Technical webinar series on avocado and pineapple value chains
Webinar #18: Responsible business conduct and risk management of pineapple value chains in Asia and the Pacific
In collaboration with the International Tropical Fruits Network (TFNet)

Summary report

25 April 2024, 09.00-10.30 Rome (UTC+2), on Zoom

Background

The FAO-led Responsible Fruits Project has been engaging with businesses, farmers and their organizations and other actors in global avocado and pineapple value chains, particularly those involved in export markets, with the aim of fostering responsible business practices to enhance the sustainability and resilience of their operations.

Studies and interactive sessions through surveys and peer-learning webinars have been conducted with these value chain actors focusing on areas such as risk management and due diligence, climate change adaptation, value chain enhancements and social-economic responsibilities. Feedback from these discussions and interactions has been essential to develop the guide Responsible business conduct in the pineapple industry: a guide for producers and exporters.

The guide aims to be a tool for businesses and producers in tropical fruits value chains to integrate responsible business conduct (RBC) practices in their operations, by setting up or improving risk management systems and introducing operational adjustments. This will lead to fewer and less harmful environmental and social risks related to businesses’ operations and enhanced value chain sustainability and resilience.

To share and contextualize the findings of the RBC guide for Asia and the Pacific, the Food and Agriculture Organization (FAO) in collaboration with the International Tropical Fruits Network (TFNet) organized a technical webinar on 25 April 2024.

The purpose of the webinar was to:

i. Provide a background of FAO’s work on RBC and explain its importance to pineapple value chains.
ii. Share and contextualize information sourced from global industry actors related to RBC practices to increase the sustainability and resilience of pineapple value chains.
iii. Elicit feedback from stakeholders on issues and challenges in the various aspects of pineapple value chains in the Asia and Pacific region. This feedback will serve to guide future plans of the project.

Participation

The technical webinar targeted pineapple value chain actors, given the importance of pineapple production and export in Asia and the Pacific. Seventeen participants attended representing private businesses and companies, universities, research institutes and government agencies.
The event agenda is in the Annex and the presentation slides are available by sending a request to Responsible-Fruits@fao.org.

Highlights of the webinar include:

i. Embracing RBC enables pineapple businesses to enhance sustainability by conducting their operations in a manner that prevents and mitigates negative environmental and social impacts.

ii. Regulations, whether voluntary or mandatory, continue to increase in both number and complexity. RBC ensures adherence to internationally recognized principles of sustainable development and human rights and importing market regulations. This adherence not only facilitates compliance but also enables businesses to maintain access to markets.

iii. RBC is operationalized through risk-based due diligence systems. Due diligence supports producers and business to identify the environmental and social risks created by their operations and business, and to address, prevent and mitigate these risks in a timely manner.

iv. Companies can address environmental and social risks through different forms. Precision agriculture, for example, can serve to proactively manage risks such as overuse of agrochemicals or water scarcity. A practical example of how businesses in Asia and the Pacific are addressing environmental risks was presented.

v. RBC can positively impact the reputation of businesses with customers, consumers and business partners.

### Welcome and introduction

Yacob Ahmad, TFNet, and Michael Riggs, Responsible Fruits Project, FAO.

The webinar was jointly opened by TFNet and FAO. TFNet outlined the objectives, and mentioned that the event, co-organized with FAO, was an opportunity to bring pineapple industry producers in the Asia-Pacific region closer to the important work on RBC. FAO introduced the Responsible Fruits Project, which works with businesses, farmers and their organizations and other actors in global avocado and pineapple value chains, fostering responsible business practices to enhance the sustainability and resilience of their operations.

