THE DYNAMICS OF SANITARY AND TECHNICAL REQUIREMENTS ASSISTING THE POOR TO COPE

Expert Consultation
Rome, 22–24 June 2004
THE DYNAMICS OF SANITARY AND TECHNICAL REQUIREMENTS
ASSISTING THE POOR TO COPE

Expert Consultation
Rome, 22 – 24 June 2004
The designations employed and the presentation of material in this information product do not imply
the expression of any opinion whatsoever on the part of the Food and Agriculture Organization of
the United Nations concerning the legal or development status of any country, territory, city or area or
of its authorities, or concerning the delimitation of its frontiers or boundaries.

ISBN 92-5-105348-0

All rights reserved. Reproduction and dissemination of material in this information product for
educational or other non-commercial purposes are authorized without any prior written permission
from the copyright holders provided the source is fully acknowledged. Reproduction of material in
this information product for resale or other commercial purposes is prohibited without written
permission of the copyright holders. Applications for such permission should be addressed to the
Chief, Publishing Management Service, Information Division, FAO, Viale delle Terme di Caracalla,
00100 Rome, Italy or by e-mail to copyright@fao.org

© FAO 2005
## Contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glossary</td>
<td>v</td>
</tr>
<tr>
<td>Executive summary</td>
<td>vii</td>
</tr>
<tr>
<td>Introduction</td>
<td>xi</td>
</tr>
<tr>
<td>Background</td>
<td>xiii</td>
</tr>
<tr>
<td><strong>Scope and definitions</strong></td>
<td>1</td>
</tr>
<tr>
<td>Standards</td>
<td>1</td>
</tr>
<tr>
<td>Risk analysis, food chains and value chains</td>
<td>1</td>
</tr>
<tr>
<td>The poor</td>
<td>2</td>
</tr>
<tr>
<td><strong>Who and what drives standards setting?</strong></td>
<td>5</td>
</tr>
<tr>
<td>Drivers of standards</td>
<td>5</td>
</tr>
<tr>
<td>Standards setting processes</td>
<td>7</td>
</tr>
<tr>
<td>Problems for developing countries and the poor</td>
<td>7</td>
</tr>
<tr>
<td><strong>How do existing and anticipated standards affect the structure of</strong></td>
<td>9</td>
</tr>
<tr>
<td>the livestock food chain and vice versa?</td>
<td></td>
</tr>
<tr>
<td><strong>Who is winning and who is losing from changes?</strong></td>
<td>13</td>
</tr>
<tr>
<td>Winners</td>
<td>13</td>
</tr>
<tr>
<td>Losers</td>
<td>13</td>
</tr>
<tr>
<td><strong>What can be done to help the losers? In particular, what can be</strong></td>
<td>15</td>
</tr>
<tr>
<td>done to assist the poor to cope?</td>
<td></td>
</tr>
<tr>
<td>Standards setting</td>
<td>15</td>
</tr>
<tr>
<td>Assistance in complying with standards</td>
<td>16</td>
</tr>
<tr>
<td>Exit strategies</td>
<td>17</td>
</tr>
<tr>
<td><strong>Recommendations</strong></td>
<td>19</td>
</tr>
<tr>
<td>FAO mandate and activities</td>
<td>19</td>
</tr>
<tr>
<td>Challenges for the future</td>
<td>19</td>
</tr>
<tr>
<td>The standards setting process</td>
<td>19</td>
</tr>
<tr>
<td>Methodology</td>
<td>20</td>
</tr>
<tr>
<td>The overall approach to food safety and veterinary public health</td>
<td>20</td>
</tr>
<tr>
<td>Advocacy on behalf of developing countries</td>
<td>21</td>
</tr>
<tr>
<td>Dissemination of information</td>
<td>21</td>
</tr>
</tbody>
</table>
Glossary

AGAL Livestock Information Sector Analysis and Policy Branch
BSE Bovine Spongiform Encepalopathy
CoAg Committee on Agriculture
CODEX Codex Alimentarius Commission
EU European Union
FAO Food and Agriculture Organisation of the United Nations
HPAI Highly Pathogenic Avian Influenza
LIC Low-Income Country
MRL Maximum Residue Level
NGO Non-Governmental Organization
OIE World Organisation for Animal Health
SPS Sanitary and Phytosanitary
TBT Technical Barriers to Trade
UHT Ultra High Temperature
WTO World Trade Organization
Executive summary

An FAO expert consultation on The Dynamics of Sanitary and Technical Requirements: Assisting the Poor to Cope was held at the headquarters of the Food and Agriculture Organization of the United Nations (FAO) in Rome from 22 to 24 June 2004. Six experts provided working papers and participated in the consultation.

The objective of the consultation was to provide advice to FAO and Member Governments on the impact of sanitary and phytosanitary (SPS) standards on domestic livestock markets, and in particular the poor who participate in livestock food chains, and the extent to which their concerns are being addressed. The consultation was asked to deliberate on the following questions:

a. Who drives standards setting in food safety and animal health?
b. How do existing and anticipated standards affect the structure of the livestock food chain and vice versa?
c. Who is winning and who is losing from changes?
d. What can be done to help the losers? In particular, what can be done to assist the poor to cope?

Scope of the consultation and definitions

While the consultation recognized that a wide range of standards can be applied in livestock food chains, the discussion focused on standards encompassed by the SPS agreement. SPS standards and regulations are one measure within a risk management strategy for livestock and public health.

Since the consultation believes that setting and application of standards is an element of risk management, it follows that standards should be evaluated within a risk management framework.

A value chain approach can be used to good effect to take into account participation and distributional impacts. There has been little work done to make a systematic typification of livestock value chains.

Who and what drives standards setting?

Standards are driven by consumers with high purchasing power, the demands of the export market, competition within the national market from export or export quality goods, and the influence of tourism.

Consumers with high purchasing power demand food which is safe, sustainable and ethical, free of toxic substances, residues, additives and contaminants. Consumers may have a disproportionate influence on standards setting compared to producers. Developed countries also have a disproportionately high role in both World Organisation for Animal Health and Codex. International standards should ideally be set at levels necessary for safety, but no higher, or they become exclusionary. In countries where supermarkets have made inroads into the domestic market, they introduce a variety of both safety and technical standards.
International standards setting, which sets the framework for negotiating power in the international arena, requires an understanding of the negotiating process and the ability to participate. There is a lack of representation of developing countries in SPS meetings and also in Codex. The private sector is having an important impact. Public sector involvement often seems to lag behind the private sector, or even be driven by the private sector.

Developing countries face a number of problems that prevent them from fully participating in the international standards setting process. These include lack of resources to attend meetings and prior negotiations, limited exploration of alternative measures more suited to developing countries, lack of economic evaluation, complexity of standards, frequent changes, lack of legal recourse.

*How do existing and anticipated standards affect the structure of the livestock food chain and vice versa?*

Food security has been an emphasis for many developing countries. Food safety is considered very important in developed countries but elsewhere has received less attention. Food safety needs to be given increasing but appropriate emphasis, as it is important to the poor.

