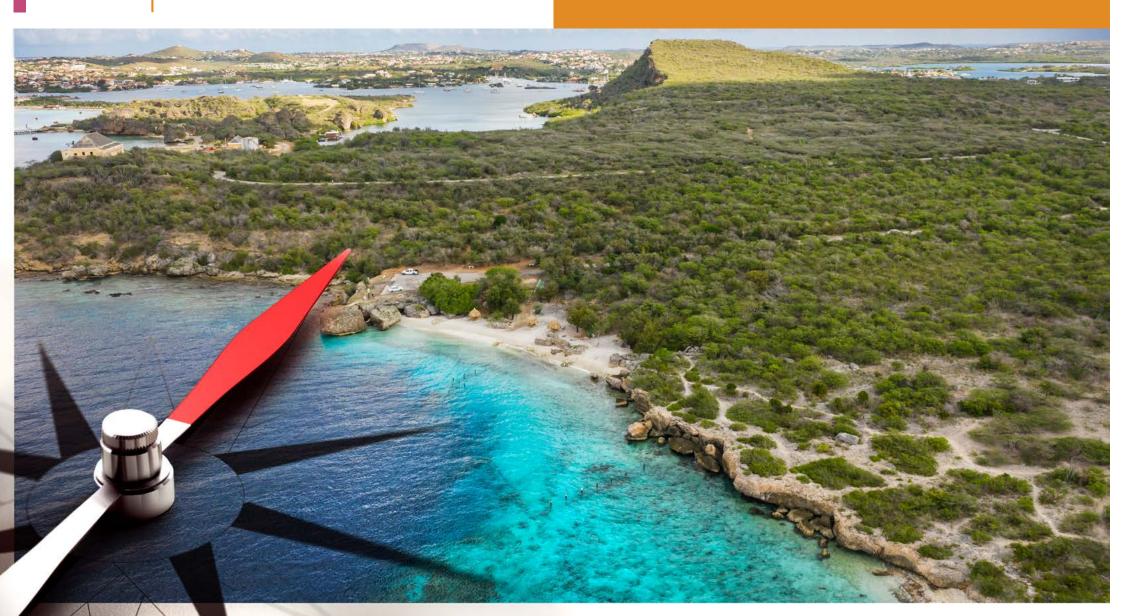


### MINISTRY OF **ECONOMIC DEVELOPMENT**

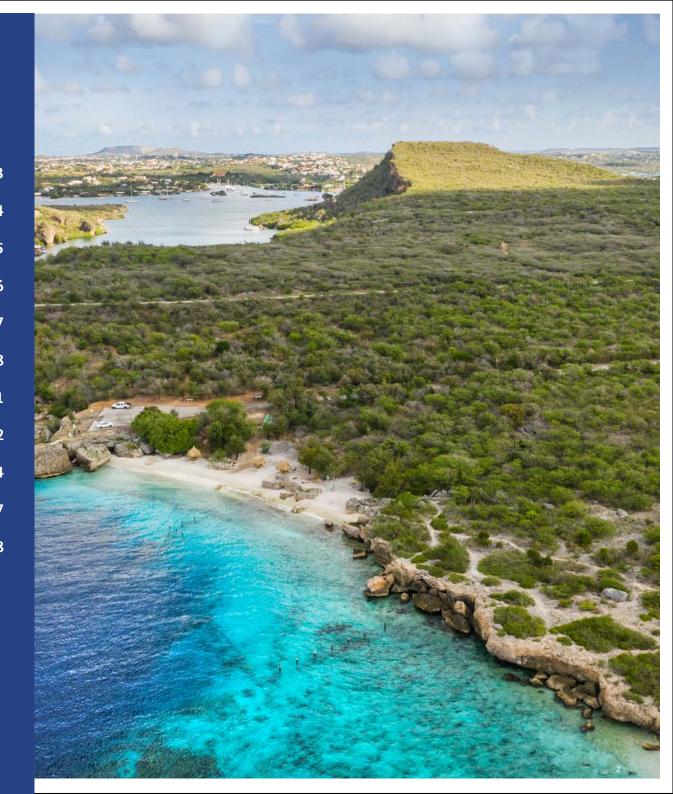
#### Curação Doughnut Economy

A NEW COMPASS FOR ECONOMIC PROSPERITY



### Index

Foreword	3
Introduction	4
An integral approach	5
The first steps to change	ć
Balance between people and the environment	7
Curaçao Island Snapshot	8
Neighborhood workshops	11
Existing initiatives in Curação	12
New ideas for economic prosperity	14
Association animal game	27
Nine recommendations	28







### CURAÇÃO IS A PIONEER IN SHOWING HOW A CARIBBEAN ISLAND CAN START PUTTING 21<sup>ST</sup> CENTURY ECONOMICS INTO PRACTICE IN ORDER TO CREATE A REGENERATIVE FUTURE.

Kate Raworth



Traditional economic performance does not lead to sustainable economic prosperity or a strong economy. The goal is to let both humans and the environment flourish.

In front of you lies a compass that makes the direction of Curaçao's economy value driven. Doughnut economy connects technical, economic and social principles for a sustainable transition towards a circular economy.

The doughnut model has been applied to the economy of Curaçao. The snapshot illustrates that there is still much work to be done to meet social needs and to stay within ecological limits. I am very grateful to the Curação Doughnut Economy Task Force and Projectbureau Circulaire Economie (PCE), for inspiring the community to think about the future of our island. This resulted in support for an integrated agenda of circular initiatives for economic prosperity. The focus is on socioeconomic reform, community building and education. The voice of our society is leading: 'there is no society without a social foundation'.

Last but not least, the Curaçao Doughnut Economy indicates the requirements for the progress of this country. This document can be read as the start of a new economic compass for the political leaders of tomorrow.



Dr. I.S. (Steven) Martina
Minister of Economic Development

#### Introduction

### A new compass for economic prosperity

The economy of Curaçao is in times of great change. Financial services, the oil refinery, tourism, trade and logistics were the stable pillars of the island's economy until a few years ago. These pillars are in need of a more sustainable direction than is previously designed.

As of March 2020, Coronavirus-related government measures have gradually reduced the island's tourism and service sector to a limited existence. At the same time, the measures have revealed which sectors (health and education) contain key occupational groups to keep our society going. These changes make it clear that the economic model of Curaçao needs a critical review.



#### AN INTEGRAL APPROACH

The Curaçao Doughnut Economy
Task force (CDE) was established as
a response to the urgent need for
change of the economic model of
Curaçao. CDE is founded in March
2020 to explore the doughnut
economy model and to use this
model as an instrument for
transformative action in Curaçao.

#### **Building bridges**

The Ministry of Economic Development (MEO) is committed to this initiative to strengthen the positive energy and practical approach of this movement. The movement fits well with the international and innovation policy (National Export Strategy) of MEO. MEO also recognizes the value of CDE's integrated approach in relation to the Caribbean Body for Reform and Development (COHO) and the implementation agenda of Curaçao. With the integrated approach of the doughnut

model, MEO wants to work together with other ministries. The economy is not a thing in itself, but is sustainable and integrally embedded in the lives of all people on Curação and its nature.

The aim is for the government to embrace the doughnut economy model as a basic principle for sustainable economic prosperity. The principles of doughnut economy provide tools for implementing processes of change in society. Currently, the CDE consists of over 50 members with a wide range of expertise who would like to learn, research and innovate with the doughnut economy model.

