



Food and Agriculture  
Organization of the  
United Nations

# Costa Rica's journey towards sustainable food systems

The processes and practices that made a difference



WAGENINGEN  
UNIVERSITY & RESEARCH



# Costa Rica's journey towards sustainable food systems

The processes and practices that made a difference

By

**Lotte Roosendaal**

*Urban Food Systems Advisor, Wageningen Centre for Development Innovation (WCDI), WUR*

**Herman Brouwer**

*Senior advisor Multi-stakeholder Processes in Food Security, Wageningen Centre for Development Innovation (WCDI), WUR*

**Pablo Garcia-Campos**

*Sustainable Food Systems Specialist, Food Systems and Food Safety Division (ESF), FAO*

**Flor Prado-Rivera**

*Research Assistant, Wageningen Centre for Development Innovation (WCDI), WUR*

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS  
Rome, 2021



Required citation:

Roosendaal, L., Brouwer, H., Garcia-Campos, P. & Prado-Rivera, F. 2021. *Costa Rica's journey towards sustainable food systems – The processes and practices that made a difference*. Rome, FAO.

<https://doi.org/10.4060/cb5997en>

The designations employed and the presentation of material in this information product do not imply the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of the United Nations (FAO) concerning the legal or development status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The mention of specific companies or products of manufacturers, whether or not these have been patented, does not imply that these have been endorsed or recommended by FAO in preference to others of a similar nature that are not mentioned.

The views expressed in this information product are those of the author(s) and do not necessarily reflect the views or policies of FAO.

ISBN 978-92-5-134785-0

© FAO, 2021



Some rights reserved. This work is made available under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 IGO licence (CC BY-NC-SA 3.0 IGO; <https://creativecommons.org/licenses/by-nc-sa/3.0/igo/legalcode>).

Under the terms of this licence, this work may be copied, redistributed and adapted for non-commercial purposes, provided that the work is appropriately cited. In any use of this work, there should be no suggestion that FAO endorses any specific organization, products or services. The use of the FAO logo is not permitted. If the work is adapted, then it must be licensed under the same or equivalent Creative Commons licence. If a translation of this work is created, it must include the following disclaimer along with the required citation: “This translation was not created by the Food and Agriculture Organization of the United Nations (FAO). FAO is not responsible for the content or accuracy of this translation. The original [Language] edition shall be the authoritative edition.”

Disputes arising under the licence that cannot be settled amicably will be resolved by mediation and arbitration as described in Article 8 of the licence except as otherwise provided herein. The applicable mediation rules will be the mediation rules of the World Intellectual Property Organization <http://www.wipo.int/amc/en/mediation/rules> and any arbitration will be conducted in accordance with the Arbitration Rules of the United Nations Commission on International Trade Law (UNCITRAL).

**Third-party materials.** Users wishing to reuse material from this work that is attributed to a third party, such as tables, figures or images, are responsible for determining whether permission is needed for that reuse and for obtaining permission from the copyright holder. The risk of claims resulting from infringement of any third-party-owned component in the work rests solely with the user.

**Sales, rights and licensing.** FAO information products are available on the FAO website ([www.fao.org/publications](http://www.fao.org/publications)) and can be purchased through [publications-sales@fao.org](mailto:publications-sales@fao.org). Requests for commercial use should be submitted via: [www.fao.org/contact-us/licence-request](http://www.fao.org/contact-us/licence-request). Queries regarding rights and licensing should be submitted to: [copyright@fao.org](mailto:copyright@fao.org).

Cover photograph: Antonio, a farmer beneficiary of a FAO project in the south of Costa Rica

©FAO/Rebeca León Hernández



# Contents

Acknowledgements .....	v
Abbreviations and acronyms .....	vi
<b>Summary .....</b>	<b>vii</b>
<b>1. Costa Rica's food system .....</b>	<b>1</b>
1.1. A brief overview .....	2
1.2. Costa Rica's assets .....	3
1.3. Key agrifood sector and trade indicators .....	4
1.4. Costa Rica's current food system outcomes .....	6
<b>2. Important processes and conditions shaping the Costa Rican food system .....</b>	<b>8</b>
2.1. Culture of collaboration across levels and domains.....	9
2.2. Public investments in key system structures .....	11
2.3. Costa Rica's comparative advantage .....	13
2.4. Environmental sustainability commitments and standards .....	14
2.5. The role of cooperatives .....	18
2.6. Strong civic space .....	20
2.7. Political stability, continuity and peace .....	21
<b>3. What does this say about the transformation towards sustainability? .....</b>	<b>22</b>
<b>4. Collective capabilities for food system transformation .....</b>	<b>25</b>
<b>5. Final reflections .....</b>	<b>28</b>
References .....	30
<b>Annexes .....</b>	<b>33</b>
<b>Annex 1.</b> Costa Rica's food system .....	<b>34</b>
<b>Annex 2.</b> List of interviewees .....	<b>36</b>

# Figures, boxes and tables

<b>Key Insight 1.</b> The public sector plays a key role in laying the groundwork .....	11
<b>Key Insight 2.</b> Costa Rica's comparative advantage is key to the development of its agricultural sector .....	14
<b>Key Insight 3.</b> A sense of urgency is crucial to leverage change.....	15
<b>Key Insight 4.</b> Cooperatives can play a key role in the transition towards sustainability .....	19
<b>Key Insight 5.</b> A transparent civic space can contribute to sustainable policies and practices .....	21
<b>Figure 1.</b> Performance of the Costa Rican food system across three dimensions.....	6
<b>Figure 2.</b> Tomatoes on sale at a Farmer's Fair stand in Alajuela, Costa Rica.....	12
<b>Figure 3.</b> Research being conducted by a scientist at Coopetarrazú's R&D facilities.....	19
<b>Box 1.</b> Types of collaboration between different food system actors in Costa Rica.....	9
<b>Box 2.</b> Case example: The institutionalization of Farmers' Fairs.....	12
<b>Box 3.</b> Transformation of the Costa Rican coffee sector .....	16
<b>Box 4.</b> Costa Rican cooperatives in numbers: an overview .....	18
<b>Table 1.</b> Collective capabilities for the transformation of the Costa Rican food system .....	26
<b>Table A1.1.</b> Selection of indicators for the construction of the food system performance chart .....	35
<b>Table A2.1.</b> List of interviewees .....	36

# Acknowledgements

The authors would like to show their gratitude to all the actors of the Costa Rican agrifood sector that participated as interviewees (see Annex 2). We thank them for their patience and openness in answering the researchers' questions.

Special thanks are owed to the FAO Representation in Costa Rica for providing support to the study at different stages, namely: the preparation of the list of interviewees, the arrangement of interviews and the revision of drafts. In particular, the authors would like to thank Sileni Chaves-Brenes, Andrea Padilla-Arce and Marta Villegas-Murillo.

Special thanks are also due to José Valls-Bedeau, Food Systems Officer (FAO), for his participation in the process of interviewing actors of the Costa Rican agrifood system, as well as for providing feedback to the publication draft at different stages of development. Thanks are also owed to Marco Sánchez-Cantillo and Claudia Trezza for participating in the Costa Rica breakout room during the online feedback session that was organized with colleagues from FAO.

Acknowledgements are due to David McDonald for his work as copy-editor and Pietro Bartoleschi (graphic designer). Also thanks to Rebeca León-Hernández (Communication Specialist, FAO) and Jimmy Porras-Barrantes (Research and Development Lead, Coopetarrazú) for providing some of the pictures used in the publication.

Finally, the authors would like to offer their sincere gratitude to the Government of Ireland for their financial support.



# Abbreviations and acronyms

<b>AKIS</b>	agricultural knowledge and innovation system
<b>ANA</b>	National Agrifood Alliance
<b>CACIA</b>	Food Industry Chamber of Costa Rica
<b>CENECOOP</b>	Centre for Cooperative Studies and Capacity Building
<b>CNAA</b>	National Chamber of Agriculture and Agribusiness
<b>CNP</b>	National Production Council
<b>CONACOOOP</b>	Cooperatives National Council
<b>ECODES</b>	Conservation Strategy for Sustainable Development
<b>EPI</b>	Environmental Performance Index
<b>FNS</b>	food and nutrition security
<b>GFSI</b>	Global Food Security Index
<b>ICAFE</b>	Coffee Institute of Costa Rica
<b>INFOCOOP</b>	National Institute of Cooperative Promotion
<b>MAG</b>	Ministry of Agriculture
<b>MEIC</b>	Ministry of Economy, Industry and Trade
<b>MINAE</b>	Ministry of Environment and Energy
<b>NAMA</b>	Nationally Appropriate Mitigation Action
<b>OECD</b>	Organisation for Economic Co-operation and Development
<b>SAPs</b>	structural adjustment programme
<b>SEPAN</b>	Secretariat for National Policy on Food and Nutrition
<b>SIECA</b>	Central American Economic Integration System
<b>SUN</b>	Scaling-Up Nutrition
<b>UN</b>	United Nations
<b>UNEP</b>	United Nations Environment Programme
<b>UPANACIONAL</b>	Union of Small and Medium Farmers
<b>UPIAV</b>	Union of Independent Producers and Various Activities
<b>WTO</b>	World Trade Organization



# Summary

Governments and other food system actors such as companies, investors, civil society and knowledge institutes are called upon to work together to enhance the sustainability, resilience and inclusiveness of food systems within the context of the 2021 Food Systems Summit, in order to meet the targets set by the Agenda 2030 and the Sustainable Development Goals (SDGs).

Governments need to know which options are the most appropriate and effective to achieve a transformation towards sustainable food systems. They require insights into the kinds of processes and practices that play an important role in putting appropriate policies and investments into place that pay due attention to all elements of the food system. Governments also want to learn from the experience of other countries.

This appraisal is part of a broader three-country study<sup>1</sup> that assesses country processes and conditions that shape and sustain opportunities for food system transformation towards sustainability. The study aims to provide insights into national initiatives, policies, sector strategies and multi-stakeholder mechanisms that together can lead to sustainable food systems. The methods employed include semi-structured interviews<sup>2</sup> with representatives of different institutions involved in Costa Rica's food system, document reviews and validation workshops.

