

**CARD GM8 Agenda 1:
Progress on Development of NRDS-II in Rwanda**

7th - 8th of October, 2021

Octave NSHIMIYIMANA

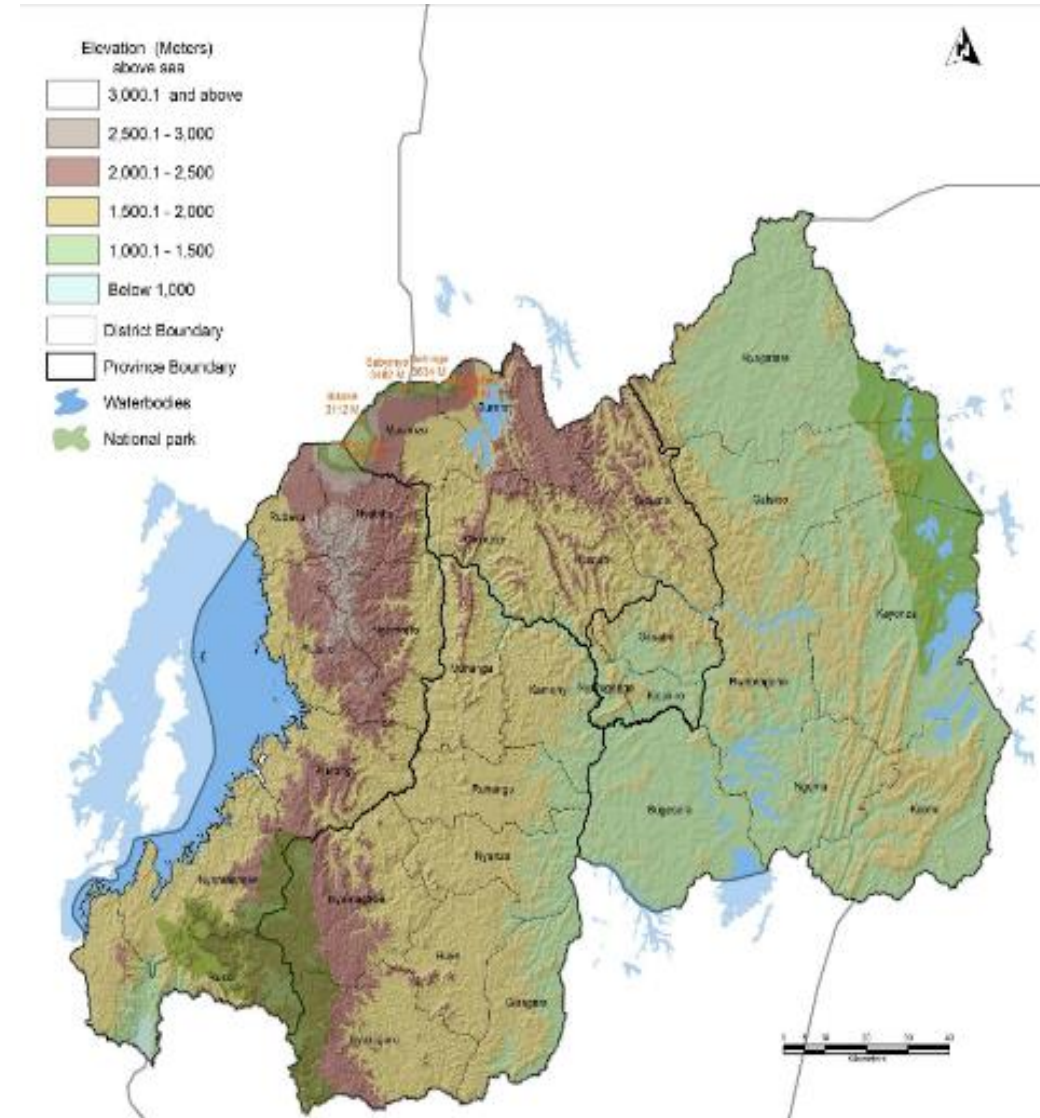
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1. Background - Rwanda at a Glance

