



Survey on G20 Agricultural Resilience and Risk Management Policies under the COVID-19 Pandemic

Summary note prepared by FAO and OECD to the G20 Presidency of Italy

October 2021

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Summary note prepared by FAO and OECD to the G20 Presidency of Italy

Food and Agriculture Organization of the United Nations

Organisation for Economic Co-operation and Development

This summary note was prepared by FAO and the OECD at the request of the G20 Presidency of Italy. It compiles and summarizes 18 responses of filled by 18 G20 countries to the Presidency's questionnaire titled Survey on Resilience and Risk Management. The results of the survey were presented to the G20 at the 2nd Agriculture Deputies meeting in July 2021.

October 2021

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Introduction

The outbreak of the COVID-19 pandemic in early 2020 placed unprecedented challenges upon the global economy. As the pandemic evolved, both public and private actors worked to minimize the disruptions to the food and agricultural sector.

Agricultural resilience and risk management have been priority issues for the Ministry of Agricultural, Food and Forestry Policies of the Republic of Italy (MiPAAF) under its G7 Presidency in 2017, and once again under its G20 Presidency in 2021. In order to share experiences, build knowledge and inform policies, the G20 Presidency, with the technical support of the FAO and OECD, designed a short survey questionnaire to collect information on the agricultural impacts, resilience of the sector, and risk management responses of G20 members to the COVID-19 pandemic. The survey aimed to collect insights on the specific challenges faced by G20 members and guest countries in relation to COVID-19, as well as their respective policy responses, and to conduct an early assessment of policies' effectiveness.

The present summary note sets out the impacts and insights from these policy responses to inform policy-makers and stakeholders. The exercise aims to increase the understanding of how to improve the preparedness and responses of the food and agriculture sector to future disruptions. A total of 18 surveys were received out of 23 questionnaires distributed.

Resilience to the COVID-19 pandemic

Disruptions to food and agriculture value chains due to COVID-19

Domestic demand

The majority of respondents — 12 out of 18^1 — reported a reduction in domestic demand for agricultural products due to the outbreak of the COVID-19 pandemic and the resulting business closures, particularly in the hotel, restaurants and café (HORECA) sector. Overall, most countries saw a reduction in demand for products typically consumed outside of the home (Figure 1^2). Many respondents, including, for instance, Canada, France, Italy, Germany, the Netherlands, Spain and the United Kingdom of Great Britain and Northern Ireland, reported a reduction in demand for *fresh meat and/or fish*. Canada and the European Union, for example, noted reduced demand for *processed potatoes*. The European Union, among others, reported reduced demand for alcoholic beverages (particularly wine). France noted a demand shift to locally produced items. The Netherlands, among others, indicated reduced domestic demand for flowers.

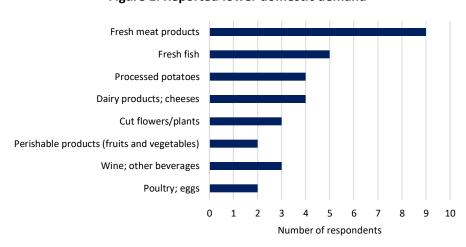


Figure 1. Reported lower domestic demand

Note: A total of six countries reported reduced domestic demand for three or more products.

Foreign market access

About half of the respondents reported reduced access to foreign markets for agricultural products. This reduction is likely related to the effects of the spread of the virus and the measures adopted to contain it had on markets at the outset of the crisis. It was felt mostly for meat

¹ In the remaining part of the report, respondents stand for G20 members and guest countries that replied to the survey, i.e. Australia, Brazil, Canada, the European Union, France, Germany, Italy, Japan, Republic of Korea, Mexico, the Netherlands, Russian Federation, Rwanda, Saudi Arabia, Spain, Turkey, the United Kingdom of Great Britain and Northern Ireland and the United States of America.

² All tables and figures were elaborated by FAO and the OECD based on the 18 responses received.

³ Lists of respondents presented here and in other sections of this note are meant to illustrate the geographic diversity of responses to particular questions. They are not meant to provide an exhaustive list of respondents for each specific question.

products (for example, beef and pork) and fresh fruits and vegetables. Rwanda reported reduced access to foreign markets for coffee. Respondents also reported reduced market access for fresh fish, wine, flowers, poultry, and coffee. The Netherlands indicated reduced market access for flowers.