---

<sup>1</sup> The other two countries of study are Ireland and Rwanda.

<sup>2</sup> Interviewees comprised a wide range of food system actors including representatives from ministries, implementing institutions, the private sector, knowledge institutes and NGOs/civil society (see Annex 2).

## KEY INSIGHTS

This rapid appraisal provides five key lessons from Costa Rica's efforts to transform its food system:

- 1. The public sector plays a key role in laying the groundwork.**
- 2. Costa Rica's comparative advantage is key to the development of its agricultural sector.**
- 3. A sense of urgency is crucial to leveraging change.**
- 4. Cooperatives can play a key role in the transition towards sustainability.**
- 5. A transparent civic space can contribute to sustainable policies and practices.**

Appraisal of the Costa Rican context provides insights into the trade-offs between transforming and intensifying production systems on the one hand, and coping with environmental challenges on the other, as well as the strategies deployed to address these issues. It is important to take into account the strengthening of Costa Rica's position within global markets from the 1980s onwards, which incentivized producers to intensify production for export. This intensification also increased pressure on Costa Rica's ecosystems, underscoring the need to address environmental sustainability as a matter of urgency.

These developments set the scene for a gradual transition towards sustainability in which different food system actors each played their part. The public sector adopted a dual approach, integrating sustainability objectives into the public agenda and agricultural knowledge and innovation systems, while strengthening legal frameworks and forging alliances both within and outside the public sector. Private sector actors invested in research and innovation, while cooperatives in particular emerged as crucial players offering stability to their members and driving sustainability efforts in response to emerging global standards. Notable examples can be found especially in the coffee, dairy and livestock sectors. Civil society played a critical role as an interlocutor during these transitions, pushing for sustainability and holding the public as well as private institutions accountable to their commitments.

The analysis presented in this case study provides an insight into the process and direction of food system transformation, and the key capabilities required. It portrays the interplay of different internal and external dynamics combined with the capacity of food system actors to connect, forge alliances and commit to specific actions that has enabled Costa Rica to move towards a more sustainable food system. As a result, the sustainability debate has increasingly opened up, moving from a focus on environmental sustainability in food production towards a broader discussion encompassing nutrition and health.

The following five sections present the findings of this rapid appraisal. Section 1 explains what makes Costa Rica an inspirational case and describes key characteristics of the food system in its current state; Section 2 covers the processes and conditions that have shaped Costa Rica's food system to date; Section 3 reflects on the transformation process and its direction; Section 4 describes the capabilities that together underpin Costa Rica's ability to enact transformation; and Section 5 presents some final reflections on the study and themes for further exploration.



# 1. Costa Rica's food system



## 1.1. A brief overview

Food systems are understood as “the constellation of activities involved in producing, processing, transporting, marketing and consuming food” (UN, 2021), leading to outcomes in three major areas: food and nutrition security (FNS), socio-economic and political outcomes, and environmental outcomes.<sup>3</sup> Over the last few decades, the Republic of Costa Rica’s food system has undergone some remarkable changes. It is the first tropical country to halt and even reverse the deforestation trend caused by the expansion of agricultural land.<sup>4</sup> Since the 1990s, Costa Rica has incorporated the sustainability agenda into its policies. Today, Costa Rica, together with Switzerland and the Worldwide Fund for Nature (WWF), is a co-lead of the United Nations (UN) One Planet Network’s Global Sustainable Food Systems Programme.

A key outcome of these commitments was the production of the world’s first carbon neutral coffee in 2012, setting an example and defining a new standard for the sector (Jiménez, Kilian and Rivera, 2013). Similar commitments have been adopted in tourism, especially in ecotourism through the development of a nexus with agrifood, which has reinforced efforts towards sustainability in both sectors. Sustainability ambitions are also deeply rooted in Costa Rica’s policy environment, where the right to food and a healthy environment form part of Costa Rica’s constitution and have been incorporated into the Food and Nutrition Security Policy 2011-2021. The integration of environmental objectives into policies on food production and rural development dates back to the 1990s, and can be observed in the recent National Policy on Sustainable Production and Consumption 2018-2030, a collaboration between different ministries developed with the involvement of a variety of food system actors through a participatory process.

However, commitments and policies alone are not sufficient to trigger transformation. They need to be accompanied by political will, funding, strategy and measurable indicators – all topics which are explored below.

Costa Rica’s progress thus far triggers a number of questions about the policy and institutional building blocks put in place, game-changing policies, programmes and investments, and other important processes and dynamics that have played a key role in the transformation to date. Structured according to five key insights, this rapid appraisal extracts the most pertinent lessons potentially of interest to other countries also intent on food systems transformation, based on conversations with a variety of Costa Rican food system actors. The case also considers the unique attributes of

<sup>3</sup> The short (non-exhaustive) definition comes from the UN Food Systems Summit 2021 website: [www.un.org/en/food-systems-summit/about](http://www.un.org/en/food-systems-summit/about). Besides a focus on the activities of the food system, a food systems approach implies a broader emphasis encompassing social, food security and environmental outcomes and the socio-economic and environmental drivers of these food system activities, as well as the ways in which these elements interact with each other (van Berkum, Dengerink and Ruben, 2018).

<sup>4</sup> “Costa Rica is the first tropical country to have stopped and reversed deforestation: over half of its land is covered by forest, compared to just 26 percent in 1983” (World Bank, 2016).



Costa Rica's food system including biophysical characteristics and climate, historic and cultural roots, and the position of leading food commodities on the global market. Although the specific examples given may not reflect the realities of other countries, the insights may inspire other countries in their respective efforts to achieve sustainable food systems.

## 1.2. Costa Rica's assets

Located in Central America with a population of just over 5 million people (World Bank, 2020a), Costa Rica is a relatively small country. Yet, it has a number of characteristics and assets that offer key comparative advantages for a successful agrifood industry. These include a highly educated workforce, and a long-standing and stable democracy. Bordering Nicaragua to the north and Panama to the south, and flanked by the Caribbean Sea to the east and the Pacific Ocean to the west, Costa Rica has a mostly mountainous topography, making the country unfit for mechanized agriculture, such as the production of commodities such as grains and pulses. However, its rich and fertile volcanic soils, together with high levels of precipitation, a wealth of microclimates and a natural environment rich in biodiversity, make the country well-suited for the production of a number of high-value sub-tropical crops and export-oriented commodities.





# 1.3. Key agrifood sector and trade indicators



## Key agrifood exports in 2019



**COSTA RICA IS THE LARGEST GLOBAL PRODUCER AND EXPORTER OF PINEAPPLE**

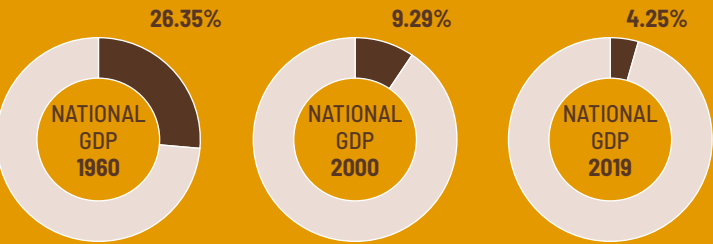
(PROCOMER, 2020)

## Key agrifood imports in 2019



(OEC, 2019)

**The contribution of the agricultural sector to national GDP has been decreasing steadily since (at least) the 1960s**



(World Bank, 2020b)



©unsplash.com/Rodrigo Flores

**ABOUT 12 PERCENT OF THE POPULATION WORKS IN THE AGRICULTURAL SECTOR. THIS PROPORTION IS COMPARABLE TO OTHER COUNTRIES IN THE CENTRAL AMERICA REGION, BUT PRODUCTIVITY (VALUE ADDED PER WORKER) IS TWICE AS HIGH.<sup>5</sup>**

<sup>5</sup> Costa Rica's profile on the Food Systems Dashboard (<https://foodsystemsdashboard.org>) shows that, in 2018, employment in agriculture was 13 percent in Central America. Value added per worker for agriculture, forestry and fishing was USD 10.60 for Costa Rica and USD 5.17 for Central America (GAIN and Johns Hopkins University, 2021).

©unsplash.com/Rinson Chory



**COSTA RICA IS IN THE PROCESS OF BECOMING A MEMBER OF THE ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT (OECD).** THE COUNTRY IS ALREADY A MEMBER OF THE WORLD TRADE ORGANIZATION (WTO) AND THE CENTRAL AMERICAN ECONOMIC INTEGRATION SYSTEM (SIECA), AND HAS AGREED BILATERAL FREE TRADE AGREEMENTS WITH SEVERAL OTHER COUNTRIES IN THE REGION AS WELL AS THE PEOPLE'S REPUBLIC OF CHINA AND THE UNITED STATES OF AMERICA. IT HAS ALSO SIGNED AN ASSOCIATION AGREEMENT WITH THE EUROPEAN UNION (TOGETHER WITH THE OTHER COUNTRIES IN CENTRAL AMERICA).

(Embassy of Costa Rica in Belgium, 2021).

### Levels of nutrition

UNDER-5 STUNTING **5.6%**

WASTING **1%**

ADULT MALES

OVERWEIGHT **39.8%**

OBESITY **21.8%**

ADULT FEMALES

OVERWEIGHT **33.4%**

OBESITY **31.5%**

(Development Initiatives, 2020)

WHILE LEVELS OF UNDER-5 STUNTING AND WASTING ARE **VERY LOW** COMPARED TO THE AVERAGES IN THE LATIN AMERICA AND CARIBBEAN REGION, LEVELS OF OVERWEIGHT AND OBESITY IN ADULTS ARE **HIGH**.



