Food and Agriculture Organization of the United Nations

FAO COVID-19 Response and Recovery Programme: Asia and the Pacific

The issue

In the fight to contain the COVID-19 pandemic, while at the same time mitigating the adverse impacts of containment measures, decision-makers require timely and quality data to inform their decisions. Data-driven systems help identify impacts on the most vulnerable populations and shape analytical insights that enable effective responses. These include real time daily information on COVID-19 incidence and mortality, current border restrictions, and food price changes; online dashboards and geomaps that make data freely available using open data approaches; and the analyses, including research papers, policy briefs, and newspaper articles, that help explain important socio-economic trends.

Initial assessments, surveys and investigative news articles show disruptions to food supply chains arising from COVID-19 containment measures, as well as increased food insecurity for vulnerable population groups. In order to properly address these issues and mitigate future risks, there is demand for more timely and relevant data, better data access, and analysis of the magnitude of these disruptions to food systems, livelihoods and food security as well as the population subgroups they most affect. In several countries in Asia and the Pacific, COVID-19 impact analyses to date have already highlighted impacts on farm production, food processing, transport and logistics, and final demand. These include bottlenecks for some agricultural inputs; significant price increases and bottlenecks in food transported by airfreight; dumping of perishable products, such as milk, by farmers unable to access markets; and a shift in consumer profiles towards household food consumption as families reduced their consumption of food away from home.

Meeting these data demands becomes a greater challenge in countries that already face data gaps and have limited national capacity, which in some countries has been compounded by the problems of gathering data through the traditional in-person interviews given physical distancing requirements and travel restrictions. Challenges are particularly acute in countries with internal security threats, such as Afghanistan and Papua New Guinea, or in small island states as in the Pacific where travel is costly and challenging.

Providing better data for decision-making rests on three pillars. The first requires better data; the second requires better access to these data; and the third requires using the data for regular and timely analyses that generate evidence that guides decision-making.

1. **Better data** requires filling data gaps, using alternative sources of data, such as earth observation (EO) data and mobile data, and using alternative and cost effective data collection tools and methods, such as crowd-sourced or web-scraped food price data and surveys implemented using and computer assisted interviewing (i.e. web and telephone).

2. **Better access** includes stronger legal frameworks for improved data sharing and easy to use platforms.

Budget

USD 10 million

Time frame

Jan 2021 – Dec 2024

SDGs

Related FAO policy notes on COVID-19

- COVID-19 and the risk to food supply chains: How to respond?
- COVID-19 global economic recession: Avoiding hunger must be at the centre of the economic stimulus
- Mitigating risks to food systems during COVID-19: Reducing food loss and waste
- Simulating rising undernourishment during the COVID-19 pandemic economic downturn

The action

The programme aims to bridge data and information gaps and improve the timeliness of agricultural and food statistics so decision-makers have the information to respond to the ever changing demands of the global environment.

1 Improve timely and quality production of national agricultural statistics using new Big Data sources and digitized data collection tools.

Accelerate the use of EO data to compile statistical indicators

- support national data producing agencies to produce regular geospatial data on crop mappings, crop area and crop yield estimates, and estimation of damage and loss resulting from a disaster;
- build on existing partnerships with other international (United Nation Statistics Division), regional and national organizations (Asian Development Bank, Pacific Community, national space agencies) and with academia (Asian Institute of Technology) to further national capacity produce and use of EO data to produce agricultural statistics;
- integrate geospatial data into data platforms such as the Food and Agriculture Organization of the United Nations (FAO)'s Hand-in-Hand geospatial data platform.

Build national data producers' capacity to digitize data collection tools and processes through technical assistance

- computer assisted telephone interviewing (CATI), computer assisted personal interviewing (CAPI), or computer assisted web interviewing (CAWI);
- use of tablets and handheld devices to capture global positioning system (GPS) coordinates and measure agriculture land area; and use se of web-scraping to identify national and subnational media sources and outlets and develop native language tools;
- capacity development through massive open online courses (MOOC), such as on the use of digital data collection tools.

Develop standard reference survey modules to assess COVID-19 impacts

- this includes food and nutrition security modules that include impacts of supply chain disruptions faced by smallholders, agriculture input suppliers, a transporters and wholesalers; and household surveys include food and nutrition security indicators on consumption, nutrition and dietary diversity;
- capacity development of UN system and national officials to adopt these modules, through development of methodological notes and guidelines, enumerator manuals, and virtual training.

Implement rapid assessment related food security and food supply chains

Regular food security and food supply chain assessments across the region, such as the COVID-19 Food Insecurity Experience Scale rapid assessments.

