Private and Public Food Safety Standards:
The Road to Peaceful Coexistence

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Main messages

To meet the challenges of using agriculture for development, agriculture must be given a more prominent place in government and donor priorities.

Successful implementation requires reconsidering the relative roles of the state, market, civil society.
Agriculture is important to the entire globe

1. A trigger of economic growth
   - In early stages of development (including lagging regions within countries)
   - GDP growth: large and leading sector, key to food security and wage competitiveness

2. A source of livelihoods
   - Ag. growth is especially effective in poverty reduction
   - 75% of poor are rural, 2.5 billion people in agriculture, 900 million extreme poor

3. A source of environmental services
   - Need to reduce the environment footprint – agriculture accounts for 80% of fresh water use, and 21% of green house gas emissions
   - But also provides environmental services
Agriculture is effective in poverty reduction

GDP growth from agriculture can benefit the income of the poor 2-4 times more than GDP growth from non-agriculture.
The three worlds of agriculture

- **Agriculture based countries** (mainly SS-Africa. 417 million rural people)
- **Transforming countries** (mainly Asia, MENA. 2.2 billion rural people)
- **Urbanized countries** (mainly LAC, ECA. 255 million rural people)

Rural poor/total poor, 2002
Agriculture is important to the WBG

- Annual Bank commitments to agriculture expected to reach over $3 billion in 2009, with three year moving average rising since 2002.

- IFC commitments rising also, with moving average up since 2004, and $750 million expected 2009.
How the World Bank engages in the agri-food standards area

1. Mainstreaming standards WPA (2002-2007)
2. SPS assessments & action plans
3. Workshops on agri-food standards, private standards, smallholder linkages
4. Co-funding and participation in STDF
5. E-learning series on agri-food
How the World Bank engages in the agri-food standards area

6. Regulatory impact analysis action research
7. Economic analysis chapter of FAO Bisosecurity Toolkit
8. Trade Standards Practitioners Network (TSPN)
9. Roundtable on Sustainable Oilpalm
10. Collaboration with WHO on Global Burden of Foodborne Illness
How can the World Bank engage in the Global Minor Use Program?

- The development challenges are many
  - Lack of clarity for industry players
  - Difficulty balancing domestic and export
  - Consumer protection vs. other goals
  - Changing technology
  - Need to reduce costs

- The WBG has its own constraints
  - Bank itself works mainly with governments
  - Pesticides are a sensitive topic
  - Bank policy heavily favors IPM with minimal use of conventional pesticides
The challenge of agri-food standards...

...is already complex...
The challenge of agri-food standards...

..and getting more difficult all the time
...which is important because most agro-enterprises mix quality and safety.

Compliance with official standards
People can disagree about what matters in terms of visual quality…
...and there’s no arguing about taste

Beefsteak

Roma

Yellow

Cherry

Heirloom

Grape
Standards can be distinguished in different ways

- Service
- Supply Chain Management
- Social Standards
- Environ. Standards
- Food Safety and Animal/Plant Health (i.e. SPS) Standards
- Technical Requirements

Public vs. private
Standards can be distinguished in different ways:

- Public vs. private
- Mandatory vs. voluntary
- Service
- Supply Chain Management
- Environ. Standards
- Social Standards
- Food Safety and Animal/Plant Health (i.e. SPS) Standards
- Technical Requirements
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Supplier, buyer, or externally driven
Food safety is part of just one category of agri-food standards…

![Diagram showing the hierarchy of service, supply chain management, environmental standards, social standards, food safety and animal/plant health standards, and technical requirements.]
..and pesticide standards are a subset of food safety standards…
...the other main subset being microbacteriological contamination

- Number of food-borne diseases
  - About 250 of concern to CDC

- New or emerging diseases
  - More than 150 agents of zoonotic infection

- Rise of vulnerable populations
  - % of young in developing countries
  - % of elders in developed countries
  - Immuno-suppressed individuals

- Limits to treatment
  - Resistant strains
  - Lack of research to replace antibiotics
Outbreaks associated with the 10 most worrisome foodborne pathogens...

