

**Maldives
Matter
Project**

An aerial photograph of a tropical beach. The left side shows a strip of white sand bordered by dense green vegetation. The water is exceptionally clear, showing various shades of turquoise and light blue, with visible coral reefs and sandy patches. A small white boat with a canopy is in the water, and several people are visible on the beach and in the shallow water. The sky is bright blue with scattered white clouds.

SUSTAINABLE, LOCAL & HIGH QUALITY
FOOD PRODUCTION

IN THE MOST
ISOLATED PLACES



CONTACT INFORMATION

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TEAM



MELCHIOR BOS
Co-Founder

Projects that go further than just a standard solution intrigue Melchior. Attention to detail and combining multiple aspects are what keep Melchior busy. During his many dives all across the globe, including the Maldives, he experienced first-hand the problematic and dire conditions. Working on this integral solution project is therefore in line with what he stands for.



SEBASTIAAN BROUWER
Co-Founder

During his life, Sebastiaan has traveled in more than fifty countries, visited hundreds of foreign cities and did more than 30 long-distant hikes through nature. He saw the urge and need for a change in the world. During his study of Architectural Engineering he aimed to make a theoretical change and now his drive is to implement this in a practical way as a project leader.



STAN VAN STRALEN
Co-Founder

Stan always had the desire to add something positive to this world, which is why after being confronted to dire situation of the Maldives during our field trip in 2017 it left him motivated to continue were the study project ended. The situation on the Maldives shows the devious way materials are handled but also gave an opportunity to rethink this.



THOMAS EDES
Co-Founder

Thomas is eager to have a positive impact on the world. It's not always that such a beautiful and clear opportunity arises. Here Thomas can put to work what he have learned in his education, and learn much more in the process. Therefor working on the Maldives Matter Project, is a no-brainer for him.



TRANG PHAN
Co-Founder

Trang did her research in greenhouses during her master course at the TU Delft. Back then the complexity and diversity surprised her in a postive way. The amount of impact you could make by implementing such techniques is significant. She believes firmly in the huge potential of greenhouses and circularity.

VISION

“TO REDUCE THE AMOUNT OF IMPORTED FOOD, TO EDUCATE THE LOCAL COMMUNITY IN HIGH PRODUCTIVITY HORTICULTURE AND TO IMPLEMENT A CIRCULAR ECONOMY“

ADVISORY BOARD



AISHATH AZFA
Sustainable Development Consultant

Azaf has been involved with the project since the collaboration between the United Nations and the TU Delft. After working for 7 years for the UN, she is now a independent sustainable consultant. Azaf supports the contact between the Netherlands and the Maldives. In the board of advisors her field of expertise lies in the social implementation.



AMIT PARULEKAR
Former Head of Finance at ABN-AMRO

Amit has more than 20 years of international finance and banking experience, strongly believes in performance culture where people matter and results count. Within the board he is the advisor on finance and business.



RAYMOND PIJPERS
General Manager at Accenture

Throughout Ray's career, innovation, technology and business always went hand-in-hand. First at KPN and the Dutch knowledge institution TNO and the last 12 years as Managing Director at Accenture, a global consultancy and technology firm, where he supports teams and clients with moving into-the-new. Within the advisory board he supports the team on the topic of strategic business development.



ROB BAAN
CEO and owner Koppert Cress

Rob Baan is a renowned entrepreneur within the agri-food world. He worked in 70 countries and became a number one expert in this field. He is constantly striving for solution based approaches, understanding cultures and diving into what really matters: help to make the world more healthy. Within the board he is the advisor on entrepreneurship in the agri-food sector

MEET OUR PARTNERS



HOOGENDOORN GROWTH MANAGEMENT

One of our technical partners is a leading horticultural company. Hoogendoorn is active in 58 countries over the world and is specialized in sustainable automation solutions for the coordination of all processes and systems in horticultural organizations.



LETS GROW.COM

Letsgrow.com is a specialist in registering and analyzing cultivation data. The overview of data allows one to instantly see the circumstances which lead to successful crops. This way a Maldivian grower can better control its environment and output.



VAN DER HOEVEN HORTICULTURAL PROJECTS

A renowned greenhouse builder that realized projects all over the world. Capable of delivering high-end horticultural projects for almost all climate types. They are contributing towards the project by in kind technical support.