Other disruptions

The overwhelming majority of respondents indicated that the *closure of HORECA channels* created difficulties for the local food and agricultural sector. It is likely that this triggered a *localized excess supply that required alternative sales channels* that also affected most respondents. Many countries also reported *reduced agricultural labour availability* (examples include Australia, European Union, France, Germany, Japan, Republic of Korea, the Netherlands, Russian Federation, Rwanda, United Kingdom of Great Britain and Northern Ireland and United States of America) and *logistic hurdles along the value chain* (Figure 2). Only Brazil reported that the COVID-19-related effects to the agricultural sector were not significant.

Sudden liquidity shortage along the food value chain Lower incomes in rural areas Others Increased unemployment Changes in the composition of diets/demand Risks related to availability of and access to agricultural inputs Food losses and waste Logistics hurdles along the food value chain Reduced labor availability Localized excess supply requiring alternative sales channels Closure of HORECA channels 10 12 14 16 18 Number of respondents

Figure 2. Reported effects of the outbreak of the COVID-19 pandemic and related movement restrictions on food and agriculture sector in G20 countries

Note: A total of 11 countries reported five or more effects.

Interventions put in place specifically to address the challenges associated with COVID-19

Respondents undertook a wide set of measures to respond to the COVID-19 crisis to limit impacts on the sector, ensure its functioning, and provide relief to farmers and actors along the supply chain. Indeed, the wide range of actions taken is noteworthy. Table 1 provides an overview of responses by category.⁴

⁴ Some of the responses were moved to different categories in order to consistently group measures.

	Table 1. Overview of policy responses
Sub-category	Examples
	Sector-wide and institutional measures
Measures related to the functioning of the	Declaring agriculture an essential sector
agricultural sector	Issuance of guidelines on health and safety measures
	Exempting sectoral workers from movement restrictions
	Implementation of green corridors
	Streamlined administrative measures
	Temporary relaxation of legislation requirements
	Increase in the use of digital technologies
	Establishment of public-private coordination mechanisms
Measures related to the functioning of the government	Increased dialogue between public institutions
	Information and coordination measures
Websites, campaigns, dissemination of	Setting up of websites, virtual meetings, online platforms, digital training
information	Increased dissemination of information (markets monitoring, data, FAQs, newsletters)
	Awareness raising on the non-conformity of food and supplements bearing claims on
	the prevention of COVID-19
Monitoring the agricultural market	Setting up systems for identifying problems, tracking requests and actions
-	Setting up monitoring mechanisms of supply chains, food shortages or food prices
Coordination with the private sector	Increased dialogue among public institutions
·	Increased dialogue between public and private actors
International coordination	Increased coordination with trade partners
Г	Measures relative to trade and product flows
Trade easing measures	Streamlining of regulations
	Increased digitalization of processes
	Issuance of guidelines for border measures
	Lowering of import or export tariffs
	Delaying entry into force of trade legislation
Logistics and transport facilitation measures	Implementation of green corridors
, ,	Declaring truck drivers in the agri-food sector essential workers;
Trade restricting measures	Temporary increase in tariffs
, and the second	Temporary export restrictions (higher duties or quantitative restrictions)
Re-channeling product flows	Seeking export market diversification
	Supported the search for alternative sales channels
	Purchase of fresh produce, dairy, and meat from affected food distributors, to be
	delivered to food banks and non-profit organizations.
Facilitating internal market integration	High-level domestic coordination to determine priorities or ensure agri-food trade flows
	Labour measures
Measures to ensure the health of workers	Introduction of enhanced hygiene and sanitation measures
•	Issuance of guidelines on health and safety
	Actions to increase awareness of health and hygiene measures (taskforces, booklets,
	recommendations, manuals, pamphlets, including in various languages)
	Offering screening; health-care services and vaccination free of cost
	Reviewing transportation and living conditions of seasonal workers
Agricultural labour measures	Awareness raising campaigns and financial incentives to encourage local workers to
g	take up farm work
	Seasonal agricultural workers classified as essential workers
	Increased flexibility of visa arrangements
	Simplification of recruitment procedures
	Financial support to cover costs related to the mandatory quarantine
	Measures to facilitate quarantine compliance
	measures to facilitate quarantine compilative

