Roles of Governments in Multi-Actor Sustainable Supply Chain Governance Systems and the effectiveness of their interventions

An Exploratory Study

Policy Studies

PBL Netherlands Environmental Assessment Agency

Universiteit Utrecht

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W.J.V. Vermeulen (UU)
Y. Uitenboogaart (UU)
L.D.L. Pesqueira (UU)
J. Metselaar (UU)
M.T.J. Kok (PBL)

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Corresponding authors:
Marcel Kok (marcel.kok@pbl.nl) and Walter Vermeulen (w.vermeulen@geo.uu.nl)

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Office The Hague
PO Box 30314
2500 GH The Hague
The Netherlands
Telephone: +31 (0) 70 328 8700
Fax: +31 (0) 70 328 8799

Office Bilthoven
PO Box 303
3720 AH Bilthoven
The Netherlands
Telephone: +31 (0) 30 274 274 5
Fax: +31 (0) 30 274 44 79

E-mail: info@pbl.nl
Website: www.pbl.nl/en

Preface

Making product chains of commodities, such as coffee, tea, cocoa and wood, more sustainable by developing and promoting certification standards, is an often used strategy. With certified products, buyers and sellers can influence the impacts of natural resource use on the environment and on social conditions in production areas.

Many certified products have by now surpassed the stage of initiation. To enable that certified products will have a significant influence on production circumstances, mainstreaming is required for further progress. This means that certified products will have to attain a breakthrough up to a share of 50% or more, instead of serving only a niche market. In this report it is shown that is starting to happen for coffee and wood.

Governments are certainly not the main actor in this field, but undoubtedly have important roles to play in their strive for a more sustainable society. Either as initiator, supporter or as a consumer.

In this study, several actions and roles for governments are explored. With it we hope to stimulate discussions and reflections on the present and future policy strategies of governments, in assisting the mainstreaming process.

We would also like to thank the interviewees and workshop participants for their willingness to contribute to this study.

Mark van Oorschot
Project Leader – Footprint and Product chains

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Summary

During the last decade, a growing number of market-based certification systems has been introduced for sustainable products consumed in the Netherlands and the EU but sourced through international supply chains. These systems, which cover agro-food products as well as non-food products, consist of requirements for products from developing countries with regard to environmental and social-ethical issues. These systems aim to improve production processes at the front end of the supply chain.

These so called "sustainable supply chain systems" have been initiated and are managed mainly by the market and civil society, without directly involving the government. This raises questions about the effectiveness, transparency, and legitimacy of such forms of self-regulation and about the most appropriate role for national government in relation to these emerging systems.

This exploratory study analyses some of the earliest multi-actor sustainable supply chain governance systems in order to answer the key research questions:

Which strategies and instruments do governments - national and supranational - apply in advancing sustainable production and consumption in global supply chains. What is known about the effectiveness of these strategies and instruments?

The study focuses on two supply chains with the longest history of addressing imports from developing countries (tropical timber and coffee). These two supply chains are compared with two supply chains that are gaining increasing attention: - cacoa and tea.

This study shows that the two most "mature" global sustainable supply chains are market led in issuing voluntary certification and that buying certified products is starting to become mainstream and increasingly effective. The sustainable supply chains for tea and cacoa are more recent developments but may develop faster because of the lessons learnt in sustainable supply chains developed earlier.

Earliest initiatives and market responses

Sustainable supply chains for tropical timber and coffee have a long history of *private initiatives* dating from the late 1980s (Fair Trade, FSC, Rainforest Alliance). In both cases this started with single initiatives originating from societal organisations in various countries, in which a market-oriented approach was taken in cooperation with producers.

In both chains, the market has responded by setting up of additional and thus competing certification systems (PFEC, Utz Certified, GlobalGAP). These new competing systems have originated from other segments of these product markets. In the case of tropical timber, certification systems have been initiated by the governments of producer countries in cooperation with local producers.

Variation and evolution

This sequence of *initiation and response* has resulted in a *variety* of competing certification systems, which vary from country to country, vary in stringency of enforcement of the criteria, and also vary in terms of the completeness of sustainability aspects included.

All systems, whether the original private certification systems or systems developed in response, have re-defined and re-organised the relationship between companies within a supply chain. These systems have led to an increase in information exchange and in some cases to a reduction in the number of links in a supply chain. Experience with these pioneer systems has been used in developing approaches for

other product groups and speeds up implementation. Furthermore, these certification systems are run by small organisations, apply efficient decision-making procedures on product requirements and are becoming increasingly all-inclusive. We also see that after various systems appeared in the same markets, they started to adjust their sets of criteria, adding criteria not yet covered by themselves, but covered by competing systems.

Supply side and demand side effectiveness

Recent practice in sustainable supply chains shows that where different and competing certification systems co-exist, a substantial growth of market shares in the market occurs. In the Netherlands, this shift has resulted in an increase in the total market share for certified products to 25% (timber) and 50% (coffee). However, these figures do not present the entire picture, because product certificates are not always used and sustainable products come into the market that are not recognised as such. If we include this the total market shares in the timber chain have grown to 45% in 2008. These figures indicate a maturing market for sustainable supply chains, following a long period of a marginal market share for single-certification systems.

Government role in initiation and implementation

The main focus in this study has been to explore the role of governments in these developments. The role of government in the Netherlands, the United Kingdom and Germany can best be described as giving side line support and using its market power as major institutional consumer (public procurement).

Government has had a very limited role in the development of the early certification systems studied. These certification systems were initiated by the private sector, some in spite of opposition from government such as the development of a competing certification system (for tropical timber), or at best with limited support from political opinion leaders through expressing moral support (tropical timber and coffee) or by giving little financial support in their development phase.

In the *implementation* phase, a broader range of government activities supporting private certification systems has been applied. These activities are directed to both the supply side (producers/farmers and support organisations in developing countries) and to the demand side.

On the demand side, some forms of traditional regulation are used (EU regulation on organic-farming certification, bilateral product import inspection agreements) or proposed regulation (traceability requirements for importers). Agreements are made with sector organisations about the sale or purchase of certified products and about social responsibility with attention to management of the international sustainable supply chain.

However, most government activities focus on either financial or promotion support for certification systems, and on projects that support small producers in developing countries to participate in certification systems. Development cooperation policies also play a relatively important role, with selective support to certification systems directed to smallholder farmers in developing countries.

More recently, the governments in the Netherlands and in Germany have put stronger emphasis on initiating and facilitating cooperation between the main stakeholders in selected product chains, with the aim of stimulating a market breakthrough for certified products from a sustainable supply chain.

In the three countries studied (the Netherlands, Germany and the United Kingdom), policies have been developed by different ministries directed to aspects relevant to the specific ministry, or as part of other policy agendas. But none of these countries has an *explicit integrated* policy programme directed to reducing the negative impact of importing finished products and raw materials from developing countries. A *Sustainable Footprint Policy* for imported products and raw materials is necessary because of the rapid growth in consumption of products from developing countries.

Shortcomings of self-regulating markets

Governments are increasingly recognising the potential of private certification, but consideration must also be given to the shortcomings of self-regulating international product supply chains. Some of the shortcomings are:

- *Confusion for consumers:* In each product chain we see variation and competition of voluntary certification systems (those merely *ensuring legal compliance* versus systems going *far beyond* legal requirements). Such variation and competition is generally considered positive by stakeholders, although it may also be negative because of the confusion for consumers, because they can't easily

see the difference between Fairtrade, Utz, or EKO. Confusion may result in reduced credibility of certification systems and reduced consumer commitment.
- *Confusion for producers:* The same variation and competition also causes confusion at the supply side. Farmers and producers in developing countries are confronted with growing numbers of certification systems and addition business-to-business supply chain requirements. This confusion is caused both by the completion in levels of strictness and aspect inclusiveness and by the fact that they (may) work with supply chains partners from many different countries. This is especially relevant to small-scale producers.
- *Organizing harmonization:* Here the issue is whether or not to reduce this variation through harmonization and/or cooperation. If this would be wanted, still the key question is whether this would be a role for the voluntary private certification systems themselves to be taken (with ISEAL already doing this) or whether this would be an appropriate role for national governments or European Union. In any case, harmonization should rather be restricted to procedural harmonization (in the way ISEAL is offering), rather then content harmonization (reducing the variation and thus competition).
- *Lack of transparency, monitoring and evaluation:* With multiple competing private certification systems active, information about performance and effects in the market and at the supply side (economic and community impacts) is very poorly available. Information on the full impacts is also further obscured, because of the variation in sustainable supply chain management strategies, not all resulting in product based certificates, visible for consumers, with single firm approaches and business-to-business approaches like GlobalGAP as examples. The problem is that none of the relevant actors is responsible for the full picture (is 100% sustainable trade in product achieved).
- *Selectiveness in prioritizing product chains:* Businesses in self regulating markets and non-governmental organizations start working towards certification systems when they feel the need to do so. We have seen the first emergence of private certification mainly in the sector of food and agro-products, responding to consumer pressure (health and safety issues). Looking both at environmental impacts and socio-ethical aspects, other product groups may very well be relevant for improving sustainable supply chain governance, but may lack the consumer pressure connected to food products, to trigger producer activity. Here we can think of raw mineral mining as an example.

The various weaknesses in the market based governance of international supply chains discussed here puts the question on the table whether it is time to develop the government policies on reducing the remote footprint of consumption in developing countries beyond the existing combination of "side line support" and "use of market power" via public procurement, like we describe in this report.

Taking into consideration the observed weak overall coordination of government activities in this field and the absence of a coherent strategic position taken, we argue that a more explicit policy is needed to make the western footprint more sustainable. Such policies would include the elements of an integrated problem analysis (covering all sustainability issues, addressing the most relevant global supply chains); goal setting and explicit uniform positioning. Here we suggest to make a clear choice which is to be implemented coherently: either returning to a stronger role of governments or supporting stronger self regulation.

A policy aiming at returning *to a stronger role for governments* may apply new possibilities for going beyond the "regulation vacuum", by;
- either applying *new regulation* for importers (minimum standards, banning uncertified products or mandatory proof of social responsible sourcing, in both cases using approved private certification systems);
- or *economic instruments* for sustainable / unsustainable products (varying VAT tariffs, varying import quota's & tariffs);
- and intensify the use of bilateral (EU-supplier countries) agreements on controlling exports by using sustainability certificates.

At the opposite side, a policy aiming at *further strengthening of self regulation in the market* would choose not to intervene in the competitive game, but reduces its side line role to writing the rules of the game and awarding the winners, limiting its public role to monitoring progress and revealing it.

A middle way strategy would also be conceivable, merely aiming at optimizing the market, addressing the weaknesses we discussed above, such as reducing the confusion in the market, limiting the number of competing schemes, but still allowing some competition.

Three sets of coherent government activity options

Table A

Strategy options	**Return to stronger government**	**Market optimisation**	**Stronger self regulation**
Position	Gvt = main player / integrated approach	Gvt = in the game / reduce confusion demand side	Gvt = outside / facilitate fair system competition
Goal setting	10 year goals: full implementation most unsustainable product chains	10 year goals: push market to address most unsustainable product chains	10 year goals: market chooses most unsustainable products
Role ➔ certification systems	Exclusive recognition of a single system (group of products)	Creation and harmonisation of certification systems	No support for certification systems
	Multi level certification: * = compliance systems *** = fair & eco+ systems	Gvt sets minimum level standards (EU level) and performance standards (compliance level)	Market creates minimum level standards (ISEAL)
			Promote credibility by benchmarking
Instruments ➔ Dutch frontrunners	Support for implementation activities	Voluntary agreements on implementation routes by business sectors	No interference
	Low VAT tariffs		
Instruments ➔ Dutch laggards	Ban illegally obtained wood by obligatory proof of legal sourcing	Ban misleading claims through limited recognition of labels	Transparency on market performance
			Ban misleading claims
Instruments ➔ suppliers	Farmer support for exclusive system (at all levels)	Farmer support for recognised systems	Farmer support by demand side companies for all systems
Instruments ➔ public discourse & consumer	Government agencies run consumer campaigns	Support NGOs in addressing consumer behaviour	No support in addressing consumer behaviour
Public procurement	Selective public procurement of single recognised system	Obligatory procurement of any recognised certificate (compliance level)	Obligatory procurement of any recognised certificate (compliance level)
		Voluntary programmes for *** = fair&eco+	Voluntary programmes for *** = fair&eco+
		Transparency by public benchmarking	Voluntary benchmarking in market
Trade policy	Bilateral treaties on import inspection Link to import quotas & tariffs	Bilateral treaties on import inspection	-
Monitoring and feedback	Annual reporting by coordinating ministry	Market actors report performance information	Market actors produce performance information
		Government publishes market penetration info	Market & civil society cooperate in publishing market penetration info

The various combinations of options for government activity have been summarized in Table A.

The study has concluded that the Dutch Government can play a more effective role, either as a strong actor in the market or as an external facilitator by taking a more explicit position with regard to:

1. Developing an integrated Sustainable Footprint Policy, including identification of priority product groups; formulation of long- and mid-term goals; and the most effective position.
2. Selecting and maintaining an appropriate and consistent instrument mix for the long term;
3. Focusing both on the front runners and on those lagging behind;
4. Organising a process of ongoing learning in specific product supply chains, which will ensure transparency, monitoring and feedback in line with the chosen strategy.

Samenvatting

In het laatste decennium is een groeiend aantal private certificeringssystemen ontwikkeld voor duurzame producten die via mondiale handelsketens op de Nederlandse/Europese markt komen. Met deze certificeringssystemen worden aan producenten in ontwikkelingslanden eisen gesteld op het gebied van milieu en sociaalethische vraagstukken. Ze hebben als doel de productieomstandigheden in de eerste stappen van de handelsketen te verbeteren.

Marktpartijen en maatschappelijke organisaties spelen een dominante rol in het ontwikkelingen en beheren van deze systemen, terwijl overheden aan de zijlijn lijken te staan. Dit roept vragen op over de effectiviteit, transparantie en legitimiteit van de certificeringssystemen, en over wat de meest passende rol is voor (nationale) overheden. In deze studie analyseren we de eerst opgekomen systemen voor duurzaam (product)ketenbeheer om antwoorden te krijgen op de vraag:

Welke strategieën en instrumenten gebruiken (nationale en supranationale) overheden voor het bevorderen van duurzame productie en consumptie in mondiale handelsstromen en wat is er bekend over de effectiviteit van deze strategieën en instrumenten?

In deze studie staan twee handelsketens centraal: die van tropisch hout en koffie. Ze hebben de langste geschiedenis van private regulering van duurzame import uit ontwikkelingslanden. We vergelijken deze twee met twee andere handelsketens die meer recent in de aandacht zijn gekomen: thee en cacao.
In de handelsketens van tropisch hout en koffie heeft de markt de leiding in het werken met certificering, en die certificering begint ook effectief te worden. De ontwikkelingen in de handelsketens van thee en cacao zijn van veel recentere datum, maar omdat de lessen uit de eerder gestarte handelsketens gebruikt kunnen worden, is een veel snellere succesvolle implementatie hier goed mogelijk.

Vroegste initiatieven en marktreacties

Zowel voor tropisch hout als voor koffie is inmiddels sprake van een lange geschiedenis van certificering, beginnend in de jaren tachtig. In beide gevallen waren de eerste initiatiefnemers maatschappelijke organisaties in diverse landen. Zij kozen voor een marktgerichte aanpak en voor samenwerking met de producenten. Zowel bij hout als bij koffie leidde deze initiatieven tot reacties in de markt: andere partijen gingen eigen, concurrerende systemen ontwikkelen. Deze marktreacties komen uit andere segmenten van dezelfde productmarkten (bij koffie) of van overheden van producentenlanden, samen met lokale bedrijven (bij tropisch hout).

Deze opeenvolging van *initiëren* en *reageren* heeft geresulteerd in een variatie van concurrerende systemen. Binnen afzonderlijke landen bestaan verschillende systemen naast elkaar. Elk systeem heeft zijn eigen criteria en duurzaamheideisen. Veel van deze systemen werken internationaal.
De eerst ontstane private certificeringssystemen en de daarop 'reagerende' systemen hebben met elkaar gemeen dat ze de relaties tussen de bedrijven in de toeleveringsketen reorganiseren; ze leiden tot meer informatie-uitwisseling en verminderen (mogelijk) het aantal schakels in de toeleveringsketen. De ervaringen in de eerste 'pioniersketens' zijn benut voor andere productketens, waarin later vergelijkbare initiatieven zijn genomen. Deze certificeringssystemen werken alle met 'slanke' organisaties: organisaties met efficiënte besluitvormingsprocedures voor het vaststellen van producteisen. De systemen worden steeds uitgebreid en vernieuwd, en stellen eisen ten aanzien van milieu en sociale aspecten. Dus niet alleen de nieuwe systemen, ook de eerdere systemen zelf voegen criteria toe, die aanvankelijk niet door hen zelf, maar wel door concurrerende systemen waren opgenomen.

Effectiviteit aan de vraag- en aanbodzijde

De recente praktijk in deze duurzame handelsketens laat zien dat, kort *nadat er concurrentie ontstaat* tussen meerdere private certificeringssystemen een indrukwekkende verschuiving plaatsvindt in de markt: de gecombineerde marktaandelen voor de verschillende systemen samen zijn in de Nederlandse markt recent gegroeid naar 25 procent (hout) tot 50 procent (koffie). Voor duurzaam hout geldt overigens wel dat het aandeel duurzaam hout uit tropische landen nog beperkt blijft.
Deze cijfers geven echter nog niet de gehele verschuiving weer, omdat niet altijd certificering op eindproducten wordt toegepast. 'Duurzame' producten komen ook als zodanig niet herkenbaar op de markt. Als we die andere duurzame producten zonder keurmerk wel meerekenen, dan is het marktaandeel van duurzaam hout 45 procent in 2008.
Op basis van deze gegevens is de duurzame handel een 'rijpende markt' te noemen. Een ontwikkeling die nu optreedt na een langere periode met marginale marktaandelen voor enkelvoudige certificeringssystemen tot 2005.

Rol van overheden bij ontwikkeling en implementatie

Welke rol hebben overheden gespeeld bij deze ontwikkelingen? Die rol kan het best worden geduid (zowel in Nederland, als in Duitsland en het Verenigd Koninkrijk) als 'ondersteunend langs de zijlijn', in combinatie met het toenemend gebruiken van de 'marktmacht' als grote (institutionele) consument om alleen duurzame producten in te kopen.

Vooral in de ontwikkelingsfase van de vroegste systemen is de rol van overheden zeer beperkt. Deze certificeringssystemen zijn onafhankelijk ontwikkeld door private actoren, soms eerder ondanks tegenwerking vanuit de overheid (zoals het ontwikkelen van een concurrerend systeem), dan dankzij de overheid Op zijn hoogst is er beperkte overheidssteun door politieke opinieleiders die morele steun uitspreken (bij hout en koffie), of met vrij geringe financiële ondersteuning.
In de implementatiefase zijn er meer overheidsactiviteiten ter ondersteuning van de private certificeringssystemen. Zulke activiteiten zijn enerzijds gericht op de vraagzijde (in Nederland en Europa) en anderzijds op de aanbodzijde, door steun te verlenen aan producenten en ondersteunende organisaties in ontwikkelingslanden.
Aan de vraagzijde worden soms vormen van traditionele regulering gebruikt (Europese regulering voor het biologische keurmerk; bilaterale inspectieverdragen) of voorgesteld (traceerbaarheidseisen voor importeurs). Met sectororganisaties worden vrijwillige afspraken gemaakt over het verkopen of het aankopen van gecertificeerde producten of over maatschappelijk verantwoord ondernemen (waarbij ook aandacht wordt besteed aan internationaal duurzaam ketenbeheer).
De meest voorkomende activiteit treedt echter op aan de aanbodzijde: financiële en communicatieve ondersteuning van de certificeringsystemen zelf en van projecten gericht op het ondersteunen van kleine boeren in ontwikkelingslanden. Ontwikkelingssamenwerkingbeleid speelt hierin een relatief grote rol, waarbij sprake is van *selectieve steun* voor systemen die gericht zijn op kleine boeren in ontwikkelingslanden.
Meer recent hebben de Duitse en Nederlandse overheid een nieuwe rol opgepakt met een sterke nadruk op het initiëren en faciliteren van samenwerking tussen de belangrijkste belanghebbenden in een kleine groep van productmarkten. Ze hopen zo marktdoorbraken van duurzame producten te forceren (bijvoorbeeld via het Initiatief Duurzame Handel).

In de drie bestudeerde landen (Nederland, Duitsland, Verenigd Koninkrijk) is door verschillende ministeries beleid ontwikkeld dat te maken heeft met duurzame handelsketens. Dat beleid beslaat telkens aspecten die voor de afzonderlijke ministeries relevant zijn of aansluiten bij hun diverse beleidsagenda's. In geen van de drie landen is een expliciet geïntegreerd beleidsprogramma aangetroffen gericht op het reduceren van negatieve effecten van de import van producten en grondstoffen uit ontwikkelingslanden.
Zo een 'duurzaam voetafdrukbeleid' voor geïmporteerde producten is relevant, gezien de effecten van de sterk groeiende consumptie van producten afkomstig uit ontwikkelingslanden.

Tekortkomingen van zelfregulererende markten

Overheden herkennen in toenemende mate de potenties van de private certificering. De zelfregulering in internationale handelsketens heeft echter ook tekortkomingen, waar de overheden rekening mee moeten houden:

- *Verwarring voor consumenten*: in elke productketen ontstaan variatie en concurrentie tussen verschillende vrijwillige certificeringssystemen; tussen systemen die vooral wettelijke eisen opvolgen en systemen die veel verder gaan in de eisen die ze stellen. Deze variatie en concurrentie tussen systemen worden door stakeholders overwegend positief beoordeeld. Voor consumenten

daarentegen zorgt de variatie voor verwarring, want men kan niet makkelijk zien wat het verschil is tussen Max Havelaar, Utz of EKO.. Deze verwarring kan resulteren in een verminderde acceptatie van de certificeringssystemen en verlies van het vertrouwen bij de consument.

- *Verwarring voor producenten (zowel aan aanbod- als vraagzijde)*: een teveel aan variatie en concurrentie zorgt ook voor verwarring bij de aanbodzijde. Boeren en producenten in ontwikkelingslanden worden geconfronteerd met een groeiend aantal certificeringssystemen en business-to-business-eisen. Deze verwarring wordt gevoed door de veelheid en uiteenlopende striktheid van die eisen. Ze wordt nog versterkt doordat producenten of boeren vaak samenwerken met meerdere handelspartners in verschillende landen. Bij de kleine producenten is de verwarring het grootst.
- *Harmonisering*: het is de vraag of de variatie in de systemen moet worden verminderd door harmonisatie en/of samenwerking. Tevens is het de vraag voor wie deze taak dan is weggelegd: zijn dat de private certificeringssystemen zelf (zoals de mondiale koepel ISEAL, die zich hier al mee bezighoudt), de nationale overheid of de Europese Unie? Harmonisatie zou hoe dan ook beperkt moeten worden tot het procedurele niveau in plaats van inhoudelijke harmonisatie (geen vermindering van variatie tussen systemen en daarmee onderlinge concurrentie).
- *Tekort aan transparantie, monitoring en evaluatie*: het is met de verschillende concurrerende private certificeringssystemen moeilijk informatie te verkrijgen over de bedrijfsprestaties, en over de effecten die optreden in de markt en aan de aanbodzijde. Het gaat daarbij om zowel de economische als de maatschappelijke effecten van de certificeringssystemen. Informatie over de invloed van een systeem wordt bovendien belemmerd doordat de verschillende productketenstrategieën niet altijd zichtbaar zijn voor de consument; ketenbeheeractiviteiten van individuele bedrijven en de business-to-business-initiatieven zoals GlobalGAP zijn bijvoorbeeld niet transparant. Het probleem bij dergelijke initiatieven is ook dat geen van de relevante actoren verantwoordelijk kan worden gehouden voor het gezamenlijke effect in de gehele keten (wordt 100% duurzame handel voor dit product gerealiseerd?).
- *De selectiviteit in prioriteiten van productketens*: bedrijven en non-gouvernementele organisaties in een zelfregulerende markt kiezen zelf voor het werken met een certificeringssysteem. De eerste private initiatieven zijn vooral genomen door bedrijven in voedselketens en andere landbouwproductketens; ze reageren op de druk die wordt uitgeoefend door consumenten. Steeds vaker wensen consumenten producten en een productiewijze die veilig zijn, en niet schadelijk zijn voor de gezondheid en het milieu. Bij andersoortige bedrijven en productketens komen vergelijkbare initiatieven niet tot stand, terwijl ook daar het milieu en de sociaaleconomische rechtvaardigheid een rol spelen, zoals bij het delven van grondstoffen. Bij die bedrijven ontbreekt echter nog de consumentendruk.

Deze vijf hierboven beschreven tekortkomingen van de zelfregulering zijn mede het gevolg van die zelfregulering. Om deze tekortkomingen op te lossen is een specifiek overheidsbeleid nodig dat verdergaat dan alleen 'steun vanaf de zijkant' of 'marktwerking' door aankoopbeleid. Het huidige beleid kenmerkt zich door een zwakke onderlinge coördinatie van de activiteiten en de afwezigheid van een expliciete coherente strategische keuze voor de positie die de overheid in het speelveld van de markt en verduurzaming moet innemen.
De overheid zou duidelijk positie moeten kiezen; een beleid dat is gericht op het verduurzamen van de voetafdruk van de Nederlandse en Europese consumptie in ontwikkelingslanden, Zulk beleid zou elementen moeten omvatten als een geïntegreerde probleemanalyse (van alle duurzaamheidsaspecten en een selectie van de meest relevante productketens), duidelijke doelstellingen en een expliciete consistente positionering.
We presenteren drie strategieën om een nieuw beleid te ontwikkelen, waar overheden een keuze uit kunnen maken: *Terug naar een sterkere overheid, Versterk zelfregulering,* of een tussenweg: *Optimaliseer de markt*.

Een beleid dat zich richt op *Terug naar een sterkere overheid* kan nieuwe mogelijkheden benutten om het oorspronkelijke 'reguleringsvacuüm' op de internationale markt dat certificeringssystemen opvullen achter zich te laten. Die mogelijkheden zijn bijvoorbeeld:

- het toepassen van *nieuwe regelgeving* voor importeurs, zoals het stellen van minimumeisen, het verbieden van niet-gecertificeerde producten. Ook is het een optie om bewijzen te vragen voor de sociaalverantwoordelijke afkomst van producten. Beide gevallen vragen overigens om een voortzetting van de private certificeringssystemen.
- het toepassen van *economische instrumenten* voor duurzame/onduurzame producten, bijvoorbeeld variatie in btw-tarieven, importquota's en -tarieven. Ook dit is weer gekoppeld aan private certificeringssystemen.
- het intensiveren van *bilaterale verdragen (met EU-importlanden)* over controle van de export. Ook hierbij wordt gebruik gemaakt van private certificering.

Drie pakketten van coherente beleidinstrumenten **Tabel A**

Strategieën	**Terug naar een sterke overheid**	**Optimaliseer de markt**	**Sterke Zelfregulering**
Positie	Overheid is belangrijkste speler / interdepartementale integratie	Overheid is betrokken en vermindert verwarring aanbodzijde	Overheid staat aan de zijlijn. Faciliteert eerlijke concurrentie tussen systemen
Doelstelling	10 jaardoelstelling: volledige implementatie in de meest onduurzame productketens	10 jaardoelstelling: sturen van markt richting meest onduurzame productketens	10 jaardoelstelling: markt kiest zelf de meest onduurzame producten uit
Rol certificeringsystemen	Exclusieve erkenning van één enkel systeem (voor groep producten) Multilevelcertificering: * = op naleving gerichte systemen *** = fair- & ecosystemen	Creatie en harmonisatie van certificeringssystemen Overheid bepaalt minimumstandaard (op EU-niveau) en prestatieniveau (naleving)	Geen overheidssteun voor certificeringssystemen Markt creëert standaard minimumniveau (ISEAL) Promotie voor erkenning systeem, bijvoorbeeld door benchmarking
Instrumenten ➔ NL koplopers	Overheidssteun voor implementatie lage btw-tarieven	Vrijwillige afspraken met bedrijfstakken over implementatie producteisen	Geen overheidsingrijpen
Instrumenten ➔ NL achterblijvers	Verbieden import illegale producten; bewijsvoering eisen van legaliteit product	Verbieden misleidende claims door beperkte erkenning van standaarden	Transparantie over marktprestatie Verbieden van misleidende claims
Instrumenten ➔ aanbodzijde	Overheidssteun boeren voor geselecteerde systemen (op alle niveaus)	Steun boeren bij erkende systemen	Overheidssteun boeren vraagkant voor alle systemen
Instrumenten ➔publieke partijen en consument	Overheidsorganisaties voeren consumentencampagnes	Steun ngo's bij campagnes over consumentengedrag	Geen steun voor beïnvloeden van consumentengedrag
Aankoopbeleid overheid	Selectief aankoopbeleid bij alle overheden op basis van één enkel erkend systeem	Verplichte aankoop bij elk erkend systeem (nalevingsniveau) Vrijwillige programma's voor *** = fair & eco Transparantie door publieke benchmarking	Verplichte aankoop bij elk erkend systeem (nalevingsniveau) Vrijwillige programma's voor *** = fair & eco Vrijwillige benchmarking in markt
Handelspolitiek	Bilaterale verdragen aangaande importinspectie Koppeling importquota's en importtarieven	Bilaterale verdragen aangaande importinspectie	-
Monitoring en feedback	Jaarlijks rapport door coördinerend ministerie	Marktactoren rapporteren over mate van succes Overheid publiceert informatie over mate van succes	Marktactoren leveren informatie over prestaties Markt en maatschappelijke organisaties werken samen op gebied van informatie over marktpenetratie en effecten aan aanbodzijde

Bij de andere beleidsstrategie richt de overheid zich op het *Versterken van zelfregulering in de markt*. Daarbij moet ze niet interveniëren in het concurrentiespel; ze beperkt zich tot een 'rol aan de zijlijn', tot het formuleren van 'de regels van het spel' en het belonen van de winnaars. De taak van de overheid blijft hierbij beperkt tot het monitoren van de effectiviteit (marktaandeel en effect in ontwikkelingslanden).

De derde strategie is een tussenweg: *Optimaliseren van de markt*. Daarbij richt de overheid zich vooral op het optimaliseren van de markt en het aanpakken van de tekortkomingen die hierboven zijn beschreven, zoals het verminderen van de verwarring bij marktpartijen. De overheid kan bijvoorbeeld het aantal certificeringssystemen verminderen, maar wel voldoende concurrentie in stand houden.

De drie strategieën zijn samengevat in tabel A.

1 Introduction

During the last decade, a growing number of multi-actor governance systems aiming for sustainable production have emerged in the international supply chains of specific products such as timber, fruits, coffee and cotton. These supply chains cover the field of agro-food products as well as non-food products such as diamonds. Market and civil society actors play a dominant role in initiating and governing these systems, while governments seem to be on the sideline. This raises questions on the effectiveness, transparency and legitimacy of such forms of self-governance and, additionally, on what the most suitable role for national governments in these developments is. In this exploratory study we focus our analysis on some of the earliest multi-actor sustainable supply chain governance systems, to obtain some preliminary answers to this second question.

These forms of self regulation are also applied in biodiversity programmes and development policies in Dutch government policies. The Dutch government[1] has formulated its nature and biodiversity policies for the coming years in its biodiversity policy programme "*Beleidsprogramma Biodiversiteit 2008-2012. Biodiversiteit werkt, voor natuur, voor mensen voor altijd*" (hereafter referred to as the BB programme). The Dutch government implements its nature and biodiversity policies through this programme. It has also committed itself to the implementation of the international agreements it has signed, for example the UN Convention on Biological Diversity (CBD).

The BB programme has 5 priorities:
- sustainable production chains and biodiversity
- payments for biodiversity
- functional biodiversity
- ecological networks
- marine biodiversity and fisheries.

The BB programme also includes two supportive policy making lines: building new coalitions with societal partners, and communication and awareness raising. The Netherlands Environmental Assessment Agency (PBL) has been mandated to evaluate the international component of the BB programme. This evaluation focuses on the impacts of the Netherlands on biodiversity beyond the country's borders through consumption and production (footprints), as well as on the efforts of the Dutch government to make international production chains more sustainable (to reduce that impact). These evaluations are published annually by PBL in the *Natuurbalans*. A first analysis of the Dutch footprint abroad and the impacts of the BB programme have already been published in the *Natuurbalans 2009* (see Chapter 5 in PBL, 2009). A number of background studies are to be carried out to support these evaluations. This study, also one of the PBL background studies for the evaluation of the BB programme, looks into the role of governments in multi-actor sustainable supply chain management systems. Other studies carried out as part of the evaluation look at the policy theory behind the BB programme (Kamphorst, 2009) and physical footprints (see for example Kuijk, Putz et al., 2009; Planbureau voor de Leefomgeving, 2009).