So far, we closely worked together and gave there endorsement through a letter of recommendation.



TOPSECTOR HORTICULTURE NETHERLANDS

One of the nine indicated topsectors of the Netherlands. This governmental organisation aims to maintain the high level of the Dutch horticulture industry. In this moment the Netherlands is the biggest exporter of food in the world after the USA. Now let's export these techniques.



NGO LIVE&LEARN - ENVIRONMENTAL EDUCATION

The NGO Live&Learn - Environmental Education has the goal to educate, mobilise communities and facilitate supportive partnerships in order to foster a greater understanding of sustainability. They strive towards a sustainable future.



Resilient Island has very close relations with Delft University of Technology and UNDP Maldives. The project has its roots in these two organisations.

Wageningen University and Research contributed to the project in a consult on the project. A team of six master students sat for more than two months full time on the project.

GREENHOUSES

The future solution to feed the world's population. Anywhere in the world.

A greenhouse is a controlled environment where you can monitor the amount of water, temperature, climate, sunlight, nutrients and ventilation. This way it is possible to grow vegetables and fruits anywhere on the planet on a commercial scale. The yield rate of a greenhouse in comparison to open field is way higher. Resulting in less surface space needed for the same amount of output.

The Dutch are famous for its greenhouses. In the 70s the land price in this region increased rapidly. This resulted in a boost of competition and innovation between the farmers of constantly getting the highest yield of each square meter. This became the famous Westland area in the south-west of the Netherlands.

This area consists of 2.300 hectares (23.000.000 m²) of greenhouses. The Netherlands is the second biggest exporter of vegetables in the world. All because of greenhouses.

OUR APPROACH TOWARDS THE SMALL ISLAND DEVELOPING STATES

We aim to implement circular economies regarding food and waste streams in the world's most isolated regions: the Small Island Developing States. By realizing local and sustainable food production, generating renewable energy, creating circular food and waste streams, upcycling materials, conducting a knowledge transfer and enhancing the local economy by providing jobs we try to bring more independency towards these Island States.

depriving them of the benefits of economies of scale; small domestic markets and heavy dependence on a few external and remote markets; high costs of energy, long distances from export markets and import resources; low and irregular international traffic volumes; Therefore, they are highly disadvantaged in their development process and require special support from the international community.

Local and sustainable food production can contribute to multiple of the previously named challenges [0].

Common challenges faced by SIDS are: having a narrow resource base

IMPLEMENT CIRCULAR ECONOMY



ENHANCE LOCAL COMMUNITY



RAISE INDEPENDENCY



They are separated in there geographical locations which are Caribbean, Pacific and AIMS (Africa, Indian Ocean, Mediterranean and South China Sea).
Caribbean: Anguilla, Antigua and Barbuda, Aruba, Bahamas, Barbados, Belize, British Virgin Islands, Cuba, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, Montserrat, Netherlands Antilles, Puerto Rico, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, United States Virgin Islands.
Pacific: American Samoa, Cook Islands, Federated States of Micronesia, Fiji, French Polynesia, Guam, Kiribati, Marshall Islands, Nauru, New Caledonia, Niue, Northern Mariana Islands, Palau, Papua New Guinea, Samoa, Solomon Islands, Timor-Leste, Tonga, Tuvalu Vanuatu
AIMS: Bahrain, Cape Verde, Comoros, Guinea-Bissau, Maldives, Mauritius, São Tomé and Príncipe, Seychelles, Singapore.

WHY BECOME A CUSTOMER?

HIGH QUALITY

The vegetables and fruits are produced in a controlled environment. This way we are able to set the climate conditions, temperature, ventilation speed, lighting and water supply in the most perfect way for each crop.

This way we produce crops of the highest quality available.

Besides producing high quality crops, we are able to produce a large variety of crops e.g. lettuce, tomatoes, bell peppers, basil, regular cucumbers. You name it, we produce.

1.

FAIR PRODUCTION

Our local employees will have a fair salary. The work circumstances will be good.

Besides fair wages and good work conditions, the greenhouse will produce freshwater and renewable energy. This is not only to become self-sufficient but also to deliver to the local Maldivian communities.

4.

CONSISTENCY

The temperatures and climate conditions change over a year. Inside a greenhouse, it doesn't.

