

**STDF/PPG/535**

# **Spillover Effects of Export-Oriented SPS Technical Assistance on the Domestic Food Safety Situation**

**LESLIE D. BOURQUIN**

**DEPARTMENT OF FOOD SCIENCE AND HUMAN NUTRITION  
MICHIGAN STATE UNIVERSITY**

**STDF WORKING GROUP MEETING  
OCTOBER 30, 2018**

# Presentation Outline

Introduction

Approach

Spillover Effects Defined

Conceptual Framework

Positive and Negative Spillover  
Effects and Categorization

Conditions that Potentially  
Influence Spillovers

Validation

Recommendations

Future Steps



# Presentation Outline

## Introduction

## Approach

## Spillover Effects Defined

## Conceptual Framework

## Positive and Negative Spillover Effects and Categorization

## Conditions that Potentially Influence Spillovers

## Validation

## Recommendations

## Future Steps



- **Objectives** of this PPG were to
  - identify and evaluate existing evidence for spillover effects,
  - propose a conceptual framework that describes potential positive and negative spillover effects, and
  - disseminate the findings of this work in a project summary document
- The ultimate goal of this work was to draw key lessons to improve the framework, design, delivery and impact of future trade-related technical assistance programs.
- A secondary goal was to develop hypotheses that could be tested by research conducted to further characterize potential spillover effects of trade-related technical assistance programs on the domestic food safety situation.

## Presentation Outline

Introduction

Approach

Spillover Effects Defined

Conceptual Framework

Positive and Negative Spillover  
Effects and Categorization

Conditions that Potentially  
Influence Spillovers

Validation

Recommendations

Future Steps



## Approach

- Initial desk research and consultations to identify evidence for spillover effects
- Internet-based survey to “crowd source” information on potential spillover effects
- Background document prepared
- Working group convened – 2-day meeting in Nov 2017
  - ❑ Developed conceptual framework
  - ❑ Identified and categorized spillover effects
  - ❑ Hypothesized conditions influencing spillovers
- Validation
  - ❑ Additional literature review
  - ❑ Key informant interviews
- Summary report developed

