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# Public sector roles in agri- food chains

Regulatory strategies and functions in  
food safety, corporate social  
responsibility and seed sector  
development

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# Public sector roles in agri-food chains:

## Regulatory strategies and functions in food safety, corporate social responsibility and seed sector development

Frank Joosten and Derek Eaton

### 1. Introduction

Comprehensive International Commodity Agreements for coffee, cocoa, grains and other important agricultural and food products used to regulate volumes, prices, standards and other critical aspects of the commodity production and trade in the past. Structural adjustment policies in the late 1980's and 1990, combined with liberalizing markets and globalization, resulted in drastic changes in the performance of agricultural commodity markets. The direct and indirect influence of governments and parastatal companies in the commodity markets' operations has drastically diminished. Nowadays the development, organization, and management of commodity production, processing and marketing arrangements are primarily a private sector responsibility. However, there are also still public sector roles in creating favourable conditions for agricultural sector development, for promoting sustainable management of natural resources, for fostering public-private cooperation and for enabling inclusion of smallholders and small enterprises. This implies that new approaches and intervention strategies are required to fulfil these roles under privatized, deregulated and globalising market conditions. Within this context value chain concepts have become one of the leading frameworks for planning and pursuing governmental strategies aimed at regulating aspects of production, processing, etc.

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 (involving a combination of physical transformation and the input of various producer services), delivery to final consumer and the final disposal after use<sup>1</sup>. It is acknowledged that the actors in a value chain operate in an overall economic, social and physical environment, which has an influence on the performance and outcome of the chain processes. In this context the term 'enabling environment' is often used, which is commonly thought of as the *'extent to which government policies, laws and regulations set the rules of the game for business and influence, positively or negatively, the performance of markets, the incentives to invest and the costs of business operations'*<sup>2</sup>.

Within this concept of an enabling chain environment, certain levels of public sector governance and regulation of the market mechanisms are broadly viewed as justified and appropriate in order to:

- promote economic growth and development that aims to include rather than to exclude certain vulnerable and poorer groups in the society and share benefits of economic growth with these groups;
- reduce negative side-effects of production and consumption practices on the climate, biodiversity, soil and water resources; and/or
- ensure the products and production processes are safe and are of a certain minimum quality standard.

In addition to (food) laws, regulations and international trade agreements, the public sector has a number of other intervention options that influence the performance and outcomes of value chains: incentive programmes (e.g. subsidies), food control and company inspections, customs and taxes, information, research and development services, etc.<sup>3</sup>

## 2. Why this paper?

The concurrence of policies and interventions aimed at economic growth and development with those aimed at sustainability, poverty reduction and/or consumer protection appears to be broadly accepted these days. However, strategies and approaches appear to differ considerably between various countries, particularly in terms of (a) the level of direct government intervention as regulator or participant in the markets and value chains and (b) the ability to put policies into practice. In bilateral and multilateral relationships it is of paramount importance to realise that these differences occur. Compatibility in policy strategies and implementation approaches will have to be sought between the countries concerned for an international development cooperation to succeed.

This paper wishes to inform and advice policy makers in the Netherlands and elsewhere on different approaches to market regulation and governance strategies that prevail in various parts of the world. To this effect the paper will review different country's policy and implementation strategies aimed at economic development combined with poverty reduction, sustainability and consumer protection.

## 3. Content and focus

Market regulation and public sector chain governance strategies comprise a broad range of different fields. In this paper we will focus on a number of examples that may be considered indicative for the various public regulatory and chain governance systems:

- Food safety and agricultural health, to be seen as an example of a chain regulatory function that is often considered to be typically in the public domain;
- Corporate Social Responsibility (CSR), which is viewed as a chain influencing strategy with a greater responsibility for the private sector and only a supporting role by the government;
- Research and development of the seed sector, which is to be seen as an example of a chain influencing and regulatory strategy where public and private sector players have a more or less equal role to play.

In this paper we aim to analyse the various approaches to public sector regulation and governance strategies around agricultural and food chains. Based on a number of case studies the object of the analysis is to check whether there consistent patterns of public sector behaviour are distinguishable that lead to effective and efficient regulatory systems.

Concerning public sector roles the range of initiatives that are deployed may be classified around four different principle roles: mandating, facilitating, partnering and endorsing<sup>4</sup>. In their mandating role, governments at different levels issue and enforce legislation, define (minimum) standards, etc. In their facilitating role, public sector organizations enable or provide incentives to the private sector to follow the envisaged improvements; in many of the approaches reflected under this heading the public sector plays a catalytic, secondary or supporting role. In their partnership role, public sector bodies add their inputs and skills to those of the private sector and the civil society organisations in order to tackle complex social, economic, environmental or technical issues. In relation to an endorsing role government agencies give support and backing to initiatives of other parties; by doing so they sanction and approve the initiatives concerned.

<b>Mandating</b>	<b>Facilitating</b>	<b>Partnering</b>	<b>Endorsing</b>
<ul style="list-style-type: none"> <li>○ "Command and control" legislation</li> <li>○ Regulators and inspectorates</li> <li>○ Legal and fiscal penalties and rewards</li> </ul>	<ul style="list-style-type: none"> <li>○ "Enabling" legislation</li> <li>○ Creating incentives</li> <li>○ Raising awareness</li> <li>○ Capacity building</li> <li>○ Stimulating markets</li> </ul>	<ul style="list-style-type: none"> <li>○ Combining resources</li> <li>○ Stakeholder engagement</li> <li>○ Dialogue</li> </ul>	<ul style="list-style-type: none"> <li>○ Political support</li> <li>○ Publicity and praise</li> </ul>

**Table 1:** Examples of different public sector roles<sup>5</sup>

There are often no strict boundaries between these roles. In a number of cases, public sector organisations are seen to combine various roles. However, as will be explained later in the paper, there are marked differences between the public sector organisations of various countries in placing emphasis on certain (combinations of) roles in relation to the various fields of market regulation and governance. In our comparison of different approaches to market regulation and governance strategies that prevail in various parts of the world the following three questions will be leading:

- I. How do different governments pursue the various market regulation and governance strategies? Is it possible to classify the different governmental roles and responsibilities?
- II. What appear to be the main 'drivers' and 'constraints' for government agencies to develop the respective public sector roles?
- III. Are these public sector roles in pursuing the various market regulation and governance strategies relatively constant or have these developed over time?

