

# European Union / IFAD-funded project on south-south collaboration for rice mechanization in Africa

Marco C.S. Wopereis

*On behalf of AfricaRice, FARA, IRRI*

# Project objective

Promote agricultural mechanization in production, processing, storage and marketing innovations in rice-based systems by establishing a platform for decentralized South-South collaboration in the context of CARD

# Project components, outputs, achievements (1/6)

Activity	Outputs	Achievement
<p>Launching workshop at AfricaRice (AfricaRice, NARS partners, FARA, IRRI)</p>	<p>Needs assessments for agricultural mechanization and available technology in Africa matched and identification of 'technology gaps' to be sourced in Latin America and Asia</p>	<p>In-country experts are currently finalizing a rice mechanization needs assessment, with funds provided from the Emergency Rice Initiative funded by the Government of Japan. So far, Benin, Burkina Faso, the Democratic Republic of Congo, Madagascar, Mali and Niger have submitted full reports.</p>

# Project components, outputs, achievements (2/6)

Activity	Outputs	Achievement
<p>Identification of national and regional agricultural mechanization 'champions' in sub-Saharan Africa from the public and private sectors (AfricaRice, FARA, IRRI)</p>	<p>A functional platform and implementation framework for agricultural mechanization for rice-based systems in sub-Saharan Africa is established in the form of an 'Africa-wide Rice Mechanization Task Force' convened by AfricaRice.</p>	<p>Africa-wide Rice Mechanization Task Force established and functional - 28 members (private and public sectors), in 19 countries.</p> <p>Focal points in each country identified.</p> <p>Workplan developed and implemented.</p> <p>Trained 14 artisanal fabricators of agricultural equipment on use and maintenance of power tillers and accessories, and motorized reapers.</p>

# Countries involved in the Africa-wide Rice Mechanization Task Force

- **NARS (19 institutions)**

Benin (INRAB/PTAA), Burkina Faso (INERA/IRSAT), Cameroun (IRAD), Côte d'Ivoire (ANADER/CFMAG), DR Congo (INERA), Ethiopia (EIAR/ARARI), The Gambia (NARI), Ghana (CSIR/MOFA-AESD), Guinea Bissau (INPA), Madagascar (FOFIFA), Mali (IER), Niger (INRAN/IPDR), Nigeria (NCRI), Rwanda (RAB), Senegal, (SAED/CRA), Sierra Leone (SLARI), Tanzania (DRD), Uganda (NARO).

- **Private sector (5 fabricators)**

Ghana (GRATIS-FOUNDATION), Senegal (AGRITECH), Côte d'Ivoire (AFCF), Nigeria (HANIGHA), Mauritania (MSA).

# Activities of the Africa-wide Mechanization Task Force

Activity 1  
Needs' assessment & survey  
(expert & field level)

Activity 4 & 5  
Inventory development &  
enhancing global partnership (e.g.  
visit to Latin America & Asia)

**Matching**

Information on hubs from various  
task forces

Activity 2  
Introduction and testing of new  
agricultural equipment (on-  
station & on-farm) in  
collaboration with  
agronomists/post-harvest  
specialists



**Local  
development  
possible**



Activity 3  
Construction of local prototype &  
testing (on-station & on-farm)

**Local development  
not possible**

Introducing to farmers as one of  
good agricultural practices by  
agronomists/post-harvest  
specialists



# Project components, outputs and achievements (3/6)

Activity	Outputs	Achievement
<p>Organization of exchange visits by African agricultural mechanization experts from public and private sectors to Latin America and Asia (AfricaRice, IRRI)</p>	<p>Exchange visits help match needs assessments in sub-Saharan Africa with available technology in Asia and Latin America</p>	<p><b>Visit to Brazil: 8-15 March, 2014; Coordinated by EMBRAPA and AfricaRice.</b></p> <p>15 rice mechanization experts and equipment fabricators from AfricaRice, Uganda, Mozambique, Madagascar, Senegal, Mali, Mauritania, Nigeria and Ghana, IRRI, AfricaRice and FARA.</p> <p>Visited: EMBRAPA, CDA rice industry, Two-river farm, Rice industry in Cooperlago and 10 Agricultural equipment manufacturing companies in Brazil.</p> <p>-&gt; African stakeholders initiated linkages and partnerships for the exchange of knowledge, technologies and business on small machineries for the smallholder rice production systems in Africa.</p>

