

REPORT

INTRODUCTION TO THE 4Rs WEBINARS

**Online Training –
November 30 – December 1st, 2022**

Table of Contents

Introduction	3
1. Objectives and Expected Results	3
2. Participants	4
3. Activities	4
3.1 Introductory Session	4
3.2 Technical Sessions	4
3.3 Q&A session.....	5
Conclusion.....	5
ANNEXES	7
AGENDA (draft).....	7

Introduction

Fertilizers provide essential nutrients for the growth and development of crops. As a result, their use helps to improve agricultural production and productivity. However, in the current context of soaring agricultural input prices, fertilizer use appears to be a challenge for most producers, including those in the West African sub-region. As a result, it appears important to use fertilizer efficiently and optimally in order to obtain effective results and have a greater impact on agricultural yields and food security.

The International Fertilizer Development Center (IFDC), through its Feed the Future Enhancing Growth through Regional Agri Inputs System (EnGRAIS) project, in collaboration with the African Plant Nutrition Institute (APNI), has sought to support private sector fertilizer companies to train and advise farmers on best management practices for fertilizer use. Most of these private companies in the sub-region are members of the West African Fertilizers Association (WAFA). Thus, a framework for collaboration was created between APNI, IFDC and WAFA, and then materialized through the realization of these online webinars.

These webinars were held in two sessions thanks to the technical support of APNI, which has developed many tools and materials for better management of fertilizer use through the 4Rs. IFDC/EnGRAIS and WAFA facilitated the meeting through their operational and organizational support. The webinars were held on November 30 for English speakers and on December 1 for French speakers to provide information using the appropriate technical terms in each language and also to facilitate exchanges with stakeholders.

1. Objectives and Expected Results

The general objective of these webinars is to introduce the 4Rs Nutrient Stewardship concept to the technical staff of the West African fertilizer industry.

Specifically, the webinar sessions intended to:

- Equip the fertilizer private sector with the requisite capacity for disseminating knowledge on best fertilizer management practices based on the 4Rs to farmers.
- Orient participants on the principles of 4Rs nutrient stewardship (Right source, Right rate, Right time, and Right place).
- Explain the role of 4Rs principles in enhancing the social, economic, and environmental benefits associated with the adoption of Good Agronomic Practices (GAPs).
- Provide tools to facilitate the extension of GAPs and 4Rs to producers
- Facilitate experience sharing with actors in the fertilizer industry on improved fertilizer recommendations and management in the region.

In parallel, these sessions were also intended to strengthen the existing collaboration between IFDC and APNI and to serve as the basis for the development of an expanded future program on crop and nutrient best management practices between APNI and IFDC.

2. Participants

About 150 people participated in the two webinars. During the English session, 100 participants were present and about 50 participants joined the French session the next day. Most of the participants came from private fertilizer companies in the region, but there were also participants from the public sector (Ministries of Agriculture) and agricultural extension organizations. Representatives from APNI, IFDC, and WAFA were also present to facilitate the sessions and provide technical training.

For more details see the list of participants in the appendix.

3. Activities

3.1 Introductory Session

At the beginning of each session, representatives of the co-organizing institutions noted the importance of this meeting which would provide the basis for 4Rs concept, for better efficiency and effectiveness of soil nutrients.