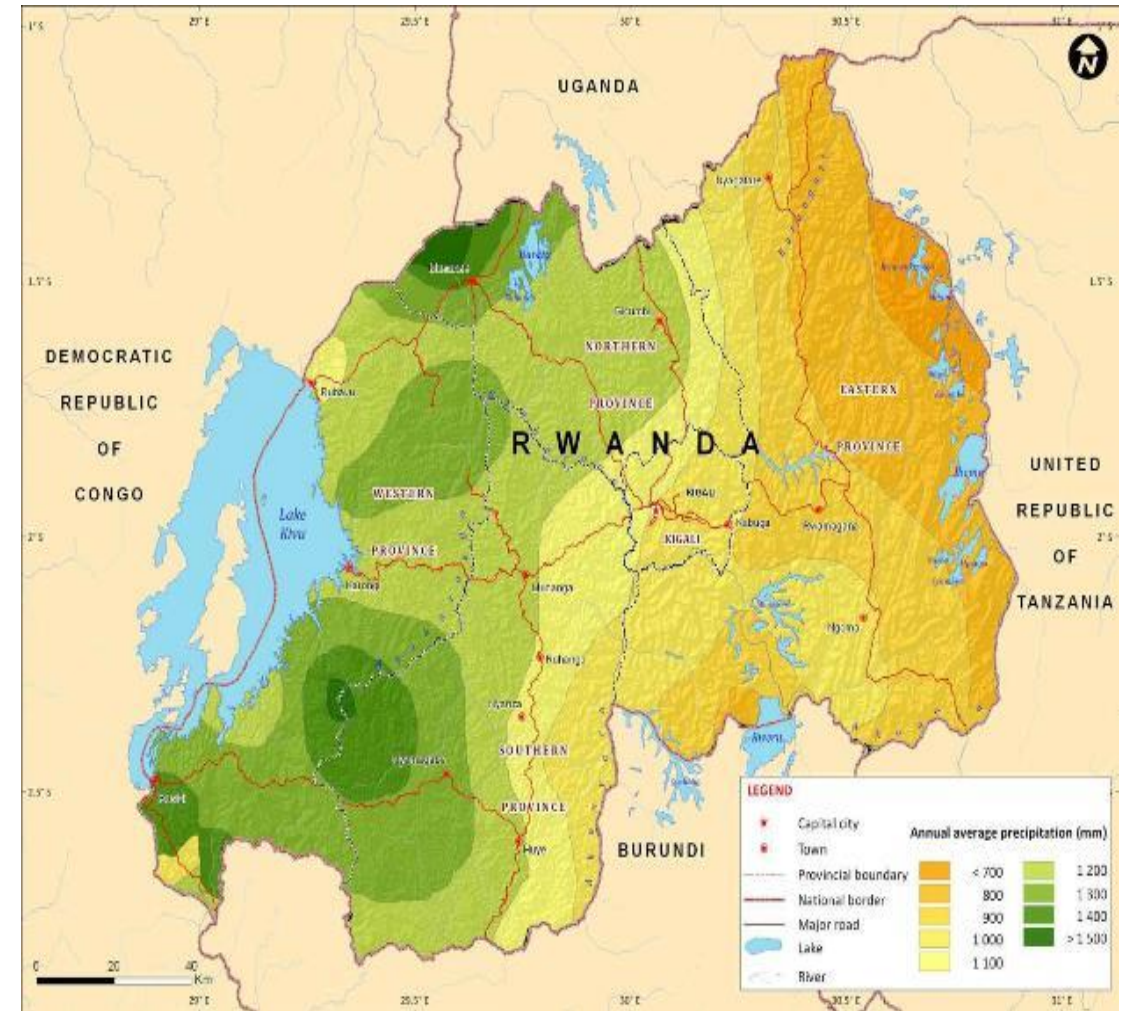
- ❑ Rwanda is a landlocked country that has estimated arable land of 26,338 km²; 58% of total geographic area (SAS 2020, NISR). Its landscape is represented by hilly topography, and the majority of areas are located at the elevation of 1,000m-2,000m above the sea level.
- ❑ The population size is 12,955,736 (2021 - Projection by NISR), the majority of which lives in rural areas (around 80%, Population Census, 2012)
- ❑ The share of agriculture sector is 28% in GDP (2020, NISR), in foreign exchange earnings and 62.3% in direct employment (2019, ILOSTAT) , etc.



1. Background - Rwanda at a Glance

❑ Precipitation ranges from 700mm to 900mm/year in Easter Province, 900mm to 1,100mm/ year in central part of the country, and more than 1,200 mm/ year in Western, and Southern Provinces.

❑ Rwanda has an irrigation potential of 501,509 ha, out of which 123,164 ha is identified as a potential marshland that is suitable for rice cultivation (2020, Irrigation Master Plan). However, only around 63,742 ha of marshland is currently exploited (MINAGRI annual report 2019-20)



1. Background - Rwanda at a Glance

□ Rice has played increasingly important roles in food security and poverty alleviation in Rwanda for the last decade;

- Rice production increased by 72% (from 66,000 MT in 2008 to 113,880 MT in 2018)
- The area of rice cultivation increased nearly 5-folds (from 6,838 ha in 2010 to 33,677ha in 2018)
- Rice consumption also increased (From 60,825 MT-milled in 2008 to 140,642 MT in 2018)
- Also rice has a potential to achieve higher yield (7t/ha) in Rwanda than other cereal crops that can be planted in marshlands (Jagwe et al, 2003)

