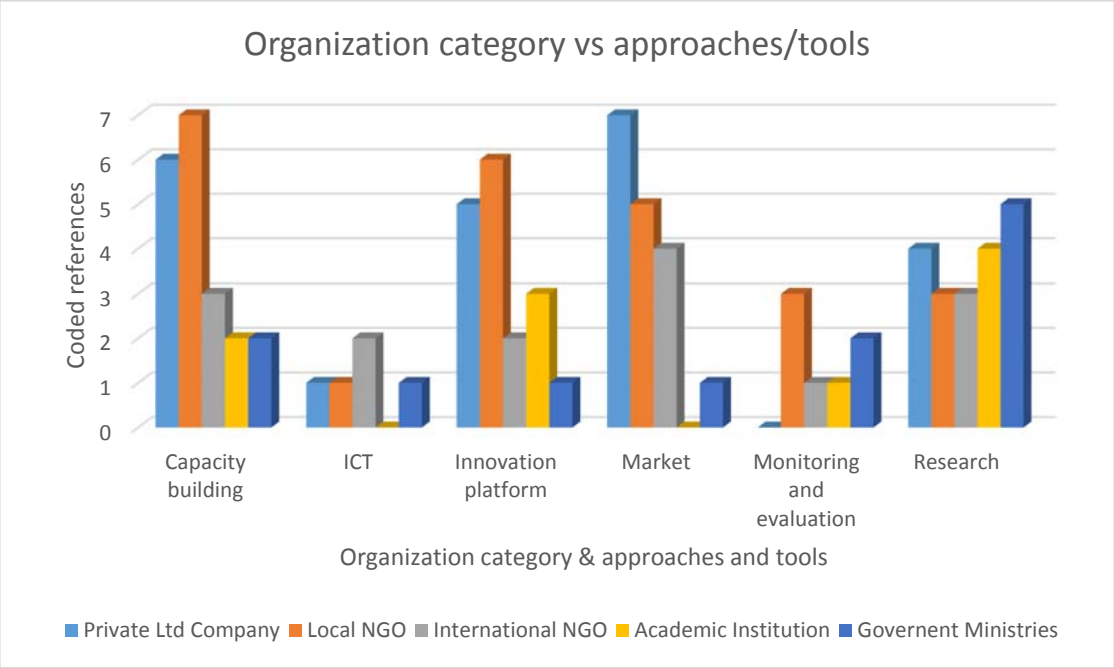
a) Research based – these are tools and approaches that are applied in any stage of the research process, such as literature review, data collection, data analysis and writing
b) Market based – these tools and approaches are at the heart of business development within agriculture value chains and are commonly applied within the private sector
c) Innovation platform based – these are tools and approaches that bring together similar or different players/stakeholders working on a common objective within agriculture value chains
d) ICT based – these are tools and approaches that apply to information technologies, such as computers and phones, and have a facilitative nature, therefore can cut across other approaches and tools discussed here
e) Capacity development based – these are tools and approaches that provide players with the ability to function better in the area of operation within agriculture value chains
f) Monitoring and evaluation based – these are tools and approaches that support organizations or businesses in tracking their achievements based on their initial target within specific timelines

These categories of approached and tools can, in many instances, overlap.

A visual representation of the approaches and tools and which organizations use them is seen in Figure 10. It is important to note that the sample did not have equal numbers of respondents in each category as described in the methodology, therefore, this chart is biased from a sample perspective. It, however, gives an idea regarding which approaches and tools are most common among specific actors. Research based approaches and tools were consistently mentioned

among all the actors. ICT and monitoring and evaluation approaches and tools are used minimally amongst the interviewed players. Private Ltd companies and local NGOs demonstrated a substantial use of capacity development, network/innovation platforms and markets/business development based approaches and tools as would largely be expected. All the players interviewed were familiar with the gender approach and most of them expressed that it is an integrated approach in their work.

Figure 10 – Coded references on approaches and tools by different organization categories



Approaches and tools mentioned within the research category include quantitative methods (randomized control trials, econometric tools, propensity score matching), qualitative (Focused Group Discussion, Key Informants Interviews), participatory approach, mix methods approach, PIM ILRI resources, action research, value chain analysis, environment assessment tools, lab based simulations and field testing, review of secondary data, visualization and participatory tools, ranking constraints, assessment of feedback from actors, diagnostic tools, rapid appraisal and literature material. The research process is applied in monitoring and evaluation work and therefore a couple of these tools can be reflected within the category. Mentioned approaches specific to monitoring and evaluation were adaptive monitoring and evaluation that allows system change during project/program implementation, use of log frames, mechanisms that allow a robust identification of indicators ensuring they are comprehensive and use of monitoring and evaluation friendly software.

