



**BUILDING RESPONSIBLE
GLOBAL VALUE CHAINS
FOR SUSTAINABLE
TROPICAL FRUITS**

VALIDATION WORKSHOP OF THE RESILIENCE STUDY FINDINGS

Summary report

6 December 2022, 16:30-18:00 CET (UTC+2), on Zoom

Background

As part of the resilience component of the Responsible Fruits project, FAO conducted a study to understand the resilience challenges of the avocado and pineapple value chains.

The event organized on 6 December provided an opportunity to present the main findings from this study and validate the results with project participants. The session also served to identify any gaps in information in terms of resilience risks and challenges faced by actors from the avocado and pineapple sector, as well as of the existing capacities and strategies the companies are using to overcome the challenges identified.

The event was held online with project participants in the Asia-Pacific Region, Europe, Latin America and North America.

Session objectives

1. Present the aggregated results of the resilience study to actors from the avocado and pineapple value chains.
2. Discuss and validate the findings with participants to ensure that these duly reflect the participants' main resilience issues and risks.
3. Promote exchange of knowledge and experience from value chain actors from the avocado and pineapple sectors about how they are addressing or responding to different resilience challenges.
4. Discuss the project's upcoming work on resilience that will help to respond to the challenges identified through the study and participants' interests.

Participation

Fifteen participants joined the session, representing producer organizations, packers, processors, importers and research institutions from the Dominican Republic, Ireland, Malaysia, Mexico, the Netherlands and the United States.

Summary

The event agenda is presented in Annex 1. All presentation slides are available by sending a request to Responsible-Fruits@fao.org.

Opening

Michael Riggs, FAO

The tropical fruit sector has been particularly affected by compounded disturbances, such as extreme climate events and other shocks, including the COVID-19 pandemic and economic slowdown that have caused disruptions to supply chains and constrained demand through reduced purchasing power in importing countries. Due to these challenges, the tropical fruit sector needs to strengthen the capacities of its actors to improve the resilience of their operations to ensure continuity and without exacerbating or creating new risks.

In this framework, the "Building responsible global value chains for the sustainable production and trade of tropical fruits" project launched its new component to work together with avocado and pineapple companies to strengthen their resilience in **October 2022**. Since then, FAO has been working to study the resilience challenges the avocado and pineapple sectors face; and to understand the capacities, skills and knowledge value chain actors have or need to strengthen in order to be more resilient to ongoing and future risks.

The project will explore how due diligence processes, for instance through risk assessment, will improve the adoption of more responsible business conduct, making agricultural supply chains more sustainable and resilient.

Part 1 - Presentation of study results

María Hernández Lagana and Juan Mata, FAO

The study aimed to identify the main resilience challenges the avocado and pineapple value chains are facing, as well as to understand the capacities the actors in both sectors have in order to prepare to and overcome such challenges. To meet these objectives, FAO drew from available research, the Baseline survey conducted by the project in 2021, one-on-one consultations with some of the most important actors from the avocado and pineapple industries in 11 countries and an online survey.