©FAO/Ezequiel Becerra

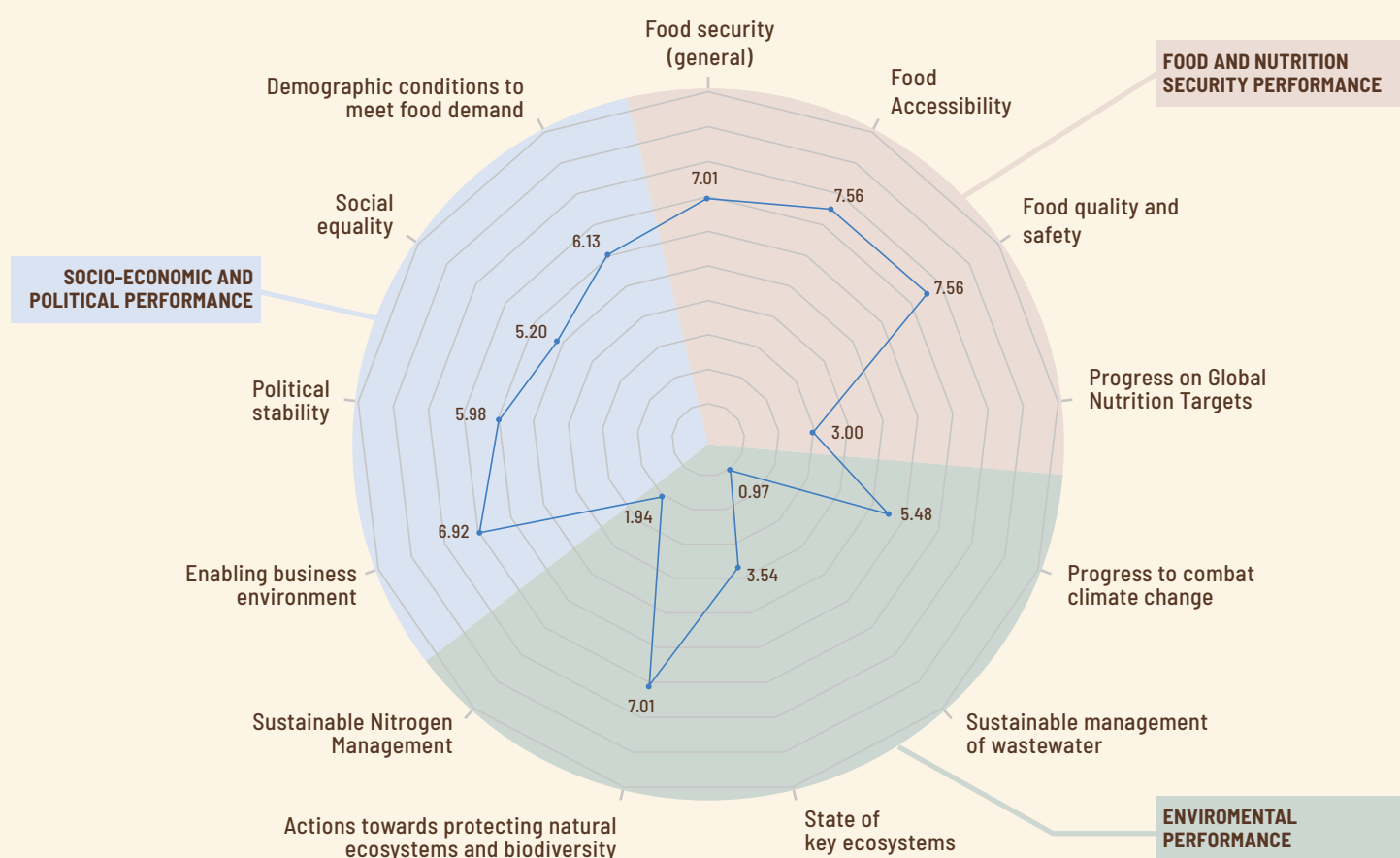
## 1.4. Costa Rica's current food system outcomes

An overview of key food system outcomes in Costa Rica using publicly available data is shown in Figure 1. This spiderweb graph shows data for the three key domains of food systems: food and nutrition security, socio-economic and political outcomes, and environmental sustainability.<sup>6</sup> This overview aims to provide a broad impression of Costa Rica's food system across these three domains.

When food system outcomes are examined across different dimensions, Costa Rica performs well compared to other upper middle-income countries. The country ranks 39th in the Global Food Security Index (GFSI) and fourth for Central and South America (The Economist, 2020). The country also scores particularly high on GFSI indicators for the presence of food safety net programmes, nutrition standards,

<sup>6</sup> This spiderweb is based on a balanced estimate of 13 food system indicators, using publicly available data sets and indexes. It makes no claim to be an overall performance assessment. Further details are available in Annex 1.

**Figure 1.** Performance of the Costa Rican food system across three dimensions



**Note:** score 1-10, where 1 is highly insufficient and 10 is excellent. Each score is based on either the maximum possible score for that indicator or, if available, a global target for that indicator.

food safety and food price stability. However, even though Costa Rica scores well on nutrition standards, the country is not on track to meet several of the global nutrition targets,<sup>7</sup> and overweight and obesity are a particular concern.<sup>8</sup> This suggests that even though food security is high, nutrition and health outcomes still need attention.

In addition, a growing population and increasing urbanization are exerting pressure and creating challenges for the food system. Currently, almost 80 percent of Costa Rica's citizens live in cities – the highest percentage among Central American countries (UN, 2018). Costa Rica also ranks fourth on the Environmental Performance Index in the Latin America and Caribbean region. Although the country has demonstrated improvements in sanitation and drinking water, environmental services and CO2 emissions, Figure 1 shows room for further progress, particularly in the areas of sustainable management of wastewater, the preservation of key ecosystems and nitrogen management.

---

<sup>7</sup> For four out of the ten global targets, data was relatively old (before 2011) and may therefore have changed.

<sup>8</sup> This is especially the case among adolescents and adults. Overweight rates are increasing sharply (Development Initiatives, 2021) and 34.6 percent of students in schools are overweight or obese (SUN, 2018).



## 2. Important processes and conditions shaping the Costa Rican food system





Seven important processes and conditions have contributed to shaping the food system. These relate mostly to internal food system dynamics that have been influenced by processes and conditions in the wider economy and regional agricultural policies.

## 2.1. Culture of collaboration across levels and domains

The importance of consensus-seeking and collaboration was one of the characteristics most frequently cited by interviewees. There was consensus among most actors that working together allowed them to achieve goals beyond their individual capacity, enabling them to compete with larger players worldwide. In Costa Rica, due to the relatively small size of the country and population, and loose, informal and flatter hierarchies and power relations, decision-makers and institutions are perceived as approachable. Collaborative efforts are present in many forms and were mentioned as key in leveraging the transition towards sustainability. A few examples are described in Box 1.

### BOX 1

#### Types of collaboration between different food system actors in Costa Rica

**Inter-ministerial collaboration:** In response to rising overweight and obesity rates, ten ministries signed a 16-point “Letter of Commitment to comprehensively address overweight and obesity in the children and young people of Costa Rica” in 2018. A key output was the request for a new set of food-based dietary guidelines, the development of which is ongoing. Different ministries<sup>9</sup> have also worked together on the formulation and implementation of the National Policy on Sustainable Production and Consumption 2018-2030, which lays the groundwork for the transformation of national systems (including the food system) in line with the 2030 Agenda for Sustainable Development. Such inter-ministerial collaboration is not usually an automatic process and therefore requires setting up and nurturing through appropriate mechanisms and incentives.

**Public-private collaboration:** A notable example of public-private collaboration is the set of voluntary efforts known as Nationally Appropriate Mitigation Actions (NAMAs). These pursue sustainability goals in line with Costa Rica’s commitment to achieve carbon neutrality by 2050, and are coordinated by the Costa Rican government in collaboration with the private,

<sup>9</sup> These include the Ministry of Health, the Ministry of Agriculture and Livestock (MAG), the Ministry of Environment and Energy (MINAE), the Ministry of Finance, the Ministry of Economy, Industry and Trade (MEIC) and others.

financial and knowledge sectors, including international partners. The coffee sector was the first to commit to implementation of its own NAMA between 2011 and 2021, making it the first agricultural NAMA worldwide. Since then, 5 000 coffee farmers have been trained in agricultural practices and the sector has measured CO<sub>2</sub> emissions and applied climate change mitigation actions to more than 60 coffee mills (NAMA Facility, 2020), hoping to inspire others to follow suit. In 2015, the livestock sector launched its Strategy for Low Carbon Livestock in Costa Rica 2015–2034, which included a livestock NAMA as a key implementation mechanism.

Public-private alliances in the field of nutrition, meanwhile, can be found in the dairy sector, such as the longstanding collaboration between the Cooperativa Dos Pinos and the Nutrition Centre CEN-CINAI to promote consumption of milk among children. Another important example is the Programme for the Reduction of Salt/Sodium Consumption in Costa Rica. In 2019, the Ministry of Health and the Food Industry Chamber of Costa Rica (CACIA) signed the third of a series of agreements with gradual, voluntary goals to reduce the content of sodium in certain processed foods widely consumed among the Costa Rican population (CACIA, 2019).

**Intra-sectoral collaboration:** In the coffee sector, the Coffee Institute of Costa Rica (ICAFE) is a leading example of how collaboration between actors can leverage sectoral transformation, with a focus not only on enforcing high-quality standards but also prioritizing sustainable production. ICAFE is a non-state public institution, founded in 1933, in which producers, processors (*beneficiadores*), roasters and exporters have joined forces to ensure a fair sector that benefits all actors, promote the consumption of Costa Rican coffee, and drive innovation and processes to ensure coffee of the highest quality (ICAFE, 2021a). The participation of Costa Rica in global markets pushed coffee chain actors to collaborate, invest in research and technology, and provide capacity building and inputs for the actors in the coffee chain. For example, as part of the Coffee NAMA, ICAFE developed a certificate that defines economic, social and environmental standards, as well as promoting supply chain transparency and traceability. ICAFE is one of six so-called “corporations” of the agrifood sector, institutions created by law and mostly funded via parafiscal taxes (e.g. ICAFE receives up to a 1.5 percent tax on the free on board value of each coffee bag exported) (ICAFE, 2021b). “Corporations” promote the convergence of actors by law, and have been reported as a success in the sectors of coffee, banana and sugar cane. However, more modest performance has been attributed to corporations in the sectors of rice, horticulture and cattle (in recent years the cattle corporation has been praised for its move towards sustainable practices) (Sáenz-Segura and Chaves-Moreira, 2014).