It is not evident that risk is taken into account when assessing appropriate standards. Governments should be setting the minimum national level of risk. However, the international community needs to help them to do the appropriate risk assessment.

Trends in food chains include lengthening of chains, vertical integration and market concentration. There has been a decoupling of production locations from consumption, and therefore the risks through the food chain become an issue. OIE and Codex standards should be the minimum needed for safe operation of long food chains. The consultation is concerned that these standards are in fact moving to become more representative of affluent country producers and consumers, which may create obstacles to regional trade.

Cross-border food chains, and a dramatic rise in the market share of the modern retail sector in many countries have created a number of effects. Most notably, these are changes in procurement systems and shifts towards private safety and quality standards. Regional diversification and value adding introduces new products and the need for new standards.

People who are not involved in any kind of integration or concentration may not be affected by international standards at all, and they may continue to apply local standards. However, if consumers learn of new products or new standards, this may change the value of traditional knowledge.

*Who is winning and who is losing from changes?*

Impacts may be complex, affect each stakeholder differently, and change over time.

Winners include:

- countries and people with negotiating power, who can influence the standards setting process to minimise negative impacts;
- those that receive external support to overcome the time lag between increased...
investment and increased returns;
- those who benefit from job creation;
- producers or consumers who experience positive externalities through improved livestock services or general raising of food safety standards;
- consumers who can afford safe food.

Losers include:
- countries or individuals that are unable to participate in the lobbying process;
- countries or individuals that cannot afford to meet compliance requirements, because of overall cost or cash flow problems;
- those affected by barriers to trade created when international standards are above minimum required standards for food safety;
- the developed country consumer may lose if standards are not appropriately formed by science in view of the trends to intensification and consolidation;
- those adversely affected by the risks in high value markets.

What can be done to help the losers? In particular, what can be done to assist the poor to cope?

Food safety is linked to food security, is beneficial to the poor when it is provided at an appropriate level, and deserves a higher priority on national agendas.

More efforts are needed to facilitate the poorest to access the negotiating process that precedes meetings. Membership of international standards setting bodies and trading blocs is beneficial. Poor producers and poor consumers are unlikely to have much voice in the standards setting process until they become organised and join lobbying groups.

It is necessary to promote standards setting appropriate for the risk management situation, and that can actually be enforced.

There is a need to make more effort in helping all member countries of these organizations to access the SPS information system.

It is important that all governments use standards setting as part of a risk management system, i.e. one that considers the level of risk and the measures that might be applied to mitigate it. Decision support tools are needed to assist policy makers. Mandated international organizations should provide their own assessment of the impact of changing standards on the poorest.

Good practice guidelines for practitioners exist, but not for all commodities and production systems, and they need to be updated and more widely disseminated. Assisting small farmers, traders and processors to enter formal (regulated) or vertically integrated markets will include but not be restricted to helping them to comply with standards.

Involvement of the private sector can produce beneficial changes, however this requires political stability, a sufficiently large and concentrated consumer population, a sufficient number of livestock producers to provide the necessary volume of produce, and sufficient infrastructure.

Those who cannot participate in the formal market may need to exit from livestock production and may require assistance.
**Recommendations for FAO**

Encourage a national agenda of gradual implementation to avoid serious adverse impact on the most vulnerable producers and consumers.

Be aware of proposals from the standards setting bodies, to review their impact on developing countries and different types of farming system, and consider them in an holistic manner.

Efforts should be made to identify the gaps in the science that impact on the standards setting process and provide information to the bodies and member countries involved in standards setting. This is the responsibility of the whole international community.

Monitor, as a regular process, the attendance of developing countries at key standards setting meetings, and explore alternative and innovative methods that do not necessarily involve attending central meetings.

There is no international organization currently monitoring, evaluating or communicating the impact of standards on sustainable development. It falls within FAO’s mandate to take on this role, taking a lead in this process.

Standards setting within a risk management context is a multi-disciplinary activity. FAO has a number of separate initiatives. These need to be synergized and harmonised into a programme. The consistent application of a standard framework is essential, and this should include economic evaluation. A value chain approach is useful to identify distributional and governance issues.

SPS standards can be valuable in promoting food safety, but the process by which they are set, and the speed at which they are implemented, may result in exclusion of vulnerable groups. FAO should develop appropriate strategies for analysis of the problem and promote effective methods of dealing with it.

FAO is in a position to champion and protect the interests of least developed member states and work with regional groups of standards setting organizations to take into account issues of relevance to low-income countries.

Information on food safety standards is available but scattered. There is a need to co-ordinate the dissemination of such information in a way that is useful to developing countries. The recently established FAO biosecurity information portal is highly recommended.

Advice and technical packages for practitioners, related to animal health food safety standards, are valuable – more are needed. They should be based on a supply-driven focus to risk management in the food or value chain.

This consultation and its documentation should be converted into a strategy for assisting the poor in the context of SPS agreements and should be funded accordingly.
Introduction

An FAO expert consultation on The Dynamics of Sanitary and Technical Requirements: Assisting the Poor to Cope was held at the headquarters of the Food and Agriculture Organization of the United Nations (FAO) in Rome from 22 to 24 June 2004. Six experts provided working papers and participated in the consultation. A further two experts provided background notes. Members of the Pro-Poor Livestock Policy Initiative Steering Committee acted as observers providing additional inputs. A full list of participants is given in Annexe 1.

Ms Louise Fresco, Assistant Director-General, Agriculture Department of FAO, opened the consultation on behalf of FAO.

Ms Fresco noted that the meeting is timely as the Millennium Development Goals are being re-thought 10 years after Rio and the Brundtland report. There have been several declarations on food security and lately on food safety and biosecurity. The challenge is to find ways that these can be translated into concrete actions.

Ms Fresco reminded the meeting of ongoing FAO discussions on trade, food chain approaches and health and nutrition which relate to the subject of the consultation. It is important to consider ways to make trade work for the poor, and the way in which standards relate to this. There is a general concern about the existence of higher standards for the rich and lower for the poor, and a need to define how standards are being applied in practice differently to the way they were negotiated. FAO has adopted a food chain approach, accepted last year at CoAg. The food chain approach needs to build a new type of inter-disciplinarity and to take into account that innovations in the food chain will come from the consumer side, reflecting rapid changes in consumer demands in developing countries. FAO engages in the debate on health and nutrition as related to food. A further emphasis needs to be placed on linking poverty, trade and health aspects, for example how to look at maximum residue levels. These are delicate and politically loaded questions.

FAO needs to engage more in issues related to trade and biosecurity, capacity building, technical advice, policy advice and negotiation capacities in this varied area of animal production, trade, health. FAO works with academia but also has opened the doors to NGOs and the private sector and is moving away from rigid government intervention.

Mr J. Scudamore acted as Chairperson for the consultation. Ms A. McLeod (FAO, AGAL) acted as rapporteur.
Livestock food chains worldwide are changing to respond to changing demands for quantity and quality of livestock products. Within middle-income, low-income and least-developed countries, changes include increased industrialization, geographic shifts, and new forms of marketing and co-operation including increased vertical integration.