- Campylobacter
- Clostridium botulinum
- E. coli 0157:H7
- Listeria monocytogenes
- Norovirus
- Salmonella
- Staphylococcus aureus
- Shigella
- Toxoplasma gondii
- Vibrio vulnificus

...are front page news
76 million cases of foodborne illness each year in the U.S. alone

- 5,200 deaths
- 325,000 cases result in an average of 5.8 days in hospital
- 1,991,311 cases who visit physician and test positive for specific pathogen

2000 TACO BELL HEPATITIS A OUTBREAK TIED TO GREEN ONIONS
76 million cases of foodborne illness each year in the U.S. alone

- 12,878,489 cases who visit a physician but have no test done
- 60,800,000 cases who do not seek medical care
- $5.6 billion in economic costs

2000 TACO BELL HEPATITIS A OUTBREAK TIED TO GREEN ONIONS
These illnesses have huge impacts on the individual,...

- Pain and suffering
- Death and disability
- Loss of wages
- Reduced productivity
- Medical expenses
- Legal costs
on society,…

- QALYs and DALYs
- Reduced labor productivity
- Loss of work and leisure time by affected person and family

1,397,187 cases of salmonella means $2,467,322,866 (2006 dollars) in lost wages and medical costs (USDA/ERS Cost of Illness Calculator)
on businesses,…

- Business interruption
- Wasted time and effort
- Loss of client
- Loss of market
- Damage to reputation
Several major retailers cut off all produce imports from Guatemala!
on the value chains and industries directly involved,…

- US and Canada blocked red raspberry imports from Guatemala next two years, resulting in $10 million loss to producers there

- Current demand for Guate berries in US is one-third of earlier levels
on the value chains and industries directly involved,…

- Many brambleberry producers went out of business

- Some growers moved to Southern Mexico

- Guatemalan berry industry never recovered despite model plan of excellence developed jointly with FDA, CDC, PMA, EMI, and supported
and even on value chains, industries, or countries not actually involved…

- Initial blame on California blackberries caused $20-$40 million in lost sales for all berries, including strawberries
- Chilean exports of red raspberries and blackberries were also affected
Regulatory agencies such as FDA have quite a challenge.

- Value of U.S. food imports exceeds $2 trillion (more than twice the size of the Brazilian economy)

![Graph showing import growth led by beverages, tropical products, fruit, and vegetables.](image-url)

Regulatory agencies such as FDA have quite a challenge

- U.S. alone has 825,000 sources of imported food, entering through 300 ports of entry
Regulatory agencies such as FDA have quite a challenge.

- More than 3,000 trucks carrying food cross through Nogales, AZ border each day from Mexico.
Regulatory agencies such as FDA have quite a challenge.

FDA can inspect only about 1% of shipments.
“I want to not only know where this was grown, I want to know who planted it, I want to know the nutrients that were fed to it, I want to know the quality of the water, I want to know who picked it, I want to know what they did after they picked it, I want to know who shipped it.

In other words, I want to know that quality was built in very step of the way. So that when it gets to the shelf of a retailer it was not dependent simply on some border protection person checking it as it comes through.”

Michael Levitt, Secretary of Department of Health and Human Services, (i.e. FDA), November 2007
“I want to not only know where this was grown, I want to know who planted it, I want to know the nutrients that were fed to it, I want to know the quality of the water, I want to know who picked it, I want to know what they did after they picked it, I want to know who shipped it.

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Codex Alimentarius has long been the foundation of official food standards

- **Identity**: name; label; other markings; country of origin
- **Physical dimensions**: size; count; shape; weight
- **Maturity**: soluble solids; Brix; color break; other indicators
- **Quality**: intact, percentage of broken; firmness; additives; foreign matter; filth; pest or disease damage; bruising
- **Condition**: freshness; firmness; percent decay; mechanical damage
- **Organoleptic traits**: smell; taste; fee; cosmetics
…interpreted and converted to regulations at the national level

Changes in food legislation
Changes in regulations governing food establishments, production, post-harvest handling, processing, products, presentations, distribution, marketing
Yet circumstances that drive the food system are fast changing

1. Liberalization---which opened up countries to foreign influence
2. Globalization---which expanded source and target markets
3. Emergence of supply chain management---which strived for reduced “friction” (blockages, delays, imbalances) and lower transaction costs
4. Creation of WTO---which defined the rules for standards-based trading
changing circumstances (cont.)

