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Agrologistics Workshop Benin and Nigeria

Summary of workshop results (project MAN16BJ01)

Workshop location: New World Campus, The Hague

Workshop date: 06 March 2017

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1 Introduction

In November 2015, Buck Consultants International presented a research report on agro-logistics in Benin and Nigeria. This research was commissioned by the Dutch Ministry of Foreign Affairs. The study concluded that due to a lack of efficient agro-logistics, post-harvest losses are high. As a result, RVO and the Ministry of Foreign Affairs wished to follow up on this study by exploring opportunities for the Dutch private sector in agro-logistics in Benin and Nigeria. In cooperation with the Netherlands-African Business Council (NABC), the Postharvest Network was commissioned to organize a workshop in the Netherlands for Dutch companies with an interest in agro-logistics in Benin and/or Nigeria. The objective of this workshop was to develop project ideas to improve agro-logistics practices in Benin and Nigeria with the focus on food value chains, using Dutch agro-logistics expertise and technology.

This workshop took place on 06 March 2017 in the New World Campus in The Hague. The results of this workshop are summarized in this document. The program of the workshop was as follows:

Time	Activity	Details
13:15 – 13:20	Word of welcome & agenda	Dirk 't Hooft, Postharvest Network
13:20 – 13:25	Context & purpose of the workshop	Anouk Baron, Ministry of Foreign Affairs Department of Sustainable Economic Development
13:25 – 14:15	Short introductions to Nigeria and Benin	Obinna Onowu, Embassy of Nigeria Robbert Blij, Consulate of Benin Errol van Groenewoud, Omnivent Bob Steetskamp, NAFTC
14:15 – 14:35	Opportunities in Agrologistics	Gerard Vos, Buck Consultants International
14:35 – 15:00	Discussion	Dirk 't Hooft, Postharvest Network
15:00 – 15:45	Collect project ideas	Working groups
15:45 – 16:15	Present project ideas	Working groups
16:15 – 16:30	Discussion	Dirk 't Hooft, Postharvest Network
16:30 – 16:45	Possibilities for governmental support	Anouk Baron, Marcel Vernooij, Ministry of Foreign Affairs, Department of Sustainable Economic Development Ivo Walsmit, RVO
16:45 – 16:50	Closure and next steps	Dirk 't Hooft, Postharvest Network



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2 Welcome and introduction

The program began with a word of welcome by Dirk 't Hooft, chairman of the Postharvest Network, followed by a brief explanation of the context and purpose of the workshop's activities by Anouk Baron from the Ministry of Foreign Affairs, Department of Sustainable Economic Development. The Dutch Ministry would like to cooperate to overcome the problem of crop post-harvest losses. Ms. Baron explained that food losses are indeed an economic loss, but also an opportunity if the issue can be addressed in a positive manner by, for example, creating local employment opportunities. The Dutch government was present to listen, learn, and facilitate the establishment of potential consortia for future projects. Ms. Baron also underlined that all parties present at the workshop have a common goal: to increase food security and prosperity around the world.

The workshop was divided into two parts. Firstly, a variety of guest speakers set the scene, and this was followed by four working groups, each of which tackled a different theme.

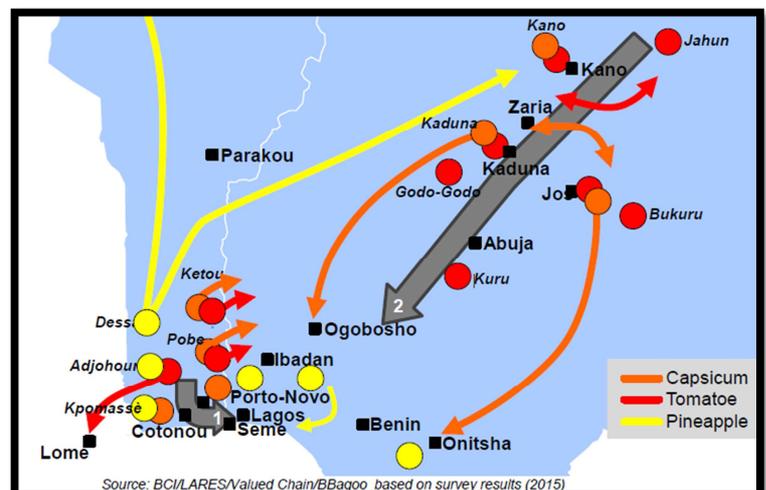
3 Setting the scene, short introductions – Nigeria and Benin