# Visit of African mechanization experts to Brazil, March 2014



RANDRIANAIVO Romule Joseph



AfricaRice



Global Rice  
Science  
Partnership



# Project components, outputs and achievements (4/6)

Activity	Outputs	Achievement
<p>Organization of exchange visits by African agricultural mechanization experts from public and private sector to Latin America and Asia (AfricaRice, IRRI)</p>	<p>Exchange visits help match needs assessments in sub-Saharan Africa with available technology in Asia and Latin America</p>	<p><b>Visit to Thailand: 14-23 July, 2014. Coordinated by IRRI and AfricaRice.</b></p> <p>16 mechanization experts from 11 African countries (Benin, Burkina Faso, Ethiopia, Ghana, Niger, Nigeria, Rwanda, Sierra Leone, The Gambia, Senegal, and Tanzania), FARA, IRRI, and AfricaRice visited rice value chain actors in Thailand.</p> <p>The visitors interacted with 12 organizations, including research centers, seed companies, agricultural equipment manufacturers, rice processors, and rice exporters.</p> <p>-&gt; African stakeholders initiated linkages and partnerships for the exchange of knowledge, technologies and business on small machineries for the smallholder rice production systems in Africa.</p>

# Visit to Kubota Thailand



AfricaRice



# Project components, outputs, achievements (5/6)

Activity	Outputs	Achievement
<p>Facilitation of inter-continental public-private sector partnerships on agricultural mechanization – using rice as an entry point under the GFAR umbrella (FARA)</p>	<p>A functional ‘open’ inter-continental public-private sector partnership on agricultural mechanization is established and accessible on the FARA website – linked for rice-</p>	<p>FARA’s consultant established the CARD mechanization platform and facilitated online consultation on the platform.            Online consultation commenced on 5 February, 2014 and is still ongoing. It has facilitated intensive interaction between mechanization stakeholders across the world and continues after the project ended.            The D-Group (researchers, extension, farmers, equipment fabricators, equipment dealers, development practitioners interested in small machineries, relevant NGOs and the private sector) is functioning as a community of practice for agricultural mechanization and currently has 100 members.</p>

# Project components, outputs, achievements (6/6)

Activity	Outputs	Achievement
<p>Facilitation of inter-continental public-private sector partnerships on agricultural mechanization – using rice as an entry point under the GFAR umbrella (FARA)</p>	<p>A functional ‘open’ inter-continental public-private sector partnership on agricultural mechanization is established and accessible on the FARA website – linked for rice-</p>	<p>Membership of the platform is open.</p> <p>The online consultation involves more than 150 agricultural research and development stakeholders from 18 countries.</p> <p>Three reports produced by consultant.</p> <p>Interaction among the D-Group of stakeholders is continuing.</p> <p>FARA is maintaining the platform beyond the life of the project and will use it as a model for other crops.</p>

# Conclusions

1. An Africa-wide Rice Mechanization Task Force was established as a platform for mechanization
2. Rice mechanization experts from Africa visited Brazil and Thailand and developed collaboration with rice stakeholders in those countries
3. An on-line platform was established and is being used for interaction between rice mechanization experts across Africa and beyond
4. Project completion workshop held on 21-23 January, 2015 - 32 participants (13 African countries, Canada FARA, and AfricaRice)

# Follow-up actions

1. Sustain the online platform for interaction between rice mechanization stakeholders
2. Secure funding for continued activities of the Africa-wide Rice Mechanization Task Force
3. Stimulate interaction/collaboration between African rice mechanization experts and their new contacts in Asia and Latin America