Extension and advisory services: at the frontline of the response to COVID-19 to ensure food security

INTRODUCTION
The global impact of the COVID-19 pandemic is expanding daily. Governments around the globe are confronted with multiple challenges related to minimizing the devastating health impact and protecting human lives, and ensuring sufficient food supplies and the functioning of services to those most in need. All this while coping with the economic consequences of COVID-19, which is expected to push an additional 548 million people below the poverty line. Between present disruptions and future threats to the food supply chain, the COVID-19 outbreak has generated extreme vulnerability in the agriculture sector. It is, therefore, crucial to mobilize all available instruments, institutions and stakeholders from both public and private sectors and civil society to ensure appropriate and timely response.

Agricultural extension and advisory services (EAS) systems play an indispensable role at the frontline of the response to the pandemic in rural areas. However, to adapt to the emergency context within the government regulations, EAS providers need to rapidly change their way of operating.

KEY MESSAGES

• EAS can make critical contributions to minimizing the impact of COVID-19 in the following main action areas:
  - **Raising awareness about COVID-19 in rural areas**: this will help reduce the spread of the pandemic while ensuring that adequate support is given to rural producers in terms of both production and compliance with new rules in force.
  - **Assessing the field situation and advocating for urgent solutions to farmers’ needs**: as trusted partners of producers and rural communities, EAS are uniquely positioned to assess the field situation, provide tailored services, and keep governments informed, thus allowing rapid and adequate decision-making for ensuring health and food supply.
  - **Ensuring continuous support to rural producers in a situation of physical distancing**: EAS assistance is even more critical than before in supporting rural producers, men and women, elderly and youth, to overcome the new and unfamiliar challenges. EAS can provide trusted sources and contact details to ensuring easy access to inputs, seeds, transport and finances that are critical to ensure guarantee food production during COVID-19 in the field. To that end, the EAS providers are increasingly being challenged to innovate to cope with physical distancing, in particular when using remote communication and digital extension, or when playing an information and brokerage role in a specifically rural COVID-19 reality.
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- **Building partnerships to overcome market disruptions and ensure supply chain functioning:** Recognizing that many EAS actors operate at the agricultural production level of the value chain, COVID-19 imperatives can push them to take action in addressing the critical problems of the farmers, in partnership with other stakeholders in the agricultural innovation system. The promotion of short value chains and homegrown production – both in urban and rural areas and virtual matching food and labour demand and supply – facilitating farmers’ access to storage facilities – while encouraging e-commerce where applicable, is among the most frequent EAS actions.

- **Help address emerging social issues,** including by facilitating linkages with social protection services, developing social safety nets, applying insurance schemes, assisting in identifying and advising on alternative income generation opportunities, and resolving local conflicts.

  - Many EAS systems need to rapidly “innovate from within” to ensure an effective and efficient response to COVID-19. Such innovations include strengthening the coordination and governance of the pluralistic EAS system made up of public and private actors, producer organizations, farmer groups and networks; advances in digital extension, while using all available and accessible information channels; and facilitating and entering into partnerships with many (often non-traditional) actors in the agricultural innovation system.
  
  - Food and Agriculture Organization of the United Nations (FAO) is playing an important role in providing policy recommendations, guidelines and tools to improve EAS systems, in order to build resilience to crises and disasters. FAO currently implements numerous technical assistance projects with components on strengthening EAS in more than 30 countries in Africa, Latin America, Asia, Near East, and Eastern Europe and Central Asia, which have been already adapted to address COVID-19 challenges.

### Changing demands and the role of agricultural extension and advisory services during COVID-19 pandemic

The world is struggling to fight the COVID-19 pandemic, and the rural population – especially in developing countries – may face a dual burden: lack of information and health services coupled with poverty will expose them to health risks as well as the disastrous socio-economic consequences of the crisis. Meanwhile, they need to continue working in agriculture to ensure not only their livelihoods but also national and global food supply and, in turn, food security.

The impact of COVID-19 is not uniform across the globe and all agricultural commodities. Different strategies and measures need to be taken to ensure food security and address bottlenecks along the food supply chains. While the disruption in food supply chains mostly concerns logistics, labour, transportation and marketing of perishable and fresh products due to restricted mobility and lockdowns, the COVID-19 outbreak leaves the agriculture sector in an extremely difficult situation that puts food supply at serious risk for 2020 and beyond.

