







Enhancing research impact for food security

Strengthening knowledge co-creation and research uptake

Food & Business Applied Research Fund Third Call International Workshop and Public Seminar, Ethiopia

February 13-16, 2018



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A4NH	Agriculture for Nutrition and Health
ARF	Applied Research Fund
A-TVET	Agricultural Technical Vocational Education and Training Center
EC	Ethiopian Calendar
EU	European Union
FAO	Food and Agriculture Organization
F&BKP	Food & Business Knowledge Platform
GCP	Global Challenge Programme
IFPRI	International Food Policy Research Institute
NGO	Non-Governmental Organisation
NWO-WOTRO	Netherlands Organisation for Scientific Research – WOTRO Science for Global
	Development
SCV	Selam Children's Village
SNV	Netherlands Development Organization
UN	United Nations
W/ro	Mrs. (from Waizero in Amharic)

Executive Summary

The Third International Workshop of the Applied Research Fund (ARF) took place from the February 13 till 16, 2018 at Azzeman Hotel in Addis Ababa. The focus of this workshop was to enhance research impact for Food and Nutrition Security (FNS) by strengthening the competence of ARF project consortium members in the areas of theory of change development, impact pathways, knowledge cocreation, and research uptake. This workshop was attended by 35 consortium members of ARF Third Call projects presently in implementation in different parts of Asia and Africa, and one Second Call project from Ethiopia.

Immediately following this international ARF workshop, at the same venue, a public seminar on nutrition sensitive value chains was held on February 16, 2018. In this seminar, the ARF project representatives were joined by around 40 Ethiopia-based participants from government, research, private sector and non-governmental organizations across several core and extended agrofood value chains. The objective of this day was to promote knowledge exchange and initiate co-creation for better informed policies and practices for nutrition security. For the Ethiopian participants, this seminar was a chance to learn, exchange and to connect around the practice of nutrition sensitivity in value chains, and also to be exposed briefly to the content and methodology of the ARF research projects. For the ARF project representatives, this public seminar was a chance to learn from Ethiopia's food systems and strategic interventions in food value chains for Food and Nutrition Security, and to contribute their ideas and experience to the Ethiopian stakeholders present.

These events were organized by WOTRO Science for Global Development of the Netherlands Organisation for Scientific Research (NWO-WOTRO) and the Food & Business Knowledge Platform (F&BKP), in collaboration with AgriProFocus Ethiopia and the International Food Policy Research Institute (IFPRI).

The International ARF Workshop

Workshop activities included: project posters and pitches, conceptual and experience sharing presentations, Q&A sessions, exercises in applying tools for consortium development, group discussions, and a field visit. Major lessons from the workshop are as follows:

- Knowledge co-creation requires a conscious effort and involvement of all relevant stakeholders and the flexibility to adopt changes and new insights.
- Joint learning, co-creation, and research uptake should start while writing the proposal.
- Co-creation goes beyond collaboration; it is about knowledge that relates to context.
- Theories of change and impact pathways need assessment, discussion and regular revision with major stakeholders.
- ARF projects should include intermediate outcomes in their impact pathway, as the gap between outputs and outcomes can be very wide.
- Assumptions are very important and should be tested continuously.
- Research uptake is an activity that should be implemented throughout the ARF research project, and it requires the involvement of all stakeholders.
- Scaling should be considered right from the project inception.
- Effective communication, discussion and exchange is vital for both co-creation as well as research uptake.
- Not all stakeholders should or can be aligned and interested, thus prioritization is important.
- Knowledge or results obtained from ARF projects are meant to be shared and disseminated as early as possible.
- Engage and invite policy makers, rather than only sending messages or reports to them.
- NWO-WOTRO and F&BKP are available to support projects, and the platform serves as a good tool in connecting projects for information exchange and interaction and connection to a broader field of food & nutrition security experts.
- Different ARF projects should learn from one another, and try to bring work forward jointly.

The Public Seminar on the Potential of Value Chains for Nutrition

The public seminar started with welcome speeches from the Ethiopian Ministry of Agriculture, Ministry of Industries, the Netherlands Embassy's Food Security Advisor, and IFPRI. A panel discussion involving panellists from research, private sector, NGOs, and interactive Q&A was then followed by an open space session on addressing issues in value chains for nutrition that had been identified by participants. In the keynote presentations and panel discussion, the following points were emphasized:

- Nutrition security is an essential component of food security.
- Ethiopia has a quite strong and comprehensive policy for nutrition in value chains.
- Nutrition should be considered throughout the whole value chain.
- Food safety and quality issues need to be improved.
- Collaboration is necessary and avoids duplication of efforts.
- The policy gap for engaging private sector should be addressed.
- Academia and research can help guide the process of improving policy and practice for nutrition sensitive value chains, and policy maker integration is vital.
- Gaps in knowledge dissemination must be addressed.
- Diversification of interest areas in the value chain is required.
- Knowhow within the community should be exchanged.
- Use of media is relevant to create awareness.

The open space discussion served as a practical co-creation process, from joint selection of issue areas of concern by the different stakeholders present, to jointly identifying key constraints and main ways to address them. Key outcomes of the open space discussion included the following:

- Private sector engagement in value chains for nutrition is limited as a result of constraints such
 as lack of infrastructure, limited financing for SMEs and farmers, limitations in workforce and
 available technology, and in the regulatory environment for business.
 - Such constraints can be addressed by public investment and regulatory incentives for private investments in supply chain infrastructure; provision of long-term, low interest loans and linking with loan granters; promotion of relevant technical vocational and business skills development and increasing linkages with industry.
- Multi-stakeholder approaches for improved nutrition are constrained by the complexity and dynamism of the environment.
 - This constraint can be addressed by co-creation of knowledge, and by inclusion of relevant stakeholders as agents of change, developing real links to the beneficiaries/customers in need of the outcomes of multi stakeholder processes, and by promoting a systems approach.
- Lack of diversity in crops leads to lack of diversity and diets, and is caused by constraints in seed systems, including: lack of awareness regarding varieties, poor packaging for seeds, and lack of regulation.
 - These constraints can be overcome through technology and breed development, improving access to both input and output markets, local leadership, policy and knowledge sharing to promote local seed supply chains.
- Vulnerable populations have low dietary diversity because of limited purchasing power, and expensive products due to low supplier competition.
 - These constraints can be overcome through improved capacity for storage and preservation of food for improved supply and reduced seasonality of availability, as well as enabling policy and compelling business models for enhanced linkages between value chain actors.
- Postharvest losses impact Food and Nutrition Security.
 - This can be addressed through improved capacity (skill and infrastructure) for storage and preservation of food; developing policy and business models for improved linkages between value chain actors.
- Food safety can be compromised at every node in the value chain
 - It requires regulation (standards), as well as enforcement of standards, and a consuming public that can differentiate between safe and not-safe food supported by some type of food safety information system.

In conclusion, the multi-stakeholder approach is important for developing nutrition sensitivity in food value chains: it is effective in identifying and addressing practical needs for information by end users such as private sector actors, consumers and policy makers in food value chains; it is important for knowledge exchange and generating knowledge through co-creation; it is also relevant ultimately in synthesis and uptake of knowledge for practically increasing nutrition sensitivity of food value chains.