# Presentation Outline

Introduction

Approach

Spillover Effects Defined

Conceptual Framework

Positive and Negative Spillover  
Effects and Categorization

Conditions that Potentially  
Influence Spillovers

Validation

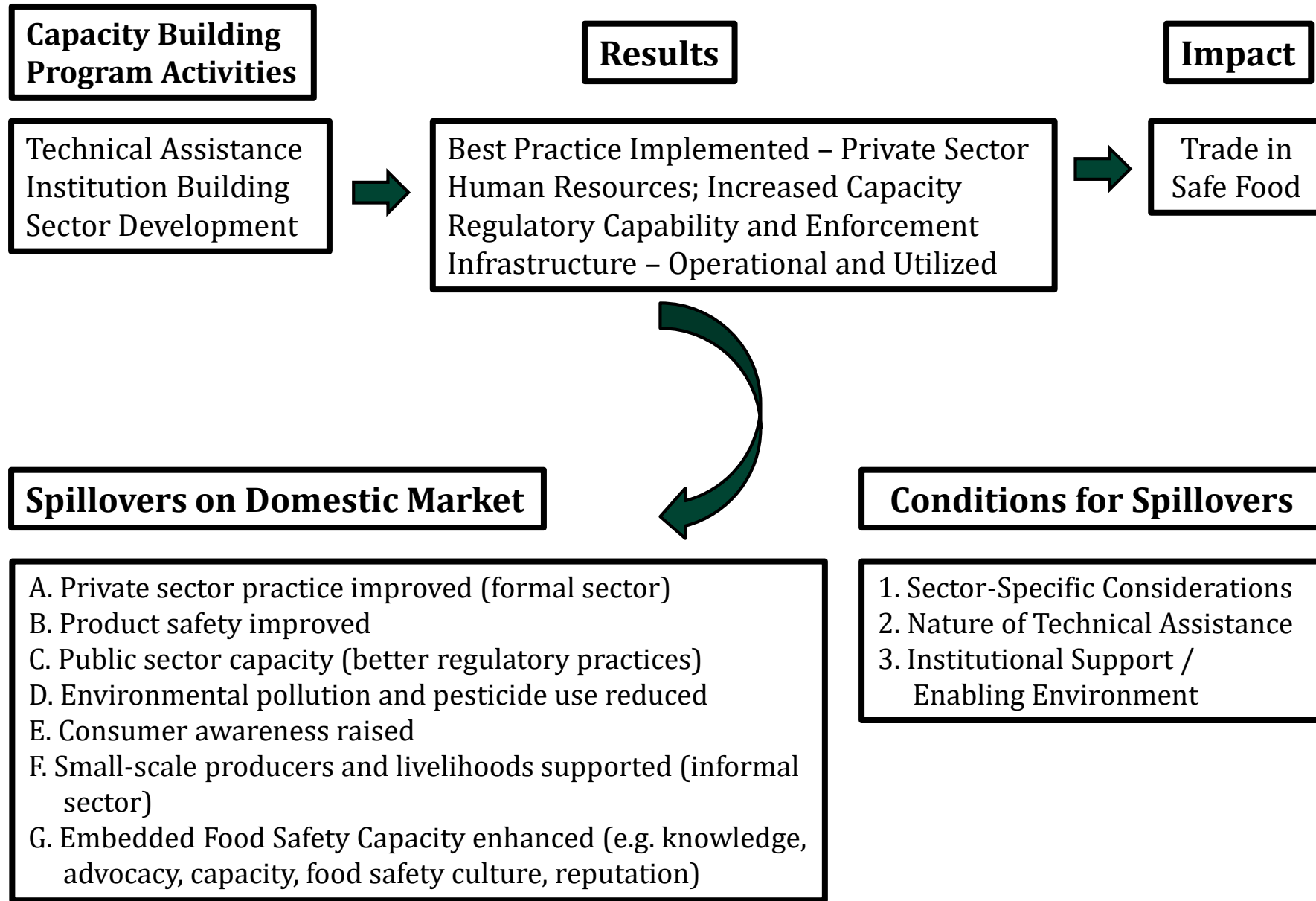
Recommendations

Future Steps



## Spillover Effects

*“Side effects (both positive or negative) of trade-related SPS capacity building programs on the domestic food safety situation.”*



Positive Spillover Effects	Spillover Category						
	A. Private Sector Practice	B. Product Safety	C. Public Sector Capacity	D. Environmental Pollution and Pesticide Use	E. Consumer Awareness	F. Small-Scale Producers and Livelihoods	G. Embedded Food Safety Capacity
1. Investments in trade-related SPS measures for exported products improves capacity of businesses to provide safe foods for the domestic market as well. This depends on the extent to which the exported products also are sold in domestic markets.							
2. Adoption of good practices by farmers and SMEs for exported products extends to different products sold in local markets.							
3. Increasing market share of formal enterprises in food production and trade will result in increased food safety. Formal enterprises are more likely to follow good practices.							
4. Investments in regulatory capacity for supporting exports also results in strengthened domestic food safety policies and improved regulatory compliance for the local market (i.e. safer foods locally).							
5. Investments in food production and processing standards may generally improve environmental conditions, occupational health, and food safety in recipient economies.							

Positive Spillover Effects	Spillover Category						
	A. Private Sector Practice	B. Product Safety	C. Public Sector Capacity	D. Environmental Pollution and Pesticide Use	E. Consumer Awareness	F. Small-Scale Producers and Livelihoods	G. Embedded Food Safety Capacity
6. Technical assistance projects aimed at meeting maximum residue limits (MRLs) for pesticide residues in fruit and vegetable products through the use of Good Agricultural Practices (GAPs) and better pesticide use may reduce environmental pollution and reduce cases of pesticide poisoning among farm workers.							
7. Projects focused on restricting use of banned pesticides for produce intended for the export market can lead to reductions in illegal pesticide residues on foods in the local market.							
8. Projects aiming to improve pre- and post-harvest practices to reduce chemical contamination in products intended for export may reduce morbidity in the local population through the increased availability of safer products.							
9. System-wide SPS capacity building projects (e.g., to improve SPS legislation or strengthening competent authority capacity) may improve domestic food safety controls.							



