# THE ECOWAS RICE FACTBOOK

*2019 - 1st Edition*

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CARI Competitive African Rice Initiative
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AGRA Growing Africa's Agriculture

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# FOREWORD

Agriculture plays a pivotal role in the economic wellbeing of nations. Its potential to stimulate economic processes by securing food through production and reducing poverty by creating wealth through the employment it generates, serves as the implement for delivering on Africa's promise of a sustainably developed continent that can feed itself. However, in comparison with the region's natural agricultural endowments, progress has been slow when viewed with comparators in Asia and Latin America. This is as a result of myriad factors including low productivity and weak capacity in modern farming practices that have precluded the realization of Africa's considerable potential. Specifically, systemic inefficiencies and low-productivity in the agricultural sector, arose from historically low crop yields, and low agro-processing capacity have manifested in the weak competitiveness of locally produced food, in quality and in pricing. This has turned the West African sub-region into a perennial importer of foods and related agro-industrial products notably rice. This long-running failure to modernize agriculture means that Member States continue to be burdened with exceptionally high annual food import bill resulting in unsustainable high levels of poverty, mass youth unemployment and persistent divide and inequities.

In nations where the agricultural sector has undergone positive structural transformation, it was able to stimulate economic progress by which they achieved food security and reduce poverty by creating wealth through employment generation. A recognition of this historical challenge, coupled with a high level of commitment to solve the food insecurity and poverty challenge, led the Heads of State and Government of the Economic Community of West African States (ECOWAS) to adopt the ECOWAS Agricultural Policy (ECOWAP) in 2005 as an instrument for the coordination of Comprehensive Africa Agriculture Development Programme (CAADP) in West Africa through the Regional Agricultural Investment Plan for Food and Nutrition Security (RAIP-FNS).

RAIP-FNS has identified under its first specific objective, the promotion of five strategic commodities, namely rice, maize, cassava, livestock and meat and fish products. It aims at achieving, in the short and medium terms, food security of the people, through substantial increase in production. It also aims to achieve in the long term, food sovereignty through the reduction of food imports from outside Africa, while ensuring the promotion and full integration of the regional market.

As a result, the Regional Offensive for Sustainable and Sustained Recovery of Rice Production in West Africa was adopted by the ECOWAS Council of Ministers in 2014. It is a key mechanism put in place to achieve Zero Hunger in West Africa and aims at revamping rice production and significantly reduce rice importation by the year 2025. The "Rice Offensive" is planned for 10 years and based on the assumption that the ECOWAS fifteen (15) member states will attain self-sufficiency in rice production by 2025.

The achievement of this mission requires the adoption of the necessary mechanisms and the development of appropriate strategies. An important strategy is the comprehensive approach to accelerate the implementation of the regional agricultural policies (ECOWAP/CAADP). This will be achieved through a multi-

factorial approach that includes improvement in rice production, either by intensification (doubling cropping seasons in irrigation schemes, increased use of fertilizers and utilization of improved seeds) or by increasing cultivated land area or by a combination of both strategies; as well as advances in processing, value addition and marketing in the value chain.

The overall objectives of Rice Offensive is to support all initiatives and strategies for the development of the rice value chain in West Africa, which directly contributes to ECOWAS's promotion of strategic products for food security and sovereignty. Specifically, it contributes to ECOWAP to:

- Achieve rice self-sufficiency with Member States becoming exporters by 2025,
- Achieve Food Security and Nutrition in ECOWAS by 2025, and
- Achieve Economic Development of the Rice Value Chain.

The development of the local rice value chain will contribute significantly to achieving regional rice self-sufficiency. The relatively rapid progress that has been experienced in West Africa since the programme was adopted in 2015, reflects that (1) individual countries made significant efforts, (2) Innovations and Research & Development played a key role, (3) regional coordination is essential to obtain common goals, build collaboration and linkages between the multi-stakeholders in the rice value chain and innovation system for mutual benefits. The projections for self-sufficiency were made by considering the parameters indicating that achieving rice self-sufficiency in 2025 requires an increasingly sustained production that is growing at the same pace with the population size. Consequently, an additional production of about 22 million tons of milled rice is required by 2025 in West Africa to reach the rice self-sufficient status.

This "ECOWAS Rice Fact book" shows evidences, summary of progress and ongoing initiatives in the rice sector and highlights the need to accelerate investment in ECOWAS for the Development of the Rice Value Chain. These facts should be considered, carefully analyzed and used as a guide to ensure that the "rice offensive" contributes to the regional agricultural transformation. This fact book has benefited from the collaborative effort of Grow Africa and Alliance for a Green Revolution in Africa who provided the background and Competitive African Rice Initiative (CARI) who provided support for its production.

**M. Sékou Sangaré**

Commissioner for Agriculture, Environment and Natural Resources, ECOWAS Commission

# ABBREVIATIONS

| | |
|---|---|
| AFDB | African Development Bank |
| AGRA | Alliance for a Green Revolution in Africa |
| BOAD | Banque Ouest Africaine de Développement (West African Development Bank) |
| CAADP | Comprehensive Africa Agriculture Development Programme |
| CARI | Competitive African Rice Initiative |
| CARD | Coalition for African Rice Development |
| CIPRISSA | Continental Investment Plan on Rice Self-Sufficiency in Africa |
| EBID | ECOWAS Bank for Investment and Development |
| ECOAGRIS | ECOWAS Agriculture Regional Information System |
| ECOWAP | ECOWAS Agricultural Policy |
| ECOWAS | Economic Community of West African States |
| EU | European Union |
| FAO | Food and Agriculture Organization |
| GIZ | Gesellschaft für internationale Zusammenarbeit / German Corporation for International Cooperation |
| HA | Hectare |
| IRRI | International Rice Research Institute |
| JICA | Japan International Cooperation Agency |
| KG | Kilogram |
| MT | Metric Tons |
| NERICA | New Rice For Africa |
| RAIP-FNS | Regional Agricultural Investment Plan for Food and Nutrition Security |
| USAID | United States Agency for International Development |
| USDA | United States Department of Agriculture |
| UEMOA | Union Economique et Monétairee Ouest Africaine |

## SOURCES OF DATA

| | |
|---|---|
| Population | World Development Indicators |
| Rice production | FAO (2003 - 2013) / ECOAGRIS (2014 - 2017) |
| Rice imports | FAO (2003 - 2012) / ECOAGRIS (2013 - 2017) / Benin & Nigeria: USDA |
| Rice exports | FAO (2003 - 2013) / ECOAGRIS (2014 - 2017) / Niger: estimate |
| Rice consumption | FAO (2003 - 2013) / ECOAGRIS (2014 - 2017) / Benin: ECOAGRIS / Nigeria: estimate |
| Rice harvested area | FAO / Benin & Burkina Faso: ECOAGRIS |
| Number of rice farmers | Countries Ministries of Agriculture (2019) / Burkina Faso & Senegal: 2018<br>Completed with AfricaRice (2018) for Gambia, Guinea Bissau & Sierra Leone |
| Irrigated & irrigable land | AfricaRice (2018) |
| Import tariffs & VAT | Countries Ministries of Agriculture (2019) |

## DEFINITIONS

| | |
|---|---|
| ECOAGRIS | ECOWAS Agriculture Regional Information System |
| Rice consumption | is the total volume of rice consumed as food by people in individual countries or for the region |
| Rice demand | is the total volume of rice used for seed, food consumption, feed and other uses in the country or region |
| Rice self-sufficiency ratio | is defined as rice production / rice demand x 100 (FAO definition) |
| Millled equivalent | is the tonnes of milled rice that can be obtained from a given tonnes of paddy rice after processing |
| Paddy equivalent | is the tonnes of paddy rice that would be required to produce a given quantity of milled rice |

# REGIONAL OVERVIEW

## OF THE RICE ECONOMY

Africa has become a big player in international rice markets as a result of growing demand for rice in the continent.

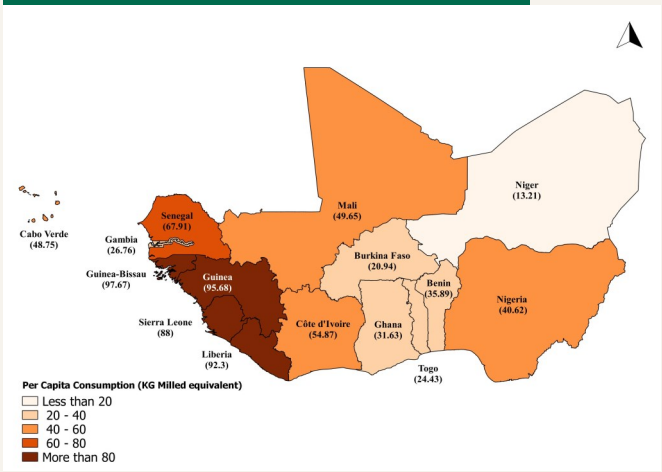
In recent years, food consumption has shifted to rice in Sub-Sahara Africa where it is the largest source of calories and fastest growing cereal. This is particularly strategic in West Africa where the increasing preference and demand for rice far outstrips the supply that is possible from domestic production. This will likely persist as a result of increased urbanization, population growth and a weak systemic linkage among the actors and relevant stakeholders in the rice value chain.

In West Africa, local production of rice meets only 60% of current demand; in part because the yield growth of 1.03% per annum in the last five years (2003-2017) does not match the population growth rate of 2.73% per annum in the same period (ECOAGRIS). The shortfall in supply has been compensated for through massive imports from Asia, an increasing trend observed to have only reduced in the past four years because of the various efforts carried out across the region.

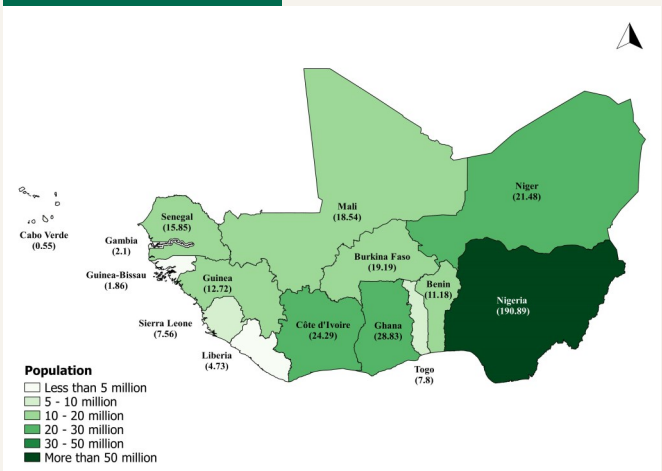
In 2017, the consumption of rice in West Africa was 15.86 million metric tonnes and is projected to grow to 22 million metric tons by 2025 based on the trends in the last five years. This is close to a 40% increase between 2017 and 2025 with per capita consumption equally expected to rise from 43kg in 2017 to 49kg in 2025.

To this end, the cost of importing rice does not only remain a heavy burden on trade balances in the sub region, but also depletes the scarce foreign reserves and undermines indigenous capabilities in the production of rice and its value chain. West Africa's inability to reach self-sufficiency in rice is the result of several major constraints in the rice value chain which require urgent redress to stem the trend of over-reliance on imports.