Cases described in the subsequent sections of this paper have been collated on the basis of literature review. Cases have been selected to present sufficient geographical diversity. All are related to examples of chain regulatory and governance systems that have been reasonably successful or successful.

#### **4. Food safety and agricultural health**

The proliferation and enhanced stringency of food safety and agricultural health standards<sup>6</sup> is a source of concern among many developing countries and those promoting the increased integration of these countries into the world trading system. There is a concern that many developing countries lack the administrative, technical and scientific capacities to comply with emerging requirements, thus presenting new barriers to trade. Additionally the investments and recurrent costs of compliance are often considered a further contribution to the marginalisation of weaker economic players at various levels, including small/poor countries, small and medium-sized enterprises and smallholder farmers. An alternative and less pessimistic view, however, emphasizes the potential opportunities by the evolving standards environment and the likelihood that certain developing countries can utilise such opportunities to their competitive advantage. From this 'standards-as-catalysts' perspective, the challenge inherent in compliance with food safety and agricultural health standards may well provide a powerful incentive for the modernisation of developing country export supply chains and give greater clarity to the appropriate and necessary management functions of government related to this field<sup>7</sup>.

Whether viewed as a barrier to trade or as a catalyst for modernisation and enhancing a sector's competitiveness, governments the world over have paid increasing attention to the development and institutionalisation of SPS systems. The World Health Organisation and Food and Agricultural Organisation of the United Nations<sup>8</sup> outline that a control system would comprise the following components: (i) laws and regulations; (ii) operational control and management; (iii) inspection services; (iv) laboratory services; (v) information, education, training and other forms of communication. Legal frameworks for the regulation of food safety and agricultural health have traditionally consisted mostly of legal definitions of unsafe food and long lists of veterinary hazards and phytosanitary quarantine organisms in combination with prescriptions for control agencies on enforcement tools for removing unsafe products from commerce and punishing responsible parties. They generally did not provide SPS control agencies with a clear mandate and authority for preventing SPS-related problems. The result has been SPS control systems that are reactive and enforcement oriented rather preventive and holistic in approach aimed at reducing food safety and agricultural health risks. A number of food safety crises in the 1990's – most notably the BSE crisis in the UK and the Belgian dioxin crisis – caught widespread public attention in Europe and elsewhere and resulted in a change in emphasis towards more comprehensive prevention and control of hazardous situations. The European General Food Law is a prime example of this change in direction<sup>9</sup>. At the same time safety and quality systems such as the Good Agricultural Practices of the Euro-Retailer Produce Working Group (EurepGAP; 1997), the Food Technical Standard of the British Retail Consortium (BRC, 1998) and the International

Food Standard of the Global Food Safety Initiative (IFS; 2003) started to emerge as a private sector response to the international consumers' demand for safe production systems and products<sup>10</sup>.

Implicitly this has also resulted in changing roles and responsibilities of both public and private sector partners in the food safety systems, whereby those of the agricultural and food businesses have further increased in importance. In many countries it is however still assumed that managing food safety and agricultural health is predominantly a public sector responsibility. Indeed, there are some crucial regulatory, research and management functions that are normally carried out by government organisations and a variety of circumstances where importing countries require that certain functions be performed by a designated public sector 'competent authority'. However, the private sector also has a fundamentally important role to play. First, private enterprises should contribute to the standard setting as they are typically well informed about technical options and hazard management practices. Second, it is through the specific actions of individual producers and processors that compliance with food safety and agricultural health requirements is achieved. Third, capacity building in the private sector can complement (or substitute for) public sector capacity, as with the investment in accredited laboratory testing facilities<sup>11</sup>.

A recent research programme from the World Bank<sup>12</sup> concluded that developing countries faced with rising SPS standards in their export markets can maintain and improve market access, enhance their industries' competitiveness, mitigate potential adverse effects on vulnerable groups and improve domestic food safety and agricultural health by adopting a strategic approach to SPS and trade issues. It was furthermore concluded that for those countries and suppliers that are well prepared, rising standards represent an opportunity; for those that are poorly prepared, they pose safety and market access risks. The institutional arrangements based on which SPS systems are founded and the role of government agencies therein appear to differ considerably between various countries. While many developing countries have significant weaknesses in food safety and agricultural health management capacity, there is evidence that even low-income countries can, selectively, put in place the necessary regulatory, technical and administrative arrangements to meet demanding standards in export markets and upcoming organised retail chains on the domestic market<sup>13</sup>. In the examples below it is demonstrated that the responsible government agencies in different countries – Thailand, Kenya and Peru – have adopted different roles towards regulating food safety and agricultural health in (export-oriented) horticultural sectors with importance to their national economies.

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Example 1: *Strategies to institutionalise new standards and good practices in Thailand*

Vegetables and fruits are grown as cash crops by Thai farmers in all regions for household consumption and local markets, and increasingly also for exports. Southern China, Australia and other countries in the region are viewed as the most important export markets. The Ministry of Public Health in Thailand as the responsible public sector organisation wishes to instil the concept farm-to-table food safety control in the Thai horticultural sector. Protection of consumer health in Thailand as well as abroad and the compliance with international SPS standards appear to be the prime motivations for promoting the food safety standards throughout the horticultural chains. To promote food safety standards in the horticultural chains the Ministry of Public Health and the Ministry of Agriculture and Cooperatives has adopted a mandatory role comprising:

- The establishment of regulatory frameworks (GAP, GHP, GMP, HACCP) and standards (MRLs)
- Promotion, inspection and certification of the newly introduced guidelines and standards at the various levels within the chain.<sup>14</sup>

The mandatory approach of the Thai government with an emphasis on issuing and enforcing standards and regulations is illustrated also by the 'Clean Food Good Taste' project. Through this project the Ministry of Public Health has aimed to reduce the food-borne health problems in restaurants and street vendors. The Ministry established a list of twelve sanitation standards for street foods and restaurants which were subsequently introduced and enforced through regional authorities. The facilitating role of the government was restricted to public awareness campaigns and training activities for restaurants and street vendor associations. The success of the project is measured in terms of numbers of restaurants and street vendors who passed the inspection criteria and are awarded the 'Clean Food Good Taste' logo<sup>15</sup>.