The dominant policy approach in the BB programme is one of indirect governance. The Dutch government tries to achieve its objectives through network steering and by stimulating voluntary initiatives of private and societal actors. Timber, palm oil, soy, biomass and peat have been prioritised as "sustainable product chains". A large number of policies have been identified to make international product supply chains more sustainable. These are predominantly indirect and voluntary, while goals are set at a strategic ambition level. Policies include developing certification schemes, supporting round tables, influencing policies in production countries, public procurement, searching for alternatives for import (peat) and capacity building in developing countries (to stop illegal logging, for instance) (Kamphorst, 2009; PBL, 2009). It is also recognised in the *Natuurbalans 2009* that voluntary certification is an important instrument with which governments can make a country's footprint more sustainable (PBL, 2009).

These activities of the Dutch and other governments must be seen within the broader context of the rapid increase in market and civil society initiated forms of "self regulation" in global product supply chains. Increasing numbers of sustainable supply chain governance systems have emerged for various types of products in the last five to ten years. These systems address specific requirements in the field of environmental and social-ethical issues, aiming to improve the performance of businesses at every link in the global supply chain. Businesses, governments and civil society each play their own roles in the initiation, development and implementation of these governance systems. Within specific product markets we see the emergence of various competing systems, with in many cases businesses and/or NGOs initially taking the lead (Vermeulen, 2009). It is also clear that

governments have difficulty in keeping up with the rapid developments taking place in the market.

The key question is therefore what roles do governments (national or supranational) play in these developments, how successful are they in these roles and to what extent do they support these systems in achieving the intended impacts in developing countries? Possible future roles of governments can be evaluated based on such information though, remarkably, little work has yet been done in this field.

This exploratory study on the roles of governments (national and supranational) in sustainable supply chain governance systems (in short, SSCG systems) has been carried out within this context. The *first goal* of this study is to further identify and describe the various policy instruments ("toolbox") applied by national and supranational governments. The *second goal* is to explore the extent to which impacts of government involvement in SSCG systems are actually being measured, and to evaluate the impacts of government involvement so far. The *third goal* is to reflect upon the current and future role of governments in SSCG systems.

This brings us to our main research question:
Which strategies and instruments do governments (national or supranational) apply to promote sustainable production and consumption in the global supply chains of finished goods or resources and what is known about the effectiveness of these strategies and instruments?

We focus on two specific product groups in this study and determine the strategies and instruments applied by the Dutch, German and British governments (various ministries) and at international level. The selected product groups should satisfy the priorities set by the Dutch government, be relevant to the existing activities of PBL, illustrate both the initiation and implementation stages of such forms of self governance and be illustrative for both environmental and social-ethical issues.

With these requirements in mind, the tropical timber and the coffee, tea and cocoa product chains were selected for study. These product chains already have a history of implemented forms of self governance, and it is possible to illustrate their developments in the market (market shares). These two groups of products differ in the sense that the timber supply chain is a mixed chain with large amounts of imports to the Netherlands from European countries, even more than from developing countries. The second group of products – coffee, tea and cocoa – is sourced solely from developing countries. This distinction is very relevant because the role of and the instruments applied by governments are very different if a large part of the sourcing comes from northern countries, with comparable government activities and instruments in the main sourcing countries. When products are sourced in developing countries, northern countries lack the instruments to directly address the sustainability of the mode of production at the supply side of these chains. Developmental concerns play a greater role in chains sourced predominantly in developing countries. Biodiversity concerns may be less relevant in the case of tea, cocoa and coffee, and may therefore not be priorities in the BB programme. These chains are however included in this evaluation because of the long experience with certification, which is likely to provide valuable lessons for other product chains. A second reason for analysing these product chains is that the social dimension of sustainability is more clearly developed in these cases. Comparing Dutch policies with German and British policies will broaden insights with regards to the available tools and different policy approaches applied.

This study includes six steps that also provide the outline for this report:

1. A review of the literature on emerging governance systems for sustainable product chains (Chapter 2).
2. Identification of the dynamics in subsequent and competing *SSCG systems* in the timber and coffee, tea and cocoa product groups in the West European market over the past decade (Chapter 3).
3. Identification of the *strategies and instruments* applied by various relevant Dutch ministries and two other European countries (*the UK and Germany)* that focus on private voluntary certification systems. This is to identify variations in government policies between these three countries (Chapter 4). A series of interviews was carried out with national governments as part of this analysis (see Annex 1 for an overview of interviewees). European and relevant global perspectives (for example as provided by the UN and OECD) are included through document analysis.
4. A meta-analysis of existing studies on the impacts of applied *strategies and instruments* at various levels. A desk study of the available literature is also conducted in this section (Chapter 5).
5. To be able to reflect on possible government roles in SSCG systems, it is worth obtaining insight into the perspectives of government actors and non-government actors on the applicability of and experiences with the various government strategies. This is covered in Chapter 6. The input for this was provided by interviews and a stakeholder workshop (see Annex 2 for a list of participants in this meeting).

The report concludes (Chapter 7) with a synthesis and reflection on the current and future role of governments in SSCG systems.

Notes

1) The BB programme has been signed by the Ministries of Agriculture, Nature and Food Quality, Development Cooperation, and Housing, Spatial Planning and the Environment and co-signed by the Ministries of Economic Affairs, Education, Culture and Science, and Transport, Public Works and Water Management.

2

Emerging governance systems and the role of governments

This chapter first introduces the developments in various forms of self governance in international product supply chains, as initiated by NGOs and business actors. A brief description is then given of the various strategies employed by governments to address environmental and social issues.

2.1 Emerging self governance in international supply chains

As environmental protection began to gain prominence on the political agenda in the late 1960s and 1970s, national and local governments first addressed the externalities connected to the production of commodities using regulative approaches. Meanwhile, environmental NGOs and academics in the public debate began pushing politicians and governments to improve the effectiveness of these policies. From the late 1980s and early 1990s onwards, a fast and substantial shift away from this classical, adversarial image of environmental politics has taken place in at least four ways. First of all, environmental policies have been embedded in the broader concept of *sustainable development*, including issues of community responsibility for producers and promoting the fair distribution of the benefits of nature's rich resources. Secondly, individual producers, as production units in the larger social system of a commodity chain, are increasingly regarded as being *responsible* for their societal impacts. Thirdly, this responsibility is shared with business partners along the complete *supply chain* (as described in the concepts of business management) or in the whole life cycle of their products (as described in the concepts of environmental sciences). Finally, not only do producers receive this message from government agencies, but increasingly directly from *civil society* actors and *customers*.

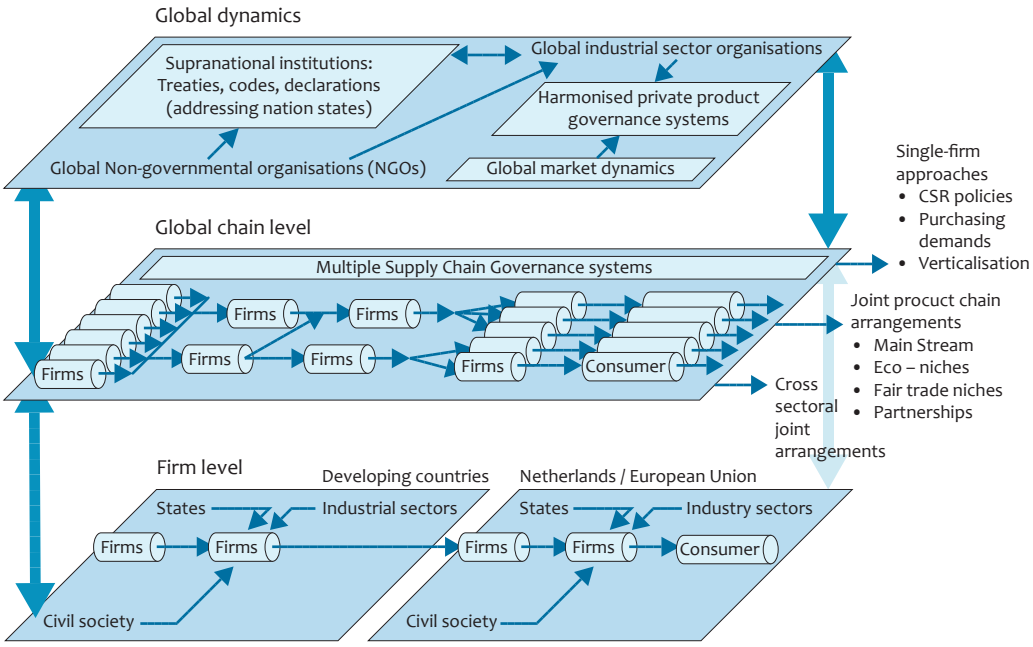
Businesses have learned to work together with these actors and have increasingly internalised the concepts of sustainable development, life cycle management and accounting for corporate responsibility within their own value sets. State-dominated adversarial environmental politics have increasingly been replaced or supplemented by a model of sustainability through the market, where businesses and NGOs focus their efforts on implementing diverse forms of sustainable supply chain management and joint governance.

This development has gained speed during the last decade. After an initial experimentation stage in which individual frontrunner companies and sustainable entrepreneurs developed niche markets for fair trade and other sustainable products, we have now entered a new phase of mainstream market activity in this field.

The *history* of global sustainable supply chain governance started with small "enlightened" entrepreneurs, often with a history in civil society, who at first bypassed dominant mainstream value chains. Starting in the late 1970s and 1980s, fair trade initiatives began to create new and shorter value chains linking small producers in developing countries more directly with Western consumers. For this purpose, new cooperatives were created, as well as new distribution systems in countries such as Finland, Belgium, Germany and the Netherlands (World Shops, Green Shops, etc.). The trade of organic products has similarly been organised in separate value chains, bypassing mainstream firms, with an even longer history dating back to the 1930s. In both cases, control systems for securing quality, both related to product quality and environmental and social responsibility throughout the value chain, have been developed and implemented (such as Max Havelaar and EKO), guaranteeing better prices for small farmers in developing countries (Kilian, Pratt et al., 2004; Ims and Jakobsen, 2006; Raynolds, Murray et al., 2007; Bitzer, Francken et al., 2008).

With these approaches, 'bioneers and ecopreneurs' (Schaltegger, 2002) in the market and civil society (NGOs) have been filling a 'regulation vacuum'. Western governments cannot do much to prevent the increasing shift of environmental impacts towards developing countries, as it is the result of growing international trade. National European governments are not entitled to address production conditions in developing countries. They have to walk the long route via supranational institutions (such as the

Three levels of analysis of supply chain governance **Figure 1**



Source: Vermeulen, 2010
Three levels of analysis of governance of supply chains

WTO, the UN or the OECD), with their weak implementation powers, and await the effective implementation of UN agreements by national governments.

The Dutch government has also been taking a more active role recently. In the NMP-4 (VROM, 2001), the transition agenda for the sustainable use of biodiversity and natural resources was initiated. The Dutch government tries to achieve its objectives through network steering and by stimulating voluntary initiatives by private and societal actors. This includes influencing markets and consumption patterns as well as making production and trade more sustainable. The product chains of timber, palm oil, soy, biomass and peat have been prioritised as "sustainable product chains". Goals are predominantly set at a strategic ambition level, while a large number of mainly indirect and voluntary policies are identified to make international supply chains more sustainable. The BB programme has formulated as its long term objective that all products from natural resources are obtained in a sustainable manner. Concrete objectives include agreements with the private sector about the transition in the use of biodiversity (by 2011), public procurement of sustainable timber by 2010, increased imports of sustainable soy and palm oil and the integration of smallholders in supply chains. Policy measures include developing certification schemes (including biodiversity concerns), supporting round tables, influencing policies in production countries, public procurement, searching for alternatives for import (peat) and capacity building in developing countries (to stop illegal logging) (Kamphorst, 2009; PBL, 2009).

These developments are therefore in full motion both in the market and in government policies. We can distinguish three types of supply chain governance in this emerging practice: single firm approaches, joint product sector approaches and cross sector approaches (see for a more detailed discussion Vermeulen, 2008).

Various types of business-to-business sustainable supply chain governance systems have emerged in the last decade. This began with a first generation of *single firm approaches* (such as the early NGO-based fair trade firms and certification, e.g. Solidaridad, which created the Max Havelaar brand), or by applying procurement demands, as done by Peeze coffee, or as a result of CSR policies, by means of verticalisation (e.g. Nike buying in the supply chain) and forms of co-makerships (e.g. in the automobile industry).

These strategies grew into a second generation of *joint product chain arrangements*, where groups of businesses, civil society organisations or sector organisations cooperate in developing and applying sustainability standards for a specific product group (FSC for timber, UTZ Certified for coffee, Rainforest Alliance for tropical timber and Integrated Production of Wine (IPW) for South African wine). It is this type of self governance in supply chains that we address in this study.

A more recent development is a third strategy of *cross-sector joint product chain arrangements* (see Figure 1) where systems are developed covering a wide range of products (such as GlobalGAP) (see for a more detailed discussion Vermeulen, 2008).

Looking at Figure 1 we see that, as far as the sustainable production performance of individual firms in the right-hand lower level of the figure is concerned, the traditional role of governments in Europe has been to treat them as separate links in the chain. During the 1980s and 1990s, supplies from firms outside the country and especially outside Europe were beyond the scope of government intervention. European governments originally mainly addressed production circumstances in the South through global diplomacy, by means of the global institutions (the UNEP, the World Bank, etc.). This has changed with the emergence of the concept of corporate social responsibility, sustainable supply chain management, extended producer responsibility and transparency.

Single firm approaches: first generation

Some individual firms took the lead in improving both social and environmental conditions in all steps of the value chain (de Groene and Hermans, 1998; Vermeulen and Ras, 2006). Such worldwide interaction is often a difficult job, as supply chains in most cases consist of large numbers of suppliers in various developing countries and inquiries about social and environmental conditions are often misunderstood by suppliers and seen as unwelcome interference in their business. Nevertheless, the early examples of fair trade and green products, one of the key strategies in sustainable supply chain management (Seuring and Müller, 2008b), had already shown how improving production conditions could be achieved, also by organising collectives of smallholders and creating independent export companies (Kessler, Romijn et al., 2003; Parrish, Luzadis et al., 2005). Examples from more mainstream firms also exist, for example in the cases of the outdoor equipment producer Patagonia (Chouinard and Brown, 1997) or the German mail-order business OTTO, that set up an additional organic cotton supply chain (Chouinard and Brown, 1997; see also Goldbach, Seuring et al., 2003; Kogg, 2003). For individual firms, this implies substantial extra transaction and control costs. One of the disadvantages of these individual firm approaches is the reliability of the business-to-business self-control and their claims on sustainable practices, which might easily be questioned by individual consumers or NGOs.

Joint product sector approaches: second generation

Joint approaches have been developed in different ways, and may reduce the problems of transaction costs and reliability. Originally, forms of eco-labelling assured independent control and had other advantages for individual firms in their interaction within the value chain. These systems for eco-labelling include environmental requirements in all relevant steps in the value chain applying the environmental life cycle approach (Heijungs and Guinâee, 1992; Guinee, 2002). Environmental and social standards are also required before suppliers can be accepted as having an eco-label (Seuring and Müller, 2008b). These are all early forms of value chain governance, mainly initiated by third parties (often representing the state, environmental organisations or the market) and including independent auditing. In the cases of governance with third party eco-labelling, two new actors have emerged in the producer-buyer relationship: the eco-label organisation and the audit organisation. Well-known examples are the Forest Stewardship Council (FSC) and the Marine Stewardship Council (MSC). The advantage for the buyer is that he does not have to go through all the steps described under the single firm approach and legitimacy is gained by the overall label rather than a single company (Müller et al., 2009). In practice, a retailer purchasing eco-labelled products (also from developing countries) does not have to inspect all suppliers himself but can expect to rely on a well-established third party control of the supplier (Mamic, 2005). The existence of independent third parties also provides legitimacy and trust. This mechanism of reducing transaction costs with joint third party approaches has been developed in various ways and has also been penetrating the mainstream product channels, where market leaders have started creating their own value chain governance systems, sometime separately, sometimes jointly with competitors and in other cases sector wide.

Cross-sectoral approaches: third generation

The third most recent form of sustainable supply chain governance goes beyond specific products and sectors and has been designed to be widely and uniformly applicable. The most extensive example of this is GlobalGAP. This is a voluntary global partnership of market-based members, aiming at worldwide harmonisation of the application of Good Agricultural Practice (GAP). It was initiated in 1999 (as EurepGAP) by Western European retailers in response to civil society and media attention to sustainability issues related to food consumption. GlobalGAP developed voluntary standards for the certification of agricultural products around the globe, to be used by retailers and their sourcing agencies when contracting producers of specific products. Producers are audited for compliance on a yearly base.

The various forms of sustainable supply chain governance clarify two aspects that have hardly been addressed in the general analysis of global value chains: *firstly*, these varying forms of interaction, cooperation and compelling rules in the value chain are an instrument of competition, partly based on specific quality assets of the products (namely the environmental and socio-ethical performance of value chain partners); and *secondly* these forms of interaction and cooperation include other types of societal actors: as well as the newly created non-profit governance institutions and their (for profit) auditing and control bodies, consumer NGOs, development NGOs and environmental NGOs also play diverse roles. Governments play a more distant role, partly by supporting these developments and partly by taking the existence and assumed effectiveness of these forms of sustainable supply chain governance as a point of departure for new forms of sustainability policy.

Harmonisation by private actors

Another more recent development also needs to be addressed here. In response to the increasing number of voluntary standards systems, the International Social and Environmental Accreditation and Labelling Alliance (ISEAL Alliance) was founded in 2002. It was created by four private certification organisations (FSC, IFOAM, Fairtrade and MSC) and has attempted to create an international reference for credible social and environmental standards. ISEAL aims

to strengthen credible and accessible voluntary standards through the ISEAL Codes of Good Practice for Setting Social and Environmental Standards.

The ISEAL Codes of Good Practice deal with the way in which voluntary standards are set and how to evaluate the credibility of these initiatives. Once a system proves full compliance with the ISEAL Codes of Good Practice, full membership to ISEAL Alliance is granted. Those organisations that are in the process of meeting these requirements for good practice and that have formally committed to the ISEAL Alliance Code of Ethics are Associate Members. Those that subscribe to the ISEAL Code of Ethics and are interested in participating in ISEAL primarily as an information sharing and awareness raising exercise are Affiliated Members. Not all the certification systems studied in this report are Full Members of ISEAL.

A comparable form of harmonisation can be seen for organic farming. To support international certification, IFOAM (International Federation of Organic Agriculture Movements) developed the Organic Guarantee System, which is designed to facilitate the development of organic standards and third-party certification worldwide and to provide an international guarantee of these standards. This system is composed of a set of Basic Standards and a set of Accreditation Criteria. For trade in individual communities or geographic areas, IFOAM also accepts other methods of organic quality assurance, for instance in the form of self-declaration or Participatory Guarantee Systems.

The Basic Standards address the principles, recommendations and required baseline standards that guide operators in producing their organic crops and maintaining organic integrity in the further handling and processing of organic products. They have been developed to comply with the ISEAL Code of Good Practice for Setting Social and Environmental Standards. IFOAM is a full member of ISEAL Alliance. The IFOAM Accreditation Criteria are also based on the International ISO norms for the operation of certifying bodies, and they are developed to reflect the particular circumstances of certifying organic production and processing.

At the same time, international sector organisations in specific product chains have also recently been integrating private certification systems developed in different countries. Early examples of such *globally harmonised certificates* can be found in coffee and wine supply chains. The International Coffee Association (ICO) introduced the Common Code for the Coffee Community in December 2006 (www.4c-coffeeassociation.org), while the International Organisation of Vine and Wine (OIV) adopted its Guidelines for Sustainable Vitiviniculture: Production, Processing and Packaging of Products in June 2008 (www.oiv.int), using the experiences of a system existing in New Zealand, South Africa and California.

To conclude this section, based on the fact that firms and NGOs are the main initiators in this field, and that European governments are increasingly supporting this development, it is possible to observe that all practitioners (market, NGOs and governments) apply the *basic assumption* that business-to-business supply chain cooperation, geared by Western consumer and civil society pressures, can be effective in improving environmental and social conditions in developing countries, as well as in industrialised countries (see Figure 2, top).

Addressing effectiveness

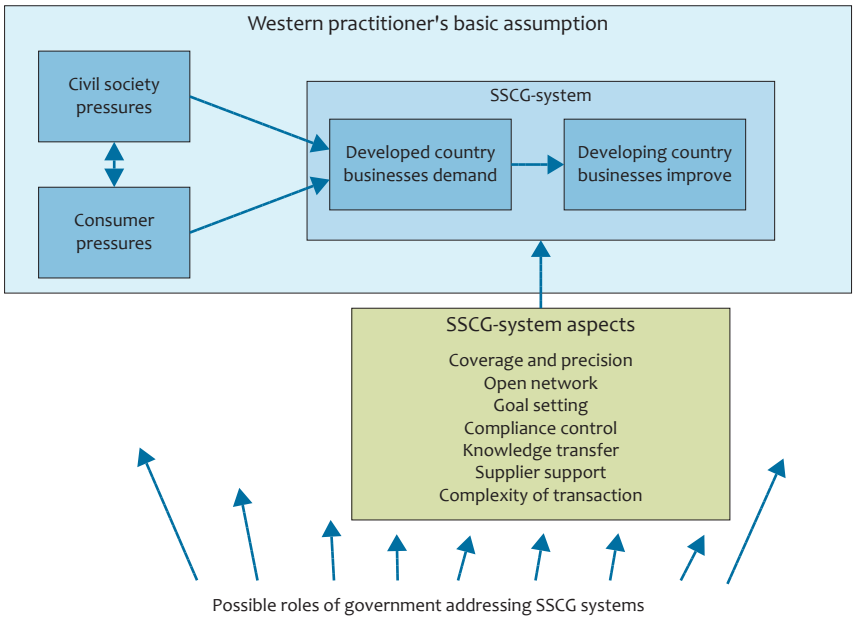
The phenomenon of governance for sustainability in global value chains integrates two general ambitions: that of profitable value creation by all market actors involved and that of improving sustainable development for all stakeholders at all stages of the supply chain. Analysing the effectiveness of these global multi-actor governance systems therefore implies the use of a multi-dimensional yardstick for assessing effectiveness.

From the perspective of traditional economic value chain analysis or supply chain analysis, one can very well take the perspective of a single (dominant) economic actor (at the firm level of analysis) and determine the conditions for optimum value creation for this actor. However, shifting our analysis to the level of the supply chain system and connecting this to the concept of sustainable development introduces the question of the distribution of costs and benefits beyond the individual firm level. Successful SSCG systems are about *collective value creation* and *sustainable development*. Both end goals can in principle be measured, but only with serious complications. The distribution of value creation throughout the chain is a core strategic issue for the firms involved and strategic implications and trust in supplier-buyer relations make data collection extremely difficult.

Measuring the contribution to sustainable development implies the use of large sets of social and environmental indicators. Determining actual environmental impacts involves delays, and even then it is difficult to attribute them to a specific firm and its activities. With this in mind, it is common practice to think in terms of a sequence of impacts: starting with adjusted firm activities –> reported activities –> measurable physical results at firm level -> physical impacts on ecosystems -> impacts on humans. In this sequence, measuring effectiveness would ideally focus on the last two steps, but methodological complications mean that measurements in the first two or three steps are often used (Vermeulen, 2000). In measuring the effects of new institutions and instruments, the focus also often shifts to the appropriateness and functioning of these institutions and instruments themselves.

Here, for the case of global SSCG systems, a combination of deductive and inductive approaches can be applied. As a first deductive step, using the general global consensus on what sustainable development should be about, the overall topics that are considered relevant can be determined. As a second inductive step, the large sum of specific items in these relevant topics can be identified by means of content analysis of all the existing certification schemes. This enables the relevant coverage of each single system to be determined.

Basic assumption underlying sustainable supply chain governance (SSCG) systems **Figure 2**



Source: Vermeulen, 2010

Basic assumption underlying sustainable supply chain governance systems

Taking the first deductive step, we need to start with the 1987 report of the Brundtland Commission, in which sustainable development is defined as development that "meets the needs of the present generation without compromising the ability of future generations to meet their own needs". The concept was explicitly intended to combine the globally shared ambition of supporting development in developing countries in order to reduce extreme differences in welfare levels, with the ambition to safeguard vulnerable ecosystems, both because of their intrinsic value and their value as life support systems for all human societies. The definition in itself was not very operational and has caused many discussions among scientists and practitioners (Jamison and Baark, 1999; Dietz, Fitzgerald et al., 2005; Kates, 2005). In practice, however, the concept is generally used as a guiding concept or a long-term policy goal or ideal for society as a whole. It clarified the fact that the sustainability challenge requires society to make fundamental transitions and calls the various societal actors to translate it into specific changes required in their sectors. These changes were highlighted in a far less often cited fragment of the original Brundtland report, which states: "In essence, sustainable development is a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development; and institutional change are all in harmony and enhance both current and future potential to meet human needs and aspirations' (WCED, 1987; p. 46). Implementing SSCG systems is one way of responding to this call.

The various global assessment reports (Kates and Parris 2003; Millennium Ecosystem Assessment, 2005; UNEP, 2007) have further clarified the main "search directions" for the environmental dimension of this global process of change as being directed towards:

- the multifunctional use of ecosystems and the safeguarding of remaining unaffected ecosystems;
- balancing the provision of growing food needs with sustaining biodiversity and the regenerating capacities of agro-ecosystems;
- converting ongoing urbanisation and urban sprawl into healthy and liveable cities and megacities;
- transforming mobility systems and infrastructures into low impact and space-efficient systems;
- the efficient use of depleting resources;
- shifting towards economies based on renewable energy sources;
- the creation of maximum closed loops of material use in economies.

Global consensus on the social dimension has resulted in the Millennium Declaration of the United Nations General Assembly. In September 2000, the General Assembly adopted some 60 goals regarding peace, development, the environment, human rights and the vulnerable, hungry and poor (United Nations, 2005).

These environmental and developmental goals cannot be realised without societal transitions and have also been translated into general industry-directed reference systems, such as ISO 14001, SA 8000 and the GRI Guidelines (Global Reporting Initiative, 2002; AccountAbility and WBCSD, 2004; International Standard Organisation, 2004).

Using such global documents, we can integrate the various indicator sets debated in environmental sciences into a *comprehensive reference set*, to be used to determine the level of issue coverage of each specific SSCG system. Various researchers have taken first steps in this direction,

which can be used as a first draft (Schmidt, Meurer et al., 2004; Kates, Parris et al., 2005; Labuschagne, Brent et al., 2005; Labuschagne, Brent et al., 2005). This allows us to describe the *issue coverage* and *precision* (the level of detail in prescribing actions) of all existing systems.

The next question that arises is whether it is necessary to test the compliance by individual firms connected to the systems? This can be analysed by measuring the managerial responses and performance in two steps (Coglianese and Lazer, 2003): as first step by looking at the availability of in-firm management systems and addressing these issues and as second step by determining the actual degree of implementation of specific prescribed actions.

Understanding SSCG system performance

To understand the impacts of supply chain governance, the *characteristics of SSCG systems* themselves offer the first set of explanatory variables (as shown in the coloured box in Figure 2). In the debate on governance for sustainable development, many authors have stressed that one of the key characteristics of the required societal changes is that the involved multi-actor networks are facing long-term challenges regarding substantive changes in resource use, which requires following as yet unbeaten paths of technological development, and also implies related social and institutional transformations. The directions for change in physical processes include *five common elements* relating to social dynamics (see also Vermeulen, 2010): :

- they require influencing the main driving forces of change: population growth, technology development and *production and consumption patterns*, as well as spatial developments (land use and urban, regional and infrastructure development);
- they require the *development of new applied knowledge and technology* and *knowledge transfer* (within national societies and between the developed and the developing world);
- they require *balanced decision making* by various relevant actors in society: governments, businesses, NGOs, citizens, consumers and experts;
- they require *competing claims and interests to be addressed* in the institutions that govern the various local, regional, national and international societies;
- they require a *link* between *long-term* perspectives and *short-term* policies and actions.

These common elements also serve as a reference for the assessment of supply chain governance systems, which address production and consumption patterns. To enhance sustainable development, these systems need to contribute to applied knowledge development and transfer and to creating more balanced decision making by the various actors engaged (both in individual firms and in the governance institutions). Essential for success is the level of *mutual learning and knowledge transfer* enabled by these forms of multi-actor governance (Bressers and Rosenbaum, 2003; Lafferty, 2004).

The institutions responsible for the SSCG systems are also expected to have a mechanism for addressing competing claims and interests. Using the work on multi-actor governance for sustainable development in *environmental policy sciences*, our assumption is that more *inclusive* and open *network relations* (market and non-market actors) will result in more comprehensive *problem perceptions and objectives* (wider coverage of issues, more precision). A second assumption is that the joint employment of knowledge and power resources enables the application of more effective *instruments* for rule setting and compliance control. Finally, SSCG systems need to include a mechanism for linking long-term requirements via forms of continuous improvement to short-term stepwise approaches.

Comparable conditions are suggested in economic geography, adding an additional key determinant for effective value chain governance: the need for effective provisions for reducing the *complexity of the transactions* that are the result of difficulties in codifying requirements (Coe, 2004; Gereffi, Humphrey et al., 2005; Hess and Coe, 2006). This key determinant is especially relevant because of the complexity of the manifold environmental and social-ethical requirements and their debated nature. Can all involved actors make sense of these requirements and communicate meeting them successfully to consumers and civil society on the demand side?

Comparative studies are required to determine these assets of SSCG systems and their relevance for effectiveness. These studies should describe the wide variety of systems using the parameters described above. Little of this work has yet been done. In an article comparing various governance systems in the trade of forest products, Visseren-Hamakers concludes that many of these competing systems emerge ad hoc and at random, generating relatively little effect in terms of protecting forests, but that they have been useful in creating new niche markets for sustainable products and actually do fill a gap where governments are unable or unwilling to implement and enforce policies (Visseren-Hamakers and Glasbergen, 2007).

2.2 Roles of governments

The common assumption in Figure 2 brings us to the current role of governments in these developments. The emergence of these detailed, product-specific, market-based governance systems can be seen as a new step in the governance of sustainable production and consumption. This may lead to a new distribution of roles and therefore requires that the strategies and instruments used by the main categories of actors be reconsidered. This study focuses on the strategies and instruments applied by governments.

The role of governments as public policymakers can be described as a set of processes, including at least (1) the setting of an agenda, (2) a problem analysis and goal setting, (3) the specification of alternatives from which a choice is to be made, (4) an authoritative choice among those specified alternatives, (5) the implementation of a decision and (6) finally evaluating the level of goal achievement.

We define policy instruments as "everything policymakers use or can use to achieve behavioural change from societal actors

A simple typology of instrument types **Table 1**

	The State Specifies the Goal to be Achieved	The State Does Not Specify the Goals to be Achieved
The state specifies how the goal is to be achieved	Regulation (for example, linking an emission target to the use of a certain type of technology); fiscal incentives (for example, tax reductions for a less polluting yechnology)	Technology-based regulatory standards (for example, best available technology)
Non-state actors specify how the goal is to be achieved	Most negotiated Voluntary Agreements; some market-based instruments; some regulations (for example, environmental quality objectives)	Environmental management systems; most market-based instruments; some voluntary agreements; eco-labels

Source: Jordan et al., 2005

A simple typology of governance types **Table 2**

	Government Determines Societal Goals (Ends)	Society Determines Societal Goals (Ends)
Government selects the means of policy	Strong Government: hierarchical steering from the centre	Hybrid types
Society selects the means of policy	Hybrid types	Strong Governance: society is 'self-steering' and 'self-organising'

Source: Jordan et al., 2005

that will contribute to the attainment of public policy goals". This definition largely resembles the classical definition posed by Hoogerwerf and Bressers and Klok (Bressers and Klok, 1987; Hoogerwerf, 1989; Klok, 1989). It stresses two points: firstly, the concept is restricted to *state activities* that aim to change the behaviour of others (therefore policy planning and strategic documents are not regarded as instruments), and secondly, it stresses the focus on *changing the behaviour of these other societal actors* (producers, consumers, NGOs, etc.).

The concept of policy instruments therefore has a narrow scope, with each instrument being just one of the things governments can do to achieve goals. In practice, multiple instruments are applied simultaneously, addressing specific actors in society. Coherent sets of instruments may be labelled with the concept "policy strategy". This concept of policy strategy stresses various aspects, such as a consciously intended course of action and a consistent combination of activities, as well as smart manoeuvres and tricks to achieve goals. It also stresses taking a specific position and locating the organisation in its external social context with a specific role to be taken, based on a specific way of perceiving the world (Mintzberg, 1987). Thus the concept of strategy captures the possible choices between different ways of achieving the same public goals.

