

TOPS

The National Horticulture Development Plan for Suriname 2024- 2034

Setting up Knowledge-Intensive Tomato Greenhouses with Solar Panels in 10 Districts in Suriname to realize 5 billion euros in exports in 10 years with tomatoes and 20 other cash crops on 10,000 hectares with 1000 Surinamese horticultural companies. Providing work for 25.000 people in Suriname.

*SURINAME IN THE LONG RUN AS A TOMATO GREENHOUSE AND AGRIHUB
FOR THE ENTIRE CARIBBEAN REGION*



For phase 1, let's follow the example of Nepal and Wageningen University:
<https://topsectortu.nl/nieuws/lowtech-groentekas-van-bamboe-voor-nepal>

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Introduction

Mark Paauwe (mark.paauwe@dragon1.com) is director of software company and AgriTech company Dragon1 from Wageningen in the Netherlands and founder of Discover Suriname (www.discover-suriname.com) and SchoolTV Suriname (www.schooltv.sr).

Mark Paauwe, together with ten Surinamese people, has come up with a plan to revive the economy of Suriname through horticulture. This plan would like to link in with the ambitious agricultural plan and horticulture plan of the Santokhi-Brunswijk government.

The goal is to realize more than 5 billion euros in annual horticultural production and horticultural exports for Suriname in 10 years, together with all stakeholders in Suriname.

The big plan is to set up a large professional and educational tomato nursery in each district (Solar driven Medium-tech Tomato Greenhouses) in which, in addition to tomatoes, 20 other cash crops are grown. All farmers learn from this. The tomato nurseries have processing, packaging and logistics facilities for themselves and surrounding companies. In this way, the tomato nurseries are also AgriHubs.

To speed up, we should immediately start a monthly Strategic National Horticulture Consultation (SLTO), with +/- 30 people and set up a WhatsApp group.

The plan consists of 2 major phases: Phase 1 - starting up low-tech tomato nurseries in 5 months and Phase 2, based on the start-up, receiving funding from investors to - For phase 1 we want to use the wonderful example of cheap but effective bamboo greenhouses from Nepal for growing tomatoes.

Tomatoes, lettuce, onion, peppers and 20 other types of vegetables, fruit and herbs can easily be grown in greenhouses on a large scale in Suriname, thus providing food for hundreds of thousands of Surinamese and income for tens of thousands of Surinamese.

Greenhouse cultivation can provide enormous import replacement production, regional export to CariCom and international export to Brazil, America, Europe and Africa. This only requires a step-by-step increase to 10,000 hectares of horticulture, carried out by 1,000 newly established Surinamese horticultural companies. This requires training and cooperation.

It is all possible if we start up 1000 horticultural companies in 10 years in collaboration with professional foreign horticultural partners, and thus work closely together in setting up low, medium and high-tech greenhouse companies with solar panels. We must also train 10,000 Surinamese people in 10 years (1000 per year) in innovative greenhouse cultivation.

In a greenhouse you can organize an ideal climate for the growth of your crops. This allows you to achieve up to 7 times more harvest on the same piece of land.

In Suriname, much greater results can be achieved with horticulture with relatively fewer investments and relatively less energy generated than in Europe. As long as innovative horticultural knowledge and technology are used. Think of AgriTech with vertical farming, insect farming, orchid nurseries next to the airport, aquaponics, hydroponics and think of tropical greenhouse cultivation in addition to "traditional" greenhouse horticulture.

Growing Tomatoes is a Golden Business

SOURCE: RIJK ZWAAN SEEDS & <https://www.pggm.nl/en/blogs/more-precious-than-gold>

- **1 kilo of tomato seed** has a value of approximately 50,000 euros, while 1 kilo of gold is worth approximately 32,000 euros at current rates.
- 1 kilo of seed is good for 4.8 million kilos of tomatoes.
- The farmer can sell that quantity for approximately **3.5 million euros**.
- In the store the value is increased to 10 million euros, 200 times the value of the seed.
- <https://www.youtube.com/watch?v=-SR6fIVXeec&t=26s>

Bringing innovative horticultural knowledge from the Netherlands to Suriname

With 12,000 hectares of horticulture and re-export, the Netherlands realizes more than 24 billion euros in exports.

