# Peanut & Tomato Get Growing Pilot Project Alliance, Santigron, Pokigron & Paramaribo Suriname

Abstract – Get mothers of weak families to grow peanuts, tomatoes, and other cash crops everywhere in Suriname in wooden mobile tiered planter boxes and homemade potting soil via instruction card training and a task based mobile website. Successfully start up continuous small scale sustainable food production on Alliance and in Santigron, Pokigron and Paramaribo in Suriname, via an online food production & planning system that ensures daily routine and income for one thousand women and let them, and their children eat much healthier.

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"An old Javanese man lives in Paramaribo.

Every morning, before it gets too hot, he manually takes care of his crops on his small plot of 0.5ha, which is located in the middle of a residential area.

He ensures that all his plants have sufficient shade, receive water and nutrients and he removes rotten branches and leaves and other rubbish to prevent diseases.

Every day again.

When a crop is ripe, he harvests it manually and sells it to the corner supermarket.

He sows or plants new things in the vacant places.

This way he is productive every day and enjoys his life.

This through knowledge, skills and routine. So it is."

- 1. No money for breakfast Many Surinamese primary schools have children that come to school without having had breakfast at home. The parents of these children are unable to buy food for breakfast with the little money they have. This also applies for children that go to primary schools in the capital Paramaribo. That is why more and more primary schools are setting up a school vegetable garden and a sandwich project. In this Peanut and Tomato Pilot project we want to reach as many mothers as possible who are in this situation. There are over thousand easily identifiable women. We want to arrange for these mothers to be taught planting crops in the vegetable garden once a week at school. We want to ensure that many schools receive a piece of agricultural land from the government on which they can plant with all parents and children. We try to give the mothers so much knowledge and stimulation that they also start planting in their garden at home. For one, we will create and provide visual instruction cards for planting easy crops.
- 2. Unused Plantation Alliance Alliance is a Citrus plantation, in government ownership, with 2100 ha of very fertile soil, of which 80 ha is currently (2022) in use, mainly for citrus cultivation. In the past, the plantation had a heyday when up to 100 crates of oranges were produced and exported per month. However, many more crops and products can be made and processed on Alliance than just citrus. There is a small town on the plantation where residents and employees live and there is a primary school. The basic facilities and facilities in the field of water, electricity and buildings are available at Alliance. Alliance has no river connection, but is easily accessible from Paramaribo by water. There used to be a ferry service from Paramaribo, which can be restored in itself.

Alliance is a gem of a plantation that, like other plantations in Suriname, is waiting to be rehabilitated. More than a hundred women from weak families could be employed on and around Alliance: routinely planting, processing and selling fruit and vegetables. The women and their children also start eating and living healthier if they have fruit and vegetables around them all day long and are busy with them. The goal is to get this done.

**3. Unused Land at Santigron and Pokigron** – Santigron and Pokigron are Maroon villages of both about 500 inhabitants, where there has been talk for years about the large-scale planting of peanuts, for example, and the setting up of a peanut butter factory. In 2020, the president also indicated that he wanted to start or support a peanut project in Santigron . However, at the moment nothing is happening in this area in Santigron and Pokigron , according to the inhabitants, while they really want this.

Because we want to start planting peanuts on Alliance and the need in Santigron and Pokigron is also very great, we can do everything we do on Alliance at the same time in Santigron and Pokigron . Later, we may also be in other inland places, such as Jaw Set up Jaw, Peanut & Tomato Get Growing projects.

In Santigron and Pokigron, more than a hundred women from weak families could routinely plant, process and sell fruit and vegetables and eat and live much healthier lives. The goal is to get this done.

