

Evidences

Study #3817

Contributing Projects:

- P771 - Shaping equitable climate change policies for resilient food systems across Central America and the Caribbean
- P274 - Scenario-guided policy and investment planning for food- and nutrition-secure futures under climate change
- P262 - Research and engagement for scaling climate-smart agriculture in Latin America

Part I: Public communications

Type: OICR: Outcome Impact Case Report

Status: New

Year: 2020

Title: Costa Rica's enhanced 2020 Nationally Determined Contribution (NDC) developed using CCAFS future scenario approach

Short outcome/impact statement:

During 2020, the MINAE used the CCAFS future scenarios methodology to enhance the country's NDC. UCI designed and facilitated an online participatory consultation in which more than 350 stakeholders participated to develop multiple sets of future scenarios based on contextual uncertainties that could positively or negatively influence Costa Rica's ability to reach climate goals. These scenarios were used in all NDC sectors to critically discuss and robust the countries' intended measures to reduce emissions and increase resilience to climate change.

Outcome story for communications use:

A growing number of scholars are finding that the anticipation of possible futures can help imagine and set in motion the transformations that are needed to reduce emissions and make societies resilient to climate change [1]. The government of Costa Rica has been experimenting with futuring methods since 2015 in collaboration with CCAFS, when they developed their INDC [2].

The Central American nation is known for its beaches and national parks, but it also faces complex challenges in traffic and transport in the greater metropolitan area, and needs to cut back on pesticide use and other unsustainable farming techniques.

During 2020, committed to increase the ambition of their NDC, Costa Rica used several ways to explore the effectiveness of climate actions under a large amount of future scenarios, and what measures to take if things don't work out as planned. The Ministry of Environment (MINAE) teamed up with two national universities, the University for International Cooperation (UCI) and the University of Costa Rica (UCR), to take up the task. What resulted was a highly participatory process where qualitative and quantitative methods complemented each other, which in turn lead to an NDC with increased ambition, rooted in fundamental values of climate justice [3].

In the middle of the pandemic, stakeholders from all ages and backgrounds were brought together in virtual workshops to talk about the future. These were facilitated by UCI, partner of CCAFS, in close collaboration with MINAE. They identified what contextual drivers in or outside Costa Rica could positively or negatively influence the countries' ability to reach climate goals; how land use would change over time; if nature and biodiversity would be integrated in society as a whole or protected exclusively in national parks; how water resources would be managed, and if countries in the region would collaborate or have conflicts. Together they made stories about the future that discussed these uncertainties, and used the scenarios to critically discuss and robust the countries' intended measures to reduce emissions and increase resilience to climate change.

Parallel to this, UCR developed an open access model to run thousands of climate, energy, land, and water scenarios. This enabled the quantification of possible results of different climate measures to understand which measures are most likely to give the most results in terms of climate resilience and mitigation.

The combination of these two approaches is what lead to Costa Rica's enhanced scenario-guided NDC.

Links to any communications materials relating to this outcome:

- <https://tinyurl.com/y7tnwxpx>
- <https://tinyurl.com/y6nabozk>
- <https://tinyurl.com/ydcydpnt>
- <https://doi.org/10.1016/j.cosust.2018.01.004>

Part II: CGIAR system level reporting

Link to Common Results Reporting Indicator of Policies : Yes

Policies contribution:

- 584 - 2020 Costa Rican Nationally Determined Contribution (<https://tinyurl.com/2k4wc2v9>)
- 840 - Costa Rica's enhanced 2020 Nationally Determined Contribution (NDC) developed using CCAFS future scenario approach (<https://tinyurl.com/2lgdbggh>)

Stage of maturity of change reported: Stage 2

Links to the Strategic Results Framework:

Sub-IDOs:

- Enabled environment for climate resilience
- Enhanced capacity to deal with climatic risks and extremes (Mitigation and adaptation achieved)
- Reduced net greenhouse gas emissions from agriculture, forests and other forms of land-use

(Mitigation and adaptation achieved)

Is this OICR linked to some SRF 2022/2030 target?: Yes

SRF 2022/2030 targets:

- Reduce agriculturally related greenhouse gas emissions compared to business-as-usual scenario 2022

Description of activity / study: <Not Defined>

Geographic scope:

- National

Country(ies):

- Costa Rica

Comments: The NDC is covering all the Costa Rica areas, rural and urban, vulnerable and less vulnerable to climate, poor/remote and rich/developed, with the objective to reduce gaps.

Key Contributors:

Contributing CRPs/Platforms:

- CCAFS - Climate Change, Agriculture and Food Security

Contributing Flagships:

- FP1: Priorities and Policies for CSA

Contributing Regional programs:

- LAM: Latin America

Contributing external partners:

- UCI - Universidad para la Cooperación Internacional

CGIAR innovation(s) or findings that have resulted in this outcome or impact:

An adapted, innovated version of the CCAFS future scenarios methodology was used to enhance the Costa Rican 2020 NDC. Here, multiple sets of scenarios were created based on multiple drivers of change, whereas in the former CCAFS scenarios method one set of scenarios was created based on multiple drivers.

