Promoting Innovation & Trade in Horticulture

25-27 November 2015
Kigali, Rwanda
Conference Report
Colophon

NAEB – PSF - AgriProFocus

2016

Thanks to all AgriProFocus colleagues who helped producing this report

Conference Report ‘Promoting Innovation & Trade in Horticulture’
Content

1 HEADLINES .............................................................................................................................. 3
2 INTRODUCTION ...................................................................................................................... 5
3 OPENING CEREMONY AND WELCOME ................................................................................ 6
4 HORTICULTURE NATIONAL AND REGIONAL MARKETS ................................................... 7
   4.1 Investment opportunities in Rwanda ......................................................................................... 7
   4.2 Facts and Figures Horticulture and trade in the region ............................................................. 7
   4.3 Panel Session: Improve regional (and international) market linkages .................................... 8
5 HORTICULTURAL PRODUCTION INNOVATIONS ................................................................ 10
6 PRODUCT DEVELOPMENT IN HORTICULTURE .................................................................... 12
7 MARKET ACCESS AND EFFICIENCIES .................................................................................. 14
8 HORTICULTURAL PRODUCTION INNOVATIONS ................................................................ 16
9 FOOD SAFETY ......................................................................................................................... 18
10 FINANCE AND INSURANCE IN HORTICULTURE ................................................................. 20
11 FOOD AND NUTRITION SECURITY ....................................................................................... 22
12 BUSINESS INNOVATION COMPETITION ............................................................................. 24
13 RECOMMENDATIONS FOR FOLLOW-UP ............................................................................... 26
ANNEX 1 LIST OF SPEAKERS .................................................................................................... 29
ANNEX 2 BUSINESS INNOVATION COMPETITION ................................................................ 30
ANNEX 3 CONFERENCE PROGRAM ............................................................................................ 31
1 Headlines

From 25 to 27 November 2015, a regional conference and trade fair took place in Kigali, Rwanda, entitled ‘Promoting Innovation and Trade in Horticulture’.

The key outcomes of the conference are as follows:

Development of the horticulture sector can have a great impact on poverty reduction in the region, offering an alternative to amongst others mineral exports. In the period 2012-2014, COMESA horticultural exports increased with 13%, while the value of imports was also growing. Nevertheless, COMESA only has a very small market share in the global horticultural market.

Innovative production and post-harvest solutions

For horticulture to thrive, innovation and investment need to increase along different chains within the sector. A consistent, high quality and quantity of production is needed using the natural assets available; innovations and technologies that make horticultural production smarter and more efficient are essential. During the conference, technical knowledge was shared about amongst others integrated soil fertility and pest management, vegetable breeding, nursery raising, bee pollination and greenhouse technology.

Reducing post-harvest losses and enabling profitable trade in fresh produce requires good practices and strategies for processing, aggregation, transport and storage. Conference participants were passionate about innovations for processing fruits and vegetables into marketable juices, jams and other products, such as those from AfriBanana Products, the winner of the event’s ‘BIC’ competition. They agreed about the urgent need for cold chains and good packaging material.

Regional trade

Opportunities to strengthen regional trade in horticultural products in East Africa and the broader region were extensively discussed. Current regional integration processes already expand the market base for horticulture products, but there is room for improvement. Reducing non-tariff barriers - a major hindrance to regional trade – is a top priority. In addition, improved procedures at border stations, investment in road transport and tax exemptions on horticultural inputs are needed. Further, a streamlined flow of official and up-to-date data on horticulture production and trade in the region as well as of market information is what traders and producers in the region need.

Knowledge sharing and networking

Agricultural extension and knowledge sharing systems were also discussed. At the community level, successful agricultural extension models may be applied that work in an empowering way, using demo plots and farmer-to-farmer contacts. In one of the sessions the particular opportunities were discussed to encourage women’s leadership in horticulture through the use of improved technologies. At national and regional level, collaboration in networks and sharing of data are crucial.

Challenges

The lively discussions showed that this regional event could work as a starting point for further exchange and collaboration. Future work could concentrate on the following challenges highlighted:
- How to upscale the successful innovations and business models presented in the BIC competition?
The technology offered by European or Dutch companies and knowledge institutions offers opportunities for some producers, but for others it doesn’t match with their needs. How could a better match be made?1

Promoting the reduction of trade tariffs and non-tariff barriers between countries in the region is expected to facilitate regional trade. How to make sure this cross-border trade benefits all actors?

Participants supported the improved inclusion of youth and women in the horticultural sector. Which steps can be taken by companies, government, NGOs and researchers to realize this?2

Which innovations could be developed to raise awareness in the region about the nutritional value of fruits and vegetables? As this may be key to enhance nutrition security.

Recommendations

Participants formulated an extensive set of recommendations for further action, of which a few have been selected here.

- Horticulture inter-professional organizations should collaborate at regional level.
- Access to finance for horticultural producers should be improved and conditions more flexible particularly for small farmers.
- AgriProFocus should increase this multi-stakeholder horticulture network both at national and at regional level: holding national and regional innovation events and using its website for a continuous discussion on horticulture.
- Training and advice on horticulture post-harvest handling and storage is needed, so that these crops meet required standards of exportation.
- Governments should be called to put effort to strengthen the horticultural sector. Amongst others, through policies that provide what is needed to improve horticultural production, including innovation, and with the necessary investment.

The event was organised as a joint initiative by the Private Sector Federation (PSF), the National Agricultural Export Board of Rwanda (NAEB) and the AgriProFocus network, in collaboration with a group of national and international partners and sponsors. The Netherlands-African Business Council (NABC) was among those international partners, bringing a group of experts from Dutch companies and knowledge institutions to the event.

All powerpoints are available online at our online platform: (www.agriprofocus.com/topic/PPTHorticulture) A short video report has been produced as well. It can be accessed via the following link https://youtu.be/3mbl-NoiW5w.

---

1 See for a Dutch knowledge exchange initiative on this topic: http://knowledge4food.net/start-of-fit-to-purpose-approach-in-agro-food-value-chains/

2 AgriProFocus’ communities of practice on Gender in Value Chains and Youth in Agribusiness welcome actors from the horticulture sector to participate.
2 Introduction

From 25 to 27 November 2015, a regional event took place in Kigali, Rwanda, entitled ‘Promoting Innovation and Trade in Horticulture’ organised as a joint initiative by the Private Sector Federation (PSF), the National Agricultural Export Board of Rwanda (NAEB) and the AgriProFocus network, in collaboration with a group of national and international partners and sponsors. The event provided a space to meet, exchange about innovations and do business, for about 300 conference participants, 96 exhibiting companies at the PSF Expo Grounds horticultural exhibition, and 600 exhibition visitors.

The objectives of ‘Promoting Innovation and Trade in Horticulture’ were:

- To create a marketplace for agribusinesses in Horticulture to showcase and/or learn about new products and services available, find new markets and forge business partnership. The regional Business Innovation Competition which formed part of the event in particular provided such marketplace for innovations.
- To advocate for an improved enabling trade environment and relations among the countries in the Eastern and Southern Africa region with respect to the smooth flow of products and services and the access of entrepreneurial farmers in horticulture to market opportunities across the region and beyond.
- To provide an opportunity to discuss challenges and co-create solutions to promote regional trade in the Horticulture sector.

Based on an evaluation performed during the event, the organisers conclude that this conference was considered as highly relevant by the participants (65 % scored the conference’s relevance as ‘excellent’ and 37 % scored it as ‘good’3). The participation to the exhibition raised similar enthusiasm: interviewed farmers said they developed useful contacts with suppliers of seeds, fertilizers, etc. Many participants to the event said they would use the insights right away to improve their business or organisation. Among the recommendations formulated by participants at the end of the conference, there was a clear call for follow up actions, such as further networking and further knowledge exchange, and a concrete interest in holding a similar regional event in East Africa in 2016.

This report presents the key knowledge shared during the two-day conference on 26 and 27 November. The organisers hope the lessons learnt and the information shared serve participants and other readers in their endeavours to build a fruitful horticultural sector. All PowerPoints are available online at our online platform (www.agriprofocus.com/topic/PPTHorticulture ) and specific knowledge exchange on particular issues may continue online using this online platform for national, regional and international exchange.

A 12-minute video report has been produced as well. It can be accessed via the following link https://youtu.be/3mbl-NoIWSw and it may be a useful tool for further sharing online, or at the start of specific meetings and seminars about horticulture in East Africa.