- **4. 220.000 Hectare Unused** In Suriname there are many hundreds of small and large unused areas. In the past, the government designated 4.3 million hectares for agricultural purposes. Of these, only 280,000 ha have been cultivated. Of the 280,000 hectares of cultivated area for agricultural purposes, only 60,000 hectares are currently in use. With this Peanut & Tomatoes Get Growing Project we can lay down the basis or blueprint that we can potentially reuse to get a thousand Surinamese to start sowing, planting and harvesting crops on their unused land. We are going to encourage many people to sustainable agriculture and horticulture. This way we can create a lot of extra work, jobs and the economy. Women from weak families can thus be more independent and earn their own money.
- **5. Build a Daily Routine** Suppose a thousand women in Suriname would routinely perform ten agricultural or horticultural tasks every day for 3 hours, such as sowing, occlusion, transplanting, planting, making and caring for beds, making nursery trays and potting soil, harvesting, irrigating, mulching, fertilize, feed, weed, manage and process. Then tens of thousands of hectares of unused agricultural land would now be in use and many thousands of people would have cheaper food and more income, there would be import substituting production and much more export. The question now is: how do we get more than 1000 extra women in Suriname to carry out routine agricultural and horticultural tasks on a daily basis? The answer is given in this document.
- 6. Improve Knowledge, Skills, Motivation and Reward The biggest problem preventing Alliance from rehabilitating as a successful plantation is not at all the lack of finances or a smaller and aging group of employees. The biggest problem is that it takes too much effort for management and employees to learn how to plant, harvest, dry, process and sell crops in a routine, planned and process-based manner and to acquire new innovative knowledge, for example in the field of cultivation, cultivation, processing, marketing and selling products. It takes far too much effort because, among other things, there are too few high-quality training and courses where people actually learn new knowledge and skills and can obtain certificates. Too many so-called training courses are in fact nothing more than information meetings and light information sessions. Language skills play a role. There are also too few managers who, in collaboration with employees, systematically carry out activities every day based on plans and thus work towards achieving objectives. In addition, the fact that managers and employees are challenged, stimulated and motivated too little through ambitious objectives and (financial) reward also plays a major role.
- 7. Set up Online Food Production System ( www.foodproductiononline.sr) The solution for Plantation Alliance, the Santigron and Pokigron localities and Paramaribo to get women to routinely plant, process and produce is to have an online or digital food production system, called Food Production Online. Alliance managers and employees, or residents of Santigron, Pokigron and Paramaribo, could log into the online system via their mobile phone and are then presented with a list of the most important tasks to be completed for the day. They see schedules, dashboards and reports with when they should do what: purchase, organize, sow, grow, grow, plant, monitor, guard, harvest, dry, process, exhibit, market and sell, exhibit crops and products. This online planning system ensures that everyone does the right things at the right time. Managers and employees also see how much they will earn and when. If certain activities are not carried out or are not carried out on time, this system sends alerts to managers and employees. The online planning system contains cultivation manuals, cultivation manuals, language courses, irrigation information, quality manuals, training courses, instruction cards, presentations and videos with which the managers and employees will learn many new technologies and techniques. The online system ensures that very efficient work can be done with very little finance and very few employees. Many young people will find this an attractive modern way of farming and horticulture. It will thus attract new young employees.
- **8. Primary Goal: Train 1000 Surinamese Mothers to get them growing** The goal of this Peanut & Tomato Get Growing Pilot Project is to train 1000 women in Suriname in the coming years and teach them routines in sowing, planting, caring for, harvesting and processing peanuts and tomatoes and other easy crops. After 6 months, on August 1, 2023, the goal is to have a minimum monthly turnover of 20,000 euros on Alliance from store sales, market sales and online sales of processed products made on Alliance. We can also achieve such turnover in Santigron, Pokigron and Paramaribo . As long as the women routinely perform the tasks daily, so that there is planting and production. In the next three years, the goal is to grow to a minimum monthly turnover of 80,000 euros per month on Alliance, and also in Santigron, Pokigron and Paramaribo. The goal is also to get the women and their children to eat much healthier with, among other things, the tomatoes and other vegetables, fruit and herbs that we will grow.
- 9. Sales Strategy: Product Sampling, Website & Expo Fields In order to achieve the turnover target, we are going to work bigger and bigger from small steps. The routine activities that we initially provide through the online system are aimed at producing dozens of product samples from peanut sambel at a very low cost. The product samples will be shown at expo's in Suriname and abroad and in videos on websites, with which we can get trial orders to produce such a full batch of hundreds of items. We will also experiment with mobile cultivation containers (tiered wooden planter boxes), our own potting soil and