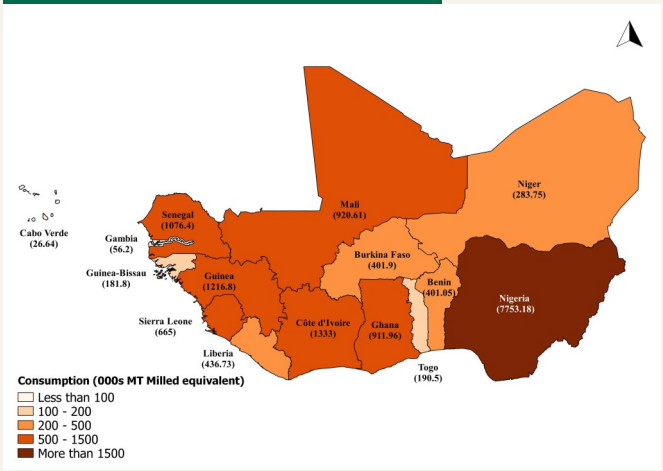
**PER CAPITA CONSUMPTION (KG) - 2017**



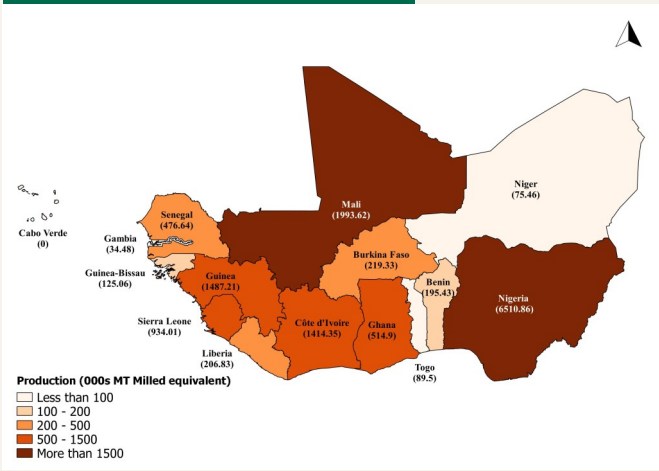

**POPULATION - 2017**



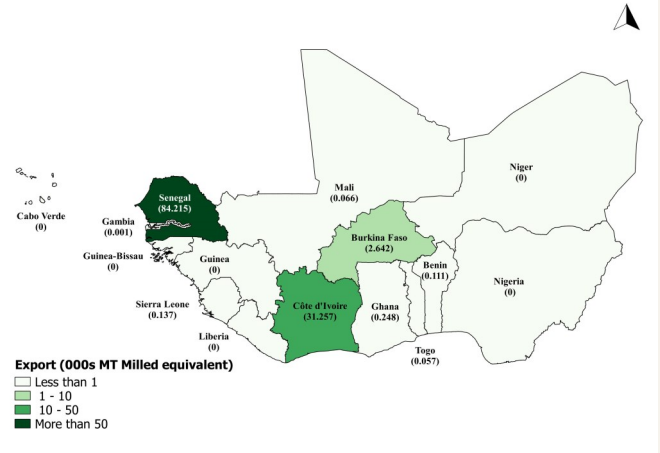
## CONSUMPTION (000s MT) - 2017



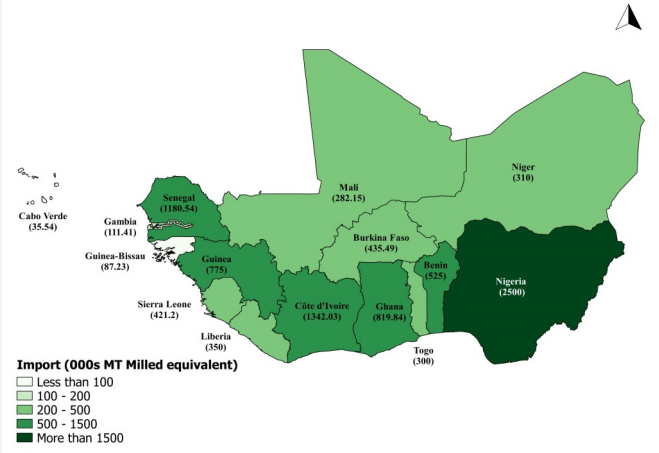

## PRODUCTION (000s MT) - 2017



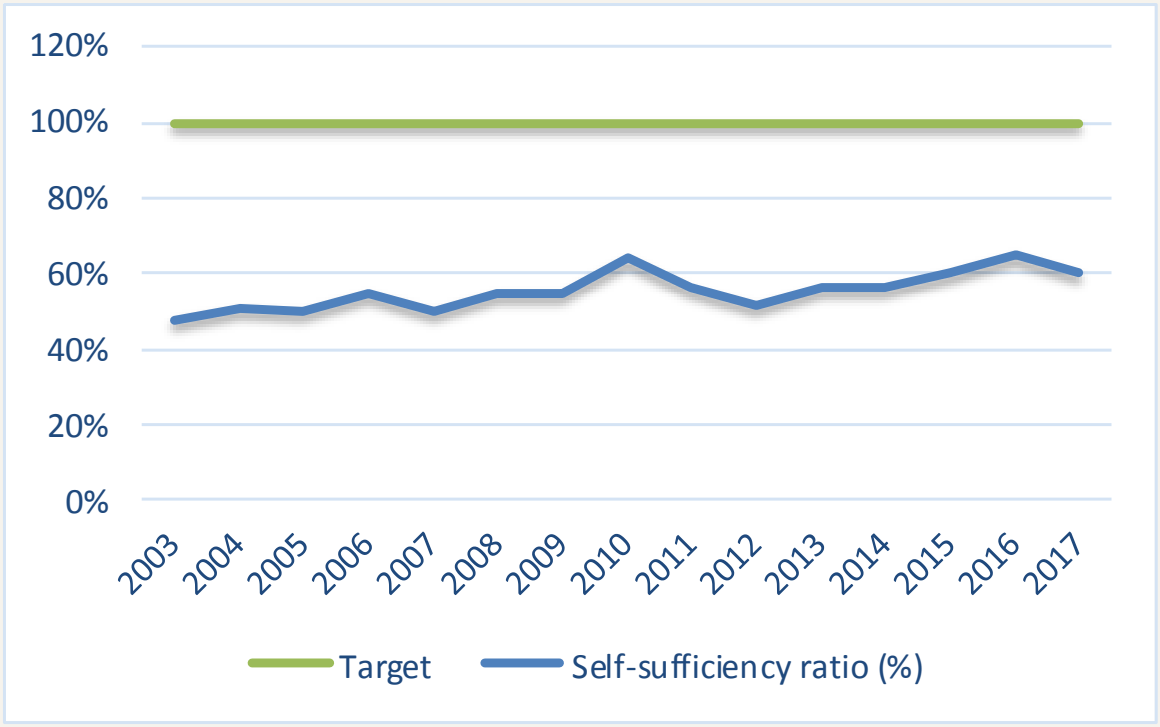

## EXPORT (000s MT) - 2017




## IMPORT (000s MT) - 2017

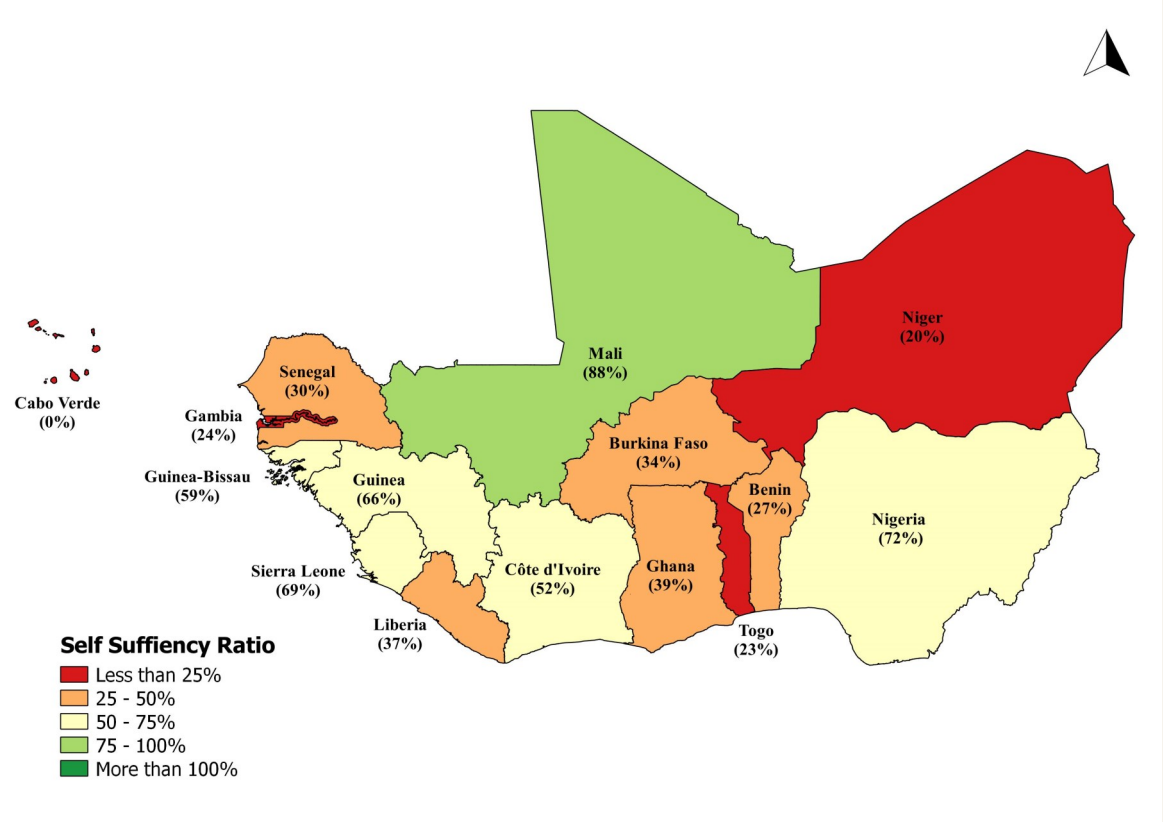


## EVOLUTION OF ECOWAS COUNTRIES RICE SELF-SUFFICIENCY RATIO (%) - 2003 TO 2017




Most West African countries are far from being self-sufficient in meeting their rice demand needs. The evolution of rice sufficiency over the years as shown above indicates that due to population growth, diet change and insufficient yield on existing land, countries have lagged between 45-60% below the 100% targeted ratio to become fully self-sufficient in rice. Henceforth, achieving rice sufficiency will require multifactorial effort from adoption of land intensification to foster improved yield per hectare, to efficient production system, and better linkages in the rice value chain to bridge the yield gap and ensure rice sufficiency in West Africa by 2025.

# RICE SELF-SUFFICIENCY RATIOS IN ECOWAS COUNTRIES (%) - 2017




West Africa has the highest rice cultivated land area in Africa and evidently, none of ECOWAS Member States is self-sufficient in the rice sector as illustrated in the map. The only country that is fast approaching the self-sufficiency target is Mali with 88% ratio, closely followed by Nigeria with 72%. The reality is that majority of ECOWAS Member States lack the adequate capacity to meet their level of demand while production growth lags behind demand rate in the sub region; thereby allowing rice importation to thrive. To significantly reduce importation of rice will require a concerted effort to mitigate the challenges in the rice value chain.

# VALUE CHAIN ANALYSIS

## PRODUCTION

- Inadequate irrigation leads to highly volatile productivity levels.
- Low levels of farming technologies, mostly rudimentary for subsistence
- Yields hampered by inability to mitigate impact of weeds, insects and birds