The group of organisers of ‘Promoting Innovation and Trade in Horticulture’ thanks all participants, BIC candidates, speakers, facilitators, rapporteurs and exhibitors for their highly relevant contributions.

---

3 From a short evaluation with participants: the quality of presentations was considered ‘excellent’ by 41% of participants, ‘good’ by 56%, and ‘average’ by 4%. The quality of discussions was considered ‘excellent’ by 52% of participants, ‘good’ by 44% and ‘average’ by 4%.
3 Opening ceremony and welcome

In his word of welcome, Mr. Roel Snelder, Acting Managing Director of AgriProFocus, explained this conference was about sharing experiences and opportunities to improve the horticultural sector in the region. Mr. Benjamin Gasamagera, Chairman of the Private Sector Federation (PSF) highlighted that revenues from horticulture in Rwanda reached US$ 9 million in 2015, from US$ 3 million in 2010. He called on both public and private institutions to be innovative. He referred to the underlying factors affecting the competitiveness of local producers, such as the certification to access international markets, the availability of packaging material and the use of advanced technologies. Mrs. Frederique de Man, Ambassador of the Kingdom of the Netherlands in Rwanda referred to a growth of horticultural production of 3% in Asia and Sub-Saharan Africa. The Embassy appreciates the existence of the Rwanda-Netherlands Horti-Platform and sees innovation as one of the key components of development. Ambassador George William Kayonga, CEO of the National Agricultural Export Board (NAEB) supported the call for stronger exports and innovation.

Key note address

Honourable Minister Mukeshimana Geraldine (Minister of Agriculture and Animal Resources, Rwanda)

Development of this sector can have a great impact on poverty reduction. Innovation and investment need to increase along different chains within horticulture. Creating networks is essential to create positive impact in the horticultural sector, particularly to allow stakeholders to strike business deals. The Ministry commits to strengthen regional, cross-country exchange, to foster appropriate regulation of the sector, and to facilitate proactive private sector engagement.
4 Horticulture national and regional markets

4.1 Investment opportunities in Rwanda

Ambassador George William Kayonga – NAEB

The horticulture sector in Rwanda is built on a strong foundation: the climate, the infrastructure required for growth, and government investment in shared infrastructure with the private sector. Fruits and vegetables as well as flowers are among the economic priorities for the local, regional and international markets. Sector champions are critical in the sector: their success has a multiplier effect. Building out grower schemes is a key option. The Rwanda government’s ambition is to increase exports from US$ 6 million to US$ 140 million by 2020. Trade in fresh produce requires a clear strategy for aggregation and good storage facilities.

For horticulture to thrive, there needs to be consistent, high quality and quantity of production using the natural assets available. Export logistics are among the key conditions too: cold rooms, pack houses, air transport linkages to key global markets. The reduction of air freight charges needs to be aimed at through innovative measures to increase volumes, jointly with other countries. Also, an enabling infrastructure is conditional, linked to agribusiness development including feeder roads and irrigation. Trade incentives that are needed: duty free imports of agriculture inputs and packaging material; good access to fertiliser; and proper regulations on inputs, to curb counterfeit products on the market.

Specific opportunities for regional trade in Rwanda are the Gishari flower park; the Kigali wholesale market for fresh produce and the 250 hectares set aside in Gashora for vegetable production, which is ready for investors.

4.2 Facts and Figures Horticulture and trade in the region

Mrs. Josephine Makondo – Chamber of Commerce Zambia

The Common Market for Eastern and Southern Africa (COMESA) was formed in 1994 and its strategy is to foster “Economic Prosperity through regional integration”. Horticulture is one of the sectors that can contribute greatly to foreign exchange within the COMESA region. It offers an alternative to mineral exports which make the economies highly susceptible to external shocks such as global demand and price volatilities.

Top COMESA exporters of vegetables are Egypt (46%), Ethiopia (36%) and Kenya (11%). In terms of fruits, Egypt once again is the major exporter accounting for 82% of the amount exported by COMESA, with Kenya for 9 %. In the period 2012-2014, COMESA horticultural exports increased with 13%, while the value of imports was also growing. Nevertheless, COMESA enjoys a very small market share in the global horticultural market for both vegetables and fruits: the average market share percentage for edible vegetables and fruits over five years (2010-2014) was 3.1 % and 1.3 % respectively. More therefore needs to be done to increase the market share of COMESA.

Challenges faced by the sector, which affect opportunities for effective regional trade:

- High costs of transport
- High costs of energy necessary for irrigation; hence, need to invest in alternative energy facilities
- Failure for exporters to meet sanitary and phytosanitary requirements on export markets
- Storage and cold chain facilities and structures
- Underdeveloped infrastructure
- Existence of non-tariff barriers (informal check points), which slows down cross border clearance processes
- Lack of official data on horticulture production and trade in the region due to unclear monitoring strategies.

4.3 Panel Session: Improve regional (and international) market linkages

Opportunities and challenges of regional trade in horticultural products; how entrepreneurial farmers can benefit from opportunities.

Panellists: Mrs. Josephine Makondo (Chamber of Commerce Zambia) | Mr. Kelvin Remen (TAHA) | Mr. Prosper Nkurunziza (RHIO). Facilitator Dr. Livingstone Byamungu

Panellists mentioned a series of opportunities and challenges for regional trade, summarised here:

**Challenges:**

- Maintain consistency in quality and quantity of production capacities to sustain the markets.
- Official information and data regarding horticulture are not easily available.
- Simple conservation techniques are needed for horticulture products.
- Limited land allocated towards horticulture production, as priority is given to other value chains.
- Support services and inputs are needed: farming techniques, fertiliser, technology transfer, etc.
- Low Marketing capacities, poor packaging, inadequate postharvest handling, limited capacity in value addition, absence of facilities for cold room storage.
- Existence of non-tariff barriers (NTB), e.g. manual clearance that slows down cross border trade.

**Opportunities:**

- Cooperation existing between countries in EAC enhances food security measures.
- Growing regional integration expands the market base for Horticulture products: facilitation of cross border trade, easy movement of trade products across borders, waiver of a certificate of origin within the EAC partnership.
- Reduced NTBs, improved procedures, fewer road blocks or check points.
- Developed ICT infrastructure to facilitate entrepreneurial farmers and traders to facilitate cross border trade.

**Urgent steps to reduce obstacles farmers face in accessing regional markets in horticulture:**

During the discussion, the panellists formulated the following recommendations:

1. Harmonisation in regulatory functions of countries in the region (EAC or COMESA members) makes it easier to do business; streamlining operations of regulatory authorities.
2. Governments need to reduce trade tariffs, and limit the non-tariff barriers to ease the movement of products across borders.
3. Tax exemptions on agricultural inputs that support the horticultural export business e.g. packaging material, improved production equipment.
4. Stable policies on export bans.
5. Higher investment in road and railway infrastructure to facilitate easy flow of trade cross country.
6. Availability and access to official and consistent data on fresh produce trade in the region.
7. Streamlined flow of market information to various traders of commodities in the region.
8. Apply appropriate conservation techniques for horticulture products, and make sure cold chain facilities are established at collection centres and at the borders.
9. More training for customs people is needed, to enhance their efficiency at border clearance.
10. Access to information about the requirements at the border is important. Online information and online procedures for cross-border trade would save time traders spent at the borders.
11. Increase production at the farms, and improve quality on horticulture products to meet international market (phytosanitary) standards.
12. Continued participation in trade on the international market, as this helps to facilitate improvements in the standards and the strengthening of the horticultural sector.

**Conclusions**

Sector champions are critical in the sector. Their success has a multiplier effect. In addition, there is a need for joint advocacy on the reduction of non-tariff barriers as a major hindrance to regional trade, while facilitating the establishment of cold rooms, the investment in road transport, and tax exemptions on horticultural inputs. Active involvement of private sector players in this advocacy is crucial. The development of an ICT infrastructure is also very important to facilitate cross border trade. There needs to be a flow of official and up-to-date data on horticulture production and trade in the region with clear monitoring strategies, as well as a streamlined flow of market information to various traders and producers across borders.
5 Horticultural Production Innovations

Breakout session facilitated by SNV - Rik Van Keulen and Anja de Feijter

Demand Driven vegetable breeding for Africa

Adrian Roelofs – RijkZwaan, Tanzania

RijkZwaan works with different climate zones to breed seeds that are resistant to pests and have a longer shelf life. The company aims at providing the best for the farmers, by improving plant types and providing variety for the local market. This contributes to increased production needed to feed a growing African population. They encourage farmers by ensuring production of quality seeds each year for uniformity and germinations of standards.

