

# Agrifood Standards and Trade

## SPS Toolkit and CBT Study

STDF Working Group Meeting  
21 October 2011



# Agrifood Standards – Ensuring Compliance Increases Trade for Developing Countries (ASEC)

## Presentation by NRI

- Ulrich Kleih: SPS Toolkit – Causal Chain Analysis, Value Chain Analysis and Cost Benefit Analysis;
- Hanneke Lam: SPS Toolkit – Institutional Analysis and Strengthening of SPS Coordination Systems;
- Dr Diego Naziri: Commodity Based Trade / Namibia project;
- Andrew Edewa – UNIDO, Nairobi, and PhD student at NRI; contributed to SPS toolkit development.

# ASEC Programme - Overview

- Supported by DFID Policy Division
- Three components
  - Public sector standards (e.g., Impact assessment of notifications – case studies; SPS toolkit to strengthen SPS coordination systems, assess the impact of SPS notifications, and analyse control measures);
  - Private standards (e.g., GLOBALGAP; National Technical Working Groups; National Interpretation Guidelines);
  - Commodity Based Trade (e.g., Namibia case study on the feasibility of meat exports from the Caprivi strip).

# Public sector standards: SPS Toolkit

Ulrich Kleih and Hanneke Lam



## Toolkit components

- I. Institutional Analysis and Strengthening of SPS  
Coordination Mechanisms
- II. Causal Chain Analysis and Sustainability Impact  
Assessment of SPS notifications
- III. Value Chain Analysis
- IV. Cost Benefit Analysis of Control Measures

# Toolkit (I): Institutional Analysis and Strengthening of SPS Coordination Mechanisms

Part I aims to strengthen coordination between and amongst:

- Public sector, private sector and civil society
  - National, regional, international and local level
  - Food Safety, Animal Health and Plant Health
- In compliance with WTO SPS Agreement

## **Well-functioning coordination systems are key for increasing trade and enhancing food safety, animal health and plant health:**

