

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). See separate presentation.

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
- Help to identify gaps/overlaps in stakeholders' mandates
- 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
- Minimise duplication of efforts
- Contribute to reduction of costs

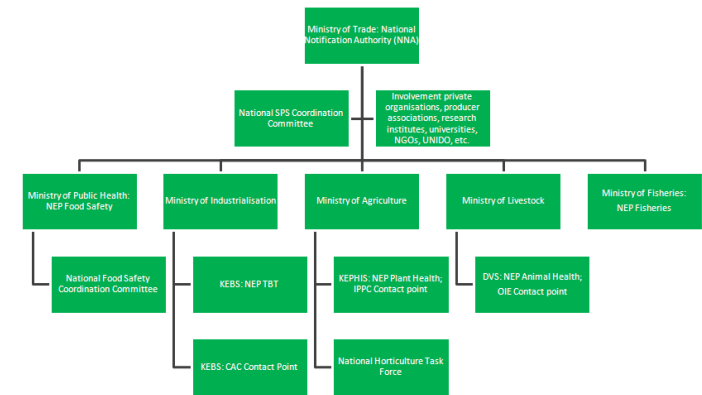
Toolkit provides methods and techniques to:

- Acquire better understanding of 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

Tools and techniques (1)

I. Map the institutional environment

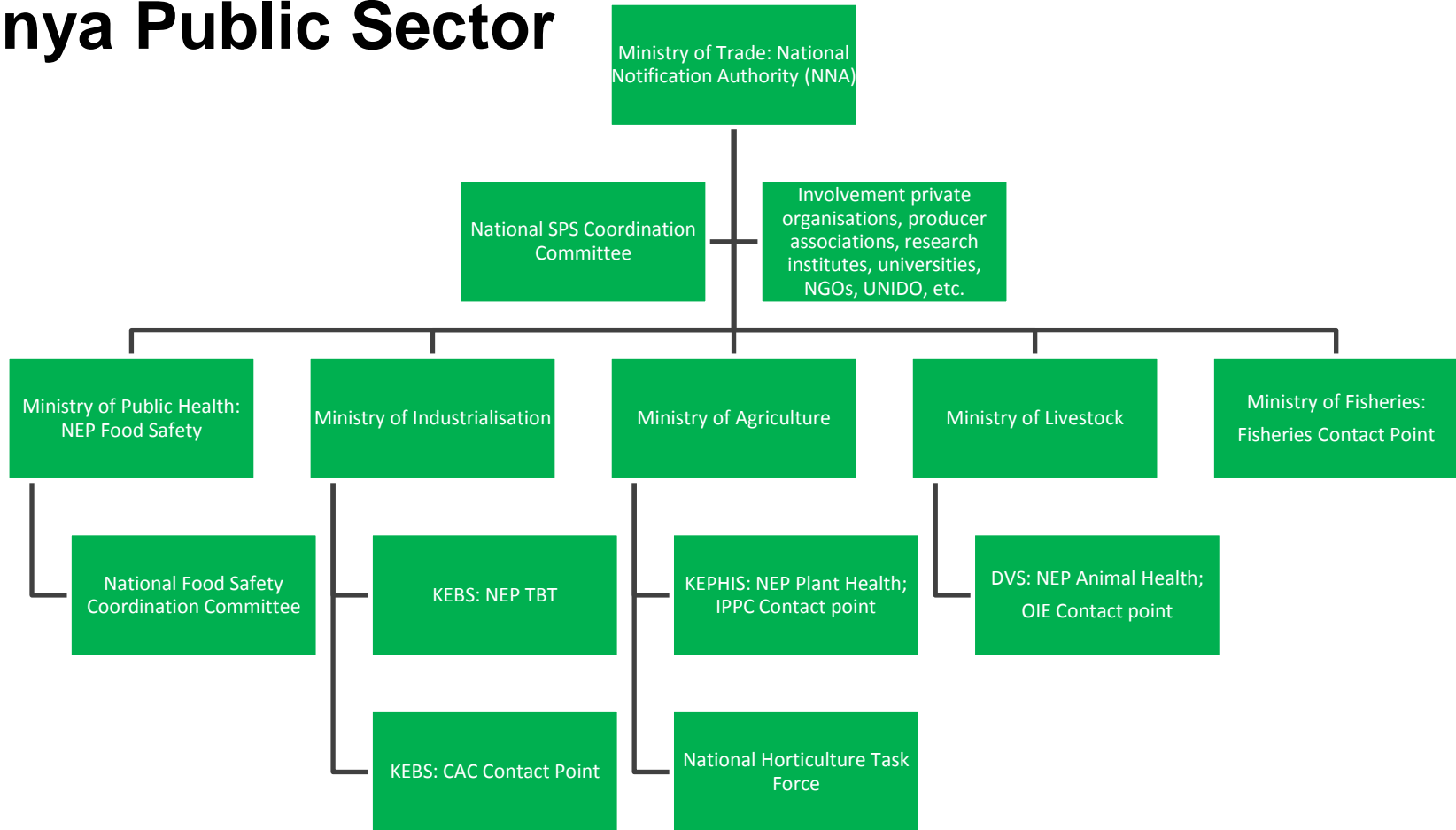
- Stakeholder Analysis
- Visual Mapping (e.g. Venn-Diagram)
- Design of a communication flow chart