The webinar focused on the project’s work on RBC, particularly in analyzing and mitigating risks that could impact business activities. These risks encompass factors such as climate hazards and change, shifts in national and international regulations, and occupational health and safety considerations, among others. By addressing these risks, RBC promotes environmental and social responsibility among value chain actors and operations, and businesses continuity. It was noted that increasing numbers of regulations in some of the main importing markets for tropical fruits, such as the European Union and the United States of America, may require producers and businesses to implement risk-based due diligence processes to ensure continued access to such markets.
Part 1: What is RBC and why is it important to pineapple production and businesses?
Dr. Marlo Rankin, FAO

The speaker emphasized that one of the main goals of the Responsible Fruits Project is to facilitate the increased sustainability of pineapple and avocado production. Recognizing the potential for risks arising that would affect these value chains, she noted that RBC provides us with a process for the prevention of such risks by implementing risk-based due diligence.

Why is RBC important for pineapple producers and businesses?

The speaker highlighted that RBC is becoming more and more important due to:

i. A growing demand for sustainability reporting for businesses, accompanied by an increase in regulatory measures on due diligence compliance in importing markets. As such, producers need to be ready to adjust to the changing regulatory environment.

ii. Voluntary sustainability standards and certification schemes may not be enough to comply with new and developing requirements of retailers and importing markets and regulations related to due diligence.

RBC aligns with internationally recognized principles on sustainable development, human rights and importing market regulations such as:

i. United Nations Guiding Principles on Business and Human Rights;
ii. Organization for Economic Cooperation and Development (OECD) Guidelines for Multinational Enterprises on Responsible Business Conduct;
iii. UN Sustainable Development Goals;
iv. European Union’s Corporate Sustainability Due Diligence Directive (CSDDD);
v. Canada’s Bill S-211 Legislation on Forced Labour and Supply Chain Due Diligence, and others.

The speaker then explained that due diligence is the process through which producers and businesses implement RBC. The process consists of five steps:

1. commit to RBC;
2. identify risks in your own operations and those of your business partners’ and prioritize them;
3. cease, remedy, prevent and mitigate risks (starting with the ones prioritized);
4. track progress; and
5. report on progress.

Part 2: How can producers and businesses identify risks with potential for negative impact?
María Hernández Lagana, FAO

The speaker presented how participants could use the risk assessment process to identify and prioritize risks related to their business activities and their partners’ operations, following three steps:

i. identify social and environmental risks in the business’ country and commodity sector, for example climate and regulations, using existing works;
ii. map the business’ supply chain, then assess the risks related to business operations, including identifying the most vulnerable groups; and
iii. prioritize risks, selecting the three most important to start with. The speaker noted that it is impossible to address all risks at the same time.

In the RBC guide for pineapple producers and exporters, the project team has identified 29 risks relevant to the global pineapple industry, categorized into four groups: environmental, social, economic, and cross-cutting risks (see table 1). These risks have been identified through consultations with industry stakeholders and extensive literature review. Each risk is explained in detail in the guide. The speaker mentioned contextualization is needed during the risk assessment process, since risks are influenced by factors such as the nature of the business operations, national regulations, climate, and natural resources allocation. The speaker subsequently elaborated on each category, emphasizing risks deemed most pertinent to the pineapple sector.
Table 1. Risks identified as particularly relevant for the pineapple industry