## PROCESSING

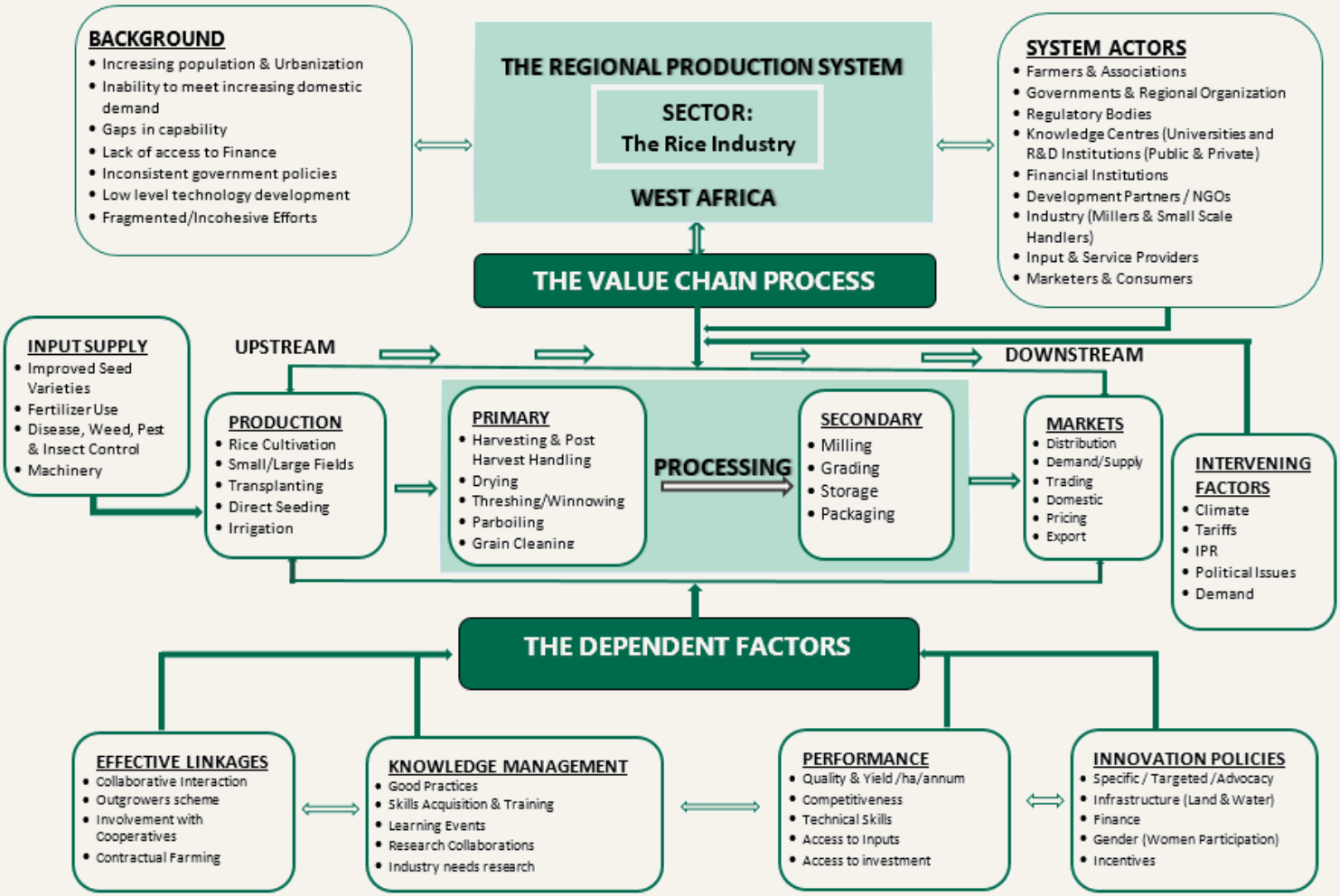
- Traditional manual processing and outdated equipment of mill processors generate high physical and quality losses of grains
- Bigger mills have difficulty sourcing sufficient quantities of good quality paddy to maintain their facility at full capacity
- Power failures increase costs dramatically
- Limited use of by-products like husks and straws due to lack of appropriate technology

## END USE

- Local produce passes through several middlemen, squeezing margins for retailers
- Perceived high quality of imports because cleanliness and packaging leads consumers to shun local rice
- Fragmented supply dominated by smallholders with low bargaining power
- Open market most dominant retail channel

