



Kingdom of the Netherlands

HORTICULTURE STUDY

*SYNTHESIS OF PHASE ONE OF THE STUDY ON THE SOURCING OF FRUITS AND VEGETABLES
FROM TANZANIA AND KENYA*



Study commissioned by the
Embassy of the Kingdom of the Netherlands and undertaken by



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1. Introduction

EKN has commissioned Match Maker Associates Ltd to carry out a study in Tanzania and Kenya that provide an analysis of the performance and sourcing of fruits and vegetables from Tanzania and Kenya to various markets. The study maps the availability (what is produced where and when & what is available; a clear overview of the supply and demand cycles); estimates the demand within the East African Region and in the EU; identifies products that are interesting for the Netherlands market; identifies niche products that are present in Tanzania and Kenya that could be interesting for the EU market; and finally Identifies which opportunities and which challenges exist that can be overcome to increase trade, benefitting Tanzanian and Kenyan producers and the Dutch companies.

The study is expected to present a clear picture of the horticultural sector (fresh fruits and vegetables) in Kenya and Tanzania, and the results and recommendations emanating from it are expected to provide Dutch traders of fruits and vegetables with an overview of opportunities to enter into strategic collaboration in the horticultural market in these two countries.

The study is conducted in four phases (i) Literature Review to understand the context and current status of the horticultural sub sector (supply side) of the two countries; (ii) Scoping the market base (Demand analysis) (iii) synthesis of demand and supply and agreement on areas to focus on for detailed analysis; (iv) Competitiveness / Business case analysis; (v) Final report.

This report covers phase three and provides a synthesis of the scoping exercise that has covered demand and supply analysis. More details of the information covered in this synthesis report are available in the scoping report for Tanzania, Kenya and Demand analysis in the EU which are available separately. Based on the discussions of this synthesis report with EKN, the rest of the phases ensued and eventually final business case reports were written.

Presentation of this synthesis report starts with a summary of key trends in the EU and UK markets, followed by presentation of potential match of key horticultural products from Tanzania and Kenya towards those markets. Thereafter potential investments areas are presented in order of priority according to some key criteria and at the end a way forward that concluded this assignment is highlighted. This synthesis is just a summary of key findings, it is meant to lead the reader into the main country scoping reports and EU market study that provide detailed analysis.

2. Key trends in the EU/UK Markets

Three trading blocs tend to dominate the global trade in fresh produce namely the European Union, NAFTA (US, Mexico and Canada) and Asia and the Pacific. The EU is the biggest importer of fruit and vegetables estimated at 50% of global imports and providing 40% of exports, however trading and processing are in the hands of only a few EU countries such as German, France, Netherlands, Belgium & Italy (trend data from ITC trade Map are provided in the EU Fresh Produce market demand study).

As a result of globalisation and greater demand in new markets like Latin America, Asia, Middle East and Africa, but also the side effect of the Russian embargoes and economic crisis in several markets, a process of diversification of international trade flow is taking place. This is resulting in a shift of supply chains leading to the opening of new markets and increase local demand from emerging economies. This has reduced the attractiveness of the EU as the new markets have less legislations and potentially higher margins.

According to Freshfel (European Fresh Produce Association) in 2014, the EU imported around 13.1 million tonnes to the value of €12.5 billion. A majority of 87% of imported volume is fruit. The main categories imported are bananas, pineapples, apples and pears from the Southern Hemisphere, as well as table grapes and citrus fruit. The EU remains a net importer as the volume imported exceeds the export volume. The biggest suppliers include South Africa, Costa Rica, Morocco, Turkey, Ecuador, Chile, Colombia, Peru, Brazil, New Zealand, Argentina, Israel, Egypt and Dominican Republic.

Consumers worldwide are increasingly demanding a higher-value and more interesting range of fruits and vegetables. The result is that, while the volume of fresh fruit and vegetable consumption around the world is barely increasing, the value of global fruit and vegetable trade is rising, spurred on by new developing markets such as China and the higher evolution of established markets such as the US. These countries are the major contributors to growth in global fruit and vegetables import demand, but others like Thailand, Malaysia, South Korea and the United Arab Emirates have also become promising markets.

While the European market might not be the growth engine for global exporters it once was, it nevertheless remains a very large and growing import market. The growth in nut and banana imports has been prominent, but rising demand for many other fruit and vegetable categories has also been creating opportunities, especially for producers close to the EU such as Morocco and Turkey.