Obina Onowu, Embassy of Nigeria in the Netherlands

Mr. Onowu conveyed greetings from the Embassy and expressed his thanks to the different parties responsible for organizing the workshop. Nigeria has a population of 190 million people, of which the middle class comprises 23%. The economy of Nigeria is growing and the government is showing more commitment to agriculture. This is very important because agronomy can play a central role in supporting the Nigerian economy – the largest in Africa. However, a lot of gaps in the value chain still exist: from local farms, all the way through to the final product on our dining tables. Clearly, there is an opportunity here to build partnerships between Nigeria and the Dutch government and private sector. The Netherlands has the expertise and know-how to bring innovative solutions to the value chain. The political and economic climate is changing in Nigeria. The country's new president, Muhammadu Buhari, has the ambition to stimulate the economic diversity by enforcing the agricultural sector. Huge economic opportunities exist for foreign companies, but also challenges do still exist resulting from, among others, problematic infrastructure. The government is doing a lot in assisting companies that want to do business in Nigeria, f.e. a one-stop-shop for foreign investors. There are certainly still some issues, but in time, these will be resolved. Nigerians are a dynamic people and the government is more dedicated than ever. Mr. Onowu's message was clear: now is the time!

Robbert Blij, Consulate of Benin in the Netherlands

Benin is almost three times larger than the Netherlands with a population of close to 11 million people. Expectations are that the population will grow to around 20 million people in the coming 18 years. Only 40 countries in the world have a lower GDP than Benin, and there is no real upcoming class as there is in Nigeria. The population is growing faster than the economy, but average family size is expected to go down from 6 to between 3 and 4 children. Reports are very





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favorable for the new president, Mr. Patrice Talon. The new government is committed to promote better political and economic governance and has plans for massive political and institutional reforms to consolidate democracy, reduce poverty, and attract investments. For this reason, a 5-year, three pillar program was developed. Large investments are involved, with 39% of these coming from public partners and 61% from Public-Private Partnerships (PPPs). Benin has an important harbor, Cotonou, and has a strong link to Nigeria as a result (see map). Nigeria is an extremely important trade partner for Benin, but the infrastructure must be improved further. If we would stand here again in 5 years, you would see large improvements. The moment is now to start activities in Benin. Mr. Blij also mentioned the upcoming trade mission to Benin in May 2017, and expressed his hope for attendees to join the mission.

Errol van Groenewoud, Omnivent

Mr. Van Groenewoud elaborated on the storage solutions Omnivent can offer. Given his company's activities and experience in Kenya, Ghana, South Africa, and Nigeria, he emphasized how important it is to take local circumstances into account, and they see interesting opportunities arise throughout the continent. Omnivent's philosophy is based on product quality. The company can improve existing buildings or develop new facilities; they have their own R&D and can therefore transfer their knowledge and adapt it to the local situation. They do not just build new stores, they train locals based on the specific needs of the local supply chain.

Taking a closer look at the total value chain of fresh products, it was explained that storage is located in the middle of the supply chain. If we look at, for example, transportation, it is important to realize that when trucks are fully exposed to the sun, the product is damaged due to overheating; subsequently, when damaged goods arrive at a storage facility, it is not possible to cure them. When looking at agriculture, important factors are, among others, about using the best seed varieties and understanding which parameters ensure that the product grows under optimal conditions.

Omnivent scanned 53 countries in Africa to see where to start. Starting in Kenya, the first conclusion was that there is no connection between the farmer and the market. It is important to get the middle men out of the supply chain if they are not adding any value to the product and are only increasing costs. However, a middle man can play another role; he can do the selling for the cooperative of growers. The best way to organise this is by forming small co-operatives of 10-15 farmers. The biggest challenge is how these cooperatives can be organized and financed. In cooperation with RVO, Omnivent developed stores on wheels for promotion and education about efficiency in value chains. According to Mr. Van Groenewoud, Nigeria is not so different from Kenya. The biggest challenge compared to Kenya is safety and security. Working with a trustworthy local agent is therefore advisable. In addition, it is more difficult in Nigeria to get the product to the market. One important lesson to learn for growers is, to wait with selling and transporting their products until prices go up. Therefore, a good cooling system to keep the products fresh is essential.

Next steps: we must understand where we can add value and provide training. Developing customized solutions and demo projects are of paramount importance. Local stakeholders need to see and experience this, as they often tend to wait and observe whether solutions work for someone else, before getting involved themselves. In summary, centers of excellence that can transfer knowledge and experiences are crucial.