*Source : Grow Africa*

# RICE PRODUCTION SYSTEM




*Source: Adapted from Adebowale, 2009*

# COUNTRIES RICE SITUATION

# BENIN*

**401 050 MT**
annual rice consumption

**85 623 HA**
rice area harvested

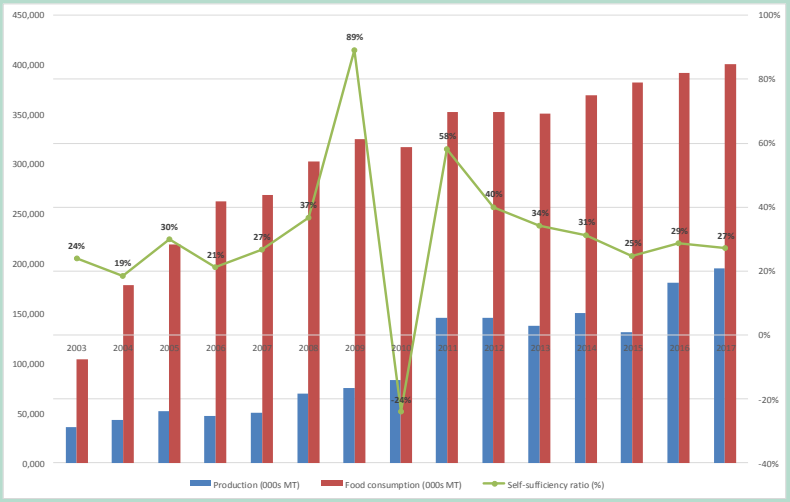
**195 433 MT**
annual rice production

**525 000 MT**
annual rice imports

**27 %**
self-sufficiency ratio

**111 T**
annual rice exports

*Data from 2017*




# BURKINA FASO

**401 901 MT**
annual rice consumption

**166 999 HA**
rice area harvested

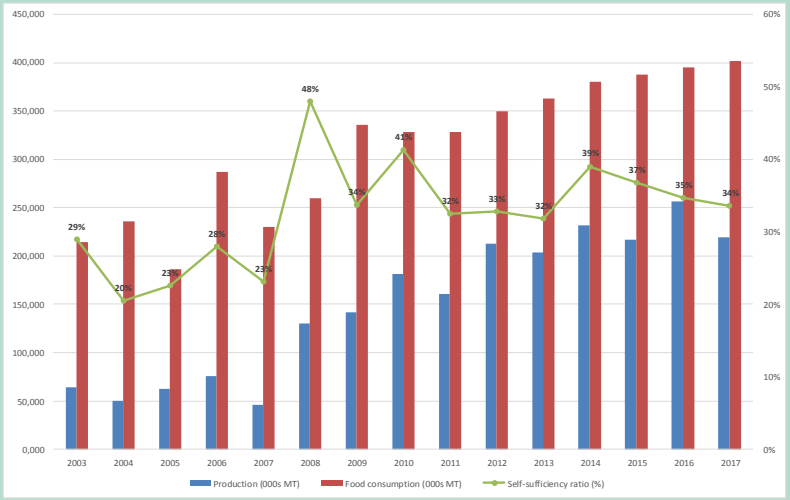
**219 334 MT**
annual rice production

**435 489 MT**
annual rice imports

**34 %**
self-sufficiency ratio

**2 642 MT**
annual rice exports

*Data from 2017*



# CABO VERDE

**26 636 MT**
annual rice consumption

**0 HA**
rice area harvested

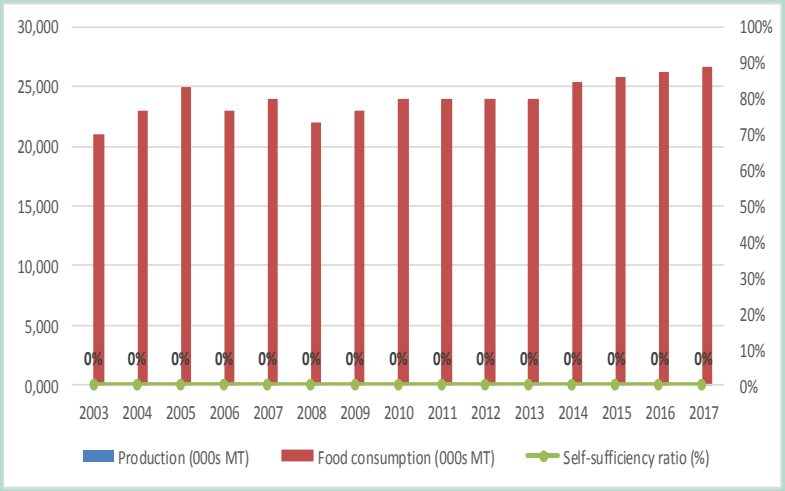
**0 MT**
annual rice production

**35 540 MT**
annual rice imports

**0 %**
self-sufficiency ratio

**0 MT**
annual rice exports

*Data from 2017*




# CÔTE D'IVOIRE

**1 332 998 MT**
annual rice consumption

**829 142 HA**
rice area harvested

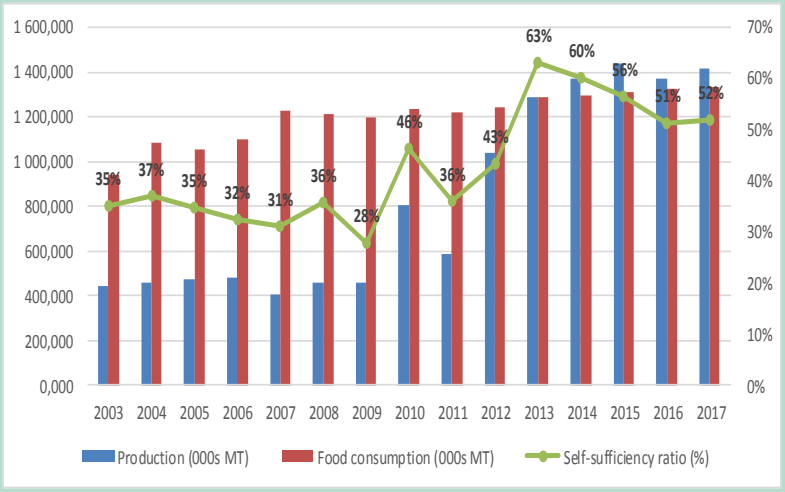
**1 414 349 MT**
annual rice production

**1 342 028 MT**
annual rice imports

**52 %**
self-sufficiency ratio

**31 257 MT**
annual rice exports

*Data from 2017*



# GAMBIA

**56 202 MT**
annual rice consumption

**65 854 HA**
rice area harvested

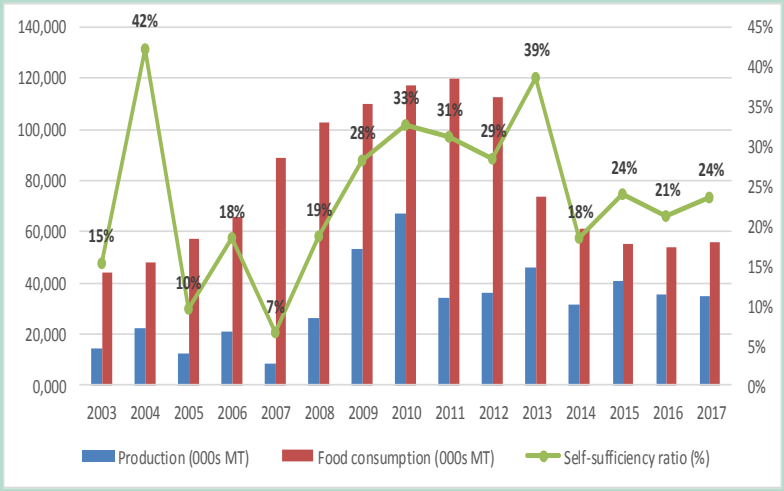
**34 476 MT**
annual rice production

**111 415 MT**
annual rice imports

**24 %**
self-sufficiency ratio

**1 MT**
annual rice exports

*Data from 2017*




# GHANA

**911 963 MT**
annual rice consumption

**258 587 HA**
rice area harvested

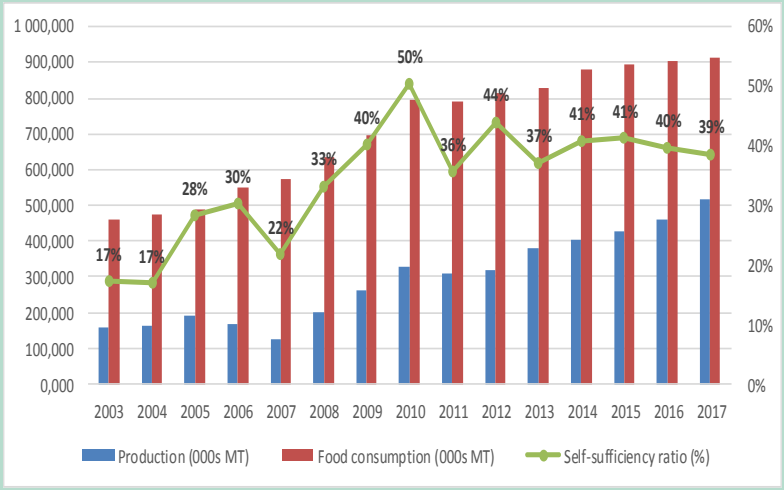
**514 899 MT**
annual rice production

**819 840 MT**
annual rice imports

**39 %**
self-sufficiency ratio

**248 MT**
annual rice exports

*Data from 2017*



# GUINEA

**1 216 804 MT**
annual rice consumption

**1 707 622 HA**
rice area harvested

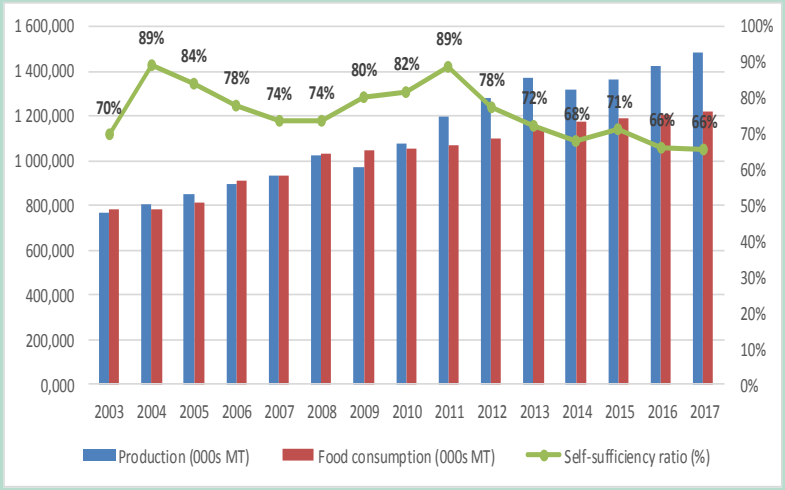
**1 487 209 MT**
annual rice production

**775 000 MT**
annual rice imports

**66 %**
self-sufficiency ratio

**0 MT**
annual rice exports

*Data from 2017*




# GUINEA-BISSAU

**181 800 MT**
annual rice consumption

**104 686 HA**
rice area harvested

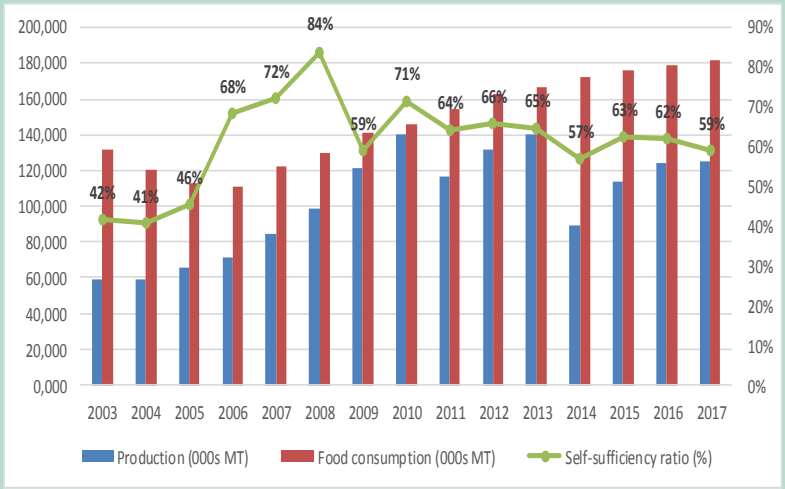
**125 064 MT**
annual rice production

**87 234 MT**
annual rice imports

**59 %**
self-sufficiency ratio

**0 MT**
annual rice exports

*Data from 2017*



# LIBERIA

**436 732 MT**
annual rice consumption

**235 824 HA**
rice area harvested

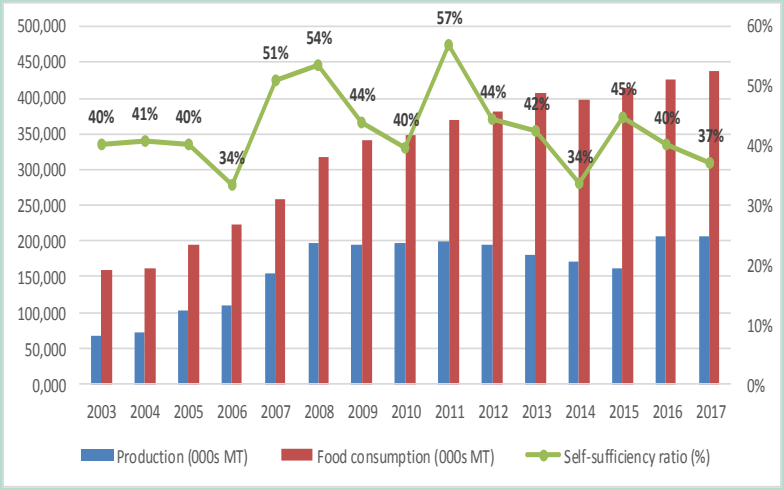
**206 827 MT**
annual rice production

**350 000 MT**
annual rice imports

**37 %**
self-sufficiency ratio

**0 MT**
annual rice exports

*Data from 2017*




# MALI

**920 611 MT**
annual rice consumption

**767 874 HA**
rice area harvested

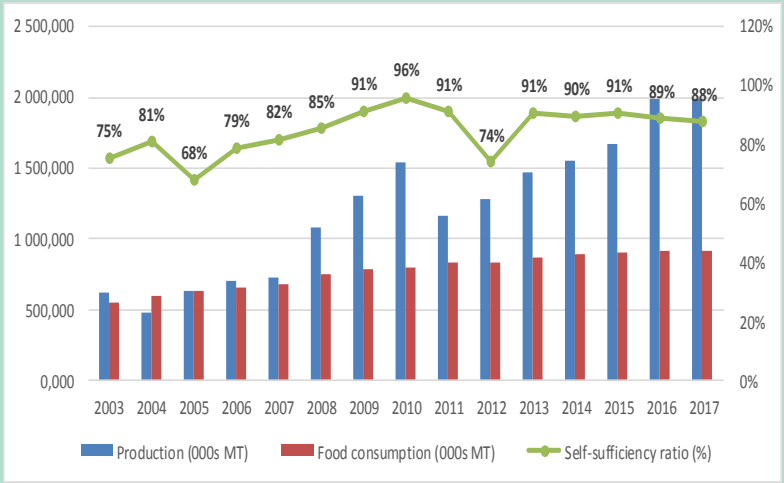
**1 993 624 MT**
annual rice production

**282 145 MT**
annual rice imports

**88 %**
self-sufficiency ratio

**66 MT**
annual rice exports

*Data from 2017*



# NIGER

**283 752 MT**
annual rice consumption

**23 803 HA**
rice area harvested

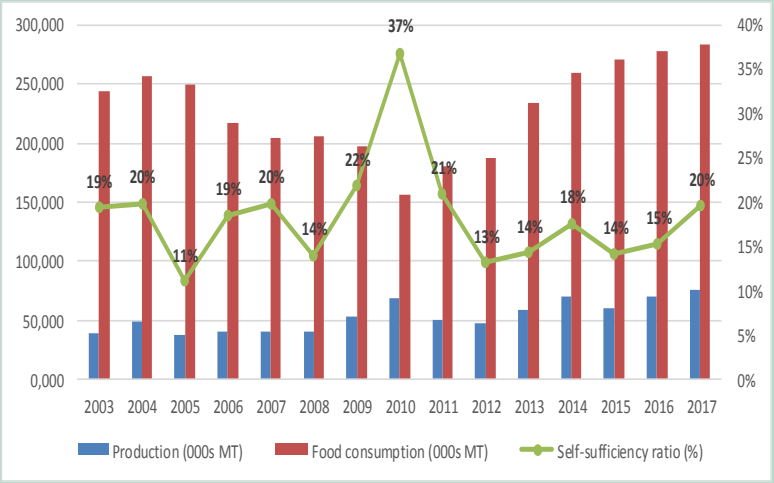
**75 463 MT**
annual rice production

**310 000 MT**
annual rice imports

**20 %**
self-sufficiency ratio

**0 MT**
annual rice exports

*Data from 2017*




# NIGERIA*

**7 753 180 MT**
annual rice consumption

**4 912 650 HA**
rice area harvested

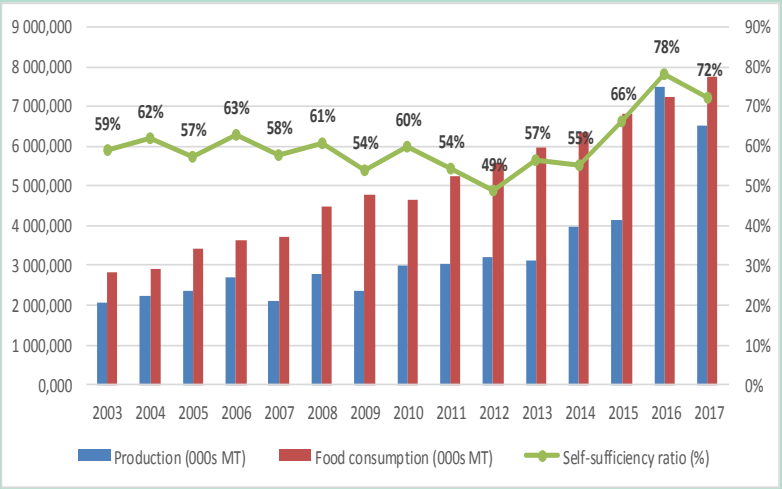
**6 510 858 MT**
annual rice production

**2 500 000 MT**
annual rice imports

**72 %**
self-sufficiency ratio

**0 MT**
annual rice exports

*Data from 2017*



# SIERRA LEONE

**665 003 MT**
annual rice consumption

**647 295 HA**
rice area harvested

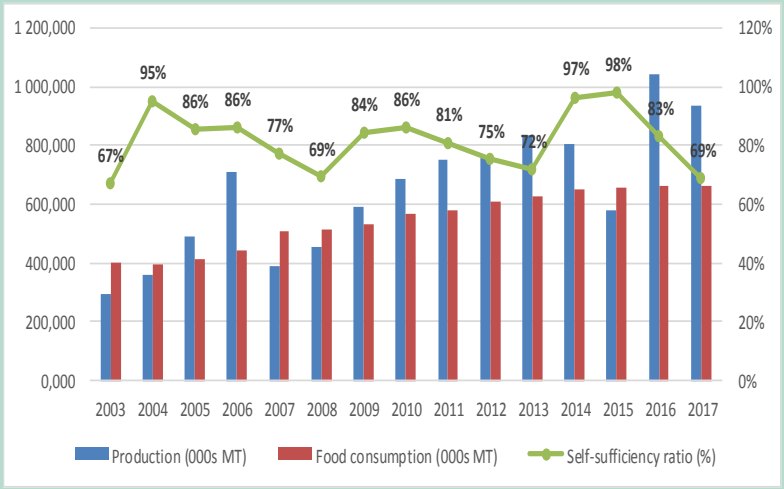
**934 015 MT**
annual rice production

**421 196 MT**
annual rice imports

**69 %**
self-sufficiency ratio

**137 MT**
annual rice exports

*Data from 2017*




# SENEGAL

**1 076 396 MT**
annual rice consumption

**169 614 HA**
rice area harvested

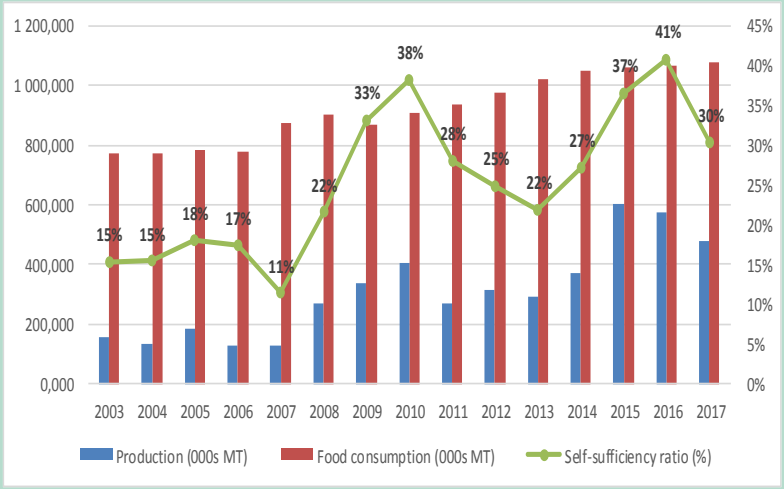
**476 643 MT**
annual rice production

**1 180 542 MT**
annual rice imports

**30 %**
self-sufficiency ratio

**84 215 MT**
annual rice exports

*Data from 2017*



# TOGO

**190 495 MT**
annual rice consumption

**84 395 HA**
rice area harvested

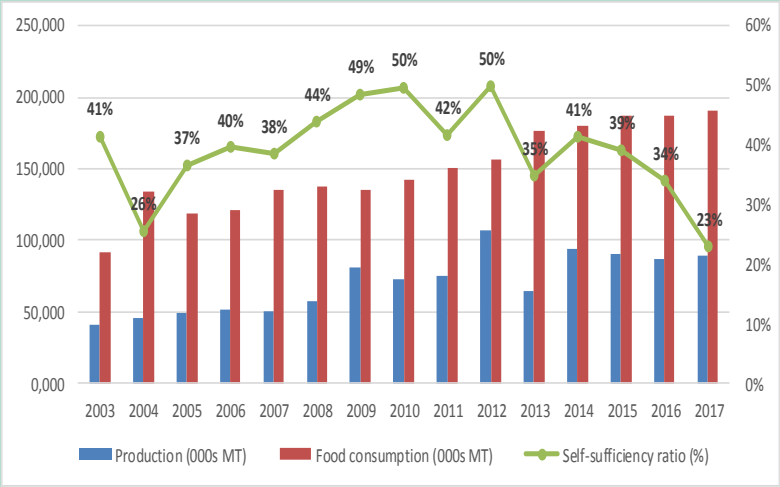
**89 496 MT**
annual rice production

**300 000 MT**
annual rice imports

**23 %**
self-sufficiency ratio

**57 MT**
annual rice exports

*Data from 2017*




★ **Case Note:** The rice import data used for the countries' analyses are from ECOAGRIS excluding Nigeria and Benin. The USDA data (2017) utilized for both countries in this analysis is not reflective of data received from other sources attributing much higher figures to rice import into Benin and thus may be adjudged not to illustrate the reality of the situation in both countries. Nigeria's preference is parboiled rice, which dominates the total rice import into Benin that prefers white rice. For instance, according to the country's own statistics, over 1.9million MT of milled rice was imported into Benin in 2017. It should therefore be presumed that the USDA data most likely accounted for the re-export that takes place from Benin to Nigeria and other West African countries like Niger and Togo through the land borders, and this might explain the differences.