Governments have increasingly been applying *new environmental policy instruments*, sometimes also labelled as "non-regulatory policy instruments' (Jordan 2005). The common characteristic of these is that they move beyond the use of regulation (environmental law based standards and permits), which was the most common practice in the earliest phases of environmental policy making. Examples of *new environmental policy instruments* are eco-taxation, fiscal incentives, tradable permits, free information access, voluntary agreements, environmental management certificates, and so on (Jordan, Wurzel et al., 2003; Sairinen, 2003; Tews, Busch et al., 2003; Wurzel, Bruckner et al., 2003; Wurzel, Jordan et al., 2003; Zito, Brückner et al., 2003; European Environment Agency, 2005).

Various attempts have been made in policy sciences to classify the instruments available. In the Netherlands, the more popular distinction between the strategies of the carrot, the stick and the sermon is often applied (Winsemius, 1986). This classification stresses the three strategies as *patterns*, basing the consistency of the combination of activities on the underlying assumed mechanisms of changing behaviour: either based on authority and coercion (enforced rules), on the "homo economicus" always looking for the economic optimum (charges, ecotaxes and emission trade) or on convincing (using the power of knowledge and values). This approach can be found in many comparable documents in the international literature, for example, Mont and Dalhammer distinguish between *administrative* (i.e. regulation), *economic* and *information* instruments. They do however add a distinction between mandatory and voluntary instruments (Mont and Dalhammar, 2005).

Mont and Dalhammar also add another way of classifying instruments: by the stage in the life cycle of the product which the instrument addresses. Classifying instruments in this framework is helpful to see the current complex role of government, but it does not show to what extent government actors or other actors have taken the initiative in designing and implementing the various instruments, or take joint efforts in doing this.

This kind of classification has been proposed by Jordan, Würzel and Zito, in a matrix addressing the question of whether or not the state specifies the goals to be achieved and the means to achieve these goals (see their table in Jordan, 2005). They therefore combine regulation and fiscal instruments in the top left, and the eco-label and environmental management systems in the bottom right.

This table illustrates the historical pathway in using policy instruments in the field of sustainable production and consumption, roughly starting on the top right and going via the left side downwards to the bottom right of the table. This development has been described in the book "Greening

Governments' strategies in relation to self-governance in product markets Table 3

Strategy 1: Central regulation by means of coercion and incentives	
1A *Direct regulation*	Regulation on organic food production and products (EU)
1B *Economic incentives*	Low VAT tariffs for eco-labelled products
1C *General communication*	National campaigns (Postbus 51)
Strategy 2: Interactive regulation and internalisation	
2A *Cooperation with target groups*	Voluntary agreements on product supply in retail Promotion of voluntary CSR: development of methodologies information transfer capacity building monitoring progress
2B *Financing cooperative programmes*	Financing new cooperative organisations
Strategy 3: Facilitating self regulation	
3A *Indirect regulation*	Regulating bottom line requirements for private certification schemes
3B *Economic incentives*	Subsidising multi-actor partnerships in supply chains
3C *General communication*	Declaring political support for actors in the market game
3D *Network creation*	Enabling creation of new actors on the playing field, active in: development of methodologies information transfer capacity building monitoring progress
Strategy 4: Government as active consumer in the market place	
4A *Indirect regulation*	Defining criteria for procurement decisions
4B *Voluntary programmes*	Stimulating public institutions Information supply
4C *Mandatory programmes*	Formally regulating public procurement decisions

Society: The Paradigm Shift in Dutch Environmental Politics' (Driessen and Glasbergen, 2002; Vermeulen, 2002; Vermeulen, 2002) as an evolution through three main categories of strategies and instruments (see also Keijzers, 2000):

Strategy 1: Central regulation by means of coercion and incentives
Applying law-based regulation in the form of standards, permits, general rules, and so on, or economic instruments such as eco-taxation, subsidies and emission trading, all aiming at a broad selection of target groups.

Strategy 2: Interactive regulation and internalisation
Creating policy support through cooperation with target groups, including development of methodologies, information transfer and capacity building, often formalised through voluntary agreements (with their implementation institutions).

Strategy 3: Supporting self regulation
Supporting target group initiatives for self regulation, such as self-formulated standards (ISO, product standards), responsible care, eco-labelling, corporate social responsibility initiatives and reporting initiatives.

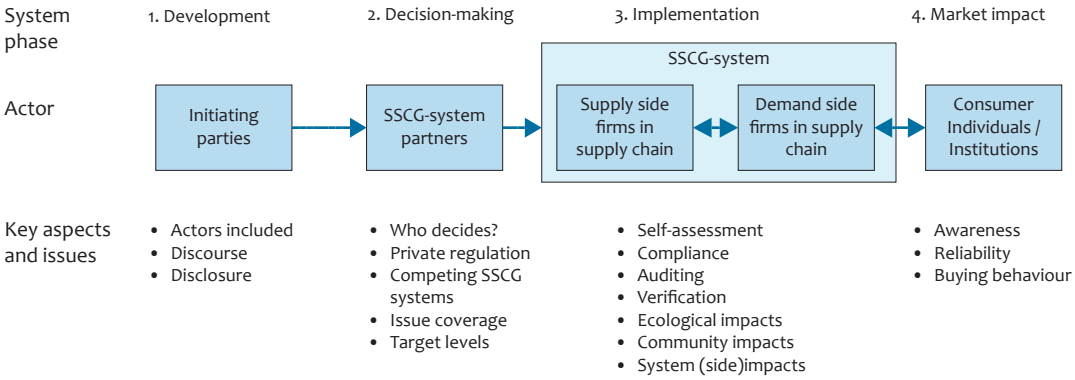
In this development we see a shift in governance styles, which clarifies the emerging role of sustainable supply chain governance systems. These are examples of the third strategy of self regulation, in which the market and civil society take the initiative and governments play various *supporting and facilitating* roles. In this sense, this situation fits in with what Jordan, Würzel and Zito have called "*strong governance*", in contrast to "*strong government*" (see Table 2).

One important observation here, however, is that this evolution in strategies is not exclusive in the sense that the later ones replace the former ones. Rather, this evolution is cumulative in nature: strong governance takes place on top of already existing regulative, economic and interactive approaches (at least in the European context).

In the context of international supply chains, the very reason for the emergence of "strong governance" is the absence of strong government policies and enforcement in the supplying developing countries and the inability of nation states in the developed world to address this weak level of enforcement. This must be seen in the context of diverging interests between the governments of European countries and those of developing producer countries. It is important to realise that these self-governance systems are initiated by Western civil society organisations and companies, who were also not at all welcomed by the producer countries to start with. What we now see is that governments in the developed world (mostly north-west Europe) are developing new ways of supporting and facilitating these self-regulative initiatives in the market.

In specifying the various roles taken by governments in these strategies it has to be remembered that, even in the case of strong governance, governments have a position of public responsibility for solving public problems. The basic

Stages and issues of the functioning of sustainable supply chain governance (SSCG) systems **Figure 3**



Stages and issues in the functioning of Sustainable Supply Chain Governance Systems (SSCG systems)

sequence of government policy activities as described in the policy cycle therefore continues to be relevant. This includes governments engaging in:

A. analysing the problem;
B. formulating and communicating achievable goals;
C. selecting, developing and implementing policy instruments, and;
D. monitoring and evaluating performance and goal achievement.

The above discussion mostly concentrates on element C in the policy cycle. However, the other three steps in the policy cycle also need to be considered. We need to adjust and further elaborate on the three strategies discussed on the previous pages to tailor them to the situation analysed in this report: government activities linked to the emergence of self-governance in product markets.

In *Strategy 1: Central regulation by means of coercion and incentive* and *Strategy 2: Interactive regulation and internalisation,* governments have had the lead; they have applied instruments that address other actors. In this context, classifying instruments in the traditional way is useful. With respect to roles addressing international supply chains of products, some examples of instruments in these strategies can be given:

In *Strategy 3: Facilitating self regulation,* the position of governments has changed. Considering the concept more in terms of a *ploy*, a *position* and a *perspective*, this implies that governments see themselves in a position outside the playing field, not as a coach or referee, but rather in a more distant position, with a perspective on using the forces in the societal and competitive game on the markets for sustainable products, using smart ploys and tricks to make the game attractive. Therefore, the governments use a set of applied instruments to facilitate the market game, partly covering the same categories as in strategies 1 and 2, but not addressing social actors directly (producers and consumers).

There is one additional strategy. As governments are in practice always an important economic actor within their role of institutional consumer, the fourth strategy is that of *active institutional consumer*. Here, we see a history of initially voluntary approaches for all departments and levels of government, combined with communication programmes on sustainable procurement. In the Netherlands, this has recently been replaced with a mandatory approach, thus tactically using its dominant position in many product markets to leverage a breakthrough.

2.3 Policy strategies and instrument for sustainable supply chain systems

It is possible to describe sustainable supply chain governance systems as examples of "strong governance". In most of these cases, governments play a limited role of indirect support. Such supply chain governance systems can be broken down into four sequential stages: initiation, development, implementation by demand and supply side businesses, and their market impacts, as shown at the top of Figure 3.

Based on this figure, it is also possible to categorise the various direct and indirect roles taken by national governments in each stage. Figure 3 serves as a practical tool in this project, identifying possible roles that can be seen in all the different product groups, but which are not necessarily all present in each product group. Specific issues are relevant in each stage. In addition to the direct and indirect positive support for these governance systems, it is also possible to identify contra-productive government instruments, supporting unsustainable practices or blocking trade in sustainable products (import quotas and barriers, etc.). Due to limited time and resources, we will identify but not elaborate on these obstacles in this project.

Figure 3 will be used to aggregate all the possible roles taken in all the different specific product chains by government agencies. In practice, different mixes of instruments are applied. However, little is known about the impacts of these different roles taken by governments. In most cases, these government activities are merely supportive and indirectly influence the performance of the market-based governance systems. Analysing the level of success of government

activities in SSCG systems needs to be done with care, acknowledging the more or less "independent roles" of the actors involved. An attempt should also be made to measure the "success" of SSCG systems themselves, as discussed at the end of Section 2.1.

Measurements can refer to the three last stages in Figure 3:

- Measuring success ultimately refers to improving the sustainability performance of businesses in developing countries.
- In practice, performance is monitored at the individual firm level using varying forms of self assessment and third party auditing. Looking at the functioning of these control systems is an indirect way of measuring the success of these governance systems.
- Another way of measuring success would be to combine the issue coverage and precision of certification requirements and target levels of SSCG systems with their market penetration.

This will be further discussed in Chapter 5.

3

Market dynamics in the selected product chains and certification systems

In response to environmental, health, safety and developmental challenges, several certification schemes for tropical products have emerged to harmonise production methods and ensure that minimum criteria are met. Certification is a market-based approach by which an independent body gives written assurance on the quality of the product and the way in which it was produced. Certification can offer trust and accountability for a product, in particular when a product is traded internationally, which cannot be ensured by the importing nations. Certification not only ensures that the consumer receives certain information, but it is also considered to offer advantages to producers in developing countries in terms of market access and competitive advantage, ensuring social development and environmental protection.

Especially relevant in this study are the different types of private voluntary certification systems that have been created for products from developing countries. We focus on tropical agricultural products – specifically timber, coffee, cocoa and tea. The first section of this chapter introduces the two timber certification systems selected for this study: the Forest Stewardship Council (FSC) and the Programme for the Endorsement of Forest Certification (PEFC). The second section introduces five different certification systems available for tropical agro-commodities including coffee, cocoa and tea: Organic, Fairtrade, Rainforest Alliance, GlobalGAP and UTZ Certified. These systems compete in some cases, and are complementary in others.

3.1 Tropical timber

3.1.1 Introduction

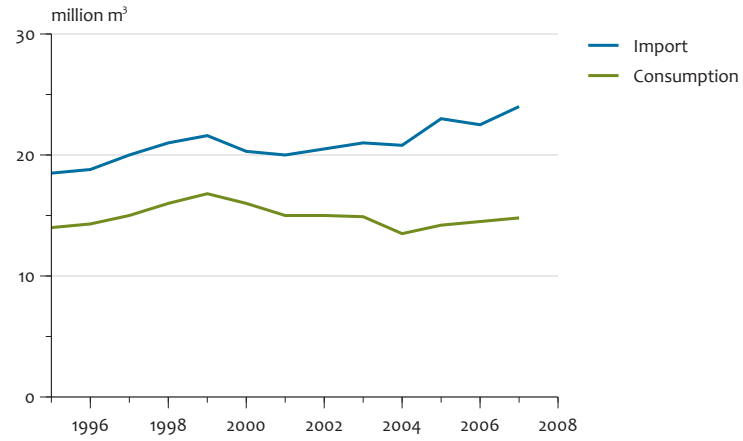
Tropical timber is obtained from tropical forests located around the equator in Asian, African and Latin American countries. Tropical forests are characteristically located in developing countries. They are home to half of all animal and plant species on the planet and are also the source of one quarter of modern medicines (WWF, 2009). This section of the report looks into tropical timber imports to Europe, especially to the Netherlands, Germany and the United Kingdom, and at the certification systems that ensure sustainable tropical timber production.

The Netherlands depends mainly on imported wood and wood products, importing most of its coniferous wood (or soft wood) from other countries within Europe. Only a small percentage of imported wood is tropical in origin (Probos, 2009). The volume of imported wood has been reasonably stable since the 1990s with some growth in recent years (see Figure 4). Currently, most imported tropical hardwood in the Netherlands comes from South East Asia, Africa and Brazil (PBL, 2009).

At the European Union level, most wood products are imported from Russia and North America. Imports of wood products to the European Union from tropical countries amount to 25%, of which nearly half comes from Brazil (INDUFOR, 2008). The market downturn that hit the construction sector in 2008 also had an impact on timber imports. Imports to the UK of hardwood from tropical countries, for instance, fell consistently during 2008, while the decline in Germany was more moderate, partly because its market is less dependent on tropical wood. Imports to the Netherlands managed to remain fairly stable, due to its position as staging post in the supply to other European countries (Global Wood, 2009).

The main problem related to the trade of timber is deforestation and unsustainable forest management: 13 million hectares of forests disappear around the world every year (INDUFOR, 2008). Deforestation contributes to climate change, producing nearly 30% of the world's total CO_2 emissions and placing important threats on biodiversity and the people whose livelihoods depend on tropical forests. The principal challenges in this sector are the uncertainty with respect to land and logging rights and the legality of timber products. Even though estimating the share of illegal wood imports to Europe is difficult, various NGOs (e.g. WWF, Friends of the Earth) have drawn attention to the destructive impact of corruption, laundering and illegal practices in the timber sector.

Import and net consumption of wood in the Netherlands **Figure 4**



Import and net consumption of wood in the Netherlands (Probos, 2009)

3.1.2 Overview of sustainable supply chain governance systems for tropical timber

A number of sustainable supply chain governance systems – also referred to as voluntary certification systems here – have been developed in recent years to ensure sustainable forest management practices and improved trade conditions. Looking at the existing voluntary certification systems in the timber sector, we can roughly distinguish two types of certification systems: the first type guarantees consumers that the products they purchase meet certain production standards (e.g. FSC); while the second type gives assessments of other certifications or labels, fulfilling a meta-certification role (e.g. PEFC).

The Forest Stewardship Council (FSC), one of the pioneer voluntary certification systems, is an example of the first type. The FSC certification system was initially introduced in 1993 and has developed a set of globally applicable standards for sustainable forest management.

Since then, other timber certification schemes have emerged, often initiated by the industry and in cooperation with governments (Cashore, Gale et al. 2006). Many countries, including those in the tropics, now have their own certification systems, such as the Canadian Standards Association (CSA), American Tree Farm Systems (ATFS –USA), Sustainable Forestry Initiative (SFI – Canada and the USA), CERFLOR in Brazil and MTSC in Malaysia. These national certification systems have different scopes; some are for all forest types (CSA), some are for private, non-industrial forests (ATFS), and some are for large-scale forests (SFI).

In reaction to the emergence of an increasing number of timber certification systems, a second type of certification system appeared to certify those other existing certification systems, in accordance with a set of criteria. The *Keurhout* is an example of this in the Netherlands. *Keurhout* was created to confirm that the standards of certificates claiming sustainable forestry and legality also comply with the requirements of the Dutch government[1]. A similar initiative emerged in 1999 at the European level, called the Programme for the Endorsement of Forest Certification (PEFC). PEFC promotes sustainable forestry through independent third party certification; it is an umbrella organisation which evaluates and recognises national forest certification schemes that have been developed through multi-stakeholder processes and that use standards referring to the indicators and criteria developed through intergovernmental processes[2] for sustainable forest management (read further in 3.1.3).

There are also other certification systems that take more general environmental management criteria into consideration, such as the ISO 14001 Environmental Management Systems and the EU-ECO Management Audit Scheme (EMAS). Although the ISO 14001 was not developed specifically for forest management, some argue that it has occasionally been promoted as an alternative to FSC by industry and government (Cashore, Gale et al. 2006). Private companies have also taken action towards creating more sustainable supply chains, usually by adopting purchasing policies that favour the sourcing of sustainable wood products. This approach matches the single firm approaches described earlier in Chapter 2. GAMMA, a leading Dutch DIY retailer, for instance, joined the initiative "*Hart voor Hout*" created in 1993 by various non-governmental organisations, including Oxfam Novib, *Milieudefensie* (the Dutch branch of Friends of the Earth) and the WWF. GAMMA now obtains a substantial proportion of its wood assortment from FSC certified sources.

Finally, as mentioned earlier, the issue of legality in the forestry sector is particularly important and is often addressed separately from other general forest management issues. Governments play a substantial role when it comes to legality, particularly through bilateral and/or multilateral agreements (read more in Chapter 4). The Forest Law Enforcement and Governance (FLEG) initiative is the main process in this respect. Through the FLEGT (Forest Law Enforcement, Governance and Trade) Voluntary Partnership Agreement, the European Union develops voluntary

agreements with timber producing countries to introduce a legality license for timber trade between the partner countries. Along with these FLEG initiatives, businesses have also developed systems to ensure that only wood products from legal sources are traded. For example, the Dutch Wood Trade Association (VVNH) set up a protocol to track the legal origin of wood, while the European Timber Trade Federation introduced the Timber Trade Action Plan in 2005 to assist its members in establishing and ensuring verified legality within their supply chains.

3.1.3 Description of selected certification systems for tropical timber

This project focuses on voluntary certification systems that have emerged in the private arena and excludes from its analysis any type of intergovernmental, bilateral or multilateral agreements initiated by governments. This project has selected FSC and PEFC as objects of study. The next sub-sections present background information on these systems, including information on the reasons for their emergence, their structure, organisation, standards and market shares.

Forest Stewardship Council (FSC)

FSC was created in reaction to the slowness and inability of domestic and international governmental responses (e.g. ITTO, UNCED) and to boycott campaigns against forest-related problems (Cashore, Gale et al. 2006). 'FSC and its supporters turned to the marketplace to generate incentives for forest businesses to conform to environmentally and socially responsible forest practices' (Cashore, Gale et al. 2006). The first meeting was held in 1990 in California, USA, by a group of timber users, traders and representatives of environmental and human rights organisations. FSC was officially established in 1993 with the objective of addressing unsustainable forest management in the tropics.

FSC is an independent, non-governmental, non-profit organisation. The members consist of a diverse group of representatives from environmental and social groups, the timber trade and the forestry profession, indigenous people's organisations, responsible corporations, community forestry groups and forest product certification organisations from around the world. There are over 800 members. The balanced power sharing within the FSC is considered to be unique (Visseren-Hamakers, 2009). FSC's membership consists of three chambers: social, environmental and economic, which is further split into North and South sub-chambers. At the General Assembly, the three chambers each have one third of the votes, divided equally between North and South.

FSC is a certification system that provides internationally recognised standards, trademark assurance and accreditation services to companies, organisations and communities interested in responsible forestry. The FSC certification is based on its own sustainable forestry Principles and Criteria (P&Cs), which are elaborated in the form of indicators that meet the national or regional standards (Rametsteiner and Simula 2003). The certification process is carried out by independent certification bodies, which first need to obtain FSC accreditation. FSC is the only global forest management certification system with an integrated accreditation programme that systematically controls its certification bodies. The FSC system is applicable to all types of forests, both natural forests and planted forests. FSC is a Full Member of ISEAL Alliance.

By 2008, more than 100 million hectares of forest worldwide had been certified to FSC standards in over 82 countries (FSC, 2009b). FSC certified forests represent the equivalent of 10% of the world's managed forests (FSC, 2009a) and the value of FSC labelled sales is estimated at over 20 billion USD (FSC, 2008). More than 80% of FSC labelled forests are in Europe (including Russia), the USA, Canada, Australia, New Zealand and Japan. Certified forests in the rest of the world (developing countries and economies in transition) account for 18.7%, and only about 13% of all FSC certified forests are in tropical / subtropical zones (FSC, 2009a).

In 2008, Aidenvironment published a study commissioned by FSC Netherlands which investigated the share of FSC certified timber on the Dutch market in 2007 (Aidenvironment, 2008). In 2007, 16% of timber on the Dutch market was FSC certified. This consisted of 35% nationally produced and 65% imported timber. The share of FSC certified timber on the Dutch market is increasing: in 1999, it was just 4%. The report predicts that this share will increase to 21% in the coming years. This trend is especially due to increased imports of FSC certified timber (see Figure 5). The study concluded that 12% of all imported timber in the Netherlands was FSC certified in 2007, of which about 18% was from tropical sources[3].

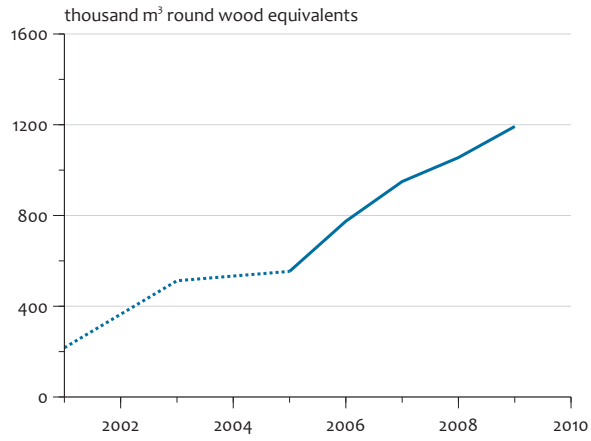
Access to FSC certification and its benefits is sometimes more challenging for smaller forest owners who often face cost and procedural barriers. With the objective of facilitating and providing more benefits for small forest owners, FSC has started to look for ways to differentiate community produced forest products in the marketplace. FSC and Fairtrade are therefore conducting a project to develop an affordable dual certification system for such communities.

PEFC (Programme for the Endorsement of Forest Certification)

PEFC was launched in 1999 in Paris by representatives of eleven officially constituted national PEFC governing bodies, mainly formed by landowners and industry under the name "Pan European Forest Certificate". It was conceived as a European umbrella organisation with a mandate to evaluate and endorse national standards for sustainable forest management. As its name suggests, the programme was originally created for European forests. The establishment of PEFC is said to be a counter reaction to FSC (Cashore, Gale et al., 2006). When FSC national standards were being established in countries like Finland and Sweden, there was strong resistance from small, farm-forestry operators concerned about protecting private property rights and minimising costs (Cashore, Gale et al., 2006). The first national schemes were endorsed by the PEFC in 2000. Today, the PEFC scheme covers national forest standards from all over the world.

PEFC is an independent, non-profit, non-governmental organisation. Its membership includes 35 national schemes

Gross import of FSC timber and timber products in the Netherlands **Figure 5**



FSC = Forest Stewardship Council

2008 and 2009 are estimates

Gross import of FSC timber and timber products in the Netherlands (2001-2009) (Aidenvironment, 2008)

from all over the world and its board currently consists of 9 members, mostly represented by forest owners or industry representatives from Western countries, with one seat reserved for a representative of an environmental non-governmental organisation.

PEFC's framework for the assessment and endorsement of national forest certification systems is based on the indicators and criteria developed through intergovernmental processes to define sustainable forest management. PEFC uses different standards developed through such intergovernmental processes for different regions. For natural forests in African countries that are members of the African Timber Organisation (ATO), the ATO/ITTO principles, criteria and indicators are applied. For other member countries of the ITTO, the "ITTO guidelines on sustainable forest management" are applied. For countries that do not come under those guidelines, other criteria and indicators currently being developed can be applied, such as the Montreal Process, Regional Initiative of Dry Forests in Asia, Criteria and Indicators for Sustainable Management in Dry-zone Africa, or the Tarapoto Proposal: Criteria and Indicators for the Sustainable Management of Manazonian forests. In cases where none of the criteria and indicators developed within these intergovernmental processes apply, then the standards for European Forests – Pan European Operational Level Guidelines (PEOLF) – are used. Of the 35 member certification systems, almost 30 have been endorsed by the PEFC Council. PEFC is not a member of ISEAL Alliance.

It is estimated that, in 2007, about 227 million hectares of forests were certified with systems endorsed by the PEFC (PEFC, 2009). Most national certification systems endorsed by the PEFC are from Western countries (33 out of 35) and only 1.25% of PEFC certified forest is in developing countries. These forests are certified by CERFOR in Brazil and CERTFOR in Chile. CERFOR (Brazil) became the first PEFC member from a developing country in 2002, while CERTFOR (Chile) was endorsed by PEFC in 2004. Additional members from developing countries include the *Sociedad de Productores Forestales del Uruguay* (Uruguay), which joined the council in 2007, and PAFC (Gabon) and MTCS (Malaysia), which have also been endorsed by PEFC since 2009.

There are no recent data on the market share of PEFC certified timber in the Netherlands. According to a study by Probos (Oldenburger and Leek, 2006), 3.9% of timber (not paper) on the Dutch market in 2005 was PEFC certified.

3.1.4 Comparison and conclusion: dynamics of FSC and PEFC

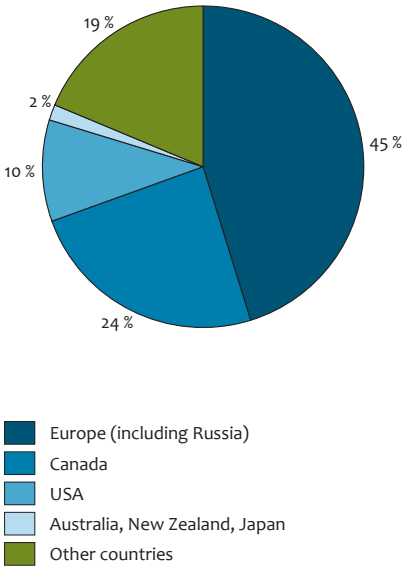
The certification of timber sourced from developing countries has a relatively long history. Private and public initiatives have alternatively emerged and resulted in adaptations in public and private certification practices over time. Timber has been selected as a case study in this research both because of its long record and because its origins combine national, European and remote international sources. Forest management policies most recently developed by the national governments of developed countries have provided a baseline for developing certification and product labels directed at the origin (production side). A large part of the political dynamics has been oriented towards the linkages between government regulations and private certification initiatives.

This report discusses the two most widely used certification systems for tropical timber: PEFC and FSC. The first noticeable difference between PEFC and FSC is the different standards they refer to in determining the sustainability of forest management. FSC has its own principles and indicators that expand beyond national regulation, while PEFC refers to guidelines developed at the intergovernmental level, thus taking government regulations as a baseline. Both systems are private, yet FSC develops its own regulations and criteria, while PEFC relies on criteria developed by governments. The difference between PEFC and FSC regarding the impact on biodiversity is also relevant and has been studied by Probos (Jansen and Benthem, 2009). Finally, FSC is a member of ISEAL Alliance and PEFC is not.

Despite the long history and the original ambition of FSC to improve the protection of *tropical* forests, the majority of FSC

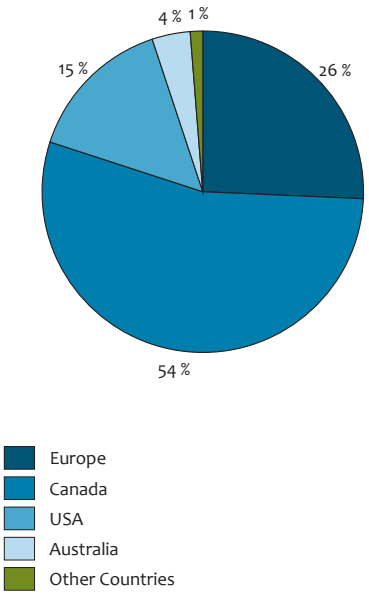
Global forests with certifications, 2009 **Figure 6**

FSC certified forests



FSC = Forest Stewardship Council

PEFC endorsed forests



PEFC = Programme for the endorsement of forest certification

Source: FSC, 2009b; PEFC, 2009
Global forest with certification, 2009.

and PEFC certified forests are located in Western countries. In 2009, 19% of FSC certified forests were situated in developing and transition countries, accounting for 44 countries (see Figure 6). Only 13% of FSC certified forests are said to be tropical forests.

PEFC on the other hand was initiated to protect European forests, but has now been extended to forests located outside Europe. Nevertheless, only 1.25% of PEFC certified forests are located in developing countries, more specifically in Chile and Brazil (PEFC, 2009).

The first indicator for measuring the success of certified products is the market share of sustainable timber products, both looking at trade flows (exports/imports) and at sales in the different relevant product markets (including construction materials, finished products, paper, etc.). Systematic monitoring of these trade impacts (in time and over categories) is not available. Neither FSC nor PEFC provide such detailed statistics. Some data are available from other sources, giving an incomplete picture, but allowing us to sketch the main trends.

Here we have to distinguish between the use of timber for paper production or as some form of timber product. In 2005 the market for FSC certified paper was very small (0.5%), while no PEFC certified paper was yet available. In two years the combined share grew to 6% (2.8% FSC and 3.2% PEFC), while a further growth to 9% in 2011 is expected (Oldenburg, 2010: 35-37).

The market share of sustainably produced timber is a far larger and strongly increasing, even if for tropical timber it is still very limited (PBL, 2009). If we look at the total sum of the various sources, we see that a strong development has taken place over the last few years, which provides some justification for pointing towards an emerging breakthrough for sustainable timber. In 2005, 13.3% of timber sold on the Dutch market was certified[4] (see Table 4) (Oldenburger and Leek, 2006), of which FSC certified timber accounted for 9.3% and PEFC for 3.9%. FSC was therefore the most important forest certification in the Dutch market in 2005. Three years later we see strong growth of the total share of certified timber products to 33.%, with PEFC bringing the largest share (22.1%).

In addition to this, it should be noted that a significant amount of timber available on the Dutch market is produced in certified forests, even if it does not bear any label or certification. Timber without any certification but from certified forests was expected to be total around 23% in 2005. In this category, PEFC's share is relatively large, 18%, compared to FSC, 2.9%. Three years later still 5.7% of the timber comes from FSC certified forests, with goes without label on the product/. For timber from PEFC certified forests the market share still is 7.7%.

As shown in Table 4, the total share of certified timber grew form 36.4% in 2005 to 47.3% in 2008. As a result of the economic crisis, this rapid growth is expected to slow down in the current years (Oldenburg, 2010: 37).

Share of timber with certification and without certification originating from certified forests in the total Dutch market in 2005 and 2008. Table 4

	With certification		From certified forests		Total	
year	2005	2008	2005	2008	2005	2008
FSC	9.3%	11.6%	2.9%	5.7%	12.2%	17.3%
PEFC	3.9%	22.1%	18.1%	7.7%	22%	29.8%
MTCC	0	0	0.3%	0	0.3%	0
CSA	0	0	0.2%	0	0.2%	0
SFI	0	0	0.1%	0	0.1%	0
Rest	0.1%	0.1	1.5%	0	1.6%	0
Total	13.3%	33.8%	23.1%	13.4%	36.4%	47.3%

Source: Oldenburger and Leek, 2006; Oldenburg, 2010

Dutch *imports* of FSC certified timber have grown strongly since 2005, more than doubling. Nevertheless, data to make a statement on the growth of the market share after 2005 are not available. Our respondents indicated that sales volumes continue to grow. When it comes to the availability of certified tropical hard wood, PEFC certified tropical wood was not available on the Dutch market in 2005. FSC was the most important player in terms of sustainable tropical woods, followed by the Malaysian Timber Certification Council (MTCC), which was endorsed by PEFC International in 2009.

3.2 Tropical agro-commodities: cocoa, coffee and tea

3.2.1 Introduction

Cocoa, coffee and tea are tropical commodities that have been traded since colonial times. For many years their prices were controlled through "producer price arrangements" until this system began to break down in the 1960s and private companies or state-owned organisations took control of production. International agreements were introduced to maintain price stability. The first agreements were established in 1933 for tea, in 1962 for coffee and in 1973 for cocoa and have been updated several times since then. Currently, these agreements are meant to set guidelines for improving international trade through increased transparency and access to information, as well as ensuring benefits for all stakeholders. Traditionally, these three commodity products have been supplied to global markets without qualitative differentiation, but lately more specialised markets demanding higher quality and better produced cocoa, coffee and tea have emerged.

Coffee and cocoa are grown on smallholder plantations as well as on large plantations, whereas tea is grown mostly on large "estates". The production of these three tropical products poses threats to biodiversity due to habitat conversion, high energy consumption (mainly using logged timber) and the extensive application of pesticides. The agro-food producing sector in the tropics is also known for its poor working conditions; child labour, short-time contracts and wages below the legal minimum have been often reported by NGOs and producers" unions (Levi and Linton, 2003). Additionally, the price fluctuation of cash crops poses complex effects on the economy and livelihoods of millions of farmers around the world who often earn less than US$2 per day (TCC, 2009a).