This makes it possible to produce every day, year round! This way we can promise our customers of a consistent delivery scheme.

2.

EDUCATION

We have a philosophy that the Maldives should be able to grow towards a clean, fruitful and a sustainable future.

The facility will have a trajectory to educate local Maldivians and other citizens of Island States in highly productive horticulture. This will set the first step in large scale food production for Island States.

5.

MORE INFO?

If anything is not clear yet, feel free to contact us.

info@resilientisland.com

FRESH

It is produced in the Maldives. After harvesting the crops the produce will be shipped directly our customers. No need to freeze or process it.

3.

CLEAN FUTURE

All our customers will support a clean future of the Maldives. The profit of our greenhouse project will go to our foundation. The Resilient Island Foundation has a goal to actively fight against plastic pollution and will develop waste processing facilities on all the Island States.

A clean future starts now.

6.

ORGANIC WASTE

The project will partly run on bio-powered energy.

When delivering we will retrieve your organic waste. A double win.

7.



WHO WILL GAIN?



LOCAL COMMUNITY



MALDIVIAN TOURIST INDUSTRY



PLANET



EDUCATION



HIGH QUALITY FOOD



LOCAL FOOD PRODUCTION



JOB OPPORTUNITIES



FRESHER



RESPONSIBLE WASTE TREATMENT



FRESHWATER SUPPLY



CONSISTENT DELIVERY



RENEWABLE ENERGY PRODUCTION



INNOVATION AND ECONOMIC GROWTH



LESS COOLED STORAGE SPACE



LESS IMPORT



SAFE ZONE FOR FLOODING



SOLUTION FOR ORGANIC WASTE



CO2 POSITIVE FOOD PRODUCTION

SUSTAINABLE DEVELOPMENT GOALS



SOLUTION

INNOVATIVE GROWING

The highly-productive and circular greenhouse produces crops that cannot be grown with the current climate. This high-end greenhouse will be able to grow vegetables and fruits that now are being imported. This results in more independency of the Maldives, more efficient land use, enhance the local economy, stimulates more innovation in the agriculture sector and will have a CO2 positive footprint.

RENEWABLE ENERGY

Sustainable and innovative techniques will deliver renewable energy and cooling for the greenhouse and local island. The project will get its electricity from renewable sources such as the sun, wind and biomass. This is essential for an isolated location like this.

PRODUCE

It is able to fulfill the need of the customer's high demand and consistency. The locally produced crops will be shipped to local islands, resorts and Male'.

It will improve the way how it is currently done: produced in a distant country, shipped and cooled by multiple parties. This is inefficient and very unsustainable.

We produce locally and deliver it directly to the customer: sustainable and more efficient.

DESALINATION

100.000 liters of water per day. The desalination plant will provide water for the crops and village.

Droughts and water shortages are still appearing in the Maldives. We will contribute towards water security so no freshwater has to be imported.

LOCAL ECONOMY

It will enhance the local population. The sustainable greenhouse will generate local jobs and will boost the local economy significantly.

EDUCATION

The Maldives Matter Project will facilitate a trajectory to educate local people to work in the greenhouse. In this way we bring innovation to the Maldives.

BIO DIGESTING

From organic waste to sustainable energy production. This will diminish the locally produced waste.

WATER STORAGE

Rainwater usage as efficient as possible. The plants can survive for two months without rain due to the buffer.

WHY DO WE DO THIS

We have the responsibility of taking care of the planet. When we were finished with our master course on the Maldives and experienced the need for action, we stepped in.