1. Introduction and Background

The Food & Business Applied Research Fund's Third International Workshop and its accompanying public seminar took place from 13 to 16 February, 2018 in Addis Ababa, Ethiopia. It had the objective of enhancing research impact for food security through strengthening knowledge co-creating and research uptake amongst ARF projects. The three-day event was organized by Netherlands Organisation for Scientific Research (NWO-WOTRO) and the Food & Business Knowledge Platform (F&BKP), in collaboration with AgriProFocus Ethiopia and IFPRI Ethiopia.

The Food & Business Applied Research Fund (ARF), in parallel with the Food & Business Global Challenges Programme (GCP), has been managed by NWO-WOTRO since 2014. ARF focuses on food security as a local challenge and aims to address the knowledge and research needs of partners in the bilateral food security programmes of 15 Dutch development cooperation partner countries. Moreover, ARF operates on the basis of various calls for proposals where local partners from the private sector, civil society or government join with knowledge or research institutions (more on the Food & Business Research programmes can be accessed at the NWO-WOTRO website).

Based on three calls, ARF has been supporting 45 research projects since its inception in 2014. As cocreation, knowledge sharing and research uptake are integral parts of the ARF research approach, the purpose of this and previous international workshops was to create opportunities for learning and exchange on these topics. The first and second ARF international workshops were held in Entebbe in 2015 and in Cotonou in 2016 respectively (reports of the workshop held in Uganda in 2015 can be found here and of the workshop in Benin in 2016 can be found here).

The Third ARF International Workshop brought together <u>35 consortium members</u> including all ARF Third Call projects from eight countries and an ARF Second Call project from Ethiopia. The first two days were organized for ARF project representatives and focused mainly on co-creation, knowledge sharing and research uptake. The final day was a public seminar reserved for the ARF project members to meet and interact with 50 Ethiopian experts from research, NGOs, private sector and policy on the topic of the potential for nutrition-sensitive value chains. The workshop was lively and interactive in such a way that enabled participants to jointly learn from each other and also by practical exercises.

Public sector actors from the Netherlands and Ethiopia played an active and important role throughout the workshop. The Dutch Ministry of Agriculture, Nature and Food Quality, represented by its Senior Policy Advisor, Marcel van Nijnatten, introduced and explained the Food and Nutrition Security policy of the Netherlands on the first day. On the final day, guest speakers representing Ethiopia's Ministry of Agriculture and Natural Resource and Ministry of Industry made presentations on their work on nutrition sensitive value chains, and remained for interactive discussion with participants.

Experience sharing presentations, panel discussions, questions and answers sessions, group exercises, networking over drinks and facilitated speed-dating sessions, and a field visit were among the activities incorporated during the three-day event. The following sections of the report provide the major activities and outcomes of the ARF international workshop and public seminar.

2. The International Workshop

The international workshop was preceded by a welcoming introduction event on the evening of the February 13, 2018.

The organizers, NWO-WOTRO, F&BKP and AgriProFocus, welcomed the ARF consortium members with a general briefing on the entire workshop and by introducing the facilitating team.

The participants, in turn, took the floor to introduce themselves and the ARF project they represent during two-minute pitch sessions. Pitches were followed by drinks, dinner and networking, which led to a favorable start of the workshop.



Figure 1: Introductory Pitches

2.1. Day One: Strengthening Knowledge Co-Creation

To orient participants to the workshop, Sarah Assefa, lead facilitator of the workshop (and also the Country Network Facilitator of AgriProFocus Ethiopia) welcomed the participants and briefly described the programme for the ARF workshop and for the public seminar. The first day of the workshop was designed to strengthen understanding and competence in knowledge co-creation, and to build connections as well as to promote sharing of knowledge and experience amongst members of different ARF projects. It would be followed by a second day developed with a focus on strengthening research uptake, particularly through effective strategies of research consortiums, and practical learning through a field visit to observe knowledge uptake for nutrition in Ethiopia.

While the two days of workshop were reserved for ARF project consortium members, on the third day a public seminar was organized to bring various stakeholders from Ethiopia to examine the potential of value chains for nutrition, as a case for ARF projects to learn from, and an opportunity to practice co-creation using multi-stakeholder discussion in open space. Program for the three days is available here.

Subsequently, representatives of the conference organizing organizations were invited to make introductory presentations on the key features of the ARF approach.

2.1.1. Introduction Presentations

Producing Societally Relevant Research



Figure 2: Cora Govers, NWO-WOTRO

Cora Govers, Senior Policy Officer and Programme Coordinator of Food & Business Research at NWO-WOTRO, restated the objectives of the workshop: To enhance impact of the research which the consortium members are conducting, and to further initiate collaboration between research projects. She also added that the ARF workshop is aimed in enhancing research for Food and Nutrition Security. After describing how NWO, the Netherlands Organisation for Scientific Research, plays a role of financing research of knowledge institutes via competition through indirect government funding,

Cora also explained the research funding role of WOTRO Science for Global Development, as department of NWO, of research in Low and Middle Income Countries. Moreover, it was indicated that NWO-WOTRO is directed towards producing societally relevant and development oriented research by multi-stakeholder consortia. Apart from managing the ARF and GCP, for food security research NWO-WOTRO is involved in LEAP-AGRI and The Netherlands-CGIAR research programme (find Cora's presentation here).

Connecting Business, Science, Civil Society and Policy



Figure 3: Vanessa Nigten, F&BKP

The F&BKP is one of the five Knowledge Platforms initiated by the Dutch Ministry of Foreign Affairs in the field of global development. As Vanessa Nigten, Knowledge Broker of the platform, presented, F&BKP connects the supply and demand of knowledge among various stakeholders and knowledge worlds by facilitating knowledge brokering. The platform practices knowledge brokering by involving in the creation, exchange and use of knowledge. Vanessa said the platform aligns the what is called "the Growth Diamond": it connects the private sector (business), knowledge institutions (science), civil societies, and the government (policy). Furthermore, she explained the three pillars of the platform in delivering knowledge brokering services: Knowledge Portal, Strategic Partnerships, and Food & Business Research support. Currently F&BKP is working with three funds, these are the F&B Knowledge Management Facility which is managed by the platform, and ARF and GCP which are managed by NWO-WOTRO. As Vanessa explained, the role of the platform with regard to Food & Business Research is to collaborate with

NWO-WOTRO in developing scope and definition of the calls and in enhancing knowledge sharing and research uptake of the projects (find Vanessa's presentation here).

Linking, Learning, Leadership

AgriProFocus is an international agricultural network, rooted in the Netherlands and with country networks in 12 African and 2 Asian countries. Meskerem Ritmeester, the AgriProFocus Ethiopia Country Coordinator, presented how the online and offline networking activities of her organization support Food and Nutrition Security through various agricultural sectors. The Ethiopia network alone has around 1800 online members engaged in agribusiness or agricultural development fields. Meskerem mentioned that AgriProFocus mainly involves in four thematic areas: Inclusive Agribusiness, Climate Smart Agribusiness, Circular Economy, and Nutrition Sensitive Agribusiness. Apart from the online platform, the network creates linking and learning opportunities for its members by organizing events such as Business Drinks, campaigns, and fairs, as well as by facilitating a number of innovation communities. Meskerem also indicated that linking, learning and leadership are the main objectives of the network (find Meskerem's presentation here).

Food Systems are Also About Politics

Following the introduction presentations by the organizers of the workshop, the floor was given to Marcel van Nijnatten, Senior Policy Advisor to the Netherlands Ministry of Agriculture, Nature and Food Quality. After explaining that one objective of his presence at the workshop was to describe the policy environment, Marcel said the topic at hand is generally related to two ministries: Ministry of Foreign Affairs, and the Ministry of Agriculture, Nature and Food Quality.