Coffee is the second most traded commodity in the world after crude oil. Brazil, Vietnam and Colombia are the three largest world producers, while *Arabica* and *Robusta* are the most traded varieties. With regards to cocoa, most of it is grown in West Africa, with Ivory Coast and Ghana accounting for 70% of total global production. African cocoa is considered bulk, while cocoa from the Americas is of higher quality, and cocoa from Southeast Asia is of medium quality. The Netherlands, Germany and the USA have the largest cocoa grinding capacity, each processing more than 400,000 tonnes per year (TCC, 2009a). Tea is the most popular beverage in the world, after water. It comes from an evergreen bush which grows at high altitudes in tropical and subtropical regions of the world. Tea production originated in China more than 3000 years ago and was introduced to Asia and African countries during the colonial period of the 19th century. The two main types of tea are black and green tea. Black tea is fully fermented and accounts for the majority of globally traded tea, while green tea is unfermented and accounts only for 7% of global trade (Walker, Di Sisto et al., 2008).

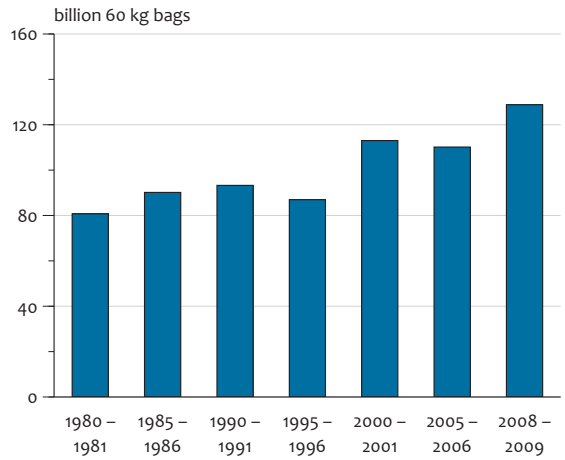
Coffee

The consumption of coffee and cocoa is mostly concentrated in the European and North American markets, while most producing countries mainly export their produce instead of consuming it. The total production of coffee is increasing (see Figure 7) (ICO, 2009). Coffee consumption in the Netherlands has been stable over the last 20 years. In 2007, the total consumption of roasted coffee was 113,580 tonnes (TCC, 2009b). Germany is both the largest coffee importer and consumer in Europe, with a market share of 22%, amounting to 512,000 tonnes in 2007 (TCC, 2009b). The import of coffee in Germany is increasing while, in the Netherlands, the import has been relatively stable since 1980 Figure 8) (ICO, 2008).

Cocoa

The production of cocoa continues to increase worldwide (TCC, 2009a). The Netherlands is one of the largest cocoa importers in the world and the largest cocoa processing country after the USA. Regarding net consumption, the market is dominated by European consumption, with Germany and the UK being two of the main cocoa consuming countries (UNCTAD, 2006) (see Figure 9). It is expected that in the coming years demand for chocolate and chocolate-flavoured products will increase in Russia, Japan, Brazil and China (TCC, 2009a).

Coffee production **Figure 7**



Total production of coffee worldwide (Based on ICO, 2009)

Tea

In 2006, global tea production reached 3.5 million tons (Walker, Di Sisto et al., 2008). Tea, other than coffee and cocoa, is mostly consumed locally. In India and China domestic consumption represents 81% and 73% respectively (Walker, Di Sisto et al., 2008). Other main tea-producing countries include Sri Lanka, Kenya, Indonesia and Turkey. Kenya and Sri Lanka together export 40% of the world's tea. Global tea production has doubled over the past 30 years, but because demand is lagging behind, a situation of oversupply has been created (SOMO, 2008). Half of all the tea traded internationally is imported by only seven countries (Russia, the UK, Pakistan, the USA, Egypt, Iraq and the United Arab Emirates) (Walker, Di Sisto et al., 2008) (see Figure 10). The United Kingdom is the biggest European consumer market for tea, importing 9.2% of internationally traded tea. In 2002, the Netherlands consumed about one tenth of UK tea consumption. Recent trends in tea imports show that imports into the UK have decreased, while those to other European countries have remained stable (Walker, Di Sisto et al., 2008).

3.2.2 Overview of sustainable supply chain governance systems for cocoa, coffee and tea

Various market and civil society led initiatives have emerged during recent decades to make the production and trade of tropical commodity products such as cocoa, coffee and tea more sustainable. Some of these initiatives have been designed as single business CSR activities – known as type one initiatives – while others include some certification granted by a third party, which is aimed at verifying production processes and informing retailers and consumers about the sustainability benefits of the products they buy – known as type two initiatives. We give an overview of these private initiatives according to the business-to-business sustainable supply chain governance systems categorised in Chapter 2.

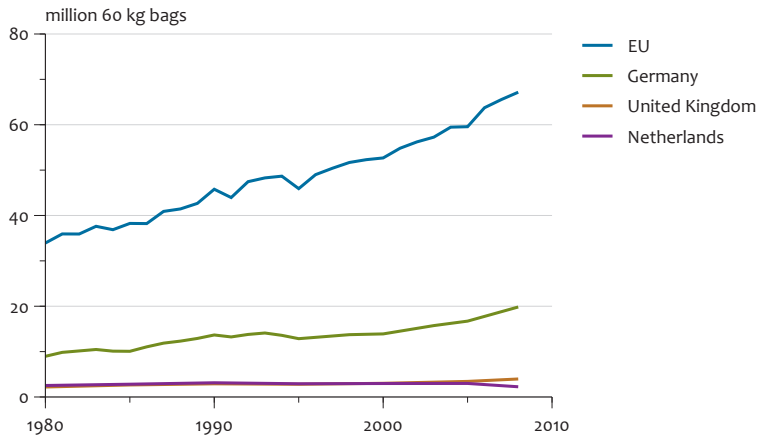
Many sustainable sourcing systems for tropical commodity products such as tea, coffee and cocoa have been designed by private companies seeking to ensure that agricultural commodity products are grown and processed in ways that safeguard the economic, social and environmental aspects of production. Examples of such systems include the Starbucks C.A.F.E programme[5], the Cadbury Cocoa Partnership[6] and Unilever's Rainforest Alliance certified tea[7]. These approaches fall under the single firm approach described in Chapter 2.

The prominent approach towards sustainable supply chain management is becoming that of cross-sectoral standards/ certification systems. Certification systems such as Max Havelaar (or Fairtrade), UTZ Certified or Rainforest Alliance started with the intention to ensure the sustainable production of a single product, either coffee (for Max Havelaar and UTZ Certified) or timber (Rainforest Alliance) (see categorisation in Chapter 2). Other standard systems such as Organic and GlobalGAP started with the cross-sectoral approach, covering a range of agricultural products. What is characteristic here is that the initially single-product systems later embraced more products.

In addition to the above mentioned cross-sectoral standard systems, there are other types of private certification systems that deal with specific issues. Examples include SA8000 – a certification system for supply chain labour standards aimed primarily at processing facilities for manufactured goods – and systems dealing with safety, such as Hazard Analysis and Critical Control Points (HACCP) – a tool for controlling food hygiene and safety applicable to companies that process, treat, package, transport and distribute foodstuffs (Fairmatch Support). There are also general environmental and health management standards, such as the ISO 14001 Environmental Management Systems and the ISO 22000 Food Safety Management Systems approach, which establish management and control practices that ensure food is safe and can be traded in world markets.

Private actors have also developed cross-sectoral programmes to comply with more stringent social and environmental requirements. The Business Social Compliance Initiative is a business-driven platform of European retail companies. It was initiated by the Foreign Trade Association[8]

Coffee import **Figure 8**



Imports of all forms of coffee from all origins (ICO, 2008)

and makes suppliers of retail companies comply with the social standard of the Code of Conduct, built on recognised international labour standards. Similarly, the Ethical Trading Initiative (ETI)[9] is an alliance of companies, non-governmental organisations and trade unions that promotes and improves the implementation of corporate codes of practice which cover supply chain working conditions of retailers and sellers who source to or sell products on the UK market. Working on the environmental side, Unilever has developed a set of good agricultural practices that deal with a range of factors contributing to sustainable production, such as soil fertility, soil loss, nutrients, pest management, biodiversity, energy, water, local economy and social capital[10].

The five main private voluntary certification schemes available for cocoa, coffee and tea were selected for further exploration in this study, based on their trajectories and evolution during the last decade. These systems are Organic, Fairtrade, Rainforest Alliance, GlobalGAP and UTZ Certified. Except GlobalGAP, all of these schemes use a consumer label on the final product which is aimed at influencing consumer perception by promoting the social and ecological advantages of the product.

3.2.3 Description of selected certification systems for cocoa, coffee and tea

This section describes five certification systems available for cocoa, coffee and tea – Organic, Fairtrade, Rainforest Alliance, GlobalGAP and UTZ Certified. The origins of the systems can be traced back to the 1980s, when the Alternative Trade Organisations (ATOs) were the only reference in the market and the concepts of consumer labels, fixed premiums and control mechanisms were still unknown to businesses in Europe (Roozen and Hoff, 2001). In time, standard setting evolved to become an extensive process to include stakeholder consultation, verification and compliance.

Organic

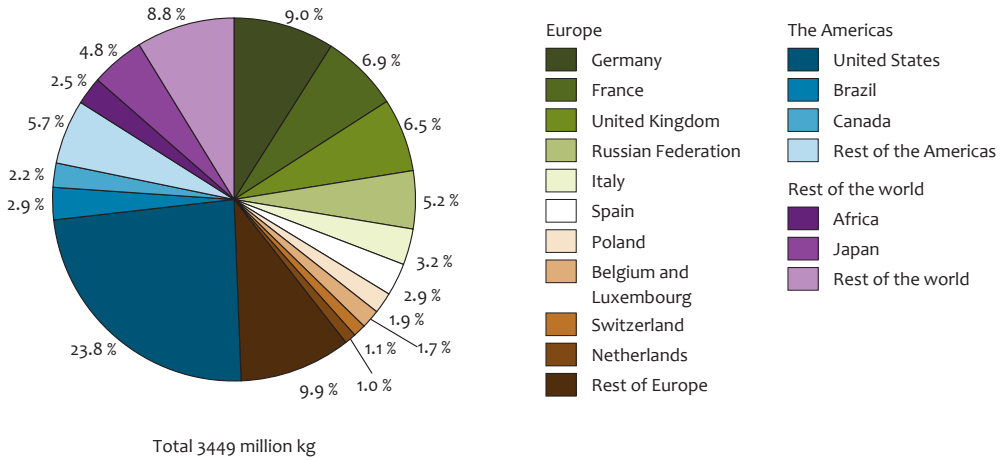
The organic movement can be traced back to 19th century practices formulated in England, India and the USA in reaction to agriculture's growing reliance on synthetic fertilisers, based on superphosphates and ammonia. The organic movement operated at grass-roots level and aimed to create a truly sustainable agriculture system that produces food in harmony with nature, supports biodiversity and enhances soil health. The first certification was created in 1967, after an internationally recognised system was developed by certifiers and farmer groups (SCAA, 2009). Since then, a variety of organic certification systems have been created. Examples in our three countries of focus are given in Text Box 1 below.

Following the proliferation of organic standards, the International Federation of Organic Agriculture Movements (IFOAM) was founded in 1972 to set minimum standards for the organic industry (Cashore, Gale et al., 2006). IFOAM was established during an international congress on organic agriculture organised by the French farmers" organisation *Nature et Progrés*. It was founded by representatives of the soil associations of Great Britain, Sweden, South Africa, France and the United States. The IFOAM has a General Assembly, which elects the World Board for a three year term. This board is formed by individuals working voluntarily to lead IFOAM and coordinates the work of diverse official committees, working groups and task forces.

IFOAM is the facilitator of the worldwide organic movement and works to be the international authority on all matters related to organic production, to increase market share and access for organic products at local, regional and international levels, to enhance capacity of the organic sector to sustain growth and development, to create "think spaces" to cultivate the organic future and to ensure an effectively managed organisation with sufficient and sustainable resources.

The definition of "organic" and its standards have, until recently, varied from country to country. Organic standards have been developed and applied to create agreement within diverse organic agriculture movements and to inform consumers. Regional groups of organic farmers and their supporters have been developing standards since the 1940s.

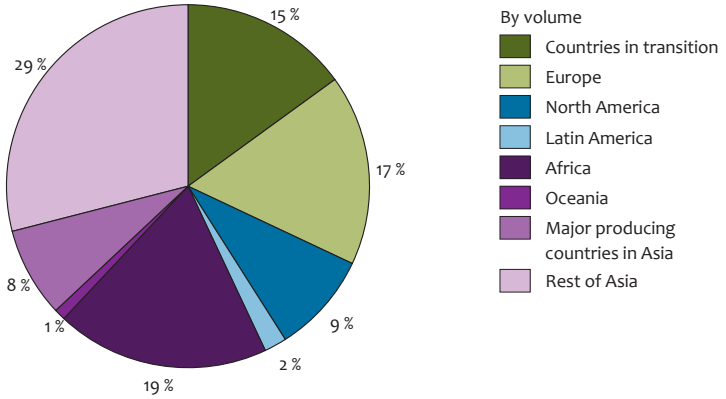
Cocoa consuming countries, 2005 – 2006 **Figure 9**



Total 3449 million kg

Share of main cocoa consuming countries in 2004/05 (UNCTAD, 2006)

Share of global tea imports per region, 2006 **Figure 10**



Share of global tea imports per region in 2006 (Wal, 2008)

There are currently hundreds of private organic standards worldwide, which have been codified in technical regulations in more than 60 countries. Third party organic certification was instituted in the 1970s. Until then, farmers had been voluntarily inspecting one another using a general set of standards. Nowadays, third party certification is a complex and formal process that is increasingly required by the regulations of many governments for an organic claim on a product label.

An important characteristic of the Organic certification system is that it is the only one that is included in national and supranational regulations, specifically at the European level. In 1991 the European Council of Agricultural Ministers adopted Council regulation "EEC No. 2092/91 on organic production of agricultural products and indications referring to agricultural products and foodstuffs" as part of the reform of the EU Common Agricultural Policy through which organic agriculture became officially recognised by the 15 states which were EU members at that time (IFOAM, 2009). The import of organic products whose production criteria and systems of control were equivalent to those of the EU was also approved. And, since only minimum standards are contained in EU regulation, member states and private parties are free to enact stricter standards.

In terms of market dynamics, the Netherlands has a larger market share of organic products (2.0%) than the United Kingdom (1.3%), France (1.1%) and Italy (1.6%); but a smaller one than Germany (3.0%) and Switzerland (4.5%) (LNV, 2008). Recent studies show that 32.2 million hectares are organically managed in 141 countries around the world, of which two thirds are industrialised countries. However, less

than one percent of the world's agricultural land is managed organically (Worldwatch Institute, 2009).

Two percent of Germany's coffee consumption is organic. The share of organic coffee in the Netherlands is smaller. As with most organic products, organic certified cocoa beans represent less than 1% of the worldwide cocoa crop (Callebaut, undated). Similarly, the market share of organic products rarely exceeds 2%; only in Germany does the market for organic products exceed this percentage (TCC, 2009b). Most organic tea is grown for export to Germany, Japan and the USA. It is expected that trends based on lifestyle and care products will increase organic product consumption, including that of tea (Biofach, 2008).

Fairtrade

The Fairtrade movement, promoting fair pay and fair working conditions for disadvantaged farmers and workers in developing countries around the world, emerged in Europe approximately 40 years ago. However, it was only in the late 1980s that a formal labelling scheme was established in the Netherlands. Fairtrade was set up to offer farmers and workers a better deal by guaranteeing a price premium. The standard was introduced in 1988 after an ad-hoc consultation period with coffee producers in Mexico (Max Havelaar). The first certified coffee came from Mexico and was sold to Dutch supermarkets under the brand name Max Havelaar. After a few years, the concept of fair trade took root in many countries and the model was replicated across Europe and North America, under the name "Transfair" in Germany, Austria, Luxemburg, Italy, the United States, Canada and Japan, the "Fairtrade Mark" in the UK and Ireland, "Rättvisemärkt" in Sweden and "Reilu Kauppa" in Finland. Text Box 2 below offers more detail about the national Fairtrade initiatives in the UK, the Netherlands and Germany.

The Fairtrade Labelling Organisation (FLO) was established in 1997 in Bonn to unite labelling initiatives around the world and establish global standard and certification methods. FLO is an international umbrella organisation owned by 22 national Fairtrade organisations. In 2002, it launched a new International Fairtrade Certification Mark to improve visibility and to facilitate cross border trade. In 2004, the FLO was split into two independent organisations: FLO International, which sets standards and provides producer business support, and FLO-CERT, which certifies producer organisations and audits traders. In the Netherlands, Fairtrade is run by *Stichting Max Havelaar Nederland*, in the United Kingdom by the Fairtrade Foundation UK, and in Germany by *TransFair Deutschland* (see Text Box 2 for more detail about these organisations). Fairtrade Labelling Organisation is a full member of the ISEAL Alliance.

The Fairtrade system is based on buyers of Fairtrade products paying a producer organisation a minimum price for their product. This is not a fixed price, but merely a starting point for price negotiations between producer and purchaser. Fairtrade minimum prices for cocoa, coffee and tea are set by the Standards Unit at FLO based on research into producer costs for sustainable production and consultation with traders and other stakeholders. In addition to the Fairtrade minimum price, buyers pay a Fairtrade premium, which is typically invested in education and healthcare, farm improvements to increase yield and quality and processing facilities.

Fairtrade registration, licensing and certification ensure that FLO standards are followed at each step of the supply chain, from the producer to the licensee responsible for applying the logo to the consumer-ready product. FLO has developed distinct generic standards for two main types of producer organisations (small farmers" organisations and commercial farms and companies that employ hired labour) in accordance to their different ownership structures and other characteristics. The Fairtrade Labelling certification system is largely financed through the fees paid by the final commercial

Text Box 1: Organic Certifications

EKO SKAL (The Netherlands)

The Dutch EKO label is owned by Skal, a private foundation in charge of certifying organic production. Skal emerged as the single organic label in 1992 when two foundations (Stichting Ekokeurmerk Controle and Stichting Keur Alternatief voortgebrachte Landbouwproducten) merged as a result of EU regulation (Amstel et al., 2006). EKO is a voluntary consumer label implemented by the private sector under a self-regulation regime.

Soil Association (United Kingdom)

This association was founded in 1946 by a group of individuals concerned about the health implications of increasingly intensive agriculture systems. For the first 30 years, the association was based on a farm in Suffolk, where it conducted research and built a membership base. The first Soil Association standards were drawn up in 1967, but it was not until 1973 that a certification system was established to provide an independent audit and tracking system. Currently, about 80% of UK organic food is certified by the Soil Association and about 4% of agricultural land in the UK is organic. Organic farmers now receive on-going support and incentives from the government to manage their land organically.

Bio-Siegel (Germany)

In 2001, the Federal Agency for Agriculture and Food in Germany created the national Bio-Siegel (eco label) to group together a multitude of organic labels, ensuring differentiation for the consumer. The Bio-Siegel is mandatory for all agricultural products and foodstuffs from organic farming. Bio-Siegel is the national umbrella label of Germany and it is only given to producers and manufacturers who comply with the provisions of the EU Organic Farming Regulation. To date, more than 34,000 products from over 1,800 companies already bear the label.

operator in the supply chain, who pays a license fee for use of the Fairtrade logo on certified products. The actual costs of becoming certified, however, must be covered by the producers.

Figure 11 shows the introduction of Max Havelaar certified coffee to the Dutch market in the late 1980s (Eshuis and Harmsen, 2003) and its relatively stable market share over the years (TCC, 2009b). The certification of cocoa and tea came a decade later.

The UK is, in fact, the leader in Fairtrade certified product sales. Reports show that in 2004, 20% of ground coffee and 5% of tea on the UK market were Fairtrade certified, while in Germany only 1% of coffee and 2% of tea had Fairtrade certification (Krier, 2005). Unfortunately, this report does not offer data for the Netherlands. By 2006, these figures had increased across the product categories: the sale of certified coffee in the UK increased by 53%, while cocoa increased by 93%. The 2009 Annual Report of the Fairtrade Foundation UK (see Figure 12) shows that Fairtrade tea sales grew by 150% in volume in 2008, accounting for 70% of global Fairtrade tea sales.

Furthermore, a TNS public survey conducted in 2007 in the UK showed that awareness of the Fairtrade logo/products reached 57% of the adult population. Consumer awareness is expected to have increased due to the recent public commitments made by large multinational brands (e.g. Starbucks and Cadbury) in sourcing sustainable supplies for their products. In the case of cocoa, for instance, Cadbury recently committed to making one of its most popular products, the Cadbury Dairy Milk, more sustainable by using only Fairtrade certified cocoa in the British and Australian markets. This corporate move will triple the demand for Fairtrade certified cocoa from Ghana to 15,000 tons annually.

In the UK, the Fairtrade Foundation has drawn thousands of schools, workplaces and communities to its movement. The existing 435 Fairtrade Towns have made important commitments to procuring Fairtrade certified products and raising awareness among their communities. As part of its strategy, the Fairtrade Foundation has focused on strengthening the position of the public's favourite products – bananas, coffee, tea, sugar and cotton, as well as introducing new products such as olive oil, beer, sweets and flowers. It has also increased its producer base to include 463 producer groups in 56 different countries and has provided them with access to UK markets. Lastly, it is notable that during 2008, 85.6% of the Foundation's income was obtained from licence fees of companies marketing products that comply with the Fairtrade standards and carry the Fairtrade label. Only 5.1% was obtained from government grants, specifically from the Department for International Development (DFID) and the European Union (Fairtrade Foundation, 2009).

Rainforest Alliance

The Rainforest Alliance was created in 1987 when the "corporate responsibility" movement was still very young. A group of activists gathered in New York to raise awareness of rainforest destruction; foresters, timber company executives, scientists, loggers, environmentalists and other stakeholders debated alternatives to reckless and accelerating deforestation. The idea of setting standards for responsible forest management emerged from these meetings.

In 1989, the SmartWood programme was launched by what later became the Rainforest Alliance. Companies were urged to adopt prudent practices and best practices were rewarded with a seal of approval. Following the model developed for the timber industry, the Rainforest Alliance designed a certification programme for bananas in 1990. Rainforest Alliance organised a two-year-long series of meetings between banana farmers, NGOs, government agencies, community leaders and other stakeholders to develop production standards and guidelines. By 2000, 15% of all the bananas traded internationally carried the Rainforest Alliance logo.

Text Box 2: National Fairtrade Certifications

Max Havelaar (NL)

Initiated in 1986 by Nico Roozen from Solidaridad and Frans van der Hoff, a Dutch missionary working with Mexican coffee farmers. The Stichting Max Havelaar was founded by Solidaridad and it introduced the very first Fairtrade-labelled products in 1988. Coffee was the first certified product, later followed by cocoa, fruits, tea, wine, cotton and honey.

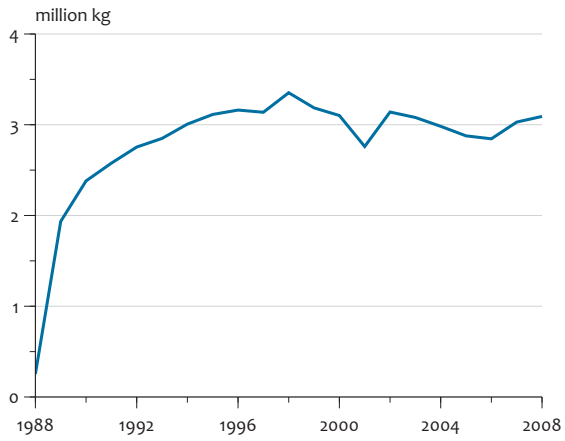
Fairtrade Foundation (UK)

The Fairtrade Foundation was established in the UK in 1992 by CAFOD, Christian Aid, Oxfam, Traidcraft and the World Development Movement, and was later joined by the National Federation of Women's Institutes, and now also includes other members such as Banana Link, Methodist Relief and Development Fund, Nicaragua Solidarity Campaign and People & Planet. The Fairtrade Foundation is the independent non-profit organisation that licenses use of the FAIRTRADE label on products in the UK in accordance with internationally agreed Fairtrade standards.

Transfair (Germany)

Transfair emerged in 1992 as a consequence of the expansion of the fair trade movement. It was established with the support of Christian Aid, environmental and development organisations. Since its beginnings, Transfair has expanded its product portfolio to other tropical products; it currently offers 15 certified product categories, for example bananas, dates, orange juice, honey, sports balls, quinoa and cotton. Transfair is completely civil-society driven and has had little government involvement since it started. Market penetration in Germany has been a difficult challenge since food is relatively cheap. In Switzerland, people spend on average 22 euros per capita per year on fair trade products, while in Germany this is just 2.70 euros.

Sales of Max Havelaar (Fair trade) coffee in the Netherlands **Figure 11**



Source: Max Havelaar
Max Havelaar coffee on the Dutch market.

Rainforest Alliance's guidelines and standards were developed by the Sustainable Agriculture Network (SAN), formed in 1998. The SAN is responsible for promoting certification in Latin America and is made up of environmental groups in Belize, Brazil, Colombia, Costa Rica, Ecuador, Mexico, and so on, plus many associated academic, agricultural and social responsibility groups from around the world. The RA is the international secretariat of the SAN and holds regional and international offices in ten different countries.

Once standards had been developed by the SAN, each of its members was allowed to provide certification services for farmers and agricultural companies in their respective countries. The system requires compliance with the internationally accepted Integrated Pest Management (IPM) model, which sets restrictions on the use of pesticides and agrochemicals and criteria for responsible farm management, including waste management, wildlife protection and labour, health and safety measures. The RA standard consists of ten principles, each made up of criteria that describe best practices for social and environmental management and are evaluated by the certification process.

Audit teams made up of Rainforest Alliance-trained specialists score farm performance and write a report that is then evaluated by an independent, voluntary committee of outside experts. Farms must comply with at least 50% of each principle's criteria and with 80% of all criteria to be allowed to bear the Rainforest Alliance label. This scoring system guides and encourages continuous improvement. The standards development process of the Rainforest Alliance complies with the Code of Good Practice for Setting Social and Environmental Standards of ISEAL Alliance, of which the RA is a Full Member.

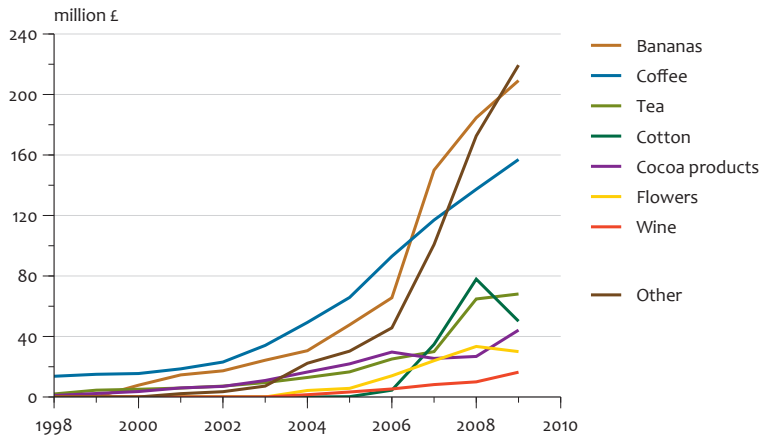
After banana certification, the programme was later expanded to coffee and in 1995 the first coffee farms were certified in Guatemala. In 1999, with support from the United Nations" Global Environment Facility (GEF), a Coffee and Biodiversity project was launched to use coffee farms as buffer zones in El Salvador. Similarly, the Rainforest Alliance became involved in cocoa in 1997 after forming a partnership with *Conservación y Desarrollo*, an Ecuadorian NGO. The cocoa programme was expanded to Africa and in 2006 began working with cocoa farmers in Ivory Coast. A total of 250 cocoa farms were certified in 2007. The certification of tea came only in 2007, when RA established an alliance with Unilever for certification of its Lipton and PG Tips brands. Unilever has a 12% share of the global tea market. Costa and McDonald's and other major retailers have also made public commitments to only supply their tea from RA certified farms.

Rainforest Alliance has global coverage, but its most important markets are the North-American, European, Japanese and Australian markets. Its cocoa programme underwent a 272 percent increase in the sale of certified cocoa last year, from an estimated $4.5 million in 2007 to $16.75 million in 2008 (Rainforest Alliance, 2009). Moreover, it was estimated that, in 2008, 1.3% of the world's coffee was Rainforest Alliance certified, with annual sales of Rainforest Alliance certified coffee approximating to USD$1 billion (Rainforest Alliance, 2009). Important certified coffee buyers include Kraft and Procter and Gamble. The Rainforest Alliance launched its tea certification programme in 2007 in Kenya and Argentina. Lipton has committed to source the tea for all its teabags from Rainforest Alliance certified farms by 2015 (Unilever, 2009).

GlobalGAP

GlobalGAP's predecessor, EUREPGAP, was initiated in 1997 by retailers belonging to the Euro-Retailer Produce Working Group (EUREP), to set voluntary standards for the certification of agricultural, livestock and aquaculture products around the world. European retailers were the driving force. The development of common certification standards was a reaction to growing consumer and producer concerns related to health, safety, environmental and animal welfare issues. EUREP started to work on harmonised

Estimated retail sales in Fair trade products in the United Kingdom **Figure 12**



Estimated UK retail sales of Fairtrade products by value 1998-2009 (Fairtrade Foundation, 2010)

standards and procedures for the development of Good Agricultural Practices (GAP) in 2000, and by 2001 the first fruit and vegetable standard was accredited. Since then, standards have also been developed for flowers and ornamental plants, combinable crops, cattle, sheep, pig, poultry, dairy, aquaculture, coffee, tea, shrimps, tilapia, pangasius and turkey.

GlobalGAP is a private sector body formed by retail (Coop, Ahold, McDonalds, Asda, Tesco, Aldi, etc.), supply (Del Monte, Driscoll's, Green Partners, etc.), and other associate members (Agrofair, SAI[11] global, Rainforest Alliance, European Crop Protection Association, UTZ Certified, etc.). It consists of a board, a secretariat, various sector committees, a certification body committee, an integrity surveillance committee and various national technical working groups.

The standard is built on various bases, starting with an integrated farm assurance standard, then an all farm base and a crop/livestock/aquaculture base and, lastly, a specific product base. The aim is to establish one standard for Good Agricultural Practice (G.A.P.) with different product applications that can be applied to the whole of global agriculture. GlobalGAP is not a member of ISEAL Alliance.

The GlobalGAP standard is primarily designed to assure retailers about how food has been produced on the farm by ensuring hygiene and food safety, minimising the environmental impacts of farming operations, reducing the use of chemical inputs and ensuring a responsible approach to worker health and safety as well as animal welfare. It is a *pre-farm gate* standard, which means that the certificate covers the process of the certified product from farm inputs such as feed or seedlings and all farming activities until the product leaves the farm. GlobalGAP is a business-to-business (B2B) trade label; it does not use a label on products and is, therefore, not directly visible to consumers.

GlobalGAP consists of a set of standard documents. These documents cover the GlobalGAP General Regulations, the GlobalGAP Control Points and Compliance Criteria and the GlobalGAP Checklist. GlobalGAP includes annual inspections of producers and additional unannounced inspections. According to some observers, GlobalGAP poses high administrative burdens and certification costs for farmers (www.fairmatchsupport.nl). Studies have proven, however, that GlobalGAP certification "contributed to the successful implementation of sound environmental practices" (Ras and Vermeulen 2009, 334). GlobalGAP has certified over 94,000 producers in 100 countries (GLOBALGAP, 2009). In South Africa, for instance, GlobalGAP has certified 95% of all table grape producers that export their produce to EU markets (Ras and Vermeulen, 2009).

The market information for GlobalGAP certified green coffee and tea is unavailable as their standards have only recently been made available (2008).

UTZ Certified

Utz Kapeh was initiated in the mid-1990s by Ward de Groote, then CEO of Ahold Coffee Company in the Netherlands, and Nick Bockland, the owner of the Finca Volcan coffee farm (one of the first UTZ Certified farms) in Guatemala. The first office of Utz Kapeh (as this system was originally called) was opened in Guatemala City in 1999 and its head office was opened in the Netherlands in 2002. The label Utz Kapeh was launched in 2002 by the Ahold Coffee Company and the coffee producers in Guatemala and has been financially supported by Solidaridad since 2004. In 2007, Utz Kapeh updated its name to UTZ Certified "Good inside", to communicate more clearly with international markets. It also began extending its programme to other commodities. UTZ expanded its certification programme to cocoa and palm oil in 2008 and to tea in 2009.

The UTZ Certified system targets mainstream markets. Unlike some other systems, UTZ Certified does not offer premium prices or guarantee a minimum price for farmers. Instead, the foundation works with farmers to produce commodities that can be sold at market prices (Vallejo, Morrison et al., 2004),

giving bigger brands the opportunity to purchase a large amount of responsibly produced products.