Bob Steetskamp, NAFTC

Mr. Steetskamp used to work for FrieslandCampina, and his last post was in Nigeria. He came back in 2012 and was asked to join the Topsector Agri & Food International. Since last year, he is retired and started to work as Chairman for NAFTC. (Netherlands Agro, Food & Technology Centre)



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First the big picture: the growth of the world population. There is not enough land to produce food for everyone, so productivity needs to increase dramatically. Second, growth needs to be at the base of the pyramid rather than at the top. Those at the base cannot afford expensive imported products. If you are poor, you do not buy the required food that ensures a healthy diet. You need proteins, and a variety of vitamins. It is clear, therefore, that these products need to be grown locally. The local population must control the whole chain and we should offer them chain solutions. We must change the way we think about exports. We must export knowledge & technology rather than products. We need to move from hit and run to structural business relations; to joint ventures instead of export positions. New seeds help farmers, rather than the trader – they can dictate their own prices. It is not only about reducing post-harvest losses, but also about improving value chains.

Zooming in on the region: 70% of Nigeria's population is not structurally employed. The country is hardly self-sufficient, and most products need to be imported. In all of Africa's developing countries, the population will grow in the coming years. You cannot do business in Nigeria without the government. The business plan of the new Nigerian government looks very well planned.

Mr. Steetskamp also had some good suggestions for the audience. Security and safety are big issues, and they should not be underestimated. You will face different import tariffs, so it is important to be aware of local regulations from the start. On the positive side: there is strong growth potential. There are many plans for agriculture like tomatoes, poultry, etc. You do not need state-of-the-art technology; by using proven technology you can make a good profit. One final advice: do your business with a local partner rather than on your own. Select a Nigerian partner: a license to operate is much easier to get when you have a Nigerian partner.

Gerard Vos, Buck Consultants International

Buck Consultants International conducted a survey on the opportunities in agro-logistics in Nigeria and Benin. The introduction to the research report will be forwarded to all invitees of this workshop together with the report on the workshop. The focus of the research of Buck Consultants was on three horticultural products: tomatoes, pineapples and capsicum.

The survey was conducted in close cooperation with local partners and involved 120 producers and traders who shared great insights into the local value chain. Informal transboundary trade is slightly more common than formal trade. The main production areas are in the north of Nigeria, and products must be transported 1,200 kilometers to the main commercial areas in the south. One might expect trade to occur near to the market, but many trade intermediaries (middle man) exist as well as all kinds of other obstacles which hamper trade. Benin and Nigeria are very different in market structure: Nigeria has huge distances between production and market, this could offer possibilities for export from Benin. The distances in Benin are smaller but the domestic market is also small and with low prices. The trans boarder trade from Benin is still hampered by a lot of obstacles.

In Nigeria, the sales price of the product is based on the margins and costs for the middle-man and traders, not the costs of value-adding activities. There is limited trust in the value chain. No one adds value to the product, it is simply bought and sold. The main costs are the seeds as well as the costs resulting from logistics (conditioning, packaging, transporting). Cross-border trading is difficult due to import tariffs. Informal transboundary trade faces lower transaction cost. Food losses are very hard to measure, but are without a doubt very high, with estimates being between 20-50% of total losses. Benin and Nigeria are very similar in this regard, and many challenges exist throughout the value chain. A summary is given in the table below.



	Benin	Nigeria
Cost structure in agro-logistics chain	Cost structure is dominated by product costs	Cost structure is dominated by margins/fees
	Agro-logistics costs vary between 5-20% of total product costs	High margins/fees indicate that value chains and value-added activities are not well-developed
Activities where food losses occur	Total agro-logistics losses range from 20-50% of total losses	
	Most food losses occur during transport and at the production site <ul style="list-style-type: none"> • Production site: inappropriate inputs and manual handling • Transport: poor road conditions and transport conditions (heat and ventilation) 	
Observations	Main challenge is access to input supply and capital. However, the lack of warehouses and labor capacities are also mentioned	Main challenges are access to markets and access to input supply
	Building of agro-logistics infrastructure is mentioned as the best lever for reducing food losses Improving handling, packaging and production are urgently required	Warehouses and cold stores are mentioned as the main lever to reduce food losses as well as the optimisation of transport
	Capacity and access to Dutch expertise is welcomed by many	Financing mechanisms appear to be a real bottleneck in terms of both developing and improving business
Value chain challenges and opportunities	Strong NGO-structure, local and regional markets are developing Diversification and entrepreneurship	Big market and strong private sector Very limited value adding in the supply chain
	Opportunities to develop (inter)national agro supply chains	Investment and adding value opportunities

4 Discussion¹

Following the informative introductions and presentations, a vivid discussion arose in which one participant argued that you need to know the characteristics of the crop before you can act. This demands input from

¹ The summary of the discussion as well as the working groups have been anonymized in order to respect the privacy of the participants. The names are known to the authors of this summary and can be shared upon request.