3. Kenya and Tanzania position in the EU/UK markets

Trade in fruit and vegetable products has been among the most dynamic areas of international agricultural trade, stimulated by rising incomes and growing consumer interest in product variety, freshness, convenience and year-round availability. Advances in production, postharvest handling, and processing and logistical technologies along with increased levels of international investment have played a facilitating role. For developing countries for which there is no exception for Kenya and Tanzania, trade in these products has been attractive in the face of highly volatile or declining long-term trends in the prices for many traditional export products. Although many developing country suppliers have entered the field, relatively few have achieved significant, sustained success, reflecting the fact that the industry is highly competitive and rapidly changing.

As shown by data on exports from Tanzania and Kenya to EU and UK markets; Kenya has been leading in building successful trading relations especially with Netherlands and United Kingdom who represent 72% of all exports from Kenya. By value the Netherlands is the main export destination for fruit with 48% (Table 1) and 27% of the overall exports and the United Kingdom represents of 58% of Kenyan vegetable exports in 2015 (Table 2) and combined 45% of overall exports from Kenya.

Table 1: Kenya top 5 fruit export countries - 2015

Kenya Top 5 Fruit Export Countries 2015				
	Value € (CIF)		Volume/KG	
Netherlands	29,759,738	48%	10,649,000	47%
France	16,830,981	27%	7,993,000	35%
Germany	5,915,197	9%	720,000	3%
United Kingdom	5,057,492	8%	1,157,000	5%
Belgium	2,142,470	3%	883,000	4%
EU28	62,628,431		22,587,000	

Source: EU Exporthelp Accessed 10/01/2017

Table 2: Kenya top 5 vegetable export countries - 2015

Kenya Top 5 Vegetable Export Countries 2015				
	Value € (CIF)		Volume/KG	
United Kingdom	103,547,779	58%	29,885,000	58%
Netherlands	35,510,800	20%	9,544,000	19%
France	20,480,625	11%	5,607,000	11%
Germany	9,672,072	5%	2,822,000	6%
Belgium	7,994,332	4%	2,757,000	5%
EU28	179,318,173		51,102,000	

Source: EU Exporthelp Accessed 10/01/2017

In comparison to Kenya, Tanzania has lower direct export to the EU as shown below. However, it has to be noted that due to current business models in the horticulture for Kenya and Tanzania businesses, there is significant under representation of Tanzania export figures in the EU/UK, as such exports have been aggregated with Kenyan produce. The Netherlands and the United Kingdom are the main import countries representing 94% in total export value. The Netherlands is the main importer for fruit with 58% (Table 3) and 31% overall exports and the United Kingdom represents of 57% of Tanzanian vegetable exports in 2015 (Table 4) and 57% of the overall exports.

Table 3: Tanzania top 5 fruit export countries - 2015

Tanzania Top 5 Fruit Export Countries 2015				
	Value € (CIF)		Volume/KG	
Netherlands	5,312,181	58%	2,142,000	60%
United Kingdom	1,715,278	19%	630,000	18%
France	1,602,524	17%	703,000	20%
Germany	303,638	3%	51,000	1%
Spain	133,411	1%	36,000	1%
EU28	9,190,543		3,599,000	

Source: EU Exporthelp Accessed 10/01/2017

Table 4: Tanzania top 5 vegetable export countries - 2015

Tanzania Top 5 Vegetable Export Countries 2015				
	Value € (CIF)		Volume/KG	
United Kingdom	6,684,893	57%	3,200,000	56%
Netherlands	2,402,956	20%	786,000	14%
Italy	1,730,091	15%	1,235,000	21%
Belgium	524,760	4%	351,000	6%
France	185,186	2%	81,000	1%
EU28	11,733,019		5,746,000	

Source: EU Exporthelp Accessed 10/01/2017

The Netherlands and the UK are key export countries and both face different challenges and opportunities for both Kenya and Tanzania. The UK has become increasingly reliant on imports of fruit and vegetables over the past two decades, with a self-sufficiency rate of just 58% in vegetables and 11% in fruit. This has been driven in part by large increases in imports of non-native foods to the UK, such as pineapples, melons and avocados. The EU is currently the main source of food imports to the UK. According to government data in 2015, 40% of all fresh vegetables imports came from Spain and 28% came from the Netherlands, with Poland and France both providing 4.0% imports.