UTZ Certified is an independent multi-stakeholder initiative, and has an independent board with representatives from coffee growers, coffee traders and roasters, and NGOs. The Code of Conduct has been evaluated and recognised by all stakeholders involved in the programme. UTZ's expenses are covered by the administrative fee paid by UTZ registered buyers (1.2 USD ct. per lb. in the case of green coffee) and by subsidies from the European Union and several Dutch NGOs (Solidaridad, Hivos, DOEN and NCDO). Coffee, cocoa and tea producers have to pay for the auditing services of an independent Certification Body (CB), approved by UTZ Certified. UTZ Certified's accounts are audited annually by PriceWaterhouseCoopers and published in the annual report.

The UTZ Certified Code of Conduct is based on the principles of Good Agricultural Practices (GAP). UTZ Certified translated the EUREPGAP Protocol for Fruits and Vegetables to the specific conditions of coffee production in 1997, adding criteria from ILO (International Labour Organisation) Conventions. The Code was revised in 2003, when UTZ Certified became a foundation, with input from various stakeholders including coffee roasters, producers, NGOs, branch organisations and independent certification bodies. UTZ is an Associate Member of the ISEAL Alliance and intends to become a Full Member in the future.

Compliance is verified by a Certification Body, an independent third-party certifier, which determines whether producers comply with the UTZ Certified Code of Conduct and Chain of Custody requirements. UTZ Certified has also developed an online real-time traceability tool for tracking the origins of products. Traceability guarantees that certified products have originated from a certified sustainable source. It enables buyers throughout the supply chain to make credible sustainability claims. UTZ Certified runs its traceability system through a web based track-and-trace system, in which certified inputs and outputs are controlled at all stages of the supply chain. Additional benefits of traceability include more effective supply chain management, increased transparency and accountability, consumer marketing opportunities and issue/risk management.

The production of UTZ Certified coffee has continued to increase rapidly. In 2008, UTZ Certified coffee accounted for 4% of the total global production volume[12]. Main buyers of UTZ coffee include Albert Heijn (16,000 tonnes) and Douwe Egberts coffee (20,000 tonnes) (TCC, 2009b). UTZ Certified also forecasts growth in the out-of-home market, including food service and restaurants; examples include McDonalds, IKEA and various universities. As a result of this, the market share of coffee sold with Utz Certified in the Netherlands has grown to 53.617 tons, or 46% in 2009 (see Table 5).

Based on its expertise, UTZ is developing new markets for certified tea with Sara Lee and Solidaridad. The first shipment of UTZ Certified cocoa reached Europe in November 2009. UTZ is expected to increase the amount of certified tones from 8,000 to 36,000, thanks to commitments made by Cargill. Mars and Nestlé are also participating in the development of the UTZ cocoa standard and are expected to launch a purchasing policy that will further increase the demand for certified cocoa in the coming years.

3.2.4 Comparison and review

The certification/standards systems reviewed in this section have been designed to improve the production conditions of several agro-food products, primarily produced in developing countries. The five systems selected here are active in certifying coffee, cocoa and tea, among other products. The origin, scope and principles of these systems differ.

Organic is the oldest certification system and the only scheme regulated under national and supranational laws. Both the Organic and GlobalGAP schemes originally aimed to change production processes in Western countries, and it was only at a later stage that they were also applied to imported products from developing countries. The Fairtrade, Rainforest Alliance and UTZ Certified schemes, on the other hand, were developed exclusively for imported products from developing countries.

The latter three systems were developed by stakeholders in Western countries, sometimes in consultation with Southern partners and producers: Fairtrade and UTZ were initiated in the Netherlands, and Rainforest Alliance in the USA. While Fairtrade and Rainforest Alliance were both initiated by civil society organisations, UTZ Certified is the initiative of a retailer: Ahold Coffee Company. Today, UTZ Certified is a foundation involving actors from different sectors.

All the certification systems studied here, except Organic and GlobalGAP, began with the certification of one particular product and later expanded to other products. Max Havelaar (Fairtrade Netherlands) and UTZ, for example, began certifying coffee, while the Rainforest Alliance started certifying tropical timber. The GlobalGAP and Organic systems, however, originated to promote the broader adoption of more environmentally-friendly agricultural production methods in general. They developed standards for different product groups, ranging from plant and livestock production to plant propagation materials and compound feed manufacturing.

The standards developed by Organic, Rainforest Alliance and GlobalGAP are based on different approaches to agricultural production. Organic food is grown and processed without using synthetic fertilisers or pesticides, livestock feed additives or genetically modified organisms . It relies mainly on biological pest control, compost, crop rotation, green manure and mechanical cultivation. Organic agriculture uses methods that are nationally and internationally regulated .

The standards of the Rainforest Alliance require, among other things, compliance with internationally recognised Integrated Pest Management (IPM) practices. IPM is an environmentally sensitive approach to pest management that relies on a combination of practices based on the life cycles of pests and their interaction with the environment (Mengech, Saxena, Gopalan & Claridge, 1997; Flint, van den Bosch &

Sales of UTZ Certified coffee Table 5

Sales of UTZ Certified coffee	2002	2003	2004	2005	2006	2007	2008	2009
Sales worldwide (1000 kg))	3700	14000	21200	28800	36027	52571	77478	82058
Sales in the Netherlands (1000kg)	3700	11200	16168	23027	24696	31203	50053	53617

Source: Utz Certified

Pimentel, 1982). IPM takes advantage of every available pest management option and makes judicious use of pesticides (Kogan & Prokopy, 1987). Organic and IPM practices share some of their main principles, yet they also display important differences, for instance the fact that organic agriculture allows only the use of pesticides from natural sources, and that IPM practices cannot be identified or labelled since they include complex control processes that vary from place to place and from product to product.

Good Agricultural Practices (GAP) are a set of practices that comprise environmental, economic and social sustainability for on-farm processes. Their goal is to ensure the production of safe and high quality food and non-food agricultural products (Swanepoel & Alberts, 2009). GAPs rely on improved agricultural methods, such as fertiliser and pest management, which contribute to food quality, safety and security (Amekawa, 2009). The main difference between GAPs, IPM and Organic practices is that GAPs include additional principles aimed at maintaining viable farming enterprises that contribute to sustainable livelihoods and ensuring that they meet the cultural and social demands of society.

There has been a lot of discussion about the differences in the approaches taken by UTZ Certified and Fairtrade[13]. Max Havelaar (Fairtrade) was created with the clear developmental objective of helping small producers to access world markets and to improve their livelihoods. For decades, the fair trade movement has played a key role in raising consumer awareness of social and environmental issues in the production of coffee and other products. Years later, UTZ Certified was founded – to some extent as a consequence of changes brought about by Fairtrade – with the objective of creating a global mainstream standard for socially and environmentally responsible production. It aims to scale up the production of sustainable agro-commodities and to enable brands to incorporate and demonstrate responsibility in their entire product chain.

Moreover, each of the five certification systems reviewed here has a different approach to sustainability; while some place more emphasis on labour conditions for workers, others emphasise biodiversity protection or the application of better agricultural practices. These fundamental differences between the system approaches also imply some differences with regards to the stringency of the system standards. It is often pointed out that the Fairtrade and Organic systems are stricter, since they aim to create alternative trading models, while UTZ Certified, Rainforest Alliance and GlobalGAP work to improve existing practices and structures and should be regarded primarily as a tool for companies. The Fairtrade and Organic systems, on the other hand, strongly rely on committed consumers who make a deliberate choice for products that contribute to social and environmental improvements in the South and who are willing to pay a premium price so that producers can invest in their development. GlobalGAP, UTZ Certified and, to a much lesser extent, Rainforest Alliance, are based on the premise that it is the duty of brands to inform consumers where their product was produced and how. Since their systems are based on existing market structures and supply and demand, they do not offer guaranteed minimum prices or premiums.

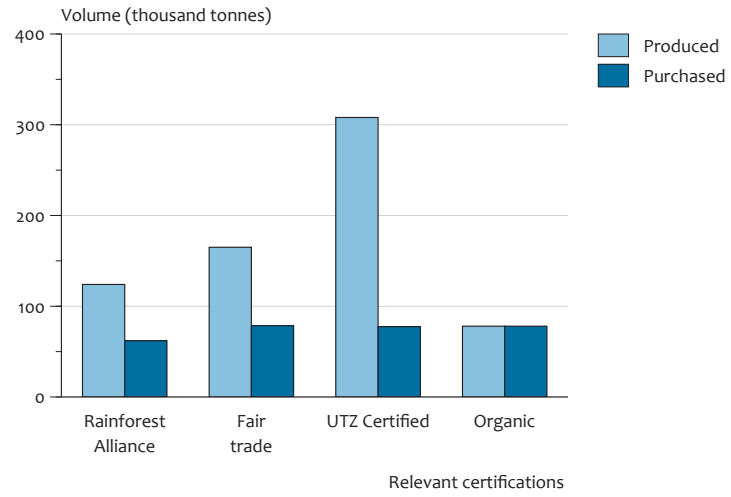
Knowledge and understanding of these differences is key to the appropriate selection of a system by consumers and to the measurement of its impacts. The systems have different aims and principles yet, in some cases, they can complement each other. The Tropical Commodity Coalition (TCC) has looked into the differences between different certification systems available for coffee and has given an overview of how the coverage of issues and principles differs between systems (see Appendix 1).

The content and design of the standards of each system pose further implications for the evaluation and accreditation of the different certification systems. As mentioned elsewhere in this report, international verification bodies, such as ISEAL, have been created to provide assurance on the credibility of voluntary certification systems and to strengthen their effectiveness and scale up their impacts. The Rainforest Alliance, IFOAM, Fairtrade Labelling Organisation and UTZ Certified all comply with the ISEAL's Codes of Good Practice and Codes of Conduct. GlobalGAP is not verified by the ISEAL Alliance.

In terms of market share, substantial differences between the different certification systems can also be observed (see Figure 13). The figure below shows sales volumes of certified coffee from each certification scheme for 2008. Although the production volume is larger than that actually purchased, experts believe that international markets will take up this production surplus as the market for certified coffee continues to grow: between 2002 and 2008, the world market share of certified coffee grew from 1% to 6%.

Market shares of both Organic and Fairtrade coffee on the Dutch market have remained stable in recent years (TCC, 2009b). In 2008, the Tropical Commodity Coalition estimated the sales of certified coffee on the Dutch market to be about 25% of (Fairtrade, Organic, Rainforest Alliance, UTZ Certified, 4C, C.A.F.E. or AAA) (TCC, 2009b). Recent data provided to us by Max Havelaar and Utz Certified show that the total market share of certified coffee on the Dutch market has strongly grown to 50% in 2009.

Global volume of certified coffee, 2008 **Figure 13**



Volume of certified coffee in 2008: available versus purchased (TCC, 2009b)

Organic coffee in Germany accounts for 2%, while the amount of Fairtrade coffee sold in Germany is low and often double certified with Organic. About 5% of coffee on the German market is considered to be certified.

With regards to cocoa, the world market is increasing but still far from becoming mainstream. In 2010, certified cocoa is expected to reach 3% of the world market (TCC 2009a). The estimated availability of certified cocoa in the years 2009 and 2010, along with a comparison of the different certification systems, are shown in Figure 14 below.

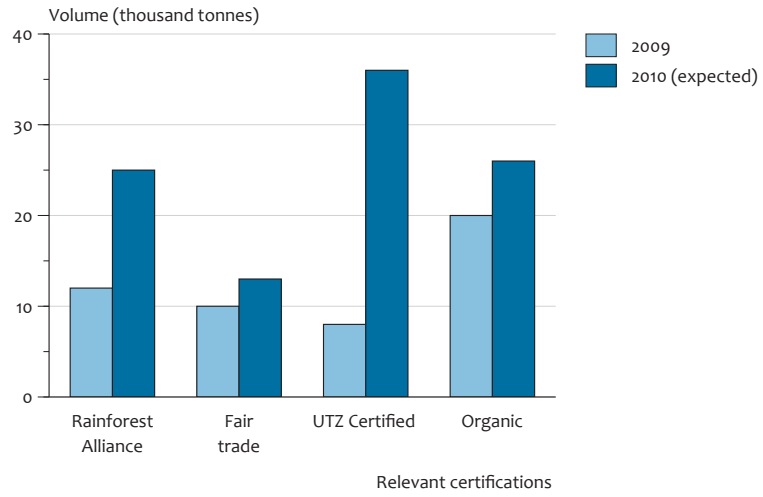
It is also important to mention here the rapid expansion of the different certification systems to include other products. As we saw earlier in this section, all the certification systems reviewed here began with the certification of one particular product and later expanded to certify other products. This shows a clear trend towards the use of private voluntary certification systems as mechanisms to fight the negative impacts of global trade. With time, certification systems have become more and more professionalised and have accumulated valuable expertise which they are using to include additional products in their inventories and also to collaborate with similar, complementary initiatives. In the tea sector, for example, both UTZ Certified and the Rainforest Alliance have signed a memorandum of understanding with the Ethical Tea Partnership[14] to align their activities in Africa and Asia and to allow ETP-monitored producers to obtain certification.

Lastly, it is important to note that during this research the availability of monitoring data was found to be limited, especially for the cocoa and tea sectors. This situation is partially understandable as certified cocoa and tea have only been available since recently and monitoring activities have only just begun. Monitoring, however, will be of the utmost importance in the near future; information on market shares and the impacts of certification will be crucial in determining the role of private voluntary certification systems in bringing sustainability about.

Notes

1) The Ministry of Agriculture, Nature and Food Quality issued 'the minimum requirements for timber certification and sustainable forestry' in 1997.
2) Intergovernmental processes refer to a series of ongoing mechanisms supported by 149 governments and covering 85% of the world's forest area (PEFC, 2009). Its members include national governing bodies, industrial confederations and unions.
3) The percentage is calculated from Figure 7 of the Aidenvironment report (2008). The sum of all FSC certified tropical timber in 2007 was 151,883 m^3. As the total import of FSC certified timber to the Netherlands was 825,703 m^3, the percentage of tropical FSC timber was 18.39%.
4) FEC, PEFC, MTCC, CSA, SFI, and the rest certified by Keurhout.
5) The Starbucks C.A.F.E. (Coffee and Farmer Equity) Practices is a green coffee sourcing guideline developed in collaboration with Scientific Certification Systems (SCS), a third party evaluation and certification firm, that evaluates, recognises and rewards producers of high-quality sustainably grown coffee. http://www.scscertified.com/retail/rss_starbucks.php; www.starbucks.com
6) The Cadbury Cocoa Partnership is a partnership between Cadbury, the United Nations Development Programme (UNDP), local governments and communities, established in 2008 to secure the economic, social and environmental sustainability of cocoa farmers in Ghana, India, Indonesia and the Caribbean. £45 million GBP will be invested over a ten year period. http://www.cadbury.com/media/press/Pages/100ghanaian.aspx
7) Unilever, the world's largest tea company, made a commitment in 2007 to source only sustainably-produced tea for its Lipton and PG Tips brands by 2015. For this purpose, it has begun to have its tea states in Kenya certified by the Rainforest Alliance. http://www.unilever.com/sustainability/environment/agriculture/sustainabletea/
8) http://www.bsci-eu.org/
9) http://www.ethicaltrade.org/
10) http://www.unilever.com/sustainability/environment/agriculture/ourapproach/default.aspx

Global volume of certified cocoa **Figure 14**



Expected availability of certified cocoa in 2009 and 2010 (TCC, 2009a)

11) Sustainable Agriculture Initiative
12) Total global production in 2008 was 120,000,000 bags, of which 5,141,059 were UTZ Certified.
13) For a more thorough review of this discussion, go to http://www.Utzcertified.org/index.php?pageID=111to read a positioning document published by UTZ Certified in 2007.
14) The Ethical Tea Partnership (ETP) is an alliance of tea packers who work together to improve the sustainability of the tea sector. Companies involved range from major multinationals to privately owned specialists producing 'boutique' blends. Together they cover around 50 brands, on sale in over 100 countries. http://www.ethicalteapartnership.org/index.asp

4

Government roles in supporting voluntary certification systems for the tropical timber and tropical commodity sectors

The previous chapter of this report described relevant voluntary certification systems for tropical timber and tropical commodity products. This chapter presents the instruments that governments have used to support the different stages of the development and implementation of these voluntary private certification systems. The findings presented in this chapter were obtained from interviews conducted with government officials and sustainable supply system managers (for a list of interviewees, please refer to Appendix 2).

For analytical purposes, the stages of development of a system are divided into two main stages: development and implementation. The development stage is the period in which a certification system is being developed by the various partners. The implementation stage starts when the certification rules have been decided and the system is ready for application by producers, traders and retailers.

During the development stage, government instruments and activities are aimed at supporting initiation or rule-making activities. During the implementation stage, governments were found to provide support for the operation of the systems and to support activities on both the supply and demand side of the supply chain, including activities at the end of the chain related to consumers.

In accordance with the framework presented in the second chapter of this report, the observation is made that governments are developing new ways of supporting and facilitating self-regulatory initiatives that emerge in the market. Governments use a set of instruments that combine elements from traditional government strategies – *central regulation by means of coercion and incentives* as well as *interactive regulation and internalisation* – in addition to more novel strategies aimed at facilitating the market game - *facilitating self regulation* and *acting as active institutional consumer*.

4.1 Development stage

Table 6 shows in its first column the categories of instruments that have been traditionally identified in literature for each government strategy. The second and third columns show the actual instruments that were found to be used by the governments of the Netherlands, Germany and the United Kingdom to support the *development stage* of various certification systems for the tropical timber and cocoa, coffee and tea chains.

The next sub-sections of this report present specific examples of the activities and instruments used by governments to support private certification systems for the two product groups reviewed in this study: Section 4.1.1 presents a description of the instruments used to support initiatives in the tropical timber chain, while Section 4.1.2 describes the instruments used to support initiatives in the cocoa, coffee and tea chains.

4.1.1 Tropical timber chain

The large majority of the world's forests are owned by governments and other public bodies (Siry et al 2005). Because of this, considerable government interest and involvement in sustainable forest management and trade is observed. This becomes evident when looking at the great

Government instruments applied in the SSCG system development stage for tropical timber and coffee, cocoa and tea **Table 6**

Development stage: Governments on the side line		
Instrument category	Instrument examples	
	Tropical timber	Coffee, cocoa and tea
Strategy 1: Classical central regulation by means of coercion and incentives		
1A Direct regulation	- Intergovernmental processes to define criteria - Defining minimum standards	- Defining minimum standards
1B Economic incentives		
1C General communication	- Communicating political support	- Expressing views on corporate responsibilities
Strategy 2: Interactive regulation and internalisation		
2A Cooperation with target groups	- Covenant Tropical Timber (1993) - Development of 2nd system	
2B Financing cooperative programmes		
Strategy 3: Facilitating self regulation		
3A Indirect regulation		
3B Economic incentives	- Direct financial support for initial studies	- Minor direct financial support - Indirect funding through NGO
3C General communication		- Positive recognition of a particular system
3D Network creation		- Funding certification-initiating networks - Participation in multi-stakeholder initiatives - Creation of new actors in the playing field
Strategy 4: Government as active consumer in the market place		
4A Selective public procurement		

number of existing intergovernmental processes that have been initiated to bring about agreements on criteria and indicators for sustainable forest management. Interviewees identified five different instruments used by governments to support private regulation. These are presented in the following sub-sections.

Strategy 1: Classical central regulation by means of coercion and incentives

1A Direct regulation

Intergovernmental processes to define criteria
PEFC was created in Europe by forest managers and owners, including state forest owners, for European forests. It was launched in 1999 to endorse timber certification schemes that had been developed mostly in Western countries, in reaction to the introduction of FSC. For the PEFC, sustainable forest management standards that had been developed by a variety of intergovernmental processes in different parts of the world became the standards of reference for assessing the credibility of any certification system claiming to ensure sustainable forest management. Since the early 1990s, various intergovernmental processes have been created to agree on the guidelines for sustainable forestry specific to regions of the world or forest types.

Defining minimum standards
In 1997, the Ministry of Agriculture, Nature and Food Quality of the Netherlands issued "Minimum Requirements for Timber Certification and Sustainable Forestry" (Minimumeisen voor Certificering en Duurzaam Bosbeheer) that were to serve as a national assessment guideline for sustainable forest management and the trade network for wood from sustainably managed forests. These standards were replaced by a new assessment guideline (BRL) in 2005.

1C General communication

Communicating political support
In 1991, the Dutch government published its vision on tropical forests (Regeringsstandpunt Tropisch Regenwoud), which stated that, by 1995, only sustainably produced timber should be imported. This policy document and its ambitious goal triggered discussion as to what sustainable timber is. The Dutch government became generally supportive of the FSC initiative, even when tropical forest-owning countries were not particularly in favour of such an initiative, and it became an important importer of FSC certified timber.

Strategy 2: Interactive regulation and internalisation

2A Cooperation with target groups

Covenant Tropical Timber
As a result of the previously mentioned government policy on tropical timber (Regeringsstandpunt Tropisch Regenwoud), a voluntary agreement with the sector was signed. It included the agreement to develop a certificate to enable the traceability of timber products.

Development of second system
In reaction to the emergence of an increasing number of timber certification systems, a second type of certification system appeared to certify already existing systems. At this point, the objective of the Dutch government was to define what sustainable forest management is and to provide clarity in terms of the various existing forest management labels and their standards (Assessment Criteria Tropical Timber). To be able to assess every timber certification scheme against this minimum requirement, the business sector established the Keurhout Foundation (Stichting Keurhout) in 1996, supported by the Ministry of Agriculture, Nature and Food (LNV) and

the Ministry of Environment (VROM). The establishment of the Keurhout certificate, the additional labelling system, met resistance from the FSC, which was at that time perceived as the only sustainable timber certification scheme. The Keurhout system was labelled as ineffective in a formal evaluation conducted in 2001 by LNV. A similar role is now played by PEFC International, which endorses existing certification schemes against internationally defined criteria for sustainable forestry.

Strategy 3: Facilitating self regulation

3B Economic incentives

Financial support for initial studies
In 1992, at the very beginning of the development of FSC, some governments provided the Interim Board with funding to conduct a series of consultations and studies on forest certification to see if there was a positive demand for such a system (Cashore et al., 2006). The Dutch government took part in this initial financial support, along with the Austrian, Swiss, British and Mexican governments and a number of NGOs. National governments had no further major role in the discussion and development of FSC's international principles and criteria; these were developed primarily by actors in tropical countries with the involvement of local government. Nevertheless, the Dutch government facilitated and financed the "Landedtafel" working group when setting the FSC national standards for Dutch forests.

4.1.2 Coffee, tea and cocoa chains

Government involvement in the development of private certification systems for the cocoa, coffee and tea chains was also limited. Chapter 3 reviewed the emergence of the Organic, Fairtrade, Rainforest Alliance, GlobalGAP and UTZ Certified certification systems as private-led and self-regulatory initiatives and already highlighted the limited government support during their development stage.

Organic certification schemes were the first to emerge and, since then, have served as inspiration for certification initiatives aimed at other product chains (Cashore et al 2006). Organic certifications, however, are fundamentally different from all the others, since they are regulated under national and EU legislation. Organic producers from developing countries also need to comply both with domestic organic regulations and with European regulations if they wish to export their products to EU countries. The choice whether to export products to EU countries lies in the hands of the producers, who determine the markets in which they want to sell their products. The use of the EU Organic label is however regulated and producers must comply with certain requirements if they want their products to bear a label.

The organic movement was initially not much welcomed by the governments of most countries since government goals were focused on increasing production through conventional production methods and intensification, while the organic movement fought for natural production systems that relied on ecological processes and prohibited the use of synthetic fertilisers and pesticides. Nevertheless, governments later recognised the aggregated value offered by organic agriculture and incorporated standards into regulations, in some cases even offering subsidies to organic producers.

Due to these particular characteristics, the Organic system is the only one to have received traditional government support during its development stage. Governments, nevertheless, were found to be more active in facilitating self regulation, by providing direct and indirect financial support to the certification systems reviewed here and by supporting the creation of networks to facilitate and expand their activities. The following sub-sections present a brief description of eight instruments and activities that governments have used to support the Organic, Fairtrade, Rainforest Alliance, GlobalGAP and UTZ Certified systems during their development stage.

Strategy 1: Classical central regulation by means of coercion and incentives

1A Direct regulation

Defining minimum standards
The organic movement took root in many European countries and in the 1990s organic production was recognised and regulated under a harmonised framework. In 1991, the European Council of Agricultural Ministers adopted the Regulation on Organic Farming and the corresponding labelling of agricultural products and foods (EEC No. 2092/91). Organic agriculture received official EU recognition, which created common minimum standards for all its members, leaving the states and private organisations to enact their own additional stricter standards. In 1999, a similar Council regulation was issued on the production, labelling and inspection of the most relevant animal species (EU No. 1804/1999). The initial 1991 regulation was renewed in 2007 (EC No. 834/2007). This new Council Regulation contains clearly defined goals, principles and general rules for organic production. Under this new regulation, the use of a common EU logo on organic products became obligatory.

1C General communication

Expressing views on corporate responsibilities
It is suspected that the government may have raised the issues of traceability and corporate responsibility among large retailers to draw attention to responsible supply chain management. In around 1996, for instance, the Ahold Coffee Company received much criticism from Minister Herfkens (Development Cooperation), who questioned the traceability of the company's products. As a result of this, Ahold revised its sourcing practices and eventually introduced a new certification system that led to the creation of what is now UTZ Certified.

Strategy 3: Facilitating self regulation

3B Economic incentives

Minor financial support
The Max Havelaar initiative is the pioneer of Fairtrade initiatives around the world. It began in the Netherlands

in the late 1980s when two social entrepreneurs working in development cooperation and Alternative Trade Organisations (ATOs) developed a new trade model based on fair conditions for the producers. The establishment of the Max Havelaar Foundation was possible partly due to a financial contribution made by the Department of Development Cooperation of the Ministry of Foreign Affairs (DGIS). In the late 1980s, the DGIS made a contribution of 250,000 guilders, which accounted for about 10% of the total initial budget of 3,000,000 guilders. The other 90% of this initial budget was collected mainly from other civil society organisations.

Indirect funding through an NGO
After UTZ Certified became a foundation in 2002 it received some money indirectly from the government (DGIS) through non-governmental organisations such as Solidaridad.

3C General Communication

Positive recognition of a particular system
In the Netherlands, the Department of Development Cooperation of the Ministry of Foreign Affairs (DGIS) showed interest in the Max Havelaar initiative because of its constructiveness and innovativeness. The Dutch royal family also supported the initiative. In 1998, Prince Claus received the first bag of certified coffee, endorsing and providing political support for Max Havelaar and the fair trade movement.

In the UK and in Germany, government actors did not play noticeable roles in setting up the national fair trade certification systems: Fairtrade Foundation in the UK (1992) and Transfair in Germany (1992). Interviewees point out that, contrary to what had happened in the Netherlands, these organisations did not receive any initial financial support from the government, but were perceived as innovative and alternative options to traditional trade by both governments. Rule-making and standard-setting activities were at this point made solely by the people involved in establishing the fair trade organisations in each country, without government involvement.

The UTZ Certified scheme was initiated in the Netherlands, about ten years after the introduction of the first Max Havelaar products. At first it did not receive enthusiastic support from the Dutch government. At that time, the preference of the government (especially of the DGIS) for Max Havelaar was clear and justified by its direct impact on development cooperation efforts in developing countries.

3D Network creation

Funding certification initiating networks
The Ministry of Agriculture, Nature and Fisheries (LNV) of the Netherlands provided substantial funds for the organisation of the first (2007) and second (2009) meetings of the Roundtable for a Sustainable Cocoa Economy (RSCE) and will again support its third meeting this year.

Participation in multi-stakeholder initiatives
LNV participates in the Roundtable for a Sustainable Cocoa Economy (RSCE) as a stakeholder, along with the governments of cocoa producing and consuming countries, the cocoa industry, NGOs and representatives of Fairtrade, Organic, Rainforest Alliance and UTZ Certified. LNV participation in and funding of the RSCE is an additional example of political commitment to problem solving, which is supported by related activities including setting guidelines for research, putting the issue on the political agenda and brokering information between stakeholders.

Creation of new actors in the playing field
More recently, the Ministry of Foreign Affairs (BUZA) has tried to stimulate alliances between different sectors of society so that government's financial contributions can reach a wider number of organisations through these alliances. The cocoa and tea chains are, among other product chains, the focus of the Sustainable Trade Initiative (Initiatief Duurzame Handel, IDH)[1], a platform created by BUZA to make strategic interventions using a value chain vision. IDH plays an initiating and facilitating role in creating cooperation between the main stakeholders in a number of product chains: cocoa, tropical timber, tea, natural stone, soy, tourism, cotton and aquaculture. Their programme aims to identify and jointly address bottlenecks in mainstreaming sustainable supply chain management. Within just one year of its conception, IDH has already shown some success and its duration has been extended for two more years, until 2015. It has been awarded 20 million euros from DGIS in addition to the original 80 million euro budget.

The principal roles of BUZA in this initiative are to provide financial funding and to act as convener, bringing different organisations to the table, promoting the initiative and helping the process to advance faster. In the case of cocoa, IDH works with Solidaridad, Cargill, Nestlé and UTZ Certified to produce certified cocoa. Sustainable cocoa programmes already existed before IDH, but it has built bridges between initiatives and added €3.6 million of the total €9.7 million budget. In the case of tea, IDH includes NGOs, research institutes and the corporate sector. Unilever, Sara Lee, Twinings and Tetley – who together account for 40% of the Western market for black tea – are involved in the IDH Tea Programme, which has an allocated budget of €9.2 million (€4.1 from IDH).

4.1.3. Conclusion

The review of the development stage of the systems analysed here indentified 12 different instruments or activities used by governments, of which only one, defining minimum standards, was used both in the tropical timber and the cocoa, coffee and tea chains. Government involvement in the earlier stages of certification system development is identified as mostly belonging to instruments in Strategy 1: classical central regulation by means of coercion and incentives.

As discussed in Chapter 3, private initiatives are linked to various types of government activity: FSC emerged as a reaction to intergovernmental processes, while PEFC was created using criteria developed in such intergovernmental

processes. PEFC is a timber certification system that evaluates and endorses already existing national certifications, such as the Canadian Standards Association (CSA). PEFC is perceived to be business driven and to focus on compliance with national regulations, while FSC is usually considered to be civil society driven. The level of government involvement and support during the development stage of these systems is therefore quite different: FSC is more or less supported merely by communicating political support, while government involvement in the initiation of *Keurhout* has been far more active.

For the case of the cocoa, coffee and tea chains, this report contains no reference to the development stages of Rainforest Alliance and GlobalGAP because they received no governmental support. Rainforest Alliance was initiated in the USA and has never received direct financial support from this or any other government, while GlobalGAP was initiated by retailers together with farmer unions and importers, who jointly developed a harmonised approach to safety and health requirements for imported food. GobalGAP was inspired by other existing certification systems such as organic and meat traceability initiatives, but was initially entirely privately driven.

4.2 Implementation stage

The implementation and management of a certification system may be more complex than its development. Implementation activities deal with the supply and demand of certified products, their promotion, and their consolidation in national and international markets. Governments were found to be more active during the implementation stage of private voluntary certification systems, in particular because they began to be regarded as tools for international development, environmental protection and market transformation. Table 7 shows that, during the implementation stage, governments have supported private certification by engaging in inspection agreements and the regulation of minimum standards for certain products; but most importantly, governments have facilitated self regulation by providing various types of economic incentives, promoting consumer awareness, and procuring sustainably-produced goods by governments.

The next sub-sections present specific examples of the activities and instruments used by governments to support the *implementation stage* of private certification systems for the two product groups reviewed in this study: Section 4.2.1 presents a description of the instruments used to support the implementation stage of various initiatives in the tropical timber chain, while Section 4.2.2 is dedicated to instruments used to support initiatives in the cocoa, coffee and tea chains. Instruments shown in brackets have been discussed but have not yet been applied in practice.

4.2.1 Tropical timber chain

This study found evidence of active government involvement in supporting the implementation stage of the FSC and PEFC certification systems. Fifteen instruments have been identified, of which thirteen have actually been applied, while the other two have only been discussed.

Several of the instruments have been designed to deal with the problem of illegal logging. As mentioned in earlier chapters, illegal logging is one of the main causes of deforestation and biodiversity loss and governments around the world have taken an active role in condemning the illegal logging trade. Governments have also realised their potential as consumers of timber products and have adopted sustainable public procurement policies that have resulted in increased demand for certified products and have set a positive example in the eyes of the consumer citizen.