Тар	le 1. Overview of policy responses (continued)
Sub-category	Examples
	Agriculture and food support measures
General financial support for the sector	Income support (various mechanisms)
	Tailored grants or compensation
	Expansion of social protection programs' activities and coverage
	Tax breaks
	Financial aid to improve health and safety measures and infrastructure (on and off-
	farms)
	Provision of government guarantees for loans
	Facilitated access to credit and liquidity (through enhanced credit programmes,
	concessional loans or legislation facilitating guarantees)
	Access to mediation for credit and business settlements
	Partial unemployment benefits scheme for salaried staff
	Financing for Producer Price Guarantee (FGPP) with resources from rural credit
	Access to solidarity fund for enterprises
Specific product support	Increased procurement of grains to increase national stocks and strategic reserves
	Specific support provided to affected subsectors, including dairy, beef, sheep,
	vegetables (including potatoes), fruits, flowers, wine or tea
Administrative and regulatory flexibility	Anticipated payment of subsidies
	Delays on payments (fiscal and social debts, taxes, rents, water, gas or electricity bills)
	Streamlined regulations and mechanisms for service delivery
	Expansion of the areas eligible for use of concessional loans
	neral support applicable to agriculture and food
Overall economic measures	Waived, reduced or deferred tax payments
	Expenditures reimbursement
	Extension of repayment of rural credit operations
	Creation of special lines of credit at concessional rates
	Financial support to affected employed and self-employed individuals
	Liquidity support, credit programs
	Fixed costs compensation program
	Extension of concessional short-term loans payments
	Deferred interest and/or principal payments on concessional loans
	Increase in the ceiling of concessional short-term loans
	Facilitated access to unemployment benefits
	Delivery of equipment for leasing on preferential terms
	Approval of a credit line to ensure liquidity
	Deferral of tax and social security debts
	Moratoriums on ship rentals
Social safety nets	Social safety nets also applicable to the food and agriculture sector
	Emergency wage subsidies
	Wages compensation (to employers)
	Increase in financial resources dedicated to various forms of social protection
	Income support for the self-employed;
	Eviction protection for commercial tenants
	Funding scheme to encourage youth employment
	Government backed credit guarantees

Table 1. Overview of policy responses (continued)			
Sub-category	Examples		
	Food assistance and consumer support		
Food assistance	Increased resources to food aid, food banks, and meal distribution institutions		
	Enhanced School Feeding Programmes		
	Food delivery services to the vulnerable, isolated, traditional communities, etc.		
	Emergency Food Grants to charitable institutions		
	Student meal subsidies		
	Strengthening of dedicated phone lines for older and vulnerable people to support their access to basic food and groceries		
	Food packages for pregnant women and families with a student		
	Distribution of coupons to encourage demand for the restaurant business		
	E-vouchers		
	Establishment of a priority grocery delivery scheme for the vulnerable		

Note: The categories and subcategories used to classify policy responses in Table 1 were based on those present in OECD. 2020. *Agricultural Policy Monitoring and Evaluation 2020*. Paris. (also available at https://doi.org/10.1787/928181a8-en).

Policy effectiveness for increased resilience in the food and agricultural sector

A number of respondents noted that it was still too early to assess the effectiveness of policies implemented, or that their evaluation was pending. Germany underlined that it was the overall combination of policy measures that ensured the resilience of the sector. Italy noted that policies were effective to support producers in the short-term, and that long-term resilience is more appropriately enhanced through policies implemented prior to COVID-19, such as the promotion of diversification, digitalization and direct and online sale, for instance. The most effective policies identified by respondents can be grouped under five categories (Table 2).

Table 2. Identified n	nost effective policies for increased resilience in the food and agricultural sector
Crosscutting policies	Declaring agriculture an essential sector Supporting agricultural workers and industry actors in the adoption of health and safety measures Active dialogue between government officials and food value chain actors Streamlining procedures Financing digital and physical infrastructures
	Increased use of digital technologies
Trade policies	Maintaining markets and borders open, and the continued movement of people, goods and raw materials Establishment of green corridors Dialogue with trade partners Development of mobility rules for essential workers Trade facilitation by increasing the use of e-certification Refraining from imposing export restrictions
Farmer income support	Income stabilization
policies	Measures to explore alternative sales channels Measures to increase the liquidity Increased access to credit Tax exemption
Supply side	Increased coordination between government officials and food industry actors Development of a system for receiving requests from the agricultural sector Increasing food reserves
Demand side policies	Expansion of safety nets, cash transfers, and social protection programmes

