



## Seed Potato Development in Kenya - Phase II of the public-private support project: Introductory note

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January 2013

*Over the past one-and-a-half year, the Kenyan Ministry of Agriculture, The Netherlands' Ministries of Foreign Affairs and Economic Affairs, and the Dutch Embassy (EKN) in Nairobi, together with relevant Dutch and Kenyan potato sector stakeholders, have joined hands to realize Phase I of the Fast Track 'Seed Potato Development Project' in Kenya. The project is a public-private initiative that supports the Kenyan seed potato value chain. Consultations with the Dutch and Kenyan sector stakeholders, both private and public, and the current state of affairs have resulted in the proposal for Phase II of the Seed Potato Project (2013-2015). This introductory note outlines the main features of the Phase II proposal.*

### **The potential of potatoes**

Being the second most important food crop in Kenya, potato plays an important role in Kenyan agriculture. Potato is an efficient crop to grow under relatively favorable growing conditions, and its high productivity per unit time, area and input make it a profitable business. This makes the crop an attractive commodity for enhancing food supply.

Nonetheless, potato yields in Kenya are low, which is mainly dedicated to a lack of good quality seed. Only 1-2 percent of the potato cultivated areas are planted with certified seed, and local seed multiplication systems have not been able to produce sufficient quantities of (pre-)basic seed for further multiplication.

As a result, the seed sector has not been able to develop into an effective seed supply system to serve a wide range of potato farmers. This situation is not likely to change in the near future. In this perspective, import of high quality seed potato is essential for a short to medium-term food security perspective, since it might take up to 5-10 years before Kenya has increased its supply to the sufficient extent of fulfilling demand.

### **Designing Phase II of the Seed Potato Project**

It is against this background that around mid-2011, the Kenyan Ministry of Agriculture (MoA) has requested the Netherlands to cooperate in the development of the seed potato sector in order to increase the output of certified seed. A range of meetings with the Embassy of the Kingdom of the Netherlands (EKN) in Kenya, and the Netherlands' Ministries of Foreign Affairs (DGIS) and

Economic Affairs (former EL&I) resulted into the development and implementation of Phase I (mid 2011-2012) of the Seed Potato Project. Based on the current state of affairs, and on close collaboration with these Dutch and Kenyan sector stakeholders (both public and private), the Phase II proposal was developed for the period 2013-2015. Key to the Seed Potato Project is Dutch-Kenyan public-private collaboration, and its strategy to link seed potato value chain development to food security and agri-business development.

### **Aligning the Seed Potato Project to policies**

The Seed Potato Project fits well into the strategic directions of the Dutch Ministry, the Dutch Embassy in Kenya, and the Kenyan Ministry of Agriculture. Food security forms one of the Dutch Ministries' four central pillars, and involvement of the private sector and the formulation of strategic public-private partnerships are seen as essential for the implementation of effective programmes. In a similar way, in its Multi-Annual Strategic Plan (MASP) for 2012-2015, the Dutch Embassy in Kenya indicated Private Sector Development and Food Security as one of its three pillars. And among one of their five formulated country outputs, 'Higher production and incomes for agribusinesses in four agro-food value chains', potato is identified as a priority crop. The Kenyan Ministry of Agriculture (MoA) has also prioritized the potato sector, resulting in a National Potato Taskforce and a National Seed Potato Master Plan.

### **Strategic added value of public-private partnerships**

The Netherlands is internationally renowned for its practical approaches and applications in the seed potato industry, and can provide new insights and knowledge for the sustainable development of seed potato supply systems. This expertise can be integrated to know-how of the local Kenyan seed potato sector that Kenyan seed potato stakeholders bring in – hence together contributing to synergy and efficiency gains in the potato sector. The partnerships approach thereby goes beyond a just concentration on certification and quarantine of seed; it also seeks to take the opportunity to develop the local seed potato value chain, and include aspects such as the introduction of new varieties, local seed multiplication, post-harvest aspects (for example storage), and marketing and finance of high quality potato seed.