→ As a result, The government of Rwanda designate rice as one of the strategic priority crops

□ Impact of COVID-19 on production and marketing of rice

- Agriculture in general decreased from 4.4% to 2.1% (BNR Annual Report 2020)
- The paddy production in 2020 is 11% less than the previous year, but its correlation with COVID-19 is unclear - as the first COVID-19 case reported with lockdown in March 2020, when the production of 1st major season (season A) was already over, and the production in 2nd major season (season B) was already started. - It is likely that irregular climate affected more on production
- Increasing trend of imported rice was observed in 2020, while some rice farmers face difficulty in harvesting and marketing due to the COVID-19 containment measures

2. Review of Rice Sector in Rwanda

□ Policy Setting

In Rwanda, Efforts in Agriculture Development are made according to National Agriculture Policy (NAP). Meanwhile, the government has National Strategy for Transformation (NST1) that is the overarching strategy for Socio-Economic Development of Rwanda for the period of 2018-2024.

All agriculture related interventions, expected to contribute to NST1, are elaborated in the 4th Phase of National Strategy for Agriculture Transformation (PSTA4), and MINAGRI plays pivotal roles in its coordination and implementation. In PSTA4 rice is designated as one of the strategic crops, and it is given high priority

□ Related Investment

- Marshland development to increase rice cultivation areas
- Industrialization of milling sector through PPP
- Capacity Development in Water Management and Market Oriented Agriculture
- Input support through Crop Intensification Program and R&D for increased yield

2. Review of Rice Sector in Rwanda

□ Performance of Rice Sector under NRDS-I

Year	Production (MT)	Area (ha)	Yield (t/ha)	Consumption (milled, MT)
2013 (Source: SAS NISR)	26,483	11,505	2.3	-
2018 (Source: SAS NISR)	113,880	33,677	3.4	140,642
2019(Source: SAS, FAOSTAT NISR)	131,577	32,896	4	180,303
2020(Source : SAS,RRA NISR)	131,577	29,584	4	179,950

Nonetheless, Rwanda experienced the overall increasing trend in production, area of cultivation and consumption

3. Lessons from the Implementation of NRDS-I

- ❑ Overall production and consumption of rice significantly increased, and rice has become more important crop for Rwandans' diet as well as livelihood
- ❑ Yield increased dramatically from 2008 to 2013, but it has been stagnant since 2014
- ❑ Marshland development enabled the expansion of cultivation area, but the pace of development slowed down
- ❑ Industrialization of milling sector was enhanced through the PPP approach
- ❑ To fill the demand gap in the domestic rice market, it is necessary to take into consideration types of rice to produce and sell within the country as well as the quality of milled rice.

4. The Process of NRDS-II Development in Rwanda

Steps Taken

Period	Event	Work done
Mar. - Aug. 2019		TF core members collected the latest data, and reviewed the achievement of NRDS-I and the current status of rice sector.
Nov. 2019	Working Week 1	TF had discussions to brainstorm the contents of NRDS-II.
Feb. 2020	Working Week 2	TF had discussions on contents of NRDS-II as well as Concept Notes (Continued)
Mar. 2020		Zero draft of NRDS-I was prepared and circulated for comments, meanwhile the first case of COVID-19 was reported, followed by COVID-19 containment measures (Activities were suspended)
Mar. 2021	ASWG	The Draft document was presented to wider stakeholders for validation
May. - Jul. 2021	Approval	Finalization of NRDS-II and Ministerial Approval

Way forward

Period	Event	Work to be done
Sep. 2021 -		Fund mobilization from both internal and external sources for the implementation of NRDS-II Concept Notes

5. Rwandan NRDS-II

□ Vision

Rwandan NRDS-II envisions a rice industry that contributes to food security, job creation and economic growth in Rwanda. The goal of NRDS-II is: To drive the rice sub-sector towards achieving self-sufficiency by increasing productivity and market competitiveness of the locally produced rice

□ Objectives

- I. Enhance rice production and productivity through research and extension
- II. Increase total factor productivity and resilience of rice farms to climate change and market shocks arising out of global, regional and national emergencies
- III. Facilitate sustainable and market-driven production systems
- IV. Improve policy and institutional environments for increasing the private sector investments in the rice

