# Evidences

## Study #3893

**Contributing Projects:**

- P1569 - AfricaRice Contribution to RICE Flagship Project 1

### Part I: Public communications

**Type:** OICR: Outcome Impact Case Report

**Status:** Completed

**Year:** 2021

**Title:** CARD (Coalition for African Rice Development) initiative has contributed to increase rice production by 10.2 million ton in 2018, benefiting both rice producers and consumers

**Short outcome/impact statement:**
Following the food price crisis in 2008, African governments, with support of partners including AfricaRice, JICA, etc., implemented policies through the Coalition for African Rice Development (CARD) to double rice production by 2018. We assessed the contribution of the CARD policy to rice production: the CARD policy contributed to increased rice production in 2018 by 10.2 million ton, which benefited both rice producers (increased sales and income) and rice consumers (lower market prices than without rice production increase).

**Outcome story for communications use:**
Following the food price crisis in 2008, African governments, with support of partners including AfricaRice, JICA, etc., implemented policies through the Coalition for African Rice Development (CARD) aiming at double rice production by 2018. We assesses the contribution of the CARD policy to rice production and forecasts the local rice supply and demand for a better understanding of the policies needed to attain rice self-sufficiency by 2030. Results showed that the CARD policy contributes to increase rice production in 2018 by 10.2 million ton. This resulted from the increasing of area and yield by 23% and 19%, respectively. However, yield growth rate was not sustainable in almost two-third of countries. Investments on supply-push factors such as fertilizer and irrigation development, which was the focus in the past, have less effect on the rice production. Scenario analysis showed that the consumption was expected to reach approximately 49.2 MT of milled rice by 2030 in the 23 countries compared to a total consumption of 30.6 MT of milled rice in 2018. Annual increases of 3% and 5.5% in yield and area, respectively, would lead to the achievement of selfsufficiency by 2030. We conclude that sustainable investments on demand-pull factors such as private-led modern milling sector and contract farming development should be prioritized for achieving rice self-sufficiency in SSA.

**Links to any communications materials relating to this outcome:**

- https://doi.org/10.1016/j.wdp.2021.100291

### Part II: CGIAR system level reporting

**Link to Common Results Reporting Indicator of Policies :** No

**Stage of maturity of change reported:** Stage 3

**Links to the Strategic Results Framework:**
Sub-IDOs:
- Conducive environment for managing shocks and vulnerability, as evidenced in rapid response mechanisms
- Conducive agricultural policy environment

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

SRF 2022/2030 targets:
- Increased rate of yield for major food staples from current 1%/year
- # of people, of which 50% are women, assisted to exit poverty

Description of activity / study: <Not Defined>

**Geographic scope:**
- Regional

Region(s):
- Sub-Saharan Africa

Comments: <Not Defined>

**Key Contributors:**
Contributing CRPs/Platforms:
- Rice - Rice

Contributing Flagships:
- F1: Accelerating impact and equity

Contributing Regional programs: <Not Defined>
Contributing external partners: <Not Defined>

**CGIAR innovation(s) or findings that have resulted in this outcome or impact:**
This outcome is linked to the developement and implementation of policy measures and technology delevery duing the post-crisis period 2008-2018 to which AfricaRIce has actively contributed with the development of Emergency Rice Initiative Spreadsheet (ERIS) model to develop the National Rice Development Strategy (NRDS) and the Rice Offensive for West Africa.

**Innovations:** <Not Defined>

**Elaboration of Outcome/Impact Statement:**
The Coalition for African Rice Development (CARD) was initiated as a policy framework with the aim of doubling rice production in sub-Saharan Africa (SSA) over the period from 2008 to 2018. This paper assesses the contribution of the CARD policy to rice production and forecasts the local rice supply and demand to provide a better understanding of the policies needed to attain rice self-sufficiency by 2030. A combination of the autoregressive integrated moving average method and counterfactual approach was adopted using rice statistical data from 23 countries in SSA. The results showed that the contribution of CARD to paddy rice production in 2018 was 10.2 million tons, equivalent to 74% of the target. This contribution resulted from increases in area and yield of 23% and 19%, respectively. However, the yield growth rate was not sustainable in almost two-thirds of countries. Investments in supply-push factors such as fertilizer and irrigation development, which were the focus in the past, have limited effects on rice production. We conclude that sustainable investments in demand-pull factors such as the private-led modern milling sector and contract farming development should be prioritized to achieve rice self-sufficiency in SSA.

**References cited:**

•[1] Arouna et al. 2021. Moving toward rice self-sufficiency in sub-Saharan Africa by 2030: Lessons learned from 10 years of the Coalition for African Rice Development. World Development Perspectives (https://doi.org/10.1016/j.wdp.2021.100291)

**Quantification:**

**Type of quantification:** a) Actual counts or estimates from a particular study (please provide reference)
**Number:** 16.00
**Unit:** %
**Comments:** the CARD had an average contribution of a 16% increase in rice self-sufficiency per annum

**Type of quantification:** a) Actual counts or estimates from a particular study (please provide reference)
**Number:** 23.00
**Unit:** %
**Comments:** CARD policy contributes to increase rice area in 2018 by 23%

**Type of quantification:** a) Actual counts or estimates from a particular study (please provide reference)
**Number:** 290.00
**Unit:** kg/ha/year
**Comments:** The impact of the CARD policy on yield was 0.29 t/ha per year

**Type of quantification:** a) Actual counts or estimates from a particular study (please provide reference)
**Number:** 10200000.00
**Unit:** ton
**Comments:** CARD policy contributes to increase rice production in 2018 by 10.2 million ton.

**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:** 0 - Not Targeted

**Other cross-cutting dimensions:** NA

**Other cross-cutting dimensions description:** <Not Defined>

**Outcome Impact Case Report link:** Study #3893

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