### **Point of departure: the potato sector in Kenya**

Potatoes are mainly cultivated in the high altitude areas ranging from 1500 to 3000 meter. At this altitude, potatoes grow faster than maize and produce more energy and protein per hectare per day. The crop is grown by some 500,000 farmers on about 108,000 hectare with average yields of 7.7 tons per hectare. Most potato growers are smallholder farmers, and it is estimated that 70 percent of them have land holdings of less than 1 hectare. Kenyan potatoes are almost entirely produced for the domestic market, with three quarters of the urban households consuming potatoes regularly.

The Kenyan potato sector is hampered by both marketing and production constraints. From a marketing perspective, individual farmers do not produce economic volumes for competitive marketing. As a result, farmers sell through middlemen, resulting in inefficient marketing and high transaction costs. This, together with the domination of brokers and traders in the value chain, makes the smallholder farmers prone to price fluctuations and exploitation.

From a production perspective, seasonality of potato production limits profitability in potato farming, as the majority of farmers depend on rainfall leading to gluts and lean times consecutively. In addition, there is not sufficient supply of certified seed, making farmers dependent on informal seed sources. Farmers are also confronted with a rapid decline of soil fertility, due to continuous cultivation without adequate replenishment of mined nutrients. And finally, a number of diseases, mainly 'brown rot' and 'late blight', contribute to poor potato yields, high post-harvest losses, and poor quality of farmer-saved seed.

### **The Seed Potato Approach**

The Seed Potato approach for Phase I and Phase II of the support project is – in a nutshell – to focus on the import of Dutch seed potatoes on an annual basis, to multiply this seed in Kenya with large scale professional seed growers, and to make the seed available to the many small and medium-scale farmers. The local multiplication of the imported seed is necessary to reduce the cost price of the imported seed and make it affordable for a wide range of potato producers.

### **Marketing and agri-business strategy**

For Phase II of the Seed Potato Project the following marketing strategy is suggested, as specified for three different market segments:

#### *❖ (1) Commercial market segment*

Imported seed from the Netherlands is in most cases too expensive for direct marketing to producers, necessitating local seed multiplication. It is calculated that, in case of modern crop management practices, one

multiplication of imported seed may half the seed price. At the moment, only a few farms have the management capacity and resources to get involved in seed multiplication. It is proposed that the Seed Potato Project will actively assist these farms to develop business plans, and to prepare project proposals to attract the necessary finance for investments. In addition, new farms will be stimulated and supported to get involved in multiplication of imported Dutch seed.

#### *❖ (2) NGO market segment*

Most farmers, NGOs, and other development organizations are not aware of the new opportunities related to increasing potato yields and improving food security through availability of healthy seed. Ideally, the Dutch seed companies exporting their varieties to Kenya should take the initiative to promote their varieties and seed potatoes. However, the current volume of seed export to Kenya is not sufficient for them to invest in marketing and promotion. It is proposed to start a promotion and marketing campaign, particularly aimed at the NGO sector that is working with small-scale farmers, with the purpose of alerting them about the availability of healthy seed potatoes, and to link them to seed companies and seed multiplication farms. Once the contacts between seed suppliers and seed users have been made and seed sales increase in volume, the seed companies and their partners in Kenya will take over this promotion and marketing role.

#### *❖ (3) Public market segment*

At this moment, the start of Phase II, new potato varieties are about to be registered in Kenya. As a result, the flow of seed from the Netherlands can potentially start. The Kenyan governmental Agricultural Development Corporation (ADC) is currently the largest seed potato producer in Kenya. Hence their involvement and commitment to using Dutch seed for multiplication will have a significant impact on the national seed supply system. It is proposed to develop a strategy to involve ADC in multiplication of Dutch seed potatoes. Due to ADC's link with the Kenyan Ministry of Agriculture, both organizations should take part in the discussions on the marketing strategy.