II. Assess key elements within SPS coordination system

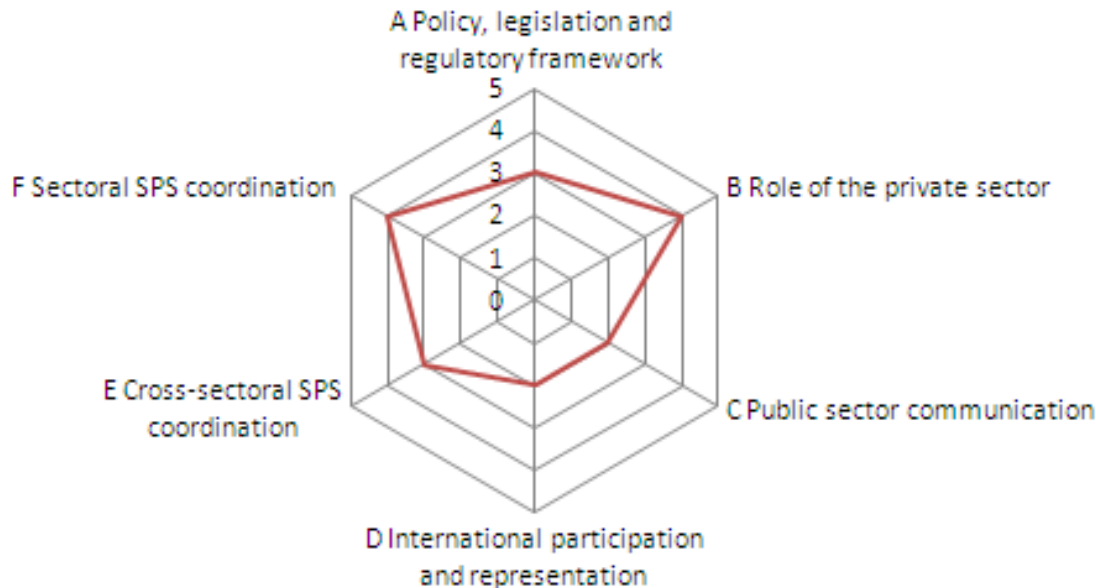
- SWOT analysis of key stakeholders:
 - Human, financial, technical resources (internal)
 - Enabling environment (external)
- Rating performance of coordination mechanisms:
 - SPS Policy and stakeholders' participation
 - Communication and interlinkages