#### **Doughnut economy**

The doughnut economy was developed by Kate Raworth, who works at the University of Oxford as a Senior researcher and has been active at the Amsterdam University of Applied Sciences since 2020. What makes the doughnut economy different

from other economic models, is that it requires an integrated approach to what are considered as externalities in conventional methods of measuring economic performance, such as GDP, GNP or gross value added. The doughnut economy combines technical, economic and social principles for a sustainable transition to a circular economy.

#### Goal document

The purpose of this document is twofold:

- An analysis of the status of the Curação economy based on principles of the doughnut economy;
- 2. An integrated agenda for economic investment.

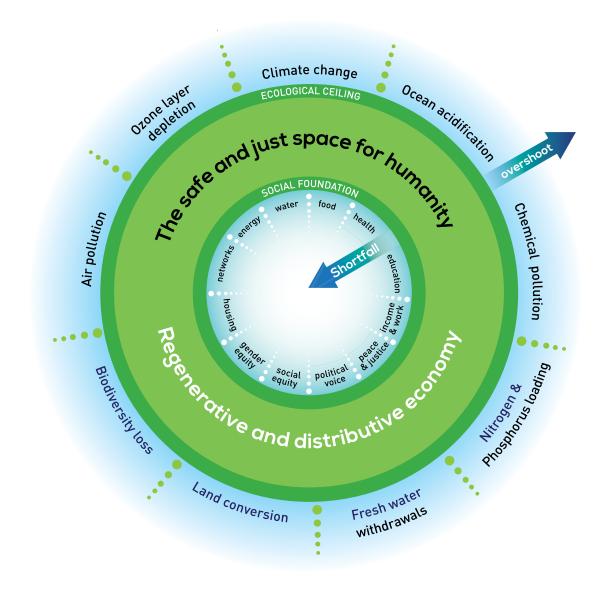
We achieve these two goals by applying the city portrait methodology which has been tested in Amsterdam, Portland and Philadelphia (creating city portraits). In this document we explain how the method will contribute to a strong economy for Curaçao.

### THE FIRST STEPS TO CHANGE

### The first island doughnut in the world

Curaçao Doughnut Economy (CDE)
Taskforce was created as a result of a
call to action by creative entrepreneur
Joeri Oltheten on various social media
channels in March 2020 in response to
the impact of COVID-19 on the Curaçao
society. His call to action sparked a large
number of residents in the Curaçao
community to contribute to a new
movement for the future of Curaçao.
This movement is inspired by the first
city doughnut in the world made by Kate
Raworth for Amsterdam.

The aim of the task force is to create the first island doughnut in the world. The change and transition that CDE wants to unleash is called circular economy. The basis of the circular economy is the sustainability and innovation of production processes, and the underlying business models.



#### THE DOUGHNUT AS A COMPASS FOR ECONOMIC PROSPERITY

AN ECONOMIC MODEL BY ECONOMIST KATE RAWORTH



#### BALANCE BETWEEN PEOPLE AND THE ENVIRONMENT

#### People and environment

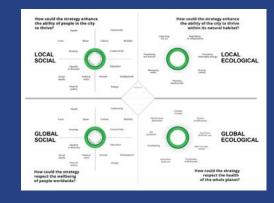
The best-known aspect of the doughnut is the first principle, which indicates that we must pay attention to the needs of everyone while remaining within the boundaries of a living planet. Raworth displays the first principle with the shape of a doughut. The doughnut consists of two concentric rings: an inner ring and an outer ring. The inner ring represents 12 social foundations, derived from the Sustainable Development Goals (SDGs), that are needed for a society to develop successfully. The outer ring represents the earth's nine ecological boundaries, developed by Rockström and his colleagues in 2009. These go far beyond the ecological aspects of the SDGs. Raworth's seven principles support economic prosperity from this inner and outer ring of the doughnut model.

#### The seven principles

The seven principles of the doughnut economy relate to economic, environmental and social aspects of society. The doughnut

economy urges us to continue challenging ourselves to pay attention to the planetary system as a whole (principles 1 and 2). It reminds us of the importance of human socio-cultural development, our ability to organize and to pay attention to the general education of mankind (principle 3). It also appreciates the diversity, dynamics, scale and complexity of the interacting systems (principle 4).

It emphasizes the importance of an open institution relative to the economy, in which power and wealth is not centralized but distributed (principle 5). It advocates for an economy that constantly reinvents itself ecologically, financially and socially (principle 6). While Raworth acknowledges that economic growth is sometimes needed, the doughnut economy shows that there are several ways to grow beyond just GDP growth or an increase in gross value added (principle 7). The goal is to let humans and the environment thrive. GDP growth should serve this purpose, instead of being a separate goal.



#### Focus on value

The doughnut economy is a compass that makes the direction of our country value driven. The model urges us to ask: How can Curaçao be a place for human development and where people flourish, with respect for the wellbeing of the whole planet and all inhabitants?

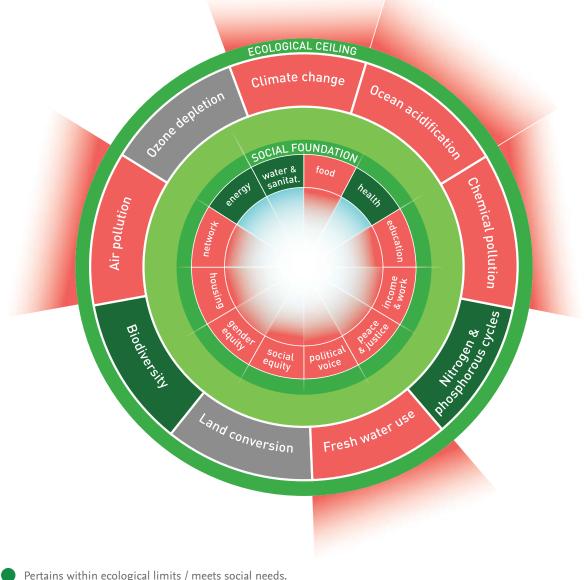
To make this big question manageable, it is divided into the four questions in the quadrant above. The questions help the island think about the local and global dimensions, as well as the social and environmental dimensions of an economy.

#### Curação Island SNAPSHOT

#### A view of the data collection

Before making the Curação Island Snapshot, we first analyzed and identified which ecological and social categories of the doughnut are relevant for the island. Subsequently, various official sources were consulted to identify the extent to which Curação meets social needs, while staying within planetary boundaries.. The snapshot shows that on the basis of this data there is still much work to be done in Curação, if we want to be a part of the doughnut.

Poverty, lack of knowledge, inequality and unemployment on the island are reflected in the way we pollute and neglect our environment. The red indicators beaming inwards outside the social foundation show which essential social needs the island is currently lacking. The red indicators beaming beyond the ecological ceiling highlight the current breach of ecological boundaries. On the following pages the insights are elaborated in detail.



- Pertains within ecological limits / meets social needs.
- Exceeds ecological boundaries (surplus) / does not meet social needs (shortage).
- Insufficient data available.

#### ISLAND DOUGHNUT OF THE COUNTRY CURAÇAO

THE SOCIAL FUNDAMENT AND THE ECOLOGICAL PLANETARY BOUNDARY

#### 1. Food

Policy goal: Diseases such as diabetes, obesity, cardiovascular diseases and addiction are less common.