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Example 2: *SPS as comparative advantage for Kenyan horticultural exports*

While the exports of many other agricultural commodities have faced stagnation and declining terms of trade, the horticultural production and exports from several sub-Saharan African countries have grown dramatically in the past few decades. Kenya is one of the leading exporters of vegetables, fruits and flowers. Its horticultural exports have grown at over 6 percent per year for the past 30 years. In spite of increased competition from other countries (South Africa, Côte d'Ivoire, Morocco, Zambia), Kenya continues to be a very important supplier of horticultural products to the European Union<sup>16</sup>. Rising food safety and quality standards at the European market has posed a serious challenge to the export-oriented horticultural sector in Kenya to maintain that position during the last decade. The Kenyan fresh produce industry – with the assistance of the Kenyan government and international partners – is effectively meeting this challenge and is even using it as an opportunity to redefine the industry's comparative advantage. For the past years significant elements of the industry have been transforming their production, packing and broader supply operations both in response to and in anticipation of changes in official regulations and private standards and protocols.<sup>17</sup> The payoff on Kenya's proactive investment has been great: Over the past decade as EU imports from non-member countries did not rise, Kenya was able to increase the value of its fresh vegetable exports significantly, in large part by shifting the product composition of its trade, meeting the highest quality and safety standards in EU markets, and achieving a shift upward in the unit value of exports. From 1991 to 2003 the value and volume of Kenya's exports of fresh vegetables increased five fold<sup>18</sup>. This achievement has been largely due to private sector initiatives.

The tendency of the Kenyan government has been not to intervene directly in the sector. In the past there was virtually no interaction between business and public sector stakeholders, but the challenge of meeting international safety and quality standards has increased the level of collaboration within the private sector and between the industry and the government of Kenya. In relation to food safety and agricultural health matters the responsible government agencies have adopted a combination of endorsement and facilitation with a mandating role. In terms of adjustments in production, procurement, and logistical operations the private sector has taken full responsibility to comply with the safety and quality requirements of the end markets. For the regulation of pesticide registration and use and the development of appropriate Maximum Residue Levels (MRLs) a National Steering Committee was established in 2002. The Managing Director of the Kenya Plant Health Inspectorate Services (KEPHIS) is the chairman of this committee, with other partners mainly coming from the agro-chemical industry and horticultural production sector. For the development and adoption of a series of crop protocols that provide recommended safety and quality strategies, individual export growers private organizations such as the Fresh Produce Exporters Association of Kenya (FPEAK) and the Kenya Flower Council (KFC) are playing a leading role. The government merely endorses these initiatives and facilitates the international donor support in this field.<sup>19</sup> The only major mandatory role is played by KEPHIS as the responsible public sector agency for the implementation of the national phytosanitary system. This includes the inspections of horticultural export consignments and the issuing of the required phytosanitary certificates. KEPHIS approach in this has contributed to the establishment of the export oriented horticultural sector in Kenya as a reliable and high-quality provider of fruits, vegetables and flowers. Very recently KEPHIS has been recognised by the European Commission as the competent authority to inspect Kenyan exports to the EU. This means in practice that horticultural products can now be locally checked for compliance with the EU market standards and sanitary and phytosanitary (SPS) legislation. This decision by the EC Commission will further facilitate Kenya's exports to the EU as the exporter no longer will bear delays due to inspection requirements and additional inspection fees at the port of entry into the European Union<sup>20</sup>.

The private sector needs and commercial interests appear to be the key driver behind the predominantly facilitating and endorsing role of the Kenyan government. The issue of meeting quality and safety standards is often viewed as primarily a public sector responsibility; in the case of Kenya the export-oriented horticultural sector manages to stay abreast of shifting technical and commercial requirement in the European markets by the proactive approach of the private industries.

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Example 3: *Top-quality asparagus exports from Peru*

Peru is the leading exporter of fresh asparagus and the second largest exporter of canned asparagus. In 2004 the total area under asparagus production amounted to 185,000 hectares supplying a total production of 193,000 tons. The exports of fresh produce amounted 72000 MT (value USD 140 million), which was mainly destined for the US market. A total of 40000 MT (value USD 79 million) was exported in the form of canned produce with the European market as its most important destination. The asparagus production in Peru started in the 1950's, but the largest production increase was realized in the second half of the 1990's with exports quadrupling between 1997 and 2004. One of the main reasons behind this considerable increase in export production has been attributed to the establishment of Good Agricultural Practices (GAP) and HACCP-systems.<sup>21</sup>

On the initiative of the Export Promotion Commission (PROMPEX) a number of technical standards committees were set up for asparagus and other important agro-industrial exports and technical assistance and training programmes have been instituted to help agricultural exporters implement good production practices, safety and quality management systems (HACCP, ISO 9000). PROMPEX was created in 1996 as an agency under the Ministry of Foreign Trade and Tourism with the explicit mission to facilitate Peruvian exports through collaboration with the country's private sector and the different public institutions responsible for foreign trade. In its efforts to enhance the export-oriented production of asparagus more competitive in international markets through introducing quality and safety compliance systems, PROMPEX supported the establishment of an association of export producers (IPEH) and the 'Frío Aéreo Asociación Civil', which organises the handling and logistics of asparagus and other perishable horticultural products prior to export. Furthermore an Asparagus Standards Technical Committee was set up by PROMPEX which comprises representatives of all relevant public and private sector institutions in this field.<sup>22</sup>

The strategy 'Competitiveness through quality and safety' adopted by PROMPEX has been highly successful. PROMPEX combined a facilitation and partnering role in order to ensure that public and private organisations effectively and efficiently developed and implemented the required safety and agricultural health systems. Based on its formal mandate as an export promotion agency for the Peruvian government, the demands on the markets in North America and Europe formed clearly the driving force behind the competitiveness enhancing strategy. Interestingly the initial role of the leading public sector organisations was to facilitate cooperation mechanisms between public and private partners as a prerequisite for the mandatory role to be played by Asparagus Standards Technical Committee.

