



**University
of Manitoba**



Canada Africa 4R Solution and Precision Nutrient Management – Online Series

A. Background

Funded by the Global Affairs Canada, the 4R Solution project aims at improving socio economic well-being and resilience of smallholder farmers, particularly women, by incorporating 4R Nutrient Stewardship (Right Source @ Right Rate, Right Time, Right Place). Fertilizer Canada, University of Manitoba, OCP group and University Mohammed VI Polytechnic are convening the first Africa- Canada 4R Solution and Precision Nutrient Management Summit Inaugural series of sessions. The series of sessions will be held on an online platform from June 2020 to February 2021. The series of virtual sessions (2 sessions per month, each running for 2-3 hours) brings together key stakeholders in 4R nutrient management research and extension from Canada and Africa with a goal of developing a Canada-Africa 4R academic network to support knowledge transfer. This will help identify 4R and precision nutrient management research and extension gaps in Africa, raise the profile of 4Rs in Africa and Canada, and create an opportunity for future investment in African 4R and precision nutrient management research and extension. It is envisaged that each session will have about 100 participants.

B. Objectives of the meeting series

- To increase visibility of 4R Solution project
- To create a network of African and Canadian scientists with a goal of advancing 4R and precision agriculture science and extension
- To increase engagement by African universities in 4R Nutrient Stewardship

C. Agenda

Monday June 15, 2020	
8.00 am – 8.20 am	Session I: Welcome and opening remarks [5 minutes each] <ul style="list-style-type: none"> - Clyde Graham Fertilizer Canada <ul style="list-style-type: none"> o <i>Welcome and Introduction to 4Rs</i> - Mario Tenuta University of Manitoba <ul style="list-style-type: none"> o <i>Introducing the Canadian Senior Industrial Research Chair in 4R Nutrient Stewardship</i> - Leonardus VERGUTZ UM6P <ul style="list-style-type: none"> o <i>Mohammed VI Polytechnic University efforts towards the 4R solutions</i>
8.20 am – 8.30 am	Q/A

8.30 am – 9.00 am	<p>Session 2: Introducing 4R Nutrient Stewardship Project [8 minutes each]</p> <ul style="list-style-type: none"> - Tom Bruulsema, Chief Scientist IPNI Canada <ul style="list-style-type: none"> o <i>The scientific foundation for relating 4R practices to outcomes</i> - - Clyde Graham, Executive Vice President Fertilizer Canada <ul style="list-style-type: none"> o <i>Relevance of 4Rs in Africa</i> - Benoit Andre, Executive Director CDF Canada <ul style="list-style-type: none"> o <i>Overview of 4R Solution Project</i>
9.00 am – 9.10 am	Q/A
9.10 am – 9.40 am	<p>Session 3: 4R Solution: Looking forward from Year I [12 minutes each]</p> <ul style="list-style-type: none"> - Frewengel Wolde-Michael, Africa Regional Director CDF Canada <ul style="list-style-type: none"> o <i>Ghana & Ethiopia: 4R Solution Progress To date and Moving forward</i> - Shamie Zingore, Director Research & Development APNI <ul style="list-style-type: none"> o <i>4R Solution for smallholder farming systems in Ethiopia and Ghana: 4R technical review and implementation process</i>
9.40 am -9.50 am	Q/A
9.50 am – 10.00 am	<p>Session 4: Closing remarks and next steps [5 minutes each]</p> <ul style="list-style-type: none"> • Mario Tenuta University of Manitoba • Leonardus VERGUTZ UM6P

4R Solution Online Series: Speakers and Presentation Topics

Date: Monday June 15 | 8:00 am – 10:00 am

SESSION I: Introducing the Online Series/Launch of the Online Series

Speaker: Clyde Graham

Title: Welcome and Introduction to 4Rs

- Introduce the online series
- Brief intro to 4Rs
- Acknowledge the sponsors and partners

Speaker: Leonardus VERGUTZ

Title: Mohammed VI Polytechnic University efforts towards the 4R solution

- presentation of UM6P
- current projects currently being developed at UM6P related to 4R
- UM6P efforts that would support the 4R practices in sub-Sahara Africa

Speaker: Dr. Mario Tenuta

Title: Introducing the Canadian Senior Industrial Research Chair in 4R Nutrient Stewardship

- Purpose and objectives
- Projects and progression
- Timeline
- Significance and anticipated benefit

SESSION 2: Introducing 4R Nutrient Stewardship Project (4R Solution)

Speaker: Benoit Andre

Title: Overview of 4R Solution Project

Content:

Speaker: Clyde Graham

Title: Relevance of 4Rs in Africa

- Why 4Rs important in African smallholder farming
- What the project aims to achieve through this project in Africa

Speaker: Dr. Tom Bruulsema

Title: The scientific foundation for relating 4R practices to outcomes

- principles of soil fertility and plant nutrition for source, rate, time and place
- principles of stakeholder engagement in setting sustainability goals
- applicability across all scales of farming

SESSION 3: 4R Solution: Looking forward from Year 1

Speaker: Frewengel Wolde-Michael

Title: 4R Solution Operational Update

- modalities, partnership, progress updates and moving forward

Speaker: Shamie Zingore

Title: 4R Solution for smallholder farming systems in Ethiopia and Ghana: implementation process and progress review.

- The context, challenges and opportunities for improving soil fertility management and crop productivity in Ethiopia and Ghana
- Technical framework for the development and dissemination of 4R recommendations
- Year 1 project progress, lessons and highlights
- Major activities for Year 2

Session 4: Closing Remarks