The major new policy directions in the field of development cooperation of the Dutch government are Immigration, Climate Change, and Agriculture. Marcel added that the agricultural policy is built upon the UN Sustainable Developmental Goals. In this regard he questioned: though production can be improved using technology, "How can we feed all the people of the world without affecting the environment?" He indicated that good research should be able to answer these kind of questions, and added "climate smart agriculture" is his focal policy issue.



Figure 4: Marcel van Nijnatten, Netherlands Ministry of Agriculture, Nature and Food Quality

Marcel asserts that agriculture, food security, as well as food systems in general are closely linked with policy issues such as the right to land, the right to water, and other local issues. Hence, he said, "When we talk about food systems, it's also about politics." Emphasizing the importance of this kind of workshop for creating open dialogues amongst relevant stakeholders and involving policy makers, Marcel closed his speech by advising participants to fully utilize the opportunities of the gathering: "I encourage you to talk to each other. I am here to talk to you – to listen to you and learn from your experience."

2.1.2. Food & Business Research and Progress by ARF

The first day of the workshop continued with a presentation by Sonja Döpp of NWO-WOTRO on the background of the Food & Business Research programme and progress of ARF. By primarily reminding participants that the Food & Business Research Agenda was first introduced in 2013 by the Dutch Ministry of Foreign Affairs and Ministry of Economic Affairs (which at that time included the now separate Ministry of Agriculture, Nature and Food Quality), Sonja indicated its aim has been strengthening the implementation of the Dutch development policy on food security. To that effect, the Food & Business Knowledge Platform and Food & Business Research were introduced.

In her presentation, Sonja elaborated about the two research funding instruments of Food & Business Research: the Global Challenge Program (GCP) and the Applied Research Fund (ARF). In comparing GCP and ARF, it was indicated that while the former focuses on global issues, the later targets the 15 partner countries of Dutch Development Cooperation. GCP aims to achieve research based "enhanced understanding" with regard to global and regional food security issues and their impact on local food security, as well as the role of private sector development. In contrast, ARF's objective is to realize research supported "concrete innovations" that contribute to the food security and related business needs in partner countries.

With regard to the ARF instrument, which is the centre of this workshop, Sonja mentioned that 45 applied research projects from 10 Dutch partner countries have received funding support since 2014 through three rounds of calls.

The ARF program will end in 2020, and up until now the program is on the right track. Some completed projects and their results were discussed by Sonja. Some of the already observed outcomes of the programme include increased farm-level production and productivity, uptake of new agricultural production and processing techniques, as well as research alignment towards local knowledge needs. In closing, Sonja underlined the importance of information exchange and collaboration with F&BKP and other partners for effectiveness of research impact and the success of the programme (find Sonja's presentation here).

2.1.3. Theory of Change and Research Uptake

The next presentation by Cora Govers introduced ARF's approach to theory of change and research uptake, taken up by the projects themselves.

Cora started her presentation by explaining what research for impact means. She said that in societally relevant research, all partners are engaged in interaction and learning to create new knowledge in a process of co-creation.

To explain ARF methods with regard to theory of change and impact pathway, Cora used the following diagram in her presentation (Figure 4).

Cora emphasized that projects must be conscious of their assumptions, and different partners may have different assumptions which all should come together on the table. She asserts that assumptions should be checked and rechecked, "If the assumptions are not correct, everything crumbles down." Moreover, risk assessment was also mentioned as vital task involving considerations such as, "What would happen if we do this, and how do we deal with that obstacle?"

Cora elaborated the steps on the impact pathway by providing definitions and examples of output, outcome, and impact. She also indicated, as compared impact pathway of previous ARF projects, a slight adjustment is

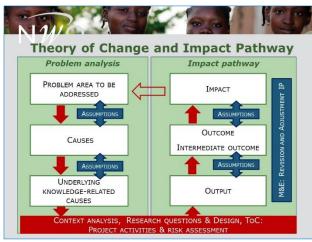
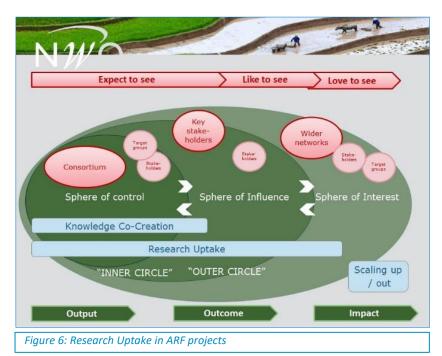


Figure 5: ARF Theory of Change and Impact Pathway

made by including the intermediate outcome component. That is because the gap between outputs and outcomes proved to be too big and it was noted that there are intermediate outcomes that can be observed and obtained before the outcomes which could include gradually observed variables which may lead to changes in behavior. Hence, she said, ARF projects are encouraged to work on defining and monitoring these intermediate outcomes.



As Cora simply explained, "Research uptake is what the whole impact pathway is all about". Research uptake includes all activities integrated throughout the entire research project that facilitate and contribute to the use of research results by policy makers, practitioners other development and actors. Cora demonstrated that the relationship between output, outcome and impact is where co-creation knowledge happens, as well as how far the research uptake should extend in ARF projects using a slide in her presentation which is shown here as Figure 6.

Cora ended her presentation by recommending the ARF projects to revisit their respective impact pathway, to include intermediate outcomes, to regularly revise their impact pathway, and to modify their research uptake strategy, based on the changes and new insights of the research (find Cora's presentation here).

After Cora's presentation that introduced the theory of change and research uptake, a few questions were raised from the participants followed by discussions. One important question was about budgetary implications when changing or reconsidering the impact pathway, and how projects should deal with these kind of situations. In response, for small budgetary changes which are in the main categories, such as research costs, the projects can make the adjustments and then inform the fund management through annual reports. However, when major budgetary change is needed, projects are required to obtain permission. In any case, it was indicated that, budgetary adjustment does not mean additional money; funds for change should be found from within the total budgeted amount, but rearranged between budget lines. In general projects are asked to explain the changes and add the revised impact pathway in the annual and final reports.

Speed Dating



During the first morning of the workshop, the ARF project members participated in 'Speed Dating' with the objective of creating exchange and interaction among the projects. Most importantly, the speed dating was aimed at helping participants open up their respective challenges and share particular experiences with regard to theory of change and research uptake. The main discussion topics for the speed dating were, "What are we doing? What can we learn from each other? Where do we see opportunities for collaborations?" Accordingly, each participant got the chance to have a brief and speedy discussion with at least

three other participants one after another. Hence, this session of the workshop served as an important tool in reflecting perspectives in relation to internal challenges and in acquiring lessons from experiences of other projects.

2.1.4. Knowledge Co-Creation

After the lunch break, Cora came back to the floor to present introduction on knowledge co-creation which laid a conceptual base for the presentations and group discussions later in the afternoon.

Knowledge co-creation, she said, "is a form of cooperation in research where different parties (researchers and stakeholders including end users) in the knowledge process interact and engage in joint learning to define problems, formulate possible solutions, design the research, conduct the research, assess the results, and translate these into new practices and products".

Researchers, even between disciplines, and stakeholders may have different meanings about knowledge, and Cora explained the concept of knowledge focusing on outside scientific boundaries. Hence, she said it requires involvement of all consortium partners and other stakeholders from the start, and it is about knowledge that is related to context. It is not only book learning, but about engaging practical experience of people in society and thus situating knowledge in its context.