5. Signature of SPS and TBT agreements---which specifically referenced the international standard-setting bodies and provided more specificity with respect to agri-food standards and their application.

6. Food industry consolidation---which necessitated arms-length trading of large volumes, often without physical examination.

7. Emergence of value chain approaches---which encouraged differentiation based on product, process or organizational innovation.

8. ICT revolution---which facilitated and rewarded speed and segmentation by target markets and attributes of the product offered.
So critics of the Codex-based official standards system say that…

…it defines just the lowest common denominator

…it does not reflect the growing diversity of products and presentations

…it is too slow to act and react

…it is insufficiently market-oriented
...and ask if Codex alone is sufficient to take the world where we all want it to go?
...especially now that value addition is the name of the game
Initially major retailers came up with their own private codes of practice

Dear Supplier,

Introduction

The concern with food safety and hygiene in the fresh produce industry, as well as with consumers, has prompted Pick ‘n Pay to become one of the first South African retailers who will be assuring its customers that our growers/suppliers have taken measures to develop guidelines and procedures to help minimise food safety risks associated with food handling. We are also more rigorously addressing the ever-present issue of having consistent quality fresh produce available - according to the preset product specifications and standards.

In response to these changing dynamics, Pick ‘n Pay is expanding its Produce Buying Safety Program. With the help of produce growing and handling professionals, we are initiating a scientifically based audit program. As a condition of doing business with Pick ‘n Pay, growers/suppliers of fresh produce will be required to participate in a verifiable, Independent Third Party Food Safety Audit. The program will initially focus on produce, which has been identified as a high risk for potential contamination. Once the Produce Safety Program is in place, we will purchase produce only from growers/suppliers meeting the objective standards necessary to be certified under the program.

Certification and Audit Parameters
...and a new industry of consulting, third-party certification and audits emerged
Standards schemes proliferated and competed.

EUREP GAP

For Primary Producers

For Food Manufacturers

BRITISH RETAIL CONSORTIUM
EurepGAP took the lead around 2004
Lifecycle of compliance drivers…

Drivers develop faster than most standards and decay over time

Drivers

Niche Response

Multi stakeholder voluntary standards & consumer labels emerge

Farmers and growers do not have enough time to finish one before the next one emerges!

Model developed with David Richardson NSF-CMi
Drivers develop faster than most standards and decay over time

Drivers

Niche Response

Public Response

Industry Response

Slow to respond creating ‘assurance lag’

Expands behind drivers & specialist standards

Model developed with David Richardson NSF-CMi
Lifecycle of compliance drivers…

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Drivers

Niche Response

Public Response

Slow to respond creating ‘assurance lag’

Industry Response

Expands behind drivers & specialist standards

Corporate Response

Legal Compliance
SPS

Market Compliance
Private Standard

Industry Leader
Niche Standard

Model developed with David Richardson NSF-CMi
Global Food Safety Initiative

- GFSI launched at the CIES Annual Congress in 2000, following a directive from the food business CEOs.

- Food safety was then, and is still, top of mind with consumers. Consumer trust needs to be strengthened and maintained, while making the supply chain safer.

- Managed by CIES – The Food Business Forum
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GFSI Mission and Objectives

“Continuous improvement in food safety management systems to ensure confidence in the delivery of safe food to consumers”

- **Convergence** between food safety standards through maintaining a benchmarking process for food safety management schemes

- **Improve cost efficiency** throughout the food supply chain through the common acceptance of GFSI recognised standards around the world

- Provide a unique international stakeholder platform for networking, knowledge exchange and sharing of best food safety practice and information
What does GFSI do?

