Will Growing Sub-Saharan African Rice Production Reduce Imports?

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Plan of the presentation

1. The Recurring Sub-Saharan (SSA) rice challenge
2. Determining factors for promoting rice production development
1. The Recurring Sub-Saharan rice challenge
A renewed agenda for rice in SSA

Rice price surge put several SSA governments in a difficult political position:

- Not able to ensure a steady supply of rice at affordable price.
- Limited capacity to address the issue at short term:
  - Tariff and tax revision
  - Budgetary constraints

Renewed interest for expanding rice production since rice world market evolutions are unpredictable
Social unrests were not necessarily triggered by rice price increase on the world market.

- Delay in transmission of price

Several countries had already considered revising their rice trade policy before the price surge:

- Common Exterior Tariff negotiation within Economic Community of West African State
Rice price was not necessarily the triggering factor for political tensions.
The end of the cheap rice era?

- Rice Import (‘000 Tons)
- Rice 25% (USD/ton)
Supply and demand trends (1990-2007)

- Total SSA production increased at 4.8% per year:
  - Mostly because of area expansion: 3.8%
  - Limited contribution of yield increase: 1%

- Total SSA consumption increased at 5.4% per year due to:
  - Population growth: 2.5%
  - And per capita consumption growth: 2.9%
Emerging markets and import dependency

Import share in total supply (%)

Per capita consumption (kg)
An accelerated rice growth in East Africa, but…

Growth rate

Total Consumption

Production

Western Eastern Middle Southern

West Africa is still dominant

Total production: 14 200 000 tons

- Western: 63%
- Eastern: 25%
- Middle: 6%
- Southern: 6%

Average values 2000 -2009
FAOSTAT

Total imports: 7 200 000 tons

- Western: 66%
- Eastern: 15%
- Middle: 8%
- Southern: 11%
A widening gap between supply and demand

Kg per capita

![Graph showing consumption, production, and imports over years.](image)

- Projecting the current trend, SSA would have to import 16MT of rice by 2019!
Is per capita rice consumption growth reversible?

- Example of CFA devaluation:
  - Reduction of other staple and side dishes.

- Substitution with other staples is limited due:
  - to the higher convenience of rice compared to other staples,
  - unstable supply in urban markets of locally produced staples.

→ Focus should be put on rice domestic supply and diet diversification.
1. The Recurring Sub-Saharan rice challenge

2. Determining factors for promoting rice production development.
1. Technology development
3. Institutional changes and enabling environment for building a competitive market for local rice.
Managing a wide range of rice cropping systems

- Dry Land
- Hydromorphic
- Rainfed
- Low Land
- Swamp
- Flooded
- Simple low land
- Improved low-land
- Irrigated

Source: WARDA - 1999
Non-irrigated systems are dominant

West Africa

<table>
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<th>Agro-ecological zones</th>
<th>Swamp</th>
<th>Flooded</th>
<th>Irrigated</th>
<th>Inland valley</th>
<th>Rainfed</th>
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<td>Savana and Sahel</td>
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<td>36.3%</td>
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Source, WARDA, 1998
Technology development

- It is a challenging task (long term)
- Promising opportunities provided by the dissemination of the NERICA (New Rice for Africa)
- Other technologies have been developed for improving, pest and crop management.

Yet, other determining factors may hindered the SSA countries capacities to benefit from the NERICA
Rice variable comparative advantages across West Africa
Cost effective technical solution

- Largely determined by:
  - Yield achieved
  - Prevailing price on the world market

- Better prospects for cost-effective technologies
  - Several ecologies are achieving better economic performance.
  - Comparative advantage threshold is about USD 300 to USD 350 per ton of rice, FOB Bangkok.
A segmented market: high transportation and transaction costs

Ghana rice market spatial configuration based on estimated local and imported rice flows

Sources: IRAM, 2007
West African Consumers justifications for purchasing imported rice

Percentage of responses

- **COTE D’IVOIRE**
  - Other organoleptic properties (30%)
  - Nutritious properties (20%)
  - Taste (20%)
  - Cooking easiness (10%)
  - Swelling capacity (10%)
  - Cleanliness and appearance (10%)
  - Availability (10%)
  - Price (5%)

- **NIGERIA**
  - Other organoleptic properties (30%)
  - Nutritious properties (20%)
  - Taste (20%)
  - Cooking easiness (10%)
  - Swelling capacity (10%)
  - Cleanliness and appearance (10%)
  - Availability (10%)
  - Price (5%)

**Sources:** WARDA- Africa Rice Centre, 2001 and 2003

**Import price < local price**

**Import price > local price**

- Import price < local price
- Import price > local price

F.Lançon - CIRAD - World Rice Conference 2009
Unstable political and institutional environment

Production '000 tons

Import '000 tons

Fixed Exchange rate
Floating Exchange rate

66% taxes
10-20% taxes
Import licences

IMPORT BAN 100 50 %

Fertilizer Subsidy

NIGERIAN GRAIN BOARD
OFN
NSS
ADP
NAFPP
RIVER BASIN DEVELOPMENT AUTHORITIES
BADEGI RESEARCH STATION

Special rice program

PRE- BAN
CRISIS
BAN
POST- BAN
Concluding remarks

- Rice development in SSA remains a major challenge:
  - Although: (+ + +)
    - Proven and promising technologies have been developed.
    - The macro-economic setting is more favorable than in the past decades
    - Policy makers and donors are more sensitive to the issue
  - Yet: ( - - - -)
    - Weak market linkages and institutions do not provide a competitive hedge to local rice production.
    - Quick technical integrated solution such as large scale agro-industrial rice scheme might not feasible or sustainable
    - It requires a long term commitment from decision makers.

- If consumption expand at the same pace, stabilizing rice import volume would be an significant achievement.
Thank you
Mature and emerging markets

Per capita cons. growth rate

% per year

Per capita consumption (kg)
A contrasted situation across the sub-continent

Index value

- 0.30 - 0.60 (9)
- 0.15 - 0.30 (10)
- 0.10 - 0.15 (15)
- 0.00 - 0.10 (9)

Source: WARDA - 2001
Diversity at a regional scale

Production share '000 tons

- Irrigated
- Swamp
- Flooded
- Low-land
- Dryland

Source: FAO and WARDA - 1997