



Growing out of poverty with potato

Project results October 2014 - April 2015

Growing out of poverty with potato

Project results October 2014 - April 2015

'Growing out of poverty with potato' creates a value chain for high quality potatoes in Vietnam in order to increase the income of small-scale farmers and improve food security. This project is funded by the Facility for Sustainable Entrepreneurship and Food Security (FDOV) and is a collaboration between Agrico, Fresh Studio, PepsiCo Vietnam, Applied Plant Research-WUR and the Ministry of Foreign Affairs of the Netherlands.

Colofon

August 2015

For more information please contact Mr. Rene van Rensen, project leader 'Growing out of Poverty with potato' and Director of R&D and Crops, Fresh Studio or visit our website www.freshstudio.vn.



Netherlands Enterprise Agency



Our goal



Learning on the job

“ The training was very practical. I learned a lot about seed and soil preparation methods, cultivation methods, fertilizer applications and post-harvest techniques and could apply this knowledge directly in my everyday work. When I had a problem with diseases in my crops, the trainer even went to my plot and demonstrated on the spot how to deal with the problem. I’ve cultivated four new varieties and my first impression is that they are resistant to the common diseases of potato. The only challenge are their English names as they are quite difficult to pronounce. I hope to join a new training in October, so that I’m well prepared for the next season. ”

Mrs. Vu Thi Dan
(12 ha of potato production)

My favourite potato recipe
French fries and potato-pork stew

Breaking the vicious cycle

Vietnam is one of the most rapidly growing economies in Southeast Asia. The percentage of people living on less than 1 US dollar per day decreased from 54% in 1990 to 15% in 2010. Nevertheless, still 13 million people live below the poverty line. The large majority of these poor (in absolute numbers) live in the rural areas of the Red River Delta (RRD) and Central Highlands of Vietnam. Both areas are also the major potato producing regions in Vietnam. The RRD region accounts for 95% of all potato production in Vietnam. Potatoes are cultivated during the cool weather season (October-April) when rice cannot be grown. The Central Highlands is the second important production area, with a year-round production. Potato is an important crop due to its high yield potential and nutritional value (a.o. vitamin C, potassium, zinc and iron). As such it can provide a good alternative for improvement of food security and an additional income for small-scale farmers in Vietnam.

From low interest crop ...

Although the domestic demand for potatoes already outnumbers domestic supply, potato remains a low interest crop to Vietnamese producers. In fact half of the consumed potatoes in Vietnam are imported from China. The development of a professional potato sector in Vietnam is currently trapped in a vicious circle of low interest crop - low quality produce. Most farmers are unaware of the economic potential and lack the knowledge and tools for successful potato cultivation. As a result, the processing industry and consumers are met with an inconsistent volume and poor quality of both processed potato (for crisps and fries) and table potato.

... to a sustainable potato production system

In the ‘Growing out of poverty with potato’ project Agrico, Fresh Studio, PepsiCo Vietnam, Applied Plant Research-WUR and the Ministry of Foreign Affairs of the Netherlands, are committed to breaking this vicious cycle. The different project partners combine their own expertise in a 5-year project that includes supply, demand and value chain development. The project aims to make Vietnam more self-sufficient in potato production by creating a sustainable potato sector; a sector that is able to compete with Chinese imports and to supply the domestic table potato market and potato processing industry with a consistent volume and quality product.

Our approach



Increasing the value of potatoes

“ We have a long tradition of potato production in our community, with two seasons of rice and one season of potato every year during the last 20 years. Our biggest challenge is access to the market. Our table potatoes have to compete with low priced potatoes from China. So in the next training I want to learn about market trends and how to expand the market. I also want to know how I can increase the value of our potatoes by being certified. I hear a lot about Viet Gap and food safety certification on radio and television and I really would like to get more detailed information and know how to start. ”

*Mr. Nguyen Dang Hoi, farmer leader Nghiem Xa cooperative
(10 ha of potato production)*

My favourite potato recipe
Potato soup

Creating value chains

To truly realize the potential of potato as a contributor to food security, pro-poor development and a healthy diet, the project developed a value chain approach that's unique in Vietnam. This approach combines activities on supply and demand side, which are linked by value chain development. In short: the project facilitates small-scale farmers, mostly women, to grow high quality potatoes, informs consumers about the nutritional value of potatoes and creates value chains to bring the potatoes to the national market. A public private partnership (PPP) was developed to make this approach a success. Companies, a knowledge institution and the Dutch government now join forces to create a value chain that will sustain after the project is formally finished.

Start with the farmers

High-yielding potato varieties that are well adapted to local growing conditions and less sensitive to diseases are a first priority. The project will test and select new Dutch potato varieties on e.g. disease resistance and yields in Vietnam and start the procedure to get the potato varieties registered in Vietnam. The next step is to train small-scale farmers in sustainable potato cultivation and preservation techniques and introduce the new varieties and simple mechanisation tools. The table and processing potato sector are developed simultaneously. The processing potato sector is an important economic driver behind sector development, while a thriving

table potato sector will result in diversification and higher quality production and more interest of farmers to start potato cultivation.

