

Trade spillover effects: the impact on domestic food safety



Bridging the benefits: from trade to domestic food safety

Spillovers are positive or negative impacts (expected and/or unexpected) from trade-related projects on domestic food safety.

Substantial investments in building food safety capacity in developing countries are helping to facilitate more competitive and sustainable agri-food trade. But when and how do these investments – in knowledge and skills, management systems, and infrastructure – generate spillover effects on food safety in the domestic markets of developing countries? What types of positive spillovers are possible? What industry, regulatory or other contexts are more likely to produce these co-benefits? And how can donors and other stakeholders involved in trade-related projects design and deliver them to maximize benefits for domestic food safety?

Unpacking the evidence of spillover effects

An STDF Project Preparation Grant (PPG)¹, led by Michigan State University (MSU) with partners including FAO, WHO, World Bank Group, USDA, US FDA and USAID, COLEACP, the Joint Institute for Food Safety and Applied Nutrition and others, reviewed available results from trade-focused food safety capacity building projects to identify the evidence of spillovers and recommend how to maximize these co-benefits in the future. The research found limited evidence of positive or negative spillovers. Most trade-focused food safety capacity building projects do not assess or report on how they impact local markets and domestic food safety. More needs to be done to understand these effects and to better target and measure co-benefits in the future.

Expected positive spillovers

- **Knowledge spillovers:** on food safety hazards, incidence and detection; on (cost-) effective technologies and farm and enterprise practices to manage food safety risks.
- **Good Regulatory Practice spillovers:** improved primary production and industry systems for exports provide lessons for domestic markets; risk-based import controls boost domestic food safety.
- **Other institutional spillovers:** strengthened industry capacities and food safety programmes; models for product traceability, successful track records of public-private partnerships, etc.
- **Infrastructure spillovers:** deployment of upgraded laboratory testing capacity for hazard and market surveillance; upgraded fish landing sites and market collection centers.
- **Incentive-related spillovers:** increased consumer and enterprise awareness of food safety increases domestic demand and supply of safe food, reaching smaller food businesses.
- **Standards compliance spillovers:** trade-associated practices (such as more careful use of pesticides, antibiotics and food additives) influences other farmers/firms and reduces pollution.

¹ www.standardsfacility.org/PPG-535

Conditions under which spillovers occur

Sector-specific conditions when

- the product is widely consumed domestically and exported
- primary production is not focused on a few large farms or a small geographic area
- leading processing and distribution companies are engaged domestically and for trade
- the “modern” retail sector is well developed or growing rapidly
- there are strong and proactive industry and farm associations

Capacity building interventions that

- engage several, different value chain actors in a coordinated way
- use and further strengthen local expertise
- are longer-term and adequately address sustainability

- focus on forward-looking, preventive measures rather than reactive, crisis management

An enabling environment with

- up-to-date national food laws and regulatory frameworks
- domestic food and primary production standards that converge with international ones
- adequate budgetary resources in food safety authorities to carry out core regulatory functions and targeted food safety programmes
- consumer organizations that have a voice in national priority-setting

“This project will also have a beneficial side effect to enhance the Government’s capacity to safeguard public health and protect Solomon Islanders from water and food contamination by improving our ability to monitor and evaluate the safety of water and food”.

Ms. Pauline McNeil, Permanent Secretary, Ministry of Health and Medical Services, Solomon Islands



Solomon Islands: investing in food safety infrastructure protects public health

Fish exports are a major source of export earnings and jobs in the Solomon Islands. To avoid losing access to international markets, the government had to demonstrate that it was taking steps to improve its laboratory testing capacity, based on international standards. An STDF project,² led by the FAO, is supporting the National Public Health Laboratory to carry out microbiological testing for fish exports. With improved knowledge and skills, laboratory staff will also be better able to monitor and evaluate microbiological risks associated with water and food, which will help to protect domestic public health.

² www.standardsfacility.org/PG-521

Africa: the link between trade opportunities and lower foodborne disease

The World Bank Group's "Safe Food Imperative" publication³ analyses both domestic and trade-related challenges and opportunities for food safety in low- and middle-income countries. It summarizes the evidence on the costs of unsafe food and the range of food safety incentives and capacities, looking across countries at different levels of economic development and food systems.

Combining unpublished country data from the WHO's FERG initiative and the OIE's PVS evaluations, the study found very strong correlations in 34 African countries between veterinary service capacities and the estimated domestic burden of foodborne disease from animal source foods.

Nearly all the countries with a lower foodborne disease burden had one thing in common – they have been active exporters of animal products and/or live animals for an extended period of time. Trade opportunities, supported by different capacity building projects, may have led to public expenditure, regulatory and private sector action that significantly affected animal disease and food safety measures on supply chains for the domestic market.

"All of the training materials are very useful for cocoa farmers. We apply them for producing high quality cocoa beans, and to obtain UTZ certification. Now I understand the importance of wearing hats and masks for protection when the chemicals are applied".