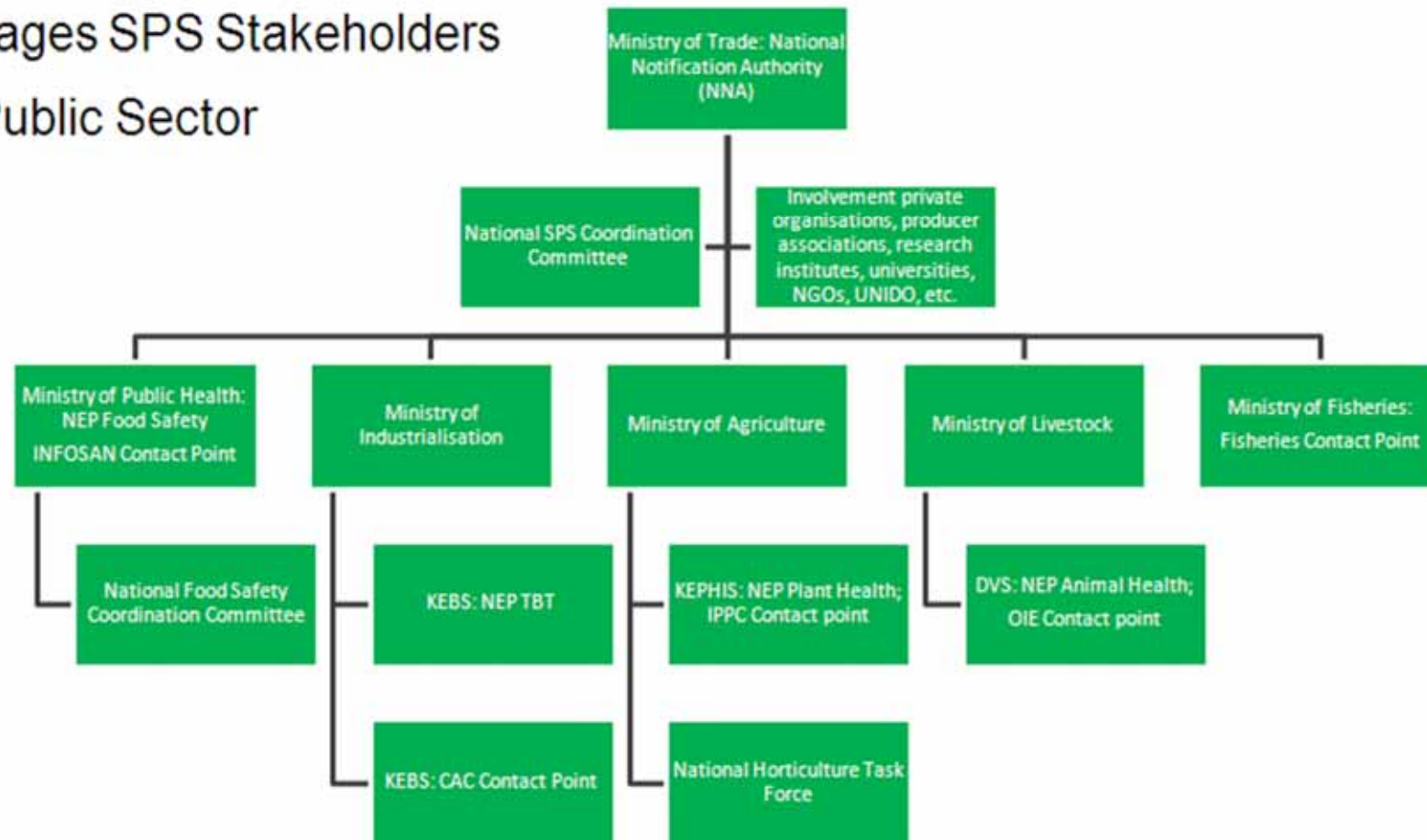
- Improve communication of SPS matters, including notifications
- Raise country's/region's ability to discuss and negotiate SPS matters at national and international forums
- Increase ability to interact with International Standard Setting Bodies CAC, OIE, IPPC
- Help to identify gaps/overlaps in stakeholders' mandates
- Minimise duplication of efforts
- Contribute to the reduction of costs

## **Toolkit (I) provides methods and techniques to:**

- Acquire better understanding of the SPS institutional environment by mapping out:
  - (inter)national stakeholders related to food safety, animal health, plant health
  - their mutual relationships
  - regulatory system in which they are embedded
- Assess key elements within SPS coordination mechanisms
- Find solutions to overcome identified challenges
- Develop strategies to turn ideas for improvement into action



Mapping Example:  
Interlinkages SPS Stakeholders  
Kenya Public Sector



# Example performance rating



A. Policy, Legislation and Regulatory Framework	Circle your score
Section A aims to assess the country's legal and regulatory framework in place: the laws, acts and regulations which are designed to govern SPS issues. A conducive regulatory framework starts with high-level buy-in: It is essential that Government officials, especially senior politicians, support and guide the development of efficient SPS coordination mechanisms. This includes the legal and regulatory framework, but also other aspects such as the coordination between concerned Ministries, Departments and Agencies (MDAs), and availability of resources (human, financial and technical). Whether the coordination system needs profound changes and re-design, or only small improvements, all cases require awareness rising (up to the highest levels) on the importance of SPS and the potential impact of related measures on trade and the wider economy. Once this is accomplished, SPS coordination should be integrated into policy and legislation. This is a complicated task as not only many SPS issues are d require coordination between environmental policy, private sector policy is developed in accordance with	
Commitment of senior Government officials to SPS issues? (1=Not at all, 5=Fully)	Rating 5 4 3 2 1 0
Government policy and legislation integrated into policy and legislation which provides SPS issues in a holistic manner?	Rating 5 4 3 2 1 0
Are laws, acts and regulations within the country developed in accordance with international safety, animal health and plant health standards?	Rating 5 4 3 2 1 0
Do regulations reflecting international standards exist?	Rating 5 4 3 2 1 0
Do policies stipulate which Ministries, Departments and Agencies are responsible for the enforcement of SPS matters?	Rating 5 4 3 2 1 0
To what extent are research institutes or other organizations encouraged to develop or improve SPS related policy, legislation and regulations?	Rating 5 4 3 2 1 0
<i>Total score for section A</i>	
<i>Average score for section A (divide total score by 6)</i>	
<b>Comments</b>	