Market based/business development approaches and tools mentioned include business planning tools, business development how to guides, market creation and linkages where they do not exist to promote sustainability, market system facilitation through existing market,

upgrading through improvement in processing, contractual agreements, partnerships arrangements between farmers and other organizations to increase business to business relations and enhanced marketing information that goes beyond market prices. Network/innovation platform approaches and tools create an enabling environment that supports the use of the market-based approaches. This is achieved by building groups of different stakeholders to work together in solving different value chains related issues. Some act as consultants in their field of expertise to advise and guide other stakeholders who lack the same knowledge and experience. Mentioned examples include community barazas, county development forums, country steering committee, stakeholder dialogues and market linkage platforms that invite different partners working along the value chain such as government officers, actors, traders, buyers, warehouses, input suppliers and financial service providers to develop systemic change for the target group, and organized regional blocks/platform focusing on specific value chains.

ICT based approaches were minimally mentioned by KIs but these can cut across other approaches and tools due to their facilitative nature. Emerging thoughts suggested how ICT approaches and tools support extension services and consequently reduce physical presence in the community. Also, mobile phone applications support collection and management of data to generate information, provide farmers access to information on commodities of their choice, and facilitate buyers through the SMS platform system and a virtual platform. Emerging capacity development approaches mentioned promote knowledge dissemination and thus increase target recipient ability to operate in their area of focus. Mentioned examples include tailor made training based on client needs and good facilitation using quality manual/how to guides, demonstrations through experimental learning such as farmer field schools, farmer to farmer approach and incubations. In some countries, extension is largely public sector driven, however, efforts to partner with the private sector in extension are now being considered as a cost cutting mechanism. Other examples of capacity building included sharing information with all stakeholders (parliamentary committees, private sector, civil society, etc.), peer critiquing for quality assurance purposes, allowing interaction with stakeholders through open field days/exposure/study visits, social behavioural change and supporting negotiation of value chain players to come up with a win-win situation.

All organizations interviewed have embraced a gender approach in support of agriculture value chains but offered no proof or evidence of them doing so during the interviews. Therefore, the following claims are based on their assurances and not actual data. The approach is key to enhance participation within households, organizations and community levels in production, marketing, value addition and sharing the benefits without bias to any gender category. This is emphasized by one respondent who said, '*it is important to ensure men are not marginalized in the process of empowering women and youth*' – Academic institution KI. The context of the comment was an observation that suggested a situation where grants offered at the university had a female focus and, as a result, there were more female student admissions compared to male students. There is also increased awareness to ensure youth is included in the gender approach to support agriculture value chains transformation. Attracting youth in agriculture is significant because the targeted farmers in Sub-Saharan Africa are often well advanced in age. Furthermore, it is important to promote gender balance in leadership roles as well.

Deciding what approaches/tools to use and obtaining feedback on their effectiveness

As described in the previous section, different actors use different approaches and tools in agriculture value chains. PIM outreach and engagement strategy can be informed by understanding why various actors use different types of approaches and tools. Furthermore, it would be progressive for PIM to monitor the effectiveness of approaches and tools that they and other actors in the hub use. Understanding different mechanisms for obtaining feedback from different players is useful knowledge for guiding feedback strategy by the PIM ESA hub. Below are a variety of reasons why different actors apply different approaches and tools in agriculture value chains.