Importance of nursery raising in vegetable productions

Anja De Feijter – SNV, Uganda

Nursery farming comes with more advantages compared to disadvantages. Some of the advantages are: easy weed control; reduced field management; convenience to look at baby seedlings; increased yields.

Some of the factors to consider when choosing locations for seedbeds are: good locations; access to a nearby water and less polluted water source, which is wet but not continually wet; soil types.

The African Greenhouse

Anne Elings – Wageningen University and Research Centre (WUR), Netherlands

Use green houses for environmental sustainability, economic sustainability and for a better crop yields. One needs to choose a crop that is acceptable in the market, but it is also recommended to try other new varieties at one corner of your green house.

Safe solutions for increased crop health, resilience and production

Patrick Koome – Koppert Biological Systems, Netherlands

Soil borne diseases result from a reduction of the biodiversity of soil micro-organisms. Koppert helps farmers avoid chemical pesticides for farming, and encourages farmers to try alternative options.

Supply Clean and Healthy Produce to Consumers

Therese Karitanyi – Agropy, Rwanda

Pesticides residues causes rejections at EU or Asian ports. A locally produced solution is pyrethrum farming: pesticides production for local markets. Pyrethrum is a contact insecticide with a broad spectrum of activity against pests, certified for use in organic farming. Africa has produced pyrethrum...
for long but it is never used in local farms, but exported to the international market. “Let us partner to make the local products fit the local market by selling the best to our own. “

Discussion

After these presentations, the room actively participated in questions and answers and discussions, and realised “within ourselves, we could find some solutions for our local problems”.

Demand driven vegetable breeding in Africa: in an African set-up farmers are used to reusing seeds; once they harvest, they keep it for the next planting season instead of getting a newer variety. It is important to get quality seeds each year for uniformity and germination of standards.

Nursery raising in vegetable production: some of the best and commonly used materials for seedbeds are heat boxes or open fields. Is there a specific temperature that is needed for these seeds to germinate? Let us have optimal temperatures for the germination process to be successful. Open fields are possible too but there are chances that the open field could be the beginning of infections from other open fields.

African Green Houses: The owner of a farm makes the final decision on the type and size of greenhouses they need. Preferably, this decision is based on access to the information and knowledge needed.

At the end of the session, specific discussion statements led to lively debate in the room, and to the following conclusions (not necessarily supported by all participants in the room):

1. It is possible for Africa to start using hybrid seeds in their farms. It might take longer than 10 years for East African farmers to fully embrace. Farmers need training on how to cultivate hybrid seeds. These seeds are resistant to some plant diseases.
2. Green houses have consistency. However with the African set up, we are not ready for this alternative but can use less harmful bio products for the soil.
3. Integrated Pest Management (IPM) is not too complicated for the smallholder farmers.

Quote by participant:

“What I take home today is the nature of expert information I have heard,” said a participant from Uganda. He further said that the information about horticulture has boosted confidence in him to try out new farming practices.
6 Product development in Horticulture

Breakout session facilitated by AgriProFocus Zambia - Claire van der Kleij

Rodney Miselo - Ronipam, Zambia

Value addition involves transformation of raw produce for economic gain which is driven by consumer need for convenience on the product usage. Value addition brings uniqueness in products leading to a premium and stable price. Challenges in value addition include inefficient harvesting and poor storage of produce. Improved infrastructure, processing of a variety of crops and integrating barcoding in packaging can improve value addition and processing.

Marie Jeanne Kahindo - GRADEM, DR Congo

Preservation of horticulture produce such as pineapple can be done by locally available products such as lemon juice and bicarbonate soda. Through such innovative methods, post-harvest losses are reduced, the cost and the use of artificial preservatives are reduced ensuring a chemical free or low product. Through such methods, employment is created leading to an improved living standard for farmers.

Steven Trijsburg - BoPlnc, Netherlands

Post-harvest losses are significant in most African countries, which includes the loss of volume of produce as well as the nutritional loss. 37% of losses occur along the value chain due to poor storage infrastructure in the farms and markets, lack of cold storage facilities, packing and repackaging of the tomatoes. Small scale solutions such as proper storage that control the temperature of the tomatoes, use of zero emitting cold chamber (made of local available materials) that cools the vegetable, use of plastic crates to avoid packing and repackaging of tomatoes through the value chain, drying (solar drying) and pulping of tomatoes and lastly providing practical training to farmers.

Maxwell Mumba - AgBIT, Zambia

Packaging gives identity to products, provides information of the product and the company, product uses and storage which provides competitiveness of the product. Moisture losses are minimized as well as preserving colours in vegetables. Packaging can be as simple as wrapping, bottling or boxing.

Discussion

Solutions on how to reduce post-harvest losses was the main point of discussion. Feedback on innovative preservation method was provided to enhance the methods. As much as the use of innovative method can be effective to kick-start the processing of local horticulture products, cheap alternative machine were highly encouraged other than the use of hands.

Conclusions

1. It is important to create product awareness, especially on the nutritional value, to create markets and demand for certain products. E.g. groundnuts for Rwanda.
2. Reducing post-harvest losses can be done using simple solutions, such as plastic crates.

Conference Report ‘Promoting Innovation & Trade in Horticulture’
3. Farmers and processors can use packaging materials that are economical and that fit to their situations.
4. Quality checks of farm produce are essential to obtain high value markets such as hotels and supermarkets.
5. Use of alternative packaging materials in countries where the use of plastic has been banned.
7 Market access and efficiencies

Breakout session facilitated by AgriProFocus Uganda - Lucy Asiimwe Twinamasiko

Peter Businda – VECO

1. There are many farmer aggregation models available, the choice for the right model in a particular context depends on what is locally acceptable and also what interests the investor.

2. Farmer inclusiveness into the growing demand for horticulture products can be improved through access to market-oriented capacity building and agribusiness support services.

3. Sustainable farmer participation and access to modern food markets is determined by: consistency in supply, regular quality control and adequate logistics, two-way information sharing and good communication.

Kelvin Remen – Tanzania Horticultural Association (TAHA), Tanzania

1. Support organisations play a crucial role as arbitrators on improving farm-firm relations e.g. the case of TAHA in facilitating contract farming.

2. Governments should play a pro-active role on improving the business environment for both firms and farmers as well as put in place appropriate and accessible infrastructure for agribusiness.

3. Horticultural farmers should be empowered to understand and deliver in line with market dynamics e.g. by planning their production cycles to match with the demand cycles within the food supply chain.

Desta Sileshi – Consultancy agency involved in development Kigali Wholesale market, Rwanda

1. The demand (market size) of horticultural produce can be increased by improving the supply side infrastructure. E.g. in the case of Rwanda, it is through investing in modern wholesale fresh fruits and vegetables market.

2. Readily available and easily accessible market information will empower farmers to have a business-minded outlook on horticulture farming.

3. Regular farm-firm exchanges on market forces can promote sustained trust between farmers and firms.

Lisette van Benthum – AgriProFocus and Ted Schrader – WUR, Netherlands

The 2-2 Trade (‘it takes two to trade’) tool facilitates:

1. Understanding the farm-firm relations
2. Evaluating the farm-firm relations
3. Improving the farm-firm relations

As a result, it gives practical opportunities for realistic and fruitful discussions as well as practical solutions between the farmers and the firm.
Effective farmer capacity building requires firstly understanding how and why farmers behave the way they do. Sustainable impact requires diverse entry points to be established for horticulture value chain development initiatives i.e. apart from horticultural farmers, enterprises along the supply chain should also be empowered for sustainable impact.

An improved policy and trade context should consider two things: designing smart market-driven subsidies; and putting policy into practice i.e. ensuring policy reliability and implementation.

Conclusions

1) For development partners: Enterprises (firms) and farmers should both be empowered to develop their technical and business management capacities for sustainable market access opportunities unlike the current limited focus on empowering farmers to supply to modern markets.

2) For horticulture value chain actors: There should be joint action, exchange and learning especially on capacity building initiatives and market information sharing at a regional level so as to promote sustainable development through effective and efficient regional trade initiatives.

3) For the government: Policy practice should be promoted as well as the availability of proper support infrastructure for the well-functioning of horticulture farming and businesses.

Quote by participants:

“This conference was amazing and gave me another mind that horticulture is the best way of growing our country. So, I am going to implement what I’ve learnt here.”