## Tools and techniques (2)

### III. Recommendations and strategy development to overcome identified institutional gaps

- Problem Tree Analysis
- Development of a Strategy

### IV. Development and implementation of action plan and/or project

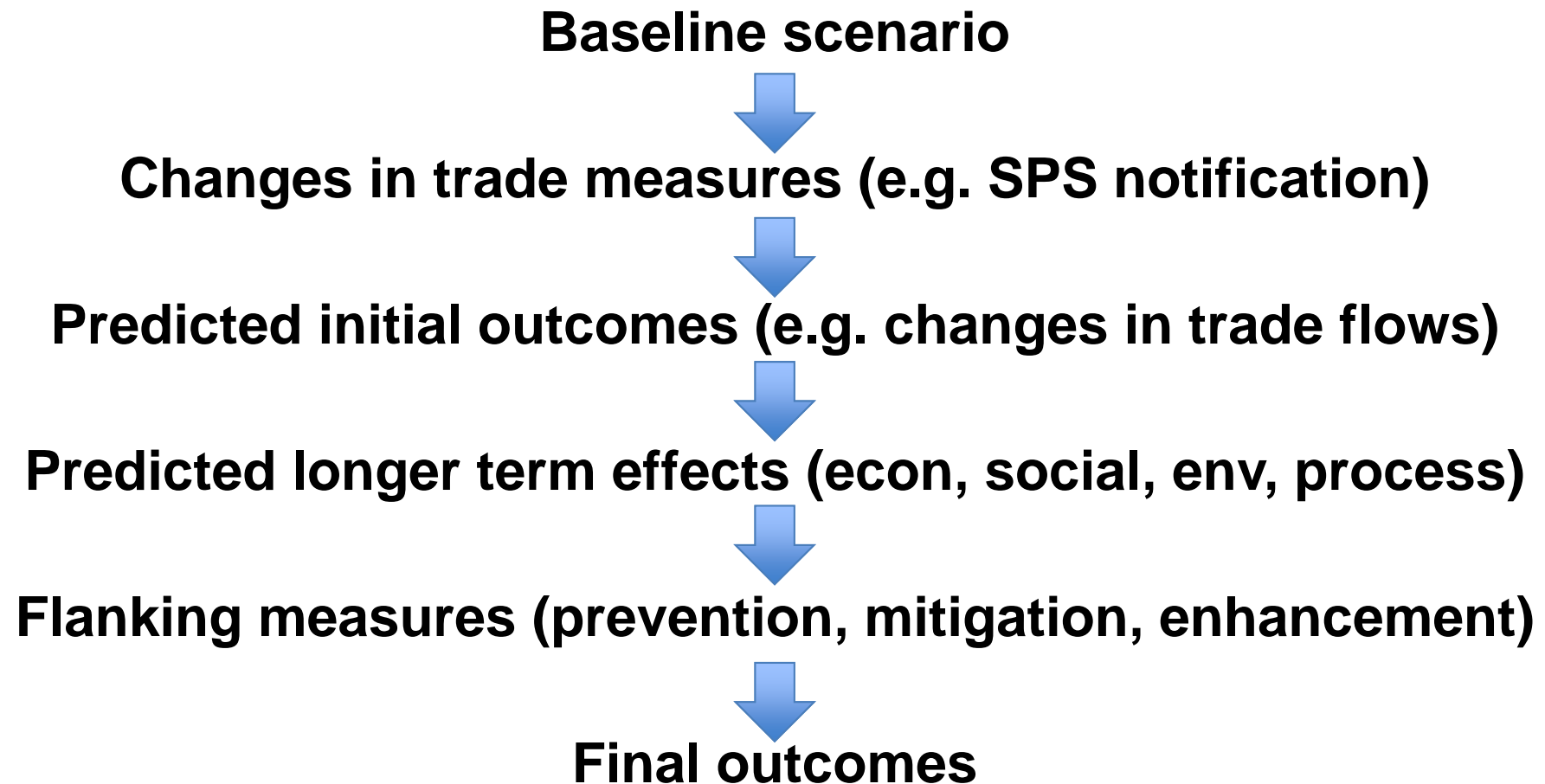
- Development of an Action Plan
- Logical Framework Approach
- Development of a Project Proposal