In ARF, knowledge co-creation is implemented by involving the practitioner as the lead partner and by ensuring stakeholder interaction through the impact pathway and research uptake strategy. Most importantly, Cora asserted that knowledge co-creation requires a conscious effort by the consortium members: "it will not happen if you don't make it happen!" Researchers, she said, want to analyze the data by themselves, but what they are supposed to do is to discuss the data and analyze it together with consortium partners and find out what the data mean for practical application. Finally, Cora discussed a list of challenges and lessons learned from previous rounds of ARF projects relating to knowledge co-creation (find Cora's presentation here).

2.1.5. Co-creation in ARF Projects (Presentations)

Following Cora's explanation of knowledge co-creation, it was time for ARF projects to demonstrate how knowledge co-creation is instilled in their projects. To that effect, two projects were selected to make presentations, and participants were given the chance to raise questions afterwards.

Enhancing Rice-Greengram Productivity in Northern Uganda (ERIGNU)

By Robert Amayo

This ARF Third Call project is being implemented in Northern Uganda with a main objective of increasing on-farm productivity of rice and improving rice farmlands. Robert Amayo described cocreation happens in the project among the Researcher, the Practitioner, and the Beneficiaries. While the researcher and beneficiary jointly engage in identifying the problem, the researcher avails different options that lead to solutions. Then the beneficiary evaluates the options and chooses the best in terms of their locality. In addition, the beneficiary and the practitioner co-create through a learning process, while the practitioner also through networking exchanges learnings with the researcher. In addition, Robert mentioned other stakeholders involved in the co-creating process, such as local leaders, rural forums, local government, and the media.



Figure 7: Presentation by ARF project

However, the most significant common feature of the co-creation strategy in this project is *communication* by which all stakeholders are connected for making evaluations and sharing experiences. Finally, Robert explained the success factors and challenges in their co-creation strategy (find Robert's presentation here).

When participants were invited to make their reflection on Robert's presentation, the first comment was relating to what the main stakeholders in the cocreation process share in sub-groups but not with all stakeholders, as in his presentation, Robert

mentioned the researcher is linked with be beneficiary through *research* and with the practitioner through *networking*. Additionally, the practitioner and the beneficiary are connected through a *learning* process. Hence, it was indicated that these research, learning, and networking processes need to be shared among all stakeholders together in a common circle, in good *communication*. Moreover, there was also a comment from the participants that beneficiaries here should be referred to by a different term (perhaps "target groups" or "stakeholders" or "end users" or "owners") as everybody in the project is a "beneficiary".

Robert was also asked what greatest challenge they encountered while working with the team, and he said the competition among partners in bringing their own agenda was difficult at some point. In response to another question relating to the contribution of local indigenous technical knowledge in the process of the co-creation, Robert indicated that farmers were applying traditional seed broadcasting and this practice was contrasted with row planting in the project's experimental trials. In addition, local knowledge of pest control techniques were integrated into the project.

Scaling-Up "Biochar-Urine Nutrient Cycling for Health" in Rural Bangladesh (BUNCH2Scale)

By Anna Bon

This ARF project is implemented in Bangladesh with the aim of scaling up biochar-based organic fertilizer through a user-centric system.

The presentation by Anna Bon started by further elaborating what is meant by co-creation in research. She calls the co-created research of ARF as "real world research which aims at improving the situation in the real world." Hence, in its complexity, it needs different perspectives from all stakeholders to be brought and mixed together to produce new, relevant knowledge. Anna asserted that real word research is user-centred.

Anna discussed various relevant ideas such as how innovation is a networked process and not a linear one, as well as how diffusion of innovation is seen through different lenses with different models. In contrast with conventional research, users have bigger influence on innovations in real life research. She also indicated and discussed how real world research needs critical reflections and feedbacks depending on various perspectives. Hence, Anna said, the Bunch2Scale project is a real world research located in a specific context of engagements for sustainable impact.

A proposed framework for co-creation

Figure 8: Proposed Framework for Co-Creation by Anna Bon (a component of her unpublished PhD Research)

rural Bangladesh to improve a real life situation with interdisciplinary and transdisciplinary

Anna then presented the proposed framework of co-creation in her project as shown in the Slide (Figure 7). She explained that there are a number of paths to get to the solution which are not the conventional straight line. In this kind of research, she added, there needs to be an exploration of other lines or paths which could take us from the problem sphere to the solution sphere (find Anna's presentation here).

On Anna's point that research projects should be user-centered, a question was raised on how to resolve the tension between the researcher and the donor. Anna replied that, flexibility from the donor's side is very important, and that the focus should always be on the user – on what the target group wants, rather than what the donor wants.

2.1.6. Group Discussions: Challenges and Suggestions on Co-Creation

As the afternoon sessions are mainly focused on the topic of knowledge co-creation, the participants gained clarity on how to revisit their own projects and pinpoint the challenges they may encounter. Hence, the group discussions afterwards were relevant for the participants to come up with suggestions on how to resolve the challenges.

Before group discussion began, Cora made a short presentation to describe guidelines and pointed out dilemmas in transdisciplinary and transnational collaboration, as well as topics that should not be discussed (such as cooperation, and participation) in order to focus mainly on co-creation and significantly related factors: Knowledge co-creation is a form of cooperation in research where different parties (researchers and stakeholders) in the knowledge process (demand and supply) interact and engage in joint learning to define problems, formulate possible solutions, design the research, conduct the research, assess the results and to translate these into new practices and products, she explained.

When looking at dilemmas of co-creation it is important to take notice from the start of differences in expectations and assumptions, of the different benefits and interests for partners involved, of the variety of meanings and interpretations for similar concepts and terminologies, and the diversity of positions and experiences that may result in different influence.

Obvious constraints exist for collaboration that also influence co-creation, such as time- and financial constraints, the difficulties around transnational communication, and working with a variety of languages, backgrounds, cultures and personalities. In the workshop exercise on knowledge co-creation the aim was not to discuss the obvious but only address these challenges when they directly influence co-creation, in particular when different languages, backgrounds and cultures lead to different assumptions, interpretations and concepts, Cora emphasized. Collaboration as such leads to challenges that need to be worked at in a consortium and research team via (virtual) communication and sharing, as a prerequisite for co-creation.

Find the explanation handout for the group work on co-creation <u>here</u>.



Figure 9: Participants in Group Discussions

Group discussions were conducted in two rounds with four groups, and members of one consortium were placed in different groups so that they might learn from and share a wide array of experiences. In the first round, members of each group indicated at least two challenges they perceived in relation to co-creation to merge and discuss them, and to finally come up with three main problems and challenges. During the first round of group discussions, there was an inclination among some participants to mix cocreation with collaboration. In order to identify problems and challenges, participants were encouraged to go beyond collaboration and to really focus on issues that may hinder cocreation of knowledge in particular. As a result, participants made thorough discussions and

listed the most relevant challenges, such as poor cooperation and mistrust among consortium members, lack of inputs from business sector, different interest among members and stakeholders, and weak linkage between researchers and practitioners.