<table>
<thead>
<tr>
<th>Environmental</th>
<th>Social</th>
<th>Economic</th>
<th>Cross-cutting</th>
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<tbody>
<tr>
<td>Water use and effluents</td>
<td>Food safety</td>
<td>Smallholder inclusion in global value chains and equitable sharing of value along the chain</td>
<td>Governance, including compliance with national policies, laws, and regulations; and disclosure, anti-corruption, advocacy and lobbying</td>
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<td>Soil health</td>
<td>Food security and nutrition</td>
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<td>Agrochemical use (fertilizers, pesticides, and flowering inducers)</td>
<td>Employment practices and working conditions</td>
<td>Anti-competitive behaviour</td>
<td>Consultation</td>
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<tr>
<td>Deforestation and forest degradation</td>
<td>Living income and living wage</td>
<td>Increasing costs of production</td>
<td>Grievance mechanisms</td>
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<tr>
<td>Biodiversity and protection of ecosystems and ecosystem services</td>
<td>Occupational health and safety (OHS)</td>
<td>Logistics</td>
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<tr>
<td>Land use, land expansion and land rights</td>
<td>Forced or compulsory labour</td>
<td>Political risk: war, civil unrest, and political instability</td>
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<td>Food loss and agricultural waste, waste disposal, upcycling and valorization</td>
<td>Child labour</td>
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<tr>
<td>Climate change effects</td>
<td>Freedom of association and collective bargaining</td>
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<tr>
<td>Carbon emissions and energy use</td>
<td>Non-discrimination and equal opportunity, including rights of women, migrants and Indigenous and Tribal Peoples</td>
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<tr>
<td>Technology and innovation</td>
<td>Local communities</td>
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In RBC, risks related to violations of human rights are considered the most important to address. These include gender-based violence, forced labour and child labour, among others. While economic risks are not the focus of RBC practices, the speaker highlighted their importance and the need to analyze them, as they are closely interconnected with environmental and social risks. For instance, tight margins and increasing costs of productions may be related to increasing pests and diseases and adverse weather events that cause lower fruit yield. Cross-cutting risks are not negotiable in RBC. Addressing these risks includes consultation with stakeholders and putting in place grievance mechanisms, which would help identify risks as they appear and prevent the risks from worsening if adequate action is taken.

Some resources were provided to participants for references on each risk category:

i. Environmental risks:
   - Adapting to climate change in the tropical fruit industry: a technical guide for pineapple producers and exporters;
   - Measuring carbon and water footprints in pineapple value chains (forthcoming), to monitor and manage GHG emissions from production to export and impacts on water quality and use; and
   - OECD-FAO Business Handbook on Deforestation and Due Diligence in Agricultural Supply Chains. The handbook supports implementing due diligence processes where deforestation or forest degradation has been identified as a priority risk.

ii. Social risks:
   - Occupational Safety and Health Standards, from the Ministry of Labour of the Philippines, specifically developed for the pineapple industry.

iii. Cross-cutting issues:
   - Free Prior and Informed Consent: an indigenous peoples’ right and a good practice for local communities; and
   - Guide on grievance and complaints mechanisms to implement such mechanisms in business operations.
Questions and discussion

During the discussion, it was noted that an Indonesian company’s endeavors to meet sustainability standards now has over 15 certifications, including Rainforest Alliance, Social Responsibility and GMP. At the same time the company has begun implementing regenerative agricultural practices.

A question arose regarding the existence of an international institution tasked with conducting certification and audit, specifically on tropical fruits like pineapple. While it was acknowledged that there is no such organization, participants agreed that its establishment could be beneficial. It was highlighted that currently all the responsibility for certification and audit lies with individual businesses. Under regulations pertaining to RBC and due diligence in several importing markets, businesses are obligated to demonstrate how they identify, prioritize, and mitigate social and environmental risks within their operations and throughout their supply chains, including those of their suppliers.

Participants also posed questions regarding common certification standards used by producers and businesses. One participant sought clarification on whether GLOBALG.A.P., a private certification scheme, was necessary for exporting pineapples to European markets. It was clarified that although private certifications are not a regulatory requirement in the European Union, these may be mandated by certain importers or retailers. This prerequisite can enable suppliers to cater to supermarkets and other retailers. It was also highlighted that current regulatory obligations for tropical fruits mainly revolve around phytosanitary and sanitary standards, and maximum residue levels. The prevalence of a wide variety of voluntary certification schemes was noted.

A query was raised regarding the potential impact of RBC implementation on product costs throughout the pineapple industry. Specifically, participants sought data illustrating any price impacts, and whether this could be linked to increased prices and incomes for producers. In response, it was acknowledged that no specific data on price impacts is available. However, it was noted that complying with RBC and due diligence practices and requirements may ensure continued access to markets in countries which impose such regulations. It was noted that implementing RBC and due diligence does come with costs for producers and companies, as they need to invest in capacity development and operational changes. This may be a daunting task for small and medium-scale businesses. On the other hand, it was suggested that adherence to RBC guidelines throughout the value chain could eventually lead to fairer prices in the future. It was suggested that further research into price impacts would be valuable.