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The three cases above demonstrate the difference in public sector approach to introducing food safety and phytosanitary health standards and regulations in the respective (export-oriented) horticultural sectors. Given the nature of the food safety and phytosanitary health systems an aspect of mandatory strategies appears to be part in all three cases. However, whilst the Peruvian authority has opted to start the improvement of food safety and phytosanitary health from a facilitating and partnership role, the Thai government follows a mandatory role throughout the process. The Kenyan government endorses the initiatives of the horticultural export growers to raise the quality and safety standards of their produce and provides the required phytosanitary frameworks and services as part of the international compliance requirements. In that the Kenyan authorities (in particular KEPHIS) combines its mandatory role with a partnership arrangement with the private sector.

In all three cases the economic interest to increase export earnings and promote sector growth appear to be the main driving force behind public sector efforts to promote safety and quality standards in the respective horticultural sectors. The adoption of a particular public sector role appears to be more influenced by the predominant cultural approach to developing and pursuing regulatory policies, rather than the overall policy objective to promote growth and development of export-oriented supply chains for increased income and employment.

## 5. Corporate Social Responsibility (CSR)

CSR has emerged relatively recently, relative to the other topics illustrated here. The mainstream CSR agenda reflects primarily concerns of stakeholders in the North, and is linked to the broader debate on globalization begun in the 1990s. Attention here focuses on the engagement of the public sector with CSR in developing countries, where initiatives with respect to labour and environmental standards have been most relevant.

The World Bank defines CSR as:

“the commitment of business to contribute to sustainable economic development – working with employees, their families, the local community and society at large to improve the quality of life, in ways that are both good for business and good for development.”<sup>23</sup>

CSR is interpreted by some as business practices that “go beyond compliance with minimum standards” in the areas of environment, employment and commercial practices<sup>24</sup>. The initiative has been taken by the private sector and poses the question as to how governments should react. Viewed this way, the role of public sector is seen essentially as one of encouraging business practices that go beyond what is required. However, the broader perspective on CSR, implied by the World Bank’s working definition, implies thinking more broadly about the two-way and dynamic relationship between CSR and official regulatory approaches, as well as the importance of globalization as a driver of the CSR agenda. Following this view, the issue for policy makers is what type of role they wish to play in providing an “enabling environment” for CSR.

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### Example 4: *Proudly South African – Facilitating, Partnering and Endorsing*<sup>25</sup>

Proudly South African is an initiative of the National Economic Development and Labour Council (NEDLAC) which is a public agency mandated to provide a forum for consensus-building in social and economic policy.<sup>26</sup> NEDLAC is supported by organized business, organized labour, government and the community.

Begun in 2001 with NEDLAC seed money (partnering), there are now more than 2000 members who commit themselves to source at least 50% in South Africa and to meet fair environmental and labour standards. Proudly South African runs a promotion campaign that includes the use of a logo to encourage consumers to purchase products from member companies, in both domestic and international markets.

The South African government has taken primarily a facilitating and partnering role in this CSR initiative. The main drivers behind this attitude were the development of consumer demand for sustainable-produced goods and services, as well as demand from businesses for transparency and legitimacy in CSR activities. This demand appears to have come as much from SMEs as from larger corporations, particularly judging by the cross-section of companies that have become members of the initiative. Over time, the desire to promote South African exports, distinguished by the Proudly South African label, has become a stronger driver of government engagement, presumably as companies have discovered the value of the label in certain export markets. For example,....Japan.

The government’s role of facilitating and partnering was strongest in the initial stages of establishment of Proudly South African, particularly in the form of seed money. Aside from this partnering impulse, the approach of the government has generally had an endorsing character, in terms of publicity, praise and promotion (for example, by trade promotion staff in embassies). There were some proposals to favour Proudly South African members in government procurement decisions but the government has avoided taking such a strong endorsement role.

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Example 5: *Vietnam – Facilitating CSR in the textile and footwear industry*

Many Vietnamese enterprises involved in the international footwear and textile supply chains are actively implementing codes of conduct concerning labour standards. These include domestic companies supplying exporters.

The government has sought means to facilitate the adoption of CSR standards in the sector. To this end, it consulted with a range of stakeholders to develop proposals for the types of initiatives the government could pursue. These include:

- financial support for CSR certification programmes;
- government marketing promotion of factories active in CSR;
- clarification of the cost / benefits of different approaches to CSR;
- support to CSR reporting;
- subsidised CSR consulting services; and
- development of local training programmes for managers<sup>27</sup>

Aside from providing incentives in a facilitating mode, some of these initiatives, such as subsidizing consulting and developing training programmes have a more partnering character.

The main driving force behind government engagement has been a desire to maintain export markets where consumer demand for CSR standards has been strong. Thus, the driving force behind government engagement has indirectly been consumer demand in export markets although this has not really been exercised directly on the government itself. The latter is in turn concerned about the competitiveness and export position of domestic enterprises. An additional driver comes from international policy processes related to trade and investment, in this case a textiles agreement between Vietnam and the U.S. This agreement, signed in 2003, includes a commitment by the Vietnamese government to encourage implementation of CSR codes of conduct, as a condition for access to the U.S. market.