Snapshot: 28% of the population is overweight. Obesity is most common among people with a lower secondary education and among people who have difficulty making ends meet. Malnutrition in poor neighborhoods.

#### 2. Health

**Policy goal:** Public health focuses on prevention, whereby the aim is to raise human health to a higher level. **Snapshot:** The average life expectancy in Curaçao is above 78 years. This average has significantly increased, and child mortality is decreasing in the past years.

#### 3. Education

**Policy goal:** Greater participation primary, secondary, higher education.

**Snapshot:** 98% literacy. 8% enrollment in Secondary Education. 32% not completed Secondary Education in Curação.

#### 4. Income and work

**Policy goal:** Nobody living below poverty line in 2030. No unemployment by 2026.

**Snapshot:** 25.1% of households living below poverty line in 2017. 38.8% youth unemployment in 2016.

#### 5. Peace and justice

**Policy goal:** Increase confidence in government institutions.

**Snapshot:** Almost a third of government corruption and fraud cases are regarding government permits and procurement. Armed robbery has significantly dropped the last few years.

#### 6. Political voice

**Policy goal:** Increase confidence in government institutions.

**Snapshot:** Curação is not registered as a state on the Voice and Accountability Index. The population trusts religious institutions (42.9%) more than government institutions (3.8%).

#### 7. Social equality

**Policy goal:** No policy on social equity. **Snapshot:** Curaçao's GINI-index indicate a big gap between rich and poor.

#### 12. Water and sanitation

**Policy goal:** 100% affiliated with Aqualectra. **Snapshot:** 2% of households cannot meet their monthly bill for water and electricity. 99.1% of households have sanitary facilities.

#### 11. Energy

**Policy goal:** Belong to the top 5 of Caribbean countries with respect to affordability of energy, water and mobility by 2023. Use 50% locally available renewable resources by 2035

**Snapshot:** The decrease in production of the refinery has resulted in an increase of energy costs. 27% of Curaçao's energy is generated with renewable energy.

#### 10. Network

Policy goal: Develop digital economy for government, companies and citizens. Adequate level of facilities for people in need of care and assistance. Snapshot: 51,3% of those with no internet indicate high internet costs as being the main reason. Facilities for refugees are below the standards of Amnesty International.

#### 9. Housing

**Policy goal:** Realize pilot projects for sustainable construction in new buildings or in the existing (social) houses.

**Snapshot:** The housing needs of single women with an income of NAf 3.000 or less, age 60+ or between 18-29 are overrepresented in the statistics.

#### 8. Gender equality

**Policy goal:** No policy on gender equality. **Snapshot:** After age 35, the difference in income between men and women is high. Of the 21 current parliament members, 6 are female (29%).

SOURCES <sup>1</sup> Sociale Ontwikkeling Agenda Curação 2019-2021; Investeringsplan Landbouw & Veeteelt 2018-2021; Regeerprogramma 2017; <sup>2</sup> Regeerprogramma 2017; CBS Population stats 2011-2019. <sup>3</sup> National Development Plan Curação 2015-2030; CBS education stats 2018; Economic Developments Curação, Maart 2019, Centrale Bank van Curação en St. Maarten. <sup>5</sup> De wortels van publieke fraude en corruptie in het Caribische deel van het Koninkrijk (2019, Schotborg). <sup>6</sup> Regeerakkoord 2017 (afgeleid uit cohesie onderzoek uit 2015). <sup>7</sup> Census 2011 (outdated) <sup>8</sup> Census 2011 (outdated). <sup>9</sup> CBS Woningbehoefte 2016; Baseline study Armoede 2018, SOAW; VVRP concept kaderbeleid volkshuisvesting 2021-2026. <sup>10</sup> ICT & Media survey 2017 CBS; Amnesty Report 2018 (Opgesloten en Uitgezet). <sup>11</sup> National Energy Policy 2018. <sup>12</sup> Environmental Development Plan 2016-2021; De toekomst van Water: Beleidsplan voor integraal waterbeheer 2020.

**SOCIAL FUNDAMENT** 

COCIAL FOUNDATION

#### PLANETARY BOUNDARY

#### 1. Climate change

**Policy goal:** Reduce the emissions of all greenhouse gasses and prepare in a timely manner for the consequences of climate change.

**Snapshot:** 419 PPM (20% surplus). Curação only registers direct emissions. The statistics show a 48.3% decrease in emissions 2018 in comparison to 2010.

#### 2. Ocean acidification

**Policy goal:** Designate 30% of Curaçao's waters as marine sanctuaries, along with the necessary regulatory framework and new fisheries laws.

**Snapshot:** Curação registered 96% and more aragonite for all reef terraces. Curação is establishing 5 fish reproductions zones to refill fish stocks and help restore the ecosystem.

#### 3. Chemical pollution

**Policy goal:** Effective control of the chain of hazardous products to reduce negative effects.

**Snapshot:** Chemical waste storage capacity is too low for the island's consumption patterns, causing chemical waste to be dumped into the sea.

#### 4. Nitrogen & phosphorous cycles

**Policy goal:** The environment and nature policy is aimed at awareness of the values and the better use of natural resources.

**Snapshot:** The emphasis of the government in relation to nature is placed on food (agriculture). For example, 'Kunukito' and syntropic farming initiatives.

### ECOLOGICAL CEILING climate change Ocean acidification 1. Chemical pollution Air pollution 3. Biodiversity Fresh Water use Land conversion

#### 5. Fresh water use

**Policy goal:** Develop an integral water management plan. **Snapshot:** The pressure on the natural sources of fresh water, such as the groundwater is high due to urbanization.

#### 9. Ozone layer depletion

**Policy goal:** No policy goal. Only global limits established.

**Snapshot:** In 2019 there was a small hole in the ozone layer. In 2020 NASA recorded the 12th biggest hole.

#### 8. Air pollution

**Policy goal:** Exhaust testing on pollutants especially particles, but also maximum sound levels.

**Snapshot:** 9,5% (815.2 kton) of GHG emissions is due to transport (35.3% due to the refinery). Stricter regulations for industry transport will drastically reduce emissions.

#### 7. Biodiversity

**Policy goal:** Research on ecosystem services will be done to ensure that nature on the island will keep providing the highest possible benefits for all.

