



Response to Agriculture related questions from Councilmen Koos Sneek

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It was requested for Dir Eni to provide answers from Question 5- 12.

5. The main challenge for the agricultural sector is the structural availability of water. What are the short and long term plans to guarantee sufficient water for the sector?



Statia has been plagued with extensive drought throughout its history. Having no natural fresh water source on the island has compounded to this problem. The total amount of water (m³) produced on the island is far less than the domestic and non-domestic demand. Not only water shortage is an issue, also the quality of the water sources is in many cases classified as non-potable water and is thus not suitable for drinking. The ground water contains a high level of salinity and nutrients (brackish).

The vision of the Directorate of Economy, Nature and Infrastructure (ENI) is to create amongst others sustainable agriculture. In 2020, ENI compiled a plan of approach to implement short-term to medium-term solutions for the availability of water. A longer term solution is incorporated in the draft European Union multiannual indicative program.

Statia places waterlines at Zeelandia to secure sustainable water for farmers

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Waterlines which draw water from the wells are currently being placed in the Zeelandia area to supply farmers with sustainable water. Two wells, the 'Spout and the Monroe' well, will be used primarily for animal husbandry and farmers.



Farmers who want access to the water supply, must be registered at the agricultural desk and also at the Chamber of Commerce.

Hobby farmers are not allowed to access the water supply. This is an effort to continue the process of professionalizing the agriculture practices.

Each distribution line will be equipped with a meter to monitor how much water is being used and to also calculate the collection charges. The farmers will be able to utilize the water when these water meters are installed.

Drought

Middle to long solution.

all solutions are structural.

Two wells were rejuvenated and connected to a reservoir. The farmers who are registered by the agriculture desk and the chamber of commerce will be connected through individual water pipes. See Article published on the Government Website:

<https://www.statiagovernment.com/key-topics/economy-nature-and-infrastructure/news/2021/03/29/statia-places-waterlines-at-zeelandia-to-secure-sustainable-water-for-farmers>



Improving water availability for arable agriculture (farming)

Middle to long term solution 2.

Under the hurricane relief program, it is the intention to construct 2 water ponds. The ponds will provide water exclusively to the farmers. One of the pond is already completed and connected to the solar park which is fed through gravity. The reforestation and made in statia foundation are already connected to the ponds. The feedback from the foundation is that they currently do not have any problem with adequate water

Pic1. gravity fed water flowing into the pond from the solar park

Pic 2. Water lines connecting soalr park with completed retention pond.



Long term solutions.



- A longer term solution is incorporated in the draft European Union multiannual indicative program. Which include the possibility of integrating a separate desalinization plant specifically for H₂O.
- Limit the quantity of water run off to the sea and increase the amount of rain water collected
 - Rejuvenating the water table through infiltration ponds
 - Construction of more water retention ponds.



6. A source of water is the well close by Made in Statia. Due to excessive use also by other parties, this water is whether not available or brackish and therefore not suitable for agricultural purposes. Can government explain what are the short-term alternatives?

Please see above answer in question no.5

- Made in Statia is now connected to the Pond with fresh rain water,
 - There are talipia fishes in the pond to control mosquitos and increase the nutrients leve of the water (aquaponics)
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- In addition; After several contact moments with the management of Made in Statia, LVV suggested to Made in Statia and the project Reforestation of STENAPA to get connected to the reservoir near the airport by buying and installing their own water pump. Since they are connected to the reservoir, they are able to pump the water directly from the pond to their properties to make use of. Since the installation of the water pump, the availability of water has been structural. The government already provided the connecting line that connects the properties to the pond.



7. One of the results for agriculture according to the multiple annual budget 2021-2024 is to catch and store rainwater to be used in agriculture. Does this include the construction of a cistern on the property used by Made in Statia? If so when will this project be carried out?

No, the construction of a cistern at the made in statia project is not specifically mentioned

- There is already a reservoir that was previously constructed on the property of MIS, placing a cistern on the property used by Made in Statia is a good idea, but not urgent since they already have a structural source of water with an existing reservoir for storage.



8. Another result mentioned in the budget is making farm machinery available. I saw an almost brand-new tractor on the premises of the slaughterhouse. Management of Made in Statia claims the lack of up to 4 weeks to honor a request to use the tractor. Is government aware of this situation and what are the reasons behind this? cooperation from the relevant government department when he wants to make use of this tractor. Sometimes it takes

Yes, we are aware of the period it can take to make use of the tractor. Sometimes it takes too long for the farmers to get the services they need, this is due to several reasons.

Operator and maintenance.

This was already dealt we have hired an external operator to provide the requested services. With the last correspondence with the foundation, they mentioned that they do not have an issue with machinery. Problem solved at least for now.

Pic. Made in Statia grounds after plowing





9. Across the street from Made in Statia is the former “proeftuin”. The construction of a hydroponics project was realized there some years ago with financing of the Dutch government. I noticed this project is not in operation now. Why is this project not in operation?

The project is already concluded but the hydroponics is currently in operation.

There is a joint ownership of the hydroponics. It is owned by the New challenges foundation and the OLE>.the decisions regarding its operation is also a joint responsibility. farmers of the community garden are executing the hydroponics system. It was dormant for some time but it is operational again. Currently it is planted with vegetables.



Hydroponics 2016



Hydroponics April 2021

10. What are the results of this government funded project since its inception? How did it contribute to the improvement of the agricultural sector?



1. Improved collaboration between the OLE, New challenges foundation and reclasserring.
2. Several local farmers received basic Hydroponics training
3. fresh Local vegetables produced
4. Several youngsters that had community services were able to learn skills at the hydroponics
5. the facility was damaged by the passing of hurricane Irma and Maria



Local Farmer harvesting pack Choi from the Hydroponics in 2017 before hurricane Irma

11. Does government agree with me that innovated forms of agriculture are the way to go forward and therefore need to be stimulated and in the case of the hydroponics project

should not stand •

Yes we agree.

This is also one of the pillar for the Agriculture vision plan.





12. I understood from a recent presentation by the director of that the main goal of government is food security above a sustainable sector. What concrete plans does government have to increase production by the agricultural sector and which innovative methods are you looking at?

This is a misunderstanding a sustainable sector is the best bet for food security.

Methods/ actions

- Structured solution for water shortage;
 - Infiltration ponds
 - Retention ponds
 - Constuction of reservoirs
 - Connecting farmers to water sources.
 - desalinization plant
- Introduction of more hydroponics and aquaponics,
- Better intercropping
- Better soil conservation and pest control methods (better sustainable methods)
 - Intercropping
 - Agrforestry
 - Less outdoor farming

other actions

- facilitating the Statia Farmers Cooperative to get operational again and supply them with an institute to address issues and find solutions together.
- Developing the islands first agriculture vision plan.
- The incorporation of the agricultural development in the Nature and environmental policy plan BES
- The implementation of the roaming animals project
- Increased access to finance for farmers.
- Investing in agriculture for the islands post 2020 EU development plan