<https://www.cbs.nl/nl-nl/nieuws/2024/10/landbouwexport-bijna-124-miljard-euro-in-2023>

<https://www.cbs.nl/nl-nl/publicatie/2024/10/the-dutch-agricultural-sector-international-2024>

There are 3,300 greenhouse horticulture companies in the Netherlands that grow vegetables, fruit, trees and flowers on an area the size of 14,000 football fields. 1 football field is 0.7 hectares. Almost none of these 3,300 companies are partnering with Surinamese agro-entrepreneurs.

This TOPS project aims to significantly change this by building a collaborative structure.

Based on research, Mark Paauwe estimates that hundreds of Dutch farmers can successfully set up greenhouse horticulture companies in Suriname together with Surinamese.

Almost all Dutch farmers are still unaware of the enormous possibilities of horticulture in Suriname.

Years ago there was the Surituin project. In fact, we want to revive the idea behind Surituin.

For years, innovative horticultural knowledge has hardly reached Suriname from the Netherlands

The Netherlands is the world leader when it comes to horticultural knowledge. Suriname must also become this. And that is possible, if we put our efforts into it.

We need to build up a lot of knowledge about AgriTech (innovative horticulture and seed breeding) and AgriBusiness (modern business models for horticulture) through training and collaboration.

For example: if you grow cash crops in greenhouses with vertical farming, you need 90% less water than otherwise and you can do this very sustainably and cost-efficiently. Because you organize a protected climate, you also have fewer diseases.

There are actually 3 types of greenhouse cultivation: low-tech, medium tech and high-tech. Each variety yields a multiplier compared to open field cultivation.

In Suriname, there are few, if any, Dutch or other foreign universities, knowledge institutes, breeders or growers that are significantly active in bringing, building up and applying innovative horticultural knowledge to Suriname.

Hardworking few are currently working on AgriTech in Suriname.

The University of Wageningen (WUR) does not have a permanent location in Suriname. Surinamese people cannot easily study at WUR or acquire high-quality horticultural knowledge in any other way.

This TOPS project aims to bring significant changes to this.

We should try to get foreign agricultural universities to set up a location in Suriname.

<https://www.groentennieuws.nl/article/9577965/het-telen-in-containers-heeft-ons-waterconsumption-drastisch-verminderd/>

<https://www.universiteitleidingen.nl/nieuws/2022/05/nederlandse-glastuinbouw-als-spraaktuin-van-de-wereld-voor-duurzaam-informatie-en-kennis>

VAN WINGERDEN – A SUCCESS OF IMPORTING HORTICULTURAL KNOWLEDGE

Example of an enormous success in introducing horticultural knowledge: in America, the Van Wingerden family, who emigrated from the Netherlands, is active with 30 companies in horticulture. They are pretty much the largest orchid grower in the USA. For example, they sell 120,000 orchids per week, mainly to large retail chains such as Walmart.

Look here: <https://alexanderranchinc.com/the-ranch/our-story>, <https://van-wingerden.com> and here <https://colororchids.com>

NEPAL AND WAGENINGEN UNIVERSITY HAVE REALIZED AN INNOVATION IN GREENHOUSE CULTIVATION

Two retired horticultural specialists have built effective greenhouses in Nepal using bamboo and a chimney construction, which provide sufficient ventilation.



<https://www.resource-online.nl/index.php/2021/08/19/retirees-construct-low-tech-greenhouse-for-nepal>

This TOPS project aims to bring professional and innovative horticultural knowledge to Suriname and build it up independently in order to realize billions of euros in horticultural exports in 10 years. We will be doing a lot of horticultural education, container cultivation and greenhouse cultivation.

This TOPS project aims to establish an expertise center for all growers and gardeners in Suriname.

Loan-to-use statement

To get started with this TOPS plan, Mark Paauwe asks the national and traditional authorities in Suriname for access to 10 plots of land suitable for horticulture of at least 100 hectares via a loan-for-nothing declaration. We are not going to plant in the open ground, but in containers and buckets that are placed in greenhouses and loose on the ground.

Suriname has more than 4 million hectares of agricultural land, of which less than 280,000 hectares are cultivated and approximately 58,000 hectares are in production.

Read more here: <https://www.discover-suriname.com/nl/agriculture>

It is possible to have pieces of land of 100 hectares made available in each district to start up a local horticultural industry.