- For IFDC, during the English session, Mr. Patrice Annequin, Chief of Party (COP) of the EnGRAIS project, invited the private fertilizer sector to be one of the main channels to spread the message for a total implementation of the 4Rs so that farmers will know how to use fertilizers correctly. The next day, Dr. Youl Sansan, Deputy COP of the EnGRAIS project emphasized the importance of the webinar at this time because of the current crises caused by COVID-19 and the Russo-Ukrainian war that have affected prices, availability, and quality of fertilizers. Thus, this concept will allow for optimized fertilizer use.
- For APNI, Dr. Shamie Zingore, Director of Research and Development, said at the English session that APNI was proud to facilitate technically the meeting because the implementation of the 4Rs for effective nutrient management was a way to ensure that farmers will use nutrients properly to maximize benefit and reduce losses. During the French session, Dr. Agnero Therese, Director of the APNI West Africa office, indicated the good collaboration with IFDC which facilitated the organization of these meetings. Dr. Agneroh also indicated that in addition to this introductory webinar, technical materials will be distributed to complement this training. She also urged participants to truly put into practice what they learned.
- On behalf of WAFA, Malick Niang, the secretary in charge of communication participated in both sessions. Mr. Niang briefly presented the association indicating its seven objectives, including fertilizer use and fertilizer quality. According to him, this technical workshop was of great importance to allow the private sector, most of which are members of WAFA, to have sufficient knowledge on better use of fertilizer for the benefit of agricultural producers.

3.2 Technical Sessions

The technical presentations focused on the 4Rs stewardship and were given by Dr. Samuel Njoroge, and Dr. Kokou Amouzou, both Program Coordinators at APNI.

4Rs Nutrient Stewardship, in combination with improved agronomic practices, supports the critical actions of Responsible Plant Nutrition to provide multiple sustainability outcomes such as the following:

- Right Source: "Applying the correct fertilizer and organic resources that provide growing crops with all nutrients required for good growth and maturity"
- Right Rate: "Supplying growing plants with the right amount of nutrients for healthy growth and development".
- Right Time: "Matching nutrient application with the timing of plant nutrient uptake".
- Right Place: "Adding nutrients to the soil at a place where the crops can easily access them"

The 4Rs implementation case study in Ghana showed the real impact of 4Rs implementation in maize trials. Through comparisons between the usual practices and those recommended by the 4Rs concept, participants were able to understand the importance of its implementation through the results presented.



3.3 Q&A session

Participants asked questions and interacted with the technical partners after their presentations. This showed that the topic was of interest and would help them in conducting their respective activities. Most of the questions were about:

- The implementation of these recommendations from the 4R concept with small-scale farmers in the region and according to specific crops
- The application of organic fertilizers due to the high prices of inputs
- Methods and techniques to avoid losses through leaching and volatilization

The answers of the experts helped to clarify these issues and directed the participants to follow the recommendations of the 4Rs which were very important to implement in African countries to benefit farmers.

Participants were also provided with training materials that included the main modules that were summarized for this webinar because of its introductory nature.

Conclusion

In organizing this introductory webinar for a better understanding of the 4Rs concept for nutrient management, APNI, IFDC/EnGRAIS and WAFA aimed to provide technical tools to the fertilizer industry in the region for its dissemination to stakeholders.

Due to the interest raised by the participants, we noted that the subject is of great importance as it would allow to

- *Reduce losses and optimize the use of fertilizers*
- *Increase agricultural production and productivity*

- *Promote the sustainability of production systems through effective nutrient management*
- *Reduce the purchase costs of fertilizers*

Partners believe that a stronger collaboration framework in the coming year could be defined to extend this kind of initiative to a larger number of actors and look forward to further collaborations between APNI and IFDC.

ANNEXES

AGENDA (draft)

Hours	Activities	Responsible
9:00-9:15	Opening ceremony	IFDC, APNI, WAFA,
	Remarks from EnGRAIS/IFDC	
	Remarks from APNI	
	Remarks from WAFA	
9:15-9:30	Introduction to the 4Rs Concept	IFDC, APNI
9:30-09:45	Right Sources	APNI
9:45-10:00	Right Rates	APNI
10:00-10:15	Case study: <i>On-farm Trials: 4R Nutrient Stewardship and GAPs for Sustainable Maize Production in West Africa</i>	APNI
10:15-10:30	Right time & Right place	APNI
10:30-11:00	Q&A session	Participants
	Sharing Experience	
11:00-11:15	Feedback and expectations from the participants for future activities	Participants
11:15 - 11:30	Closing ceremony	
	Message from APNI (4Rs Handbook sharing)	APNI
	Message from EnGRAIS	IFDC