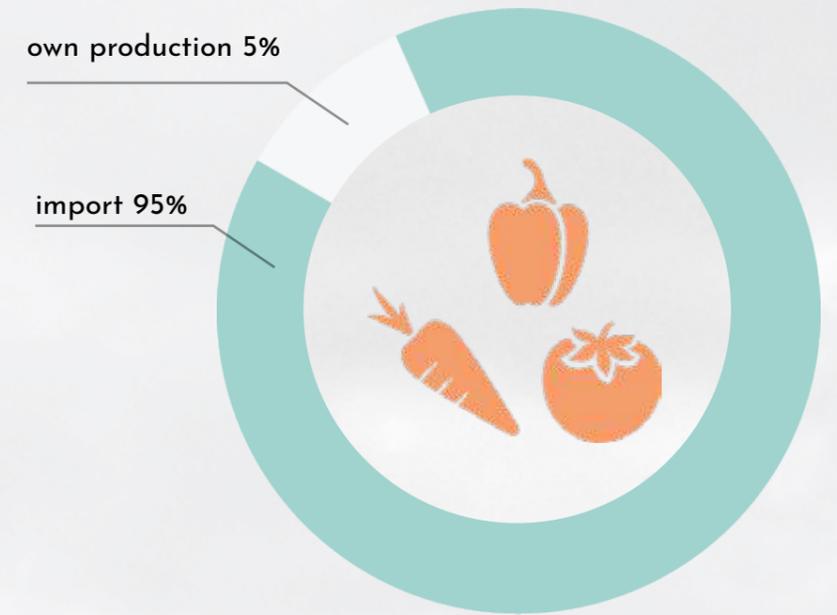
We formed a plan to solve the problems the SIDS are facing: the Resilient Island Foundation was born. Developing concepts to plans, and plans to reality focussing on three pillars: Sustainability, impact and economic feasibility.

Developing large scale, financially feasible projects with a big impact. Profits go to solving other problems that require financial investments such as the solid waste management, plastic soup, coral bleaching, protecting animal habitats, marine environments and safeguarding islands from floodings.



IMPORT DEPENDENCY

Like all Small Island Developing States, the Maldives imports a huge percentage of their food consumption. A staggering 95%. But why? The techniques to produce locally, anywhere in the world exist!



UNBALANCED CASHFLOW

The Maldives are heavily dependent on the few external and remote markets and their own export is very little due to their limited resources. They rely heavily on fossil fuels which are all imported. This results in a very large outgoing cash flow and relatively little to the local economy.