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Example 6: *India – Partnering CSR in the carpet industry*

There have been a number of initiatives from the North, primarily driven by CSR, to discourage the use of child labour in the carpet industry in South Asia. The Rugmark label is one of the best known of these.<sup>28</sup> In response to criticism from domestic producers concerning the strict Rugmark standards that were conceived by foreigners, the Indian Carpets Export Promotion Council, a semi-public agency, introduced its own “Kaleen” label.<sup>29</sup>

The main driver behind this initiative was thus trade promotion, in particular concern about loss of export markets for a broad group of carpet producers. In some senses, these businesses were also a driver of this approach. While not seeing a strong enough advantages from collaborating with an initiative such as Rugmark, these companies were demanding improvements in the credibility of a less stringent, local standard.

The Kaleen label does not appear to have been a complete success either in gaining market share, or discouraging child labour.<sup>30</sup> But it is also not clear whether companies participating in the scheme have lost market share in export markets to those participating in Rugmark or other schemes. It would thus be interesting to learn more about how public authorities in India have reacted to the lack of success of the label.

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In general the main drivers behind public sector involvement in Corporate Social Responsibility has been summarised in the table below.

<b>Drivers</b>	<b>Description</b>
<i>Trade and investment promotion</i>	Governments may engage with the CSR agenda because of opportunities to increase exports of sustainable-produced goods and services, or to attract foreign investment. This can also include facilitating or promoting CSR among domestic enterprises as potential partners for foreign investors and clients.
<i>Business demands for effective minimum standards</i>	Businesses want effective implementation and enforcement of regulated standards for labour and environmental concerns in order to ensure that there is a “level playing field” in which CSR can distinguish itself and make a positive contribution to development. In this manner, CSR is closely related to the good governance agenda.
<i>Civil society demands for responsible business activities</i>	Civil society organizations at local, national and international levels can be a driver of public sector engagement in CSR. While there seem to be few documented examples, pressure from community organizations in the Philippines is seen as one of the drivers of the shift in government policy towards the mining sector of one of “tolerating” to one of “promoting” CSR within the sector.
<i>Consumer demand for sustainable goods and services</i>	In many high-income countries, governments have promoted consumer demand for CSR, which is also one of the drivers of business initiatives in this area. There are also some examples of governments in low- and middle-income countries attempting to build domestic demand for sustainable products. This is clearly visible, for instance in the “Proudly South African” campaign.
<i>International policy processes</i>	International agreements and cooperation on codes of conduct and standards have the potential to drive public sector engagement with CSR. The World Bank “stock-taking” report concludes that this driver has been of limited relevance so far but suggests that some more recent developments may lead to greater engagement by public authorities. For example, Chinese accession to the WTO might be driving efforts by some ASEAN governments, such as Cambodia, to promote an export strategy based on differentiation according to higher labour and environment standards.

**Table 2:** Main drivers of public sector engagement in CSR

In the area of CSR, governments have chosen among a range of facilitating and partnering roles. There are few examples of governments assuming a more mandating role which is not that surprising given that CSR is in essence a private sector initiative. This facilitating and partnering generally involves support, including financial and institutional, to local CSR initiatives. The main drivers in the cases examined are often concerns about the competitiveness of domestic industry and promotion of trade and investment.

Given that CSR is a relatively recent topic on the policy agenda, it is less meaningful to discuss how public sector roles have evolved over time. The general evolution that has taken place is one that started with initial scepticism, defensiveness or perhaps indifference concerning CSR. Governments of low- and middle-income countries were often wary in the initial stages of whether CSR posed a threat to their sovereignty as regulators, or perhaps to their competitiveness in the international marketplace. In many instances, there was probably also little awareness of these new developments in the private sector, as they were also largely driven by concerns in high-income countries. Scepticism might also have been fed by the attitude of academic researchers who dwell on the use of CSR essentially as a marketing tool with little transparency.<sup>31</sup>

This initial wariness was generally replaced in many countries by a more positive perspective in which governments came to recognize the opportunities presented by CSR. This led to interest in developing the enabling environment and efforts by multilaterals institutions, such as the World Bank (including IFC) to provide advice and guidance on public sector engagement in CSR. The question now is how much this engagement will deliver on expectations and a growing appreciation of the associated constraints. These constraints are partly related to overall capacity strengthening needs in the public sector, but they are also related to the overall governance agenda. A more recent “stock-taking” report from the World Bank concludes that “care needs to be taken when applying these four public sector roles so

that they do not draw attention away from the need to tackle deeper systemic issues in the CSR enabling environment”.<sup>32</sup>

For example, businesses may wish to see a more effective implementation and stricter enforcement of minimum labour and environmental standards by public sector agencies, as this supports the CSR agenda. But the underlying reasons or constraints preventing such improvements are typically deep-rooted in politics and social norms and not simply matters of “political will”. The need to address these might be pursued and advocated more strongly by civil society groups and outside stakeholders, rather than public sector actors given the interests and sensitivities involved.

## 6. Support for seed sector development

The seed sector is a particularly interesting case for examining patterns and changes in government perspectives on development strategies. Improvements in the provision of planting seed for farmers are an integral part of the agricultural development process. Such improvements do not have to be limited to the development and distribution of high-yielding modern varieties dependent on associated inputs such as fertiliser and irrigation. Improvements can also be thought of in terms of strengthening of farmer seed systems, with support for farmer-led or participatory breeding.

In some respects, the seed sector represents a microcosm of the issues inherent in the development of a market economy in general. Markets for seed are fraught with difficulties concerning transparency and the flow of information<sup>33</sup>. The simple fact that both the characteristics and quality of seed is not readily verifiable until after it has been planted and the crop cultivated provides considerable impediments to the development of market transactions. For lower value-added crops, this has typically required either collective self-regulation or a strong form of public regulation, most notably in certification and registration of varieties and enterprises.

The public sector continues to play a strong role in plant breeding, a vital step in seed provision, in both industrialized and developing countries.<sup>34</sup> But this role varies according to crop sector. Generally the public sector has been much more engaged in the provision of new varieties of major food crops, such as grains, oilseeds and tubers, and commodity exports, such as coffee, cacao and rubber. On the other hand, the public role has been far more modest for many vegetable crops. The nature of engagement also varies according to stage in seed supply chain.