- benchmarks existing food safety standards, including pre-farm gate standards against the GFSI Guidance Document.
- communicates to stakeholders about scheme equivalence
- helps and encourages retailers and other stakeholders to share knowledge and strategy for food safety through different projects.
What GFSI does NOT do

- make policy for retailers
- make policy for standard owners
- undertake any accreditation or certification activities
GFSI Foundation Board of Directors

- Roland Vaxelaire, Carrefour, France (Chairman of the GFSI Board)
- Kevin Chen, China Resources Vanguard, P.R. China
- Yves Rey, Danone, France
- Cory Hedman, Hannaford, USA
- Bryan Farnsworth, Hormel Foods Corp., USA
- Cindy Jiang, McDonalds, USA
- Hans-Jürgen Matern, Metro, Germany
- Johann Züblin, Migros, Switzerland
- Hugo Byrnes, Royal Ahold, The Netherlands
- Terry Babbs, Tesco, UK
- JP Suarez, Wal-Mart, USA
Governance Structure

- GFSI Stakeholder Meeting
  - Update on GFSI Work Item Proposals
- GFSI Board Review
  - Review of Proposals Mandate to TC
- GFSI Technical Committee
  - Recommendations to Board
- GFSI Board Review
  - Approval and Communication
- CIES Food Safety Conference
  - Output
GFSI Governance and Working Groups

**GFSI BOARD**
- 10 retailers
- 4 manufacturers
- 1 food service

**GFSI TECHNICAL COMMITTEE**
- Benchmarking
- Revision Guidance Document
- Auditor Competence
- Accreditation
- Protocols for Small Suppliers
- Emerging Markets
- Food Defence

**GFSI STAKEHOLDER GROUP**
GFSI Technical Committee

- an international multi-stakeholder group
- over 50 food safety experts
- open to key experts by invitation
- works on common-interest projects to ensure continuous improvement in food safety
GFSI Technical Committee

[Logos of various companies and organizations]
Factors driving the development of private food safety management standards

- to assure product safety
- to provide brand protection
- to meet legislative requirements
- to promote business improvement and efficiency
- to promote consumer confidence
Pressures on Retail Brand Owners

- legal compliance - enforcement
- consumer perception – corporate policy and Industry approach
- product quality maintenance, improvement and innovation - brand competition
- media
- NGO’s influence
- the move toward a litigious society
- cost
- shareholder value
- retention of consumer trust
After testing 576 conventionally grown fruits and vegetables, Greenpeace Germany found that 84% of goods sold in the country’s leading supermarkets were contaminated with toxic pesticides. In fact, 12% of the produce tested had residue levels actually at or exceeding legal pesticide limits.
“Tesco can say all good things, but the truth is the people are not being treated well here.”

‘Tesco is known to squeeze suppliers and these pressures are passed on in the form of low wages and precarious employment’ Report exposes: low wages, exposure to pesticides, poor housing and discrimination

Action Aid report April 2005
Principles of Private Food Safety Management Standards

- established to minimise duplication of evaluation
- encourage ‘local’ evaluation
- promote ‘best practice’ and continuous improvement
- be open, transparent and compliant with fair trading legislation
- control and maintenance is reliant on an internationally recognised accreditation process
- direct stakeholder participation during development, continuous review and improvement of Standards
Private Food Safety Management Standards

- provide a benchmark requirement for all suppliers ensuring a ‘level playing field’ globally
- compliant with legislative requirements
- provide compliant suppliers with access to new markets and customers
- used to promote and enhance food safety using the principles of self regulation
- suppliers recognise the advantages to their operation of gaining certification
- a strong move towards harmonisation, reducing multiple and divergent standards and audits from individual retailers
- the certification and accreditation processes proactively improves food safety and knowledge of legislative requirements
The Relationship Between Private Food Safety Management Standards and Regulation

- do not conflict with regulatory requirements
- provide assurance of compliance through education and knowledge transfer
- enhance the understanding of legislative requirements for markets where the product is sold
- promote uniform interpretation of legal requirements and any specific requirements of the Standards
- are regularly updated to reflect legislative change and define best practice such as technology and knowledge advance
- driven by consumer demand
- governance of Standards and supporting systems are in line with Corporate Governance principles
Convergence means confidence