Strategy 1: Classical central regulation by means of coercion and incentives

1A Direct regulation

Bilateral product inspection agreement
The legality issue is a separate discussion from sustainability and is mainly addressed under the EU framework. As mentioned in Chapter 3, the EU adopted the Forest Law Enforcement and Trade (FLEGT) Action Plan in 2005, which aims to help countries to properly organise their forest management sector. Wood supplied directly from other countries to the EU can be inspected under Voluntary Partnerships Agreements (VPA), while wood from FLEGT countries without a license could be rejected by importing EU countries. The Netherlands, for example, supports the European Commission in its negotiations with Malaysia regarding VPA. Wood coming into the EU through non-FLEGT countries, however, does not fall under this programme and the import of illegal wood cannot be prohibited due to WTO free trade regulations.

Prosecution of importers of illegal timber
Under Dutch law, importers cannot be required to prove that the wood they import is legal. Governments cannot prosecute companies that import illegally felled wood. Only those species listed as endangered or protected species under CITES can be legally protected (in the case of the Netherlands, these are included in the Dutch Flora and Fauna Act). The Dutch government also supports UNEP's work in identifying and including vulnerable tree species in CITES. This instrument has been widely discussed and explored but has not yet been applied.

Import restrictions for illegally sourced timber
In exceptional cases, the Dutch government has been able to prohibit wood imports from conflict areas by means of international sanctions. This was the case in the early 2000s when a United Nations Security Council embargo came into force to cease Liberia wood imports. Liberia has some of the last pristine forests in the region and timber is one of the country's largest taxable exports, but also a source of environmental destruction and corruption.

Setting traceability and legality obligations for timber importers
As a follow up to the FLEGT, a related regulation is being proposed which will make it obligatory for traders to identify the country of origin of their timber, as well as to ensure that the timber they sell has been felled according to the relevant laws of that country. This will enable Member States

Government instruments in the SSCG system implementation stage **Table 7**

Implementation stage: Governments in the market place		
Instrument category	Instrument examples	
	Tropical timber	Coffee, cocoa and tea
Strategy 1: Classical central regulation by means of coercion and incentives		
1A Direct regulation	- Bilateral product inspection agreements - (Prosecution of importers of illegal timber) - Import restrictions for illegally sourced timber - (Setting traceability and legality obligations for timber importers)	- Regulation of organic produce - (Defining minimum standards)
1B Economic incentives	- Creating special tax arrangements	
1C General communication		
Strategy 2: Interactive regulation and internalisation		
2A Cooperation with target groups		- Promotion of voluntary CSR
2B Financing cooperative programmes	- Financing cooperative action plans or campaigns	
Strategy 3: Facilitating self regulation		
3A Indirect regulation		- Regulating bottom line requirements for private certification systems
3B Economic incentives	- Applying special tax arrangements - Financing activities related to implementation - Indirect funding through NGOs	- Voluntary agreements on product supply in retail - Financing activities related to implementation - Indirect funding through NGOs - Support critical consumer NGOs
3C General communication	- Promoting consumer awareness - Monitoring the market	- Declaring political support for actors in the market game - Promoting consumer awareness
3D Network creation	- Creation of new actors in the playing field	- Creation of new actors in the playing field - Evaluation of impacts
Strategy 4: Government as active consumer in the market place		
4A Selective public procurement	- Definition of own minimum requirements - Voluntary public procurement programmes - Formal regulation of public procurement decisions	- Definition of own minimum requirements - Voluntary public procurement programmes - Formal regulation of public procurement decisions

to significantly influence illegal logging and send a strong message to suppliers to the EU market. During the discussion preceding implementation of this law, the Dutch government has already indicated that both PEFC and FSC certification guarantees the legal origin of wood and paper products. It is most likely that this EU law will also recognise such sustainable forest management certifications as satisfactory proof of legality. This will allow certification systems such as PEFC and FSC to avoid extra administration to comply with the new law. This instrument is still in the discussion stage and has not yet been applied.

1B Economic incentives

Create special tax arrangements
Governments have been found to support the implementation of certification systems for tropical timber by creating special tax arrangements that aim to reward those that consume more sustainable products. These arrangements include setting tax levies on uncertified products and granting tax discounts or tax cuts for those that are certified. In the Netherlands, for example, PEFC Netherlands has been recognised by the tax office as an Algemeen Nut Beogende Instellingen (ANBI), and may therefore take advantage of some tax benefits.

Strategy 2: Interactive regulation and internalisation

2B Financing cooperative programmes

Financing of cooperative action plans or campaigns
The Dutch government also supports initiatives taken by businesses to exclude illegal wood from the market. To meet its goal under FLEGT initiatives, the European Commission made 3.5 million euros available for the Timber Trade Action Plan (TTAP), initiated by the Dutch Timber Trade Association and similar associations from the UK, Belgium and France, as well as the UCBD (European Hardwood Federation) and FEBO (European Timber Trade Association). 80% of all the VVHN's activities (2005-2010) against illegal logging in Indonesia, Malaysia, Cameroon and Gabon will be financed by the EU. The LNV will cover half of the budget of the remaining 20%.

Strategy 3: Facilitating self regulation

3B Economic incentives

Create special tax arrangements
Discussion is ongoing concerning the introduction of a tax levy on non-sustainable timber in the Netherlands. This idea, however, is not accepted in the EU and at the international level, because the use of VAT (Value Added Tax) needs to comply with EU guidelines and regulations. An extensive legal study carried out to further analyse this possibility recommended that the government should not introduce a

tax on non-sustainably produced timber during this cabinet period. The underlying legal framework, uncertainty over the administrative burdens, and questions over the practical implementation are considered to be the challenges. Moreover, the current economic situation, as well as potential conflicts with WTO rules, has an important impact on such an approach.

Financing activities related to implementation
The governments of Germany, the United Kingdom and the Netherlands have supported the PEFC and FSC certification systems by providing some financial resources to pay for activities related to the implementation of these systems. This funding has included providing funds to run the system, to train farmers, to develop the capacity of producers, to form partnerships with local organisations, and so on. These funds can be untagged in the sense that the system itself decides at a later stage how they should be applied, or they can be in the form of competitive grants for which the system needs to present a work plan and compete for the money.

In the case of the FSC, 34% of its funds come from charitable foundations, government donations and business contributions. The other 66% is generated from membership and accreditation fees and services rendered. PEFC Netherlands does not receive any financial support for running its office and programmes from the Dutch government. The Ministries of the Environment, Nature and Fisheries (LNV) and Foreign Affairs (BUZA), together with NUFFIC, have also been involved in capacity building for foresters from developing countries, through a programme called Wageningen International at Wageningen University in the Netherlands. In the United Kingdom, the Departments of Environment, Food and Rural Agriculture (DEFRA) and Foreign International Development (DFID) have created Sustainable Development Dialogues with five major developing countries, including Brazil, on topics related to sustainable forest management and the environment.

Indirect funding through an NGO
In 2005, FSC Netherlands formulated a plan to increase the market share of FSC certified wood from 11% to 25% by 2008. In implementing this goal through 1) concluding agreements, 2) participant recruitment and 3) communication, FSC Netherlands has received financial support from Stichting DOEN, VROM and EZ, as well as ICCO[2].

3C General communication

Promoting consumer awareness
Government support is often focused on also creating demand for certified products. In this role, the government usually functions as a broker, connecting the certification system with its potential clients. In the Netherlands, the Ministry of Housing, Spatial Planning and the Environment (VROM) makes agreements with housing corporations and building contractors to encourage the use of sustainable wood. In the UK, funding from DFID supports the Fairtrade Schools scheme that aims to provide a space in which teachers and students can exchange ideas on issues related to fair trade and development. In the Netherlands, the consumer information organisation Milieucentraal provides information on available certification scheme on its website.

Monitoring the market
As part of their activities to increase market share for certified products in the Netherlands, VROM and LNV also monitor the timber market on issues related to sustainability and legality, supporting NGOs in commissioning and publishing reports for the industry and consumers. Studies by the NGOs AidEnvironment and Probos are examples of these types of activities; they were largely sponsored by the government. Since the late 1990s, DEFRA in the UK has also publicly praised the work of FSC as well as the use of FSC certified woods.

3D Network creation

Creation of new actors in the playing field
In recent years, governments have supported initiatives or forums that directly or indirectly support certification systems. The Initiatief Duurzame Handel (IDH) in the Netherlands (refer to Section 4.1.2 of this report for more detail) is an example of this. IDH aims to scale up the FSC certification of tropical timber concessions in the Amazon and Indonesia, to increase market demand for FSC tropical timber and increase its market share in the Netherlands to a minimum of 33%. IDH has allocated 6.6 million euros for the programme in the Amazon and 2 million euros over a five year period for the Indonesian project. PEFC certified wood is not yet supported by IDH. Although IDH's programmes are implemented in collaboration with different actors, the start-up budget comes from the Ministry of Foreign Affairs of the Netherlands, specifically from the DGIS directorate.

Similarly, the German government set up the Programme Office for Social and Ecological Standards in 2001 to study and evaluate the impacts of private certification systems and to determine ways for governmental intervention (refer to Chapter 5 for more details on this programme).

Strategy 4: Government as active consumer in the market place

4A Selective public procurement

Defining own minimum requirements for procurement
Following the 1992 Regeringsstandpunt Tropisch Regenwoud, the LNV issued the "Minimum Requirements for Timber Certification and Sustainable Forestry" (Minimumeisen voor Certificering en Duurzaam Bosbeheer) in 1997. The Dutch government's objective was to define what sustainable forest management is and to provide clarity in terms of the various existing forest management labels and their standards. The LNV assessed every timber certification scheme against this minimum requirement and established the Keurhout Foundation (Stichting Keurhout), together with businesses. The establishment of Keurhout, another labelling system in effect, met with resistance from the FSC, which was perceived as the only sustainable timber certification scheme. The Keurhout system was labelled as ineffective in a formal evaluation conducted in 2001 by LNV. In 2002, and together with progressive timber industries and environmental organisations, VROM and LNV decided to formulate an

assessment guideline for sustainable forest management requirements, solely for the purpose of public procurement. The result was the Dutch Timber Procurement Assessment Committee (TPAC), which initially set very stringent criteria (even higher than those of PEFC and FSC).

After a few corrections, FSC International received a positive assessment from the TPAC. This was, however, not the case for PEFC International. PEFC endorsed programmes are assessed individually. Only a few PEFC endorsed certifications have been assessed and confirmed as meeting the TPAC criteria: PEFC Germany, Finland and Sweden. The preliminary results of the assessment of PEFC International indicated the need to further clarify some of the organisation's benchmark requirements. PEFC has expressed its commitment to collaborate with the TPAC in working towards the timely endorsement of PEFC International by TPAC. PEFC hopes to be positively assessed once the modification requirements have been fully implemented.

Voluntary public procurement programmes
In June 2004, the Dutch government decided that wood purchases by public authorities should be sustainable to the greatest possible extent. The lower house of parliament adopted a resolution in 2005 (motie Koopmans – De Krom) which requires the state to purchase only sustainable products (including timber products) as of 2010 at the latest. VROM is responsible for public procurement and for drafting the purchasing policy of the Dutch government. In the UK, the Procurement Policy on Timber and Timber Products was introduced in 2000. Since then, the Department of Environment, Food and Rural Affairs (DEFRA) has conducted an extensive study of the main certification schemes (FSC, PEFC, CSA, SFI and MTCC) to determine which schemes meet UK government requirements. In 2002, DEFRA established the Central Point of Expertise in Timber (CEPT). CEPT plays a similar role to TPAC in the Netherlands. The CEPT's 2008 assessment drew a different conclusion to that of TPAC, as it accepted both FSC and PEFC International.

Formal regulation of public procurement decisions
The UK Government's timber procurement policy introduced in 2000 (see above) required its departments to actively seek to purchase legal and sustainable timber and timber products. This changed on 1 April 2009 and the policy[3] now demands that all timber and wood-derived products must be from independently verifiable legal and sustainable sources or must be FLEGT-licensed timber or equivalent. Timber which only meets the legality criteria is only accepted in very special cases. Further, DEFRA is also engaged in the exchange of its public procurement standards with Brazil and other countries interested in designing their own public procurement policy.

4.2.2 Coffee, cocoa and tea chains

Our study found 11 different instruments and activities, ranging across the 4 different government strategies, which have been used to support the Organic, Fairtrade, Rainforest Alliance, GlobalGAP and UTZ Certified systems during their implementation stage.

With regards to the cocoa, coffee and tea chains, governments have in recent years taken a more active role in promoting voluntary corporate social responsibility activities in industry and in influencing consumption choices in society. Governments have also supported the supply side of the chain by providing indirect funding through NGOs that work with producer groups in developing countries and by strengthening collaboration between NGOs in consumer countries. These activities, along with an active and selective procurement vision, have given the governments of the Netherlands, Germany and the United Kingdom an important role to play in the scaling up and mainstreaming of certified cocoa, coffee and tea in Europe and the rest of the world.

Strategy 1: Classical central regulation by means of coercion and incentives

1A Direct regulation

Regulation of organic produce
In the UK, organic legislation was introduced following the trend both in other Member States and at EU level. DEFRA launched the Organic Action Plan for England in 2002 and the EC Regulation 2092/91 was transposed through the Organic Products Regulations of 2004. Complying with EU policies on agriculture and organic farming, DEFRA has since 1994 provided financial assistance to farmers converting to organic farming under a number of schemes.

Defining minimum requirements/standards
The UK Organic Action Plan encourages supermarkets to buy organic produce, especially that which is produced in the UK. The Advisory Committee on Organic Standards (ACOS), a non-executive, non-departmental public body, approves organic certifying bodies, giving them accreditation to perform certification activities. Furthermore, the marketing of organic products needs to be administered by DEFRA-approved Organic Inspection Bodies. Important to note is that the organic policy of the UK is focused on national production and consumption. With regards to organic products imported from developing countries, the Soil Association works with retailers to inform them about minimum requirements and equivalencies between organic farming practices. At the international level, UNCTAD, UNEP, ITC and FAO policies support organic farming based on the perceived advantage that it offers to farmers.

Strategy 2: Interactive regulation and internalisation

2A Cooperation with target groups

Promotion of voluntary CSR

In the UK, DEFRA engages in dialogue with large retailers regarding sustainable purchasing behaviour and corporate social responsibility (CSR). Although making explicit requests to increase the availability and shelf space of more sustainable products is difficult, receiving frequent recommendations and communication from the government is the norm. Similarly, in the Netherlands the government uses different business/civil society platforms to encourage CSR. The MVO platform,

for example, works to put CSR on the agenda of employers, including small and medium-sized enterprises.

Strategy 3: Facilitating self regulation

3A Indirect regulation

Regulating bottom line requirements
In the 1990s, DEFRA put considerable effort into controlling self-declared "green" labels and reducing "green wash" in the market place. DEFRA continues to only support reliable certification systems, by drawing consumer attention to robust, verifiable, third party verified labels. On its website[4], DEFRA provides information about the benefits and advantages of labelled products for manufacturers, retailers and consumers and provides information on criteria established by the EU on Ecolabels.

3B Economic incentives

Voluntary agreements on product supply in retail
Although not directly related to certification systems analysed in this report, the Ethical Trading Initiative (ETI) should be mentioned here. The Ethical Trading Initiative, an alliance of companies, trade unions and voluntary organisations, was established in 1998 to improve the working conditions of men and women around the world. It receives one third of its funding from the Department for International Development (DFID), which maintains the observer post of the board. All corporate members of ETI agree to adopt the ETI Base Code of labour practice, which is based on the standards of the International Labour Organisation (ILO). DFID maintains contacts with ETI, brokering contacts and initiating dialogue over public procurement.

Finance activities related to implementation
An international donors' consortium, led by the Swiss government (Department of International Cooperation) and formed by the governments of various European countries and NGOs, was initiated to come up with strategic collaborative efforts to support the fair trade movement and the Fairtrade Labelling Organisation (FLO). The Department for International Development (DFID) has since made a substantial commitment to FLO and the Fairtrade Foundation UK. In February 2008, DFID announced a grant of £1.2 million over two years for FLO International. Between 1999 and March 2009, DFID provided Fairtrade Labelling with grants totalling £2.6m for a variety of activities, including new product development, awareness raising and the promotion of Fairtrade products in the out of home sector (press release July 2009 FLO). In October 2009, DFID committed a further £12 million to the Fairtrade Labelling Organisation (FLO) for the coming four years.

The Fairtrade Foundation UK has been able to use some of the DFID grant to FLO to kick-start its ambitious new five year strategy (Tipping the Balance 2008-2012) which aims to double the UK market for Fairtrade products to £1 billion by 2010 and to £2 billion by 2012. DFID also awarded a grant of £240,356 in 2006 to help fund the Fairtrade Foundation's Fairtrade Schools Initiative over a three and a half year period.

In Germany, Transfair largely received financial support for educational projects in the 1990s, since when direct government support has been rare.

Furthermore, certification systems such as Rainforest Alliance and Fair Trade Foundation have been financially supported[5] under DFID's Challenge Funds (in particular the FRICH: Food Retail Industry Challenge Fund, which supports the development of food trade between Africa and the UK, as well as the BLCF: Business Linkage Challenge Fund). DFID has also worked in South Africa, providing farmers with support to meet GlobalGAP standards. Only the Fairtrade Foundation and FLO receive non-competitive structural funds from the British government. Other certification systems receive some financial support from DFID through competitive grants that are mostly aimed at supporting their international development work and not at the systems itself.

Declaring political support for actors in the market game
After £12 million was committed in 2009 to the Fairtrade Labelling Organisation by the Department for International Development of the UK, FLO stated that this support clearly highlighted the recognition of fair trade as an effective means to fight poverty and hunger. DFID has financially supported the work of the Fairtrade Foundation since 2002. One of the first DFID contributions to the Fairtrade Foundation was closely related to its work with Ghanaian cocoa farmers. The DFID White Paper "Eliminating Poverty: Building Our Common Future" of July 2009 stated: "Fair and ethical trade is a powerful way to boost business standards, to ensure working conditions are decent, producers and workers are paid a fair price for their products and to allow millions of individual consumers in the UK and worldwide to make a daily contribution to development."

In the Netherlands, the government has been an active promoter of Max Havelaar certified products and the Fairtrade movement. In Germany, the situation is similar: TransFair has received a positive reaction from the government since its beginning and ministers are usually involved in fair trade related events and conferences. TrainsFair (Fairtrade Germany) is financially independent and has never received a substantial financial contribution from the government. TransFair receives smaller funds from the government for projects and by taking part in larger campaigns/programmes.

Promoting consumer awareness
In the Netherlands, the website "consuWijzer"[6], which the government set up to give consumers practical advice over their rights, began to provide information about labels in April 2008. The credibility of the labels is tested by an independent accreditor (Raad voor Accreditatie) and the results of the tests are published on the website. Labels (certifications) are not obliged to register with the website.

The Fair Trade Fortnight campaign has been financially supported by the German government since 2001. Between 2003 and 2006, as part of the federal government's campaign to halve extreme poverty[7], the government supported the "Fair Feels Good" campaign. The campaign was funded by the

Federal Ministry of Economic Cooperation and Development (BMZ), with 3 million euros. The Fair Feels Good campaign was an information campaign launched by the consumer initiative Die Verbraucher Initiative e.V. Project partners included Transfair and the German World Shops (Werltladen).

The government of the UK has also provided support to increase consumer awareness through the Fairtrade Towns campaign, which started in 2000. This campaign encourages towns to become fairer by meeting three goals, including the condition that the local council passes a resolution supporting Fairtrade and agrees to serve Fairtrade products. Today there are over 400 Fairtrade Towns in the UK. The campaign is co-financed by a grant from the European Union and the initiative is now worldwide, spread over 18 countries. In the Netherlands there are now three Fairtrade municipalities[8]. The campaign's main sponsor in the Netherlands is ICCO. In Germany there are now six Fairtrade Towns[9].

3D Network creation

Creation of new actors in the playing field
As mentioned in previous sections, the Dutch Ministry of Foreign Affairs is a co-founder of Initiatief Duurzame Handel (Sustainable Trade Initiative), jointly launched in 2008 by businesses, non-governmental organisations and other ministries of the Dutch government (EZ and LNV). IDH is part of the Schokland agreement, a plan to reach the MDG by 2015, in cooperation with the public and the private sector. In March 2010, the Dutch Ministry of Agriculture, Nature and Food Quality (LNV), with the support of the Ministries of Economy and Foreign Affairs and the most important market players in the cocoa sector, made a public statement of commitment to source 100% sustainably produced cocoa to the Netherlands by 2025 (and 50% by 2015). Some of the parties involved in this intention are Oxfam Novib, Mars, Unilever, Albert Heijn, Dutch Cocoa, Ecom, Jamin, V&D La Place, Baronie-De Heer, the Port of Amsterdam, Solidaridad, UTZ Certified and Max Havelaar.

GTZ (Deutsche Gesellschaft für Technische Zusammenarbeit) is a federally owned agency that supports the German government in achieving its development policy objectives. Among other activities, GTZ is involved in developing standards in organic farming and fair trade, social standards in agriculture, and sustainable coffee production. GTZ contributed to the creation of the Common Code for the Coffee Community (4C), an initiative agreed by representatives of industry and trade, producers and civil society in producer and consumer countries.

Strategy 4: Government as active consumer in the market place

4A Selective public procurement

Defining own minimum requirements for procurement
In the Netherlands, an interdepartmental working group guided by SenterNovem is in charge of drafting the sustainable procurement (Duurzame Inkoop) policy. This policy does not establish a preference for a particular certification system or make a commitment to an explicit brand, but provides guidelines for determining which products or types of products can be considered as being sustainable. By drafting these types of policies, the government acknowledges its role as consumer and commits to following certain guidelines to ensure that only sustainable products are purchased.

Similarly, in the UK the government received a document called "Procuring the Future" in 2006. This document was a suggested National Action Plan drawn up by an independent task force. The government, led by the Department of Environment, Food and Rural Affairs (DEFRA), then designed its own procurement policy based on this document. The Sustainable Procurement Policy Statement[10] was published in 2009 with the aim of establishing the UK as a leader in sustainable procurement and achieving a low carbon and more efficient public sector.

Formal regulation of public procurement decisions
The point of departure for drawing up public procurement policies and guidelines is usually the minimum guidelines that are established in national and supranational laws. The purchasing policies of Germany, the Netherlands and the UK comply with EU Treaty and Procurement directives.

4.2.3 Conclusion

Government support in the scaling up and mainstreaming of sustainable timber, coffee, tea and cocoa has increased dramatically in the last five years. During the implementation stage of the certification systems reviewed here, the governments of the UK, Germany and the Netherlands have become increasingly active in facilitating self regulation and sustainable procurement. For tropical timber, activities related to regulation can still be found during the implementation stage of certification, due to the threats posed by illegal logging.

Economic incentives to facilitate self regulation, however, were found to be particularly relevant instruments for both product categories at this stage. Thanks to the financial support for activities related to the implementation and promotion of consumer awareness, the certification trend has been strengthened and certification systems have been able to expand their expertise to other products.

The latest Dutch initiative created to promote certification, the Dutch Sustainable Trade Initiative (IDH), is active in both tropical timber and commodities, as well as other products.

This accumulation of efforts and approaches suggests that over time governments have become more experienced in issues related to private certification and their contributions to sustainable development and are willing to provide more active support for the creation of certification systems for selected products. Similarly, it could be noted that governments in various countries have also chosen similar approaches, especially with regards to public procurement. The governments of the Netherlands, Germany and the UK, for example, are participating in the Fairtrade Town campaign and purchasing significant quantities of certified products. Also, they have all implemented public procurement policies

and guidelines that departments and ministries use to ensure that they purchase sustainably-produced products.

By looking at the instruments used during the implementation stage of different types of private certification it becomes clear that governments have partially moved away from their traditional regulatory role towards a more facilitating role. This attitude is perceived as beneficial by those directly involved in certification activities since it allows for entrepreneurship and innovation to emerge from within society, while at the same time providing some support to those systems that prove to be effective. The preferred approach from the government at this stage is for it to allow private initiatives to emerge, to evaluate them, and – only at a later stage – to support them if deemed effective in contributing to sustainability.

Notes

1) IDH is supported by the Ministries of Development Cooperation, Economic Affairs and Agriculture, Nature and Food Quality. See also http://www.duurzamehandel.com/en/home
2) The most important ICCO donor is the Ministry of Foreign Affairs (BUZA).
3) The Timber Procurement Advice Note April 2009. This advice note replaces previous versions issued January 2004, November 2005 and August 2008.
4) http://ecolabel.defra.gov.uk/index.htm
5) Examples:
FRICH: The Betty and Taylors of Harrogate's programme to assist Rwandan farmers to increase income, compete effectively in global markets by meeting high ethical, environmental and quality standards, in partnership with the *Rainforest Alliance* and OCIR Thé (Rwanda's tea authority).
FRICH: Sainsbury's and its partners will help smallholder farmers living just outside the Democratic Republic of Congo's recent conflict zone, as well as coffee farmers in a Malawi cooperative, to raise standards and access new markets. The project will help the farmers rehabilitate their coffee plots while meeting social and environmental standards and developing the management systems needed to obtain *Fairtrade* and *Organic* certification for their coffee.
BLCF: Unilever and Kenyan Tea Development Agency (KTDA) programme to encourage individual smallholder tea farmers to adopt sustainable agricultural practices through the provision of training and access to expertise. *Rainforest Alliance* is used in this context.
6) http://www.consuwijzer.nl/Keurmerken/Keurmerken_op_ConsuWijzer
7) *Aktionprogramm2015* http://www.aktionsprogramm2015.de/
8) http://www.fairtradegemeenten.nl/content.aspx?l=001
9) http://www.fairtrade-towns.de/
10) http://www.defra.gov.uk/corporate/about/how/procurement/policy.htm

5 Existing policy impact assessments

5.1 Introduction

The second goal of this study is to explore what is known from evaluation studies about the effectiveness of government interventions supporting private certification. The focus of this chapter is not on the environmental or socio-economic impacts of certification on production practices in developing countries, but on the impacts at system level.

In measuring the effects of private certification systems, four levels can be distinguished. Effect monitoring is partly organised within the systems themselves (see Figure 15). The core activity of private certification organisations is the formulation of sets of rules with which supply chain actors have to comply. Compliance checks can be either self assessments or third party assessments.

The first order effect of private certification is behavioural change amongst suppliers, who adjust production practices in order to comply with the sets of rules, enabling them to sell products as certified. Private certification organisations register this first order effect (and have financial mechanisms connected to this registration) but, as we saw in Chapter 3, provide few statistics on the level of compliance.

The second order effects are the improvements resulting from the changes in production practices at the farm and producer level. Depending on the scope of the rules set in the certification system, these improvements can relate to direct ecological and social-economic impacts at community level (improved biodiversity, reduced pollution, reduced poverty, improved labour conditions, etc).
Both first and second order effects will strongly depend on the effectiveness at the demand side: are the final market actors (retail and consumer) actually selling and buying the certificated products?

The third order effects are possible, maybe unintended, side effects, for example competition between domestic food production and food export, increased exploitation of natural ecosystems or the growth of large farms that push smallholders out of the market. These possible impacts usually fall beyond the scope of the sets of rules included in certification systems and auditing practices and can occur unnoticed if not deliberately studied.

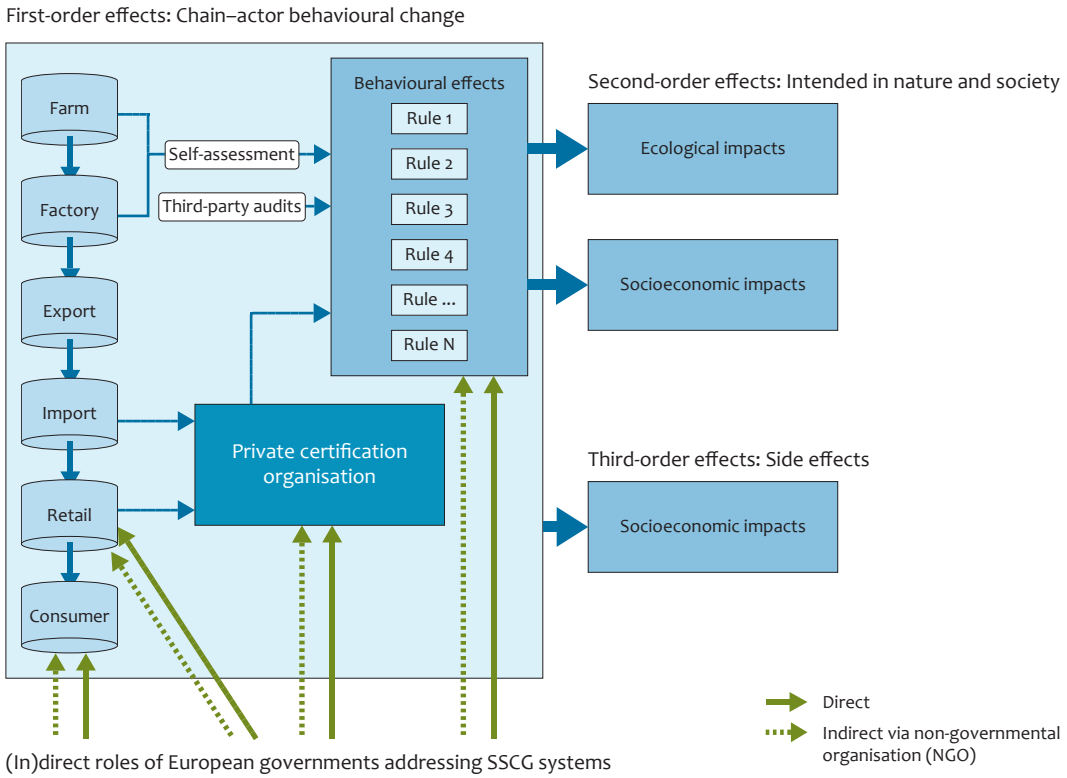
A fourth level of measuring the effects of private certification systems is more relevant to this study: evaluation at system level. We want to know whether the various types of government intervention in these sustainable supply chain systems do actually reinforce the first and second order effects and reduce unintended side effects. A literature search was conducted as part of this study and respondents from government agencies and from the market and civil society were asked about the availability of such system level evaluations in their fields. The results are discussed in the two next sections.

5.2 Evaluation by governments

Governments evaluate their policies, projects and spending. However, governments do not usually have specific policies on supply chains for products that come from developing countries. This is mainly because, as explained in earlier chapters, the sustainability of these supply chains is mainly organised by non-state actors through voluntary standards and certification systems. Government policies are instead related more directly to biodiversity protection (e.g. by means of reforestation), food quality standards and/or development cooperation (e.g. through capacity building of farmers). Therefore, governments" own evaluations mainly concern their biodiversity policies abroad and development cooperation projects.

Government policies do however touch on issues of supply chains and sustainability. For example, the 1992 Dutch "Governmental position on tropical rainforests" (*Regeringsstandpunt Tropisch Regenwoud-RTR)* does include in its policy line the issue of the tropical timber trade. The RTR, which was signed by most ministries, aims to stimulate the development and implementation of long-term timber production plans and other instruments to control *the entire chain* from logging to the consumer. The RTR also includes the aim to import only sustainably produced tropical timber by 1995. In 2008, and based on this policy document, the Ministry of Foreign Affairs conducted an evaluation of

Evaluating outcomes, effects and impacts of sustainable supply chain governance (SSCG) systems **Figure 15**



(In)direct roles of European governments addressing SSCG systems

Evaluating outcomes, effects and impacts of sustainable supply chain governance (SSCG) systems

the effect of the international cooperation policy on the protection of the tropical forests between 1999 and 2005 (BUZA, 2008). According to this evaluation, the international development funds to *help control the whole chain* are only allocated at the end of the evaluation project period. This was initially done through the very limited context of BBI/OS[1] (2.5 million per year), and later in bilateral programmes with Ghana. It was concluded that this policy line took only a small part in shaping the work of international cooperation in line with the RTR. Obviously, the goal to import only sustainable timber to the Netherlands by 1995 was not met.

The Netherlands Ministry of the Environment (VROM) also conducted an evaluation in 2009 of the effect of sustainable procurement policy in terms of impacts on the market and the environment (VROM 2009). Products such as tropical timber, coffee, cocoa and tea are not specifically analysed in the report, which claims that the governments" sustainable procurement policy has made important contributions to the current market movement. The report concludes that private parties themselves are involved in sustainable purchasing policy and that they expect the increasing role of the government to stimulate such behaviour by means of facilitation.

Coffee, cocoa and tea production is not included in the priorities of Dutch international biodiversity policies (PBL 2009). For these products, the international development cooperation policies are dominant. Government departments do not often address these products separately, as in the case of the timber, which is usually dealt with by a "forest policy" cluster/department. So far, we have not come across any policy evaluation reports specific to coffee, cocoa and tea supply chain management.

The most relevant evaluation report for these tropical agro-commodities is an evaluation report on Dutch co-financing programmes (BUZA, 2007). This evaluation looks at projects that fall under Dutch co-financing programmes, and that are funded and/or undertaken by a Dutch co-financing organisation: Cordaid, Hivos, ICCO or Oxfam Novib. Two of the case studies in the evaluation report actually look at the co-financing project and its effectiveness and efficiency in influencing policy in relation to the recognition and implementation of codes of conduct in the coffee sector.