“I am going to learn from innovations I catch in this conference and practice it in my country.”
8 Horticultural Production Innovations

Breakout session facilitated by Mr. Charles Murekezi (MINAGRI) and Mr. Jan Willem Eggink (AgriProFocus)

Women’s Leadership in Horticultural Planting Material Production: New Roles and Technologies

Mr. Olivier Habimana - Oxfam, Rwanda

Women’s role in horticulture is not recognized and there are challenges in horticulture production such as lack of planting material, land, improved technologies and finance. Oxfam aims to improve women’s leadership in horticulture through the use of improved technologies such as planting material. However, the challenges of these planting materials are; lack of good quality materials, shortage of land and limited skills in planting material production. The following solutions have been developed by OXFAM:

Pineapple – Oxfam and its partners have trained women in macro propagation which results in 1 crown producing 16 fruits as opposed to 1 crown producing 1 fruit. According to the speaker, the initiative is easy to do, it produces a fair revenue and is cost effective. However, there are still challenges of dry spells in the eastern and southern region, as well as market price fluctuations.

Passion fruit – Oxfam and its partners also train women in passion fruit grafting. The purple passion fruit variety is grafted on the yellow passion fruit variety that is resistant to pests and diseases. However, with this technology, there are still challenges of limited access to yellow seed and practical skills needed for grafting.

Pollination in Horticulture Crops: its practices and farmer benefits

Mr. Kelvin Odoobo - East Africa Hive Group, Rwanda

Most pastures are pollinated by bees. Honey bees enhance yields up to 79% and 1,500 species benefit from pollination. Horticulture crops that require bee pollination include; oranges, apples, cotton, soybeans and watermelon, among others. In coffee in particular, studies have shown that bee pollination enhances the coffee yields, taste and aroma. However, the bee colonies are declining and this can be attributed to; misuse of crop protection synthetic agro-chemicals, global warming and parasites.

The Hive group aims to promote bee keeping for horticulture crops and honey production. They promote modern farming methods that are favourable for women, they provide equipment, train farmers on how to use it and provide a guaranteed market for farmers.
Capacity Building for all Rwandan farmers/ Successful Model for Extension Services

Dr. Telesphore Ndabamenye - Rwanda Agricultural Board, Rwanda

“Twigire Muhinzi” (Farmer Field School) approach is an integrated model used to improve incomes and food security at village level. Farmers are aggregated in an inclusive way. The Rwandan Agricultural Board trains “Farm Facilitators” who then act as extension workers training “Farm Promoters” in best management practices using demo plots. These Farm promoters use the knowledge at their own plots and organise farmer visits. The farm visitors take keen interest and also use these best practices on their farms, also resulting in empowerment at local level.

The model monitors indicators such as yields and crop productivity. It has resulted in generating income and savings for farmers. It is a voluntary based program and the Rwandan Agricultural Board wishes to have it at a cooperative level and provide incentive based payment systems, for it to be sustainable.

<table>
<thead>
<tr>
<th>Take-home messages by participants:</th>
</tr>
</thead>
<tbody>
<tr>
<td>“Prepare implementation plan from the lessons learnt and use the network obtained to boost my investment.”</td>
</tr>
<tr>
<td>“Promote horticulture crops off-season using greenhouse technologies.”</td>
</tr>
<tr>
<td>“Promote high quality seed production through linkages with international seed companies producing horticulture seeds.”</td>
</tr>
</tbody>
</table>
9 Food safety

_Breakout session facilitated by ADECOR - Alphonse Karabaranga_

_Claudius Kurtna - Agri-Tech, Kenya_

Agri-Tech has developed a traceability tool for produce which enables the efficiency of conducting business. It uses ICT and starts all the way from procurement of planting material up to consumption of the produce, recording farmers’ crop production activities in different stages, the inputs used, and the expected vs actual data. It produces a database of producers who are profiled in detail including their GPS location. This links value chain actors through one platform, and generates relevant reports including business information in terms of acreage of land under use or not, quantities being harvested, etc. It includes farmers’ real time information in an expert database, which allows for real-time inquiries and on spot response by relevant experts; this enhances the know-how of farmers.

The tool is also useful to enhance food safety as information (type of seed used, inputs, soil, planting methods etc.) is gathered on the production right from planting by the agronomist on a mobile gadget, and tracked up to harvest and market. This food safety tool needs regulated and organised environment in order to achieve the desired results. It may be used in all value chains.

_Mbabazi Antoinette - Rwanda Standard Board_

Food safety interventions in Rwanda include a hazard analysis critical control point (HACCP) management system in which food safety issues are addressed; food product certification (product certification requirements etc.); horticulture standards (code of practice, fresh fruits standards); training and testing raw materials; research; and a few more areas such as capacity building to adhere to the HACCP standards.

Challenges are to have competent personnel to translate the standard requirements into practical actions, to have the appropriate technology equipment. Quality control at farms and during post-harvest handling also requires particular attention. Therefore RSB thinks financial investment and support should be oriented towards technological and managerial skills, with proper coaching and the right infrastructure.

_Venuste Muhamyankaka –ADECOR_

It is important to carefully monitor and influence the parameters affecting the safety of food. As a consumers’ organisation ADECOR is appreciative of the existence of food laws and regulations to protect consumers; and as an organisation, they are in an advisory position to develop the new food safety law in Rwanda. It is very important to strengthen the implementation of these laws.

Discussion and conclusions

- Regulations and monitoring are needed for the entire value chain to ensure food safety. This needs to encompass agro-inputs used (including seeds), plant production, as well as post-harvest handling.
- Food safety at regional level: EAC participation in developing regional horticulture trade standards and adopted at national level. Ongoing peer assessment to check procedures on...
how standards are developed and assessed. Research and statistics on monitoring health threats caused from eating raw vegetables which have not met food safety standards.

- Traceability of products in particular value chains is very effective, efficient and reliable with a well-established ICT system operating in an organised and well-regulated environment. This has great impact on up to availability of producer information, value chains engaged and performance in terms of meeting food safety standards etc.

- Regulation and monitoring on Food safety management systems are mandatory in providing consumer protection and ensure all food is protected right from the production process.
10  Finance and insurance in horticulture

Breakout session facilitated by AgriProFocus - Lisette van Benthum

Maarten Suzan - Financial Access East Africa, Uganda

The mission of the company is how to have farmers and banks understand each other by bridging the gap and reducing mismatch between farmers and banks. Currently operational in Kenya and Uganda and expected in Tanzania and Rwanda next year. Financial Access provides bank support to develop products, risk mitigation, and workflow. Systemic risk is what shies away interest of bank (climate, price fluctuations); firm level risk gap, operational cost gap. Late payment is a huge problem for SMEs to grow. Value chain financing tries to solve this problem by achieving early payment. FACTS a new company will provide short term credit through value chain financing first quarter

Alexis Bizimana - Kenya Commercial Bank, Kenya

KCB provides value chain financing in Kenya and presence in the region. Value chain financing is not only the task of the bank. Many stakeholders along the value chain are involved to ensure loan is successful. Also the bank works with technical assistance providers to do quality assessments since this is not part of their expertise. Good policies and private ownership of land are required to ensure agri-finance is successful as well. There are still many risks involved in agri-finance due to low production, quality constraints, side selling, and lack financial management of lender amongst others. The bank has learned however that the bank needs to tailor make products to the farmer and also a bank requires qualified staff that understand the agriculture sector which has unique characters in comparison to other sectors.

Munyaneza Jackson - Urwego Opportunity Bank, Rwanda

Urwego provides financing in horticulture in many varieties of vegetables and fruits. The bank provides inputs, labour, post-harvest, equipment and asset financing. Thy explained their application process and explained the importance of their qualified staff with a specific Agri Finance Unit. Still the banks faces challenges providing this loans including the perishable nature of horticulture, price volatility amongst others.

Discussion topics

- Input finance is risky and borrowing is expensive. Focus needs to be on saving mobilisation in rural areas. This will help to mitigate the risk and borrow less and generate more savings to make yourself less dependent on the bank
- Cold chain supply is challenging for banks to finance (capital expenditure) and currently no solution for this. This is been taken up in dialogue with stakeholders in different fora
- The risks are shared between many stakeholders, not only the bank who provides the financing. The partnerships support to promote banks and provide them with knowledge on how to go into the sector.
- KCB provided individual and group loans. However, they receive many applications for very small loans from farmers so then it would be more efficient to apply as a cooperative/group.
- Interest rates have a floor rates, which is the rate the government borrows at. But banks have a limited influence on determining interest rates.
- If there is a guaranteed market, processors are able to receive post-harvest loans to cater for the unique nature of the agriculture sector.
- There was an observation that the return on investment for some crops are very low and with the interest rates for loans, it would not be profitable to get a loan.
- There is also a role for government play a role to facilitate this environment and ensure that the models that are being introduced are sustainable.