Standards and regulations for animal health, food safety and food quality affect and are affected by the structure of livestock food chains. These standards are increasing in stringency, complexity and cost. They are variable in nature and driven by multiple forces, which include international agreements and bodies, national policies and laws, and the requirements of large scale retailers.

Consumers in affluent countries have a major impact on standards setting, yet the results may affect poor and marginal producers, processors and consumers who do not directly trade in the global market and have very little voice in the standards setting process. The private sector has an increasing influence, while the impact of the public sector is limited and policies do not always reflect the needs of the various stakeholders in livestock food chains.

While the safety and quality of food for consumers is of paramount importance, a balance must be found between their needs and the livelihoods of vulnerable producers, traders and processors. Standards set may be inappropriate for local circumstances, imposing unnecessarily high demands on poor and marginal players, who may then be excluded from markets without alternative forms of livelihood.

Many developing countries would wish to expand their capacity to carry out the necessary analysis of what is appropriate for their domestic circumstances, and to negotiate in the international arena for standards that allow them to trade internationally and in a responsible manner, while at the same time promoting locally appropriate safety and quality of food. It is the responsibility of FAO to assist such countries in analyzing their respective situations, defining appropriate food safety and quality policies that do not lead to increased livelihood vulnerability, and engaging productively in international dialogue on standards and regulations.

The objective of this consultation was to provide advice to FAO and Member Governments on the impact of sanitary and phytosanitary (SPS) standards on domestic livestock markets, and in particular the poor who participate in livestock food chains, and the extent to which their concerns are being addressed. The consultation was asked to deliberate on the following questions:

a. who drives standards setting in food safety and animal health?
b. how do existing and anticipated standards affect the structure of the livestock food chain and vice versa?
c. who is winning and who is losing from changes?
d. what can be done to help the losers? In particular, what can be done to assist the poor to cope?

An FAO/OIE workshop was held during Livestock Week, Montpellier, March 22-25
2004 and attended by members of the CGIAR system, international organizations and representatives of donors to livestock research. At this workshop, papers were presented on: ‘Trends in livestock market chains’; ‘Dynamics of animal health regulations’; ‘Food safety and quality requirements affecting the livestock sector’; ‘Technical and quality requirements of retailers’. Questions arising from the papers were debated by working groups and produced preliminary recommendations that were made available to the members of the current consultation while they prepared their working papers.
Scope and definitions

STANDARDS
While the consultation recognized that a wide range of standards can be applied in livestock food chains, relating to animal health, food safety and other technical requirements, the discussion focused on standards encompassed by the SPS agreement. These have a well-developed institutional infrastructure including formal international regulations as well as nationally and locally applied standards.

SPS standards derive from the need to maintain animal health and food safety when countries trade livestock and livestock products internationally. Without international standards, many countries would adopt a ‘zero-risk’ policy and would use unnecessarily stringent precautionary measures as a sanitary barrier to trade. The imposition of international standards provides a basis for negotiation and guidance based on the best assessments of the science available.

The issue at stake is the identification of hazards and management of risk for countries and people. SPS standards and regulations are one measure within a risk management strategy for livestock and public health.

RISK ANALYSIS, FOOD CHAINS AND VALUE CHAINS
Since the consultation believes that setting and application of standards is an element of risk management, it follows that standards should be evaluated within a risk management framework. This framework would encompass the definition of hazards, identification and assessment of risk, as well as the development of a strategy to manage risk elements and risk communication.

Animal health and food safety are affected by events that occur throughout the food chain (using the term in a market rather than physical sense), from input supply to consumer. Therefore, the development and enforcement of SPS standards needs to reflect risk along the whole food chain. FAO acknowledges the relevance of a food chain approach to food safety:

“...recognition that the responsibility for the supply of food that is safe, healthy and nutritious is shared along the entire food chain - by all involved with the production, processing, trade and consumption of food. This approach encompasses the whole food chain from primary production to final consumption. Stakeholders include farmers, fishermen, slaughterhouse operators, food processors, transport operators, distributors (wholesale and retail) and consumers, as well as governments obliged to protect public health. The holistic approach to food safety along the food chain differs from previous models in which responsibility for safe food tended to concentrate on the food processing sector.”

FAO, 2003a

In order to assess impact on the poor, it is important to use an approach that takes into...
account participation and distributional impacts. A value chain approach can be used to
good effect:

"The value chain describes the full range of activities which are required to bring a product or service from
conception, through the different phases of production... delivery to final consumers, and final disposal after
use. (Kaplinsky and Morris, 2000) ....

"...the emergence of 'value chains' as the foremost organizational arrangement in global food markets.
In contrast with a 'supply chain' dynamic, where production is often insensitive to market requirements
and the focus is exclusively on efficient logistics, a value chain is demand-driven. A value chain recognises
the real opportunities that all participants have to contribute and to increase product value through skilful
management in meeting market requirements." GRDC (2003)

"a vertical alliance or strategic network between a number of independent business organizations within
a supply chain. A value chain is created when organizations have a shared vision and common goals. It is
formed to meet specific market objectives through satisfying the needs of consumers." (Hobbs, Cooney and
Fulton, 2000).

There are several definitions of value chains and value chain approaches. Important
work was done by Porter in the 1980s who defined parallel value and support chains. The
"Filière" approach is essentially a value chain one. The relevance of the approach is that it
takes into account value changes along the chain, providing a distributional dimension, and
it also considers the participation of different actors, bringing into focus the governance
and control of the chain.

For the present discussion, food chains (and possibly value chains) were typified as fol-
lows:

- formal, regulated, complying with SPS standards, long and vertically integrated,
  including an international dimension;
- formal, regulated, complying with national standards;
- vertically integrated national;
- concentrated national, e.g. co-operatives;
- informal, unregulated, standards set by agreement between producer and consumer:
  many of the poor sell to and buy from informal markets.

With illegal standards set by agreement between producer and consumer, there may be
no compliance with national or international standards. Examples of this include:

- tax evasion;
- cross-border trade in domestic animals;
- trade in bush meat.

There has been little work done to make a systematic typification of livestock value
chains. This would be a valuable starting point for analysis of the impact of standards.

**THE POOR**

The consultation addressed two dimensions of poverty – developing countries and poor
people.

Developing countries (notably Low-Income Countries or LICs) need to be singled out for
special consideration because of:

- the extent to which they may or may not be involved in standards setting;
• the extent to which they choose are or able to apply international standards;
• problems of dumping where unequal standards are applied between countries.

The poor within a country will experience the effect of standards in a variety of ways. Their point of participation in the value chain (production, trading, wholesaling, processing, consumption) may affect the way that they experience the impact of standards more than their physical location (e.g. rural/urban). Different levels of poverty can be seen and have been formally defined. They include the destitute (often described as below the poverty line, which in the international definition means having an income of less than $1 a day) as well as those who are not destitute but are still vulnerable.