Mapping example: Interlinkages SPS stakeholders Kenya Public Sector



Example performance rating exercise

Example



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) ironmental policy, private sector policy is developed in accordance with	
commitment of senior Government	Rating
integrated SPS coordination?	5 4 3 2 1 0
nation integrated into policy and hytosanitary policy which provides S issues in a holistic manner)?	Rating
5 4 3 2 1 0	
re laws, acts and regulations within id safety, animal health and plant	Rating
5 4 3 2 1 0	
regulations reflecting international	Rating
5 4 3 2 1 0	
l policy stipulate which Ministries, sponsible for the enforcement of PS matters?	Rating
5 4 3 2 1 0	
extent are research institutes or lopor improve SPS related policy,	Rating
5 4 3 2 1 0	
<i>Total score for section A</i>	
<i>or section A (divide total score by 6)</i>	
omments	

Tools and techniques (2)

- III. Recommendations and strategy development to overcome identified institutional gaps
 - Problem Tree Analysis
 - Development of a strategy as a targeted approach
- 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 conducive 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

Baseline scenario



Changes in trade measures (e.g. SPS notification)



Predicted initial outcomes (e.g. changes in trade flows)



Predicted longer term effects (econ, social, env, process)



Flanking measures (prevention, mitigation, enhancement)



Final outcomes

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

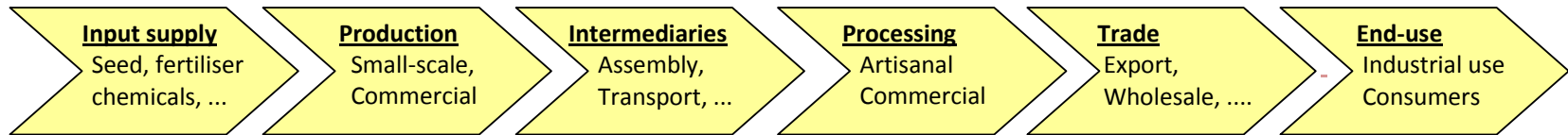
- Most goods and services are the result of a sequence of activities > value chain;
- Some key concepts of value chain analysis (VCA): governance; benchmarking; innovation & upgrading; positioning of the product and the value chain;
- Why value chain analysis is important in an SPS context:
 - to upgrade 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

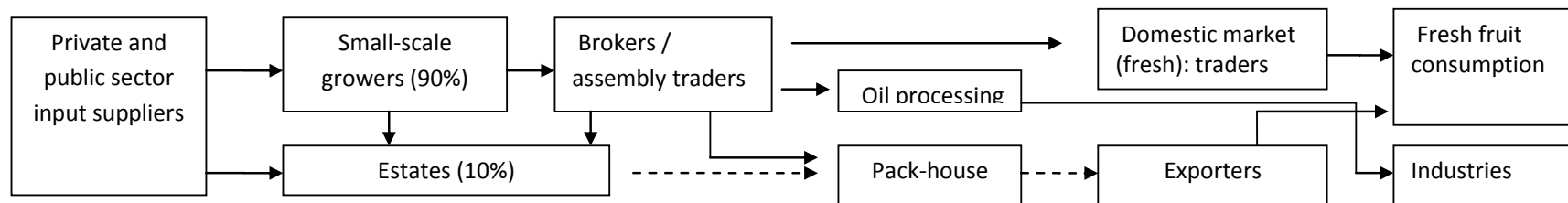
- Checklist for assessing SPS compliance > understanding:
 - The market (e.g., price premiums for SPS compliance)
 - Value chain and SPS requirements
 - Costs and benefits of control measures
 - Service requirements and providers;
- Mapping the chain > functioning of the chain in terms of end-markets, 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