	Spillover Category						
	A. Private Sector Practice	B. Product Safety	C. Public Sector Capacity	D. Environmental Pollution and Pesticide Use	E. Consumer Awareness	F. Small-Scale Producers and Livelihoods	G. Embedded Food Safety Capacity
<b>Positive Spillover Effects</b>							
10. Investment in infrastructure (e.g., processing and packing facilities, laboratory capacity) to support trade can simultaneously facilitate the provision of safer food/water locally.							
11. Increasing consumer awareness of food safety as a result of technical assistance projects can create demand for safer food, driving improved domestic policies and regulatory capabilities, and improved food safety management by local producers and processors.							
12. Demonstration of effective food safety management in one or more value chains in a country can have positive spillovers for other VCs.							
13. SPS technical assistance investments can have positive impacts on capability of domestic universities, research organizations, industry associations and other groups supporting other food and agriculture sectors.							
14. Improved awareness and SPS capacity can lead to self-policing of food safety requirements by the food and agriculture industries.							

	Spillover Category						
	A. Private Sector Practice	B. Product Safety	C. Public Sector Capacity	D. Environmental Pollution and Pesticide Use	E. Consumer Awareness	F. Small-Scale Producers and Livelihoods	G. Embedded Food Safety Capacity
<b>Positive Spillover Effects</b>							
15. SPS technical assistance projects can facilitate cooperation among different government agencies and other key stakeholders to address food safety concerns in recipient countries. These can include public:private partnerships or partnerships among public sector agencies							
16. Building the food safety capacity of individuals within the export sector can have a wider impact nationally as these people are mobile and may transfer the benefits and skills to other organizations and sectors.							
17. Expansion of agriculture and food sector exports creates jobs and investments related to production, processing and servicing of these exports.							
18. Demonstrated national capacity to export safe food in one category has positive impact on reputation, improving domestic and export market opportunities in other export categories (from the point of view of importing countries).							

	Spillover Category						
	A. Private Sector Practice	B. Product Safety	C. Public Sector Capacity	D. Environmental Pollution and Pesticide Use	E. Consumer Awareness	F. Small-Scale Producers and Livelihoods	G. Embedded Food Safety Capacity
<b>Negative Spillover Effects</b>							
1. Trade-related SPS investments could result in a multi-tiered food safety system in developing countries, wherein the highest quality products are exported and less safe products are sold in domestic markets.							
2. Increased focus of competent authorities on servicing SPS requirements for exports can divert needed attention away from appropriate regulation for domestic markets.							
3. Inappropriate food safety reform processes and lack of coordination among donors can create distortions in the public sector and local markets (e.g., wrong policies, misallocation of resources, etc.)							
4. Higher food safety standards may increase local food prices and lower access to food and lead to exclusion of smallholders from the market due to their limited financial resources and technical capacity.							
5. Identification of food safety failures in exported products can have reputational risks for other exports, and also decrease consumer trust in domestically produced foods.							

## Presentation Outline

Introduction

Approach

Spillover Effects Defined

Conceptual Framework

Positive and Negative Spillover  
Effects and Categorization

Conditions that Potentially  
Influence Spillovers

Validation

Recommendations

Future Steps

Conditions that potentially influence the likelihood of spillover effects were hypothesized and can be broadly grouped in three categories.

1. Sector-Specific Considerations
2. Nature of the SPS-Food Safety Technical Assistance for Trade Related Compliance
3. Institutional Support / Enabling Environment

Conditions	Positive Spillovers	Neutral or Negative Spillovers
<b>Products – primarily exported or domestically consumed?</b>	Anticipated when the product has a large domestic market.	Limited benefits associated with products that are primarily exported
<b>Size and maturity of industry sector</b>	Established sectors would be expected to have potential for domestic spillovers.	Niche sectors, particularly those having limited domestic markets, would have minimal spillovers.
<b>Nature of lead firms – export focused or significant sales to domestic markets</b>	Domestically engaged firms would be expected to be more likely to generate spillovers.	Export only firms would have no impact on domestic situation.
<b>Nature of lead firms – vertically integrated companies</b>	Vertically integrated companies would be expected to generate significant spillovers depending upon the extent to which they are engaged in domestic markets.	
<b>Geography</b>		Sectors that are spatially segregated from the rest of the domestic market (e.g. plantations) would have limited spillovers.
<b>Organized retail sector</b>	Positive spillovers would be expected to the extent that retailers source locally.	
<b>Strength / capacity of local institutions</b>	Strong local professional institutions of producers, processors and other actors along the food chain would be more likely to generate positive spillovers.	

