

Agroecological TRANSITIONS Programme



Report – Transitions Webinar

Improving rice sustainability through digital tools

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General information about the webinar

Time: November 9th 2022 at 9:00 – 11:00, Hanoi

Platform: Zoom

Participation: The webinar was attended by 34 participants in total and included simultaneous translation for Vietnamese and English. Participants consisted of:

- Representative of the Department of Crop Production, Ministry of Agriculture and Rural Development
- Representatives of Can Tho Sub Department of Crop Production and Plant Protection
- International organisations and universities: IFC, SNV, GrowAsia, Harvard
- Private sector: Olam International, Bayer Group, WeatherPlus, Agrig8, Agritask, the Pan Group, Seaspray Labs, ST Group, PetroVietnam Ca Mau Fertilizer, etc.).

Background and objectives

To provide a platform for dialogue among the stakeholders on the challenges of reaching Vietnamese smallholder farmers with digital tools, the International Rice Research Institute (IRRI) organized a webinar titled ‘Improving Rice Sustainability through Digital Tools’. Part of the Agro-ecological transformation for inclusive and sustainable agriculture and food systems (TRANSITIONS) project, funded by the European Union through its DeSIRA initiative and managed by the International Fund for Agricultural Development (IFAD), the webinar identified the opportunities for improving access and use of digital tools and tailoring the services to meet the needs of farmers through inclusive co-production of digital tools.

In his opening remarks, Mr. Le Thanh Tung, Deputy Director General of Department of Crop Production-Ministry of Agriculture and Rural Development, emphasized that digital tools present huge opportunities for transformation to sustainable, low-emission rice production systems in Vietnam. From the Government’s perspective, the envisioned digital transformation of the Vietnamese rice sector should

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be achieved through the widespread participation of farmers and support of international organizations. Therefore, the webinar was well aligned with this priority of the agriculture sector.

The webinar focused on technical advisory services and performance assessment tools that could contribute to improving knowledge and practices of farmers and can reach the "last mile" including marginalized farmers. Specific objectives are to:

- Define the challenges of reaching small-scale rice farmers with digital tools
- Discuss opportunities for improving access and use of digital tools, and tailoring the services to meet the needs of farmers through inclusive co-production of digital tools
- Gather lessons learnt from various stakeholders to develop a best practice guidance for digital tool development with rice farmers

Introduction to user-centric design and co-creation of digital tools to involve farmers in digital tool development

Ms. Anne Konertz, Founder of SeaSpray Labs started the webinar with information on how to make digital tools more successful. Ms. Konertz elaborated on the three basic steps in user-centered design — learn, prototype, and test, and elaborated the activities and expected outcomes of each step. A case study was given to demonstrate how the steps took place and what was achieved after each step. Ms. Konertz stressed that these steps are quick processes that help the developer learn and fail early to avoid costly mistakes later.

This was followed by a presentation by Ms. Sessie Burns, Digital Tools consultant for the Alliance of Bioversity International and CIAT. Ms. Burns added methods to involve farmers in the process that Ms. Konertz outlined, starting with problem definition, followed by user testing and design updates. User testing helps in determining the usability of the digital tool and in updating the design and processes. She stressed that farmers' participation in the development and modification of the process is as important as the tool itself.

Lessons learned from adapting and piloting a rice digital tool in

Vietnam - working with buyers

Several speakers provided country- and sector-specific experiences to contextualize the use of digital tools in sustainable agriculture. Ms. Marta Bogdanic, Senior Operations Officer for MAS Agri Advisory of the International Finance Corporation, talked about their Ag Tech project in Vietnam. She shared several lessons from their project implementation as follows.

- Engage farmers via an interested buyer or supply chain integrator
- Appropriate selection of farmers
- Solid preparation for the first training
- Engage aggregator's field team as back up team for the app use
- Provide follow up refresher visits to farmers

She highlighted the importance of engaging farmers via an interested buyer or supply chain integrator as it would strongly influence farmers' sustained use of digital tools.

Farmer and Extension agent perspectives on digital tool use

Mr. Le Nhut Tao of the Sub-department of Crop Production and Plant Protection of Can Tho City shared the experience from a field survey with farmers and extension staff. Among other observations, the close relationship between farmers and extension agents was stressed. Farmers trust technical advisory from the agents in terms of both accessibility and quality. Digital tools were used to facilitate communication between these two groups, but face-to-face meetings and field visits were pivotal. It was recommended that digital tools should complement face-to-face interaction with extension workers because most farmers still prefer personal meetings, as they can observe the field situation and build a better relationship.

Interestingly, stories of two typical farmers from the surveyed were shared to highlight how different factors (i.e., age, education level, income level, and whether or not a farmer was part of a cooperative or

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had farming contract with a rice buyer) influenced the extent to which they used digital tools. These are important factors for digital tool developers to ensure usability and inclusion of marginalised groups.