Conclusions

1. Banks require support from stakeholders to enter into agricultural financing since they are unknown to the sector and require knowledge from experts in the sector. Partnerships are key.
2. There is a gap in understanding between farmers and banks. There is need to support banks to develop tailor made products for agriculture, of which value chain financing is a good alternative.
3. The banks still see agriculture as a risky sector but they also see the sector as a highly strategic decision that will be highly profitable be in the long term but currently not in the short term.
11 Food and nutrition security

*Breakout session facilitated by Food & Business Knowledge Platform / AgriProFocus – Nicole Metz*

*Botany Hang’ombe - Profit+ of Zambia (programme of USAID Zambia)*

Botany spoke about the CAD (Community Agro-Dealer) model, which is a rigorous business membership program. This program assists food security through Community Agro-Dealers.

Farmers are ready to become rural entrepreneurs. They should be trained and linked to a profitable market to get income and should be supported with the ‘revolution’ of agricultural technology. CAD members work closely with the Government to assist farmers.

Profit+ have not done much in nutrition, but this conference session is a learning opportunities for them.

*Nicole Metz - Food & Business Knowledge Platform, Netherlands*

Nicole presented the results of the study done by LEI/Wageningen University and the FB&KP: “How does the fruit and vegetable sector contribute to food and nutrition security?”

The findings focused on different pillars of the horticultural sector as:

1. **Availability of vegetable and fruit:**
   - There has been significant production increase in the past two decades. Several interventions are oriented towards increasing horticultural production.
   - Getting incomes from land cultivated: having an income is an important determinant that influences consumers’ access to fruits and vegetables. What quantity of fruit and vegetable are available on the market? This is an opportunity for farmers to increase their incomes.

2. **Food access:** Fruit and vegetable generate more income for farmers compared to traditional crops. If you have income, you can buy food and other needs on the market. Some questions asked are: How many farmers produce beans and sell them to the markets? How much fruits and vegetable are processed for the market?

   This has been tested in Ethiopia and Kenya and showed that it is a good opportunity to create jobs, especially for women working in horticultural sector.

3. **Utilisation:** Fruit and vegetable are an important component of a healthy diet and the consumption can help prevent a wide range of diseases. So, there is a poor utilisation of fruit and vegetable in rural areas within some African countries, where women preferred selling them to buy other type of food than eating them.

4. **Stability:** it is an important pillar of food security. To make it sustainable, we need appropriated inputs and technology.
Discussion and conclusions

Regarding impact on nutrition:

- Fruit and vegetable consumption patterns are highly influenced by cultural factors and people’s mind set. It depends for example on the mind set of people whether people sell vegetables instead of consuming them; on the culture of people whether they leave the consumption of fruits and vegetable to the children.
- Cooking habits also affect the nutritional value of the vegetables consumed (e.g. the practice of cooking green leafy vegetables too long);
- Sensitization of the population on the importance of consuming fruits and vegetables by including its benefits into school curriculums and display the info in public health facilities;
- Employing youth in horticulture to produce more fruits and vegetable;
- Training women on how to cook vegetables.

Other observations:

- It is hard to find accurate data on the levels of consuming fruits and vegetables;
- Knowledge sharing on different platforms is needed;
- Inclusion of the government can help to improve the intake of fruits and vegetables

Inclusiveness:

- Open market should be modernised to serve more people because supermarkets cannot have fruit and vegetable in quantity to respond to the needs of consumers;
- Bring women and children to become champions in consuming fruit and vegetable. They should be also clustered.
- Influencing young generations to integrate the horticulture sector.
12 Business Innovation Competition

Lucy Asiimwe, AgriProFocus Uganda: “I was really inspired by the 10 innovations presented at the pitching forum. The innovations did show how much potential and opportunity there is in the horticultural sector. The forum was very inspiring to many. Thanks to the judges for the work they have done. “

Overview

AgriProFocus networks; DR Congo, Kenya, Rwanda, Tanzania, Uganda and Zambia organised Business Innovation Competitions in their respective countries where top 3 winners were selected in each of these countries and were sponsored to attend this event. These winners faced off in a final show during the AgriProFocus Regional Event where the top winners were awarded. A total of 14 innovators participated in the competition, see Annex 2 for list of participants and judges.

Objectives of the competition

1. To showcase innovations in horticulture existing within the region.
2. To select and award the overall winners of the business innovation competition from 14 cases drawn from 5 countries
3. Share best practices in running and managing horticultural businesses
4. Audience and participating ‘BIC winners’ gather ideas to improve their own practice.

Approach and methodology

The competition was widely promoted in the different AgriProFocus country networks which attracted interesting innovations in horticulture. The innovators presented cases in horticulture drawn from categories of productivity, market access, access to finance, regional trade and social impact (gender/youth environmental aspects). Each participant was given 5 minutes to present his/her...
innovation to a panel of independent judges (See Annex 2) selected by AgriProFocus. The judges were given 5 minutes to question each innovator. The public also participated in the nomination by voting their favourite innovation through the AgriProFocus online Platform which contributed 20% to the total score. Public voting which was done after each pitch session produced an additional category of winner of “Public Voting Best Innovation”.

Results:

The results of the competition, the winning companies and the respective prizes were as follows:

<table>
<thead>
<tr>
<th>Category</th>
<th>Name</th>
<th>Country</th>
<th>Prize</th>
</tr>
</thead>
<tbody>
<tr>
<td>Winner</td>
<td>Afribanana Products Ltd</td>
<td>Uganda</td>
<td>$2,000</td>
</tr>
<tr>
<td>1st runner up</td>
<td>KoFAr Ltd</td>
<td>Kenya</td>
<td>$1,500</td>
</tr>
<tr>
<td>2nd runner up</td>
<td>Maisco Ltd</td>
<td>Rwanda</td>
<td>$1,000</td>
</tr>
<tr>
<td>Public Vote Winner</td>
<td>Gashora Gold</td>
<td>Rwanda</td>
<td></td>
</tr>
<tr>
<td>Best new idea</td>
<td>JeunA</td>
<td>DR Congo</td>
<td>Technical Support from AgriProFocus</td>
</tr>
</tbody>
</table>

The innovators also participated in the exhibition which took place at PSF grounds. To make this possible, each innovator was accompanied by a colleague from their work place who stayed at the exhibition throughout the event period.

The winner of the competition together with the judges
13  Recommendations for follow-up

During the closing session of the conference, participants were invited to formulate one priority follow up action or recommendation on a small note. The result of this inventory is summarized below, and is based on in total 98 contributions. Please be aware that recommendations below should not be seen as a consensus position reached by the conference⁴, they are primarily meant as a source of ideas and inspiration for stakeholders when they plan follow-up.

General comments

“I think this is a good initiative but we have to continue and extend business relationships,” writes one participant, “in order to achieve changes in the horticultural sector and for the peasant population”. “Farmers should be linked to national and international markets.” Ideas are needed to help small farmers to achieve great things, and to make sure the private sector takes the lead to overcome challenges. It is important to find the right stakeholders who can support the farmers in horticulture.

“Thank you for the great work put in both the network and conference here.”

Recommendations for stakeholders in the horticultural sector⁵:

- Stakeholders should be aware of the importance of mass awareness on the value of horticultural crops for food and nutrition security of individuals and communities.
- Inter-professional organizations should be linked pro-actively. An umbrella of horticulture farmers at regional level (EAC/ ECOWAS/ COMESA) is considered necessary by some participants, who expect such organization to speak with one voice on behalf of farmers/business players to policymakers.
- Promote women and youth empowerment in horticultural value chains, through specific facilities for inclusion with appropriate follow up. Facilitate youth to start a business in horticulture.
- Access to data: several participants recommend to improve regional market information, establishing a database on horticultural products from the member countries, together with existing data providers like TAHA, RHIO and AgriProFocus, and to improve on the frequency and dissemination. Show the demand and supply of specific products.
- Investment in horticulture farmer clusters for high productivity, linkage to inputs, finance and markets.
- Carrying out regular inspections for consumer interest.
- Improvement of agro-processing machines, Packaging, standards and brands of horticultural crops.
- Mushroom crop should be promoted like other vegetables.