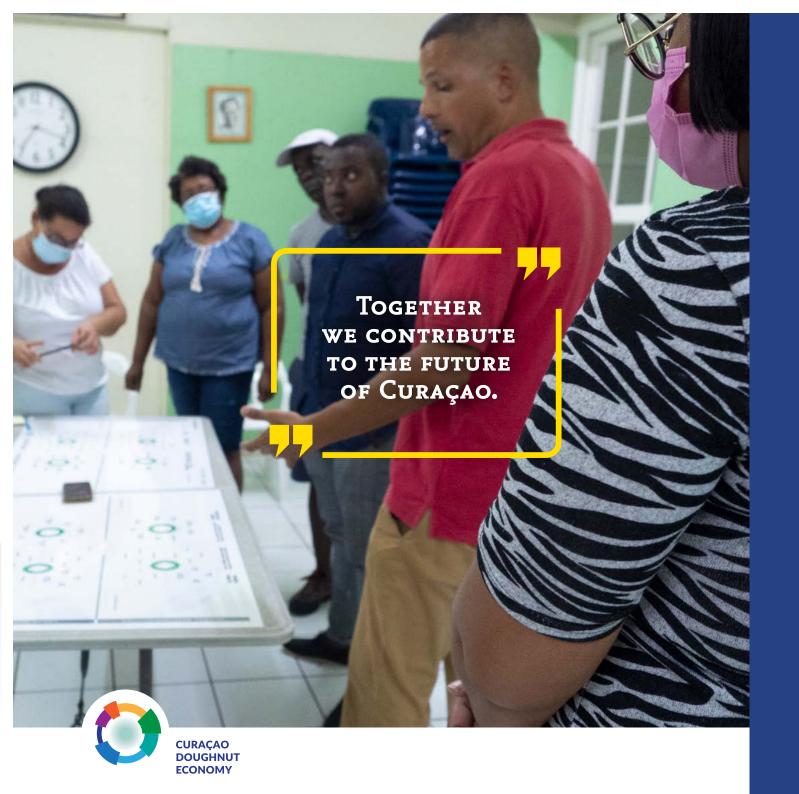
**Snapshot:** 6 sea (including 2 sea turtles) and 2 land species are critically endangered. Fishing gear entanglement, illegal harvesting, coastal development and marine pollution are putting serious pressure on turtle populations.

#### 6. Land conversion

**Policy goal:** The Island Development Plan (EOP) should be used as an instrument for the implementation of several environmental issues. The current policy strives for a balance between urbanization and ecology.

**Snapshot:** 32% protected land.

**SOURCES** <sup>1</sup>Environmental Policy Plan 2016-2021; CBS Environmental Compendium 2017. <sup>2</sup>(2012) Sea-level history of past interglacial periods of corals, Curaçao, Leeward Antilles islands. Muhsa et al; Environmental Policy Plan 2016-2021; CBS Environmental Compendium 2017. <sup>3</sup>Environmental Compendium 2017; (2006) anthropogenic impacts and bleaching-associated tissue mortality of corals in Curaçao. Nagelkerken. <sup>4</sup>Regeerakkoord 2017; Environmental Policy Plan 2016-2021; CBS Environmental Compendium 2017. <sup>5</sup>Integral Watermanagement plan 2020; Environmental Policy Plan 2016-2021; CBS Environmental Compendium 2017. <sup>6</sup>Environmental Policy Plan 2016-2021; CBS Environmental Policy Plan 2016-2021; CBS Environmental Compendium 2017. <sup>8</sup>Environmental Policy Plan 2016-2021; CBS Environmental Compendium 2017. <sup>8</sup>Environmental Compendium 2017. <sup>8</sup>Environmental Compendium 2017. <sup>8</sup>Environmental Policy Plan 2016-2021; CBS Environmental Compendium 2017. <sup>8</sup>Environmental Compendium 2017. <sup>8</sup>En



#### Neighborhood workshops

### Bottom-up approach for the realization of doughnut economy

In addition to the data collection at CBS, we also organized workshops in different neighborhoods of Curaçao.

A total of 10 workshops were held, of which 4 were for the general public and 6 workshops aimed at specific groups. During the workshops, participants learned about the principles of the doughnut economy and brainstormed about the realization of circular economy in Curação.

The ideas presented by the participants focused mainly on cooperation, education, training, sustainability and employment. The inhabitants of Curaçao realize that there is no society without a social foundation. On the following pages, existing initiatives and ideas from the sessions are highlighted.

### Existing initiatives in Curação

Local social initiatives are mentioned most often, followed by local ecological initiatives and finally global ecological initiatives. One global social initiative has been identified.

The initiatives were analyzed based on the 3 core principles of doughnut economics: inclusiveness, distribution and / or regeneration. Only 7 initiatives comply with all 3 principles:

- Hòfi Cas Còrá
- Kunukito di Kas, Skol i Bario (initiative GMN)
- Samyama Permaculture Transition
- Soltuna
- Urban Food Forest Otrobanda
- Wawuya
- Kaya Kaya

Some participants categorized an initiative as local social, and another participant considered the same initiative as one belonging to the local ecological category. Some examples are: Hòfi Cas Còrá, Kunikito di Kas, skol i Bario, Kunukuman. The workshop with young entrepreneurs and civil servants were particularly familiar with

initiatives within the local social framework. Within the other groups, the division between local social and local ecological initiatives was insignificant.

The following initiatives are mentioned several times during the different workshops (either because of good visibility/publicity; or because these initiatives are important for a large group within society):

- Eden's Garden
- Green Phenix
- Hòfi Cas Còrá
- Kunukito di Kas, Skol i Bario
- Limpi
- Wawuya

A total of 95 unique initiatives have been identified. This high number indicates that Curaçao, has great potential to develop into a full-fledged doughnut island, and is already well on the way to achieve it.

#### GLOBAL SOCIAL INITIATIVES

Fundashon Salú pa Tur
 (free healthcare for undocumented people)

#### GLOBAL ECOLOGICAL INITIATIVES

- Amigu di Tera •
- Antillian Scrap Company •
- Asphalt Lake Recovery
- Carmabi (coral restoration) •
- Horizonte Nobo (biowaste plants) •
- ICCAT •
- Paradise brokerage (scraps trader) •
- Stichting SMOC •
- Tiny House (sustainable and small houses) •
- Wind energy project Aqualectra •

- Distributive
- Regenerative

#### LOCAL SOSIAL INITIATIVES

- Agenta di Lus
- Aliansa di lus •
- Aloë vera farm ••
- Anakumba
- Arte di Palabra •
- Baseball stadion Muizenberg (Andrew Jones) •
- Bo Salu Ta Den Bo Kura •
- Bulabando
- Caribbean-Locals.com
- Children's Museum Curação •
- Crafted by Angel (local potpouri) ••
- Curação Clean Up •
- Curação Cooperative Academy •

#### GLOBAL ECOLOGICAL INITIATIVES

- Amigu di Tera •
- Asphalt Lake Recovery
- Ban planta awa (syntropical agriculture) •
- BedrijvenPlatformMilieu (BPM) •
- Blue Halo Curação •
- Bo Salu Ta Den Bo Kura •
- Carmabi (coral restoration)
- Crafted by Angel (local potpourri) ••
- Curação Clean Up •
- Curação Nature Conservation (CUNACO) •
- Curação Plastic Polution Taskforce •
- Dinah's Botanic & Historic garden (herbal medicines)
- Dynaf Group
   (electrical cars and solar panels
- Eden's garden •••
- Electric Vehicle Association (EVA) Curação (recharge stations, collective purchasing) •
- Fuik Co. •
- Area development Zakitó •
- GreenKidz (natuureducatie) •
- Green Phenix •
- Green Zone (UoC AgriTech lab) •
- Green Force •
- Plan Groenblauw Curação Park
   (EcoTourism and Composting)
- Restructuring the Plaza area (APC) ••

- Curação Nature Conservation (CUNACO) •
- Curação Pride •
- CuraDoet
- De Mind Tree •
- Dinah's Botanic & Historic garden (herbal medicines)
- Eden's garden •
- Favela Street Foundation •
- Fo'i bo kurá pa bo tayó •
- Fundashon Bos di Hubentut •
- Fundashon Lechi di Mama •
- Fundashon Negoshi Pikiña •
- Funditut (Jongeren Unie) •
- Gebiedsontwikkeling Ser'i Otrobanda ••
- GreenKidz (nature education) •
- Hidden Trails of Curação •
- Hòfi Cas Còrá
- Innovation C •
- Integral Natural •
- It's Yummy •
- Youth Parlament Curação •