# SUMMARY OF COUNTRIES RICE SITUATION

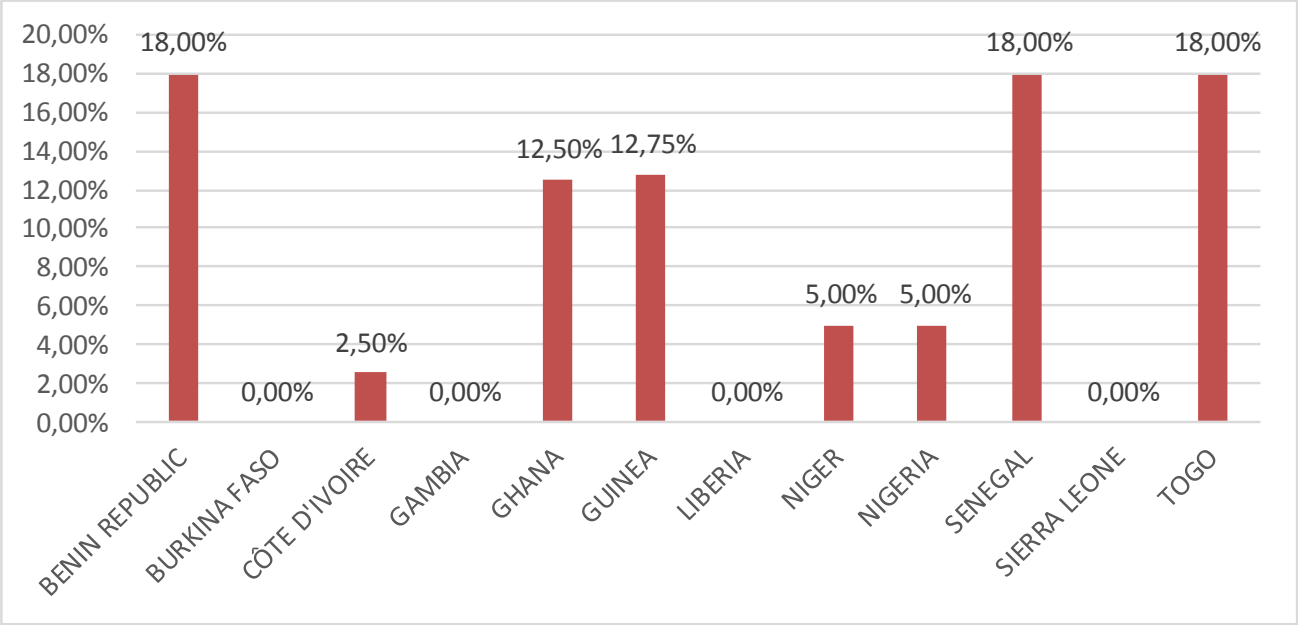
- Total annual rice demand (MT) → 23,619,820
- Total rice area harvested (HA) → 10,059,968
- Total annual rice production (MT) → 14,277,690
- Total annual rice imports (MT) → 9,475,429
- Annual rice exports → 118,734 MT

**In Summary,** individual country rice situations have emerged from the analysis. While significant advancement has been made in a few countries, others are making slow progress. Overall, the regional rice situation by 2017 shows a picture of work in progress, and the gap between production and demand needs a concerted effort to close.

# FACTORS INFLUENCING RICE TRADE

## AT A GLANCE

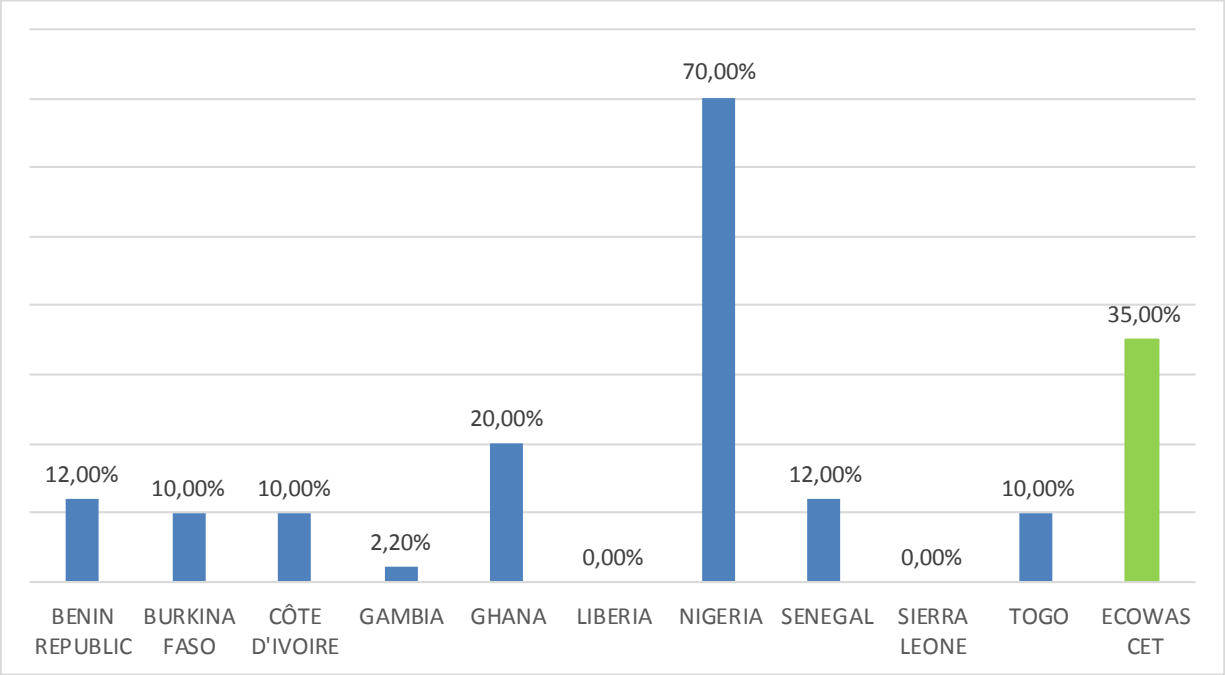
## VAT ON RICE IN ECOWAS COUNTRIES - 2019




**data not available for Cabo Verde, Guinea-Bissau & Mali*

The value-added tax (VAT) is a consumption tax placed on goods or products (in this case, milled rice), and whenever value is added at each stage of the supply chain, from production to the point of sale. The VAT that is applied in the Member States varies from one country to another.

## IMPORT TARIFFS ON RICE IN ECOWAS COUNTRIES - 2019



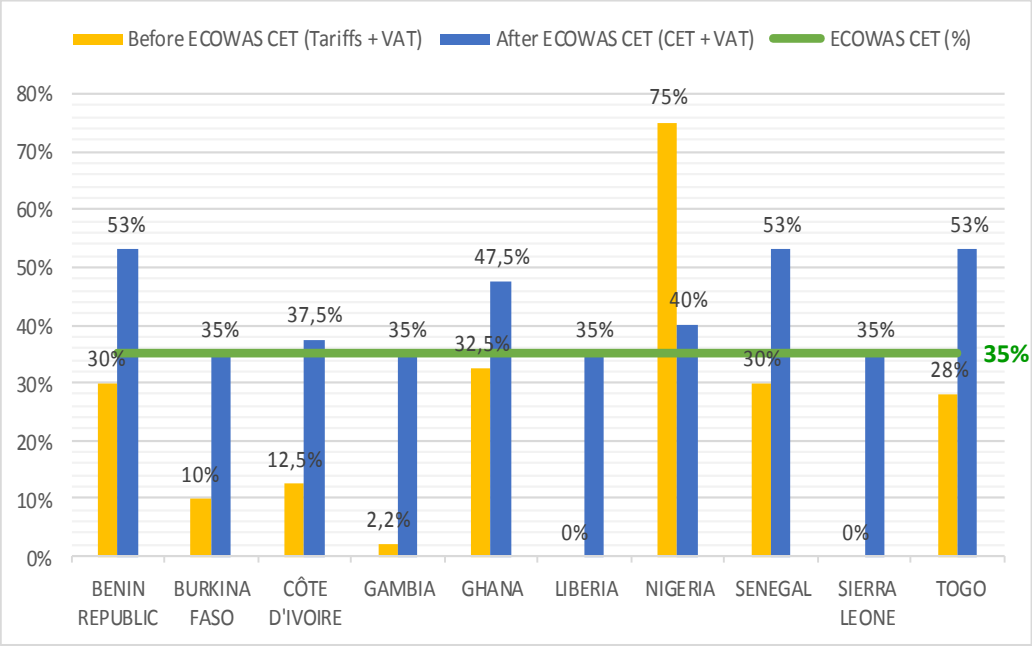

**data not available for Cabo Verde, Guinea-Bissau & Mali*
**Niger and Guinea impose a specific tariff that is levied as a fixed charge per unit of imports*

The rice import tariff is the tax imposed by the National Governments on milled rice that is imported from other countries outside of the ECOWAS region and this vary across the Member States.

In the Gambia, the tariff rates are applied on the CIF (Cost, Insurance and Frieght) values. The 2.20% is composed of customs processing fees (1.50%), AU levy (0.20%), ECOWAS levy (0.50%) and duty rate (0%).

Niger and Guinea impose a specific tariff that is levied as a fixed charge per unit of imports. For Niger, the import tariff is 50,000 FCFA ($85 US Dollars) per metric tonnes of milled rice; while the rates are applied on the CIF (Cost, Insurance and Freight) values in Guinea and this rate rose to $535 (US Dollars) per metric tonnes of milled rice in 2019.