The German government has taken an interesting approach to private standards systems, setting up a special department within GTZ for private initiatives in 2001: the Programme Office for Social and Ecological Standards (http://www.gtz.de/en/themen/uebergreifende-themen/sozial-oekostandards/2204.htm). The mandate of the Programme Office was firstly to study and evaluate the impacts of existing and emerging standards to assess whether these standards systems are worth intervention by government (through GTZ) and, if so, how. As the result of the initial study was very positive, the Programme Office began carrying out many projects (including public-private partnerships) and pilot projects to work together with these standards. The Programme Office concentrates on four components:

1) forest certification, 2) organic agriculture, 3) social standards, and 4) the code of conduct for the coffee sector. The Programme Office is now entering a consolidation stage in which scaling up is considered at a strategic/meta level without interference in each standards system.

The German BMZ assigned an external consultant to produce an evaluation report (2008) called the "Introduction of voluntary social and ecological standards in developing countries' (BMZ, 2008). This report examines the contributions of German development policy to the promotion of voluntary social and ecological standards in selected countries. It focuses on cases in Brazil, China, Kenya and Zambia. BMZ comments on the report by saying that "a number of standards have been strengthened and developed further as a result of German development cooperation efforts". Furthermore, it is stated that "German development cooperation interventions have contributed to the fact that the four partner countries selected for the evaluation case studies have adopted a more positive and open-minded attitude with regards to the development and implementation of market-induced social and ecological standards". The BMZ states that its aim is to "increase sustainability and outreach, boost the further development of local certification systems and enhance the complementarity of voluntary standards and statutory norms in the supported countries."

To our knowledge, none of the other governments studied have set up a special programme dealing with voluntary standards that are used to make supply chains from developing countries more sustainable.

5.3 External evaluations

A few organisations look into the role of governments in private standards systems. The most relevant organisation with respect to assessing private standards systems is ISEAL: the global association for social and environmental standards systems. ISEAL conducted a study, published in 2008 (ISEAL Alliance, 2008), into the governmental use of voluntary standards in certification schemes. This report draws on a set of ten case studies[2] and demonstrates that governments are successfully using voluntary standards and in diverse ways. The report looks into the governments" motivations behind the collaborations with voluntary standards, and the ways in which the governments make use of voluntary standards. The report sees three styles of relationships that governments establish when working with voluntary standards systems:

A. As *Users*, having a direct relationship with voluntary standards systems. They may or may not specify a standards system.
B. As *Supporters*, providing incentives related to affiliation to voluntary standards systems. Again, they may or may not specify standards systems.
C. As *Facilitators*, providing a favourable policy environment or resources to facilitate the development of a specific multi-stakeholder voluntary standard.

The report also identifies a range of implementation mechanisms (instruments) when working with voluntary standards systems, including fiscal and non fiscal incentives, disincentives and conditions.

ICCO (the Interchurch Organisation for Development Cooperation) has commissioned a study to explore possible instruments for the Dutch policy on sustainable timber, to which ICCO hopes to draw the attention of governments and other stakeholders. The report looks into potential financial and non-financial instruments. A total of 22 instruments are identified and each of the instruments is evaluated in terms of its effectiveness, efficiency and implementability. The study does not exclusively study government instruments that could support certification systems, nor does it evaluate the effectiveness of instruments applied to voluntary standards systems.

IISD conducted a study into the lessons that can be learned from Multilateral Agreements and Eco-labels for the WTO negotiations for the reduction or elimination of trade barriers in environmental goods and services (EGSs) (Aguilar, Ashton et al., 2009). The report takes lessons from two case studies on eco-labels (Organic, Fairtrade, Rainforest Alliance and UTZ), sustainability labels on coffee and the Marine Stewardship Council (MSC) label on fish. In this report, the question arises as to which standards would be used to measure compliance for the products listed on the EGS list. The report does not discuss what role governments can or should play in relation to voluntary labelling systems.

When it comes to government procurement policies, FERN has conducted a study comparing the timber procurement policies of six EU countries and Japan (Jackson, 2009). This report focuses on the differences between and similarities in the design and implementation of each timber procurement policy.

The academic literature also fails to address government activities that are directed at or that influence voluntary certification systems for products that are traded globally (see Appendix 4). Questions concerning the position of the government within the governance for sustainable supply chain management where businesses and civil societies are taking the lead are not sufficiently addressed. Instead, literature on the theme of supply chains discusses the role of private actors and non-governmental actors in supply chain governance (governance literature, private regulation, etc).

5.4 Conclusion

The governments studied in this report do not conduct specific evaluation studies in terms of what impact their activities have or could have on private/voluntary certification systems. The German government is probably the exception in this respect. External actors also focus either on evaluating government policies more in general (as development policy or biodiversity policy), or study their procurement policies. The research focus is still on the roles of private actors in meeting public interests and the effectiveness of such self-regulatory systems. No one has systematically evaluated the roles state actors play or could play in facilitating or

encouraging private initiatives in supply chain management. Hence it is not yet possible to systematically evaluate the effectiveness of different policy approaches and to learn across the countries that this research focuses on.

Notes

1) BBI: *Beleidsprogramma Biodiversiteit Internationaal*(International policy programme on biodiversity) and OS: *Ontwikkelings Samenwerking*(International cooperation).
2) The ten case studies include one case in the Netherlands: Groningen Province and Fairtrade (FLO) standards.

6

Stakeholders' perspectives

On 10 December 2009, a group of people representing various ministries of the Dutch government and the certification systems reviewed in this study met with researchers from Utrecht University and the Netherlands Environmental Assessment Agency (PBL) in a workshop in which "the roles of governments in multi-actor sustainable supply chain governance systems and the effectiveness of their interventions" were discussed. This chapter presents a compilation of the perceptions gathered during the workshop.

6.1 General perceptions and main concerns

In general, for the more mature sustainable supply chains (e.g. tropical timber and coffee), stakeholders consulted in the interviews and at the workshop agree that the *market* is *in the lead* in promoting sustainability in international supply chains through the use of voluntary certification systems. These have proven to be quite effective in making successful use of the capacities of market actors.

For most product chains, it is possible to find *competing* voluntary certification systems. Such variation and competition is generally considered *positive*, both by the governmental actors and private actors. However, from the perspectives of the market actors and the certification systems themselves, the governments, unavoidably, take a selective approach in supporting the certification systems. Here we see a fundamental dilemma between the governmental actors" concerns and the private actors" concerns.

Government selectiveness comes from concerns related to the following issues:

- Different policy goals (nature protection vs. poverty reduction, for instance) match with different certifications systems. This leads to preferences for certain systems in accordance with particular goals.
- Governments need to set a baseline in terms of what is to be seen as sustainable production and management (e.g. defining what sustainable forest management is).
- With regards to public procurement policy, governments need to define their own criteria for sustainable products.
- Certification schemes should not mislead or confuse the consumer.
- Above all, there is a belief that the existence of too many certification systems confuses the consumer.

In the UK, for instance, the Department for International Development (DFID) decided to support the Fairtrade system above other options for reasons mostly related to the concerns mentioned above.

The two other countries considered in our study, namely the Netherlands and Germany, do not take a similar explicit selective approach. They express the importance of having a variety of systems on the market that cover different issues and use different strategies. Nevertheless, some actors perceive that governments sometimes show a preference for FSC over PEFC and for Fairtrade over UTZ Certified or Rainforest Alliance. Such perceived uneven support was found to be a concern among various actors.

Private actors have expressed opinions on the following:

- Governments should not be selective in supporting one certification system over another.
- Governments should not define a sustainability standard for a particular product based on the specific definition used by private certification systems.
- Their concern over the reliability and credibility of sustainability claims made by competing systems.
- Governments should not interfere with private certification initiatives, especially through the creation of competing standard systems (as in the past with *Keurhout*), which is perceived as market interference.

The greatest dilemma faced by governments relates to stimulating and supporting private certification systems while ensuring the reliability and accountability of the sustainability claims made by existing certification systems.

To determine which certification system is sustainable, it is crucial to define minimum sustainability standards for each product chain. However, even just for the purpose of public procurement, such an exercise would require a large amount of time and money (as in the case of timber in the

Netherlands through TPAC). Moreover, such a definition is never definitive in the long term.

Related to the possibly selective approach of governments regarding certain certification systems, another concern expressed by private parties is the fact that governments do not consistently promote the sustainable supply chains of alternative products that could compete with already certified products (e.g. certified wood against uncertified aluminium).

In addition to, and partly related to, the selectiveness discussion, various stakeholders referred to the absence of an *integrated, coherent policy strategy on sustainable production chains*, which would require the involvement of various ministries, each stressing different goals and applying instruments in accordance with their activities. There is a view that the philosophy of certain policy departments is in line with that of a particular certification system. Such a situation could hinder other systems which operate on the basis of a different philosophy.

6.2 Expected roles for governments

In general, the role of governments (in the Netherlands, the UK and Germany) is expected to be a *sideline "supporting" role* to the existing and emerging private standards systems, in combination with use of its market power as a major *institutional consumer* through its public procurement decisions. Stakeholders have different perceptions of what the role of governments should be. A summary of the main discussion points is provided below.

Timing of support

In the current situation of "sideline support" some raise the question of timing: should governments support the start-up stage of new voluntary certification systems, for instance through the direct and indirect funding of round tables or the development of standards; or should they support the implementation stage of these systems, for instance by supporting the capacity of smallholder famers to meet the system requirements?

In general, when it comes to the certification systems reviewed in our study, the involvement of governments in the initiation stage (including the standard-setting process) was limited. Some believe that governments should not discourage market actors from taking a prominent lead in the issue; instead, governments should focus on quality control of the existing systems, rather than being involved with the setting of the criteria and standards.

However, for other product chains presenting challenging sustainability issues, such as cotton and bio-fuels, greater government involvement seems to be expected in the initiation stage. This shows that, since the first pioneer systems appeared in the market in the 1990s (FSC and Max Havelaar), the potential of private voluntary standards systems for introducing more sustainable practices continues to be increasingly recognised by governments. Governments have since been found to be more eager to support and encourage the emergence of similar systems for more product chains. In the case of bio-fuel production, governments are expected to display greater involvement in the development of international markets and in compliance with certain sustainability requirements.

Dealing with competing systems

There are different views of what the role of governments should be in dealing with existing and emerging certification systems and the competition that might arise between them. Such roles might be to:

- support successful systems;
- harmonise existing systems;
- promote cooperation among standards to reduce competition instead of supporting a focus on particular market niches;
- define what governments consider to be "sustainable" and use these definitions to indicate which systems are reliable;
- set minimum standards which would allow certification systems to compete on the basis of what they provide above this minimum.

The majority of stakeholders do not favour the first two options listed above since, as mentioned earlier, they do not agree with selective government support. For the cases where there is a necessity to define what reliable systems are, the question remains as to whether this would actually be an appropriate function for national governments or the European Union. Some stakeholders are of the opinion that ISEAL, as global private umbrella organisation, sufficiently fulfils this task and that its guidelines should be the reference, instead of having each government define its own criteria for accepting certification systems. Another point mentioned was the suggestion that financial government support should be channelled through more general programmes and platforms (e.g. IDH) that are not related to various certification systems. It was also suggested that governments should take on an evaluator function, in which they evaluate the different impacts and effectiveness of each certification system.

Address the sector

During the workshop it was argued that in order to increase the market share of sustainable products, the role of governments should not be limited to offering support to certification systems. Another important role identified by the stakeholders is that of encouraging market actors to engage in sustainable chain management practices and to stimulate the mainstreaming of certified products on the market. In this regard, the discussion was centred on whether to stimulate the market front-runners or the laggards. Some workshop participants are of the opinion that larger market actors should be encouraged to take the lead by increasing their share of sustainably sourced product; while others stress the importance of addressing those actors that are lagging behind and bringing them on board. These actions could improve sourcing practices and could put some pressure on removing unsustainable products from the market.

To help the mainstreaming of sustainable supply chains, some financial instruments, such as tax arrangements for certified or uncertified products (e.g. VAT removal/reduction for certified woods, organic products, etc.) were suggested as a possibility. Additionally, monitoring and publicly communicating the market shares of sustainably supplied products by market actors is another tool suggested to stimulate competition among the players.

In addition to the discussion on placing the focus on either the leaders or the laggards, another concern among practitioners is whether to focus on particular sectors or to expand government support to those sectors not yet addressed by sustainability standards. Some people find it crucial that government support should not be limited to the sectors that are already active in sustainable supply chain management, such as timber. Governments are believed to have an important role in addressing other productive sectors and bringing about more sustainable practices on a sectoral scale. In response, government actors argue that it is impossible for them to work with an infinite number of product chains; rather, they believe that government efforts can have more impact if they are aimed at key priority sectors.

Supply side support

Focusing on the supply side, some participants are of the opinion that governments can play an important role in supporting farmers or foresters by increasing their capacity to meet certification requirements.

Coherent policy and position on certification systems

Governments are expected to draw a coherent line for addressing private standards systems, harmonising the interventions of government ministries, development agencies, consumer policy, public procurement and international action.

Public procurement

Public procurement is recognised by participants as an essential government activity/policy for encouraging sustainable production and trade. Some people expect governments to communicate more transparently and widely about the definition of public procurement standards and about their exemplary role in society (by having an action plan to stimulate the demand of sustainable products based on the procurement criteria).

Beyond certification and sustainable supply

Many agree that governments have an important role to play beyond supporting private voluntary certification systems and market actors. Many key functions can only be performed by state actors, especially those related to setting a level playing field, drafting policies to create an enabling environment, rewarding innovation and entrepreneurship, preventing private standards and certification from becoming trade barriers, and ensuring the proper functioning of certification systems and their credibility. In brief, setting and enforcing a proper set of rules.

In this era of globalisation and international trade, governments also have to be aware of their role at the international level. National governments are expected to define policies and create a level playing field at a global level in accordance with international processes and agreements, especially within international frameworks such as the World Trade Organisation (WTO). Within these frameworks, governments can enforce certain rules to improve production and trade conditions in other countries. In the case of timber, for example, European governments could consider the possibility of banning imports of illegally-produced timber. Expertise in this regard is expected to emerge from the seal products import ban agreed by the EU in 2009, instigated by several EU member states (including the Netherlands). Governments also have a role to play in promoting bilateral trade agreements with exporting countries to facilitate sustainable supply chain management.

Policy at the European level is very important since sustainable supply can be a costly and risky investment for most companies. The fact that sustainability actions are not equal across European countries (some display less demand for sustainable products and less civil society activities, for instance), leaves national governments of leading countries with the responsibility of placing the issue on the European agenda and getting other governments to follow.

The long-term nature of sustainability is often difficult to address in national policy, which changes periodically. This fact makes international policy a more attractive field to address the issue, for instance through conventions that bring national governments to commitments on certain principles over a longer timeframe, such as the Convention on Biological Diversity (CBD).

6.3 Concluding remarks

The stakeholders" perspectives diverge on the expectations that they have of the role of governments in promoting sustainable production and consumption. Some expect governments to be strongly involved in supporting existing and emerging private voluntary certification systems, while others expect governments to be more active in drafting supportive policies that create an enabling environment. In general, governments are expected to facilitate, provide fair support for different certification systems, and make sure that quality and sustainability claims are true to ensure the credibility of the systems. The facilitator role of governments includes addressing the certification systems (e.g. setting minimum standards, tax arrangements for certified products, public procurement, etc.) as well as the environment in which they operate (e.g. addressing legality issues, WTO rules, etc.).

7

Conclusions and implications

In the introduction of this report we presented the emergence of private supply chain certification systems as instruments to ensure responsible and sustainable practices at the production side in developing countries. This takes place in the context of increased sourcing of consumer goods from developing countries for Western markets. We stated that these initiatives have been taken by businesses and NGOs in the context of the underlying problem: a "*regulatory vacuum*" on behalf of European governments in effectively addressing *un*sustainable practices of suppliers in developing countries.

In their initial development stages most of these initiatives, such as Fairtrade, Rainforest Alliance, GlobalGAP and UTZ Certified received very little support from governments; neither did their initiators look for it. These private activities emerged more or less in the shadow of national and intergovernmental activities addressing sustainability issues in global trade.

This observation was the motivation for this exploratory study into the roles taken by governments in the past, more recently, and possibly in the future. This study largely confirms the observation of autonomous emerging supply chain systems, but also illustrates that interaction between private certification activities and public regulation and policy development is growing. The virtues of private certification are being increasingly recognised by the Dutch government and new strategies are being explored. This raises the question of what might be the most effective combined governance strategies of the various key stakeholders in this complex international *market and society* system. The answer to this question will partly depend on the perspectives of different actors who have differing interests, and will remain indicative, as very little systemic evaluative research was found in this field. In accordance with the central research question of this study, we will however focus on the strategy of government in this chapter.

In this final chapter we first look at the most relevant findings and then reflect on the implications of this for possible future roles of governments in SSGC systems.

7.1 Main findings

This study shows that, as far as the role of governments in "maturing" global sustainable supply chains (tropical timber and coffee) is concerned, there is a generally shared perception amongst most involved stakeholders that the *market* is *in the lead* in promoting sustainability in international supply chains with voluntary certification, that this can be effective and that in this situation the capacities of front running market actors are utilised in the best way. The developments in the supply chains of tea and cocoa are far more recent, but the lessons learnt in the other two chains may very well contribute to their faster successful implementation.

Chapter 3 discussed the market dynamics for two selected types of products, representing the currently most developed international supply chains in terms of sustainability.

Early initiatives and market responses

Both in timber and coffee there is a long history of fully *private initiatives*, going back to the late 1980s. In both product cases this started with single initiatives, originating from civil society, taking a market oriented approach and connecting to some of the producers. In their first years these systems were successful in small niches of these markets. Comparable initiatives took place simultaneously in Europe and North America.

Both in the timber and the coffee chains this has resulted in market responses and the emergence of competing systems. These "responding" systems come from other segments of the same product markets, and in the case of timber from producer country governments in cooperation with responding firms in other, larger, segments in the timber market.

This *initiation – response* sequence has resulted in *variations* in systems, both between countries and in the stringency levels set in the criteria applied and in the inclusiveness of the various aspects related to the concept of sustainable development.

Variation and evolution

Both the "responding" systems and the original private certification systems aim to ensure compliance in producer developing countries to at least the internationally endorsed levels of regulation in the fields of environmental and social policies. The original Fairtrade and Organic certifications, however, intend to go beyond these compliance levels, adopting organic production techniques and/or different models of trade pricing. The "responding" systems and the original private certification systems have in common that they reorganise business to business relations in the supply chain, increase information exchange and, possibly, reduce the number of supply chain links.

Looking at the two selected types of products, we also observe that both in the timber and coffee chains the experiences of these pioneer systems (FSC, Rainforest Alliance, Fairtrade, GlobalGAP and UTZ Certified) have been used to *transfer the approach to other product groups*, often closely related and still comparable (for example from rainforest to bananas or coffee produced in rainforest environments, or from fresh fruits to other food products).

All of the systems discussed in Chapter 3 have in common that they are run by fairly *lean organisations*, with very limited numbers of employees and limited operational costs, while still covering large numbers of countries both on the supply side and the demand side. Both UTZ Certified and GlobalGAP have been able to achieve fairly worldwide coverage (over 100 countries) in less than 5 years.

In connection to this organisational aspect, the decision making *procedures* concerning the criteria sets have proven to be fairly *efficient*. Working with global frontrunners in these specific product groups has enabled the initiators to "tap" the frontrunners" consensus in the global arena, to translate various globally accepted standards (SA8000, ILO, Good Agricultural Practice Standards, ISO standards, IFOAM, etc.), to formulate draft versions and to implement efficient and transparent review procedures in the preparation of final documents.

It should be noted at this point that the separation between the worlds of international diplomacy and supranational regulation (UN, OECD treaties and agreements, etc.) and private product certification (as presented in our introduction) is not as strict as might appear. These private systems effectively use the outcomes of global intergovernmental processes to determine which criteria to use at which level.

Another observation in this respect is that the private certification systems studied here have become increasingly *all-inclusive* in recent years. Originally, the early systems all had a specific focus, either on environmental issues or social issues. The "responding" systems have emerged in a context of single issue public unrest and anti-business campaigning (mad cow disease, Asian flu, child labour in cocoa production, etc.). The initiators have taken a pro-active approach in this, trying to organise supply chain management in such a way that any unexpected new single issue conflict may be prevented. All these "responding" systems have therefore integrated environmental and social-ethical issues into their system from the start, and connected it to aspects of traceability. The initial private certification systems have in their turn responded to this by expanding their originally narrower scope (either organic or social-ethically oriented), also moving towards more inclusive criteria sets.

Public and private harmonisation

Another relevant development in response to the variation in private systems between different countries and different product groups is the attempt to move towards the *global harmonisation* of private systems. In Chapter 4 we saw that national governments have taken steps to ensure a bottom line quality level for private certification systems. This public effort may conflict with the private collaborative efforts of the most successful international certification systems to ensure procedural and organisational quality. Private international umbrella organisations, such as ISEAL and IFOAM for organic products, have been active in creating this kind of general harmonisation applicable to different product groups (also see Chapter 2). These efforts have resulted in benchmarks, such as the ISEAL Code of Good Practice for Setting Social and Environmental Standards, which can serve as quality control.

Demand and supply side effectiveness

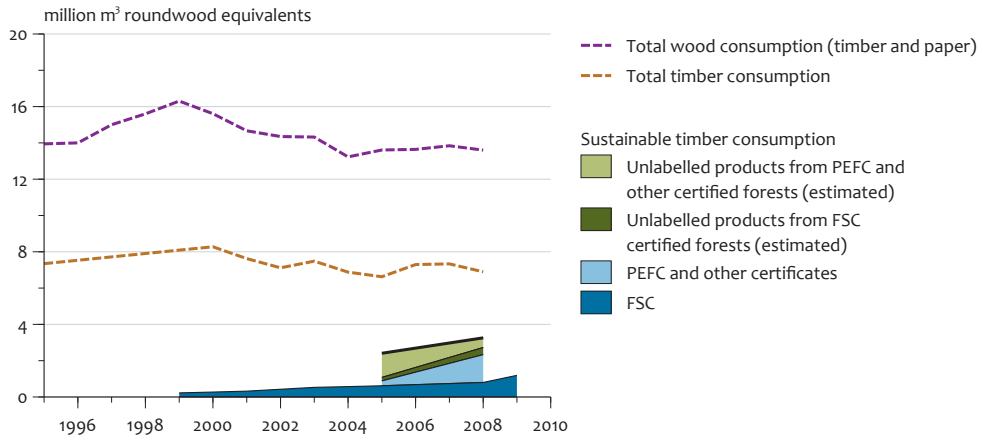
In Chapter 3 we also addressed the question of the *effectiveness* of the private certification systems in the market. We mainly looked at the available information on impacts in Western markets in terms of market shares. Although systematic data on market shares are hard to obtain and the picture is therefore incomplete, the same upward trends are seen for both timber and coffee.

Recent practices in these sustainable supply chains show that, shortly after competition between multiple private certification schemes emerged, an impressive shift in the market took place: following a longer stable period in which minor market shares for the initial single system totalled 1-2%, the combined market share increased to 25% (certified timber) and 50% (certified coffee) for the various certification systems in the Netherlands. In the UK, such market breakthroughs have been achieved by Fairtrade, even for single systems in various agro-food markets (coffee, cocoa, bananas), as shown in Section 3.2.3.

However, the market shares of certified products do not tell the full story: for both timber and coffee it is observed that the market share of products sold on the market without certificates, but sourced from certified producers should also be added to the total market share. Figure 16 and 17 show the aggregated information available from different sources. It shows that the combined market shares for certified products and products from certified sources in the timber chain and the coffee chain has grown to 45 to 47% of the market in 2008.

In addition to this, the coverage of business-to-business certification systems such as GlobalGAP, which does not show information on consumer goods, should also be added to the market share totals, though no systematic data are available.

Sustainable wood consumption in the Netherlands **Figure 16**



Developments in market shares of sustainable timber products on the Dutch market (certified products and products from certified sources).
Based on AidEnvironment, 2008 and Oldenburger et al., 2010.

Based on these growing market shares we can start to talk in terms of "maturing" sustainable supply chains, following a long initial period of sustainability restricted to small niche markets. We note here that these summed market shares refer to the combined effect of both the initial private certification systems and the "responding" system, with different levels of strictness.

Looking at these growing *market shares*, it also needs to be acknowledged that these observations are not yet fully complete, through for a different reason. Because of the exploratory nature of this study, the focus is on the most relevant *collective approaches*, thus excluding "single-firm" labels (see Chapter 2). It should be noted that various individual firms have implemented additional sourcing policies, sometimes linking them to the general certification systems included in this study, but there are also examples of successful single-firm approaches which have imposed their own, less formal, assurance systems on their suppliers. Example are IKEA's wood sourcing policy since 2006, TESCO in the UK market with the "Nature's Choice" label, or Peeze Koffie).

There is a debate in society on what can actually be labelled as "sustainable": only the strictest systems or the compliance oriented systems too. However, the private activities of both civil society and the market actors emerged in the context of the "*regulatory vacuum*" referred to in the first section of this report: European governments were unable to effectively address the unsustainable practices of suppliers in developing countries, resulting in an absence of enforcement and/or acceptable regulation. For this reason we argue that this combined effect of the various systems can be regarded as a breakthrough on the route towards more sustainable international trade in agro-food products.

Government roles in initiation and implementation

The main focus in this study has been to explore the roles taken by governments in these dynamics. These roles were discussed in Chapter 4. A distinction was made between the roles taken in the early stage of the development of private certification systems and the stage of operating and implementing certification systems. In Chapter 2 it was explained that the position of governments in SSCGs and, therefore, the applied mix of instruments, differs from the traditional position of governments, which is to take the lead in pursuing public goals. The traditional role of government in policymaking can be described as a sequence of activities carried out from a hierarchical position, including identifying a public problem, formulating achievable goals and solutions, applying a mix of regulatory, economic, collaborative and/or communicative instruments aiming at changing relevant target group behaviour and, finally, monitoring goal achievement and, possibly, adjusting policy interventions to ensure sufficient goal achievement.

This study addresses the situation in which private actors (target groups), acting as frontrunners in relevant product chains, themselves initiate solutions, addressing public problems. Governments are hardly in the position to resume their traditional regulating role in sustainable production chains, but may try to support and accelerate desired activities as a member of a network of actors. Still, even here, governments remain responsible for public goals. In this study we are interested in the question of what the implications are for governments in fulfilling their public responsibilities in this situation.

Looking at the roles taken in these practices, as discussed in Chapter 4, we can in general best describe the role of governments (Dutch, British and German) as "*side line*

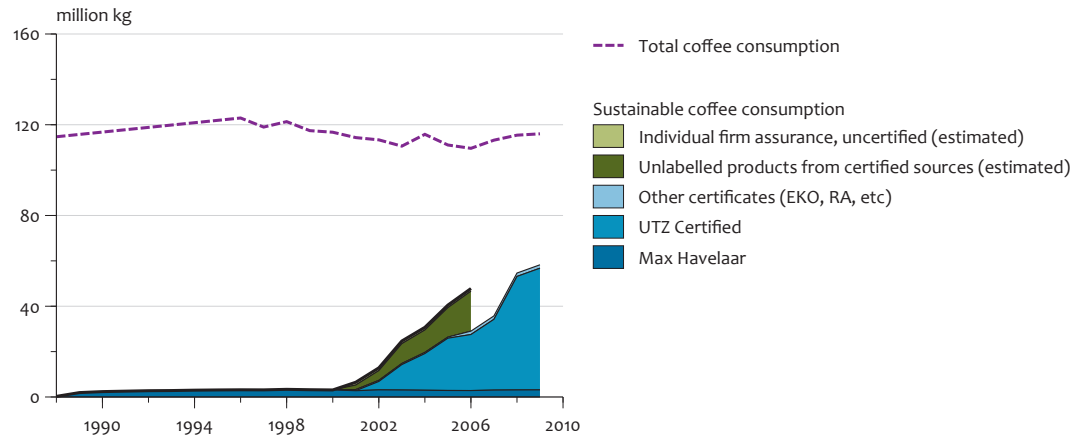


Figure 17 Developments in market shares of sustainable coffee on the Dutch market (certified products and products from certified and assessed sources).
Based on data CBS for total coffee consumption and based on data UtzCertified and Max Havelaar.

support" in combination with usage of *market power* as major institutional consumers (through public procurement).

The interviews conducted have shown that, especially in the stage of *initiating* the systems studied, the role of governments has been very limited. All certification initiatives were established independently by private actors, sometimes despite adversarial government activity (for timber by initiating a competing system), or at best with limited support from political opinion makers expressing moral encouragement (timber and coffee), and sometimes with limited financial support. This observation is valid in all three countries studied.

Here we also need to note that far more active approaches have been taken by governments more recently in other supply chains (soy and palm oil), where governments participate directly in local or international multi-actor fora and round tables and actively take part in debates on the formulation of criteria.

Looking again at the frontrunner product chains analysed in this study, we see a broader range of government activities supporting the private certification systems in their *implementation* stage. Such activities are both directed at the European or national demand side and at supply side implementation by producers/farmers and supporting organisations in developing countries. Some forms of traditional regulation are applied on the demand side (regulation on organic certification, bilateral inspection agreements), or are being discussed (traceability obligations for importers). Third parties are presented with interactive policies aiming for voluntary agreements on selling and purchasing certified products or voluntarily applying corporate social responsibility policies (including supply chain management).

However, most activities described in Chapter 4 are forms of financial or promotional support for the systems themselves, or support for small farmers in developing countries to encourage them to participate. International development policies play a strong role in this, *selectively promoting* the systems linked to smallholder support in developing countries.

More recently in the Netherlands, with the creation of the Sustainable Trade Initiative (IDH) and earlier with comparable activities by the German agency GTZ, a more active facilitation role has been taken, with a stronger emphasis on initiating and facilitating cooperation between the main stakeholders of selected product chains, with the ambition to mainstream private sustainable supply chain certification.

Addressing sustainability in international supply chains is related to various different tiers and sectors of government activity. In practice, in none of the three countries studied has an *explicitly integrated* policy been developed for sustainable products sourced from developing countries. Rather, policies have been developed in the various relevant governmental departments to address specific aspects, as part of other separate policy agendas. Table 8 provides an overview of the specific policy agendas that have been linked to private certification.

Evaluation of impacts of government roles

In Chapter 5 we looked at the evaluation of the effects of governmental activity in this field. We saw that information is slowly becoming available on this question, but that hardly any systematic monitoring and evaluation has yet taken place. Some NGOs and other organisations do take a small role in this, often relying on subsidies. There is also a growing focus in the academic literature on global supply chain governance, but most studies take descriptive case study approaches,

Government departments and related policy agendas and instrumental focus Table 8

National government departments	Related policy agendas & instrumental focus
International development assistance	- poverty reduction - achieving Millennium Development Goals - social dimension of sustainable development - socio-economic empowerment in developing countries
Environment	- various environmental impacts, mostly domestic - weak strategies on remote impacts - linkage to CSR - specific policy foci, for example: climate change and energy transition resources and biodiversity transition mobility transition
Economic affairs and international trade	- promoting CSR in global trade - supporting businesses active in international trade - inputs in intergovernmental agenda for trade policies (non-tariff barriers issues)
Agriculture	- sustainable food production, both domestic, European and in global context - food safety, traceability - focus on biodiversity

addressing selected aspects. There is as yet little organised systemic evaluation of the functioning of sustainable supply chain governance systems and the role of governments within them.

This situation is both understandable and remarkable. It is understandable, because the emergence of private certification is a fairly recent innovation in sustainable development governance; new private actors are taking up this activity with lean organisations and small budgets and without central coordination. Comprehensive monitoring and impact assessment is not their first priority. It is however remarkable because, as we saw, although the collection of various competing private systems can be effective, competition depends on transparency in the competitive game as both suppliers and consumers base their strategies and choices on what is available in the market place. Also, from the perspective of a government stepping back and using the self-organising capacity of product chains, transparency and adequate information about the impact of these systems on the achievement of the public goals (a reduced negative footprint abroad) are still required.

In addition to the observation from the interviews and analysis of relevant documentation provided by stakeholders in the supply chains analysed and the scientific literature, the Expert Meeting also resulted in some additional observations.

Policy integration and selection of product chains

One of the relevant questions here is which product chains can best be addressed in a *Sustainable Footprint Policy* for imported products and resources. In current practice, the various government departments select priority product chains in reaction to issues in the public discourse and willingness in the market to take up initiatives, closely linked to their specific departmental policy agendas. Within the various related policy programmes, such as the Biodiversity Policy Programme, such priority setting has been done from the department's specific perspective, in this case to promote biodiversity (Kamphorst, 2009; p. 50). This does not however explicitly address other issues such as energy use, social-ethical issues and so on. As a result, the biodiversity programme, the Ministry of Foreign Affairs and the Sustainable Trade Initiative all have their separate priority list of products. There is a strong emphasis on agro-products and less on all other categories of products (clothing, footwear, electronics, toys, etc.).