**Sources:** CACIA. 2019. *CACIA renueva alianza con el Ministerio de Salud para la reducción del contenido de sodio en alimentos procesados*. [online]. Revista Digital Alimentaria, 8 July. [Cited 14 December 2020]. <http://alimentaria.cacia.org/digital/cacia-renueva-alianza-con-el-ministerio-de-salud-para-la-reduccion-del-contenido-de-sodio-en-alimentos-procesados>; ICAFE. 2021a. *Acerca del ICAFE*. [online]. Barva, Instituto del Café de Costa Rica. [Cited 14 December 2020]. [www.icafe.cr/icafe/acerca-del-icafe](http://www.icafe.cr/icafe/acerca-del-icafe); ICAFE. 2021b. *Preguntas frecuentes: ¿Cómo se financia el ICAFE?*. [online]. Barva, Instituto del Café de Costa Rica. [Cited 14 December 2020]. [www.icafe.cr/preguntas-frecuentes](http://www.icafe.cr/preguntas-frecuentes); NAMA Facility. 2020. *Costa Rica: Low-Carbon Coffee NAMA*. [online]. [Cited 14 December 2020]. [www.nama-facility.org/projects/costa-rica-low-carbon-coffee-nama](http://www.nama-facility.org/projects/costa-rica-low-carbon-coffee-nama); Sáenz-Segura, F. & Chaves-Moreira, J.M. 2014. *La Institucionalidad del Sector Agropecuario Costarricense: evolución y efectos sobre el desarrollo del sector*. Informe Final. Vigésimo Informe, Estado de la Nación en Desarrollo Humano Sostenible. San José, CONARE.

## 2.2. Public investments in key system structures

Over the past decades, the Costa Rican government has made a number of strategic investments that have contributed to building key infrastructures in the food system. Some of these investments strengthened important drivers and can be linked to social and economic development, while others focused on improving connections between the different parts of the food system. For example:

Following the abolition of the national army in 1948, additional public funds became available and investments were made in **social services and education**. This helped to increase educational levels and the welfare of the general population, with laws enacted to reform wages, insurance, pensions and social security schemes. Higher educational levels were cited by interviewees as an important prerequisite for an active civil society, while a critical mass formed around issues such as consumer interests and individual demand for sustainable food products.

### KEY INSIGHT 1

#### The public sector plays a key role in laying the groundwork

Structures such as education systems, social protection, policies, legal frameworks and formal institutions function as the foundation for sustainable development, and constitute key enablers helping food system actors to work towards achieving sustainability goals. However, these structures can only enable transformation when complemented with resources, clear and transparent participatory processes, and leading examples of interdisciplinary collaboration.

Significant investments were made in the **agricultural knowledge and innovation system (AKIS)**. AKIS has played a crucial role in shaping the agricultural sector, underpinned by a strong research and development arm and a widespread network of agricultural extensionists, which facilitates the access of farmers to inputs, technology and finance.<sup>10</sup> During the 1980s, structural adjustment programmes (SAPs) were implemented in many developing countries, including Costa Rica, which placed public agricultural extension services under pressure (FAO, 2003). However, the Costa Rican government chose to sustain these services, and in so

<sup>10</sup> Costa Rica's investments in agricultural innovation and research and development in 2013 reached 48 percent of the total General Services Support Estimate of OECD, which measures all general (as opposed to individual) support to farmers. The OECD average percentage is 20 percent. Overall, Costa Rica's support to agriculture represents a significant cost to the economy and society as a whole compared to other countries in the region (OECD, 2017).

doing maintained institutional memory and the ability to transfer knowledge and technology to farmers.<sup>11</sup> The Ministry of Agriculture (MAG) provides free services to (mostly) small and medium-sized farmers through extension agencies spread across the country's 82 cantons. Over recent years, however, budgets for public extension services have been reduced significantly (InfoAgro, 2021), which has placed other actors, such as universities, cooperatives, sectoral corporations and other private sector actors, in a position to innovate, transfer knowledge and organize access to finance across the food system.

**Farmers' Fairs** are an example of how the government has invested in basic food system structures to provide the population with stable access to nutritious food. The fairs began as a small initiative, but with MAG support they have been scaled and institutionalized, and today play an important role in the lives of many Costa Rican families (see Box 2 for more details).

<sup>11</sup> An example of such an exchange platform for farmers, extension workers and researchers is PLATICAR ([www.platicar.go.cr](http://www.platicar.go.cr)), established by the National Institute of Agricultural Innovation and Technology Transfer (INTA).



**Figure 2.**  
Tomatoes on sale  
at a Farmer's Fair  
stand in Alajuela,  
Costa Rica

## BOX 2

### Case example: The institutionalization of Farmers' Fairs

The first Farmers' Fair was organized in San José in the early 1980s, when a few farmers decided to sell produce from their small vehicles on a crowded street. These street markets proved a success and began to spread throughout the country. The Ministry of Agriculture recognized their incipient value as part of the basic infrastructure of Costa Rica's food system and started to invest in these markets, strengthening their organization and stimulating further expansion. In 2008, law No. 8533, entitled "Regulation of Farmers' Fairs", was enacted.

The aim of the law is to encourage a direct relationship between consumers and producers, whereby consumers obtain better prices and quality, and producers increase their profit. Under this law, producers have organized themselves into regional committees and established a National Board of Fairs, which acts as a governing and supervisory institution at the national level. Consumer organizations may also request to form part of the regional committees. Lastly, the National Production Council (CNP) acts as a technical and advisory public entity.

Currently, more than 80 Farmers' Fairs are located across the country, with over 9 000 households dependent on them for stable food supplies (see Figure 2). During the COVID-19 pandemic, social distancing and hygiene measures were introduced, and the markets managed to remain open, even being cited as an important factor ensuring the resilience of the food system. Farmers are aware of competition from supermarkets and are trying to adapt their business model to reach more customers, for example by working with university students to build an app to facilitate the purchase process.

**Source:** Interview with representative of the National Board of the Farmers' Fairs.

## 2.3. Costa Rica's comparative advantage

Costa Rica is a relatively small country but has several natural assets that offer a key comparative advantage and form the basis for a successful agricultural industry, with a particular focus on export commodities such as pineapples, coffee and bananas. These natural characteristics combined with Costa Rica's efforts to enter international trade markets have enabled the country to become a world leader in tropical fruit exports.

This transition to global markets, especially since the 1980s, has encouraged farmers to specialize in crops suitable for exports. A significant trade-off in this regard is the advent of monocropping and agrochemical use, which has heavily impacted the country's natural resources. Large monocultures of banana and pineapple have exerted pressure on Costa Rica's environmental resources, such as water, forests and biodiversity, and the overuse of chemical fertilizers and pesticides, as noted by some interviewees, represents a major cause for concern. In addition, a complicated registration process for new agrochemicals has resulted in a lack of new registered agrochemicals over the last ten years.



## KEY INSIGHT 2

### Costa Rica's comparative advantage is key to the development of its agricultural sector

While the country possesses several natural characteristics that form the basis of a successful agricultural industry, it is political efforts in combination with these characteristics that have shaped the agricultural sector. Deliberate efforts to engage in global trade through, for example, foreign trade agreements, have allowed Costa Rica to position itself on the global market. This transition has triggered a transformation in the agricultural sector, and the natural landscape. Although this transition may have increased financial security for producers, the environmental costs represent a major trade-off.

Yet, access to global markets has also introduced new income opportunities for many producers, new opportunities for partnerships, and sustainability standards that have stimulated producers and cooperatives to innovate and push their respective sectors to become more sustainable. However, another drawback is that while suitable for production of the aforementioned export commodities, Costa Rica is not well-suited to the production of staple grains, which forms a barrier to self-sufficiency.

## 2.4. Environmental sustainability commitments and standards

Environmental sustainability has gained an increasingly prominent position in Costa Rica's food system through a variety of mechanisms, notably the increased sense of urgency surrounding environmental issues. In the 1980s, Costa Rica's agrifood sector experienced economic setbacks due to the drop in prices of its key export crops (coffee and bananas). The country also suffered the consequences of environmental degradation (e.g. deforestation, soil degradation and water pollution), in part caused by the intensification of key export crops and the expansion of the livestock sector in the 1970s. The Rio Earth Summit in 1992 introduced a sustainability perspective to development, and created a sense of urgency among the country's leaders (already inspired by the ideas of "conservationism" and "sustainable development" in the 1970s and 1980s)<sup>12</sup> about the need to integrate environmental objectives into agricultural policies and invest in the technical training of staff with an emphasis

<sup>12</sup> Although the Rio Earth Summit in 1992 is considered a key moment in the transition towards sustainability, the consensus-building process took decades. Prior to the Summit, an important indicator was the launch of a national Conservation Strategy for Sustainable Development (ECODES) in 1990.

on sustainable development programmes (Fernández-González, 1994). Since then, environmental objectives have formed part of national policies, such as the National Policy on Sustainable Production and Consumption 2018-2030.

### KEY INSIGHT 3

#### A sense of urgency is crucial to leverage change

Costa Rica took an important step towards sustainable development in the 1990s, as the inevitable need for environmental sustainability led to a revision of the whole development model. This shift included increased engagement with the global community around sustainability, which in turn reinforced the sense of urgency in Costa Rica. Key approaches included identifying issues such as the environmental crisis and using them as entry points to spur a sustainability dialogue, thereby creating a sense of urgency.

Costa Rica's engagement with the international community and commitment to global initiatives have also contributed to a sense of urgency at the national level. This has led to outcomes such as a project supported by the Food and Agriculture Organization of the United Nations (FAO) and the Dutch development cooperation agency on soil and water management, a partnership with the German development agency GIZ on the Coffee NAMA and, from 2014, integration into the Scaling-Up Nutrition (SUN) movement to strengthen health and nutrition. The latter also stems from an increased sense of urgency to tackle all forms of malnutrition, with an emphasis on overweight and obesity, on the basis that promoting healthy diets represents an investment in the future of the nation.