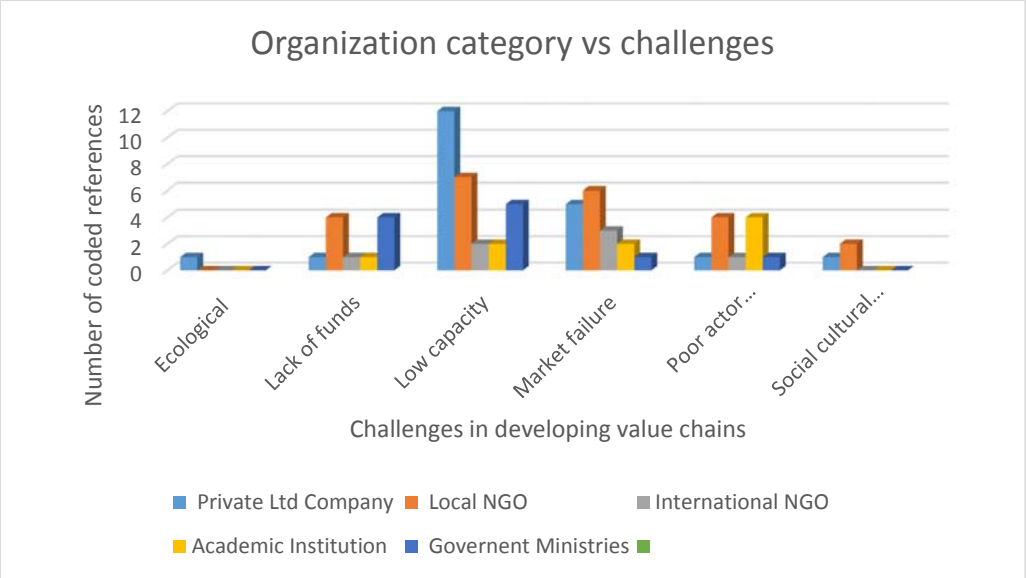
- Assessments, such as clients need assessment or market dynamics assessment, that reveal where to make profits are key in selecting approaches or tools to use. The assessments which take a scientific approach depend on the question that needs to be answered and this consequently dictates the design of the study, data needed and the appropriate test(s) to run.
- Existing staff knowledge base of approaches and tools will also dictate approaches and tools used. If the toolkit is limited then there is limited application of tools as suggested by a respondent who said, '*if you only have a hammer then every problem looks like a nail'* – Local NGO KI.
- Multi stakeholder participatory process is used to determine the approach and tools to consider.
- In some instances, development or government funds come with conditions on approaches and tools to be used; '*he who pays the piper calls the tune'*– Government Institution KI.
- The most cost effective approach is often prioritized.
- Some approaches and tools are standard based on organizational policy whilst in other cases, clients make a request for certain approaches and tools by providing specific terms of reference.
- Learning new technologies and innovation through best practices, case studies, as well as obtaining information from other organizations determines approaches and tools. This avoids reinventing the wheel and instead leads to adapting and scaling.
- The local context in which value chain actors operate influences approaches and tools used. The local context also includes gender differences that need to be taken into consideration.
- Time is a key resource and since value chain players have other engagements, the extent of time and attention needed influences their choice of approaches and tools.
- Sustainability of value chains is very critical. Questions to raise include, what is the available resource and who is paying? If the resource is cascading to farmers, then farmers would need to be able to pay.

Common methods used to obtain feedback on approaches and tools were monitoring and evaluation approaches and direct feedback from actors and farmers. Specific examples mentioned around monitoring and evaluation include annual and mid-term reviews, annual outcome survey, end of session evaluations, use of feedback forms, intervention target assessments, end of project assessment, feedback from intervention partners, general audit, standard/mandatory program evaluations, re-evaluating and realigning assumptions where necessary, monitoring and evaluation reports/financial reports and case studies. Mechanisms of receiving direct feedback from client included comments on methodology in inception reports, direct feedback from farmers, feedback during field days, convened beneficiary feedback meetings, stakeholders in meetings, customer satisfaction feedback, observations, participation, informal feedback from partners i.e. community development officer, agriculture extension officers and private sector, and capturing activity feedback during training sessions. Others included ICT mechanisms (online mobile technology, emails, and website interaction), contract performance review and observing consistency in transactions and participation. An understanding of the different methods players employ in obtaining feedback may be useful information as PIM designs a monitoring and evaluation framework to track progress made by the learning hub. The framework should not only address accountability based on set indicators but should incorporate in it the ability to learn from the achievements and failures and be able to adapt where there is need.

Challenges experienced in developing agriculture value chains

The study also focused on understanding key challenges players encounter in support of agriculture value chains. These challenges are likely to be similar to what the PIM ESA hub will come across while implementing its agriculture value chain outreach and engagement strategy. These, therefore, have the potential to help in defining areas of intervention of the hub amidst other priorities already identified. The main areas emerging as challenges are a lack of capacity in value chain development, market failure related challenges, poor coordination of actors along the value chain and lack of resources, especially funds (Figure 11). Private companies grappled more with low capacity in agriculture value chains. Low capacity in agriculture value chains was also the top challenge for local NGOs, followed by market failure related challenges. There were also mentions of challenges related to lack of funds, poor actor coordination and social cultural factors. Government organizations were associated with lack of funds and low capacity. Understanding of challenges in relation to players is useful information for the PIM ESA hub, in helping identifying the kind of areas of intervention that different players need most support in. Below further discussions around specific challenges mentioned within each category can be found.

Figure 11 – Coded references on challenges experienced by organization



Low capacity challenges

One form of low capacity in value chain development is characterized by a low amount of skilled people in the area. As such, value chain development has not been based on a clear

understanding of how value chains function. Most people, both staff in organizations promoting agriculture value chains and farmers participating in the value chain, have adequate experience in agriculture production but lack experience when it comes to business and marketing skills. For the case of staff, the challenge is further compounded by staff turnover, i.e. where staff dealing with specific value chain partners leave and new staff members are needed. An ageing workforce, especially in cases where the government has frozen employment is also increasing the capacity gap.