A minimum requirement for any producer and exporter is that they have GlobalGap certification. GlobalGap is B2B pre-farm gate standard that covers the whole agricultural production process including a chain of custody to enable full traceability. This includes small holders who need to be GlobalGAP certified. All product needs to be accompanied by a GGN number (GLOBALGAP number is a 13-digit number that uniquely identifies each producer and individual member of a producer group in the GLOBALGAP database. Some EU retailers might also require social certification like BSCI, ETI, GRASP. Besides the industry standards producers could gain an organic and/or B2C certification like Fairtrade, Rainforest Alliance etc. which could give an edge over other suppliers.

All product imported into the EU must comply as a minimum with EU food safety laws and standards. All companies undertake their own MRL testing with the norm for most is to test the first shipment and then randomly the consecutive shipments.

4. Product - Market Match

4.1 Tanzania

Tanzania scoping report (supply) side showed that, there are numerous untapped opportunities to produce (based on agro ecological suitability and track record) and tap market for various varieties of horticultural products in a bid to increase the share of the country in the economic growth. It has been noted that horticulture industry in Tanzania is currently the fastest growing subsector within the agricultural sector with an annual average growth of about 9 - 12 per cent per annum. This record of growth is more than double the overall annual growth rate of the agricultural sector. In 2015, horticulture contributed 38% of the foreign income earned from the agriculture sector. The exports value in 2015 reached US \$ 545 million, compared to US \$ 64 million in 2005. Vegetables and fruits contribute about 50% to 60% of the export value. Horticulture sub sector employs about 2.5 million people, which makes the industry a major employer within the agricultural sector.

Wide ranges of fruits are cultivated albeit in different degrees of intensity. These include tropical fruits like citrus, mangoes, pineapples, avocado, jackfruit and guavas, but also fruits suitable to more temperate climates (the highlands) such as apples, pears, peaches, plums, blackberries and strawberries. Varieties of vegetables produced in Tanzania include Asian vegetables, baby corn, baby marrow, beetroots, beans, cabbage, carrots and baby carrots, cauliflower, eggplant, kale, leeks, onions and shallots, okra, peas, potatoes, spinach and tomatoes to name a few. Horticultural development strategies in Tanzania has shown that the country could develop different clusters or portfolio of horticultural investments based on different comparative advantages. The status of these clusters is summarised in figure 1 below.