Other commitments are linked to ongoing internal and external dynamics. Development cooperation programmes on environmental sustainability, international standards set by trade partners through Foreign Trade Agreements, certification programmes, and changes in consumer demand and shifting markets all exercise influence on the policy agenda and shape it organically. In 2007, the public and private sectors jointly committed to a decarbonized economy and, more recently, Costa Rica presented its National Decarbonisation Plan 2018-2050, which includes a number of commitments for the decarbonization of the food system. This plan led to the country being given the Champion of the Earth for policy leadership 2019 award by the United Nations Environment Programme (UNEP, 2019).

In 2020, Costa Rica received USD 54.1 million in non-reimbursable funds (a first for a Central American country) in recognition of its efforts in the fields of conservation and climate action (GCF, 2020). Through these commitments and policies, Costa Rica has become a leader in the transition towards sustainability, which in turn may attract greater attention to sustainable solutions. For example, the rise of (agri- and eco-) tourism is partially attributed to Costa Rica's image. Since the tourism sector

is relatively large in Costa Rica at 3.1 million visitors per year (ICT, 2020), compared to a national population of 5 million, accommodating tourists' demands for locally sourced, sustainably produced and healthy agricultural products could potentially lead to more widely embedded sustainability practices.

### BOX 3

## Transformation of the Costa Rican coffee sector

At the start of the nineteenth century, coffee was planted around Costa Rica's capital city on previously deforested areas and mostly produced for local consumption. From 1850 to 1950, coffee farms extended to other regions of the country, and a series of transformations brought international recognition to the sector. However, although shade-growing techniques were common and agrochemical use was almost non-existent, the first negative impacts on the environment began to appear with the dumping of honey water and husks from the processing of coffee beans (beneficiado) resulting in the pollution of rivers.

From 1950 to 1980, the sector gradually felt the influence of the Green Revolution. New varieties were introduced (with higher growing densities and lower use of shade growing), the use of agrochemicals was generalized, and the growing area increased by approximately 570 percent. As a result of these changes, productivity reached 7.2 tonnes per hectare in 1981 (compared to 2.6 tonnes per hectare in 1935). However, these changes also triggered soil erosion and the increase in farm inputs saw costs rise.

In 1989, Costa Rica consolidated its position on international markets; however, coffee prices dropped to their worst level in 25 years and remained there until 1994. The break-up of the International Coffee Agreement (ICA) and worldwide overproduction had led to price decreases and the sector was showing signs of a tipping point with farm costs higher than earnings. However, contrary to other countries, a public institution (ICAFFE) remained the regulator of the commercialization process in Costa Rica. From 1990 onwards, as a response to the price crisis, ICAFFE promoted crop diversification, alley cropping and agroforestry systems as a solution, and launched a reforestation programme with incentives for organized small- and medium-sized producers.

From 2001 to 2006, worldwide overproduction again led to a decrease in price. This resulted in drops in production, as well as societal crises in coffee-producing areas of Costa Rica, driving some producers to abandon their farms. As in the past, the sector (with the leadership of ICAFFE) responded by pushing for crop diversification and quality. Emphasis was placed on arabica varieties, high altitude growing and wet processing methods. A campaign launched in 2000 and directed at producers, processors and exporters had already encouraged the sector to produce "the best coffee in the world", with shade growing and agroforestry techniques both receiving research funding. In 2009, a system of payments for environmental services was created for agroforestry systems with coffee; and, in 2011, the first agricultural Nationally Appropriate Mitigation Action (NAMA) in the World, the Coffee NAMA 2011-2021 was launched.



While the transition towards a more sustainable coffee sector seems to have been driven mostly by market forces (price crises and consumer demand), public institutions (e.g. ICAFE and MAG) have played a key role as facilitators of change. The country has also made use of its “green” and “pacific” image to market its products to international consumers. Although the volume of coffee exported has more than halved since the 1990s, the above-mentioned changes highlight an ongoing transformation that has already enabled Costa Rica to export its coffee at a higher price than other countries in the region – an outcome that makes it easier for actors in the value chain to increase their focus on sustainability.

**Sources:** Interviews with informants; **Granados**, C. 1994. El impacto ambiental del café en la historia costarricense. [online]. *Diálogos. Revista Electrónica de Historia*. Monterrey, Escuela de Historia, Universidad de Costa Rica. [Cited 14 December 2020]. [https://repositorios.cihac.fcs.ucr.ac.cr/repositorio/bitstream/123456789/183/1/6vol4\\_n2cgranados.pdf](https://repositorios.cihac.fcs.ucr.ac.cr/repositorio/bitstream/123456789/183/1/6vol4_n2cgranados.pdf); **Montero-Mora**, A. 2018. *Café, Revolución Verde, regulación y liberalización del mercado: Costa Rica (1950–2017)*. Universitat de Barcelona. (PhD dissertation)



## 2.5. The role of cooperatives

In Costa Rica, cooperatives have played an important role in driving sustainability within their respective sectors for decades (see Box 4 for an overview). National governance of cooperatives includes set limitations on the percentage of benefits distributed each year among members, and minimum thresholds on capacity-building investments or contributions to certain institutions, including the National Institute of Cooperative Promotion (INFOCOOP) and the Cooperatives National Council (CONACOO). These institutions support, promote and represent cooperatives and provide capacity building and research services (CENECOOP). In addition, cooperatives enjoy a number of special benefits, such as preference in the allocation of public procurement contracts set up by the state (IICA, 2010).

### BOX 4

#### Costa Rican cooperatives in numbers: an overview

In 2010, out of a national census of 347 cooperatives, 101 operated in the agrifood sector. Of these, 50 organizations reported a focus on production, followed by commercialization (25) and processing (10). Among the production-focused cooperatives, coffee was the subsector with the highest number of operational cooperatives (11), followed by oil palm (8) and sugar cane (7). In terms of the number of members, out of the total of 111 404 individuals that are members of agrifood cooperatives in Costa Rica, 71 644 were associated with one of the seven credit cooperatives that operate in Costa Rica, while 38 760 were associated with one of the 94 cooperatives that operate in different activities of the food system, ranging from production to distribution.

**Source:** IICA. 2010. *Un nodo de cooperación sobre: La experiencia de Costa Rica en cooperativas agrícolas*. San José, Interamerican Institute for Cooperation on Agriculture. 60pp. (also available at <http://repiica.iica.int/docs/B1659E/B1659E.pdf>).

One of the largest agrifood organizations in the country is Dos Pinos R.L., a dairy cooperative with around 1 400 associated milk producers that accounts for around 80 percent of the total milk processed in the country. Dos Pinos was established in 1947 by 25 farmers with the aim of purchasing milk from farmers to add value (e.g. pasteurizing and processing further) and commercialize the final products. As with other cooperatives, the organization naturally integrates social and economic objectives, thereby focusing on the well-being of its members. This combination of historic roots and representing the interests of their constituency lends cooperatives an important bargaining position as well as the unique function of providing stability to its members. These characteristics allow them to pursue long-term development for their members while incorporating economic and social objectives – a key aspect of sustainable development.



## KEY INSIGHT 4

### Cooperatives can play a key role in the transition towards sustainability

Cooperatives are unique in using their bargaining position to pursue social as well as economic objectives, unlike companies where profits are usually prioritized. In Costa Rica, the cooperatives create a platform for a wide variety of food system actors and explicitly give a voice to smallholders. In negotiations they foreground the long-term interest of their members, which includes a focus on sustainability as a prerequisite for long-term social and economic development. Cooperatives can also play a key role in innovation for sustainability, due to their close links with producers which provides them a knowledge of, for example, environmentally friendly composting techniques, fertilizers and pesticides. Many cooperatives are capable to engage with other entities, as evidenced by their numerous collaborations with knowledge partners within and outside Costa Rica.

At the same time, cooperatives are in a position to strictly monitor and regulate quality and sustainability standards, provide support to farmers to meet those standards, and invest in research and innovation (see Figure 3) to identify more sustainable solutions within their sector. This is the case in the dairy sector, especially in relation to food safety, but also in the coffee sector, where 37 percent of coffee production is undertaken by farmers associated with cooperatives. Coopetarrazú, a coffee cooperative, collaborates with several knowledge institutes both within and outside Costa Rica in the search for organic alternatives to agrochemicals and new composting techniques, thereby diversifying their range of products and services. These activities are accompanied by considerable investments, with Coopetarrazú investing 31 percent of their 2019-2020 season profit in R&D (J. Porras-Barrante, personal communication, 2020). Another cooperative, Coopedota, produced the world's first carbon neutral coffee. These investments in innovation and sustainable development are also an indication of how non-state actors are increasingly driving sustainability.

**Figure 3.**  
Research being  
conducted by  
a scientist at  
Coopetarrazú's R&D  
facilities



## 2.6. Strong civic space

An important element frequently mentioned by interviewees is the role of lobbying and advocacy in shaping Costa Rica's food system. For example, during a successful civil society-led campaign against the introduction of genetically modified crops by a multinational firm, a number of lobbying and advocacy strategies were pursued. Actions included a country-long march, demonstrations, the promotion of local government declarations in support of the cause, legal appeals, pressure by lawmakers, and participation in debates and interviews across a variety of academic and media platforms (Pacheco-Rodríguez and García-González, 2014). The fact that these actors can participate in this manner without experiencing serious repercussions, and are sufficiently vocal to undertake these steps, indicates a strong civic space – a fundamental pillar of a functional democracy. The civic space can also be a space of confrontation and friction. Some interviewees noted their preference for dialogue, and stressed the importance of being invited to participate in decision-making processes and actions of concern to them (e.g. the design of sectorial policies). Despite positive examples, several interviewees also commented on the limited representation of civil society in some parts of the food system, such as negotiations about consumer interests, and the continued struggle against environmental degradation.

When food system actors come together they can achieve victories, large and small, and gain a seat at the negotiating table, but they can also bring about more systemic change. One example of this is the National Agrifood Alliance (ANA), an informal collaboration consisting of agribusiness actors of all sizes.<sup>13</sup> This alliance initially emerged in response to proposed changes in property tax law that would affect producers, and the collective realization that while they might compete in business, they had a common interest in ensuring a thriving and sustainable agrifood sector. These convergent interests led these different actors to work together to form a more effective lobby. ANA is now a recognized alliance with an established relationship with government and is increasingly seen as a channel through which issues related to labour, agrochemicals, water and other topics can be brought forward and addressed.