Further discussions identified FAO’s work on cost-sharing responsibility, particularly in banana value chains. The consensus was that a broader collaboration among different value chain stakeholders, including retailers and government representatives, is needed to allow discussions regarding cost distribution for pineapple and avocado industries facing similar pressures.

The need for increased efforts to track risks, which requires additional time and resources, was identified.

It was observed that some certification schemes initially focused on food safety and consumer health awareness. Over time, these have become more socially conscientious to promote better conditions for producers and workers and foster more collaboration with local communities. While numerous certification schemes exist across various sectors, some felt that certification should remain voluntary, serving as an assurance of adherence to standards. In the Philippines, it was reported that certification processes have streamlined operations, enhancing their benefits based on compliance and sustainability within the company. However, significant challenges remain in ensuring that small-scale growers also meet certification requirements. Implementing digital tools and software could prove invaluable in providing real-time information for management, improving productivity and facilitating compliance. The importance of support for capacity development for small growers and access to better inputs and traceability systems was emphasized.

Part 3: Addressing environmental risks: Implementation of Precision Agriculture in Regenerative Pineapple Systems in Great Giant Pineapple, Indonesia

Fauzan Khumaidi, Great Giant Foods

Great Giant Pineapple, a subsidiary from Great Giant Foods, operates primarily on the Island of Sumatra in Indonesia with approximately 21,000 hectares out of a total of 34,000 hectares dedicated to the cultivation of pineapple for fresh consumption and processing. Additionally, they cultivate Cavendish banana, guava, papaya, cassava, coconut, durian and other tropical crops.

The company’s fresh and processed pineapples are exported to 70 countries, representing approximately 26 percent of the global market share. Fruit losses at pre- and post-harvest stages are repurposed for energy and biofuels, while organic waste serves as
fertilizer. The company operates an efficient waste management system where a “zero waste” approach is key. The speaker emphasized the “no waste is wasted” tagline in the company’s operations.

The speaker reported that the company’s overall mission is to become a global sustainable producer through a strategic framework and objectives to: be a dominant global player in processed pineapples; lead fresh fruit supply for the domestic and key international markets; build a plant and fruit-based branded consumer business; build a profitable protein value chain; and grow a plant-based business.

The priority actions to achieve these are to emphasize regenerative and sustainable agriculture, precision and digitalisation farming, and establish a robust supply chain to markets. Initiatives to achieve this include:

- Minimize harm to soil by reducing tillage practices, aiming to decrease soil disturbance and erosion, and maintain soil organic matter.
- Use of sustainable agrimaterials, including compost, vermicompost and charcoal, with the company operating its own bio-control factory.
- Superior clone selection, focusing on plant characteristics to minimize fertilizer usage and enhance efficiency.
- Optimize water conservation strategies, including reservoir protection and advanced irrigation technology.
- Precision farming supported by remote technologies.
- Comprehensive catchment area mapping, involving channel management and community engagement, utilizing digital surface model (DSM) technology and erosion-reducing channels on 15-20 percent of pineapple fields.
- Water management practices, using soil moisture sensors and drone boats from July to October to optimize irrigation efficiency.
- Implementation of microclimate sensors for real-time weather monitoring and pest prevention.
- Quantification of plant health using Normalized Difference Vegetative Index (NDVI) for nutrient status assessment and yield prediction.

Questions and discussion

Yacob Ahmad, TFNet Advisor

During the discussion, participants inquired about the effectiveness of utilizing technology to combat pest and disease infections and monitor nutrient status. They questioned whether Great Giant Foods (GGF) bases its decisions on data from such technology and how it impacts production costs. In response the GGF speaker explained that employing early warning monitoring systems enables a reduction in pesticide usage and associated costs. It was reported there exists a clear correlation between pest and disease outbreak trends and climate conditions. Monitoring reportedly allows for proactive and timely pest control measures to be implemented when temperature and humidity levels indicate heightened risk.