Key factors contributing to resilience to the COVID-19 pandemic

Existing governance and policy structures across the G20 members shaped the resilience of the agriculture and food sector (Figure 3). Two-thirds of respondents highlighted the key role of well-established policy delivery mechanisms, enabling the rapid and effective application of policy measures, including the European Union, France and Australia. In particular, France reported that the European Union Common Agricultural Policy, European crisis measures and market tools made the European agricultural sector highly resilient, contributing to the continuity of food supply and food security. The same number of respondents emphasized the role of dynamic farmer groups or cooperatives, contributing to the rapid response of the sector, including, for instance, Canada, Italy, Mexico, Turkey and the United States of America. Many respondents also reported the importance of well-developed and vertically coordinated food value chains, ensuring the smooth functioning of the sector (including Spain).

Most respondents also emphasized the role of openness to *international trade* in bolstering resilience to shocks. In particular, ten respondents noted that the export orientation of their agricultural sector contributed to its resilience, including Italy, while four respondents noted the same for import orientation, including Saudi Arabia. Australia noted that trade allows weather and other supply shocks to be buffered by the global market, resulting in more stable prices and supply volumes globally, while Germany reported that the balance between local production and international trade is crucial for food security. The fact that the US-Canada border remained open to cross-border transportation of food was seen as key to limiting the impact of COVID-19-related measures on the sector in Canada.

Import orientation Others Decentralization of decision-making roles and responsibilities Diversification of farmers' sources of income Effective extension services Extent of digitalization of supply chains Export orientation Well developed and vertically coordinated food value chains Dynamic farmer groups or cooperatives Well-established policy delivery mechanisms 0 2 6 8 10 12 14 Number of respondents

Figure 3. Characteristics contributing to the resilience of the agri-food sector during the COVID-19 pandemic

Note: More than half of respondents reported more than four of the ten proposed characteristics.

Other factors included the presence of digital supply chains (in Turkey and the United States of America, for instance), effective extension services (in Brazil and Rwanda, among others) or the diversification of farmers' source of income (France). The European Union noted the fact that farmers had already experienced the need to diversify in recent years helped them adapt to this new situation. Existing informal safety nets in rural areas, of which resilience and flexibility had been developed through previous economic crises, helped the sector's response in Mexico.

Resilience to future risks

While the pandemic remains active, early lessons can be drawn from the past year, especially as the most stringent lockdown measures were implemented early in the crisis, during the first half of 2020.

Risk management measures undertaken following the COVID-19 pandemic emergency to improve the sector's resilience to future risks

Following their experience with addressing the COVID-19 crisis, respondents reported taking a number of risk management measures to improve the management of future shocks to the food and agriculture sector (Figure 4).

- Eight respondents reported the setting of market observatories or early warning systems, including the Republic of Korea, Mexico and Turkey. For instance, a pre-COVID-19 pandemic market observatory proved to be useful in the European Union and will be strengthened.
- The same number of respondents reported introducing permanent mechanisms to facilitate communication between governments and key sector stakeholders, including Brazil, France and Turkey. The United Kingdom of Great Britain and Northern Ireland considered the engagement and dialogue between government and industry the most significant element of risk management measures during the COVID-19 crisis.
- Regarding risk management, six respondents introduced (emergency) income stabilization tools, including Italy and Rwanda, five respondents increased ex-post support for farmers and food companies, including Canada and Saudi Arabia, while five respondents, including Australia and Turkey introduced ex-ante risk management measures.
- Four respondents, including Italy and Rwanda implemented more targeted *technical* assistance on risk management.

Japan did not report any specific measure as it was evaluating its response to COVID-19 in order to inform changes in risk management policies.

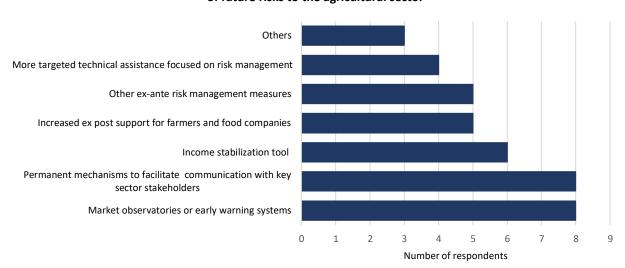


Figure 4. Risk management measures adopted to improve the management of future risks to the agricultural sector

Note: More than half of respondents reported adopting one or two of the proposed measures.