<sup>13</sup> Launched in 2013, the ANA was initially formed by the National Chamber of Agriculture and Agribusiness (CNA), the Union of Small and Medium Farmers (UPANACIONAL), the Union of Independent Producers and Various Activities (UPIAV) and CONACCOOP (which left the alliance in 2020).

## KEY INSIGHT 5

### A transparent civic space can contribute to sustainable policies and practices

Civic space plays a crucial role in any society because it creates a necessary dynamic between state and non-state actors that allows a democracy to function well. An example of this is the mobilization of civil society during a campaign against the introduction of genetically modified crops by a multinational firm. This dynamic is seen in Costa Rica: food system actors voice their interests and disagreements, take steps to bring them forward (e.g. through platforms, legal steps or by mobilizing others) and the government responds to those issues by giving the actors space to take these actions without repercussions while also respecting the outcomes of the measures.

## 2.7. Political stability, continuity and peace

Interviewees attribute Costa Rica's ability to steer a course towards sustainability to its relatively long-standing period of political stability and peace, in particular when compared to other countries in the region.<sup>14</sup> Over the years, sustainability and FNS have steadily claimed a place in the constitution, laws and regulations, ranging from the right to a healthy environment, to a Participatory Guarantee System for organic farming certification, laws around the organization of Farmers' Fairs, and environmental rules and regulations. Although such frameworks may not trigger transformation per se, they do form a stable foundation for actors to use to claim their rights or to call to account other food system actors. However, the same strong social structures and environmental laws might constitute a disadvantage for Costa Rica in terms of the global market, as they make production more expensive compared to other countries in the region.

Civil servants were cited by interviewees as a key stabilizing factor because they tend to stay in their posts beyond electoral cycles and rotate or relocate only occasionally, thereby creating continuity in their line of work and ensuring institutional memory which can be called upon when needed.

<sup>14</sup> Costa Rica ranks 32nd in the Global Peace Index 2020, after Italy, with the next Central American country (Panama) in 56th position (Institute for Economics and Peace, 2020).



# 3.

## What does this say about the transformation towards sustainability?

3 WHAT DOES THIS SAY ABOUT THE TRANSFORMATION TOWARDS SUSTAINABILITY?



©FAO/Ezequiel Berra



As discussed in the previous section, a number of important elements are in place in the Costa Rican food system: political commitment, policies, institutions and laws, basic infrastructures (in political, social and economic domains) and a critical consumer population increasingly demanding sustainability. But what does this say about the transformation of the food system towards sustainability, and what are the key moments that triggered the transition? In the case of Costa Rica, it is evident that the developments of past decades have set the scene for the transformation towards a sustainable food system. A few important milestones can be highlighted to illustrate this journey.

In the 1980s and 1990s, stringent **financial and economic reforms** were introduced through SAPs (FAO, 2003). These reforms were implemented in sectors that helped Costa Rica to reinforce its position on global markets with products such as coffee and bananas, and later also pineapple. Diversification of the market was also promoted, encouraging farmers to switch from the production of basic grains to more profitable crops. Free Trade Agreements then helped Costa Rica further strengthen its position on the global market. This focus on global commodities meant that Costa Rican producers had to compete with other producers from countries such as the People's Republic of China and the United States of America, which pushed them to intensify production through monocropping and heavy use of agrochemicals. These external dynamics defined the context in which the Costa Rican food system was shaped and represent a clear trade-off between economic objectives and environmental sustainability – one that is still relevant today. However, these events set the scene for a subsequent shift towards sustainability which was consolidated in the early 1990s.

The **Rio Earth Summit** in 1992 made clear the importance of steering a course towards sustainability. For Costa Rica, experiencing economic setbacks and environmental degradation, the moment constituted a window of opportunity. From this point onwards, sustainability was consolidated on the political agenda and sustainability objectives were complemented with necessary capacity building. This led to the implementation of sustainability initiatives in soil, water and reforestation.

Although the sustainability narrative initially focused on environmental sustainability and improving existing practices, the debate opened up and became more integrated. Health and nutrition, for example, are now increasingly part of the debate as a result of the formulation of the **Food Security and Nutrition Policy 2011-2021**. The Secretariat for National Policy on Food and Nutrition (SEPAN), created in 2007, played an important role in this process. As a supporting body of the Ministry of Health, SEPAN initially focused on health; however, civil servants working at SEPAN flagged the need to integrate their work with food security and nutritional objectives, eventually leading to an integrated policy. The integration of food, nutrition and health opened the way for the formulation of an FNS agenda in collaboration with FAO, engagement with the SUN movement to strengthen civil society around nutrition and health, and a letter of commitment signed by ten different ministries. SEPAN now functions as a lynchpin linking other ministries, promoting inter-ministerial collaboration, and further integrating health and nutrition into the sustainability

debate. These institutional changes and commitments are a first step in moving beyond the optimization of existing practices towards the type of integrated action that is essential for food systems transformation.

Costa Rica's commitments to the Coffee **NAMA** are a pivotal part of the transition towards sustainability. Indeed, they represent more than commitments and are accompanied by the necessary inputs, training, monitoring systems and actions across the coffee chain, from producers to markets (Schloenvoigt and Spies, 2019). This initiative shows how a pilot can become a sector-wide movement capable of defining new standards and inspiring other sectors to follow suit. Indeed, the livestock sector is now committed to implementing its own NAMA.

# 4. Collective capabilities for food system transformation

4 COLLECTIVE  
CAPABILITIES FOR  
FOOD SYSTEM  
TRANSFORMATION



So what makes for successful, transformative change in a complex environment such as Costa Rica's food system? This case study focuses on the role of the public sector in leveraging such change, but it must be acknowledged that the role of other food system actors is also crucial. Our interviewees comprised a wide range of food systems actors: representatives from ministries, implementing institutions, the private sector, knowledge institutes and NGOs/civil society. These actors each have their own capabilities as individuals or as an organization, and together present a collective ability to leverage systemic change. To help reflect on this collective ability, this concept has been broken down into five capabilities for systems change (adapted from Baser and Morgan, 2008). A short overview of these capabilities and some examples from Costa Rica are provided in Table 1.

**Table 1.** Collective capabilities for the transformation of the Costa Rican food system

CAPABILITY	CHARACTERIZATION OF THE SITUATION IN COSTA RICA
Capability to <b>resource, act and deliver</b> for sustainability transformation  <i>Key words: intervention management (doing things right), resource allocation</i>	Although investments have been made in the past to boost the agricultural sector, budget cuts were frequently mentioned as having affected the quality of extension services and key functions in the system, such as innovation and access to finance. Current commitments to sustainability are not necessarily complemented by investments or concrete action plans. The role of agricultural research by different public knowledge institutes remains key.
Capability to <b>relate and partner</b> for sustainability transformation  <i>Key words: relationships and collaboration</i>	Historic roots nurture a culture of collaboration. In this small country, actors are well connected and approachable which encourages engagement, both formally and informally. Low rotation among civil servants contributes to this dynamic through strong institutional memory and continuity.
Capability to <b>adapt and self-renew</b> to align with sustainability transformation requirements  <i>Key words: urgency responsiveness and willingness to change</i>	Some commitments and alliances have been created out of a sense of urgency, such as the initial commitments to environmental sustainability in the 1990s, or the alliance with SUN. Other actors such as civil society or cooperatives play an important role in signalling the need for change, creating a sense of urgency, and promoting innovation in technology and practices.
Capability to <b>address diversity and achieve coherence</b> in sustainability transformation  <i>Key words: inclusion and coordination, leadership, doing the right thing</i>	The government may not necessarily seek to address diversity or include specific actors at first. Rather, people, organizations and activists form alliances and reach out to the government. In so doing, they create space to discuss concerns with the government, either by invitation, by claiming a seat at the negotiation table or by confronting when needed (e.g. through legal steps).
Capability to <b>anchor</b> food systems sustainability transformation <b>in relevant institutions</b>  <i>Key words: institutionalization and consolidation of achievements</i>	In general, Costa Rica has strong institutions, and this is also the case in the food system. In terms of sustainability, these institutions are increasingly aligning, for example through collaborations among ministries on food-based dietary guidelines, public-private partnerships such as NAMAs, and intra-sectoral alliances such as cooperatives or the ANA. However, such institutions also create a level of bureaucracy that can hinder innovation and speedy decision-making when needed.



The interviewees made mention of numerous **institutions** that played a key role in the development of Costa Rica's food system over the past decades. These institutions together constitute a complex web of organizations and committees and an even more complex web of actors. The actors involved know one another, and a high level of approachability encourages mutual engagement, both formal and informal. In addition, as mentioned in Section 2.7, rotation among civil servants at a variety of public organizations is generally low, which results in strong institutional memory that can be called upon when needed. However, interviewees also noted that easy engagement among public officials does not necessarily lead to integrated policies and collaborations per se. Although some examples were cited, such as the Policy on Sustainable Production and Consumption, stronger inter-institutional coordination and integration is needed to produce integrated, system-wide action.

A high level of approachability also seems to lower the threshold to **engage different actors** in policy processes, programmes and alliances, but it was not always clear to what extent such processes were formally organized. Several interviewees mentioned being invited to participate in policy development processes, but the level of engagement and influence were contested. Some indicated that they had not been invited or had declined invitations because they felt their voice would not truly be heard. This might indicate that new policies, networks or programmes would benefit from a more organized and transparent process where actors participate throughout in a more systematic manner. This includes active efforts to include consumers in this process.

These institutions – whether organizations, informal and formal collaborations, or legal and policy frameworks – create a stable foundation upon which actors can count. However, they also create a level of **bureaucracy** (OECD, 2020) that can hinder innovation and speedy decision-making when needed. As one cooperative noted, markets may sometimes exert pressure to implement sustainable practices, but the process of fulfilling all national requirements for new products and techniques can be lengthy and slow.

A large number of commitments, laws, policies and institutions can potentially guide the transition towards a sustainable Costa Rican food system, but these need to be complemented with **resources**. As described in Section 2.2, the Costa Rican AKIS has played a crucial role in shaping the agricultural sector. However, over recent years, these functions have increasingly shifted towards the private sector. In addition, concerns were expressed about future capacity to continue extension services. These trends seem to contradict somewhat the commitments made by the government which may not be kept if unaccompanied by sufficient resources, both financial and human.