Despite the multiple linkages to the policies of various governmental departments, in none of the three countries was any specific comprehensive policy programme found for reducing the impact of finished products and resources from developing countries. Such a *Sustainable Footprint Policy* for imported products and resources would make sense if we look at the substantial and growing impacts of consumption in developed countries on source developing countries. This has been addressed in various recent PBL reports (see reports by Nijdam and Wilting, 2003; Wilting and Vringer, 2007; Netherlands Environmental Assessment Agency, 2008).

Various efforts have been made in recent years to identify product groups with the largest environmental impacts, and therefore the most relevant to be addressed in integrated product policies. Examples are the *Environmental Impact of Products* (EIPRO) study by the European Commission Joint Research Centre and the Institute for Prospective Technological Studies and others (Tukker, Huppes et al. 2006) and the study by *Stichting Natuur and Milieu* entitled "Playing with Hyenas' (de Vries and te Riele, 2005; de Vries and te Riele, 2006). Both studies identified relevant product groups, though mainly based on environmental indicators, and not yet inclusively on both environmental and social impacts. Linking the "footprint" analysis of PBL with such product group impact assessments (of both current and future impacts) would enable a far more explicit and comprehensive selection of target product chains and key environmental and social-ethical aspects to be addressed in government policies addressing private certification systems.

7.2 Weaknesses of self regulating markets

The conclusion was drawn in the previous section that it is possible to speak in terms of maturing sustainable supply chains, especially after variation and the evolution of certification systems in a specific product chain take place on the demand side. Various examples of mainstreaming to more than 25% of the market share are available and governments

are increasingly recognising this potential. Having made this observation about the potential of private certification, it is also necessary to recognise the *weaknesses* of self-governance in international product supply chains.

Confusion for consumers

In each product chain we see variation and competition between voluntary certification systems (those merely *ensuring legal compliance* versus systems going *far beyond* legal requirements). Such variation and competition is generally considered positive by stakeholders, although it may also be negative because it creates confusion for consumers. Confusion may also result in the reduced credibility of certification systems and reduced consumer commitment. This brings some government agencies to more selective approaches, as described for Fairtrade in the UK.

Confusion for producers

The same variation and competition also causes confusion on the supply side. Farmers and producers in developing countries are confronted with growing numbers of certification systems and additional business-to-business supply chain requirements. This confusion is caused both by the variations in levels of strictness and aspect inclusiveness and by the fact that they may work with supply chain partners from many different countries. This is especially relevant to small-scale producers.

Organising harmonisation

Here the issue is whether or not to reduce this variation through harmonisation, coordination and/or cooperation. If desirable, the key question is still whether this would be a role for the voluntary private certification systems themselves (with ISEAL already doing this) or whether it would be an appropriate role for national governments or the European Union. Defining minimum environmental and socio-ethical requirements and organisational requirements would be a next step. This would make sense if private certification were connected to specific government policies (see later).

However, harmonisation may very well conflict with enhanced competition which, as we concluded, may very well be seen as one of the major triggering factors in the mainstream breakthrough we now see. Taking this in consideration, harmonisation should rather be restricted to procedural harmonisation (in the way ISAEL is offering) rather than content harmonisation (reducing variation and thus competition).

Lack of transparency, monitoring and evaluation

With multiple competing private certification systems active, information about performance and effects on the market and the supply side (economic and community impacts) is very poorly available. Information on the full impacts is also further obscured because of the variation in sustainable supply chain management strategies, not all of which results in product based certificates visible for consumers, with single firm approaches and business-to-business approaches such as GlobalGAP as examples.

No single relevant actor is responsible for the full picture. In the situation of self-governance, it is unclear who is to take this common responsibility. This might either be a task for cooperating actors in the market or for government agencies. Independent of the choice made here, governments, due to their public task, should ultimately have a role in measuring the level of public goal attainment, also if self governance in the market is supported.

Selectiveness in prioritising product chains

Businesses in self regulating markets and non-governmental organisations start working towards certification systems when they feel the need to do so. The first emergence of private certification has taken place mainly in the food and agro-products sector, in response to consumer pressure (health and safety issues), and based on previous experience in meeting traceability requirements. Looking both at environmental impacts and socio-ethical aspects, other product groups may very well be relevant in terms of improving sustainable supply chain governance but may lack the consumer pressure connected to food products that is required to trigger producer activity. An example is mineral mining.

The question is to what extent these weaknesses in self regulating markets affect the potential success of private certification. Hard statements are difficult to give, but the expectation is that these limitations will ultimately result in reducing potential impacts. The challenge here is to determine how combined and complementary strategies of the various key stakeholders active in this complex international *market and society* system can accelerate the breakthrough of sustainable products. This is addressed in the next section, from the perspective of governments, the core actor in this study.

7.3 Strategies for a Sustainable Footprint Policy

In Chapter 2 and earlier in this chapter the special role of governments was described as ultimate responsibility for the production of public goods. Within this legitimate role, national governments continue to address public goals, such as enhancing sustainable development, both "here" and "there" and "now" and "in the future" (*Kabinetsbrede aanpak duurzame ontwikkeling*, 2008). This implies the application of the full policy cycle. Governmental policies may very well make a strategic decision to allow self regulating markets to take the lead, but they still need to include the following key elements of good "meta" governance:

- independent problem analysis, that in turn is politically supported;
- a resulting long term vision and goal setting;
- explicit positioning in societal dynamics (the market game), thus resulting in the articulation of its role by means of:
  - suitable strategy and instruments;
  - enabling learning processes;
  - creating transparency for actors in the game.
- continuing to link self regulating markets to existing bottom line regulation in the field of environment, health and social development;
- organising the monitoring of goal achievement and goal attainment evaluation (feedback).

These roles are essential, irrespective of the strategic choice to be made regarding how to address self regulating markets as a government. Various stakeholders have in this study referred to the absence of an integrated, coherent policy strategy, with various ministries each stressing different main goals and making different choices in applying instruments.

The various weaknesses in the market-based governance of international supply chains discussed in Section 7.2 raises the question whether it is time to develop government policies that aim to reduce the remote footprint of consumption in developed countries beyond the existing combination of "side line support" and "use of market power" via public procurement, as described in this report.

Taking into consideration the observed weak overall coordination of government activities in this field and the absence of a coherent strategic position, we would argue that a more explicit policy is needed to make the Western footprint more sustainable. Such policies would include the elements of an integrated problem analysis (covering all sustainability issues, addressing the most relevant global supply chains), goal setting and explicit uniform positioning. Various suggestions for such a policy were discussed during the interviews and the expert workshop, and two possible directions given: either to return to a stronger role for governments or to support stronger self regulation.

A policy aiming at a return *to a stronger role for governments* may apply new possibilities for going beyond the "regulation vacuum", by;

- either applying *new regulation* for importers (minimum standards, banning uncertified products or mandatory proof of social responsible sourcing, in both cases using approved private certification systems), or;
- *economic instruments* for sustainable/unsustainable products (varying VAT tariffs, varying import quotas and tariffs), and;
- intensifying the use of bilateral (EU supplier country) agreements on controlling exports by using sustainability certificates.

On the other hand, a policy aiming at *further strengthening of self regulation in the market* would choose not to intervene in the competitive game, but to reduce the sideline role of governments to writing the rules of the game and awarding the winners, limiting its public role to monitoring and reporting progress.

An intermediate strategy is also conceivable. This would merely aim to optimise the market, addressing the weaknesses discussed in Section 7.3, such as reducing confusion in the market by limiting the number of competing schemes, but still allowing some competition.

It is not the intention to fully define either of these policy strategies here, but to stress the need for a consistent and comprehensive approach. This should include the position taken, goal setting, choices of instrument mixes and the handling of the private certification systems, as well as the instruments to be used to address both frontrunners and laggards in the competitive game. It should also consider both suppliers and domestic consumers and the consequences for trade policies and public procurement policies plus, finally, the organisation of monitoring and feedback. Choices to be made for each of these elements would need to be in line with the policy strategy chosen. Essential elements of a government strategy would include:

- The *position* taken in the societal network by the government in interactions between actors in the market. These actors include product suppliers, consumers and the newly created third parties that provide sustainability certification (FSC, UTZ Certified, Max Havelaar, etc.), as well as related organisations such as auditors and umbrella organisations (e.g. ISEAL). Governments can either fully step into this market network and take over the roles of certifiers, or they can fully step outside the market network and merely facilitate fair competition.
- *Goal setting* – currently not very developed, which would address questions such as the time horizon chosen for full market coverage by all the various competing private certificates and the issue of which, most relevant, product groups should be included in the policy: would the government select a set of most relevant product groups, covering the larger anticipated remote footprint, or would this be left to the autonomous dynamics of the market and civil society?
- The *role* taken *towards* the *private certification systems*. This is essential and can vary from a selective approach to a passive approach. In the first approach, governments would recognise a single certification system and focus any financial support for certification organisations and supply side smallholders assistance to this single system. In this case, the existing variation in levels of requirement could be continued as a multi level approach within a single certification system. Under the opposite strategy, the passive approach, existing certification systems are not at all supported and have to prove their legitimacy by being fully independent. In this case, private quality assurance initiatives (such as ISEAL) are fully endorsed by governments. Governments might support the competition mechanism by organising benchmarking activities.
- The *instruments* applied for *frontrunners* and *laggards* on the *demand side*. These would be very different, either using "traditional" instruments (Section 2.2), such as economic incentives supporting sustainable products and regulation, including obligatory proof of legal sourcing; or not interfering with frontrunner initiatives at all. In addressing laggards, some government regulation may still make sense in a "strong self regulation" strategy, addressing unfair competition by banning misleading claims.
- *Instruments* applied on the *supply side*. These are currently regular elements in government policies and include various forms of farmer support in developing countries, often selectively applied to some of the existing private certification systems. It would make sense, in relation to the choices above, to either allow this for an exclusively recognised system or to give any of the certification systems access to these resources.
- *Instruments* addressing the *consumer side* and the *public discourse* on sustainable trade. These would also be

different, either entailing a strong role for government communication or leaving this completely to the market actors themselves.
- The *public procurement policies*. These would also differ in the three strategies, depending on whether governments promote a single certification system or endorse multiple recognised systems. For this aspect of the policy, however, government agencies are, in all three strategies, a part of the market network, being institutional consumers. This implies that even in the case of a "strong self regulation" strategy, governments may very well promote voluntary government agency policies promoting the far reaching certification systems.
- A specific role in *international trade policies*, due to the essential government role of representing a country at the supranational level. In the return to stronger government, various opportunities are available, such as bilateral treaties on import inspection and possibilities to link sustainability requirements to import quotas and tariffs.

The organisation of systematic *monitoring* of the level of goal attainment throughout the product chains (see Chapter 5) and the use of such information for *feedback* both into the market network and the policy process. Such information production and processing might be organised as a government activity, as a shared responsibility between market actors or as forms of collaborative activity. The organisation of performance information processing and handling, as developed in the environmental target groups policies in the Netherlands in the last decade (via the Facilitation Organisation Industry), may serve as an example for a collaborative approach.

The various combinations of government activity options are summarised in Table 9.

Discussions during the Expert Meeting on the most appropriate strategy revealed stronger support for the activities suggested either in the "Stronger Self Regulation" strategy or in the "Optimising the Market" strategy. An element emphasised during the meeting was the possible need for different strategies depending on the situation in different product markets. The second and the third strategies might be applied in parallel: making a differentiation between "new, still resistant markets" and "mature markets", where key actors have proven to successfully have taken initiatives.

Opinions do differ in respect to this *question of timing:* some argue that such government support (with direct and indirect funding) should mainly address the start up stage (funding round tables and the development of new competing voluntary certification systems), while others state that governments should rather reward successful systems that have proven successful in practice.

In discussing the three strategies, one issue that came up was the special position of governments: their ability to enhance *international coordination* in two ways:
- by promoting bilateral agreements with supplying countries, and;
- by developing new coherent sustainable supply chain policies in their supranational organisations (EU, UN, WTO, etc.).

These are relevant additional roles, compensating for one fundamental weakness in private certification systems, which is that these organisations cannot be expected to reduce the increasing variation between approaches taken within a single product chain, between different product chains and between initiatives taken in various geographic regions. Whatever the strategic choice might be, this specific role of governments in the international context is essential to further promote *governmental policies* elsewhere and to develop internationally coherent approaches. This would benefit both producers and end-consumers.

The goal of this study is to reflect on the current and future role of governments in sustainable supply chain governance systems and to answer the research question: which strategies and instruments do governments (national or supranational) apply in promoting sustainable production and consumption in global supply chains of finished goods or resources and what is known about the effectiveness of these strategies and instruments?

This chapter summarises the findings on developments in two groups of supply chains with the longest history of full implementation of private certification. A detailed look is taken at the role governments have played in the dynamics in these product markets. The conclusions state that, in the context of increasing competition in the timber and coffee markets, it is in these cases possible to start to talk in terms of "maturing" sustainable supply chains, following a long initial period of sustainability restricted to small niche markets. However, various weaknesses in these self regulation practices have also been identified. Conclusions about the roles taken by governments stress that, in the stage of initiating the systems studied, the role of governments has been very limited, while a broader range of government activities have been employed to support the private certification systems in their implementation stage. Such activities are directed both at the European or national demand side and at implementation by producers/farmers and supporting organisations in developing countries on the supply side. Also discussed is the fact that private certification is related to various different tiers and sectors of government activity, but that in practice in none of the three countries studied has a strong and explicitly fully integrated policy been developed. As a result, a systematic evaluation of the impacts of government roles has hardly been developed and selection of relevant product chains for certification is made based on dynamics in the market and civil society, and not on a systematic analysis.

Finally, reflecting on possible future roles for government, we conclude that governments can take a more effective role, either as a strong market actor or as an outside facilitator, by taking a more explicit position in four areas:
1. Develop a more integrated approach by formulating an explicit interdepartmental *Sustainable Footprint Policy.* This would include:

Three sets of coherent government activity options **Table 9**

Strategy options	Return to stronger government	Market optimisation	Stronger self regulation
Position	Gvt = main player / integrated approach	Gvt = in the game / reduce confusion demand side	Gvt = outside / facilitate fair system competition
Goal setting	10 year goals: full implementation most unsustainable product chains	10 year goals: push market to address most unsustainable product chains	10 year goals: market chooses most unsustainable products
Role ➔ certification systems	Exclusive recognition of a single system (group of products) Multi level certification: * = compliance systems *** = fair & eco+ systems	Creation and harmonisation of certification systems Gvt sets minimum level standards (EU level) and performance standards (compliance level)	No support for certification systems Market creates minimum level standards (ISEAL) Promote credibility by benchmarking
Instruments ➔ Dutch frontrunners	Support for implementation activities Low VAT tariffs	Voluntary agreements on implementation routes by business sectors	No interference
Instruments ➔ Dutch laggards	Ban illegally obtained wood by obligatory proof of legal sourcing	Ban misleading claims through limited recognition of labels	Transparency on market performance Ban misleading claims
Instruments ➔ suppliers	Farmer support for exclusive system (at all levels)	Farmer support for recognised systems	Farmer support by demand side companies for all systems
Instruments ➔ public discourse & consumer	Government agencies run consumer campaigns	Support NGOs in addressing consumer behaviour	No support in addressing consumer behaviour
Public procurement	Selective public procurement of single recognised system	Obligatory procurement of any recognised certificate (compliance level) Voluntary programmes for *** = fair&eco+ Transparency by public benchmarking	Obligatory procurement of any recognised certificate (compliance level) Voluntary programmes for *** = fair&eco+ Voluntary benchmarking in market
Trade policy	Bilateral treaties on import inspection Link to import quotas & tariffs	Bilateral treaties on import inspection	-
Monitoring and feedback	Annual reporting by coordinating ministry	Market actors report performance information Government publishes market penetration info	Market actors produce performance information Market & civil society cooperate in publishing market penetration info

   a. Identifying product groups with the most unsustainable impact in developing countries in relation to trade volume expectations, considering all relevant environmental, social and ethical issues, fair trade relations and value allocation. Such a product group prioritisation would preferably be a European level activity, rather than various national activities.
   b. Formulating long-term and mid-term *goals* in terms of demand side market penetration and supply side poverty reduction, integrating the various related policy goals.
   c. Interdepartmental cooperation to jointly select the *most effective position* to take as governments in this complex international *market and society* system, with a coordinating ministry.
2. Select a consistent and longer term continued mix of instruments, enhancing coherence through the strategic options suggested in Table 9. The essence is to create coherence through the elements of the strategy and to apply the same strategies in the policies of the related ministries.
3. It is essential to extend the policies that currently mainly focus on frontrunners to also address laggards.
4. Enable continuous learning at the supply chain level by ensuring transparency, monitoring and feedback organised in line with the chosen strategy.

Self governance implemented by actors in the market and civil society has the potential of creating effective and efficient solutions to the regulatory vacuum that governments are facing in the context of international trade. However, as shown, this also has its limitations and various essential functions of public policymaking tend to fall between two stools. This therefore requires an explicit government strategy and organisation. At the level of monitoring and evaluation, the creation of a governmental organisation may be necessary (compare emission registration in the Netherlands), while at the level of policy development and implementation, stronger inter-ministerial and multi-stakeholder cooperation may be required. Depending on the strategy chosen, this might be a full government agency or a collaborative arrangement.

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Abbreviations

4C
Common Code for the Coffee Community

ACOS
Advisory Committee on Organizational Standards

ATFS
American Tree Farm Systems

ATO
African Timber Organization

ATOs
Alternative Trade Organizations

B2B
Business to Business

BMZ
Ministry of Economic Cooperation and Development (Germany)

C.A.F.E
Coffee and Farmer Equity

CAFOD
Catholic Agency for Overseas Development

CB
Certification Body

CBD
Convention on Biological Diversity

CEO
Chief Executive Officer

CITES
Convention on International Trade in Endangered Species

CSA
Canadian Standards Association

CSR
Corporate Social Responsibility

DEFRA
Department of Environment, Food, and Rural Agriculture (United Kingdom)

DFID
Department for International Development (United Kingdom)

DGIS
Directorate-General of Development Cooperation (The Netherlands)

EGS
Environmental Goods and Services

EIPRO
Environmental Impact of Products

EMAS
Eco-Management Audit Scheme

ETI
Ethical Trading Initiative

ETP
Ethical Tea Partnership

EU
European Union

EUREP
Euro Retailer Produce Working Group

FAO
Food and Agriculture Organization

FLEG
Forest Law Enforcement and Governance

FLEGT
Forest Law Enforcement, Governance and Trade

FLO
Fairtrade Labelling Organization

FRICH
Food Retail Industry Challenge Fund

FSC
Forestry Stewardship Council

GAP
Good Agricultural Practices

GEF
Global Environmental Facility

GRI
Global Reporting Initiative

GTZ
German Agency for Technical Cooperation

HACCP
Hazard Analysis and Critical Control Points

ICCO
Interchurch Organization for Development Cooperation

ICO
International Coffee Association

IDH
Dutch Sustainable Trade Initiative

IFOAM
International Federation of Organic Agricultural Movements

ILO
International Labour Organization

IPM
Integrated Pest Management

ISEAL
International Social and Environmental Accreditation Labelling Alliance

ISO
International Standards Organization

ITTO
International Timber Organization

KTDA
Kenyan Tea Development Agency

LNV
Ministry of Agriculture, Nature, and Food Quality (The Netherlands)

MDG
Millennium Development Goals

MSC
Marine Stewardship Council

MTCC
Malaysian Timber Certification Council

NGO
Non-governmental Organization

NL
Netherlands

OECD
Organization for Economic Co-operation and Development

OIV
International Organization for Vine and Wine

P & C
Principles and Criteria

PBL
Planbureau voor de Leefomgeving (Netherlands Environmental Assessment Agency)

PEFC
Programme for the Endorsement of Forest Certification

PEOLF
Pan European Operational Level Guidelines

RA
Rainforest Alliance

RSCE
Roundtable for a Sustainable Cocoa Economy

SA
Social Accountability

SAN
Sustainable Agriculture Network

SFI
Sustainable Forestry Initiative

SSCG
Sustainable Supply Chain Governance

TCC
Tropical Commodity Coalition

TPAC
Timber Procurement Assessment Committee

TTAP
Timber Trade Action Plan

UK
United Kingdom

UN
United Nations

UNCED
United Nations Conference on Environment and Development

UNCTAD
United Nations Conference on Trade and Development

UNEP
United Nations Environment Programme

USA
United Stated of America

VPA
Voluntary Partnerships Agreement

VAT
Value Added Tax

VROM
Ministry of Housing, Spatial Planning, and the Environment (The Netherlands)

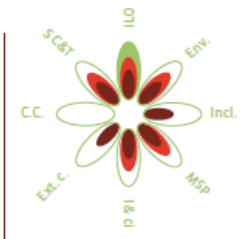
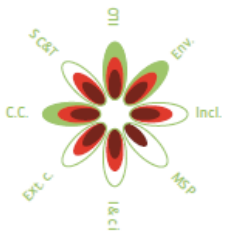
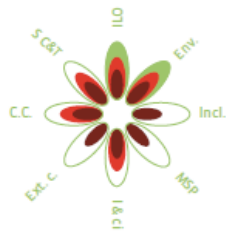
VVNH
Dutch Wood Trade Association

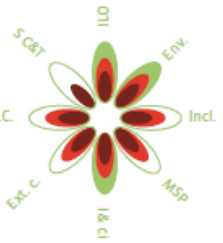
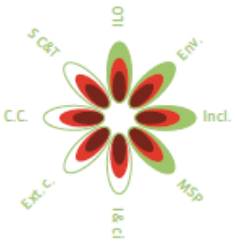
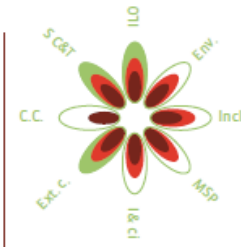
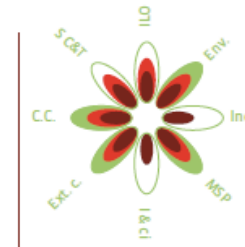
WTO
World Trade Organization

WWF
World Wildlife Found

Appendices

Appendix 1: Scope of top seven coffee standards systems vis-à-vis the TCC Principles (Coffee Barometer, TCC 2009)

	Legenda no coverage low coverage average coverage high coverage			
		Verification system	Company verification system	Company verification system
Thematic	Labour norms in line with ILO	Compliance with core ILO labour norms in the list of unacceptable practices	Compliance with relevant ILO Conventions and national laws	Compliance with relevant ILO Conventions and national laws
Thematic	Environmental requirements	Basic environmental standards, exclusion of banned pesticides through unacceptable practices and minimization of pesticides in WHO lists	Environmental leadership covers large part of the indicators	Environmental sustainability is the focus point, 100% compatible with Rainforest Alliance environmental standards
Thematic	Inclusiveness of vulnerable stakeholders	Low for small-holders, high for plantation workers and low on gender	High for small-holders, average for workers and gender	High for small-holders able to deliver specific coffee qualities
Systematic	Multistakeholder participation	Tripartite membership association with broad participation on international level of producers, companies and civil society, weak at local level	Modest multi-stakeholder participation, code designed as company standard	Modest multi-stakeholder participation, close relationship with Rainforest Alliance and SAN network
Systematic	Implementation & continual improvement	3 levels of criteria (green, yellow, red); low entrance level and step-by-step improvement process with access to support service	Low entry level, possibility to improve to higher score, three supplier levels, low amount of Zero-tolerance criteria	Low entry level, in a region of specific coffee quality all producers can participate, long term relation, improvement over time
Systematic	External control	Annual self-assessment, verified by third-party if self-assessment reflects reality and supports the producers to improve	Second-party verification system, internal and external control mechanism	Second-party verification by Rainforest Alliance, will become third-party certification by 2013
Economic	Commercial conditions	No assurance of demand, rules of participation oblige companies to raise the volume over time	High assurance of actual demand by Starbucks, if supplier level score is high	Average assurance of demand, not all verified coffee complies as Nespresso AAA.
Economic	Supply chain coverage & traceability	Coverage on multiple levels (farmers, processing, trading)	Strong connection between producer and Starbucks	Strong connection between Nespresso and producers
Economic	Consumer communication	B2B model, Membership Statement on pack; Corporate Communication by 4C Members	B2B concept, communication only through Shared Planet website	Quality and sustainability is actively communicated to the Nespresso club members

			
Certification system	Certification system	Certification system	Certification system
Compliance with relevant ILO Conventions and national laws	Compliance with relevant ILO Conventions and national laws	Compliance with relevant ILO Conventions and national laws	Operators should comply with all ILO Conventions relating to labor welfare and the UN Charter
More than half of the code consists of very specific environmental criteria, including ecosystem and wildlife conservation	Substantial part of the code is reserved for generic environmental standards with a three year implementation period	Environmental standards to improve agricultural and processing practices	Main part of the code consists of environmental requirements
Good on small-holders, average on workers and low on gender	Code is designed for smallholders with difficult market access, additional standards for hired labor, average focus on gender	Support network Average for small-holders, strong for workers and low on gender	Average for small-holders who comply to minimal requirements, low for workers, low on gender
Standards developed by environmental NGOs of the SAN network, together with local stakeholders and international experts	Revision of governance structure, to balance stakeholder participation from producers side. Difficult to enter for new producer groups	Two-yearly evaluation of standards in multi-stakeholder consultation process. At local level there is a weak relationship with labour unions	Federation of 750 member organizations ranging from organic producers, retailers, NGOs, to (large) companies with indirect influence on Standards Bodies
Standards include planning and monitoring component to demonstrate compliance and allow for improvement	Producer standards contain minimum and progress requirements, permanent improvement over time	Over a period of 4 years, the amount of mandatory control points increases gradually	Basic reference set of organic standards, additional certification standards for organic coffee production
Certification by SAN network members	Certification centralized through FLO-Cert in Germany, based upon check list of local inspectors	Independent third-party control by approved bodies, local and international	Accreditation and certification, by private and governmental bodies
Good balance between production and demand, price premium depends on market demand	Pre-financing and long-term relationship. Assurance of a Fairtrade premium, internalisation of social and environmental costs. Contribution to balance demand and supply	Strategic balance between supply and demand. Price premium depends on market demand.	High assurance of demand, with a market price premium
Coverage of standards focused at producers' level, transactions registered at electronic marketplace	Coverage focused at producers' level, trader standards applicable	4 inspection levels (producer, certificate holder, nursery, storage); separate chain of custody code. High traceability, web-based	Separate criteria on processing and handling
2 types of B2C communication: 1. Label : 100% RA coffee 2. Label: minimum 30%-90% RA coffee with a seal indicating the exact percentage	B2C concept with active communication	B2B communication. Assurance label used on pack when at least 90% of content is Utz certified	B2C message by 95% organic

Appendix 2: List of Interviewees

Product groups/Certification

Fairtrade
Nico Roozen, Max Havelaar, Initiator (currently Director of Solidaridad), 12th October, Utrecht.
Dieter Overath, Transfair Germany, Director, 29th October, Telephone interview.
Toby Kuantrill, Fairtrade Foundation, 21st October, London.

UTZ Certified
Ward de Groote, UTZ Certified, Initiator, 2nd October, Amsterdam.

GlobalGAP
Kristian Moeller, GlobalGAP, Secretary, 6th November, Cologne.

Organic
Peter Melchett, Soil Association (UK Organic), Policy Director, 22nd October, London.
Diane Bowen, IFOAM, Project Manager, 4th November, Telephone Interview.
Marian Blom, Biologica, Team Knowledge and Innovation, 17th November, Utrecht.

Rainforest Alliance
Edward Millard, Rainforest Alliance, Senior Manager Sustainable Landscapes, 20th October, London.
Joke Aerts, Rainforest Alliance, 20th October, London.

Timber
Gemma Boetekees, ICCO, 23rd November, Telephone Interview.
Erik Lammerts van Beuren, ISAFOR, 12th October, Scherpenzeel.
Paul van den Heuvel, VVNH, Director, 15th October, Almere.

Coffee, Cocoa, Tea Certification
Sjoerd Panhuyzen, Tropical Commodity Coalition, 10th November, Den Haag.

PECF
Cees Boon, PEFC Netherlands, Chairman, 11th November, Telephone Interview.

Government

Netherlands
Jan van Wijngaarden, Ministry of Economic Affairs, Policy Coordinator CSR and Trade, 27th October, The Hague.
Anke Swets, Ministry of Economic Affairs, SCR and Trade, 27th October, The Hague.
Rob Busink, Ministry of Agriculture, Nature and Fisheries, Senior Policy Officer International Affairs, 28th October, The Hague.
Leonoor van Munster, Ministry of Foreign Affairs, Senior Policy Officer Sustainable Economic Development, 26th October, The Hague.
Lucie Wassink, Ministry of Agriculture, Nature and Fisheries, Department of Agro-commodity and fishery, 4th November, The Hague.
Lizet Quaak, Ministry of Environment, Public Procurement, 17th November, The Hague.

The UK
Deborah McGurk, DFID, Fair and Ethical Trade Policy, 20th October, London
Bob Ryder, DEFRA, Sustainable Product Policy and EU/ International Businesses, 21st October, London

Germany
Carsten Schmitz-Hoffman, GTZ, Head of Programme for Social and Ecological Standards, 6th November, Telephone Interview

Appendix 3: Expert Workshop Participants List

Name	Position/Organisation
Herman Bavinck	Interim Manager, Ministry of Housing, Spatial Planning and the Environment
Juliette Caulkins	Director, UTZ Certified
Stefan van der Esch	Policy Officer, Dutch Environmental Assessment Agency (PBL)
Ward de Groote	Founder UTZ Certified
Paul van den Heuvel	Director, Dutch Timber Trade Association, (VVNH)
Marcel Kok	Senior Researcher, PBL
Martin Lok	Ministry of Agriculture, Nature and Food Quality
Janneke Metselaar	Student Utrecht University/ Intern PBL
Leonoor van Munster	Directorate Sustainable Economic Development, Ministry of Foreign Affairs
Mark van Oorschot	Senior Researcher, PBL
Sjoerd Panhuyzen	Tropical Commodity Coalition
Mathew Parr	IUCN Netherlands
Luli Pesqueira	Junior Researcher, Utrecht University
Lizet Quaak	Public Procurement, Ministry of Housing, Spatial Planning and the Environment
Anke Swets	Directorate-General for Foreign Economic relations, Trade Policy and Globalisation, Ministry of Economic Affairs
Yukina Uitenboogaart	Junior Researcher, Utrecht University
Frida van der Veen	ICCO - Interchurch Organisation for Development Cooperation

Appendix 4: Literature Review Scopus

Key words: UTZ Certified, Rainforest Alliance, GlobalGAP, FSC, PEFC, Organic + Coffee, Organic + Tea, Organic + cocoa, sustainability + certification + government, Certification + environment + government, certification + development + government, "fairtrade".

Here are most relevant literatures that came out with the above key words.

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5. D.H. Schepers, "Challenges to Legitimacy at the Forest Stewardship Council," 2009, Scopus,
6. C. Bacon, "Confronting the coffee crisis: Can Fair Trade, organic, and specialty coffees reduce small-scale farmer vulnerability in Northern Nicaragua?," *World Development* 33, no. 3 (2005): 497-511.
7. Jason Hall McNichol, "Contesting Governance in the Global Marketplace: A Sociological Assessment of Business-NGO Partnerships to Build Markets for Certified Wood" (U California, Berkeley, 2003).
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10. M. Amstel, P. Drissen, P. Glasbergen, "Eco-labeling and information asymmetry: a comparison of five eco-labels in the Netherlands" Journal of Cleaner Production 16 (2008): 263-276
11. D. Klooster, "Environmental certification of forests in Mexico: The political ecology of a nongovernmental market intervention," *Annals of the Association of American Geographers* 96, no. 3 (2006): 541-565.
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Colophon

Responsibility
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Supervisor
Mark van Oorschot

Authors
W.J.V. Vermeulen (Utrecht University), Y. Uitenboogaart (Utrecht University), L.D.L. Pesqueira (Utrecht University), J. Metselaar (Utrecht University), M.T.J. Kok (PBL)

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S. Lyon, A. Righart

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Government effectiveness in advancing sustainable supply chains

During the last decade, a growing number of market-based certification systems have been introduced for sustainable products consumed in the Netherlands and the EU, that are sourced through internaational supply chains. These systems consist of requirements for products from developing countries with regard to environmental and social-ethical issues. These so called 'sustainable supply chain systems' have been initiated and are managed mainly by the market and civil society, without directly involving the government. This study shows that the two most 'mature' global sustainable supply chains (tropical timber and coffee) are market led in issuing voluntary certification and that buying certified products is starting to become mainstream and increasingly effective. Government has had a very limited role in the development of the early certification systems studied.

Various weaknesses in the market based governance of international supply chains discussed in this report put the question on the table whether it is time to develop government policies on reducing the remote footprint of consumption in developing countries beyond 'side line support' and 'use of market power' via public procurement, as is currently the case. Taking into consideration the observed weak overall coordination of government activities in this field and the absence of a coherent strategic position taken, this report argues that a more explicit policy is needed to make the western footprint more sustainable and provide three possible strategies for doing so through supply chain policies.

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