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local companies. The biggest challenge is, there is currently very little in place locally, meaning that a start from scratch is required. What kinds of local companies and organizations should you work with? Traditional farmers (don't have the money), NGOs (do have the money but, do they want to spend it), governments? According to this participant, the ideal situation is a value chain approach where you have one big company that can start pulling together the rest of the consortium, which would consist of local SMEs. If you are only dealing with big companies, the challenge is that they might not want to open their doors for competition, which is good for trade but not for developing the country and local business.

Another participant was interested to find out how to get the right cooperation from companies and governments. During the discussion, he shared his own experience with the cool chain of melons that did not take off due to a lot of local barriers and he posed the question "how can you get local cooperation?" NABC replied by stating that understanding the local environment is crucial and partnerships are very important. NABC has local partners who can help remove barriers. The Nigerian government also has an Investment Promotion Commission which can further assist in removing these barriers. This commission is a one-stop agency, helping with licenses, administration, etc. Dealing with the government only is not going to get you very far, you absolutely need a local partner. Even if you can get your product in, you should cooperate with a local partner to investigate together how you can add value.

According to a third participant, the cold chain is not being developed because there are too many parties involved and there is not enough trust amongst them. This limits the chance to add value to products and causes tremendous food losses. On the other hand, once you know how to reduce losses, you win. The market is big enough; you can sell everything. It was mentioned that new supermarkets (like Shoprite from South Africa) are currently entering the market in Nigeria and Benin. The development of retail chains will demand added value. They also know how to deal with the cold chain.

Additional advice: In other cultures, a politician can be in business too, and this is not necessarily a conflict of interest as it is for us in the Netherlands.

5 Working Groups Sessions

During the last 1.5 hours of the afternoon, time was spent on four topics to gather ideas for next steps and interesting new projects for the future. Finally, participants were requested to indicate to which project they would be willing to contribute.

5.1 Capacity building

Current situation:

- Lack of knowledge at farmers' level on how the chain is working
- Lack of value chain cooperation (both vertically as well as horizontally) and lack of value chain information

Project idea:

Develop an awareness program (for instance on 'what exactly is product quality?').

Start with a small market driven project:

- Select 2 to 3 value chains (demand driven)
- Organize demonstration units and promotion to visualize the chain structure:



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- Farm -> cooperations -> market
- Market (retailer) -> consumer
- Showing that postharvest losses could go down by at least 10-15%
- Organize farmers/ set-up (farmer) co-operatives that would give growers a stronger position vis-à-vis traders and build knowledge.
- Education and demonstration
 - Consider the current and new role of the middle men in the value chain (information – cooperation)
 - Capacity building by train-the-trainer programs
 - Create awareness via universities and governments
 - Create visibility, transparency and share market information
- Logistics and infrastructure (PPPs)
 - Define current and to-be distance to market
 - Programs on how to connect different areas
- In Plateau State, Nigeria, you can work with a cooperation of 5,000 women. Market driven, work with local content.
- Start with Dutch private sector and public money and make projects for 3 years, revolving.
 - Build on experiences with/replicate Omnivent's demo truck.

First step:

Nigerian, Benin and Dutch governments support and promote awareness programs.

People/organizations willing to contribute to a project proposal:

Names are known to the PhN and can be shared upon request.

5.2 Cold chain

First steps to be taken:

- Define the cold chain: the lowest level of technology possible must be the starting point
- Define the scope of the value chain: Which value chain/products/markets? Which farmers? What do locals want?
- Develop a demo: decide on where, cooperative level or private sector? And where to found the cooperation?
- Decide who will be willing to invest (who is benefiting the most?)

You should start at the farm level and invest in all parts of the chain: cooled truck, collecting center, storage, wholesale, retail store, cooling at consumer level. Start with one cooling truck and pick up the harvested products from different farmers and store it.

Make sure local partners are involved, do not push Western solutions. The main discussion was on what group of farmers are you focusing on. A cooperation of smallholder farmers might not be willing to cooperate. Besides, co-operatives do not work for all types of products. For tomatoes, try to find companies that are almost ready for the next step: upscaling.