### V. Monitoring and evaluation

## Coordination: Novel approach

- The SPS Toolkit recognises existing SPS Capacity Evaluation Tools, which are widely adopted and applied (e.g. OIE PVS, IPPC PCE, IICA PVS Tools, etc)
- Part I of the Toolkit complements these as it aims to:
  - address (inter)national SPS coordination, and communication between public and private sector organisations in a more holistic manner
  - help develop a regulatory framework which facilitates integrated and effective SPS policy in accordance with WTO SPS agreement
  - put project management tools in an SPS context: from analysis of current situation to implementation of action plans and projects

## Toolkit (II): Causal Chain Analysis and Sustainability Impact Assessment of SPS notifications



## Toolkit (III): Value Chain Analysis in an SPS context

- Most goods and services are the result of a sequence of activities > value chain;
- Some key concepts of value chain analysis (VCA): governance; benchmarking; innovation & upgrading; positioning of the product and the value chain;
- Why value chain analysis is important in an SPS context:
  - to upgrade the value chain and position the product at a higher level, i.e. access markets where higher prices can be fetched.

## Tools and techniques used for VCA

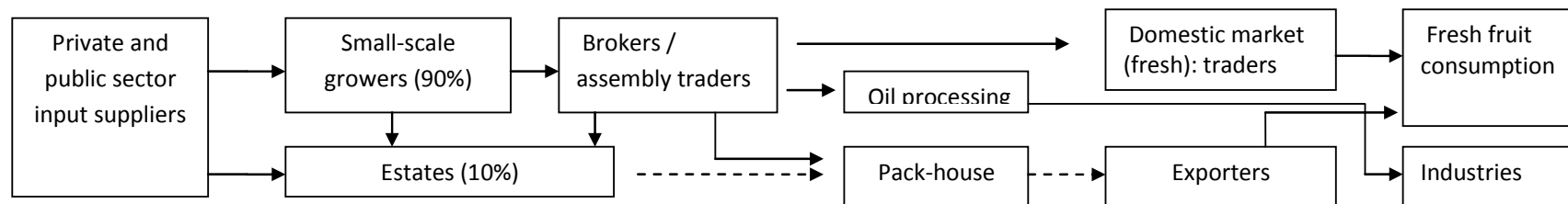
- Checklist for assessing SPS compliance > understanding:
  - The market (e.g., price premiums for SPS compliance)
  - Value chain and SPS requirements
  - Costs and benefits of control measures
  - Service requirements and providers;
- Mapping the chain > functioning of the chain in terms of end-markets, actors, and their functions;
- Identification of SPS related issues and control measures;
- Financial implications for farmers and other actors in chain;
- Improved SPS service delivery.

# Value chain map - example

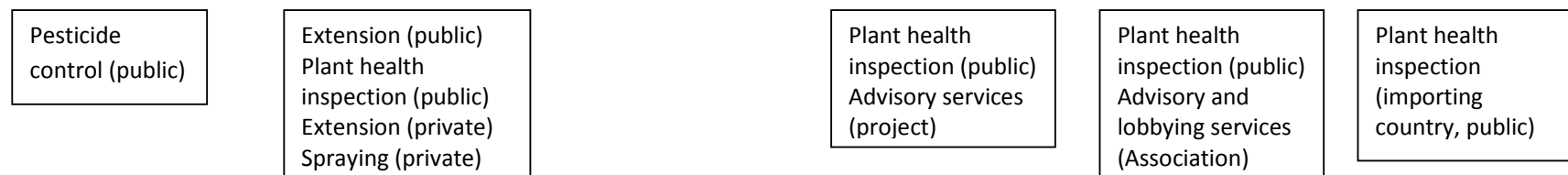
## Stages in the Value Chain – Overview of functions