Mark Paauwe does not initially request ownership rights for each piece of unused agricultural land, but rather a loan-for-use declaration for a period of 20 years. This has the advantage, among other things, that no time is lost on ownership changes and that all unused agricultural land in Suriname is eligible for this TOPS project.

Mark Paauwe will set up a nursery and horticultural business on each piece of land in collaboration with local residents. The nurseries then supply cultivated plant material to local agricultural entrepreneurs at very low prices. A lot of education is also done at nurseries and horticultural companies.

Phase 1 – The Start-up Phase

Mark Paauwe would like to take the following steps immediately, in the role of program manager in a Horticulture Task Force, together with the Ministry of Agriculture (LVV), Regional Development (ROM), all district commissioners and other relevant key players:

1. Start a monthly Strategic National Horticulture Consultation (SLTO), with +/- 30 people.
2. Q3 2024 - Getting 10 plots of land of at least 100 hectares of land suitable for horticulture, in each district via a “free use loan declaration” for a period of 20 years.
3. Each location is given the name of the district: TOPS Brokopondo, etc...
4. At these locations we will set up a first version of a tomato nursery at low cost with low-tech greenhouses, with attention also for 20 other cash crops.
<https://www.roshanp.com.np/2023/04/greenhousepolyhouse-design.html>
<https://www.tuinadvies.nl/tuinwinkel/product/2651/serreplastiek-professioneel-65-m>
5. We will only grow in planters and buckets. Not in open ground.
6. Q3 2024 - Appointment of a site manager per location and appointment of 3 site manager assistants. Mark Paauwe already has possible candidates in every district.
7. Q3 2024 – Building a bamboo greenhouse, like in Nepal. Cost estimate: 3000 euros per greenhouse.
8. Q3 2024 - Making wooden planters every month and having 100 black buckets and seeds delivered, of tomatoes, peppers, lettuce, onion and 20 other cash crops and providing water and growth nutrients. This requires at least 1,000 euros per month per location, but quickly yields more than 2,000 euros per month.
9. Start producing seeds from fruits and vegetables and start propagating plants.
10. Planting seeds in black buckets every day and watering and caring for the growing plants in the buckets every day.
11. Selling nurseries to surrounding agricultural companies and harvested fruit and vegetables
12. On www.discover-suriname.com, Mark Paauwe, together with others, will create a lot of visibility on the internet for the TOPS project. This will attract many investors.
13. Q4 2024 - Organizing an SDG Investment Fair in Suriname at the TOPS locations in September 2024.
14. The sale/sales will first take place in Suriname itself. We are going to promote the buying and eating of Surinamese tomatoes.
15. In addition, according to international agreements, all CariCom countries must purchase tomatoes from Suriname before tomatoes from the USA or Europe.
16. With various fact-finding horticultural missions to Suriname, we will interest many foreign buyers and investors in Surinamese tomatoes, tomato paste and ketchup. We will invite fast food chains such as McDonalds, Burger King, Wendy's, supermarkets such as WallMart and Costco, pizza chains such as Domino's and Ketchup brands such as Heinz.

The tomato farms in the districts will in fact become local or regional AgriHubs.

What we want to do in later phases is:

- Attracting and supporting 100 small agricultural businesses around each TOPS location.
- Setting up solar panels and WiFi/internet for ourselves and surrounding companies.
- setting up processing, packaging, storage and logistics for ourselves and surrounding companies.
- Organize many digital horticulture lessons via www.discover-suriname.com and www.schooltv.sr
- Set up a goat farm for dairy, a petting zoo with playground and pancake house for tourism at all locations
- Set up a bakery for bread, cakes and pastries
- Setting up a garden center
- Set up a cyber cafe
- Set up a daycare center and medical post
- Setting up medium tech and high tech tomato greenhouses.

The Places in Suriname need Horticulture!

Mark Paauwe has spoken with district commissioners, captains and residents of various places in Suriname in recent months about this horticultural plan.

He also gave a presentation at the UN on behalf of Suriname about setting up medium-sized tomato farms in Suriname.

Local people indicate that they benefit greatly from this TOPS horticultural development plan.

People would like to see a central tomato nursery in the area that can function as a kind of AgriHub and education center for the surrounding areas.

People would like to be trained and supported in setting up local horticulture.

Contact and get started

Mark Paauwe would like to get started with this TOPS horticultural plan immediately. He is open to any proposal from the Ministry of LVV or the Office of the President for the next step.

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