Thus while the same types of roles can be identified for public sector involvement in the seed sector as for the other topics addressed in this paper, there is one very relevant distinction. In addition to engaging in private sector activities, the public sector may actually also undertake to provide this type of economic good and associated services, making this topic similar to discussions related to public utilities (energy, telecommunications, water, sanitation) and their recent deregulation.

In general, direct public sector provision of goods and services in the seed sector to farmers has been declining throughout the world. But the trend has been perhaps strongest in countries of the North where the private sector has been most active in developing and delivering new varieties. But the situation in developing countries and economies in transition varies as is illustrated by the countries discussed below<sup>35</sup>.

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### Example 7: *India – Facilitating with trepidation*

The Indian seed industry has undergone a series of changes over the last 20 years, the most important of which is the change in the policy and regulatory environment. Until the late 1980s, the Indian government assumed a strong mandating role in the economy in general and this was very apparent in the seed sector. Not only did the general system of licenses for industrial production capacity apply, but foreign firms were prohibited from entering the market. The licenses were also reserved for the “small-scale” sector.<sup>36</sup> At the same time, the public sector dominated seed production.

The current role is more of a facilitating one. The New Seed Development Policy, introduced in 1988, allows seed companies to import seed for commercial purposes and eased regulations on the importing of seed for research and breeding<sup>37</sup>. This is credited with a rapid expansion of foreign companies in the Indian market, mostly in the form of joint ventures and subsidiaries. Furthermore, the entire body of regulations governing the seed sector (registration and certification) also has a more facilitating role including the use of financial incentives. For example, seed produced by cooperatives or private companies (typically from publicly-developed varieties) might be eligible for subsidies if it is certified (to guarantee source and purity), which is not strictly required<sup>38</sup>.

But the government does still maintain elements of a mandating approach, for example by restricting imports of wheat and (paddy) rice seed. And public research agencies under the Indian Council for Agricultural Research as well as state-level institutes and agricultural universities, are still quite active in breeding<sup>39</sup>. While the private sector role is strongest in the sale of seed, including varieties bred by public sector institutes, its presence in breeding has been growing, particularly for hybrid crops such as maize and cotton.

The driving forces behind India's largely facilitative role appear to be the farmers' organisations and the seed sector. External actors, such as the World Bank, which has offered substantial technical assistance on seed sector development to the government of India, may also play a role. External forces, such as WTO membership, could also have contributed, but this appears to have been more limited in influence. For example, the obligations of the TRIPS Agreement on India to introduce some form of intellectual property protection for plant varieties, led to an extensive public debate in India and ultimately the development of legislation that attempts to address concerns of some NGOs. But these drivers have also been more recent in character, coming some time after liberalisation of the sector, and in any case serve to reinforce the domestic drivers of farmers' groups and seed industry interests.

The approach of the public sector to seed sector development in India has thus evolved over time. The almost extreme mandating role was introduced in the late 1960s as part of an overall shift in Indian economic policy emphasising state planning and national self-sufficiency. Some of the specific regulations adopted concerning seed certification appear to have been driven more by public sector breeding interests than by a desire to serve farmers.<sup>40</sup> The more facilitative approach adopted recently is part of the general liberalisation trend in the Indian economy. But even then, the public sector maintains a fairly strong role in breeding and regulations, which can be explained by the broad array of political interests active on agricultural issues, as well perhaps by the interests of the public sector agricultural research organisations which are quite large and able to exercise considerable weight in governmental arenas.

The tendency to perceive a need for strong regulation of private sector activities is also apparent in the recent controversy concerning the pricing of Bt cotton seed by Monsanto subsidiaries in Andhra Pradesh, where state government lodged an official complaint with the competition authorities (Monopolies and Restrictive Trade Practices Commission).

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Example 8: *China – Facilitating a more transparent market*

China provides another example of a country in which the public sector role towards the seed sector has changed considerably in recent decades from that of a mandating character under a socialist planned economy to a more facilitating stance as more space is created for markets in economic life. Since the late 1990s, the government has adopted essentially a facilitating approach to the sector. As in India, a key aspect has been stimulating both breeding and seed production by private sector companies, and a main element of this approach was a new seed policy and law. This eased restrictions on participation by seed companies in the seed sector. Participation by foreign seed companies in joint ventures is now also possible. In addition, the Chinese government has implemented a system of plant variety protection to provide incentives to plant breeders, both domestic and foreign.<sup>41</sup>

While trying to facilitate private sector provision of seed, the Chinese government has also clearly maintained an element of dirigisme in its approach. The sector is highly regulated, even in comparison to industrialised countries. For example, companies must be certified, or approved, by the government before they can even sell seed (in addition to certification of varieties themselves). The new seed policy of 2000 recognises four different classes of seed companies, roughly according to their capital. On the other hand, these and other regulations generally do not apply to vegetable seed companies, which have operated with far less facilitation or direction since even before the most recent set of reforms (much as in India).

Some of the largest seed companies in China are still public corporations, such as the China National Seed Group, which holds considerable market share in most food crops and has been negotiating joint venture agreements with some foreign companies. One of the most important breeders of vegetable crops is a public organisation, the Institute of Vegetables and Fruit (IVF) of the Chinese Academy of Agricultural Sciences (CAAS). In contrast to most other public crop research institutes the IVF has much longer experience with a commercial approach to its work as it was effectively encouraged to market its own varieties.