### **Phytosanitary strategy**

An important component of the Seed Potato Project is support to KEPHIS, focusing on phytosanitary aspects. Four major activities related to phytosanitary aspects are foreseen for 2013:

#### *❖ (1) Development of import inspection training sessions*

This activity aims to train phytosanitary inspectors on import inspection of seed potatoes according to the requirements of the bilateral agreement, and harmonize the inspection procedures with EU-standards. The

foreseen outputs are two workshops on phytosanitary inspection.

❖ *(2) Development of import instructions as part of a phytosanitary inspection manual*

The aim is to develop written instructions on how to inspect seed and ware potatoes at the border point. Foreseen output is a set of import inspection instructions on potato.

❖ *(3) Monitoring missions*

This activity strives to have the possibility to accompany some experts, and to evaluate the progress in the project, and discuss next activities together with KEPHIS.

❖ *(4) Training sessions on diagnostics*

The fourth activity is to train the diagnostic specialists in the laboratories of KEPHIS on the international accepted diagnostic standards for testing potato on a number of harmful organisms. The expected output is that diagnostic specialists are trained on disciplines that are in line with the international accepted diagnostic methods, and to support the classification and certification of seed potato in Kenya with additional diagnostic tests.

#### **Cross-cutting issues**

An important cross-cutting issue in the Seed Potato Project is *food security*. An estimated 10 million Kenyans are chronically food insecure, and the availability of energy is currently below standard. With the availability on the market of high quality seed potatoes, it is expected that potato yields will increase significantly, leading to more availability, and hence, lower prices on the market. This is beneficial for Kenyan consumers and for smallholder producers, who can expect more income and higher potato consumption at household level.

Other advantages are that potato is a supplier of carbohydrates and some vitamins and minerals, and with an almost year-round availability, the crop is highly *stable*. In addition, given its highly efficient production, potato can clear land for other, more nutrient rich crops to supplement the diet with micronutrients – in that way contributing to food and nutrition security.

Nevertheless, food security pathways are complex, and whether increased food *availability* and *accessibility* lead to food security, also depends on the method of preparation of the potato and other components served with the potatoes.

A second cross-cutting issue in this project is *gender*. One of the main goals in the Seed Potato Project is contributing to higher incomes for the participating

small and medium-scale farmers in Kenya. In reality, male and female farmers often operate on an unequal level playing field, whereby female farmers usually have limited access to agricultural inputs, knowledge and credit. This leads to exclusion, less opportunities for capacity and skills development, and a weaker bargaining position in the domain of the market.

In addition, considering that women are important decision-makers for a household's food and nutrition intake, the exclusion of women can have dramatic impacts on household's welfare and its food and nutrition security. For this reason, Phase II of the projects integrates a gender perspective, by which the empowerment of female potato growers is taken into account.

Gender-sensitive activities can be focused on: (1) conducting a *gender responsive study* to identify constraints and opportunities for male and female potato farmer participants; (2) *support targeted training* to build female potato farmers' skills, knowledge, and awareness; (3) *support scoring exercises* to increase the number of women in potato contract out-grower schemes; (4) *link to partners* providing targeted training for female potato farmers in the use of innovative communication technology; and (5) *conduct knowledge & sharing sessions* for female agri-business network members, as part of the Seed Potato Platform.

#### **Phase II: Components and activities**

In Phase I of the Seed Potato Project, important steps have been taken by relevant Dutch and Kenyan seed potato sector stakeholders. Stakeholders have started to collaborate, and import-restricting barriers have been withdrawn – enabling the start of an import of Dutch seed potatoes.