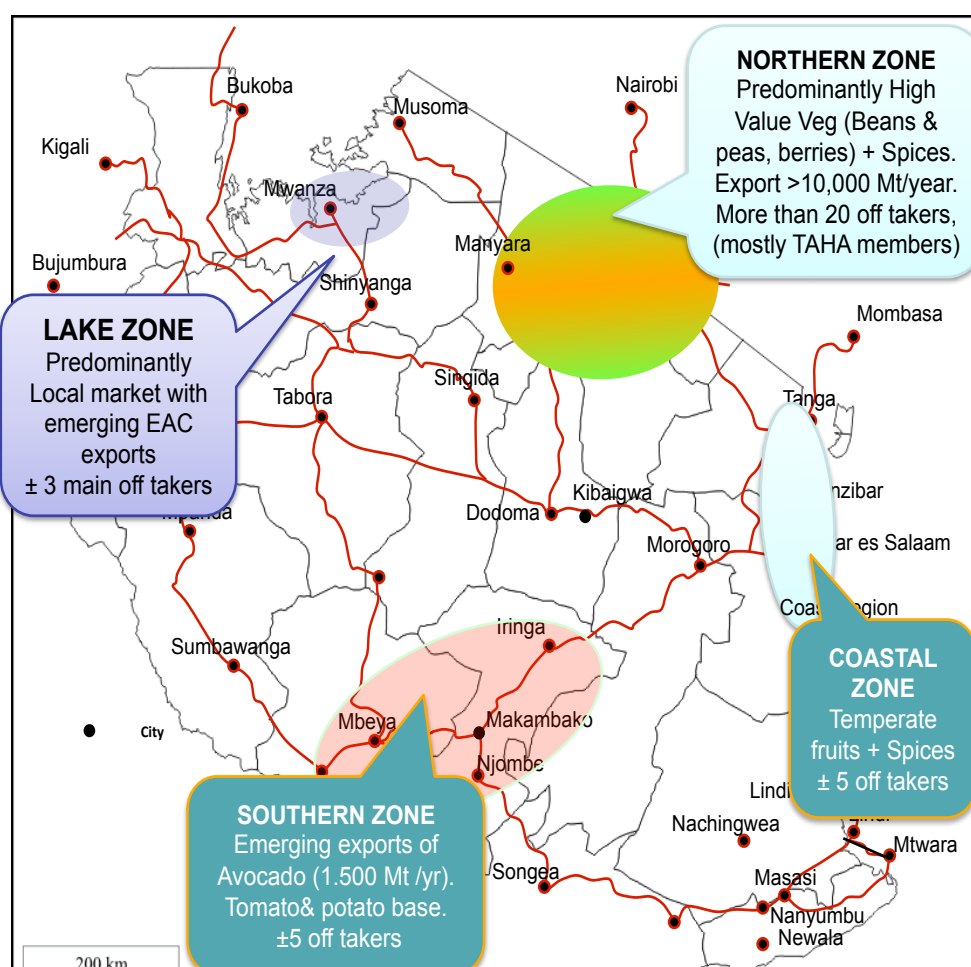


Figure 1: Current export status from different clusters

Tanzania is among world top 20 producers of fresh vegetables according to FAOSTAT data, although it has an insignificant position in the export of vegetables, mainly due to the current business arrangements whereby Tanzanian exporting companies are subsidiaries of large aggregation companies often based in Kenya, and these kinds of exports are not fully captured in Tanzania data and eventually in positioning Tanzania in the export markets.

The horticulture industry is dominated by small-scale farmers with less than 2 hectares, especially in vegetables production whereby they account for about 70% of vegetable producers. Majority of these small-scale farmers are not connected to the regional and international markets and therefore have limited chance to conduct export business themselves. Some producers have formed groups to produce as contract farmers or out growers to large scale export firms. Currently, Tanzania's horticulture industry has about 40 large-scale growers/exporters (off takers), majority of them located in the northern Tanzania (Arusha and Manyara regions).

Less than 10% of the horticultural products produced in Tanzania are exported to European Union, regional markets (i.e. East African Community – EAC, Southern African Development Community – SADC) and Middle East. This implies that the local market in fresh form consumes most of the horticultural produce and a very small proportion is processed, although a significant proportion also go to waste due to lack of post-harvest facilities given perishable nature of horticulture.

From the market scan results in the EU/UK done as part of this study (attached as a separate document) a good number of opportunity windows where Tanzania and Kenya could tap for different horticultural crops have been established. Synchronizing the peak demand months in EU / UK with the production calendar in Tanzania and Kenya and the following Table 5 emerging market-product match has been established.

Table 5: Market window of opportunity for Tanzania

Product	Peak demand months in EU/NL	Remarks for Tanzania
Avocado	February- September	Good match only missing out in Mar-April.
Mango	October – Mid November May - July	The only window is one month in November.
Sweet Onions	End December - March	Good match only missing out in March.
Fresh Garlic	November - February	Total mismatch
Soft Fruits (strawberry, berries, raspberry, black berry)	October - May	Perfect Match
Fine Beans	All Year Round	Perfect Match only missing out in the May-Sept window.
Sugar Snaps, Mange tout	April – May October- November	Very good match and great opportunity to expand. Only missing out in the May window.
Herbs (Chives, Mints, Garlic, ginger, clove etc.)	Unknown	Tanzania has great production conditions and has a track second of exports to EU/UK and Middle East.

The message from the opportunity window is indicative of starting point for identification of commodities whose demand and supply timing is congruent, but further analysis is required of exact terms and conditions that would make the business cases attractive. Hence once a selection of a few commodities is done further in-depth analysis will be done of issues such as: required quantities, quality specifications, indicative prices and degree of competitiveness with other suppliers to be able to determine the actual investment opportunities.

4.2 Kenya

The Kenya scoping report (supply) side showed that, the horticultural industry in Kenya has been very successful in the last three decades. Kenya has a long history of growing horticultural crops for both domestic and export markets. Kenya's ideal tropical and temperate climatic condition makes it favourable for horticulture production and development. The horticultural industry has grown from its base of small business/farmer, to being dominated by sophisticated businesses that are becoming increasingly vertically integrated.