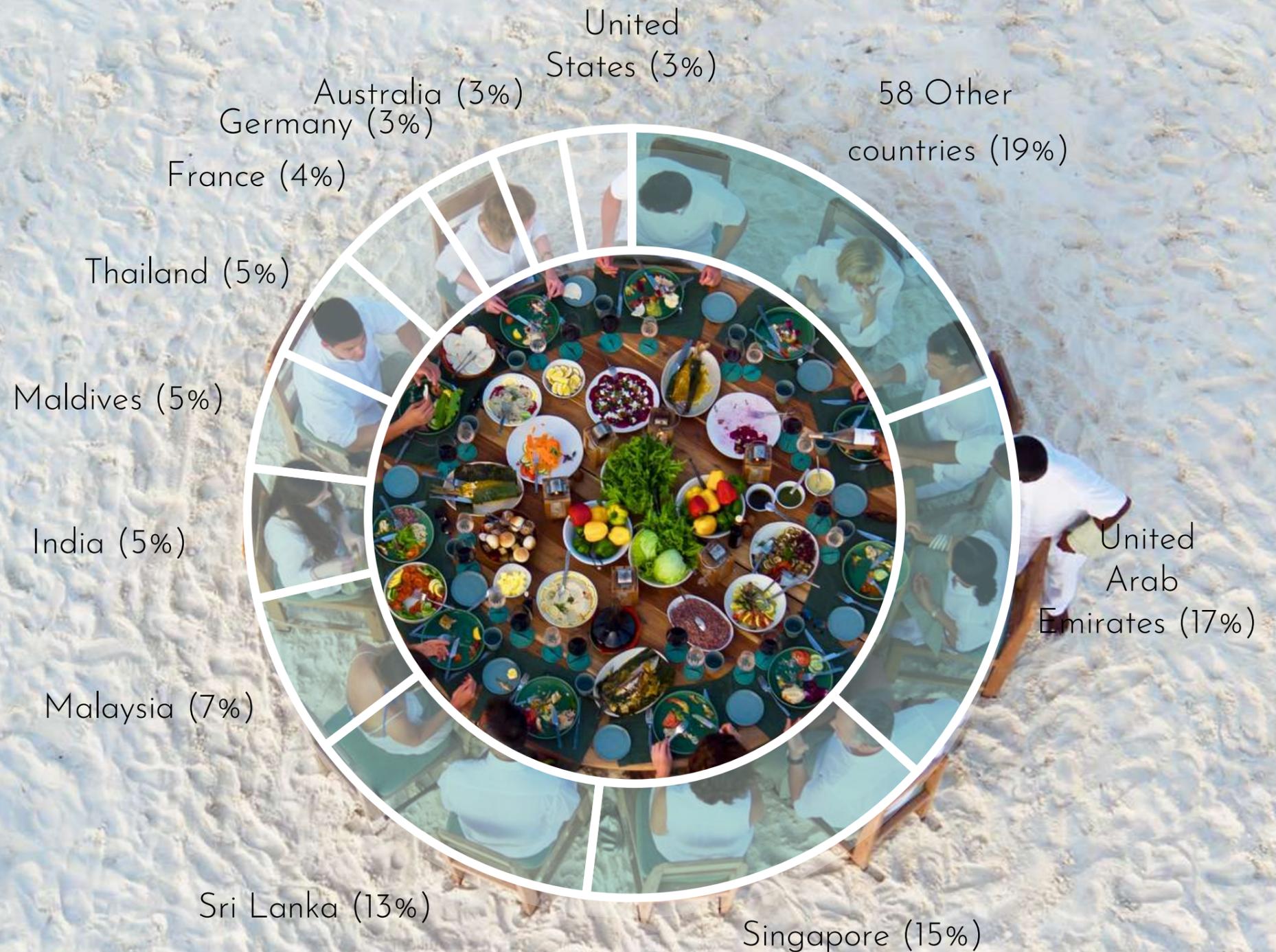
FOOD SOURCES

The Maldives are largely dependent on food import to cater to the growing population, expatriate community and the large number of tourists visiting the country. Shockingly, a 100 percent of rice, flour and sugar are imported [2].

The world bank shows that the Maldives can cater a value of 5% of its food sources, as seen in the visual [3].

The UAE, Singapore and Sri Lanka are, value-wise, the three main importers for this Island nation. India is also one of the main importers, quantity-wise. That being said, Maldives' imported food comes from all over the world, ranging from Australia to Germany, and from India to the United States [4].

It makes you think, doesn't it?



2. <https://wits.worldbank.org>, 2014, website visited 2019
3. Food and Agriculture Organization, Maldives country programming framework 2013-2017, 2012
4. Maldives Customs, import data, 2018

THE MALDIVES

FUTURE LEADER OF SUSTAINABLE TOURISM

The Maldives is ready for the biggest agricultural project: the Maldives Matter Project.

From all the island states we choose the Maldives as our pilot location. Why? Because this country has the most potential in succeeding.

It has an enormous drive to become world leader in sustainable tourism. 1.4 million tourists visit the Maldives every year. This number is growing.

Besides, the 130 resorts, dozens of hotels and ever growing amount of guesthouses have a high demand for fresh, sustainable locally grown produce. The drive in becoming sustainable is high. With one goal on the horizon: becoming the world's showcase in sustainable tourism.

Due to its extremely isolated location the drive to become circular is high, very high.

The Maldivian Association of the Tourism Industry has its as their motto.

We share its vision to become the world leader in sustainable tourism

Our network on the Maldives is very big. UNDP deputies, atoll presidents, Maldivian celebrities, the European Ambassador, ministers of Agriculture and Environment and many more.

Resilient Island is ready to start the biggest agricultural project in the Maldives.

“FOOD SECURITY AND ADEQUATE NUTRITION FOR ALL IS WHERE SUSTAINABLE DEVELOPMENT STARTS.”

José Graziano da Silva, FAO General Director

FAST FACTS MALDIVES

-  430.000 inhabitants
-  Capital: Malé
-  Dhivehi
-  30% of GDP from tourism
-  1194 islands
-  196 inhabited
-  130 resorts islands
-  1.4 million tourist annually



*Timeline not to scale

TIMELINE

1. SPECIFY DEMANDS

During our business trip we conduct in-depth interviews to get insight of the exact demands.

2. SELECT OUTPUT OF GREENHOUSE

After analyzing the data, the output will be selected.

3. EXPAND OUR TECHNICAL TEAM

The team will be expanded to get every expertises on board. This way we are able to face all challenges.

4. OBTAIN LETTERS OF INTENT

Around January a team is going back to the Maldives. We will select a couple of resorts as Launching Clients.