It is accepted that there are poor people within rich and middle-income countries. FAO’s priority reflects the Millennium Development Goals and is likely therefore to place most emphasis on poor people within the poorest countries. However, the consultation did not consider it appropriate to place strict boundaries around the poor for the purpose of this discussion.
Who and what drives standards setting?

The standards imposed internationally and nationally are driven by the need to manage risk in the food chain. The demand for changes in standards is created by drivers within a country’s economy, while the institutional structure influences the way in which standards are defined and imposed.

**DRIVERS OF STANDARDS**

**Consumers with high purchasing power**

Consumers are the primary drivers of standards. Those who are very poor are concerned mostly with access to food. As their livelihoods improve, they become concerned with safety and then with other less tangible quality elements. Consumers with high purchasing power demand, as a right, food which is safe, sustainable and ethical, free of toxic substances, residues, additives and contaminants. They have influence, hence their preferences become reflected in standards set and imposed by the public and private sectors. In any national livestock food chain, the demand for health and safety standards is influenced by an interaction between the demands of the export market and competition within the national market.
Export
Consumers in affluent countries have a major impact on standards setting. Their preferences are expressed through their governments, international supermarket chains and multinational food processors. Long, vertically integrated market chains originate in developing countries to supply consumers in affluent countries.

Consumers may have a disproportionate role in standards setting compared to producers. A culture of litigation encourages retailers in developed countries to pursue a ‘zero-risk’ policy, to demand very high international standards and expect government to enforce them. International retailers demand safety standards that are at least as strict as those set by international agreements and in some cases (e.g. organic food) may be higher, while other technical standards (consistency of appearance and flavour, volume, animal welfare) may also be very high.

Developed countries also have a disproportionately high role in both OIE and Codex. Little account is taken of the needs and circumstances of developing countries in e.g. setting MRLs. For instance, developed countries and affluent consumers consume on average much higher quantities of meat but lower quantities of maize than the poor in Africa, and MRL levels reflect developed country consumption. No alternatives are considered based on dietary patterns.

International standards should ideally be set at levels necessary for safety, but no higher, or they become unnecessarily exclusionary. One example is the need for very expensive laboratories to test MRL levels which are becoming increasingly stringent but may not be a realistic reflection of the safety needs of the consumer.

Competition on the national market from export quality or local goods
Standards imposed by export can affect those in domestic markets. Examples include Thailand, where chickens for export are produced by approved farms and slaughtered by approved abattoirs. However, some parts are not exported and enter the domestic market, where they are consumed by a variety of people including the poor. This has created an expectation of standards among urban consumers. In South Africa, competition from imported foreign cheese, which is more expensive than the local product but has a longer shelf life and is preferred by consumers who can afford it, has led to a raising of standards by some local processors. Income influences the market for standards – as people become richer, they demand higher standards.

In countries where supermarkets have made inroads into the domestic market, they introduce a variety of standards, both safety (e.g. quality testing of milk, use of packaging) and technical (e.g. labelling, type of cut). Livestock products have been less affected than vegetables, but the share of milk passing through supermarkets is increasing rapidly, e.g. in China.

Producer groups may attempt to use SPS measures to prevent ‘dumping’, although under WTO this cannot be done purely as a trade barrier, but only where local standards justify it.

Tourism and media impact
Tourism creates a direct relationship between the consumers of one country and the
producers and processors of another. It may create a demand for certain products and safety standards, perhaps resulting in a specialized market niche, or eventually influencing the preferences of consumers from the host country. It may also create a hazard if tourists travel in livestock producing areas and then return home.

Consumer preference is affected by the information at their disposal. Hence, there is concern among middle class consumers in Africa about genetically modified organisms, which have received considerable media exposure, but rather less about zoonoses which have an immediate and major impact on human health.

STANDARDS SETTING PROCESSES

International standards setting, which sets the framework for negotiating power in the international arena, requires an understanding of the negotiating process and the ability to participate. There is a lack of representation of developing countries in SPS meetings and also in Codex and this may be leading to an unnecessary trend towards raising of international standards (which should be those necessary for safe food consumption rather than zero tolerance).

In addition to standards setting, negotiations are needed for international trade. Where a country has a strong producer organization (e.g. the dairy industry in South Africa, the pig industry in Chile) it may be able to negotiate commercial agreements, but still needs the government to participate in international fora.

The private sector is having an important impact. For example, prior to Poland’s accession to the European Union (EU) foreign investors in Poland set standards above national legislation. National legislation has now been upgraded to comply with EU regulations. The high standards are set particularly by companies that are aiming to export, or international retail chains like McDonalds with a global image and sales to maintain. Is the private sector keeping pace with the dynamic of the livestock sector, or is it driving the dynamic? It seems that the perception held by retailers, of the needs of consumers, when coupled with competition, creates the dynamic.

Public sector involvement often seems to lag behind the private sector, or even be driven by the private sector. For example, in Thailand, the private sector forced the government to ban the import of certain chemicals.

Whilst the international standard setting process is relatively slow, the rate of change in scientific knowledge, the development of new technologies, consumer demands and risk analysis progresses at an ever-increasing rate.

PROBLEMS FOR DEVELOPING COUNTRIES AND THE POOR

Countries may face the following problems that prevent them from fully participating in the international standards setting process:

- Lack of resources and participation. Of 200-250 countries in the world (FAO data), approximately 150 are members of WTO, and 170 members of OIE and Codex. Those that do belong to international bodies may be unable to attend meetings or to make the necessary investments to comply with standards due to lack of finance. They may also lack motivation – the importance may not be understood, or the country may not be interested in export.
• Lack of expertise - to understand the codes, to attend the meetings. It is easier for countries that trade in blocs, since not all members of the bloc need to send representatives to all meetings.
• Limited access to scientific and technical information. For an official to make an impact at an international meeting, they need to be very thoroughly briefed beforehand.
• Countries that do not participate in discussion and negotiations before major meetings will lack negotiation power at meetings.
• Outputs of international meetings are driven by information from developed countries (e.g. on MRL levels).
• Stricter and stricter standards are driven by developed countries.
• Alternative measures suitable for the developing countries have not been explored.
• Economic or environmental evaluations are not carried out as a matter of routine before standards are introduced or changed, instead they are left to individual countries to implement.
• There can be conflict between national and international standards.
• Standards can be complex and difficult to interpret.
• Standards may change annually.
• International standards are published in few languages. To be interpreted and used correctly they need to be available in the official language of each country. It can be difficult to make an accurate translation of a complex scientific issue.
• Developing countries lack legal recourse, which is expensive.

The very poor tend to operate in informal markets. Changing standards make it increasingly difficult for them to move into formal markets. Those participating in formal markets individually and on a small scale may be squeezed out if regulations change or are enforced more strictly. For example, the Brazilian dairy sector has developed rapidly, and changes in the structure of food chains have resulted in considerably fewer producers supplying major markets. The speed of change may be as important as its direction for players in the food chain, particularly small producers and processors, because of the investment required in physical capital and human resources. For example, in Latin America, China and Poland, supermarket penetration has been very swift and has placed demands on those wishing to participate in associated value chains.