5. Rwandan NRDS-II

□ Target

	2018	2024	2030
Required Production (paddy rice; t) for self-sufficiency	180,499	311,164	434,553
Observed/Projected Production (paddy rice; t)	113,880	254,440	390,000
Observed/Projected local production (milled rice; t)	66,620	165,386	253,500
Observed/Projected Area Harvested (ha for 2 seasons)	33,677	50,888	60,000
Required yield for Self Sufficiency		6.11	7.24
Observed/Projected Yield (t/ha)	3.4	5.0	6.5
Observed/Projected Net Imports (t)	(74,022)	(36,871)	(27,335)
Consumption requirement (milled rice; estimated) (t)	140,642	202,257	280,835
Self-sufficiency ratio	47.4%	82%	90%
Population Figure	12,301,970	14,030,371	16,141,036
Per capita rice consumption (kg/year; estimated)	11.43	14.42	17.40

5. Rwandan NRDS-II

□ Strategic Axis of Rwandan NRDS-II

The strategic axes of NRDS-II are aligned to PSTA4 and shall be implemented in line with the following four pillars of PSTA4;

Pillar 1: Innovation & Extension

(This Pillar includes Industrialization, Competitiveness and Empowerment components of R.I.C.E.)

- R&D of Technologies for better yield, cost reduction and Value addition of Rwandan rice.
- Adoption of GAP and innovations by farmers through proximity extension services, and by other rice value chain stakeholders through incentives and promotion

Pillar-2: Productivity & Resilience

(This Pillar includes Resilience and Competitiveness components of R.I.C.E.)

- Increasing total factor productivity through increased yields and on-farm productivity.
- Increasing resilience of rice farms to climate change through sustainable land and husbandry management.
- Improving market resilience against global, regional and national rice supply and price shocks by increasing self-reliance and domestic market share of locally produced rice.

5. Rwandan NRDS-II

□ Strategic Axis of Rwandan NRDS-II (Cont'd)

Pillar-3: Inclusive markets & Value addition

(This Pillar includes Industrialization, Competitiveness and Empowerment components of R.I.C.E.)

- Improving marketing process and market functions through quality-based pricing and promotion of contract farming.
- Introduction of quality-based grading of paddy (e.g. moisture content, degree of purity, homogeneity, presence of immature grains and foreign materials).
- Branding

Pillar -4: Enabling environment & Responsive institutions

(This Pillar includes Competitiveness and Empowerment components of R.I.C.E.)

- Capacity building of rice value chain actors and supporters.
- Enhancing organizational skills of the rice farmers' cooperatives through reorganizing the rice farmers' organizations (Cooperatives and unions) and establishing a rice value chain platform for the rice stakeholders

5. Rwandan NRDS-II

□ Governance and Implementation Structure

The implementation of NRDS-II will be facilitated by the NRDS TF and coordinated by MINAGRI,. To enhance the proper functioning of NRDS-II, there is a need to have an organizational structure, headed by the Director General of Value Chain Management and Trade of MINAGRI.

Task Force

The NRDS taskforce members (present and future) will facilitate the implementation of NRDS recommendations by;

- Providing technical and administration guidance
- Resource mobilization for the implementation of NRDS-II by developing project concept notes and lobbying for funds from government, development partners and other public and private stakeholders
- Provide technical back stopping and feedback
- Undertake monitoring and evaluation of NRDS-II activities

5. Rwandan NRDS-II

□ Governance and Implementation Structure

National Rice Stakeholders' Forum (NRSF)

A national rice stakeholders' forum will be established. The forum will be instrumental in priority setting and implementation of interventions identified in NRDS-II. The stakeholders' forum will be composed of; (i) MINAGRI (to provide and house Secretariat), (ii) RAB, (iii) Private sector Organizations dealing with rice, (iv) Relevant sector ministries (e.g. Local Government, Trade), (v) Farmer organizations (Representatives of farmers cooperatives), (vi) Regulatory bodies (RSB), (vii) Rice millers, (viii) Agro-dealers, (ix) Rice traders, (x) NGOs and CBOs, and (xi) Credit providers (Banks and MFIs)

Terms of reference for the National Rice Stakeholders' Forum

- Periodical review the rice sector within the framework of Government policies.
- Set and periodically review extension, research and capacity building agenda.
- Prioritize programs and activities under NRDS-II.
- Monitor and evaluate implementation of NRDS-II.
- Assess and respond to any emerging challenges in production and marketing of rice in Rwanda

6. Conclusion and Way Forward

- Due to the difficulties in physically meeting under the COVID-19 situation, the process took longer than the initial plan.
- Nonetheless, the Government of Rwanda has successfully managed to develop NRDS-II
- From now on, Rwandan NRDS TF will work on mobilizing financial resources from both internal and external sources based on the Concept Notes already developed.
- In addition, we will revise the Concept Note as necessary, so that NRDS II can be effectively implemented in changing circumstances and can address emerging issues can be addressed

THANK YOU FOR YOUR ATTENTION..