# 5.

## Final reflections

5 FINAL REFLECTIONS



In considering the processes, conditions, practices and capabilities underpinning Costa Rica's food systems transformation over the past decades, it is evident that sectoral and sub-sectoral visions converge in some areas and diverge in others. The trajectories of many industrialized countries outline a path of growth based on competitiveness and efficiency, with sustainability programmes embedded as public and policy pressure grows to adhere to targets. Costa Rica is an outlier in this respect. Since the 1970s, Costa Rica has moved beyond rhetoric, steadily embedding principles and practices of conservation and sustainable development into economic development. The agrifood sector was not initially at the forefront of these efforts, but has benefited from previously generated in-country knowledge and public awareness. This awareness coupled with experiences in developing integrated policies as outlined in Box 1, has facilitated a broader discussion on nutrition and moved the discourse beyond quantity to quality and diversity, as evidenced in the formulation of the **Food Security and Nutrition Policy 2011-2021** and the important role played by the SEPAN.

Important insights from Costa Rica, albeit constrained by the case approach and requiring further exploration, relate to the need to look beyond sectors and sub-sectors in the agrifood system in order to consider the nexus, impacts and synergies of bordering industries. The obvious case for Costa Rica is the tourism industry and the role it has played in informing the sustainability debate in the food system. Ecotourism and agritourism are on the rise and could be game changers promoting local sustainability in a broad sense – from holiday activities to food consumption. Costa Rican travel agencies are increasingly adopting these models, offering opportunities to visit farms with sustainability credentials (e.g. organic, biodynamic) and enjoy the local cuisine. In turn, exposure to sustainable food products and cuisine could nudge Costa Ricans towards healthier food choices, although this requires further study.

Similarly, growing inequality compared to the OECD average (OECD, 2020), and its impact on the health of poorer segments of the population, as reduced purchasing power makes affordable healthy diets less accessible, also requires further research. This should extend beyond food production to focus on consumer perspectives on sustainability and changing diets.

Ultimately, political stability, civic space to engage in dialogue and high-levels of education have all been highlighted as foundation stones for the transformation process in Costa Rica, and undoubtedly other countries. The capacity of Costa Rica's public and non-governmental institutional employees and the general public to convene, engage and transform difficult dialogues into policy reforms for progress is an important lesson for all countries.

Moving forward, an important role for international development actors and UN agencies will be to support ongoing country-led processes with the provision of strong data and evidence. This will enable decision makers to quickly appraise trade-offs and make informed decisions on the content and direction needed to move the food system in Costa Rica further along its journey as a regional and global leader in sustainability.



# References

**Baser, H. & Morgan, P.** 2008. Capacity, change and performance study report. ECDPM Discussion Paper 59B. Maastricht, ECDPM. 157pp. (also available at <https://ecdpm.org/publications/capacity-change-performance-study-report>).

**CACIA.** 2019. CACIA renueva alianza con el Ministerio de Salud para la reducción del contenido de sodio en alimentos procesados. [online]. Revista Digital Alimentaria, 8 July. [Cited 14 December 2020]. <http://alimentaria.cacia.org/digital/cacia-renueva-alianza-con-el-ministerio-de-salud-para-la-reduccion-del-contenido-de-sodio-en-alimentos-procesados>

**Development Initiatives.** 2020. Global nutrition report. Country nutrition profiles: Costa Rica. [online]. Bristol, Development Initiatives. [Cited 14 December 2020]. <https://globalnutritionreport.org/resources/nutrition-profiles/latin-america-and-caribbean/central-america/costa-rica>

**Embassy of Costa Rica in Belgium.** 2021. Trade: Overview Brussels. [online]. [Cited 14 December 2020]. <https://costaricaembassy.be/trade/#:::text=Under%20the%20bilateral%20framework%2C%20Costa,the%20People's%20Republic%20of%20China>

**FAO.** 2003. Agricultural extension, rural development and the food security challenge. Rome. (also available at [www.fao.org/3/Y5061E/y5061e00.htm#Contents](http://www.fao.org/3/Y5061E/y5061e00.htm#Contents)).

**FAO.** 2016. Country profiles: Costa Rica. [online]. Rome. [Cited 14 December 2020]. [www.fao.org/countryprofiles/index/en/?iso3=CRI](http://www.fao.org/countryprofiles/index/en/?iso3=CRI)

**Fernández González, Á.** 1994. Ambiente y desarrollo en Costa Rica: el debate a principios de los noventa. In J.K. Boyce, Á. Fernández-González, E. Fürst & O. Segura-Bonilla, eds. Café y desarrollo sostenible: Del cultivo agroquímico a la producción orgánica en Costa Rica, pp. 25-79. Heredia, Editorial Fundación UNA.

**GCF.** 2020. Projects and programmes: FP144. Costa Rica REDD-plus results-based payments for 2014 and 2015. [online]. Incheon, South Korea, Green Climate Fund. [Cited 14 December 2020]. [www.greenclimate.fund/project/fp144#details](http://www.greenclimate.fund/project/fp144#details)

**Global Alliance for Improved Nutrition (GAIN) and Johns Hopkins University.** 2020. The Food Systems Dashboard. Country profiles: Costa Rica. [online]. Geneva. [Cited 14 December 2020]. <https://foodsystemsdashboard.org/countrydashboard>

**Granados, C.** 1994. El impacto ambiental del café en la historia costarricense. [online]. Diálogos. Revista Electrónica de Historia. Monterrey, Escuela de Historia, Universidad de Costa Rica. [Cited 14 December 2020]. [https://repositorios.cihac.fcs.ucr.ac.cr/repositorio/bitstream/123456789/183/1/6vol4\\_n2cgranados.pdf](https://repositorios.cihac.fcs.ucr.ac.cr/repositorio/bitstream/123456789/183/1/6vol4_n2cgranados.pdf)

**ICAFFE.** 2021a. Acerca del ICAFFE. [online]. Barva, Instituto del Café de Costa Rica. [Cited 14 December 2020]. [www.icafe.cr/icafe/acerca-del-icafe](http://www.icafe.cr/icafe/acerca-del-icafe)

**ICAFFE.** 2021b. Preguntas frecuentes: ¿Cómo se financia el ICAFFE? [online]. Barva, Instituto del Café de Costa Rica. [Cited 14 December 2020]. [www.icafe.cr/preguntas-frecuentes](http://www.icafe.cr/preguntas-frecuentes)

**ICT.** 2020. Statistics: Tourism figures. [online]. San José, Instituto Costarricense de Turismo. [Cited 14 December 2020]. [www.ict.go.cr/en/statistics/tourism-figures.html](http://www.ict.go.cr/en/statistics/tourism-figures.html)

**IICA.** 2010. Un nodo de cooperación sobre: La experiencia de Costa Rica en cooperativas agrícolas. San José, Interamerican Institute for Cooperation on Agriculture. 60pp. (also available at <http://repiica.iica.int/docs/B1659E/B1659E.pdf>).

**InfoAgro.** 2021. Gasto Público Agropecuario. Gasto público efectivo del sector agropecuario 2016-2019 (Millones de colones corrientes), según Programa sectorial. [online]. San José, Sistema de Información del Sector Agropecuario Costarricense. [Cited 14 December 2020]. [www.infoagro.go.cr/EstadisticasAgropecuarias/Paginas/GastoPublicoAgropecuario.aspx](http://www.infoagro.go.cr/EstadisticasAgropecuarias/Paginas/GastoPublicoAgropecuario.aspx)

**Institute for Economics and Peace.** 2020. Global Peace Index 2020: Measuring Peace in a Complex World. Sydney, Australia. 103pp. (also available at [www.visionofhumanity.org/wp-content/uploads/2020/10/GPI\\_2020\\_web.pdf](http://www.visionofhumanity.org/wp-content/uploads/2020/10/GPI_2020_web.pdf)).

**Jiménez, G.A., Kilian, B. & Rivera, L.** 2013. Sustainability in the coffee growing business: Coopedota and the path towards carbon neutral coffee. San José, Mif-coopedota R.L. 23pp. (also available at [www.lenoirlacroix.ca/wp-content/uploads/2017/02/245\\_ESTUDIO\\_de\\_Caso\\_Caficultura\\_ingles\\_IMPRENTA\\_VF.pdf](http://www.lenoirlacroix.ca/wp-content/uploads/2017/02/245_ESTUDIO_de_Caso_Caficultura_ingles_IMPRENTA_VF.pdf)).

**Montero-Mora, A.** 2018. Café, Revolución Verde, regulación y liberalización del mercado: Costa Rica (1950-2017). Universitat de Barcelona. (PhD dissertation)

**NAMA Facility.** 2020. Costa Rica: Low-Carbon Coffee NAMA. [online]. [Cited 14 December 2020]. [www.nama-facility.org/projects/costa-rica-low-carbon-coffee-nama](http://www.nama-facility.org/projects/costa-rica-low-carbon-coffee-nama)

**OECD.** 2019. Profiles: Costa Rica. Exports, imports and trade partners. [online]. Observatory of Economic Complexity. [Cited 14 December 2020]. <https://oec.world/en/profile/country/cr>

**OECD.** 2017. Agricultural policies in Costa Rica. OECD Food and Agricultural Reviews. Paris, OECD Publishing. 192pp. (also available at [www.oecd-ilibrary.org/agriculture-and-food/agricultural-policies-in-costa-rica\\_9789264269125-en](http://www.oecd-ilibrary.org/agriculture-and-food/agricultural-policies-in-costa-rica_9789264269125-en)).

**OECD.** 2020. OECD economic surveys: Costa Rica. [online]. Paris, Organisation for Economic Co-operation and Development. [Cited 14 December 2020]. [www.oecd.org/economy/costa-rica-economic-snapshot](http://www.oecd.org/economy/costa-rica-economic-snapshot)

**Pacheco-Rodríguez, F. & Garcia-Gonzalez, J.** 2014. Situación de los cultivos transgénicos en Costa Rica. Acta Académica, 54(May): 29-60. (also available at [www.corteidh.or.cr/tablas/r33618.pdf](http://www.corteidh.or.cr/tablas/r33618.pdf)).