An academic shared experience about a research programme that is providing support to small-scale companies with a focus on processing and development initiatives, specifically at transforming pineapple leaves into fiber. With 28 machines dedicated to this endeavor, the project seeks to support local industries. The substantial potential of pineapple leaf fiber for textile production was highlighted, noting its existing applications in the industry.

During the discussion, participants asked whether the technology used by GGF was simple enough to comply with regulations and whether such technologies could contribute to social sustainability aspects. In response, it was noted that technologies, such as some of the risk screening tools utilized by some certification schemes to identify issues related to child labour, can support meeting social sustainability standards. However, there was acknowledgment that improvement is necessary, particularly in integrating information into the monitoring system.

On a related note, it was highlighted that the World Banana Forum (WBF) aims to address the issue of multiple certification requirement. The WBF is creating a new working group on this topic and participants were invited to visit the WBF website for more information.
Next steps of the project and concluding remarks
Michael Riggs, FAO, and Dorothy Chandrabalan, TFNet

FAO thanked GGF for sharing their approach to identifying and addressing risks, enhancing efficiency, and leveraging technology, and expressed an interest in the principle “no waste is wasted”. The speaker mentioned that the Responsible Fruits Project has prepared a technical brief on reducing food loss and waste in the pineapple industry with practical ideas on how value chain actors can minimize post-harvest losses and valorize agricultural residues and fruits not suitable for fresh consumption. It was also mentioned that the project has developed a tool to measure carbon and water footprints in pineapple value chains. The tool has been validated with industry players in Costa Rica and will be published soon together with capacity development materials.

The webinar was closed by Dorothy Chandrabalan, TFNet’s Technical Officer and Acting CEO. She summarized the main points of the presentations, and feedback shared in the discussions, emphasizing the significance of RBC and risk management within the pineapple industry. It was highlighted that responsible business conduct embodies a proactive approach to mitigating risk and fostering positive impacts. By operating with integrity and accountability, businesses can not only safeguard against adverse effects but also remain relevant, and enhance their reputation and competitiveness in the market, especially in the tropical fruits sector where issues such as labour rights, environmental conservation, and community welfare are paramount.

The discussions have shed light on the multifaceted nature of responsible business conduct, and the interconnectedness of social, environmental and economic factors throughout the value chain and taking proactive steps to address them. She also called for an urgent need for capacity development initiatives tailored to the unique challenges faced especially by small and medium-sized enterprises in the sector.

Next steps for FAO:

i. Commodity-specific guides on responsible business conduct for pineapple and avocado value chains will be published in June 2024, to serve as a roadmap, outlining step-by-step processes for risk identification, prioritization, and mitigation.

ii. The guide for measuring carbon and water footprints in pineapple value chains will be published in July 2024.

iii. The workshop on Resilience and Sustainability in Tropical Fruit Value Chains (May 15 and 16, at FAO headquarters), will provide an opportunity to gather, share experience and explore collaborative solutions.

Other resources from the Responsible Fruits Project:

i. Video introduction to Measuring water footprints in pineapple value chains

ii. Video introduction to Measuring carbon footprints in pineapple value chains

iii. Adapting to climate change in the tropical fruit industry: a technical guide for pineapple producers and exporters

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.

Agenda

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<td>Dorothy Chandrabalan and Yacob Ahmad, TFNet</td>
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<td>Part 1: What is responsible business conduct and why is it important to pineapple production and businesses? (10 min)</td>
<td>Dr. Marlo Rankin, FAO</td>
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<td>How can the guide on RBC in the pineapple industry help to implement RBC</td>
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<td>Presentation of environmental, social, economic, and cross-cutting risks identified</td>
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<td>Q&amp;A and discussion (5 min)</td>
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<td>Tools and guidance available to address some of the risks</td>
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For more information about the project or the webinar series, please contact: Responsible-Fruits@fao.org