## Detailed map of sub-channels and actors within the chain (example)



## Map of SPS related service providers and their roles (example)





## Toolkit (IV): Cost Benefit Analysis of Control Measures

- Two models: (a) short version; (b) long version;
- Incremental cash-flow analysis for private and public sectors;
- Financial indicators: Net Present Value (NPV), and Internal Rate of Return (IRR);
- Short version: additional sales on export or local markets; cost of control measures; other additional costs (pre & p-h);
- Long version:
  - Comparison of all sales and costs for situations with and without SPS control measures;
  - Analysis of three production systems / value chains possible;
  - Sensitivity analysis (i.e. change of key variables);
  - Currency conversion of summary results possible.

## Cost-Benefit Analysis of SPS Measures (Plant Health) - Short Version of Model

Overall Overview

Browse Worksheets

Summary of Results

### Private sector

#### Benefits & Costs of Control Measures

Benefits of Control Measures

#### Costs of Control Measures

Cost of Control Measure 1

Cost of Control Measure 2

Cost of Control Measure 3

#### Additional Production and Post-harvest Costs

Additional Production Costs

Additional Post-harvest Costs

Residual Value of Investments

### Public sector

#### Additional Income and Costs

Public sector - Additional Income

Public sector - Additional Costs (Pre-harvest)

Public sector - Additional Costs (Post-harvest)

Public sector - Residual Value of Investments

Microsoft Excel - Toolkit Draft V1 Test version 4 - Keriya 04-10-2011.xlsx

Home Insert Page Layout Formulas Data Review View Developer

Clipboard Font Alignment Number Styles Cells Editing

E32

Select sheet to goto

Costs and Benefits

Currency

Home Page  
Overview  
Sum Results  
Pr Benefits  
Pr Costs of CM1 (pre-h)  
Pr Costs of CM2 (pre-h)  
Pr Costs of CM3 (post-h)  
Pr Add Prod Costs  
Pr Add Post-harvest Costs  
Pr Res value of Inv  
Pub Add Income  
Pub Add Costs (Prod)  
Pub Add Costs (Post-harvest)  
Pub Res value of Inv

OK  
Cancel

For results in US Dollars, see below

Rate 20%

	2014	2015	2016	2017	2018	2019	2020
Pr Benefits	658,416,000	658,416,000	658,416,000	658,416,000	658,416,000	658,416,000	658,416,000
Pr Costs of CM1 (pre-h)	0,000,000	-120,000,000	-120,000,000	-120,000,000	-120,000,000	-120,000,000	-120,000,000
Pr Costs of CM2 (pre-h)	4,480,000	4,480,000	4,480,000	4,480,000	4,480,000	4,480,000	4,480,000
Pr Costs of CM3 (post-h)	7,000,000	17,000,000	17,000,000	25,000,000	17,000,000	17,000,000	17,000,000
Pr Add Prod Costs	4,000,000	144,000,000	144,000,000	144,000,000	144,000,000	144,000,000	144,000,000
Pr Add Post-harvest Costs	7,200,000	7,200,000	7,200,000	7,200,000	7,200,000	7,200,000	7,200,000
Pr Res value of Inv	0,000,000	120,000,000	120,000,000	120,000,000	120,000,000	120,000,000	120,000,000
Pub Add Income	5,736,000	245,736,000	245,736,000	237,736,000	245,736,000	245,736,000	245,736,000
Pub Add Costs (Prod)	960,000	960,000	960,000	960,000	960,000	960,000	960,000
Pub Add Costs (Post-harvest)	2,125,000	2,125,000	2,125,000	6,125,000	2,125,000	2,125,000	2,125,000
Pub Res value of Inv	4,890,000	4,890,000	4,890,000	4,890,000	4,890,000	4,890,000	4,890,000
Incremental cash-flow (private & pub sector)	-376,895,000	239,681,000	239,681,000	239,681,000	239,681,000	239,681,000	239,681,000