- benchmarking work on four key food safety schemes (BRC, IFS, Dutch HACCP and SQF) reached a point of convergence
- all schemes were completely aligned with the GFSI Guidance Document Version 5 requirements
- this meant increased confidence in the schemes and comparable audit results
GFSI Convergence of Standards

“Once certified, accepted everywhere”
The GFSI Road To Harmonisation

What has been achieved

- Quality
- Quantity
- Confidence

Retailers / Authorities

Goal

Safe Food
Cost Effectiveness

Manufacturers / Retailers

Guidance Document

IFS

BRC

SQF

Dutch HACCP
Objectives of Food Safety Knowledge Network

1. To harmonise existing technical food safety training schemes, through the development of food safety professional competencies, recognised by international stakeholders, both in the public and private sectors.

2. To develop and establish a global professional food safety system training and qualification programme for all functions along the food value chain.
Components of Food Safety Knowledge Network

1. transparent industry defined and established set of technical competencies
2. development of appropriate competency based training programs provided by collaborative local public and private organisations
3. development of an effective knowledge network for the dissemination and sharing of competence requirements, training materials and best practice standards across all organisations in the food supply chain
4. development of a food business recognised qualification programme
Benefits of Food Safety Knowledge Network

1. increased availability and quality of in-country mentor and auditor training capacity
2. increased supply of suitably qualified and competent food industry mentors and auditors
3. ensures individual accountability and security of food chain in emerging markets
4. reduction in the cost of mentor and auditor training and transferability of skills across location, food safety management standards and organisations
5. provision of local expertise and improve market opportunity
6. building of technical knowledge and expertise within emerging markets
GFSI Adding Value …

- promoting less duplication
- driving continuous improvement in the content and delivery of the food management systems
- facilitating dialogue and co-operation with key organisations in the food supply chain
- promoting more cost efficiency in the supply chain
- proactively engaging with stakeholders to address relevant food safety issues
- providing confidence in sourcing of consistently safe food for the consumer
The rise of private standards raises some important questions

- Are they really “standards” or just requirements?
- Are they based on sound science?
- How transparent are they?
- Are they equitable?
- Do they optimize public welfare?
- Whose code of practice should prevail?
- Are they crowding out smallholders?
- Do they add unnecessary cost?
- Who really benefits, how, and how much?
- Do they undercut national standards?
- Do they violate international law?
Core Elements of the SPS Agreement

- “Measures not maintained without sufficient scientific evidence”
- Based on a risk assessment
- Harmonization: “international standards”
  - Codex, OIE, IPPC
  - Measures to facilitate participation of developing countries
- Equivalence
- Transparency
- S&D + Technical assistance
- Control, inspection and approval
Legal question: does SPS Agreement extend to private standards?

Agreement applies to all SPS measures affecting international trade.
Article 13 (SPS) : “Members are fully responsible under this Agreement for the observance of all obligations... Members shall formulate and implement positive measures and mechanisms in support of the observance of the provisions of this Agreement by other than central government bodies. Members shall take such reasonable measures as may be available to them to ensure that non-governmental entities within their territories, as well as regional bodies ..., comply with the relevant provisions of this Agreement... Members shall ensure that they rely on the services of non-governmental entities for implementing SPS measures only if these entities comply with the provisions of this Agreement.”
Is a combination private standard in our future?

- Environmental and Pesticides
  - Our unique approach with 'Nurture' offers us the fantastic opportunity to pioneer standards around the use of pesticides, reducing energy usage and allows us to break new ground improving and enhancing the local environment.

How does Nurture work?

Each grower is audited on an annual basis to ensure they meet the required high standard Tesco has set. No matter where in the world we source our fruit and vegetables from and who we work in partnership with we use one standard this is Nurture.
M&S Plan ‘A’

- Field to fork
- Climate Change
- Waste
- Sustainability