The group discussions continued in the second round to come up with suggestions and lessons learned for addressing challenges faced in knowledge co-creation. The following lessons were drawn from the four group discussions and shared and discussed plenary led by Sarah:

- Sharing perspectives among each consortium partner is important.
- Research design should allow co-creation of knowledge and be flexible and open for new ideas.
- Working with multi-disciplinary actors brings out efficiency of the project.
- Co-creation can be a time-consuming process.
- Continuous negotiation among stakeholders is essential.
- There should be equal involvement of all partners from project conception onwards and this should be communicated from the start.
- Simple and understandable language is relevant for effective communication between all stakeholders.



Figure 10: Participants in Group Discussions

Similarly, participants have also forwarded relevant suggestions to effectively implement knowledge co-creation. Here are the major ones:

- Bring all partners on board to make practical guidelines and develop a communication strategy.
- Maintain horizontal relations among partners.
- Define roles of stakeholders in the process of knowledge co-creation.
- Continuously dialogue to merge different knowledge and create platforms for proper communication and knowledge sharing.
- Clarify expectations from the start and involve neutral party for designing expectations and the

During the plenary session, in reaction to the presented lessons, and suggestions a number of issues were raised and discussed among the participants. The challenges of remaining flexible and sometimes changing research design while co-creating were discussed. Here it was noted that it is important to identify whether the changes can be easily incorporated under given constraints or whether they may

require a whole other and bigger research. In addition, on the issue of relating to the donor as a stakeholder, it was indicated that the donor's role as a stakeholder can be based on the three foci (Eradicating existing hunger and malnutrition; Promoting inclusive and sustainable growth in the agricultural sector; and Creating ecologically sustainable food systems) in the proposals and that engagement with the donor is necessary to meet the foci. Another major point raised in the plenary was the role of a facilitator for an effective co-creation. The facilitator can either be part of the consortium or a more neutral outsider, but the facilitator is very important in co-creation – a point that got a general consensus among participants.

The first day of the workshop ended by the lead facilitator's short recap of the day's learning, including a reminder that one of the objectives of the day was to promote connections for sharing of knowledge and experience amongst members of different ARF projects, and encouragement to continue such exchange into the evening and coming days.

2.2. Day Two: Enhancing Knowledge Sharing and Research Uptake

The objectives of the second day of the workshop was to enhance knowledge sharing and research uptake. The day began with a brief introduction of the day's activities by the lead facilitator, and then a participatory recap of the previous day, in which participants were instructed to have short discussions in pairs about their favorite elements of the day before. A few pairs were called upon to share a summary of their highlights with the wider group, and they expressed having appreciated lessons on the significance of communication for co-creation, distinguishing between collaboration and co-creation, and the several networking opportunities and especially for getting to know one another during the speed dating activity, which promoted meaningful interaction among participants.

2.2.1. Introduction on Knowledge Sharing and Research Uptake

This was the first presentation of the day by Vanessa Nigten. Vanessa explained how concepts in application of research findings in real-world situations had shifted from research valorization or dissemination to research uptake, the latter of which is the focus of the ARF project theory of change.

Research uptake denotes all activities of the entire research project that facilitate and contribute to the use of research results by policy makers, practitioners and other development actors. The four main components of research uptake are: Stakeholder Engagement, Capacity Building, Communication, and Monitoring and Evaluation.

Engaging stakeholders involves first identifying relevant stakeholders in both the inner and outer project circle, and then developing a strategy for effective engagement. Assessing the capacity of target groups and providing the necessary training and support is another component of research uptake. With regard to communication, Vanessa explained that consortium members need to communicate when important things happen and to inform the project team so that the project may adapt to the needs of various target groups. Also she asserted, "Be sure you

understand each other, be it in language or conceptually." In monitoring and evaluation of research uptake, several considerations were highlighted and paramount of these, it was indicated that constantly paying attention to lessons learned is very important. Finally, her presentation ended by explaining the supporting role of F&BKP and NWO-WOTRO in project research uptake, for example through providing a platform for information sharing and exchange (find Vanessa's presentation here). Following Vanessa's presentation, a number of questions were raised by the participants and a fruitful discussion was held. Regarding stakeholder engagement and communication, the conflict between stakeholders in connection with communicating results was one of the issues mentioned. It was noted that all projects have clear agreements to make results open access as public money is not intended to support any one company. Moreover, it was discussed that there should not be any surprise for participating companies when the product is out in the market and visits by stakeholders and public demonstrations are necessary. Marcel van Nijnatten added that from the donor's point of view, the money for ARF research projects is intended also for knowledge sharing (as well as generation through co-creation) and he informed the projects to disseminate knowledge as much as possible, also to

donors, and without delay. In response to another question on monitoring and evaluation, it was also noted that it should be simple but ongoing, undertaken throughout the project.

Poster Presentation & Networking

Coffee and lunch breaks were a good opportunity not only for social networking, but also for learning about the other ARF projects through posters presented on the wall. Each ARF project brought an A1 size poster with a summary of the project.



2.2.2. Presentations on Research Uptake Approach in ARF Projects

Two presentations on interpretation and application of research uptake were made in order to model and encourage reflection on how research uptake is understood in ARF projects.

Enhancing Kersting's Groundnut (Doyiwé) Production and Marketability to Improve Food Security in Benin

By Mathieu Ayenan

The general objective of this project is to improve production and availability of keresting's groundnut grains in rural and urban markets in Benin. Mathieu presented how the project applies research uptake and explained the main success factors of their approach. He stated that involving the private sector in the consortium can be regarded as one success factor in relation to sustainability of the project. Moreover, engaging with farmers, consumers and regulatory agencies in their project has potential results in increasing adoption of seed varieties and in promoting favourable seed regulations. On the other hand, he mentioned that stimulating interest at regional level could be a future challenge (find Mathieu's presentation here).

On the issue of involving a regulatory agency as a stakeholder, participants asked if the project has a formal agreement and how to deal with a change in the director of the agency or similar situations. Mathieu indicated that the project does not only invite directors of significant agencies, but also technical persons. Hence, it was indicated that connection with regulatory agencies or other stakeholders should not depend solely on one person.

Improved Resilience through Sustainable Production of Grafted Tomatoes in Uganda (IRESO)

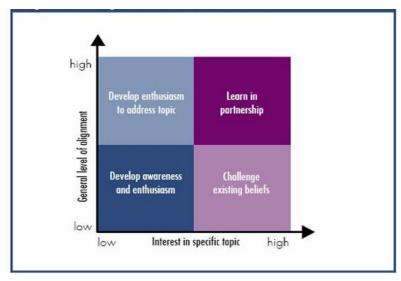
By Julius Ssemyalo

The main goal of this project is to improve wealth, nutrition and resilience in its target groups through sustainable production of grafted tomatoes in Uganda. Julius presented the research uptake approach of the project by elaborating on the role of and interaction between all stakeholders. He indicated a number of success factors, including how all stakeholders, from students, to field level partners and private sector actors are highly interested in contributing to the agenda. He identified the fact that some youth would rather work individually than jointly as one of the challenges (find Julius' presentation here).

2.2.3. Group Work: Stakeholder Engagement, Using the Alignment, Interest and Influence Matrix (AIIM)

Next in the program was a team exercise to practice applying the AIIM framework for an applied research project by firstly identifying main research project stakeholders, and secondly, by suggesting possible courses of action toward effectively engaging those stakeholders (find the AIIM

exercise explanation <u>here</u>). Workshop participants were divided into four groups, and selected one of the real ARF projects to practice application of this AIIM framework. They were firstly asked to list all project stakeholders. Consequently the were mapping them onto the AIIM according to their level of Alignment and Interest on the matrix below.