Three types of measures were also reported under the category "Others". The Russian Federation reported the adoption of several new measures, including state support for SMEs in the agroindustrial complex, and changes in legislation regarding the regulation of agricultural cooperatives. Germany is undertaking a research project on adaptation in the design of state food storage and decentralized private food storage within the framework of state food emergency preparedness. The Netherlands reported introducing specific programs aiming at disseminating knowledge on risk management for agricultural entrepreneurs.

Actions potentially strengthening the resilience of the sector to future shocks

Looking forward, respondents ranked possible actions to strengthen resilience of the sector at the global and national levels.

Global actions (Figure 5)

- Half of the respondents, including Australia, Brazil, the Republic of Korea, and the
 United States of America rated the facilitation of international trade in times of crisis as
 the top priority action overall among the five suggested options to strengthen the
 sector's resilience.
- Many countries also rated strengthening the One Heath approach as a high priority action, and as a top priority for France, Germany, the Netherlands and Rwanda, although rankings varied more widely among respondents.
- Global warning systems and digitalization of value chains were ranked as middle priority actions by most respondents.

• The facilitation of movement of agricultural workers was the fifth ranked action, even if some countries considered it more important than others.

Japan did not rank any option but considered that all of these actions are important to strengthen resilience, while France noted the complementarity of the different options in the short, medium and long term.

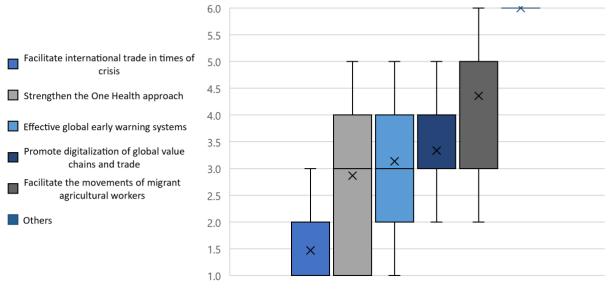


Figure 5. Ranks of potential global actions strengthening resilience

Notes: Categories of response are ordered by average score. "X" indicate average rank, bars indicate the median rank, boxes include the 75 percentile, and minimum and maximum ranks are indicated by half bars.

National level actions

Respondents differed more significantly in their prioritization of national actions to strengthen resilience to potential crises. Four proposed actions led the rankings, including two that were ranked between first and fourth priority actions by all respondents.

- The improvement of supply chain functioning was ranked first by seven respondents, including the United States of America, the European Union, and Italy. This action resonates with previous responses on the disruptions of supply chains and shifts in demand due to lockdown measures.
- Mexico and Brazil rated financing digital and physical infrastructure as their top priority
 while six respondents had it as second priority, including the Republic of Korea and
 Rwanda, with this action exhibiting the highest overall consistency in ranking.
- Australia, France, Spain and the United Kingdom of Great Britain and Northern Ireland ranked the improvement of producer tools to build on-farm resilience as their leading priority, while a number of other respondents ranked it relatively lower. For instance, Canada noted that adjustments in work space for farmers and farm housing for farm workers was as important in allowing for proper safety measures and physical distancing.

- Canada and Saudi Arabia ranked *preventative actions to mitigate the risk of systemic shocks* as their highest priority action, with half of respondents ranking it as third or lower option.
- Respondents ranked *regulatory improvements* as the fourth overall priority, while France ranked the setting up of crisis management tools that can be mobilized quickly in the event of a crisis as another action of interest (ranked as third).

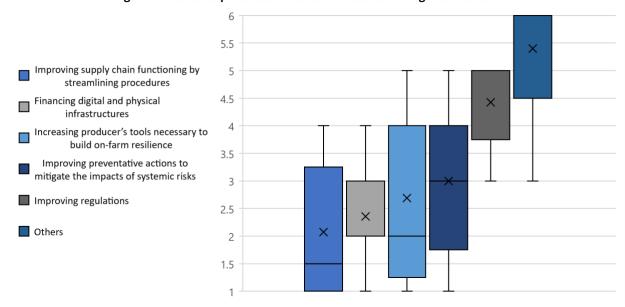


Figure 6. Ranks of potential national actions to strengthen resilience

Notes: Categories of response are ordered by average score. "X" indicate average rank, bars indicate the median rank, boxes include the 75 percentile, and minimum and maximum ranks are indicated by half bars.