tropical greenhouses for other crops and products. We are going to make mobile wooden market stalls ourselves. We will also immediately use agritourism, partnering and investment opportunities to realize turnover. This strategy solves the problems of a lack of finances, a lack of a cross-river connection and an ever-shrinking and aging workforce. It is important to have a website and to train the employees there as well and as modern as possible in making processed products. The online planning system will play a central role here. The online system will initially support the planting of peanuts, sopropo, peppers, peppers, cucumbers, tomatoes, citrus, mango and pineapple.

Interesting: https://www.dbsuriname.com/2021/10/26/pindaplanter-wijst-op-potentie-suriname/

- **10. Website & Communication plan** We are going to create a public website, for example <u>www.alliance.sr</u>. On this website we make five sections: a section for customers, for new employees/agricultural entrepreneurs, for investors/entrepreneurs, for partners and for volunteers/tourists/students.
  - 1. Customers can see on the website which products Alliance makes and will make in the future. You can place an order online and also buy these products in certain stores and markets in Suriname and certain stores abroad.
  - 2. New employees/agricultural entrepreneurs can read on the website how they can earn money with or via Alliance . We are going to enable people throughout Suriname to grow crops and make products and if they meet the quality requirements, they can be sold under the Alliance name.
  - **3.** *Investors/entrepreneurs* can read on the website and see how, where and why they can invest in Alliance, Santigron and Pokigron .
  - **4. Partners** can read on the website and see how, where and why they can partner / collaborate with Alliance, Santigron and Pokigron.
  - **5.** Volunteers/tourists/students can read how they can have a great time for 1 or 2 weeks at Alliance or in Santigron and Pokigron .
- 11. Priority Crops & Products We will start planting peanuts and boulanger (eggplant) and a little beekeeping. These 2 crops complement each other in cultivation. Both crops grow quickly (in 8 to 10 weeks). They can also be processed easily. In the beginning we will do that manually or semi-manually. Only much later, when there is turnover, will we do it all by machine. In addition to peanuts, we will also plant pepper, tomatoes, boulanger, sopropo, mango, margoesa, citrus, pineapple, coconut and cocoa. This way we can deliver the processed peanut sambel product within 3 months. Other processed products that we also want to produce are: citrus grater (for the catering industry), honey, syrup, stroopwafels, pineapple jam, mango jam, coconut biscuits, marquisa juice, frozen sopropo, tomato ketchup, chocolate powder, tea and cassava and banana chips. The important thing is that they are processed products, which makes them easier to export.
- **12.** Online Education/Training We will put a lot of effort into training and motivating employees via the websites. The goal is to teach a thousand women a daily routine of planting and processing. We are also going to teach employees how to work routinely, systematically, project-based and process-based very effectively via downloadable instruction cards. They will also enjoy working this way. It gives various benefits, including a lot of results and earning more money.
- **13. Nursery and Garden Center** In addition to focusing on planting and processing crops into products, we will also gradually set up a nursery and garden center at Alliance, in Santigron and Pokigron . For ourselves and for agricultural entrepreneurs in the area, this is a support for starting agriculture and horticulture. Here too we are going to start very small and then make it bigger step by step.
- **14. Wooden Planter Boxes & Pergolas** In Suriname, knowledge on and usage of mobile tiered wooden planter boxes and pergolas is not widespread. Vertical farming is up until today for most people an unknown concept. In Suriname there is so much wood available, it is very easy for anyone to create a planter box or pergola at very low cost. The challenge is to learn people how to construct it and what its benefits are. For instance you have more control over the shade, insects, quality of soil, drainage and flooding issues.
- **15. Agritourism** On the Alliance site and in Santigron and Pokigron we will set up a weekly market place with catering, where mobile market stalls can be set up by our own employees and surrounding farmers. We are also going to set up a wooden playground, including a zip line and climbing tower. We are going to make it easy for tourists to follow workshops and tours on Alliance. We start small with the market, catering and playground and slowly expand it.
- **16. Team** The team that will carry out the Peanut & Tomatoes Get Growing Project on Alliance, Santigron, Pokigron and Paramaribo, initially consists of 16 people: Mark Paauwe is the project coordinator. 5 persons work continuously on Alliance (employees), 5 persons (residents) work continuously in Santigron and 5 persons in Pokigron. Mark Paauwe will mainly be in Suriname for 10 years to lead this peanut project.