- Hidden Trails of Curacao •
- Hòfi Cas Còrá •••
- Horizonte Nobo (biowaste plants) •
- Integral Natural •
- Kunukito di Kas, Skol i Bario (initiative GMN) •••
- Limpi ••
- Living Green Furniture (recycle furniture) •
- Mi Lampi Curação •
- Mondi Lodge (ecolodge) •
- Nos Kunuku (l(local agriculture aquaponics/ hydroponics)
- Paradise brokerage •
- Rancho de Herberg (local agriculture) •
- Round Bottle Houses •
- Samyama Permaculture Transition
- Soltuna (local farmers) • •
- Stichting SMOC

- K1 Britannia Foundation •
- Kaya Kaya (sustainable neighborhood festival) • •
- Kooperativa di Piska (Kooperativa Piskadonan di Korsou; Kooperativa Playa Canoa (Kooplacan); Kooperativa di piskado Kura di Buriku; Kooperativa di Piskadonan Daaibooi (KPD)
- Kringloopwinkel Businesscenter Brievengat •
- Kunukito di Kas, Skol i Bario (initiative GMN) •••
- Kunukuman (cleaning initiative)
- Kura di Arte •
- Limpi ••
- · Mi Sekreto •
- Nos ta Konekta •
- Passionistas
- Rancho de Herberg (local agriculture) •
- Reina Joe Biblioteka di kas •
- Soltuna (local farmers) • •
- · Spotted Banana (vegan food service) •
- Stichting Totolika •
- Stichting Uniek Curação •
- Stichting Wintertuin (literary art, culture participation) •
- Teatro Drazans (art and culture participation) •
- Teatro Kadaken (art and culture participation) •
- The Moringa Elf (vegan food service) •
- Urban Food Forest Otrobanda • •
- Wawuya •••
- · Wild Cooking (Saeed Laurens) •
- Wind energy project Aqualectra •
- Youth for Climate
- Fundashon Salú pa Tur (free healthcare for undocumented people)

- The Ripple (sustainable Co2 neutral container houses) •
- Tiny House (sustainable and small houses) ••
- Urban Food Forest Otrobanda
- Urban Mangoes ••
- Wawuya •••
- Zakitó District Cooling project •



**Target Group:** Entrepreneurs **Number of participants:** 7 **Location:** Aqualectra

In every brainstorming session about doughnut economy in Curaçao, there was repeatedly a need for more cooperation. According to the participants in the sessions, the population in Curaçao is characterized as individuals who work on their own island for similar goals.

Therefore, it is noticeable that in the session with the entrepreneurs two cooperatives were proposed. The focus of the concepts includes indicators of cooperation, sustainability, employment, income, education and training.

### By empowering people, you increase their self-esteem.

#### Curação Mulch

Curaçao Mulch is a cooperative organization that focuses on cooperation and ecology. Young and unemployed people are offered the opportunity to collect garden waste for a fee and deliver it to a central location. Old boxes and reusable bags can be used to collect garden waste. The garden waste is given a new purpose to enrich the soil for agriculture. By encouraging people to contribute, you increase their self-worth. The economy gets a boost by creating jobs and supporting local agriculture also makes the economy stronger. This concept promotes the island in the local social as well as in the local/global ecological field.

#### **Education & Buddy**

The aim of this initiative is to prepare children for the future by applying a two-track policy. Social education is given to children of 4-6 years during primary school, with the central theme How do I grow up? The second approach is to connect role models with young people. During the educational

trajectory, each young person gets a buddy who helps with choosing a profession and who discusses the job opportunities. Ideally, each young person is paired with a buddy who has the same background as the desired profession. The buddy is a general point of contact and confidant who the youngster can go to for support, a listening ear, and if applicable, for the financial assistance for their studies.

This project increases the chances of young people finding a job in the future by providing guidance at an early stage in choosing a profession. Involving the community to achieve this goal contributes to community building. This initiative focuses on the local social indicators education, society, employment and income.

#### Cooperative for skills

This cooperative focuses on the psychology and personal growth of children. Support is provided to the daycare center and to parents. Social workers visit families at home and pay attention to problem areas such as insecurity, norms, values and behavioral problems of children. Children are encouraged to work more together instead of considering each other as competitors. The wellbeing of the child is central, and we work on the character, mindset and mindfulness. The goal of the organization is to invest in the new generation by giving them tools and knowledge so that they can grow into confident citizens with a solid personality. Education and community building are the two pillars of the organization.



Target Group: Civil Servants
Number of participants: 19
Location: University of Curação and
Hòfi Cas Còrá

Representatives of the public sector are indispensable in the discussion about the realization of circular economy in Curaçao. Unlike the general public, they have to deal with policy and organizational processes within the government. This specific group presented projects that work on the mindset of society and the effectiveness of the prison. In addition, solutions for ensuring mental health and the balance between humans and nature were discussed.

#### A self-sufficient and climate-neutral prison

This concept is a rewarding system in which a prisoner can reduce his prison sentence by performing work. For instance, planting and harvesting your own food can contribute to self-reliance, personal development and awareness of nature among the prisoners.

Compost from the food production processes can also be sold to local farmers. Growing crops is not only cost-cutting, but also healthier for prisoners who currently do not receive a varied and healthy diet. In addition, a water management system will be installed to reuse water for agriculture. All proceeds go to the prison to cover the expenses. This allows the tax money of Curaçao to be used for other purposes.

More rehabilitation programs are offered, including an entrepreneurship program. The talents and skills of prisoners are developed to make products. The income from the products sold is allocated to a

fund. The profit makes it possible to invest in prison maintenance and prevention programs, and to offer jobs to ex-prisoners based on the knowledge gained during prison programs.

This idea highlights a number of local social and environmental indicators of the doughnut economy. The indicators education, employment, income, peace and maintenance, food, ecology and society (community building) are applied in this concept.

#### **Change of mindset**

This project focuses on the implementation of knowledge about the conservation of nature and the environment in the educational curriculum in Curaçao. Information is provided about norms and values and how this relates to the way we deal with our environment. The burden on the environment must be reduced and the community is urged to treat the environment in a cautious manner. We are working to raise the awareness that every

individual is part of society. Organizations and individuals adhere to a monitoring role by pointing out incorrect behavior such as polluting nature.

In addition to education, we are also working on society as a whole. Citizens who show exemplary behavior are rewarded with prices so that others are encouraged to adopt this behavior. The ultimate goal of this project is to transform the mindset in Curaçao. Education, community building and the improvement of the environment are the main principles of this project. This promotes local social and environmental aspects.

#### **Dushi Cactus Farm**

Dushi Cactus Farm produces organic beauty products (skin and hair products), culinary products ('yambo' and 'kadushi'), fencing and construction blocks made of cactus. The products are sold to the local and international market. Locals and tourists can pay to get a tour of the cactus company. Dushi Cactus Farm

THE GOAL
IS TO PREVENT
BURNOUTS.

is a cooperative organization with an educational character. Anyone can be involved in the operational processes of the company. Knowledge about the different types of cacti and their use are shared with students.