Experiences of need-based digital tools in rice in Vietnam from private sector

Ms. Tran Phuong Hi, Sustainability Lead Vietnam of Olam Global Agri, shared in her presentation that in developing digital tools it is necessary to pay attention to the education level and age of the farmers. She also highlighted that with digital tools, farmers can review information at their own time and pace.

Dr. Nguyen Ngoc Quang, CSO of Weatherplus, reported on their experience in developing MobiAgri app, which provides farmers with information on weather forecast and pest and diseases, among others. He shared that an intensive survey on the needs of farmers in the production process was conducted to ensure the app was suitable to the users. The MobiAgri app is linked with a mobile service provider to offer their rural farming target users a mobile package that includes technical farming advice. This type of linkage enables scaling to a large number of users while also ensuring a sustainable business plan as farmers are already purchasing mobile data packages and this particular offering is tailored for their needs and adds value to an existing expense.

Open discussion

The presentations stimulated interest of the audience. Questions were raised during the Discussion session surrounding farmer inclusion, data privacy, user authorisation and information verification. The audience was particularly interested in different methods to engage the marginalised farmers in tool using, for example, the senior farmers who were not familiar with smart phones and apps.

Data access and extraction for users, especially for farmers to access/download their records and view information from other farmers in the neighbourhood was deemed an important benefit to encourage and sustain farmers' use of digital tools.

Summary and wrap-up

Dr. Katherine Nelson summarised the key messages and lessons shared in the webinar and thanked the participants for their active participation and welcomed further discussions about digital tool development and inclusion of farmers and other groups of end-users.

Link to the webinar recordings: https://zoom.us/rec/play/h-vi0UUKrO2zfvnim85mF2QEDgcdRcK5lykrQemJNh4142TNv-IPYJgU3GeyGvwPNhg3mUuYxZ4C3JGR.eCtQshB0omEe3FNe?continueMode=true&_xzm_rtaid=wD5KCjyYQum26o2bCaPB9A.1670567067567.6b55edafcf3646cd8bc137591302844a&_xzm_rhtaid=524

Appendix – Webinar agenda



CGIAR IRRI IFAD Investing in rural people Bioversity International Alliance CIAT European Commission

WEBINAR:

Improving **rice sustainability**
through the use of **digital tools**

9 November 2022, 09:00-11:00 AM
via Zoom

Improving rice sustainability through digital tools

Webinar: Improving rice sustainability through the use of digital tools

9 November 2022, 9:00-11:00 AM
Via Zoom

PROPOSED PROGRAMME

Time	Activity	Speaker
8:40-9:00	Speakers join for tech check. Registration of participants	
9:00-9:05	Welcome and webinar introduction	Jennifer Barnard, <i>Sustainable Finance Expert, IRRI</i>
9:05-9:10	Opening remarks – Digital Transformation in Agriculture	Mr. Le Thanh Tung, <i>DDG, Department of Crop Production, MARD</i>
9:10-9:20	Introduction to user-centric design and co-creation of digital tools	Anne Konertz, <i>Founder, SeaSpray Labs</i>
9:20-9:30	Involving farmers in digital tool development	Sessie Burns, <i>Digital Tools Specialist</i>
9:30-9:40	Lessons learned from adapting and piloting a rice digital tool in Vietnam - working with buyers	Marta Bogdanic, <i>Senior Operations Officer, MAS Agri Advisory, IFC</i>
9:40-9:50	Farmer perspectives on digital tool use	Le Nhut Tao, <i>Sub-department of Crop Production and Plant Protection</i>
9:50-10:00	Experiences of digital tools in rice in Vietnam	Tran Phuong Hi, <i>Sustainability Lead Vietnam, Olam Global Agri</i>
10:00-10:10	Working with farmers to develop a digital tool based on needs.	Nguyen Ngoc Quang, <i>CSO, Weatherplus Weatherplus</i>
10:10-10:45	Q&A and Discussion	Facilitated by Trang Vu, <i>Associate Scientist, IRRI</i>
10:45-11:00	Closing remarks	Katherine Nelson, PhD, <i>Senior Scientist, IRRI</i>

Improving **rice sustainability**
through the use of **digital tools**

Agroecological TRANSITIONS Programme

The Program on Agroecological Transitions for Building Resilient, Inclusive, Agricultural and Food Systems (TRANSITIONS) aims to enable climate-informed agroecological transitions by farmers in low- and middle-income countries through the development and adoption of holistic metrics for food and agricultural systems performance, inclusive digital tools, and transparent private sector engagement. The *Inclusive Digital Tools to Enable Climate-informed Agroecological Transitions* (ATDT) aims to scale agroecological practices by enabling smallholder farmers to participate in co-design of digital tools and farming practices. Learn more about ATDT [here](#).



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