There was a sense that existing monitoring and evaluation approaches only provide simple qualitative analysis that identify key constraints and potential intervention; however, they lack scientific rigour to show impact. A comprehensive analytical approach that provides adequate justification of the benefits obtained through value chain interventions is needed to promote investor buy-in. In addition, getting the right indicators is key to robust monitoring and evaluation. For instance, many interventions are measuring only the number of groups formed, rather than the results achieved by those groups, i.e. the number of bags sold, food access etc. That said, good analytical approaches that do not have proper knowledge sharing mechanisms do not bring effectiveness in growing value chains. There is a need for mechanisms that simply break down facts to other players in the value chain to create an environment that promotes innovation out of the existing knowledge base. ICT use in monitoring evaluation and learning is also limited, but if used, it could be useful in obtaining more direct and real time feedback.

Based on the KI discussions, low capacity is also characterized by a lack of a proper market infrastructure, which in some instances results in brokers domineering and consequently leads to poor farmer prices. The inability of groups to function as strong producer entities that have functional governance structures, i.e. constitutions and leadership in place, thus reducing farmers' competitiveness was raised as a low capacity area. Once entities such as cooperatives are in place, community sensitization to grow membership is required so that more farmers can access training, inputs and services through public and private extension services.

Market failure challenges

In some countries, existing market regulations and legislation supporting agriculture value chain activities makes it difficult to allow movement of commodities across national and local borders. This can also be characterized as payment of several taxes at every local border thus discouraging producers from establishing easier connections with the marketers. The poor market infrastructure, amongst other market failure problems, could be a contributor to common scenarios in countries with high agriculture potential import products that can be sufficiently produced within those economies. For example, Kenya currently imports beans from DRC despite the untapped production potential within Kenya.

Political instability is another challenge that contributes to poor legislation as mentioned in the cases of Rwanda and South Sudan. Rwanda still lags behind in value chain development due to its historical instability but has now established political goodwill and building expertise within the country is now a priority. On the other hand, South Sudan is currently embroidered in civil war and this kind of political marginalization results in insecurity and poor infrastructure (poor

roads, lack of electricity and water), key pillars of economic growth in a country that consequently affect value chain development.

Moreover, challenges in commodity upgrading hinders the growth of value chains, especially in cases where farmers have good prototypes that they cannot scale up/out. In some instances, the problem is caused by the inability of producers to standardize their commodity/product i.e. exact colour, size and shape. For purposes of scaling up, smallholder farmers have to employ collective action and for standardization to work in these arrangements much more effort is needed. Supermarketization is another dynamic, which when viewed from a smallholder farmer perspective, can deter growth of informal markets. From a consumer's end, supermarketization is a dynamic where people get food from supermarkets rather than small local stores or markets, making access to the market more difficult for local producers due to the 'technological, organizational and institutional changes in their /supermarkets'/ product-procurement systems' (Reardon et al, 2005). Contract farming, where farmers are contracted and facilitated by an investor, is sometimes poised to support the development of efficient agriculture value chains. However, in some instances, this is challenged by farmer's side selling habits that result to producers not always selling the product to the contractor.

Poor coordination

Operationalizing value chain interventions following analysis of obstacles and entry points is challenged where its success needs system-wide collaboration to work. This is often characterized by numerous and different organizations working on the same (or similar) ideas with no synergy. Beneficiaries get in situations where they have to listen to many voices and sometimes use different approaches/methodologies to address the same problem. From a technical perspective, openness and credibility in sharing information from the end of the chain (processing level) actors possibly lacks due to low social capital. These information gaps create a situation where actors do not understand how they contribute to each other's work. Whilst a national approach to solving agriculture value chains challenges, rather than an individual approach, would promote sustainability, differing priorities of actors, i.e. NGOs, government and research institutions make it difficult to collaborate. National governments have also, in some instances, not been able to coordinate different actors' work and, as a result, isolated efforts continue.

Lack of funds

Opinions from KIs suggest that inadequate funds to develop value chains can be attributed to a poorly defined and continuously shifting agenda around value chain development. This probably contributes to the reason why value chain financing is considered risky. Banks' risk-averse nature contribute to smallholder farmers finding it difficult to access loans and only large profit making farmers are successful. Government grants are also sometimes inaccessible to local investors due to strenuous protocols that in some instances require long incubation programs. In drought emergency seasons, accessing funds for value chain development from

the governments gets even harder as more funds are diverted to addressing immediate emergencies. Donors also in some cases limit funds when project implementers are not able to demonstrate impact of their programs, a challenge that can be more daunting for organizations running short term agriculture value chain projects. A common challenge that exacerbates inadequate funds is the poor incorporation of a sustainability plan during project development, reducing the ability of good agriculture value chain projects post funded project timelines.

Sociocultural

Amongst other broader factors, some religions and cultures can limit the level of value chain activities. A good example is areas where we still have pockets of pastoralists who do not believe in selling livestock due to the multiple functions that go beyond income. Another observed negative cultural mindset is instances where NGOs are facilitating business value chain activities and some communities assume that prices offered for commodities on sale should be better than conventional market prices. Also, when transferring technology from one country to another, it is important to give careful consideration to the social context differences that would affect the adoption or the outcomes of its adoption.