Each listed stakeholder name was written on a sticky note, and then placed on the grid above according to the following x and y coordinate assessment Alignment (agreement with the research project's assumptions, mission, values and (uptake) approach & similarity with the strategies, attitude and action plans) and Interest (engagement to projects subject in time, money and public presentation) made according to the considerations listed below. After that, as exercise step 3, projects were prioritizing stakeholders

considering which of the actors identified are the most influential on the practical and/or policy process the research project wants to influence, whether and how they are connected to the project, and what steps would be necessary to connect them in the most valuable way. With those insights projects could adapt their current engagement strategy for specific target audiences.

2.2.4. Plenary on Group AIIM Exercise

The outcomes of the individual group AIIM mappings were shared with all workshop participants in a plenary session. Many overarching lessons came out of this:

- With regard to which stakeholders should be targeted, it was noted that not all stakeholders can be involved effectively in a project, so prioritization of stakeholders the project wants to work with is crucial.
- Sometimes some stakeholders do not need to be a connection the project works with initially, but will remain low interested and low aligned until commitment later in the project stage arises eventually.
- INTEREST TOTAL

Figure 11: AIIM Exercise group work

- It is important to check and test project assumptions regarding to the different stakeholders.
 - It is not realistic to assume that stakeholders such as donors and financial institutions are always interested by default, and thus projects need to make efforts to make them interested.
 - The matrix above goes from 0 to 'high' levels of both interest and alignment. However, it is possible for certain stakeholders (e.g. concurring private actors) to actually have negative levels of interest and alignment, and as a result of their destructive contribution towards project goals, these should be mapped and eventually special action plans for addressing them should be developed.
- It may be helpful to add a third dimension on connections existing between different actors (indicating who works with and influences whom) because this can have a large influence on the engagement strategy of the project.

2.2.5. Interactive Session on Ideas for Knowledge Sharing and Research Uptake Activities

The morning session of the second day workshop ended with a short presentation by Vanessa Nigten and Nynke Humalda of F&BKP. The objective of this presentation was to explain to projects how they can enhance co-creation, knowledge sharing, and research uptake through the Food & Business Knowledge Platform. Projects were shown how the F&BKP website can be used for those purposes by viewing the relevant sections of the website. It was demonstrated that all the ARF projects have their own project page at the website and that research results and progresses can be published through the platform and disseminated via F&BKP social media. It was made clear that it is the responsibility of all ARF project groups to continuously **update their own F&BKP project page**. To this end, projects are encouraged to develop knowledge items such as videos, policy briefs, reports, blogs, infographics, podcasts and papers. They can be emailed to the F&BKP Office (info@knowledge4food.net) to be edited and uploaded at the project page. The presenters, moreover, indicated possible collaboration routes with the various F&BKP partners in diverse themes in the field of Food and Nutrition Security. Projects were encouraged to connect and co-create with these experts using the platform.

Projects are also encouraged to subscribe to the newsletter of the platform to follow ongoing activities to link up to as well as to inform F&BKP and NWO-WOTRO if there is an interest in a specific research uptake trainings (find here the presentation on Knowledge Sharing and Research Uptake).

2.2.6. Field Visit: Selam Children's Village (SCV)

The afternoon session of the second day workshop was to visit an organization called Selam Children's Village (SCV), to demonstrate knowledge uptake for Food and Nutrition Security as a case that relates to the ARF workshop, and also nutrition sensitive value chain development as relates to the following Public Day. SCV is a humanitarian organization established in 1986 EC by W/ro Tsehay Roschili with the objective of creating a better life for orphans and needy children, and one of the ways that SCV is well known for achieving its mission is by engaging in core and extended value chain activities across several food value chains, right from production to service provision to final market access.



Figure 12: Organic dairy and vegetables Selam' Village's hands-on agriculture technical vocational college

The technical and vocational education which SCV provides encompasses an agricultural department and food handling and catering department that provides hands-on skills for nutrition sensitive value chains. The agriculture department focuses on organic diary, poultry, apiculture, and horticulture, while practical field work provides skill development opportunities for students as well as inputs for the food handling and catering department. The food handling and catering department adds value to agricultural produce through processing into delicious and nutritious food that workshop participants got to experience in the form of a gourmet organic five-course meal prepared by students.

Both the agriculture and food handling and catering departments are taught in a very practical manner, effectively conveying knowledge into practice. The process of production and harvest of all agricultural products provides hands-on, skill-building opportunities for the students of the agricultural

department, as well as inputs for the restaurant which SCV runs as income generating activity and practical skill building opportunity for students of the catering and food processing department. SCV also generates income and promotes agricultural value chains by producing and selling seedlings and technology for sustainable agriculture. SCV has effectively managed to successfully address the gap in access to high quality foods by vulnerable populations including scores of orphans and low-income families in the neighborhood. More information on SCV can be obtained at www.selamchildrenvillage.org.

The ARF participants were especially impressed by the integrated value chain approach and the vocational training, not only directed at the orphans of SALEM itself but also on children in the surrounding community who need additional care.

At the end of the field visit, Cora Govers made a recap of the day with lessons learned with input from the participants, which is presented in the next section of this report combined in the wrap-up of ARF international workshop.

2.3. Workshop Wrap-up

At the end of the Selam Children's Village visit a wrap up with all participants was held, at the field visit site. Cora re-caped that the ARF Third Call projects participated in the international workshop in order to improve impact of their researches, and in line with that objective, several tools and methods for maximizing impact pathways, reviewing theories of change, selecting and engaging appropriate stakeholders in effective ways for co-creation and research uptake were presented, demonstrated, debated and practiced. Additionally, practical experience across projects were shared.



Figure 13: Workshop participants on field visit to Selam Children's Village.

Of the vast amounts of knowledge and experience shared over two days, some of the most important lessons learned included the following:

- Knowledge co-creation requires a conscious effort and involvement of all relevant stakeholders.
- Joint learning, co-creation, and research uptake should start while writing the proposal.
- Co-creation goes beyond collaboration and is about knowledge that relates to context.
- Theories of change and impact pathways need assessment, discussion and regular revision with major stakeholders.
- Amendments on theory of change and impact pathway should be communicated in time.
- ARF projects should include intermediate outcomes in their impact pathway, as the gap between outputs and outcomes can be very wide.
- Assumptions are very important and should be tested continuously.
- Research uptake is an activity that should be implemented throughout the ARF research project, and it requires the involvement of all stakeholders.
- Effective communication, discussion and exchange is vital for both co-creation as well as research uptake.
- Not all stakeholders should or can be aligned and interested, thus prioritization is important.
- Knowledge or results obtained from ARF projects are meant to be shared and disseminated as early as possible.
- Engage and invite policy makers, rather than only sending messages or reports to them.
- Consortium partners should be flexible to situations and should be willing to adopt changes.
- NWO-WOTRO and F&BKP are available to support projects, and the platform serves as a good tool in connecting projects for information exchange and interaction.
- It is important to consider scaling from the start of the project, and this is one of the reasons that private actors are significantly engaged in the project, in fact, in the lead.
- Dutch potential follow up funding in the field of private sector development and food security: RVO, the Netherlands Enterprise Agency for Dutch Funds for private sector development. Also, the <u>Dutch Good Growth Fund</u> (DGGF) and <u>Facility for Sustainable</u> <u>Entrepreneurship and Food Security</u> (FDOV), (now transformed into SDG Partnership Facility (SDGP)).
- ARF projects should continue to learn from each other: look for lessons of other similar ARF and GCP projects (see F&BKP website) and try to bring work further jointly.