Recommendations in the area of financing, investments⁶:

Many participants stressed the importance of access to finance for horticultural producers, as this would enable farmers to access equipment such as processing machines. They called for advocacy to

---

⁴ Recommendations should not be read as a consensus position reached during the conference, nor as a position of any of the organizing agencies or sponsors. Please use these as source of ideas and inspiration and for further knowledge sharing.

⁵ 17 comments in total referred to the horticultural sector in general, often to several stakeholders therein.

⁶ 14 recommendations referred to financing and investment
banks and (micro-) financial institutions, to develop specific financial products for farmers, to show flexibility for small farmers, to use less complex loan procedures, and to lower interest rates (less than 10%). Some participants mention a role for governments too: these could provide subsidies to keep interest rates low, or could partner with farmer organizations and donors to create an agricultural bank serving (especially small) farmers. A specific suggestion was that small loans could be paid after harvesting of fruits and vegetables, to fight youth unemployment.

Further, several participants called for investment in the agricultural sector in general; some focused on the importance of investing in projects on food safety in partnership with standards and certification bodies (e.g. cold storage availability). Finally, the need for more long-term finance as well as for a particular export fund facility was highlighted.

**Suggestions for AgriProFocus and other development facilitators**:  
- AgriProFocus should increase this multi-stakeholder horticulture network both at national and at regional level: holding national and regional events to strengthen innovation; and provide a specific page within its website for a vigorous and continuous discussion on horticulture innovations. It could interact with youth online networks for that purpose (e.g. YEAN Rwanda, SMART Agriculture Initiatives, Tanganyika Farmers Cooperatives).
- Further support the innovators to develop their business pitches, their linkages with investors; also with technical capacity building or research. More in general, development facilitators could follow up with horticulture cooperatives and associations in their start-up innovations, supporting what they have already in action, and assisting them in finding new solutions for the challenges they encounter.
- Development facilitators can analyse both informal and formal vegetable seed systems in Rwanda, and bring stakeholders together to discuss options for sustainable network formation around availability and access to quality seeds.
- As a network identity, AgriProFocus could match potential donors, venture capital/impact investors, or financial institutions with emerging local businesses in horticulture.
- AgriProFocus should include policymakers and other key stakeholders in their programs, and facilitate members to lobby and educate for fair policies which support horticulture development. “AgriProFocus should make advocacy to other companies and markets because we are young and need to get known and get another step.” (see also section with policy advocacy ideas)
- Development facilitators: capacity building for mushroom production and post-harvest handling.

**Training, knowledge sharing, capacity strengthening**:  
The recommendations called for a range of actions by various actors to further strengthen capacities of different target groups within the sector. Participants mentioned several knowledge sharing methodologies: trainings; study tours; experience sharing events. It was also recommended to work with the current agriculture extension system (TWIGIRE MUHINZI) for increased number of small scale farmer producing horticultural crops.

- “I recommend all the partners to share experiences for the regional development”
- The BIC winners would need technical assistance for the improvement of their innovations in order to achieve their objectives.

---

7 17 recommendations referred to development facilitators’ role in follow-up  
8 9 recommendations were formulated in total in this area
- Training and advice on horticulture post-harvest handling and storage is needed, so that these crops meet required standards of exportation.
- Particularly in Rwanda: capacity building for mushroom farmers, jointly organized by relevant governmental bodies, AgriProFocus, PSF and NAEB.
- Fellowship for those participants who try to work with youth - the future horticulturists. Empowering young professionals in terms of capacity building, possibly professional internships, so that these young professionals can help farmers to increase the horticulture production.
- Research and development by higher learning institutions and research centres.

**Policy (advocacy) recommendations**

Many participants recommended the outcomes of this conference and the highlighted challenges should be shared with relevant policy makers in the countries in the region, also in the context of regional integration. Governments should be called to put effort to strengthen the horticultural sector within the agriculture sector. Amongst others, through policies that provide what is needed to improve horticultural production, including innovation, and with the necessary investment. Government institutions and donors should focus on the feedback they receive from sensitized and supported horticultural farmers and act as a long term partner. Some respondents called for the government to intervene in businesses of horticulture products: for some crops with low market value (for export) the government should intervene to enable the internal market (food security and nutrition). There was a call for investment in the construction of cold rooms; a suggestion to develop “a securing horticulture crop trade routes program in the region” for increased food availability; a call for regional lobby towards governments to harmonize horticulture trade. Some specific trade-related suggestions were made: help participants who have good products to register their company in any country; convince our state not to tax the importation of machines and packaging used by a farmer to transform and sell horticulture products. Further comments called for African governments to be as lean as possible, outsourcing activities to private sector; and for investigation of Southern Sudan’s membership of the East-African Community.

**Suggestions for future events**

- Suggestions about the participant group: engage more policymakers; and more youths (“it was encouraging to see many youths”) and horticultural students. Also involve the participants of the current conference in the next one, to share what we have done here. In the next horticulture event other players like buyers of horticulture products should be invited, and one could create trade partnerships with them during the event.
- Suggestions about the organization of sessions: make the breakout sessions more engaging, fostering people’s participation more.
- “Next time, participants should come up with action plans or way forward based on their firm to avoid questions like what next after the conference!”
- Increase the days of the conference.
# Annex 1 List of speakers