Currently the horticulture industry is the fastest growing agricultural sub-sector and is ranked third in terms of foreign exchange earnings from exports after tourism and tea. Fruits, vegetable and cut flower production are the main aspects of horticultural production in Kenya, however increasingly, medicinal and aromatics plants (MAPS), which include herbs and spices are being produced. In 2015 Kenya produced 12 Million MT of horticultural produce valued at KES 211 Billion. Major fruits grown are avocado, mango, passion fruit, pineapple, banana, pawpaw, and water melon; while vegetables include tomato, kale, cabbage, onion, potato, French beans, chillies, snow peas, sugar snaps, runner beans, baby corn, garden peas, Asian vegetables (e.g. Okra, Dudhi, Valore, Turia), herbs and spices.

Horticultural crops in Kenya can be produced in a wide range of ecological zones from the high and mid rainfall regions to the semi-arid and arid regions. The wide geographical and climatic diversity together with complementary irrigation have allowed production of different types of horticultural crops that target both domestic and export markets. Consequently, Kenya is able to produce horticultural products year-round. Major horticultural production clusters are shown in the figure below.



Figure 2: Major horticultural production cluster in Kenya

Kenya's right climate, competitive labour and good market access in terms of regular flights has made it successful in growing horticultural crops particularly for the export market. Export horticulture is an important source of income for the resource poor in the peri-urban and rural areas either through smallholder out grower schemes or through employment on commercial farms. Smallholder production constitutes 80% of all growers and produces 60% of total horticultural exports. There are over 200 fruits and vegetables exporters in Kenya of whom 137 are active members of the Fresh Produce Exporters Association of Kenya (FPEAK). Majority exporters are small and medium scale (SMEs) and about 20% are large companies.

Major importing countries of Kenya's horticultural produce are mainly in the European Union (EU) and the following Table 6, emerging market-product match has been established. Other export destinations include United States of America (USA), Canada, Middle East, Japan, Russia, South Africa and Australia. Competition in these markets is stiff due to a large number of other international suppliers such as the Colombia, Ecuador, Ethiopia, Spain, Morocco, Israel, Egypt, India and China among others.

Table 6: Market window of opportunity for Kenya

Product	Peak demand months in EU/NL	Remarks
Avocado	February- September	Hass Avocado: (available from mid June – mid September); Fuerte Avocado (from March/April – mid September)
Mango	October – Mid November May - July	Apple & Keitt Mango (available from November – March); Kent Mango (from February – March); Ngowe Mango (from November – March and again from May – July).
Fine Beans & extra fine beans	All Year Round	Perfect match available all year round (varieties: Amy, Teresa, Samantha, Serengeti, Julia and Paulista)
Sugar Snaps, Mange tout	April – May October- November	Perfect match available all year round (sugar snaps Cascadia variety)
Herbs (Chives, basil, coriander, thyme and rosemary)	Unknown	Kenya is a good supplier to United Kingdom, France, Netherlands, Germany, Belgium

5. Investment areas

5.1 Explanation of the criteria for the identified investment areas

A snowball process has been used to identify potential investment areas and possible business cases. During the scoping exercise a good number of producers, exporters and other stakeholders have been interviewed who are engaged in the production and marketing of horticultural crops mainly for export markets and based on their experiences, areas attracting further investments have been mentioned. Meetings with development organisations active in horticulture and with horticultural member associations were also used to vet potential investment areas.

Important criteria that we have used to prioritise such opportunities include among others:

- The product – market match (see table 1 and 2 above)
- Presence of potential investors that could pull the business case
- Match of the investment area with on going promotional initiatives (synergy)
- Validated by many stakeholders in the industry

Although these criteria could be further refined as the assignment continues, they have been used to highlight emerging business cases that are described in the next section.

5.2 Emerging business cases

5.2.1 Tanzania

Based on the criteria, the following product and service business cases have been listed during the scoping exercise in Tanzania as shown in Table 7 and Table 8 respectively below.