The challenges faced by the food and agriculture sector include: access to agricultural inputs, marketing, the availability of the labour force at critical times of agricultural production and harvesting, and agricultural extension and other necessary services. Those who are hardest hit by the COVID-19 outbreak are the poorest, most vulnerable populations as well as smallholder producers whose household incomes and food security are at risk. Rural communities and producers are not always well informed and supported; there is increasing demand to ensure that they have access to basic services and accurate information during this unprecedented crisis.
The network of EAS actors including public, nongovernmental organizations (NGOs) private sector, producer organizations (POs), farmer groups, etc., has proven very instrumental for national and local governments as well as for rural communities – during and after the pandemic – in bridging information from and to the field. These actors can play an effective and efficient role in raising awareness of COVID-19 in rural areas to reduce the spread of the pandemic, while ensuring that rural producers have relevant and accurate information and services to support their agricultural production, both during and post-crisis. Their actions must adhere closely to the regulations and guidelines of the respective governments. As long-term trusted and close partners of producers and rural communities, EAS actors are in a unique position to assess the situation in the field, provide tailored services, and inform governments, who need to take rapid and adequate measures in ensuring health, food supplies and security in the short and long term.

Recommendations for immediate response during the COVID-19 pandemic

In this difficult time, the role of EAS is even more critical than before in bridging the realities of local communities with the government actions, and helping rural producers to overcome new difficulties for which they cannot find solutions on their own, ranging from continuing to work to protect their health, producing food and maintaining their earnings despite the disrupted supply chains. EAS providers also need to rapidly adapt to the emerging situation and change their approach to respond to the emergency context within the government regulations.

Adaptation of EAS delivery mechanisms:

- Coordinate actions among EAS actors including public, private, NGOs, POs etc. Crises such as COVID-19 require timely provision of a wide range of services, and the concentrated action of different types of EAS is key.
- Go digital: digital tools and technologies enable information flow in spite of physical distancing and mobility constraints. Explore simple, available and accessible, and easy-to-implement Information and Communication Technologies (ICT) solutions such as short message service (SMS), Interactive Voice Response (IVR), radio and TV, drones, online marketing, e-extension platforms, social media, etc.
- Take advantage of existing formal and informal contacts, mechanisms and local networks, such as cooperatives, producer organizations, community and farmer leaders, self-help and religious groups. These are crucial to ensuring timely and widespread information and advice when measures constraining mobility are in place.
- Provide timely preparation of EAS providers as necessary. Raise awareness and inform frontline providers on most urgent topics such as prevention measures, ICT use, conflict management and effective communication as they deal with the context under high stress.
- Join forces with emergency response actors at national and local level: health authorities, civil protection, early warning, and others in the frontline. Regularly update the government on the situation in the field and challenges facing farmers, and implement the response in partnership with private sectors and other agencies on the ground.

Remember!

Take all necessary measures to protect the health and safety of EAS workers: inform staff on approaches to enable physical distancing and prevention while effectively supporting rural farmers and communities; provide a flash training on the use of personal protection equipment; conduct regular health checks on EAS employees working in the epidemic areas.
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EAS service provisions to reduce COVID-19 impact:

- Carry out a timely assessment of COVID-19 impacts in rural areas and identify the specific challenges and needs of farmers and rural communities to inform governments and enable other agencies to respond.
- Provide locally appropriate advice and services on access to inputs, market information, easily implementable ways of storage and processing, use of labour-saving practices, collective action to facilitate smart transport arrangements and matching of supply and demand, especially for perishable produce, to reduce post-harvest loss. These are key as the COVID-19 pandemic is not business-as-usual: disruptions such as lack of markets and inputs, increased food loss, limited labour, and lack of transportation require locally appropriate and innovative solutions.
- Raise awareness through timely and accurate information about relevant government measures, social protection schemes, credits and other preventive measures such as physical distancing and hygiene, as well as the distribution of masks and sanitary products.
- Facilitate access to locally available agricultural inputs; promote community and household level seed banks and other mechanisms to avoid contacts in groups. This can be achieved in collaboration with local input suppliers, as they are also struggling to keep their distribution lines open with farmers.
- Facilitate matchmaking between labour demand and supply such as providing labour banks and logistical support. Uptake of these new services by EAS actors is key as harvest and other labour-intensive agricultural activities are at risk due to workforce shortages related to constraint mobility of occasional and migrant labourers.
- Facilitate conflict resolution: the crisis puts the population under huge stress while the fear of contagion may disrupt social relationships. EAS workers need to be able to manage intra and inter-community conflicts, as well as have adequate soft skills to communicate with distressed populations.
- Promote local and homegrown food to ensure household food security and facilitate local value chains, informal markets, ICT based food orders and distributions, to overcome disrupted formal food supply chains are needed.

Remember!
The impact of COVID-19 is not uniform across producer groups and geographic areas. Ensuring equal access to information and services by different groups and disadvantaged population including women, youth, pastoralists, fisherfolk, migrants, and indigenous people, and responding to the different needs and circumstances is crucial.