Proposed solutions to address challenges

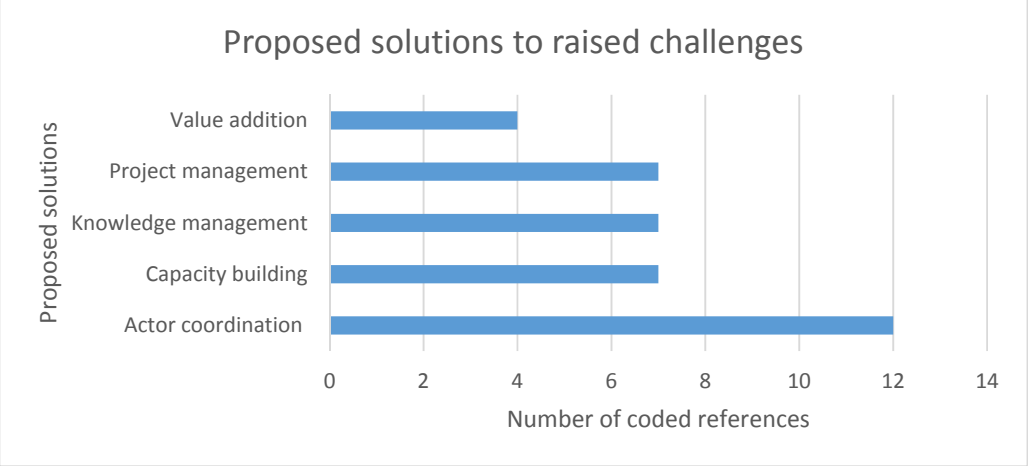
Based on the perceptions obtained by conducting in-depth interviews with the 19 KIs, several solutions were proposed to address the majority of the detected challenges related to value chains. These solutions include actor coordination, knowledge management, project management/resource availability, capacity development in value chain related areas and value addition (Figure 12). The proposed solutions are good pointers to the ESA hub secretariat when drawing up the outreach and engagement strategy, in determining what may or may not be a priority and what may be a new idea that is not already considered within the strategy.

Actor coordination was the proposed solution that was mentioned most frequently by the key informants. One way to promote effective actor coordination is by promoting multi stakeholder platforms that allow creation of a common vision through consistent promotion of confidence and trust amongst actors as valuable platform members. This can either have a national or regional focus to allow working with players across borders or be structured through the creation of technical networks or stakeholder platforms that address value chain process issues, technology issues, regulation and policy issues. These efforts will promote collective work and reduce disjointed activities by different actors and regions. One respondent noted that *'value chain development work needs a facilitator to midwife the process before direct actors can take over'* – Government ministry KI. An example given to support the thought is export oriented value chains whose success is attributed to a lead firm that provides quality assurance. This helps get the right products in markets, something unsuccessful value chains lack. The PIM ESA hub can possibly offer innovative actor coordinating mechanisms, that can play the 'midwife' role described above and consequently provide leadership in coordinating agriculture value chain actors. Better relationships will further encourage partnerships, especially with the private sector and financial institutions, which require not only a convincing business case but also transparency. Partnering with academic and research institutions will further support development of cost effective innovations whose scale and impact can be increased.

In support of capacity development through extension, opinions suggested that reduced public institutions led extension can be addressed through partnership with the private sector, to lower the cost of training by using identified cost sharing mechanisms. Furthermore, there is a need to build a critical mass within universities on the subject of value chains through curriculum development. This should have a focus on practical applied value chains work with the latest technologies from the private sector through internships to help bridge the gap between theoretical and practical innovations. This is especially key in supporting the role of youth in agriculture transformation. Education and more awareness are also crucial in addressing sociocultural and religious related challenges within value chain development. A knowledge management system was raised as a possible solution to address challenges within agriculture value chains. A good system is instrumental in supporting the capacity development of the hub members by providing easy to implement tools for quick application and problem-solving, provide needed information, avoid losing information and duplication and

consequently ensure efficient use of resources. Since value chains can be very case specific, one unconventional way to manage and share knowledge mentioned is the creation of impact zones. These are areas of high intensification that have all services needed provided to create efficiency and apply best practices. Successes achieved would then be documented as success stories and used for learning purposes for those seeking to replicate similar value chains.
A concern was previously raised on the growing ageing workforce and frozen employment within governments. An underlying cause is that staff are employed on permanent and pensionable terms and employment on short-term basis is not supported in policy. Review of such policies to allow short-term employment and to reduce long tedious procurement processes in governments can support outsourcing staff to retain a refreshed set of skills around value chain work. In addition to staff, more investment from governments can provide support to technical areas of value chain development such as upgrading, policy and infrastructure and disease control. Value addition is key in addressing post-harvest losses in agriculture value chains by providing technical skills around processing, grading and quality control. For communities/systems, such as pastoralist, who keep livestock for multiple functions that are not limited to income generation, embracing livestock marketing as an integral part of livestock production is key in building value chains. Change of mindset in this area would be supported through awareness on livestock management and marketing. Funding African indigenous investors and entrepreneurs through transparent mechanisms that are unbiased and non-political will encourage growing investment in agriculture value chains.