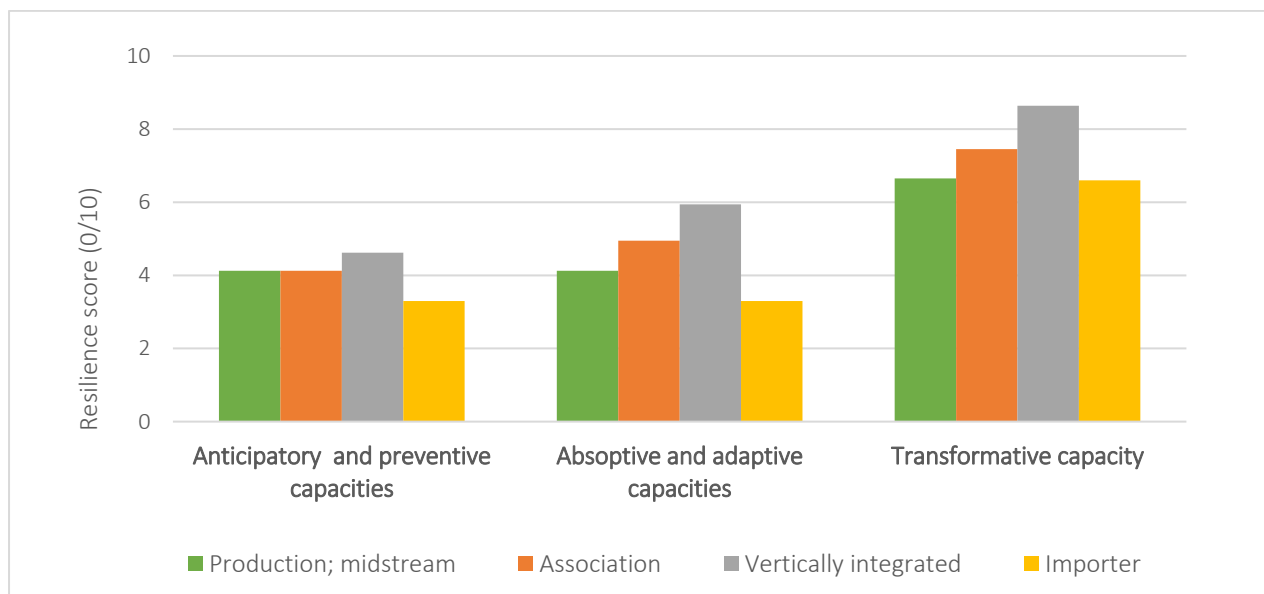
FAO's presentation was divided into three main parts with dedicated time for discussions to corroborate the results. The first part of the presentation focused on presenting the main **shocks, stresses and risks** identified through research, which were confirmed by participants mentioning that:

- Climate change, extreme weather events and environmental degradation are the main issues challenging the operations of the avocado and pineapple industries. In the case of avocado, it was reiterated that increasing temperatures are negatively affecting the quantity and quality of production. Warmer weather is causing flower blasting (flower bud abortion), reducing the size of fruits and affecting the population of pollinators.
- Economic-related factors, such as high market concentration and waste reduction are aspects that need further attention, as they are limiting the economic resilience of both commodities.

The second part of the presentation outlined the aggregated results from the survey that aimed to assess the **resilience capacities** of the value chains actors. The findings were differentiated by sector (avocado and pineapple) and by value chain

actors. The results indicated that well integrated companies and associations seem to be better redier to future shocks, and be better able to adapt and make important changes to address unexpected crisis and future risks. On the other hand, actors that work in isolation seem to struggle more to prepare for shocks and need more time to recover when experiencing these (Figure 1). It was discussed and confirmed by companies that close integration and association membership might enable value chain actors to share and access information, knowledge and resources more efficiently, allowing them to make decisions and take actions in a timelier manner.

Figure 1. Aggregated results of the self-assessment of the different resilience capacities, disaggregated by value chain actor



Note: Scores range from zero to ten based on the response provided by companies to the online survey. Zero indicates low resilience levels, and ten suggests strong resilience. Capacities with scores lower than 4 are considered as low, i.e. where resilience gaps exist. Scores between 4 and 6, indicate areas with some resilience constraints that need monitoring. Above 6 points, the capacities are considered as adequate to continue functioning.

Part 2 - Discussion of the results

Maria Hernandez Lagana and Juan Mata, FAO and project participants

Following FAO's presentation, participants shared reflections on what the results indicate and what areas can be further explored to strengthen the resilience of value chain actors in both sectors. It was noted that:

- Actors from the avocado and pineapple sectors possess valuable resilience capacities and are developing positive response strategies to address the main issues identified. Actions have been mostly taken by companies on the production side (e.g. soil analyses, development of water management plans, reduction of pesticides use), with strong focus on tackling climate change issues and environmental degradation.
- Social capital emerged as an important element for resilience building, reflected in better resilience performance among vertically integrated companies and associations where higher cooperation, information sharing and knowledge generation is observed.

- Anticipatory and preventive capacities of value chains need to be further strengthened to enhance preparedness to future risks and to minimize potential damages and losses. About 80 percent of pineapple companies and 75 percent of avocado companies consulted do not have contingency or risk management plans in place.
- Some areas need attention across the different sustainability dimensions to strengthen resilience: Environmental (water quality, pesticides use, soil health), social (working conditions, theft, gender); economic (value addition, input/output market diversification, reduction of waste and loss).
- Resilience building actions and strategies need to be context-specific and developed by companies in a participatory manner. This, as climate and other risks affect firms and their operations differently, for instance due to the presence of multiple microclimates or agro-climatic zones in the same producing region. The contextualization of the resilience strategies is also needed given that the scale of production varies among companies within and across countries and sectors, and also because there are different levels of business integration, and the capacities and needs of the value chain actors are diverse. The institutional context in which value chains operate also differ from country to country.