## Presentation Outline

Introduction

Approach

Spillover Effects Defined

Conceptual Framework

Positive and Negative Spillover  
Effects and Categorization

Conditions that Potentially  
influence Spillovers

Validation

Recommendations

Future Steps



## Validation Activities

- Literature review – focus on project reports in the past ten years.
- Key informant interviews – used to fill gaps where project reports were lacking, and to provide additional input on the overall conceptual framework and indicators.
- Results of these validation exercises are summarized in the report and in Annex 2.

## Presentation Outline

Introduction

Approach

Spillover Effects Defined

Conceptual Framework

Positive and Negative Spillover  
Effects and Categorization

Conditions that Potentially  
Influence Spillovers

Validation

Recommendations

Future Steps



## Recommendations for Donors, Development Partners, etc.

- Future projects should consider including assessment of potential spillover effects where practicable.
- During design of projects focused on building trade-related capacity, explicitly consider potential synergies between trade-related capacity building and domestic food safety.
- Donors and implementing agencies are strongly encouraged to make more use of the online STDF library to disseminate project reports and supporting documents where possible.
- Donor agencies should strongly consider funding research and analysis to evaluate the occurrence of individual spillover effects as well as the broader conceptual framework for spillovers, including conditions hypothesized to support positive spillovers.

## Presentation Outline

Introduction

Approach

Spillover Effects Defined

Conceptual Framework

Positive and Negative Spillover  
Effects and Categorization

Conditions that Potentially  
Influence Spillovers

Validation

Recommendations

Future Steps



## Recommendations for Recipient Countries

- Trade related capacity building efforts are more likely to generate positive domestic spillover effects when the efforts are focused on value chains/products that are consumed domestically.
- Investments in regulatory capacity and infrastructure supporting export markets should be planned in a manner in which they can support domestic food safety efforts.
- Engagement of all relevant actors – government, private sector, civil society organizations, research institutions, consumers, etc. – in value chains will increase the likelihood of positive spillovers on domestic food safety.



## Presentation Outline

Introduction

Approach

Spillover Effects Defined

Conceptual Framework

Positive and Negative Spillover  
Effects and Categorization

Conditions that Potentially  
influence Spillovers

Validation

Recommendations

Future Steps



## Challenges

- Access to data/information
- Attribution
- Magnitude of evidence (anecdotes vs quantitative evidence)

## Future Steps

- Develop indicators for spillovers that can be useful to assess their occurrence
- Test the framework purposefully – design projects to evaluate the framework and evidence for spillovers

# Working Group Participants



- Jens Andersson – SIVIK Consult
- Betsy Baysinger – United States Department of Agriculture, Foreign Agricultural Service
- Camille E. Brewer – U.S. FDA, Center for Food Safety and Applied Nutrition
- Eleonora Dupouy – Food and Agricultural Organization of the United Nations
- Mary Kenny – Food and Agricultural Organization of the United Nations
- Jill Luxenberg – United States Department of Agriculture, Foreign Agricultural Service
- Lourdes Martinez – United States Agency for International Development
- Clare Narrod – University of Maryland, Joint Institute for Food Safety and Applied Nutrition
- Kateryna Onul – World Bank Group International Finance Corporation
- Phillipe Verger – World Health Organization
- Morag Webb – COLEACP

# Acknowledgements



- STDF Secretariat
- Working Group Members
- Additional contributions from:
  - Dennis Bittisnich
  - Megan Crowe
  - Sylvie Coulon
  - Marta Drago
  - Samuel Godefroy
  - Luc Ingenbleek
  - Steve Jaffee
  - Babacar Samb

# Thank you for your kind attention



Leslie D. Bourquin

Professor and Food Safety Specialist

Department of Food Science and Human Nutrition

Michigan State University

139A G. M. Trout Bldg.

469 Wilson Road

East Lansing, MI 48824-1224 USA

Phone: +1-517-353-3329

Email: [bourqui1@msu.edu](mailto:bourqui1@msu.edu)