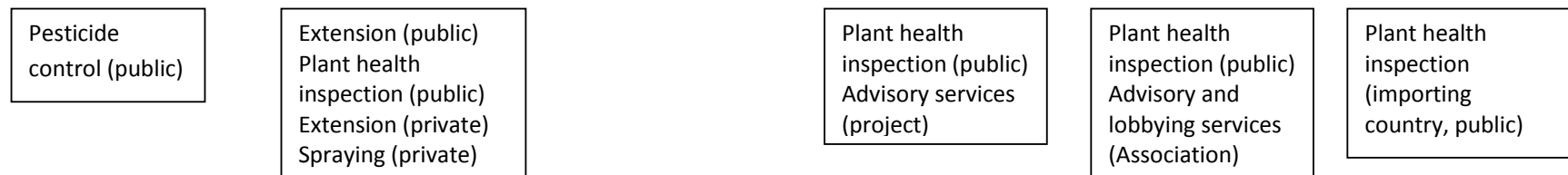
Stages in the Value Chain – Overview of functions



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](#)

Toolkit Draft V1 Test version 4 - Kenya 04-10-2011.xlsm - Microsoft Excel

Home Insert Page Layout Formulas Data Review View Developer

Clipboard Font Alignment Number Styles Cells Editing

E32

Select sheet to goto

- 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

For results in US Dollars, see below

Rate 20%

	2014	2015	2016	2017	2018	2019	2020
8,416,000	658,416,000	658,416,000	658,416,000	658,416,000	658,416,000	658,416,000	658,416,000
0,000,000	- 120,000,000	- 120,000,000	- 120,000,000	- 120,000,000	- 120,000,000	- 120,000,000	- 120,000,000
4,480,000	4,480,000	4,480,000	4,480,000	4,480,000	4,480,000	4,480,000	4,480,000
7,000,000	17,000,000	17,000,000	25,000,000	17,000,000	17,000,000	17,000,000	17,000,000
4,000,000	144,000,000	144,000,000	144,000,000	144,000,000	144,000,000	144,000,000	144,000,000
7,200,000	7,200,000	7,200,000	7,200,000	7,200,000	7,200,000	7,200,000	7,200,000
0,000,000	120,000,000	120,000,000	120,000,000	120,000,000	120,000,000	120,000,000	120,000,000
5,736,000	245,736,000	245,736,000	237,736,000	245,736,000	245,736,000	245,736,000	245,736,000
960,000	960,000	960,000	960,000	960,000	960,000	960,000	960,000
2,125,000	2,125,000	2,125,000	6,125,000	2,125,000	2,125,000	2,125,000	2,125,000
4,890,000	4,890,000	4,890,000	4,890,000	4,890,000	4,890,000	4,890,000	4,890,000
Pub sector - additional costs (post-harvest)	90,000	4,890,000	4,890,000	4,890,000	4,890,000	4,890,000	4,890,000
Pub sector - residual value of investments							
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	280,899	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

Cover 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)

Ready

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	
		Summary - Overall	CM = Control Measures
Production systems	Traditional: A	Semi-intensive: B	Intensive: C
	Summary of results: A	Summary of results: B	Summary of results: C
Private sector	Sales	Sales	Sales
	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
	Costs	Costs	Costs
	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	Additional income due to control measures	Additional income due to control measures	Additional income due to control measur
	Additional income - with CM	Additional income - with CM	Additional income - with CM
	Additional costs due to control measures	Additional costs due to control measures	Additional costs due to control measure:
	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.

Thank you



UNIVERSITY
of
GREENWICH

Natural Resources Institute

University of Greenwich
Medway Campus
Central Avenue
Chatham Maritime
Kent ME4 4TB

Telephone: 01634 880088

Telephone from outside the UK: +44 1634 880088

Fax: 01634 883386

Fax from outside the UK: +44 1634 883386

E-mail: nri@greenwich.ac.uk

Website: www.nri.org



FS 54723

ISO 9001

University of Greenwich is a charity and company limited by guarantee, registered in England (reg. no. 986729).
Registered office: Old Royal Naval College, Park Row, Greenwich, London SE10 9LS