FAO presented a list of recommended actions (Table 1) gathered through research and consultations, to improve the resilience of businesses' operations and based on the main gaps identified.

Table 1. Recommended actions for resilience building based on the main study findings

Resilience capacity	Recommended actions (non-exhaustive list)	
Prepare and anticipate future shocks	<ul style="list-style-type: none"> • Access to and exchange of information (e.g. climate, market, new pathogens) • Investments in training for workers and service providers on sustainability issues • Access to weather insurance and other financial instruments 	<ul style="list-style-type: none"> • Conduct comprehensive risk assessments at the firm level and of the value chain • Development of plans and strategies responsive to the risks identified
Adapt and cope with current stressors and changes	<ul style="list-style-type: none"> • Climate change adaptation (CCA) practices (e.g. sustainable land and water management practices, improved inputs) • Non-CCA practices (e.g. marketing strategies, health protocols for workers) 	<ul style="list-style-type: none"> • Investments in farm infrastructure and technology (risk-assessed) • Reducing loss and waste • Environmental protection
Make operations and sectors more flexible	<ul style="list-style-type: none"> • Stronger multi-stakeholder collaboration (with other value chain actors, communities, government, research) • Exploring new markets, including through produce diversification 	<ul style="list-style-type: none"> • Closing the gender gaps through businesses' policies and women participation along the value chain • Stronger consideration of human and labor rights as part of the organizational operations and policies

During the discussion that followed, companies recognized these as valuable practices and it was mentioned that:

- In the avocado sector, addressing land use regulations for the legal expansion of avocado plantations is important to reduce the vulnerability of the sector and prevent further degradation of natural resources (e.g. deforestation).

- Investments in research is needed, including genetic improvements in the planting material through cross-breeding to enable access to seeds, plants and crops that are more resistant to biotic and abiotic stresses.
- The reduction of high toxicity agrochemicals is required to minimize health and environmental risks and ensure the safety of the produce.
- Actions to reduce waste in production is desirable, for instance through processing of lower-quality fruits not suitable for export. Examples provided by companies were the production of a guacamole dip for the domestic market and export (avocado), and the production of juice or dry-fruit (pineapple).
- It is crucial to protect pollinators (e.g. by establishing water stations, adding pollen-rich plants) and ecosystems (e.g. by building biological corridors and living fences). This is needed to ensure the continuity of production and prevent the abandonment of the activity as already seen in some regions.

Part 3 - Wrap up and next steps

Maria Hernandez Lagana, FAO

The project presented the planned next steps for the work on resilience, including:

- Finalization and publication of the resilience study report (first quarter 2023)
- Development of a technical guide and technical briefs based on the main issues identified through the study, consultations and this workshop (throughout 2023)
- Establishment of a working group on Resilience (2023)

Participants showed interest in working on the elaboration of a technical guide in 2023.

As always, the project team welcomes suggestions or questions on the project's activities at any time. Please contact us at: Responsible-Fruits@fao.org

Annex 1

Working languages

The online session was held in English and Spanish.

Agenda

Section title	Speaker/Facilitator
Welcome and introduction (5 mins)	Michael Riggs, Technical Advisor, FAO
Part 1: Presentation of study results (25 mins) <ul style="list-style-type: none"> The main resilience gaps/issues identified in avocado and pineapple value chains will be presented The opportunities for strengthening the resilience of these two value chains will be outlined 	María Hernández Lagana, Resilience Officer, FAO, and Juan Mata, Agronomist, FAO
Part 2: Discussion of the results (30 mins) The results will be discussed with project participants and validated.	María Hernández, Juan Mata and participants
Part 3: Next steps (10 mins) We will discuss about the project's upcoming work on resilience that will help to respond to the challenges identified through the study	María Hernández Lagana
Closing remarks (2 mins)	María Hernández Lagana

For more information about the project, please contact: Responsible-Fruits@fao.org