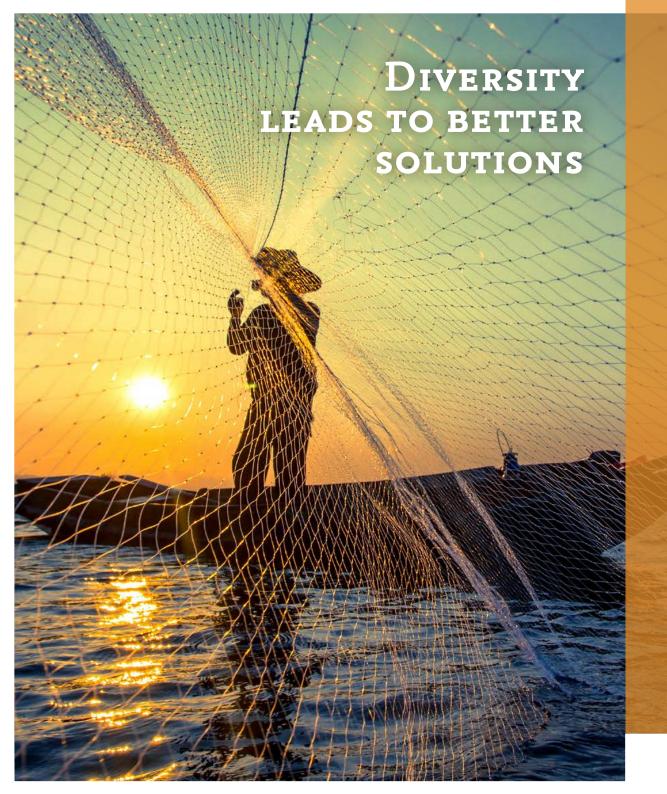
This initiative involves the indicators social equality, diversity, food, employment and income. Local social and local environmental indicators are taken into account.

#### Wellness Center Curação

The Wellness Center Curação offers people who have stress or many worries on their mind, a place for mental rest. Guests can schedule sessions with a massage therapist or psychologist and participate in group therapy. One can also enjoy the jacuzzi that is filled with sea water. Locally produced natural products are available and own crops are grown. Products from Dushi Cactus Farm are also purchased for use during therapy sessions. The services of the Wellness Center Curação can be

partially reimbursed by the SVB, because the goal is to prevent burnouts.

The price is reasonable so that every citizen or tourist can visit the center. Health, employment, income and ecology are the focal points of this wellness concept.



Target Audience: Open public session

Number of participants: 57

Location: Sentro di Bario Otrobanda, Hòfi Moringa,

Rode Kruis Barber & Don Bosco Buena Vista

The sessions were made public to encourage people to think about the future of the island. A future in which innovation and change are embraced. The participants of the open public sessions varied in age, educational background, occupation, ethnicity and social environment. The diversity was evident through the proposed initiatives regarding the implementation of the circular economic model in Curação.

With passion and enthusiasm, this group brainstormed about solutions to promote social services, education, education, food production, employment, income, waste management and water management.

#### **Fundeshi**

It is essential to start with the social aspects of the doughnut economy such as an affordable home. This creates mental peace within the Curação community. With Fundeshi, the government can guarantee the social safety net of the family and community. Education and a stable income, adequate food. A society that is hungry and concerned about food is in survival mode. In a survival mode, there is simply no room to think about the future and to make the natural resources more sustainable. Police officers and social workers must also enter the neighborhoods to ensure security and provide guidance to citizens. The creation of community gardens will ensure the connection between people, the production of crops, which will make the community become more self-reliant.

#### Social development

This idea focuses on a foundation that is established with the aim of working for the personal growth of society. Norms and values are taught as these are fading more and more. Social education can result into a positive change in the mindset of citizens and contribute to the foundation of the Curaçao society. In addition, another foundation will focus on the guidance and education of children and teenagers who are becoming mothers and fathers. Although they are currently not ready for parenthood, with the right guidance they can develop into independent and confident adults and parents. These foundations have an impact on the local social indicators of the circular economy.

#### Kunukito na skol

The Kunukito project, implemented by the Ministry of Health, Environment and Nature in different neighborhoods, has to be integrated into the educational curriculum. Children and young people learn to plant crops and to prepare dishes with the harvest. In this way, from an early age more awareness is created to be self-sufficient and to invest in the local economy instead of importing (almost all) fruit and vegetables. This may inspire

young people to choose a career in agriculture. By teaching seasonal cooking, young people (and when they are older) will eat healthier.

Finally, it saves the state money that is normally spent on an unhealthy lifestyle. The project can also be extended by giving more attention to fishing and craftmanship in the educational curriculum. This project has an impact on the local social indicators education, food, health, income, employment and on the local/global ecological area.

#### Upcycle

Things that are broken get a new life by transforming them into new products. Prisoners will upcycle things and they get a fee for this. The fee is saved in their bank account so that there is money to start a new life when they get out of prison. This idea relates to employment, income, social equality and strengthening the community. Concluding, the idea promotes improvement on a local social level.

## WATER IS THE BASIS OF OUR LIVES. SUSTAINABLE WATER MANAGEMENT IS THE SOLUTION TO MAKE THE MOST OF THIS NATURAL RESOURCE.

#### KAPUKO: Kaba ku bo potoshi

The separation of waste must be encouraged. The community can deliver and separate the waste at central locations. The unemployed and prisoners are involved in this subsidized project. They are held responsible for the detailed waste separation. Some items that are still in a reasonably good condition can be sold to citizens who want to make recycled products.

An important part of the project is the education center that provide courses on communication, collaboration, management etc. Sharing knowledge for personal growth. This project focuses on the local social areas and local global ecological areas. It improves employment, income, education, society and the environment.



#### Rainwater management

Currently Curaçao is experiencing flooding because it has rained immensely. There is also extreme drought outside the rainy season. Rainwater can be collected and used, for example to enrich agricultural land. Some of the water is also stored for dry periods. Aqualectra can provide this sustainable water management and offer local farmers the option to buy this water at a reasonable price. This proposal includes the indicators food, employment, income, water and the environment. It offers solutions in the local social and local global ecological field.

# AGRICULTURE IS NOT SLAVE LABOR. IT COULD BE AN ADDITIONAL ECONOMIC PILLAR FOR CURAÇÃO.

#### Skol di Agrikultura

This concept is aimed at developing agricultural education to let the local agriculture flourish. At the same time, it is intended to raise awareness within the community that agriculture is not slave labor, but it can be an important economic pillar. Self-reliance is encouraged and food imports are reduced. It indirectly creates jobs in agriculture. The production of food on the island strengthens the economy. Young and old can also book a tour to visit this Agricultural School. This will generate money for the school. This concept covers the local social aspects education, food, employment and income.

#### **De Snoezelbus**

'De snoezelbus' has a relaxation room in which objects, images, colors, scents and sounds pleasantly stimulate the senses. The goal is to activate and calm people who have an intellectual disability, dementia, stress or behavioral problems. This idea may seem simple, but it offers a solution to promote mental health, education (children with behavioral problems can learn better through this therapy) and social equality

(inclusiveness of persons with disabilities). Managing stress prevents a burnout which keeps the employee in the labor market. 'De Snoezelbus' receives grants from the government, and it creates jobs.