5. FINALIZE GREENHOUSE DESIGN

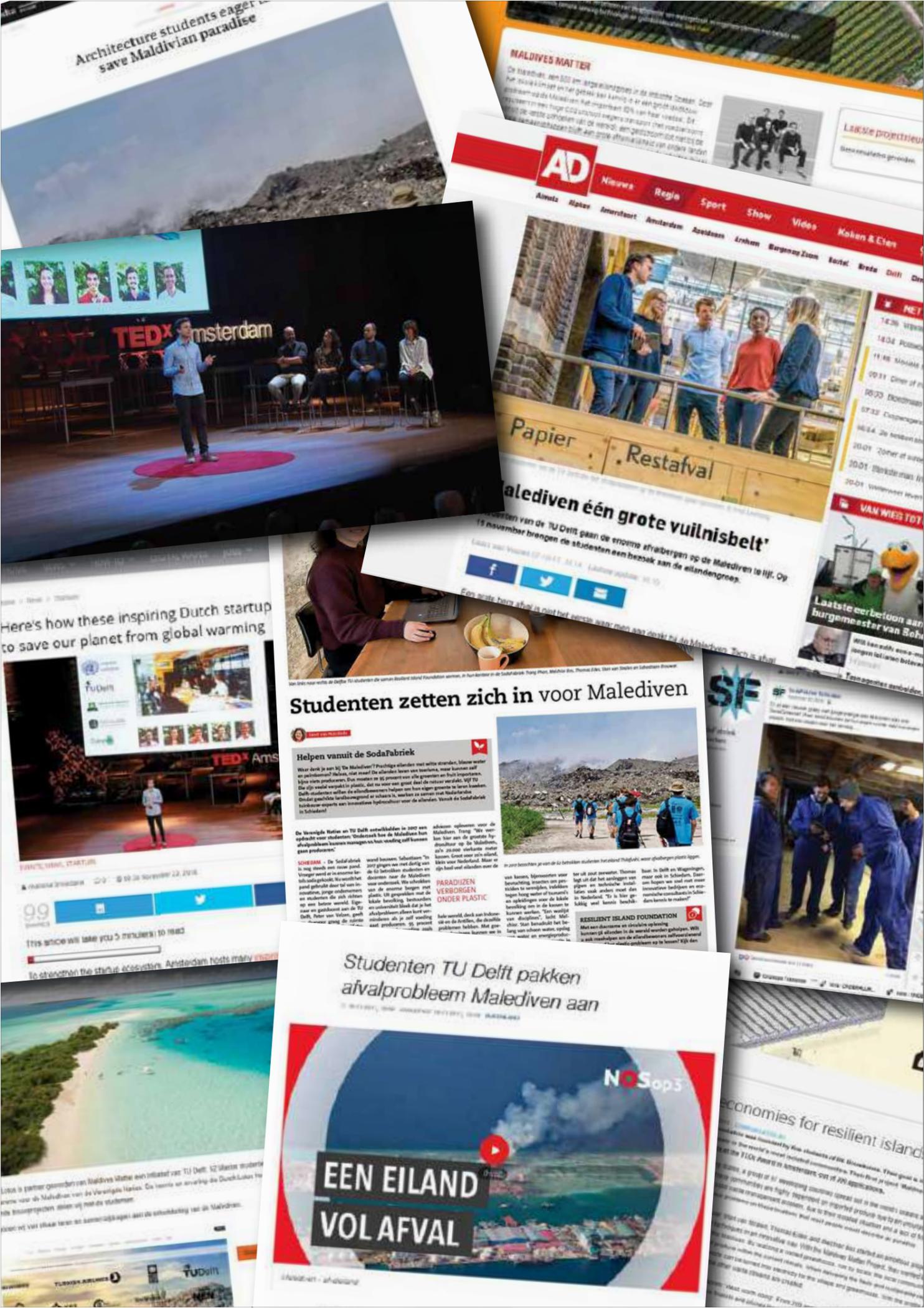
Now it is time to put words into action by designing the greenhouse complex.

6. APPROACH INVESTORS

At the same time investors will be approached. The investor has to have a sustainable philosophy.

7. BUILD

Together with all our Maldivian partners we will design and realize the Maldivian greenhouse.



THANK YOU

شُورَا عَزِيْزَةً



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