Factors that are already influencing developments in standards, and will be a potential problem to the developing countries include, (but are not restricted to), the following:
• demand for greater controls on food and feed;
• quality and hygiene supervision and controls;
• testing for residues;
• safe use of veterinary medicines;
• microbial resistance to antibiotics;
• traceability;
• use of the precautionary principle;
• analytical methodologies and laboratory standards;
• role of paraprofessionals;
• animal welfare standards.
How do existing and anticipated standards affect the structure of the livestock food chain and vice versa?

Food security has been an emphasis for many developing countries, with a strong focus on supplying staple foods from within the country. Food security can sometimes be increased and food production made more efficient by international food chains but this requires political security to allow equitable distribution to occur. Perceptions of what constitutes food security will be affected by perceptions of continued stability in the food chain.

Food safety is considered very important in developed countries but elsewhere has received less attention. For example, animal health, which is strongly linked to food security, has been emphasized above veterinary public health, and data on the incidence and impact of zoonotic and foodborne disease in humans is very limited. Food safety needs to be given increasing but appropriate emphasis as it is important to the poor. A balance is needed between food safety and the cost of food safety. The poor cannot afford to be sick and have limited social networks to support them but equally, should not be asked to pay for inappropriate levels of safety.

It is not always evident that risk is taken into account in assessing appropriate standards to be applied in a particular food chain. The poor need food safety but they may not need SPS agreements and all that is contained in them. Governments should be setting the minimum national level of risk, however the international community may be required to do the appropriate risk assessment. The government should then decide to implement appropriate measures, which may include standards, enforcement of existing standards, or other measures.

There are differences between commodities. For example:

- There is little trade in milk between or from developing countries (East Africa is an exception). Yet there is an increasing national demand for milk and milk products in urban centres, supplied from peri urban and rural areas through collectives or vertically integrated chains.
- In Africa, there has been regional trade in live animals for a long time, involving mostly animal health standards, but recently there has been an increasing trade in chilled carcasses, which requires food safety standards.
- Poultry markets tend to be segmented. Exotic birds produced in large units, with internationally set health and safety standards, supply the export market and urban consumers influenced by international tastes, while local birds produced on small farms supply local demand through a short value chain with locally determined standards.
Trends in the structure of the food chain and their relationship with SPS standards.

Lengthening of food chains. There has been a decoupling of production locations from consumption, and this has resulted in the risk through the food chain becoming an issue. It is possible that environmental concerns will interrupt the trend towards lengthening the supply chain, though this is not yet evident. The increasing length of the food chain affects areas such as the cost of transportation. The primary price is negotiable and local producers may be price-takers because they have no transport and therefore no negotiating power. However, where a professional and commercial vertically operated chain is in place, good prices may be paid for quality of product. When conditions become sufficiently attractive (a sufficient number of consumers and concentration of producers, economic and political stability and therefore a predictable level of profit), the private sector invests. The length of food chains, particularly where they include an international dimension or cater to affluent local consumers, impacts on consumers and increases the requirement for food safety measures such as traceability. International trade includes regional trade between developing countries, and here the standards applied may be very different from those for trade between developing and developed countries. For private sector international involvement there needs to be at least a clear minimum standard to work to. OIE and Codex standards should be the minimum needed for safe operation of long food chains. The consultation is concerned that these standards are in fact moving to become more representative of more affluent country producers and consumers which may create obstacles to regional trade.

Vertical integration within food chains. Multinationalization of food chains and a dramatic rise in the market share of supermarkets and the modern retail sector in many countries have created a number of effects, such as:

- important changes in procurement systems, e.g. centralization;
- a shift toward cross-border systems, with corporation procurement in their different countries of operation;
- a shift toward specialized/dedicated wholesalers (specialized in product category, dedicated to supermarkets);
- a shift toward preferred supplier systems to select producers meeting quality and safety standards and lower transaction costs;
- a consolidation of production and processing which may be of unknown safety;
- a shift toward private safety and quality standards.

While the speed and intensity of effects vary by region – rapid in Eastern Europe, Latin America and China, much slower in Africa – they suggest a trend that will continue.

Market concentration within the food chain. This can be driven by the following:

a. The need for greater efficiency, for example with development efforts to concentrate dairy producers into marketing groups. How will this affect the way standards are applied? In dairy co-operatives in East Africa, milk is cooled and much of it is sold fresh. If the milk is to be used to produce ultra high temperature (UHT) milk, it needs to be of high quality.

b. A response to crisis, e.g. in Thailand following the highly pathogenic avian influenza (HPAI) crisis, the poultry sector and particularly the layer industry, showed signs of becoming more concentrated. Factors affecting this include producer liquidity, govern-
ment policy and consumer risk perception towards food safety. The trend was already in evidence as a result of the export-oriented policy of one large company, but has been hastened by the disease epidemic.

**Regional diversification and value adding.** This introduces new products and therefore the need for new standards. Uganda, Tanzania and Kenya have a regional trade in fresh milk, UHT milk and value added dairy products. Arbitrary invocation of SPS standards, or technical barriers to trade (TBT) standards, may affect the sustainability and stability of regional trade and therefore create sudden over-supply of products to domestic markets. SPS standards on milk are being applied. Where there is an overspill onto the domestic market, the products are not usually consumed by the poor. Producers are contracted into vertically integrated chains.

**Segmentation – or exclusion?** People who are not involved in any kind of integration or concentration may not be affected by international standards at all, and may continue to apply local standards. However, if consumers learn of new products or new standards, this may change the value of traditional knowledge. For example, overspill from vertical food chains into domestic consumption in the Thai chicken industry has affected consumer perceptions of quality.
Who is winning and who is losing from changes?

Impacts may be complex, affect each stakeholder in a value chain differently, and change over time. Important and potentially beneficial effects should not be ignored.

WINNERS
Countries and people with negotiating power have a greater chance of being winners, those that have a lobbying group to ensure that returns from changes in market structure actually accrue to them. Countries with support from a regional trading group may stand a higher chance of influencing the standards setting process to minimise negative impacts. In many countries the dominant livestock commodity group has a union or association that lobbies for it. Many have smallholder members. However, they charge membership fees so the poorest and least entrepreneurial are likely to be excluded and smallholder members may have limited influence within the union.

External support can help to overcome the time lag between increased investment and increased returns. Small producers who are able to enter formal, vertically integrated chains are likely to receive help from the controlling company in setting up the necessary infrastructure. Programmes run by private companies or NGOs often provide formal, targeted assistance to bring people into the market (e.g. credit, training, ensuring that inputs are available). Such programmes may be beneficial to women, who have limited access to resources when operating in the informal market, and lose control over income when there is an increase in sales of livestock products. They can be specifically targeted by programmes that train them or support women’s groups to overcome these barriers.