Figure 12 – Coded references on proposed solutions to value chain development challenge.



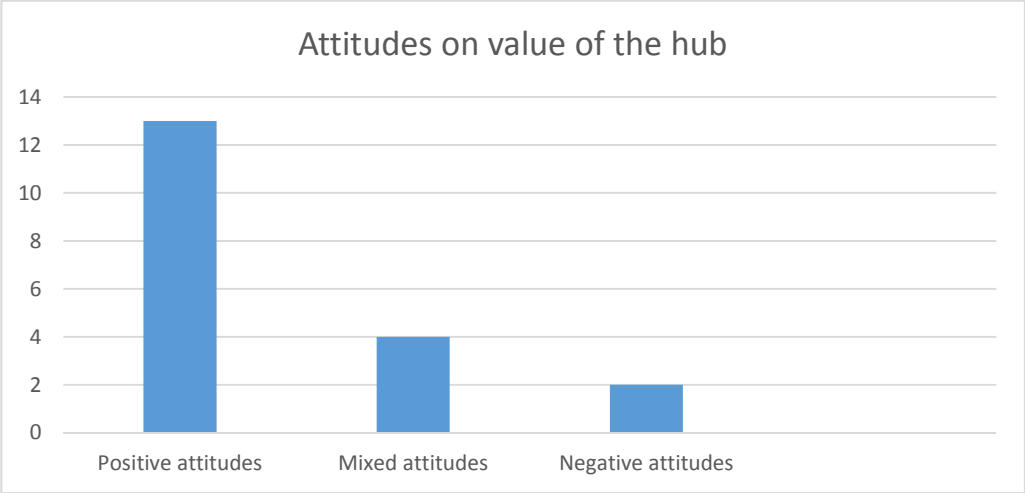
Value of the proposed hub

The value of the East and Southern Africa agriculture value chain learning hub was addressed by seeking views on its usefulness and potential partners' expectations. Views were sought following a brief explanation of the proposed hub mandate as captured in the existing ESA hub concept note. Opinions captured ranged from the kind of expectations respondents would have to experiences of respondents through interactions with other similar initiatives. Reactions were coded either as positive, mixed or negative. The proposed hub was conceived as a great idea by the majority of key informants (Figure 13). Some positive reactions recorded were *'great idea'* – International Research NGO KI*, 'very useful'* – Government Ministry KI. Mixed reactions raised on the usefulness of such a hub suggested the need to have the right content discussed in the hub depending on hub membership. One key informant was recorded saying, '*if the hub is very academic it will not be useful, but if it engages different practitioners, it will be more attractive'* – Knowledge and capacity service provider KI, referring to the type of content to be shared via the hub. As there are different actors participating in the hub, the content should be as universally made as possible to assure that it is not too academic and generic enough to understand by all interested parties. This thought falls in line with PIM ESA hub's outreach and engagement strategy that is expected to step away from only publishing papers as key outputs.

Furthermore, it is important to ensure that the hub has the right geographical scope. If too huge, the efficiency and effectiveness of the hub is questionable. More benefits will be reached if the hub closes the capacity gaps identified by tailoring programs and generating interest to participate. The effectiveness of the hub was emphasized as quoted by another respondent saying, *'it is key to note that there are a couple of knowledge hubs going on, but the question is, are they effective, sustainable, provide new knowledge, engage partners?'* – International NGO KI. No additional information was provided as to which hubs the KI was referring to and if these are, in fact, still active. The answers to these questions depend on how the hub is driven and how the hub partner organization interests are addressed.

Negative reactions towards the value of such a learning hub pointed to dissatisfaction by organizations that had a role in other hubs that did not provide much value to address their members' needs. This is a possibility where hubs are developed without input from beneficiaries of such hubs and thus validates the importance of work carried out in this study. This helps teasing out some of the needs potential hub members of the ESA hub would have before hitting the ground running with its implementation. There was also a lack of excitement caused by the notion that hubs can get exploitative as suggested by a key informant saying, *'a clique of people wants to obtain information without paying for it. This is exploitative given the fact that we are in the business of selling information that we obtain, package and is paid for. What do the giving partners get in return? This reduces the value of membership'* – Knowledge and capacity service provider KI. While this comment is not referring directly to the PIM ESA hub, it is a useful perception to take into consideration when approaching and engaging with different actors.