<table>
<thead>
<tr>
<th>Name</th>
<th>Company</th>
<th>Country</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adrian Roelofs</td>
<td>RijkZwaan Tanzania</td>
<td>Tanzania</td>
<td><a href="http://www.afrisem.com">www.afrisem.com</a></td>
</tr>
<tr>
<td>Alexis Bizimana</td>
<td>Kenya Commercial Bank</td>
<td>Kenya</td>
<td><a href="http://www.kcbbankgroup.com">www.kcbbankgroup.com</a></td>
</tr>
<tr>
<td>Anne Elings</td>
<td>Wageningen UR</td>
<td>Netherlands</td>
<td><a href="http://www.wageningenur.nl">www.wageningenur.nl</a></td>
</tr>
<tr>
<td>Anja de Feijter</td>
<td>SNV</td>
<td>Uganda</td>
<td><a href="http://www.snvworld.org">www.snvworld.org</a></td>
</tr>
<tr>
<td>Antoinette Mbabazi</td>
<td>Rwanda Standard Board</td>
<td>Rwanda</td>
<td><a href="http://www.rsb.gov.rw/">www.rsb.gov.rw/</a></td>
</tr>
<tr>
<td>Benjamin GASAMAGERA</td>
<td>PSF</td>
<td>Rwanda</td>
<td><a href="http://www.psf.org.rw">www.psf.org.rw</a></td>
</tr>
<tr>
<td>Botany Hang’ombe</td>
<td>Profit+</td>
<td>Zambia</td>
<td></td>
</tr>
<tr>
<td>Claudius Kurtna</td>
<td>AGRITECH</td>
<td>KENYA</td>
<td><a href="http://www.agrikenya.wordpress.com">www.agrikenya.wordpress.com</a></td>
</tr>
<tr>
<td>Desta Sleshi</td>
<td>Kigali Wholesale Market</td>
<td>Rwanda</td>
<td></td>
</tr>
<tr>
<td>Frédérique de Man</td>
<td>Embassy Kingdom of the Netherlands</td>
<td>Rwanda</td>
<td><a href="http://www.rwanda.nl">www.rwanda.nl</a> embassy.org</td>
</tr>
<tr>
<td>George William KAYONGA</td>
<td>NAEB</td>
<td>Rwanda</td>
<td><a href="http://www.naeb.gov.rw">www.naeb.gov.rw</a></td>
</tr>
<tr>
<td>Honorable Minister MUKESHIK MANA Gerardine</td>
<td>Ministry of Agriculture</td>
<td>Rwanda</td>
<td><a href="http://www.minagri.gov.rw">www.minagri.gov.rw</a></td>
</tr>
<tr>
<td>Jackson MUNYANEZA</td>
<td>Urwego Opportunity Bank</td>
<td>Rwanda</td>
<td><a href="http://www.opportunity.net/rwanda">www.opportunity.net/rwanda</a></td>
</tr>
<tr>
<td>Josephine Makondo</td>
<td>Chamber of Commerce</td>
<td>Zambia</td>
<td><a href="http://www.zambiachamber.org">www.zambiachamber.org</a></td>
</tr>
<tr>
<td>Kelvin Odoobo</td>
<td>East Africa Hive Group</td>
<td>Rwanda</td>
<td><a href="http://www.thehivegp.com">www.thehivegp.com</a></td>
</tr>
<tr>
<td>Kelvin Remen</td>
<td>TAHAA</td>
<td>Tanzania</td>
<td><a href="http://www.taha.or.tz">www.taha.or.tz</a></td>
</tr>
<tr>
<td>Lisette van Benthum</td>
<td>AgriProFocus</td>
<td>Netherlands</td>
<td><a href="http://www.agriprofocus.com">www.agriprofocus.com</a></td>
</tr>
<tr>
<td>Louis Butare</td>
<td>Rwanda Agricultural Board</td>
<td>Rwanda</td>
<td><a href="http://www.rab.gov.rw">www.rab.gov.rw</a></td>
</tr>
<tr>
<td>Marie Jeanne Kahindo</td>
<td>GRADEM</td>
<td>DRC</td>
<td></td>
</tr>
<tr>
<td>Maxwell Mumba</td>
<td>AgBIT</td>
<td>Zambia</td>
<td><a href="http://www.agbit.co.zm">www.agbit.co.zm</a></td>
</tr>
<tr>
<td>Nicole Metz</td>
<td>Food&amp;Business Knowledge Platform</td>
<td>Netherlands</td>
<td><a href="http://www.knowledge4food.net">www.knowledge4food.net</a></td>
</tr>
<tr>
<td>Olivier Habimana</td>
<td>Oxfam</td>
<td>Rwanda</td>
<td><a href="http://www.oxfam.org">www.oxfam.org</a></td>
</tr>
<tr>
<td>Patrick Koome</td>
<td>Koppert Biological Systems</td>
<td>Netherlands</td>
<td><a href="http://www.koppert.com">www.koppert.com</a></td>
</tr>
<tr>
<td>Peter Businda</td>
<td>VECO East Africa</td>
<td>Rwanda</td>
<td><a href="http://www.eastafrica.veco-ngo.org">www.eastafrica.veco-ngo.org</a></td>
</tr>
<tr>
<td>Prosper Nkurunziza</td>
<td>RHIO</td>
<td>Rwanda</td>
<td></td>
</tr>
<tr>
<td>Rodney Miseko</td>
<td>Ronipam</td>
<td>Zambia</td>
<td><a href="http://www.ronipam.com">www.ronipam.com</a></td>
</tr>
<tr>
<td>Roel Snelder</td>
<td>AgriProFocus</td>
<td>Netherlands</td>
<td><a href="http://www.agriprofocus.com">www.agriprofocus.com</a></td>
</tr>
<tr>
<td>Steven Trijsburg</td>
<td>BoP Inc.</td>
<td>Netherlands</td>
<td><a href="http://www.bopinc.org">www.bopinc.org</a></td>
</tr>
<tr>
<td>Ted Schrader</td>
<td>Wageningen UR - CDI</td>
<td>Netherlands</td>
<td><a href="http://www.wageningen-ur.nl">www.wageningen-ur.nl</a></td>
</tr>
<tr>
<td>Therese S. Karitanyi</td>
<td>AgroPy Ltd.</td>
<td>Rwanda</td>
<td><a href="http://www.agropyltd.com">www.agropyltd.com</a></td>
</tr>
<tr>
<td>Venuste MUHAMYANKAKA</td>
<td>ADECOR</td>
<td>Rwanda</td>
<td><a href="http://www.adecor-rwanda.org">www.adecor-rwanda.org</a></td>
</tr>
</tbody>
</table>
# Annex 2 Business Innovation Competition

## Innovators

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Name of Company</th>
<th>Name of innovation</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Sandrine Mutezinka</td>
<td>Gashora gold</td>
<td>Peanut butter</td>
<td>Rwanda</td>
</tr>
<tr>
<td>2</td>
<td>Martin Simunchembu</td>
<td>Horticulture and Poultry outgrower</td>
<td>High value vegetable nursing</td>
<td>Zambia</td>
</tr>
<tr>
<td>3</td>
<td>David Chisulo</td>
<td>Zelo Foods Limited</td>
<td>Packaged pounded groundnuts</td>
<td>Zambia</td>
</tr>
<tr>
<td>4</td>
<td>Isabelle Uzamukunda</td>
<td>Agasaro Organic</td>
<td>Fruits biscuits and organic juices</td>
<td>Rwanda</td>
</tr>
<tr>
<td>5</td>
<td>Hadijah Ssekyondwa N Ssekyondwa N</td>
<td>EcoLife Foods Ltd</td>
<td>Eco-Cold Storage</td>
<td>Kenya</td>
</tr>
<tr>
<td>6</td>
<td>Francescah Munyi</td>
<td>KOFAr Ltd</td>
<td>Soil repair</td>
<td>Kenya</td>
</tr>
<tr>
<td>7</td>
<td>Hellen Acham</td>
<td>NECPA</td>
<td>Improving household incomes through Chilli processing</td>
<td>Uganda</td>
</tr>
<tr>
<td>8</td>
<td>Wambui Mweha</td>
<td>Kiambu Strawberry growers and processors association</td>
<td>Strawberries</td>
<td>Kenya</td>
</tr>
<tr>
<td>9</td>
<td>Marie Angelique</td>
<td>JeunA (Jeunesse Active)</td>
<td>Production of saccharomyces yeast using pineapple fruits</td>
<td>DR Congo</td>
</tr>
<tr>
<td>10</td>
<td>Sehewa Chilonga</td>
<td>Help Other People Emerge (HOPE)</td>
<td>Scaling up of innovative sustainable organic horticulture value chains</td>
<td>Tanzania</td>
</tr>
<tr>
<td>11</td>
<td>Elia Timothy</td>
<td>East African Fruits Farm</td>
<td>Fresh produce, storage and logistics</td>
<td>Tanzania</td>
</tr>
<tr>
<td>12</td>
<td>John Bosco Byamugisha</td>
<td>Afribanana products Ltd</td>
<td>Value added banana products</td>
<td>Uganda</td>
</tr>
<tr>
<td>13</td>
<td>Gahima Deo</td>
<td>MAISCO Ltd</td>
<td>Vegetable grafting</td>
<td>Rwanda</td>
</tr>
<tr>
<td>14</td>
<td>Rodney Miselo</td>
<td>Ronipam Enterprises Limited</td>
<td>Processing locally grown fruits and vegetables</td>
<td>Zambia</td>
</tr>
</tbody>
</table>

## Judges

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>David Kyeyune Sengozi</td>
<td>Uganda Country Coordinator for VECO East Africa</td>
<td>Uganda</td>
</tr>
<tr>
<td>Jane Kamau</td>
<td>Senior Advisor in the Kenya Market-led Horticulture Programme – SNV Kenya</td>
<td>Kenya</td>
</tr>
<tr>
<td>Staford Mwambola</td>
<td>Agricultural Specialist in World Vision leading Pamoja project</td>
<td>Tanzania</td>
</tr>
<tr>
<td>Patrick Birasa</td>
<td>Program Advisor for ICCO Terrafina</td>
<td>Rwanda</td>
</tr>
<tr>
<td>Teddie Muffels</td>
<td>Agricultural Counsellor at Netherlands Embassy in Kigali</td>
<td>Rwanda</td>
</tr>
<tr>
<td>Ernest UZARIBARA</td>
<td>Agribusiness Specialist, MINAGRI</td>
<td>Rwanda</td>
</tr>
</tbody>
</table>

Conference Report ‘Promoting Innovation & Trade in Horticulture’
## Annex 3 Conference Program