Get to know the consumer

On the demand side, the project first investigates if, how and when consumers in North and South Vietnam are willing to buy and prepare potatoes. To ensure that the new potato varieties are adopted in the local diet the appearance, taste and structure of the potatoes are tested in taste labs. Household panels will also test the potatoes on home-use and ease of preparation. These tests will be conducted only on varieties with proven agronomic potential. An awareness raising campaign informs consumers about the health benefits of eating potato and the numerous ways to prepare potatoes. At a later stage, the newly selected potato varieties will be introduced to the consumers via a marketing campaign, emphasizing the nutritional value, taste and quality of the new varieties.

Develop the potato value chain

Both the efforts on the producer and the consumer side come together when the right intermediary parties are being selected to bring the potatoes to the market, creating different value chains in Vietnam for high quality, locally and sustainably produced potatoes. This will make Vietnam more self-sufficient in potato production, improve the livelihoods of smallholders and improve the nutrition of poor farmer households.

Our results



The wow effect of potato

“ This project is unique in its kind in Vietnam, as it investigates the performance of the different potato varieties in the field and at the same time looks into consumer preferences and perceptions regarding potatoes. This combination is very promising. What I find most remarkable so far is the smile -the wow expression- on the face of the potato farmers when the new potato varieties are being harvested. ”

Mr. Rene van Rensen, project leader and Director of R&D and Crops, Fresh Studio

My favourite potato recipe
Homemade French fries

Potatoes in practice

The results in the first ‘year’ of the project (October 2014-April 2015) are promising and the project is well on track.

Test and share results

The first steps have been made to formally register five new potato varieties: three table potatoes, one processing potato and one multipurpose potato. High quality seed potatoes were shipped to Vietnam for testing and training purposes. The project established two demo farms in Hai Duong (North Vietnam) and Dalat (Central Highlands) and conducted the first field trials with the new varieties. Potato field days have been organized to share project activities and the first trial results with representatives of the Vietnamese Ministry of Agriculture and Rural Development, extension officers, traders and farmers. During these field days visitors tasted the new varieties and gave their opinion on the appearance, taste and structure of the potato.

Eager to learn

In the first months of 2015, 519 farmers (of which 62% female) received training about potato cultivation. As most of the farmers in the regions are women and potato cultivation is heavy and demanding work, a lot of attention is given to using appropriate tools and techniques to make cultivation easier. Sustainable production methods are an important part of the training, such as responsible use of agrochemicals and water and reducing post-harvest losses. Even though the project is only 6 months

underway, many more farmers are enthusiastic to become involved in the project.

Potatoes’ positive image

In 2014, both in Ho Chi Minh city and Hanoi 400 consumers were interviewed in a consumer household survey on the consumption, usage and preferences of table potatoes. In 2015 an additional 200 consumers were interviewed to correct for the seasonality effect of the potato season. The study shows that potato consumption per capita in Vietnam is low compared to Asia. Households purchase potatoes on average 3 times per month and wet-markets are the main purchase channels for table potato. Although current uptake of potatoes in the diet is low, it is expected that the trend towards a more globalized Vietnamese diet will also increase the consumption of potatoes. The survey also indicates that consumers have a positive attitude towards table potatoes. Consumers perceive potatoes as tasteful, satisfying, important to consume and not boring. These results are a promising starting point for the next years of the project.

Sector development

The PPP model of ‘Growing out of poverty with potato’ allows the project to contribute to a sustainable potato sector. Project partners PepsiCo Vietnam and Fresh Studio are both members of the World Economic Forum (WEF) Sustainable Agriculture Taskforce in Vietnam, focused on sustainable agricultural growth and food security in Vietnam. In two meetings of the Taskforce the project leader and partners presented the project model and approach; a first step in developing a policy advice for the potato sector development in Vietnam.

Our next steps



Listen and learn

“ Public-private partnerships (PPPs) have a proven value but are never a guarantee for success. In our partnership we are committed to be innovative, and part of the innovation lies in interdisciplinary cooperation. We all come from a different background; farmers, businessmen and researchers. It is important to keep on listening to each other; to truly learn from each other’s views and beliefs. ”

*Mrs. Sigrid Wertheim-Heck,
Director Marketing and Business Development, Fresh Studio*

My favourite potato recipe

Small new potatoes boiled in the skin with butter salt and green onions

Scaling up

More farmers, better practices

In the remainder of 2015, trials with the Dutch potato varieties will continue, as well as the research and information gathering needed for the registration of the potato varieties. During the next 4 seasons many more farmers will be trained and involved in the project. In total 2,500 farmers will be trained in potato cultivation, resulting in an indirect outreach to at least 175,000 people who will be able to add potatoes to their diets. To quickly scale up the training activities, training materials for future trainers will be developed. Topics that will receive specific attention in the trainings are post-harvest techniques and management, responsible application of agrochemicals and water usage.

Tasting potatoes

Concerning the demand side, the first research results will be used to develop an awareness campaign about the importance of a balanced diet and the role of table potatoes in such a diet. Mobile taste labs will be organized to map consumer preferences in terms of taste, structure and inner and outer appearance of the five new potato varieties. The results will be analysed to adequately address consumer preferences in the near future.

Pro poor potato: year 1



37.5MT

seed potatoes shipped to Vietnam

Field trials with
5 new
varieties



demo farms established



519 farmers

trained (of which 62% female)



Consumer survey among

1,000

consumers in Hanoi and Ho Chi Minh City