#### **Happy Cactus**

The company *Happy Cactus* offers an inclusive working environment by employing people with physical and mental disabilities. In this company cactus is processed into food, drinks and products such as soup, cactus drink and leather made from cactus. Artistic objects are also made of cactus. In addition, artists and entrepreneurs can buy (pieces of) cactus from Happy Cactus to make their own artwork or products. This company focuses on social equality, diversity, food, employment and income. Local social and local environmental indicators shall be taken into account.



### A FRESH LOOK AT THE FUTURE

**Target Group:** Young adults and young professionals

Number of participants: 14

Location: Villa Kakelbont and Kurá di Arte

Young adults and young professionals often have a different view on things than the (slightly) older generations. This refreshing look resulted in interesting arguments and innovative ideas during the sessions.

Participants considered projects to stimulate nation building, technological developments to match supply and demand in agriculture; ecology in the tourism industry; education (life-long learning) about entrepreneurship and art in the broadest sense.

## In Curação WE HAVE TO WORK ON ECONOMIC DIVERSIFICATION.

#### Renase Kòrsou

The primary school starts with lessons about patriotism. If you know who you are and where you're from, you know where you're going! The school material already exists, only the teachers need to be prepared. The government and the media must be convinced to understand the importance of these lessons. Adults are also included. Knowledge transfer also takes place via traditional and social media. Courses on history, culture and other topics are organized. Everyone can take part in the courses for a small fee. This project focuses on education, culture and inclusiveness to build a strong nation (community building).

#### Kosecha

The Kosecha App provides data on the demand for fruit and vegetables which allows local farmers to respond to the market. The farmers sell and deliver their crops directly to the farms according to their needs. This system increases effectiveness because the farmer can adjust his production in the

future on the basis of the data available to him. This app also offers benefits for companies that save time on shopping in supermarkets because of the Kosecha App. Moreover, farmers can offer a sharper price than the supermarket that adds a profit margin to the selling price. This software contributes to local and global ecological factors and local social factors such as food, employment and income.

#### First Curação Ecological Hotel

Locals and tourists can stay at this hotel by paying or by working. With the performed tasks the guest can earn points that give a discount on the total bill. The First Curaçao Ecological Hotel is located on the coast of Curaçao. Solar panels are installed, and water energy is generated. Local products are purchased for the hotel and the furniture is made of pallet wood. We work with local employees and suppliers. Own crops are grown, but if there is a demand for certain fruits and vegetables, the Kosecha App is used for orders from

local farmers. The restaurant sells as many local drinks as possible such as Rum Tambú and punch made from oregano. Guests can engage in activities such as cycling, hiking, Totolika show, etc.). Initiatives such as Renase Kòrsou are given the opportunity to give presentations to guests of the hotel. The souvenir shop has handmade and recycled products such as calabash and coconut products. This ecological hotel is a concept that optimizes the indicators food, culture, employment, income, inclusiveness and local ecology.

#### **Education & Business**

This non-governmental organization (NGO) supports young people in the field of entrepreneurship. They learn which steps to take to start a business. Attention is paid to customer friendliness, service orientation and collaboration. The company encourages young people to listen to each other and to be open to learn from another. In Curaçao we have to work on economic diversification, that's why education has to facilitate different markets. Employment, income, education and social education are the focal points of this NGO.

#### **Akademia Pashon**

Akademia Pashon focuses on artistic education as a stimulus for the orange economy in Curaçao. Students create artwork that are used for presentations and décor during events and festivals. The artwork is also sold at a reasonable price. The academy is open to the general public and knowledge transfer takes place on social aspects through art. The revenue generated from these activities will be reinvested in the programs of the academy.

# AWARENESS STARTS AT SCHOOL, LET'S FOCUS ON THAT

Target Group: Teachers
Number of participants: 10
Location: Dr. Albert Schweitzer School

Education is the foundation of a value driven community. Teachers play an important role in the education and training of the new generation, the future of Curaçao. Most of the ideas presented by the teachers focus on more knowledge transfer and social-emotional development of young and old. The focus of the initiatives is on education, social education, social equality and community building.

### KNOWLEDGE MUST BE AVAILABLE TO EVERYONE!

#### Te Aki!

The idea for this initiative was born because people often exceed boundaries. The goal of *Te Aki!* is facilitating workshops and courses for a small fee. These workshops and courses are organized by the government at community centers. Knowledge is shared on various themes such as learning to cook, exercising, educating, solving behavioral problems, sex education and mental health. Attention is also paid to social-emotional development through for instance, talking about how to deal with emotions.

The focal point is to make this knowledge available to everyone. By keeping the initiative accessible, children and their parents can have the same opportunities to learn and develop. In addition, the government can also give financial support to one-parent families by making day care affordable for them.

Te Aki! is an initiative that touches on the local social indicators of the doughnut

economy. This movement aims to increase people's ability by investing in education, social education and mental health and thereby indirectly contributing to a more stable community (community building). Te Aki! improves social equality within the Curaçao community.

#### **Nos Bario**

Nos Bario is a movement that encourages the use of public transport. As a result, people are less dependent on cars and you get a reduction in exhaust emissions. Needless to say, the government should first improve the infrastructure and the basic facilities (bus roofs, seating areas, sidewalks etc.).

In addition, this movement seeks to increase security in neighborhoods by fighting crime through education. The educational curriculum will create subjects that address the safety of neighborhoods and the solutions to improve this phenomenon. Efforts are also made to integrate

multilingual education more effectively. Moreover, Nos Bario aims for a water management system in new neighborhoods so that waste water can be reused.

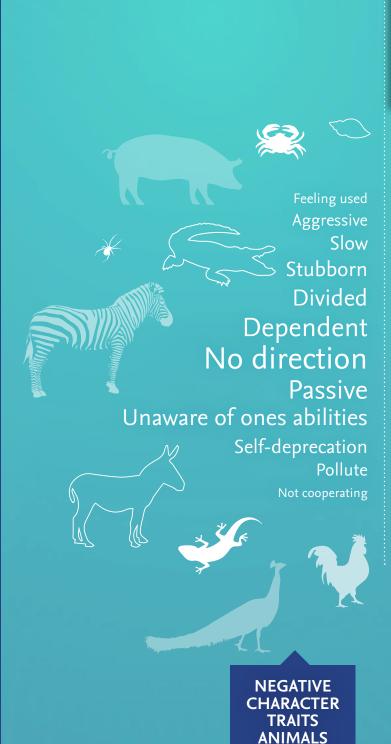
Nos Bario is committed to the local social indicators mobility, connectivity, education, peace and enforcement. Creation of a Walkable City is better for the environment (local and global ecological) and it also creates health benefits. People that walk more, improve their health. The installation of a water management system in new neighborhoods involves aspects on a local ecological level.

# ASSOCIATION ANIMAL GAME AT START AND END WORKSHOPS

At the beginning of all workshops, we asked the participants which animal they associate with the current Curaçao. At the end we asked them which animal they associate with the Curaçao they wanted.

It was remarkable to see that participants highlighted negative character traits when they chose an animal at the beginning. At the end of the workshop, the focus was on the positive traits.

This development illustrates the potential that participants see to make Curaçao the first island doughnut. It seemed as if the thoughts and perception of the participants, like their animals, went through an evolutionary process because of the workshops.