Figure 13 – Coded references of attitudes on value of the hub



Based on the in depth discussions regarding the usefulness and the expectations from the hub, the majority of respondents had positive reactions to the idea and below are areas raised as key in making the hub more valuable. While this might read as a 'wish list', it can be considered as a useful guideline when setting priorities and having to decide among different options. Not all options will be implemented as-is due to a number of different (financial, logistical, priority) reasons, yet as these were all mentioned by the participants, it is important to recap their expectations and possibly think of cost-efficient alternatives and implement the relevant solutions as a next step.

Fostering collaboration – by coordinating a disjointed agriculture value chain sector, the hub can give a collective voice on agriculture value chains issues, provide regional cooperation and policy framework harmonization, build multi donor network, spur governments to think about their role, joint proposal writing, maintain a database of networks to help find resources or people to support technical issues, building partnerships and promote expert exchange.

Learning and capacity development – through exchanging ideas and information sharing, exchange visits between different value chain actors, revealing assumptions regarding current practices to ensure actors remain aware of the cutting edge, bringing together technical competencies, broadening the value chain concept to have more appreciation locally, nationally and regionally, addressing gaps in technical capacity through provision of physical or virtual training centers, sharing tools, approaches and lessons, obtaining new innovations that can be tested to improve project effectiveness, cost efficiency and sustainability and enticing producers and consumers to have better practices.

Business development to enhance sustainability of value chains – linking farmers to service providers, making business deals/business to business linkages, linking business development services looking for opportunities to invest, providing cross-border markets, finding investments with the private sector and widening market for different value chains.

Central access to information – sharing information such as awareness on disease outbreaks, increasing the capacity of farmers and actors to access and use information and knowledge/brokerage of market information, making CGIAR science and other research material accessible to promote getting research into use.

Hub design

Two areas discussed in regard to the configuration of the hub are coordination of hub and its communication role.

Coordination of the hub

Based on the discussions with the KIs, a robust hub would benefit from being anchored within a regional community and especially within existing regional bodies which, in turn, can provide entry into member countries. The hub, while coordinated and managed by PIM, needs to have a strong networking component. For example, it could provide service through local partnerships and networks such as academic institutions, companies or other forms of clusters. These can be beneficiaries but can also help build other networks of beneficiaries within their sector through mentorships, participation and communities of practice. Finding representation from different categories of actors/networks and engaging them in communication will enhance the benefits of the comparative advantage, which is instrumental to finding success.

Another perception mentioned by a KI, which might not apply to the PIM hub directly due to its virtual nature, is that the process of coordination should ensure ownership of the hub, be it through registration or any other kind of membership arrangement. The secretariat, or, in PIM's case, PIM ESA as the managing entity, should consider geographical positioning of members. As a result, there may be a need for satellite units considering different areas have different needs. To promote inclusivity and implementation, the secretariat can consider moving around project activities and meetings in different countries. Where partnership is deemed useful, its creation could seek to ensure that engaged members have the right technical capacity in the area of interest, an enterprise in common and have built trust to allow free sharing of information. Furthermore, a form of commitment of individual partner organizations can be useful where necessary through mechanisms such as signed memorandums of understanding, sanctions to ensure that the participation is active and membership regulation.

Communication in the hub

Respondents' perceptions indicate that a robust knowledge management system is key to supporting communication within the hub by essentially facilitating access to information by all interested players. Moderation of the hub should, however, allow right conversations between the correct groups of actors to avoid other groups feeling inferior based on the available content. This can be achieved by using different mechanisms such as various discussion rooms or forums for different level of actors. Furthermore, having an understanding of the local environment will support customizing information to address problems at a local level as well

as ensuring language barriers are factored in design. In addition, farmer representation is needed in the hub to avoid discussing farmers' issues without their participation. In the case of the PIM ESA hub, this would entail having farmers present in the virtual hub, which might call for offering those who do not have experiences with virtual platforms an eLearning on how to use the hub. A good brand supported by an interactive website, such as PIM's tools4valuechains website, will go a long way in keeping people interested through monthly or quarterly newsletters, quick info on documents and reports. Many opportunities in ICT provide ways to keep the audience interested and these can include creating user-friendly material for communication, such as short videos, and ensuring the content is consistent in diversity and freshness in solving problems. Linking up different material through social media can be especially useful in instances where one wishes to interact with more people. That said, technology development is moving at a fast pace and there is need to know how to stabilize what is being offered to avoid introducing too many new things in very short spans. If the content is valuable and practical to the needs of the actors, the demand for technology to obtain it may not be a problem.

Another matter to consider with detail is how to bring visibility to the youth taking into account that one of the challenges raised is advanced age of the targeted farmer to improve agriculture productivity. How do we develop innovative materials/information or ways that will catalyse the youth to play a role in agriculture bearing in mind unemployment among them is a big challenge? An agriculture knowledge system that will improve the youth uptake is key.