Recommendations for medium- to long-term post-pandemic response

While health emergency and restrictive prevention measures may be relaxed over time, the socio-economic crisis and food insecurity may become even more acute.

Service provision to help increase resilience and rebuild the livelihoods of rural people:

- Facilitate linkages with social protection and insurance schemes, including the promotion of self-help and community-saving groups. Also advise on alternative income-generating
opportunities, as many people may have lost their jobs, income, livelihood assets, or breadwinners.

- Promote locally and homegrown produce including underutilized, neglected and nutritious varieties and species, as well as the establishment of shorter value chains and local markets, to contribute to local food security in times of disrupted markets and unstable prices.
- Strengthen the capacity of youth and women on issues related to farming as a business both technically and functionally/managerially. As a consequence of the pandemic, many young people and women need to be empowered to lead farming as heads of their households.
- Enable access to credit and inputs such as seeds and fertilizers by collaborating with private sector companies, input suppliers, buyers, and contract farming, by offering flexible solutions for producers, such as pre-buying at fixed prices etc.
- Facilitate the rebuilding of social relationships and conflict management, as socio-economic distress continues. Support to organizational processes of producers and grassroot organizations is key to helping communities become cohesive and resilient.

**Strengthening the capacities of EAS to respond to the post-pandemic crisis:**

- Establish EAS response mechanisms to tackle the urgent matters caused by COVID-19 and post-pandemic crisis. It should strengthen the coordination and joint planning of EAS actors at local and national level, and help adapt EAS activities to new crisis-related policies and governmental measures.
- Ensure funding of EAS activities: resources will become more scarce than before and traditional funding sources may be at risk (public funding, donors) as priorities may switch to other sectors like health or formal markets.
- Increase efficient use of available resources and look for alternatives: collaborating with private sector, funding for emergency response and recovery, advocate with the government and donors to show relevance of EAS, etc.
- Strengthen infrastructure, institutional set-ups and individual capacity to make use of digital information and services.

Remember!
Monitor the impact on the various producer groups, keeping in mind that the way they are affected may change over time (due to immediate pandemic-related measures or by a protracted socio-economic crisis). Evaluation of the strategies adopted by EAS is also key. Enable inclusive access to ICT-based services to ensure those less advantaged groups also benefit from innovations and digital developments.

**Examples:**

**Côte d’Ivoire** – The National Rural Development Support Agency (ANADER), the main public EAS provider in Côte d’Ivoire has actively engaged EAS advisors in the field as part of their response strategy to prevent and reduce COVID-19 impact. ANADER’s priority actions include the preservation of staff health (awareness-raising on COVID-19 and equipping staff with protective measures such as masks, hydro-alcoholic gels, etc.); adjustments of the tools and methods used for extension delivery with the focus on the ICTs; the use of the existing e-extension system to inform and interact with producers; the extension of
Existing advice to COVID-19-related topics; consultations between central and teams in the field – increasingly by video-conference or phone calls; and high priority service for market facilitation, coordinating with its networks and post-harvest management activities. ANADER is collaborating closely with health services to provide necessary information and raise awareness among producers on COVID-19 response measures. (http://rescar-aoc.org/)

**India** - In the response to the difficulties in perishable food supply (harvesting and marketing) due to the lockdown, the government of Meghalaya (India) established cloud-based iTeams at the Department of Agriculture and Farmers’ Welfare, which normally provide market-oriented services to farmers. iTeams works with multiple actors on the ground including extension advisors, local leaders, and private businesses, as well as local administrations, to assess produce, connect farmers to the logistic chain through a special hotline, and obtain curfew passes for iTTeam personnel and vehicles. iTTeam is comprised of government officials, domain experts, and market specialists who work remotely from homes through multilingual IRV, social media, WhatsApp and mobile SMS with farmers, suppliers and consumers. (https://www.aesanetwork.org/covid19-fieldnotes1/) Similarly in Odisha, with the help of the Odisha Livelihood Mission, which has contributed vehicles and established temporary vegetable counters, EAS providers help match demand and supply through social media. The villages coordinate lists of the farmers and local private companies support them with curfew passes and vehicles. In Uttar Pradesh, farmers were given help to organize into groups to access inputs supply, while agri-input outlets are providing information about the prevention measures to their clients.

**China** – During the outbreak of COVID-19, over 200 extension agents in Caohu city of Anhui province provided advisory services to farmers via We-chat, mobile phones, telephones, and apps, as well as site visits to ensure the production and marketing of vegetables, through a special supply chain established to provide fresh produce to those in lockdown. In Mianyang city of Sichuan province, remote consultation techniques using ICTs as well as live TV broadcast programs were used to provide advisory services to farmers. In Shandong province, the government collaborated with the private agro-service companies to help farmers to control weeds and pests in their field using drones. (www.natesc.org.cn)

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