Cora mentioned that the workshop is just a starting point that needs to be continued in each project so that all project consortium project members can benefit in order to attain project impact by:

- Sharing the relevant workshop power point slides;
- Doing your own project AllM with the research team, and also verifying with project stakeholders;
- Discussing your Impact Pathway and Theory of Change, check the original assumptions, revise where necessary and adjusting the research uptake strategies accordingly;
- Include the changes in your annual report;
- Engage with other projects and with policy makers, and visit the Dutch embassy in your country to inform, exchange and link with other projects;
- All participants and projects should feed NWO-WOTRO and F&BKP and thereby each other with project output, (intermediate) outcome and impact, and with highlights.

Sarah reminded the group of the connections between knowledge creation and systemic uptake for nutrition outcomes witnessed at the field visit site, including unique value chain interventions in impactful skills dissemination and product access by vulnerable populations.

Lastly, Cora thanked all participants for their positive and active engagement during the two workshop days held, and acknowledged SCV for the practical learning of the field visit.

3. The Public Seminar

After the fruitful two-day workshop, ARF projects were joined by some 40 Ethiopian experts from research, NGOs, private sector and government ministries for a public seminar on February 16, 2018 entitled "The potential of value chains for nutrition: knowledge exchange for better informed policies and practices." The seminar focused on nutrition-sensitive interventions in agricultural value chains, specifically on how knowledge sharing through food value chains can be improved in order to contribute to Food and Nutrition Security.



Figure 14: The Public Seminar

Sarah Assefa welcomed participants, provided a short recap on what the ARF projects were doing over the previous two days with regard to improving research impact nutritional outcomes, multi-stakeholder enhancing knowledge co-creation and uptake. Organizers of the seminar made very introductions. Accordingly, representatives of NWO-WOTRO, F&BKP, AgriProFocus Ethiopia, and IFPRI introduced themselves and their respective organizations. opening speeches of the seminar

were made by speakers from the Ethiopian Ministry of Agriculture and Natural Resources, from the Ethiopian Ministry of Industries, and from the Embassy of the Kingdom of the Netherlands in Addis Ababa.

3.1. Opening Remarks

The official speeches by the invited dignitaries focused on nutrition sensitivity in value chain and food system development, and their work relating to nutrition sensitive food value chain development in Ethiopia.

Alemtsehay Sergawi, Senior Nutrition Expert and Nutrition Case Team Coordinator of the Ministry of Agriculture and Natural Resources, explained the policy directions of Ethiopian Government in achieving nutrition security. Alemtsehay elaborated on the current status of nutrition in Ethiopia, and noted that while much progress has been made in the area of food security and nutrition, under nutrition still accounts for around 16% reduction in Ethiopia's annual GDP. Key determinants of undernutrition include limited diversity of food at production, as well as limitations in dietary consumption, particularly due to suboptimal infant and young child feeding practices. Furthermore, undernutrition in Ethiopia is exacerbated by periodic drought, gender disparities, WASH limitations, and suboptimal access to health services.

Efforts to mainstream nutrition are several: over time Ethiopia has moved from a food security approach to an integrated, multi-sectorial nutrition security approach that embraces food systems. Ethiopia is now in the process of validating a new Nutrition Sensitive Agriculture Strategy, a multi-stakeholder food and nutrition case team that is still in its infancy has been established by the Ministry of Agriculture and Natural Resources to support development and implementation of evidence based policy (find miss Sergawi's presentation here).

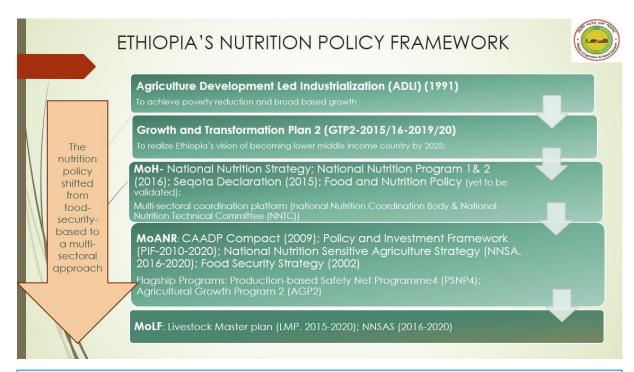


Figure 15: Ethiopia's Nutrition Policy Framework

Shimelis Tilahun from the Ministry of Industry, also representing the Food, Beverage, Pharmaceutical Industrial Development Institute under the Ministry made a speech on the work of his ministry to promote nutrition outcomes. In his opening remarks, Shimelis summarized the policy commitments of the government in mainstreaming food and nutrition by incorporating the topics in the Growth and Transformation Plan II (a five-year development plan, also known as 'GTP II'), as well as by providing institutional frameworks such as establishment of National Nutrition Coordination Body and National Nutrition Technical Committee. He also asserted the importance of creating a coordination platform amongst different stakeholders, and called for collaboration with his Ministry (find miss Tilahun's speech here).

Jan Willem Nibbering, Food Security Policy Advisor to the Embassy of the Kingdom of the Netherlands, started his welcoming remark by greetings in eight different languages to connect with participants from different countries. He emphasized that nutrition should be the very goal of food security and working on value chains is unavoidable since many people depend on the larger food system for their nutrition. In that regard he discussed the efforts of the Embassy through several food security programmes in Ethiopia and their contribution to nutrition. He presented the various programmes that fit in the three main pillars for the Dutch food security policy, and take a value chain approach from input to consumption into account: Reducing household vulnerability; Increase agricultural productivity, market access and support agribusinesses; and Strengthen ecological sustainability. Most current embassy efforts fall under pillar 2 on agricultural private sector development of which he highlighted some successful examples of which the support of market access for village woman by whom he was personally much impressed (find the slides presented by Jan Willem Nibbering here).

3.2. Nutrition sensitive value chains and food systems for Ethiopia: where are the entry points?

Belay Terefe, representing A4NH programme of IFPRI in Ethiopia, gave an overview of the importance of nutrition in Ethiopia and the frameworks developed by IFPRI and others to analyze the potential for nutrition within value chains.

Belay listed several entry points to work on nutrition from a value chain perspective in Ethiopia. These entry points are: an enabling policy environment (which is already present in Ethiopia); increased production of fruit and vegetables; transport, storage and cold chain infrastructure improvement; food safety improvement; processing technologies; promotion of healthy eating; an effective regulatory environment; and applied research in which Ethiopian academic institutions work on contextual solutions. These presented entry points set the stage for the subsequent panel discussion and open space discussions (find Belay's presentation here).

3.3. Panel Discussion: To link agro-food value chains and nutrition in practice

The panelists were Alem Greiling (NutriDense, private company), Yohannes Mehari (SNV – a Dutch development organisation), Ursula Truebswasser (Nutrition consultant to the European Union Delegation in Addis Ababa), Kaleab Baye (Addis Ababa University), and Maya Hage Ali (Food and Agriculture Organisation of the United Nations). Main questions for the panel discussion were related to the extent of contribution of panelists on agro-food value chains, the challenges they encountered, the required effort to overcome the challenges, and possibilities for enhanced multi-stakeholder

efforts improved impact regarding nutrition sensitivity in development of food value chains.