2 Strengthen data access and dissemination of existing or new agricultural data while respecting privacy laws.

Support countries to strengthen legal frameworks for data sharing and access policies, including open data access

- adoption by countries of open data licenses and sharing of data products in open data formats to improve data access and dissemination;
- development of technical capacity of national data producers to anonymize and publish georeferenced micro data while respecting privacy;
- use by countries of existing national and international geospatial platforms (e.g. the FAO Hand-in-Hand platform) to disseminate multiple types of EO and georeferenced datasets.

Support countries to strengthen value-added data products and enhanced data platforms

Technical assistance to national data producers to improve dissemination of data products using open data formats and online platforms.

[1] The Asian Development Bank (ADB)– FAO 2020 CAPI MOOC courses had over 1 200 learners worldwide and a record 50 percent completion rate at a total cost of under USD 50 000, less than USD 50 per learner and USD 100 per completer

- **Greater collaboration between global, regional Greater collaboration between global, regional and national partners to maintain and update existing data platforms**

  - Coordination of data sharing and dissemination in existing regional and global platforms to enhance international comparative analyses. Existing platforms include the FAO Hand-in-Hand geospatial data platform, FAOSTAT, FAO Innovation Lab, the Association of Southeast Asian Nations (ASEAN) Food Security information Network, and the UN-ESCAP regional statistics platform.

3. **Improve the evidence base for decision-makers through timely analysis of agricultural and food security data**

- **Monitoring and analysis government programmes and policies to counter COVID-19 containment impacts and support FAO country offices/teams, other FAO COVID-19 umbrella streams, and regional associations.** This includes quarterly or annual updates on:

  - Analysis of macroeconomic programmes and policies, and their expenditures, directed to the agri-food sectors, or to rural and vulnerable populations whose livelihoods and food and nutrition security have been most affected by COVID-19 food supply chain disruptions. This includes national policies, as well as regional policies such as the Association of South-East Asian Nations (ASEAN)

- **Monitoring food price changes and food security changes throughout the recovery**

  - monthly reports of food price changes.
  - quarterly food supply chain assessment reports.
  - quarterly programme and policy monitoring reports.
  - quarterly food security and nutrition assessments.

- **Contributions to monitoring the global SDGs.** As part of its role as custodian of 21 indicators of the SDG indicator framework, the FAO Regional Office will maintain the above efforts to ensure that data produced are fit for use in the 2030 Agenda.

Expected results

The programme is expected to strengthen the capacity of national governments in Asia and the Pacific to collect, compile and use timely and relevant food security and food supply chain statistics, integrate agriculture statistics into their national data systems, and expand use of alternative Big Data sources and technologies such as internet-scraped data, crowd-sourced mobile, and EO data.

It will also support the data and insights needed by policymakers to identify the most vulnerable population groups and the critical points of food supply disruptions in order to design effective interventions and reduce the adverse socio-economic impacts of COVID-19 and its containment measures.

1. **National capacities enhanced for the collection and use of agriculture data** based on new sources and digitized data collection tools.

2. **Improved access to timely, relevant and disaggregate data by decision-makers,** including smallholders and agricultural value chain actors.

3. **Better analyses and targeted interventions by decision-makers** to reduce the adverse impacts of COVID-19 containment measures to bolster economic and social recovery and agriculture value chain development.

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Partnerships

FAO relies heavily on partnerships to strengthen national and global data in a way that exploits expertise and comparative advantages across partners, introduce cost efficiencies, and reduce duplication and burden on countries and respondents. FAO collaborates extensively with national governments, the Asian Development Bank, the Pacific Community, the UN Economic and Social Commission for Asia and the Pacific (UNESCAP), the UN Statistical Institute for Asia and the Pacific (UNSIAP), the UN International Children's Education Fund (UNICEF), UN Women, UN Statistics Division (UNSD), the World Bank and the World Food Programme. FAO will continue to build on its existing partnerships with national authorities and regional and international organizations and continue to engage with and expand partnerships in government, bilateral and multilateral agencies, international financial institutions, development banks, the private sector and academia.

Programme links

The programme will tie in with work under the FAO Hand-in-Hand Initiative, the FAO-World Bank 50x2030 Initiative and the UN Global Working Group Big Data Task Team on Earth Observation data.

Regional and country focus

Afghanistan, Bangladesh, Bhutan, Cambodia, India, Indonesia, Lao People's Democratic Republic, Myanmar, Nepal, Pakistan, Papua New Guinea, Timor-Leste, Pacific Small Island Developing States (SIDS).

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