International collaboration or cooperation mechanisms to improve agricultural risk management and resilience

Thirteen respondents expressed their intention to undertake international collaboration or cooperative actions to improve agriculture risk management, with half of them considering using at least four of the proposed mechanisms in the survey (Figure 7).

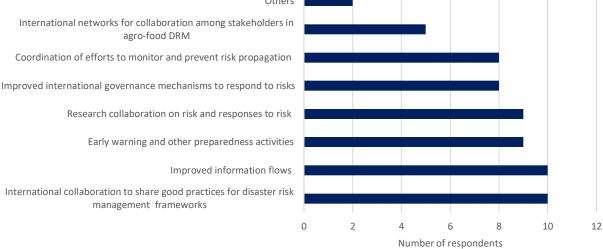
- The majority of respondents plan to engage into international collaboration efforts to exchange good practices on disaster risk management (DRM) frameworks and to improve information flows, including Canada, Mexico and Turkey. In particular, the Republic of Korea has signed agricultural memoranda of understanding (MoUs) with 30 countries to share best practices for risk management in the agricultural sector, in particular on addressing livestock diseases.
- Nine respondents expected to collaborate on early warning or other preparedness
 activities, including Australia and Saudi Arabia, and the same number of respondents
 valued collaboration in terms of research on risks and response to risks, including Japan
 and France.

- Eight respondents intend to use collaboration on improved international risk governance mechanisms. For instance, China, Japan, Republic of Korea and ASEAN countries are operating a system called APTERR (ASEAN Plus Three Emergency Rice Reserve) providing food aid in the event of a crisis in the region. The European Union is working on the creation of a contingency plan to ensure European food security and food supply in times of crisis.
- Brazil, Italy and six other respondents intend to improve the coordination of risk mitigation efforts. Italy highlighted the OECD and FAO study on "Building Agricultural Resilience to Natural Hazard-induced Disasters",5 which encompass in-depth studies in seven countries, including four G20 members, as an example of international cooperation on risk management.
- Five respondents identified networks among stakeholders in agro-food disaster risk management as an important mechanism to consider, including the European Union and Rwanda.

Others International networks for collaboration among stakeholders in agro-food DRM Coordination of efforts to monitor and prevent risk propagation

agricultural risk management and resilience

Figure 7. International collaboration or cooperation mechanisms to improve



Note: More than half of respondents reported considering at least five of the proposed mechanisms.

⁵ OECD and FAO. 2021. Building Agricultural Resilience to Natural Hazard-induced Disasters: Insights from Country Case Studies. OECD Publishing, Paris. 174 pp. Also available at https://doi.org/10.1787/49eefdd7-en.

As "other" collaborative action, Brazil plans to continue its efforts to ensure the flow of international trade in agri-food products and Australia highlighted its food security monitoring actions in the Pacific region. The United Kingdom of Great Britain and Northern Ireland welcomes collaboration or cooperation between countries and the effective use of existing mechanisms and initiatives to help facilitate improved agricultural risk management and resilience, including through the Agricultural Market Information System (AMIS).

Concluding remarks

As the COVID-19 pandemic emerged, health risks and associated lockdown restrictions impacted the agriculture and food sectors in G20 members and guest countries and resulted in significant supply chain disruptions and demand shifts in various economic sectors. The impacts of these shocks on the food and agriculture sectors were largely limited, thanks to a wide range of government measures facilitating the continued functioning of markets and providing relief to affected agents. The effectiveness of these measures varied by context, but some measures were seen as instrumental to the resilience of the agriculture and food sector. Existing good policy practices and dynamic farmers' groups, the prevalence of well-functioning supply chains, and cooperation to ensure open international trade further contributed to managing risks.

While the pandemic continues to evolve and food security remains fragile in many countries, G20 respondents are already contemplating ways to bolster their resilience to future risks. Many have already undertaken a number of measures, ranging from setting up market monitoring mechanisms or institutional links with stakeholders, to adjustment to risk management policies and technical assistance. Looking forward, G20 members and guest countries are considering actions at the global and national levels, including to facilitate international trade under crises and to strengthen the One Health approach, while improving the functioning of supply chains, investing in infrastructure and promoting the use of digital and on-farm tools at the national level. Lastly, respondents to the questionnaire are also considering means to strengthen international collaboration through sharing best practices on disaster risk management, information and research, knowledge on improved governance, and tools to respond to future risks and uncertainties.

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