Eko Santoso, cocoa farmer, East Java, Indonesia



Southeast Asia: building food safety capacity improves environmental health

Cocoa is a vital source of income for thousands of smallholder farmers across Southeast Asia. Concerns about pesticide residues and other contaminants in cocoa among consumers put this trade at risk, threatening livelihoods. A regional STDF project,⁴ led by CABI, facilitated public-private collaboration to roll out improved agriculture and hygiene practices among farmers, extension officers, agro-dealers and processors, improving food safety on farms and post-harvest. In the process, farmers learned about the importance of using protective clothing and equipment, and how to safely use chemicals to manage pests and diseases, which is also improving environmental health.

³ The Safe Food Imperative: Accelerating Progress in Low- and Middle-Income Countries. S. Jaffee, S. Henson, L. Unnevehr, D. Grace, and E. Cassou. Washington, DC: World Bank. 2019.

⁴ www.standardsfacility.org/PG-381

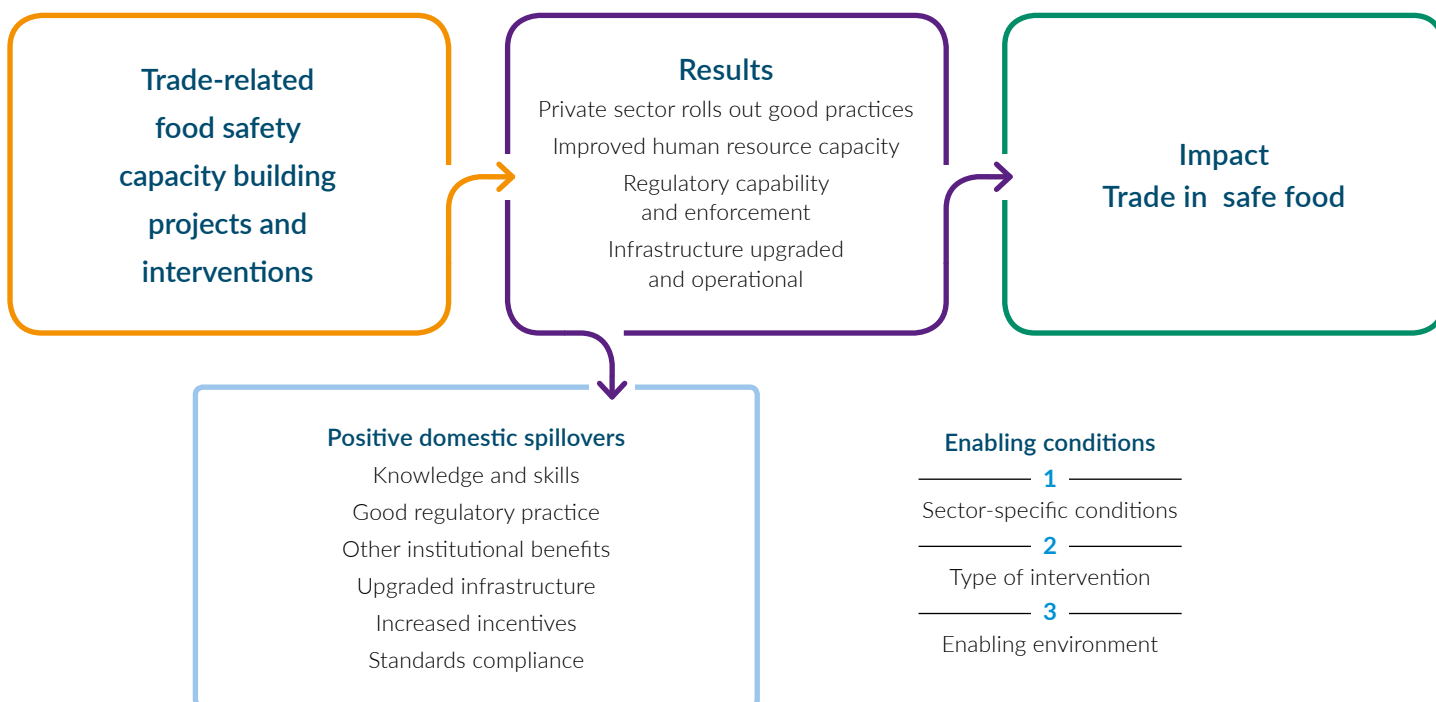
The STDF vision

The STDF is working to advance the Sustainable Development Goals through its vision:

Sustainable economic growth, poverty reduction, food security and environmental protection in developing countries



The spillover effects framework



How to promote positive spillovers in trade-related projects?

Identifying, targeting and measuring spillovers throughout the project cycle can help to:

- highlight potential synergies (and any conflicts) between trade-related measures and domestic food safety.
- engage a broad range of national stakeholders to better understand potential direct or indirect impacts.
- build robust monitoring and evaluation frameworks to measure potential domestic co-benefits.

Going forward, more analysis and guidance is needed across different country and industry contexts based on strong evidence. Additional case studies of policy makers and regulators, as well as private sector associations and enterprises, will help to identify the influence of interventions on domestic beneficiaries worldwide.