17. Ten Year Use Loan Agreement for 3 x 100 hectares – In Suriname there is a lot of land that has been reclaimed for agricultural purposes, but is not used. Of the 280,000 ha of cultivated area for agricultural purposes, only 60,000 ha is used. Mark Paauwe, director of Dragon1, therefore requests that, in the context of this project, for the duration of ten years (2023-2033), at least 100 hectares of unused agricultural land be provided in writing, on, next to or near Alliance, Commewijne and a minimum of 100 ha at Santigron, Wanica and a minimum of 100 ha at Pokigron, Upper Suriname, suitable for the purposes mentioned in this document. If you want this Peanut and Tomatoes Get Growing project to be carried out at other places, please do start it up. Be sure is to make at least 100 hectares of agricultural land available, so that women can routinely plant, process and produce on this land.

#### 18. Roadmap

Below are a number of steps that can be taken at any time in 2023 and will lead to a monthly turnover of 20,000 euros within 6 months at Alliance, Santigron, Pokigron and Paramaribo.

- 1. Motivating and training the team members, employees and residents of Alliance, and mothers in Santigron, Pokigron and Paramaribo in a simple daily routine of sowing, planting, tending and harvesting crops (in tiered mobile planter boxes).
- 2. Setting up an external base website <a href="www.alliance.sr">www.alliance.sr</a> this will greatly boost product pre-sale from day 1, boost trade missions to Alliance, Santigron, Pokigron and Paramaribo, boost demand for product samples and attract tourists to the tours, workshops and market stimulate.
- 3. Setting up an internal online food production & planning system by Dragon1.
- 4. Motivating and training the team members/employees in using the online system via their mobile phone.
- Motivating and training the team members/employees in manual planting of the first 1 ha peanut, pepper and boulanger on Alliance, Santigron, Pokigron and Paramaribo (using visual instruction cards).
- 6. Preparing sites for sowing and planting by hand.
- 7. Start beekeeping on Alliance and in Santigron, Pokigron and Paramaribo.
- 8. Installing irrigation, drainage and related matters.
- 9. Procurement of seeds and collection of mother plants.
- 10. Start sowing and planting various horticultural crops.
- 11. Planting many manja trees , dwarf coconut, marcusa and citrus trees in strategic places.
- 12. Sow and plant the other crops on other pieces of land. Like an experiment with different types of tomatoes.
- 13. Make your own potting soil.
- 14. Making mobile wooden cultivation boxes and filling them with your own potting soil.
- 15. Set up a nursery and garden center at Alliance, in Santigron, Pokigron and Paramaribo.
- 16. Beginning language courses for adults.
- 17. Setting up the wooden playground and weekly market. Making mobile market stalls.
- 18. Setting up an expo field where investors, partners and customers (from a trade mission) can try the product samples.
- 19. Organizing workshops and tours for tourists.
- 20. Organizing a weekly market with small-scale catering and food trucks: terraces where you can enjoy juice, smoothies and fruit
- 21. Selling processed products in Paramaribo and Nickerie.
- 22. Organizing trade missions to Alliance, Santigron, Pokigron and Paramaribo
- 19. Weekly Online Activity Schedule We will teach the women participating in the project to work in small teams of 5 to 10 people with a weekly online activity schedule for the agricultural and horticultural tasks. This has the advantage that you can do much more through cooperation than as 5 or 10 loners. Also consider organizing childcare among themselves so that all women can participate. Below is an example of an activity schedule:

Week no	1	Date	January 1, 2023		Week goal	Plant 1ha of small plants		
Team members		Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Joint		Day meeting	Day meeting	Day meeting	Day meeting	Day meeting	Day meeting	Day meeting
Team member 1		Tidy	Weeding	To water	Making nets	Occulate	To clean	Transplant
Team member 2		To sort	To water	Weeding	Occulate	To water	Occulate	To water
Team member 3		To clean	Making nets	Occulate	To water	Weeding	To water	Making nets
Team member 4		To replace	Occulate	Tidy	Transplant	sow	Making nets	Occulate
Team member 5		Making beds	To clean	Transplant	sow	mulch	Tidy	To replace
Joint		Day closing	Day closing	Day closing	Day closing	Day closing	Day closing	Day closing
Details ( what failed)								
Details ( what failed)								

<sup>\*)</sup> Each activity is a maximum of 1 hour of work

#### 20. Contact Us & Feedback

Would you like more information about this project or do you have feedback on the plan? You can always contact the author by sending an email to <a href="mark.paauwe@dragon1.com">mark.paauwe@dragon1.com</a> or calling (whatsapp) on +31 6 284 17 269.

## Production for Food and Sales

Initially, we produce food (fruit and vegetables) for the women and children's own use, so that people eat and drink much healthier and learn a daily routine for horticultural tasks. Secondly, we produce for local sales and thirdly for export.

We want to make the following processed products with the fruit and vegetables: citrus grater (for the catering industry), honey, syrup, stroopwafels, pineapple jam, mango jam, coconut biscuits, marquisa juice, frozen sopropo, tomato ketchup, chocolate powder, tea, cassava and banana chips.

We will make some processed products without growing the same crops, but we will see if we have outgrowers in the area who have these fresh products.

# Vegetable Garden

### Plan Open Ground Cultivation, Tropical Greenhouse Cultivation and Water Cultivation

To begin with, we will first prepare a piece of  $100 \times 100$  meters on the 100 ha as a nursery and  $100 \times 100$  meters as a vegetable garden for planting.

We are going to divide the nursery section into 20 sections with a path in between and cover each section with wood as simply as possible. Under a roof we will place breeding trays in which we will create baby plants. We also make a seat, table and chairs and a small shed.

We clean half of the vegetable garden area (50 x 100) and we dig beds in it so that we can plant 20 crops. A manual and instruction card for cultivation and cultivation will become available for each of these crops.

Over half of that part (50 x 50) we make a roof, so that half is in the sun and half in partial shade. We can then clearly see the difference in growth.

We do not clean the other half of the vegetable garden section ( $50 \times 100$ ), but we place wooden breeding boxes (on legs of 1 m / work table height) there. We put potting soil in the cultivation boxes and we put nets over the cultivation boxes. Here, too, we make wooden roofs that are as simple as possible.

We will plant flowers around the beds that will attract butterflies and bees.

We plant the same 20 crops in the nursery trays and beds. These include the crops: Peanut, pepper (Madame Jeanette), bell pepper, tomatoes (beef tomatoes, truss tomatoes and cherry tomatoes), strawberries, boulanger (eggplant), sopropo, long beans, cucumber, manja, marquisa, citrus, pineapple, dwarf coconut, cocoa, cauliflower, onions, potatoes, bok choy.

We are going to place a friendly bee colony at a good distance.

# Daily routine

It is the intention that everyone who cooperates in the vegetable garden does the following horticultural tasks:

Make a simple wooden roof	Occulate	Plants	Transplant	Fertilize
Make pergola	Make or buy a hoe	Repot	Harvest	Apply permitted pesticides (to prevent diseases)
Make or buy stone pots	Buying and harvesting seeds (including from vegetable and fruit waste)	Making beds	Realize drainage	To feed
Make or buy bucket	Planting seeds	Taking care of beds	Irrigate / water	Weeding
Make or buy a rake	Make or buy a watering can	Make compost/potting soil	Mulching	Process harvest
Make or buy chap	Making wooden planter boxes			

If everyone does this work every day, much more fruit and vegetables will soon be produced on the land than can be used for personal consumption.