Private sector

Public and private sector

Net present value 560,684,503 487,992,826

Internal rate of return 77.3% 62.6%

Conversion of results into US Dollars

Currency used Kshs

Exchange rate to the US Dollar 89

	2012	2013	2014	2015	2016	2017	2018	2019	2020
Benefits (increased exports)	-	7,397,933	7,397,933	7,397,933	7,397,933	7,397,933	7,397,933	7,397,933	7,397,933
Benefits (increased local market)	-	1,348,315	1,348,315	1,348,315	1,348,315	1,348,315	1,348,315	1,348,315	1,348,315
Costs (control measure 1; pre-harvest)	50,337	50,337	50,337	50,337	50,337	50,337	50,337	50,337	50,337
Costs (control measure 2; pre-harvest)	449,438	191,011	191,011	191,011	191,011	260,899	191,011	191,011	191,011
Costs (control measure 3; post-harvest)	1,617,978	1,617,978	1,617,978	1,617,978	1,617,978	1,617,978	1,617,978	1,617,978	1,617,978
Additional costs (production)	80,899	80,899	80,899	80,899	80,899	80,899	80,899	80,899	80,899

Ready

Start Un... To... Re... [A...] N... ex... sel... To... F... Pr... N... un... 13:22

# Cost Benefit Analysis – Long Model, Home Page

ASEC - Theme A: Toolkit to Assess the Costs and Benefits of SPS Control Measures (CM) in the Plant Hea

		Home Page		Browse Worksheets	
		Overall Overview		CM = Control Measures	
		Summary - Overall			
Production systems	Traditional: A	Semi-intensive: B	Intensive: C		
	Summary of results: A	Summary of results: B	Summary of results: C		
Private sector	<b>Sales</b>	<b>Sales</b>	<b>Sales</b>		
	Sales - no CM	Sales - no CM	Sales - no CM		
	Export Domestic market	Export Domestic market	Export Domestic market		
	Sales - with CM	Sales - with CM	Sales - with CM		
	Export Domestic market	Export Domestic market	Export Domestic market		
	<b>Costs</b>	<b>Costs</b>	<b>Costs</b>		
	Production costs - no CM	Production costs - no CM	Production costs - no CM		
	Production costs - with CM	Production costs - with CM	Production costs - with CM		
	Post-harvest costs - no CM	Post-harvest costs - no CM	Post-harvest costs - no CM		
	Post-harvest costs - with CM	Post-harvest costs - with CM	Post-harvest costs - with CM		
Residual value of investments - no CM	Residual value of investments - no CM	Residual value of investments - no CM			
Residual value of investments - with CM	Residual value of investments - with CM	Residual value of investments - with CM			
Public sector	<b>Additional income due to control measures</b>	<b>Additional income due to control measures</b>	<b>Additional income due to control measur</b>		
	Additional income - with CM	Additional income - with CM	Additional income - with CM		
	<b>Additional costs due to control measures</b>	<b>Additional costs due to control measures</b>	<b>Additional costs due to control measure:</b>		
	Production costs - with CM	Production costs - with CM	Production costs - with CM		
	Post-harvest costs - with CM	Post-harvest costs - with CM	Post-harvest costs - with CM		
	Residual value of investments	Residual value of investments	Residual value of investments		

## SPS Toolkit: Challenges and way forward

- Availability of data (some data may be confidential, some may be time-consuming to collect);
- User-friendliness of model;
- Staff may lack understanding of financial calculations;
  - Guidance notes are required (currently being produced).
- Way forward
  - Feedback and evaluation required;
  - Packaging of toolkit (soft and hard copies);
  - Dissemination, awareness raising and mentoring activities.