It was noted that Ethiopia has a consistent set of policies, but implementation and operationalization is where challenges lie. several The mentioned panelists several difficulties in operationalizing the policy and research frameworks presented in the morning. They agreed that multi-stakeholder partnerships are important and cooperation between sectors is



Figure 16: Panel Discussion Session

the key. However, it was also highlighted that involving the private sector and policy makers remains difficult. The current lack of private sector incentives was raised and the need to be aware of the priorities of other stakeholders was indicated. Hence, to involve private sector actors, nutrition-sensitive value chains also need to be strong enough to make food processing businesses economically viable and attractive. The government, on the other hand, could support this by appropriate taxes and regulations. The importance of knowledge and information sharing and exchange among different sectors and actors was emphasized several times by different panelists. In addition, there remains a need for more evidence on the impact of nutrition-sensitive value chains, since there are knowledge gaps on the overall outcomes of interventions.

The panel discussion and following interactive Q&A session with seminar participants highlighted the following main insights for jointly increasing nutrition sensitivity in value chain development:

- Consider nutrition and food safety throughout the whole value chain and food system.
- Collaboration is necessary and avoids duplication of efforts.
- The policy gap for engaging private sector should be improved.
- Food safety and quality issues need to be addressed.
- Academia and research can help guide the process, and policy maker integration in research for value chain development is vital.
- The gaps in knowledge dissemination between researchers and grassroots level must be addressed.
- Diversification of interest areas in the value chain is required.

 Awareness amongst society should be enhanced and use of media is relevant to create awareness.

3.4. Open Space: Challenges and Solutions for Nutrition-Sensitive Value Chains

The participants of the workshop set their own agenda in the open space, and used the expertise and knowledge in the room to address several challenges related to nutrition-sensitive value chains. The open space discussion served as a small, practical co-creation process, from joint selection of issue areas of concern to the different stakeholders present, to jointly identifying key constraints and key ways to address those constraints.



Figure 17: Top nutrition sensitve value chain constraints

To kick-off selection of discussion topics, seminar participants were asked to discuss in pairs about what in their view were the top challenges to nutrition sensitive value chains. Several issues for consideration in open space were raised. These concerns were written on cards, and during the lunch break the facilitator broadly grouped them into the following categories:

- Developing a conducive environment for the private sector.
- Strengthening multi-stakeholder approaches for improved nutrition.
- Knowledge and awareness of the public on nutrition.
- Strengthening seed systems for nutrition.
- Post-harvest loss management.
- Access to healthy food.

Participants were instructed to select an issue of their choice to discuss. Each self-selected multistakeholder group first identified a problem owner to interview to become more familiar with the problem and clearly define key constraints underlying the selected issue. Then the groups suggested and discussed solutions to the defined constraints. Solutions proposed were prioritized and presented to the larger group. Group members were informed that they were free to move between discussion topics, and/or create new discussion topics if they should so choose.

Over the course of the afternoon, an additional discussion topic on food safety was formed. As for the other pre-identified issues, the process of defining the problem (gaps) and identifying solutions based on the experience of different stakeholders was followed.









The following table summarizes the outcomes of the open space discussions:

rne	e following table summarizes the outcomes of the open space discussions:				
#	Issue	Key Gaps	Key Solutions		
1	Private sector engagement in value chains for nutrition	a. Lack of supply chain infrastructure	 Public investments Government to encourage private investments through policy (e.g. promoting social responsibility, soft infrastructure for like storage, distribution.) 		
		b. Limited financing for SMEs and farmers across the whole value chain; financing institutes have limited and unsuitable financing products	 Provision of long-term loans Provision of loans with lower interest rates Loan guarantors (e.g. Government) 		
		c. Gap in skilled workforce and locally relevant technology	 Promotion of technical, vocational, and business skills Practice oriented programmes Promoting engagement between public and the industry 		
		d. Lack of favourable regulatory environment	 Capacity building and resources Levelling the ground for all stakeholders 		
2	Strengthening multi- stakeholder approaches for improved nutrition	Complex and dynamic environment for multi-stakeholder approach	 Inclusion of relevant stakeholders as agents of change Real link to the beneficiaries/customers Co-created knowledge 		

			Systems approach
3	Knowledge and awareness of the public on nutrition	Issue combined with #5, on a	access to healthy food.
4	Seed systems for nutrition and food security	Lack of diversity of crops and diet because of: fake seeds, lack of awareness regarding varieties, poor packaging for seeds, and lack of regulation.	 Enabling policy environment Access to input and output markets Technology development Local leadership Knowledge sharing Promote local supply chains
5	Access to healthy food	Vulnerable populations have low dietary diversity because of limited purchasing power, and expensive products due to low supplier competition	 Storage facilities will stabilize prices and make food more accessible to populations with low buying power. (Private, public or NGO sector investment) Capacity building on preserving, processing and storing food Enabling policy for and linkages between producers and food manufacturers. Developing business models for cooperation between VC actors Knowledge and awareness of the public on nutrition can be increased through various media
6	Post-harvest loss	Extensive loss of food between production and consumption	 Community based storage facilities Capacity building on knowledge, skill and technologies on preserving, storing, and processing perishable food products Developing business model for cooperation between producers, manufacturers and other value chain actors
7	Food safety	Opportunities for contamination abound at each node of the value chain (right from farm to fork)	 Regulation Monitoring for compliance with food safety standards Differentiation between safe and unsafe food

3.5. Seminar Wrap-Up

After the open space discussions, Sarah Assefa wrapped-up the public seminar.

She restated what the Netherlands Embassy's Food Security Officer, Jan Willem Nibbering had said in the opening speech about nutrition being an integral part of food security, and remarked on how Ethiopia's good policy framework endorses a holistic approach to development of food systems for nutrition. She also noted that implementation of progressive policy remains a large challenge, and she invited all stakeholders to work together to solve these challenges, reiterating the appeal from Shimelis Tilahun of the Ministry of Industries for multi-stakeholder problem solving, and reminding the group of the special tools for multi-stakeholder problem solving embraced by the ARF projects, particularly knowledge co-creation, that includes end-users of knowledge in the development of knowledge, right from proposal development, and enhances efficiency, and impact of research in terms of nutritional outcomes, through improved uptake.

The outcomes of the multi-stakeholder open space session were very important. The private sector has a central role to play in all value chains, and therefore an enabling environment for the private sector is required, and Sarah hopes for uptake and development of the detailed recommendations for solutions to private sector constraints raised forth during this seminar with regard to enabling environment, including access to skills, technology, licensing, and access to finance. Interestingly, several of the solutions proposed by the post harvest loss group also were raised as important in access to healthy food; thus market system interventions to support consumers of healthy food can also be relevant and beneficial to producers. Of note, a new group formed during the session focusing on the topic of food safety identified that opportunities for contamination are present at each step in the value chain, and a strong regulatory environment as well as capacity building for safer food production and handling are needed.

Finally, all participants and organizers were given special thanks. Participants were reminded of the many avenues to stay connected, such as the Food & Business Knowledge Platform online and the AgriProFocus Nutrition Sensitive Agriculture Network. Sarah expressed the organizer's sincere hope that the learning and networking initiated during this workshop and seminar would continue afterwards, and foster ongoing exchange of learnings and ideally new partnerships.

The F&BKP and NWO-WOTRO representatives thanked all participants for their commitment during this and the other days, and especially thanked AgriProFocus in Ethiopia for their support and dedication before and during this event.