The main drivers behind the government's approach to both facilitating the sector, but maintaining a strong form of regulation, appear to be policy objectives of promoting agricultural growth in China's smallholder-dominated sector. As part of a general policy of transition from socialist-planned to market economy, the Chinese government wants to harness the potential of private enterprise. But tempering facilitation of the seed sector with a number of regulations also seems to reflect concerns of ensuring that farmers do not fall victim to unscrupulous seeds men. While governments in industrialised countries have, from the perspective of farmers' interests maintained relatively stringent regulations in the seed sector, the perspective in China might be driven also by general political concerns in the heart of the national government about further disruption in the rural areas and potential instability. In the seed sector, for example, there are thousands of small enterprises active in seed production and sale, of which many neither have permission from agricultural authorities nor hold PVP rights to varieties. And the authorities appear to lack sufficient resources to ensure that farmers do not fall victim to unscrupulous traders.

Nonetheless, the current approach stands in sharp contrast to the situation twenty or even ten years ago. Aside from the general economic reform programme, this process of liberalisation, including in the seed sector, has been driven by policy objectives of joining the WTO and increasing China's export share in world markets. This helps explain the seriousness with which China has worked on implementing its plant variety protection system.

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#### Example 9: *Kenya – Facilitating and Laissez-Faire*

A marked difference in attitude taken by the government to staple crop versus horticultural crops is also apparent in Kenya. The public sector there has also adopted more of a facilitative approach to the development of a private seed sector in recent years. The Kenya Seed Company (KSC), a parastatal, sells seed of the principal staple, maize, as well as wheat, sorghum and sunflower, now faces competition from private sector seed companies, for the most part subsidiaries of multinationals, including some from South Africa. Until this shift in the 1990s, KSC had a monopoly on seed production including exclusive rights to varieties developed by the Kenyan Agricultural Research Institute (KARI). Now, KARI allocates rights to its new varieties through a tendering process in which KSC competes against other companies. Another element of a more facilitating and less mandating approach to the seed sector has been the implementation of plant variety protection (PVP), under the responsibility of the Kenyan Plant Health Inspectorate (KEPHIS).

The history of mandating and directly providing seed for major food crops contrasts with the almost "hands-off" approach to the development of the flower sector in Kenya, which has grown over the last 15 years to become one of the country's principal export earners. While the public sector has not participated in the provision of planting material for the sector (or for the vegetable sector for that matter), little has been done to proactively stimulate companies in this sector. The major initiative is perhaps finally taking steps in the late 1990s to implement PVP, to encourage breeders and producers of roses to expand their activities in Kenya, in particular the development of adaptive breeding operations.

The driving forces behind these different approaches are sometimes difficult to discern in the complicated political economy of Kenya's agricultural sector. The more facilitative approach adopted towards the seed sector for staple crops appears to be a direct result of foreign pressures, in particular those coupled with public finances. The inability to serve public debt and the resulting structural adjustment programme, beginning in the 1980s, initiated a long process in which bilateral and multilateral donors placed pressure on the Kenyan government to limit or remove the regulations ensuring market monopolies for a range of agricultural parastatal organisations, such as KSC. The political basis that these organizations provided for MPs and government ministers, together with the general possibility for civil servants to also profit, means that few domestic stakeholders had an interest in liberalising markets, including for maize seed.<sup>42</sup> Furthermore, a strongly directed approach to the seed sector is also consistent with the general philosophy within public agricultural research organisations which are often characterised by a top-down attitude to the provision of inputs to farmers<sup>43</sup>. Such a situation can be seen in many countries of Sub-Saharan Africa.



The driving forces behind the approach to the flower sector do not share the same history as for staple crops. The export of fresh horticultural products to Europe is a recent development made possible largely due to falling air transport costs, aided somewhat by increasing production costs in Northern Europe. This process bypassed the public agricultural research sector. In Kenya, investments in the flower sector are also held by prominent businessman and political figures with a strong and concentrated interest in avoiding the types of regulation and direction seen in the staple crop seed sector (or other commodity export crops for that matter, such as tea and coffee).

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The three cases illustrate a common trend around the world concerning government involvement in the seed sector: scaling back the mandate and activities of public seed companies while facilitating the emergence of a private seed sector. As noted above, this parallels a similar trend in industrialized countries. But the driving forces behind the shift from direction participation and mandating to a more facilitating one reflect different domestic situations, of both a political and an economic nature. These driving forces include economic policy objectives and external pressures, but are also complicated by various domestic interests, partly because of the perceived importance of seed provision for household and national food security. In addition, in many developing countries, many farmers still rely on a mixture of both commercial (formal sector) sources and farmer seed systems. Thus, issues concerning the organization of seed provision are tied up with broader political debates about the commercialization of smallholder farming systems.

The public sector in many countries has adopted a more facilitating approach to the seed sector. But in all cases, a certain amount of mandating is deemed to be necessary (in some form of varietal certification or registration process). The purpose here is to protect the interests of farmers as it is quite difficult for them, for example, to establish systems to verify the trustworthiness of seed sellers. But a common pattern is that this regulatory role has generally not been adopted by governments with respect to horticultural crops. In a case such as Kenya, developments in the flower sector are so recent that the public sector appears to have little time, or capacity, to respond. In larger countries such as India and China with a longer history of commercial vegetable production, it is not entirely clear why the public sector has not committed itself as much to regulating the sector. It may reflect a view that such crops are generally cultivated for sale on a commercial basis and thus, not only are such farmers perhaps better placed to verify suppliers, but also potential implications for household food security and livelihoods are less serious.

## **7. Discussion**

The table below provides a summary overview of the various examples of public sector roles in relation to the three different regulatory chain interventions. The result is a fairly diffuse picture. On the basis of this summary overview it appears that the nature of the chain regulation function is not always an overriding factor for the type of role for the public sector. The examples of Peru and Kenya demonstrate that the public sector does not always play a mandatory role in a typical public sector regulatory domain such as food safety and agricultural health. At the same time the example of India's CSR-label for the carpet industry indicates that public organisations can have a fairly mandatory role in a typical private sector regulatory function.