Conclusions

In order to understand the market needs of the agriculture value chain in East and Southern Africa, a study was conducted. Nineteen key informants selected from international and local NGOs, private businesses and government institutions gave opinions on their engagement/experience with agriculture value chains and the role a value chain learning hub could play in making these experiences better. The three areas of value chain support evaluated were a) value chain assessment, diagnosis or analysis, b) value chain development, upgrading and interventions, c) monitoring and evaluation of value chains, including interventions or market information systems. The findings contribute to the ongoing discussion around building the East and Southern African agriculture value chain learning hub, one of the four PIM hubs.

Findings suggest that research activity is carried out both within research and non-research institutions i.e. the development and private sectors. Research skills in agriculture value chains are applied in the areas of value chain assessment and monitoring and evaluation of value chains. This is achieved either through inbuilt research skills within development organizations, partnership with research institutions or through support by private knowledge and capacity service providers. Further results show that all the three areas of agriculture value chains evaluated form part of the value chain work, however, the extent of work within each area differs by organization. Generally, there were more efforts detected in value chain assessment, diagnosis or analysis and value chain development, upgrading and interventions. Monitoring and evaluation of agriculture value chains activities were minimal and it was revealed that more capacity was needed within this area compared to the other two areas of intervention.

To understand the approaches and tools diverse organizations use in building agriculture value chains, the discussions held reveal five emerging themes categorized as capacity development based, ICT based, networks/innovation platforms based, market/business development based, monitoring and evaluation based and research based. Research based approaches and tools were consistently mentioned by most actors, whilst capacity building, innovation platforms, market-based approaches and tools are more associated with private companies, local and international NGOs. The categories are not purely distinct and therefore approaches and tools overlap in some instances. A case example is an ICT tool can be used within research or development context. In comparison to PIM's tools4valuechains.org, the emerging approaches and tools cut across different actors i.e. research, private and development sectors, while PIM tools are only applied by researchers. The larger portfolio of approaches and tools used by researchers and non-researchers will provide more insight on which of these are a priority for an outreach and engagement strategy that is less academic. The types of approaches and tools used in a sense validate the challenges that diverse players of agriculture value chains grapple with, as well as the proposed solutions to these challenges. These include a lack of capacity in agriculture value chain expertise, market failure challenges and poor coordination amongst

actors respectively. Strategies around coordinating actors working in value chains was the major proposed solution to address challenges in value chains, while other proposed solutions raised include knowledge management, project management/resource availability and capacity development strategies.

Developing an agriculture value chain learning hub as a mechanism to build linkages between different types of value chain players was deemed a positive idea by the majority of respondents. The learning hub should have the ability to foster collaboration, promote learning and capacity development, support business development and provide a central access to information. A few mixed and negative reactions to such a learning hub suggested the need to ensure the hub is user-friendly in order for it to achieve its mandate. Effective coordination of diverse actors and robust/innovative communication methods will be instrumental in making the proposed hub a success.

References

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Annex 1—Interviewed organizations profile

Interviewed Organization	Country	Gender	Years of work	Organization category	Research and Development focus	Geographic focus
Org 1:	Kenya	Male	5-10	International NGO	Mostly Agriculture Research	Regional
Org 2:	Kenya	Male	0-5	Local NGO	Mostly Agriculture Development	Regional
Org 3:	Tanzania	Female	5-10	International NGO	Mostly Agriculture Development	National
Org 4:	Uganda	Female	5-10	Private Ltd Company	Equal Agriculture Research and Development	Regional
Org 5:	Kenya	Female	15-20	Government Ministries	Mostly Agriculture Development	National
Org 6:	Ethiopia	Male	10-15	Private Ltd Company	Equal Agriculture Research and Development	Regional
Org 7:	Kenya	Female	5-10	Academic Institution	Equal Agriculture Research and Development	Regional
Org 8:	Kenya	Male	25-30	Government Ministries	Equal Agriculture Research and Development	National
Org 9:	Rwanda	Male	0-5	Private Ltd Company	Mostly Agriculture Development	National
Org 10:	Kenya	Male	0-5	International NGO	Mostly Agriculture Development	Regional
Org 11:	Rwanda	Male	0-5	Private Ltd Company	Mostly Agriculture Development	National
Org 12:	Kenya	Male	0-5	International NGO	Mostly Agriculture Development	International
Org 13:	Uganda	Male	10-15	Local NGO	Equal Agriculture Research and Development	National
Org 14:	Uganda	Male	5-10	Private Ltd Company	Equal Agriculture Research and Development	Regional
Org 15:	Kenya	Female	5-10	Academic Institution	Mostly Agriculture Research	Regional
Org 16:	Tanzania	Male	0-5	Local NGO	All three	National
Org 17:	Tanzania	Male	5-10	International NGO	Mostly Agriculture Development	National
Org 18:	Kenya	Male	0-5	Private Ltd Company	Mostly Agriculture Development	National
Org 19:	Tanzania	Male	10-15	Local NGO	Mostly Agriculture Development	National