### DAY 1 – WEDNESDAY  NOV 25th, 2015

<table>
<thead>
<tr>
<th>Time</th>
<th>Event &amp; Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.00am - 5.00pm</td>
<td><strong>Exhibition</strong>&lt;br&gt;B2B Matchmaking Event at Expo Ground&lt;br&gt;Dutch Trade mission delegates and exhibitors meet&lt;br&gt;Organised by: *NABC, SPARK, Embassy of the Kingdom of the Netherlands, AgriProFocus&lt;br&gt;Networking cocktail for participants afterwards</td>
</tr>
<tr>
<td>12.00am – 5.00pm</td>
<td><strong>Conference</strong>&lt;br&gt;Conference Registration&lt;br&gt;Opening ceremony and Welcome&lt;br&gt;Acting Managing Director AgriProFocus – Mr. Roel Snelder&lt;br&gt;Chairman Private Sector Federation Rwanda (<em>PSF</em>) – Mr. Benjamin GASAMAGERA&lt;br&gt;Ambassador of the Kingdom of the Netherlands - Mrs. Frédérique de Man&lt;br&gt;CEO National Agriculture Export Development Board Rwanda (<em>NAEB</em>) – Amb. George William KAYONGA</td>
</tr>
<tr>
<td>9.45 - 10.00am</td>
<td><strong>Keynote</strong>&lt;br&gt;<strong>Honorable Minister MUKESHI MANA Gerardine</strong>&lt;br&gt;Ministry of Agriculture and Animal Resources Rwanda</td>
</tr>
<tr>
<td>10.10 – 10.45am</td>
<td><strong>Horticultural national and regional markets</strong>&lt;br&gt;Investment opportunities in Rwanda&lt;br&gt;Amb. George William KAYONGA (<em>NAEB</em>)</td>
</tr>
</tbody>
</table>
| 10.45 – 11.15am | **Tea break**
### Panel session: Improve regional (and international) market linkages

Opportunities & challenges of regional trade in horticultural products
- How entrepreneurial farmers can benefit from opportunities?

Panellists:
- Mrs. Josephine Makondo - **Chamber of Commerce, Zambia**
- Mr. Kelvin Remen - **Tanzania Horticultural Association (TAHA)**
- Mr. Prosper NKURUNZIZA - **Rwanda Horticulture Inter-Professional Organisation (RHIO)**

<table>
<thead>
<tr>
<th>11.15 – 12.45 am</th>
<th><strong>Networking Lunch</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Breakout Session 1:</strong></td>
<td><strong>Breakout Session 2:</strong></td>
</tr>
<tr>
<td>Business Innovation Competition</td>
<td>Horticultural production innovations</td>
</tr>
<tr>
<td><strong>Conferenceroom:</strong></td>
<td><strong>Breakout Session 3:</strong></td>
</tr>
<tr>
<td>‘Asian Fusion’ Restaurant</td>
<td>Product development in horticulture</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>12.45 – 14.45 pm</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Networking Lunch</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2.00 – 3.00 pm</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Innovations in Horticulture</strong></td>
</tr>
<tr>
<td>5 pitches by winners of the national <a href="#">business innovation competitions</a>, followed by preliminary jury response</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3.00 – 3.30 pm</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tea break</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3.30 – 4.30 pm</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Innovations in Horticulture</strong></td>
</tr>
<tr>
<td>4 pitches by winners of the national <a href="#">business innovation competitions</a>, followed by preliminary jury response</td>
</tr>
</tbody>
</table>

| | **Sustainable & smart horticultural production** |
| | **Innovative preservation methodologies using local products for horticulture** |
| | **Packaging Technologies** |
| | **Mr. Patrick Koome – Koppert Biological Systems bv - NL** |
| | **Mrs. Marie Jeanne KAHINDO – GRADEM – DR Congo** |
| | **Mr. Maxwell Mumba - AgBIT- Zambia** |
| | **Mr. Adrian Roelofs - RijkZwaan** |
| | **Ms. Anja de Feijter – SNV** |
| | **The African greenhouse** |
| | **Mr. Anne Elings – Wageningen UR** |
| | **Value addition – best practices** |
| | **Mr. Rodney Miselo - Ronipam - Zambia** |
| | **Opportunities for minimizing food losses – Tomato value chain** |
| | **Rwanda** |
| | **Mr. Steven Trijsburg - BoP Innovation Centre - NL** |
| | **Sustainable & smart horticultural production** |
| | **Innovative preservation methodologies using local products for horticulture** |
| | **Packaging Technologies** |
| | **Mr. Patrick Koome – Koppert Biological Systems bv - NL** |
| | **Ms. Therese S. KARITANYI – Agropy - Rwanda** |
| | **Mr. Rodney Miselo - Ronipam - Zambia** |
| | **Mr. Steven Trijsburg - BoP Innovation Centre - NL** |

---

Conference Report ‘Promoting Innovation & Trade in Horticulture’
### Feedback: Highlights of the day and what do we take home?

### Visit to Exhibition at Expo Grounds

All conference participants are invited for interaction with businesses, innovators, institutions and officials at the Expo Grounds. Transport to the Expo Grounds will be arranged.

### DAY 3 – FRIDAY  NOV 27th, 2015

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.30 - 9.00am</td>
<td>Recap Previous Day</td>
</tr>
<tr>
<td>9.00 – 10.00am</td>
<td>Breakout Session 4: Business Innovation Competition</td>
</tr>
<tr>
<td></td>
<td>Breakout Session 5: Market access and efficiencies</td>
</tr>
<tr>
<td></td>
<td>Breakout Session 6: Horticultural production innovations</td>
</tr>
<tr>
<td>Conference room</td>
<td>'Asian Fusion’ Restaurant</td>
</tr>
<tr>
<td></td>
<td>Innovations in Horticulture</td>
</tr>
<tr>
<td></td>
<td>Fruit and vegetable sourcing in Africa: responding to the consumer demand</td>
</tr>
<tr>
<td></td>
<td>Mr. Desta SILESHI - Kigali Wholesale market</td>
</tr>
<tr>
<td></td>
<td>Improved Farmer-Firm relations in horticulture</td>
</tr>
<tr>
<td></td>
<td>Mr. Kelvin Remen - Tanzania Horticultural Association (TAHA)</td>
</tr>
<tr>
<td></td>
<td>Mr. Peter Businda-VECO East Africa</td>
</tr>
<tr>
<td></td>
<td>Women’s Leadership in Horticultural Planting Material Production: New roles and Technologies</td>
</tr>
<tr>
<td></td>
<td>Mr. Olivier HABIMANA - OXFAM Rwanda</td>
</tr>
<tr>
<td></td>
<td>Pollination in Horticulture crops: practices and farmer benefits</td>
</tr>
<tr>
<td></td>
<td>Mr. Kelvin ODOOBO - Hive Group – Rwanda</td>
</tr>
<tr>
<td>10.00 – 10.30am</td>
<td>Tea break</td>
</tr>
<tr>
<td>Time</td>
<td>Session</td>
</tr>
<tr>
<td>--------------</td>
<td>-------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| 10.30am – 12.15pm | Innovations in Horticulture  
Interactive session, meeting with the winners of the national business innovation competitions |
| 12.30 – 1.30pm  | Networking Lunch                                                         |
| 1.30 – 3.00pm   | Breakout Session 7: Food Safety                                         |
|                | Breakout Session 8: Finance and insurance in horticulture               |
|                | Breakout Session 9: Food and Nutrition security                         |
|                | Conferenceroom                                                          |
|                | Ihema                                                                   |
|                | Lemigo 1                                                                 |
|                | ‘Asian Fusion’ Restaurant                                                |
| 3.00 – 3.30pm   | Tea break                                                               |
| 3.30 – 4.30pm   | Feedback: Highlights of the day and what do we take home?                |
| 4.30 – 5.00pm   | All participants will travel to Expo Grounds. Transport will be arranged. |

**It takes two to trade**

- Mr. Ted Schrader - Wageningen UR  
- Ms. Lisette van Benthum AgriProFocus  
and two partners from Rwanda

**Discussion panel: Opportunities and challenges to innovate family horticulture**  
With all speakers and audience

**Successful model for extension services** – Dr. Louis BUTARE - Rwanda Agricultural Board

- Discussion panel: improving Farmer-Firm relations in horticulture  
With speakers and audience

**Procedures to guarantee food safety & quality for regional and international markets**

- Mr. Claudius Kurtna - AgriTech Kenya  
- Ms. Antoinette MBABAZI - Rwanda Standard Board  
- Mr. Venuste MUYAMYANKAKA - ADECOR (Rwanda Consumers organisation).

**Financial products for horticulture**

- Mr. Maarten Suzan - Financial Access East Africa Ltd.  
- Mr. Alexis Bizimana - Kenya Commercial Bank  
- Mr. Munyaneza Jackson – Urwego Opportunity Bank

**How can the Fruits & Vegetables Sector contribute to Food and Nutrition Security?**

- Mr. Botany Hang’ombe & team - Profit+ - Zambia  
- Ms. Nicole Metz - Food & Business Knowledge Platform

**Conference Report ‘Promoting Innovation & Trade in Horticulture’**