**PROCOMER.** 2020. Portal Estadístico de Comercio Exterior: Exportaciones. [online]. Promotora del Comercio Exterior de Costa Rica. [Cited 14 December 2020]. <http://sistemas.procomer.go.cr/estadisticas/inicio.aspx>

**Sáenz-Segura, F. & Chaves-Moreira, J.M.** 2014. La Institucionalidad del Sector Agropecuario Costarricense: evolución y efectos sobre el desarrollo del sector. Informe Final. Vigésimo Informe, Estado de la Nación en Desarrollo Humano Sostenible. San José, CONARE.

**Schloenvoigt, A.K. & Spies, S.** 2019. Costa Rica's coffee NAMA: Towards a low carbon coffee sector. [online]. Bonn, Germany, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. [Cited 14 December 2020]. [www.giz.de/en/downloads/giz2019\\_en\\_Factsheet\\_NAMA%20Cafe.pdf](http://www.giz.de/en/downloads/giz2019_en_Factsheet_NAMA%20Cafe.pdf)

**SUN.** 2018. Costa Rica prioritises reducing overweight and obesity. [online]. Scaling Up Nutrition Movement. [Cited 14 December 2020]. <https://scalingupnutrition.org/news/costa-rica-prioritises-reducing-overweight-and-obesity>

**The Economist.** 2020. Global Food Security Index: Costa Rica. [online]. London, The Economist Intelligence Unit. [Cited 30 March 2021]. <https://foodsecurityindex.eiu.com/Country/Details#Costa%20Rica>

**UN.** 2018. World urbanization prospects: The 2018 revision. [online]. Department of Economic and Social Affairs, Population Division. New York, United Nations. [Cited 14 December 2020]. <https://population.un.org/wup/DataQuery>

**UN.** 2021. Food Systems Summit 2021. About the Summit: Why food systems? [online]. New York, United Nations. [Cited 30 March 2021]. [www.un.org/en/food-systems-summit/about](http://www.un.org/en/food-systems-summit/about)

**UNEP.** 2019. Costa Rica: Policy Leadership Award. Champions of the Earth. [online]. Nairobi, UN Environment programme. [Cited 14 December 2020]. [www.unep.org/championsofearth/laureates/2019/costa-rica](http://www.unep.org/championsofearth/laureates/2019/costa-rica)

**Van Berkum, S., Dengerink, J. & Ruben, R.** 2018. The food systems approach: Sustainable solutions for a sufficient supply of healthy food. Wageningen Economic Research, no. 2018-064. (also available at <https://doi.org/10.18174/451505>).

**World Bank.** 2016. Accounting reveals that Costa Rica's forest wealth is greater than expected. [online]. Washington, DC, World Bank. [Cited 14 December 2020]. [www.worldbank.org/en/news/feature/2016/05/31/accounting-reveals-that-costa-ricas-forest-wealth-is-greater-than-expected](http://www.worldbank.org/en/news/feature/2016/05/31/accounting-reveals-that-costa-ricas-forest-wealth-is-greater-than-expected)

**World Bank.** 2020a. Agriculture, forestry, and fishing, value added (% of GDP): Costa Rica. [online]. World Bank Data. Washington, DC, World Bank. [Cited 14 December 2020]. <https://data.worldbank.org/indicator/NV.AGR.TOTL.ZS?locations=CR>

**World Bank.** 2020b. Population, total: Costa Rica. World Bank Data. [online]. Washington, DC, World Bank. [Cited 14 December 2020]. <https://data.worldbank.org/indicator/SP.POP.TOTL?locations=CR>



# Annexes

## 1. Costa Rica's food system

## 2. List of interviewees

# Annex 1.

## Costa Rica's food system

The spiderweb graph presented in Section 1.4 provides a quick overview of the different dimensions of the Costa Rican food system. It distinguishes between three dimensions within the larger food system:

- | **food and nutrition security performance**
- | **environmental sustainability performance**
- | **socio-economic and political performance.**

While it is not possible to capture an entire food system with one visual element, this figure is intended as a **discussion starter** regarding Costa Rica's performance within these different dimensions. To create an integrated and comprehensive overview, a variety of topics/indices that comprise a larger set of primary indicators were selected. For example, the food accessibility component includes indicators on food price, income per capita, poverty indicators and the presence of food safety net programmes. In the table below, links are included for further information on the indicators used. In addition, indicators that are available for all countries included in this study were used. See Table A1.1 for a detailed list of the indicators selected.

For Costa Rica, **food security scores** relatively high while progress on global nutrition targets seems to lag behind. Here, it must be noted that for four out of the ten global targets, the data were relatively old (<2011) and therefore may have changed. Although it might be assumed that Costa Rica is on track to meet targets on stunting and wasting assumptions, this seems not to be the case for exclusive breastfeeding and childhood obesity. This suggests that even though food security is high, nutrition security and health outcomes still need attention.

Regarding **environmental performance**, environmental and biodiversity objectives are becoming increasingly prominent in Costa Rican food policies. However, the graph indicates that these efforts have not yet translated into measurable outcomes, especially with regard to efforts to improve the sustainable use of water resources and to minimize the impact of agriculture.

**Social, economic and political** performance includes a set of indicators that shed light on the enabling context for food systems to thrive. The spiderweb shows that a growing population and positive urbanization rate together result in demographic pressure on the food system, which may pose a challenge to meeting food demand. It should be noted that economic indicators are also integrated into a variety of topics related to food and nutrition security performance.

**Table A1.1.** Selection of indicators for the construction of the food system performance chart

TOPIC	INDICATOR USED	SOURCE
<b>Food and nutrition security performance</b>		
Food security (general)	Global Food Security Index (GFSI)	GFSI <sup>1</sup>
Food accessibility	Affordability component of GFSI	GFSI
Food quality and safety	Quality and Safety component of GFSI	GFSI
Progress on Global Nutrition Targets	On/off track on global nutrition targets (10)	Global Nutrition Report
<b>Environmental sustainability performance</b>		
Progress to combat climate change	Climate change component of EPI	EPI <sup>2</sup>
Sustainable management of wastewater	Wastewater treatment component of EPI	EPI
State of key ecosystems	Ecosystem services component of EPI	EPI
Actions towards protecting natural ecosystems and biodiversity	Biodiversity and Habitat component of EPI	EPI
Sustainable Nitrogen management	Sustainable Nitrogen management index	EPI
<b>Socio-economic and political performance</b>		
Enabling business environment	Doing Business index	World Bank
Political stability	Political Stability index	World Bank
Social equality	GINI (inequality)	World Bank
Demographic conditions to meet food demand	Demographic stress component of GFSI	GFSI

<sup>1</sup> Global Food Security Index, The Economist Group<sup>2</sup> 2020 Environmental Performance Index, Yale University



## Annex 2.

# List of interviewees

A total of 16 well-informed actors of the Costa Rican agrifood sector (see Table A2.1) were interviewed between the months of August and October 2020.

**Table A2.1.** List of interviewees

NAME	AFFILIATION
Acuña Navarro, Alejandra	Vice-Minister, Ministry of Health
Araúz Cavallini, Luis Felipe	Dean, Faculty of Agrifood Sciences, Universidad de Costa Rica, University of Costa Rica (UCR)
Azofeifa Rodríguez, Roberto	Head, Department of Sustainable Production, Agricultural Extension Directorate, Ministry of Agriculture (MAG)
Bejarano Rodríguez, Wenceslao	National Board, Farmers' Fairs
Chaves Alvarado, Gonzalo	CEO, Cooperativa Dos Pinos
Fernández Ramírez, Juan Ricardo	President, Association of Free Consumers
Gamboa Cerda, Cecilia	Coordinator, Secretariat for National Policy on Food and Nutrition (SEPAN), Ministry of Health
Lizano Sáenz, Juan Rafael	President, Costa Rica Farming and Agribusiness Chamber (CNAA)
Mastroeni Camacho, Luis Reinaldo	Director of Corporate Relations and Sustainability, Cooperativa Dos Pinos
Mata Ramírez, Édgar	Director, Agricultural Sector Executive Planning agency (SEPSA), Ministry of Agriculture
Pacheco Rodríguez, Fabián	Director, National Centre of Organic Agriculture (CENAO)
Porras Barrantes, Jimmy	Research and Development Lead, Coopetarrazú
Scorza Agüero, Faviana	Senior Advisor on Organic Agriculture, Agri-environment, Healthy Food Systems and Climate Change, Ministry of Agriculture (MAG)
Torres Ledezma, Carmen	Programme Development Manager, Sustainable Food, Hivos Latin America
Vargas Artavia, Guido	Executive Director, National Union of Small and Medium Producers (UPANACIONAL)
Vargas Leitón, Carlos	CEO, Coopetarrazú

## Related publications

**Guijt, J., Wigboldus, S., Brouwer, H., Roosendaal, L., Kelly, S. & Garcia-Campos, P.** 2021. *National processes shaping food systems transformations. Lessons from Costa Rica, Ireland and Rwanda*. Rome, FAO. (also available at <https://doi.org/10.4060/cb6149en>)

**Brouwer, H., Guijt, J., Kelly, S. & Garcia-Campos, P.** 2021. *Ireland's journey towards sustainable food systems. The processes and practices that made a difference*. Rome, FAO. (also available at <https://doi.org/10.4060/cb5996en>)

**Wigboldus, S., Guijt, J. & Garcia-Campos, P.** 2021. *Rwanda's journey towards sustainable food systems. The processes and practices that made a difference*. Rome, FAO. (also available at <https://doi.org/10.4060/cb6057en>)



With financial support from the  
Government of Ireland



**Rialtas na hÉireann**  
Government of Ireland

## **Contact information**

Food Systems and Food Safety

ESF-Director@fao.org

[www.fao.org/food-systems](http://www.fao.org/food-systems)

**Food and Agriculture Organization of the United Nations**

Rome, Italy

ISBN 978-92-5-134785-0



9 789251 347850

CB5997EN/1/07.21