Innovations:

- 1692 - Participatory building and analysis of multiple set of scenarios

(<https://tinyurl.com/2f823oh9>)

Elaboration of Outcome/Impact Statement:

CCAFS and the University of International Cooperation (UCI) have collaborated with the Ministry of Environment and Energy of Costa Rica (MINAE) for 5 years to support the country in the definition and achievement of ambitious climate goals.

In 2015, MINAE collaborated with UCI and CCAFS to develop their INDC, presented at the COP21 in Paris. The CCAFS future scenarios methodology allowed MINAE to define a highly ambitious climate goal in a participatory and qualitative manner, at a time when national experts did not trust in the quality of national climate data, and extrapolative projections of emission abatement measures were not able to show the ambitious results Costa Rica was planning for [1, 2, 3].

In 2017, MINAE and CCAFS collaborated to support the development of a sectoral agreement between MINAE and the Ministry of Agriculture and Livestock (MAG) to generate enabling conditions that allow the transformation of productive activity into a more resilient and less carbon-intensive one. The National Development Plan indicated the agreement as crucial to achieve the NDC goals [4,5].

In 2020, CCAFS and UCI supported MINAE to design and facilitate a participatory consultation to enhance Costa Rica's NDC. The process consisted of 21 online workshops with all NDC sectors. More than 350 stakeholders participated from the public, private sector, civil society, NGO's and academia, 55% women, and 26% younger than 30. Using a novel scenarios methodology [6], stakeholders developed multiple sets of future scenarios based on contextual uncertainties that could influence Costa Rica's ability to reach climate goals. They critically discussed and tested the countries' intended measures for climate action in the future scenarios. Recommendations of improvement were given to robust climate measures, considering what could go wrong and what could thrive climate action in these future worlds. The final NDC document [7] was announced on 12 December [8] and published on 28 December, mentioning the future scenarios methodology used [7:p95]. All workshop recordings and materials used during the process are displayed on the MINAE website [9]. The 2020 NDC emphasizes several key aspects derived from the scenario guided consultation process.

25 experts of key climate change organizations were trained by UCI in the development of future scenarios to help facilitate workshops. These installed capacities will enable MINAE to organize iterative sessions every few years to anticipate futures and adjust climate measures as needed, as part of their National Ambition Cycle, to be developed in 2021.

References cited:

- [1] Policy brief summarizing the 2015 process and main results of the development of Costa Rica's INDC through a participatory process including the building and use of future scenarios:
<https://ccafs.cgiar.org/resources/publications/shifting-paradigm-narratives-future-guide-development-costa-ricas-indc>
- [2] Case studies issued by MINAE, GEF, and PNUD regarding The Process of Preparing Costa Rica's Intended Nationally Determined Contribution (INDC) - Paniagua 2016:
<https://minae.go.cr/recursos/2016/pdf/Estudio-Caso-ingles.pdf>
- [3] INDC of Costa Rica in 2015 issued by the government of Costa Rica:
<https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Costa%20Rica%20First/INDC%20Costa%20Rica%20Version%20%200%20final%20ES.pdf>
- [4] <https://cambioclimatico.go.cr/acuerdo-reduccion-de-emisiones-sector-agropecuario/>
- [5] <https://cambioclimatico.go.cr/wp-content/uploads/2019/02/Acuerdo-sectorial-de-reduccion-de-emisiones-sector-agropecuario.pdf>
- [6] Lessons learned from scenarios methods application in Latin America region and methodological improvement: <https://cgspace.cgiar.org/handle/10568/107187>
- [7] NDCC 2020 issued by Costa Rican government:
<https://www4.unfccc.int/sites/ndcstaging/PublishedDocuments/Costa%20Rica%20First/Contribucion%20Nacionalmente%20Determinada%20de%20Costa%20Rica%202020%20-%20Versio%20%2081n%20Completa.pdf>
- [8] 2020 NDC official announcement: <https://minae.go.cr/noticias-minae/comunicados/124-ndc>
- [9] The official MINAE repository with all the materials of the workshops of the NDC 2020 formulation process, including scenario materials:
<https://cambioclimatico.go.cr/contribucion-nacionalmente-determinada-ndc-de-costa-rica/>

Quantification: <Not Defined>

Gender, Youth, Capacity Development and Climate Change:

Gender relevance: 0 - Not Targeted

Youth relevance: 0 - Not Targeted

CapDev relevance: 0 - Not Targeted

Climate Change relevance: 2 - Principal

Describe main achievements with specific **Climate Change** relevance: The NDC 2020 set a higher objective of Greenhouse gas reduction compared to the 2015 NDC one, with an objective of 9.11 billion tons of CO₂ eq. emissions in 2030 compared to the former 9.37 billion tons of CO₂e. for 2030. These reductions will enable the country to meet COP21 engagement and are in line with 1.5°C global temperature increase goal.

Other cross-cutting dimensions: Yes

Other cross-cutting dimensions description: The NDC enhancement process emphasized the participation of stakeholders from all age groups (including youth), and gender.

Outcome Impact Case Report link: [Study #3817](#)

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