Delivering Agricultural Advisory Services in Post COVID-19 Era: Experiences of SAA-Mali

Introduction

COVID-19 was first seen in Mali towards the end of March 2020. It was found in travelers from Europe at President Modibo Keita Senou airport in Bamako. Some of them tested positive while in confinement. It was then that the pandemic was seen in Kayes, the first administrative region of Mali, sharing border with Senegal and cradle of emigration. In April, the disease reached such a point that the Malian Government made the decision to close land and air borders, limit movement within the country, and enforce barrier measures such as social distancing, wearing a face mask, washing hands with soap, disinfecting hands and homes, coughing in the elbow, etc.

At the same time, Sasakawa Africa Association (SAA) instructed its country offices in Mali, Nigeria, Ethiopia and Uganda to respect government measures and limit the presence of their staff in the office and in the field. The staff were encouraged to work from home. Compliance with these measures both inside and outside the country has slowed down or even stopped activities for this organization.

However, extension and advisory services provision requires a continuous interaction between extension agents. Therefore SAA management commissioned a study of the impact of Covid19 which was carried out in the four SAA partner countries. In Mali, the study highlighted impacts at several levels of the value chains, including access of actors to agricultural extension services, limited access to inputs and agricultural technologies and equipment.

Components and Flow of Agricultural Extension and Advisory Services

Sasakawa Africa Association considers agricultural extension as a continuous process which begins with a survey to identify technology and skill gaps and assess farmers’ needs for knowledge, information, organization, governance, financing, market, weather forecast, prices,
etc. *(Fig. 1)*. Once farmers’ needs are identified, packages of solution can be designed and implemented with farmers using a selected delivery channel that would facilitate adoption of the solutions to improve productivity, income and livelihoods in the targeted community.

![Diagram showing the components and their flow in agricultural extension and advisory services.](image)

**Figure 1. Components and their flow in agricultural extension and advisory services**

In the agricultural extension continuum there are multiple stakeholders who intervene to design models of delivery of solution packages to farmers, test those models to establish their effectiveness in terms of adoption rates and attainment of the ultimate goal of agricultural extension and advisory services (increase of productivity, income in overall livelihoods). These stakeholders include research institutions and universities who are technology designers, extension agents, students, farmers and multiple actors of the private sector (Figure 2). Feedback is also collected from the field and shared with all the stakeholders including research institutions and universities. Frequent and direct interactions between all the stakeholders is necessary for a smooth and successful functioning of the extension and advisory system continuum. Unfortunately, the outbreak of the COVID 19 pandemic has disrupted this continuum and broken apart all the components and actors of the continuum (Figure 2) making it necessary to design and mount mitigation measures.
Sasakawa Africa Strategic response to the outbreak of the Covid19 Pandemic

- Covid 19 impact assessment survey
The disruption of the agricultural extension and advisory services continuum observed by SAA led the organization to react and develop and implement its response strategy. First of all, a survey was conducted in mid-April 2020 to assess the impact of the pandemic on all actors of the agricultural value-chains. The survey had the following objectives: a) To assess the impact of COVID-19 on the food systems (Real constraints); b) To establish how the COVID-19 pandemic situation and mitigation measures put by the country are affecting the food systems (Real constraints); and c) Recommend/Suggest concrete mitigation measures and practical solutions that SAA can deliver on.

All partners of SAA were interviewed using specific key informant interview questionnaires. They included: agents of the Ministry of Agriculture, extension agents, farmers, processors, service providers, agro dealers, output traders, agents of financing institutions, lecturers and students of universities and agricultural colleges. The survey covered the whole territory of Mali and reached 105 respondents among which 14% were women. Among people reached at the training institutions partners of SAA, 78% were students and 22% lecturers. According to the results of this survey, 81% of farmers reported lack of access to extension agents and the trainings they provide. Ninety percent of farmers reported labor scarcity whereas 52% reported disrupted access to postharvest and agro processing activities. Eighty two percent of input dealers reported irregular operation of input shops and sales reduction whereas 67% of the staff of financing institutions reported a reduction in loan repayment and rural credit flow. As a result, 81% of farmers foresee a decrease in crop productivity and increase in food and nutrition.
insecurity if nothing is done to mitigate the impact of the pandemic. Face to face trainings at universities and laboratory practices were completely stopped due to the closing of all schools and universities in the country.