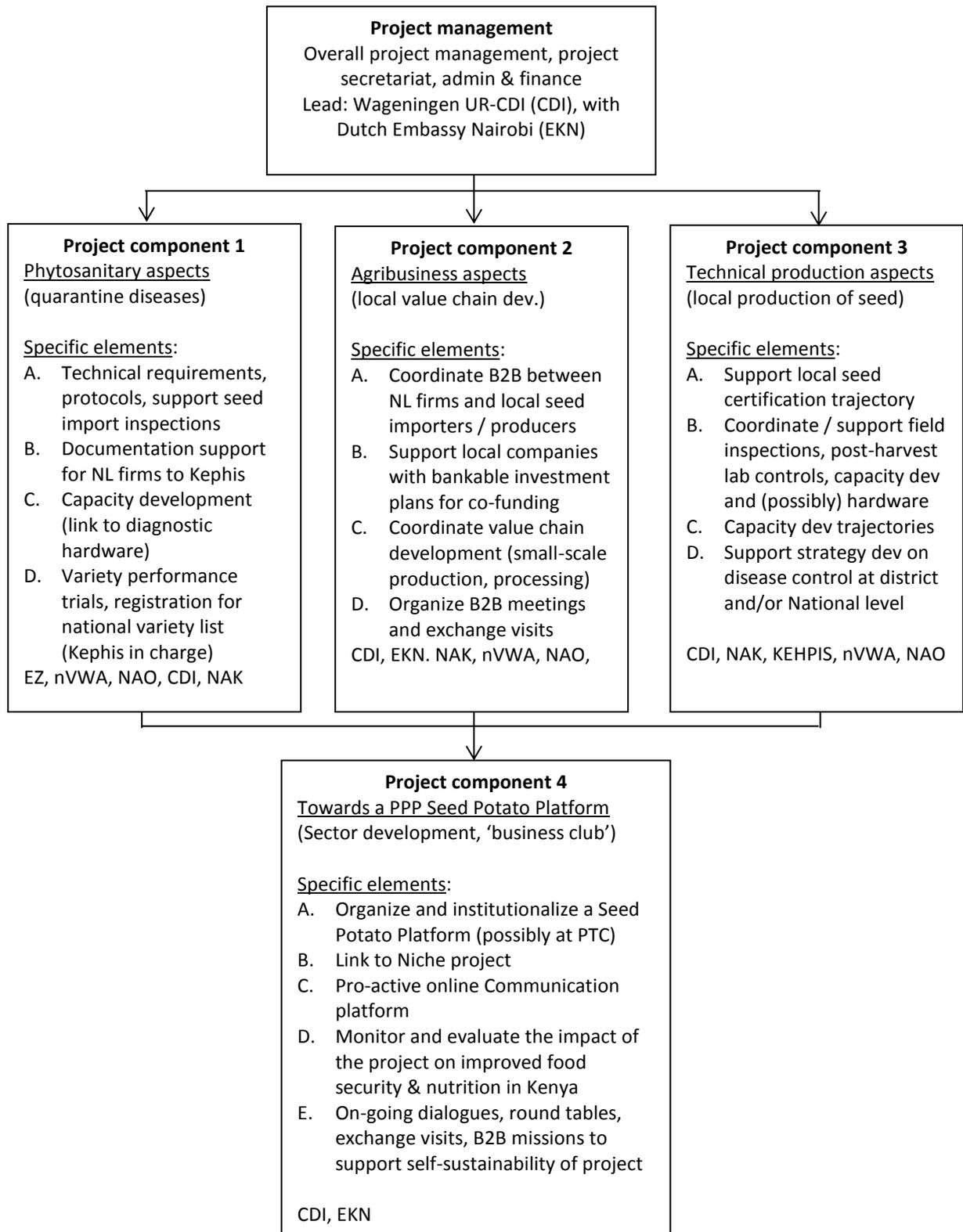
Furthermore, some five large scale farms in Kenya are currently registered to produce certified seed. These farms are prepared to invest in commercial multiplication, and storage and marketing of the imported Dutch seed potatoes. Phase II of the Seed Potato Project further builds on the activities as undertaken in Phase I.