Table 7: Emerging product cases of interest to Tanzania

S/No	Product	Case	Justification
1	Avocado	Joint venture (JV) in increasing production, productivity with entrepreneurs with farms /track record	Rungwe Avocados, 4,000 SHF in Njombe, are interested
2	Beans, Sugar Snaps, Mange tout	Joint venture (JV) in increasing production, productivity with entrepreneurs with farms /track record	Steve Moria (Moshi), Serengeti Fresh (Arusha) etc. are interested
3	Soft Fruits (strawberry, berries, raspberry, black berry)	Joint venture (JV) in increasing production, productivity with entrepreneurs with farms /track record	Perfect match with EU window. Steve Moria has interest and farm though no track record yet.
4	Canning of Fine Beans	Joint Venture to set up beans canning investment	Arusha Blooms is interested
5	Potato (Sweet and Irish)	Commercialising new varieties in Sweet (OFP) and Irish potatoes for Chips (Mainly for local /regional markets.	Build on SAGCOT, TAHA and NI-TZ Government agreement etc
6	Herbs and Spices		

NB: The coloured areas are considered lower hanging fruits

Table 8: Emerging service cases of interest in Tanzania

S/No	Product/service	Case	Justification
1	Strategic Pack house/ Logistics services nearby Airports	Partnership in establishing state of art pack houses & logistics & service centre	TAHA Fresh, Serengeti Fresh are interested,
2	Packaging manufacturing (export), Cold chain equipment	Joint venture (JV) to set up state of the art packaging for EU customer specifications & supply cold chain equipment	Serengeti Fresh is interested TAHA Fresh is also interested Cold Storage Manufacturer in NL interested (Celtic)
3	Logistics infrastructure upgrading Southern Tanzania	Off taker investments in Logistics in Southern Tanzania (pack house at Songwe Airport, containerisation along with TAZARA to Dar es Salaam Port)	Potential link with SAGCOT & TMEA Growth Hub) project
4	Airfreight Cargo	Feasibility of aggregation and airfreighting, insurance from different clusters in Tanzania	TAHA Fresh is working on it and looking for partners

NB: The coloured areas are considered lower hanging fruits

5.2.2 Kenya

The following product and service business cases have been listed during the scoping exercise in Kenya as shown in Table 9 and Table 10 respectively below.

Table 9: Emerging product cases of interest in Kenya

S/No	Product/service	Case	Justification
1	Avocado	Joint venture (JV) in avocado farm	Mara EPZ is interested
2	Mango, papaya	Joint venture (JV) Canning and pulping facility for fruit	Mara EPZ is eager to set up facility at Kenya EPZ
3	Herbs (especially Chives and Basil)	Strategic partnerships with EU based traders	A European appetite for basil has opened a window of opportunity for farmers in Nakuru County in Kenya who are now earning up to \$2000 a month in exports. International buyers say East Africa meets a paltry 15% of their demand

4	Beans, TSB, etc.	Strategic partnerships with EU supermarkets and traders	Few Kenya SME exporters interested: e.g. WAMU, KANDIA, KENYA FRESH
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NB: The coloured areas are considered lower hanging fruits

Table 10: Emerging service cases of interest in Kenya

S/No	Product/service	Case	Justification
1	Potatoes storage facility	Joint venture (JV) to set up potato storage facility	Patrick Garner is interested; HortIMPACT has matching grant
2	3PL cold chain or High Care Facility (HCF)	Joint venture (JV) to set up independent 3PL cold chain - Kenya and NL investors are required	Celtic Kenya Limited has modular technology Kenya Fresh Ltd is interested in HCF JV

6. Proposed way forward

A debriefing session was conducted with Bert Rikken, EKN, in Nairobi on Tuesday 17th January 2017. The meeting endorsed the progress made in the scoping phase. The comments from EKN on the scoping reports were made and have been incorporated in the final version of the respective reports.

The next steps that were agreed included the following:

- Half-day meetings were organised with key stakeholders in Tanzania and Kenya to validate the emerging business cases and especially the short list. In Tanzania, this meeting was organised in collaboration with TAHA and in Kenya in close collaboration with HCD and FPEAK. The consultations with the key stakeholders defined the business cases per country to study further.
- Field and desk study continued to develop the selected business cases. Also, verification of the demand in EU/NL as well as Dutch interest was undertaken
- A first full draft of the final report was shared with EKN in mid-February. Hereafter, EKN after incorporating EKN comments, final version was delivered in early March;
- Finally, it has been agreed with EKN that presentation of the main findings will be done by the Team Leader during a meeting to be organised by GroenteFruitHuis in 2017.