Changes in the value chain may result in job creation, e.g. processing, quality control. Producers or consumers may experience positive externalities. For example, vaccination of livestock owned by poor farmers has in some cases been subsidised by richer ones. Excess Thai chicken parts from the export market, with high safety standards, are sold to domestic consumers.

Consumers who can afford safe food should experience benefits in health.

When producers enter the formal market and encounter tax, they will hope to see taxes being reinvested in the livestock sector. However, there is limited evidence of earmarked taxation being used in this way.

LOSERS
Countries or individuals that are unable to participate in the lobbying process may find that standards set are inappropriate to the risk involved and disadvantageous to them. Lobbying is a hidden but important cost for countries attempting to enter an export market. Negotiation with prospective trade partners on certification and conditions for export may also be
an important cost.

Countries or individuals that cannot afford to meet compliance requirements or costs, especially for infrastructure requirements, will find that certain markets are unavailable to them. Compliance may require capital investment, knowledge and finances to change management practices, as well as certification or assurance.

When international standards are above minimum required standards for food safety, they will create a barrier to trade. It could be argued that current BSE regulations are disproportionate to risk.

The developed country consumer may lose if standards are not appropriately formed by science in view of the trends to intensification and consolidation. Safety of such consolidation is not known for many food chains.

There may be a need to make investments or management changes very quickly – therefore, although long term benefits may be attractive, cash flow or lack of knowledge may make it impossible for people to take advantage.

Higher value markets not only require greater investment in standards compliance but may also carry a higher risk of losing the market, e.g. as a result of a disease outbreak. This may affect not only those who are in the chain but also those who are outside it, producing a similar product for a different market.

The intensification and consolidation within the country of supply may compromise local and domestic access to products produced “for export” and actually create hardship in poor populations.

When a vertically integrated market develops there are three clusters of producers – those who are already competitive, those that can be helped to make it, and those who will never make it, who will either remain in the informal market or need other sources of income. In some countries the transformation takes many years, in others it happens very quickly. In Malaysia and Thailand, as market chains for pigs and poultry have become more export oriented and vertically integrated, and standards have been more strictly imposed, the number of smallholders participating has become much smaller.
What can be done to help the losers? In particular, what can be done to assist the poor to cope?

**STANDARDS SETTING**

**Prioritization of appropriate food safety standards.**

Animal health appears to be a higher priority than food safety for many national governments, except where consumers have considerable voice. This consultation has concluded that food safety is linked to food security, is beneficial to the poor when it is provided at an appropriate level, and deserves a higher priority on national agendas. International agencies can assist, but national governments ultimately determine their own priorities.

**Equalising access to the standards setting process.**

Efforts have been made to encourage the poorest countries to attend international meetings and to understand and apply SPS measures. As yet, they have insufficient access to the negotiating process that precedes meetings, and may be inadequately briefed. Contributing factors to participation include:

- membership in international standards setting bodies;
- membership in trading blocs, providing economies of scale in managing knowledge about standards;
- willingness of more affluent countries to involve poorer countries in the full negotiation process, as well as support from the international community, e.g. in-country workshops in SPS to help countries identify their issues, assistance to attend meetings;
- poor producers and poor consumers are unlikely to have much voice in the standards setting process until they participate fully in the formal market, become organised and join lobbying groups.

**Setting appropriate standards.**

It is necessary to promote standards that are appropriate for the risk management situation and can actually be enforced. Risk management measures to create food safety, including standards, vary with food chains and situations.

International vertical chains depend on SPS standards and agreement between trading partners. National vertical chains have minimum standards set by governments but consumers, private processors and retailers may set additional standards. One example of this is in the Thai milk market, where the highest quality standards are now set by retailers. Condensed milk used to be commonly drunk by the poor, now there is more fresh
milk drunk which has a nutritional benefit. Indeed, in the Thai poultry and pig markets, national standards and abattoirs for domestic markets are run under inadequate legislation, although those for exports run under a much higher level of legislation. Competition can drive up standards, e.g. imported cheese in South Africa is setting quality standards that some local producers and processors are trying to match.

In informal markets, standards are agreed between producer and consumer. For own consumption, the producer/consumer decides what standards to apply. At this level, legislation may already be sufficient but disseminating the message is equally important.

Enforcement is greatly influenced by responsibility. This requires both defining the scope of accountability, and promoting the mindset to accept it. Risk communication to developing countries, and within developing countries is an important component of this process. Transparency and information access to producers and consumers need to be improved and this requires capacity building in risk communication.

**ASSISTANCE IN COMPLYING WITH STANDARDS**

**Access to information**

Understanding of the SPS agreement and its implications, and up to date briefing, are essential for national governments to fully participate in OIE and Codex decision making. There is a need to make more effort in helping all member countries of these organizations to access the SPS information system. Information about SPS processes should ideally be distilled and presented according to different needs, e.g. for different commodities, different levels of participation in international trade, and the possible implications of proposed changes. Specific solutions could come from consultation with member countries.

**Tools to support decision making**

It is important that all governments use standards setting as part of a risk management system, by asking questions like:

- To what standards do they wish to protect consumers and cost?
- Do they have a tourist industry?
- Do they wish to export/trade?
- How important is the export market?
- What standards for exports?
- Will it be economically viable to introduce heightened standards?
- Are they prepared for variable standards?
- What food safety problems will need to be addressed?
- What animal diseases need to be tackled?
- Are their current standards appropriate?
- Can they meet obligations?
- How can they demonstrate they have met the obligations?
- Who will negotiate on their behalf?

Decision support tools are needed to assist policy makers in determining:

- what is appropriate for their national markets;
- what may be unfairly disadvantaging them;
- what changes may be needed in national legislation and support services to make
it possible for participants in livestock value chains to comply with changes in standards.

A number of tools and guidelines exist, and some have been prepared by FAO, but there is a lack of worked examples and concrete case studies, as well as a confusing plethora of information.

In addition, mandated international organizations should provide their own assessment of the impact of changing standards on the poorest, who are least equipped to do the analysis for themselves. There is a need to assess economic as well as technical risks of changes in markets and standards, including an assessment of externalities (e.g. who will be affected if the market fails through an uncontrolled risk?).

Adequate surveillance of foodborne disease is lacking in the poorest settings, and this surveillance function is critical in evaluating the success of systems. Investment in health infrastructure in poor settings is key to creating this capacity.

**Support to small producers and processors to encourage good practice**

Good practice guidelines for practitioners are in existence, but not for all commodities and production systems. These need to be updated and more widely disseminated.

Assisting small farmers, traders and processors to enter formal (regulated) or vertically integrated markets will include, (but not be restricted to) helping them to comply with standards. It may involve quite wide ranging changes to management practice.

**Involvement of a wide range of players**

Greater input of good science into risk assessment, evaluation and communication is needed, (e.g. precautions against BSEs are very hard to justify economically). Universities and other research institutions have an important role to play.

Involvement of the private sector can produce beneficial changes e.g. Nestle’s model for involving smallholders in the dairy value chain in Pakistan and China. This business model requires political stability, a sufficiently large and concentrated consumer population that can afford to purchase processed milk, a sufficient population of livestock producers to provide the necessary volume of produce, and sufficient infrastructure. Where these conditions do not exist, significant private sector involvement is unlikely since the risk will be too high or the returns too low.

