Trends in Rice Production and Consumption during the CARD period 2008-2018

Compiled by AfricaRice

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Outline

1. Introduction
2. Trends in production, area and yield
3. Milled rice production and consumption
4. Achievement of CARD objectives
5. Looking forward
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Introduction

- Global food crises and insecurity in 2007-2008
- Symptoms in sub Saharan Africa: soaring food prices & riots in 2008
- Increased awareness for the production of more and better food
- Importance of rice: consumed by more than 750 million people in SSA, important dietary energy source, and employment opportunities
- **CARD**: launched on the occasion of TICAD IV in 2008 (currently 23 SSA countries as members)
- Goal: **Double rice production** in SSA in 10 years (2008-2018)
- Presentation shows **trends** in rice production and consumption over the last decade, **progress in** meeting CARD objectives & **proposes** the way forward
Continuous increase in rice area observed over the last decade

Rice area increase by 43%: from 8.2 million ha in 2008 to 11.8 million ha in 2018
West Africa shows the highest growth rate in rice area at **53%**, followed by Central Africa at **37%** & East Africa at **20%**.
Rice yield

- Rice yield increased from **2.17 t/ha** to **2.36 t/ha**

- 3 phases in yield trend:
  1. 2008-2010 (after food crisis): yield increased by 12% (Saito et al., 2014)
  2. 2010-2012: yield decreased
  3. 2012-2018: yield is almost constant around **2.35 t/ha**

- Decrease in yield observed after 2010 (after the food crisis) could be attributed to policy measures (government support) that did not sustain yield growth over time
East Africa show the highest yield rate, followed by West Africa and then by Central Africa.
Paddy production

- Production target achieved at 93%: estimated at 26.1 million in 2018 against target of 28.0 million tons (source USDA 2018)

- Production increased by 58%: from 16.5 million tons in 2008 to 26.1 million tons in 2018

- Increase in production mainly due to rice area expansion
Paddy production per region

- West Africa shows fastest growth at 73% compared to 65% and 33% for Central Africa and East Africa, respectively.

- Similar trend observed in rice area expansion.
Meeting CARD objective per region

On the basis of each region’s base-line production level in 2007 and applying the objective of CARD to double rice production in regions:

- Only the West Africa region achieved the CARD objective of doubling and surpassing its production target.
- Performance of Central and East African countries affected achievement of CARD target of 28 million tons.
Meeting CARD objective per country

<table>
<thead>
<tr>
<th>% achievement</th>
<th>Number of countries</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 50%</td>
<td>1</td>
</tr>
<tr>
<td>50% to 75%</td>
<td>4</td>
</tr>
<tr>
<td>75% - 99%</td>
<td>5</td>
</tr>
<tr>
<td>100% and more</td>
<td>13</td>
</tr>
</tbody>
</table>

From 2008 to 2018, **57% of countries** achieved the CARD objective.
Milled rice production vs consumption

- Consumption increased faster than production
- Consumption increased by 87% while production increased by 58%
Rice self-sufficiency decreased from 63% to 59% in CARD countries.
Rice imports in CARD countries

- Rice importation increased by 44%: from 5.9 million tons to 13.4 million tons
- Estimated bill for rice imports: USD 5.4 billion in 2018
Rice imports in CARD countries

- Nigeria increased rice imports by 71%.
- Its import share decreased from 30% in 2008 to 22% in 2018 of total rice imports.
- Senegal increased rice imports by 83%.
- Its import share decreased from 12% in 2008 to only 9% in 2018 of total rice imports.
- Côte d’Ivoire increased importation by 100%.
- Its import share decreased from 14% to only 12% of total rice imports.
Projection toward 2025

• Based on the annual average growth rate over the last decade of 4.9%, milled rice production is projected at 23.48 million tons in 2025.

• Based on the annual growth rate over the last decade of 6.5%, consumption is projected at 46.69 million tons.

• To realize rice self-sufficiency up to 2025 in CARD countries, production must increase by an annual growth rate of 15.73%.
Looking forward
Rice sector development objectives in SSA

• Major objectives going forward:
  ✓ Increase rice production
  ✓ Accelerate self-sufficiency in rice
  ✓ Increase investments

• Modeling investment requirements: Continental Investment Plan for accelerating Rice Self-Sufficiency in Africa (CIPRiSSA)

• Pilot test in 10 countries in SSA (Senegal, Sierra Leone, Côte d’Ivoire, Ghana, Mali, Nigeria, Cameroon, Uganda, Tanzania, Madagascar)
Annual additional investments for 10 pilot countries (US$ million)

Total investment needed over 8 years: USD 2754 million
Expected gains from additional investments

### Additional milled rice

- **Expected additional production from the 3 ecologies (million t):** 11.7
- **Expected additional production from rainfed lowland (million t):** 4.1
- **Expected additional production from irrigated (million t):** 3.3
- **Expected additional production from rainfed upland (million t):** 4.3

### Foreign exchange savings

- **Annual Foreign exchange savings (US$ million):** 334
- **Total Foreign exchange savings (US$ million):** 2,675
Looking forward
Additional policy measures

• **Reduce rice importation:** *need to continue* and be sustained especially in major rice consumption countries (e.g. Nigeria, Senegal, Cote d’Ivoire)

• Develop and use **improved technologies** (including quality seeds, fertilizer, small scale mechanization, value addition)

• Organize **efficient rice value chains** (development and introduction of best-fit contract farming linking especially producers, industries, markets, banks, insurance, use of IT)
1. From 2008 to 2018, 57% of countries (13 out of 23) achieved the CARD objective

2. 93% of CARD target achieved (paddy production in 2018 is estimated at 26.1 million tons against the CARD target of 28 million tons)

3. Production increased by 58% (from 16.5 to 26.1 million tons) due to increase in area (by 43%)

4. Trends in yield showed that policy measures after 2008 were not sustained

5. To realize rice self-sufficiency up to 2025, domestic production must increase at 15.73% per annum and this requires increased investments and strong policy measures
Thank you