**SAA Covid19 impact mitigation strategy and preliminary achievements**

- **The strategy**
  Since agricultural extension and advisory services provision requires extensive formal and informal training, the survey therefore recommended the digitalization of the process. SAA management headquartered in Tokyo (Japan) reacted positively and rapidly to the proposed solutions and supported all its country programs to implement short term (July-September) pilot projects in E-extension to rural communities and extension agents; and E-learning at the partner universities.

  In the specific case of SAA-Mali, the pilot projects are meant to test the hypothesis that informal training and formal training in agricultural extension can still continue in spite of the pandemic through adequate use of E-extension and E-learning, respectively.

- **Activities implemented and preliminary achievements**
  On the 10th of August 2020, SAA-Mali gathered key people in Bamako the capital city of Mali at Hotel Azalai Salam for a one day workshop. There were 83 participants among which were 70 representatives of the government extension and advisory services, extension agents of SAA, and smallholder farmers. During this workshop, 70 persons were provided with smart phones or tablets and airtimes and an orientation session on how to properly use these ICT tools, internet and social networks. The beneficiaries were identified using selection criteria which included the willingness to share the learning materials with other extension agents and farmers and report back to SAA. This event was placed under the chairmanship of the Ministry of Agriculture represented by its Permanent Secretary.

  SAA-Mali staff were also trained on the proper development of training modules and a template was developed which the staff used to develop six informal training modules on good practices of seed field inspection, improved post-harvest handling, and farmer business management. Each module was recorded on video and audio media in French and in Bambara, and posted in an online platform (You Tube). They were also recorded on the smart phones and tablets before handling them to the beneficiaries. Contracts are currently being signed with rural radios across SAA intervention areas to broadcast the audio materials in French and in the local language Bambara. Regarding the formal training, University of Ségou which hosts a program of SAA for...
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training of extension professionals was chosen as a pilot site for SAA’s E-learning pilot project. This university was provided with the required ICT tools and an online platform was established for this university. Lecturers were trained on the use of the platform to provide virtual lectures and consultations to students. Owing to the relevance of this initiative by SAA, the country director of Mali office was invited to a live TV debate on August 16, 2020 by the Actu hebdo program of the nationwide television ORTM-1. A recording of this debate can be accessed through this Link. The National Directorate of Agriculture (DNA) of Mali which is a government agency in charge of agricultural extension in the country has greatly appreciated the initiative of SAA to digitalize extension in this country. According to its Director Mr Oumar Tamboura, this is highly relevant to the response strategy of the Government of Mali to the COVID 19 pandemic. Soon after the August 10 workshop, a letter was issued to SAA-Mali to thank it for its support to the initiatives of the Government.

For all the pilot projects of SAA-Mali, a strong and rigorous output and outcome monitoring is currently being implemented to collect data to adequately inform SAA and guide its future decisions related to the digitalization of agricultural extension and advisory services in Mali.

Conclusion
In spite of the existence of ICT tools, SAA has been doing extension work by the traditional way. COVID 19 has given us opportunity to use the ICT tools to explore new ways of doing agricultural extension and advisory service provision. Likewise, the University of Ségou was not well versed in the use of E-learning and SAA has provided opportunity for distance learning at this university which we believe will open the university to new avenues. SAA Mali expects to harvest significant achievements through the pilot projects in both formal and informal trainings and hope that other actors in agriculture will join their future initiatives to upscale the projects throughout Mali and beyond.

This is our twenty third issue in a series of articles we are releasing as part of our RUFORUM Thought Pieces on the Corona Pandemic. This Thought piece is part of the discussion points raised by Dr. Dagnoko during the 9th RUFORUM Webinar on “Delivering Agricultural Advisory Services in the COVID-19 era.” You can get more information about RUFORUM at www.ruforum.org. You may also share your thought piece about the Pandemic with us by writing to e.adipala@ruforum.org and copying m.agena@ruforum.org.
About the Author

Dr. Dagnoko is the Country Director of the Sasakawa Africa Association office in Mali and also serves RUFORUM as a member of its Technical Committee. Her areas of expertise include among others, Biometry, experimental design and statistical analysis of complex data sets, Plant breeding and seed systems, conventional and molecular breeding, biotechnology, Agricultural extension and advisory services, Monitoring & Evaluation of value-chain projects, Gender and participatory approaches. She holds a Master of Science in Animal Science with major in Nutrition from Laval University, Quebec (Canada) and a PhD in Plant Breeding and Genetics with minor in International Agriculture from Cornell University, Ithaca (New York).