# TOTAL TAXES ON RICE IMPORTS IN MEMBER STATES BEFORE & AFTER APPLYING ECOWAS CET - 2019



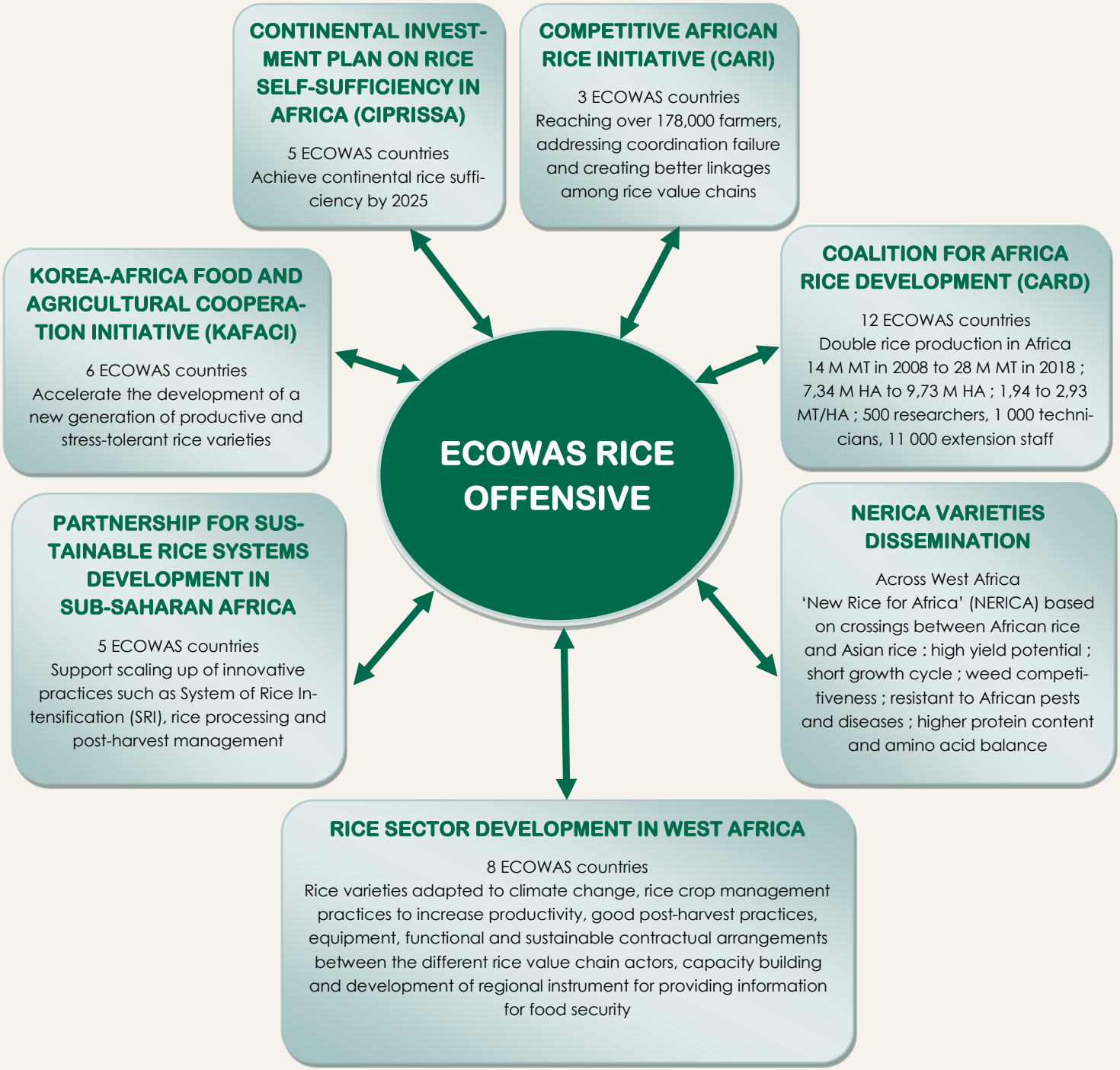

The Article 3 of the ECOWAS Revised Treaty defines the aim of the community as promoting co-operation and integration, leading to the establishment of an economic union in West Africa. The Common External Tariff (CET) is one of the instruments of harmonizing ECOWAS Member States and strengthening its Common Market with the aim of increasing intra-community trade and enhancing the competitiveness of the regional production. It came into effect on 1 January 2015 in line with the decision of the Extraordinary meeting of the Authority of Heads of State and Government that held in Dakar on 25 October 2013.

The CET comprises five (5) tariff bands (0, 5, 10, 20, 35 % tariffs) and covers five (5) categories of products (categories 0 – 4) depending on the status of the products (essential social goods, basic necessities, inputs and intermediate products, final consumer goods, etc.). The 5th tariff band allows taxing "specific goods for economic development" at 35% and cereals (rice) is captured within this category.

The graph above therefore demonstrates the outlook of the total tax applicable on rice in each Member State, before and after the ECOWAS CET becomes fully operationalized in the rice sector. It shows a picture of non-uniformity which is directly linked to the individual country VAT System.

# REGIONAL RICE INITIATIVES*

## 2014 - 2019




**Only the regional initiatives and programmes that operate in more than two ECOWAS countries have been captured here.*

## COALITION FOR AFRICA RICE DEVELOPMENT (CARD)

**LOCATION**: 23 African countries and West African countries involved include Guinea, Sierra Leone, Senegal, Nigeria, Ghana, Mali, Benin, Burkina Faso, Liberia, Cote d'Ivoire, Togo and Gambia

**FUNDING**: JICA in partnership with Alliance for a Green Revolution in Africa (AGRA)

**DURATION**: May 2008 - to date

The project's objective is to promote donors' investment and harmonization for rice development in Africa, with a goal of doubling rice production in Africa. This initiative is to increase production of rice in Sub-Saharan Africa from 14 M MT in 2008 to 28 M MT in 2018, increase cultivated land area from 7.34 million HA to 9.73 million HA, increase yield per unit area from 1.94 to 2.93 MT/HA. This initiative is to generate 500 researchers, 1,000 technicians and 11,000 extension staff dealing with rice.

## PARTNERSHIP FOR SUSTAINABLE RICE SYSTEMS DEVELOPMENT IN SUB-SAHARAN AFRICA

**LOCATION**: 10 countries (Benin, Nigeria, Mali, Cameroon, Cote d'Ivoire, Guinea, Kenya, the United Republic of Tanzania and Uganda)

**FUNDING**: FAO, AfricaRice and International Rice Research Institute (IRRI)

**DURATION**: September 2006 – December 2018

This partnership aims to support scaling up of innovative practices such as System of Rice Intensification (SRI), rice processing and post-harvest management. The objectives are as follow: (i) improved efficient rice production system for Africa through promotion and adoption of best practices and up-scaling of proven and tested technologies, (ii) support of the development and promotion of policy options and effective institutions and markets, (iii) development of Agribusiness models along the rice value chain for increased production and productivity, including reduction of post-harvest losses and improved grain quality and, (iv) irrigated and integrated rice systems to ensure sustainable increased production and productivity in the major rice production environment.

## KOREA-AFRICA FOOD AND AGRICULTURAL COOPERATION INITIATIVE (KAFACI)

**LOCATION**: 20 African countries, including Burkina Faso, Côte d'Ivoire, Ghana, Mali, Nigeria & Senegal

**FUNDING**: Rural Development Administration (RDA) of the Republic of Korea, AfricaRice

**DURATION**: 2016 - To date

The RDA and AfricaRice have entered into a strategic partnership in 2016 to accelerate the development of a new generation of productive and stress-tolerant rice varieties to meet the pressing needs of rice farmers and consumers in Africa. The partnership is to broaden the African rice gene pool with high yield and quality traits from Korean rice germplasm. It will also enhance African rice breeding capacity by training national rice breeders, particularly in the application of another culture which has high potential to increase rice yields in Africa.

## COMPETITIVE AFRICAN RICE INITIATIVE (CARI)

**LOCATION**: 3 ECOWAS Countries (Burkina Faso, Ghana, Nigeria) and Tanzania

**FUNDING**: Commissioned by German Federal Ministry for Economic Cooperation and Development (BMZ) and co-financed by the Bill & Melinda Gates Foundation with a total budget of 10.2 M€

**DURATION**: Phase I (November 2013—June 2018) & Phase II (July 2018—June 2021)

The CARI Phase I project, implemented by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and Technoserve was launched with the sole aim of reaching 150,000 farmers, addressing coordination failure and creating better linkages among rice value chains. The project surpassed its set out goals by reaching over 178,000 farmers with over 750,000 direct and indirect beneficiaries along the rice value chain in the 4 countries. The economic returns and competitiveness of the actors in the value chain were improved leading to poverty reduction.

Following the successful conclusion of CARI Phase I, the 2nd phase of the project (CARI 2) began in July 2018 and is implemented by GIZ GmbH in cooperation with Kilimo Trust (KT) and John Agyekum Kufuor Foundation (JAFK). The activities of CARI Phase II focuses on increasing knowledge management support and cooperation among stakeholders of the rice value chain. It aims to integrate more than 60,000 smallholder rice farmers in sustainable business models and improve the policy framework for the rice sector. CARI 2 builds on strong partnerships with public and private stakeholders.

## CONTINENTAL INVESTMENT PLAN ON RICE SELF-SUFFICIENCY IN AFRICA (CIPRISSA)

**LOCATION**: 10 countries, including 5 ECOWAS countries: Côte D'Ivoire, Mali, Nigeria, Senegal & Sierra Leone

**FUNDING**: African Development Bank (AFDB), AfricaRice

**DURATION**: 2018-2025

CIPRISSA has the aim of achieving continental rice sufficiency by 2025. The initiative is executed by AfricaRice. This initiative aims to strengthen the currently implemented programmes of the countries involved by providing new impetus through sustained massive dissemination of the technologies and innovation to users.

## NERICA VARIETIES DISSEMINATION

**LOCATION**: Across West Africa

**FUNDING**: South-South Cooperation, AfricaRice

**DURATION**: Ongoing

AfricaRice's breakthrough in producing the 'New Rice for Africa' (NERICA), based on crossings between African rice (Oryza glaberrima Steud.) and Asian rice (O. sativa L.), offers welcome relief to Africa's rice farmers. It is a new and unique opportunity for sustainable agricultural development in the rained environments where most of Africa's rice farmers earn a living. NERICA varieties have high yield potential and short growth cycle. Several of them possess early vigor during the vegetative growth phase and this is a potentially useful trait for weed competitiveness. Likewise, a number of them are resistant to African pests and diseases, such as the devastating blast, to rice stemborers and termites. They also have higher protein content and amino acid balance than most of the imported rice varieties. Participatory varietal selection (PVS) trials in rainfed environments across WCA have met with an enthusiastic response from farmers. The dissemination of NERICA varieties as been facilitated by AfricaRice and South-South Cooperation.

## RICE SECTOR DEVELOPMENT IN WEST AFRICA

**LOCATION**: Benin, Burkina Faso, Côte D'Ivoire, Guinea-Bissau, Mali, Niger, Senegal & Togo

**FUNDING**: West African Economic and Monetary Union (WAEMU)

**DURATION**: May 2018 - To date

This project aimed at identification, production and distribution of rice varieties adapted to climate change, rice crop management practices to increase productivity, good post-harvest practices, introduction and adaptation of equipment, promote functional and sustainable contractual arrangements between the different rice value chain actors, capacity building and development of regional instrument for providing information for food security. Africa rice and its partners are implementing the project activities through the task force and the rice sector development hub mechanisms.

# ICT APPLICATIONS IN THE RICE VALUE CHAIN

The application of ICT devices has been documented in many parts of the sub region and noted as potential tools to transform poor agricultural practices, yields and revenues that can economically improve the livelihoods of small farmers, as well as boost productivity along the rice value chain in West Africa.

The use of the **Rice Advice** administered by Africa Rice and jointly funded by CARI-GIZ has impacted the management and practice of rice farming in selected countries of West Africa. This Android-based decision support tool for smallholder rice farmers, facilitate pre-season field specific guidelines for rice production. It helps farmers identify the best option of fertilizer to buy, based on nutrient requirement and price. Thereby assisting farmers to make informed decisions that is tailored to the agro-ecology.

The **Weed Manager** is an innovative application promoted by AfricaRice. The application assists service providers (SPs) in generating farm-specific advice for weed management to smallholder rice farmers. A profile is generated with farm specific information on field conditions, available resources and prevailing weed problems for the participating farmers. It reduces reliance on hand weeding, thereby contributing to sustainable and affordable productivity enhancement.

The CARI program in partnership with Crop2cash launched a mobile-based application called **PaddyBase**. It is a supply management tool for rice millers to track the supply chain of paddy.

# THE ECOWAS RICE OFFENSIVE


© CARI, GIZ

The **ECOWAS Rice Offensive** for sustainable and sustained recovery of rice production in West Africa programme was approved by the ECOWAS Council of Ministers in June 2014.

The programme is planned for 10 years and the overall contribution to ECOWAP is to attain self-sufficiency in rice production **by 2025.**

## OBJECTIVES

Specifically, the Regional Rice Offensive contributes to:

1. **Achieving Rice Self Sufficiency by 2025**
2. **ECOWAS Member States becoming Rice Exporters by 2025**
3. **Achieving Food Security and Nutrition in ECOWAS by 2025**
4. **Achieving Economic Development of the Rice Value Chain**

## FUNDING

The Rice Offensive requires huge investments and a strong political will at both the National and Regional levels. The main sources of funding should be: ECOWAS (EBID) and UEMOA (BOAD) Commissions, the ECOWAS Member States (their Central and Commercial Banks), the private sector and development partners (AfDB, EU, USAID, JICA etc.).