**EXIT STRATEGIES**

Those who cannot participate in the formal market may need to exit from livestock production, or find an additional income source. Policy change must therefore embrace more than agriculture. Additionally, it must be about creating conditions to encourage investment, e.g. education, information, credit.

The ability of farmers to adjust in order to participate in the formal market will be affected by equity, e.g. land holding, which affects the ability to participate in a value chain.

The severity of the effect will depend partly on the speed of change, e.g. in Brazil, major milk companies holding 50% of the formal market in three years excluded approximately 35% of their producers.

The best approach will be country specific and will require empowerment of displaced
market chain members so that they are able to adopt alternative livelihood options. For example, before the HPAI outbreak in Thailand, small scale producers used to depend on contract farming. Now there is a possibility that large producers will choose to contain the whole value chain within one business, without contract farming, and small farmers will go out of business. Government is encouraging them to invest in evaporative housing, but this will not be economical for many and some will go out of commercial chicken farming. Empowering would need to include extension on biosecure poultry raising, information and training in other options, as well as credit to start other livelihood activities. African farmers are aware that their children may not have a secure future in farming, leading many to choose education as a safety net, so that their children have a choice of livelihood. In this situation, a very broad based policy process encompassing sectors other than agriculture is needed to mitigate the impact of changes in the livestock sector.
Recommendations

FAO MANDATE AND ACTIVITIES
FAO’s mandate is to “raise levels of nutrition, improve agricultural productivity, better the lives of rural populations and contribute to the growth of the world economy” (http://www.fao.org/UNFAO/about/mandate_en.html). The consultation concludes that setting and enforcement of SPS standards at international and national levels has a major impact in each of these areas and that FAO has an important role to play. Its strength lies in interdisciplinary capability in economics and social sciences as well as biological sciences. The following are specific recommendations.

CHALLENGES FOR THE FUTURE
The pace of change is increasing in all areas of animal health, human health and food safety standards, and this impacts on poor populations. Historically, very rapid change in this area has been harmful to poor producers. FAO should encourage a national agenda of gradual implementation to avoid serious adverse impact on the most vulnerable producers and consumers. In order to do this it will be necessary to monitor the impact of changing standards on vulnerable groups, learn lessons and bring them to the attention of governments where similar situations arise.

Intensive and extensive farming systems embody different risks and may require different approaches. FAO needs to be aware of proposals from the standards setting bodies, to review their impact and possible interactions and consider them in an holistic manner.

International standards are gold standards but not necessarily achievable quickly or even appropriate for domestic or regional food chains, e.g. laboratory testing standards, maximum residue levels, disease control. Uniform gold standards are not globally enforceable. Equivalent options to manage the risks should be defined both for and by developing countries (e.g. between pasteurization and boiling, milk powder or UHT; BSE surveillance). They must be applicable, enforceable and practical. FAO should evaluate international SPS standards in the context of their impact on developing countries.

THE STANDARDS SETTING PROCESS
Efforts should be made to identify the gaps in the science that impact on the standards setting process (e.g. diseases of trade, AI, zoonotic diseases, MRLs) and provide information to the bodies and member countries involved in standards setting. This is a responsibility of the whole international community. It will require a co-ordinated agenda with broad interdisciplinary research to provide the scientific information necessary to ensure the development of appropriate evidence based standards. FAO should work with other international organizations and the private sector in order to obtain the information that is needed.

The Doha declaration expects that LICs should become WTO members. The consulta-
tion recognises that there has been a major input from the international organizations to encourage participation and provide training and advice on implementation of SPS standards. One further step in this process is to analyse the involvement of developing countries to the standards setting process, and the reasons why they do not attend or contribute. It is suggested that FAO should undertake this as a regular process, and explore alternative and innovative methods that do not necessarily involve attending central meetings and put in place a mechanism for measuring the success of this programme.

OIE and Codex have the mandate to develop standards. There is no international organization currently monitoring, evaluating or communicating the impact of standards on sustainable development. This ideally occurs before and during the process of standards development and remains an important function during the implementation of standards. It falls within FAO’s mandate to take on this role and FAO should take a lead in this process. It is important that the publication of an economic, social and environmental impact statement is prepared when new standards are set or major revision of existing standards takes place.

**METHODOLOGY**

Standards setting within a risk management context is a multi-disciplinary activity. Programme management or task forces have been used by member countries to bring together the range of expertise necessary without major organizational change. FAO has a number of separate initiatives. These need to be synergized and harmonised in a programme rather than a silo structure.

FAO should develop a framework for decision making including criteria to enable developing countries to assess their requirements in a systematic manner. A consistent application of a standard framework is essential and should include assessment, management and communication of risk. It should include an economic evaluation.

A food chain approach is a useful way to identify gaps in food safety. A value chain approach is useful to identify distributional and governance issues. Both are recognised and have been used by FAO, however the consultation recommends a more systematic and uniform approach to their use, and suggests that as a starting point an attempt is made to typify livestock value chains.

FAO should continue to provide advice to countries as requested, using the framework for risk analysis and the decision processes previously described but tailored to the needs of developing countries.

**THE OVERALL APPROACH TO FOOD SAFETY AND VETERINARY PUBLIC HEALTH**

This consultation believes that the issue of food safety is central to the poor. Food safety cannot be uncoupled from food security, especially for the poor and vulnerable. It is recognised that changes in standards have a complex effect on low income countries and the poor. While the SPS standards can be valuable in promoting food safety, the process by which they are set, and the speed at which they are implemented, may at the same time result in exclusion of vulnerable groups from participation in the food chain. FAO should use its offices to develop appropriate strategies for analysis of the problem and promote
effective methods of dealing with it.

Figures to assess the problem are not clearly known. There appears to be over emphasis on problems of the wealthy countries, e.g. residue levels, rather than basic safe food. FAO should work with WHO to assess the problem because they have complementary skills. Sharing information is important. There is also a lack of primary data, but it may be valuable to explore new analyses of existing but unexploited data.

ADVOCACY ON BEHALF OF DEVELOPING COUNTRIES
The consultation recognises that there is excellent technical co-operation on a regional basis and that there is an FAO representative in the majority of member countries. It is important to build on this structure to maximize the way in which FAO relates to the member countries at the high level and uses this to inform the standards setting process.

FAO is in a position to champion and protect the interests of least developed member states and work with regional groups of standards setting organizations to take into account issues of relevance to the LIDCs. This consultation sees this advocacy as a common good for development of all FAO members.

There is a need to promote risk analysis methodology and its application in the development of sustainable national policies for food safety, human and animal public health. This includes economic, social and environmental as well as technical risks.

DISSEMINATION OF INFORMATION
Information on food safety standards is available but scattered. There is a need to co-ordinate the dissemination of such information in a way that is useful to developing countries. The recently established FAO biosecurity information portal is highly recommended. It should continue to be developed to meet the needs of all member countries, including consultation on its value to them. Other useful dissemination tools include policy briefs, which should be short and to the point, e.g. World Bank policy briefs, SPS newsletters.