As to be expected most public sectors combine different roles in order to develop an effective mix of approaches to the respective chain regulatory function. The Kenyan combination of endorsing and mandatory roles may be surprising at first sight, but when considered more closely also fairly recognisable for a considerable number of other sub-Saharan African countries. Limited resources of the public sector are concentrated around a number of essential regulatory functions, whilst other aspects of the chain regulatory functions are left mainly up to the private sector to take undertake. As demonstrated by the examples of breeding and quality standards in the export-oriented horticultural chains in Kenya, this does not necessarily lead to ineffective regulatory functions.

Public role:	Endorsing	Partnering	Facilitating	Mandating
Food safety & agricultural health	Kenya	Peru	Thailand	Kenya
Seed sector development	Kenya		India China	Kenya
Corporate Social Responsibility		India South Africa Vietnam		

**Table 3:** Summary overview of public sector roles described in cases

Enhanced chain competitiveness and sector growth appear to be often the main driving force behind the adoption of a particular role towards the various regulatory functions of the public sector. Different countries, however, use this policy objective for the development and pursuing of differing public sector roles towards the same regulatory function. Factors such as the general view on the role of the state may be more determining than the policy objective itself. As a bilateral or multilateral partner collaborating with counterpart organisations in the South this is an important issue to consider. Transposing lessons learnt with the development of certain public sector approaches towards food safety, seed sector regulation or corporate social responsibility from one country to another may not always have the desired effect. Further analysis is required into the determining factors (e.g. available capacities, prevailing political and cultural thinking on the role of state) behind the adoption of a particular public sector role before experiences and approaches with public regulatory functions from one country are transposed to another.

International support organisations and bilateral donors may wish to familiarise themselves with prevailing patterns of pursuing regulatory functions in a market-economic environment before getting involved in supply chain governance programmes and projects. Public-private partnerships or public sector capacity building in implementing market regulatory functions are not to be viewed as defined approaches towards introducing improved supply chain governance systems. The case material presented in this paper demonstrates that there is too much diversity in approaches. Identification of the main driving forces behind the prevailing market regulatory functions and studying existing patterns of public sector roles may hold the key to determining the most effective approach to public sector involvement in governing certain aspects of agri-food supply chain performance and developments.

## 8. Notes

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- <sup>4</sup> Fox, T., H. Ward & B. Howard (2002). *Public Sector Roles in Strengthening Corporate Social Responsibility: A Baseline Study*. Prepared for the World Bank by the International Institute for Environment and Development (IIED), UK.
- <sup>5</sup> Based on: Fox, T., H. Ward & B. Howard (2002). *Public Sector Roles in Strengthening Corporate Social Responsibility: A Baseline Study*. Prepared for the World Bank by the International Institute for Environment and Development (IIED), UK.
- <sup>6</sup> Often also referred to Sanitary and Phytosanitary (SPS) standards
- <sup>7</sup> Jaffee, S. and S. Henson (2004). Standards and Agro-Food Exports from Developing Countries: Rebalancing the Debate. *World bank Policy Research Working Paper*, no. 3348.
- <sup>8</sup> FAO & WHO (2004). *Assuring Food safety and Quality: Guidelines for Strengthening national Food Control Systems*. FAO Food and Nutrition paper 76, Rome, Italy.
- <sup>9</sup> For details refer for example to: Meulen, B. van der & M. van der Velde (2004). *Food Safety Law in the European Union; an introduction*. Wageningen, the Netherlands.
- <sup>10</sup> Luning, P.A., F. Devlieghere and R. Verhé (eds) (2006). *Safety in the agri-food chain*. Wageningen, the Netherlands.
- <sup>11</sup> Based on: Jaffee, S. and S. Henson (2004). *Standards and Agro-Food Exports from Developing Countries: Rebalancing the Debate*. World Bank Policy Research Working Paper 3348.
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- <sup>13</sup> Based on Jaffee, S. and S. Henson (2004). *Standards and Agro-Food Exports from Developing Countries: Rebalancing the Debate*. World Bank Policy Research Working Paper 3348.
- <sup>14</sup> FAO/WHO (2004). *Application of Farm-to-Table Official and Non-Official Food safety Control in Thailand: Case Study on Fresh Produce*. Second FAO/WHO Global Forum of Food safety Regulators, 12-14 October 2004, Bangkok, Thailand.
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- <sup>16</sup> Minot, N. & M. Ngigi; (2004). *Building of Successes in African Agriculture; are Kenya's horticultural exports a replicable success story?* IFPRI, Washington.
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- <sup>24</sup> Various definitions and forms of CSR are discussed in Marrewijk, M. van (2003). Concepts and Definitions of CSR and Corporate Sustainability: Between Agency and Communion. *Journal of Business Ethics*, **44**(2): p. 95-105.
- <sup>25</sup> <http://www.proudlisa.co.za>
- <sup>26</sup> NEDLAC is funded by the Department of Labour but the Department of Trade and Industry and the Department of Finance and Public Works are also involved. See <http://www.nedlac.org.za>
- <sup>27</sup> <http://www.responsiblepractice.com/english/worldwide/worldbank/>

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- <sup>28</sup> <http://rugmark.org>
- <sup>29</sup> <http://www.india-carpets.com> is the website of the Carpets Export Promotion Council.
- <sup>30</sup> See <http://www.brookes.ac.uk/eie/ecolabels.htm> and also Fox, T., H. Ward, and B. Howard (2002). *Public Sector Roles in Strengthening Corporate Social Responsibility: A Baseline Study*. World Bank, Washington, D.C.
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- <sup>35</sup> Much of the information used in this section was collected in the course of a study on the impacts of IPRs on the seed sector in developing countries.
- Fox, T., H. Ward, and B. Howard (2002). *Public Sector Roles in Strengthening Corporate Social Responsibility: A Baseline Study*. World Bank, Washington, D.C.
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- <sup>41</sup> While enforcement of PVP rights continues to be far from perfect, it can also be argued that the Chinese government has addressed the issue reasonably seriously. The reality is that the associated changes in both formal judicial systems (e.g. courts as well as laws) and informal norms influencing behaviour of individual breeders, seed traders, etc. constitute intrinsically long-term processes.
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