## AXIS 1: SUSTAINABLY INCREASE RICE PRODUCTION

This axis mainly seeks to boost the regional production and specifically to provide a number of incentives to stimulate production intensification. What is at stake here is to reinvigorate efforts made by the governments to boost rice productivity and production. These national efforts have focused on three types of actions: facilitating access to inputs and production factors (improved seeds, fertilizers, small agricultural equipment, small seasonal credits) and measure for market regulation (paddy collection, processing and marketing through public boards) in many countries. As discussed below, the challenge for the region is to be able to support and increase productivity of the different production systems.

**EXPECTED RESULTS:**

**RESULT 1: Quality seeds are available in sufficient quantity**

**RESULT 2: Facilitate producers' access to improved seeds**

**RESULT 3: Access to fertilizers is facilitated**

**RESULT 4: Rice production is secured by irrigation development at different scales**

**RESULT 5: Access to material and equipment is facilitated**

## AXIS 2: PROCESS AND PROMOTE LOCAL RICE PRODUCTION

Valorization is at the core of the rice value chain in the current context of West African market. Indeed, it is both an incentive for the production and a national and regional market factor for conquering the tapping factor. Low intensification of the regional rice production is partly attributed to failures of the processing and utilization methods. Efforts are undertaken both regionally (normalization, standardization) and nationally. At the national level, many initiatives are promoted either by public authorities, producer organisations or by the private sector. Valorization through processing, normalization, standardization and marketing of products (packaging, traceability) falls under the private sector's skills, which could provide maximum efficiency.

**EXPECTED RESULTS:**

**RESULT 1: Innovative processing technologies and processes are adopted and disseminated**

**RESULT 2: Processing methods are modernized**

**RESULT 3: Local rice is normalized and standardized**

**RESULT 4: Consumption of local rice is promoted**

## AXIS 3: PROMOTE THE REGIONAL LOCAL RICE MARKET

Credited with some 350 million consumers, the West African market is expected to become, in 2050, the third largest consumer centre in the world with 650 million inhabitants. This market is undergoing deep transformations that are likely to impact the demand for rice. The market's operation is currently hampered by many obstacles created by the multiple fragmentations of trade, fiscal, and monetary policies, the unpredictability of rules, abnormal practices by both state and private actors. These deficiencies do not promote the free movement of agricultural productions, despite the fact that the trade liberalization scheme has been operational since 2003. The surpluses of rice production that will be released by the major producing areas will not be able to compensate for the deficits in other cropping areas and, above all, supply the large consumption centres, unless the trading environment is improved and the regional market implements decisive structural reforms.

**EXPECTED RESULTS:**

**RESULT 1: Appropriate structural reforms are carried out**

**RESULT 2: Trade facilitation actions are promoted**

## AXIS 4: IMPROVE THE RICE DEVELOPMENT ENVIRONMENT

The rice economy is inseparable from the environment in which it is promoted. It is inter-connected to all the agricultural economy of the country and the region. Decisions that contribute to its development also depend on the global dynamics of all other economic, social and environmental phenomena, or even more basic issues such as the role of each category of stakeholders. Dealing with the development issues necessarily leads to take an interest in broader dimensions such as those relating to the role of research, information for decision making, the capacity of actors to support the proposed reforms, the role of women in the envisaged structural changes, the environmental impact of actions.

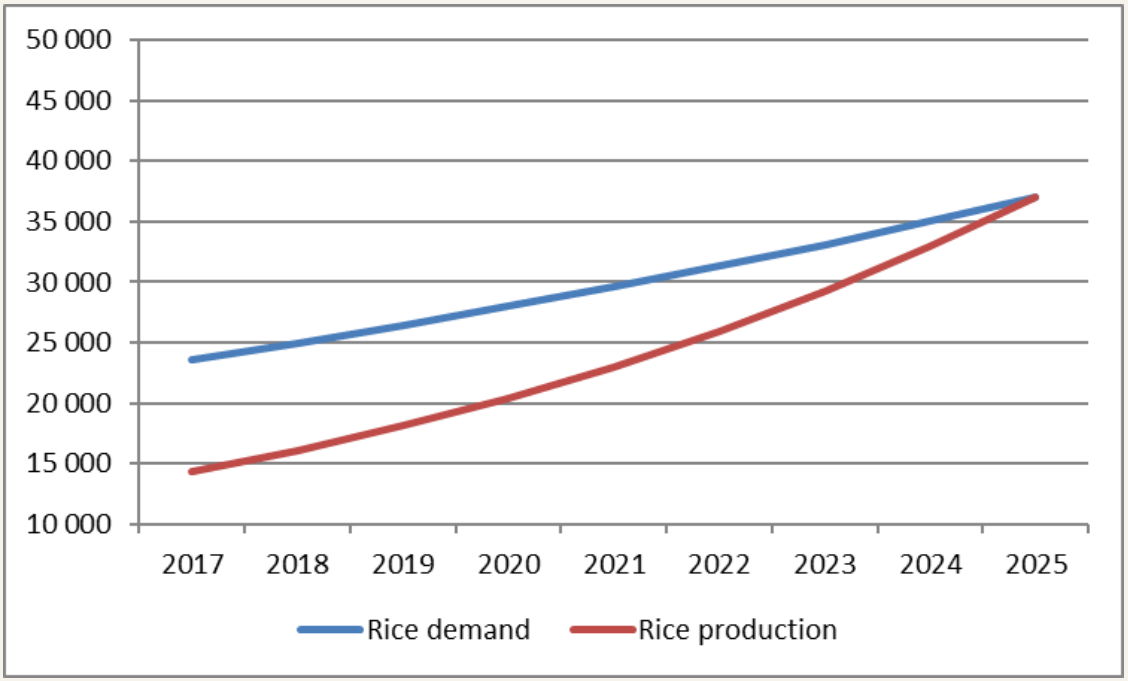
**EXPECTED RESULTS:**

**RESULT 1: The capacity of institutions and regional actors are strengthened**

**RESULT 2: Gender and environmental aspects are considered**

# EXPECTED IMPACTS BY 2025

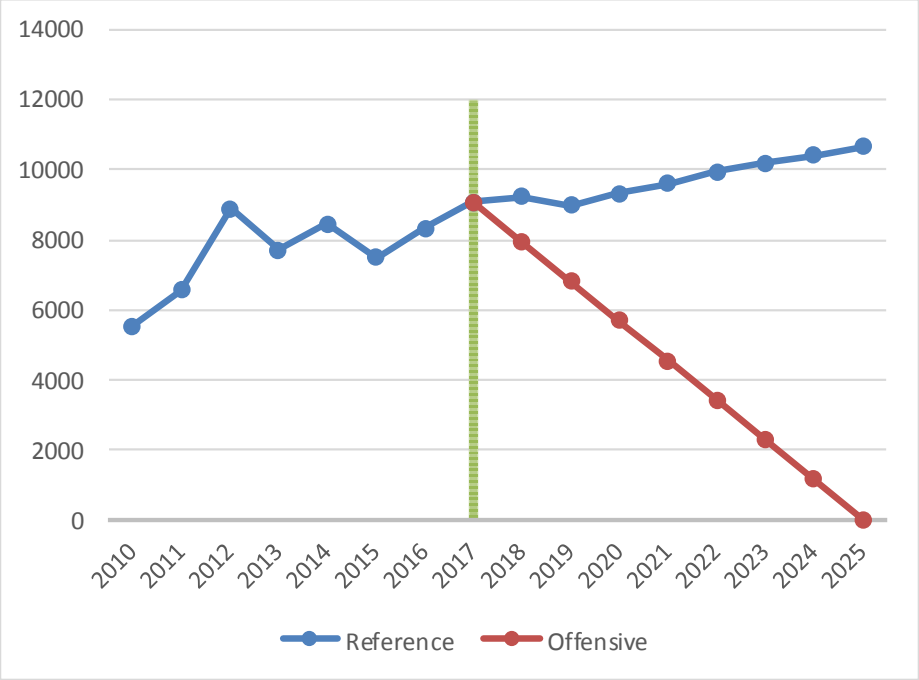
## EVOLUTION OF RICE DEMAND AND PRODUCTION (000s MT) - 2017 TO 2025




Concerted efforts at Implementing the rice offensive will lead to closing the gap between rice demand and domestic rice production. Given the recent population growth rates from 2013 to 2017, rice demand is expected to increase to about 37 million tonnes by 2025. Likewise, the impact of the Rice offensive will cause to grow the 2017 production level of rice by about 20 million tonnes in order to achieve self sufficiency. Closing this gap will require improvements along the entire segments of the value chain (e.g. reduction in losses along the chain) which will reduce pressure on demand.

Under the rice offensive, the evolution of rice importation into the West African region from the year 2010 to 2025 indicates a gradual reduction in the rate of imports. Sustaining all efforts at the various national and regional levels on the rice sector development will ensure that ECOWAS meets its Rice Offensive target by 2025. Importation of rice into the sub region is expected to terminate by 2025.

## EVOLUTION OF ECOWAS NET IMPORTS (000s MT)

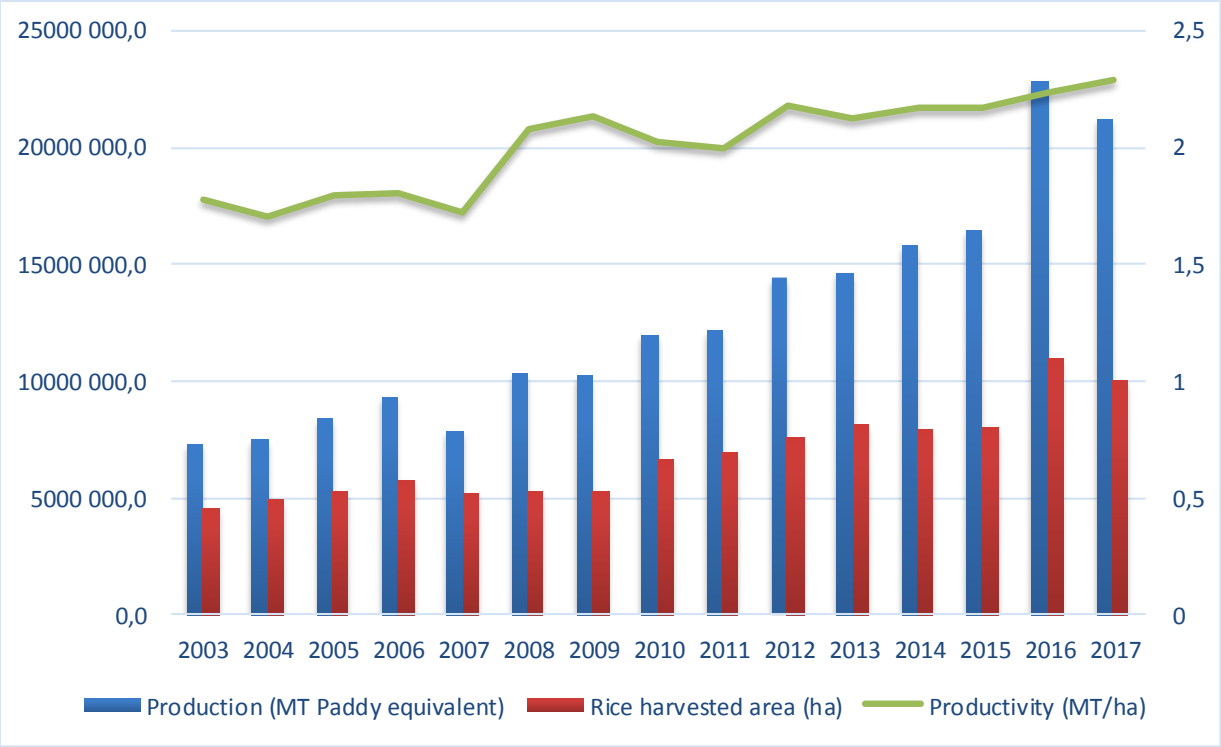



## DRIVERS TO ZERO IMPORTS

| |
|---|
| Increase rice production and yield |
| Process and valorize local rice production |
| Promote the regional local rice market |
| Improve the rice development environment |
| Availability and accessibility of certified inputs |
| Equipment sourcing facilities |
| Innovative process technology |
| Integrated local processing systems |
| Standardization of local rice |
| Capacity development of regional actors |
| Gender and youth dimensions considered |
| Environmental dimension considered |