Phase II is proposed to be built around 4 key project components:

- (1) Phytosanitary and market access support aspects*
- (2) Agribusiness support aspects*
- (3) Technical production and certification support aspects*
- (4) Seed potato platform aspects*

Each of the four components is structured around a set of specific activities, as described in the figure below. As in Phase I, these components will be carried out in collaboration with relevant Dutch and Kenyan sector stakeholders.

Meanwhile more attention goes to the sustainability of the project, i.e. how to work towards local institutional embedding and ownership in the years to come.



### Expected outcomes and performance indicators

Phase II builds on two reforms that have been formulated by the stakeholders involved in Phase I of the project: (1) *Unrestricted and fast-tracked imports of Dutch seed potatoes into Kenya*; and (2) *Following import of seed potatoes from the Netherlands, potato seed growing and multiplication will continue to be supported and carried out by commercial farmers with a proven track record, under the supervision of KEPHIS.*

#### Expected outputs and performance indicators

The expected main output of Phase II is defined as 'A self-financing Public-Private Seed Potato Platform' that pays attention to:

- Fast track importation of superior seed potatoes
- Capacity development of staff on relevant core functions of KEPHIS
- Start of growth and multiplication of superior seed potatoes by commercial farmers and effective value chain linkages to producers of table potatoes (= seed users)
- Facilitation of associated private and public service providers

*Secondary outputs consist of strengthened bilateral investment/trade relations:*

- Kenyan imports of high-quality Dutch seed potatoes and associated know-how is at full speed
- Business linkages are facilitated for Dutch providers of cultivation equipment, storage and handling technology, processing technology/practices, standards for raw materials and food safety aspects
- Access to complementary (Dutch, other) financing mechanisms such as PSI, AECF and equity investors

*The foreseen performance indicators are:*

- Arrangement/MoU for the PP Seed Potato Platform
- Stakeholders' on-going acceptance and support of foreseen seed potato development
- Capacity in KEPHIS with core functions: inspection, certification and variety trials
- Number of hectares under commercial seed potato growing and multiplication
- Number of tons of certified seed available
- Number of smallholders engaged in the project and benefitting from improved potato seed (higher yields/income).

### Planning, monitoring and evaluation (PM&E)

An integral part of Phase II will be an effective PM&E system, that:

(1) *demonstrates the effectiveness of the project*; and (2) *captures the complexity and diversity within which the project is operating.* In collaboration with Mr. H. van Trigt (Ministry of Foreign Affairs, DDE/VF) the project will design, develop, and implement a result chain aimed at a broader context than the project alone.

The PM&E plan will make use of result indicators at various levels, which will support the PM&E system in comparing and aggregating the various (levels of) activities. Specific indicators will be designed in the next steps of Phase II. An M&E document will be developed in the first half of 2013, which will serve as the project's M&E implementation guideline.

It is hereby important to note that the potato sector environment in which the project operates is dynamic, and subject to expected and unforeseen changes. Additionally, it is almost impossible to have a 'perfect' M&E system at the start of phase II of the project; realities of engaging in a large project as this one cannot all be anticipated. Accordingly, the PM&E document will continuously need to be reviewed and updated to ensure that a realistic and useful system is used. The guidelines will therefore be seen as a 'living document'; flexible and allowing for revision, and will be shared and strengthened by views of all stakeholders.

### Communication strategy

In the context of this project, a commercial and private sector-driven project requires a good information and communication strategy. In Phase I it was decided to invest in a strategic communication strategy to ensure (a) *transparency through information flows among stakeholders*; and (b) *communication using an online platform.* This strategy will continue in Phase II and will enable the platform being an intersection of internal communication among key players and external updates to a wider circle of stakeholders and media.

The main purpose of strategic communication activities for Phase II will be to inform and motivate stakeholders, whereby newsletters will be developed, and by which a Seed Potato Platform website and its forum will be used to share information and experiences. As a result of publicity, the project aims to be well-known by all relevant private, public, and not-for-profit actors.