Investors might come from the demand side, retailers, as they need steady supply and will benefit the most from it.

People/organizations willing to contribute to a project proposal:

Names are known to the PhN and can be shared upon request.



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5.3 Added value in the agro-logistics chain

Four project ideas:

- a) One site for sorting, processing and packaging -> collective facility and then transport collectively
- b) Investment in the complete value chain by one party, adding value for supermarkets (like PepsiCo)
- c) Establishing a cooperative storage that will provide year-round revenues (farmers need working capital). Challenge is finding the financial means
- d) Branding of products: higher price is paid if the product has the right name on it. What kind of branding is necessary for domestic and/or export market?

Remarks:

- Make sure you do the grading at farm site, as this means there are lower running costs etc.
- Adding value by reducing costs

People/organizations willing to contribute to a project proposal:

Names are known to the PhN and can be shared upon request.

5.4 Investment opportunities

The best investment opportunities are foreseen in:

- a) Food processing project set up as PPP
- b) Aggregation – economies of scale
 - Demand perspective (they need to invest themselves)
 - Access to scale – stable supply
 - Creating economies of scale (aggregation & matching finance mechanisms)!

Need for matchmaking (finding local partners), public-private partnerships, aggregation, access to markets and guarantees/finance, etc.

Participation from local trustworthy partners is important; this will lower investment risks. Investors need to have access to skilled labour. Creating economies of scale are necessary to start.

People/organizations willing to contribute to a project proposal:

Names are known to the PhN and can be shared upon request.

6 Final remarks (Anouk Baron)

First, of Mrs. Anouk Baron thanked everyone for the interesting afternoon and the knowledge sharing. Possible questions for participants for continuation might be:

- What do you expect from the governments?
- How do you find and assess local partners?
- Where can you find your Dutch partners?

As for partners, NABC and PhN can support with their networks. Regarding support from the government, there are instruments available to support.

The most important ones of the RVO are:

- 1) Infrastructural investments: demo projects can be very interesting
- 2) PPP



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- 3) Financing: Dutch Good Growth Fund
- 4) PSD Apps via the Embassies, to overcome obstacles, awareness raising, providing assistance, matchmaking facility
- 5) Partners for International Business

7 Closure

Mr. Onowu was very grateful for the organization of this seminar. In his view the topic is really very important. The biggest challenge now is how to bring partners together. The Nigerian Embassy is open for support and looking forward continuing to work with partners on these topics.

Mr. Blij, Benin Consulate, was positively surprised about the knowledge available in the Netherlands. The problem is how to get it to Nigeria and Benin. Plus, the difference between the two countries is immense. The new presidents in Nigeria as well as in Benin are really wanting to go forward. The key lies in the Cotonou harbor; investments are necessary and as a follow-up it is needed to invest in railway infrastructure to the hinterland.

Dirk 't Hooft closed the meeting by saying that the organizers of this workshop will soon get back to the invitees about the follow-up of today's event. The event today certainly showed that there is willingness to work on agro-logistics in Benin and Nigeria and that a lot of Dutch know-how is available. We should therefore further develop the ideas and make them a lived reality.



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8 Annex: Participants

Company	Name
Aerobic Integrated Concepts Limited	Owolabi Sule Adewumi
Afric	Solange Domaye
Agrofair	Luud Clercx
AidTrade	Bert Spenkelink
Benin Consulate	Robbert Blij
Buck Consultants	Gerard Vos
DIBcoop	Mathieu Chaix-Bar
Dijkstaal International B.V.	Joris van Dijk
Embassy of Nigeria	Obinna Onowu
Enclude (Triodos Facet)	Marlou Rijk
Geerlofs Refrigeration	John Tsoutsanis
Green Farming Network	Nico Groot
Ministry of Economic Affairs	Mireille Boshuizen
Ministry of Foreign Affairs	Marcel Vernooij
NAFTC	Bob Steetskamp
Omnivent	Errol van Groenewoud
Omnivent	Tony Na
Ozer Logistics	Victoria Varga
PUM: Expert Benin	Philip Todd
Reuleaux Triangle	Paul Parea
RVO	Amarens Felperlaan
RVO	Hans Smolders
Tradin Organic	Maren Peters
Tradin Organic	Philip Barth
Wageningen Economic Research	Christine Plaisier
Wim van Bon	Wim van Bon



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Organizing Committee	
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RVO	Ivo Walsmit