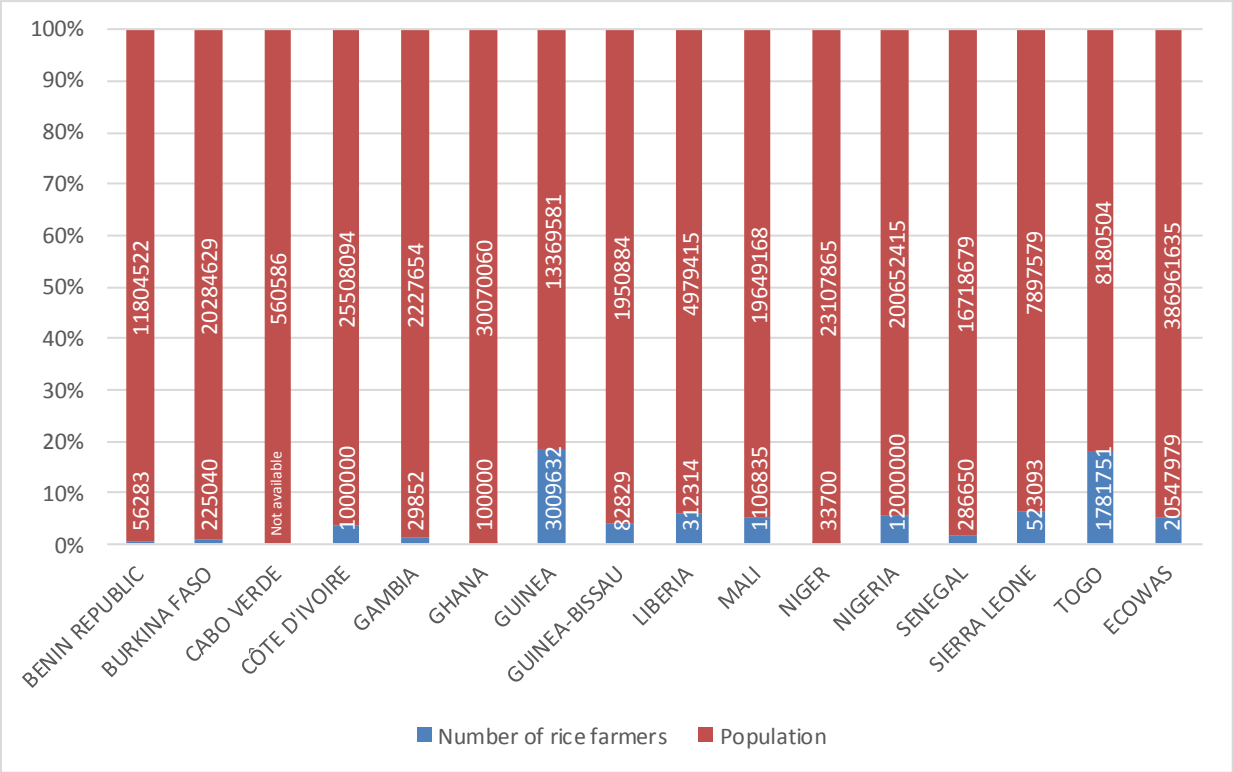
# OPPORTUNITIES
## IN RICE DEVELOPMENT

# PRODUCTION, AREA CULTIVATED & YIELD PRODUCTIVITY



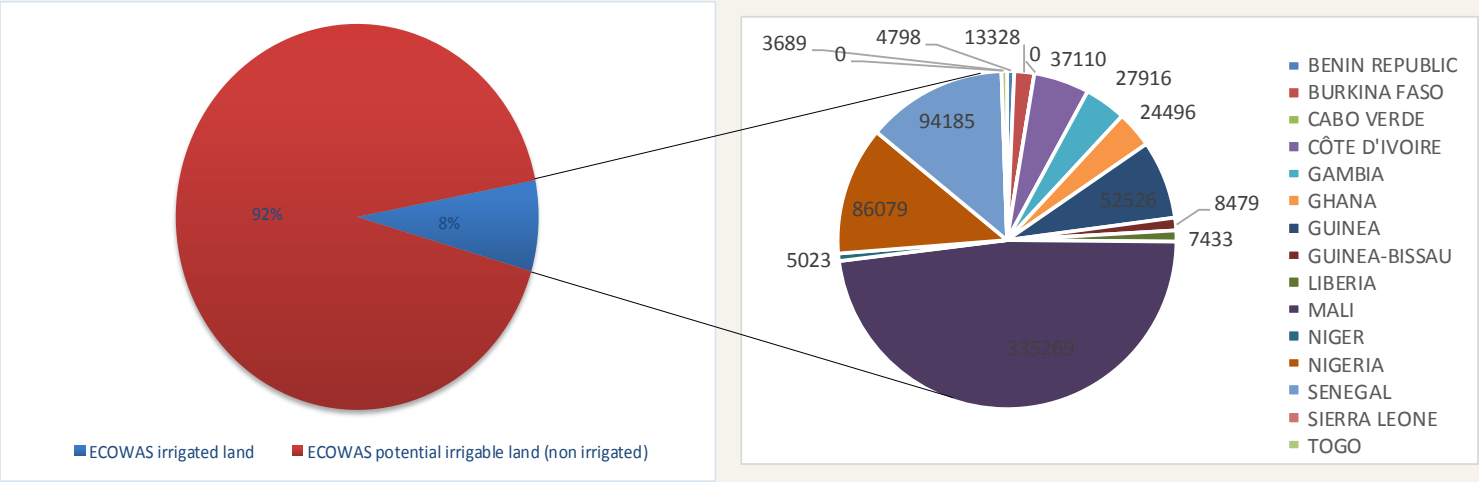

Yield is the measured tonnes produced per hectare of cultivated area (tonnes/hectare). The gradually increasing rate of production capacity observed in the period between year 2003 and 2017 corresponds with an equally increasing harvested land area, which underscores the predominant nature of rice farming in most of the West African countries. Even though the region experienced increase in rice production between 2014 and 2015 without expanding the cultivated area as shown above, the intensified farming was not sustained. In 2016, West Africa recorded a tremendous increase in rice production with more than 20 million MT of paddy rice on a larger harvested area of 10 million Ha. This extensification of agriculture needs to be combined with strategies and tools to intensify agriculture to achieve sustainable productivity in the rice sector.

## RICE PRODUCERS VS POPULATION - 2018/2019




Rice farmers are key actors and play a very important role in the rice value chain in the region. The farmers contribute immensely but represent only 5% (20,358,591) of the total ECOWAS population (386,961,635) in 2019. The future of the West African rice economy depends highly on building and improving trained farmers to meet the increasing population demands.

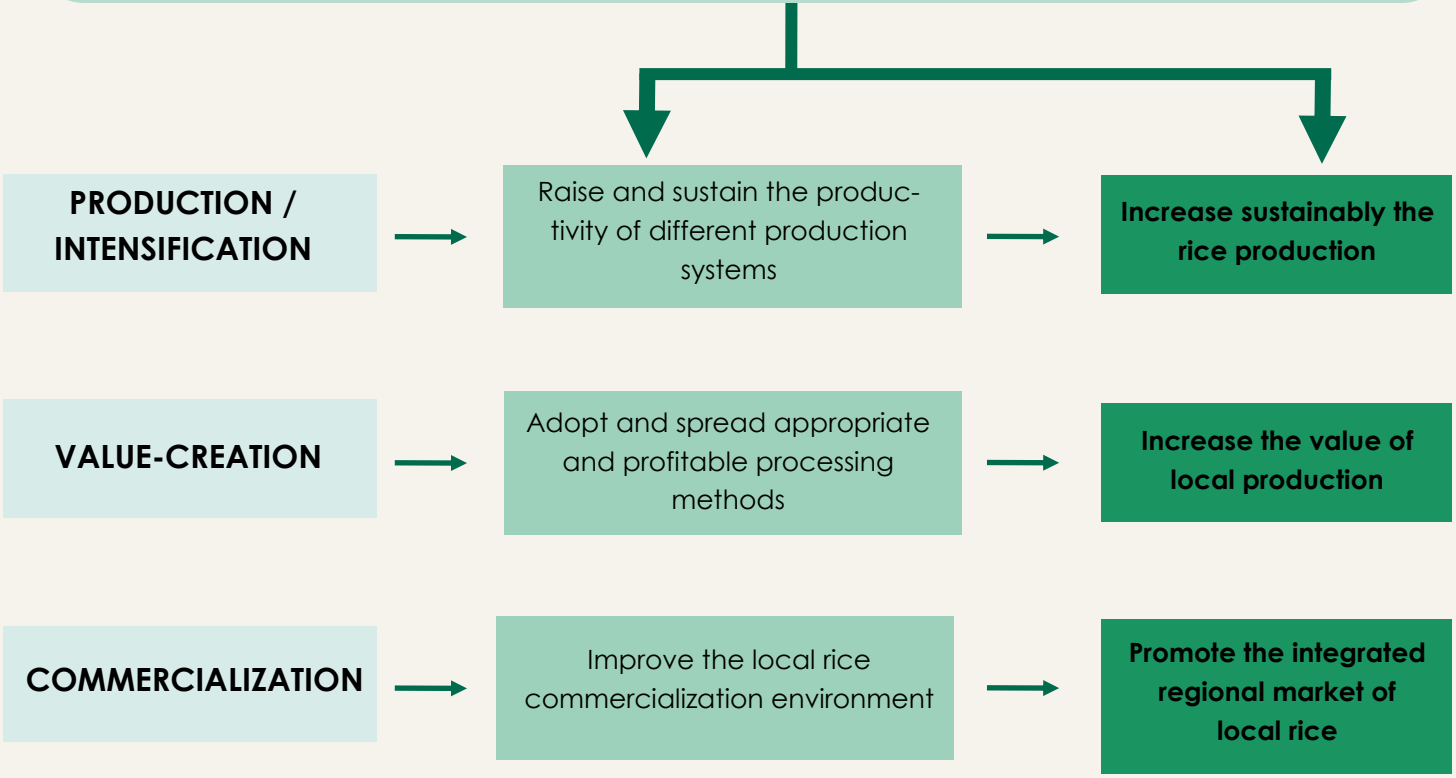
# IRRIGATED LAND VS IRRIGABLE LAND - 2018




The chart shows a region that is far from fully harnessing its natural resources for benefit and for economic development. Of the available agricultural land in West Africa, only 8% of the land is irrigated translating to a total of 700,331 Ha of land being utilized. Forty-eight (48%) percent of this proportion is accounted for by Mali, which has currently attained 88% self-sufficiency in rice. The residual 92% represents the rest of the viable irrigable land area that is not utilized, thereby depicting an untapped potential for the region to produce food for its teeming population. There is therefore a crucial need to renew effort to boost food production in the region by sustainably committing to the development of irrigable land for agriculture in West Africa.

**Major challenge:** To satisfy the growing demand with a competitive and environment-friendly local production

**Major stake:** To increase significantly and sustainably the local rice production, by improving the productivity and competitiveness of current production and processing systems




*Source : IFPRI*

There is a need to increase the value of local production and processing systems.

# MAIN FINDINGS

- The increased production capacity observed in West Africa, as a result of corresponding increase in the harvested land area lend credence to the pattern of rice farming in most part of the sub region. The predominant extensification of agriculture, while promoting the utilization of irrigable land, may also not be adequate to guarantee rice self-sufficiency by 2025. There is need to intensify agriculture with inputs, improved farm management practices, and climate smart technologies to increase yield per hectare.

- Improving competitiveness in the rice sector will require identification of the causes of yield gaps, eliminating them, and enhancing productivity through adoption of improved agricultural and mechanized practices.

- One of the challenges of rice productivity in West Africa is the weak institutions and lack of effective linkages among the rice value chain actors. Hence, the need to strengthen linkages and foster greater coordination between all economic, public and private actors to stimulate private sector investment in the rice sub-sector.

- Knowledge is a crucial development factor in the agricultural sector. In order to support these varied and long-standing practices in the rice sector, agricultural research and innovation capacity must be strengthened, and appropriate technologies deployed to improve the sector.

- Promotion of domestic rice is crucial vis-à-vis rice imports. In 2017, the West African region imported over 9 million MT of rice representing about 60% of rice consumption. This underscores the huge opportunities for investment and active participation of untapped youth resources to increase rice production in order to meet the regional need and significantly reducing rice import by year 2025.

- There is need to boost and promote regional rice trade relations among the Member States. This will provide a safety net for the entire sub-region in mitigating the challenge of cross border issues related to rice smuggling and thereby enhance resilience.

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