Advice and technical packages for practitioners, related to animal health food safety standards, are valuable and necessary. They should be based on a supply-driven focus to risk management in the food chain or value chain and take account of investment potential of producers as well as the purchasing preferences of consumers. They will usually need to be modified in light of local circumstances. A publication exists for the dairy industry describing the food chain approach and recommendations for best practice. A similar publication on meat is under development. Similar publications for other livestock products would be useful.

STRATEGY
This consultation and its documentation should be converted into a strategy for assisting the poor in the context of SPS agreements, and should be funded accordingly. The recommendations of this report should be reviewed in one year, to assess their effectiveness and application, and FAO should develop indicators against which to judge progress.
Working papers

Dries, L. Meat and dairy products market change induced by the transformation of the retail and food processing sectors.

Jöhr, H. Enabling market access for smallholder dairy farms in Pakistan and China.


Poapongsakorn, N. SPS standards and the South East Asian livestock sector: a case study of Avian Influenza.

Scudamore, J. The dynamics of SPS (animal health and food safety) regulations and impacts on domestic livestock markets in developing countries.
References


Additional Bibliography


Poapongsakorn, N. and others (2003). Policy, Technical, and Environmental Determinants and


Strand, I. Pfiesteria Concerns and Consumer Behavior. Department of Agricultural and Resource Economics, University of Maryland, College Park. (http://www.arec.umd.edu/Policycenter/Pfiesteria/strand/strand.html)


Annexe 1
List of participants

EXPERTS

Dries, Liesbeth
Assistant Professor, Department of Agricultural and Environmental Economics & Research Group on Food Policy Transition and Development, Katholieke Universiteit Leuven (K.U.Leuven), de Croylaan, 42, 3001 Leuven, Belgium
Tel: +32 16 321615
Fax: +32 16 321996
E-mail: Liesbeth.Dries@agr.kuleuven.ac.be

Johr, Hans
Corporate Head of Agriculture, Nestec Ltd, Avenue Nestlé 55, CH-1800 Vevey, Switzerland
Tel: +41 21 924 22 77
Fax: +41 21 924 28 61
E-mail: hans.johr@nestle.com

Kimball, Ann Marie
Director, Asia Pacific Economic Cooperation Emerging Infections Network
Professor, Epidemiology and Health Services, University of Washington, School of Public Health and Community Medicine, Department of Epidemiology
Box 3572336, Seattle, Washington 98195, USA
Tel: +1 206 616-2949
Fax: +1 206 616-9415
E-mail: akimball@u.washington.edu

McCrindle, Cheryl
Professor, Veterinary Public Health Section, Department of Paraclinical Sciences
Veterinary Faculty, University of Pretoria, Private Bag X04, Onderstepoort 01100, South Africa
Tel: +27 12 529 8075
Fax: +2712 529 8311
E-mail: mccrindl@op.up.ac.za
Poapongsakorn, Nipon
Assistant Professor, Faculty of Economics, Thammasat University
Consultant, Thailand Development Research Institute (TDRI)
565 Soi Ramkhamhaeng 39 Ramkhamhaeng Road, Bangkapi Bangkok 10310
Thailand
Tel: (662) 718-5460
Fax: (662) 718-5461-2
E-mail: nipon@tdri.or.th, nipon@econ.tu.ac.th

Scudamore, James
Retired Director-General for Animal Health and Welfare and Government
Retired Chief Veterinary Officer, Department for Environment, Food and Rural Affairs (DEFRA)
56 Horseshoe Lane East, Guildford, Surrey GU1 2TL
UK
Tel: +44 1483 572706
Fax: +44 1483 572706
E-mail: jim@jscudamore.fsnet.co.uk

Invited experts who were unable to attend but provided background notes:

Okali, Christine
Senior Lecturer in Rural Development and Gender, School of Development Studies
University of East Anglia, Norwich, NR4 7TJ
UK
E-mail: C.Okali@uea.ac.uk

Rojas Olavarria, Hernan
Director, Departamento protección pecuaria
Servicio Agrícola y Ganadero (SAG), Ministerio de Agricultura
Avenida Bulnes 140, piso 7, Casilla 4088, Santiago
Chile
E-mail: hrojas@sag.minagri.gob.cl

OBSERVERS

Lubroth, Juan
Senior Officer, AGAH, FAO

Hoffmann, Irene
Chief, AGAP, FAO

Bennet, Andrew
Livestock Product Officer, AGAP, FAO
Annexe 1: List of participants

Bazeley, Peter
Department for International Development, UK
E-mail: p-bazeley@dfid.gov.uk

Benzerrak, Saaid
Veterinaires Sans Frontieres, France
E-mail: sb.prog@vsf-france.org

Cisneros, Hector
Consortium for the Sustainable Development of the Andean Region
E-mail: h.cisneros@cgiar.com

de Haan, Cees
World Bank
E-mail: cdehaan@worldbank.org

Gustafson, Daniel
FAO, India
E-mail: Daniel.Gustafson@fao.org

FAO SECRETARIAT
McLeod, Anni
Senior Officer, Livestock Policy, AGAL, FAO

Steinfeld, Henning
Chief, AGAL, FAO

Otte, Joachim
Programme Co-ordinator, PPLPI, FAO
1. Protein sources for the animal feed industry, 2004 (E)
2. Expert Consultation on Community-based Veterinary Public Health Systems, 2004 (E)
3. Towards sustainable CBPP control programmes for Africa, 2004 (E)
4. The dynamics of sanitary and technical requirements – Assisting the poor to cope, 2005 (E)
5. Lait de chamelle pour l’Afrique, 2005 (F)
6. A farm-to-table approach for emerging and developed dairy countries, 2005 (E)

Availability: July 2005

Ar – Arabic
C – Chinese
E – English
F – French
P – Portuguese
S – Spanish

Multil – Multilingual
* – Out of print
** – In preparation

The FAO Animal Production and Health Proceedings are available through the authorized FAO Sales Agents or directly from Sales and Marketing Group, FAO, Viale delle Terme di Caracalla, 00100 Rome, Italy.
The expert consultation on *The Dynamics of Sanitary and Technical Requirements: Assisting the Poor to Cope* was held in Rome from 22 to 24 June 2004. The objective of the consultation was to provide advice to FAO and Member Governments on the impact of sanitary and phytosanitary (SPS) standards on domestic livestock markets, and in particular to consider impacts on the poor who participate in livestock food chains, and the extent to which their concerns are being addressed. It addressed four questions:

Who drives standards setting in food safety and animal health?  
How do existing and anticipated standards affect the structure of the livestock food chain and vice versa?  
Who is winning and who is losing from changes?  
What can be done to help the losers? In particular, what can be done to assist the poor to cope?

This publication describes the conclusions of the six experts and observers of the consultation. It contributes to a very lively global debate on the subject of livestock standards and market exclusion.