### Nine recommendations for a Curação Doughnut Economy

Curaçao has a good foundation to work on an island doughnut. There are enough statistics to further develop the model. Curaçao has plenty of existing initiatives that are already making the island sustainable. There is a broad awareness on the island that the current economic changes are inevitable. Many of the ideas developed during the workshops are related to socio-economic reform and focus on community building and education. On an ecological level, the focus is on sustainable water consumption and agriculture.

The snapshot of Curaçao shows an alarming picture of the Curaçao economy, both socio-economic and ecological (see pages 6 to 10). Curaçao does not meet the limits imposed by the model on several fronts. Five of the nine ecological indicators and nine of the twelve socio-economic indicators provide worrying insights. Curaçao lacks a

social foundation, and this has its impact on the climate. More research is needed to find out exactly how this social foundation can be built on a sustainable basis.

With the right priorities, work programs and projects, the next governance period for Curaçao can create a path towards 2030 that will make the island a leader for sustainability in the Caribbean. In 2030 Curaçao will be able to respect the wellbeing of all people on earth, develop a climate-proof island and handle regulations in an innovative way. This will automatically attract investors who drive sustainability and guarantee the prosperity of the Curaçao economy.

The recommendations in this document are intended as a first outline towards 2030. Nine years seems like a long time. The process towards 2030 needs to be accurately designed. Accurately because the island is built from a web of cultural, socio-economic and ecological relations. The population of Curaçao is small and therefore it is important that there is good cooperation.





#### Inter-ministerial cooperation

The next administration should have inter-ministerial cooperation high on the agenda. The complexity of a transition to a circular economy requires a lot of coordination.

Instead of cooperation being organized exclusively on the basis of mandates from the top, new forms of team work should be organized on the basis of intrinsic motivation to develop the island. Human nature is central. Closer inter-ministerial cooperation will strengthen the integrated approach to the doughnut economy.



#### Knowledge sharing and advice

The strength of the doughnut workshops proves itself in the optimism and openness to cooperation that it unleashes. A total of **95 unique initiatives have been identified** that are currently active on the island and are in line with the doughnut model approach. This high number indicates that, Curaçao, on one hand, has great potential to develop into a full-fledged doughnut island, and on the other hand, is already well on the way to achieve it. These are existing initiatives that are big or small; long or short-lived; and above all, respect the planet and the wellbeing of our people.

In addition, 30 new business concepts were generated during the workshops that overlap greatly. The overlap indicates that certain indicators of the doughnut are considered important by society.



#### Information and monitoring

More research is needed to better understand the critical situation of the island's economy. The indicators of the doughnut should be updated annually (and quarterly measurements should be used).

The Ministry of Economic Development (MEO) should build close cooperation with the Central Bureau of Statistics (Ministry BPD) and the Universities of the island (Ministry OWCS) to achieve this sustainable development. This will not only benefit the doughnut model.

The whole administration should be more **evidence-based**. The National Committee of the SDGs will also regularly have to give advice on the island's road to prosperity.



#### Open collaboration platforms and a good digital infrastructure

Through collaboration platforms and good digital infrastructure, Curação can facilitate information exchange between stakeholders. This can increase the transparency of the government and bring residents, (social) entrepreneurs, academics and the industry closer in connection with each other.

Digitalization also makes it possible to establish a **robust collaboration with CBS**, allowing the government to structurally monitor (raw) material flows on the island according to the seven principles of the doughnut model. This recommendation acknowledges the importance of high-quality, statistics, data visualizations, and data-driven control system, in accordance with the requirements of the implementation agenda for Curaçao with regards to the Corona measures.



#### Jobs and skills

Previous research in Amsterdam proves that circular economy creates new opportunities for employment and also requires different skills. The doughnut workshops held in Curaçao have also clearly exposed this, by identifying 95 existing initiatives and generating more than 30 business concepts. These developments prioritize renewable resources; extend the life of products; use waste as a raw material; increase local production capacity of goods and services; collaborate on new ways of value creation; and integrate digital technology to reduce waste.

It is essential to prepare the labor market of Curaçao for these changes in the labor market. In collaboration with existing platforms such as Curaçao Doughnut Economy Taskforce, Bedrijvenplatform Milieu, MiNegoshi and the Amsterdam program Startup in Residence, this can be realized quickly and easily.



#### Investment fund

Aside from the creation of an Island program with projects for the circular economy, setting up an Investment fund is crucial. The investment fund will support the ecosystem of start-ups (start-ups, scale-ups and stay-ups) that contribute to the transition towards a circular economy. It creates co-financing opportunities for the circular economy.

It also aims to **optimize access to knowledge**, through coaching about entrepreneurship and exchange programs via key stakeholders. During the new governance period, we will approach the financial sector to operationalize an investment fund.



#### Circular area development and procurement

During the sessions with civil servants, several area developments were mentioned that lend themselves to a circular design. Think of Horizonte Nobo, redevelopment of Zakitó, Wechi, University of Curaçao-Green Zone, redevelopment of Plaza area (APC/HPC), Ser'i Otrobanda. See also the concept Nos Bario and Walkable City on page 26.

A circular design in these area developments will reflect on the efficiency and sustainability of materials. In addition, the seven principles of the doughnut economy will help reduce fraud and corruption by establishing ethical frameworks. The local associations for contractors and architects (AAV and the DCAE), and in co-operation with the Ministry of VVRP (in particular, Grond- en Vastgoed Bedrijf Curaçao) can work on new, innovative ways of procuring the quality of life and housing needs of the island, hand-in-hand with a positive environmental impact.



#### International partners

Curaçao is small but has great potential to set an example globally. Other countries in the region have focused their attention on the developments of the doughnut economy in Curaçao. Various organizations from Aruba, St. Maarten, Costa Rica, Grand Bahama, Suriname and Malta have shown interest in the developments that are going on in Curaçao. The Latin America and the Caribbean Circular Economy Coalition of the Ellen McArthur Foundation and European funding channels also offer many opportunities for the doughnut economy approach.

Curação is currently learning from the experiences gained in Amsterdam but is the first developing country and island to embrace the principles of the doughnut economy. This pioneering role will be reflected in other parts of the Caribbean and Latin America in the upcoming years.



#### Own narrative

During the doughnut workshops it has been noticed that the participants **need their own narrative**, which they expressed through animal metaphors. In the coming period, these metaphors will be explored further for their underlying value. We hope to better understand the mentality the island has in relation to its sustainable future.

A narrative provides landmarks for sustainable initiatives. A personal narrative also organizes ownership of the initiatives for the unique Curaçao version of the doughnut economy. Special attention should be provided to narrative building during future doughnut workshops.



### MINISTRY OF **ECONOMIC DEVELOPMENT**

This document was developed by:

Curação Doughnut Economy is a product of Projectbureau Circulaire Economie of the Ministry of Economic Development and was established in close cooperation with Curação Doughnut Economy Taskforce. The government of Curação shows gratitude to all parties involved for their valuable discussions and insights that have contributed to the creation of this first doughnut economy model for islands.

Editor: Curação Doughnut Economy Taskforce, Gemeente Amsterdam.

Design, data visualization and realization: I-Design N.V.

Pletterijweg 43, Willemstad, Curação

Tel.: (+5999) 4621444 Fax: (+5999) 4627590

Mail: info.meo@gobiernu.cv